



ТЕЛЕФОНЫ

0 (800) 800 130
 (050) 462 0 130
 (063) 462 0 130
 (067) 462 0 130



SKYPE

km-130

130

COM.UA

Интернет-магазин автотоваров

АВТОМАГНИТОЛЫ — Магнитолы • Медиа-ресиверы и станции • Штатные магнитолы • CD/DVD чейнджеры • FM-модуляторы/USB адаптеры • Flash память • Переходные рамки и разъемы • Антенны
 • Аксессуары | **АВТОЗВУК** — Акустика • Усилители • Сабвуферы • Процессоры • Кроссоверы • Наушники • Аксессуары | **БОРТОВЫЕ КОМПЬЮТЕРЫ** — Универсальные компьютеры
 • Модельные компьютеры • Аксессуары | **GPS НАВИГАТОРЫ** — Портативные GPS • Встраиваемые GPS • GPS модули • GPS трекеры • Антенны для GPS навигаторов • Аксессуары |
ВИДЕОУСТРОЙСТВА — Видеорегистраторы • Телевизоры и мониторы • Автомобильные ТВ тюнеры • Камеры • Видеомодули • Транскодеры • Автомобильные ТВ антенны • Аксессуары |
ОХРАННЫЕ СИСТЕМЫ — Автосигнализации • Мотосигнализации • Механические блокираторы • Иммобилайзеры • Датчики • Аксессуары | **ОПТИКА И СВЕТ** — Ксенон • Биксенон • Лампы
 • Светодиоды • Стробоскопы • Оптика и фары • Омыватели фар • Датчики света, дождя • Аксессуары | **ПАРКТРОНИКИ И ЗЕРКАЛА** — Задние парктроники • Передние парктроники
 • Комбинированные парктроники • Зеркала заднего вида • Аксессуары | **ПОДОГРЕВ И ОХЛАЖДЕНИЕ** — Подогревы сидений • Подогревы зеркал • Подогревы дворников • Подогревы двигателей
 • Автохолодильники • Автокондиционеры • Аксессуары | **ТЮНИНГ** — Виброзоляция • Шумоизоляция • Тонировочная пленка • Аксессуары | **АВТОАКСЕССУАРЫ** — Радар-детекторы • Громкая связь Bluetooth • Стеклоподъемники • Компрессоры • Звуковые сигналы, СГУ • Измерительные приборы • Автопылесосы • Автокресла • Разное | **МОНТАЖНОЕ ОБОРУДОВАНИЕ** — Установочные комплекты • Обивочные материалы • Декоративные решетки • Фазоинверторы • Кабель и провод • Инструменты • Разное | **ПИТАНИЕ** — Аккумуляторы • Преобразователи
 • Пуско-зарядные устройства • Конденсаторы • Аксессуары | **МОРСКАЯ ЭЛЕКТРОНИКА И ЗВУК** — Морские магнитолы • Морская акустика • Морские сабвуферы • Морские усилители • Аксессуары |
АВТОХИМИЯ И КОСМЕТИКА — Присадки • Жидкости омывателя • Средства по уходу • Полироли • Ароматизаторы • Клей и герметики | **ЖИДКОСТИ И МАСЛА** — Моторные масла
 • Трансмиссионные масла • Тормозные жидкости • Антифризы • Технические смазки



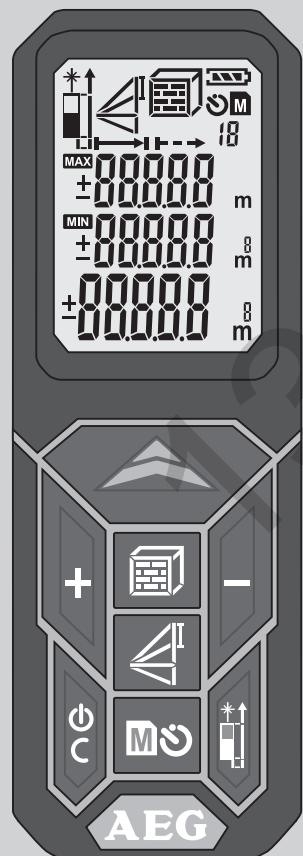
В магазине «130» вы найдете и сможете купить в Киеве с доставкой по городу и Украине практически все для вашего автомобиля. Наши опытные консультанты предоставят вам исчерпывающую информацию и помогут подобрать именно то, что вы ищите. Ждем вас по адресу

<https://130.com.ua>

AEG

POWERTOOLS

LMG 50



click ➤	GB	Original instructions
click ➤	D	Originalbetriebsanleitung
click ➤	F	Notice originale
click ➤	I	Istruzioni originali
click ➤	E	Manual original
click ➤	P	Manual original
click ➤	NL	Oorspronkelijke gebruiksaanwijzing
click ➤	DK	Original brugsanvisning
click ➤	N	Original bruksanvisning
click ➤	S	Bruksanvisning i original
click ➤	FIN	Alkuperäiset ohjeet
click ➤	GR	Πρωτότυπο οδηγιών χρήσης
click ➤	TR	Orjinal işletme talimatı
click ➤	CZ	Původním návodem k používání
click ➤	SK	Pôvodný návod na použitie
click ➤	PL	Instrukcją oryginalną
click ➤	HU	Eredeti használati utasítás
click ➤	SLO	Izvirna navodila
click ➤	HR	Originalne pogonske upute
click ➤	LV	Instrukcijām oriģinālvalodā
click ➤	LT	Originali instrukcija
click ➤	EST	Algupärane kasutusjuhend
click ➤	RUS	Оригинальное руководство по эксплуатации
click ➤	BG	Оригинално ръководство за експлоатация
click ➤	RO	Instrucțuni de folosire originale
click ➤	MK	Оригинален прирачник за работа
click ➤	PRC	原始的指南

CONTENTS

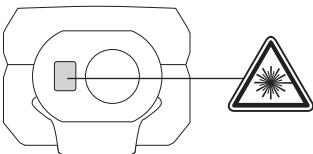
Important safety instructions.....	1
Specified Conditions of Use	2
Error Code Table	2
Overview.....	3
Change batteries	4
Corner Pin	4
Belt Clip	4
Function Switch, Pythagoras, Measuring Reference.....	5
Single Distance Measuring.....	6
Permanent / Minimum-Maximum Measuring.....	7
Add / Subtract Measuring.....	8
Area Measuring	9
Volume Measuring.....	10
Indirect Measuring (Pythagoras 1)	11
Indirect Measuring (Pythagoras 2)	12
Indirect Measuring (Pythagoras 3)	13
Wall Area Measuring (Scenario 1).....	14
Wall Area Measuring (Scenario 2).....	15
Timer	16
Memory.....	16
Basic Description on example of Area measuring (1).....	17
Basic Description on example of Area measuring (2).....	18

IMPORTANT SAFETY INSTRUCTIONS



Do not use the product before you have studied the Safety instructions and the User Manual.

Laser Classification



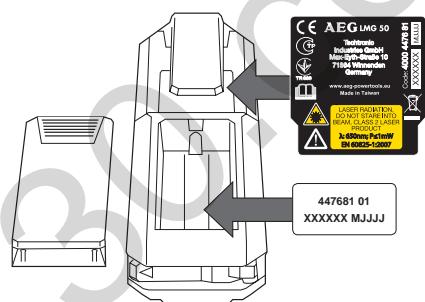
WARNING:

It is a Class 2 laser product in accordance with EN 60825-1:2007.



Labeling

We have supplied you with an adhesive label in your language and now request that you please apply this in place of the English text on the specification plate before first commissioning the machine.



WARNING:

Avoid direct eye exposure. The laser beam can cause flash blindness.

Do not stare into the laser beam or direct it towards other people unnecessarily.

Don't dazzle other individuals.

WARNING:

Do not operate the tool around children or allow children to operate the tool.

The reflective surface could reflect the beam back at the operator or other persons.

Keep extremities in a safe distance from the moving parts. Carry out periodic test measurements. Particularly before, during and after important measurements.

Watch out for erroneous measurements if the product is defective or if it has been dropped or has been misused or modified.

WARNING: Use of controls, adjustments, or the performance of procedures other than those specified in the manual may result in hazardous radiation exposure.

The laser distance measurer has limits of use. (Refer to the "Technical data" section). Attempts to measure outside the maximum and minimum range will cause inaccuracy. Use in adverse conditions including too hot, too cold, very bright sunlight, rain, snow, fog, or other vision restricting conditions will result in inaccurate readings.

When the laser distance measurer is brought into a warm environment from very cold conditions, or vice versa, allow it to come to the surrounding temperature before use.

Always store the laser distance measurer indoors, avoid exposing the tool to shock, continuous vibration or extreme temperatures.

Always keep the tool away from dust, liquids and high humidity. These may damage internal components or affect accuracy.

Do not use aggressive cleaning agents or solutions. Use only a clean, soft cloth for cleaning.

Avoid heavy impact to or dropping of the measuring tool. The accuracy of the tool should be checked before use if it has been dropped or subjected to other mechanical stresses.

Any repair required on this laser product should be performed only by authorised service personnel.

Do not operate the product in explosion hazardous areas or in aggressive environments.

Only use chargers recommended by the manufacturer to charge the batteries.



Flat batteries must not be disposed of with household waste. Care for the environment and take them to the collection points provided in accordance with national or local regulations. The product must not be disposed with household waste. Dispose of the product appropriately in accordance with the national regulations in force in your country. Adhere to the national and country specific regulations. Please contact your local authority or your dealer for how to dispose of batteries properly.



European Conformity Mark

TECHNICAL DATA

Dust and Water resistance	IP54
Receiving Lens	14 mm
Focus	35 mm
Maximum Measuring Range	50 meters (Tolerance : 55m)
Minimum Measuring Range	0.05 meters
Absolute Accuracy @ < 10m	± 1.5 mm (Max)
Repeatability Accuracy @ < 10m	± 1.5 mm (Max Typical, 2σ)
Repeatability Accuracy @ > 10m	Increase ± 0.25 mm / meter (Max Typical, 2σ)
Measurement Time	0.5 s
Display Type	LCD (22.7 mm x 31 mm)
Power Type	AAA 2x (Alkaline Battery)
Battery Life	10000 (Single Measure)
Laser Output Power	0.6 mW ~ 0.95 mW (Class 2, 650nm)
Laser Spot Size	25 x 30 mm @ 16 m (Max)
Laser Radiation Vertical Angle	+1 degree
Laser Radiation Horizontal Angle	±1 degree
Device auto off time	180 seconds
Laser auto off time	30 seconds
Operating Temperature Range	-10°C to +50°C
Storage Temperature Range	-25°C to +70°C
Weight without Battery	80 g

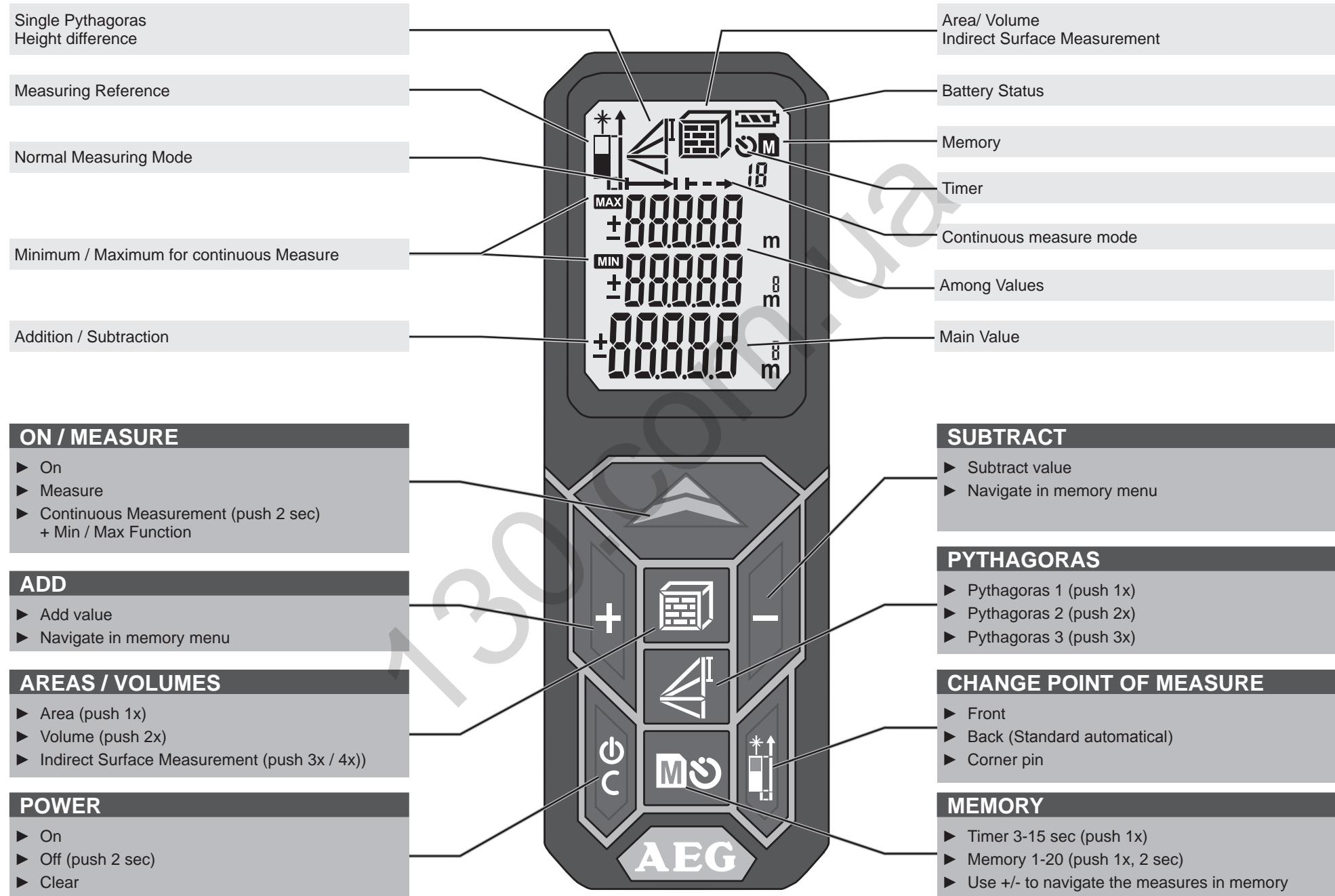
ERROR CODE TABLE

Code	Description	Solution
Err01	Out of measuring range	Measure in a proper range
Err02	Reflect signal is too weak	Choose a better surface
Err03	Out of display range (max value: 99.999) e.g. result of area or volume is out of display range	Check and verify values and steps are correct
Err04	Pythagorean calculation error	Check and verify values and steps are correct
Err05	Battery is low	Install new batteries
Err06	Out of working temperature	Measure in an environment with the specified working temperature
Err07	Ambient light is too strong	Measure in a darker place (shadow target)

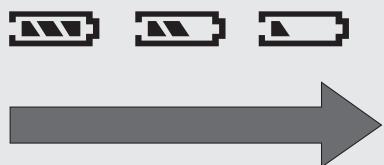
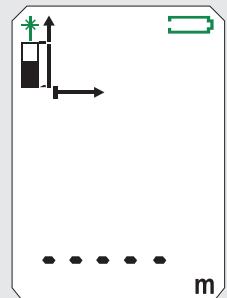
SPECIFIED CONDITIONS OF USE

The laser distance measurer can be used for measuring distances and tilts.

Do not use this product in any other way as stated for normal use.

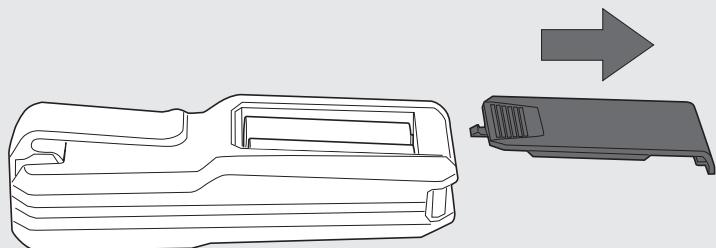


CHANGE BATTERIES

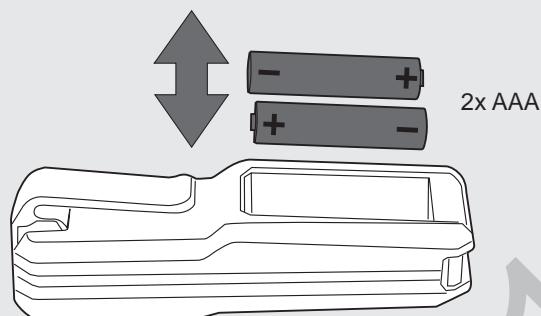


Change batteries
when battery
symbol is flashing.

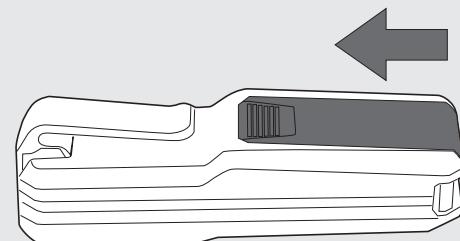
1



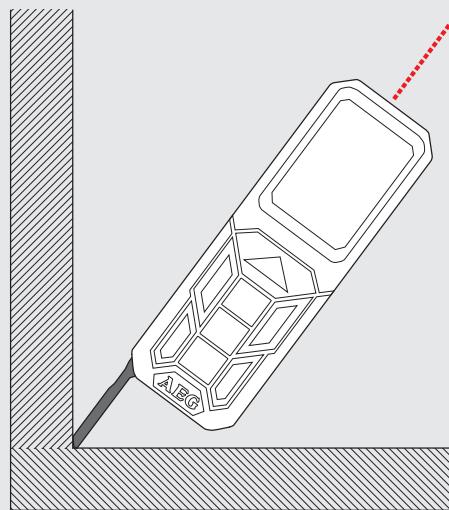
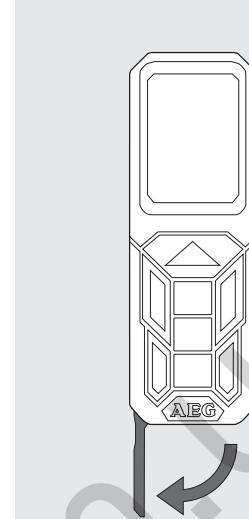
2



3

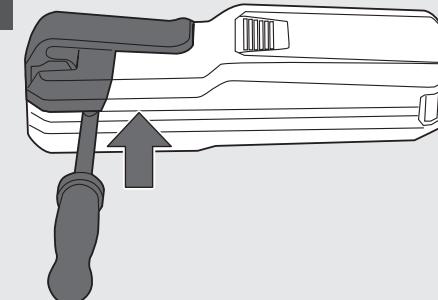


CORNER PIN

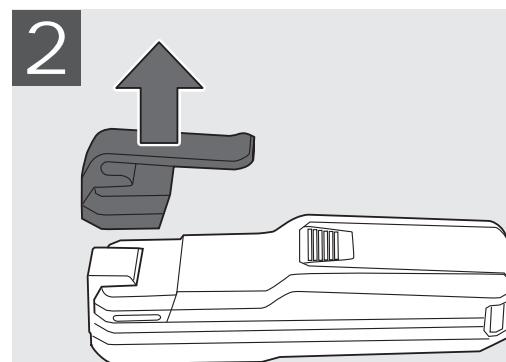
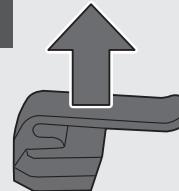


BELT CLIP

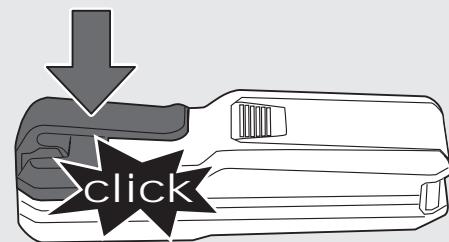
1



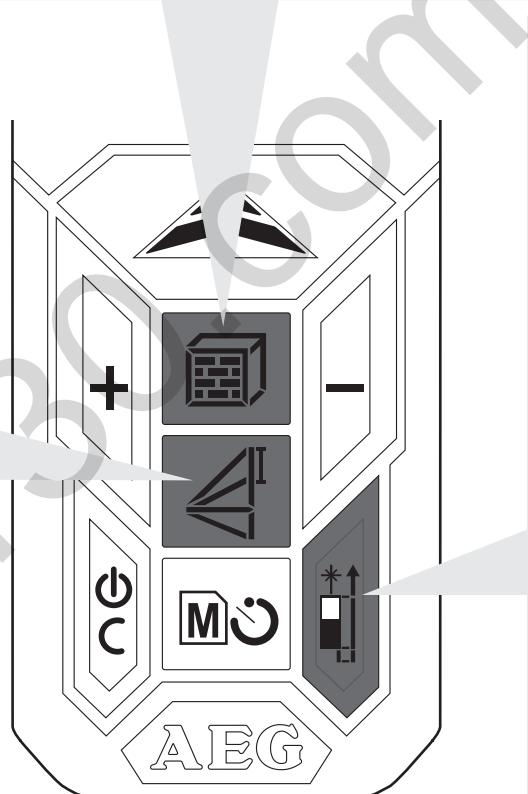
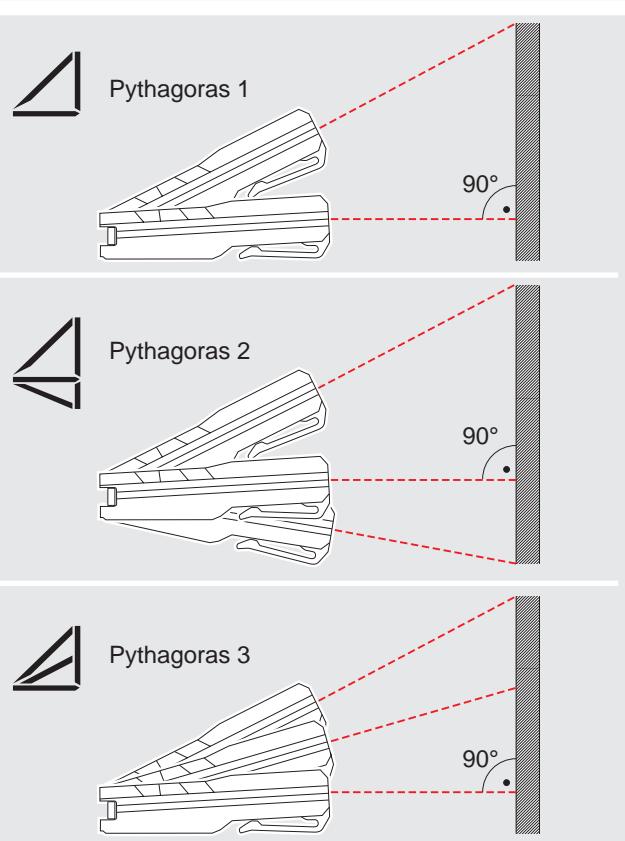
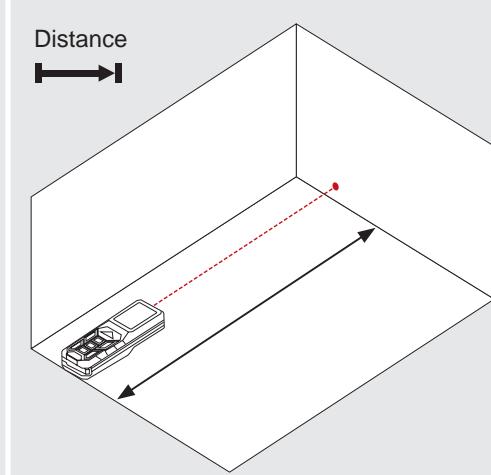
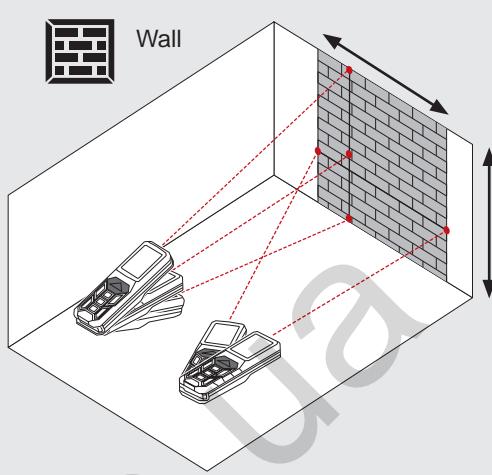
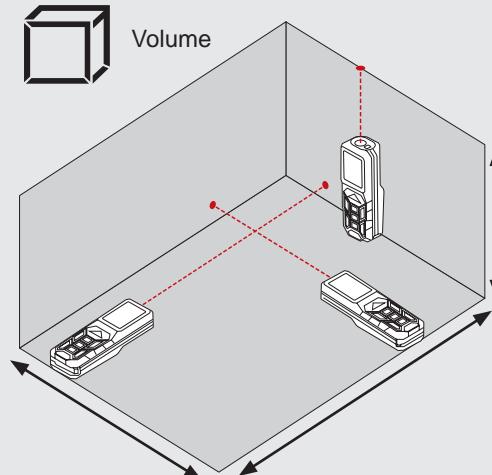
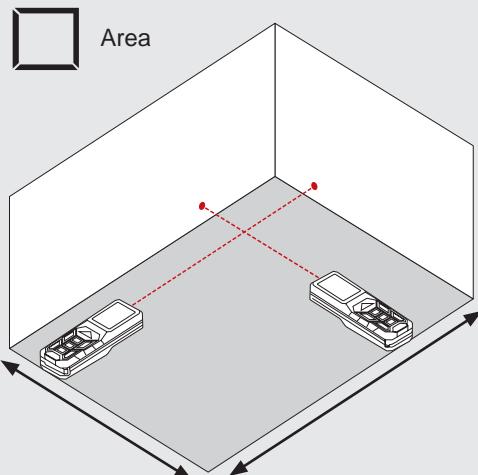
2



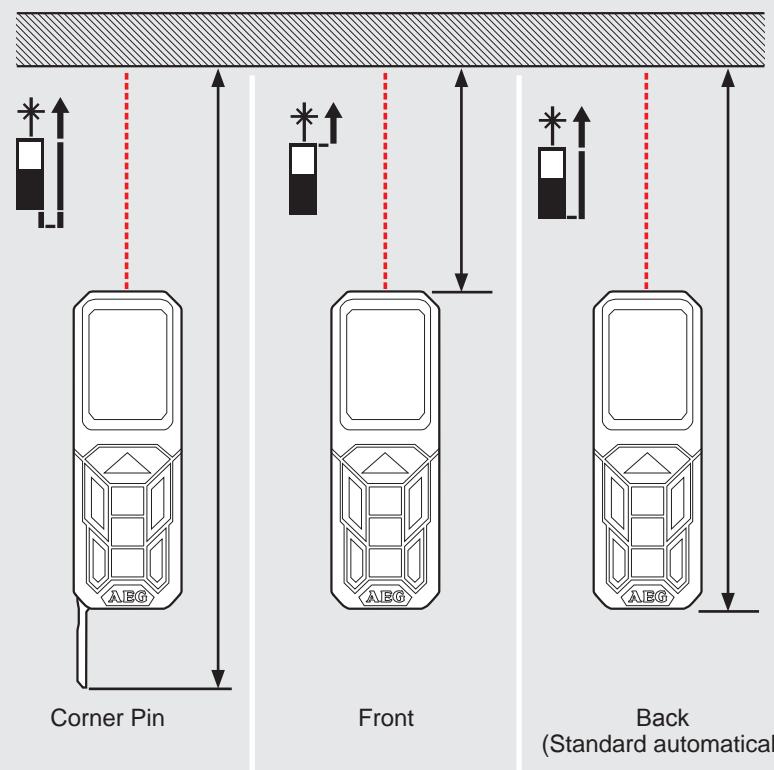
3



FUNCTION SWITCH, PYTHAGORAS, MEASURING REFERENCE

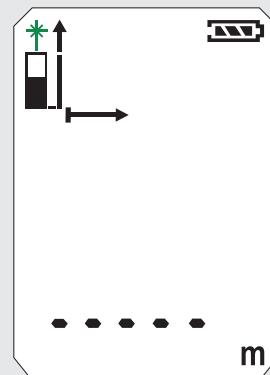
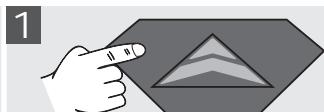


Starting Point of Measure

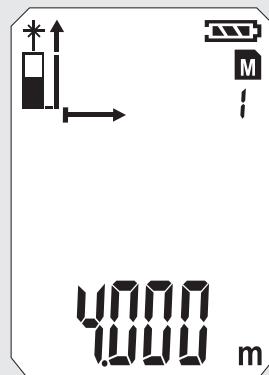


SINGLE DISTANCE MEASURING

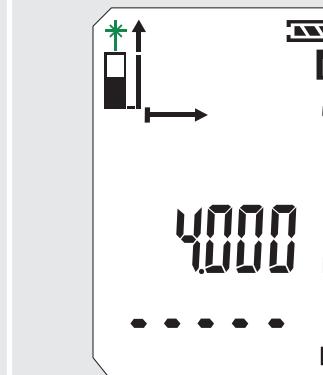
0



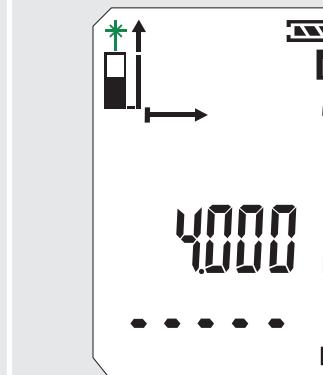
1



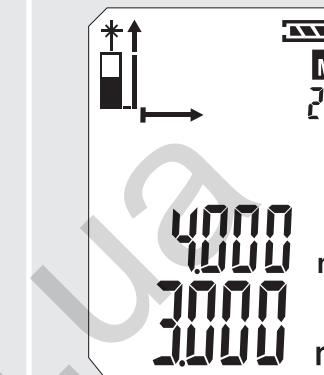
2



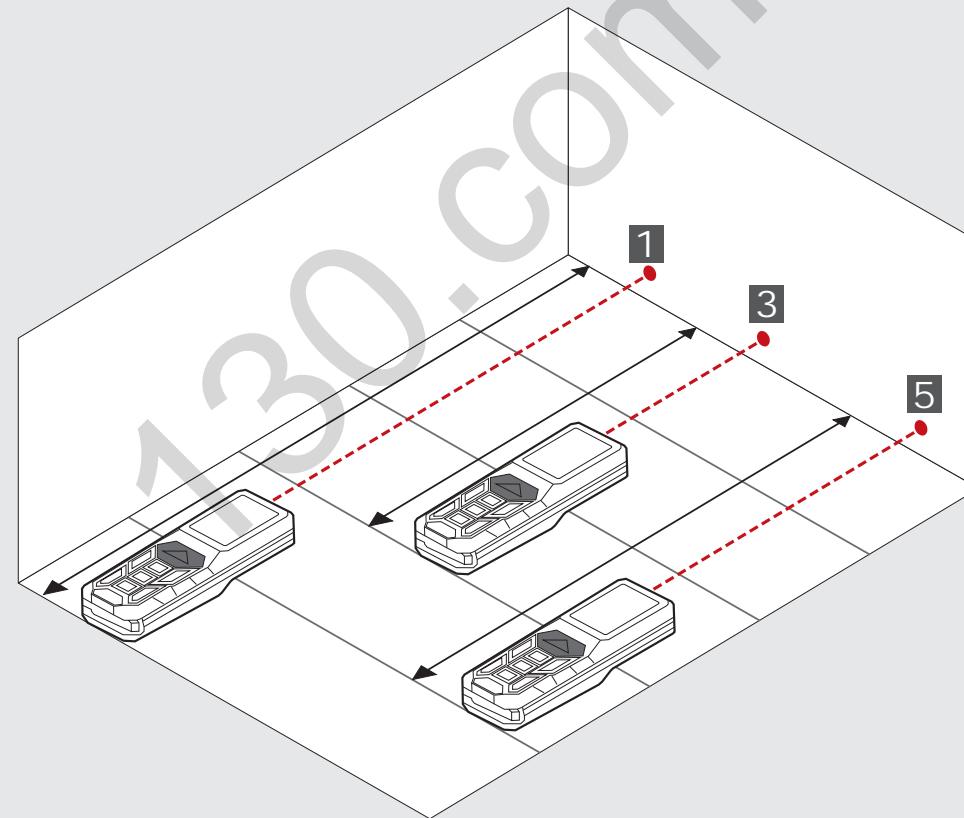
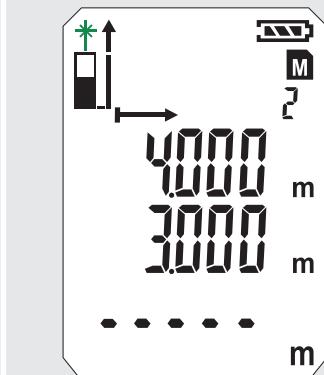
3



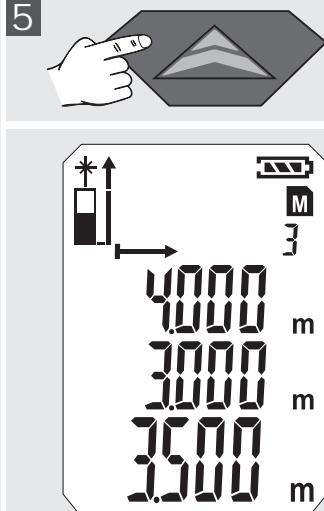
4



4



5

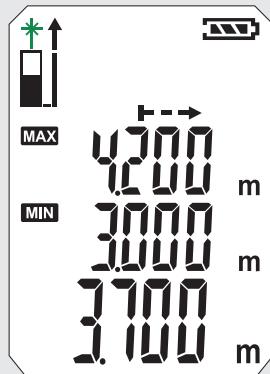
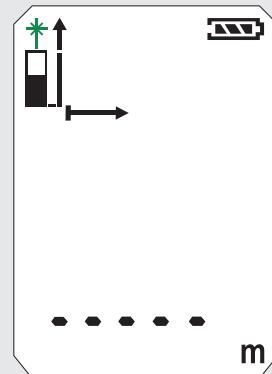


PERMANENT / MINIMUM-MAXIMUM MEASURING

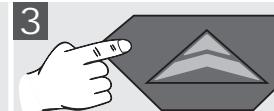
0



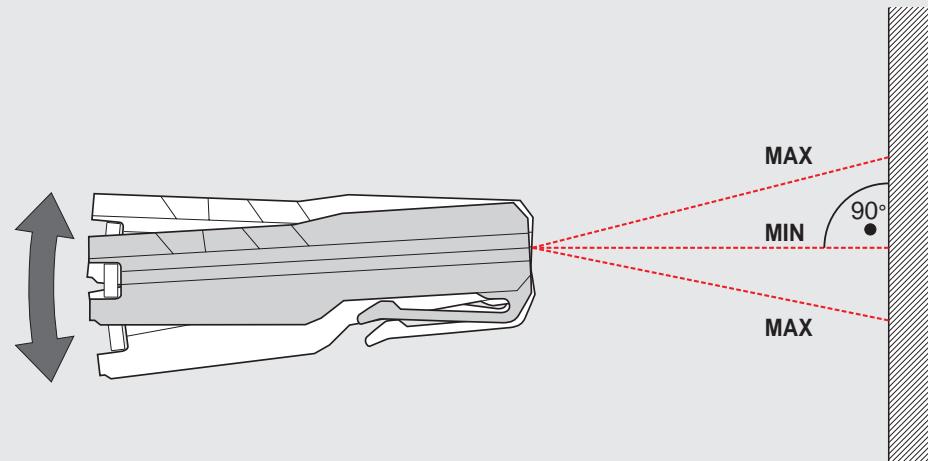
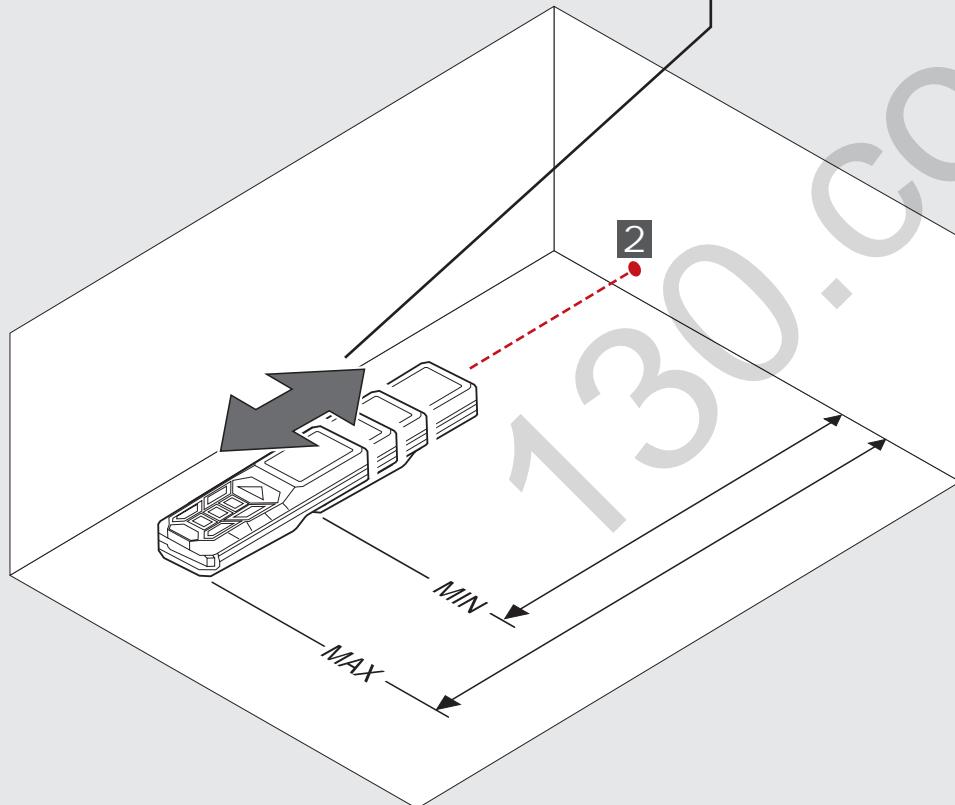
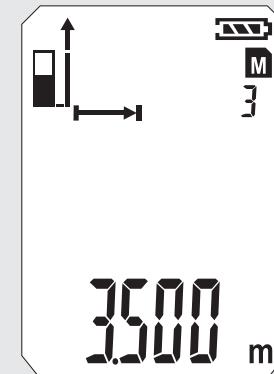
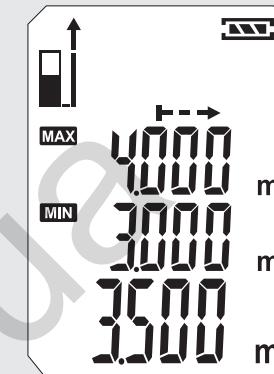
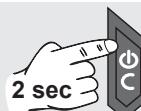
2



3

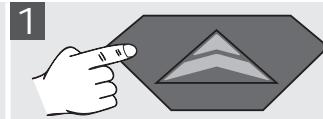


4

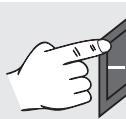


ADD / SUBTRACT MEASURING

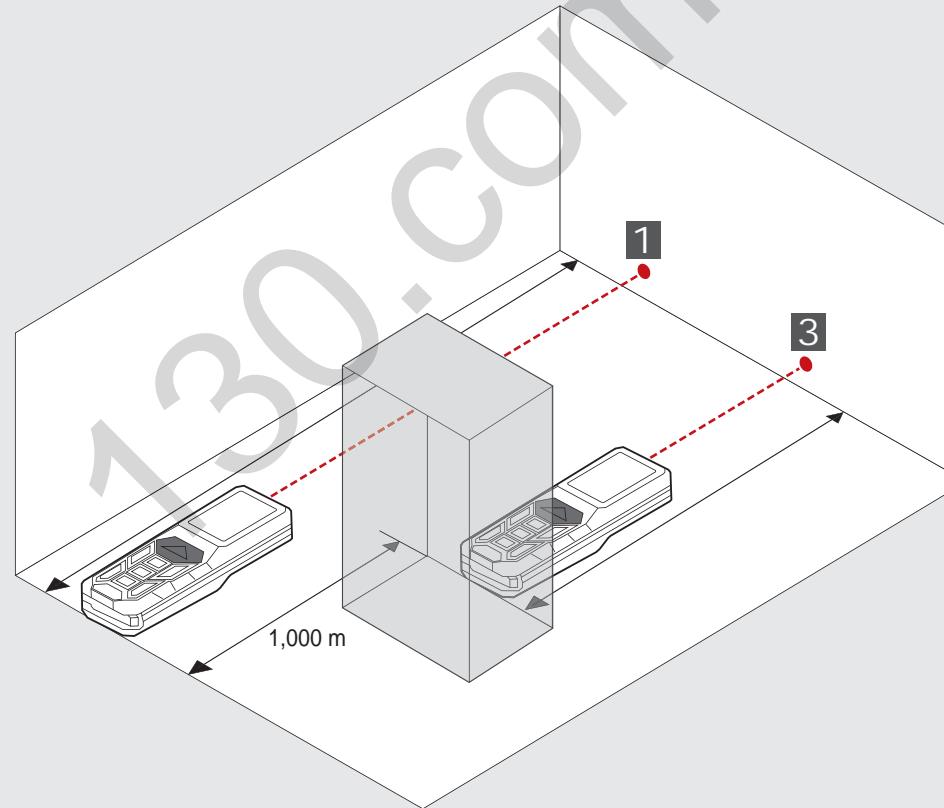
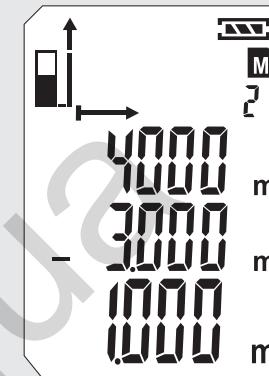
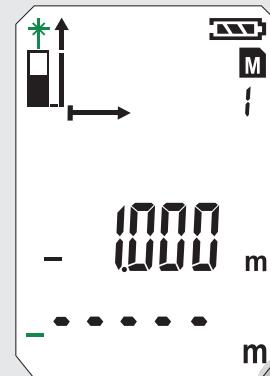
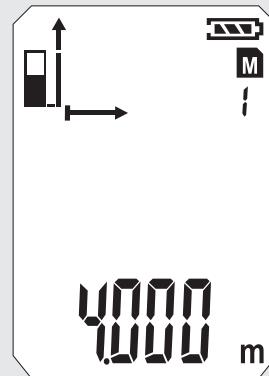
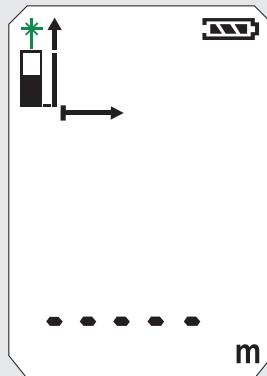
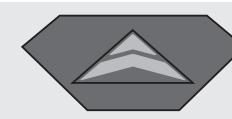
0



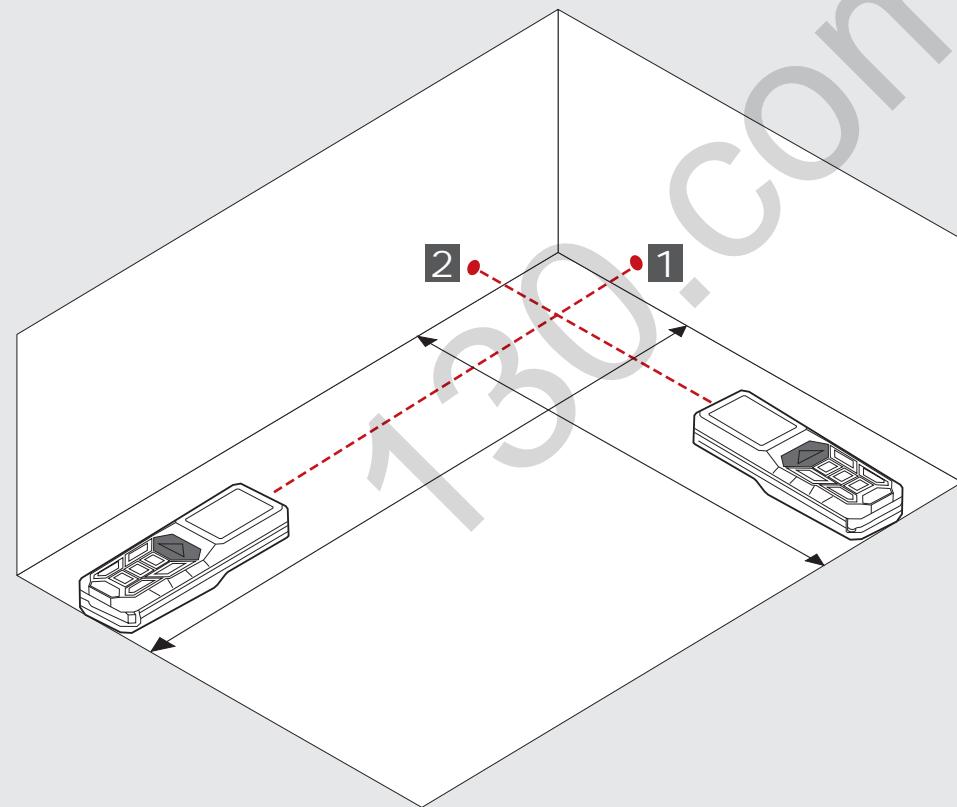
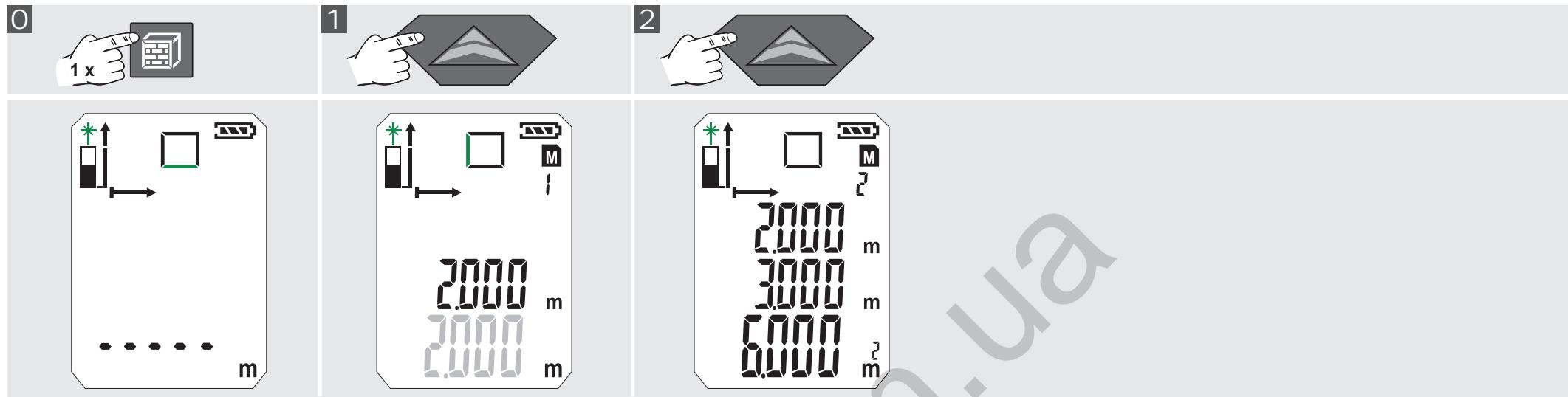
2



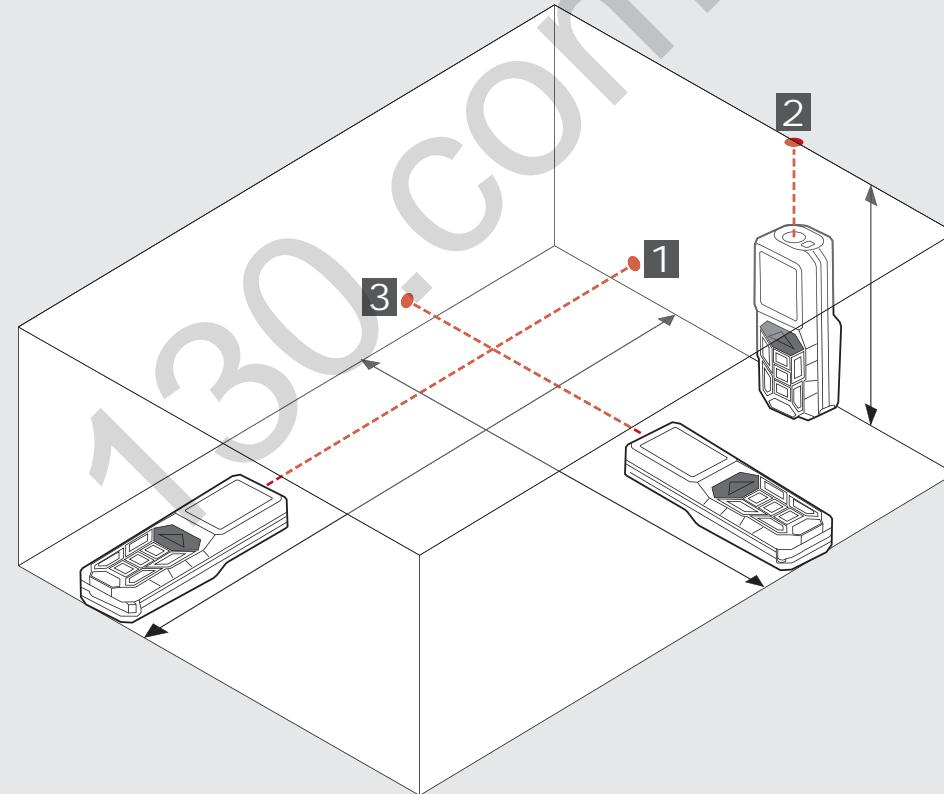
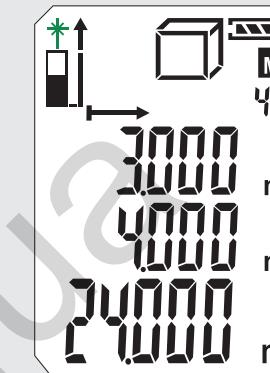
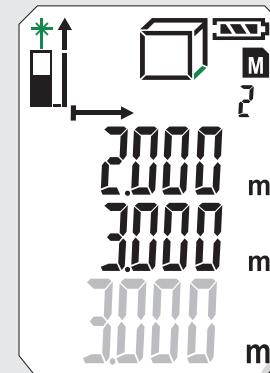
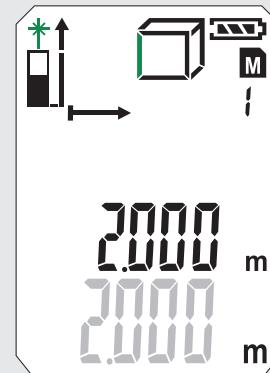
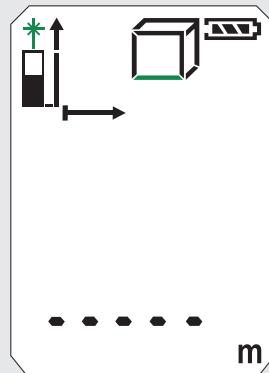
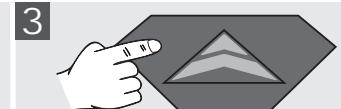
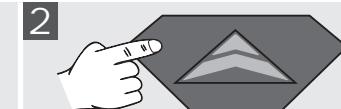
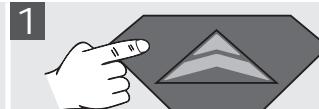
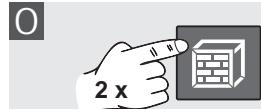
3



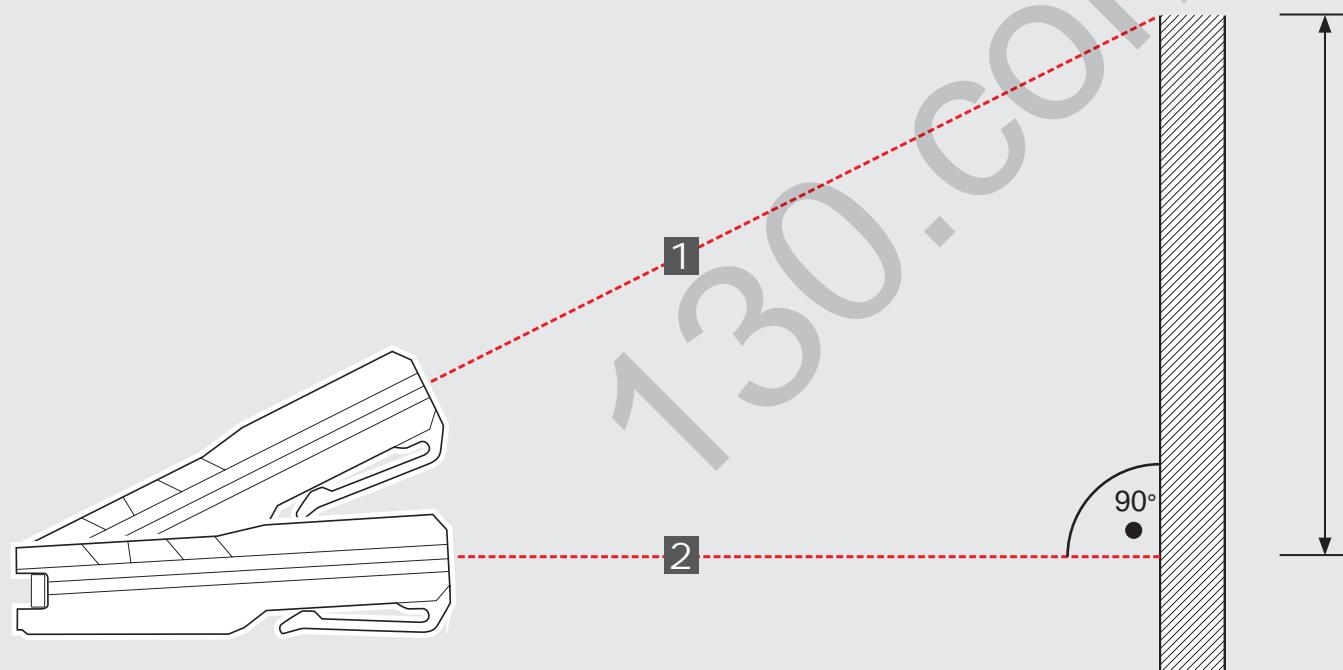
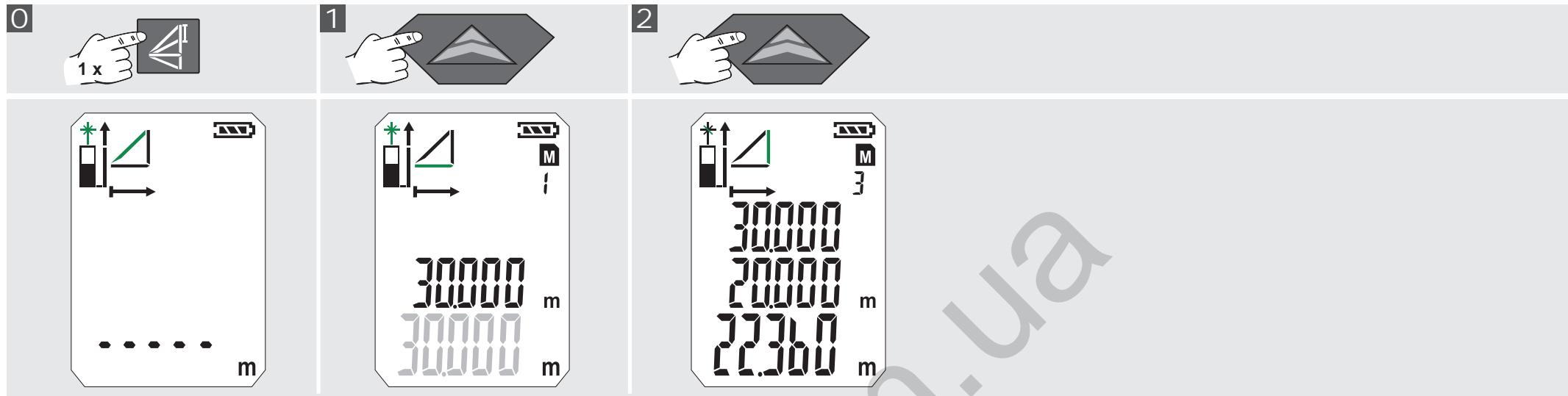
AREA MEASURING



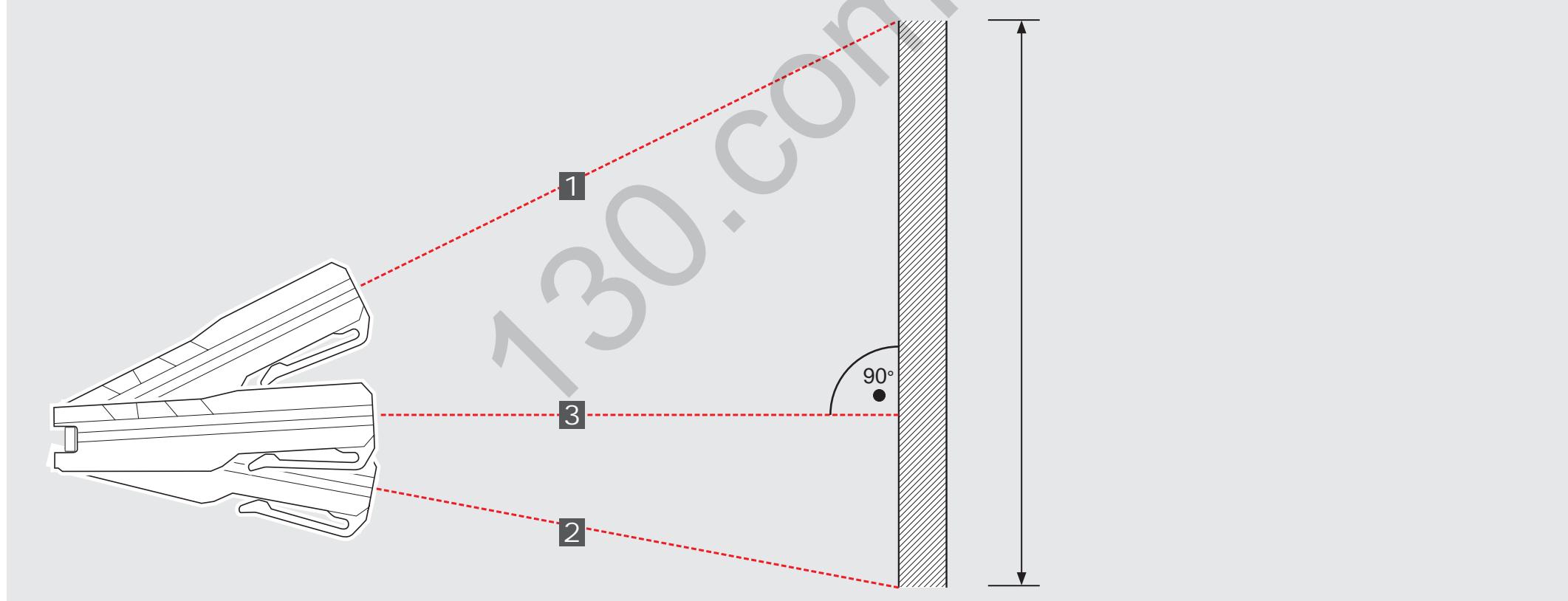
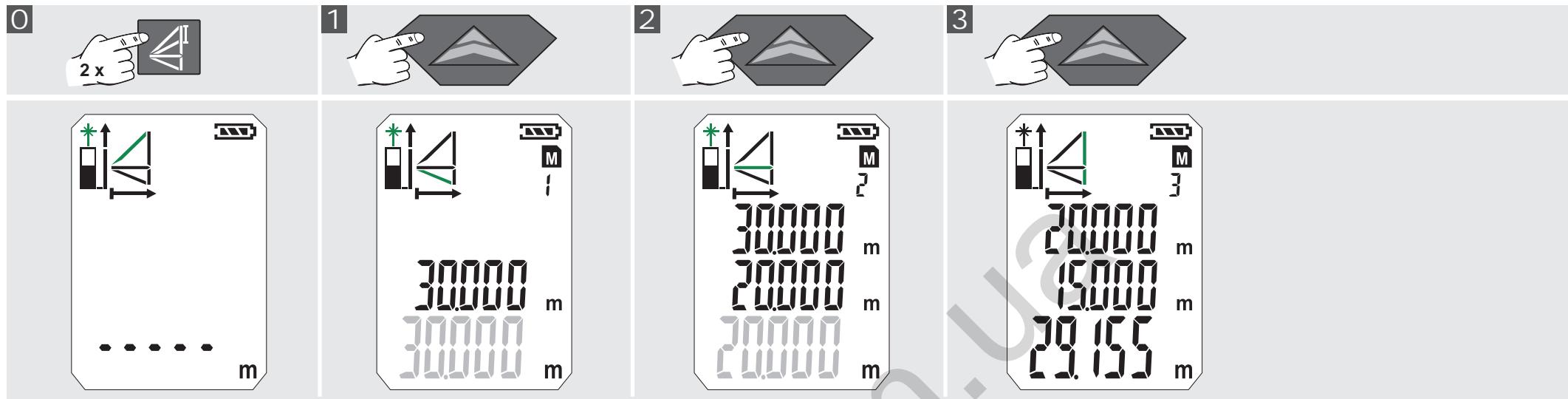
VOLUME MEASURING



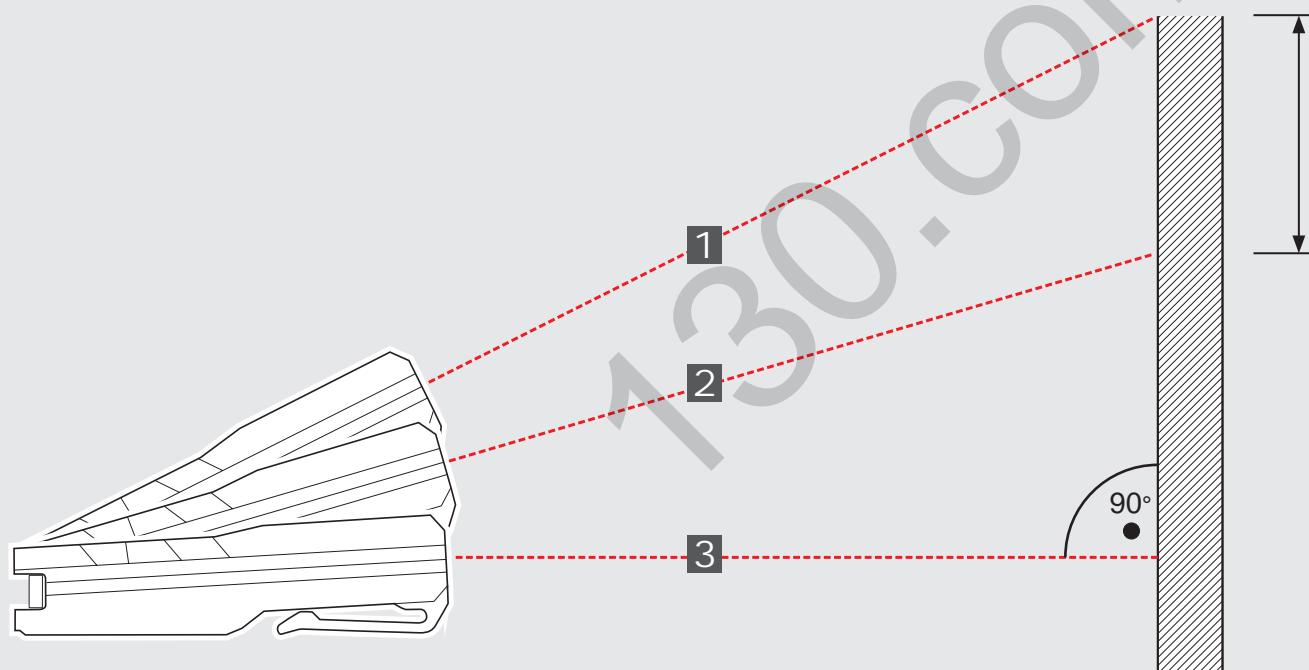
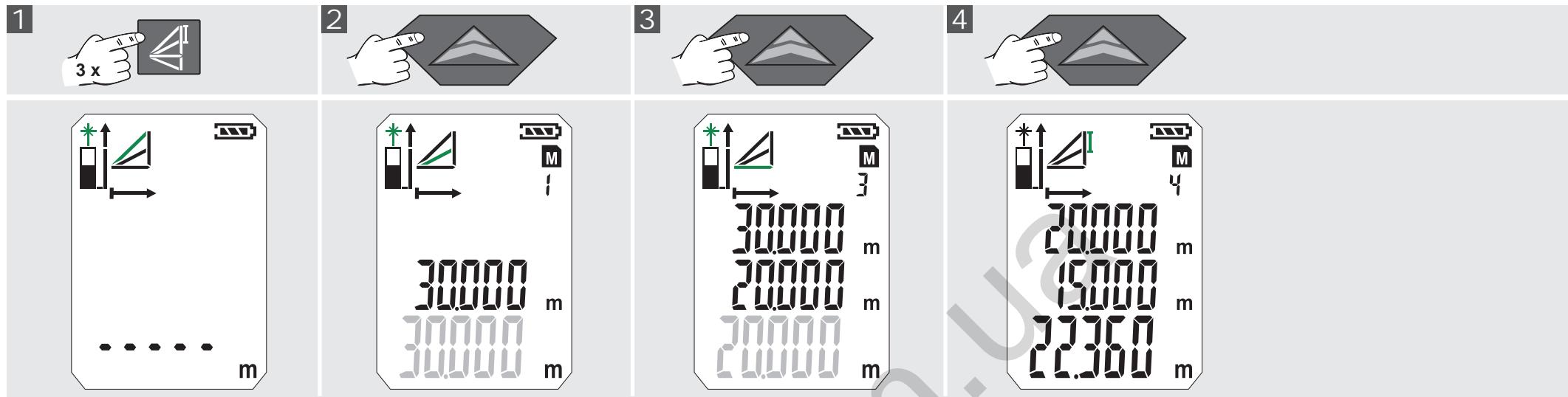
INDIRECT MEASURING (PYTHAGORAS 1)



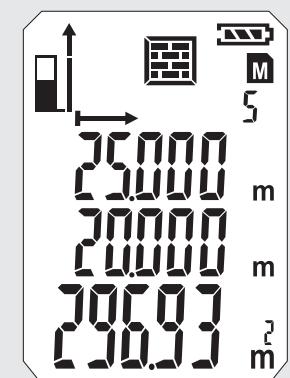
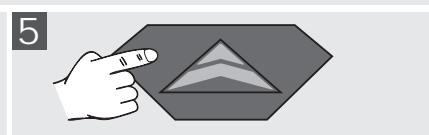
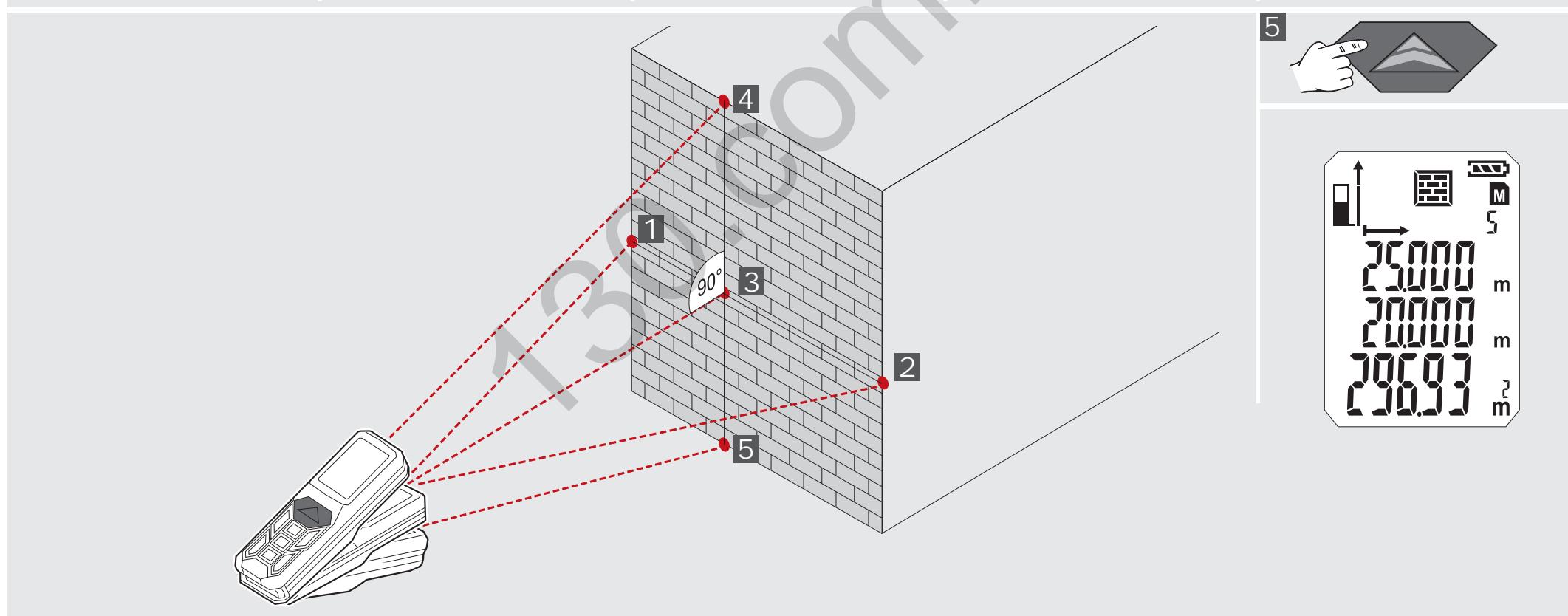
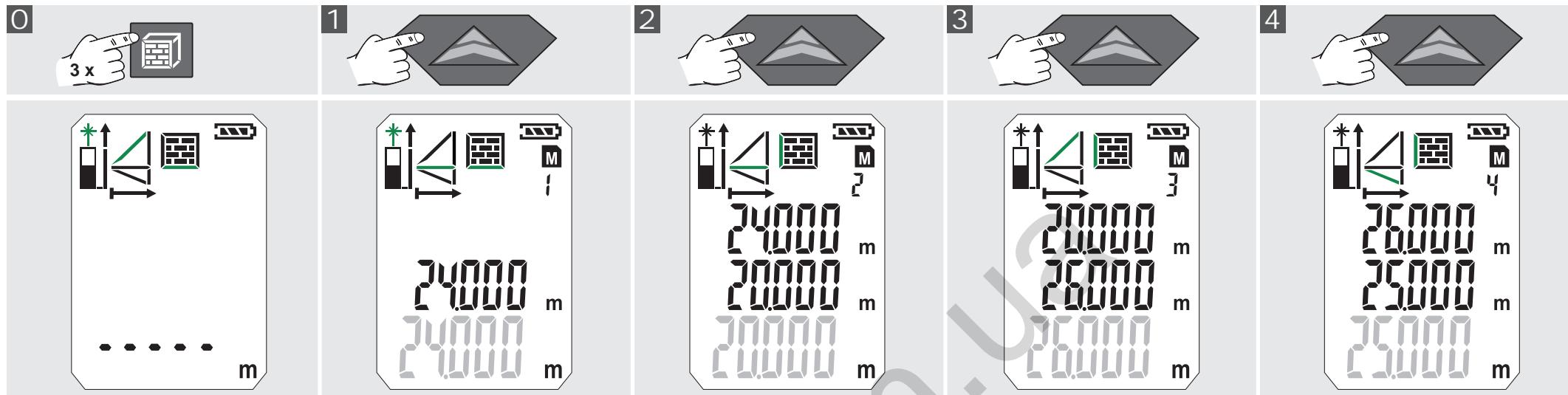
INDIRECT MEASURING (PYTHAGORAS 2)



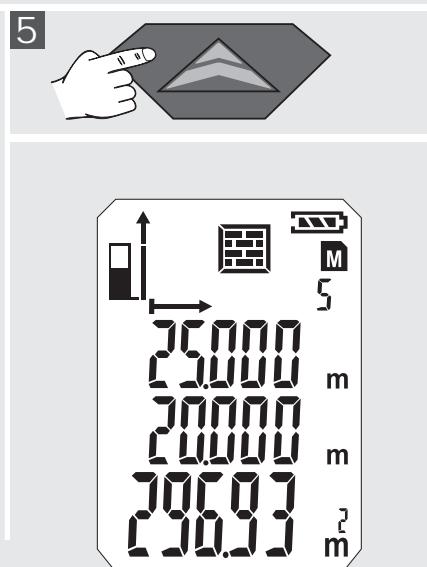
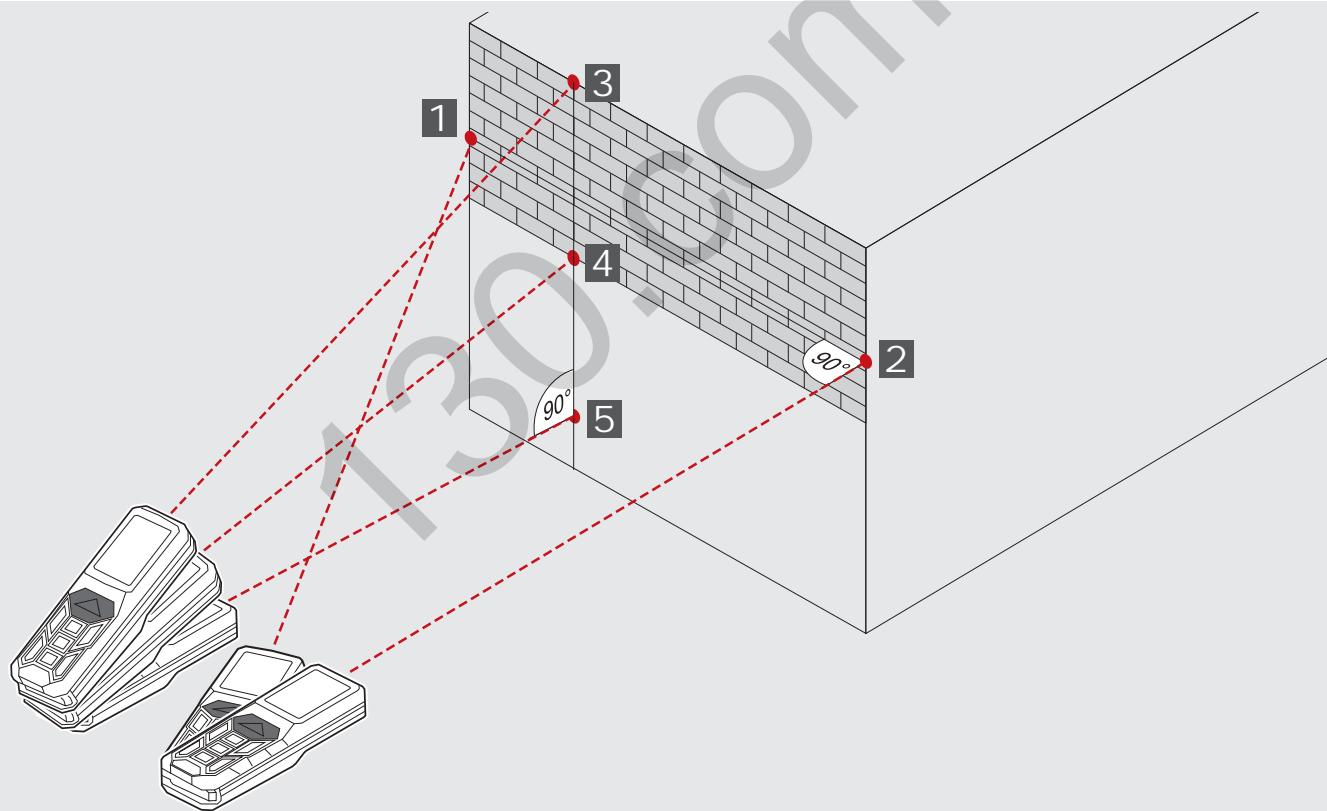
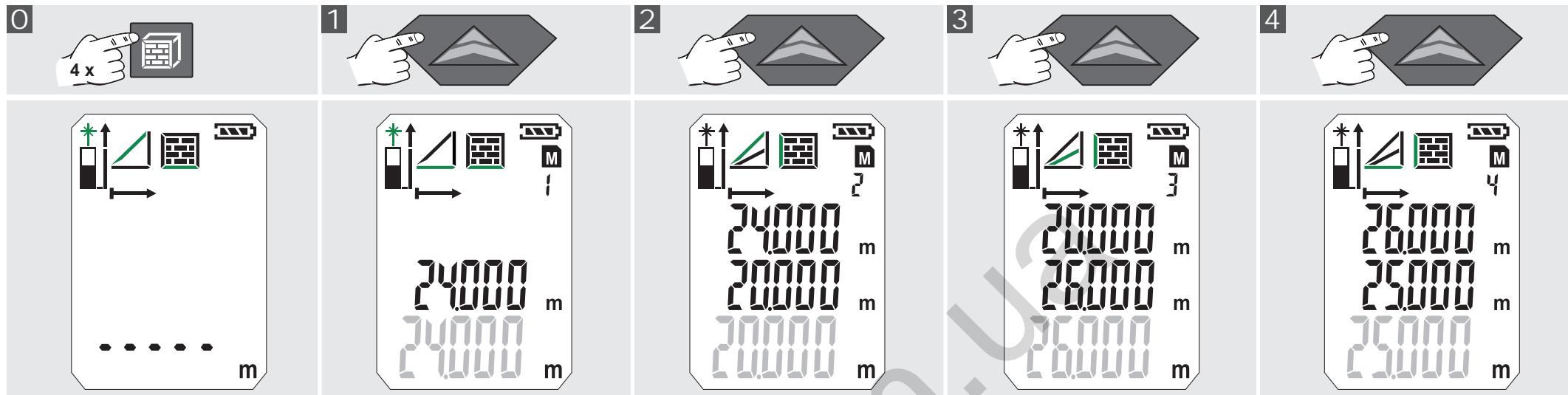
INDIRECT MEASURING (PYTHAGORAS 3)



WALL AREA MEASURING (SCENARIO 1)



WALL AREA MEASURING (SCENARIO 2)



TIMER

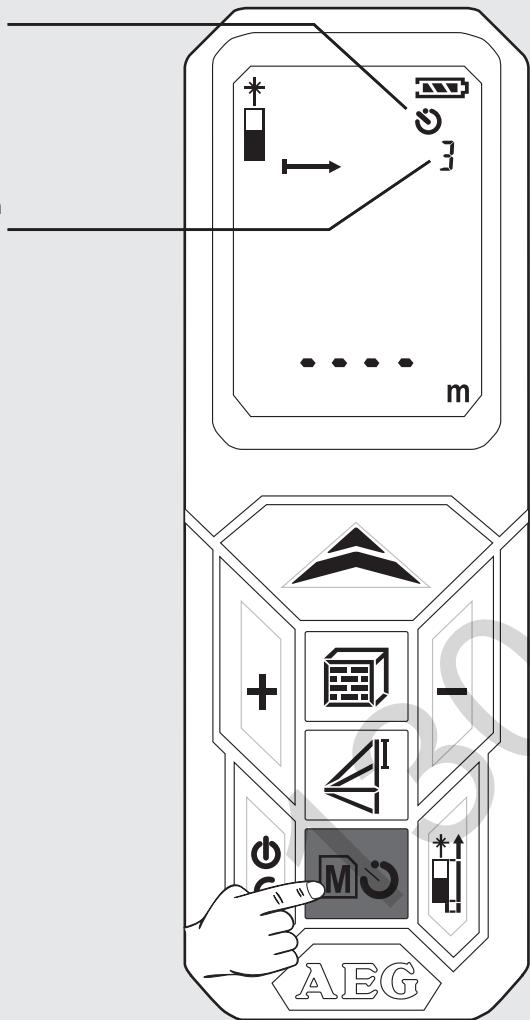
With the timer, the measurement can be start delayed. For example to position a part in the measuring beam.

Push button 

- Icon is displayed.
- Timer can be set between 3 to 15 sec by pressing the button .

Push button 

- The seconds are counted down until the measurement starts.
- At 0, the measurement starts.



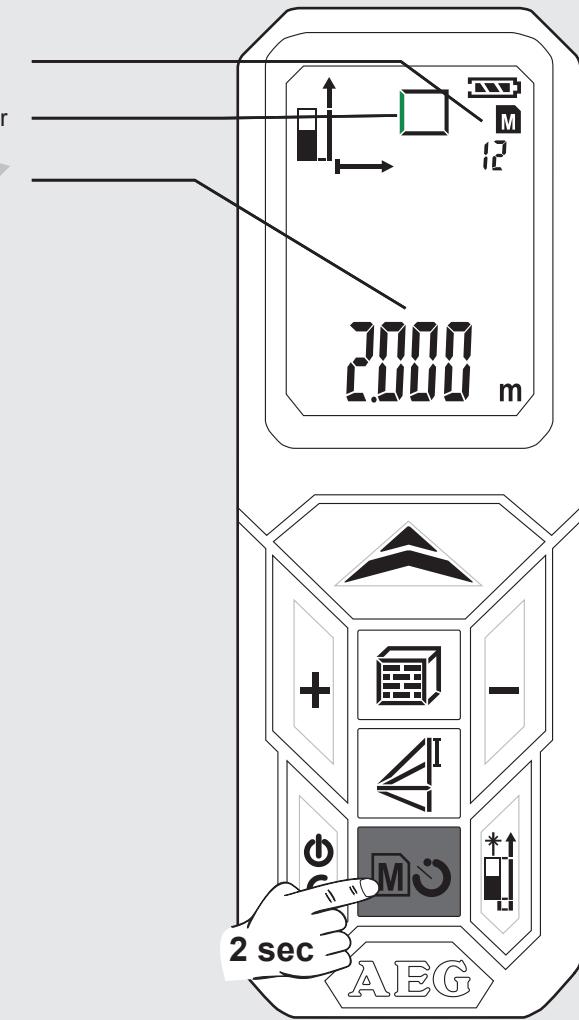
MEMORY

The measured values are stored continuously and automatically in memory.

The stored values can be retrieved by pushing the button .

Push the button  2 sec.

- Icon and memory number appears.
- associated measured parameter is shown.
- Stored value is displayed in the main line.
- Navigate with the + / - buttons



BASIC DESCRIPTION ON EXAMPLE OF AREA MEASURING (1)

1 Turn On

Push Button 
Attention! Laser on!
 Do not point it at a person!

Lasericon flashes
 (flashing green illustrated).

2 Choose Measuring Reference

Standard after turning on: Bottom
 Push 1x -> Corner Pin
 Push 2x -> Top
 Push 3x -> Bottom

Icon is displayed.

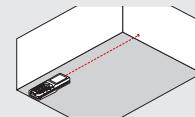
3 Choose Function

After switching on the device is
 always on single distance
 measurement
 Push 1x - Area Measurement.

- Icon appears.
 Measured parameter flashes
 (flashing green illustrated)

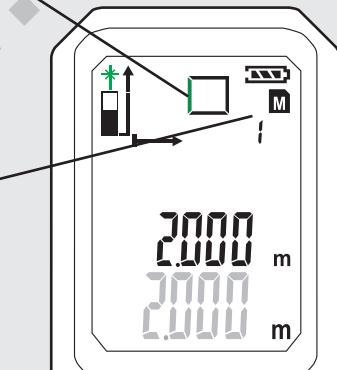
4 Measure length

Level the device
 and push
 button 



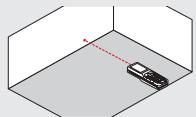
- Measured value appears briefly in
 the main line.
 - Measured value jumps by 1 sec in
 line above.

Measured value is stored in
 memory at consecutive numbers.
 Second measured parameter
 flashes.
 Device ready for measurement of
 the second value.



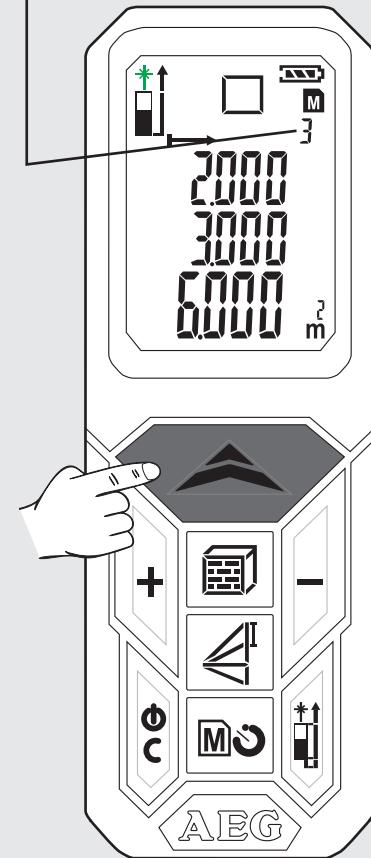
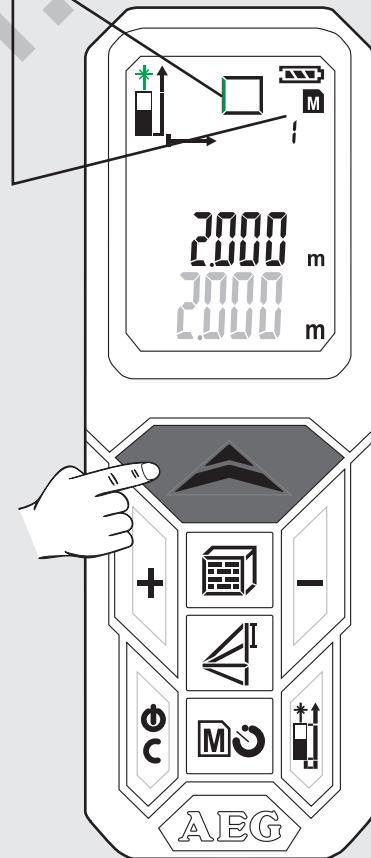
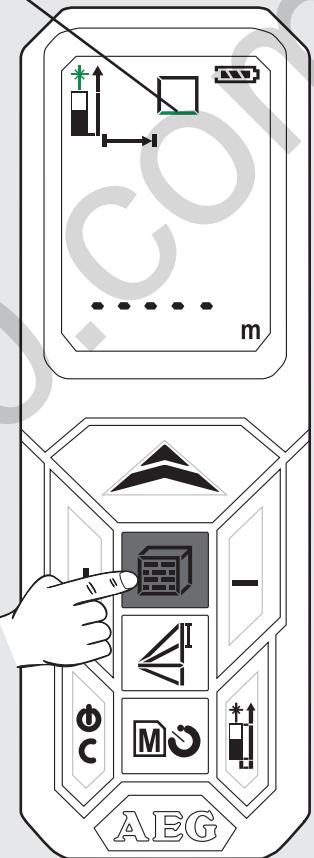
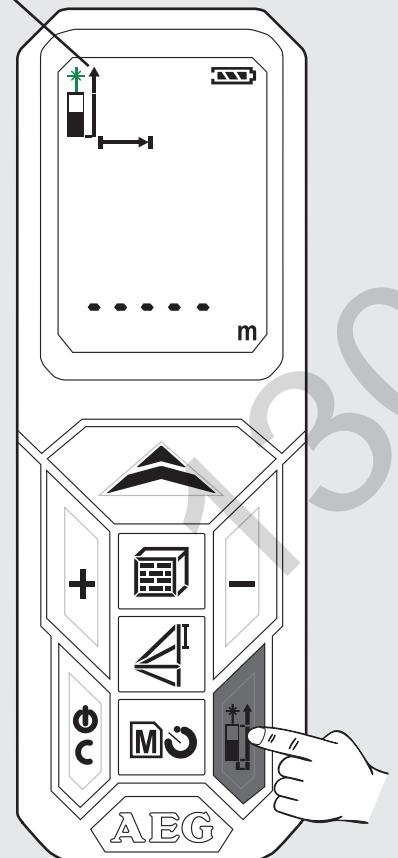
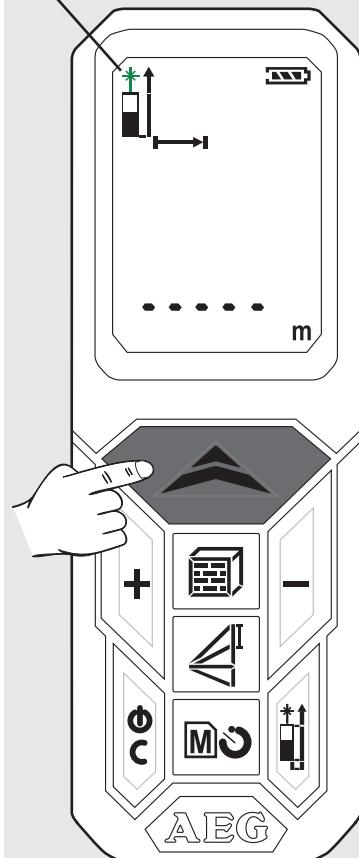
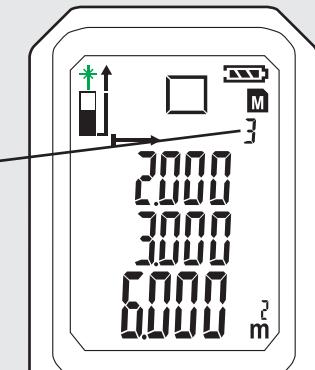
5 Measure width

Level the device
 and push
 button 



- Measured value appears briefly in
 the base line.
 - Measured value jumps by 1 sec in
 line above.

Measured value is stored in
 memory at consecutive numbers.
 - Result is displayed in the main line
 and stored in memory at
 consecutive numbers.



BASIC DESCRIPTION ON EXAMPLE OF AREA MEASURING (2)

6 View stored values

Push button  2 sec.

Push + or push -

7 Exit memory

Push button .

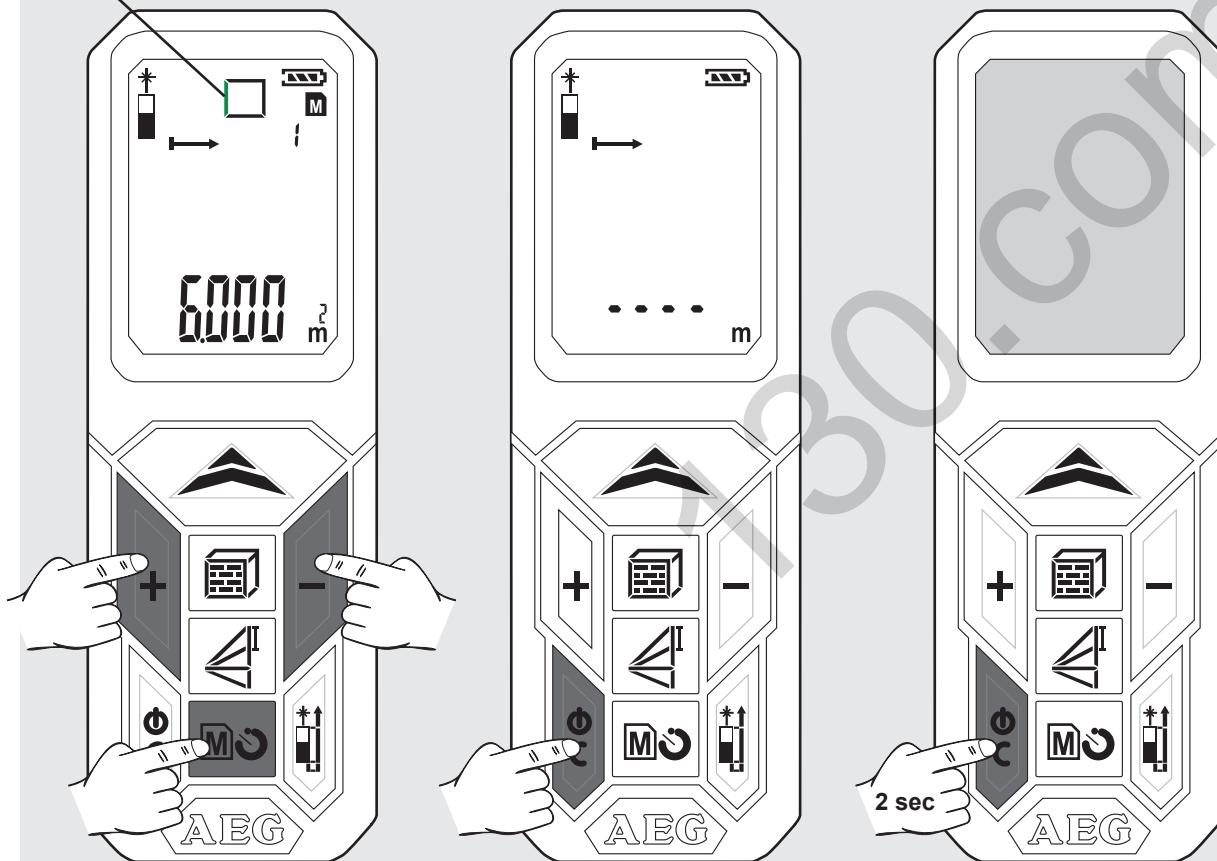
8 Switch off

Push button  2 sec
(Memory must be exited before)

- Stored values appears in the main line.

Associated icon appears and measured parameter flashes (flashing green illustrated)

- Device switches off.
- If no button is pressed, the device switches off automatically after 3 minutes.



INHALT

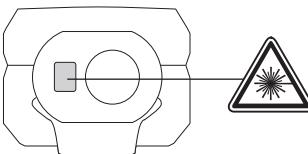
Wichtige Sicherheitshinweise	1
Technische Daten	2
Bestimmungsgemäße Verwendung	2
Fehlercode Tabelle	2
Übersicht	3
Batterie wechseln	4
Eckenstift	4
Gürtelhalter	4
Funktionstaste, Pythagoras, Messebene	5
Einfache Längenmessung	6
Kontinuierliche Messung / Minimum-Maximum Messung	7
Additions- / Subtraktionsmessung	8
Flächenmessung	9
Volumenmessung	10
Indirekte Messung (Pythagoras 1)	11
Indirekte Messung (Pythagoras 2)	12
Indirekte Messung (Pythagoras 3)	13
Wandflächenmessung (Szenario 1)	14
Wandflächenmessung (Szenario 2)	15
Timer	16
Speicher	16
Grundlegende Funktionsweise am Beispiel einer Flächenmessung (1)	17
Grundlegende Funktionsweise am Beispiel einer Flächenmessung (2)	18

WICHTIGE SICHERHEITSHINWEISE



Nehmen Sie das Produkt erst in Gebrauch, wenn Sie die Sicherheitshinweise und die Gebrauchsanweisung auf der beiliegenden CD gelesen haben.

Laserklassifizierung



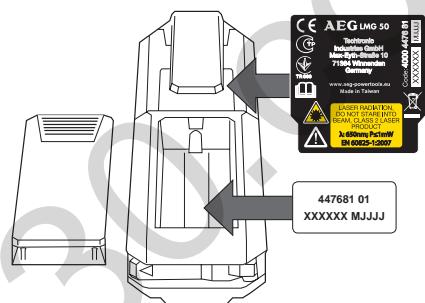
WARNUNG:

Das Produkt entspricht der Laserklasse 2 gemäss IEC 60825-1:2007.



Beschriftung

Überkleben Sie den englischen Text auf dem Leistungsschild vor der ersten Inbetriebnahme mit dem mitgelieferten Aufkleber in Ihrer Landessprache.



Warnung:

Vermeiden Sie direkten Blickkontakt. Der Laserstrahl kann die Augen verblassen und zu einer kurzzeitigen Blendung führen.

Nicht in den Laserstrahl blicken und Strahl nicht unnötigerweise auf andere Personen richten.

Keine anderen Personen blenden.

Warnung:

Das Laser-Gerät nicht in der Nähe von Kindern betreiben oder Kindern erlauben, das Laser-Gerät zu benutzen.

Achtung! Eine reflektierende Oberfläche könnte den Laserstrahl zurück an den Bediener oder andere Personen reflektieren.

Halten Sie einen entsprechenden Sicherheitsabstand zu den beweglichen Teilen.

Regelmässige Kontrollmessungen durchführen, insbesondere vor, während und nach wichtigen Messaufgaben.

Vorsicht vor fehlerhaften Messungen beim Verwenden eines defekten Produkts, nach einem Sturz oder sonstigen unzulässigen Anwendungen bzw. Veränderungen am Produkt.

Warnung: Die Verwendung von Steuerelementen, Einstellungen oder die Durchführung von anderen als den im Handbuch festgelegten Verfahren kann zu gefährlicher Strahlenbelastung führen.

Das Lasermessgerät hat einen begrenzten Einsatzbereich. (Siehe Abschnitt "Technische Daten"). Versuche, außerhalb des maximalen und minimalen Bereichs zu messen, verursachen Ungenauigkeiten. Der Einsatz bei widrigen Bedingungen, wie zu heiß, zu kalt, sehr hellem Sonnenlicht, Regen, Schnee, Nebel oder anderen sicht einschränkenden Bedingungen, kann zu ungenauen Messungen führen.

Wenn das Lasermessgerät von einer warmen Umgebung in eine kalte Umgebung gebracht wird (oder umgekehrt), warten Sie, bis sich das Gerät der neuen Umgebungstemperatur angepasst hat.

Das Lasermessgerät immer innerhalb von Räumen aufbewahren, das Gerät vor Erschütterung, Vibrationen oder extremen Temperaturen schützen.

Das Lasermessgerät vor Staub, Nässe und hoher Luftfeuchtigkeit schützen. Dies kann innere Bauteile zerstören oder die Genauigkeit beeinflussen.

Verwenden Sie keine aggressiven Reinigungsmittel oder Lösungsmittel. Nur mit einem sauberen, weichen Tuch reinigen.

Vermeiden Sie starke Schläge auf das oder den Fall des Lasermessgeräts. Die Genauigkeit des Gerätes sollte überprüft werden, wenn es heruntergefallen ist oder anderen mechanischen Belastungen ausgesetzt war.

Erforderlichen Reparaturen an diesem Laser-Gerät dürfen nur von autorisiertem Fachpersonal durchgeführt werden.

Das Produkt darf nicht in einer explosionsgefährdeten oder aggressiven Umgebung eingesetzt werden.

Zum Aufladen der Akkus nur vom Hersteller empfohlene Ladegeräte verwenden.

Leere Batterien dürfen nicht über den Hausmüll entsorgt werden. Gebrauchte Batterien zur umweltgerechten Entsorgung gemäß nationaler oder lokaler Vorschriften an den dafür vorgesehenen Sammelstellen abgeben. Das Gerät darf nicht im Hausmüll entsorgt werden. Gerät sachgemäß entsorgen. Länderspezifische Entsorgungsvorschriften befolgen. Wenden Sie sich an die örtliche Behörde oder Ihren Händler, um Auskunft über die Entsorgung zu erhalten.



TECHNISCHE DATEN

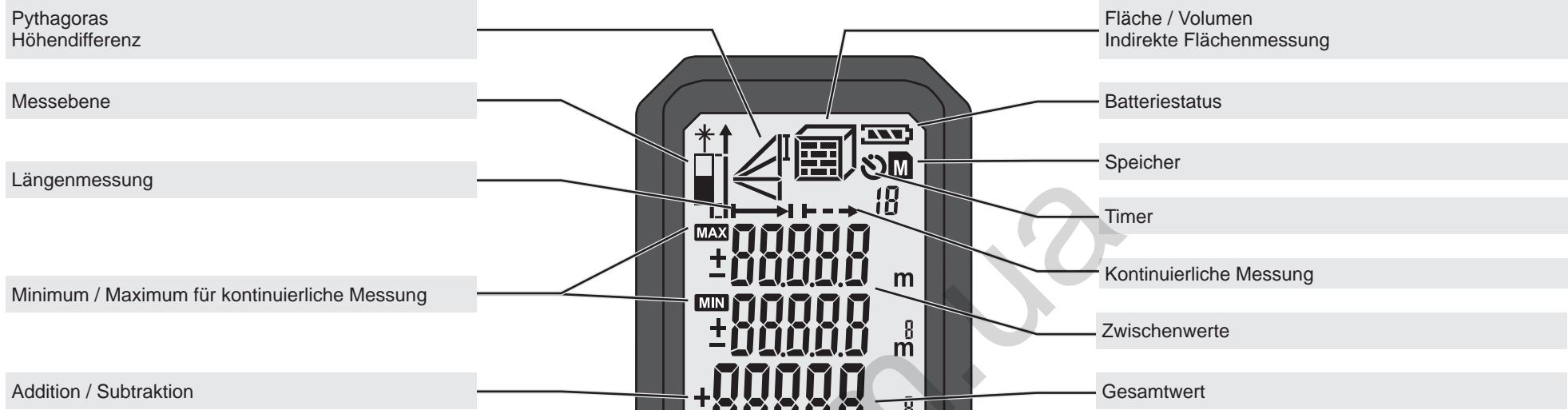
Schutzklasse	IP54 (staub- und spritzwassergeschützt)
Optik	14 mm
Brennpunkt	35 mm
Messbereich max.	50 Meter (Toleranz: 55 m)
Messbereich min.	0,05 Meter
Absolute Genauigkeit @ < 10m	± 1,5 mm (Max)
Wiederholgenauigkeit @ < 10m	± 1,5 mm (typisch max. 2σ)
Wiederholgenauigkeit @ > 10m	Anstieg ± 0,25 mm / Meter (typisch max. 2σ)
Messzeit	0,5 s
Display Typ	LCD (22,7 mm x 31 mm)
Stromversorgung	AAA 2x (Alkaline-Batterie)
Batterielebensdauer	10000 (Einzelmessung)
Laser Ausgangsleistung	0,6 mW ~ 0,95 mW (Class 2, 650nm)
Laserpunktgröße	25 x 30 mm @ 16 m (Max)
Laserstrahl Vertikalwinkel	+1 Grad
Laserstrahl Horizontalwinkel	±1 Grad
Automatische Geräteabschaltung	180 Sekunden
Automatische Laserabschaltung	30 Sekunden
Arbeitstemperaturbereich	-10°C to +50°C
Lagertemperaturbereich	-25°C to +70°C
Gewicht ohne Batterie	80 g

FEHLERCODE TABELLE

Code	Beschreibung	Lösung
Err01	Außerhalb des Messbereiches	Messung im vorgesehenen Bereich durchführen.
Err02	Reflektiertes Signal ist zu schwach	Eine bessere Oberfläche wählen.
Err03	Außerhalb des Anzeigebereiches (max. Wert: 99.999) z.B. ist das Ergebnis von Fläche oder Volumen außerhalb des Anzeigebereiches	Prüfen, ob die Werte und Schritte korrekt sind.
Err04	Fehler in der Pythagorasberechnung	Prüfen, ob die Werte und Schritte korrekt sind.
Err05	Battery schwach	Neue Batterien einsetzen.
Err06	Außerhalb des Arbeitstemperaturbereichs	Messung im vorgegebenen Arbeitstemperaturbereich durchführen.
Err07	Umgebungslicht zu hell	Zielbereich abdunkeln.

BESTIMMUNGSGEMÄSSE VERWENDUNG

Das Lasermessgerät ist geeignet zum Messen von Distanzen und Neigungen.
Dieses Gerät darf nur wie angegeben bestimmungsgemäß verwendet werden.



EIN / MESSEN

- ▶ Ein
- ▶ Messen
- ▶ Kontinuierliche Messung (2 sek drücken)
Min. / Max. Funktion

ADDITION

- ▶ Wert addieren
- ▶ Navigieren im Speicher

FLÄCHE / VOLUMEN

- ▶ Fläche (1x drücken)
- ▶ Volumen (2x drücken)
- ▶ Indirekte Flächenmessung (3x / 4x drücken)

EINSCHALTEN

- ▶ Ein
- ▶ Aus (2 sek drücken)
- ▶ Zurücksetzen

SUBTRAKTION

- ▶ Wert substrahieren
- ▶ Navigieren im Speicher

PYTHAGORAS

- ▶ Pythagoras 1 (1x drücken)
- ▶ Pythagoras 2 (2x drücken)
- ▶ Pythagoras 3 (3x drücken)

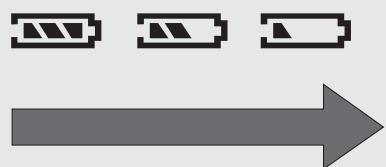
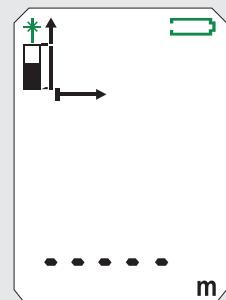
MESSEBENE WECHSELN

- ▶ Vorn
- ▶ Hinten
- ▶ Eckendreieck

SPEICHER

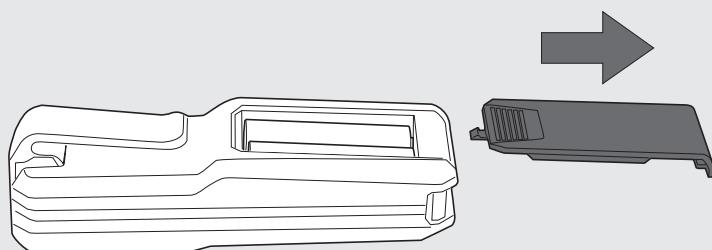
- ▶ Timer 3-15 sek (1x drücken)
- ▶ Speicher 1-20 (1x 2 sek drücken)
- ▶ Mit den +/- Tasten im Speicher navigieren

BATTERIE WECHSELN

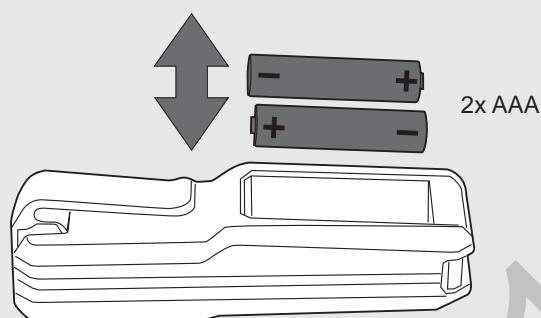


Wenn das Symbol
blinkt, Batterie
wechseln.

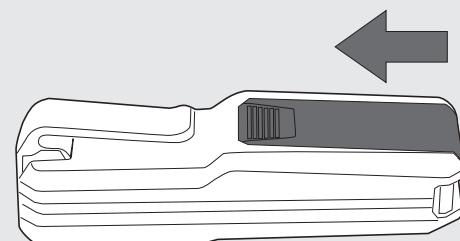
1



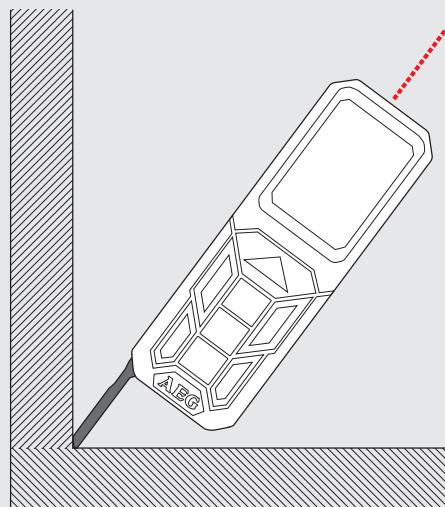
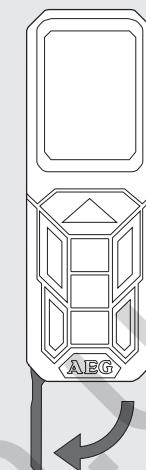
2



3

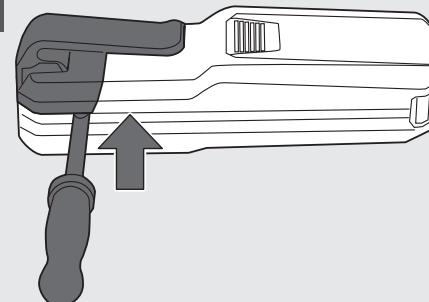


ECKENSTIFT

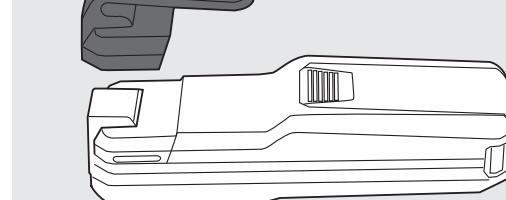
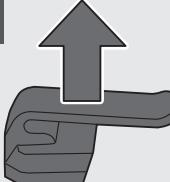


GÜRTELHALTER

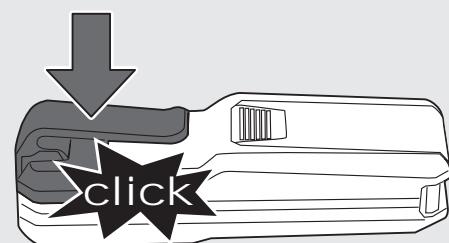
1



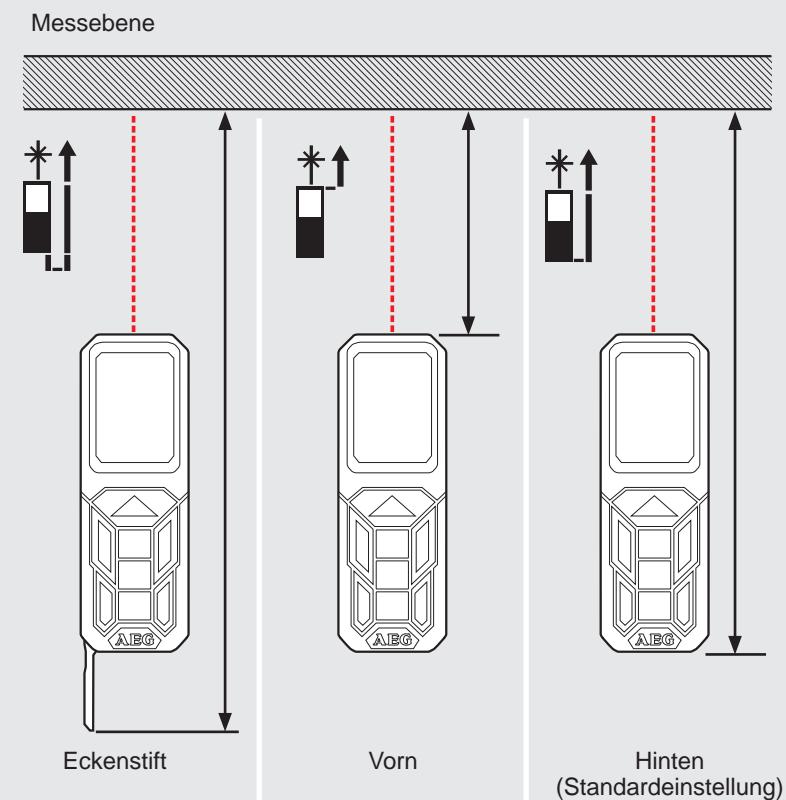
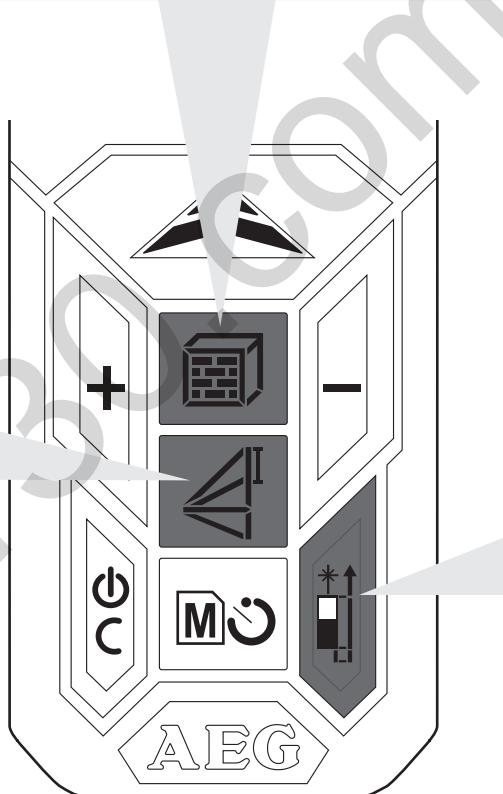
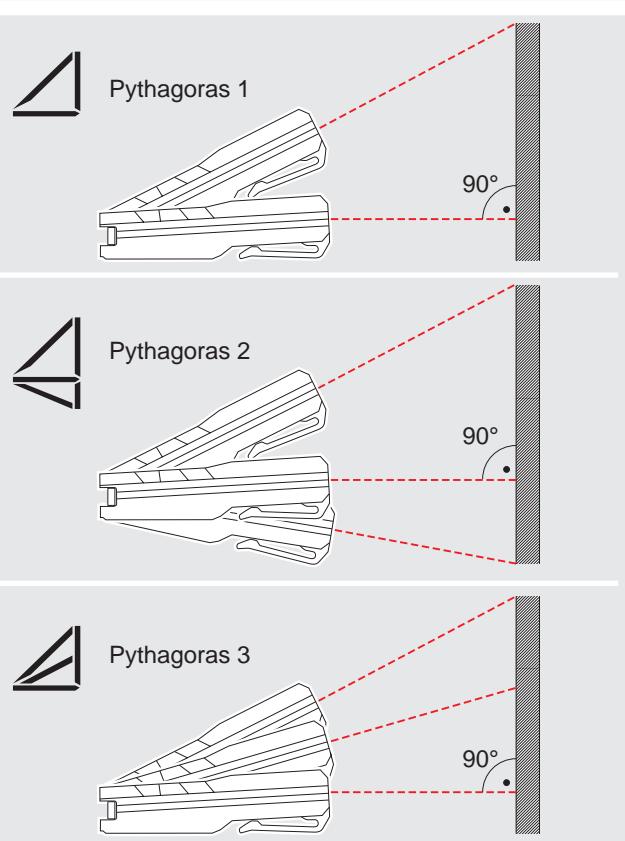
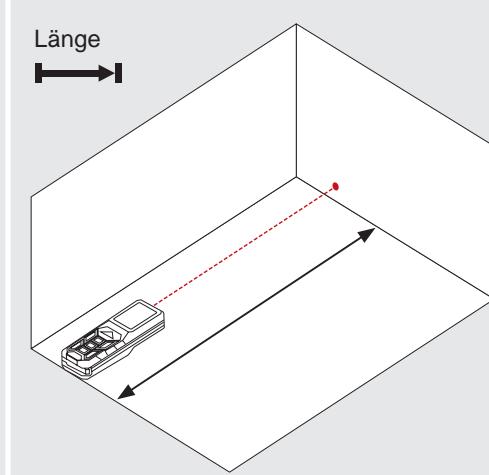
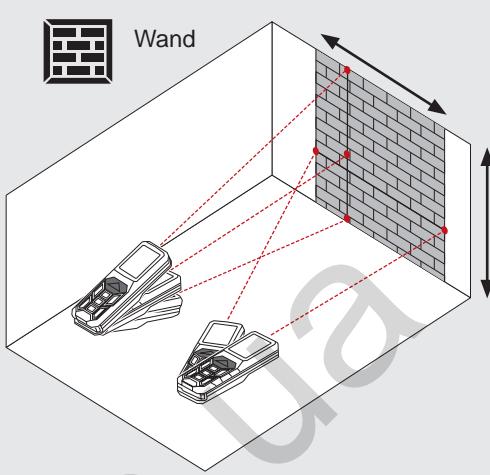
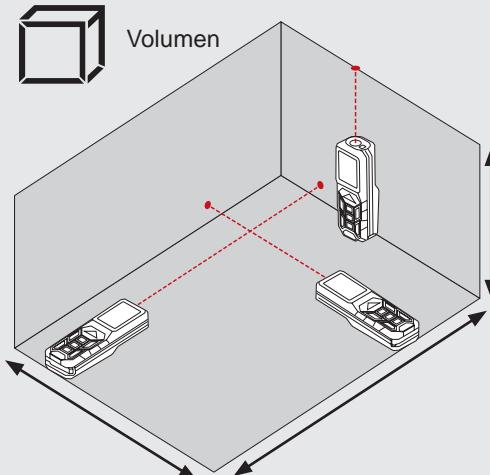
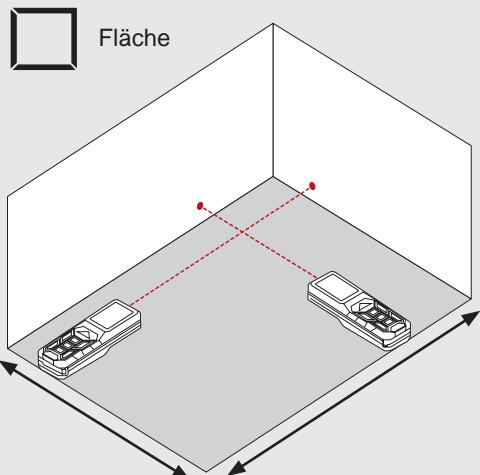
2



3

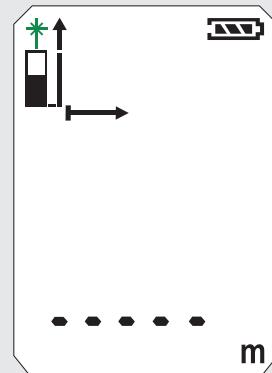
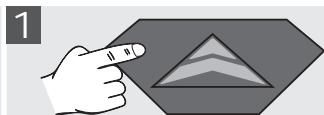


FUNKTIONSTASTE, PYTHAGORAS, MESSEBENE

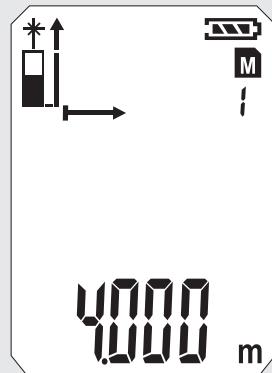
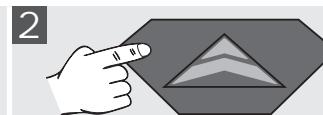


EINFACHE LÄNGENMESSUNG

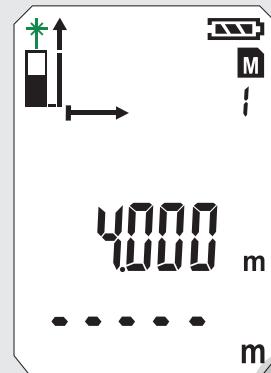
0



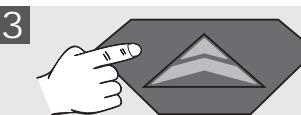
1



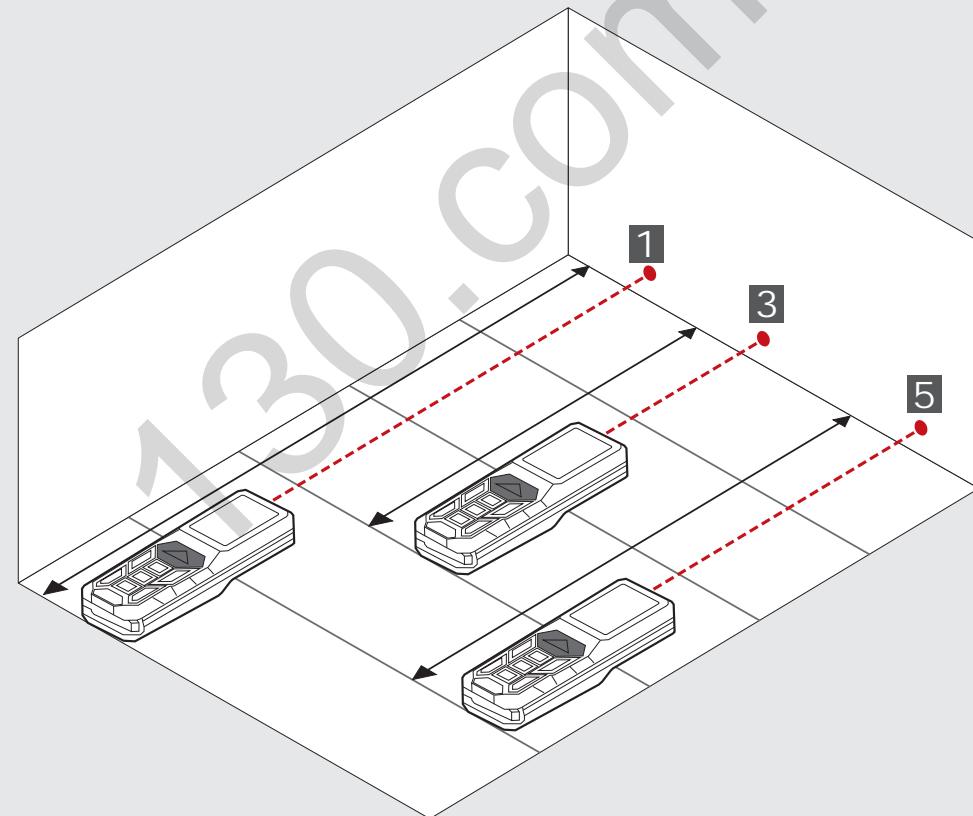
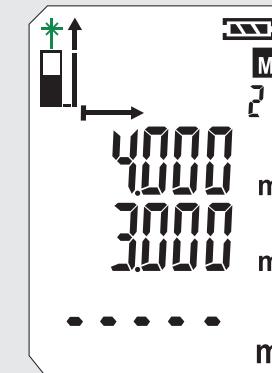
2



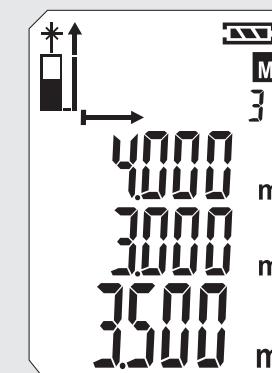
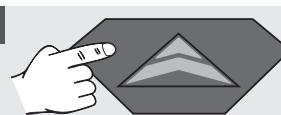
3



4



5

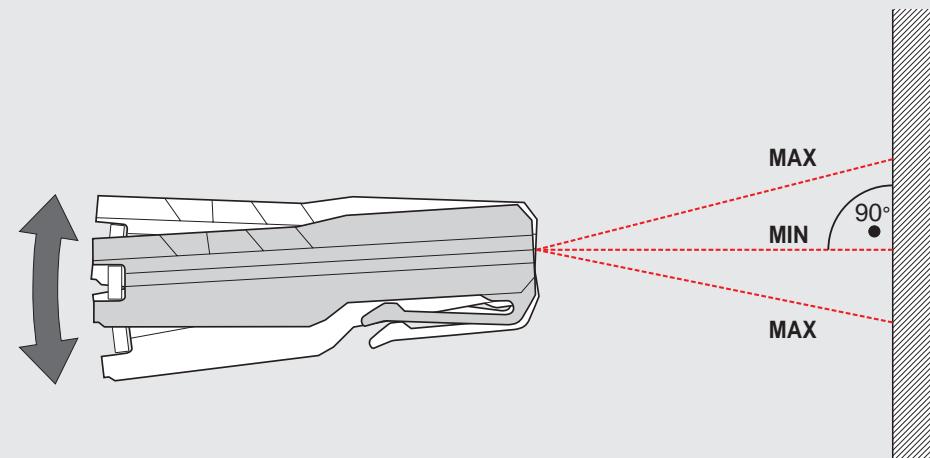
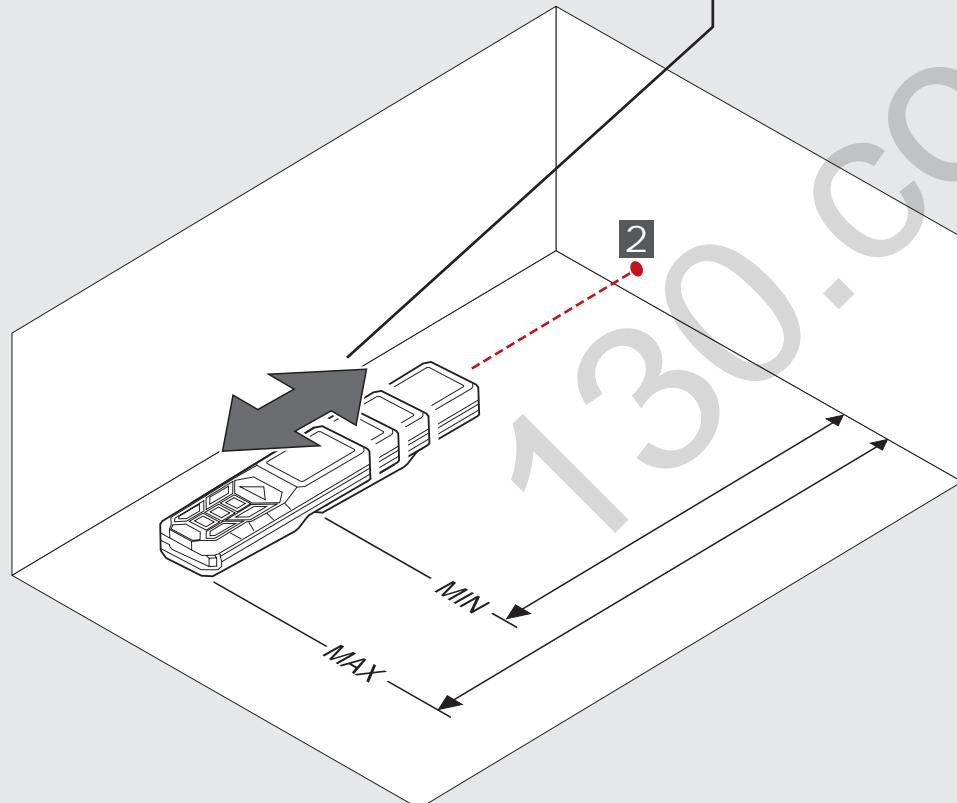
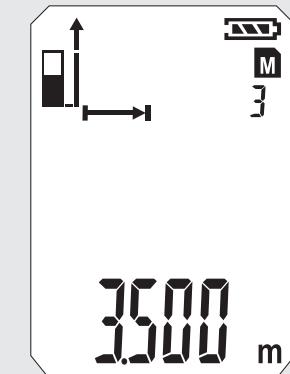
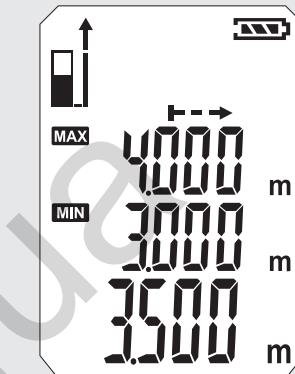
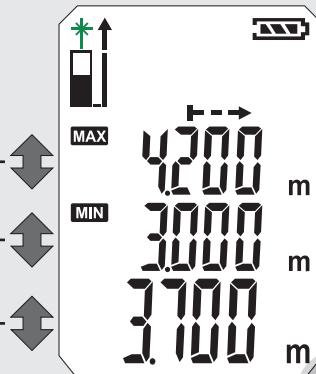
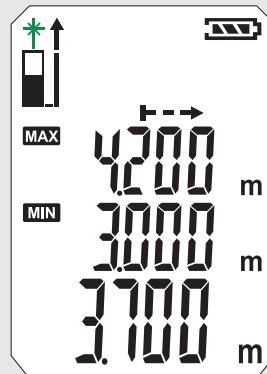
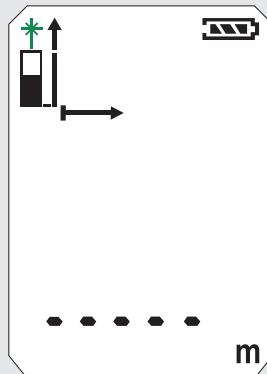


KONTINUIERLICHE MESSUNG / MINIMUM-MAXIMUM MESSUNG

0

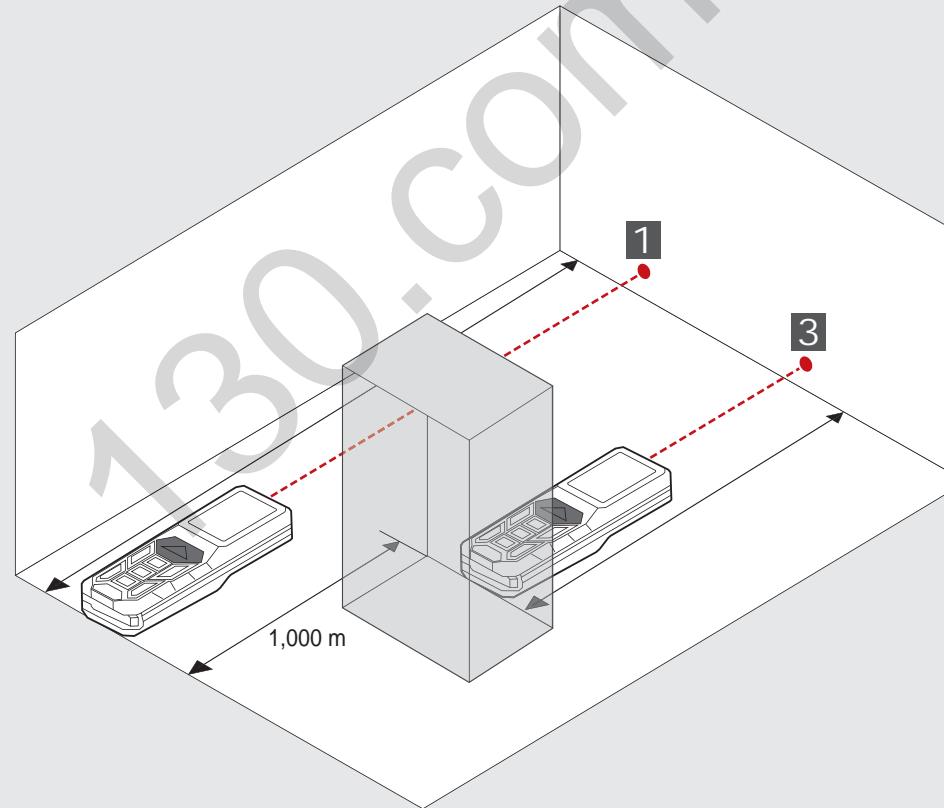
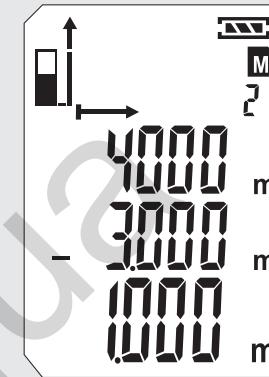
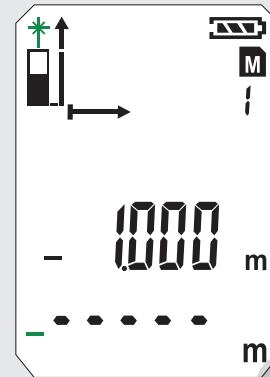
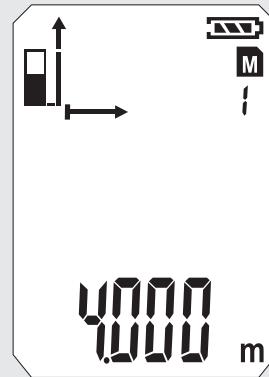
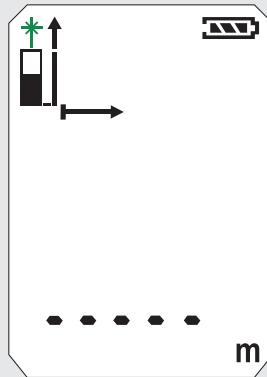
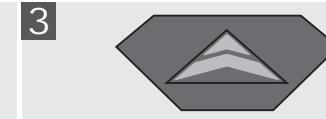
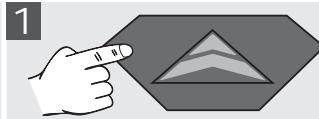


2

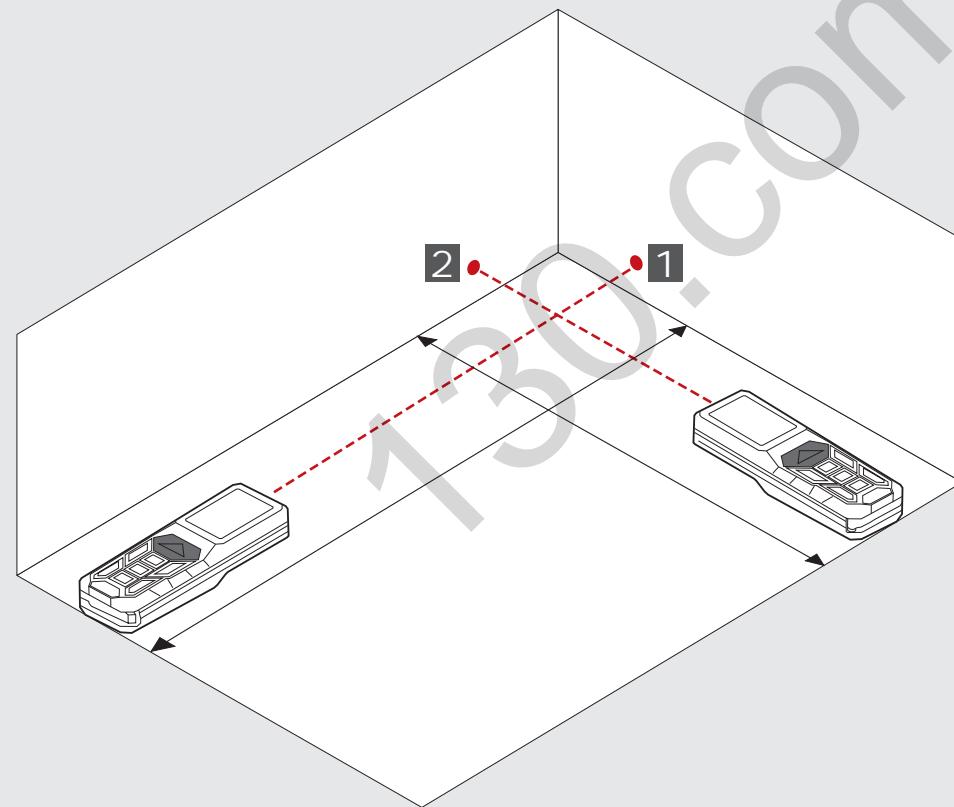
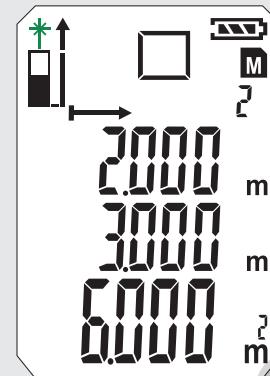
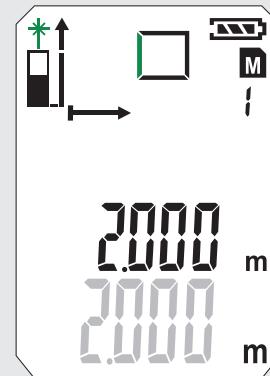
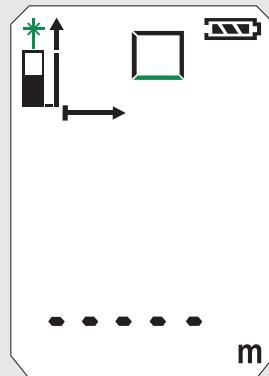
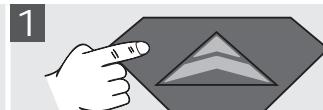
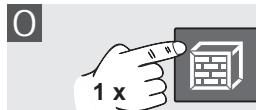


ADDITIONS- / SUBTRAKTIONSMESSUNG

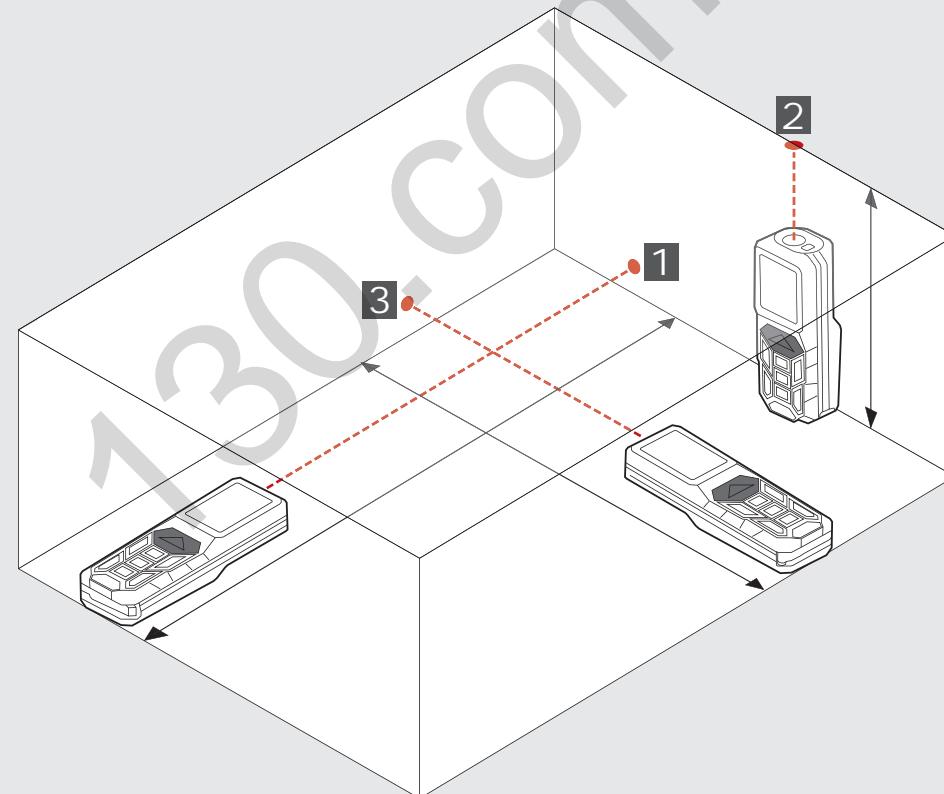
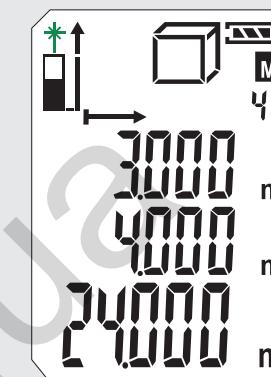
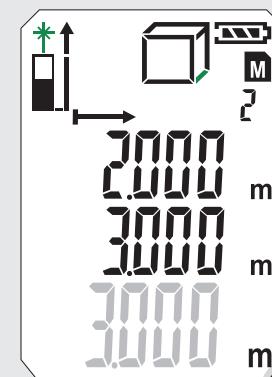
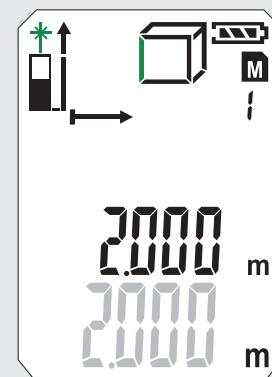
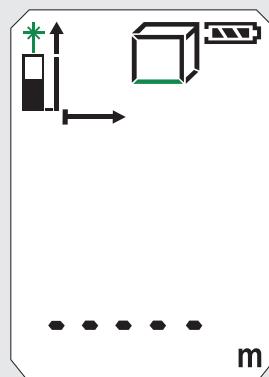
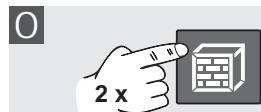
0



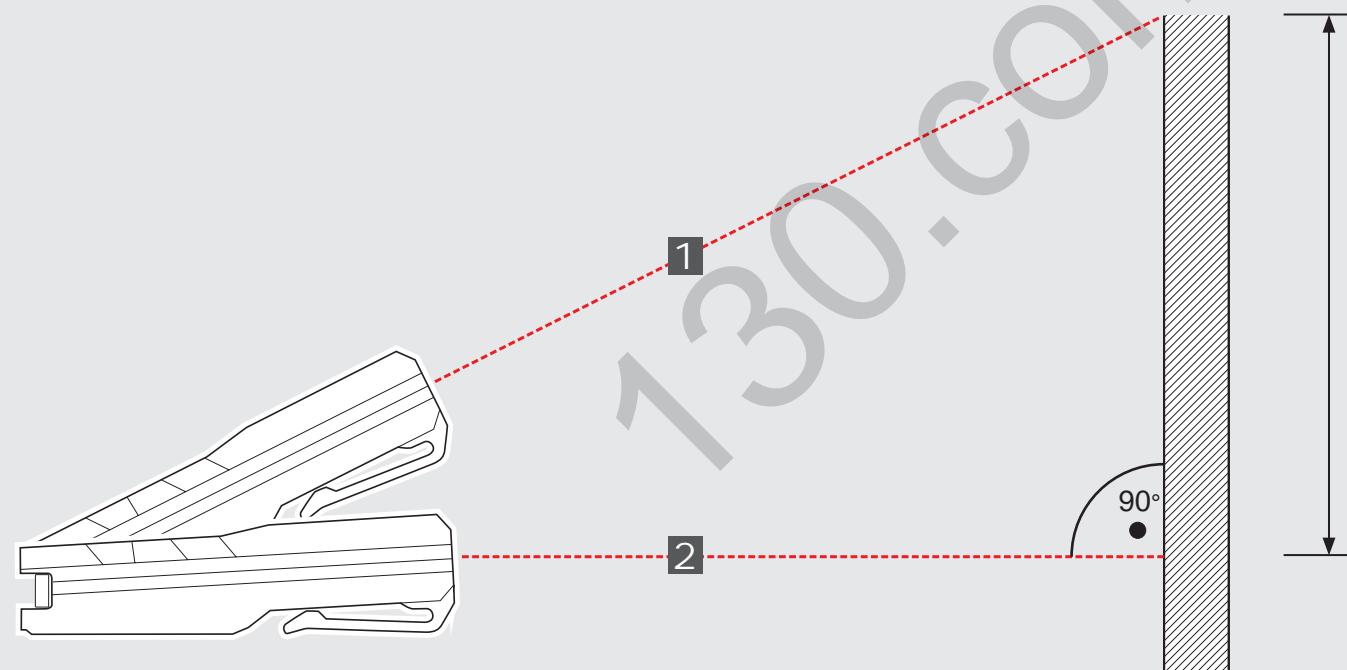
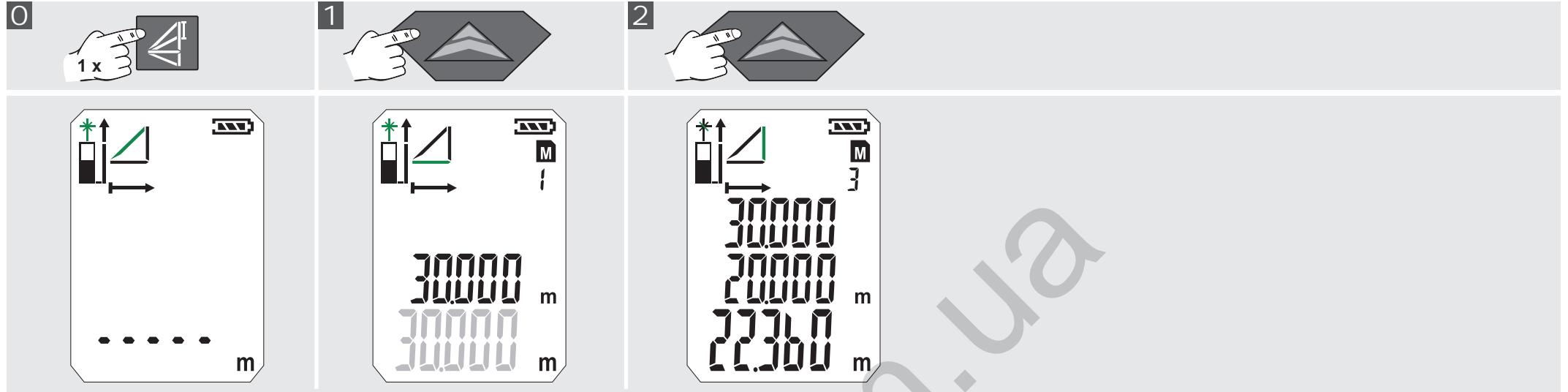
FLÄCHENMESSUNG



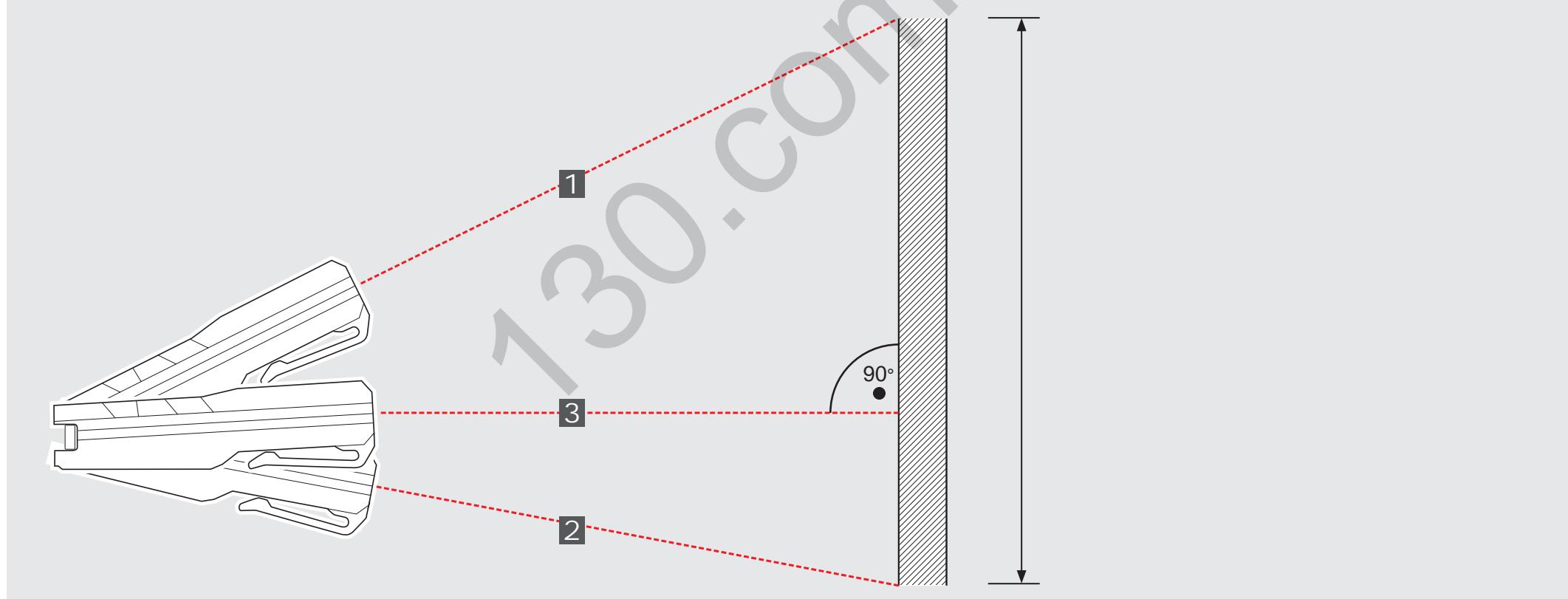
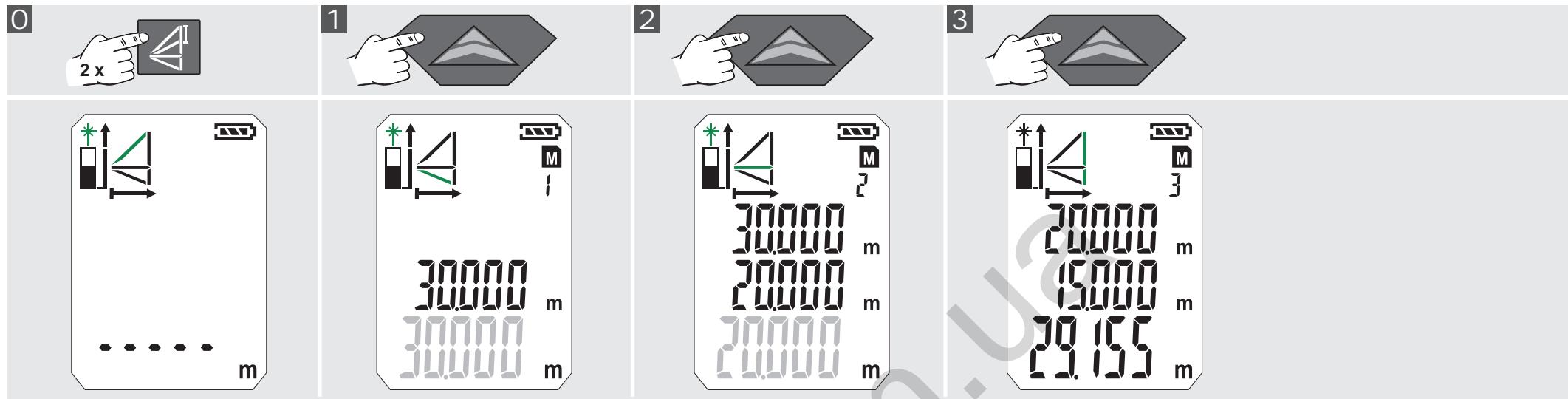
VOLUMENMESSUNG



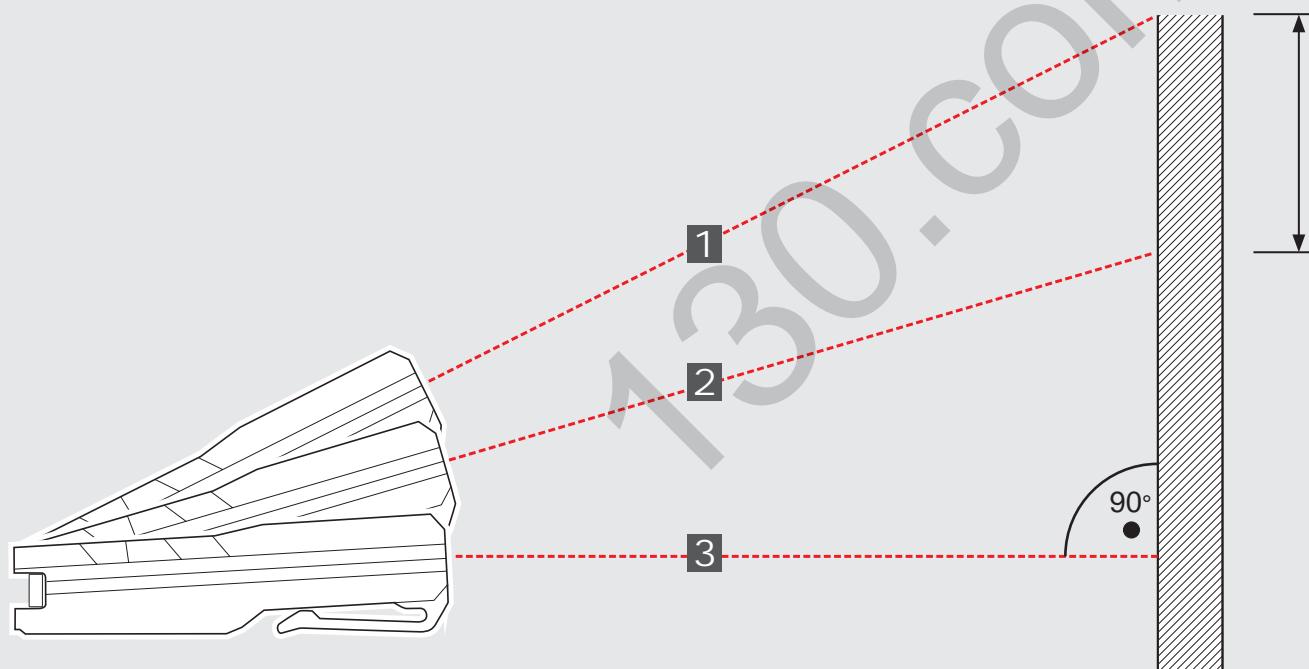
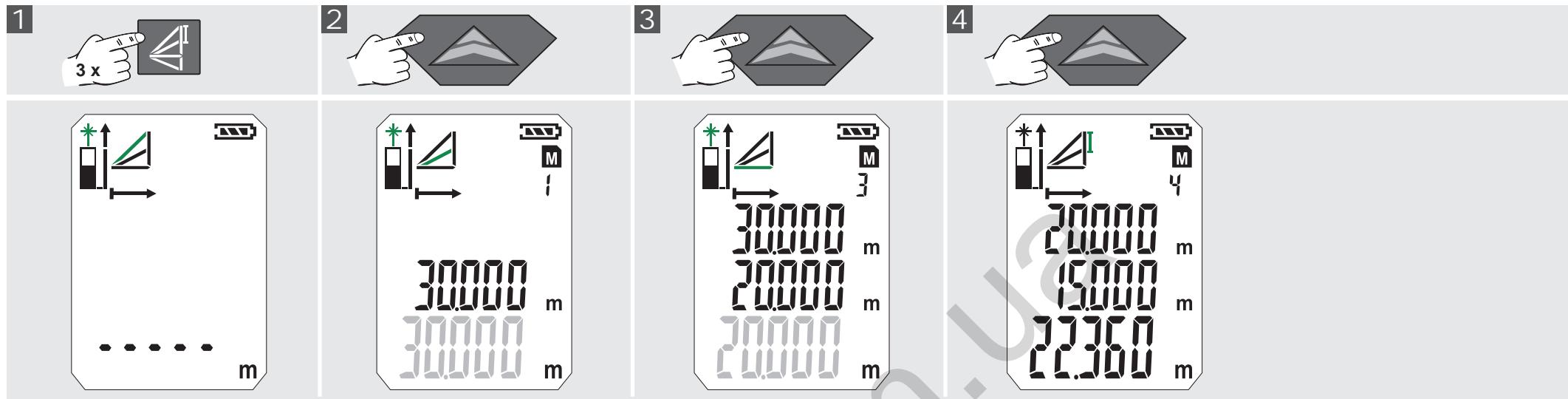
INDIREKTE MESSUNG (PYTHAGORAS 1)



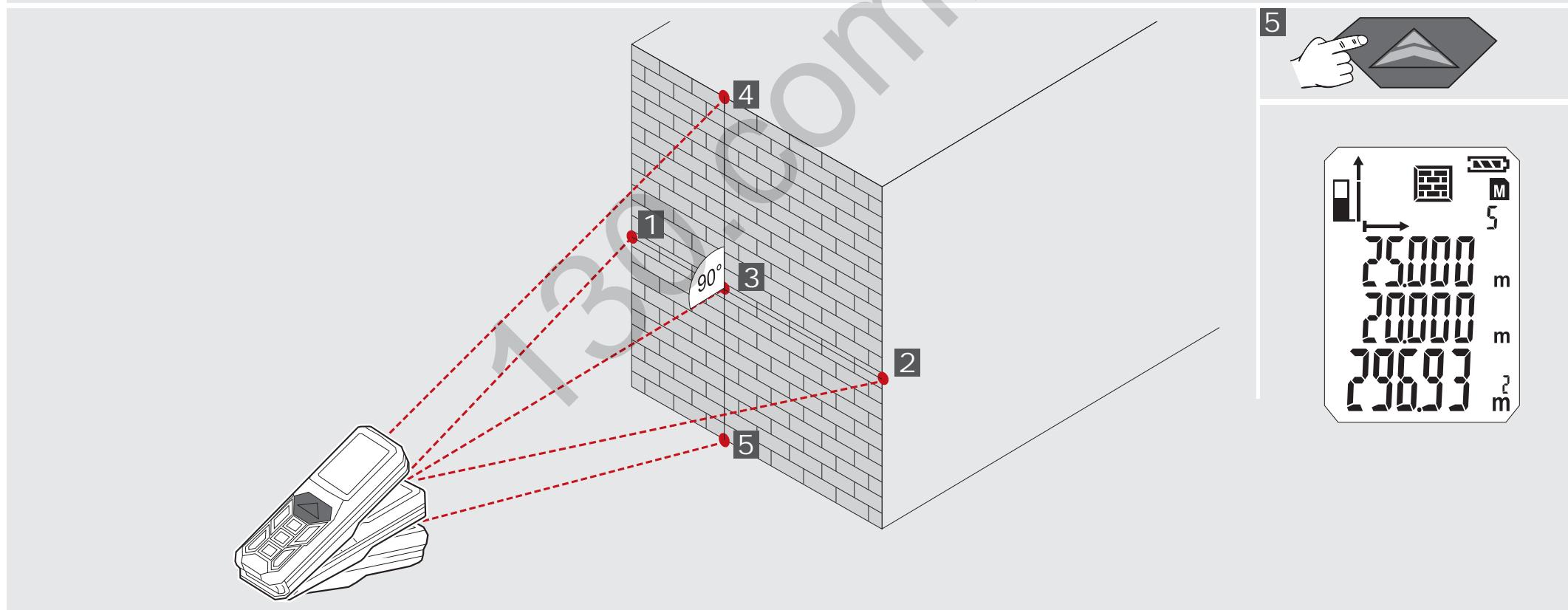
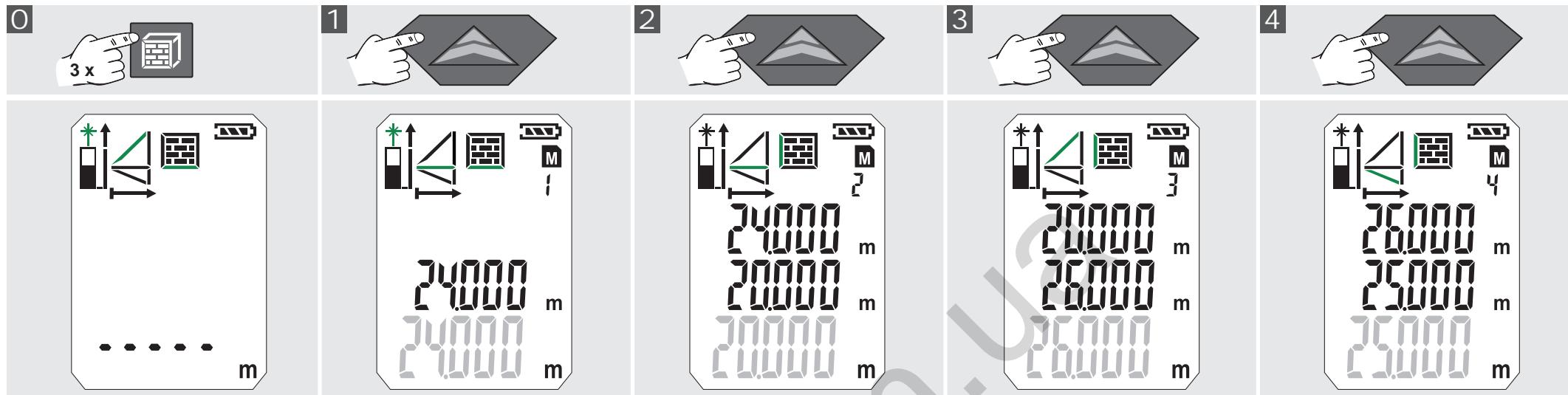
INDIREKTE MESSUNG (PYTHAGORAS 2)



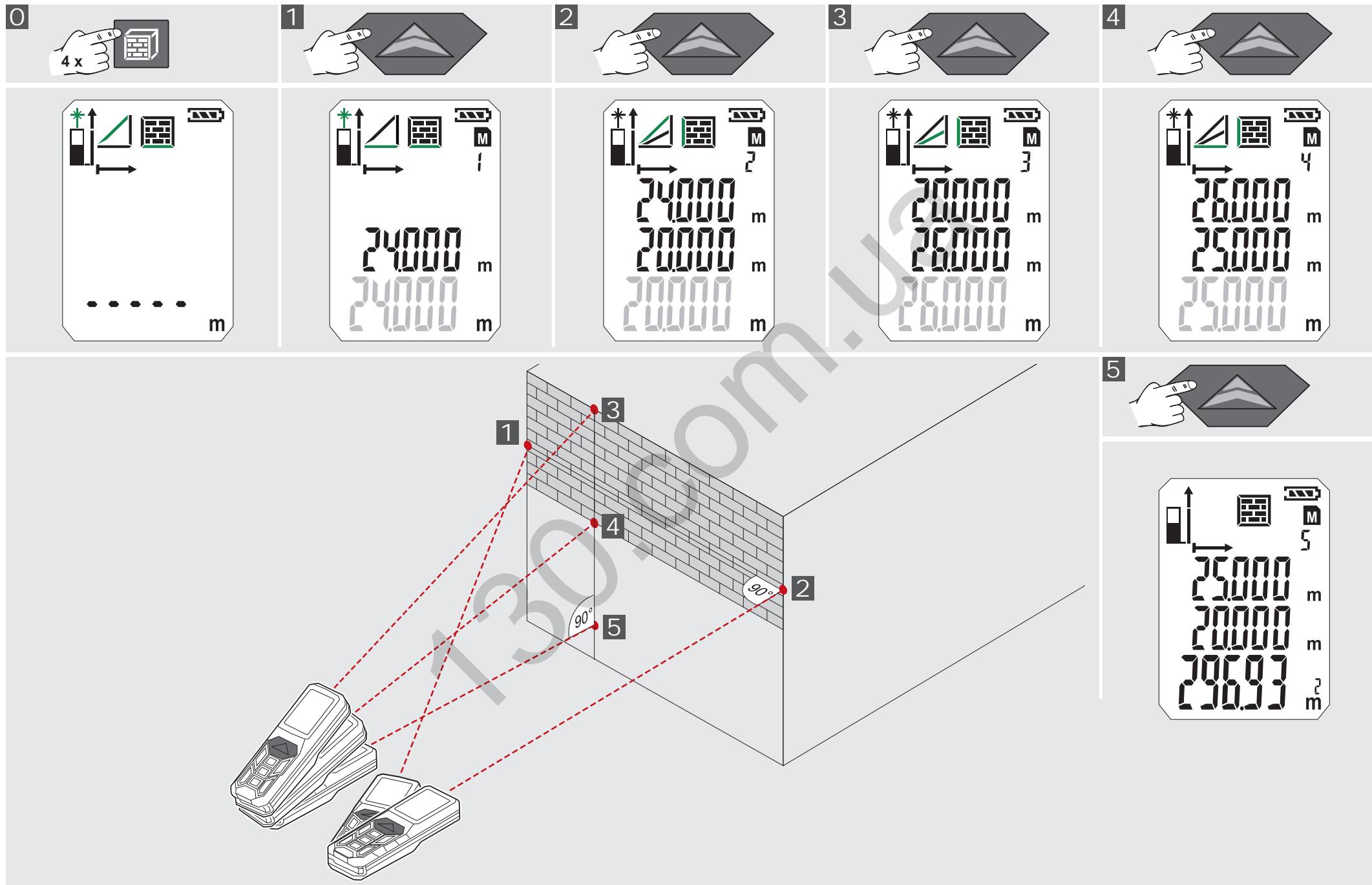
INDIREKTE MESSUNG (PYTHAGORAS 3)



WANDFLÄCHENMESSUNG (Szenario 1)



WANDFLÄCHENMESSUNG (Szenario 2)



TIMER

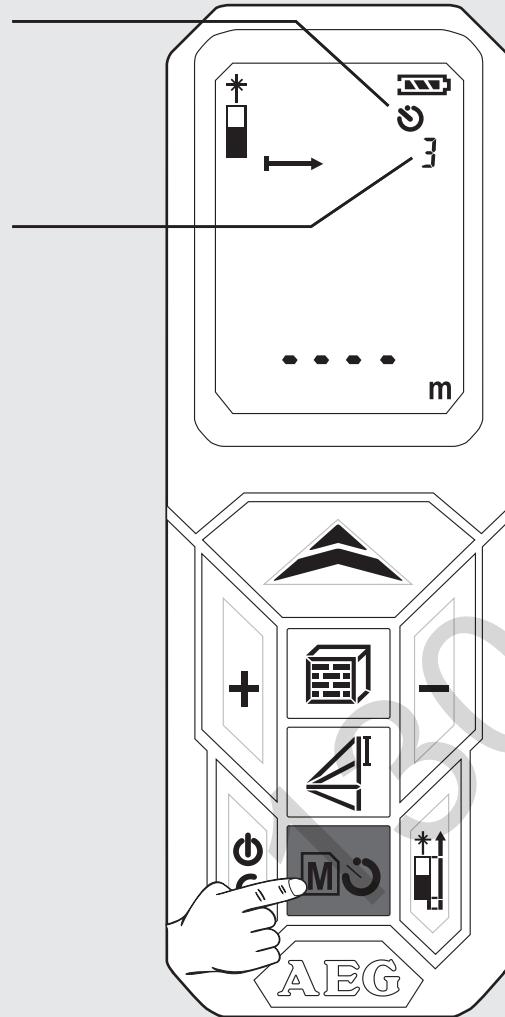
Mit dem Timer kann die Messung verzögert ausgelöst werden, um z. B. ein Bauteil im Messstrahl zu positionieren.

Taste  drücken

- Symbol erscheint
- Durch Drücken der Taste  kann der Timer zwischen 3 und 15 sek eingestellt werden.

Taste  drücken

- Die Sekunden werden bis zur Messung heruntergezählt.
- Bei 0 wird die Messung ausgelöst.



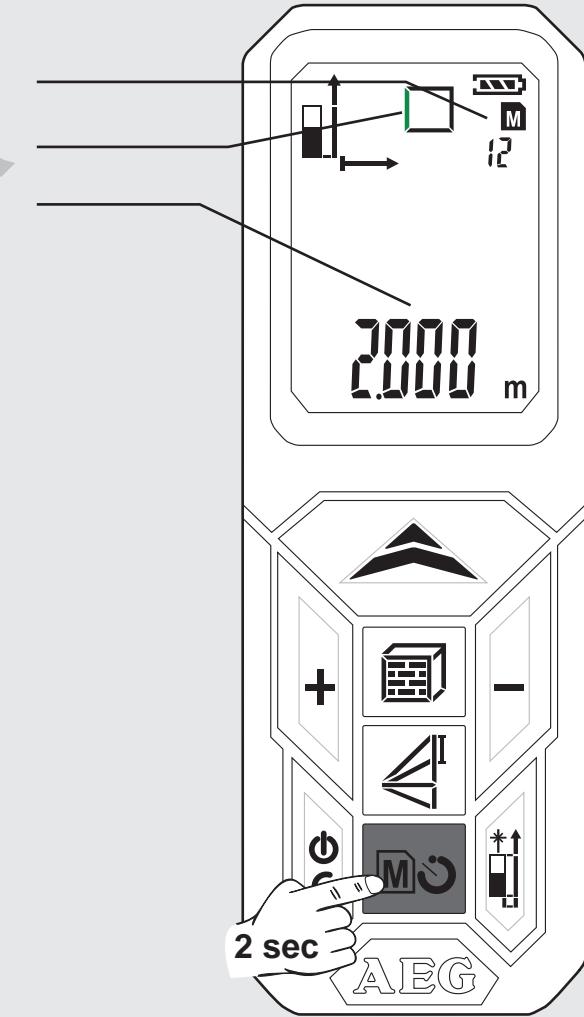
SPEICHER

Die Messwerte werden automatisch fortlaufend im Speicher abgelegt.

Die gespeicherten Werte können mit der Taste  abgerufen werden.

Taste  2 sek drücken

- Symbol und Speicherplatz erscheint.
- Zugehörige Messgröße wird angezeigt.
- Gespeicherter Wert wird in der Hauptzeile angezeigt.
- Mit den +/- Tasten navigieren

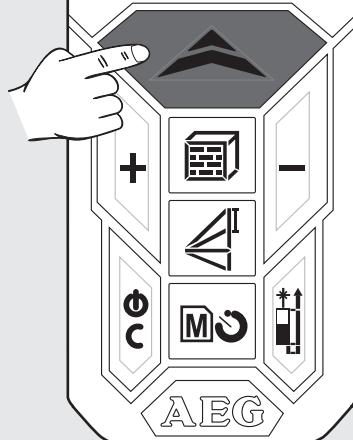
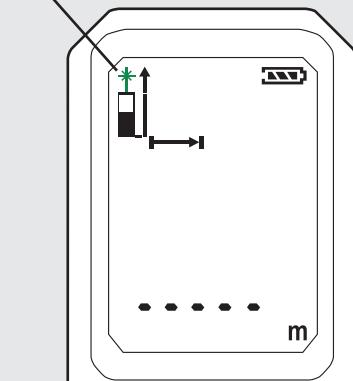


GRUNDLEGENDE FUNKTIONSWEISE AM BEISPIEL EINER FLÄCHENMESSUNG (1)

1 Einschalten

Taste drücken.
Achtung! Laserstrahl an!
Nicht auf Personen richten!

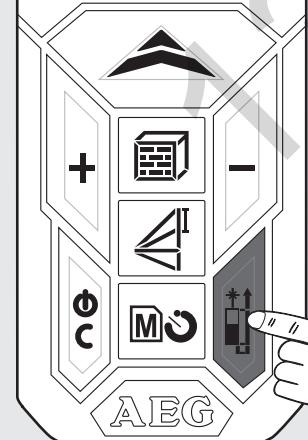
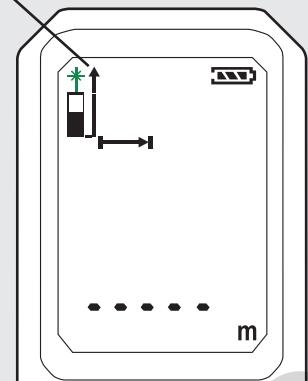
- Lasersymbol blinkt
(blitzen grün dargestellt).



2 Messebene wählen

Standardeinstellung nach dem Einschalten: hinten
1x drücken -> Eckenstift
2x drücken -> vorn
3x drücken -> hinten

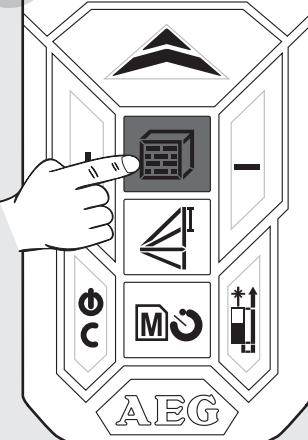
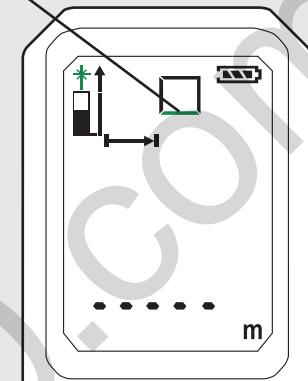
- Symbol wird angezeigt



3 Funktion wählen

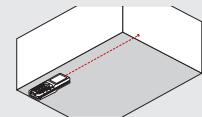
Nach dem Einschalten steht das Gerät immer auf Längenmessung.
1x drücken - Flächenmessung

- Symbol erscheint
Messgröße blinkt
(blitzen grün dargestellt)

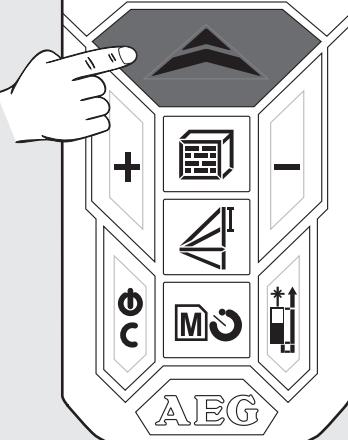
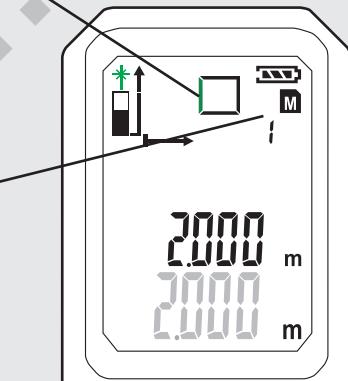


4 Länge messen

Gerät ausrichten und Taste drücken

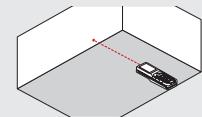


- Messwert erscheint kurz in der Hauptzeile.
- Messwert springt nach 1 sek in darüberliegende Zeile.
- Messwert wird im Speicher unter fortlaufender Nummer abgelegt.
Zweite Messgröße blinkt.
Gerät bereit für Messung des zweiten Wertes.

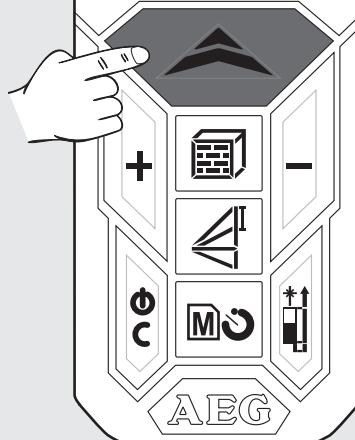
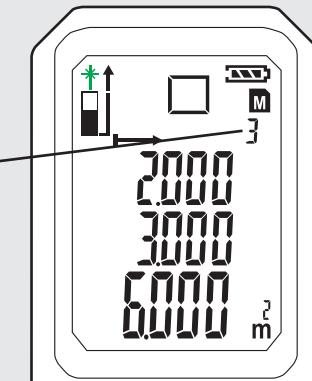


5 Breite messen

Gerät ausrichten und Taste drücken



- Messwert erscheint kurz in der Hauptzeile.
- Messwert springt nach 1 sek in darüberliegende Zeile.
- Messwert wird im Speicher unter fortlaufender Nummer abgelegt.
- Ergebnis wird in Hauptzeile angezeigt und im Speicher unter fortlaufender Nummer abgelegt.



GRUNDLEGENDE FUNKTIONSWEISE AM BEISPIEL EINER FLÄCHENMESSUNG (2)

6 Gespeicherte Werte abrufen

Taste 2 sek drücken.

Taste + oder - drücken

7 Speicher verlassen

Taste drücken

8 Ausschalten

Taste 2 sek drücken
(Speicher muss vorher verlassen werden).

- Gespeicherte Werte werden in der Hauptzeile angezeigt.

Das zugehörige Symbol wird angezeigt und die Messgröße blinkt (blitzen grün dargestellt).

- Das Gerät schaltet ab.
- Wenn 3 Minuten lang keine Taste gedrückt wird, schaltet sich das Gerät automatisch ab.

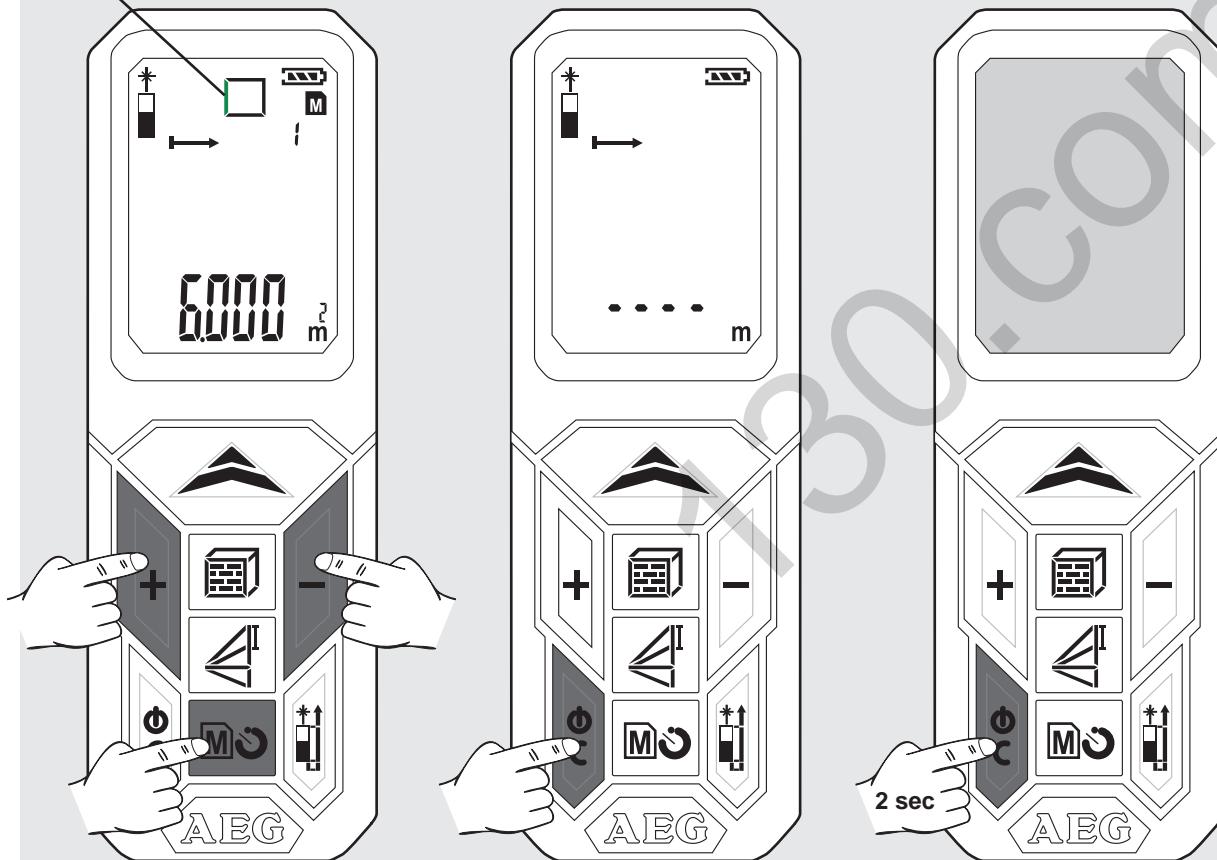


TABLE DES MATIÈRES

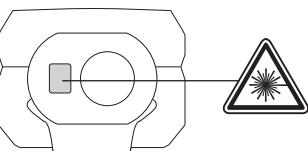
Consignes de sécurité importantes	1
Caractéristiques techniques	2
Utilisation conforme aux prescriptions.....	2
Tables codes erreurs	2
Panoramique	3
Remplacement batterie	4
Pointe multifonctions	4
Clip à ceinture.....	4
Touche fonction, Pythagore, plan de mesure	5
Mesure longueur simple	6
Mesure continu / mesure min. / max.	7
Mesure par addition / soustraction	8
Mesure surface	9
Mesure volume.....	10
Mesure indirecte (Pythagore 1)	11
Mesure indirecte (Pythagore 2)	12
Mesure indirecte (Pythagore 3)	13
Mesure surface paroi (scène 1).....	14
Mesure surface paroi (scène 2).....	15
Timer	16
Mémoire.....	16
Fonctionnement de base exemplifié pour la mesure de la surface (1).....	17
Fonctionnement de base exemplifié pour la mesure de la surface (2).....	18

CONSIGNES DE SÉCURITÉ IMPORTANTES



N'utilisez pas ce produit avant d'avoir lu les consignes de sécurité et le manuel de l'utilisateur chargés sur le CD joint.

Classement laser



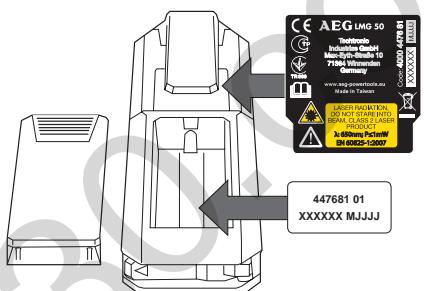
AVERTISSEMENT:

Ce produit fait partie de la classe laser 2 au sens de la norme CEI 60825-1:2007.



Plaquette autocollant

Avant la première mise en service, collez l'autocollant livré dans votre langue nationale sur le texte anglais de la plaque signalétique.



Avis :

Éviter tout contact visuel direct. Le rayon laser peut causer un aveuglement temporaire type flash aux yeux.

Ne regardez pas dans le faisceau laser et ne le dirigez pas inutilement sur d'autres personnes.

N'éblouissez pas d'autres personnes.

Avis :

Ne pas employer le dispositif au laser près des enfants et ne pas permettre aux enfants d'employer le dispositif au laser

Attention ! Des surfaces réfléchissantes pourraient réfléchir le rayon laser sur l'opérateur ou sur des autres personnes.

Se tenir à distance des pièces en mouvement.

Effectuez régulièrement des mesures d'essai, en particulier avant, pendant et après des mesures importantes.

Attention: si le produit est défectueux, est tombé, a été utilisé de manière non conforme ou modifié, il peut fournir des mesures incorrectes

Attention ! Familiarisez-vous avec les éléments de commande et l'utilisation appropriée de l'outil de jardin.

Le dispositif de mesure laser a une plage d'application limitée. (Voir chapitre "Données techniques"). Tout essai de mesure hors de la plage max. ou min. produira des résultats imprécis. L'utilisation en présence de conditions atmosphériques défavorables, telles que températures très hautes ou très basses, lumière solaire très intense, pluie, neige, brouillard ou toute autre condition limitant la visibilité, pourra comporter des mesures imprécises.

Si le dispositif de mesure laser est déplacé d'un site chaud à un site froid (ou vice-versa) il faut attendre pour permettre au dispositif de s'adapter à la nouvelle température ambiante.

Conserver toujours le dispositif de mesure laser dans un endroit fermé et le protéger contre les chocs, les vibrations et les températures extrêmes.

Protéger le dispositif de mesure laser contre les poussières, les liquides et la haute humidité de l'air. Les facteurs susdits pourraient endommager gravement les composants internes ou influencer négativement sa précision.

Ne pas utiliser des détergents agressifs ou des solvants. Nettoyer uniquement avec un chiffon propre et doux.

Éviter de forts chocs sur le dispositif de mesure laser ou sa chute. Après une chute du dispositif de mesure laser ou après son exposition à d'autres sollicitations mécaniques, il est nécessaire de contrôler la précision du dispositif.

Les réparations éventuellement nécessaires sur le dispositif au laser sont à effectuer exclusivement par du personnel spécialisé autorisé !

N'utilisez pas le produit dans des zones à risque d'explosion ou dans des environnements agres-sifs.

Recharger seulement les batteries avec les chargeurs recommandés par le fabricant.

Ne pas jeter les batteries déchargées avec les ordures ménagères. Les amener à un point de collecte prévu à cet effet pour une élimination conforme aux prescriptions environnementales nationales ou locales. Ne pas jeter le produit avec les ordures ménagères. Eliminer le produit conformément aux prescriptions nationales en vigueur dans le pays d'utilisation. Suivre les règles de recyclage en vigueur sur le plan national, spécifiques au produit. Contactez les autorités locales ou le détaillant pour avoir des renseignements concernant la mise à la ferraille.



CARACTÉRISTIQUES TECHNIQUES

Classe de protection	IP54 (protection contre les poussières et les projections d'eau)
Optique	14 mm
Point focal	35 mm
Plage de mesure max.	50 mètres (tolérance: 55m)
Plage de mesure min.tab#0,05 mètres	0,05 Meter
Précision absolue @ < 10m	± 1,5 mm (max)
Précision de répétabilité @ < 10m	± 1,5 mm (typiquement max. 2σ)
Précision de répétabilité @ > 10m	montée ± 0,25 mm / mètre (typiquement max. 2σ)
Temps de mesure	0,5 s
Afficheur type	LCD (22,7 mm x 31 mm)
Alimentation	AAA 2x (batterie alcaline)
Durée batterie	10000 (mesures individuelles)
Puissance de sortie laser	0,6 mW ~ 0,95 mW (Classe 2, 650nm)
Dimension point laser	25 x 30 mm @ 16 m (max)
Rayon laser angle vertical	+1 degré
Rayon laser angle horizontal	±1 degré
Coupure automatique dispositif	180 secondes
Coupure automatique laser	30 secondes
Plage température d'utilisation	de -10°C à +50°C
Plage température de stockage	de -25°C à +70°C
Poids sans batterie	80 g

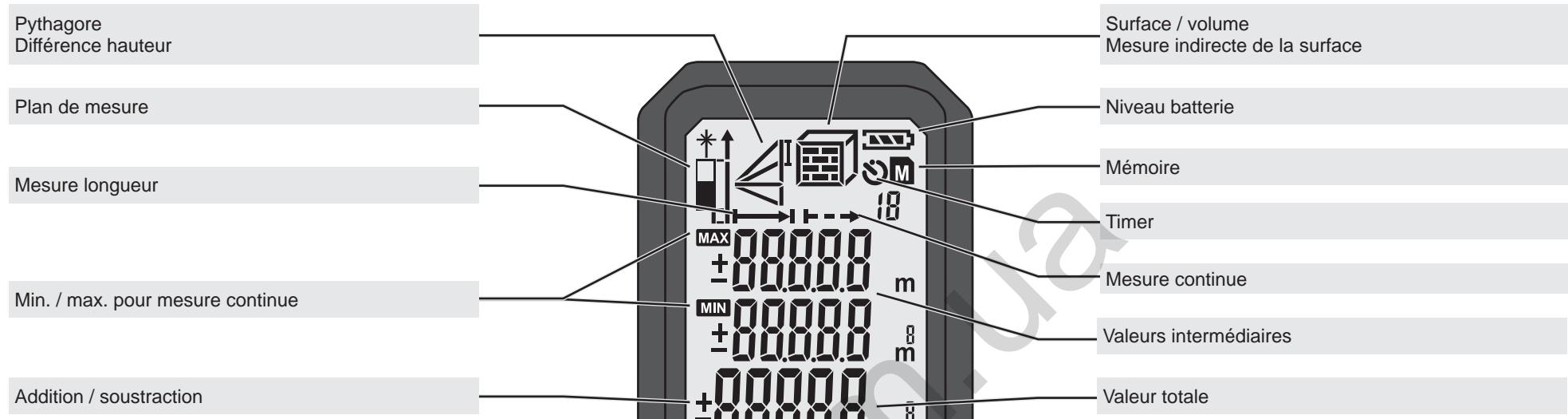
TABLES CODES ERREURS

Code	Description	Solution
Err01	Hors de la plage de mesure	Mesurer dans la plage prévue.
Err02	Signal réfléchi trop faible	Choisir une surface plus appropriée.
Err03	Hors de la plage de visualisation (valeur max: 99.999) est par exemple le résultat d'une surface ou d'un volume hors de la plage de visualisation	Contrôler l'exactitude des valeurs et des pas.
Err04	Erreurs dans le calcul de Pythagore	Contrôler l'exactitude des valeurs et des pas.
Err05	Batterie épuisée	Remplacer la batterie.
Err06	Hors de la plage de la température d'utilisation	Effectuer la mesure dans la plage prévue pour la température d'utilisation.
Err07	Éclairage excessif	Obscurcir la zone cible.

UTILISATION CONFORME AUX PRESCRIPTIONS

Le dispositif de mesure laser est apte à mesurer des distances et des inclinaisons.

Comme déjà indiqué, cette machine n'est conçue que pour être utilisée conformément aux prescriptions.



ON / MESURER

- ▶ ON
- ▶ Mesurer
- ▶ Mesure continue (enfoncer pendant 2 sec)
Fonction min. / max.

ADDICTION

- ▶ Addition valeur
- ▶ Navigation mémoire

SURFACE / VOLUME

- ▶ Surface (enfoncer 1x)
- ▶ Volume (enfoncer 2x)
- ▶ Mesure indirecte de la surface (enfoncer 3x / 4x)

ACTIVER

- ▶ ON
- ▶ Off (enfoncer pendant 2 sec)
- ▶ Reset

SOUSTRACTION

- ▶ Soustraction valeur
- ▶ Navigation mémoire

PYTHAGORE

- ▶ Pythagore 1 (enfoncer 1x)
- ▶ Pythagore 2 (enfoncer 2x)
- ▶ Pythagore 3 (enfoncer 3x)

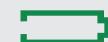
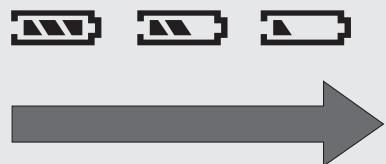
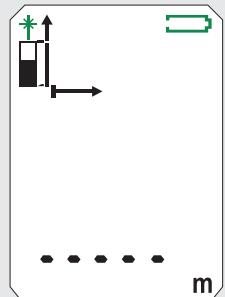
CHANGE PLAN DE MESURE

- ▶ Antérieur
- ▶ Postérieur
- ▶ Pointe multifonctions

MÉMOIRE

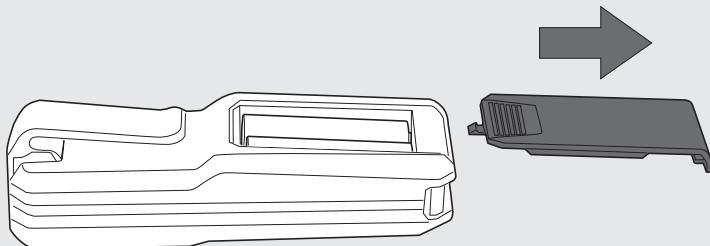
- ▶ Timer 3-15 sec. (enfoncer 1x)
- ▶ Mémoire 1-20 (enfoncer 1x 2 sec.)
- ▶ Utiliser les touches +/- pour naviguer en mémoire

REEMPLACEMENT BATTERIE

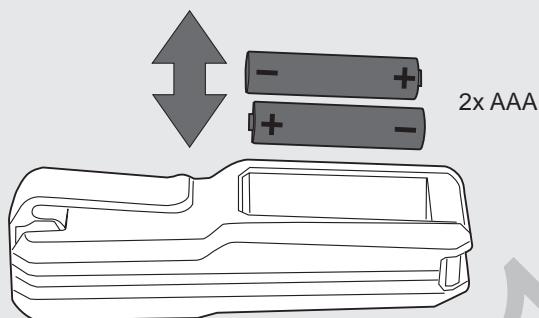


Si le symbole clignote, remplacer la batterie.

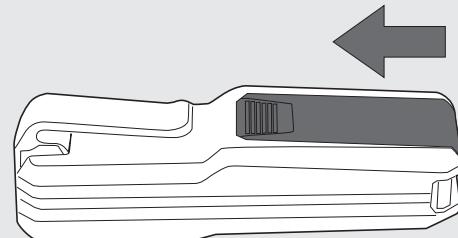
1



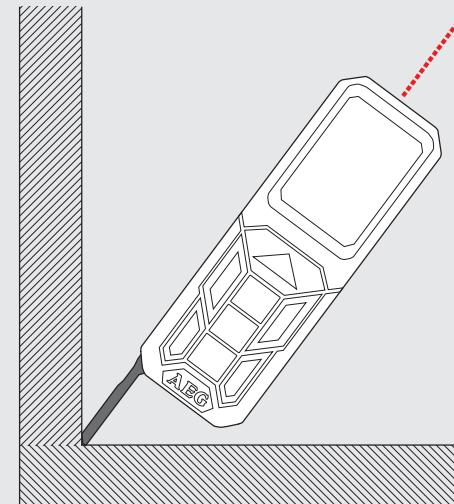
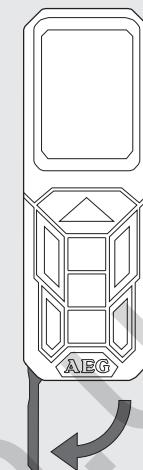
2



3

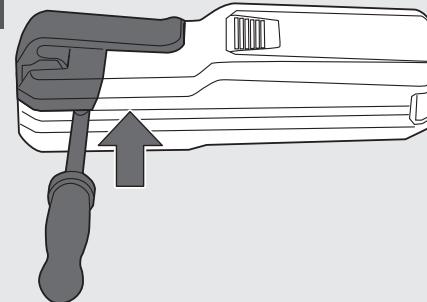


POINTE MULTIFONCTIONS

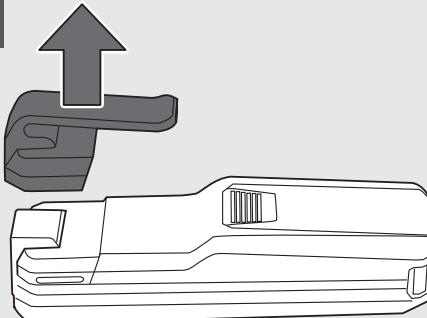


CLIP À CEINTURE

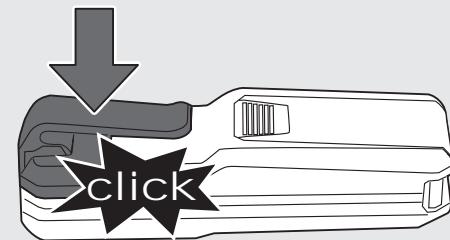
1



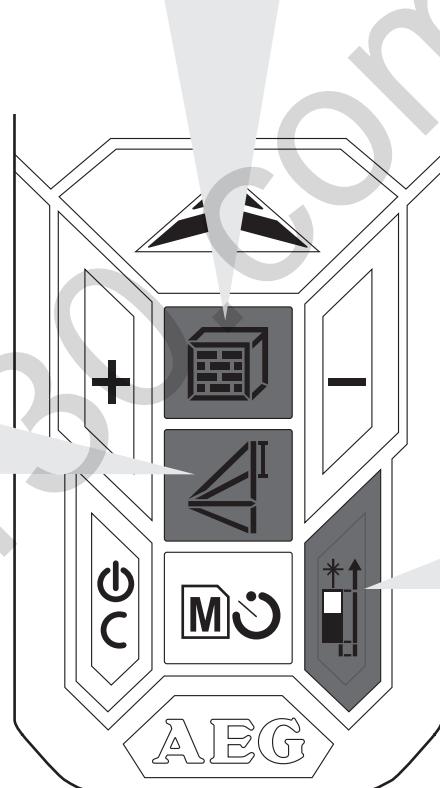
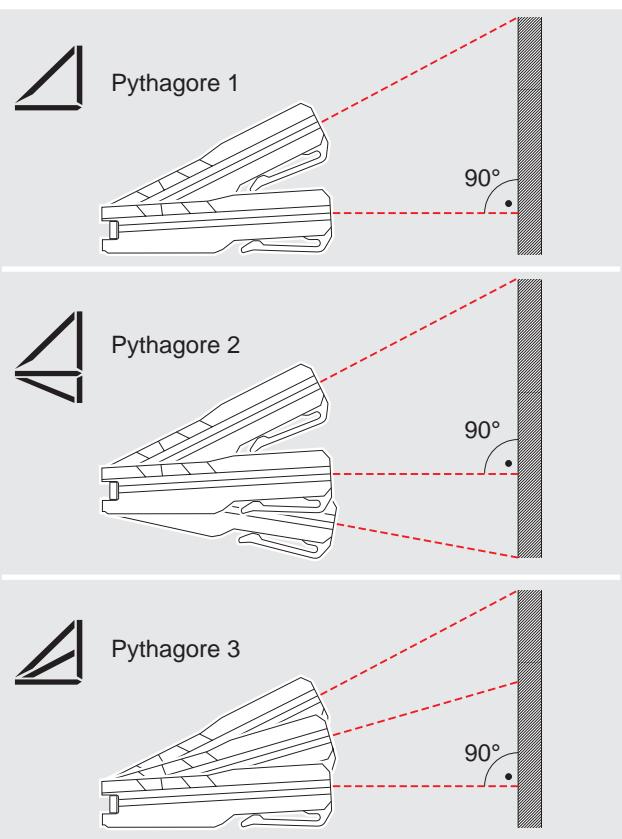
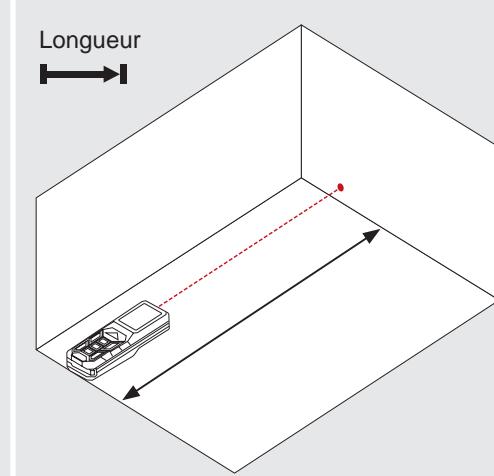
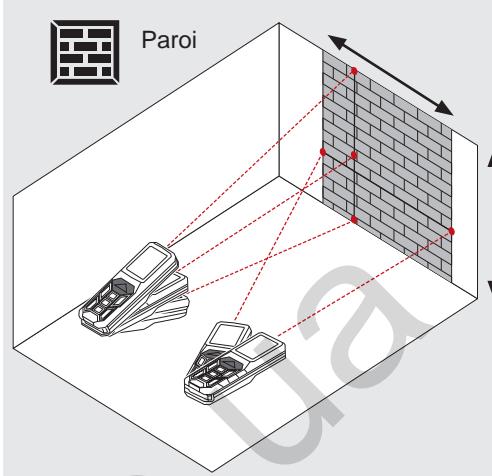
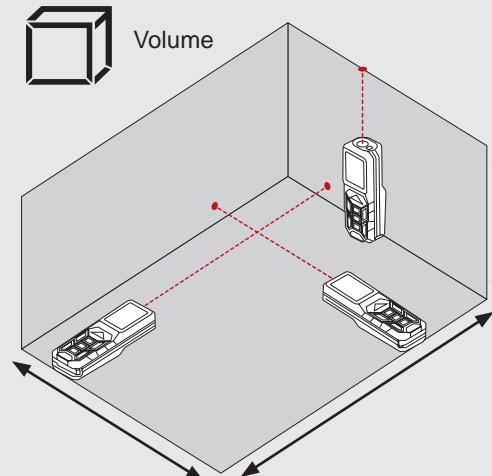
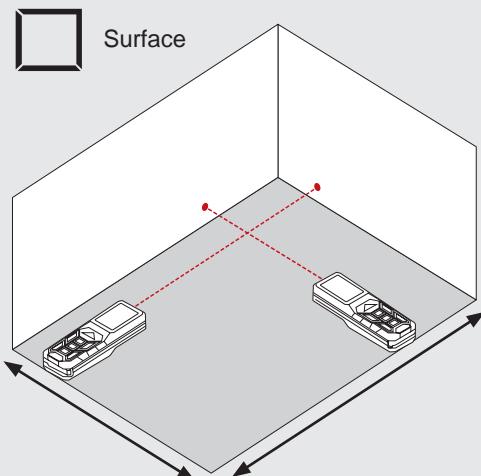
2



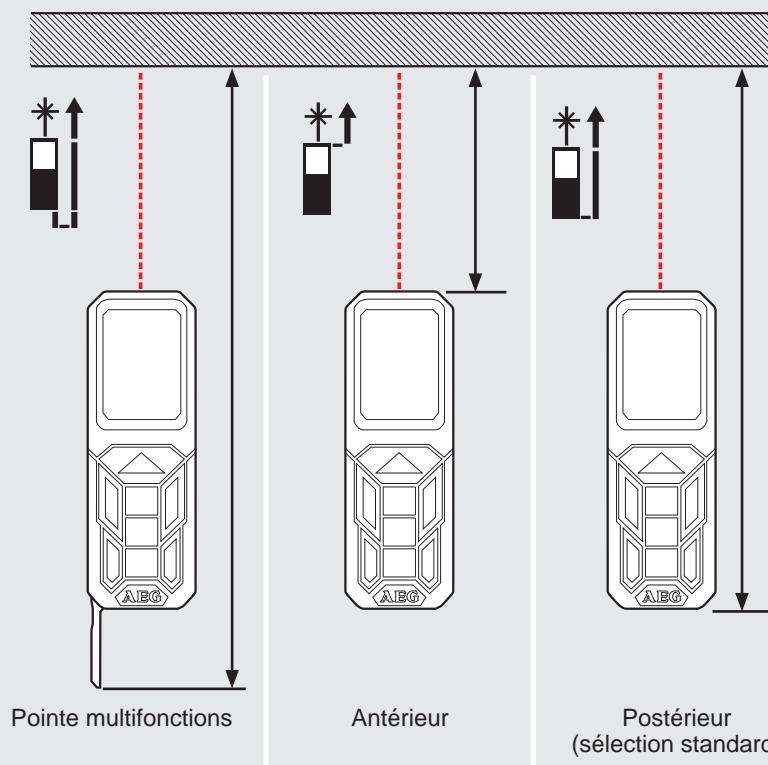
3



TOUCHE FONCTION, PYTHAGORE, PLAN DE MESURE

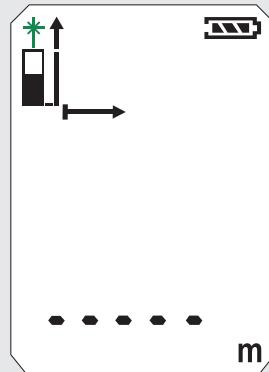
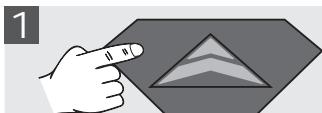


Plan de mesure

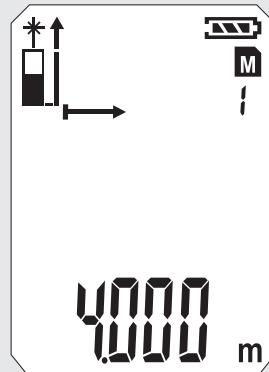
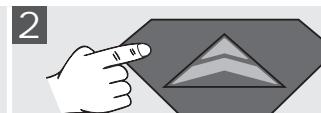


MESURE LONGUEUR SIMPLE

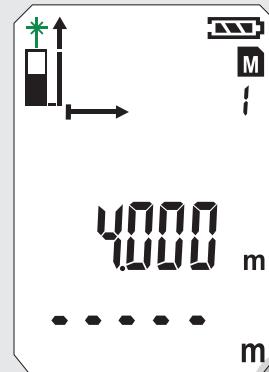
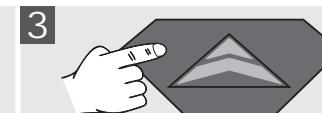
0



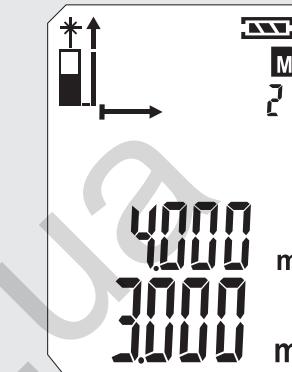
1



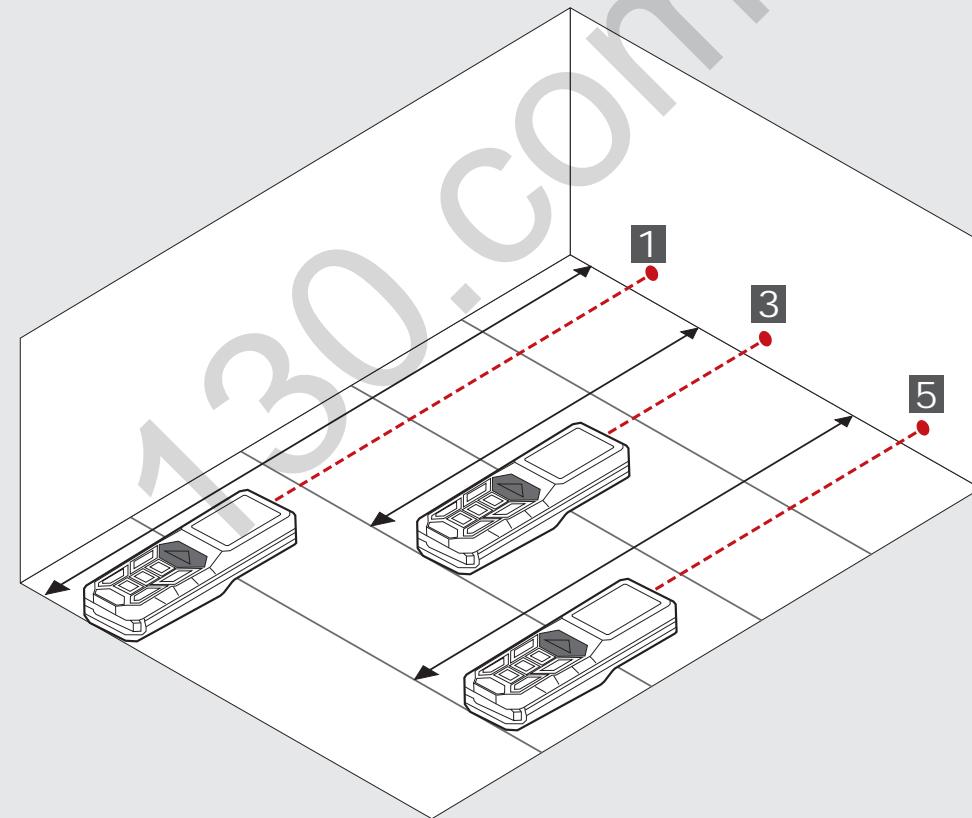
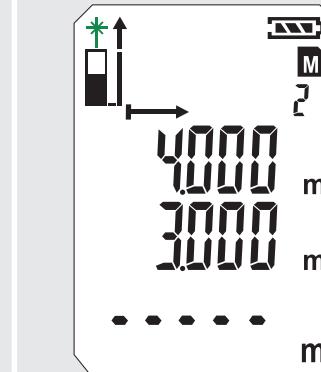
2



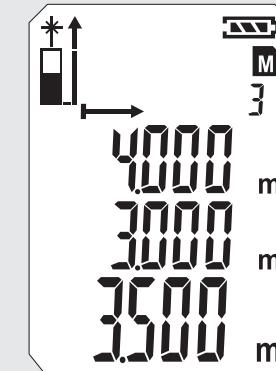
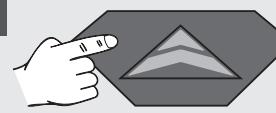
3



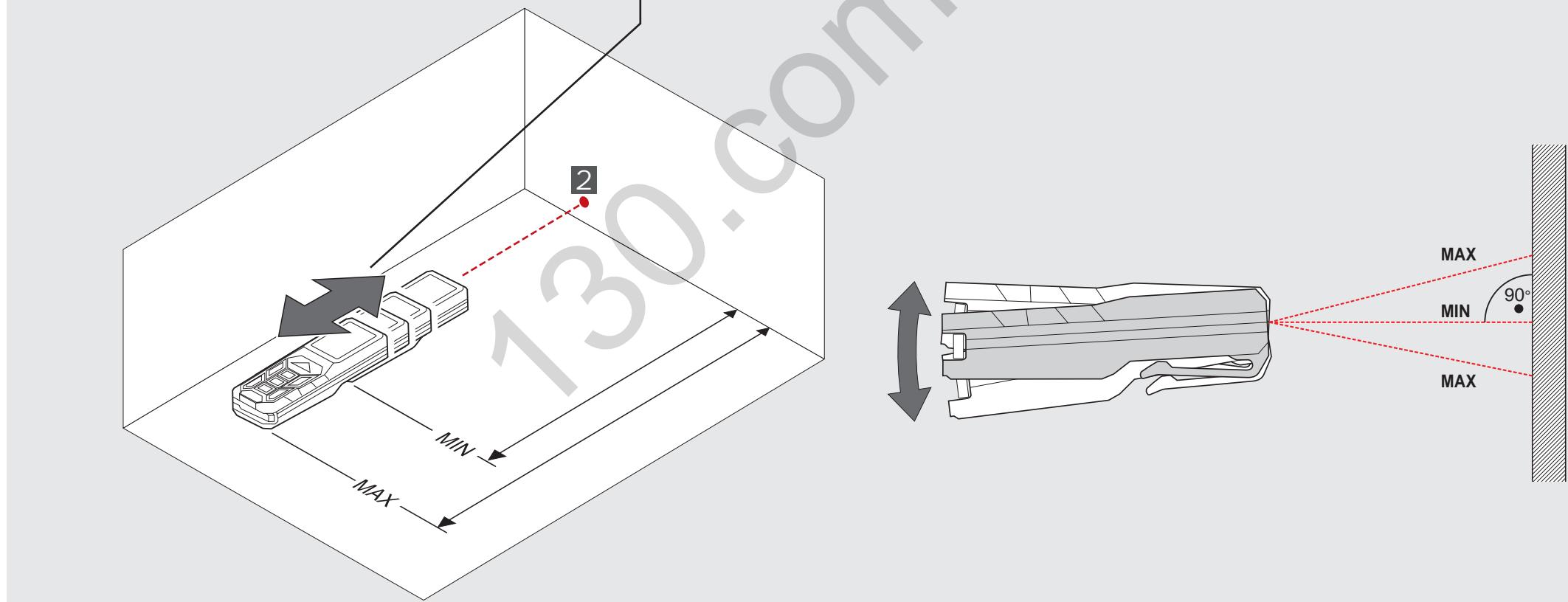
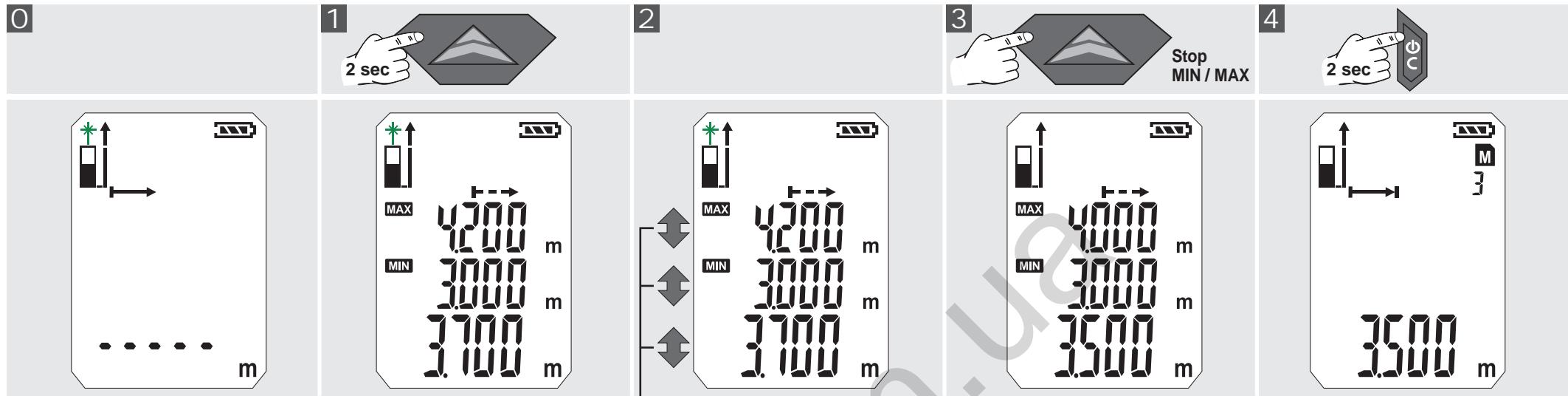
4



5

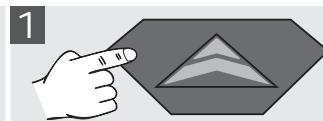


MESURE CONTINU / MESURE MIN. / MAX.

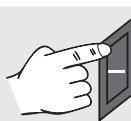


MESURE PAR ADDITION / SOUSTRACTION

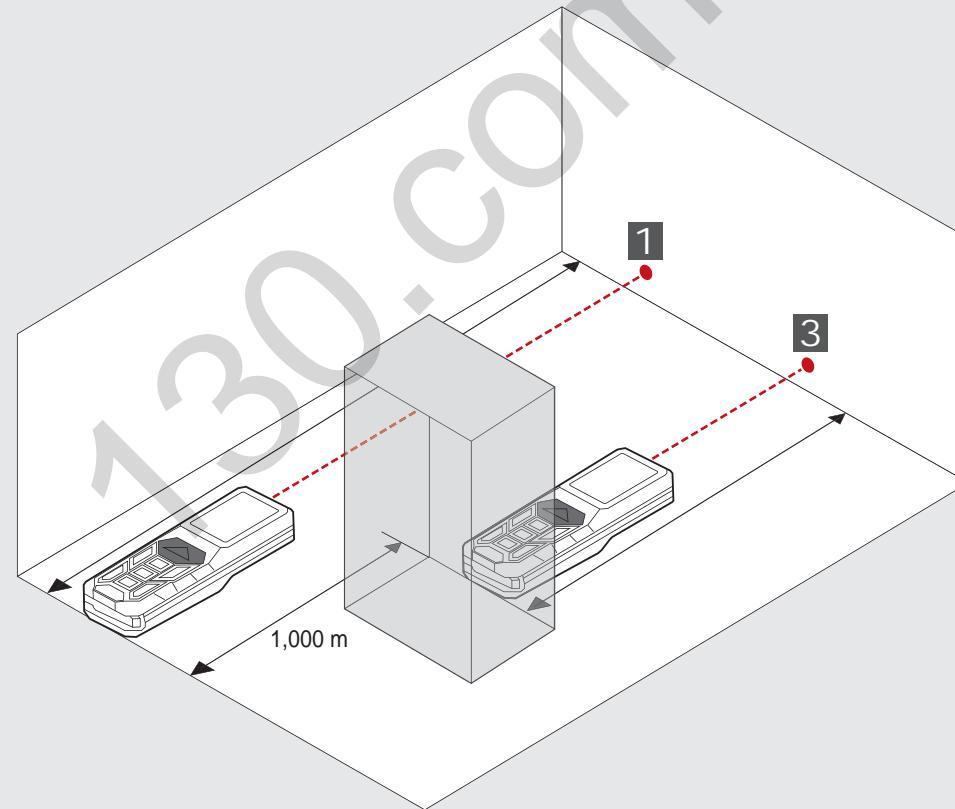
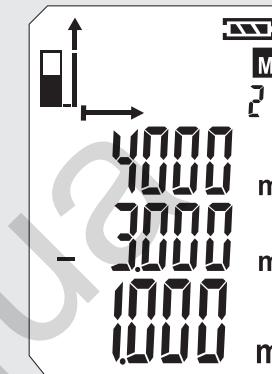
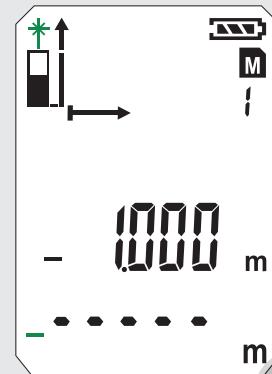
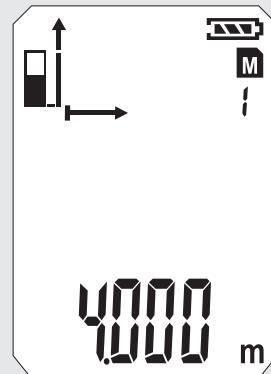
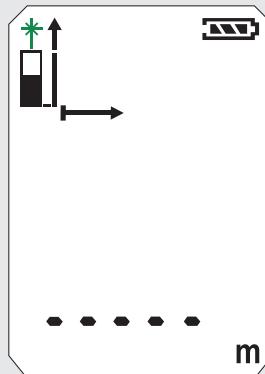
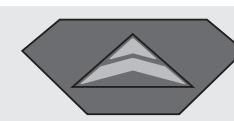
0



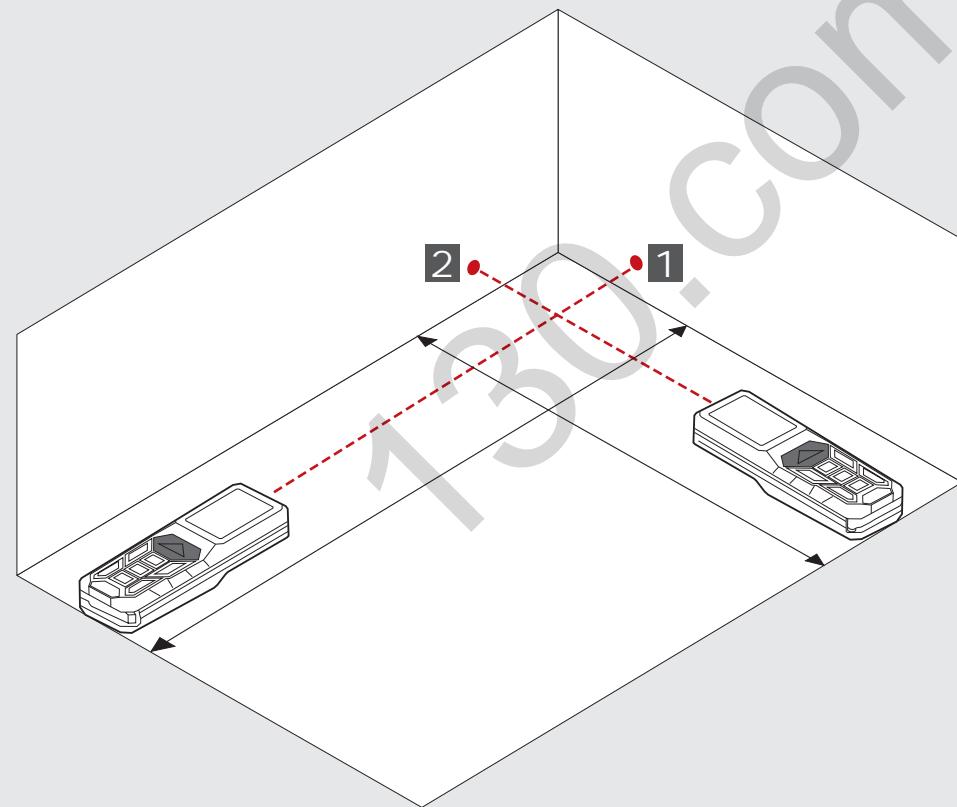
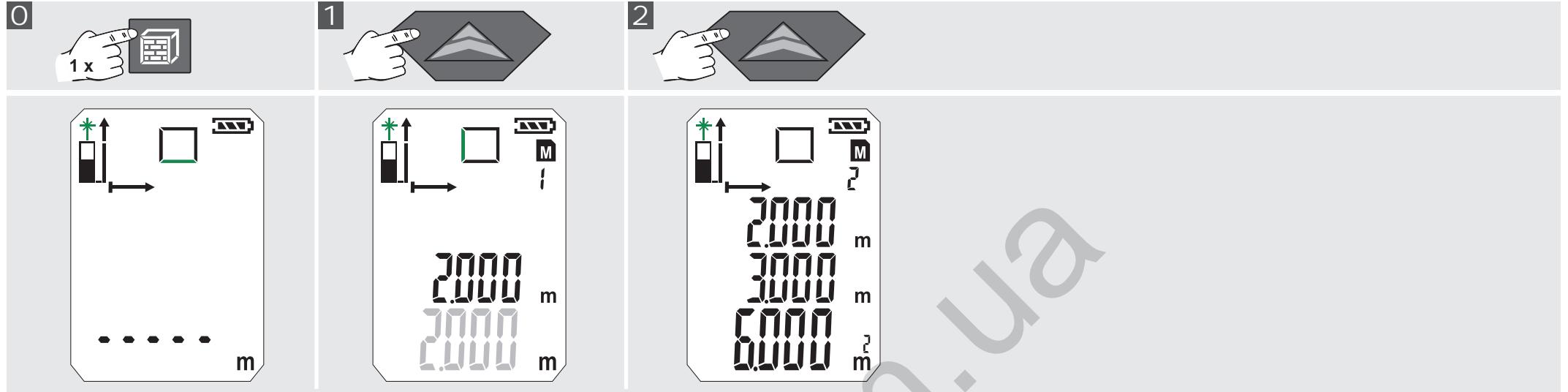
2



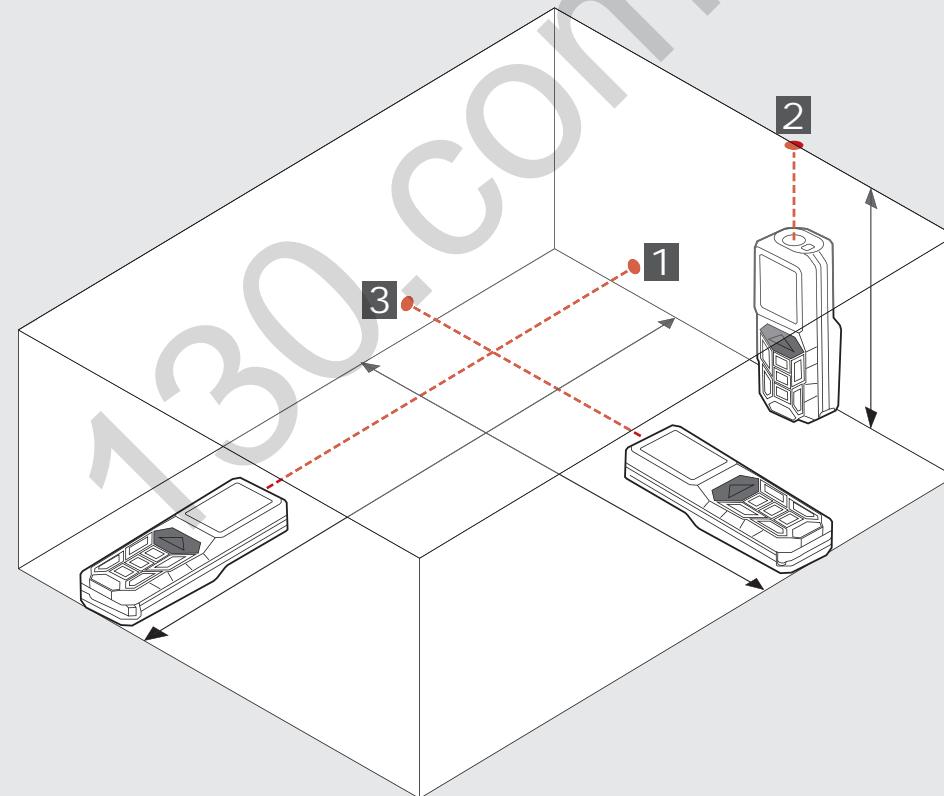
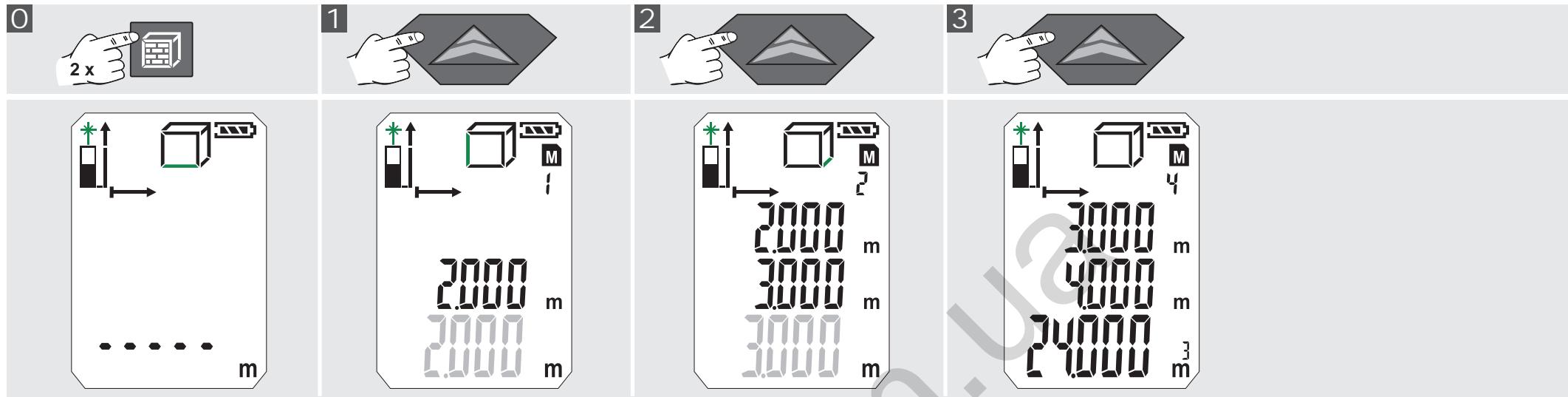
3



MESURE SURFACE



MESURE VOLUME



MESURE INDIRECTE (PYTHAGORE 1)

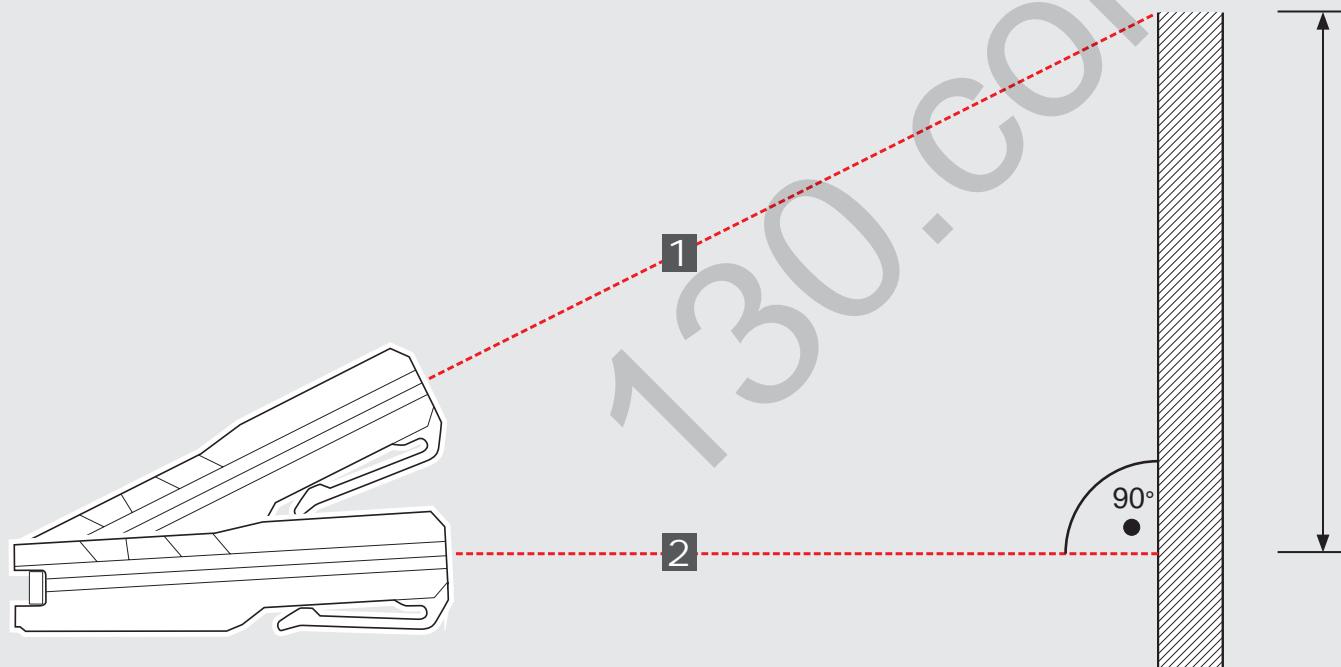
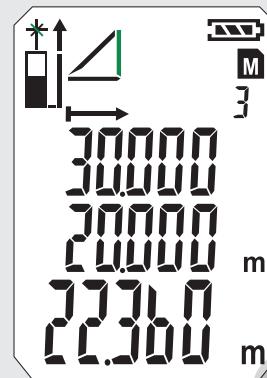
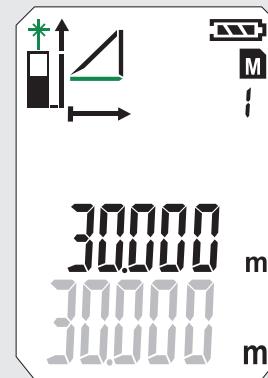
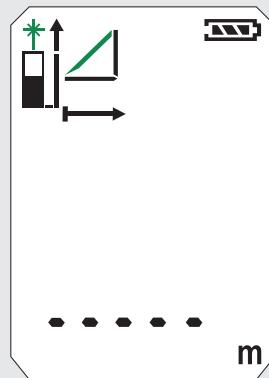
0



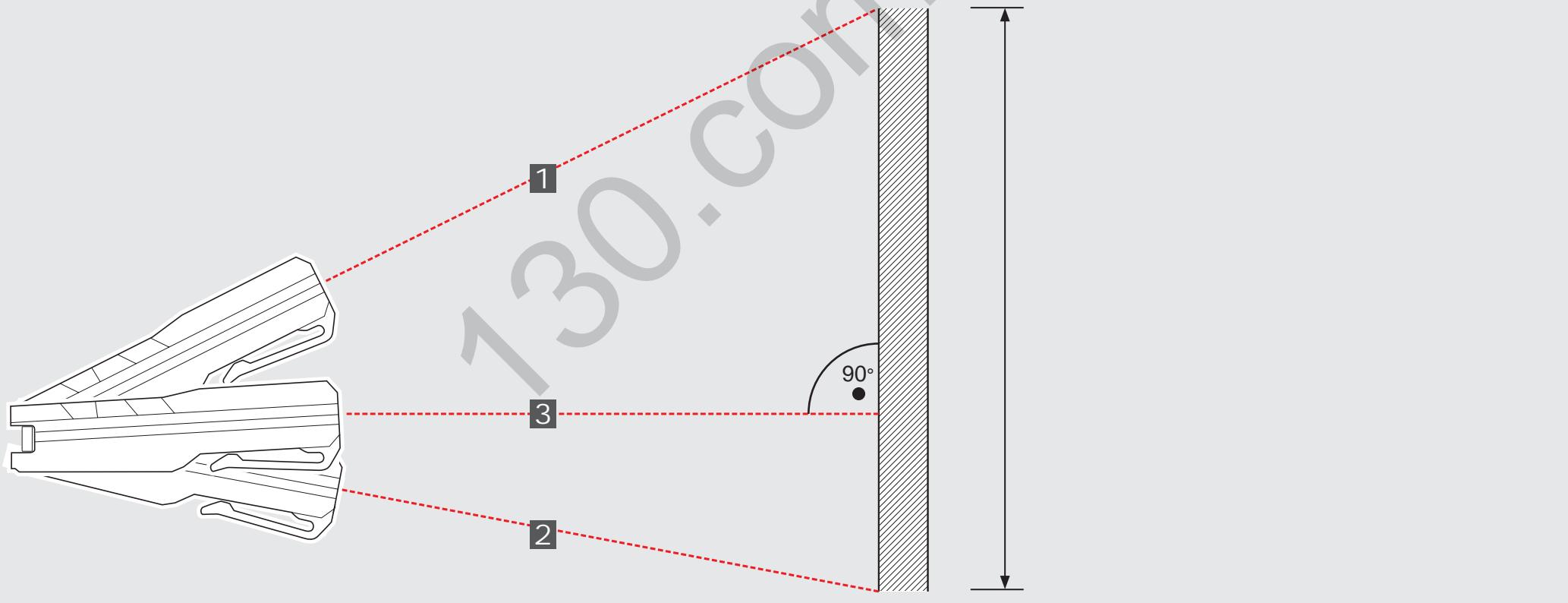
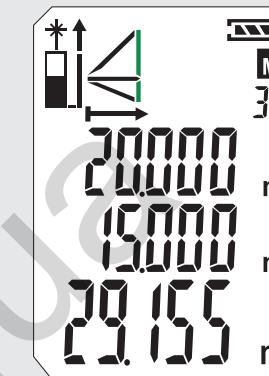
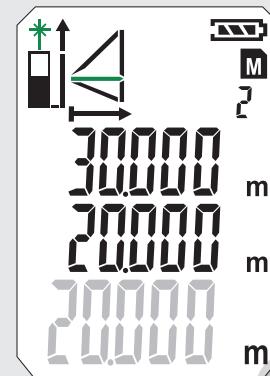
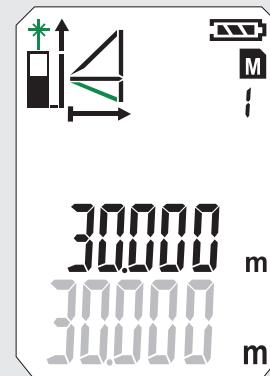
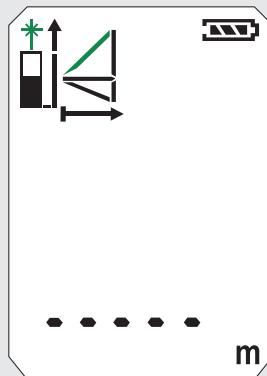
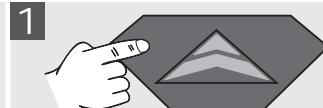
1



2



MESURE INDIRECTE (PYTHAGORE 2)

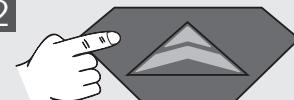


MESURE INDIRECTE (PYTHAGORE 3)

1



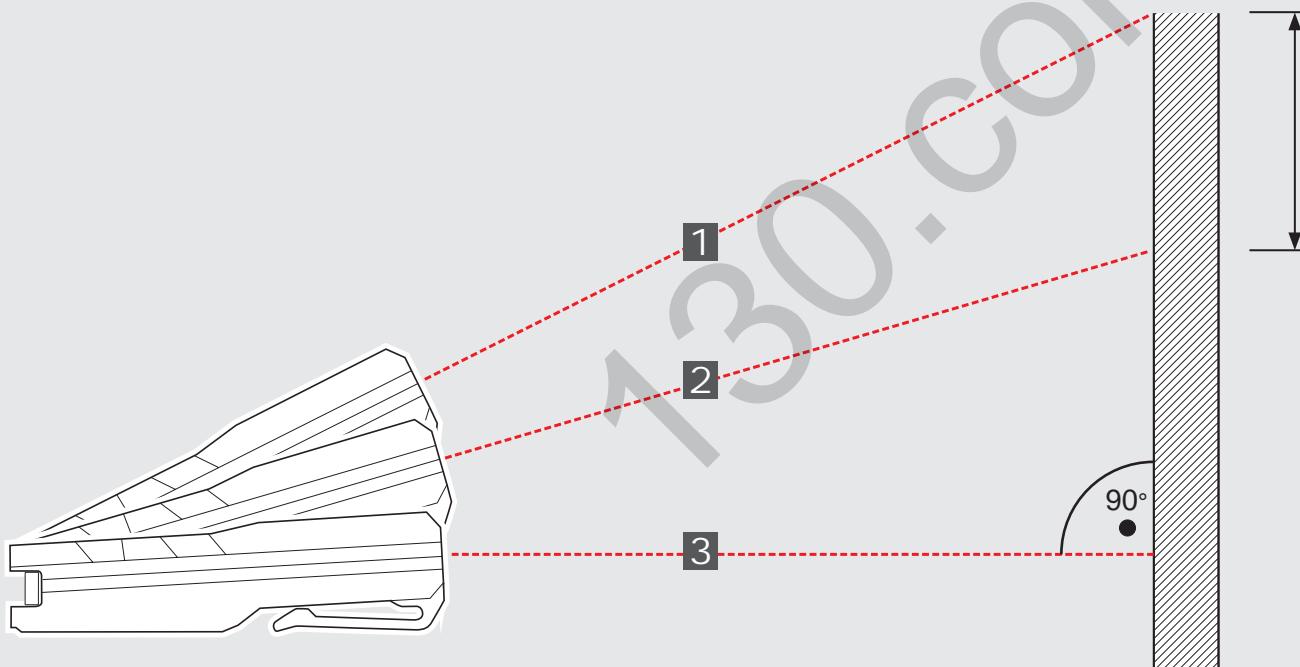
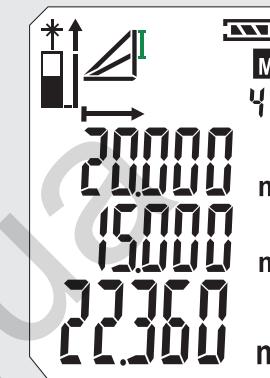
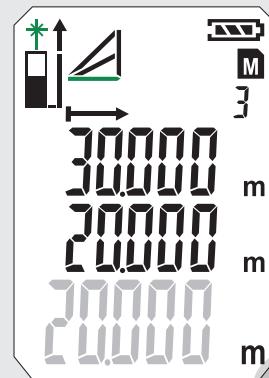
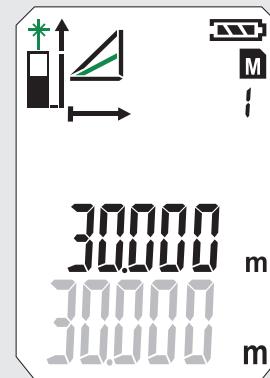
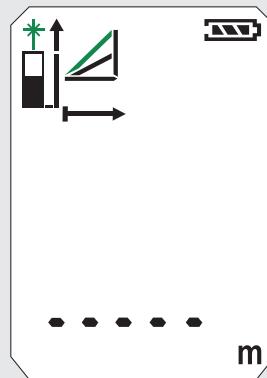
2



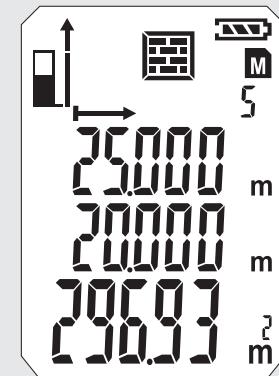
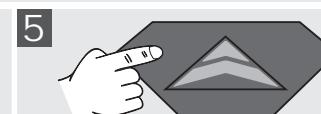
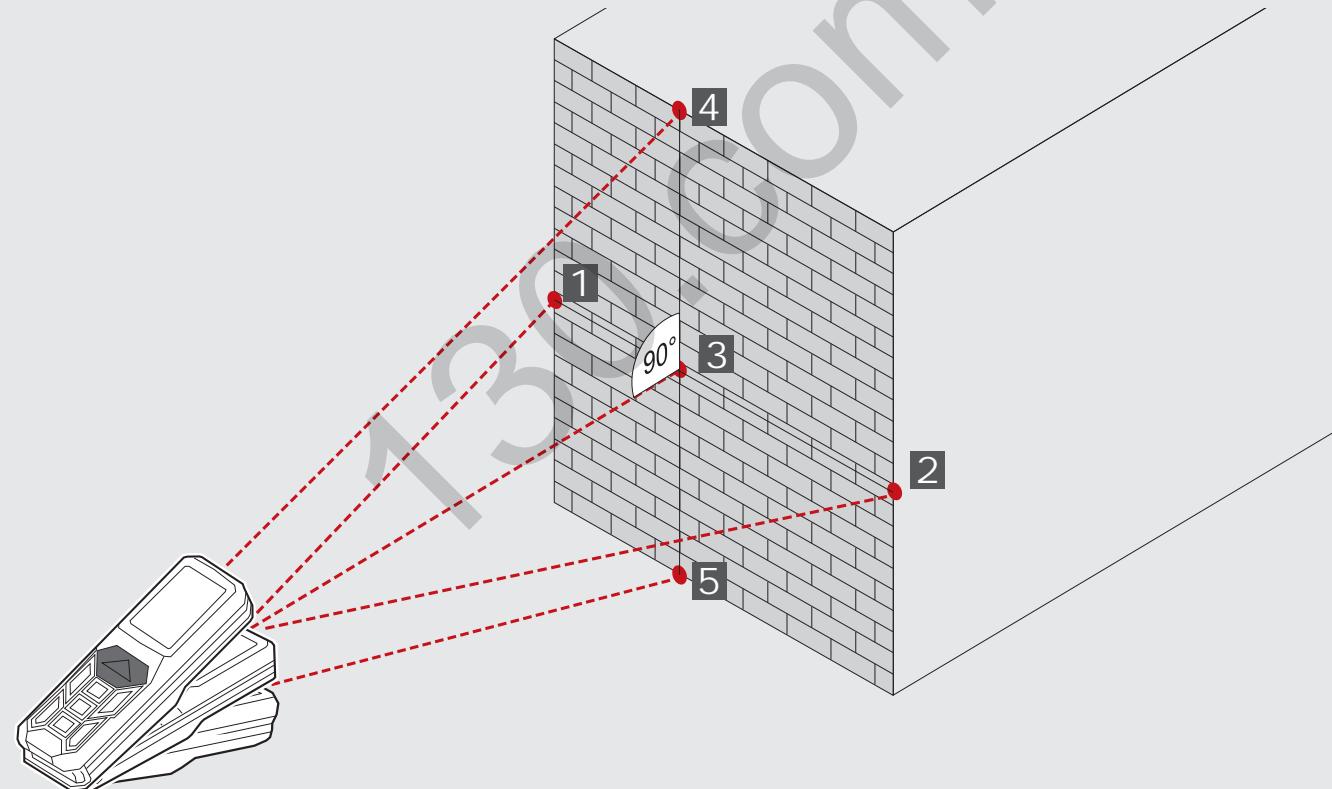
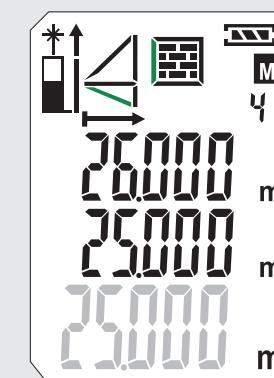
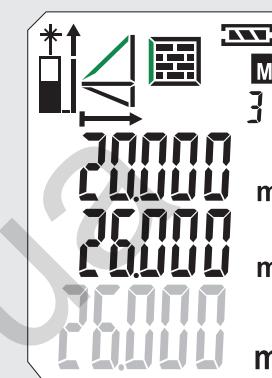
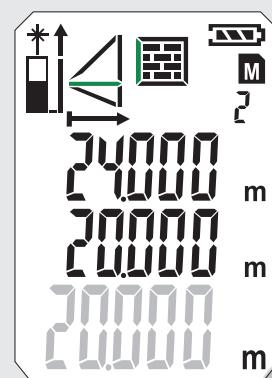
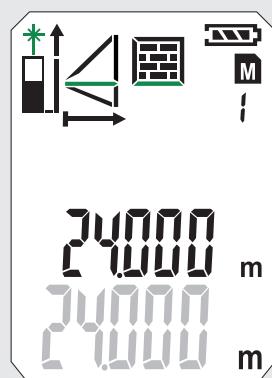
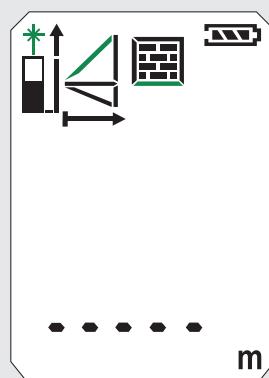
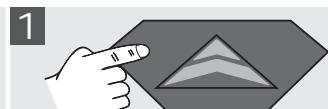
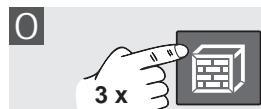
3



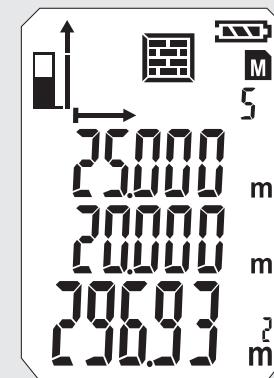
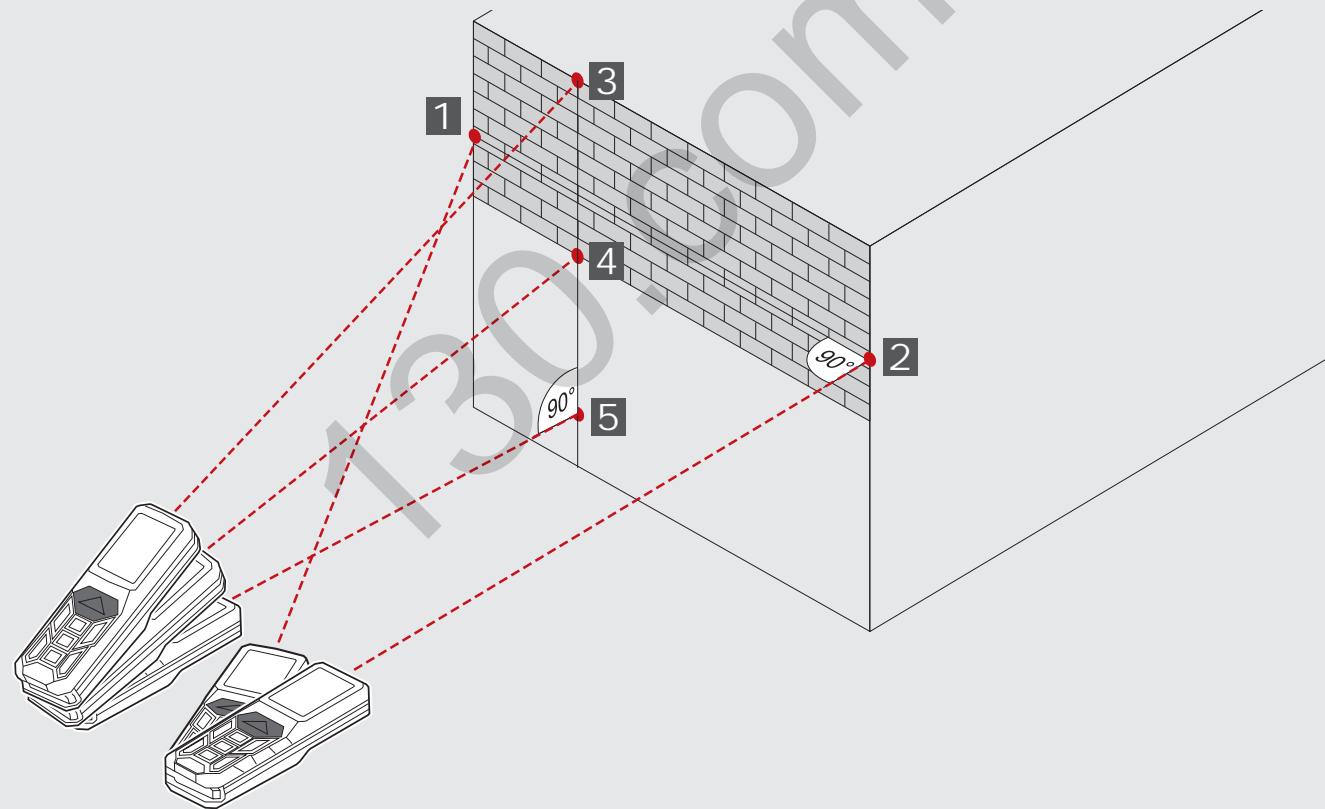
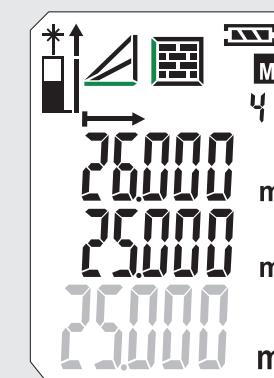
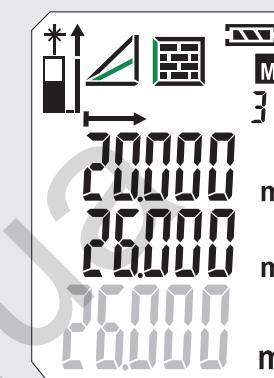
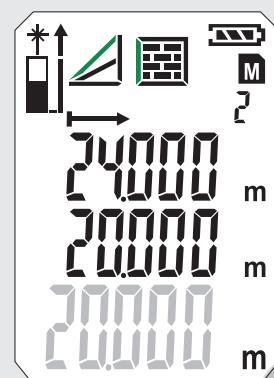
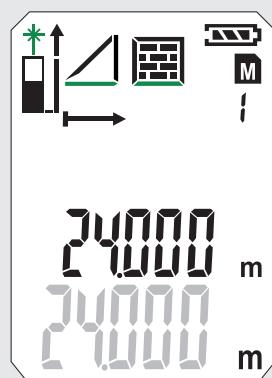
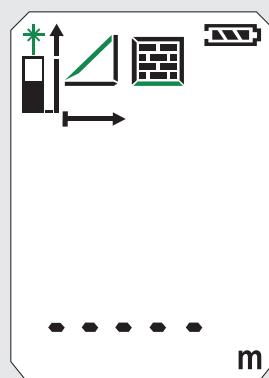
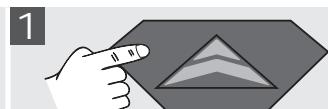
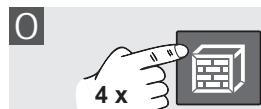
4



MESURE SURFACE PAROI (SCÈNE 1)



MESURE SURFACE PAROI (SCÈNE 2)



TIMER

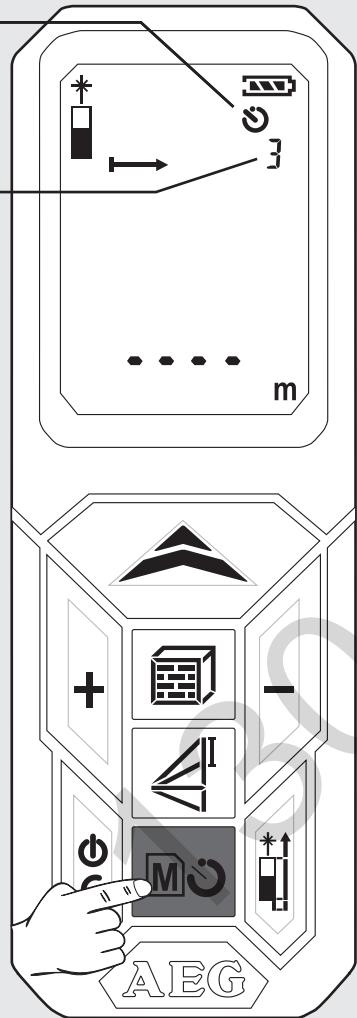
Le timer permet de retarder le démarrage de la mesure, par ex. pour placer un composant dans le rayon de mesure.

Actionner la touche **M**

- Le symbole  sera affiché
- Par l'appui sur la touche **M** il sera possible de sélectionner le timer entre 3 et 15 sec.

Actionner la touche 

- Le compte à rebours jusqu'à la mesure démarre.
- Au 0, la mesure sera activée.



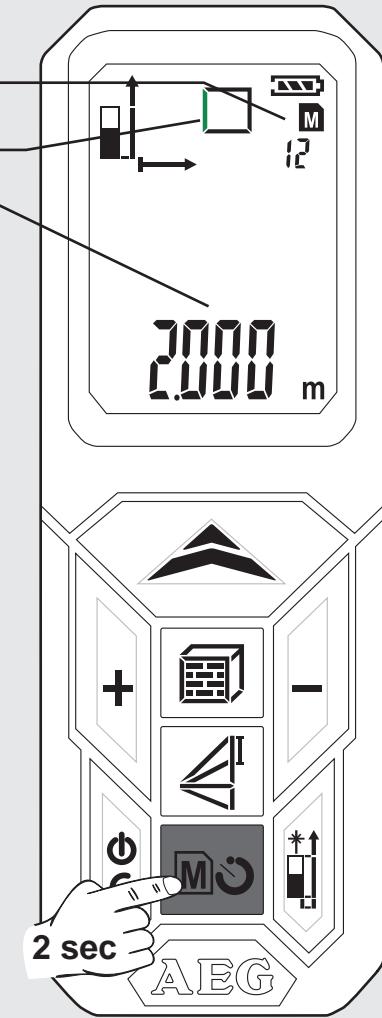
MÉMOIRE

Les valeurs mesurées seront sauvegardées en mémoire automatiquement d'une façon progressive.

Les valeurs mémorisées pourront être sélectionnées par la touche **M**.

Maintenir la touche **M** enfoncée pendant 2 sec.

- Le symbole et l'espace de mémoire seront affichés.
- Le paramètre de mesure intéressé sera affiché.
- La valeur mémorisée est affichée dans la ligne principale.
- Utiliser les touches +/- pour naviguer



FONCTIONNEMENT DE BASE EXEMPLIFIÉ POUR LA MESURE DE LA SURFACE (1)

1 Activer

Actionner la touche 
Attention ! Rayon laser on !
 Ne pas diriger sur des personnes !

2 Sélectionner le plan de mesure

Sélection standard à l'activation:
 postérieur
 Enfoncer 1x -> pointe multifonction
 enfoncez 2x -> antérieur
 enfoncez 3x -> postérieur

Le symbole laser clignote (clignotement indiqué vert).

Le symbole est affiché

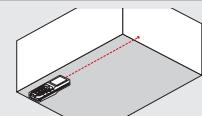
- Le paramètre mesuré clignote (clignotement indiqué vert)

3 Sélectionner la fonction

A l'activation le dispositif est toujours sélectionné sur mesure longueur.
 enfoncez 1x - mesure surface
 - Le symbole est affiché

4 Mesurer la longueur

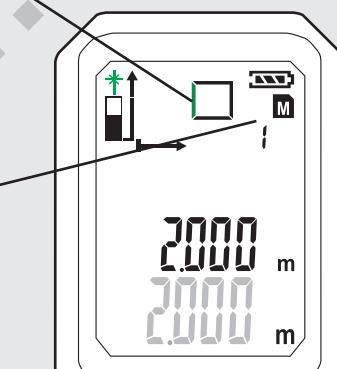
Orienter le dispositif et enfoncez la touche 



- La valeur mémorisée est affichée brièvement dans la ligne principale.
- Après 1 sec. la valeur mesurée se déplace sur la ligne supérieure.

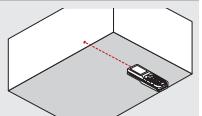
La valeur mesurée sera mémorisée avec un nombre progressif.

Le second paramètre mesuré clignote.
 Le dispositif est prêt à la mesure de la seconde valeur.



5 Mesure largeur

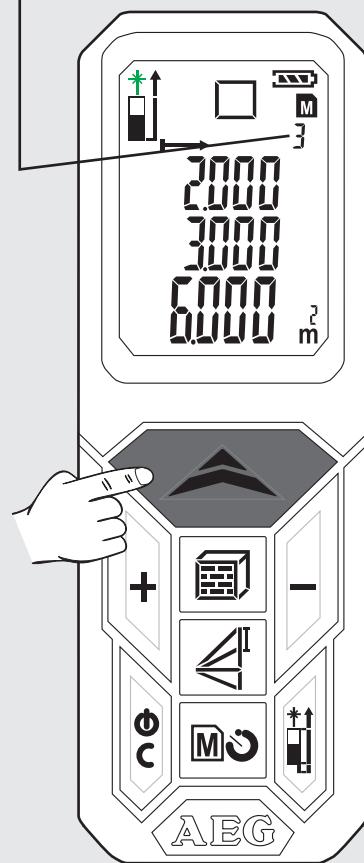
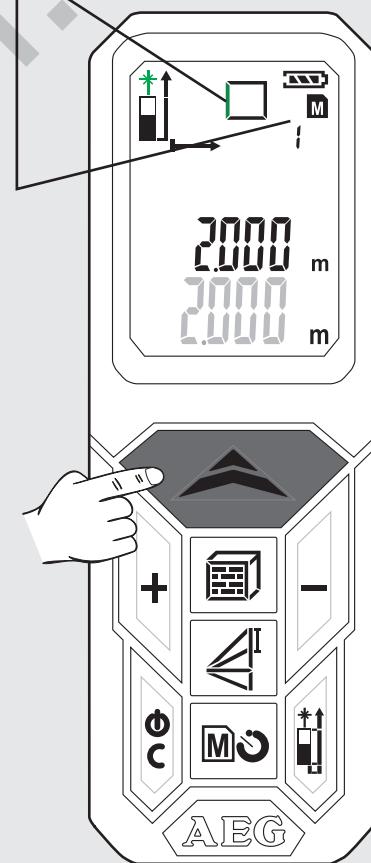
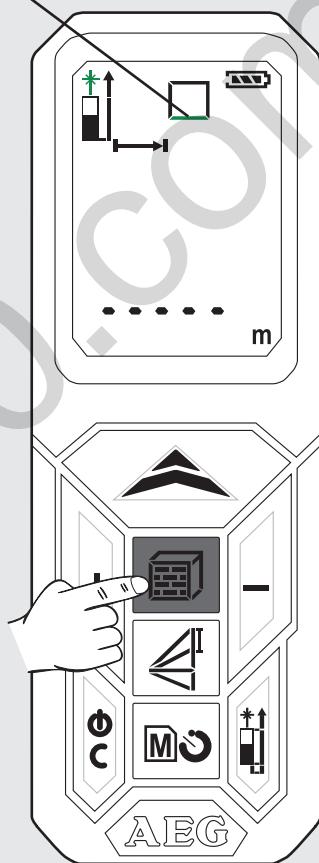
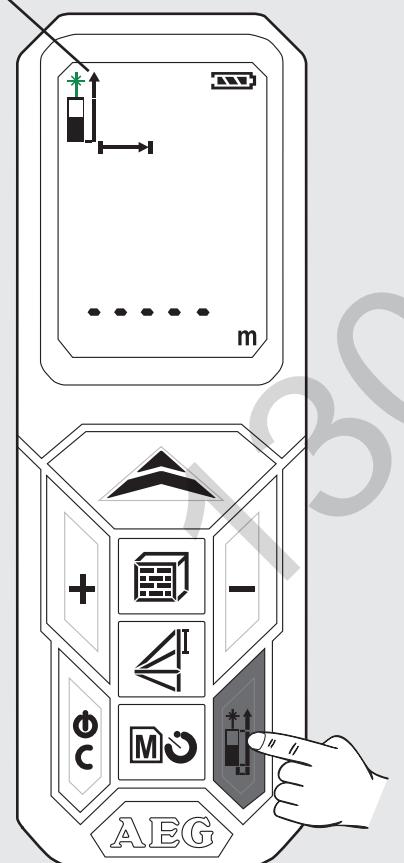
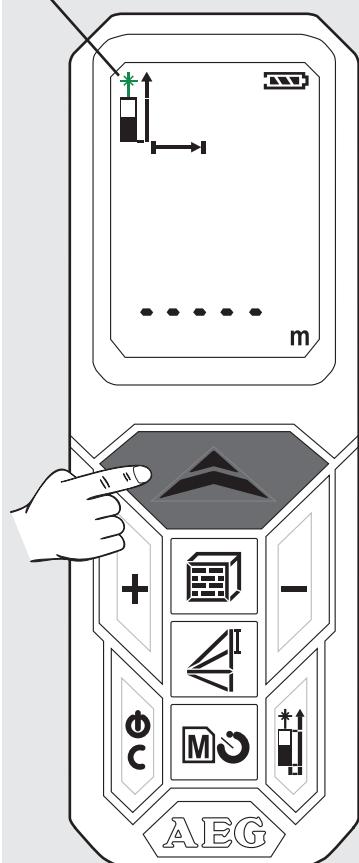
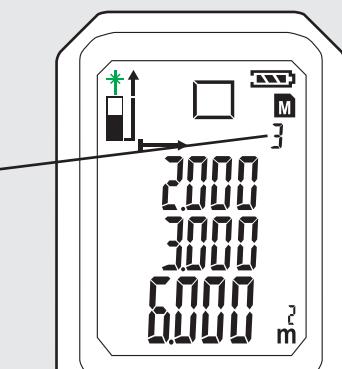
Orienter le dispositif et enfoncez la touche 



- La valeur mémorisée est affichée brièvement dans la ligne principale.
- Après 1 sec. la valeur mesurée se déplace sur la ligne supérieure.

La valeur mesurée sera mémorisée avec un nombre progressif.

- Le résultat est affiché dans la ligne principale et sera sauvegardé en mémoire avec un nombre progressif.



FONCTIONNEMENT DE BASE EXEMPLIFIÉ POUR LA MESURE DE LA SURFACE (2)

6 Sélectionner les valeurs sauvegardées

Maintenir la touche  enfoncée pendant 2 sec.

Enfoncer la touche + ou -.

- Les valeurs mémorisées seront affichées dans la ligne principale.

Le symbole intéressé sera affiché et le paramètre mesuré clignotera (clignotement indiqué vert).

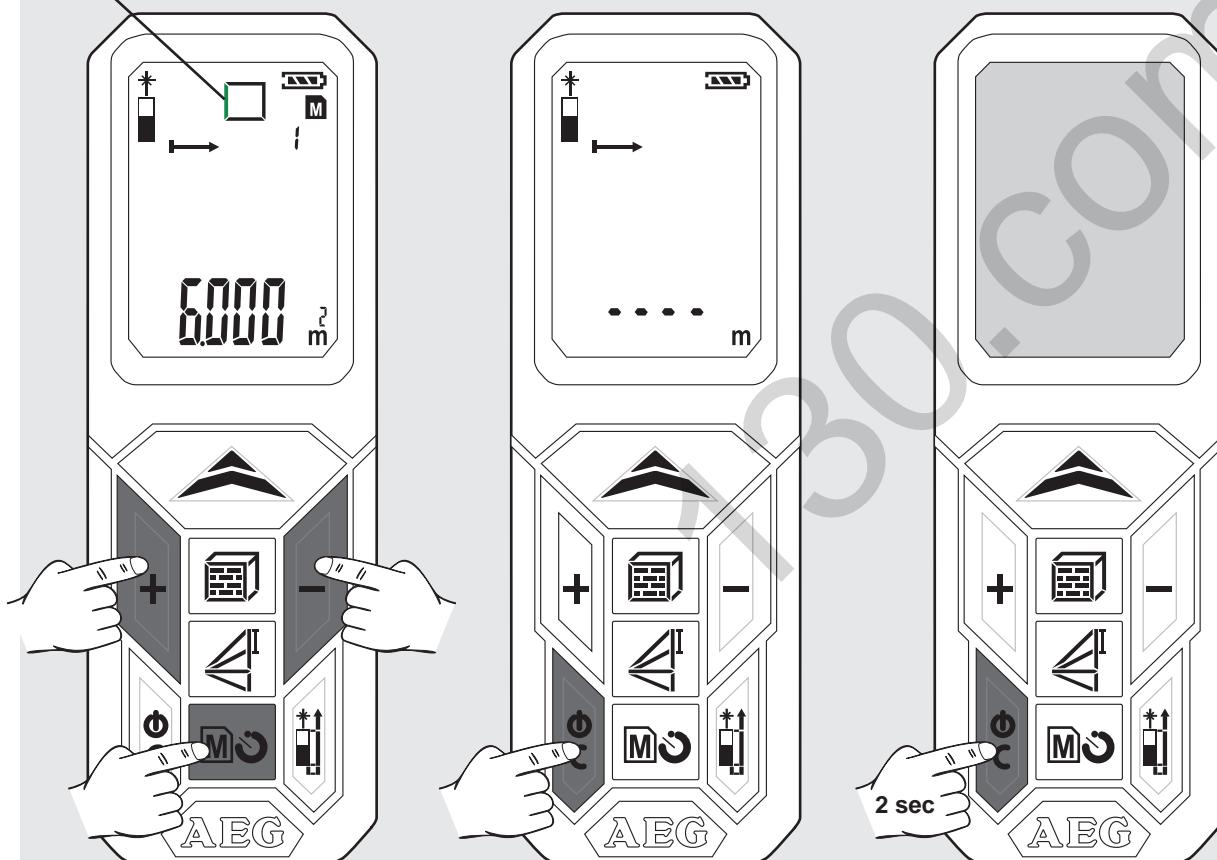
7 Sortir de la mémoire

Actionner la touche 

8 Désactiver

Maintenir la touche  enfoncée pendant 2 sec
(Avant la désactivation, il est nécessaire de sortir de la mémoire).

- Le dispositif se désactive.
- Si dans les 3 minutes suivantes aucune touche ne sera actionnée, le dispositif se désactivera automatiquement.



INDICE

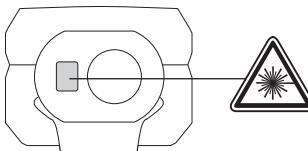
Importanti istruzioni di sicurezza	1
Dati tecnici	2
Utilizzo conforme	2
Tabella codici errori.....	2
Panoramica	3
Sostituire la batteria.....	4
Perno d'angolo	4
Clip per cinta.....	4
Tasto funzione, Pitagora, piano di misurazione	5
Misurazione lunghezza semplice.....	6
Misurazione continua / misurazione minimo/massimo	7
Misurazione per addizione / sottrazione.....	8
Misurazione superficie.....	9
Misurazione volume.....	10
Misurazione indiretta (Pitagora 1).....	11
Misurazione indiretta (Pitagora 2).....	12
Misurazione indiretta (Pitagora 3).....	13
Misurazione superficie parete (scenario 1).....	14
Misurazione superficie parete (scenario 2).....	15
Timer	16
Memoria.....	16
Funzionamento di base esemplificato per la misurazione della superficie (1).....	17
Funzionamento di base esemplificato per la misurazione della superficie (2).....	18

IMPORTANTI ISTRUZIONI DI SICUREZZA



Non usare il prodotto prima di avere studiato le Istruzioni di sicurezza e il Manuale d'uso sul CD in allegato.

Classifica laser



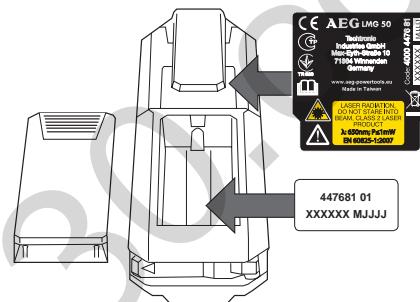
AVVERTENZA:

Si tratta di un prodotto laser di classe 2 conforme a IEC 60825-1:2007.



Targhetta

Prima della prima messa in esercizio, coprire il testo inglese della targhetta di fabbrica con l'etichetta fornita a corredo nella Sua lingua nazionale.



Avvertenza:

Evitare qualsiasi contatto visivo diretto. Il raggio laser può causare un accecamento temporaneo da flash agli occhi.

Non fissare il raggio laser né puntarlo verso altri senza motivo.

Non abbagliare altre persone.

Avvertenza:

Non usare il dispositivo a laser nelle vicinanze di bambini e non permettere ai bambini di usare il dispositivo a laser.

Attenzione! Superfici riflettenti potrebbero fare riflettere il raggio laser sull'operatore o su altre persone.

Tenere le estremità a una distanza di sicurezza.

Effettuare periodicamente delle misure di controllo, soprattutto prima, durante e dopo misurazioni di particolare importanza.

Se il prodotto è difettoso, è caduto, è stato usato in modo improprio o modificato potrebbe fornire misurazioni errate.

Attenzione! Acquisire dimestichezza con gli elementi di comando ed il corretto utilizzo dell'apparecchio per il giardinaggio.

Il dispositivo di misura a laser ha un range di applicazione limitato. (Vedi il capitolo "Dati tecnici"). Tentativi di misurare al di fuori del range massimo e minimo causano imprecisioni. L'uso in presenza di condizioni atmosferiche avverse, come temperature eccessivamente alte o basse, luce solare molto intensa, pioggia, neve, nebbia o altre condizioni che limitano la visibilità, può comportare misurazioni imprecise.

Se il dispositivo di misura a laser viene portato da un ambiente caldo in un ambiente freddo (o vice-versa), attendere che il dispositivo si adatti alla nuova temperatura ambiente.

Conservare il dispositivo di misura a laser sempre in ambienti chiusi, proteggerlo da urti, vibrazioni e temperature estreme.

Proteggere il dispositivo di misura a laser da polveri, liquidi ed elevata umidità dell'aria. I suddetti fattori potrebbero danneggiare gravemente i componenti interni o influenzare negativamente la precisione.

Non usare detergenti aggressivi o solventi. Pulire soltanto con un panno pulito, morbido.

Evitare forti urti sul dispositivo di misura a laser o la sua caduta. Dopo una caduta del dispositivo di misura a laser o dopo una sua esposizione ad altre sollecitazioni meccaniche è necessario verificare la precisione del dispositivo.

Le riparazioni eventualmente necessarie sul dispositivo a laser devono essere eseguite esclusivamente da personale specializzato autorizzato!

Non azionare il prodotto in aree a rischio di esplosione o in ambienti aggressivi.

Utilizzare solo caricabatterie raccomandati dal produttore.

Non smaltire le batterie scariche assieme ai rifiuti domestici. Al fine di garantire il rispetto dell'ambiente smaltirle presso i punti di raccolta esistenti secondo quanto previsto dalle disposizioni nazionali o locali. Non smaltire il prodotto assieme ai rifiuti domestici. Altro il prodotto correttamente, nel rispetto delle normative vigenti nel paese d'uso. Attenersi alle norme nazionali e locali vigenti in materia. Contattare le autorità locali o il rivenditore per ottenere informazioni sullo smaltimento.



DATI TECNICI

Classe di protezione	IP54 (protezione da polveri e spruzzi d'acqua)
Ottica	14 mm
Punto focale	35 mm
Range di misurazione max.	50 metri (tolleranza: 55m)
Range di misurazione min.	0,05 metri
Precisione assoluta @ < 10m	± 1,5 mm (max)
Precisione di ripetibilità @ < 10m	± 1,5 mm (tipicamente max. 2σ)
Precisione di ripetibilità @ > 10m	salita ± 0,25 mm / metro (tipicamente max. 2σ)
Tempo di misurazione	0,5 s
Display tipo	LCD (22,7 mm x 31 mm)
Alimentazione	AAA 2x (batteria alcalina)
Durata batteria	10000 (misurazione singola)
Potenza di uscita laser	0,6 mW ~ 0,95 mW (Class 2, 650nm)
Dimensione punto laser	25 x 30 mm @ 16 m (max)
Raggio laser angolo verticale	+1 grado
Raggio laser angolo orizzontale	±1 grado
Disattivazione automatica dispositivo	180 secondi
Disattivazione automatica laser	30 secondi
Range temperatura di lavoro	da -10°C a +50°C
Range temperatura di immagazzinaggio	da -25°C a +70°C
Peso senza batteria	80 g

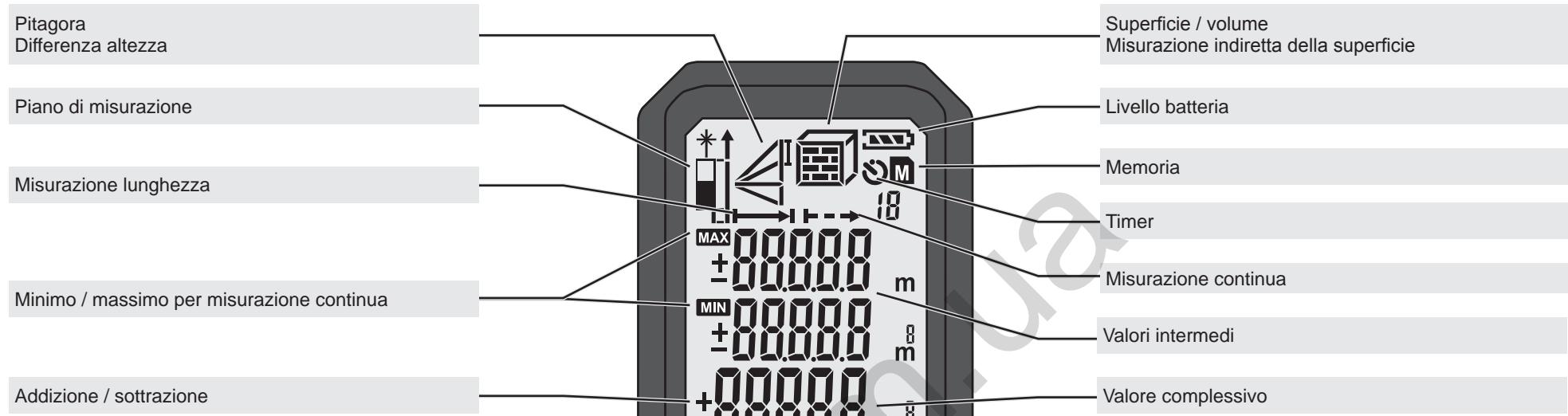
TABELLA CODICI ERRORI

Codice	Descrizione	Soluzione
Err01	Fuori range di misurazione	Misurare nel range previsto.
Err02	Segnale riflesso troppo debole	Scegliere una superficie più idonea.
Err03	Fuori range di visualizzazione (valore max: 99.999) è ad esempio il risultato di una superficie o volume al di fuori del range di visualizzazione	Verificare se i valori ed i passi sono corretti.
Err04	Errore nel calcolo di Pitagora	Verificare se i valori ed i passi sono corretti.
Err05	Batteria scarica	Sostituire le batterie.
Err06	Fuori range della temperatura di lavoro	Eseguire la misurazione nel range previsto per la temperatura di lavoro.
Err07	Eccessiva luce ambiente	Oscurare l'area target.

UTILIZZO CONFORME

Il dispositivo di misura a laser è attrezzato a misurare distanze ed inclinazioni.

Utilizzare il prodotto solo per l'uso per cui è previsto.



ON / MISURARE

- ▶ ON
- ▶ Misurare
- ▶ Misurazione continua (premere per 2 sec)
Funzione min. / max.

ADDIZIONE

- ▶ Addizione valore
- ▶ Navigazione memoria

SUPERFICIE / VOLUME

- ▶ Superficie (premere 1x)
- ▶ Volume (premere 2x)
- ▶ Misurazione indiretta della superficie (premere 3x / 4x)

ATTIVARE

- ▶ ON
- ▶ Off (premere per 2 sec)
- ▶ Reset

SOTTRAZIONE

- ▶ Sottrazione valore
- ▶ Navigazione memoria

PITAGORA

- ▶ Pitagora 1 (premere 1x)
- ▶ Pitagora 2 (premere 2x)
- ▶ Pitagora 3 (premere 3x)

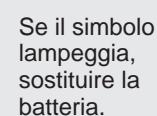
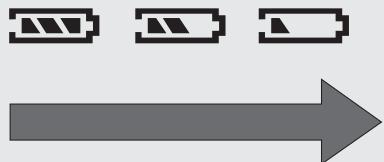
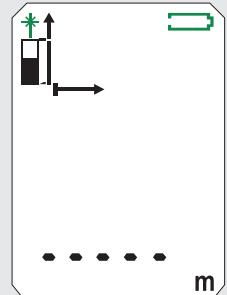
CAMBIA PIANO DI MISURAZIONE

- ▶ Anteriore
- ▶ Posteriore
- ▶ Perno d'angolo

MEMORIA

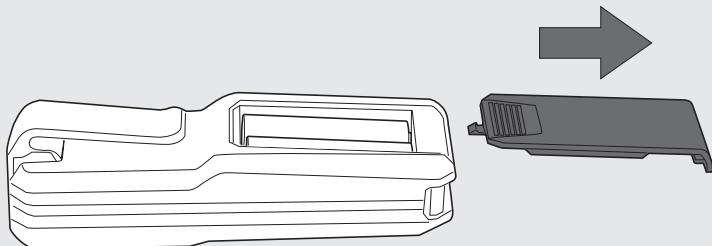
- ▶ Timer 3-15 sec. (premere 1x)
- ▶ Memoria 1-20 (premere 1x 2 sec.)
- ▶ Usare i tasti +/- per navigare in memoria

SOSTITUIRE LA BATTERIA

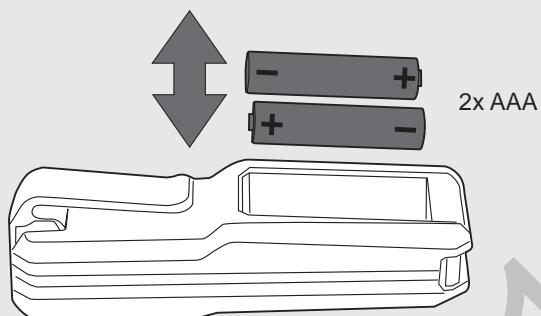


Se il simbolo
lampeggia,
sostituire la
batteria.

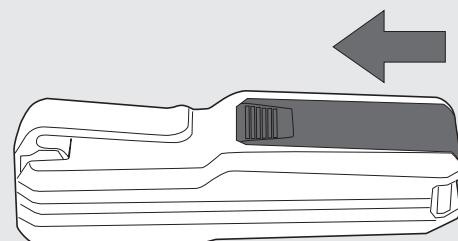
1



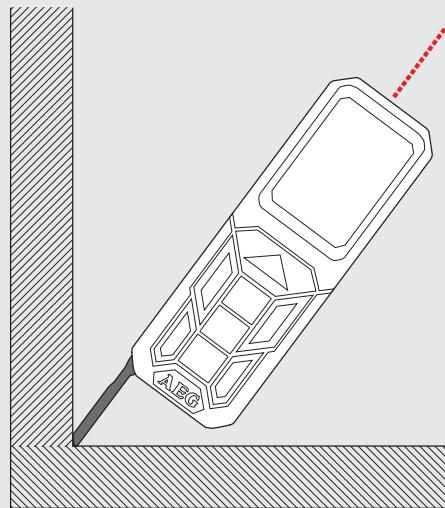
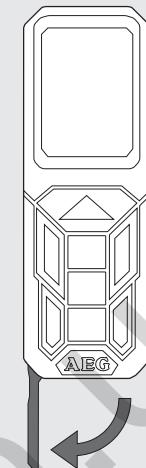
2



3

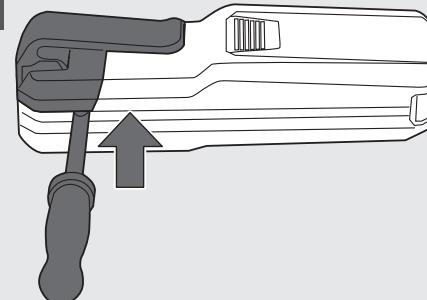


PERNO D'ANGOLO

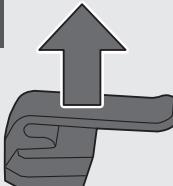


CLIP PER CINTA

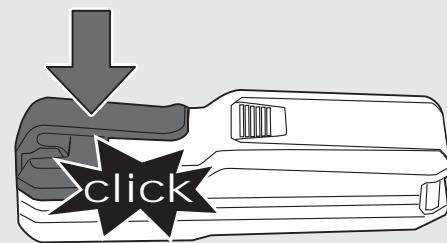
1



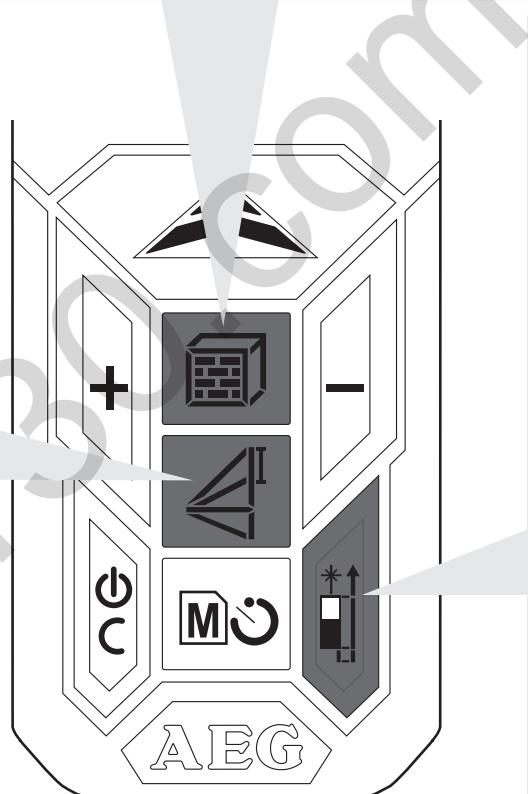
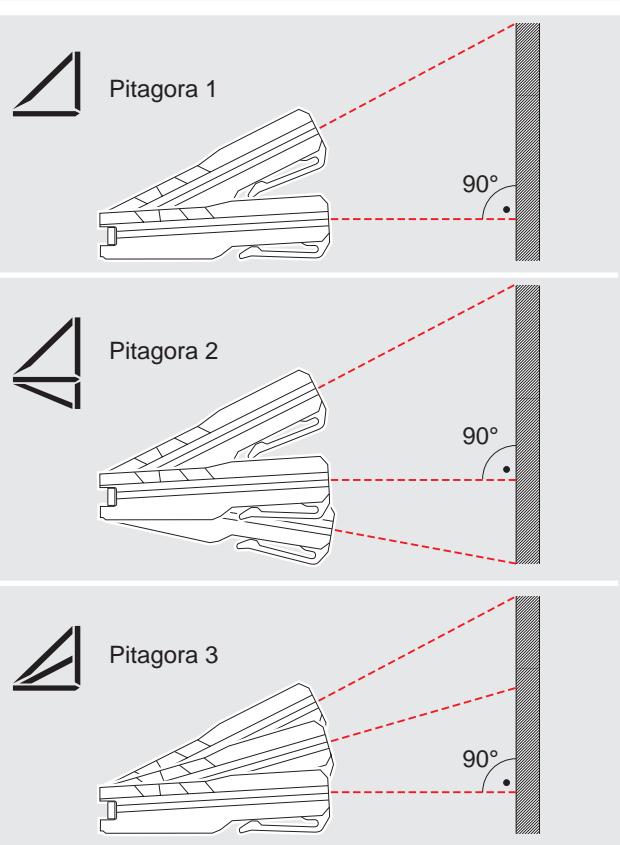
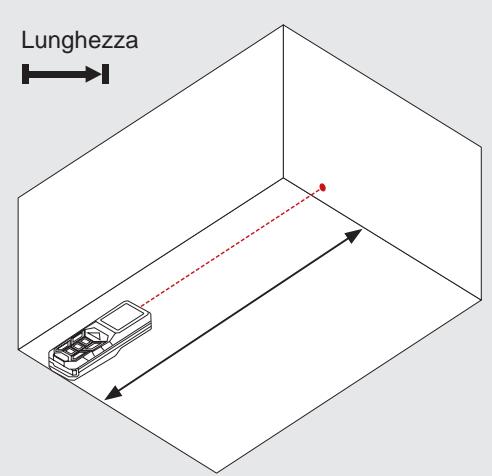
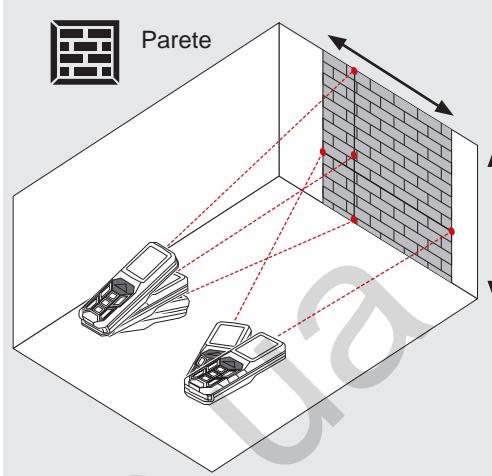
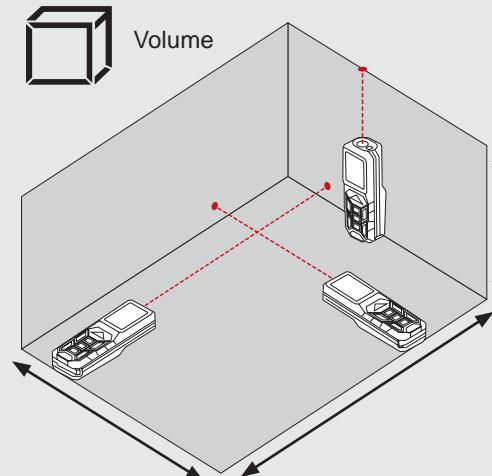
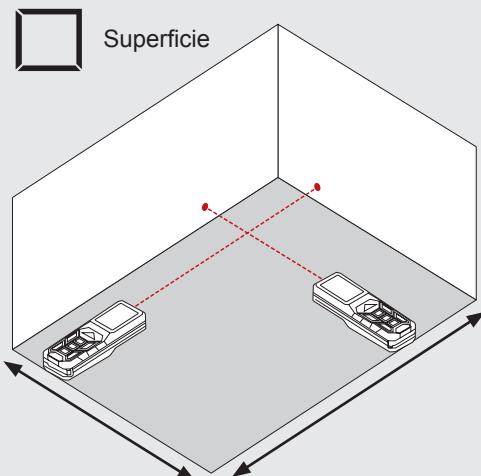
2



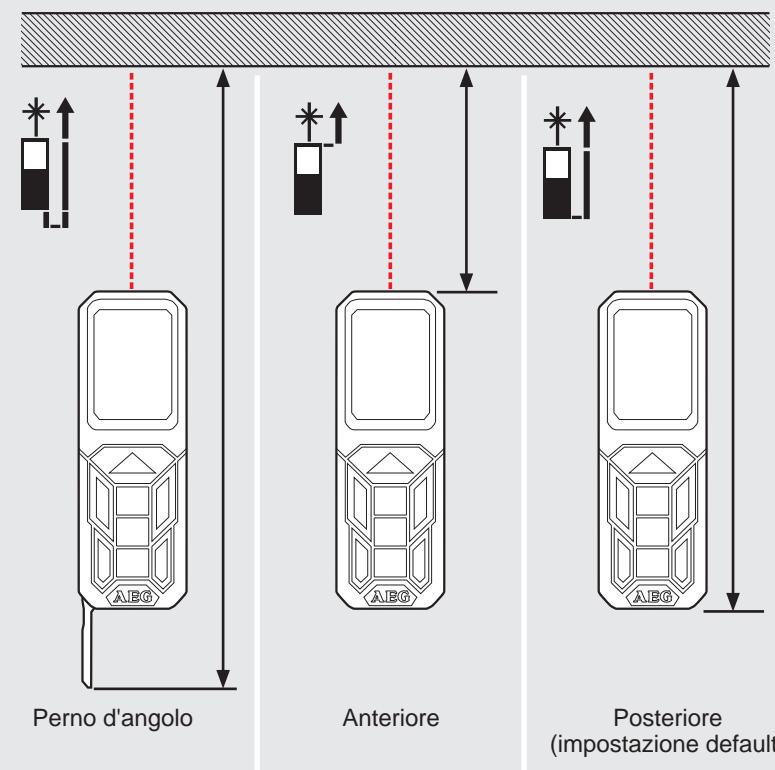
3



TASTO FUNZIONE, PITAGORA, PIANO DI MISURAZIONE

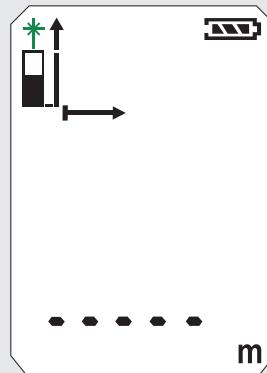
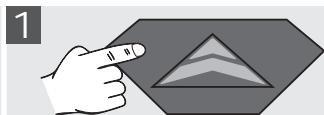


Piano di misurazione

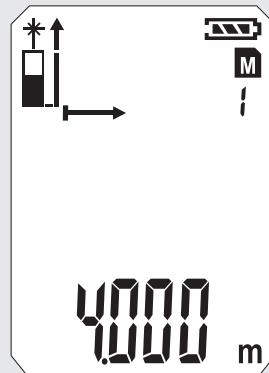
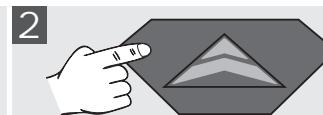


MISURAZIONE LUNGHEZZA SEMPLICE

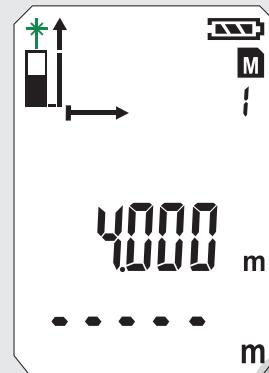
0



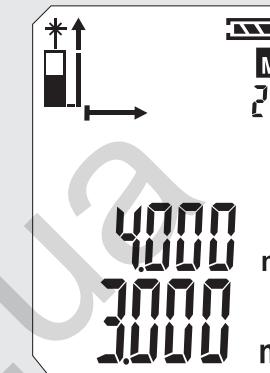
1



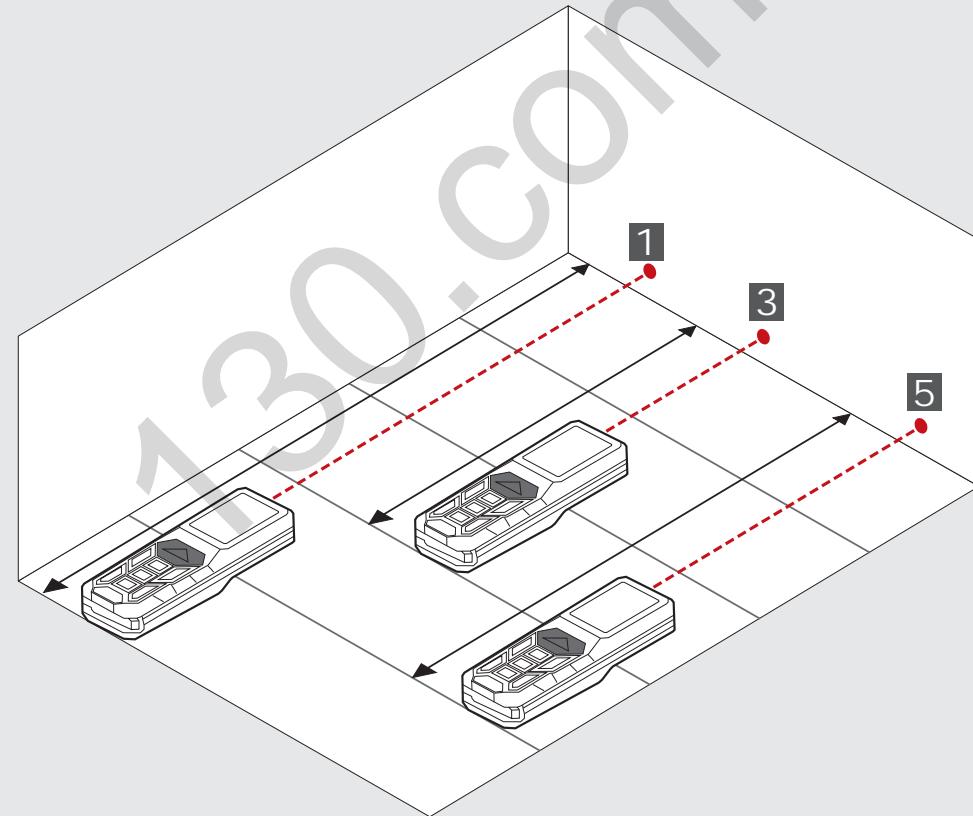
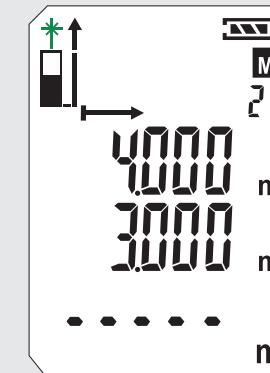
2



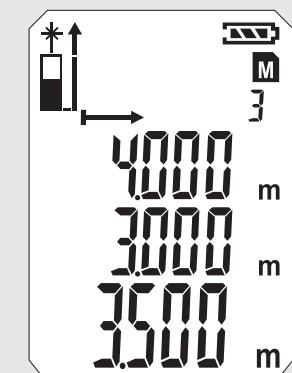
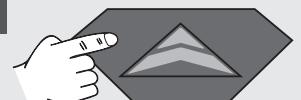
3



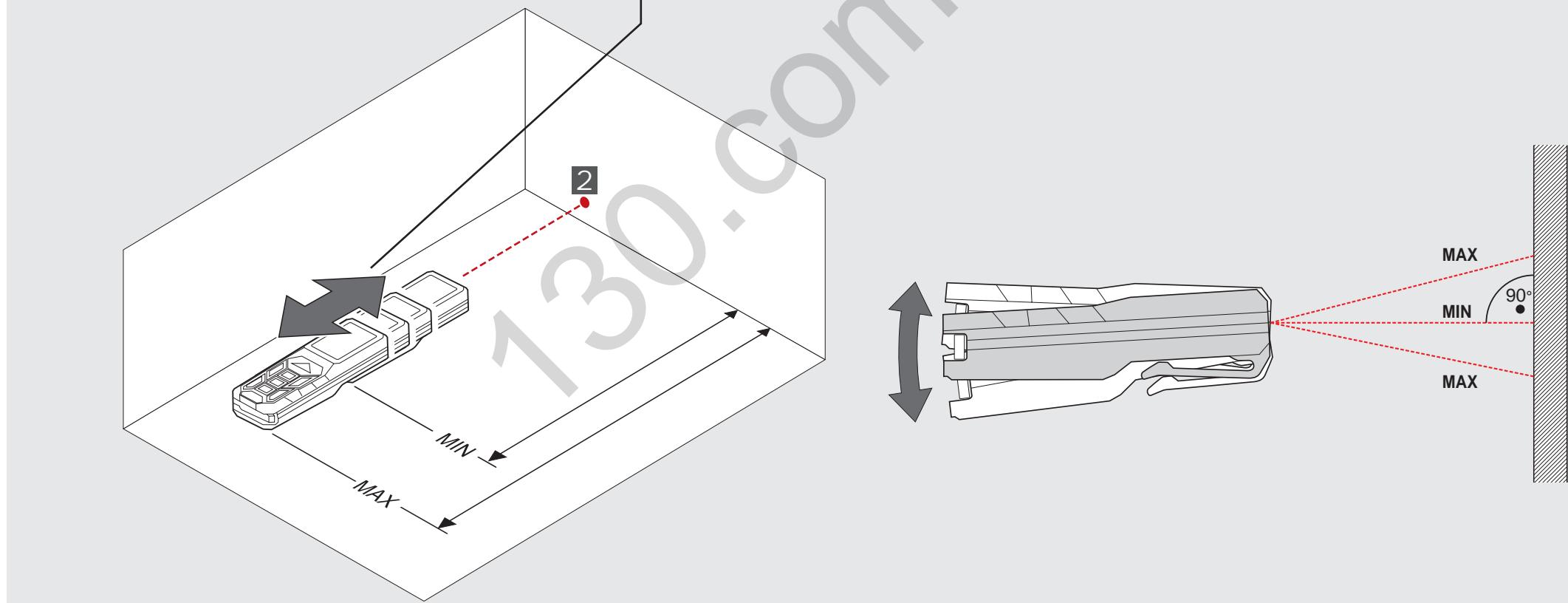
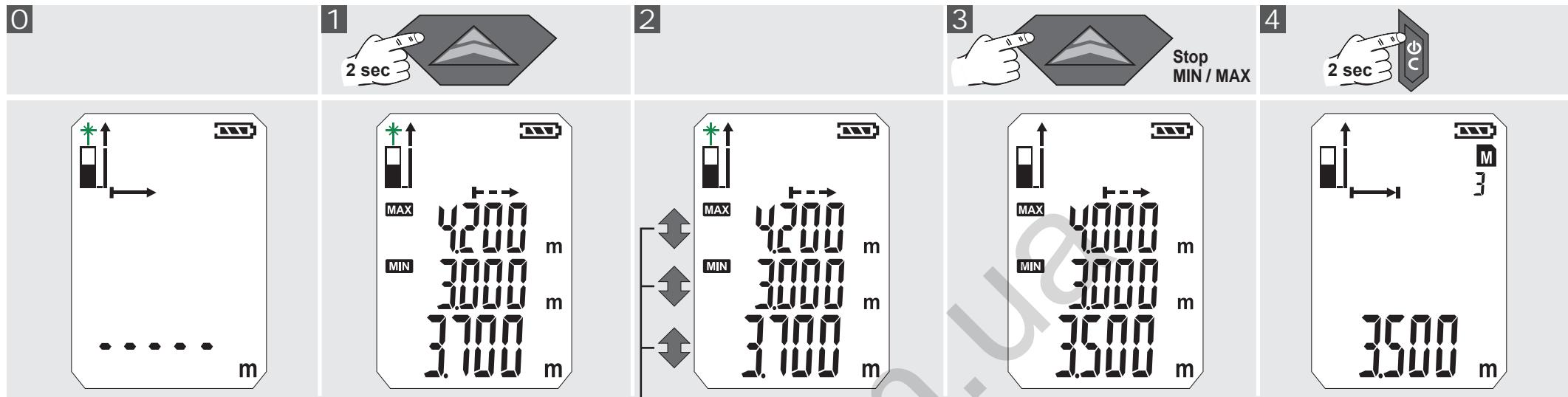
4



5

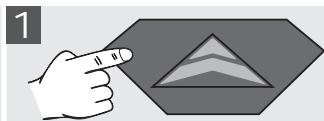


MISURAZIONE CONTINUA / MISURAZIONE MINIMO/MASSIMO



MISURAZIONE PER ADDIZIONE / SOTTRAZIONE

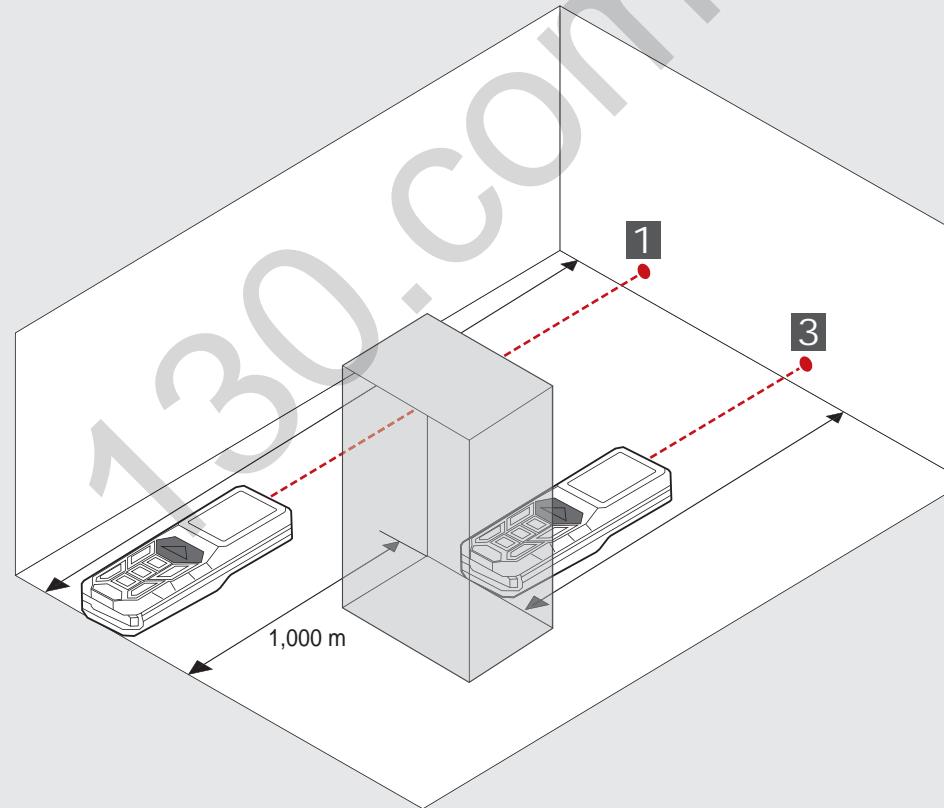
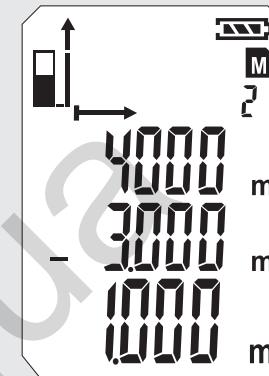
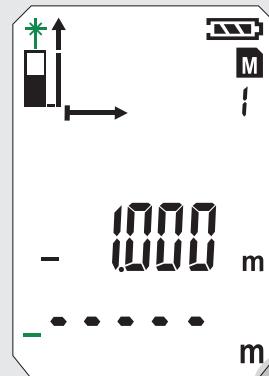
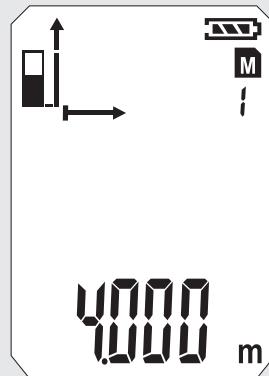
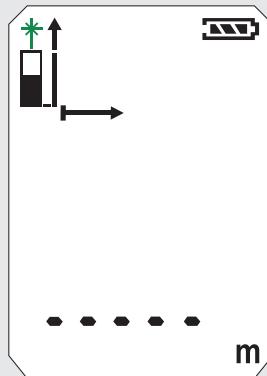
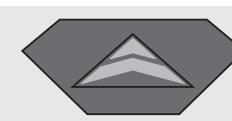
0



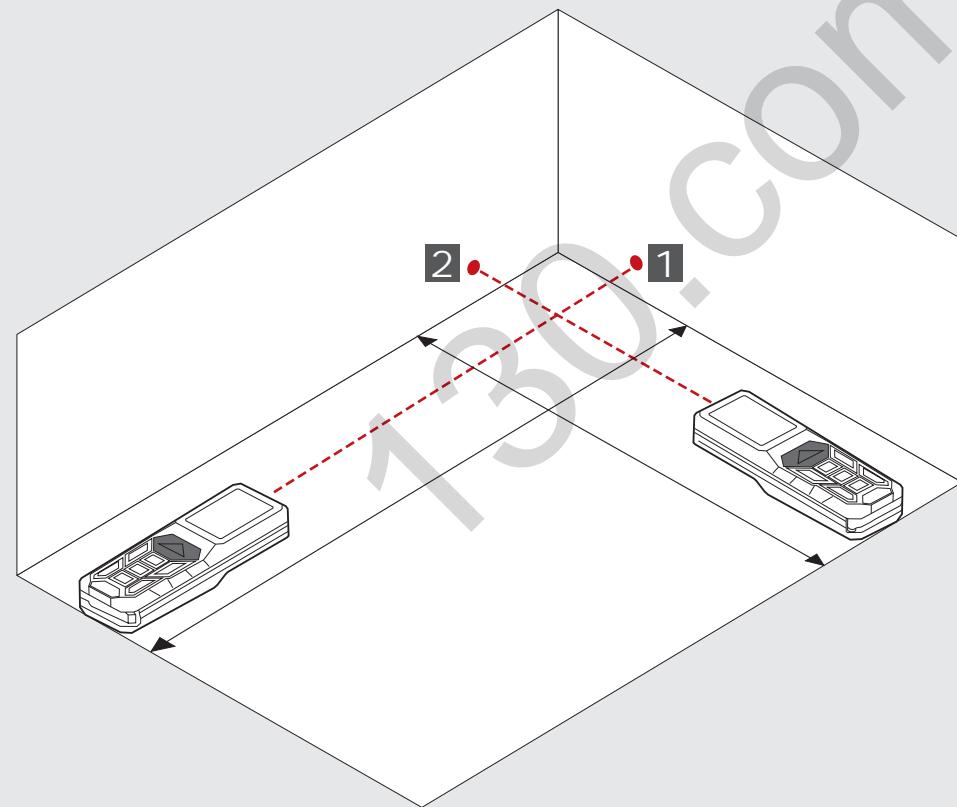
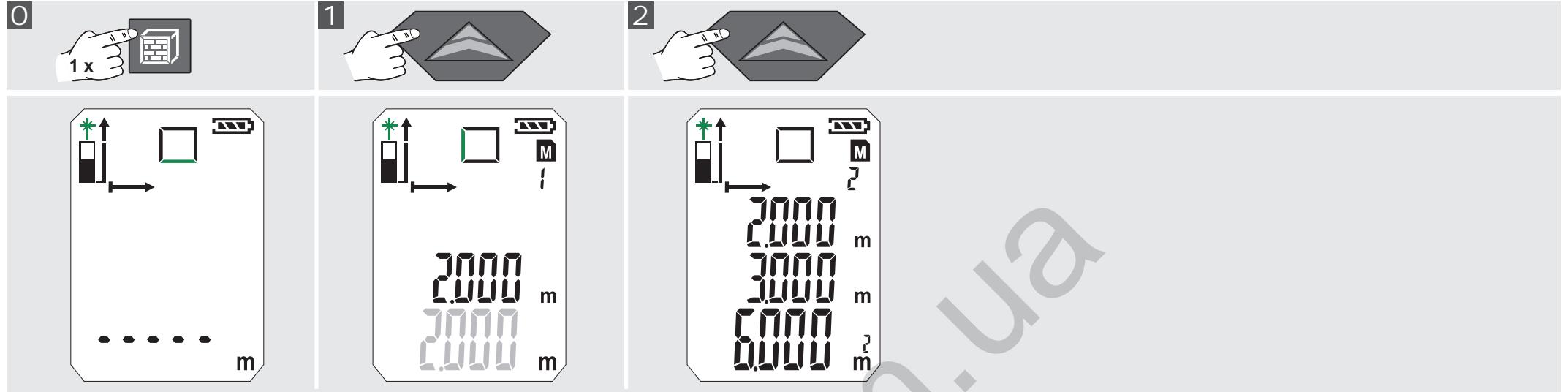
2



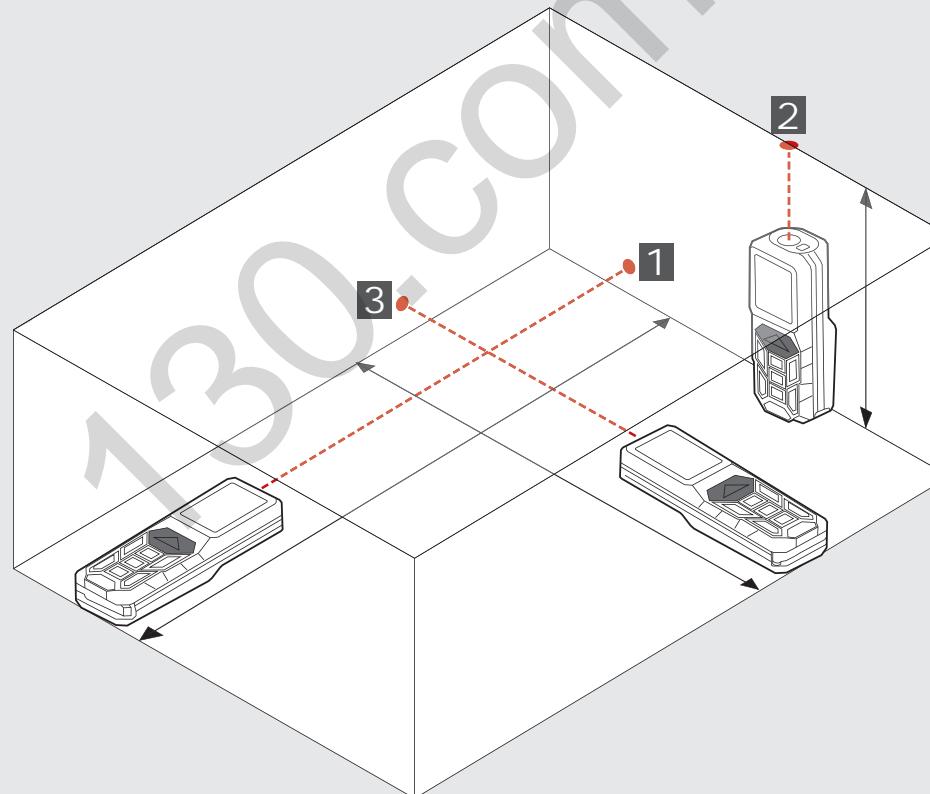
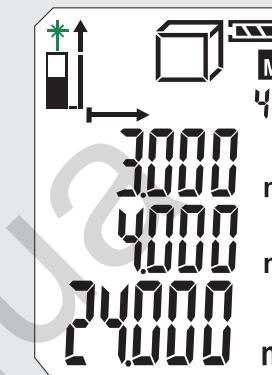
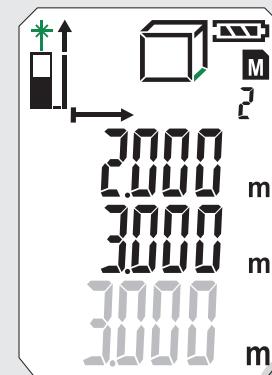
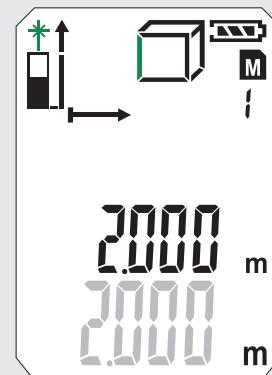
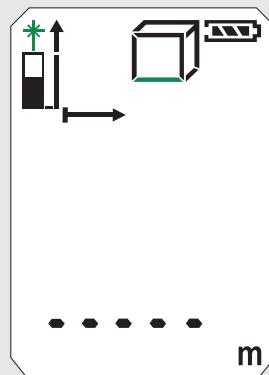
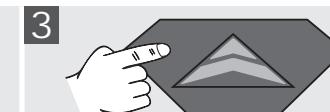
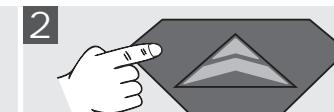
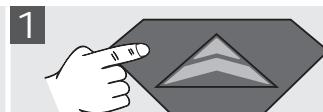
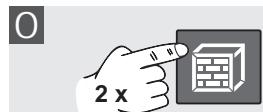
3



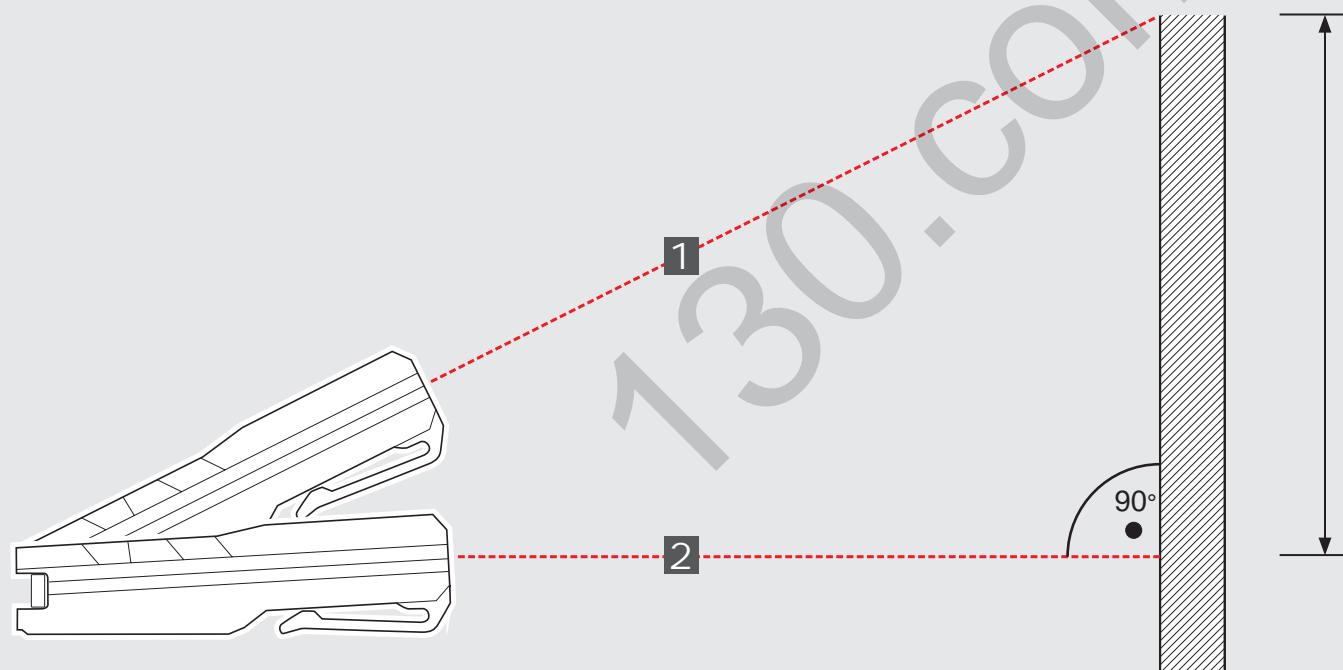
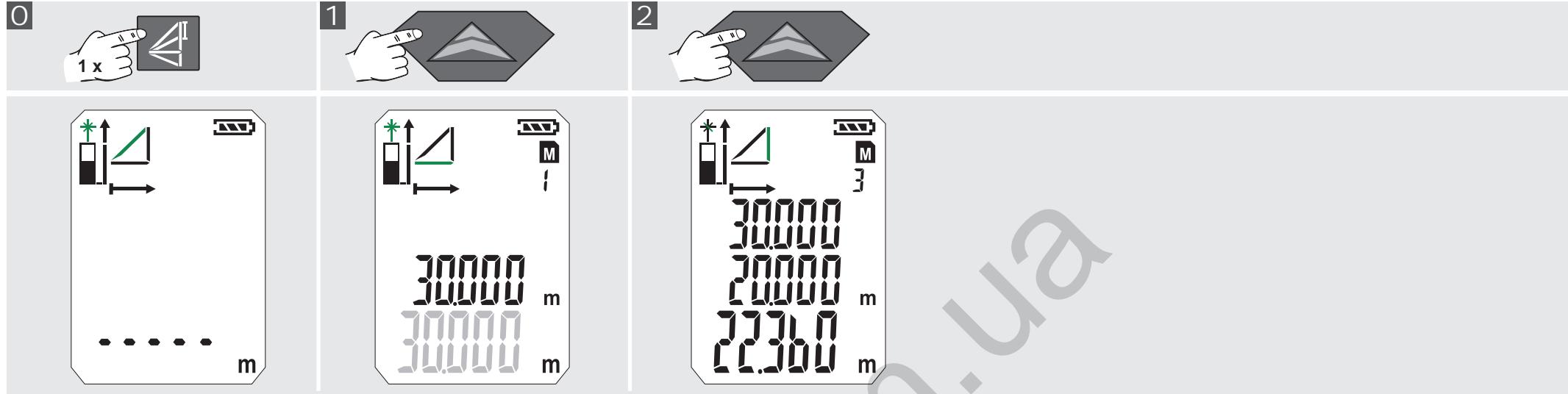
MISURAZIONE SUPERFICIE



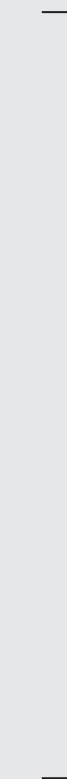
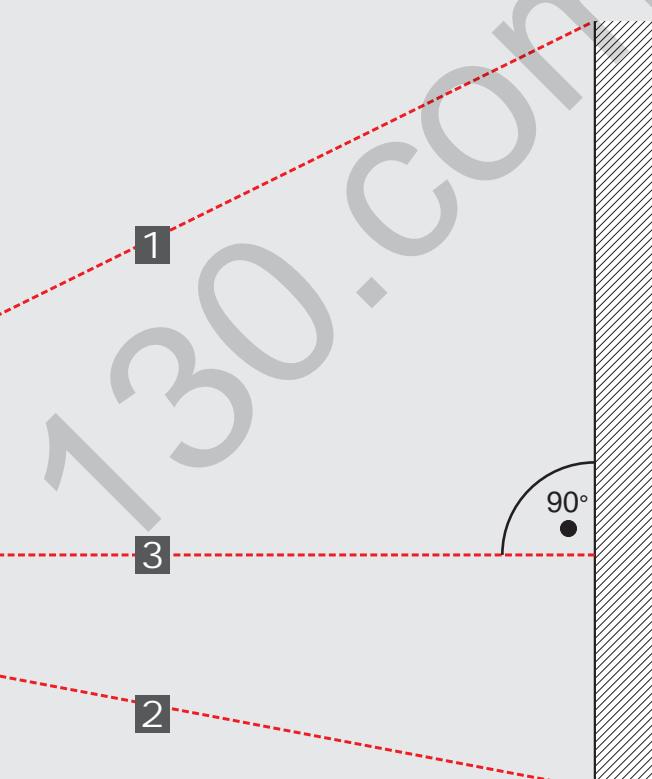
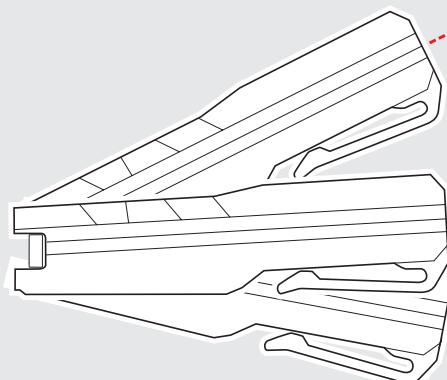
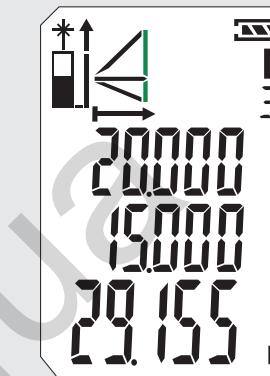
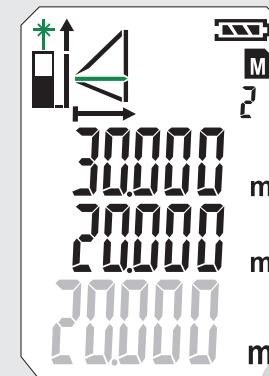
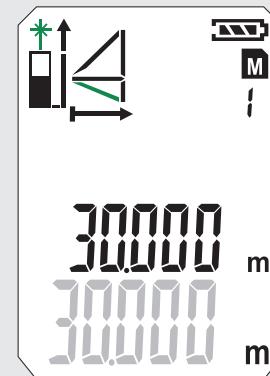
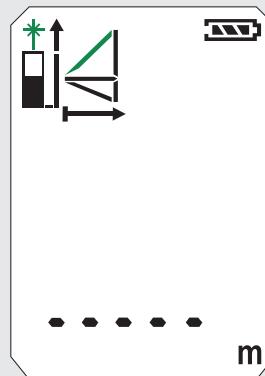
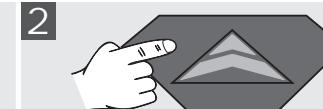
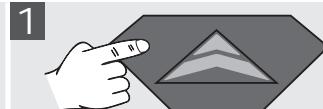
MISURAZIONE VOLUME



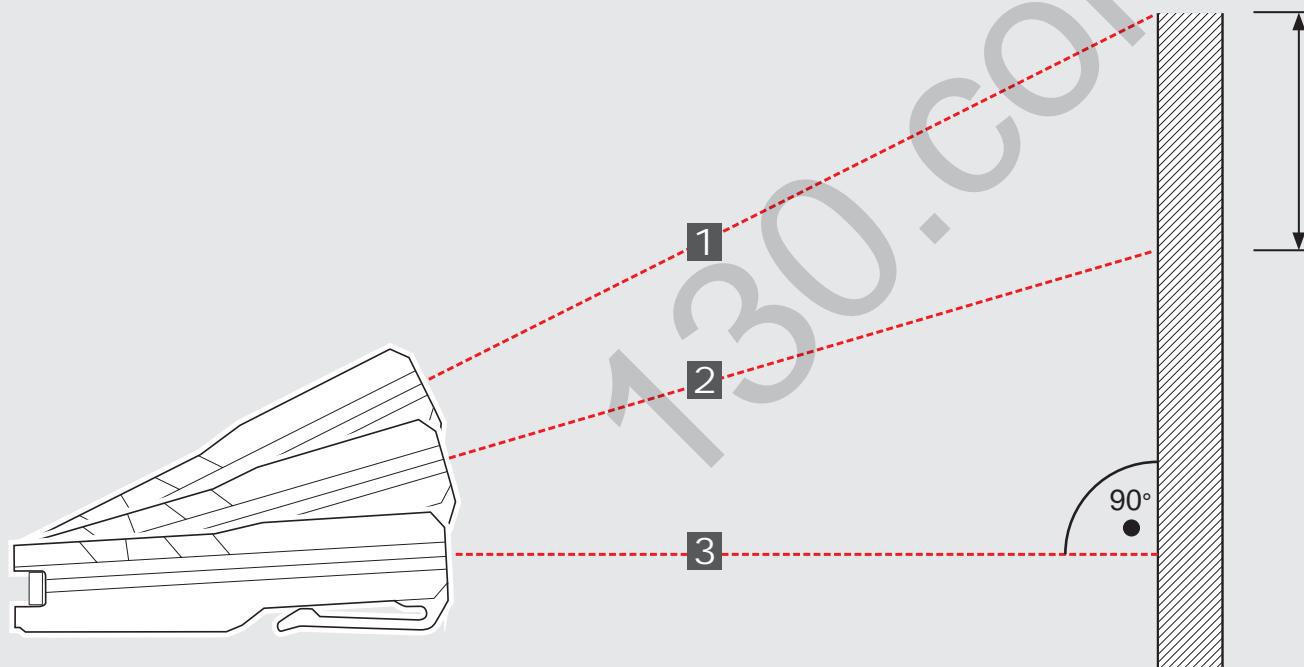
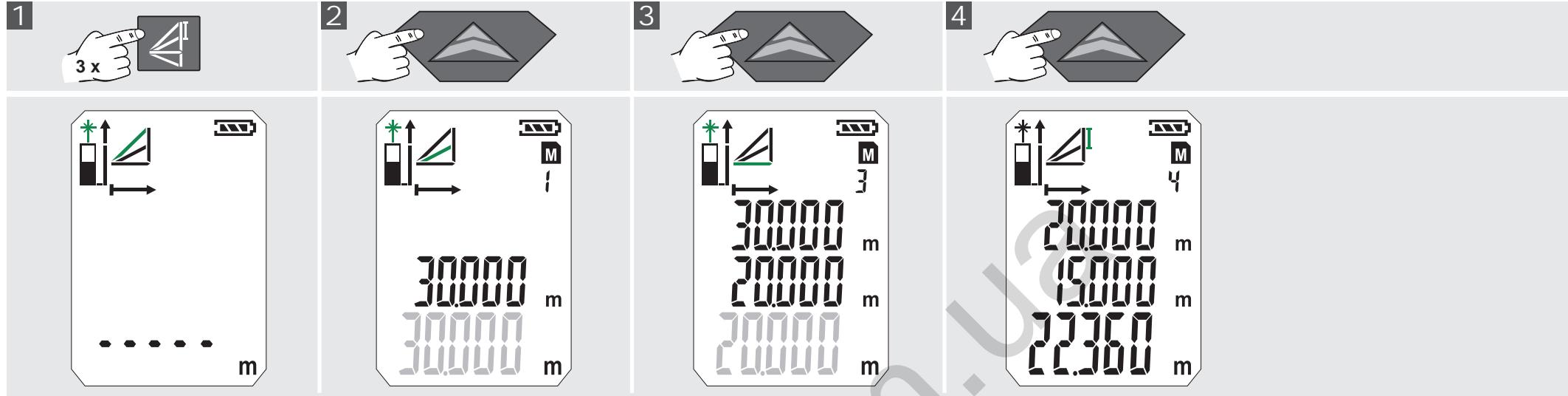
MISURAZIONE INDIRETTA (PITAGORA 1)



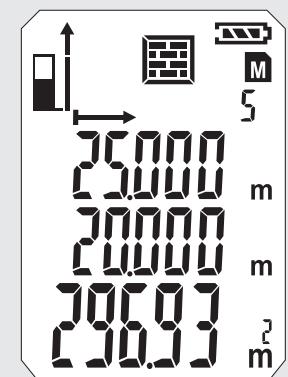
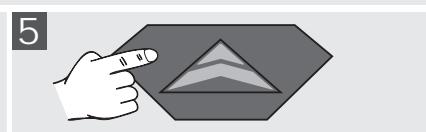
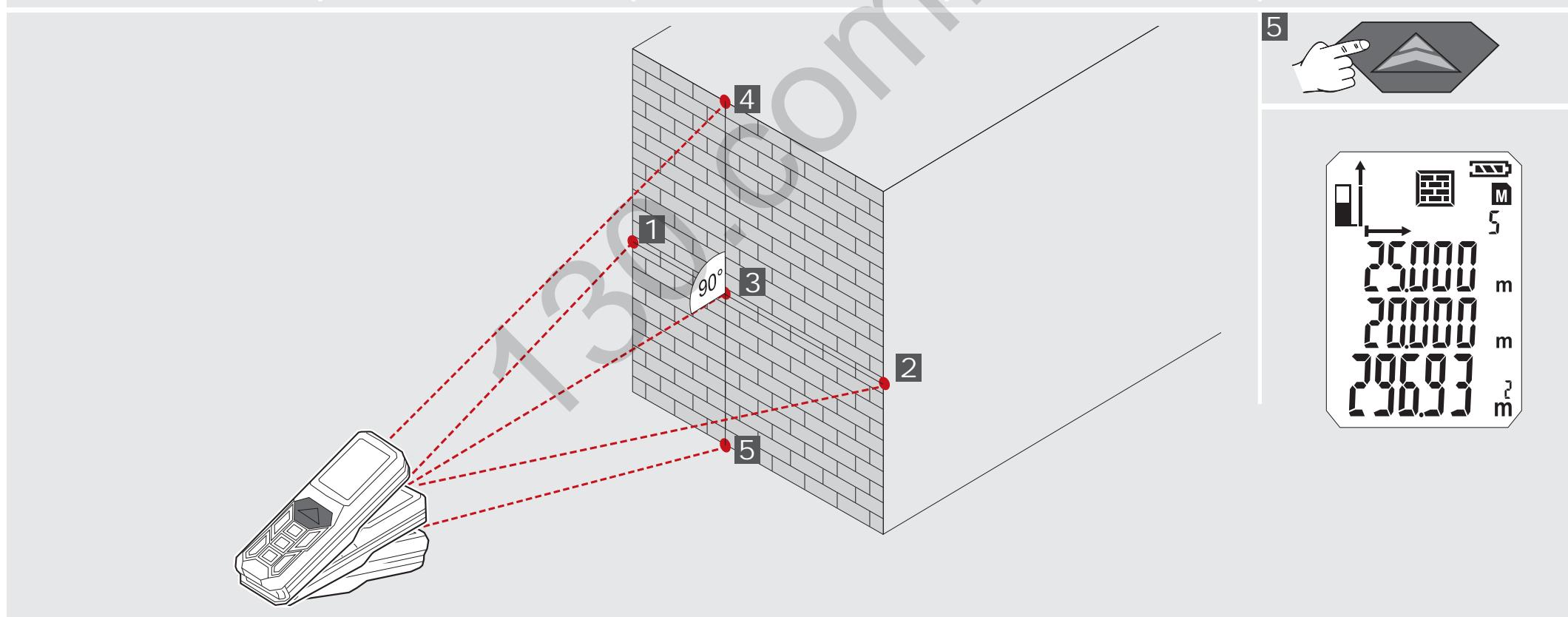
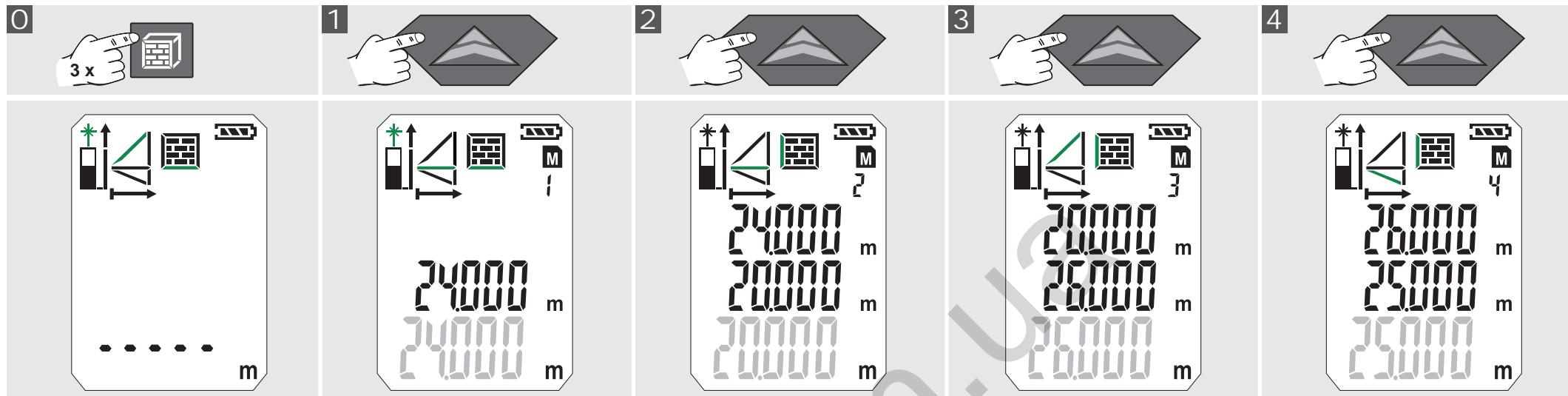
MISURAZIONE INDIRETTA (PITAGORA 2)



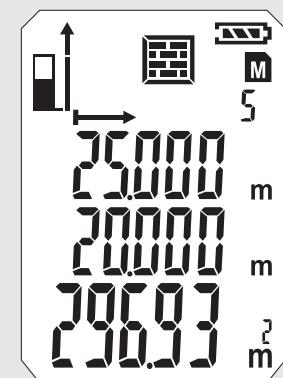
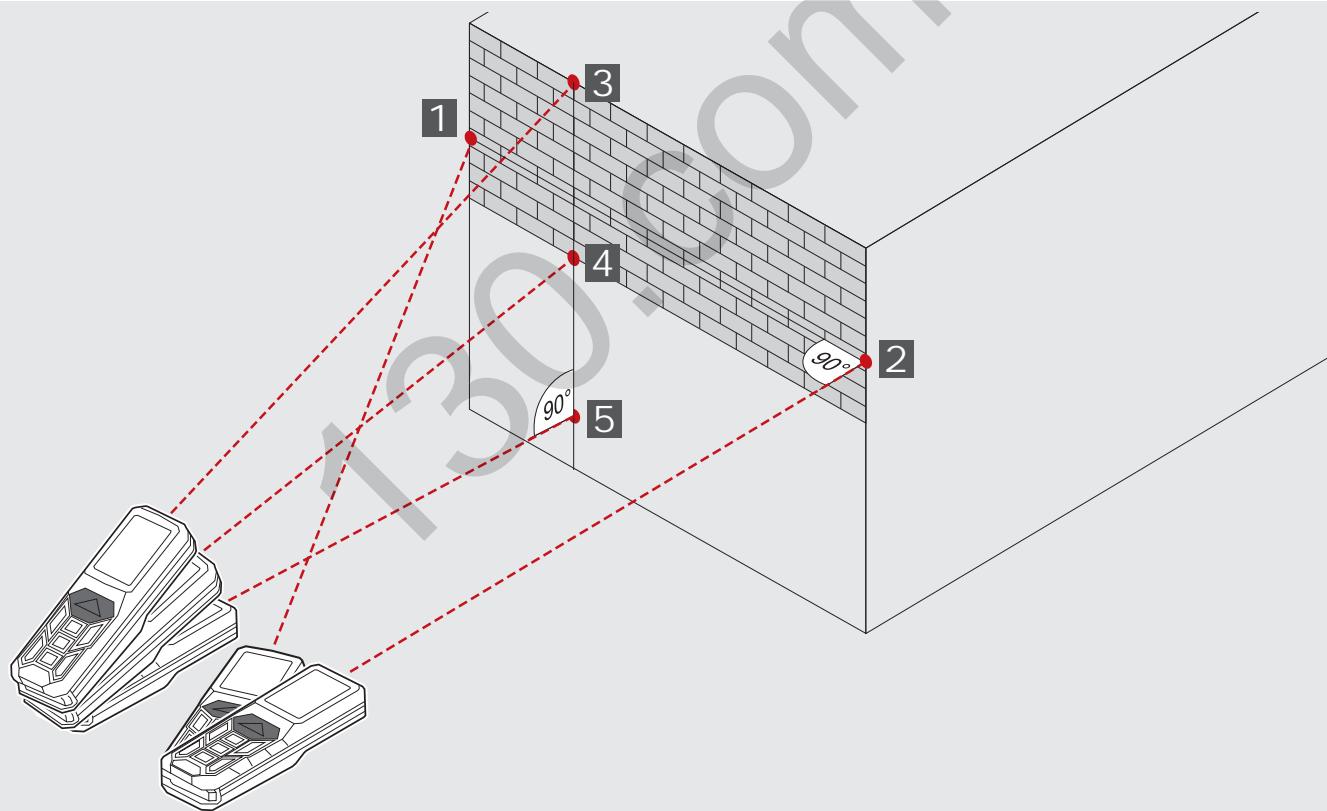
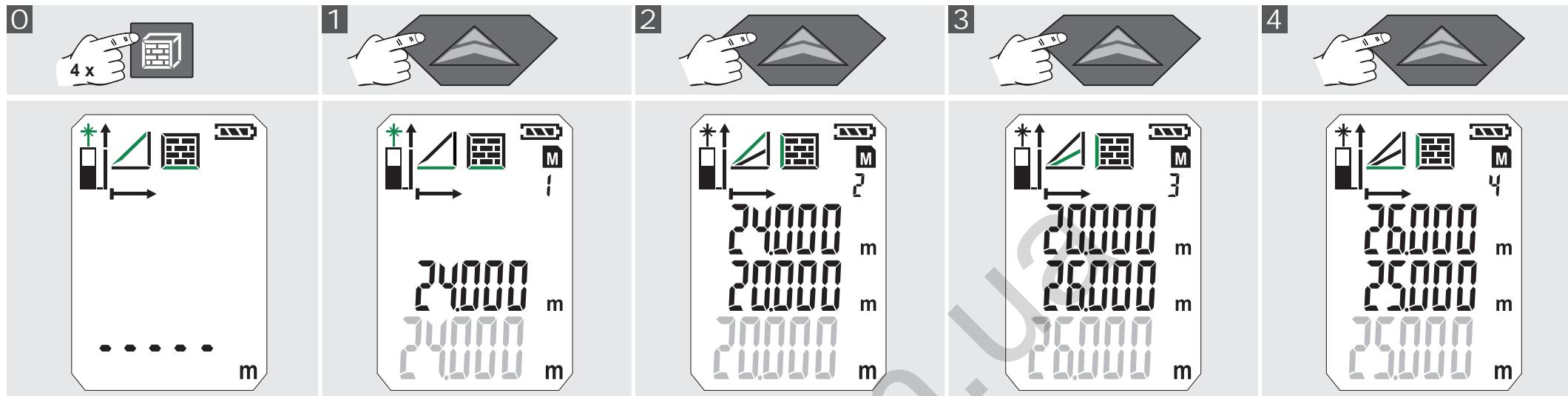
MISURAZIONE INDIRETTA (PITAGORA 3)



MISURAZIONE SUPERFICIE PARETE (SCENARIO 1)



MISURAZIONE SUPERFICIE PARETE (SCENARIO 2)



TIMER

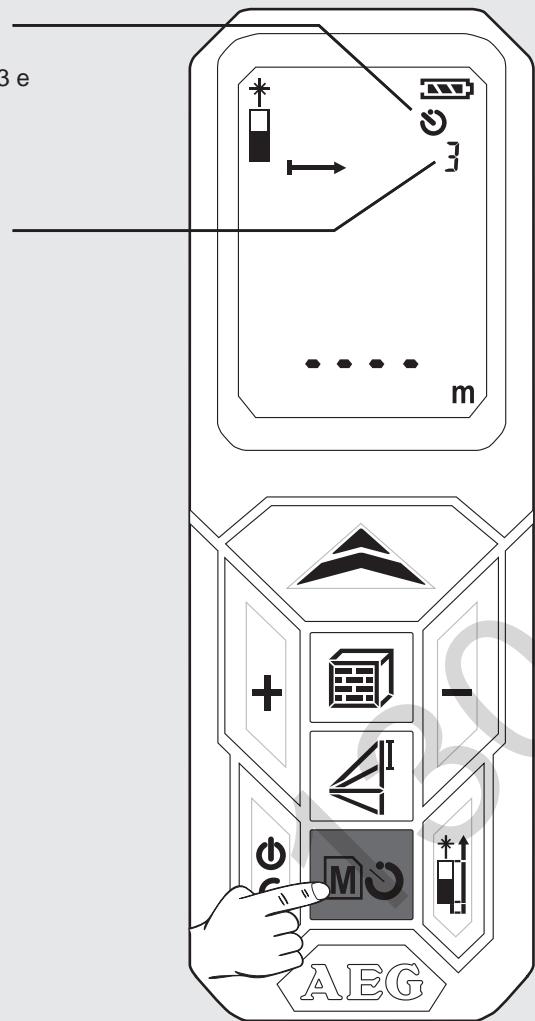
Il timer permette di ritardare l'inizio della misurazione, ad es. per posizionare un componente nel raggio di misurazione.

Azionare il tasto **M⌚**

- Appare il simbolo **M⌚**
- Azionando il tasto **M⌚** è possibile impostare il timer tra 3 e 15 sec.

Azionare il tasto **▲**

- Parte il count-down fino alla misurazione.
- Raggiunto lo 0 viene attivata la misurazione.



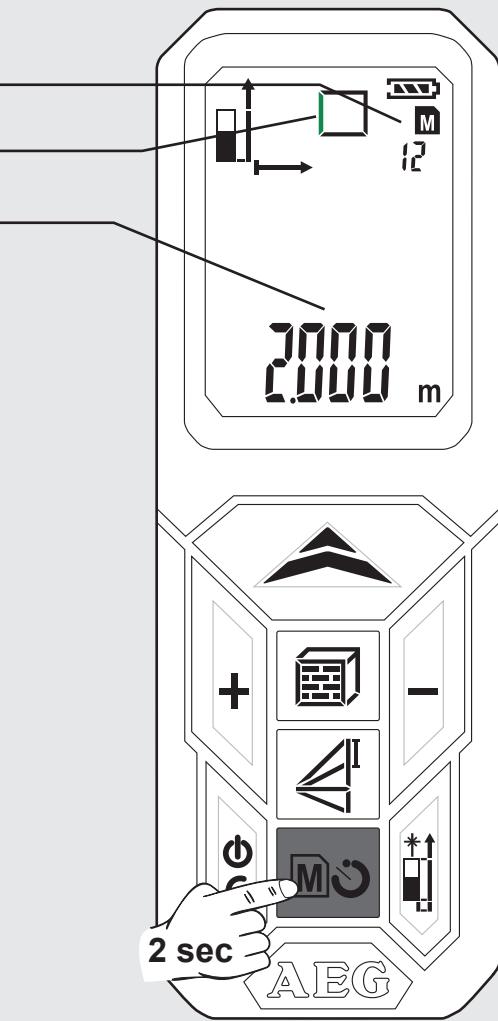
MEMORIA

I valori misurati vengono salvati automaticamente in memoria, in maniera progressiva.

I valori memorizzati possono essere chiamati con il tasto **M⌚**.

Tenere premuto il tasto **M⌚** per 2 sec.

- Viene visualizzato il simbolo e lo spazio di memoria.
- Viene visualizzato il relativo parametro di misura.
- Il valore memorizzato viene visualizzato nella riga principale.
- Usare i tasti +/- per navigare

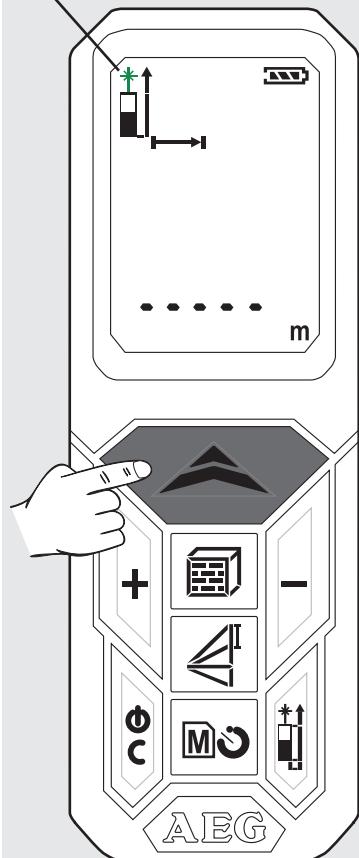


FUNZIONAMENTO DI BASE ESEMPLIFICATO PER LA MISURAZIONE DELLA SUPERFICIE (1)

1 Attivare

Azionare il tasto .
Attenzione! Raggio laser on!
 Non dirigere su persone!

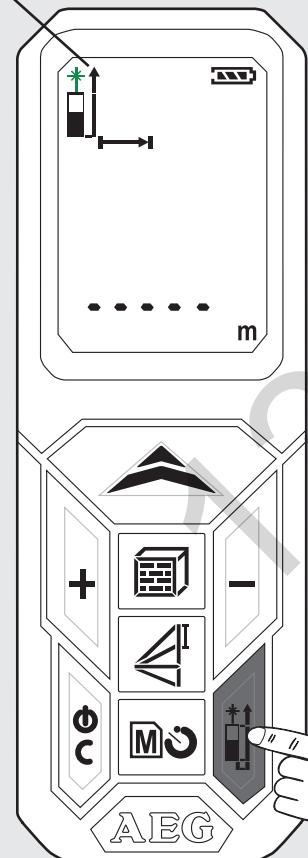
Il simbolo laser lampeggia (lampeggio indicato verde).



2 Selezionare il piano di misura

Impostazione di default all'accensione: posteriore
 Premere 1x -> perno d'angolo
 Premere 2x -> anteriore
 Premere 3x -> posteriore

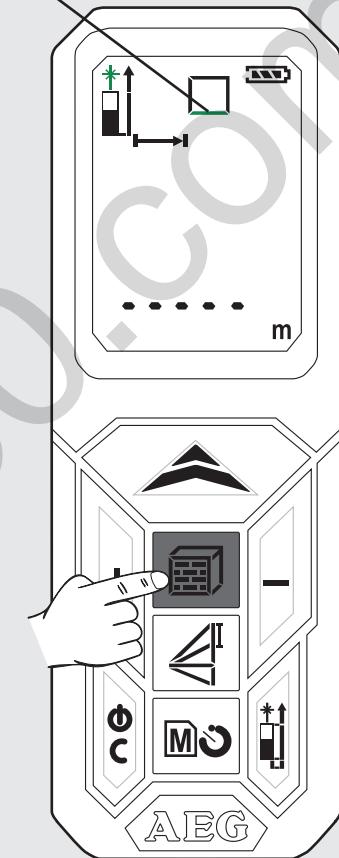
Viene visualizzato il simbolo



3 Selezionare la funzione

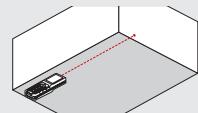
All'accensione il dispositivo è sempre impostato su misurazione lunghezza.
 Premere 1x - misurazione superficie

- Viene visualizzato il simbolo Lampeggia il parametro misurato (lampeggio indicato verde)

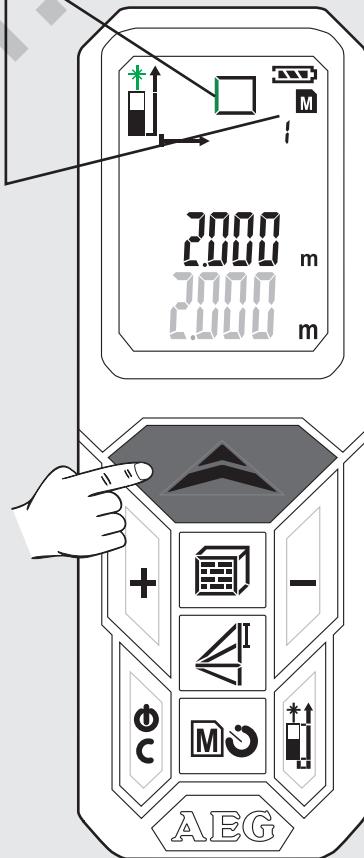


4 Misurare la lunghezza

Orientare il dispositivo e premere il tasto .

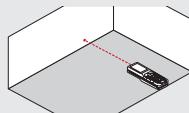


- Il valore misurato appare brevemente nella riga principale.
- Dopo 1 sec. il valore misurato si sposta alla riga superiore.
- Il valore misurato viene memorizzato con numero progressivo.
- Lampeggia il secondo parametro misurato. Il dispositivo è pronto per la misurazione del secondo valore.



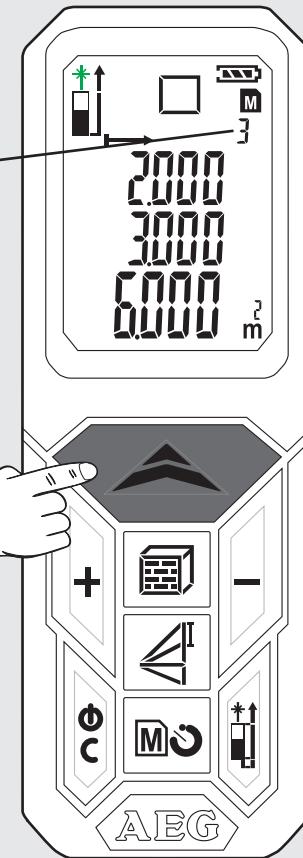
5 Misurazione larghezza

Orientare il dispositivo e premere il tasto .



- Il valore misurato appare brevemente nella riga principale.
- Dopo 1 sec. il valore misurato si sposta alla riga superiore.

- Il valore misurato viene memorizzato con numero progressivo.
- Il risultato viene visualizzato nella riga principale e salvato in memoria con un numero progressivo.



FUNZIONAMENTO DI BASE ESEMPLIFICATO PER LA MISURAZIONE DELLA SUPERFICIE (2)

6 Chiamare i valori salvati

Tenere premuto il tasto **M** per 2 sec.

Premere il tasto + o -

- I valori memorizzati vengono visualizzati nella riga principale.

Viene visualizzato il relativo simbolo e lampeggia il parametro misurato (lampeggio indicato verde).

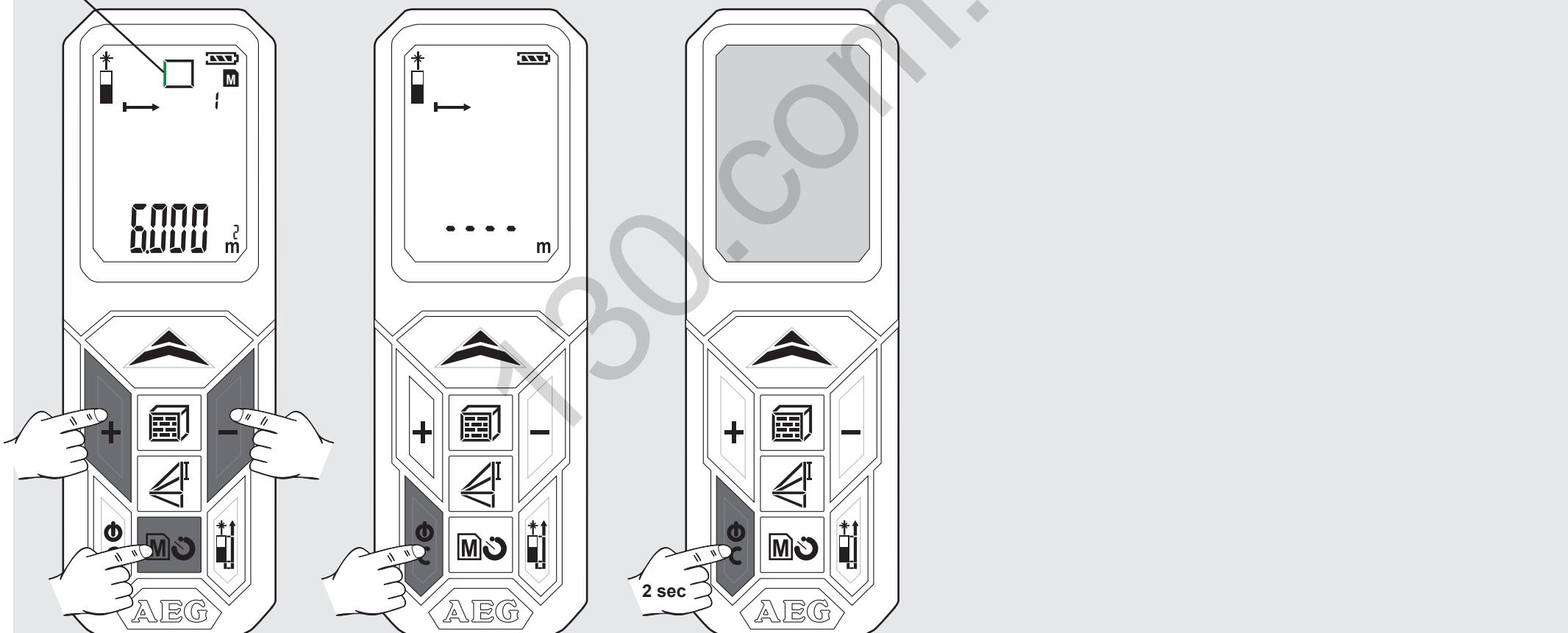
7 Uscire dalla memoria

Azionare il tasto ϕ

8 Disattivare

Mantenere premuto il tasto ϕ per 2 sec
(E' necessario uscire prima dalla memoria).

- Il dispositivo si spegne.
- Se per 3 minuti non verrà azionato alcun tasto, il dispositivo si spegnerà automaticamente.



CONTENIDO

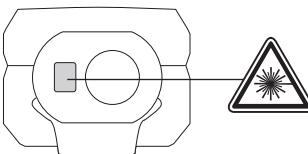
Instrucciones de seguridad importantes.....	1
Datos técnicos	2
Aplicación de acuerdo a la finalidad	2
Tabla de códigos de error	2
uadro sinóptico	3
Cambiar baterías	4
Punta de ángulos.....	4
Sujeción del cinturón	4
Tecla de función, Pitágoras, plano de medición	5
Medición de longitud simple	6
Medición continua / Medición mínima - máxima.....	7
Medición de adición / sustracción.....	8
Medición de superficies	9
Medición de volumen.....	10
Medición indirecta (Pitágoras 1).....	11
Medición indirecta (Pitágoras 2)	12
Medición indirecta (Pitágoras 3).....	13
Medición de superficies de paredes (escenario 1).....	14
Medición de superficies de paredes (escenario 2).....	15
Temporizador.....	16
Memoria.....	16
Funcionamiento básico poniendo como ejemplo una medición de superficies (1).....	17
Funcionamiento básico poniendo como ejemplo una medición de superficies (2).....	18

INSTRUCCIONES DE SEGURIDAD IMPORTANTES



Lea detenidamente las Instrucciones de seguridad y el Manual de empleo que se encuentran en el CD adjunto antes de empezar a trabajar con el producto.

Clasificación de láser



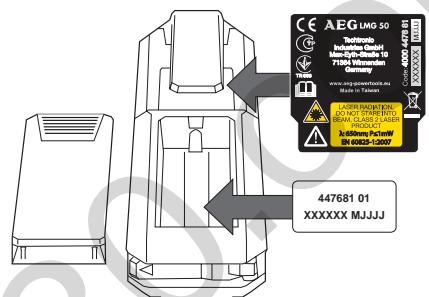
ADVERTENCIA:

El producto corresponde a la Clase de láser 2 según la norma IEC 60825-1:2007.



Etiquetado

Tape el texto en inglés en la placa indicadora de potencia antes de la puesta en funcionamiento con la etiqueta suministrada en el idioma de su país.



Advertencia:

Evite el contacto directo con los ojos. Debido a la intensa brillantez del rayo láser se puede producir un deslumbramiento durante un breve período de tiempo.

Absténgase de mirar directamente al rayo láser y no dirija éste a otras personas.

No deslumbrar intencionadamente a terceros.

Advertencia:

No hacer funcionar el aparato láser cerca de niños o permitir a los niños que utilicen el aparato láser.

¡Atención! Una superficie reflectante podría dirigir el rayo láser de vuelta hacia el operador o hacia otra persona.

Respetar una distancia de seguridad de las partes móviles.

Realizar periódicamente mediciones de control. Especialmente cuando el producto ha estado sometido a esfuerzos excesivos así como antes y después de tareas de medición importantes.

Pueden producirse medidas erróneas si se utiliza un producto que esté defectuoso, después de haberse caído o haber sido objeto de transformaciones no permitidas.

Atención! Familiarícese con los elementos de manejo y el uso reglamentario del aparato para jardín.

El aparato de medición por láser tiene un campo de aplicación limitado. (Véase capítulo "Datos técnicos"). Los intentos de medir fuera del rango máximo y mínimo ocasionan inexactitudes. El uso en condiciones meteorológicas adversas como por ejemplo demasiado calor, demasiado frío, luz solar brillante, lluvia, nieve, niebla u otras condiciones que limitan la visión, pueden producir mediciones inexactas.

Si el aparato de medición por láser se lleva de un ambiente cálido a un ambiente frío (o al revés), espere hasta que el aparato se haya adaptado a la nueva temperatura ambiente

Guardar el aparato de medición por láser siempre en el interior de locales, proteger el aparato contra sacudidas y vibraciones o temperaturas extremas

Proteger el aparato de medición por láser siempre contra polvo, humedad y alta humedad del aire. Esto puede destruir los componentes internos o influir en la exactitud.

No utilice detergentes o disolventes agresivos. Limpiar solamente con un paño limpio y blando.

Evite golpes fuertes sobre el aparato de medición por láser o la caída del mismo. Se debería comprobar la exactitud del aparato, si éste se ha caído o si ha estado expuesto a otras cargas mecánicas.

Las reparaciones necesarias en este aparato láser deben ser realizadas únicamente por personal especializado y autorizado.

No utilizar el producto en áreas con una atmósfera potencialmente explosiva o volátil.

Utilice sólo los cargadores recomendados por el fabricante para cargar las baterías.

Las pilas vacías no deben eliminarse con la basura doméstica. Cuide el medio ambiente y llévelas a los puntos de recogida disponibles de conformidad con las regulaciones nacionales y locales. No desechar el producto con la basura doméstica.

Desechar el producto correctamente. Cumplir con las normas de desecho específicas del país. Respetar la normativa específica nacional y local. Póngase en contacto con la autoridad local competente o con la tienda en la que adquirió el producto para obtener información acerca de la eliminación correcta.



DATOS TÉCNICOS

Clase de protección	IP54 (protegido contra el polvo y las salpicaduras de agua)
Sistema óptico	14 mm
Foco	35 mm
Rango máximo de medición	50 metros (tolerancia 55m)
Rango mínimo de medición	0,05 metros
Exactitud absoluta @ < 10m	± 1,5 mm (máx.)
Precisión de repetición @ < 10m	± 1,5 mm (valor típico como máx. 2σ)
Precisión de repetición @ > 10m	Aumento ± 0,25 mm / metros (valor típico como máx. 2σ)
Tiempo de medición	0,5 s
Tipo de display	LCD (22,7 mm x 31 mm)
Alimentación de corriente	AAA 2x (batería alcalina)
Vida útil de la batería	10000 (medición individual)
Potencia de salida del láser	0,6 mW ~ 0,95 mW (Clase 2, 650nm)
Tamaño del punto creado por el láser	25 x 30 mm @ 16 m (máx.)
Ángulo vertical del rayo láser	+1 grado
Ángulo horizontal del rayo láser	±1 grado
Desconexión automática del aparato	180 segundos
Desconexión automática del láser	30 segundos
Rango de temperatura de trabajo	-10°C a +50°C
Rango de temperatura de almacenamiento	-25°C a +70°C
Peso sin batería	80 g

TABLA DE CÓDigos DE ERROR

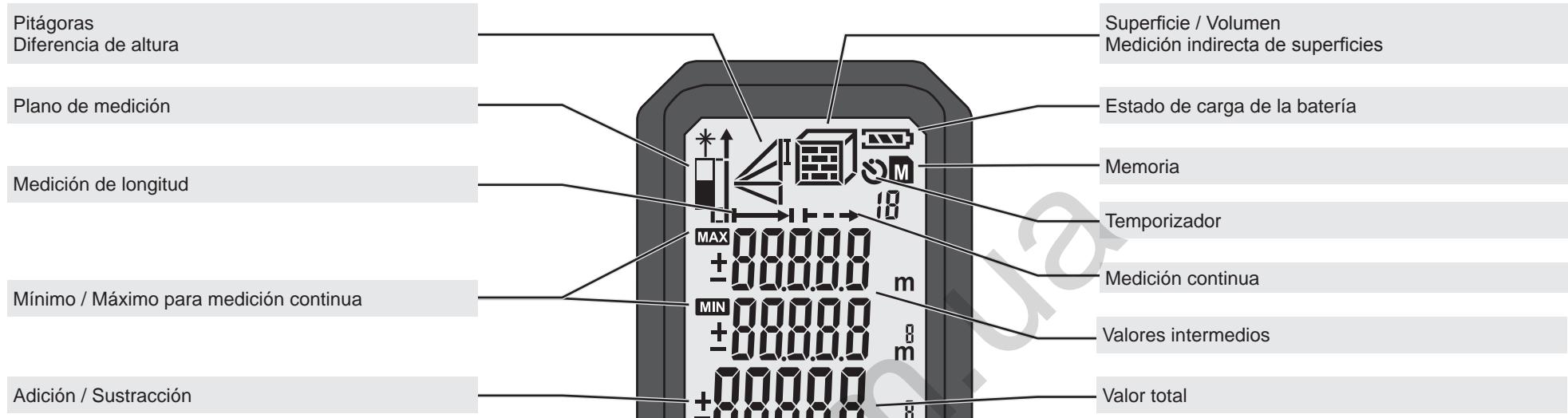
Código	Descripción	Solución
Err01	Fuera del rango de medición	Realizar una medición dentro del rango previsto.
Err02	La señal reflejada es demasiado débil	Elegir una superficie mejor.
Err03	Fuera del rango de indicación (valor máx.: 99.999) por ej. el resultado de la superficie y del volumen está fuera del rango de indicación	Comprobar, si los valores y los pasos son correctos.
Err04	Error en el cálculo de Pitágoras	Comprobar, si los valores y los pasos son correctos.
Err05	Batería débil	Insertar baterías nuevas.
Err06	Fuera del rango de temperatura de trabajo	Realizar la medición dentro del rango de temperatura de trabajo previsto.
Err07	La luz ambiente es demasiado brillante	Oscurecer la zona de interés.

APLICACIÓN DE ACUERDO A LA FINALIDAD

El aparato de medición por láser es apropiado para la medición de distancias e inclinaciones.

No utilice este producto para ninguna otra aplicación que no sea su uso normal.

CUADRO SINÓPTICO



ENCENDER / MEDIR

- Encender
- Medir
- Medición continua (apretar 2 segundos)
Función mín. / máx.

ADICIÓN

- Sumar el valor
- Navegar en la memoria

SUPERFICIE / VOLUMEN

- Superficie (apretar 1 vez)
- Volumen (apretar 2 veces)
- Medición indirecta de superficies (apretar 3 / 4 veces)

ENCENDER

- Encender
- Apagar (apretar 2 segundos)
- Reponer

SUSTRACCIÓN

- Restar el valor
- Navegar en la memoria

PITÁGORAS

- Pitágoras 1 (apretar 1 vez)
- Pitágoras 2 (apretar 2 veces)
- Pitágoras 3 (apretar 3 veces)

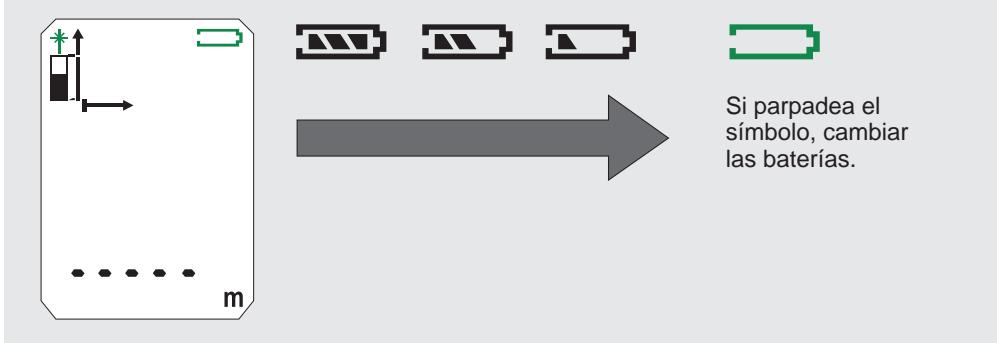
CAMBIAR PLANO DE MEDICIÓN

- Delante
- Atrás
- Punta de ángulos

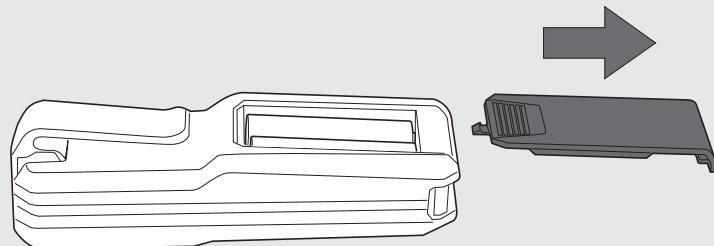
MEMORIA

- Temporizador 3-15 segundos (apretar 1 vez)
- Memoria 1-20 (apretar 1 vez 2 segundos)
- Navegar con las teclas +/- en la memoria

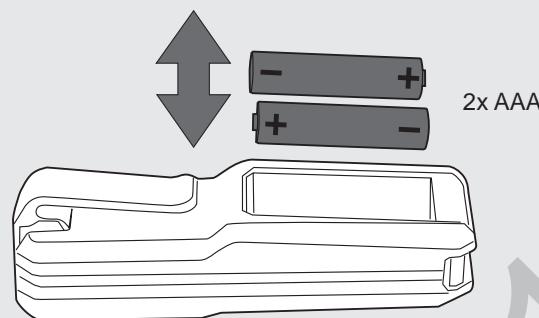
CAMBIAR BATERÍAS



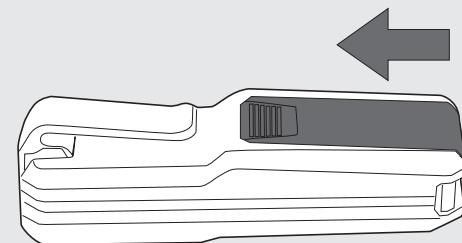
1



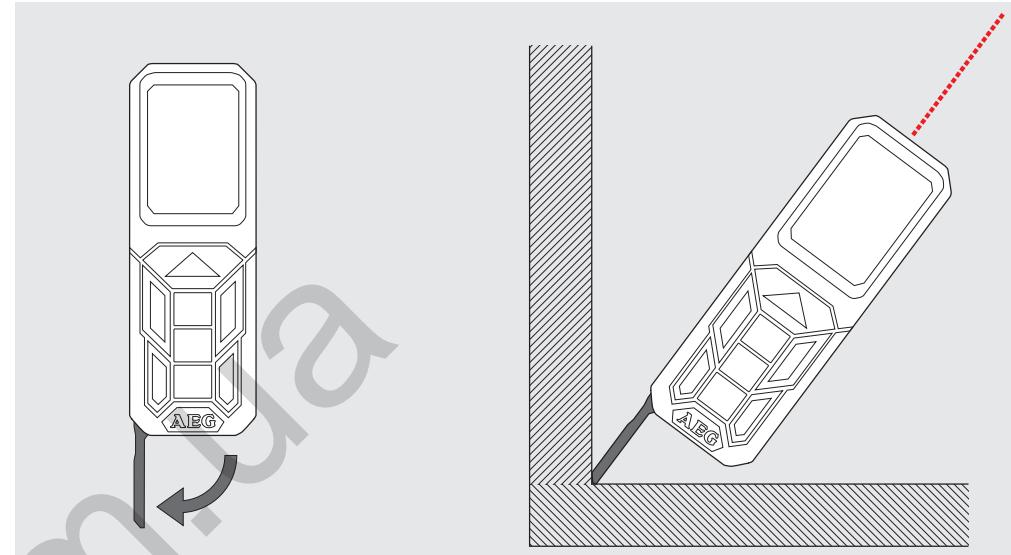
2



3

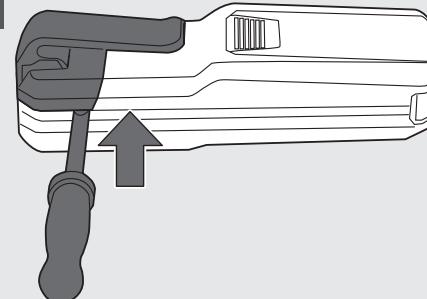


PUNTA DE ÁNGULOS

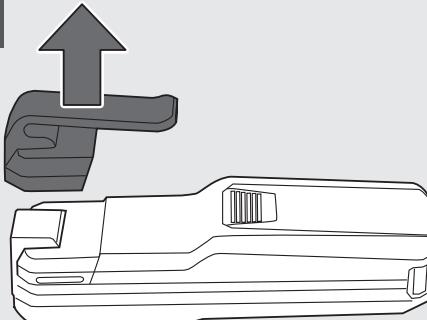


SUJECCIÓN DEL CINTURÓN

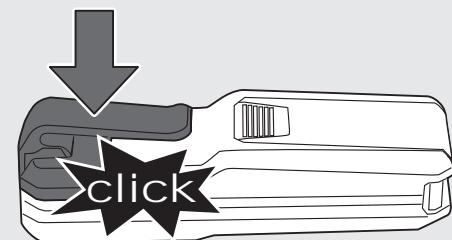
1



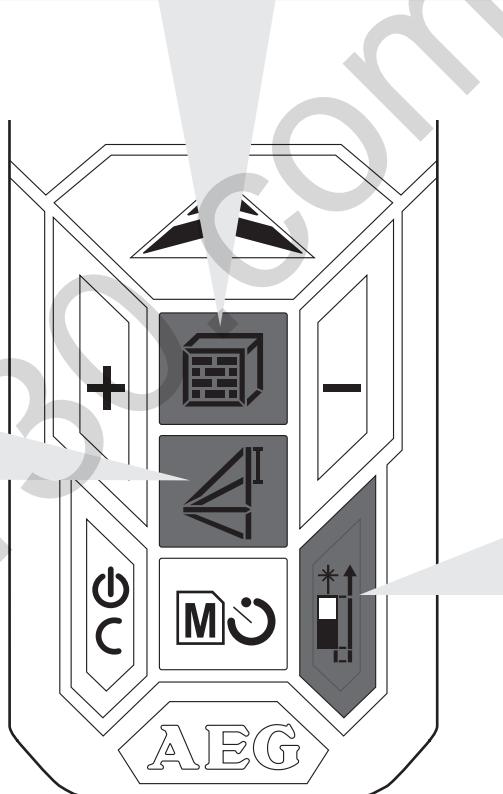
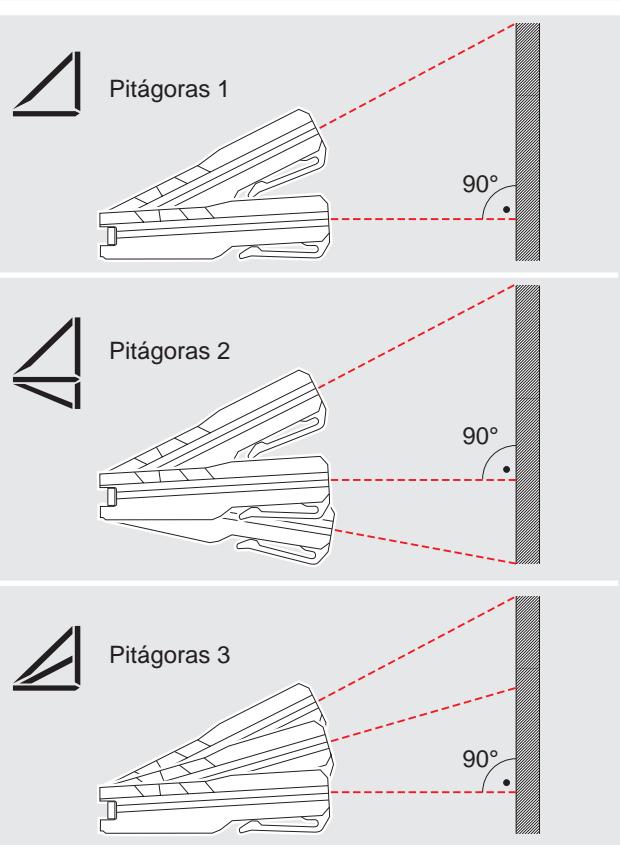
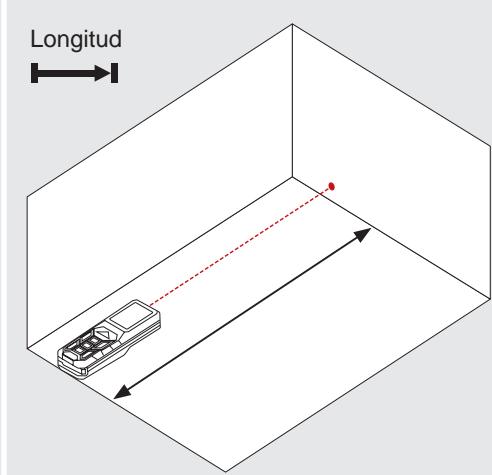
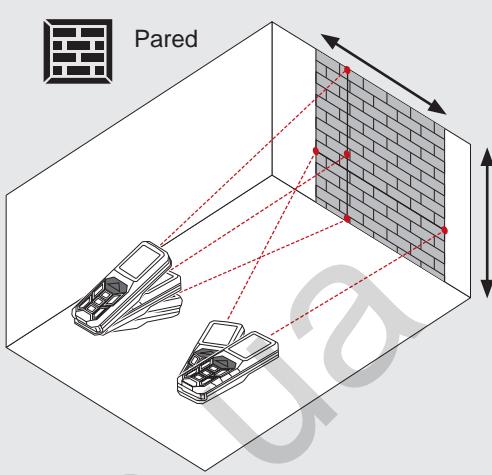
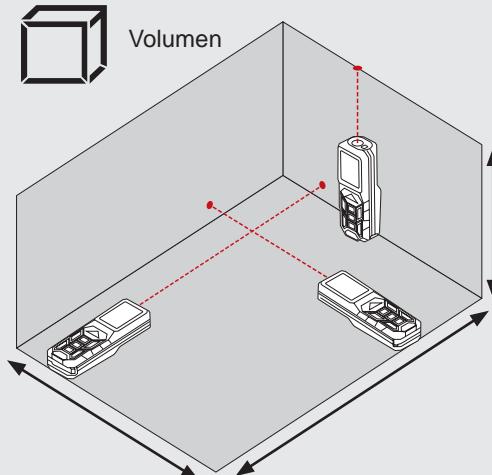
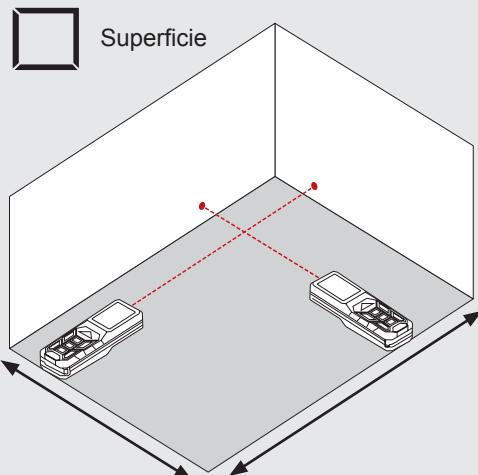
2



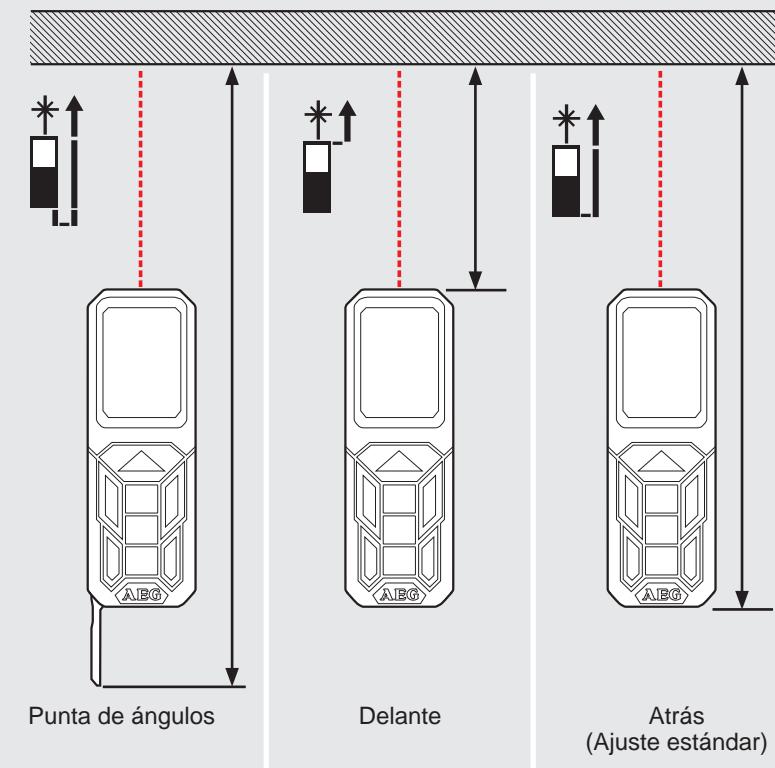
3



TECLA DE FUNCIÓN, PITÁGORAS, PLANO DE MEDICIÓN

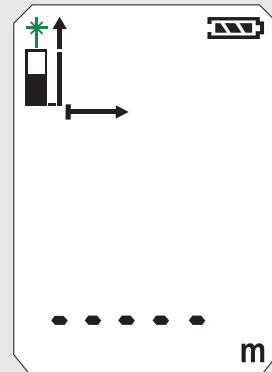


Plano de medición

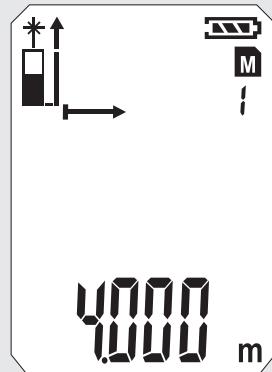


MEDICIÓN DE LONGITUD SIMPLE

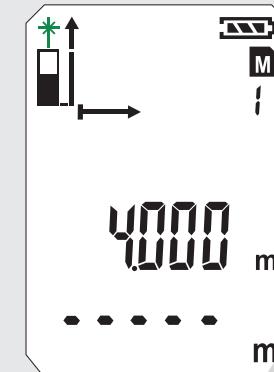
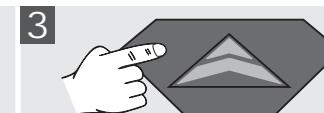
0



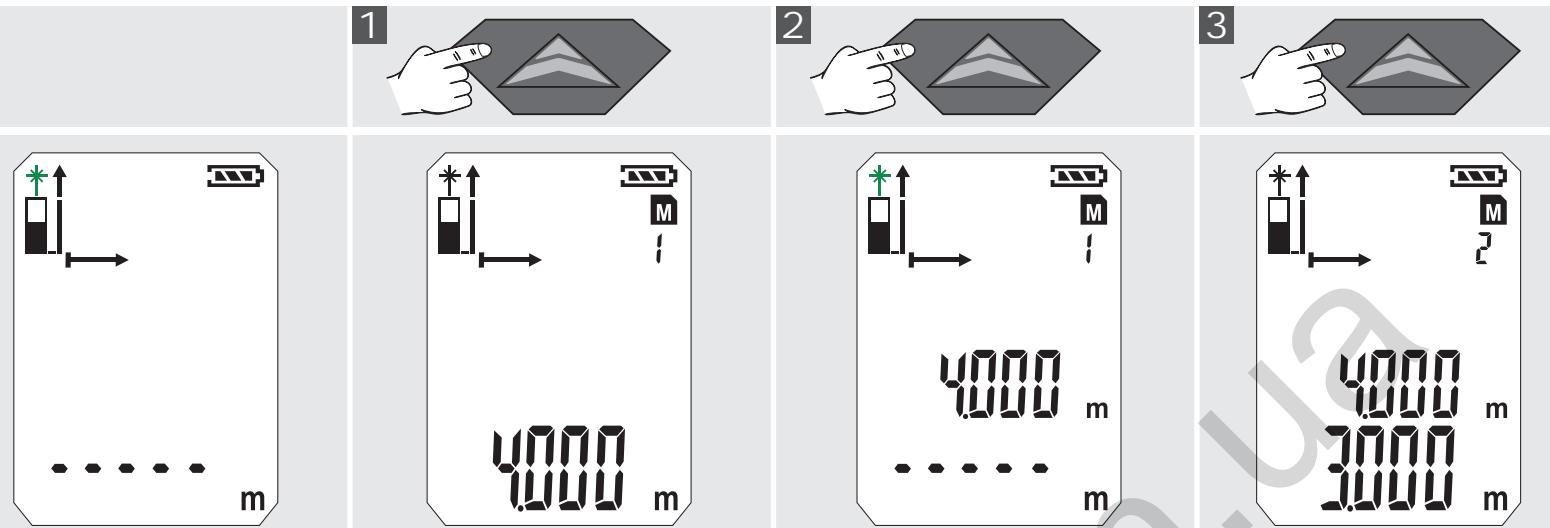
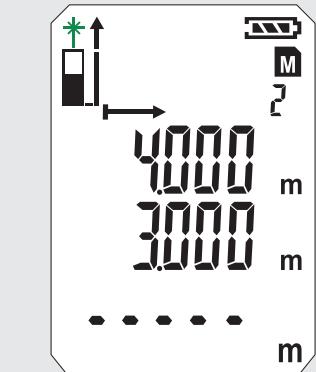
1



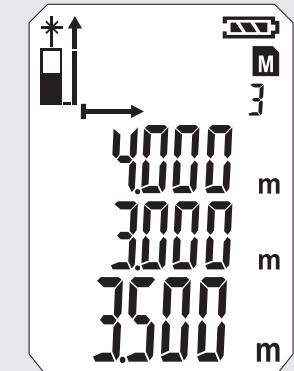
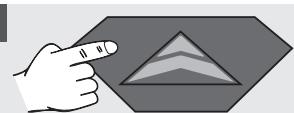
2



3



5

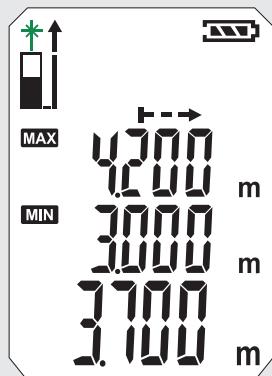
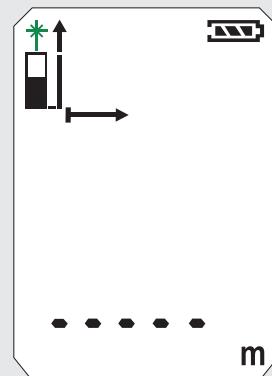


MEDICIÓN CONTINUA / MEDICIÓN MÍNIMA - MÁXIMA

0



2

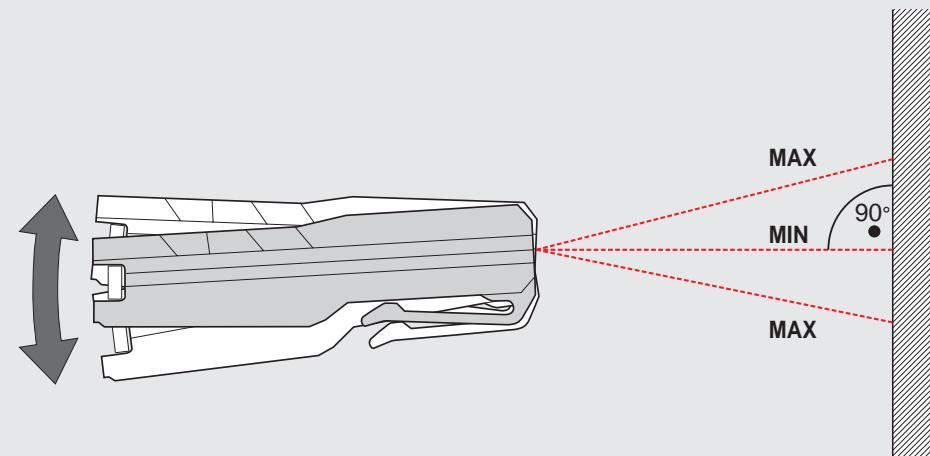
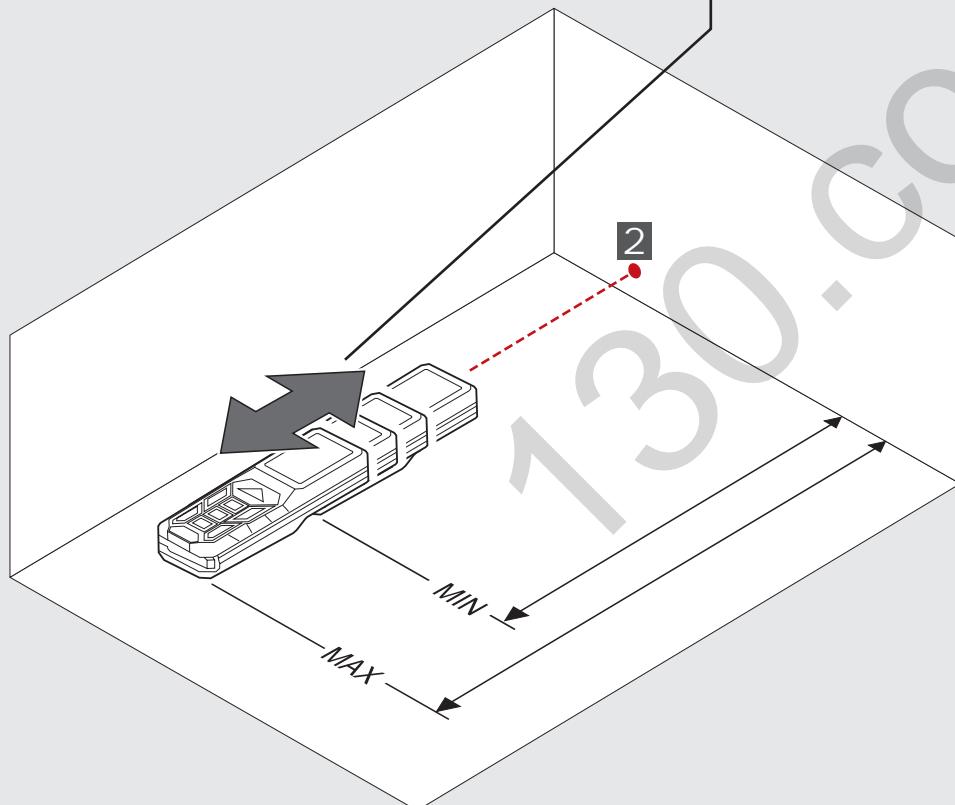
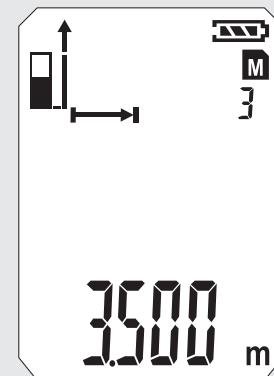
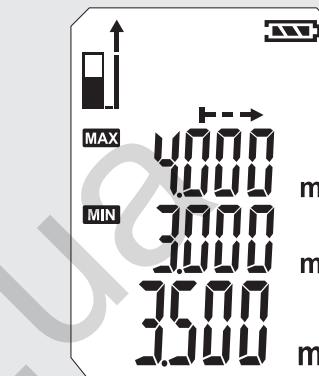
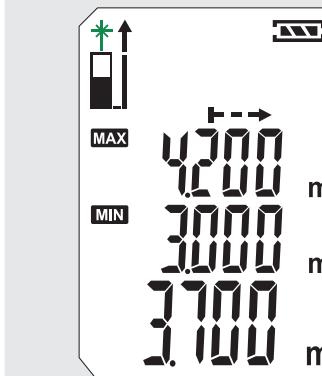
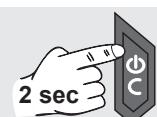


3



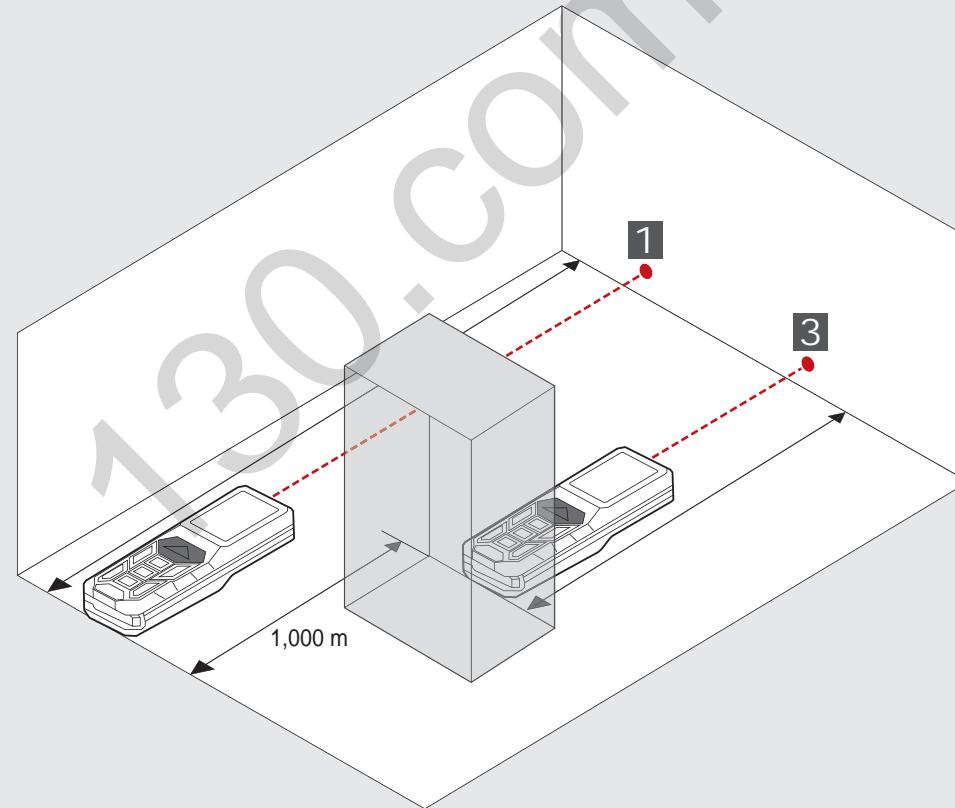
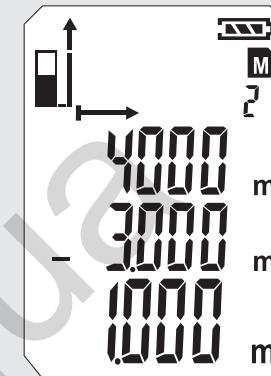
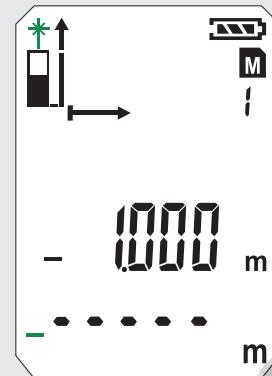
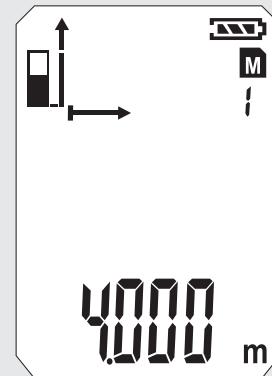
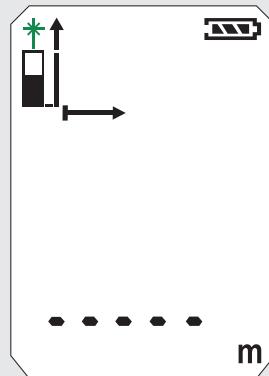
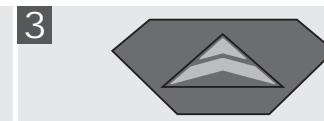
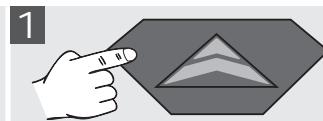
Stop
MIN / MAX

4

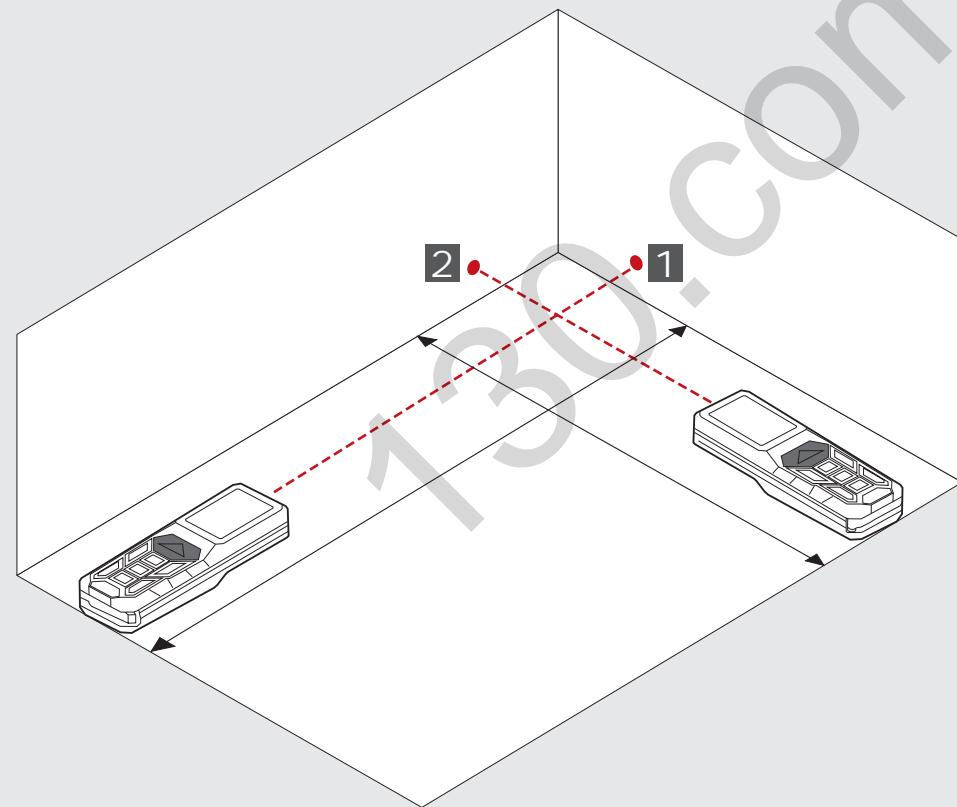
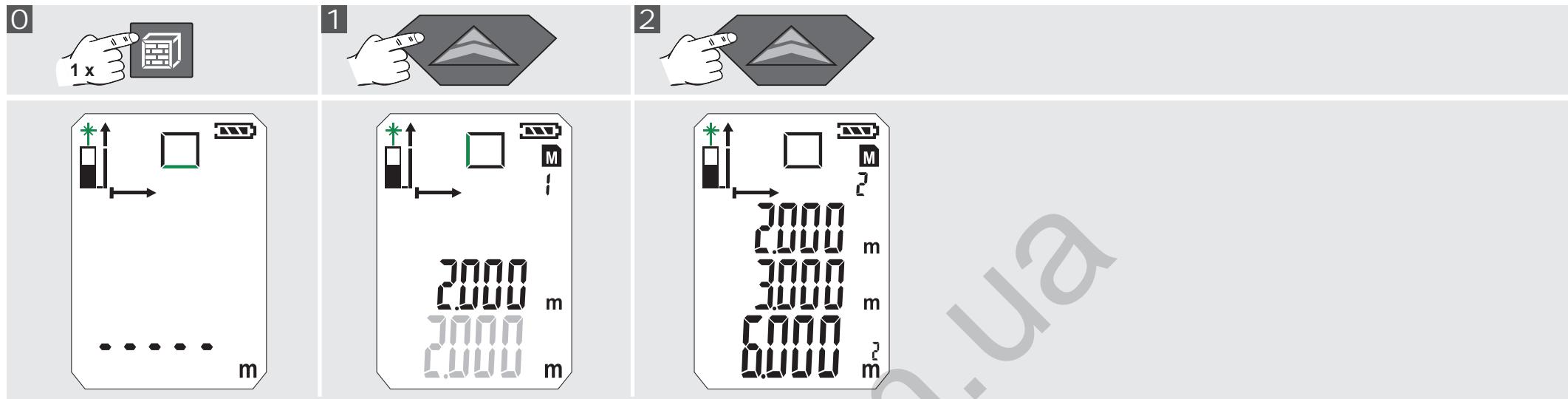


MEDICIÓN DE ADICIÓN / SUSTRACCIÓN

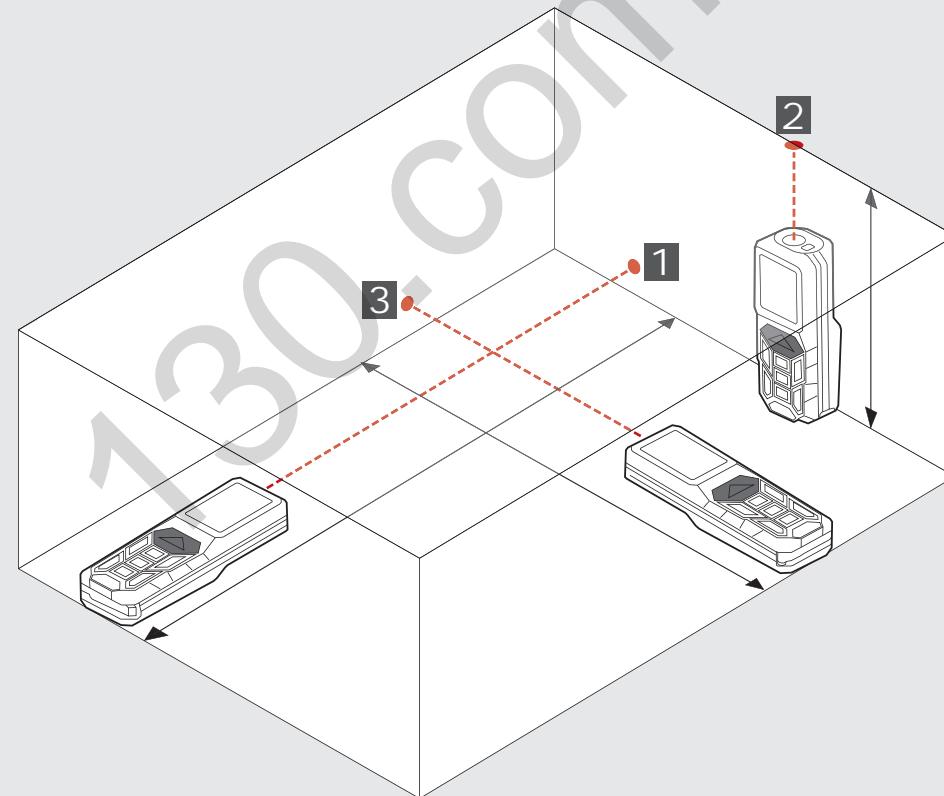
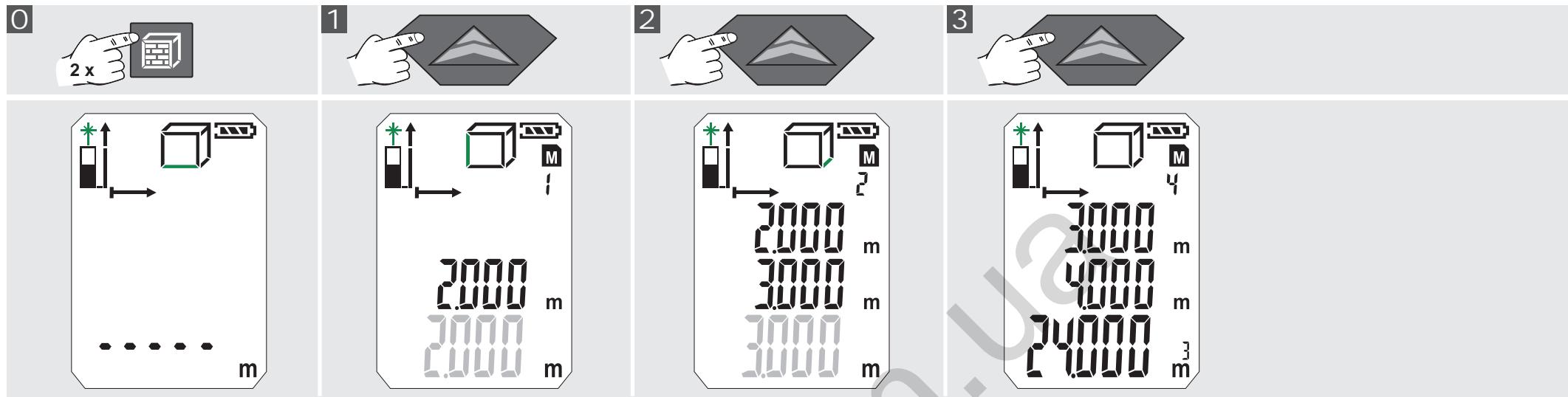
0



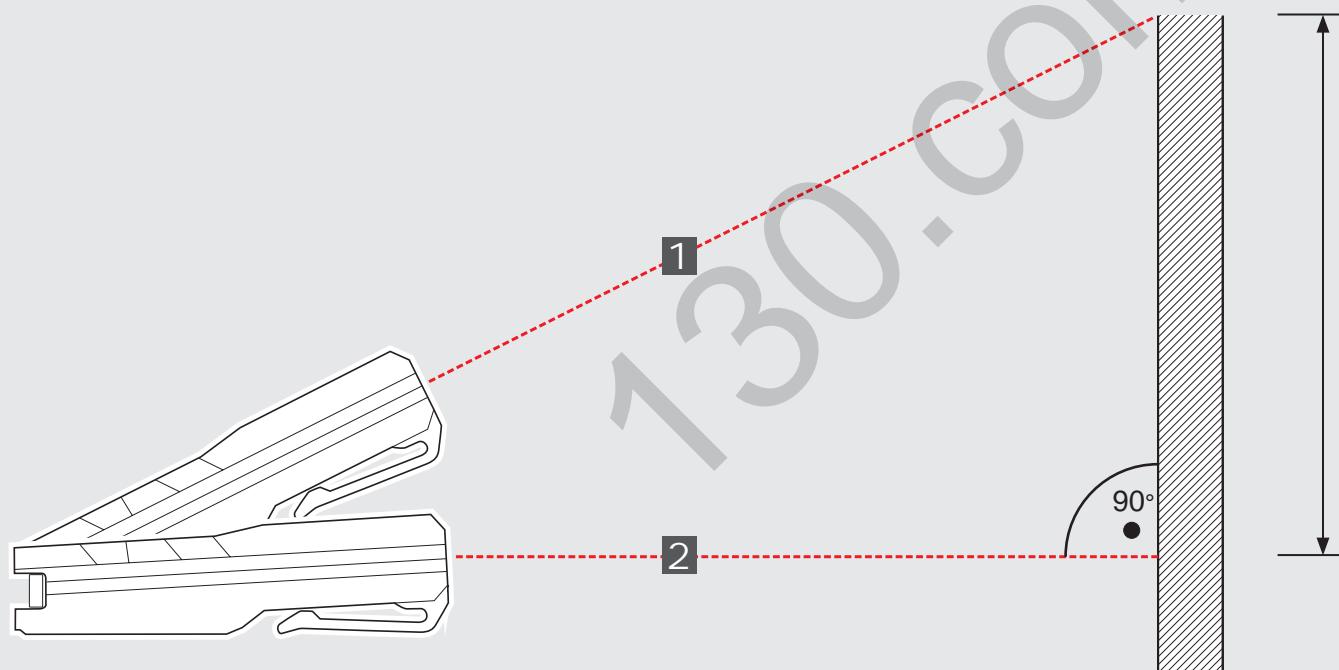
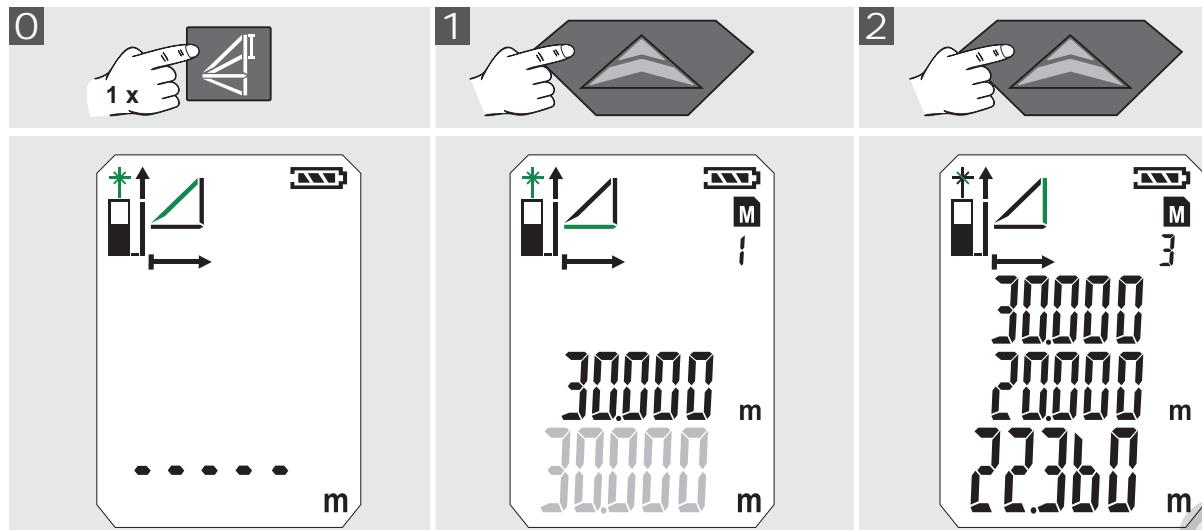
MEDICIÓN DE SUPERFICIES



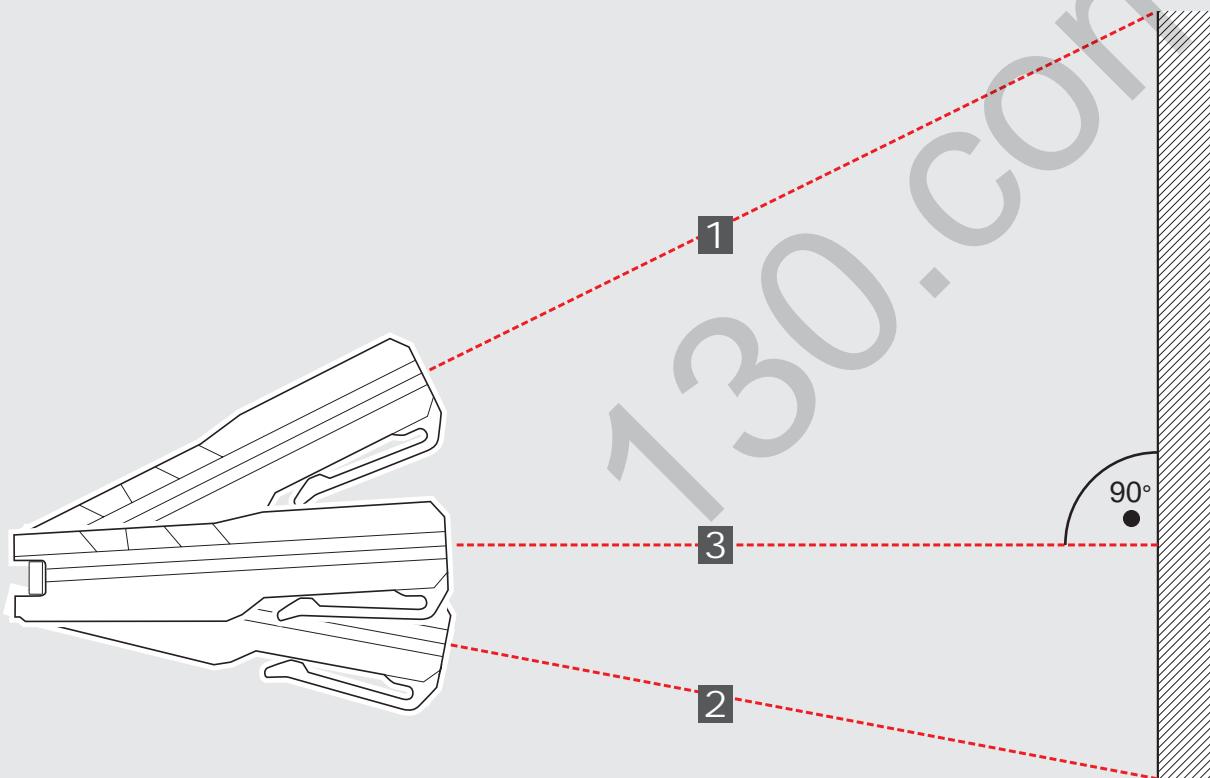
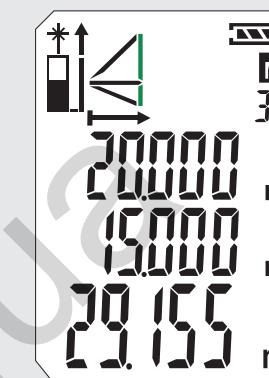
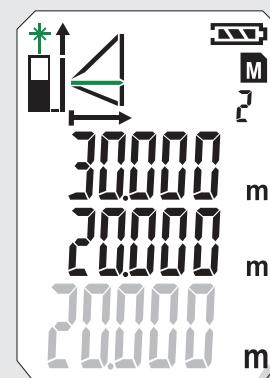
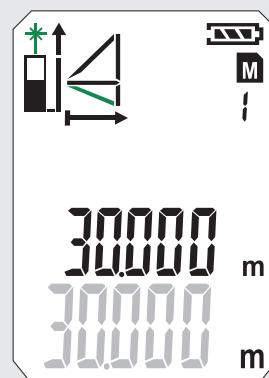
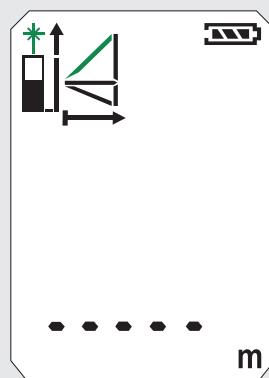
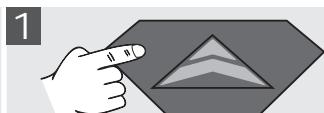
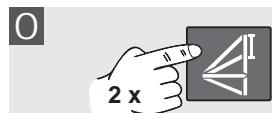
MEDICIÓN DE VOLUMEN



MEDICIÓN INDIRECTA (PITÁGORAS 1)



MEDICIÓN INDIRECTA (PITÁGORAS 2)



MEDICIÓN INDIRECTA (PITÁGORAS 3)

1



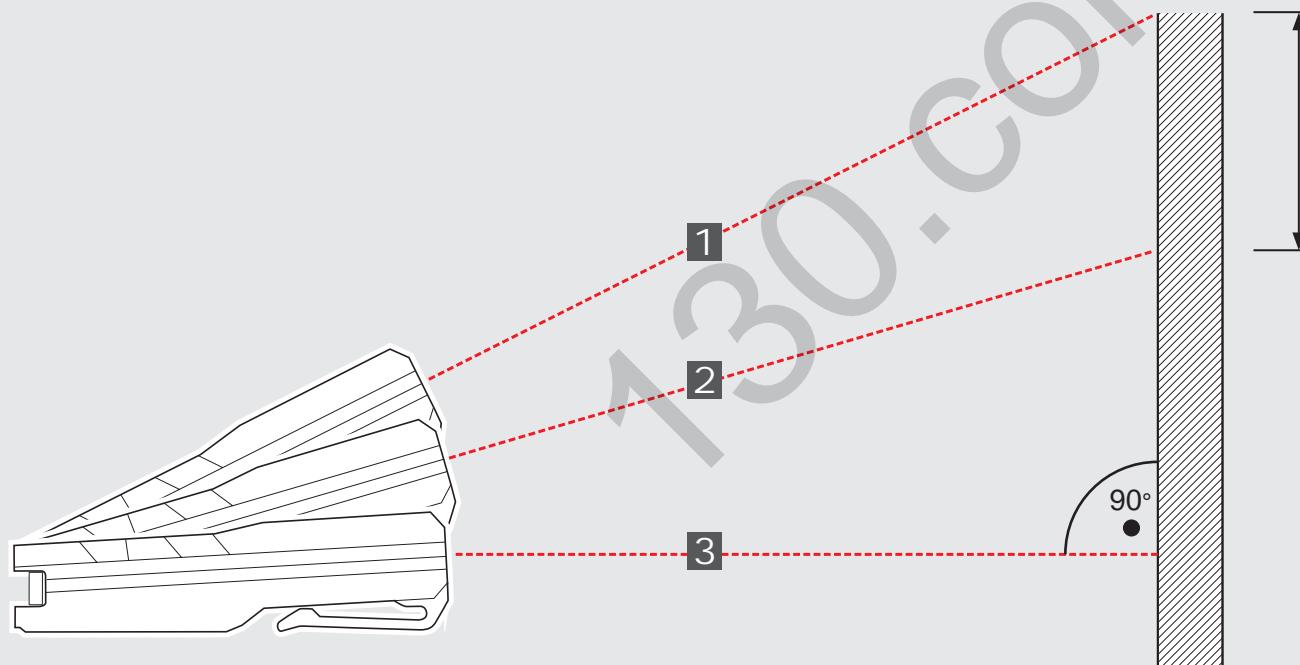
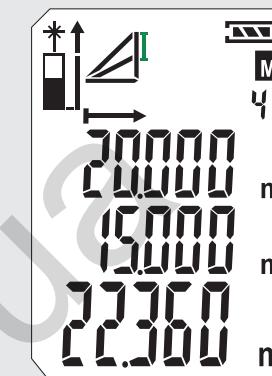
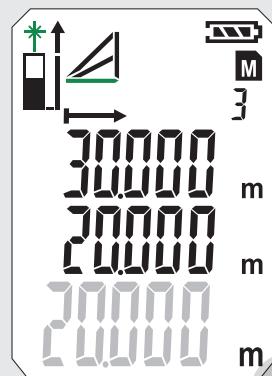
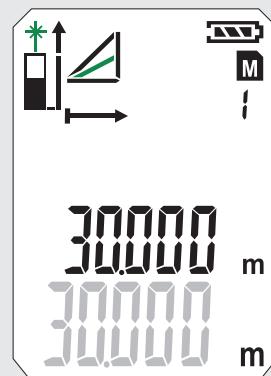
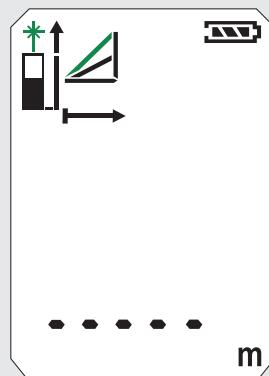
2



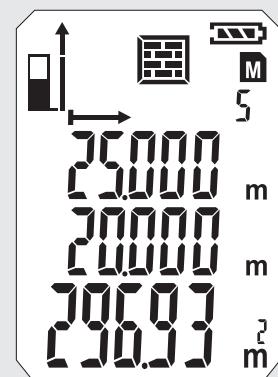
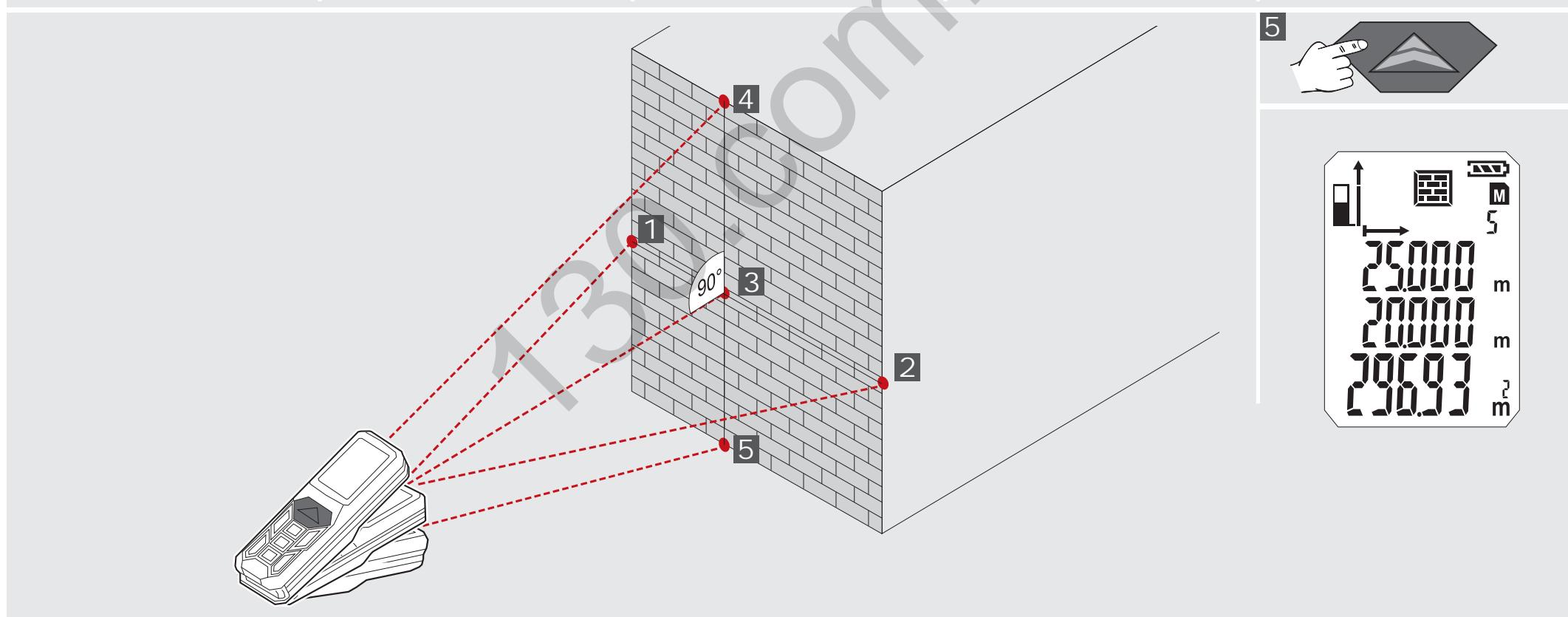
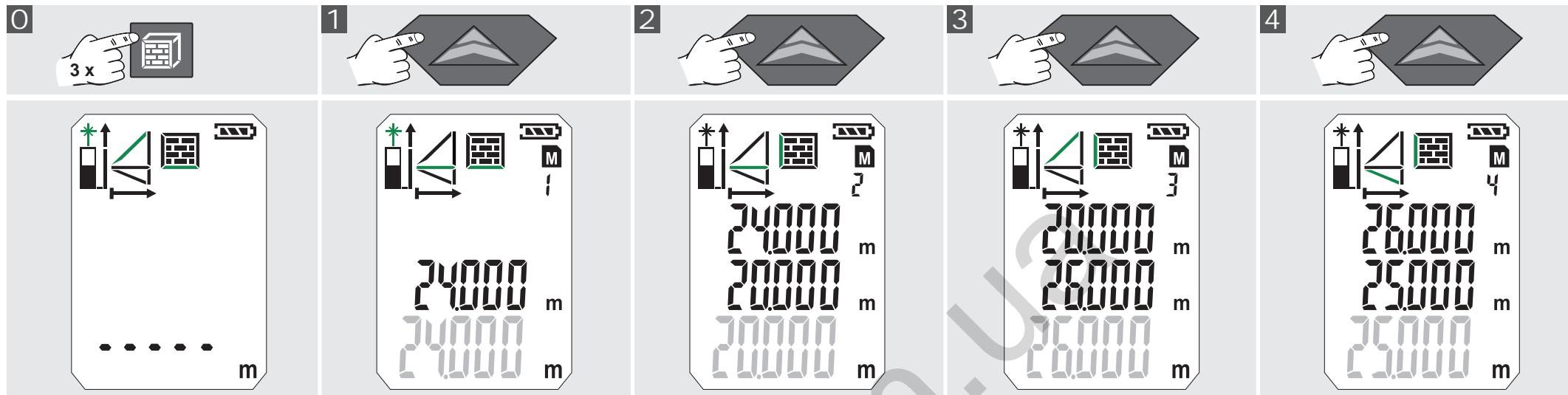
3



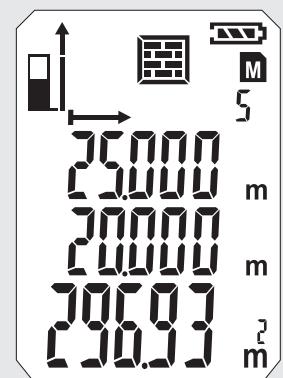
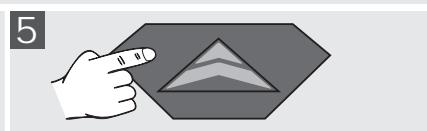
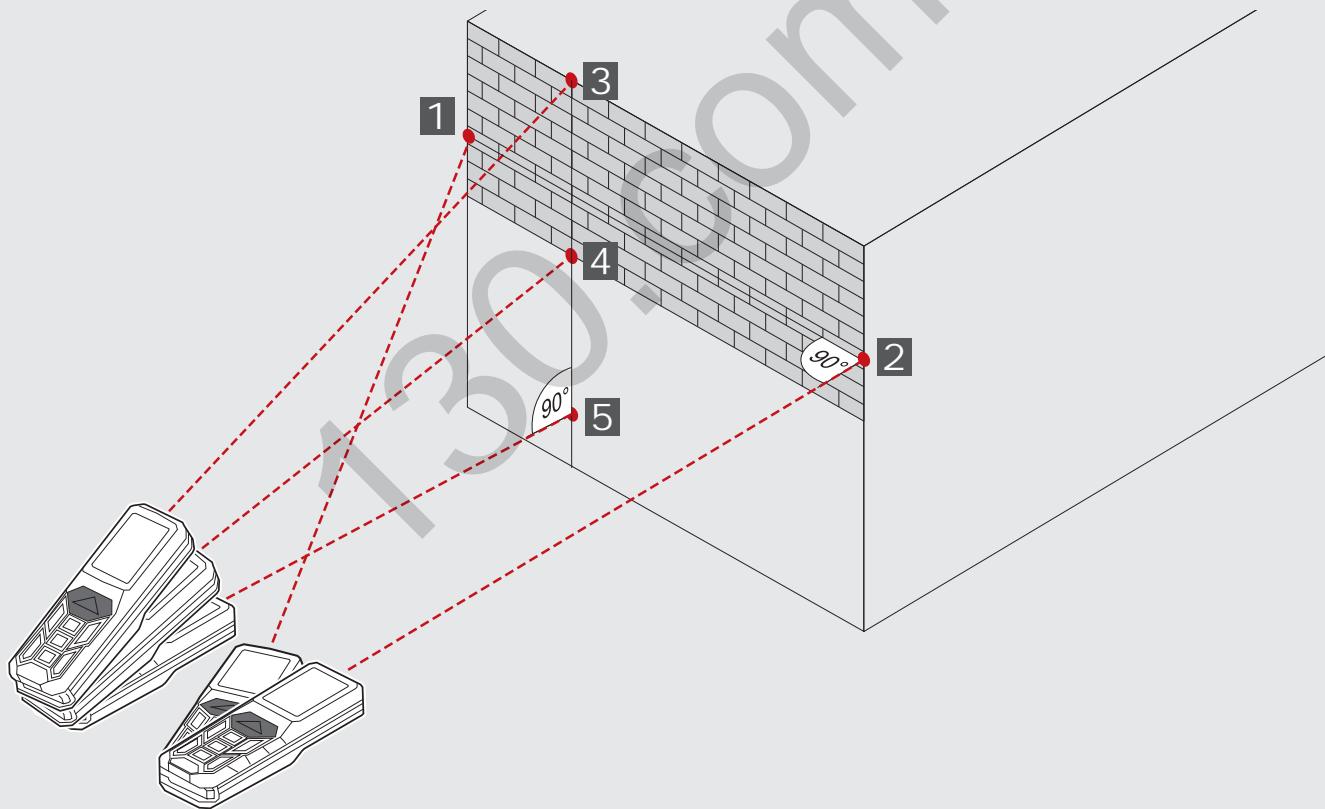
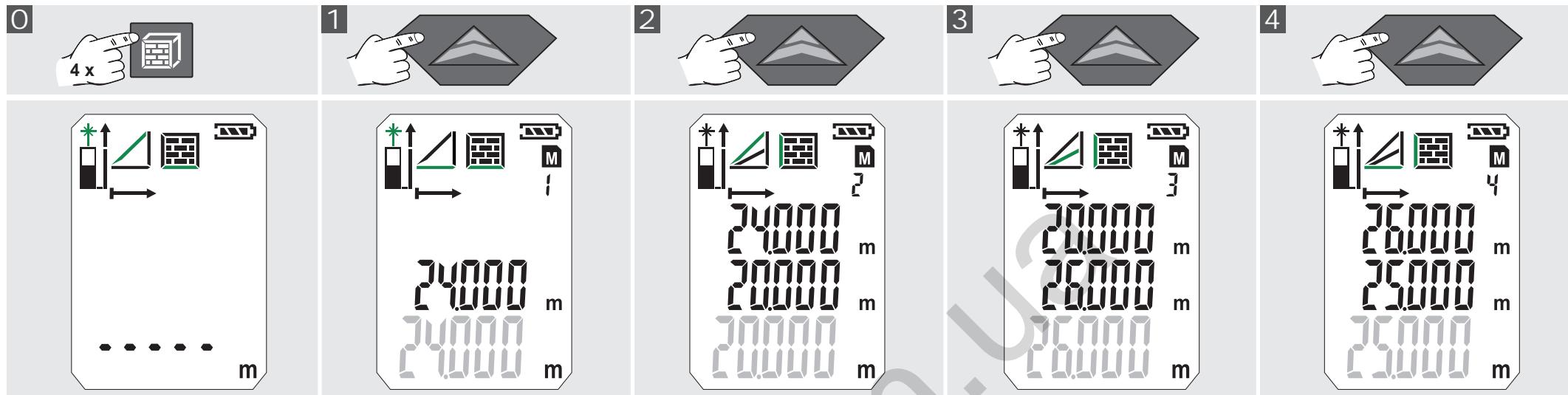
4



MEDICIÓN DE SUPERFICIES DE PAREDES (ESCENARIO 1)



MEDICIÓN DE SUPERFICIES DE PAREDES (ESCENARIO 2)



TEMPORIZADOR

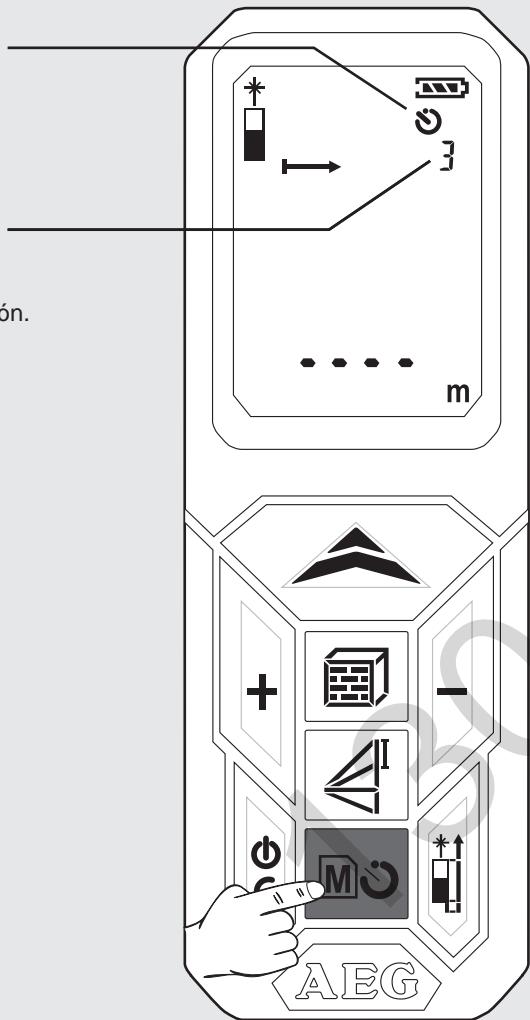
Mediante el temporizador se puede activar la medición de forma retardada, por ej. para posicionar un componente en el haz de medición.

Pulsar la tecla

- Aparece el símbolo.
- Pulsando la tecla el temporizador se puede ajustar entre 3 y 15 segundos.

Pulsar la tecla

- Los segundos se van descontando hasta efectuar la medición.
- Al llegar a 0 se activa la medición.

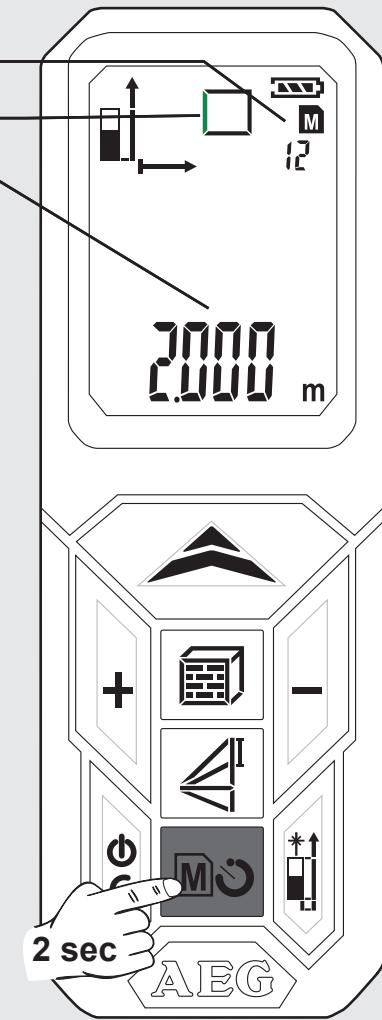


MEMORIA

Los valores de medición se van guardando automáticamente y de manera progresiva en la memoria. Los valores guardados se pueden visualizar con la tecla .

Pulsar la tecla 2 segundos.

- Aparece el símbolo y la posición de memoria.
- Se visualiza la magnitud de medición correspondiente.
- El valor guardado se visualiza en la línea principal.
- Navegar con las teclas +/-

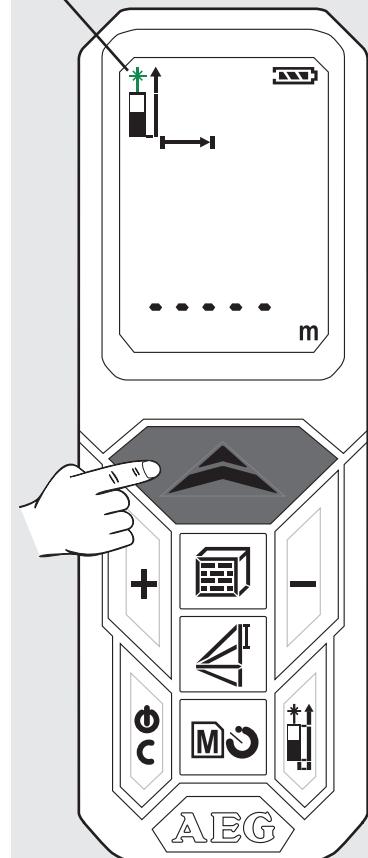


FUNCIONAMIENTO BÁSICO PONIENDO COMO EJEMPLO UNA MEDICIÓN DE SUPERFICIES (1)

1 Encender

Pulsar la tecla .
Atención! ¡El rayo láser está encendido!
 ¡No dirigir hacia personas!

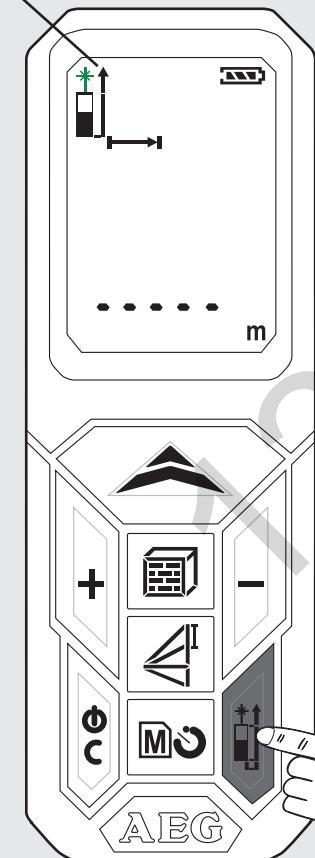
El símbolo del láser parpadea (parpadea en color verde).



2 Seleccionar el plano de medición

Ajuste estándar después de la activación: atrás
 ↑ Pulsar 1 vez -> punta de ángulos
 Pulsar 2 veces -> delante
 Pulsar 3 veces -> atrás

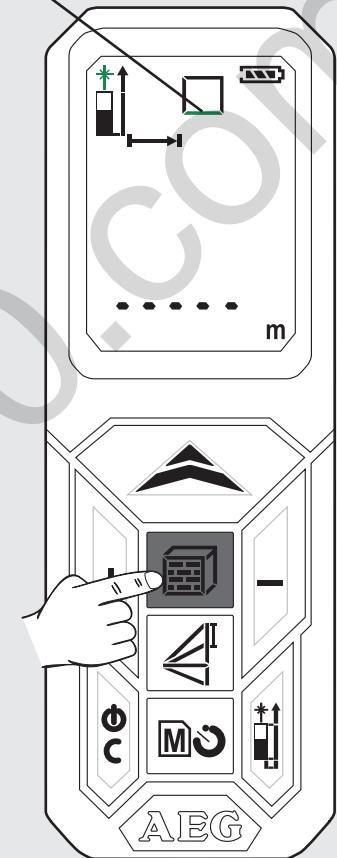
El símbolo se visualiza.



3 Seleccionar la función

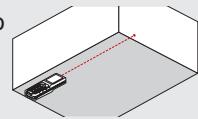
Después de la activación, el aparato se encuentra posicionado siempre en medición de longitud. Pulsar 1 vez  -> medición de superficies

- El símbolo aparece.
 La magnitud de medición parpadea (parpadea en color verde)



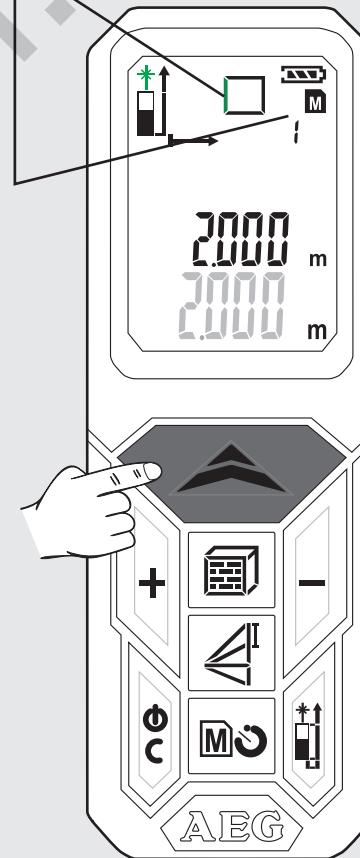
4 Medir la longitud

Orientar el aparato y pulsar la tecla .



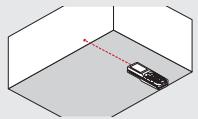
- El valor medido aparece brevemente en la línea principal.
 - Después de haber transcurrido 1 segundo, el valor medido salta a la línea situada directamente encima.

El valor medido se guarda en la memoria con el número consecutivo.
 La segunda magnitud de medición parpadea. El aparato está listo para la medición del segundo valor.

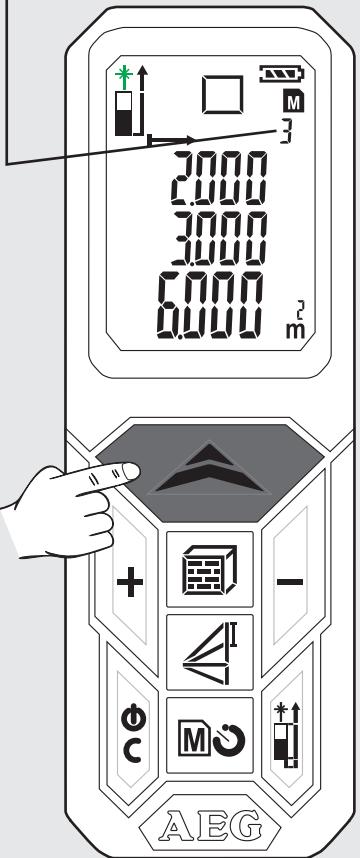


5 Medir la anchura

Orientar el aparato y pulsar la tecla .



- El valor medido aparece brevemente en la línea principal.
 - Después de haber transcurrido 1 segundo, el valor medido salta a la línea situada directamente encima.
 - El valor medido se guarda en la memoria con el número consecutivo.
 - El resultado se visualiza en la línea principal y se guarda en la memoria con el número consecutivo.



FUNCIONAMIENTO BÁSICO PONIENDO COMO EJEMPLO UNA MEDICIÓN DE SUPERFICIES (2)

6 Visualizar los valores guardados

Pulsar la tecla **M** 2 segundos.

Pulsar la tecla + o -

- Los valores guardados se visualizan en la línea principal.

El símbolo correspondiente aparece y la magnitud de medición parpadea (parpadea en color verde).

7 Abandonar la memoria

Pulsar la tecla **∅**

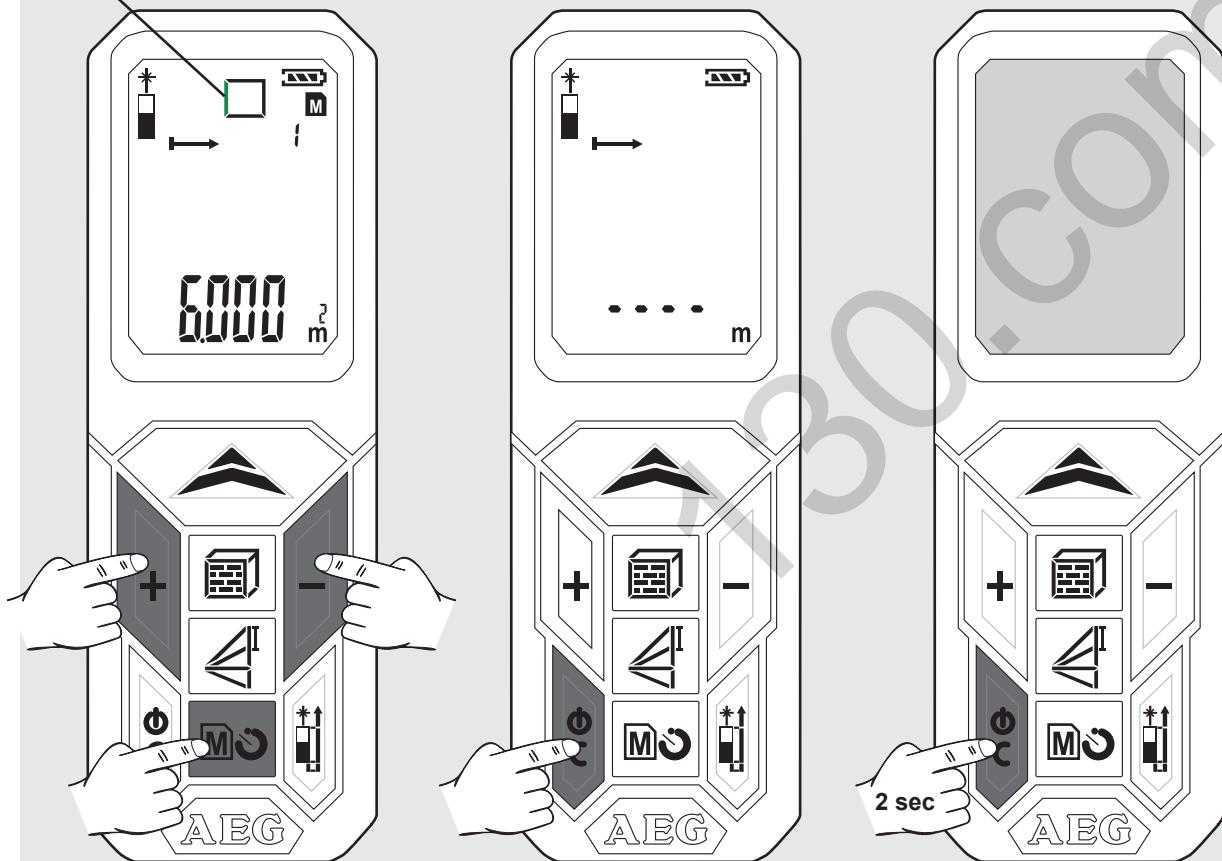
8 Apagar

Pulsar la tecla **∅** durante 2 segundos

(Antes se debe abandonar la memoria).

- El aparato se apaga.

- Si durante un lapso de tiempo de 3 minutos no se presiona ninguna tecla, el aparato se apaga automáticamente.



CONTEÚDO

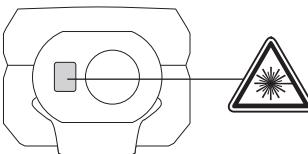
Instruções de Segurança Importantes.....	1
Características técnicas	2
Utilização autorizada	2
Tabela de códigos de erro	2
Vista geral.....	3
Trocar a bateria	4
Pino de canto.....	4
Clip de cinto.....	4
Tecla de função, pitágoras, referência de medição	5
Medição de comprimento simples	6
Medição contínua / Medição mínimo-máximo	7
Medição de adição / subtração.....	8
Medição da área.....	9
Medição do volume	10
Medição indirecta (pitágoras 1)	11
Medição indirecta (pitágoras 2)	12
Medição indirecta (pitágoras 3)	13
Medição da área da parede (cenário 1)	14
Medição da área da parede (cenário 2)	15
Temporizador.....	16
Memória.....	16
Modo de funcionamento básico no exemplo de uma medição da área (1)	17
Modo de funcionamento básico no exemplo de uma medição da área (2)	18

INSTRUÇÕES DE SEGURANÇA IMPORTANTES



Não utilizar o produto, antes de ler atentamente as Instruções de Segurança e o Manual de Operação incluídos no CD-ROM fornecido com o produto.

Classificação do laser



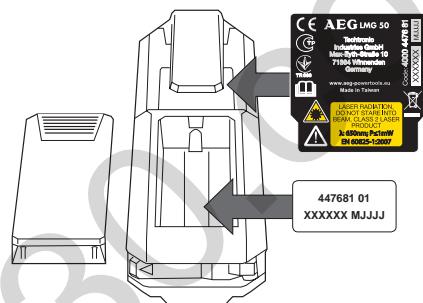
ATENÇÃO:

Produto laser de Classe 2, de acordo com a Norma IEC 60825-1:2007.



Etiquetagem

Por favor, cole o autocollante na sua língua nacional juntado sobre o texto em inglês na placa das características do equipamento antes da primeira colocação em serviço.



Aviso:

Não olhar directamente para o feixe de luz laser. O raio laser pode queimar os olhos e levar a uma cegueira temporária.

Não olhar directamente para o feixe de luz laser, nem apontar o feixe de luz directamente para as outras pessoas.

Não apontar o feixe de luz laser para outras pessoas.

Aviso:

Não opere o aparelho de laser na proximidade de crianças e não deixe crianças usar o aparelho de laser.

Atenção! Uma superfície reflectora pode reflectar o raio laser ao operador ou a terceiros.

Manter as extremidades a uma distância segura das peças móveis.

Efectuar medições de teste frequentes. Especialmente, antes, durante ou depois de medições importantes.

Em caso de anomalia no funcionamento, queda ou utilização incorrecta do produto, ou se este tiver sido modificado, existe o risco de as medições efectuadas serem incorrectas.

Atenção! Familiarize-se com os elementos de comando e com a utilização do aparelho de jardinagem.

O medidor a laser tem uma área de utilização limitada. (Veja a secção "Dados técnicos"). Tentativas de medir fora da área máxima e mínima levam medições inexactas. A utilização em caso de condições adversas, como muito quente, muito frio, luz do sol muito clara, chuva, neve, névoa ou outras condições que prejudiquem a vista pode levar a medições inexactas.

Se o medidor a laser for levado de um ambiente quente a um ambiente frio (ou vice-versa), aguarde até o aparelho se adaptar à temperatura ambiente nova.

Guarde o medidor a laser no interior, proteja o aparelho contra choque, vibrações ou temperaturas extremas.

Proteja o medidor a laser contra pó, humidade e alta humidade do ar. Isto poderia destruir componentes internos ou influenciar a precisão.

Não use detergentes ou solventes agressivos. Só limpe com um pano limpo e macio.

Evite choques duros ou a queda do medidor a laser. A precisão do aparelho deve ser verificada depois dele cair ou ter sido exposto a outros esforços mecânicos.

Reparações necessárias neste aparelho de laser só devem ser executadas pelo pessoal especializado e autorizado.

Não utilizar o produto em áreas com risco de explosão ou ambientes agressivos.

Para carregar as baterias, utilizar apenas carregadores recomendados pelo fabricante.



As pilhas esgotadas não devem ser descartadas juntamente com os resíduos domésticos. Proteger o ambiente e descartar as pilhas nos pontos de recolha ("Pilhões") da sua área de residência. O instrumento não deve ser descartado juntamente com os resíduos domésticos. Eliminar o instrumento de acordo com os regulamentos aplicáveis em vigor. Respeitar os regulamentos nacionais específicos do país. Contacte a sua autoridade local ou o seu vendedor para informações relativas à eliminação.



Marca CE

CARACTERÍSTICAS TÉCNICAS

Classe de protecção	IP54 (protegido contra pó e salpicos de água)
Lente	14 mm
Foco	35 mm
Área de medição máx.	50 metros (tolerância: 55m)
Área de medição mín.	0,05 metros
Precisão absoluta @ < 10m	± 1,5 mm (máx.)
Precisão de repetição @ < 10m	± 1,5 mm (típica máx. 2σ)
Precisão de repetição @ > 10m	aumento ± 0,25 mm / metros (típica máx. 2σ)
Tempo de medição	0,5 s
Tela tipo	LCD (22,7 mm x 31 mm)
Alimentação eléctrica	AAA 2x (bateria alcalina)
Vida útil da bateria	10000 (medição individual)
Potência de saída do laser	0,6 mW ~ 0,95 mW (classe 2, 650nm)
Tamanho do ponto do laser	25 x 30 mm @ 16 m (máx.)
Raio laser ângulo vertical	+1 grau
Raio laser ângulo horizontal	±1 grau
Desligamento automático do aparelho	180 segundos
Desligamento automático do laser	30 segundos
Gama de temperatura de trabalho	-10°C a +50°C
Gama de temperatura de armazenamento	-25°C a +70°C
Peso sem bateria	80 g

TABELA DE CÓDIGOS DE ERRO

Código	Descrição	Solução
Err01	Fora da área de medição	Faça a medição na área prevista.
Err02	Sinal reflectido muito fraco	Seleccione uma superfície melhor.
Err03	Fora da gama de indicação (valor máx.: 99.999) p. ex. é o resultado de área ou volume fora da gama de indicação	Verifique, se os valores ou passos são correctos.
Err04	Erro no cálculo de pitágoras#tsab#Verifique, se os valores e passos são corretos.	Check and verify values and steps are correct
Err05	Bateria a esgotar	Coloque baterias novas.
Err06	Fora da gama de temperatura de serviço	Faça a medição na gama de temperatura prevista.
Err07	Luz ambiente muito clara	Escureça a área de destino.

UTILIZAÇÃO AUTORIZADA

O medidor a laser destina-se a medir distâncias e inclinações.

Não use este produto de outra maneira sem ser a normal para o qual foi concebido.

Pitágoras
Diferença de altura

Referência de medição

Medição do comprimento

Mínimo / Máximo para a medição contínua

Adição / Subtração

LIGAR / MEDIR

- Ligar
- Medir
- Medições contínuas (pressionar por 2 seg.)
Função mín. / máx.

ADIÇÃO

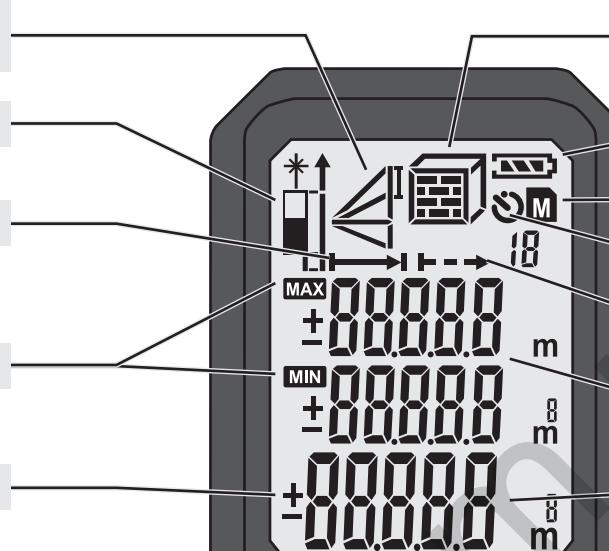
- Adicionar o valor
- Navegar na memória

ÁREA / VOLUME

- Área (pressionar 1x)
- Volume (pressionar 2x)
- Medições indiretas da área (pressionar 3x / 4x)

LIGAR

- Ligar
- Desligar (pressionar por 2 seg)
- Resetar



Área / Volume
Medição indireta da área

Status da bateria

Memória

Temporizador

Medição contínua

Valores intermediários

Total

SUBTRACÇÃO

- Subtrair o valor
- Navegar na memória

PITÁGORAS

- Pitágoras 1 (pressionar 1x)
- Pitágoras 2 (pressionar 2x)
- Pitágoras 3 (pressionar 3x)

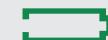
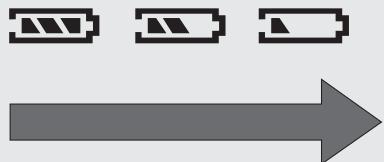
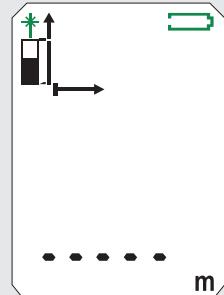
MUDAR A REFERÊNCIA DE MEDIÇÃO

- Frente
- Atrás
- Pino de canto

MEMÓRIA

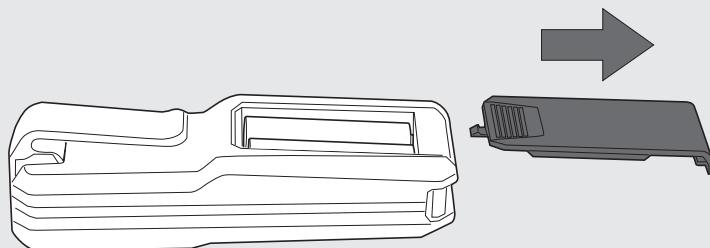
- Temporizador 3-15 seg (pressionar 1x)
- Memória 1-20 (pressionar 1x por 2 seg)
- Navegar na memória com as teclas +/-

TROCAR A BATERIA

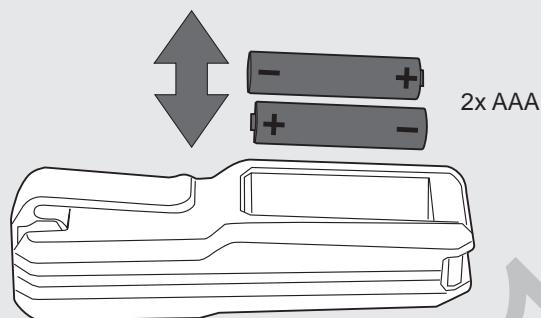


Troque a bateria,
quando o símbolo
piscar.

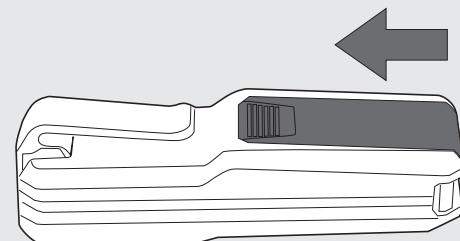
1



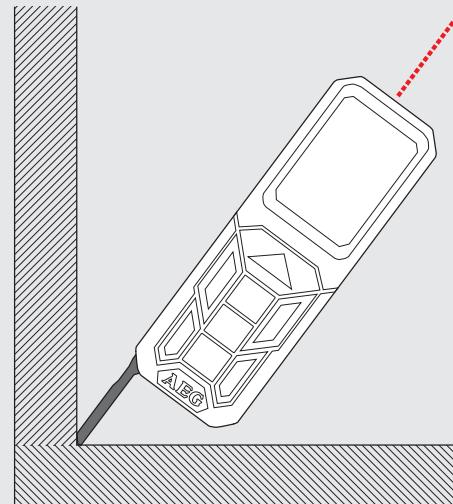
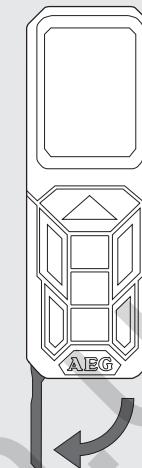
2



3

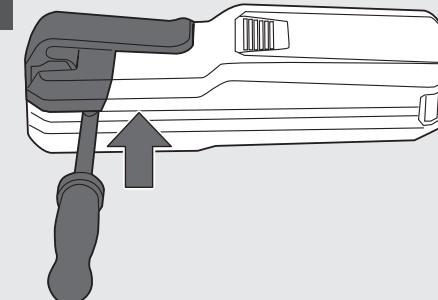


PINO DE CANTO

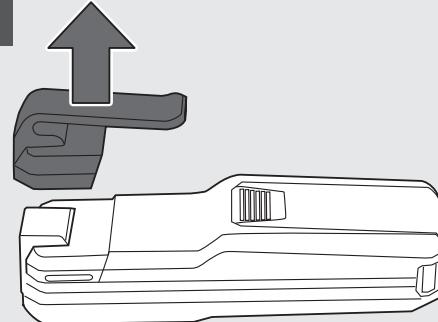


CLIP DE CINTO

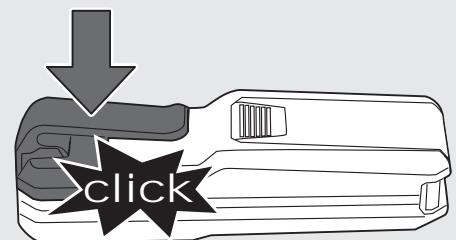
1



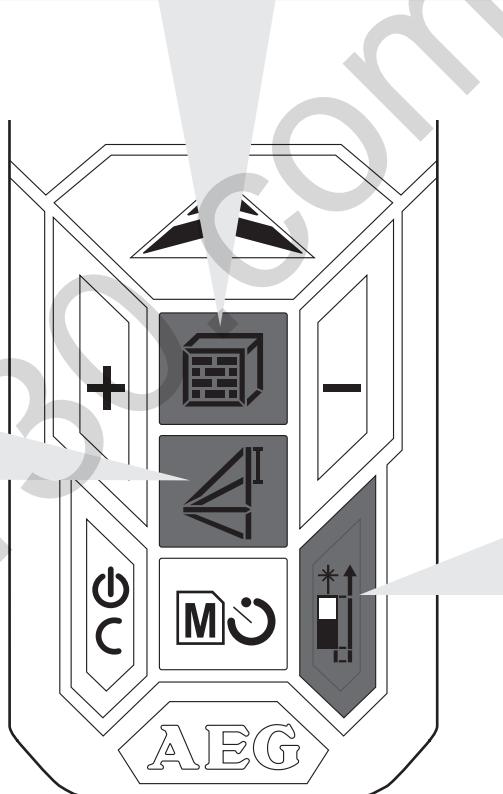
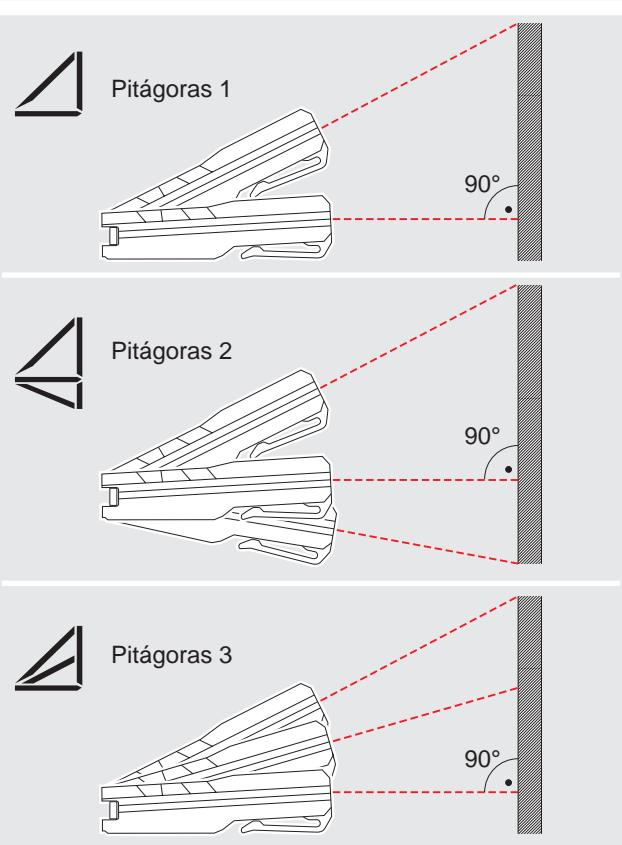
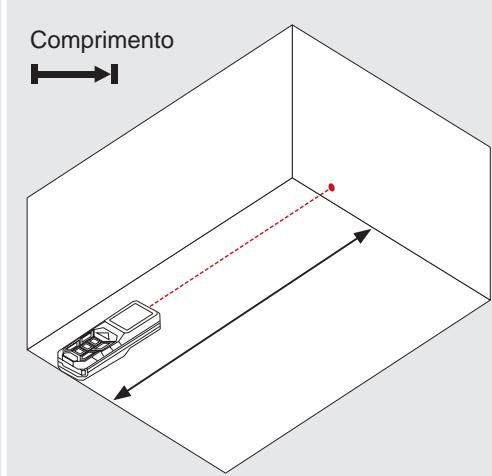
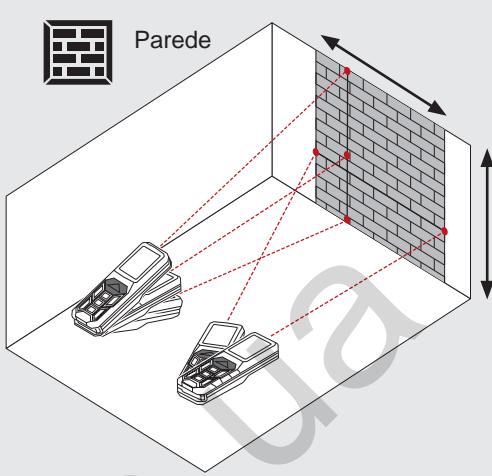
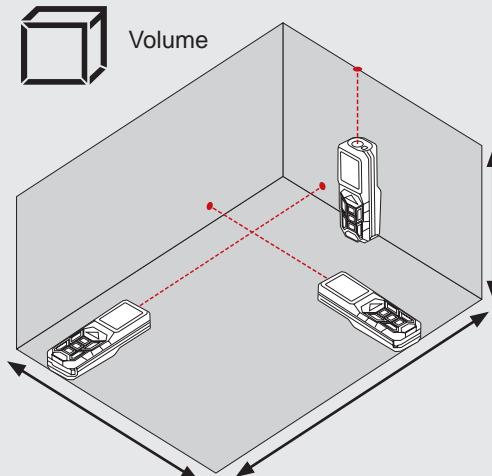
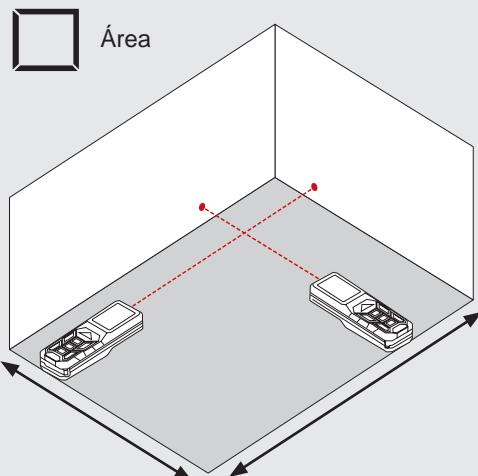
2



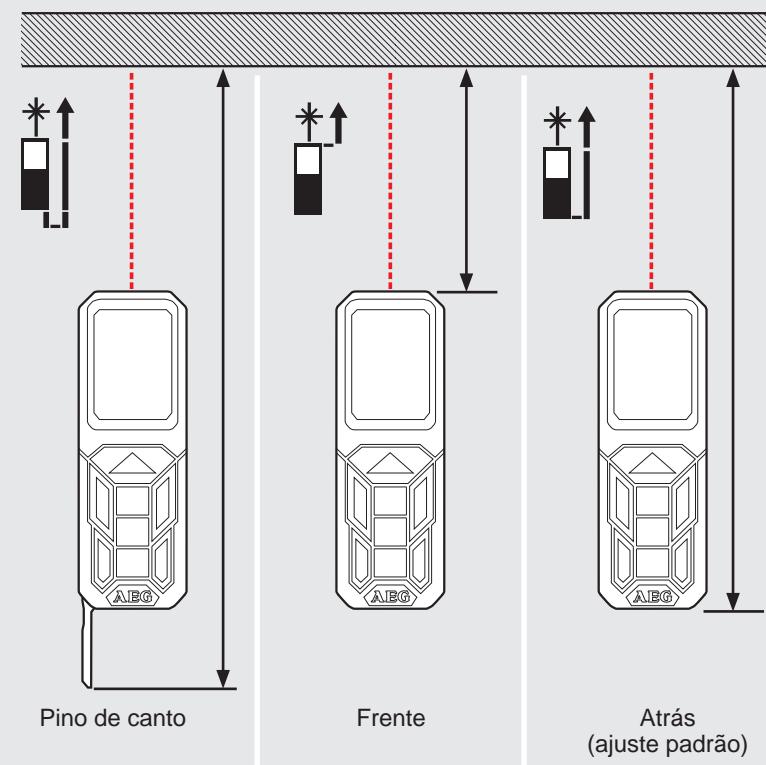
3



TECLA DE FUNÇÃO, PITÁGORAS, REFERÊNCIA DE MEDAÇÃO

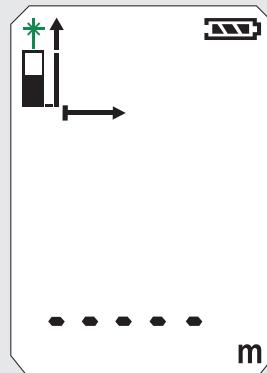


Referência de medição

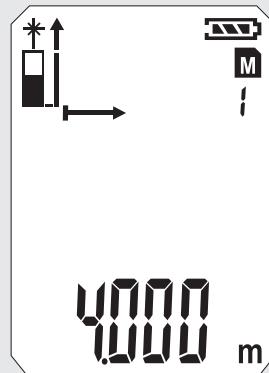
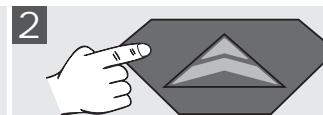


MEDIÇÃO DE COMPRIMENTO SIMPLES

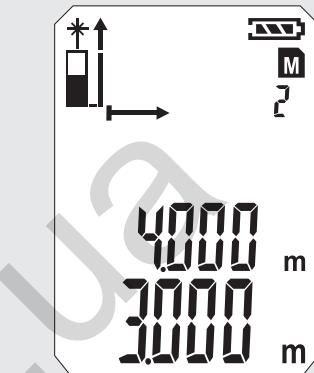
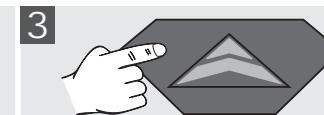
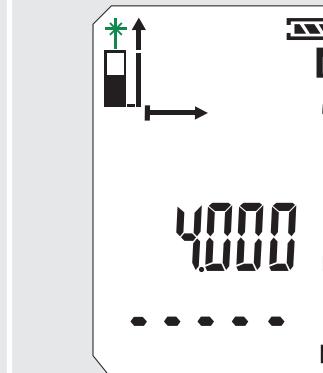
0



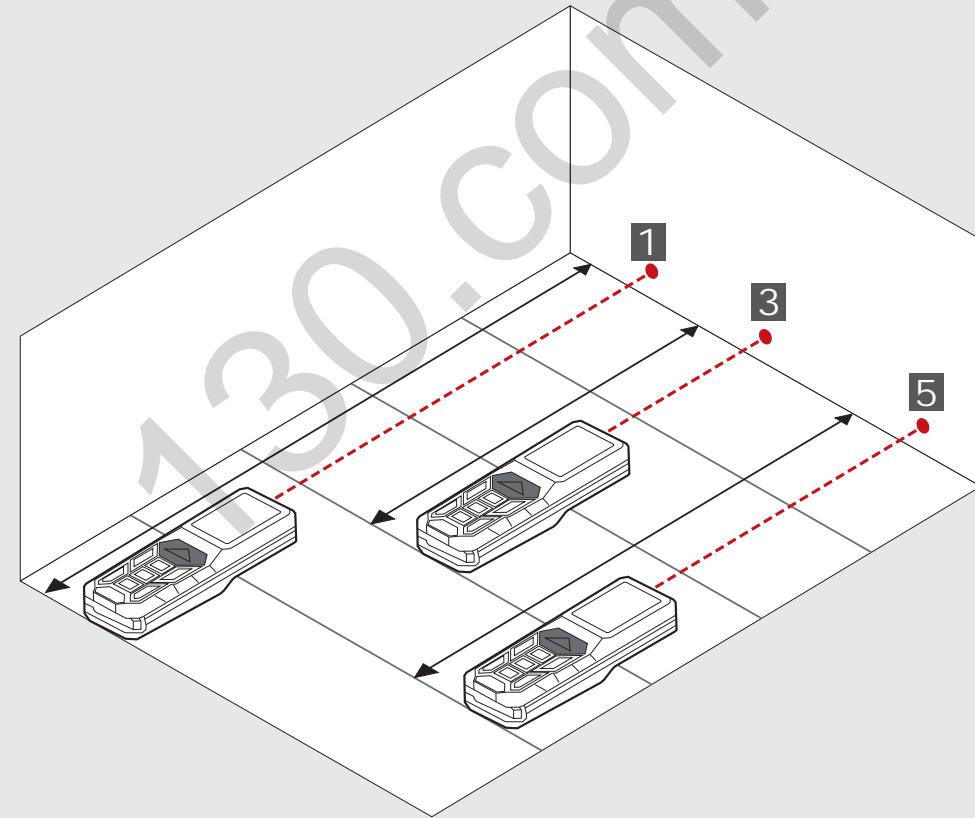
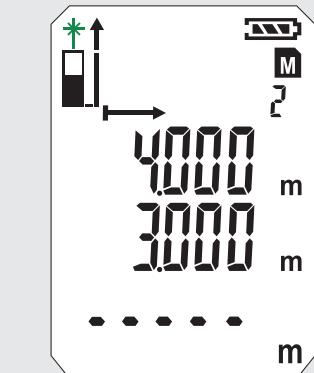
1



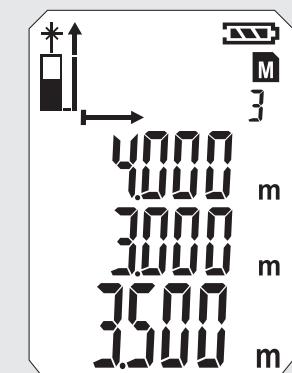
2



4



5

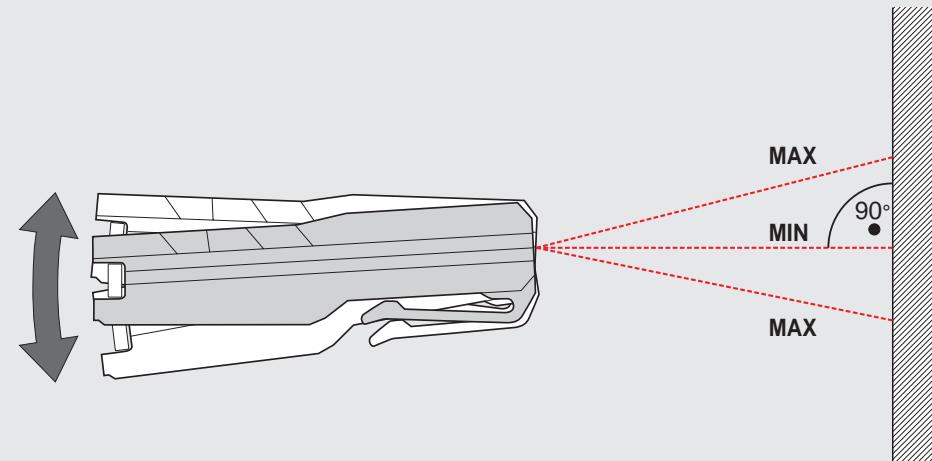
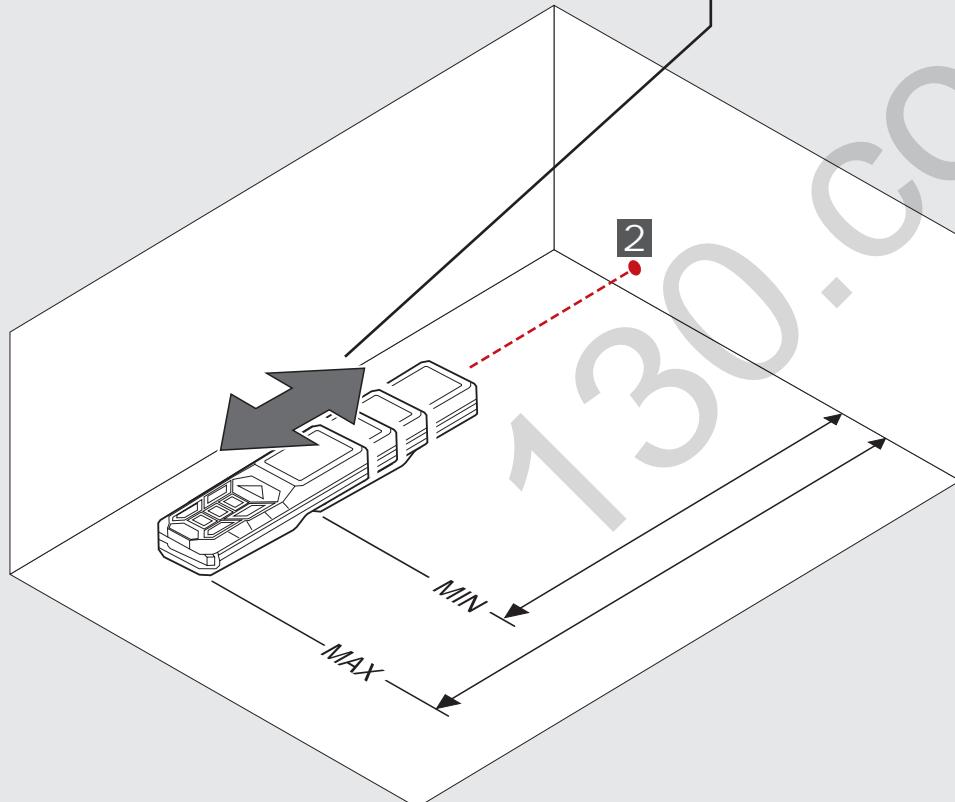
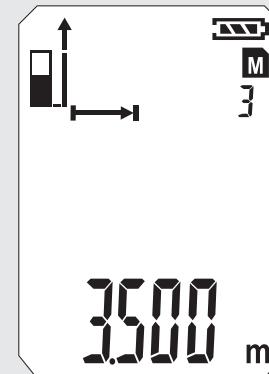
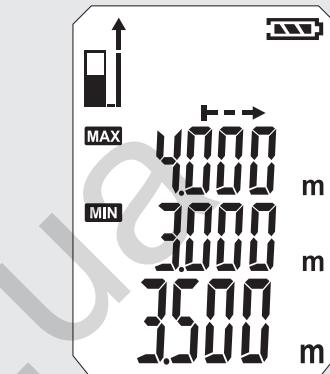
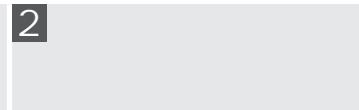
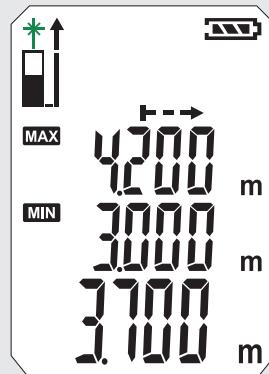
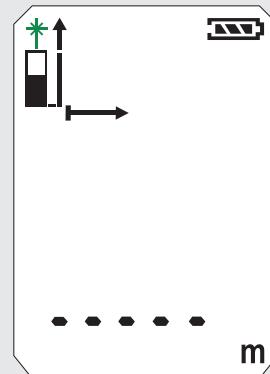


MEDIÇÃO CONTÍNUA / MEDIÇÃO MÍNIMO-MÁXIMO

0

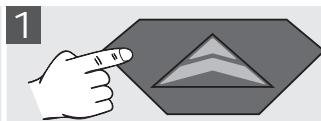


2

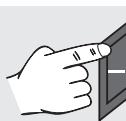


MEDIÇÃO DE ADIÇÃO / SUBTRACÇÃO

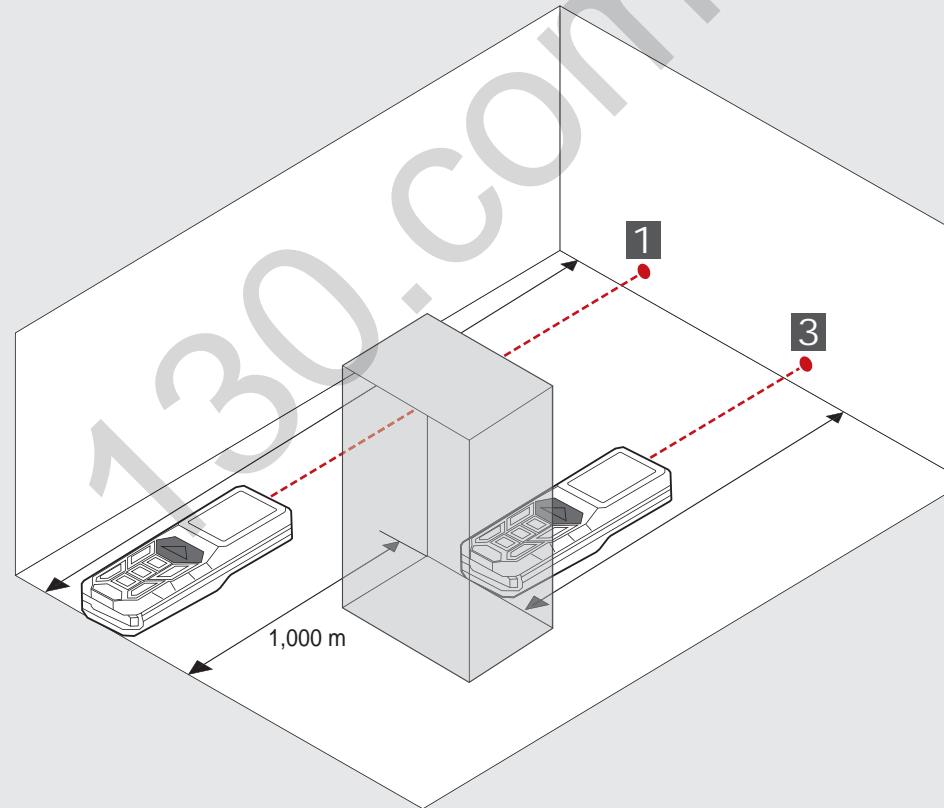
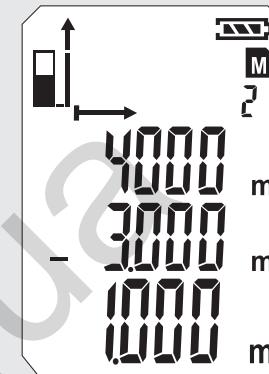
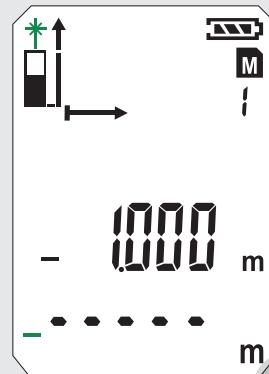
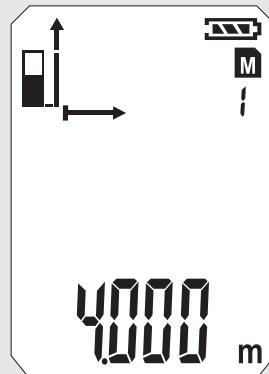
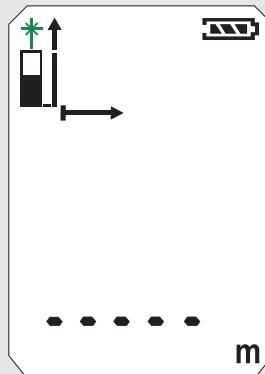
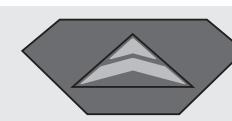
0



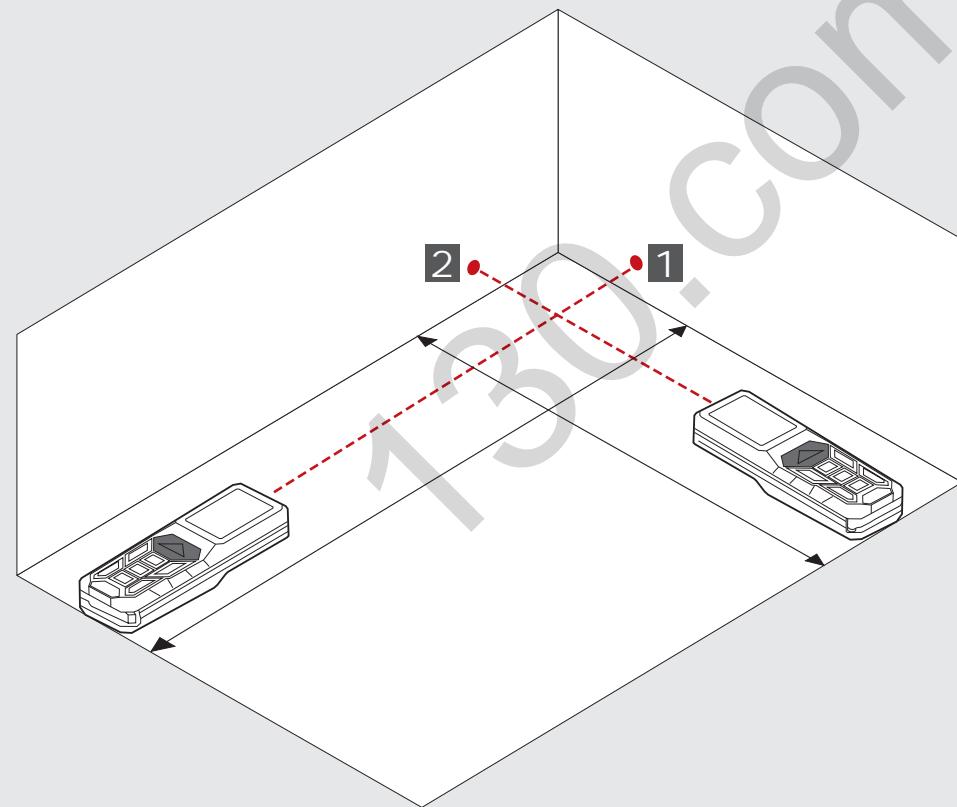
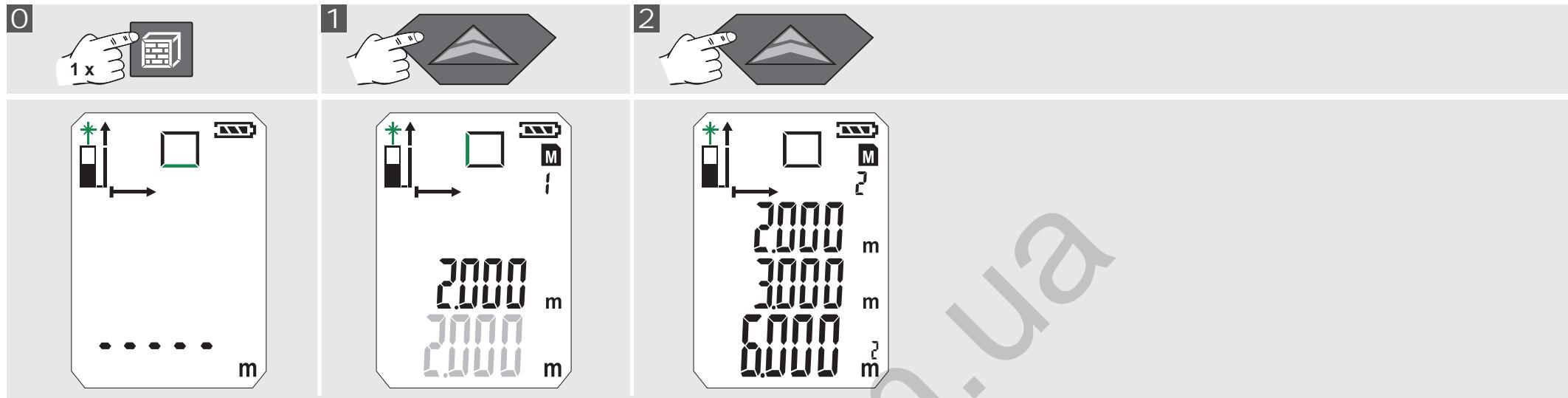
2



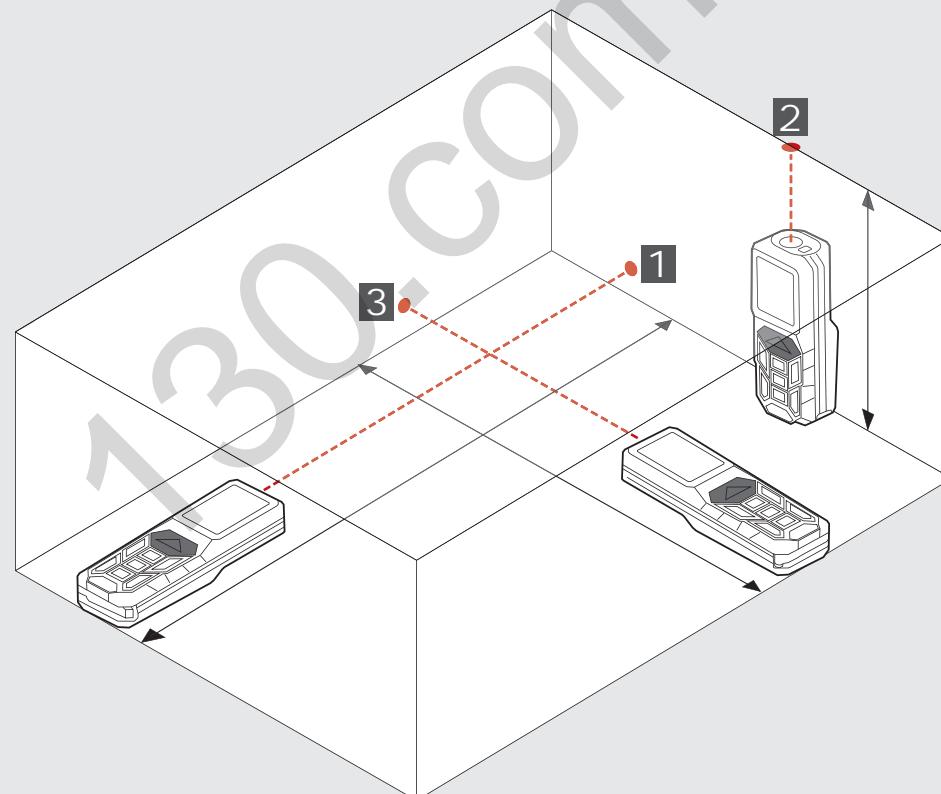
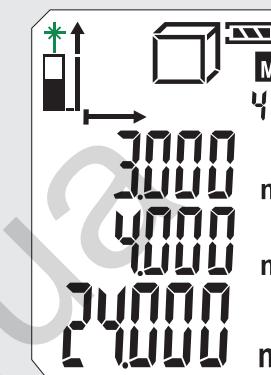
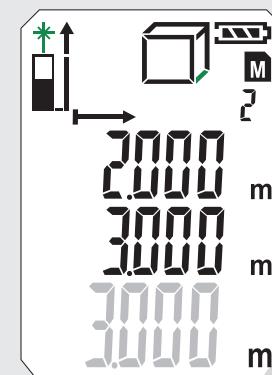
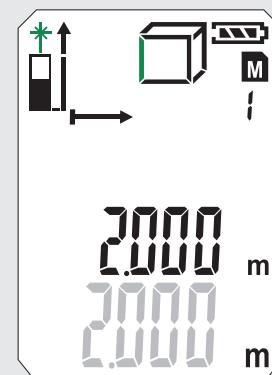
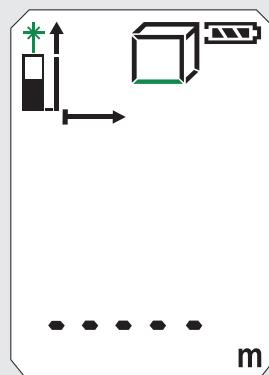
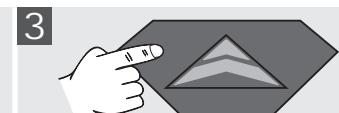
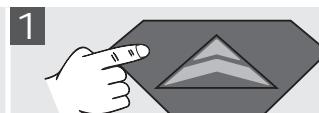
3



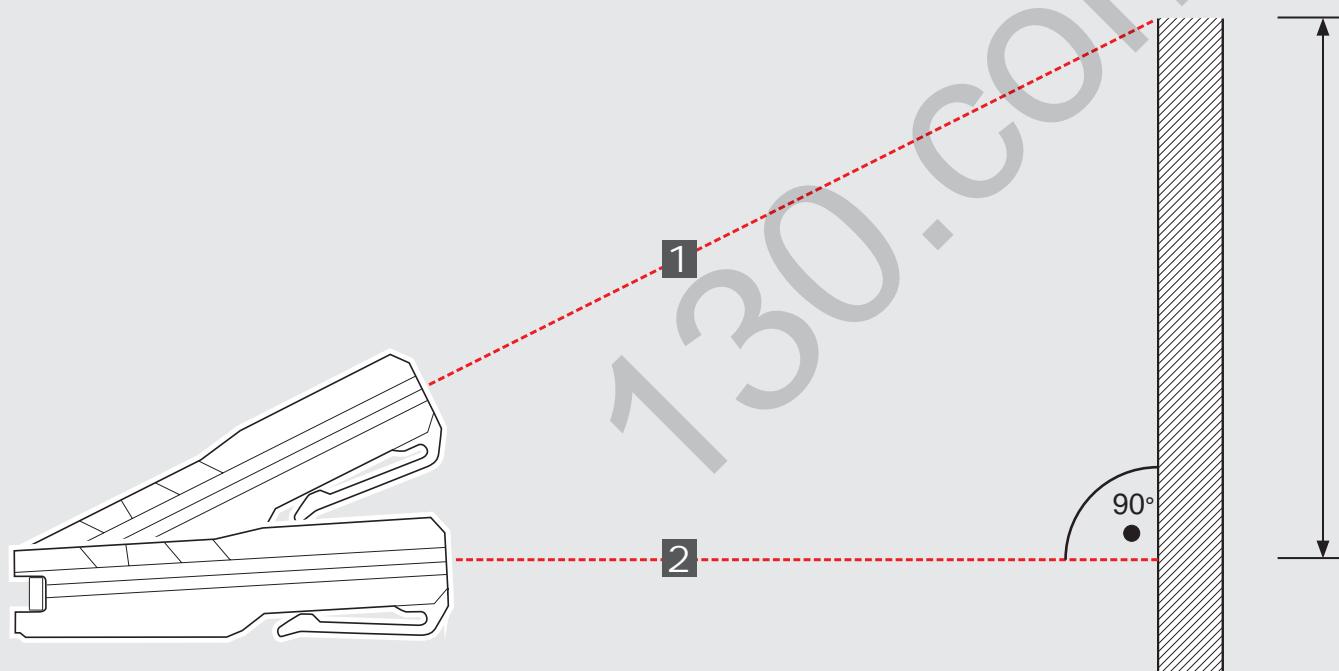
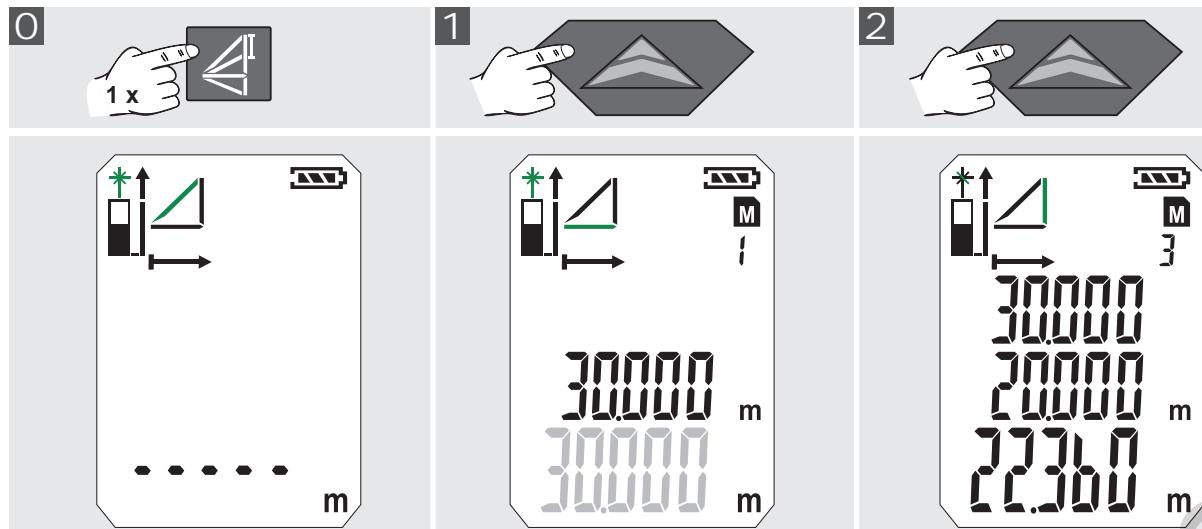
MEDIÇÃO DA ÁREA



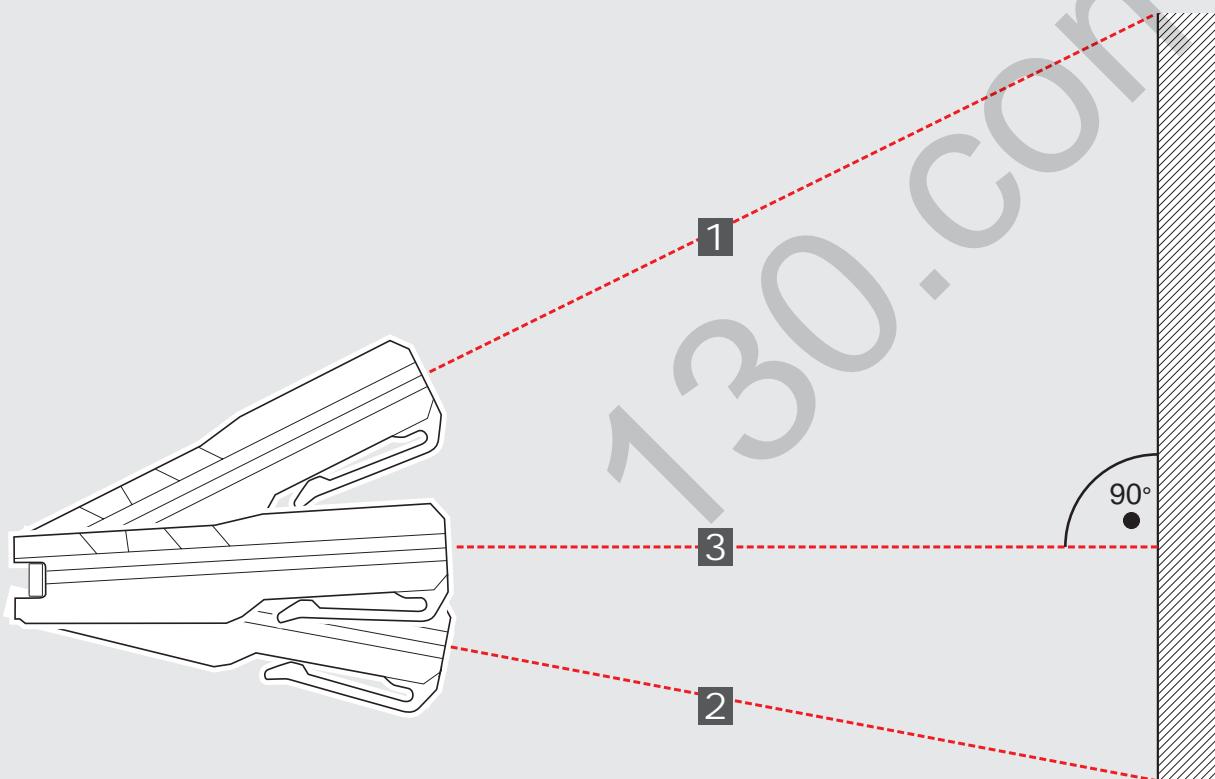
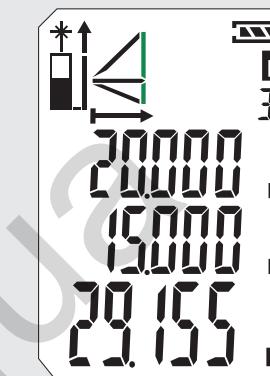
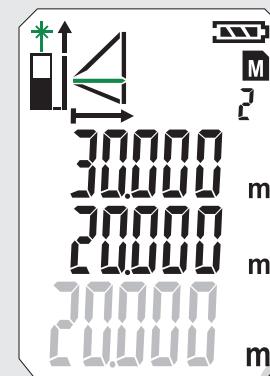
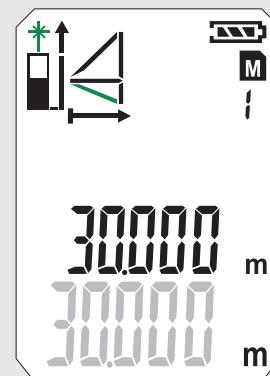
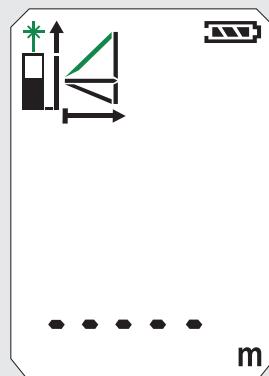
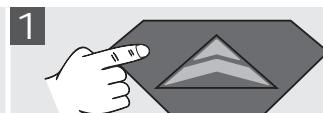
MEDIÇÃO DO VOLUME



MEDIÇÃO INDIRECTA (PITÁGORAS 1)



MEDIÇÃO INDIRECTA (PITÁGORAS 2)

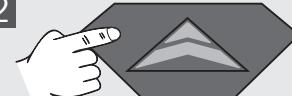


MEDIÇÃO INDIRECTA (PITÁGORAS 3)

1



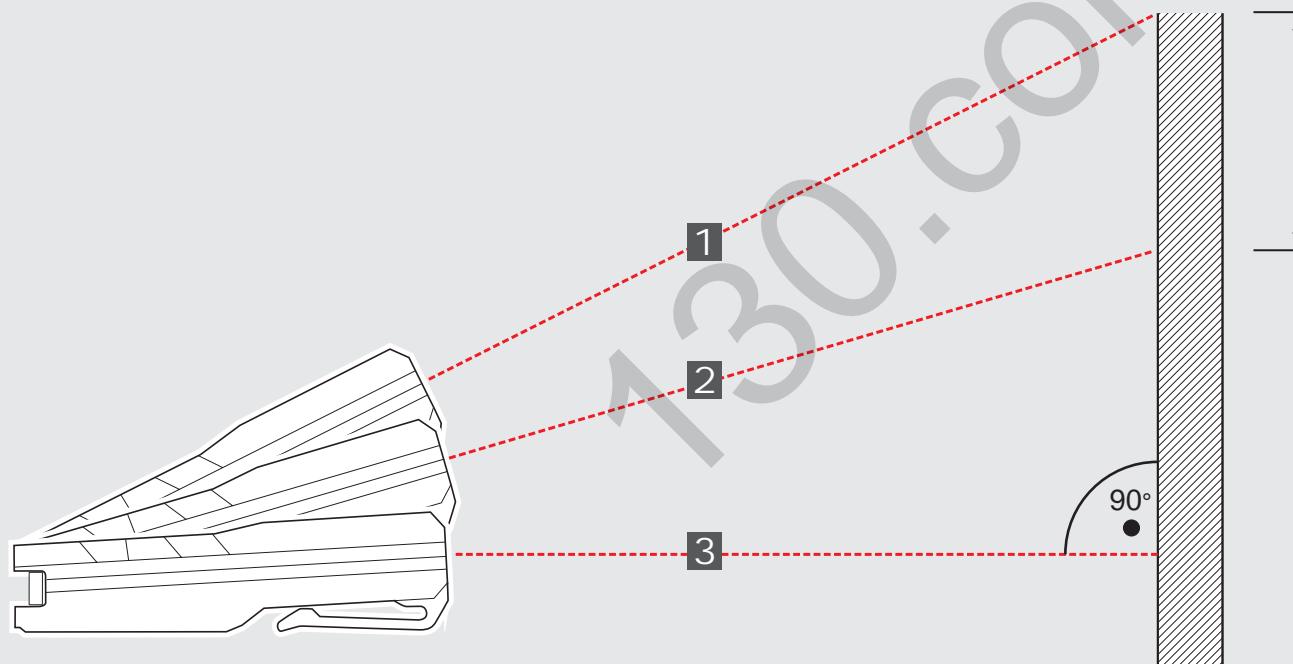
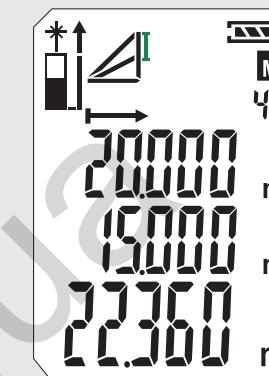
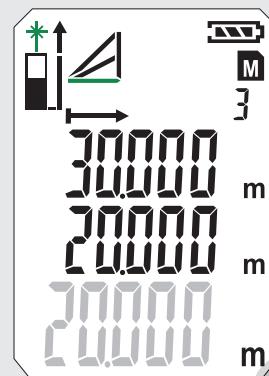
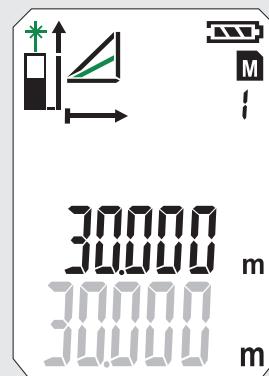
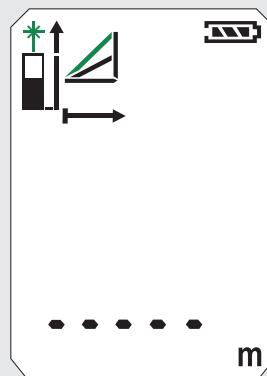
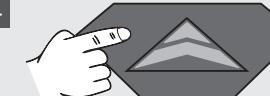
2



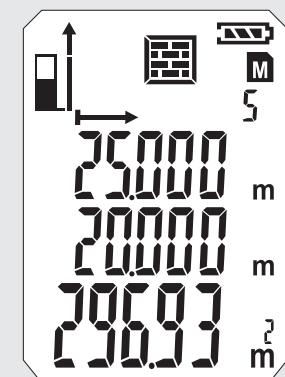
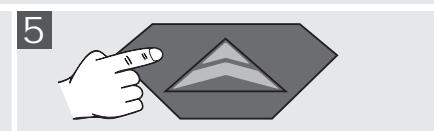
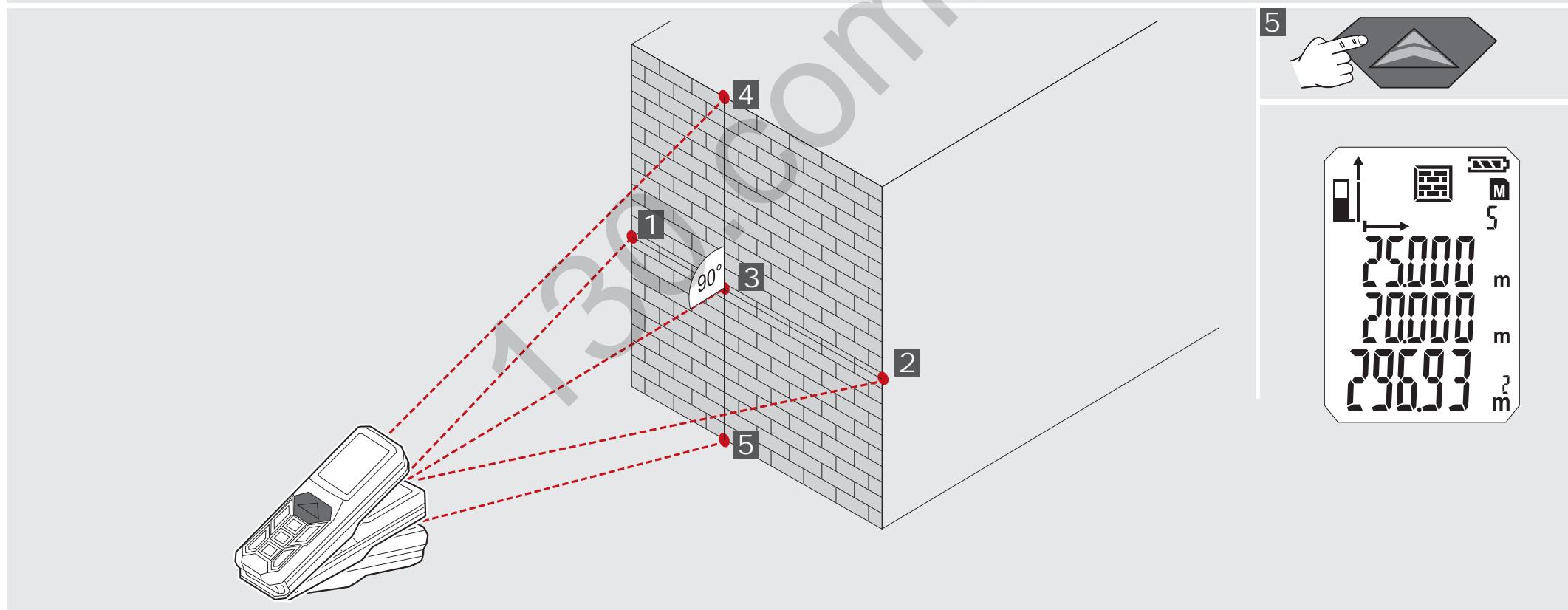
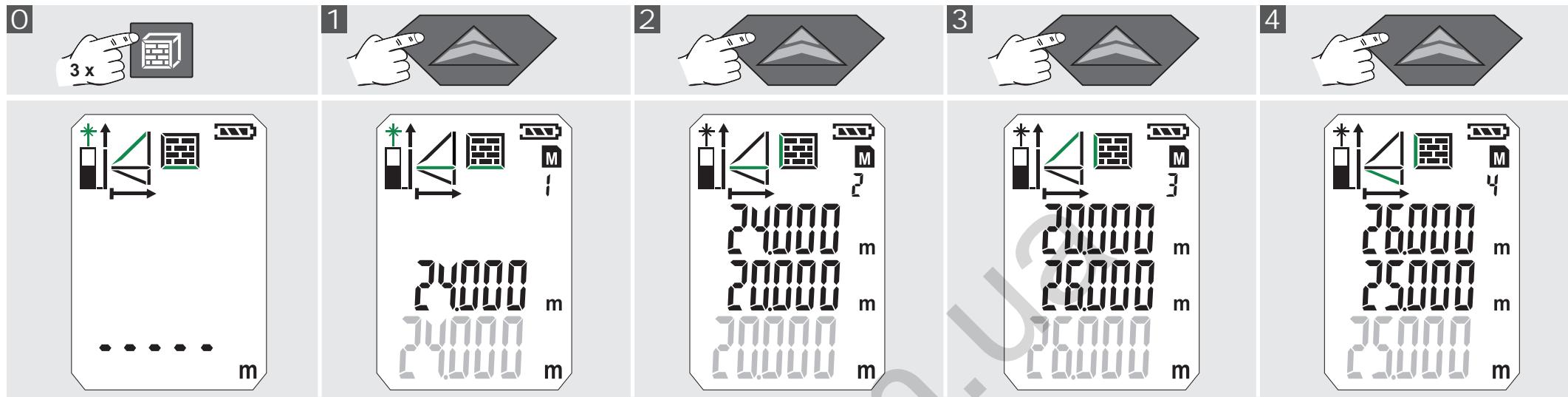
3



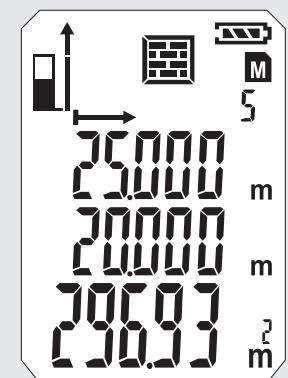
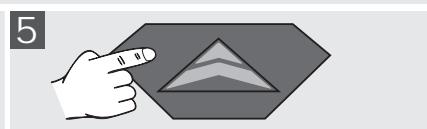
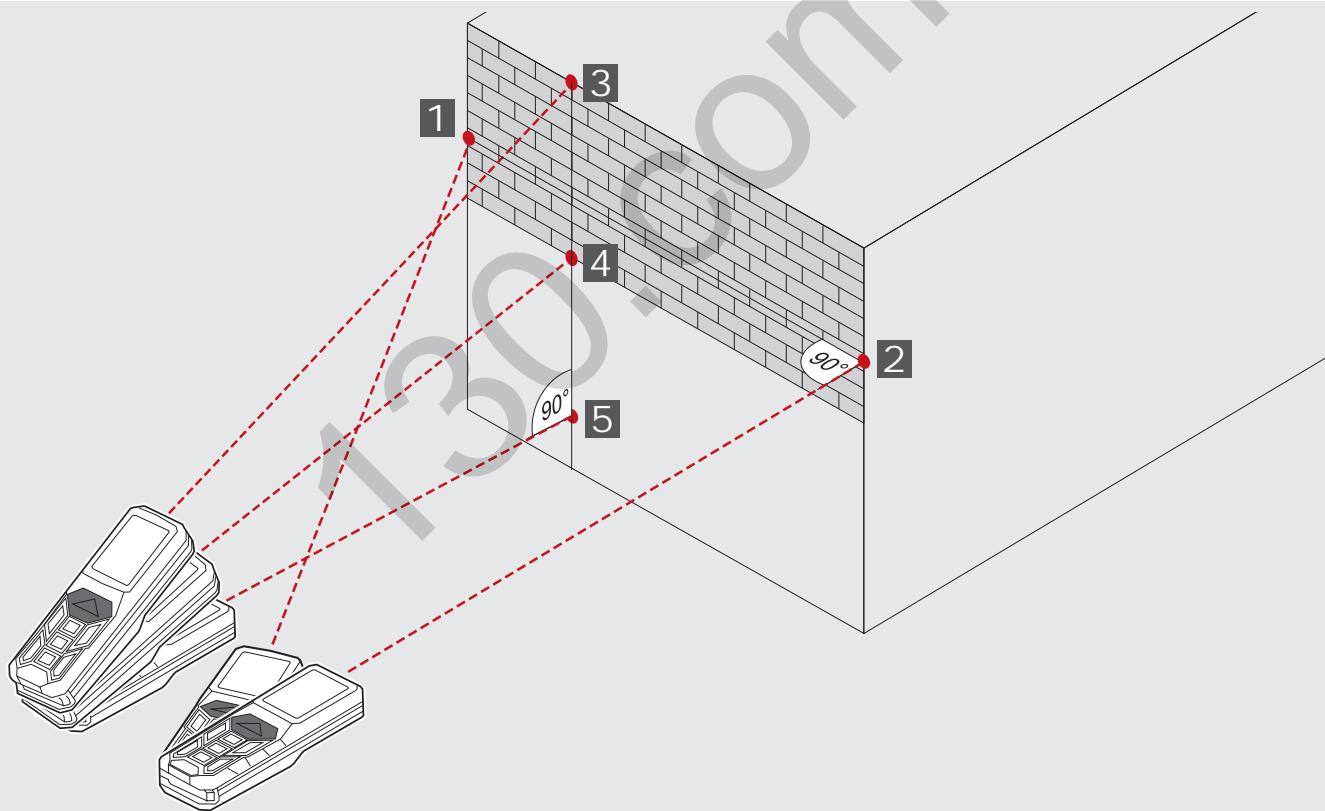
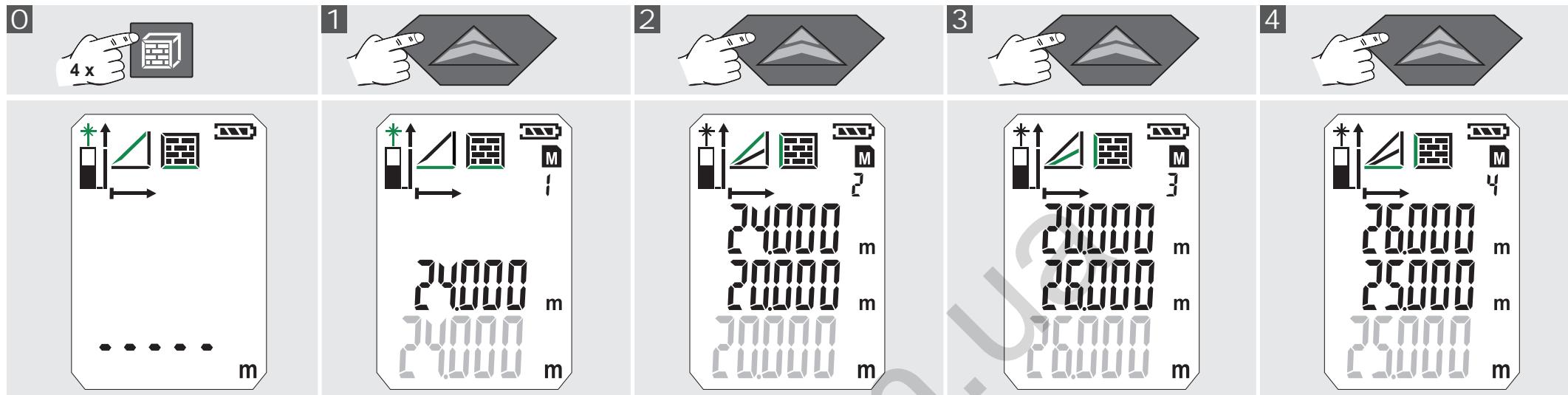
4



MEDIÇÃO DA ÁREA DA PAREDE (CENÁRIO 1)



MEDIÇÃO DA ÁREA DA PAREDE (CENÁRIO 2)



TEMPORIZADOR

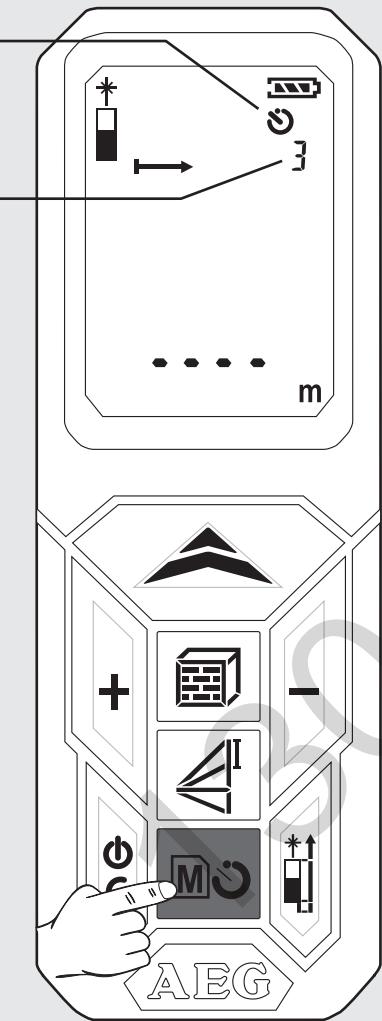
Com o temporizador a medição pode ser activada com retardo, p. ex. para posicionar um componente no raio de medição.

Pressione a tecla

- O símbolo aparece
- Pressionando a tecla o temporizador pode ser ajustado entre 3 e 15 seg

Pressione a tecla

- São contados os segundos até à medição.
- Ao chegar a 0, a medição é activada.



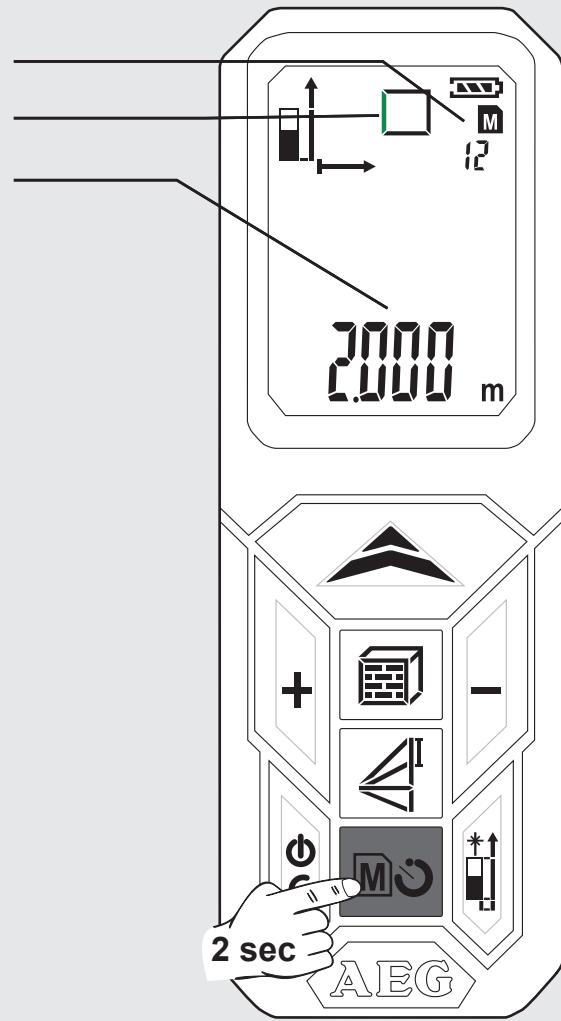
MEMÓRIA

Os valores de medição são memorizados automaticamente sucessivamente na memória.

Os valores memorizados podem ser acessados com a tecla .

Pressione a tecla por 2 seg

- O símbolo e o espaço de memória aparecem.
- Os parâmetros de medição correspondentes são indicados.
- O valor memorizado é mostrado na linha principal.
- Navegue com as teclas +/-.



MODO DE FUNCIONAMENTO BÁSICO NO EXEMPLO DE UMA MEDIDA DA ÁREA (1)

1 Ligá

Pressione a tecla .
Atenção! Raio laser ligado!
Não apontar contra pessoas!

2 Seleccione a referência de medição

Ajuste padrão depois de ligar: atrás
 Pressione 1x -> pino de canto
 Pressione 2x -> frente
 Pressione 3x -> atrás

O símbolo do laser pisca (o piscar verde é mostrado).

3 Seleccione a função

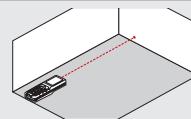
Depois de ligar, o aparelho sempre está ajustado em medição do comprimento.
 Pressione 1x - Medição da área

O símbolo é mostrado

- O símbolo aparece
O parâmetro de medição pisca (o piscar é mostrado em verde)

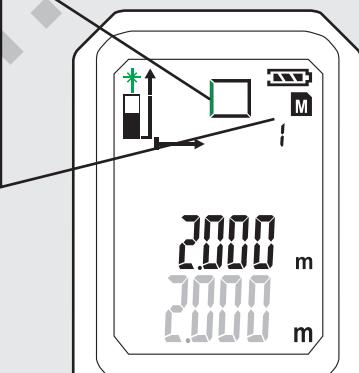
4 Medir o comprimento

Alinhe o aparelho e pressione a tecla .



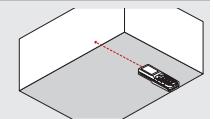
- O valor de medição aparece brevemente na linha principal.
- Após 1 seg o valor de medição salta para a linha superior.

O valor de medição é memorizado na memória sob o número corrido.
O segundo parâmetro de medição pisca. O aparelho está pronto para medir o segundo valor.



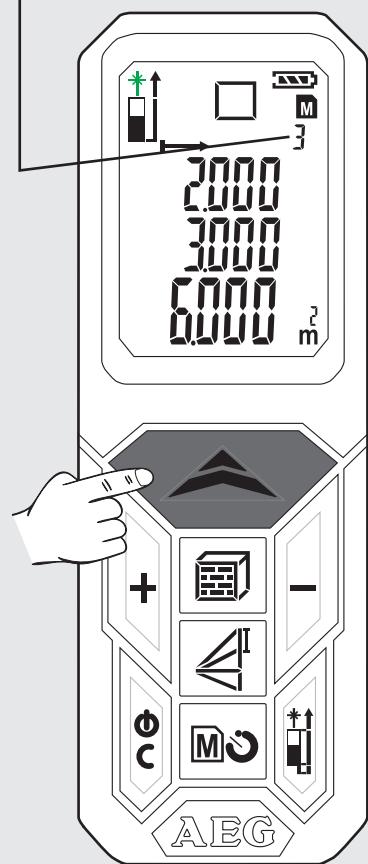
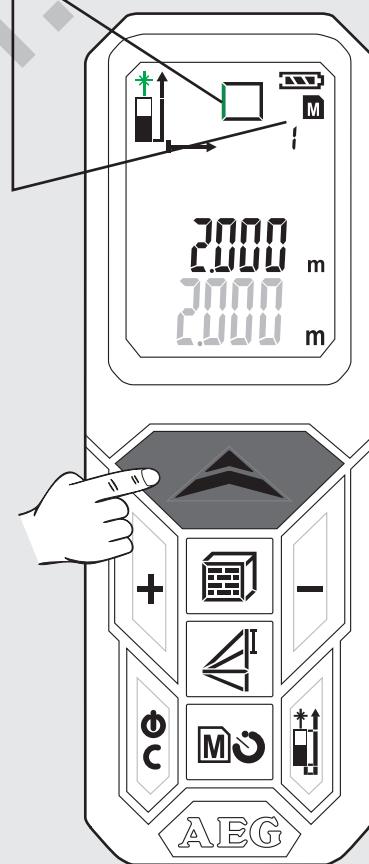
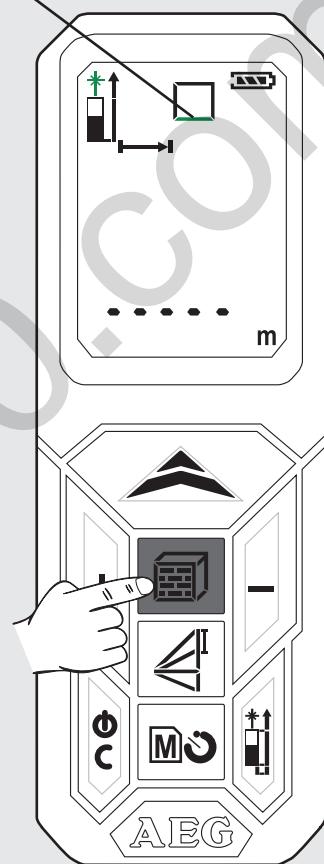
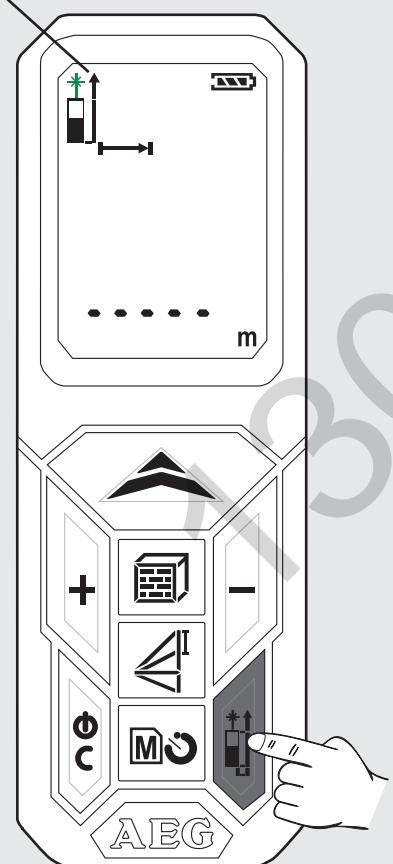
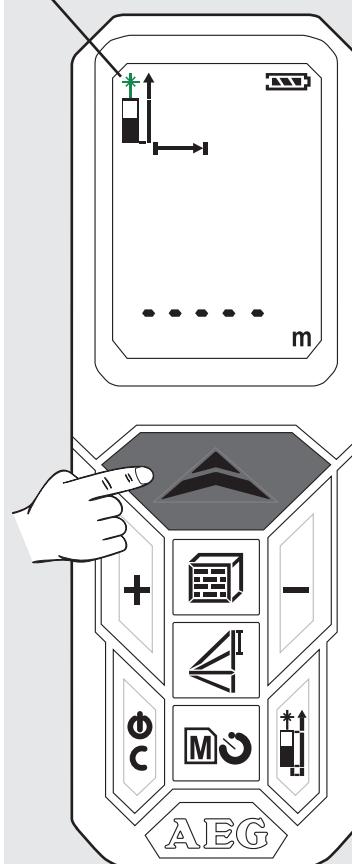
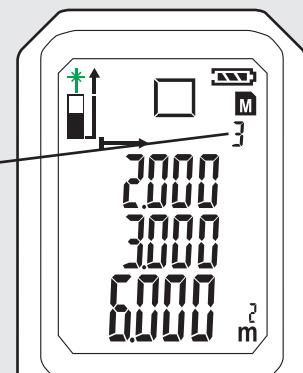
5 Medir a largura

Alinhe o aparelho e pressione a tecla .



- O valor de medição aparece brevemente na linha principal.
- Após 1 seg o valor de medição salta para a linha superior.

O valor de medição é memorizado na memória sob o número corrido.
- O resultado é mostrado na linha principal e é memorizado na memória sob o número corrido.



MODO DE FUNCIONAMENTO BÁSICO NO EXEMPLO DE UMA MEDIDA DA ÁREA (2)

6 Ver os valores memorizados

Pressione a tecla **M** por 2 seg.

Pressione a tecla + ou -

7 Sair da memória

Pressione a tecla **φ**

- Os valores memorizados são mostrados na linha principal.

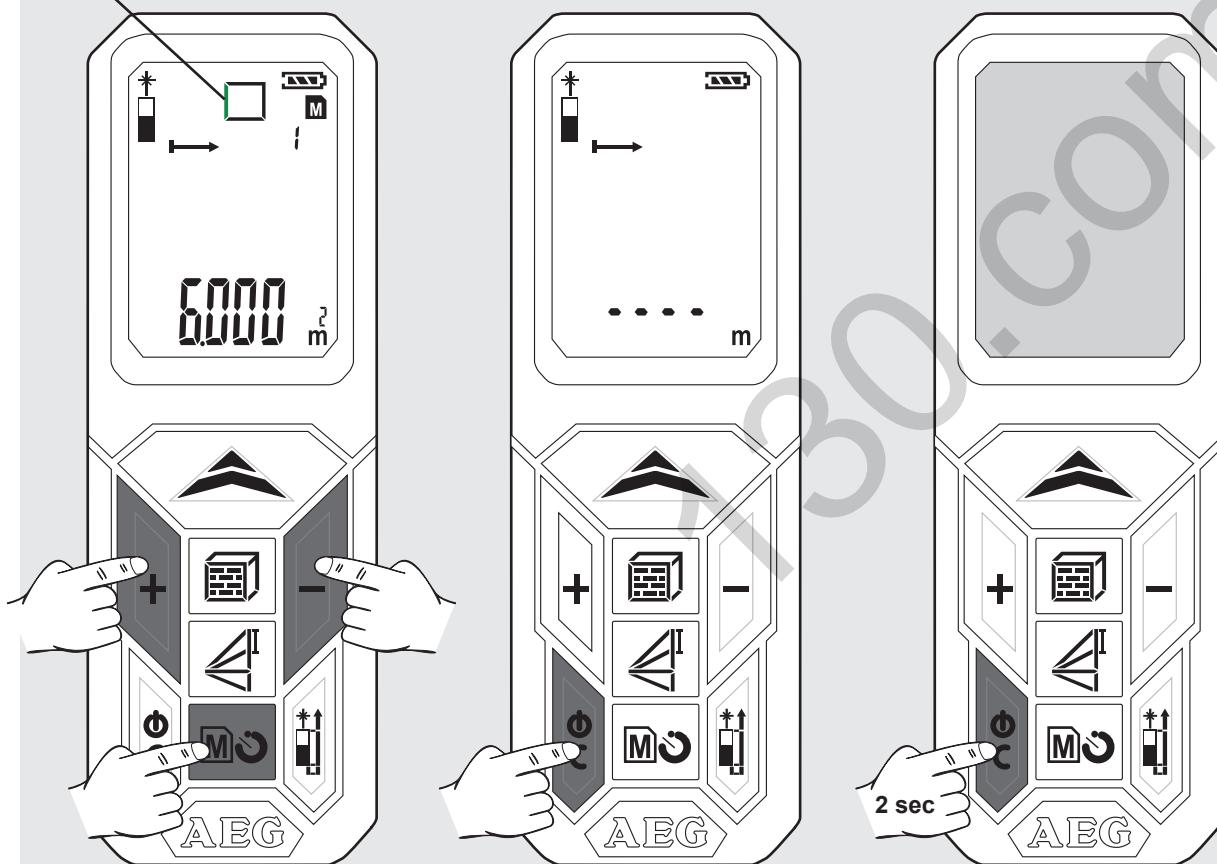
O símbolo correspondente é mostrado e o parâmetro de medição pisca (piscar é mostrado em verde).

8 Desligar

Pressione a tecla **c** por 2 seg
(primeiro, deverá ser saído da memória).

- O aparelho desliga-se.

- Se nenhuma tecla for pressionada por 3 minutos, o aparelho desligar-se-á automaticamente.



INHOUD

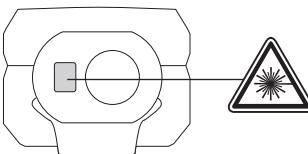
Belangrijke Veiligheidsvoorschriften	1
Technische gegevens	2
Voorgeschreven gebruik van het systeem	2
Tabel met storingscodes	2
Overzicht	3
Vervangen van de batterijen	4
Hoekpen	4
Riemhouder	4
Functietoets, Pythagoras, meetniveau	5
Eenvoudige lengtemeting	6
Constante meting / minimum-/maximum-meting	7
Optel-/aftrekmeting	8
Oppervlaktemeting	9
Volumeteting	10
Indirecte meting (Pythagoras 1)	11
Indirecte meting (Pythagoras 2)	12
Indirecte meting (Pythagoras 3)	13
Wandoppervlaktemeting (scenario 1)	14
Wandoppervlaktemeting (scenario 2)	15
Timer	16
Geheugen	16
Principiële werking aan de hand van een oppervlaktemeting (1)	17
Principiële werking aan de hand van een oppervlaktemeting (2)	18

BELANGRIJKE VEILIGHEIDSVOORSCHRIFTEN



Gebruik dit product niet voordat u de veiligheidsinstructies en de gebruiksaanwijzing op de bijgevoegde CD hebt bestudeerd.

Laserclassificatie



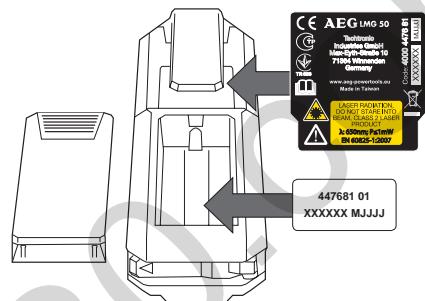
WAARSCHUWING:

Het is een Klasse 2 laserproduct in overeenstemming met IEC 60825-1:2007.



Opschrift

Plak de Engelse tekst op het vermogensplaatje vóór de eerste inbedrijfstelling af met de bijgeleverde sticker in uw taal.



Waarschuwing!

Vermijd direct blikcontact. Het felle licht van de laserstraal kan tot letsel aan de ogen leiden en de ogen kortstondig verblinden.

Kijk niet in de laserstraal en richt niet onnodig op andere personen.

Andere personen niet verblinden.

Waarschuwing!

Het laserapparaat mag noch in de buurt van kinderen worden gebruikt noch mogen kinderen het apparaat gebruiken.

Opgelet! Een reflecterend oppervlak zou de laserstraal terug naar de bediener of een andere persoon kunnen reflektieren.

Houd een veilige afstand aan naar bewegende delen.

Verricht periodiek controlemetingen. Met name vlak voor, tijdens en na belangrijke metingen.

Pas op voor meetfouten als het instrument defect is of als het is gevallen, misbruikt of gemodificeerd.

Let op! Maak uzelf vertrouwd met de bedieningselementen en het juiste gebruik van het tuingereedschap.

Het lasermeettoestel heeft een beperkt toepassingsbereik. (Zie hoofdstuk 'Technische gegevens'). Pogingen om buiten het maximale en minimale bereik te meten resulteren in onnauwkeurige resultaten. De toepassing onder ongunstige omstandigheden, zoals te grote hitte of koude, fel zonlicht, regen, sneeuw, mist of andere, het zicht belemmerende omstandigheden kan leiden tot onnauwkeurige meetresultaten.

Als het lasermeettoestel van een warme naar een koude omgeving wordt gebracht (of omgekeerd), moet u even wachten totdat het toestel zich aan de nieuwe omgevingstemperatuur heeft kunnen aanpassen.

Bewaar het lasermeettoestel altijd in gesloten ruimten en bescherm het tegen schokken, vibraties of extreme temperaturen.

Bescherm het lasermeettoestel tegen stof, natheid en te hoge luchtvochtigheid. Deze factoren zouden inwendige onderdelen onherstelbaar kunnen beschadigen of de nauwkeurigheid negatief kunnen beïnvloeden.

Gebruik geen agressieve reinigingsmiddelen of oplosmiddelen. Reinig het toestel uitsluitend met een schone, zachte doek.

Voorkom harde stoten en laat het toestel niet vallen. De nauwkeurigheid van het toestel dient te worden gecontroleerd als het gevallen is of aan andere mechanische belastingen werd blootgesteld.

Vereiste reparaties aan dit laserapparaat mogen alleen worden uitgevoerd door geautoriseerd vakpersoneel.

Gebruik het instrument niet in ruimten met explosiegevaar of in een agressieve omgeving.

Gebruik uitsluitend acculaders aanbevolen door de fabrikant van de batterijen.



Lege batterijen mogen niet bij het huisvuil worden weggegooid. Denk aan het milieu en lever ze in bij de beschikbare inzamelpunten in overeenstemming met nationale en lokale regels. Het product mag niet bij het huisvuil worden weggegooid. Het product moet in overeenstemming met de nationale regelgeving van uw land worden verwijderd. Houdt u aan de nationale en landspecifieke regelgeving. Neem voor informatie over de afvoer contact op met uw gemeente of vakhandelaar.



CE-keurmerk

TECHNISCHE GEGEVENS

Veiligheidsklasse	IP54 (tegen stof en spatwater beschermd)
Optiek	14 mm
Brandpunt	35 mm
Meetbereik max.	50 meter (tolerantie: 55m)
Meetbereik min.	0,05 meter
Absolute nauwkeurigheid @ < 10m	± 1,5 mm (max.)
Herhalingsnauwkeurigheid @ < 10m	± 1,5 mm (karakteristiek max. 2σ)
Herhalingsnauwkeurigheid @ > 10m	stijging ± 0,25 mm / meter (karakteristiek max. 2σ)
Meettijd	0,5 s
Displaytype	Lcd (22,7 mm x 31 mm)
Stroomvoorziening	AAA 2x (alkaline-batterij)
Batterijlevensduur	10.000 (afzonderlijke metingen)
Uitgangsvermogen van de laser	0,6 mW ~ 0,95 mW (class 2, 650nm)
Grootte van de laserpunt	25 x 30 mm @ 16 m (max.)
Laserstraal verticale hoek	+1 graad
Laserstraal horizontale hoek	±1 graad
Automatische uitschakeling toestel	180 seconden
Automatische uitschakeling laser	30 seconden
Arbeidstemperatuurbereik	-10°C tot +50°C
Opslagtemperatuurbereik	-25°C tot +70°C
Gewicht zonder batterij	80 g

TABEL MET STORINGSCODES

Code	Beschrijving	Maatregel
Err01	Buiten het meetbereik	Meting uitvoeren in voorgeschreven bereik.
Err02	Reflecterend signaal is te zwak	Een beter oppervlak kiezen.
Err03	Buiten het weergavebereik (max. waarde: 99.999) bijv. het resultaat van een oppervlak of volume buiten het weergavebereik	Controleer of de waarden en stappen correct zijn.
Err04	Fout in de Pythagorasberekening	Controleer of de waarden en stappen correct zijn.
Err05	Batterij zwak	Nieuwe batterij plaatsen.
Err06	Buiten het arbeidstemperatuurbereik	Meting uitvoeren in het voorgeschreven arbeidstemperatuurbereik.
Err07	Omgevingslicht te fel	Doelbereik donkerder maken.

VOORGESCHREVEN GEBRUIK VAN HET SYSTEEM

Het lasermeettoestel is geschikt voor het meten van afstanden en neigingen.

Dit apparaat uitsluitend gebruiken voor normaal gebruik, zoals aangegeven.

Pythagoras
Hoogteverschil

Meetniveau

Lengtemeting

Minimum / maximum voor constante meting

Optellen / aftrekken

AAN / METEN

- ▶ Aan
- ▶ Meten
- ▶ Constante meting (2 sec. indrukken)
Min./max.-functie

OPTELLEN

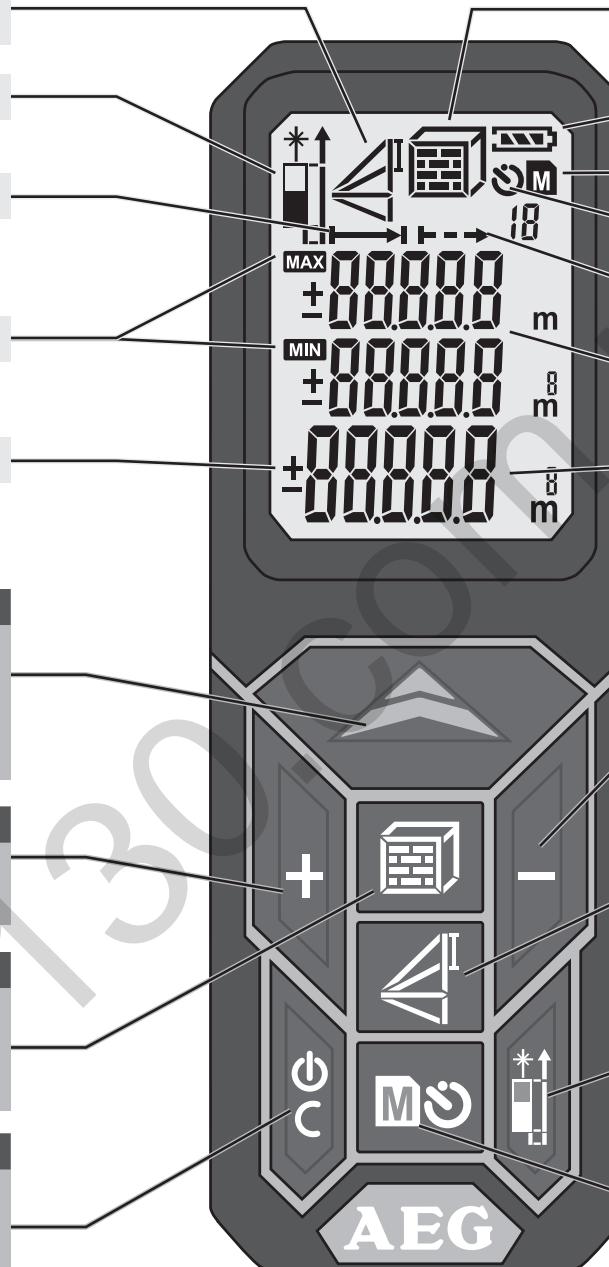
- ▶ Waarde optellen
- ▶ Navigeren in het geheugen

OPPERVLAK / VOLUME

- ▶ Oppervlak (1x indrukken)
- ▶ Volume (2x indrukken)
- ▶ Indirecte oppervlaktemeting (3x / 4x indrukken)

INSCHAKELEN

- ▶ Aan
- ▶ Uit (2 sec. indrukken)
- ▶ Terugzetten



Oppervlak / volume
Indirecte oppervlaktemeting

Batterijstatus

geheugen

Timer

Constante meting

Tussenwaarden

Totale waarde

AFTREKKEN

- ▶ Waarde aftrekken
- ▶ Navigeren in het geheugen

PYTHAGORAS

- ▶ Pythagoras 1 (1x indrukken)
- ▶ Pythagoras 2 (2x indrukken)
- ▶ Pythagoras 3 (3x indrukken)

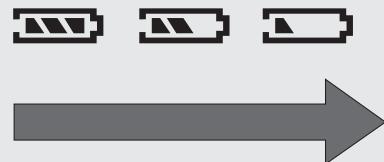
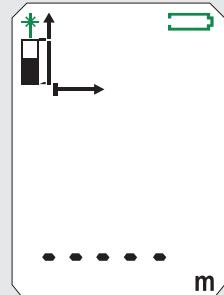
MEETNIVEAU OMSCHAPELEN

- ▶ Voor
- ▶ Achter
- ▶ Hoekpen

GEHEUGEN

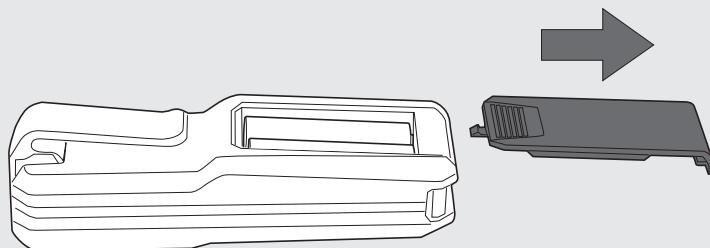
- ▶ Timer 3-15 sec. (1x indrukken)
- ▶ Geheugen 1-20 (1x 2 sec. indrukken)
- ▶ Met de toetsen +/- in het geheugen navigeren

VERVANGEN VAN DE BATTERIJEN

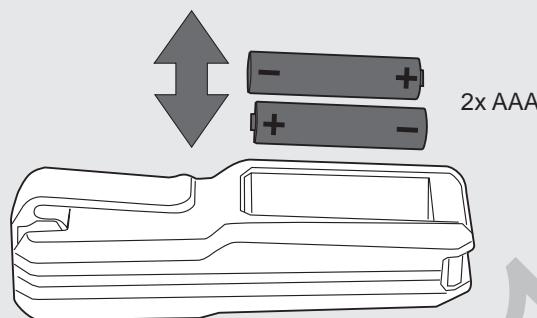


Vervang de batterij als het symbool begint te knipperen.

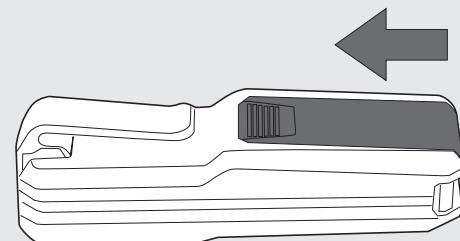
1



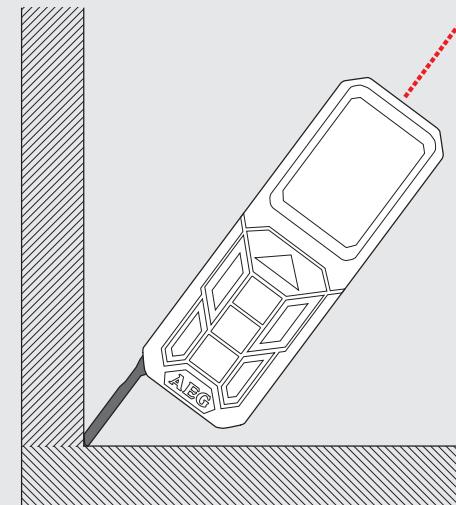
2



3

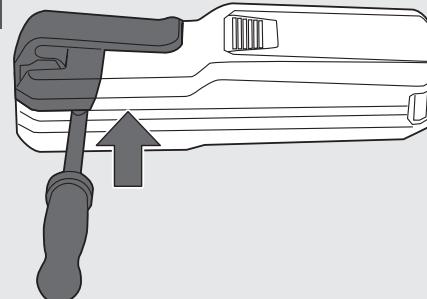


HOEKPEN

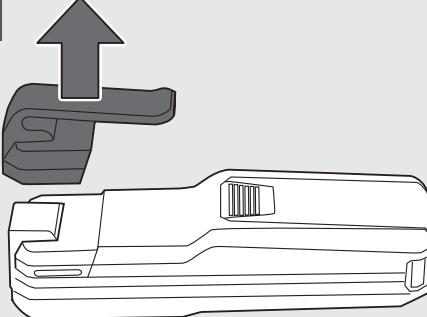


RIEMHOUDER

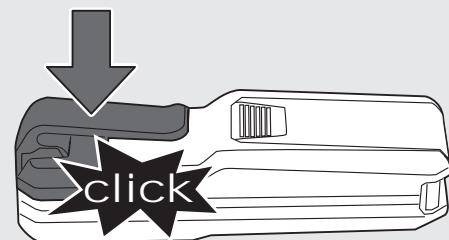
1



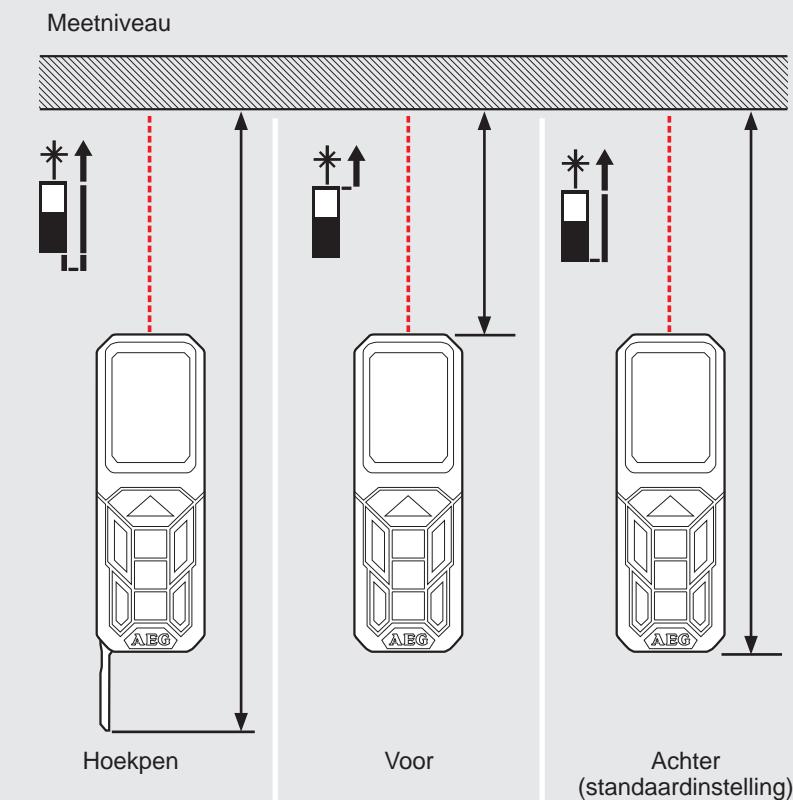
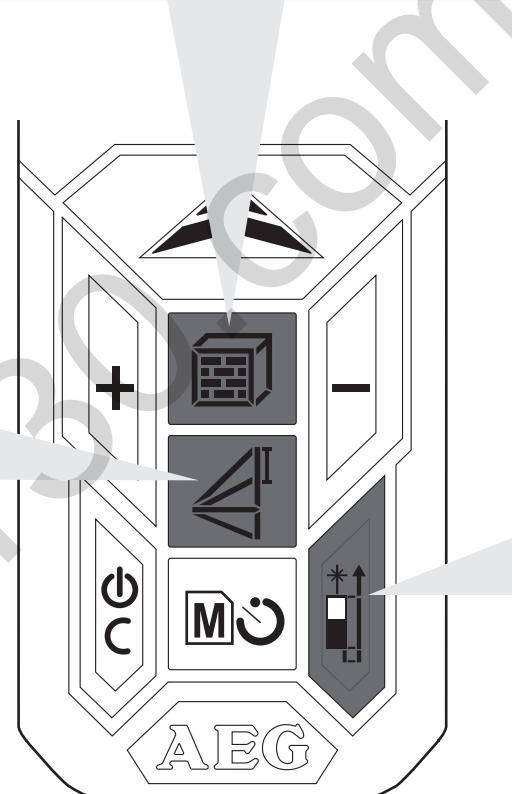
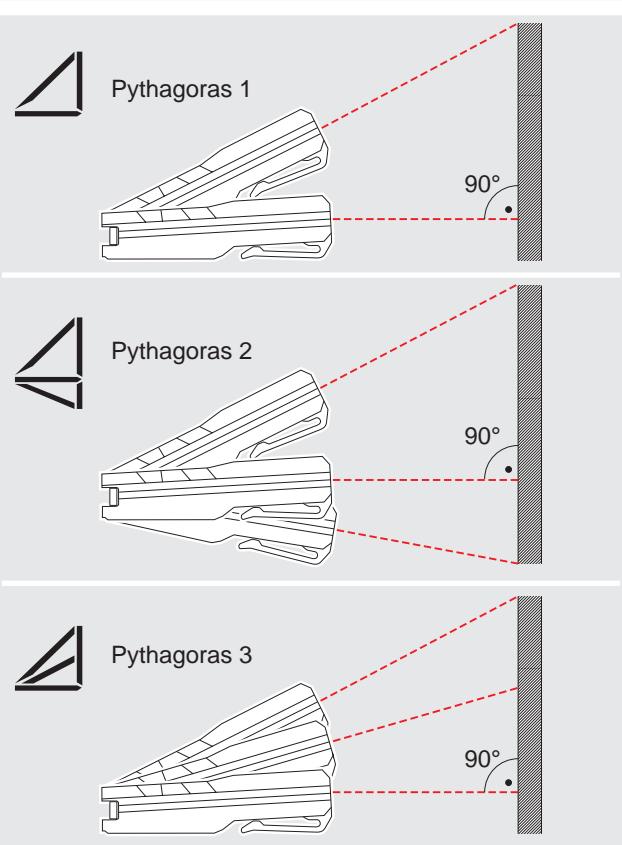
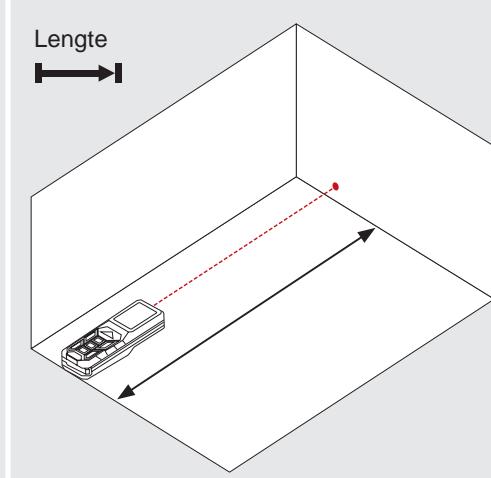
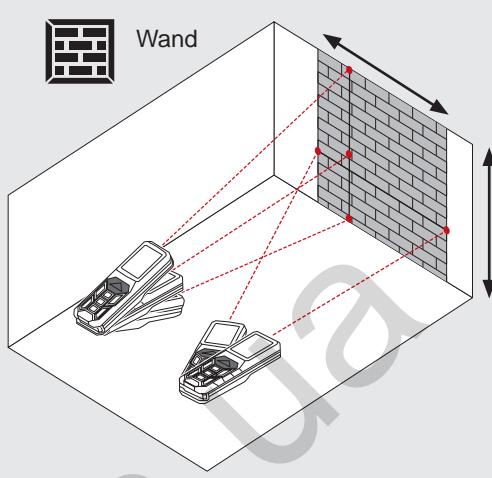
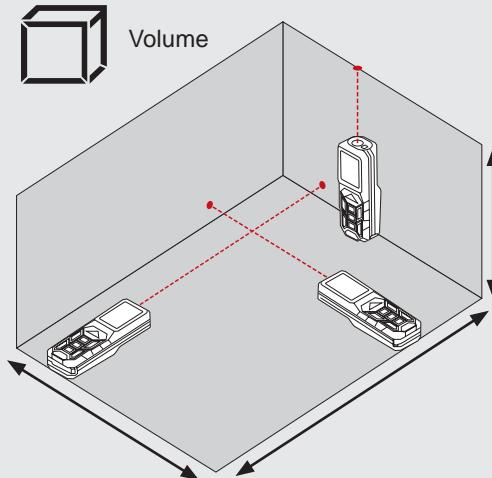
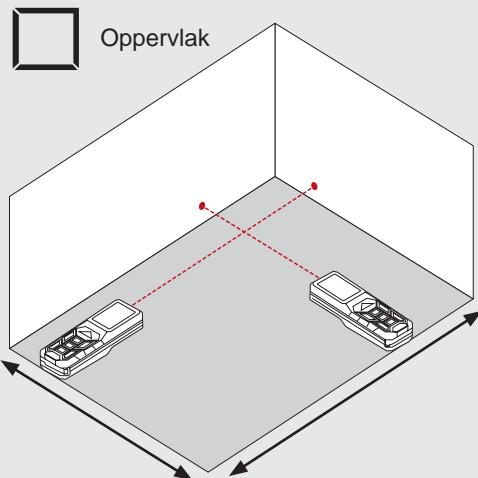
2



3

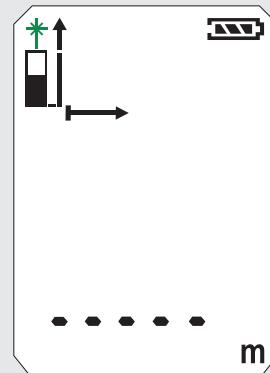
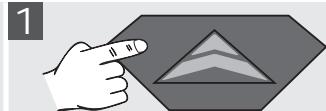


FUNCTIETOETS, PYTHAGORAS, MEETNIVEAU

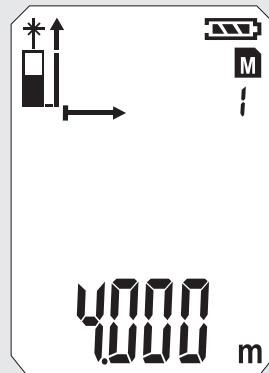
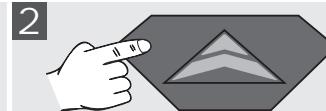


EENVOUDIGE LENGTEMETING

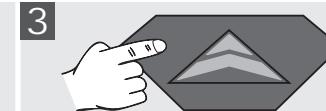
0



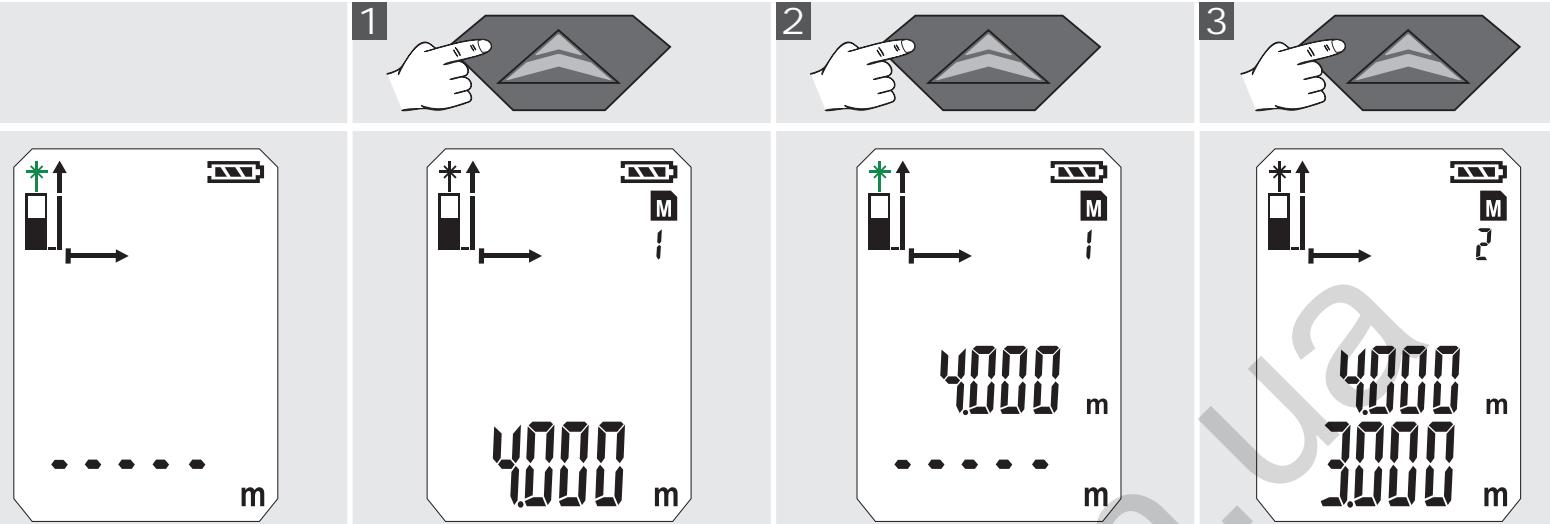
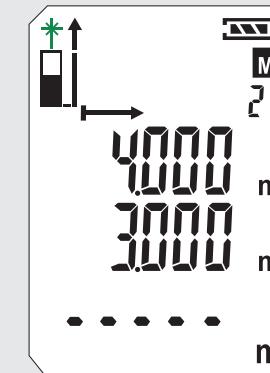
1



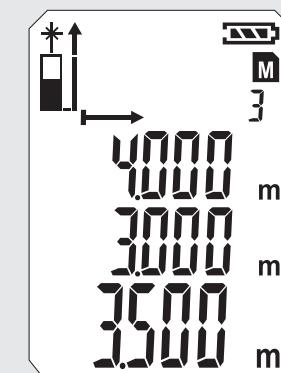
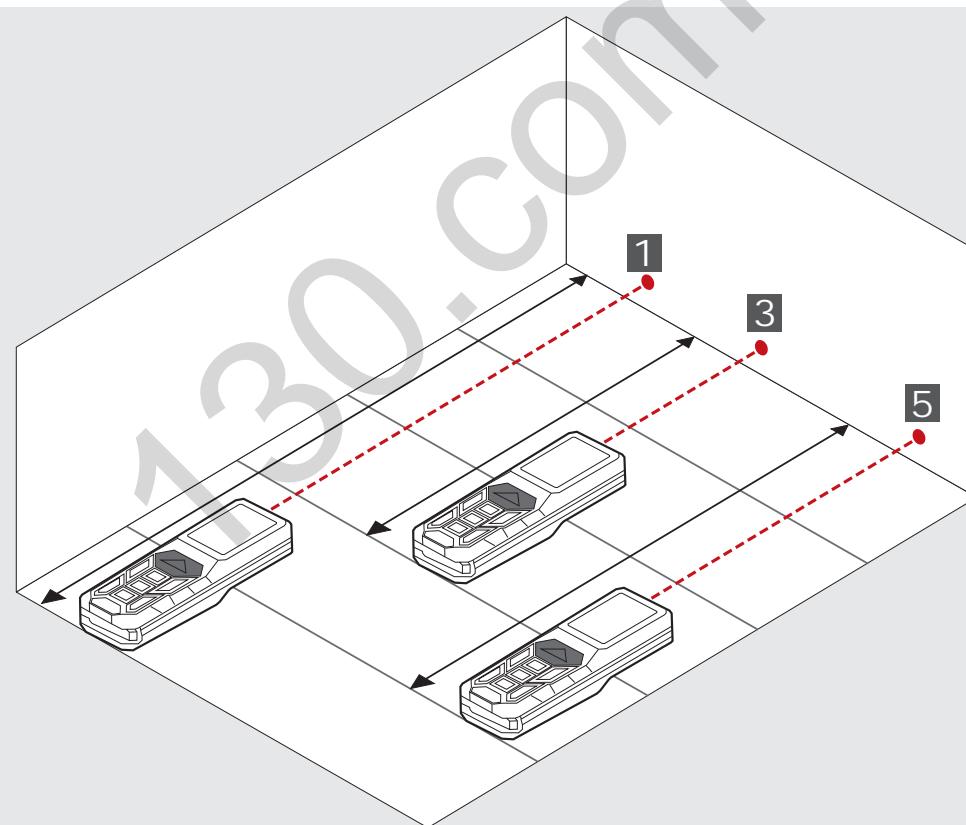
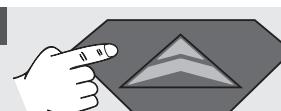
2



3

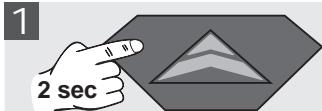


5

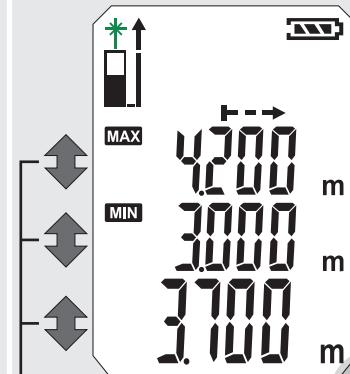
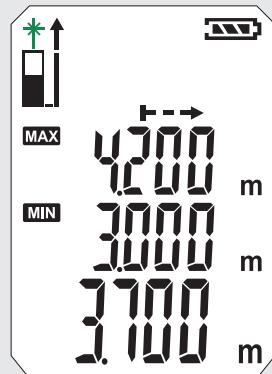
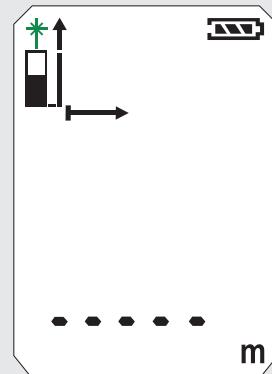


CONSTANTE METING / MINIMUM-/MAXIMUM-METING

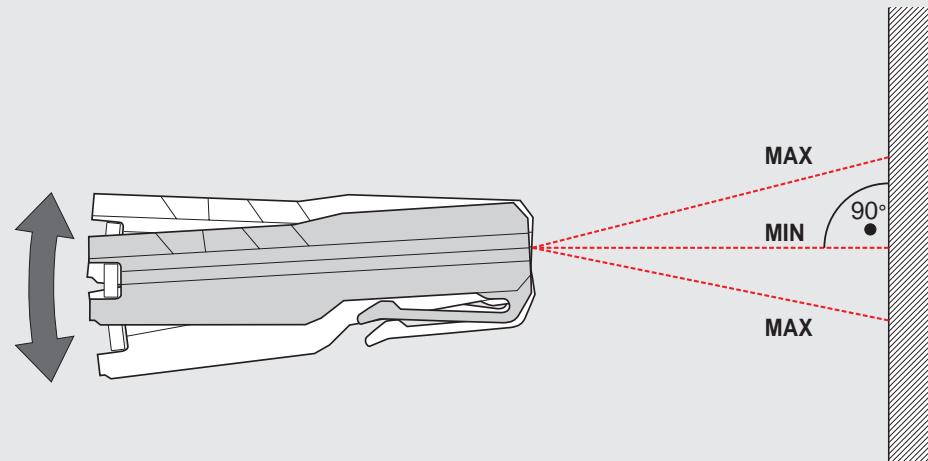
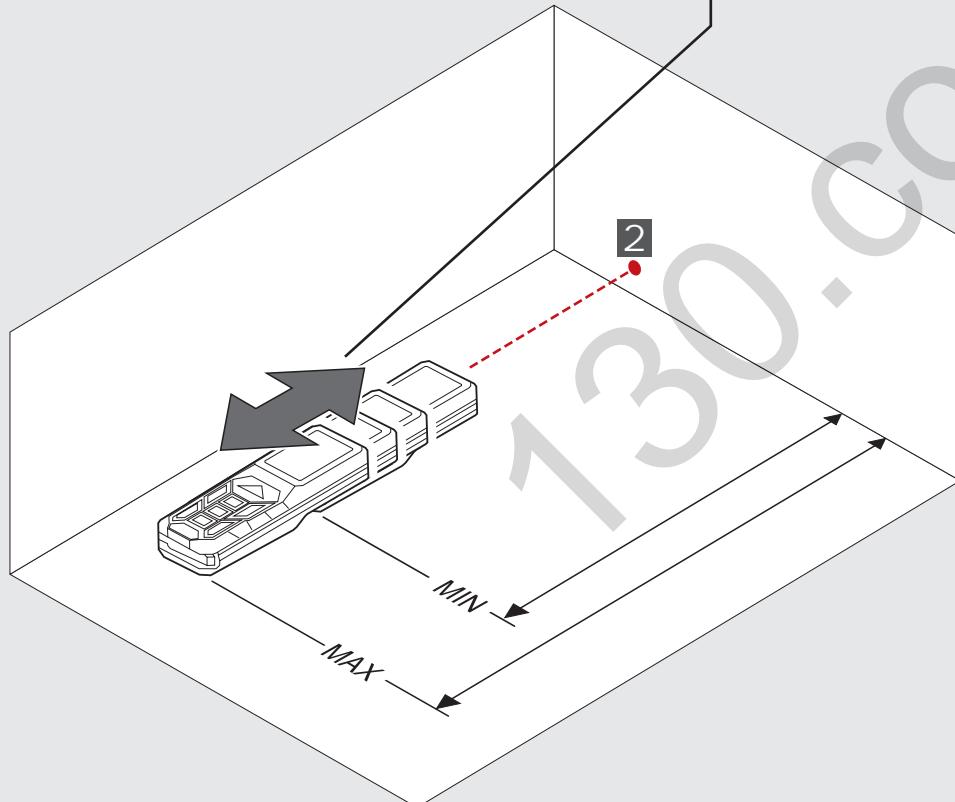
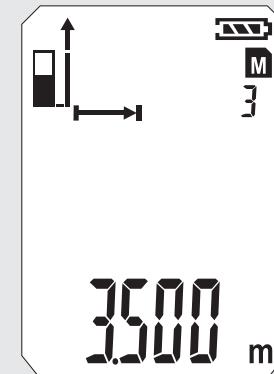
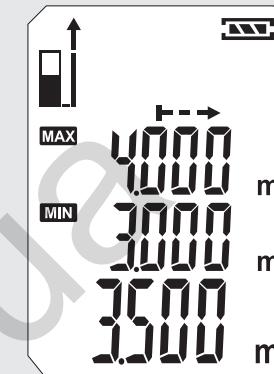
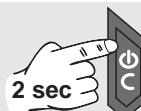
0



2

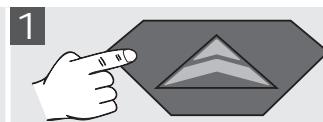


4

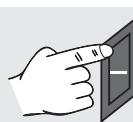


OPTEL-/AFTREKMETING

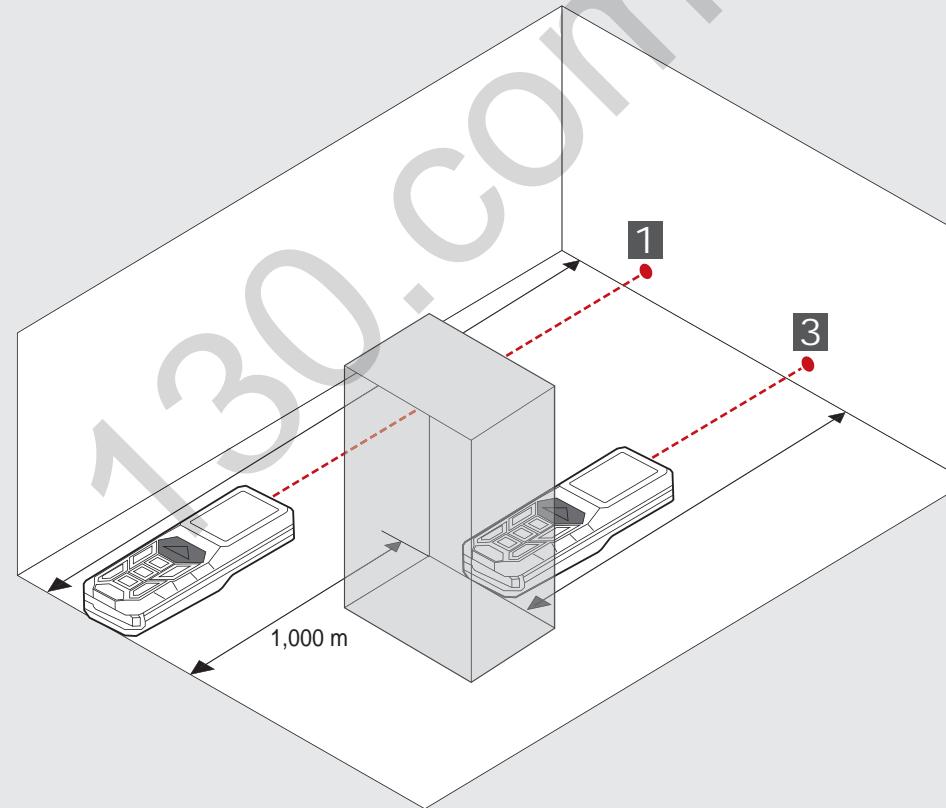
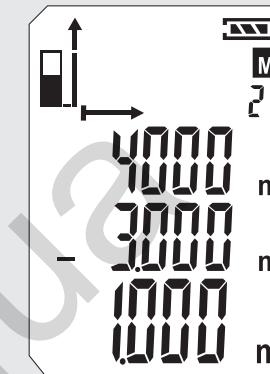
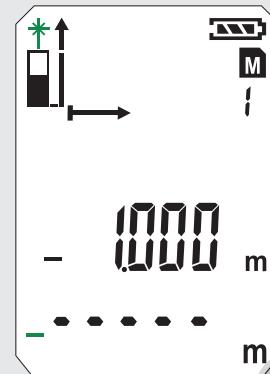
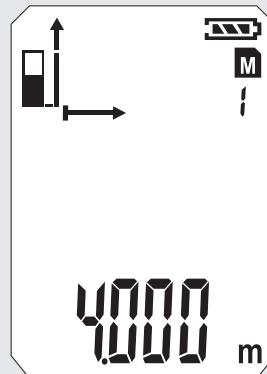
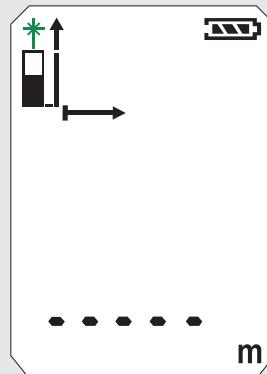
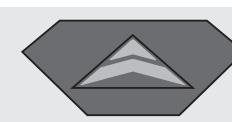
0



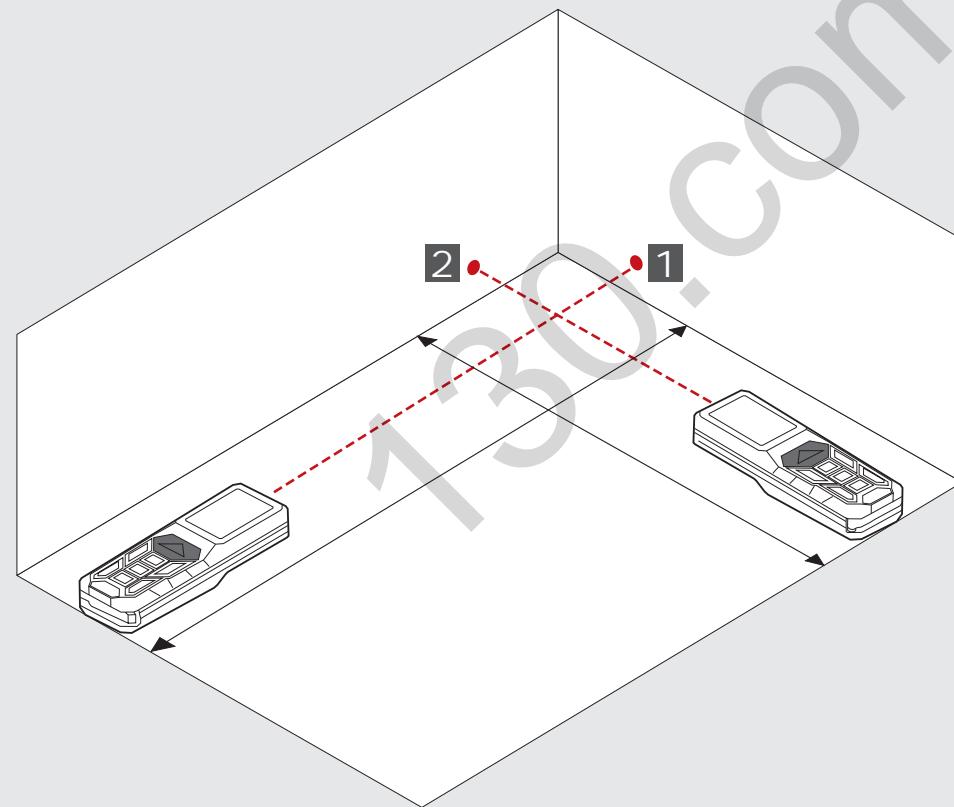
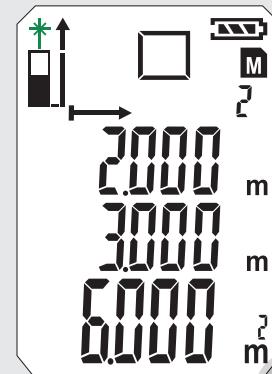
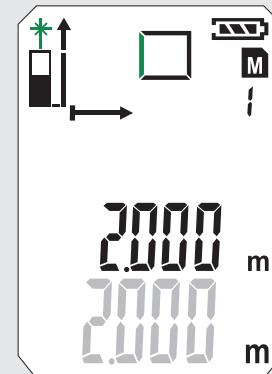
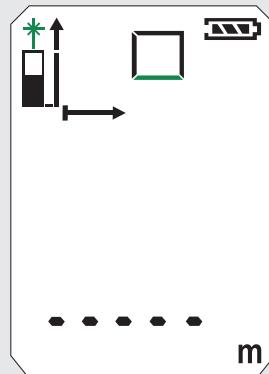
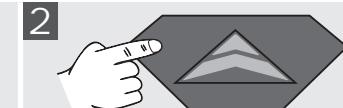
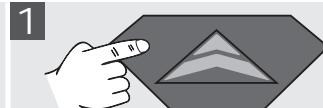
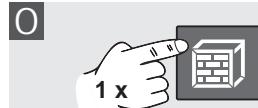
2



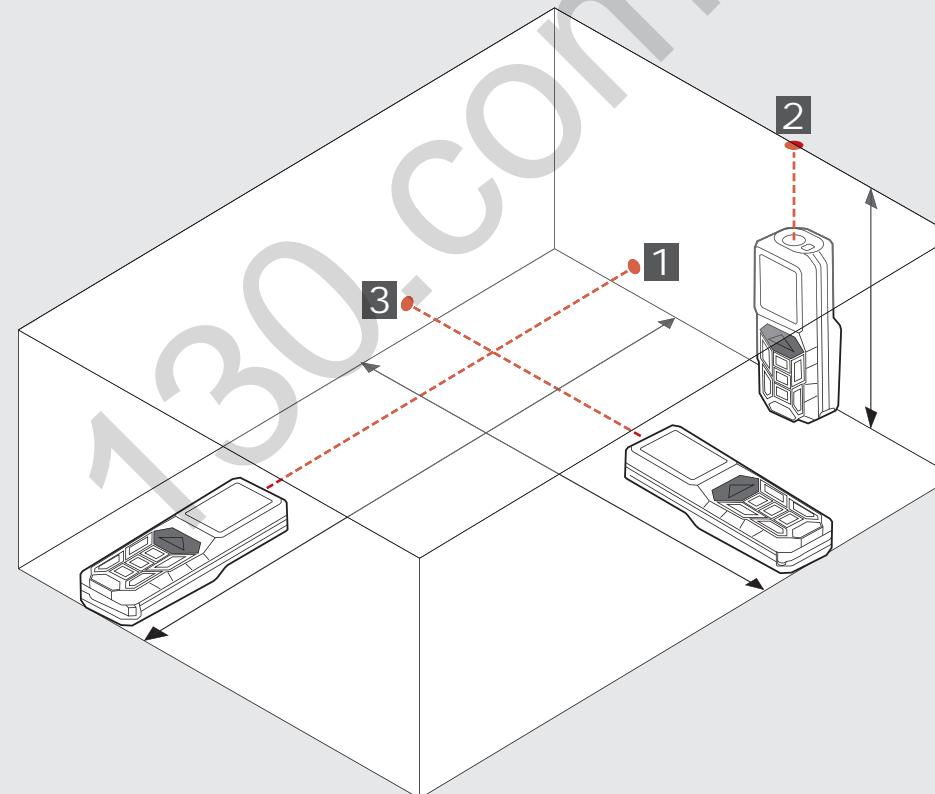
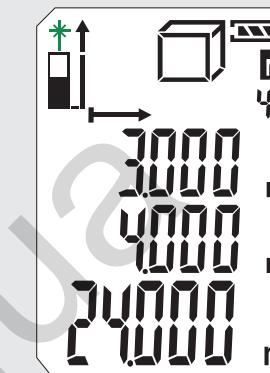
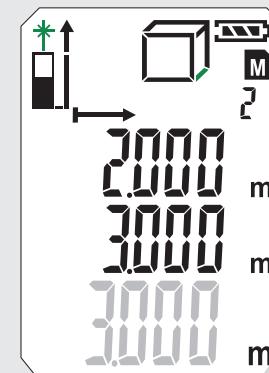
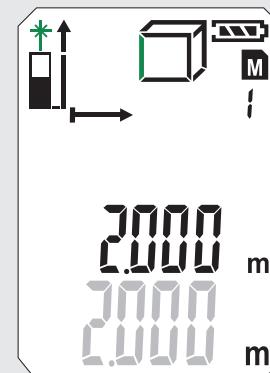
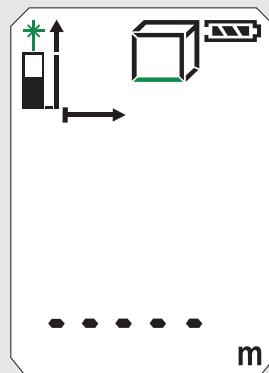
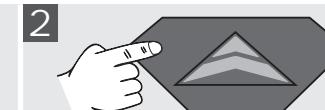
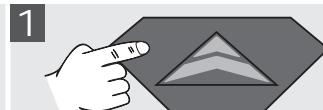
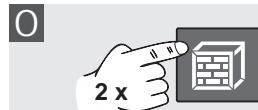
3



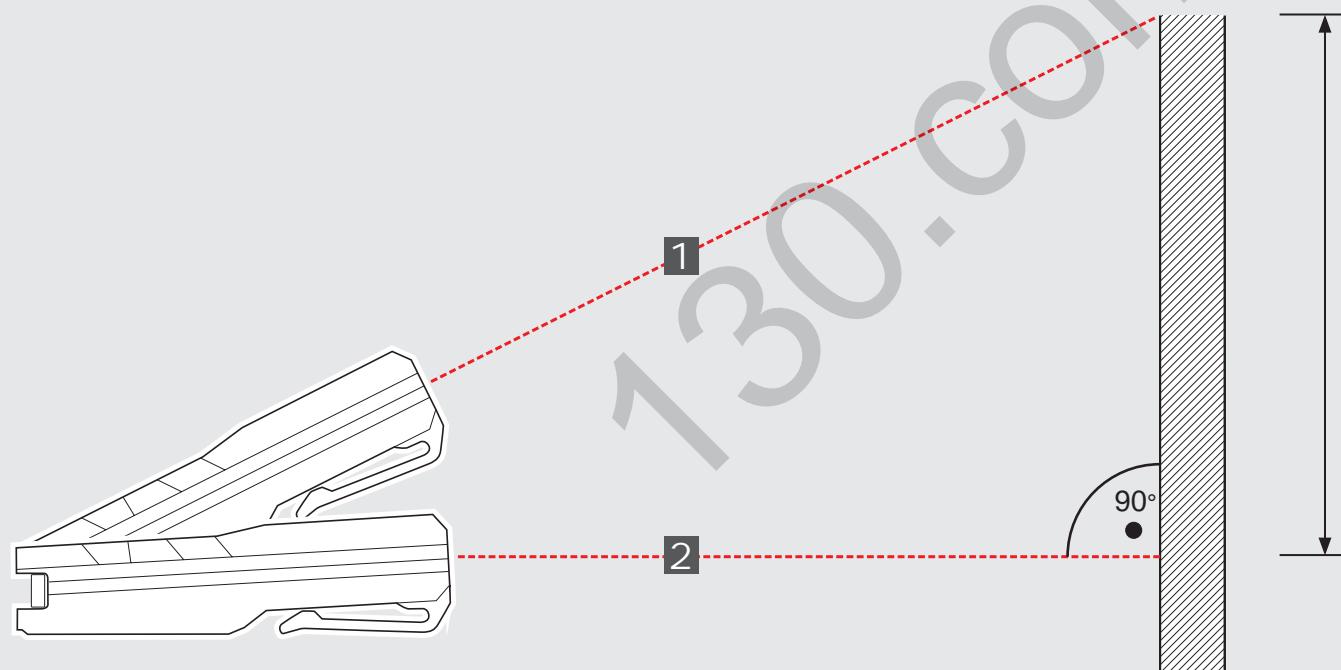
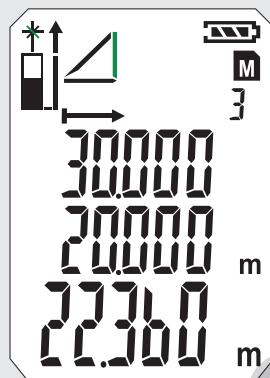
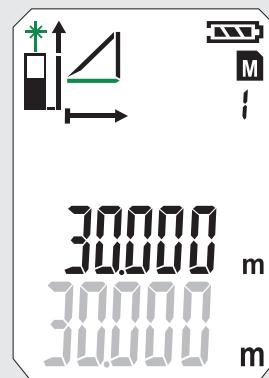
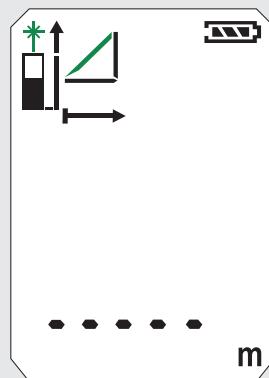
OPPERVLAKTEMETING



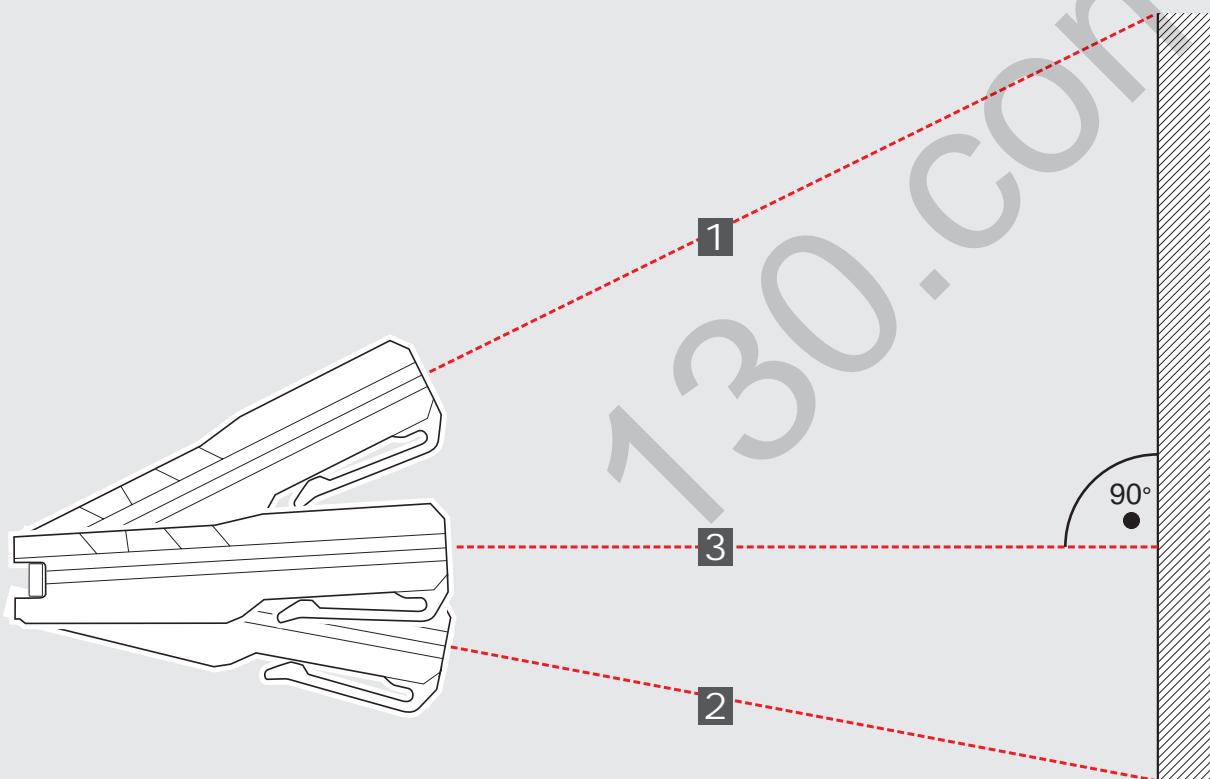
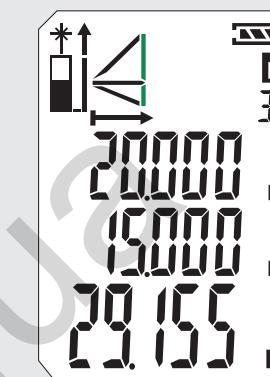
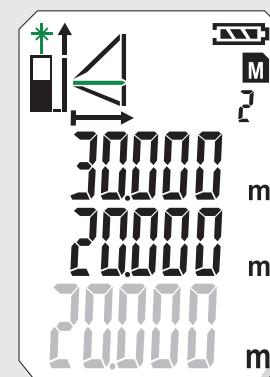
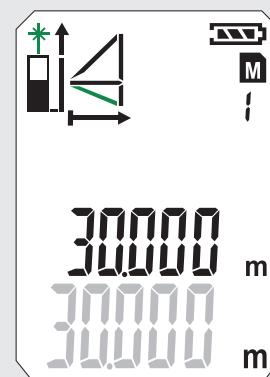
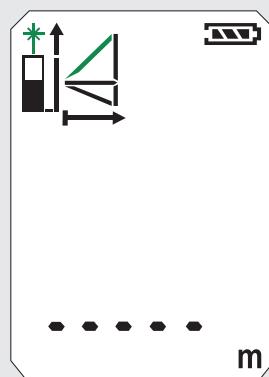
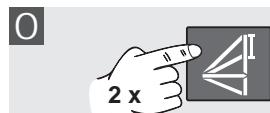
VOLUMEMETING



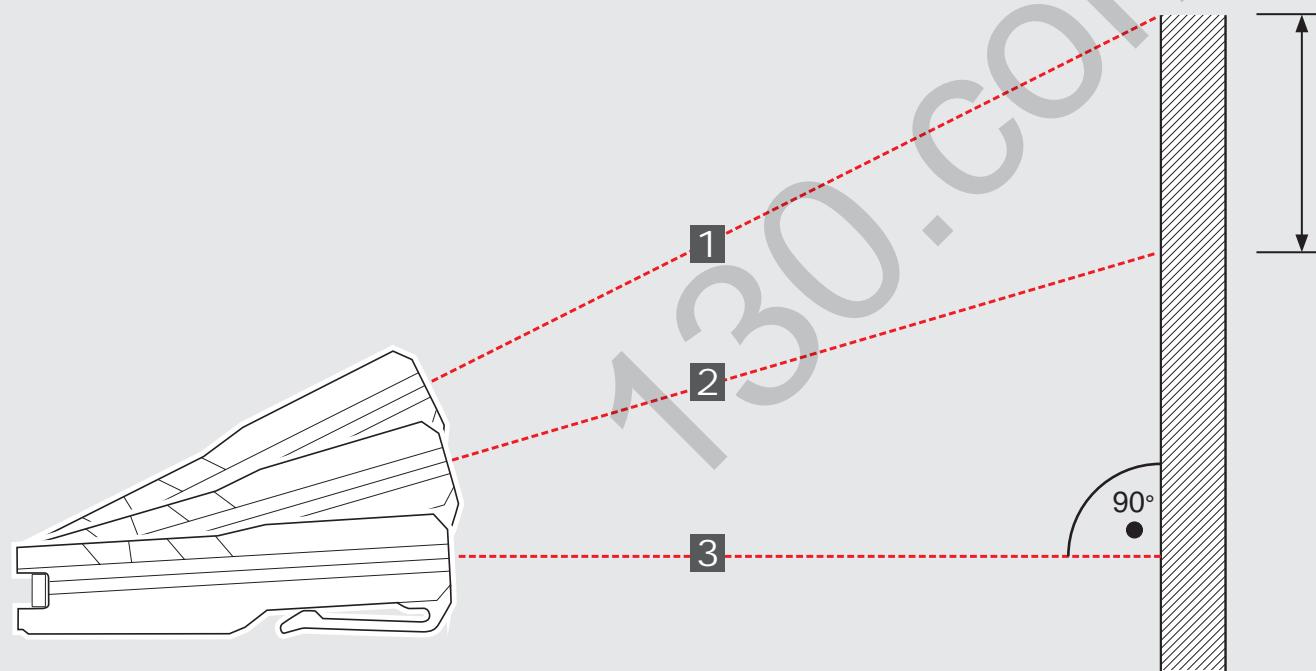
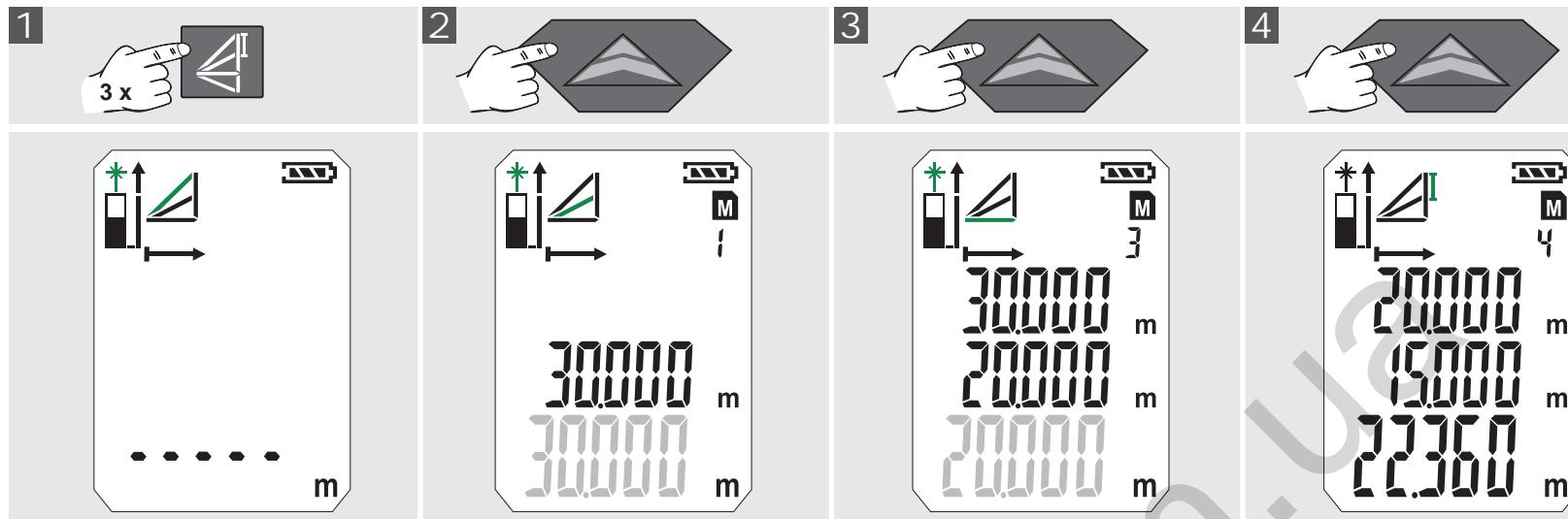
INDIRECTE METING (PYTHAGORAS 1)



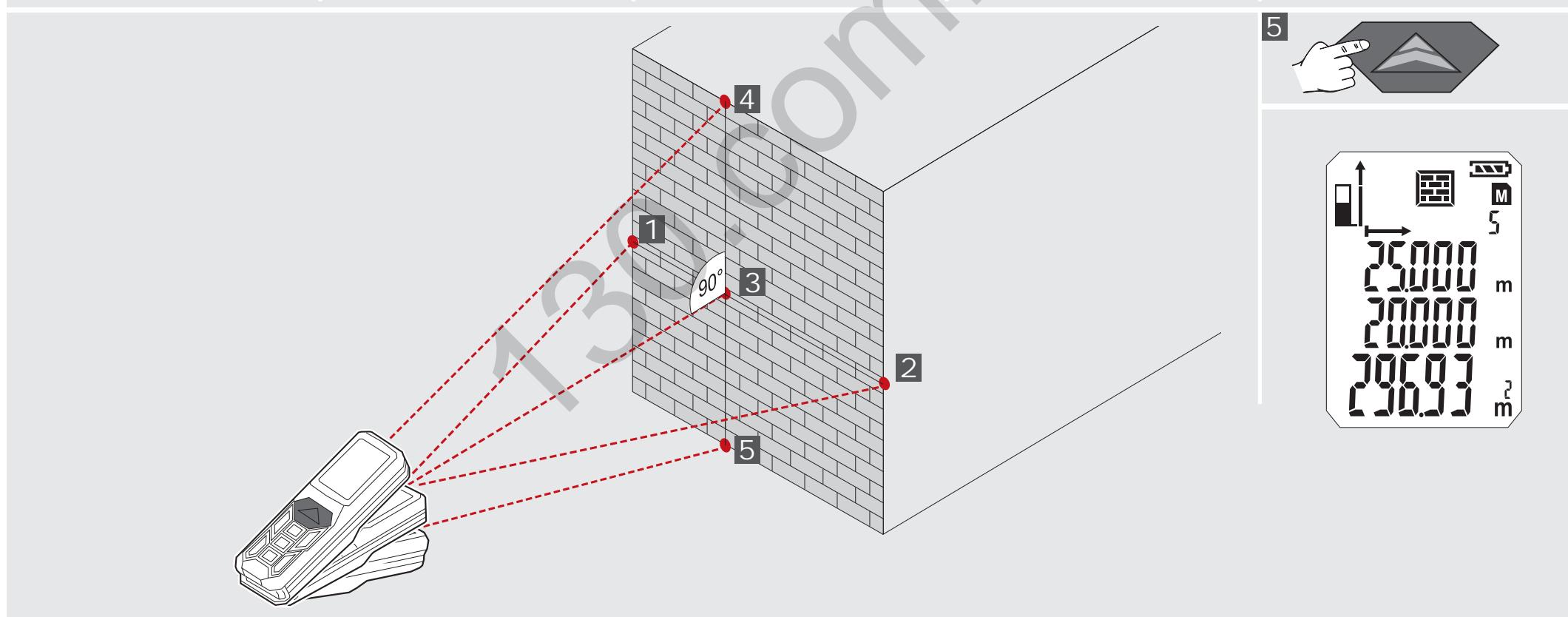
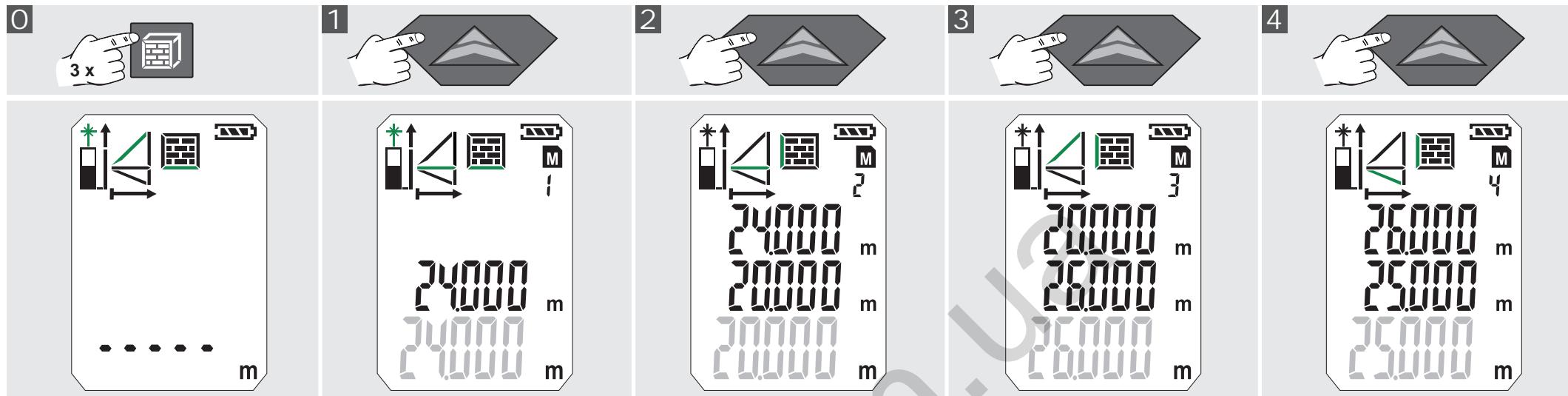
INDIRECTE METING (PYTHAGORAS 2)



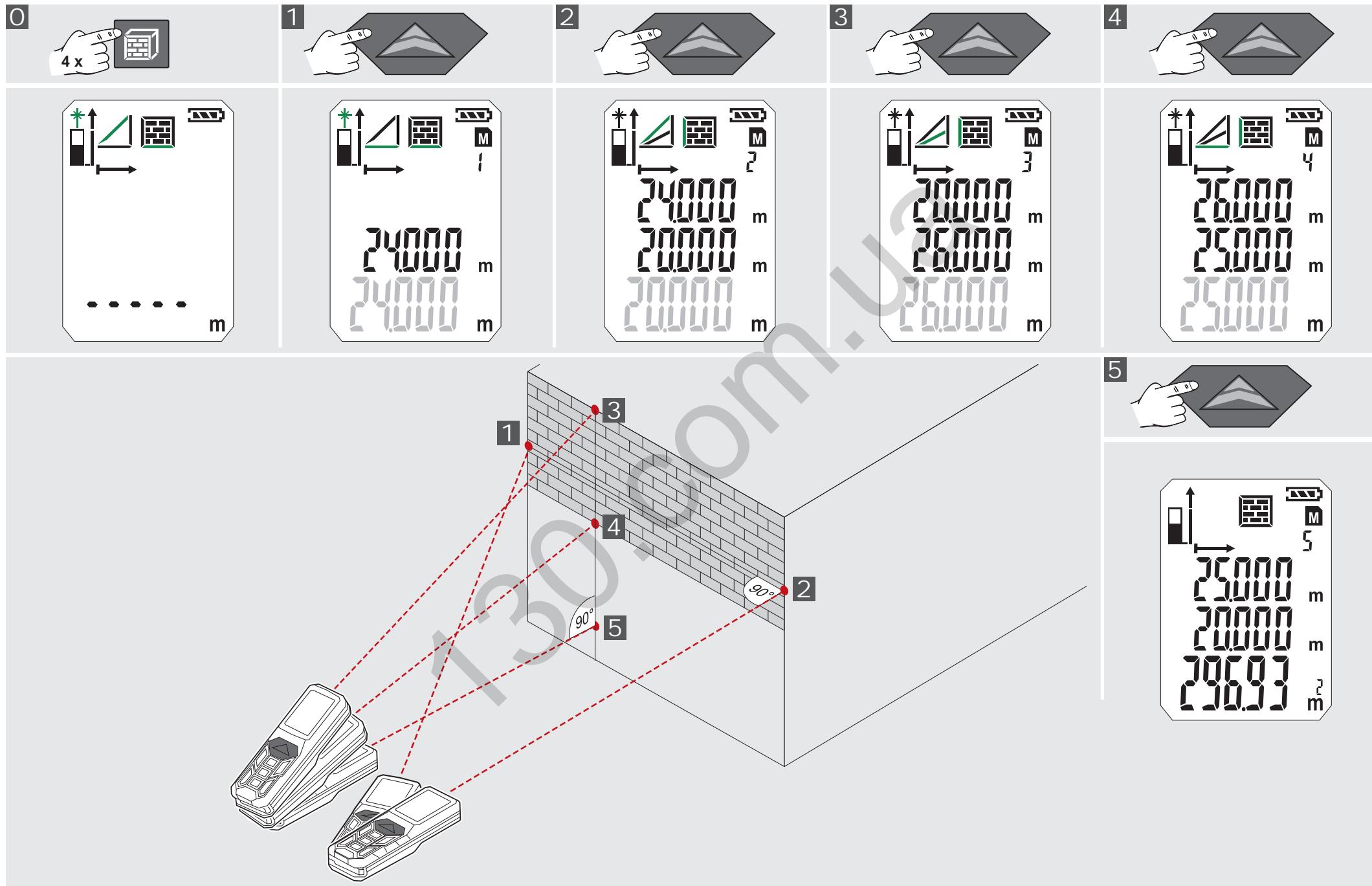
INDIRECTE METING (PYTHAGORAS 3)



WANDOPPERVLAKTEMETING (SCENARIO 1)



WANDOPPERVLAKTEMETING (SCENARIO 2)



TIMER

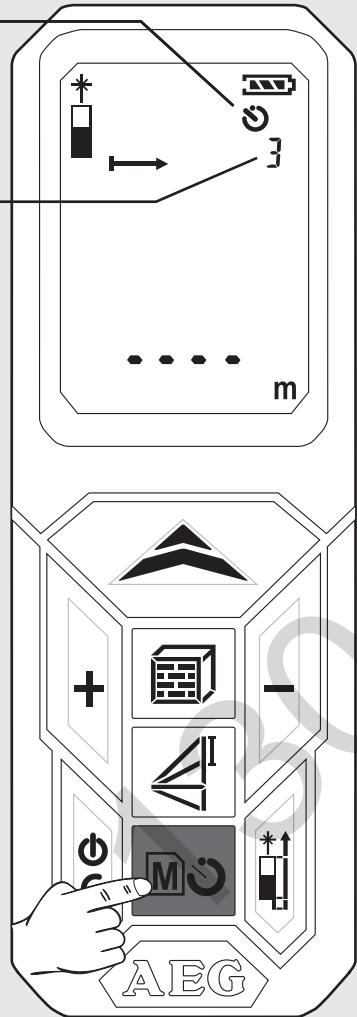
Met de timer kan de meting vertraagd worden geactiveerd om bijv. een onderdeel in de meetstraal te kunnen plaatsen.

Toets  indrukken

- Symbool verschijnt
- Door het indrukken van de toets  kan de timer tussen 3 en 15 sec. worden ingesteld.

Toets  indrukken

- De seconden tot de meting worden teruggeteld.
- Bij 0 wordt de meting geactiveerd.



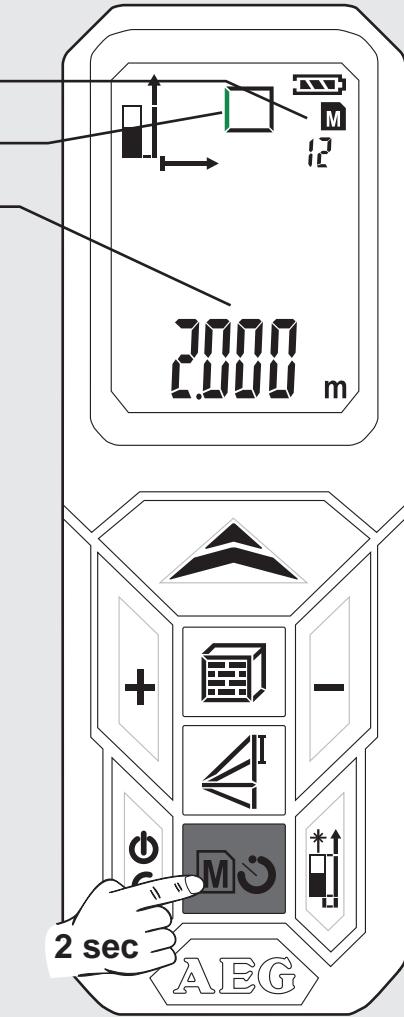
GEHEUGEN

De meetwaarden worden automatisch doorlopend in het geheugen opgeslagen.

De opgeslagen waarden kunnen worden opgeroepen met behulp van de toets .

Toets  2 sec. lang indrukken

- Het symbool en de geheugenplaats verschijnen.
- De bijbehorende meeteenheid wordt weergegeven.
- De opgeslagen waarde wordt in de hoofdregel weergegeven.
- Met de toetsen +/- navigeren

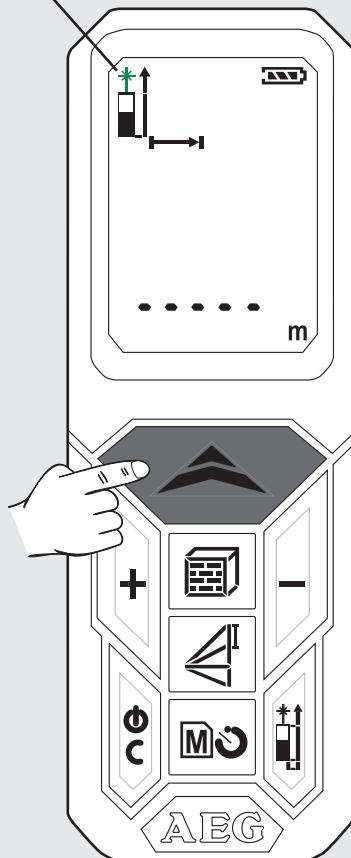


PRINCIËLE WERKING AAN DE HAND VAN EEN OPPERVLAKTEMETING (1)

1 Inschakelen

Toets indrukken.
A! Opgelet! Laserstraal inschakelen!
 Niet op personen richten!

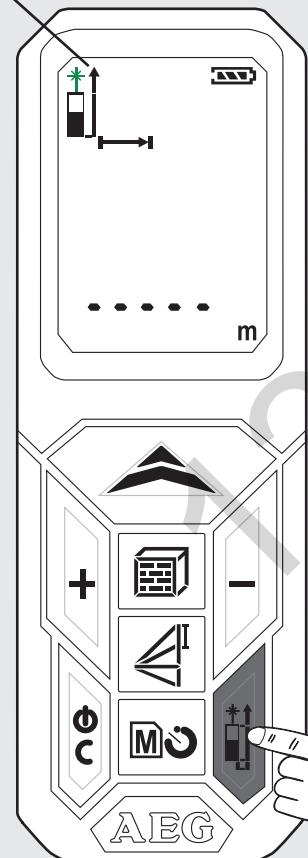
- Het lasersymbool knippert (knipperen wordt groen weergegeven).



2 Meetniveau selecteren

Standaardinstelling na het inschakelen: achter
 *↑ 1x indrukken -> hoekpen
 2x indrukken -> voor
 3x indrukken -> achter

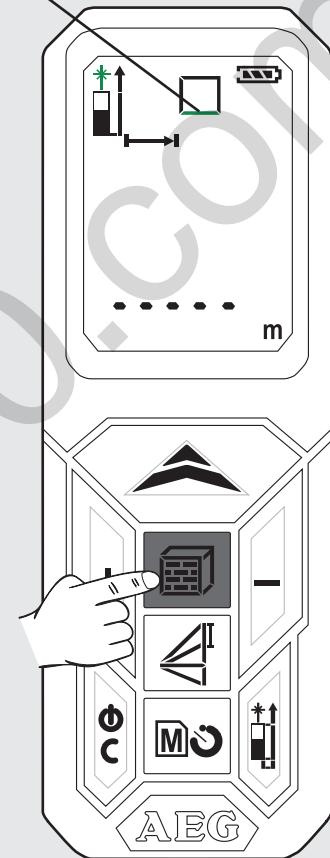
- Symbol wordt weergegeven



3 Functie kiezen

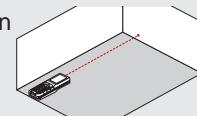
Na het inschakelen staat het apparaat altijd ingesteld op lengtemeting.
 *↑ 1x indrukken - oppervlaktemeting

- Het symbool verschijnt
 De meeteenheid knippert (knipperen wordt groen weergegeven).

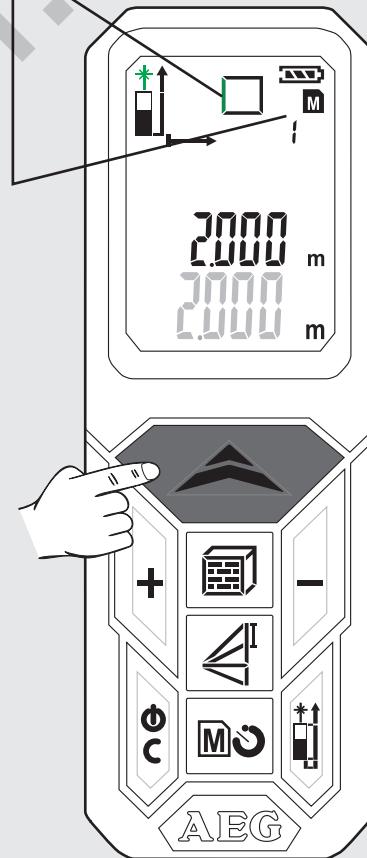


4 Lengte meten

Het toestel uitlijnen en toets indrukken

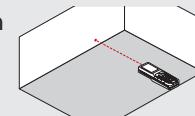


- De meetwaarde verschijnt kort in de hoofdregel.
- De meetwaarde springt na 1 sec. naar de daarboven liggende regel.
- Meetwaarde wordt in het geheugen opgeslagen onder een volgnummer.
- Tweede meeteenheid knippert. Het toestel is gereed voor de meting van de tweede waarde.

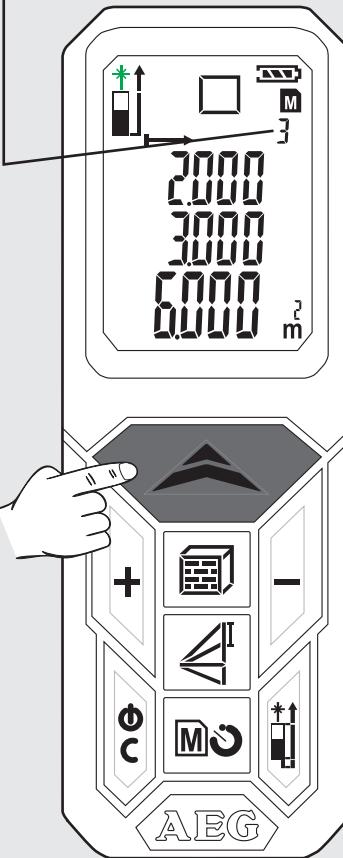


5 Breedte meten

Het toestel uitlijnen en toets indrukken



- De meetwaarde verschijnt kort in de hoofdregel.
- De meetwaarde springt na 1 sec. naar de daarboven liggende regel.
- Meetwaarde wordt in het geheugen opgeslagen onder een volgnummer.
- Het resultaat verschijnt in de hoofdregel en wordt in het geheugen opgeslagen onder het volgnummer.



PRINCIËLE WERKING AAN DE HAND VAN EEN OPPERVLAKTEMETING (2)

6 Opgeslagen waarde oproepen

De toets  2 sec.lang indrukken.

De toets + of - indrukken.

- De opgeslagen waarden worden in de hoofdregel weergegeven.

- Het bijbehorende symbool wordt weergegeven en de meeteenheid knippert (knipperen wordt groen weergegeven).

7 Geheugen verlaten

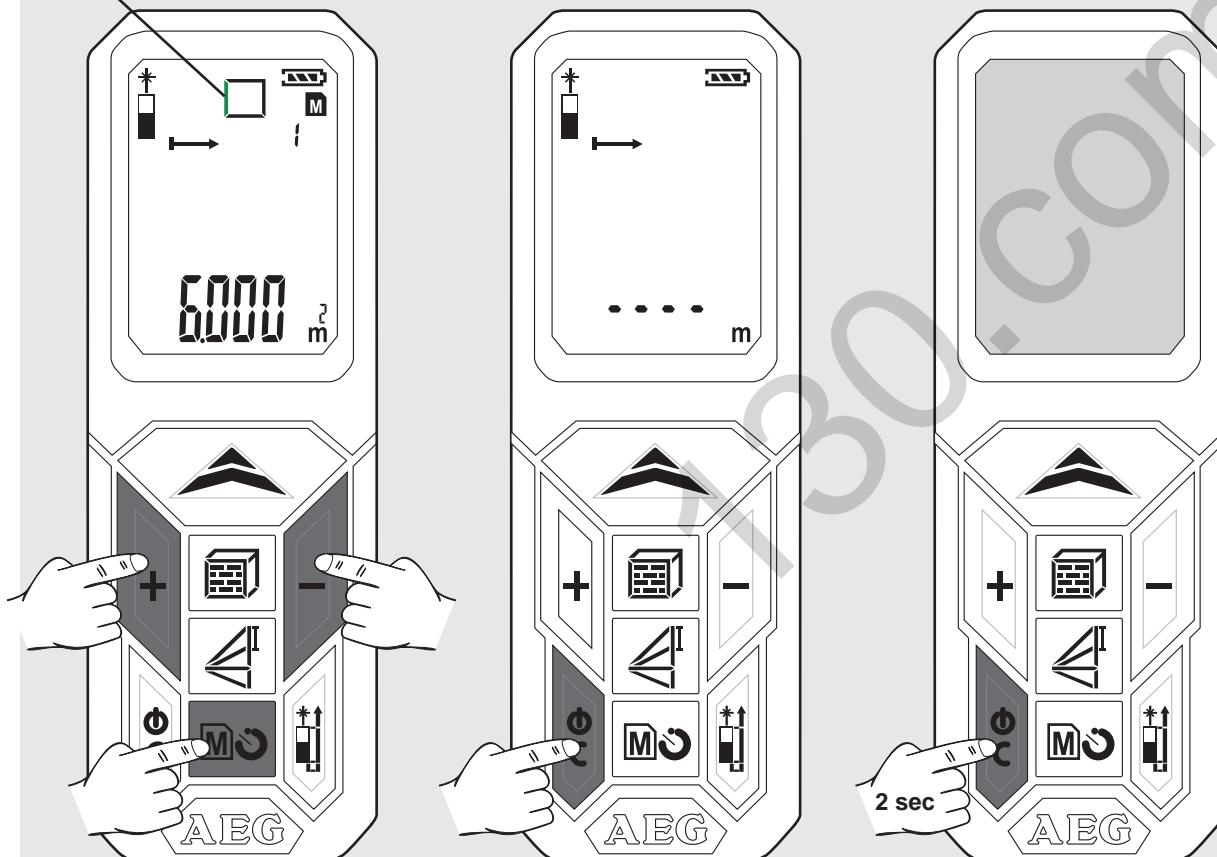
De toets  indrukken

8 Uitschakelen

De toets  2 sec. lang indrukken (het geheugen moet eerst worden verlaten).

- Het toestel schakelt uit.

- Als gedurende 3 minuten geen toets wordt ingedrukt, schakelt het toestel automatisch uit.



INDHOLD

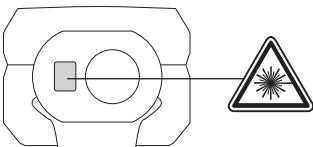
Vigtige sikkerheds- instruktioner.....	1
Tekniske data.....	2
Tiltænkt Formål.....	2
Fejlkode Tabel	2
Oversigt	3
Skift batteri.....	4
Hjørnestift	4
Bælteclips	4
Funktionstast, pythagoras, målereference	5
Enkelt afstandsmåling	6
Konstant måling / minimum-maksimum måling	7
Additions- / subtraktionsmåling.....	8
Arealmåling.....	9
Volumenmåling	10
Indirekte måling (pythagoras 1).....	11
Indirekte måling (pythagoras 2).....	12
Indirekte måling (pythagoras 3).....	13
Måling af vægareal (scenario 1).....	14
Måling af vægareal (scenario 2).....	15
Timer	16
Hukommelse.....	16
Grundlæggende funktionsmåde vist med et eksempel på en arealmåling (1).....	17
Grundlæggende funktionsmåde vist med et eksempel på en arealmåling (2).....	18

VIGTIGE SIKKERHEDS- INSTRUKTIONER



Brug ikke produktet før du har læst sikkerhedsinstruktionerne og brugervejledningen på vedlagte CD.

Laserklassificering



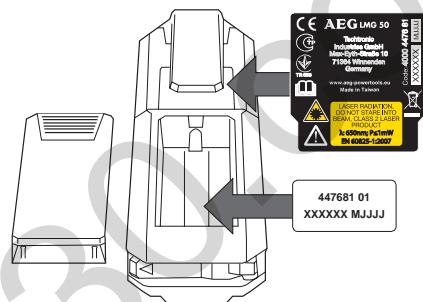
ADVARSEL:

Det er et Klasse 2 laserprodukt i overensstemmelse med IEC 60825-1:2007.



Mærkning

Inden idriftsættelse første gang skal den medfølgende mærkat med dansk tekst klæbes oven på den engelske tekst på mærkepladen.



Advarsel:

Undgå en direkte synskontakt. Laserstrålen kan forårsage "blitz blindhed" og føre til en kortvarig blænding.

Se aldrig ind i laserstrålen og ret den ikke unødig mod andre personer.

Blænd ikke andre personer.

Advarsel:

Betjen ikke laserapparatet i nærheden af børn eller tillad ikke børn at benytte laserapparatet.

OBS!! En reflekterende overflade kunne reflektere laserstrålen tilbage til brugerens eller andre personer.

Hold arme og ben i sikker afstand fra bevægelige dele.

Udfør regelmæssige testmålinger. Især før, under og efter vigtige målinger.

Vær opmærksom på fejl-målinger, hvis produktet er defekt, eller hvis det er blevet tabt eller er blevet misbrug eller modifieret.

Pas på! Gør fortrolig med haveværktøjets betjeningsanordninger og korrekte anvendelse.

Laserafstandsmåleren har grænser for sit anvendelsesområde. (Se afsnittet "Tekniske data"). Det vil forårsage unøjagtigheder at forsøge at måle uden for det maksimale og minimale område. Bruges instrumentet ved ugunstige betingelser som hvis det er for varmt eller for koldt, meget kraftigt sollys, regn, sne, tåge eller andre sigtbegrænsende betingelser kan det føre til unøjagtige målinger.

Hvis laserafstandsmåleren kommer fra varme omgivelser til kolde (eller omvendt), så vent, indtil den har tilpasset sig til den nye omgivelsestemperatur.

Opbevar altid laserafstandsmåleren indendørs, beskyt den mod stød, vibrationer eller ekstreme temperaturer.

Beskyt laserafstandsmåleren mod støv, fugtighed og høj luftfugtighed. Dette kan ødelægge indvendige komponenter eller påvirke nøjagtigheden.

Brug ikke aggressive rengøringsmidler eller opløsningsmidler. Rengør kun instrumentet med en ren, blød klud.

Undgå at laserafstandsmåleren udsættes for kraftige stød eller at tabe den. Instrumentets nøjagtighed skal kontrolleres, hvis det er faldet ned eller har været udsat for andre mekaniske belastninger.

Nødvendige reparationer på dette laserapparat skal udføres af autoriserede fagfolk.

Brug ikke produktet i områder med eksplorations-fare eller under barske forhold.

Brug kun opladere anbefalet af producenten til opladning af batterierne.

Brugte batterier må ikke smides ud med husholdningsaffaldet. Skån miljøet og tag dem til opsamlingsstederne i overensstemmelse med nationale eller lokale regler. Produktet må ikke smides ud med husholdningsaffaldet. Smid produktet ud i overensstemmelse med de gældende nationale regler i dit land. Følg de nationale og landespecifikke regler. Henvend dig til de lokale myndigheder eller din forhandler for at få oplysning om bortskaffelsen.



TEKNISKE DATA

Kapslingsklasse	IP54 (støv- og stænkvandsbeskyttet)
Modtagelinse	14 mm
Fokus	35 mm
Maks. måleområde	50 meter (tolerance: 55m)
Min. måleområde	0,05 meter
Absolut nøjagtighed @ < 10m	± 1,5 mm (maks.)
Gentagelsesnøjagtighed @ < 10m	± 1,5 mm (typisk maks. 2σ)
Gentagelsesnøjagtighed @ > 10m	stigning ± 0,25 mm / meter (typisk maks. 2σ)
Måletid	0,5 s
Display type	LCD (22,7 mm x 31 mm)
Strømforsyning	AAA 2x (alkaline batteri)
Batteriets levetid	10000 (enkelt måling)
Laser udgangseffekt	0,6 mW ~ 0,95 mW (klasse 2, 650nm)
Laserpunktstørrelse	25 x 30 mm @ 16 m (maks.)
Laserstråle vertikalvinkel	+1 grad
Laserstråle horisontalvinkel	±1 grad
Automatisk slukning af instrumentet	180 sekunder
Automatisk slukning af laser	30 sekunder
Arbejdstemperatur område	-10°C op til +50°C
Opbevaringstemperatur område	-25°C op til +70°C
Vægt uden batteri	80 g

FEJLKODE TABEL

Kode	Beskrivelse	Løsning
Err01	Uden for måleområdet	Foretag målingen i det korrekte område.
Err02	Reflekterende signal er for svagt	Vælg en bedre overflade.
Err03	Uden for visningsområdet (maks. værdi: 99.999) f.eks. er resultatet af areal eller volumen uden for visningsområdet	Kontrollér, at værdier og trin er korrekte.
Err04	Fejl i pythagoras beregningen	Kontrollér, at værdier og trin er korrekte.
Err05	Batteri er svagt	Sæt nye batterier i.
Err06	Uden for arbejdstemperaturens område	Foretag målingen inden for det fastlagte område for arbejdstemperaturen.
Err07	Omgivelseslyset er for stærkt	Sørg for at målområdet er mørkere.

TILTÆNKET FORMÅL

Laserafstandsmåleren er egnet til måling af afstande og hældninger.

Produktet må ikke anvendes på anden måde og til andre formål end foreskrevet.

Pythagoras
Højdeforskel

Målereference

Afstandsmåling

Minimum / maksimum for konstant måling

Addition / subtraktion

TÆND / MÅL

- Tænd
- Mål
- Konstant måling (tryk i 2 sek.)
Min. / maks. funktion

ADDITION

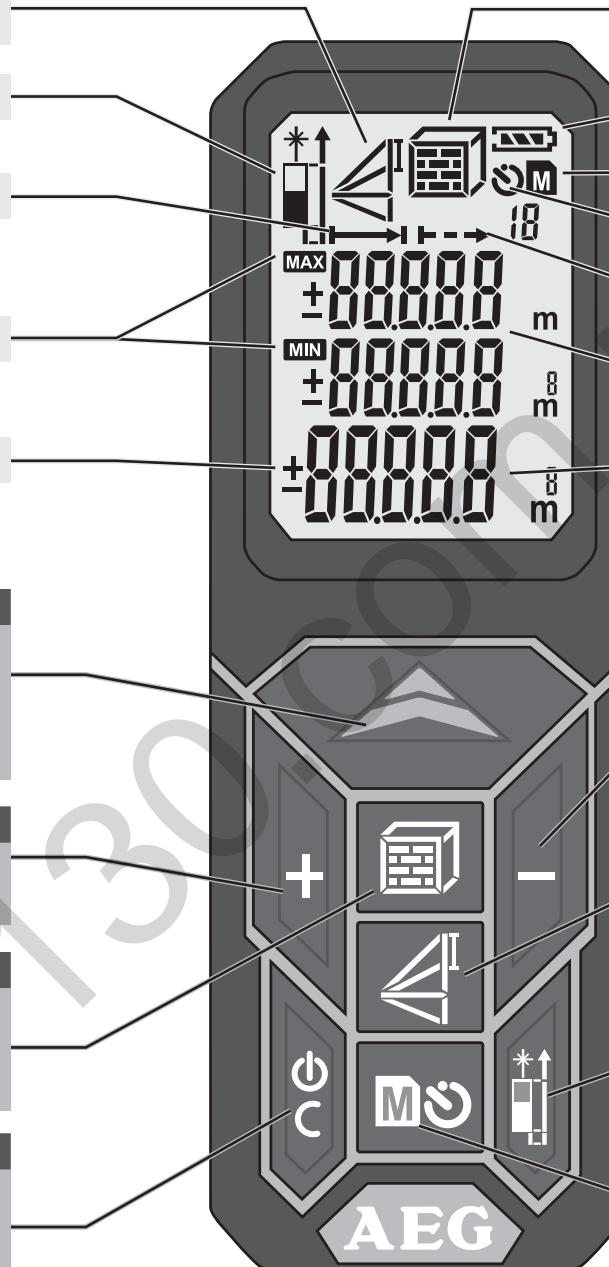
- Læg værdi til
- Navigér i hukommelsen

AREAL / VOLUMEN

- Areal (tryk 1x)
- Volumen (tryk 2x)
- Indirekte arealmåling (tryk 3x / 4x)

TÆND FOR INSTRUMENTET

- Tænd
- Sluk (tryk 2 sek.)
- Slet



Areal / volumen
Indirekte arealmåling

Batteristatus

Hukommelse

Timer

Konstant måling

Foreløbige værdier

Totalværdi

SUBTRAKTION

- Træk værdi fra
- Navigér i hukommelsen

PYTHAGORAS

- Pythagoras 1 (tryk 1x)
- Pythagoras 2 (tryk 2x)
- Pythagoras 3 (tryk 3x)

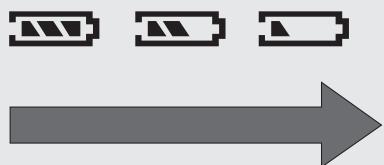
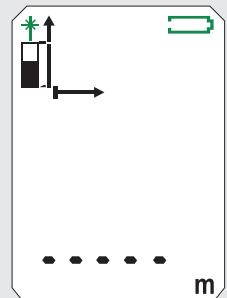
SKIFT MÅLEREFERENCE

- Forkant
- Bagkant
- Hjørnestift

HUKOMMELSE

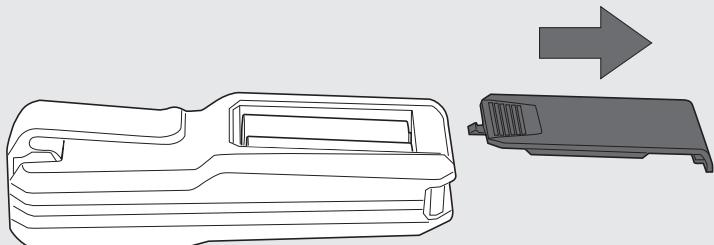
- Timer 3-15 sek. (tryk 1x)
- Hukommelse 1-20 (tryk 1x i 2 sek.)
- Navigér med +/- tasterne i hukommelsen

SKIFT BATTERI

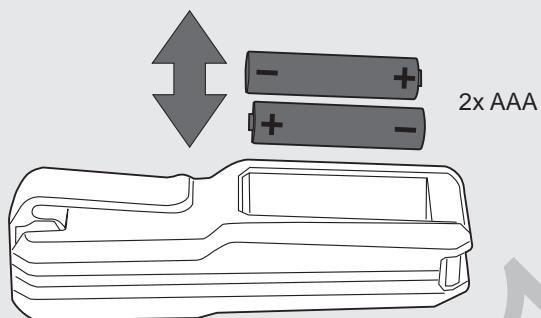


Skift batteri, hvis
symbolet blinker.

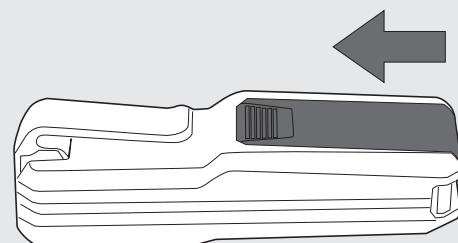
1



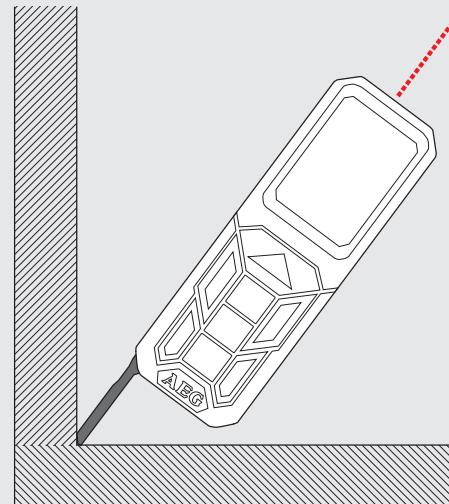
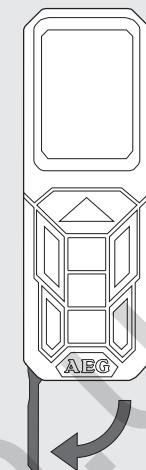
2



3

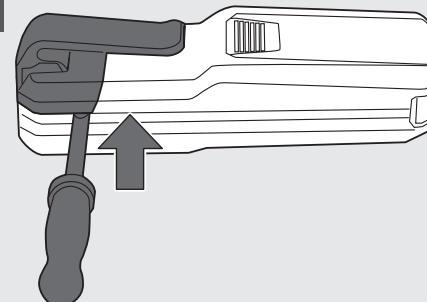


HJØRNESTIFT

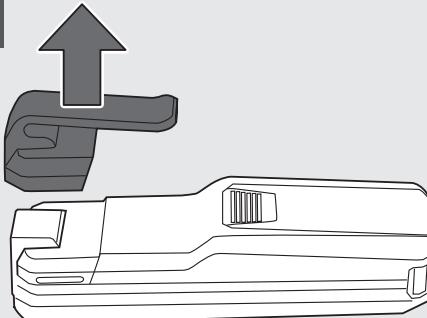


BÆLTECLIPS

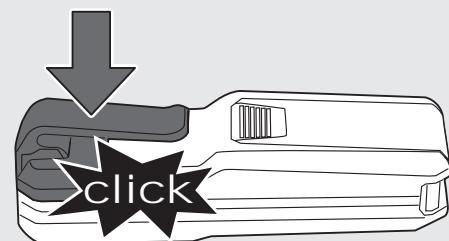
1



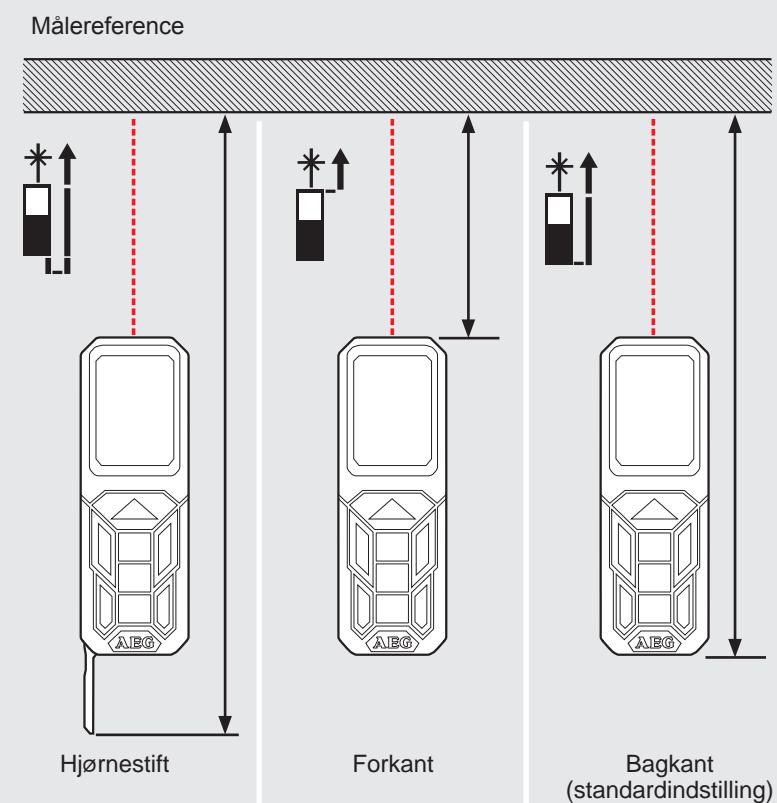
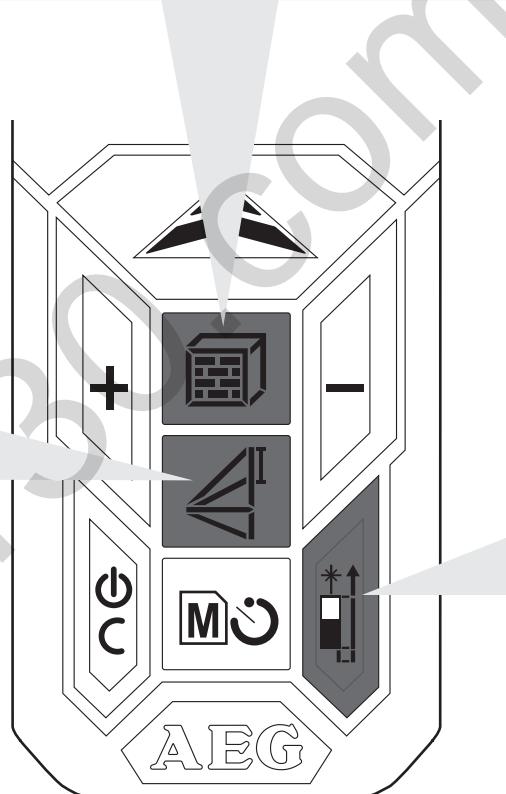
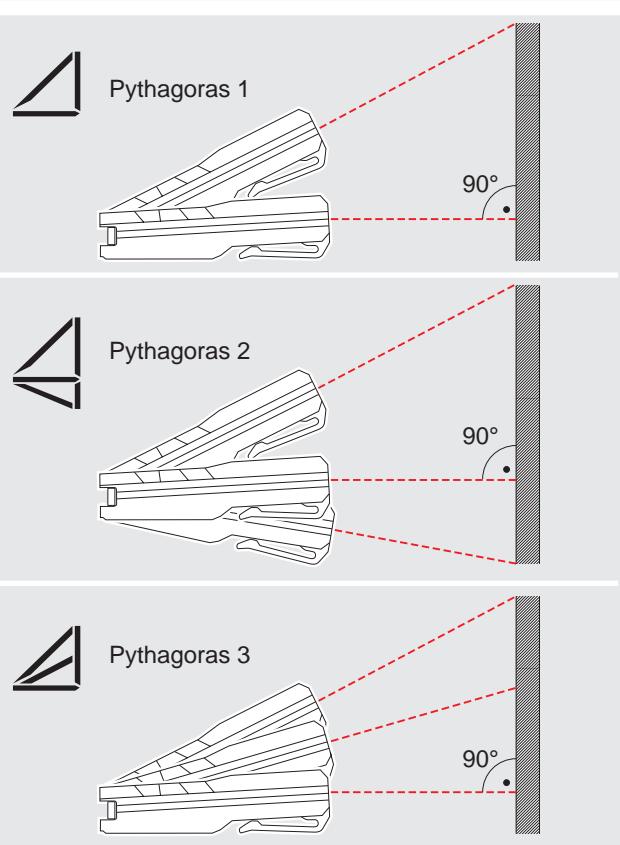
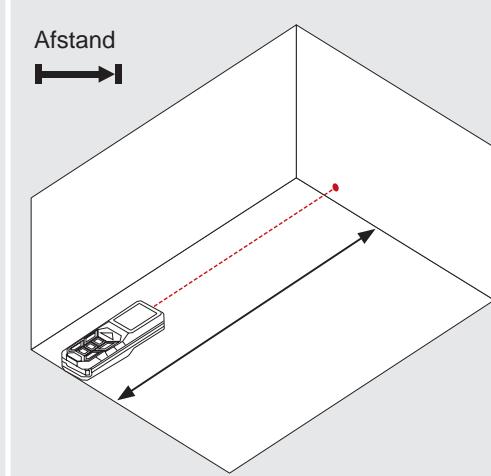
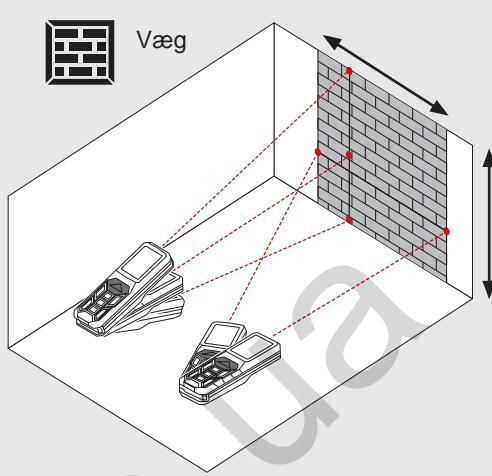
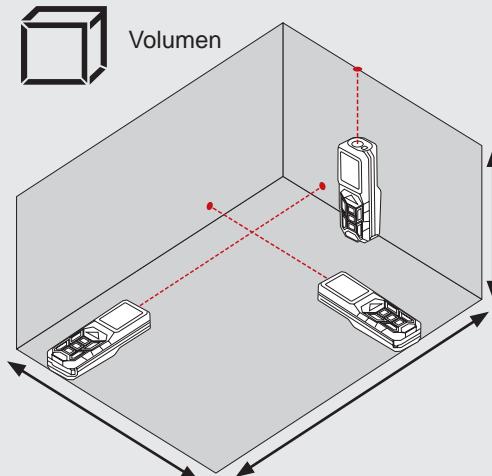
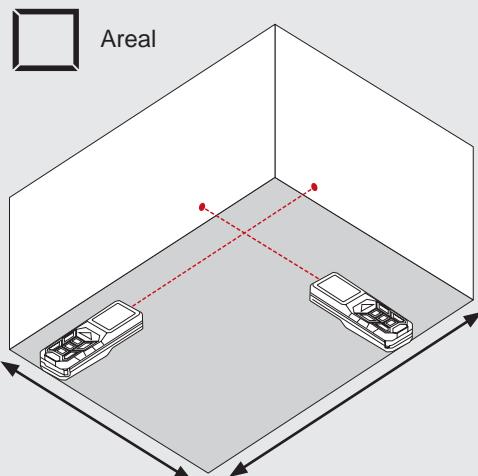
2



3

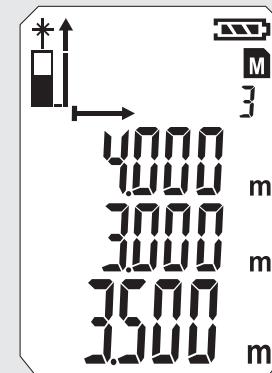
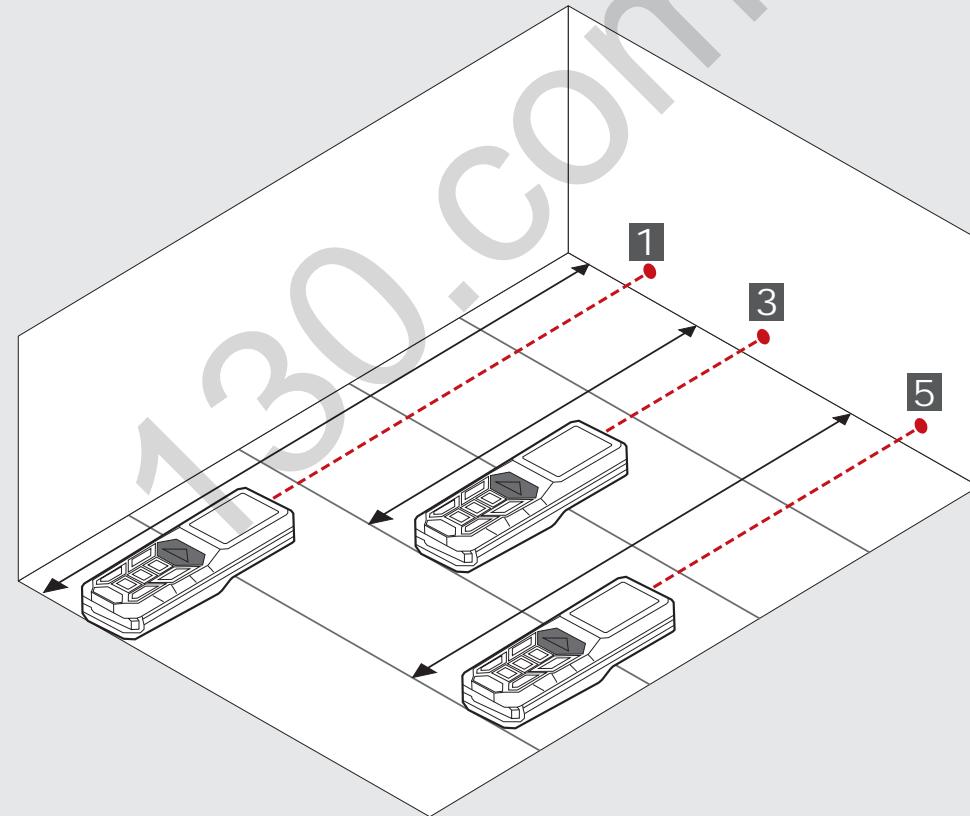
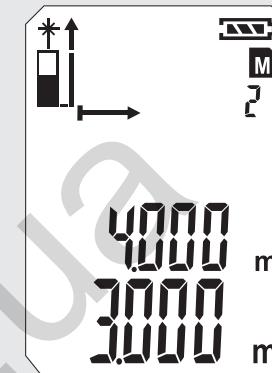
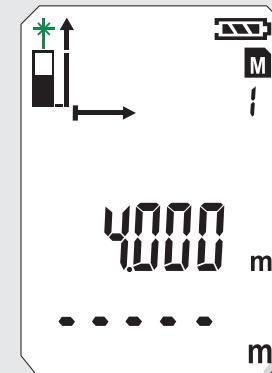
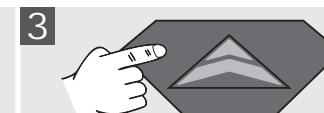
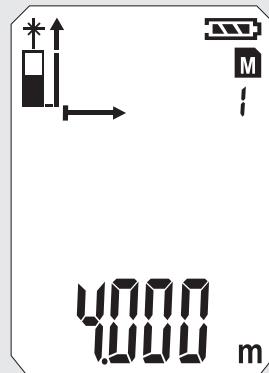
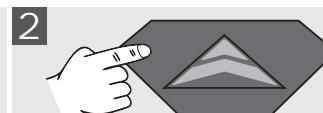
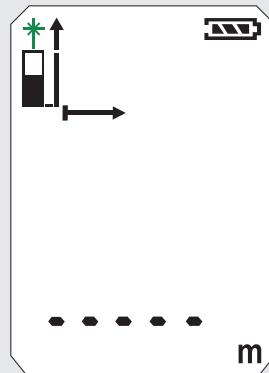
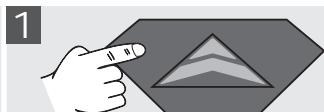


FUNKTIONSTAST, PYTHAGORAS, MÅLEREference



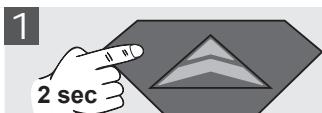
ENKELT AFSTANDSMÄLING

0

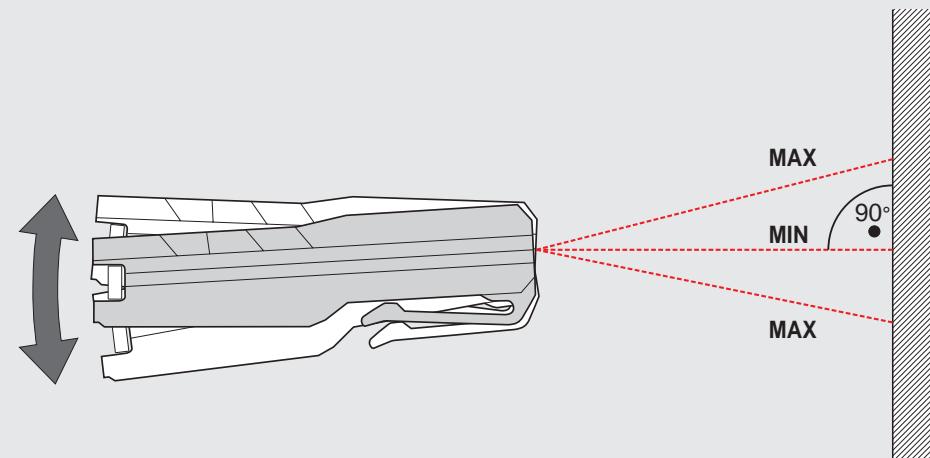
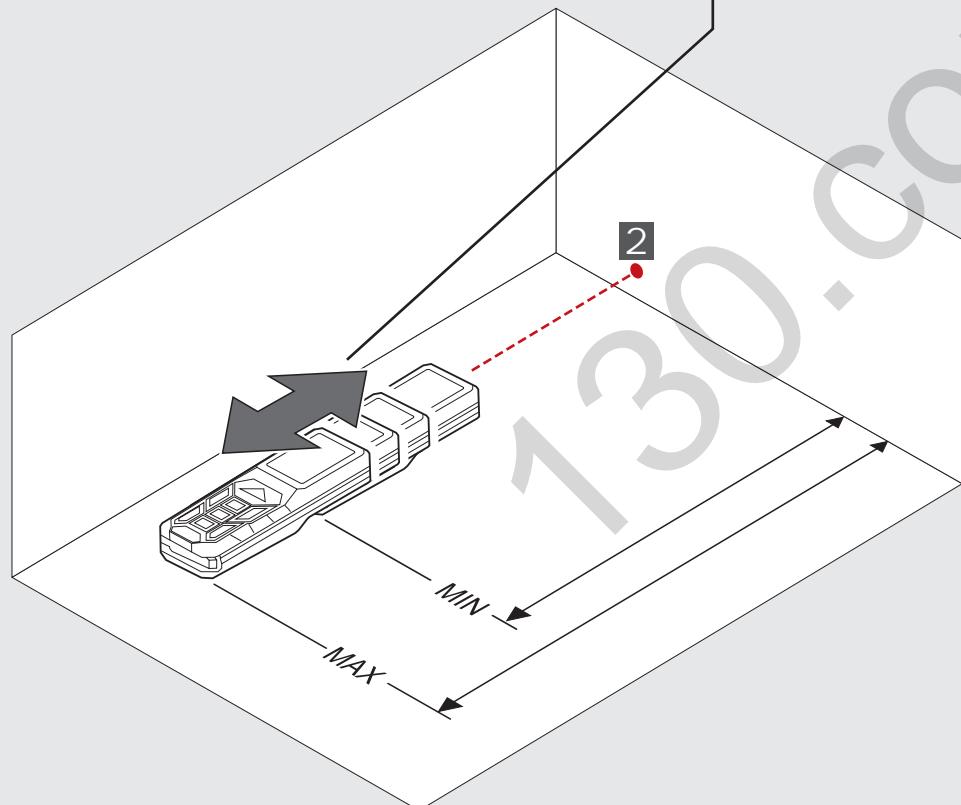
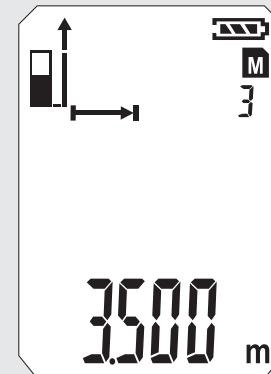
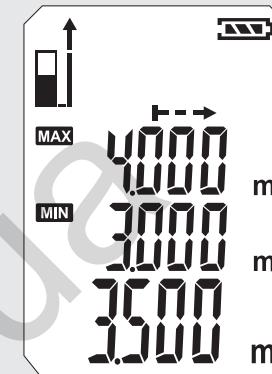
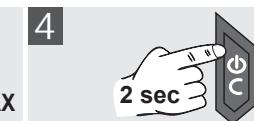
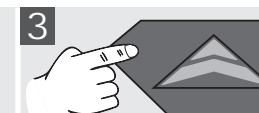
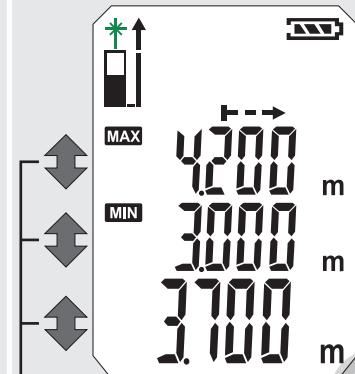
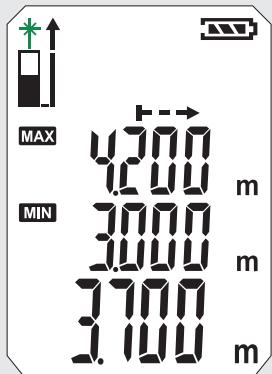
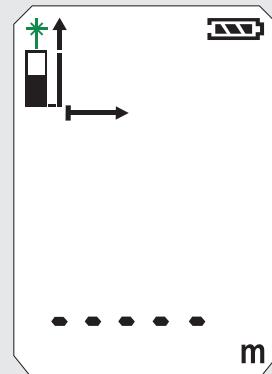


KONSTANT MÄLING / MINIMUM-MAKSIMUM MÄLING

0

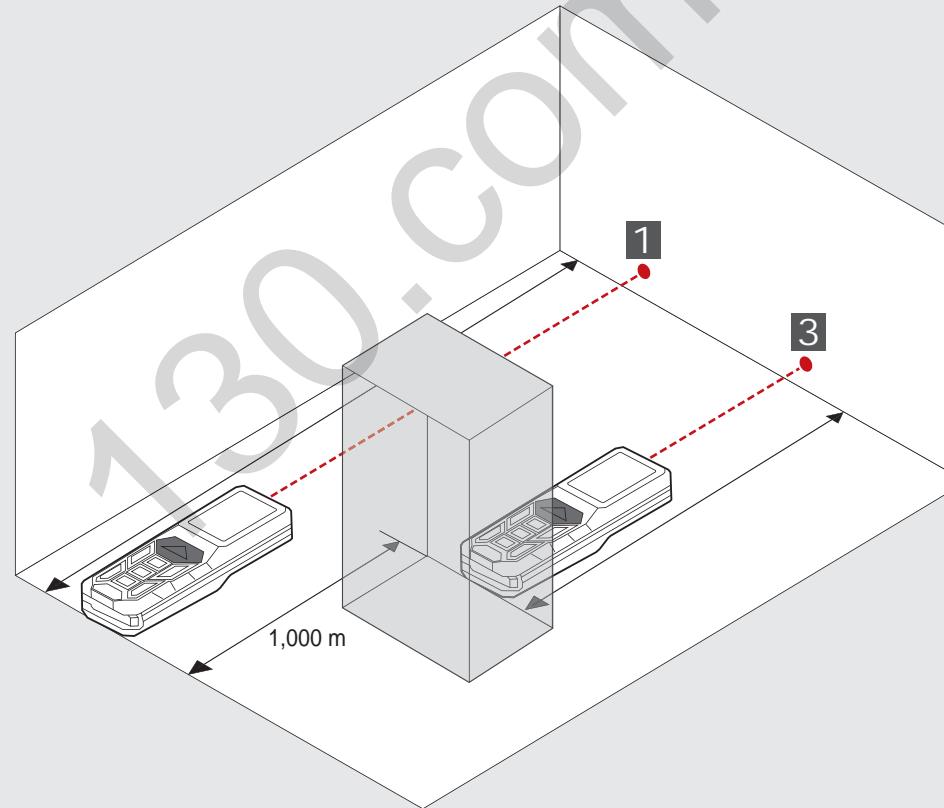
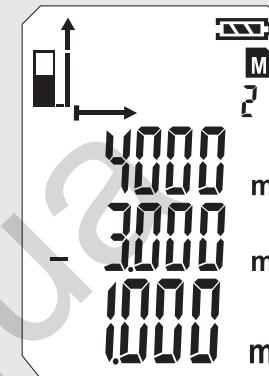
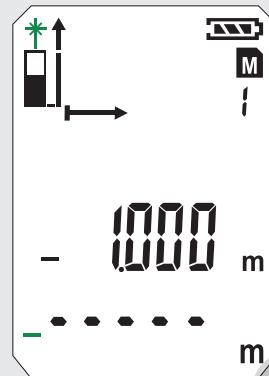
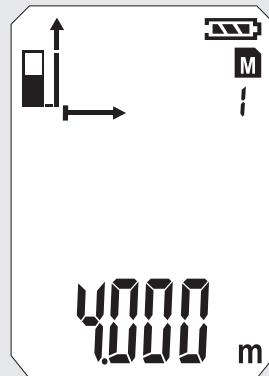
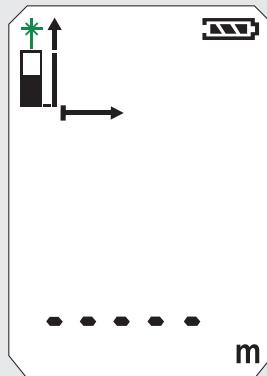
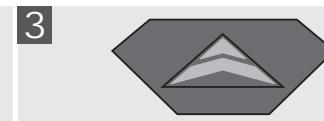
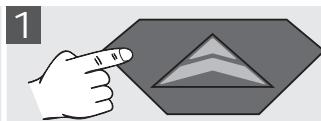


2

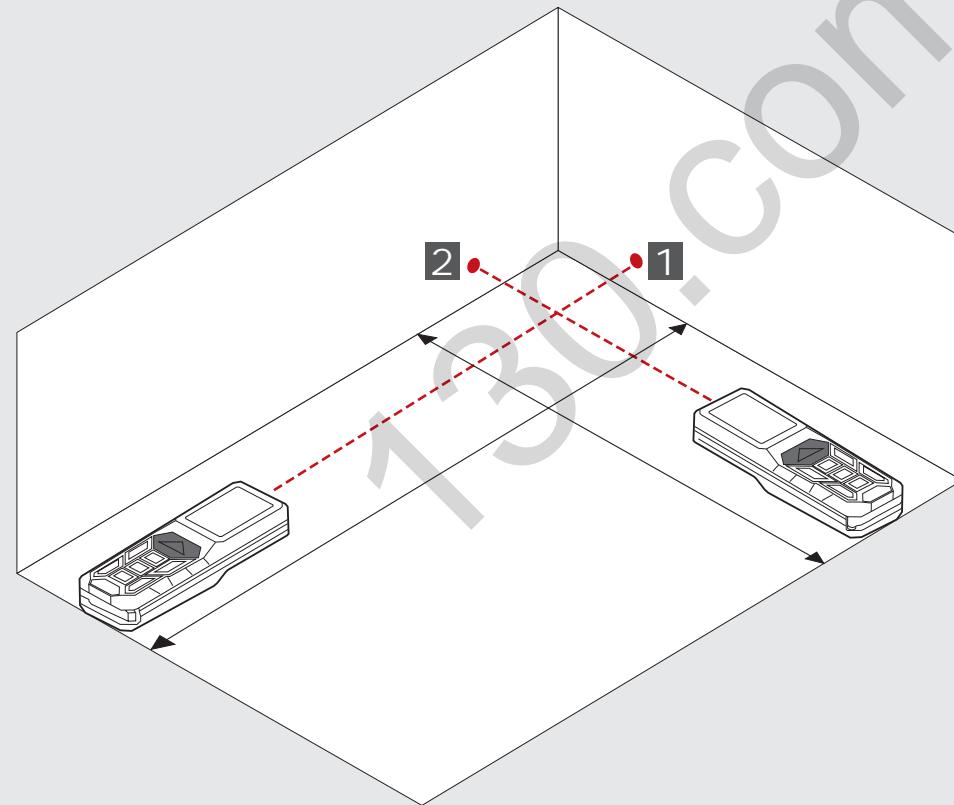
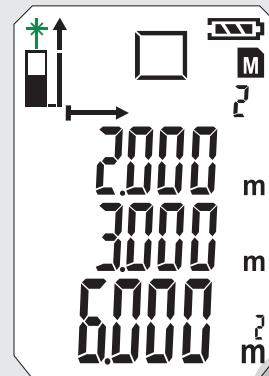
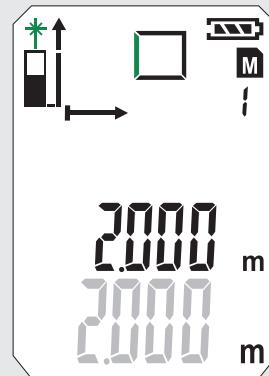
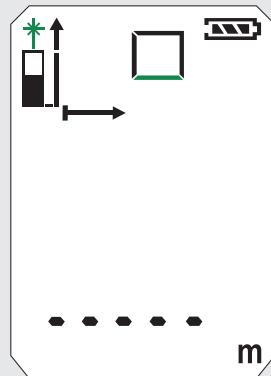
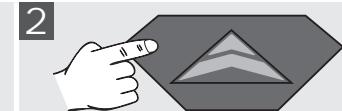
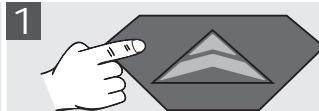


ADDITIONS- / SUBTRAKTIONSMÄLING

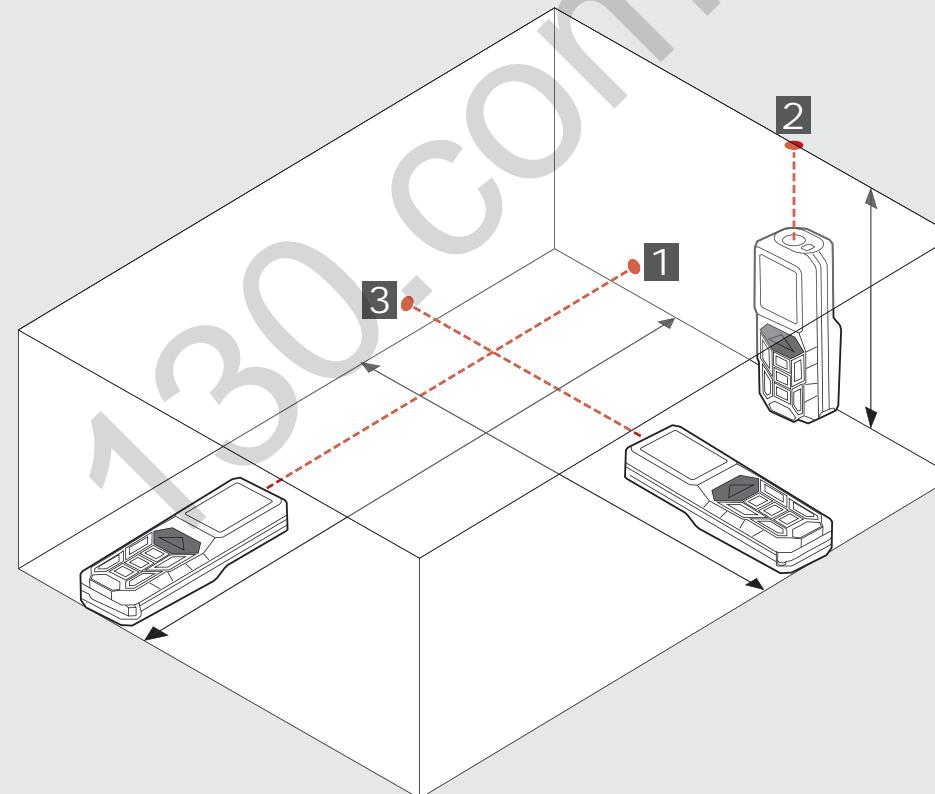
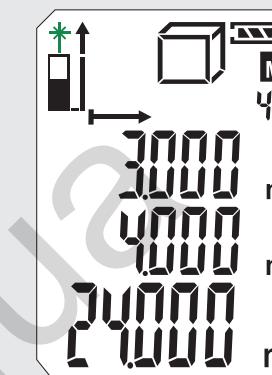
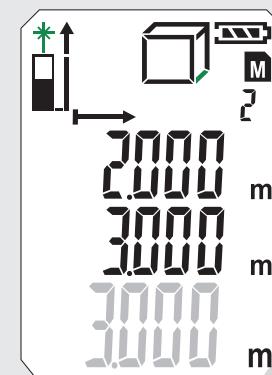
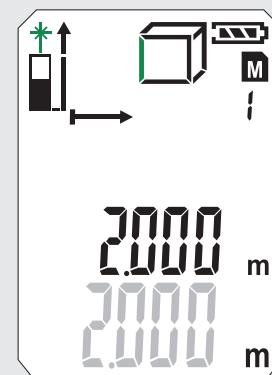
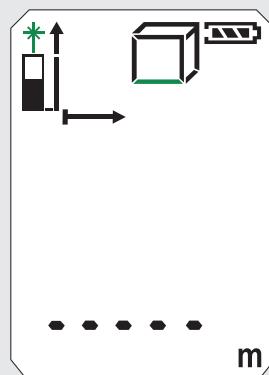
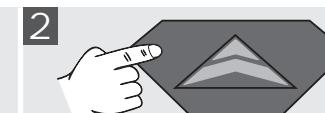
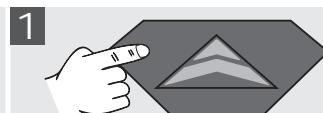
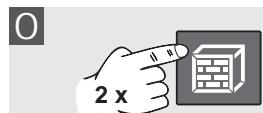
0



AREALMÄLING

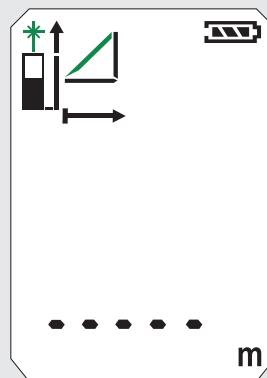


VOLUMENMÄLING

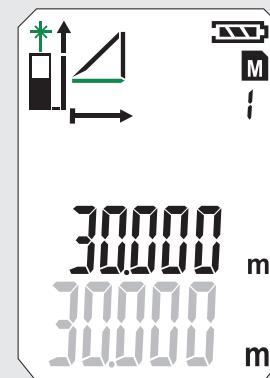


INDIREKTE MÄLING (PYTHAGORAS 1)

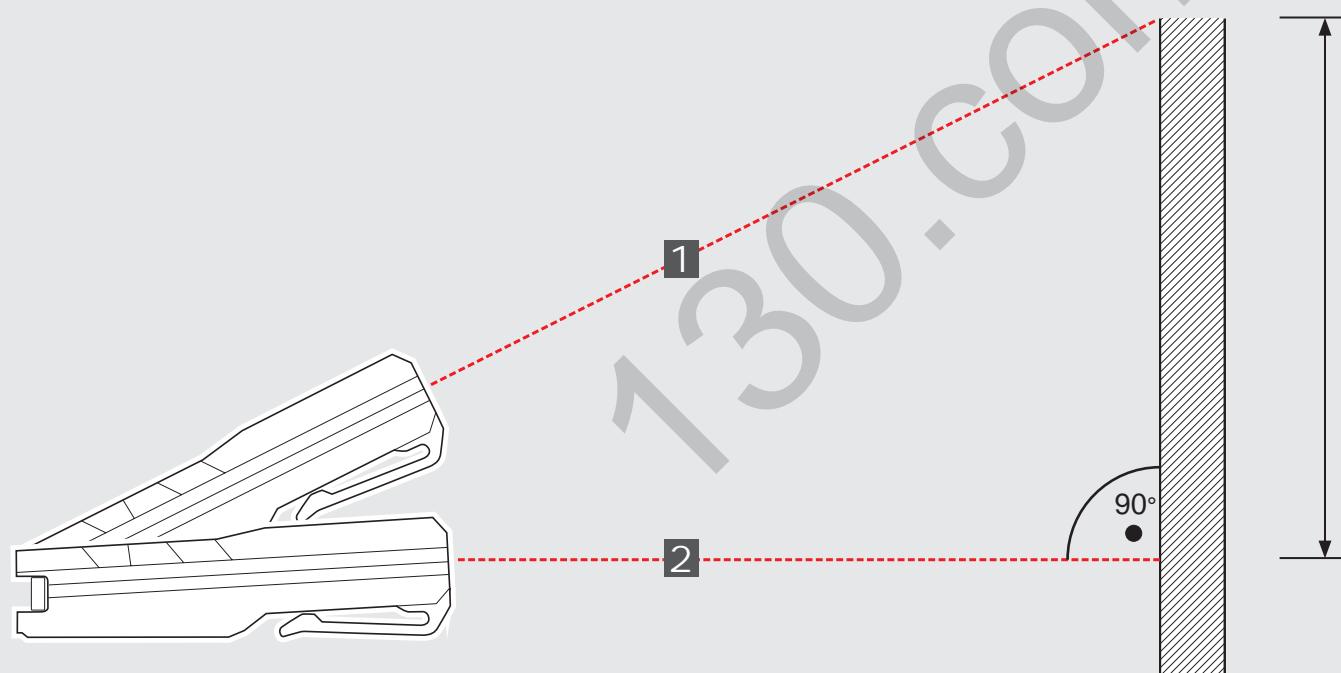
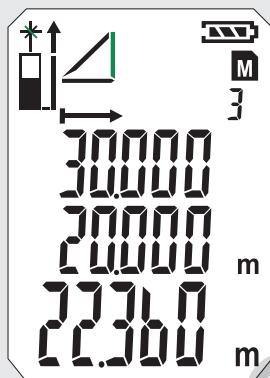
0



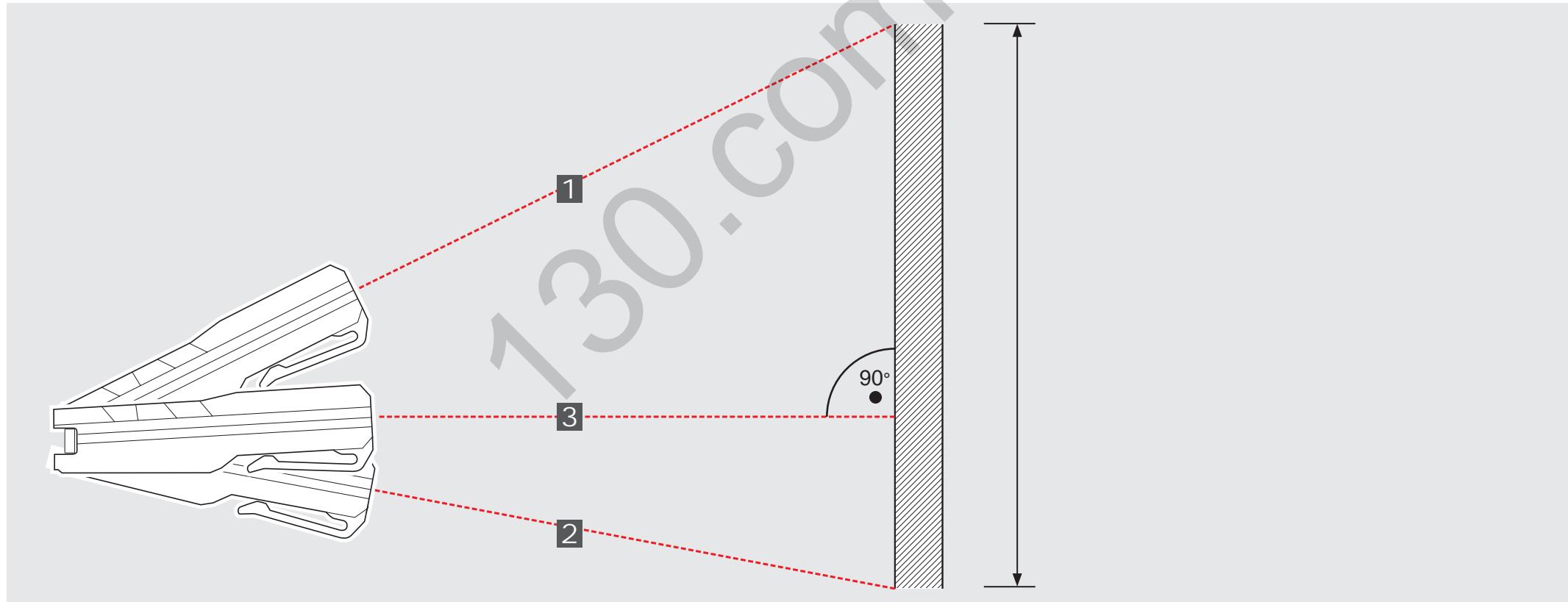
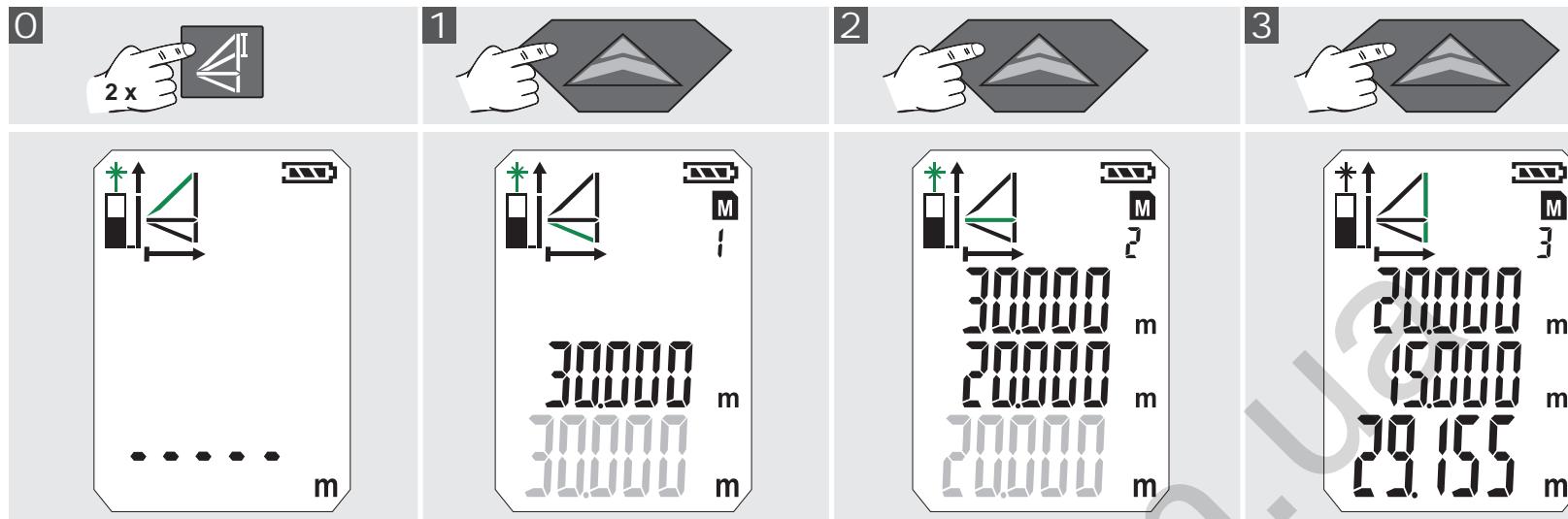
1



2



INDIREKTE MÄLING (PYTHAGORAS 2)

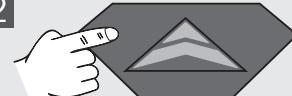


INDIREKTE MÄLING (PYTHAGORAS 3)

1



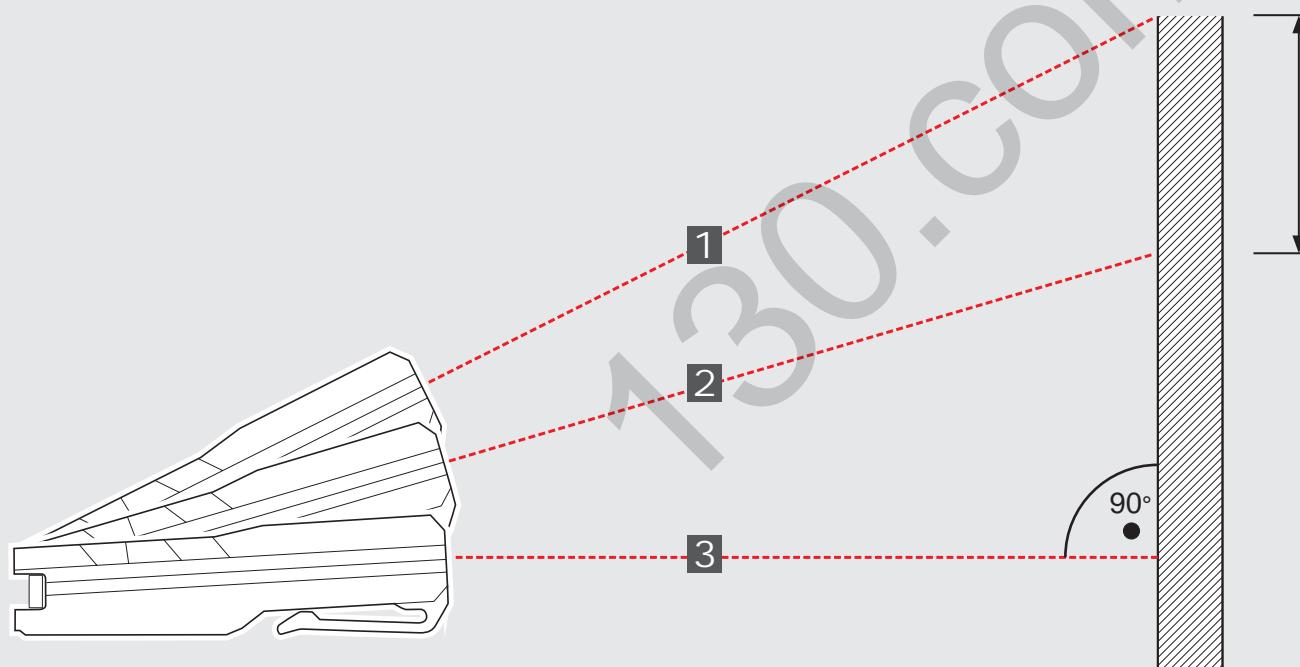
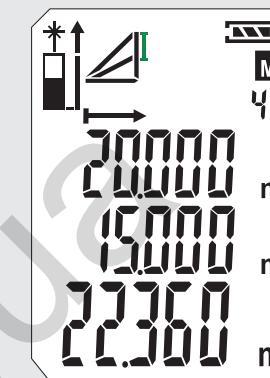
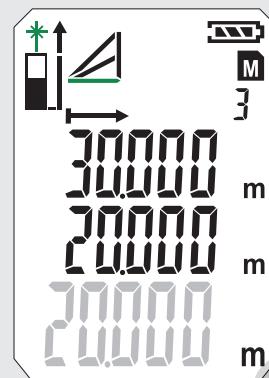
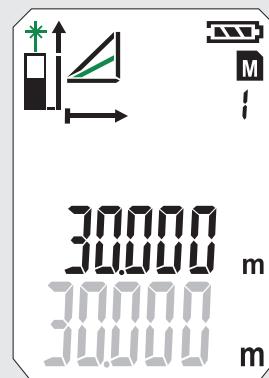
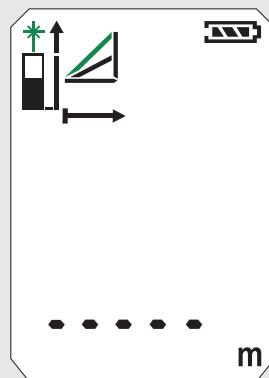
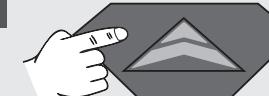
2



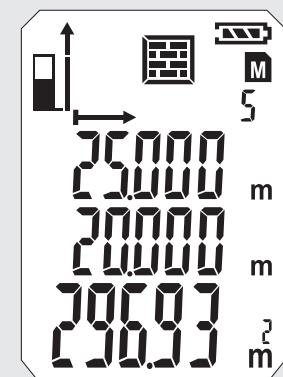
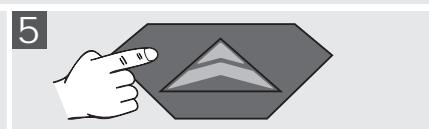
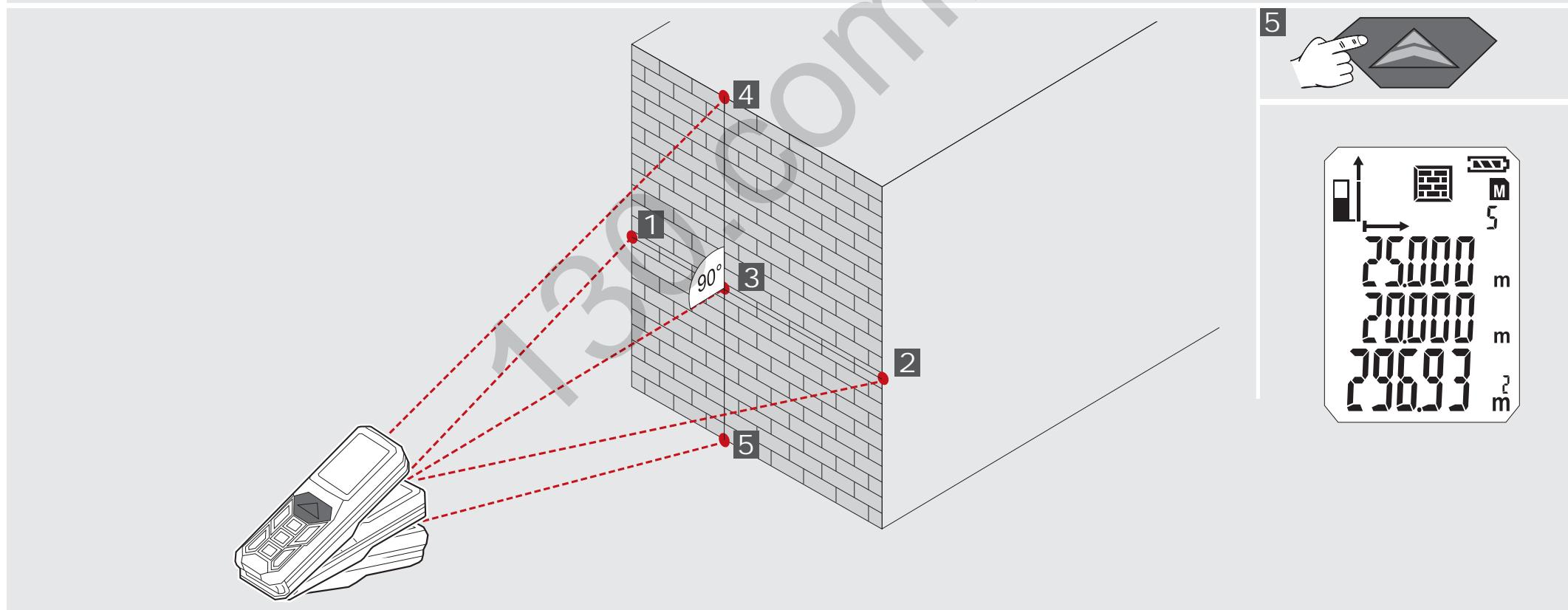
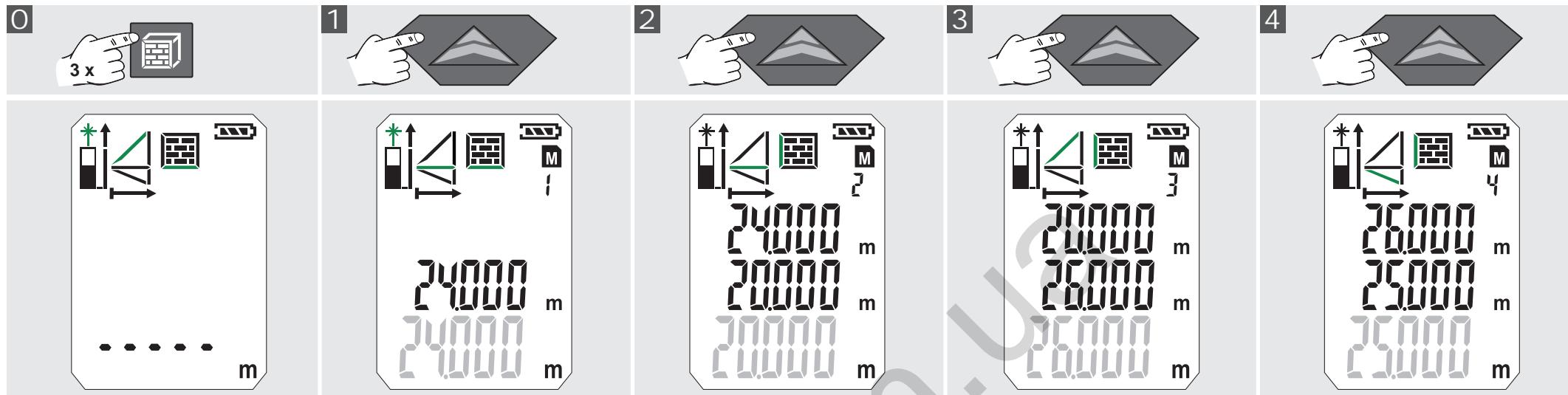
3



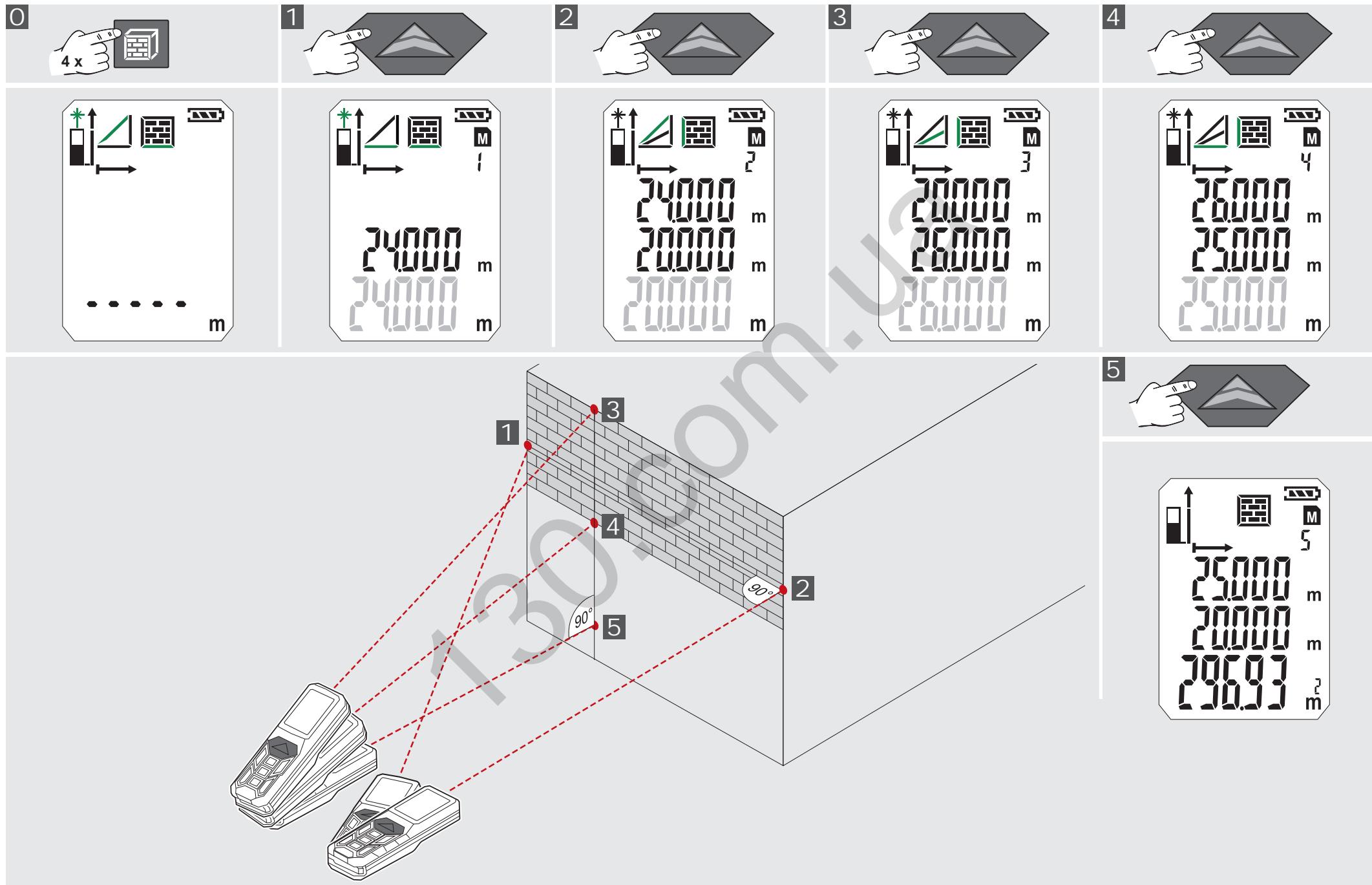
4



MÅLING AF VÆGAREAL (SCENARIO 1)



MÄLING AF VÆGAREAL (SCENARIO 2)



TIMER

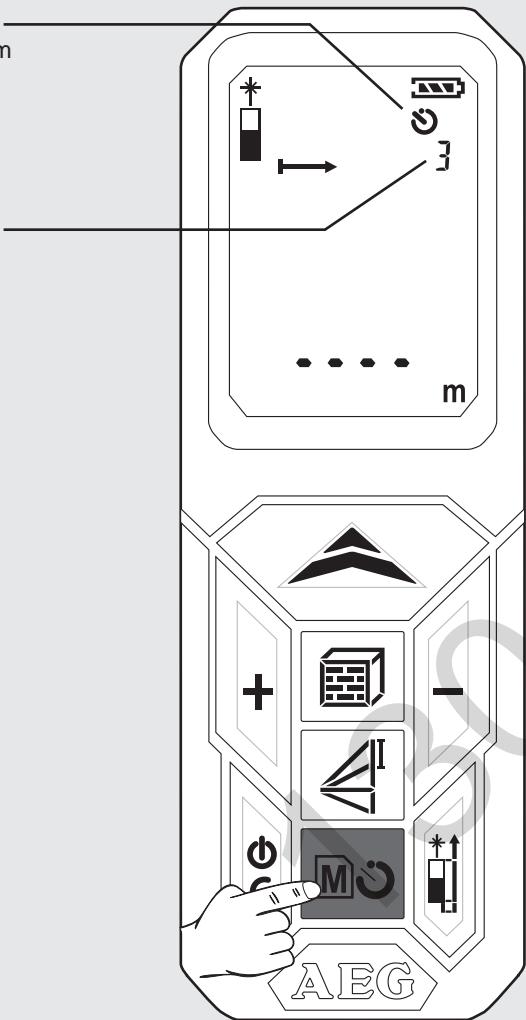
Med timeren kan målingen startes forsinket, sådan at der f.eks. kan placeres en komponent i målestrålen.

Tryk på tasten

- Symbolet vises
- Timeren kan indstilles på mellem 3 og 15 sek., når der trykkes på tasten .

Tryk på tasten

- Sekunderne tælles ned, indtil målingen starter.
- Ved 0 starter målingen.



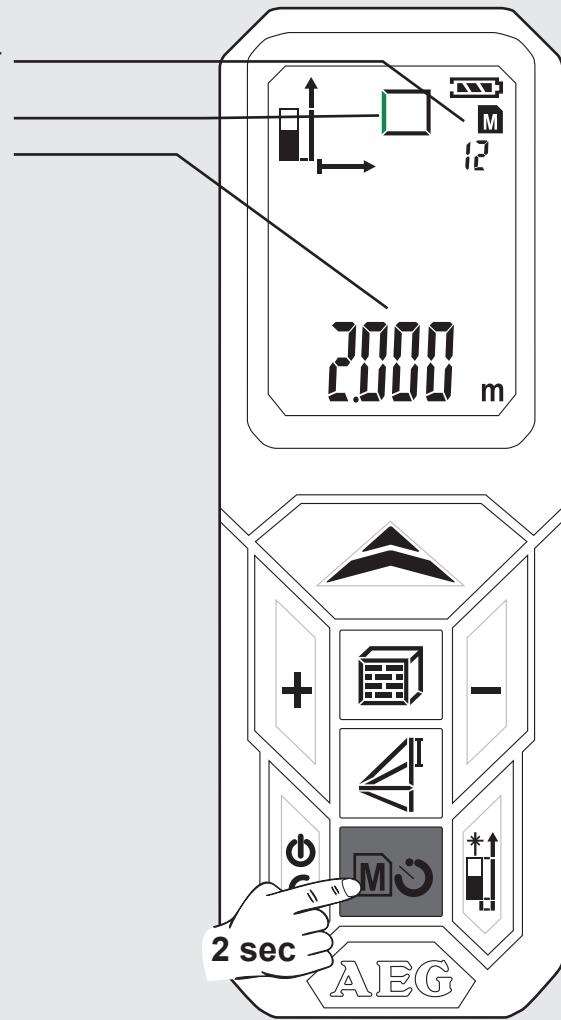
HUKOMMELSE

Måleværdierne gemmes konstant og automatisk i hukommelsen.

De gemte værdier kan hentes med tasten .

Tryk på tasten i 2 sek.

- Symbol og hukommelsesnummer vises.
- Tilhørende målestørrelse vises.
- Den gemte værdi vises i hovedlinjen.
- Navigér med +/-tasterne

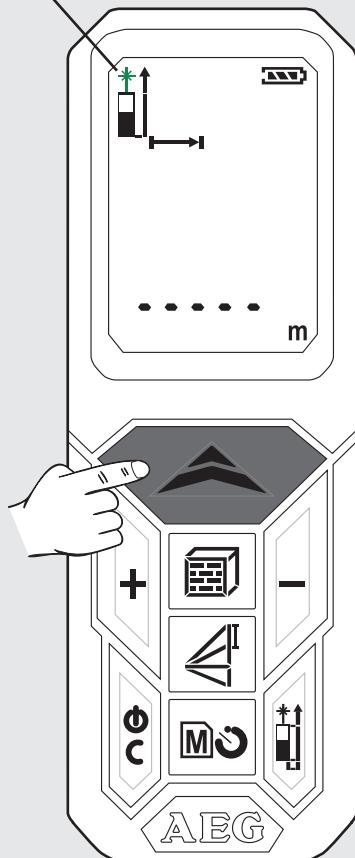


GRUNDLÆGGende FUNKTIONSMÅDE VIST MED ET EKSEMPEL PÅ EN AREALMÅLING (1)

1 Tænd

Tryk på tasten .
OBS! Laserstrålen er tændt!
 Peg ikke på personer!

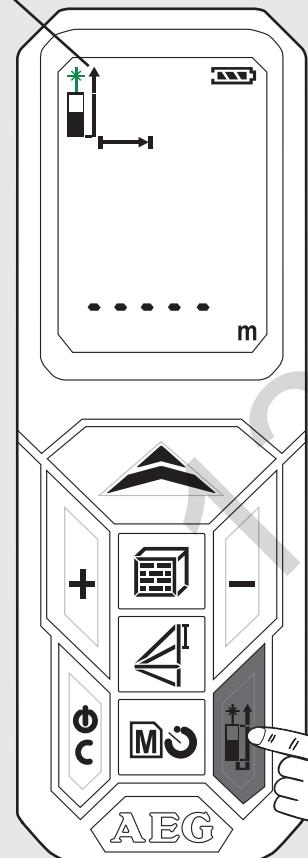
- Lasersymbolet blinker
 (grøn blinke er vist).



2 Vælg målereference

Standardindstilling når instrumentet
 er tændt: bagkant
 Tryk 1x -> Hjørnestift
 Tryk 2x -> Forkant
 Tryk 3x -> Bagkant

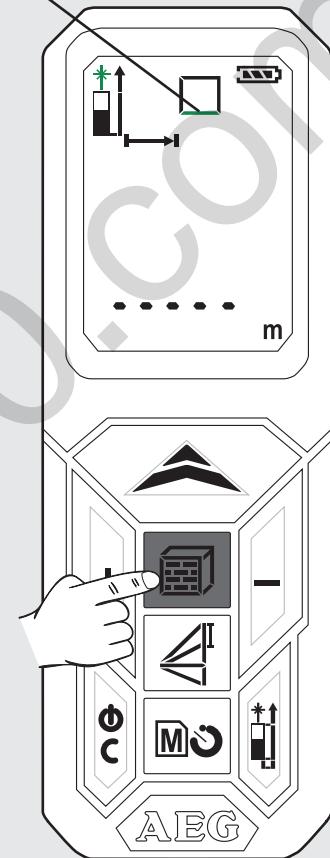
- Symbolet vises



3 Vælg funktion

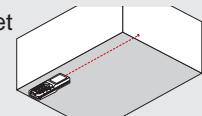
Når instrumentet er tændt, står det
 altid på afstandsmåling.
 Tryk 1x - arealmåling

- Symbolet vises
 Målestørrelse blinker
 (grøn blinke er vist)

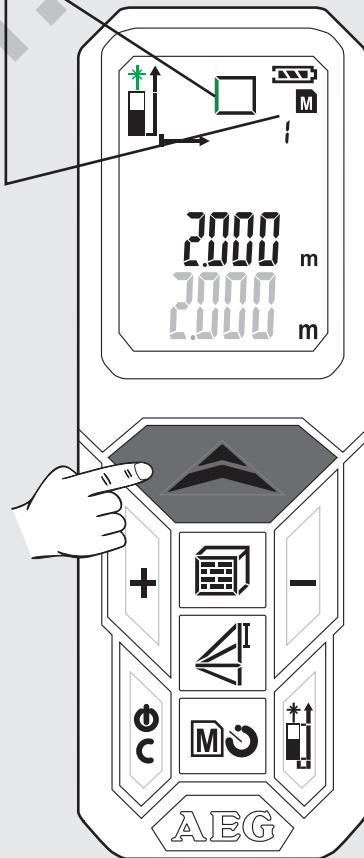


4 Mål længde

Justér instrumentet
 og tryk på
 tasten

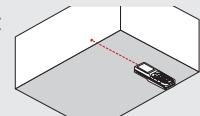


- Måleværdien vises kort i hovedlinjen.
 - Måleværdien hopper efter 1 sek. op i
 linjen oven over.
 - Måleværdien gemmes i
 hukommelsen under et fortrolende
 nummer.
 Den anden målestørrelse blinker.
 Instrumentet er parat til at måle den
 anden værdi.

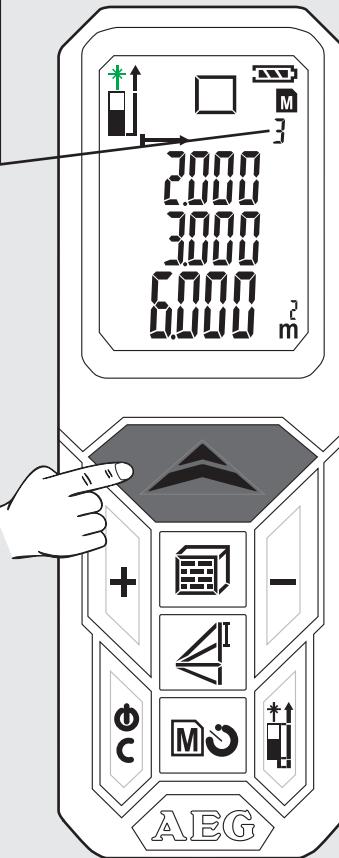


5 Mål bredde

Justér instrumentet
 og tryk på
 tasten



- Måleværdien vises kort i
 hovedlinjen.
 - Måleværdien hopper efter 1 sek.
 op i linjen oven over.
 Måleværdien gemmes i
 hukommelse under et fortrolende
 nummer.
 - Resultatet vises i hovedlinjen og
 gemmes i hukommelsen under et
 fortrolende nummer.



GRUNDLÆGGende FUNKTIONSMÅDE VIST MED ET EKSEMPEL PÅ EN AREALMÅLING (2)

6 Hent gemte værdier

Tryk på tasten  i 2 sek.

Tryk på tasten + eller -

7 Forlad hukommelsen

Tryk på tasten 

8 Sluk

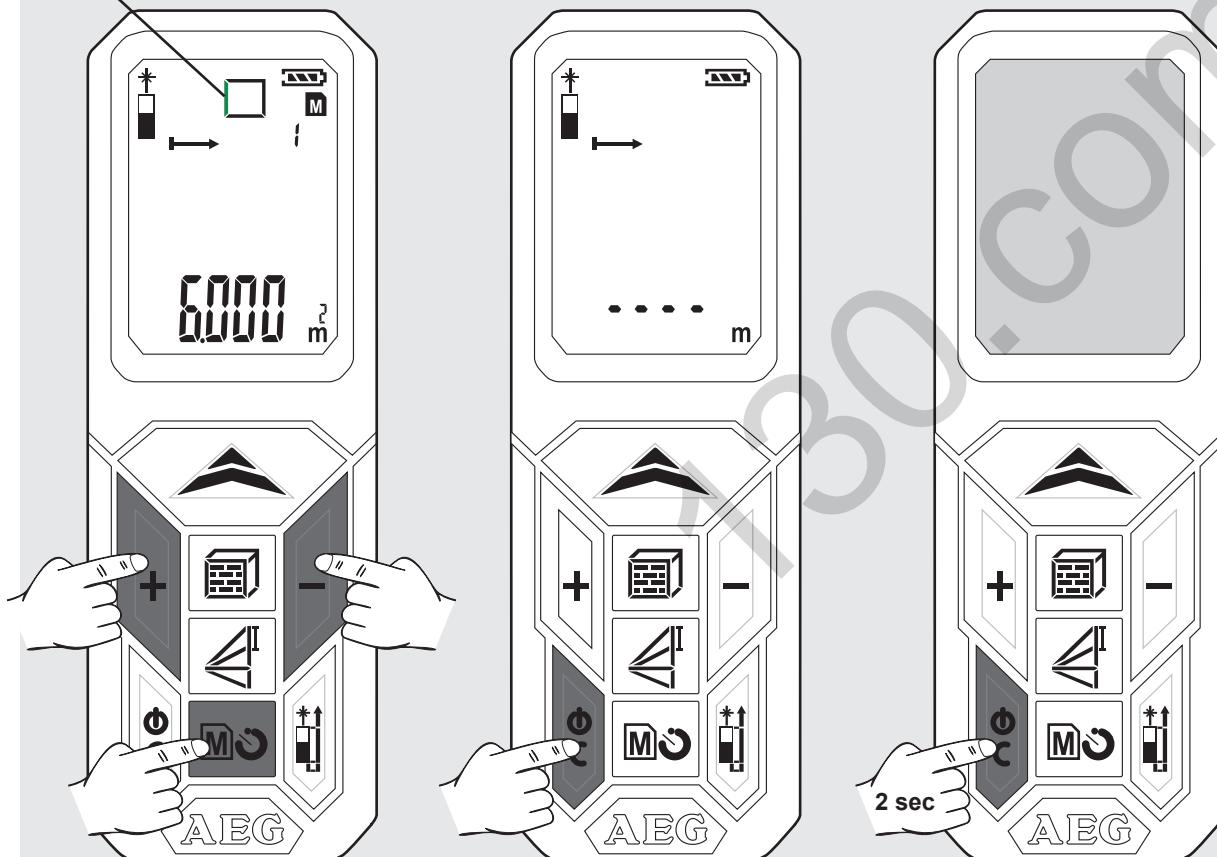
Tryk på tasten  i 2 sek.
(Hukommelsen skal forlades
forinden).

- De gemte værdier vises i hovedlinjen.

Det tilhørende symbol vises og målestørrelsen blinker (grøn blinke er vist).

- Instrumentet slukker.

- Trykkes der ikke på en tast i 3 minutter, slukker instrumentet automatisk.



INNHOLD

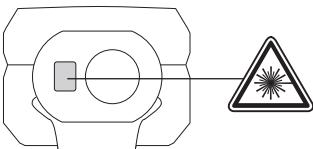
Viktige sikkerhetsinstrukser	1
Tekniske data.....	2
Formålsmessig bruk	2
Feilkode tabell	2
Oversikt	3
Skifte batteri.....	4
Hjørnestift	4
Belteholder	4
Funksjonstast, Pythagoras, Måle nivå.....	5
Enkel lengdemåling	6
Kontinuerlig måling / Minimum-Maksimum Måling	7
Addisjons- / Subtraksjonsmåling	8
Overflatemåling	9
Volummåling	10
Indirekte måling (Pythagoras 1).....	11
Indirekte måling (Pythagoras 2).....	12
Indirekte måling (Pythagoras 3).....	13
Veggflate måling (Scenario 1)	14
Veggflate måling (Scenario 2)	15
Tidsinnstiller.....	16
Minne.....	16
Grunnleggende bruksbeskrivelse av eksempel til en overflatemåling (1).....	17
Grunnleggende bruksbeskrivelse av eksempel til en overflatemåling (2).....	18

VIKTIGE SIKKERHETSINSTRUKSER



Ikke bruk produktet før du har studert sikkerhetsinstruksene og brukerhåndboken på vedlagte CD.

Laserklassifisering



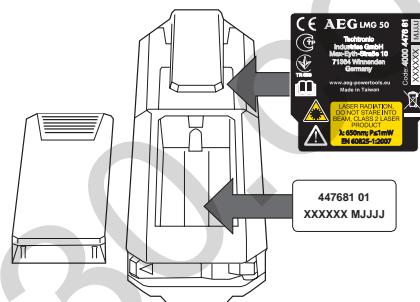
ADVARSEL:

Dette er et Class 2 laserprodukt i henhold til IEC 60825-1:2007.



Påskrift

Før første ibruktaking skal det klistres over prestasjonsetiketten med opplysninger på engelsk språk. Til dette er det vedlagt et klebemerket med opplysninger på deres språk.



OBS:

Unngå direkte øye kontakt. Laserstrålen kan gi blitzer i øynene, noe som kan føre til en midlertidig blending.

Unngå å inn i laserstrålen og å rette den unødig mot andre personer.

Ikke pek mot andre personer.

Advarsel:

Ikke bruk laser apparatet i nærheten av barn. Ikke tillat at barn benytter laser-apparatet.

OBS! En reflekterende overflate kan sende laserstrålen tilbake til bruker eller reflektere andre personen.

Hold kroppsdelene i sikker avstand til deler som beveger seg.

Gjennomfør regelmessig kontrollmålinger. Spesielt før, under og etter viktige målinger.

Se opp for feilmålinger hvis det er feil ved instrumentet, hvis det har falt i bakken, hvis det har vært utsatt for ikke tillatte belastninger, eller hvis det har blitt ombygd.

OBS! Gjør deg kjent med betjeningselementene og den korrekte bruken av hageredskapet.

Lasermåleapparatet har et begrenset bruksområde. (Se avsnitt "Tekniske data"). Forsøk på måling utenfor det minimale og maksimale område forårsaker unøyaktigheter. Bruk ved vanskelige betingelser som for varmt, for kald, svært sterkt sollys, regn, snø, tåke eller andre betingelser som innskrenker sikten, kan føre til unøyaktige målinger.

Dersom lasermåleapparatet blir brakt fra en varm omgivelse til en kald omgivelse (eller omvendt), må det ventes til apparatet har tilpasset seg den nye omgivelsestemperaturen.

Lasermåleapparatet skal alltid oppbevares i rom som beskytter apparatet mot rystelse, vibrasjoner og ekstreme temperaturer.

Lasermåleapparatet skal beskyttes mot støv, væte og høy luftfuktighet. Dette kan skade de indre delene og ha innflytelse på nøyaktigheten.

Ikke bruk aggressive rensemiddel eller løsemiddel. Skal rengjøres bare med en ren myk klut.

Unngå harde slag på og fall av lasermåleapparatet.

Nøyaktigheten av apparatet burde kontrolleres dersom det har falt ned eller har vært utsatt for andre mekaniske belastninger.

Nødvendige reparasjoner på dette laser-apparatet skal kun gjøres av autorisert fagpersonale.

Ikke bruk instrumentet i eksplosjonsfarlige områder eller i aggressive miljøer.

Batteriene må bare lades opp med et ladeapparat som er levert av produsenten.



Brukte batterier må ikke kastes i husholdningsavfallet. Vern om miljøet og send dem til oppsamlingsstasjoner som er beregnet til dette i henhold til nasjonale eller lokale forskrifter. Produktet må ikke kastes i husholdningsavfallet. Utstyret må kasseres på forsvarlig måte i samsvar med gjeldende nasjonale forskrifter. Følg nasjonale og landsspesifikke bestemmelser.



TEKNISKE DATA

Vernekasse	IP54 (støv- og sprutevann beskyttet)
Optik	14 mm
Fokus	35 mm
Måleområde maks	50 meter (toleranse: 55m)
Måleområde minimum.	0,05 meter
Absolutt nøyaktighet @ < 10m	± 1,5 mm (maks)
Gjentakelse nøyaktighet @ < 10m	± 1,5 mm (typisk maks 2σ)
Gjentakelse nøyaktighet @ > 10m	Stigning ± 0,25 mm / meter (typisk maks 2σ)
Måletid	0,5 s
Display type	LCD (22,7 mm x 31 mm)
Strømforsyning	AAA 2x (Alkaline-batteri)
Batteriets levetid	10000 (Enkeltmåling)
Laser utgangsytelse	0,6 mW ~ 0,95 mW (Class 2, 650nm)
Laserpunktstørrelse	25 x 30 mm @ 16 m (Maks)
Laserstråle vertikalvinkel	+1 grad
Laserstråle horisontalvinkel	±1 grad
Automatisk avslåing av apparatet	180 sekund
Automatisk avslåing av laser	30 sekund
Arbeidstemperaturområde	-10°C til +50°C
Lagertemperaturområdes	-25°C til +70°C
Vekt uten batteri	80 g

FEILKODE TABELL

Kode	Beskrivelse	Løsning
Err01	Utenfor måleområdet	Gjennomfør målinger i planlagt område.
Err02	Reflektert signal er for svakt	Velg en bedre overflate.
Err03	Utenfor visningsområde (maks verdi: 99.999) f.eks. Er resultat av flate eller volum utenfor visningsområde	Kontroller om verdiene og trinnene er korrekt.
Err04	Feil i Pythagorasberegningen	Kontroller om verdiene og trinnene er korrekt.
Err05	Batteri er svakt	Sett inn nye batterier
Err06	Utenfor arbeidstemperaturområde	Foreta målinger i fastsatt arbeidstemperaturområde.
Err07	Lyset i omgivelsen er for sterkt	Skyggelegg måleområdet

FORMÅLSMESSIG BRUK

Lasermåleapparatet er egnert for måling av avstander og hellinger.

Dette apparatet må kun brukes til de oppgitte formål.

Pythagoras
Høydeforskjell

Måle nivå

Lengdemåling

Minimum / Maksimum for kontinuerlig måling

Addisjon / Subtraksjon

PÅ / MÅLING

- På
- Måling
- Kontinuerlig måling (trykk i 2 sekund)
Minimum / Maks funksjon

ADDISJON

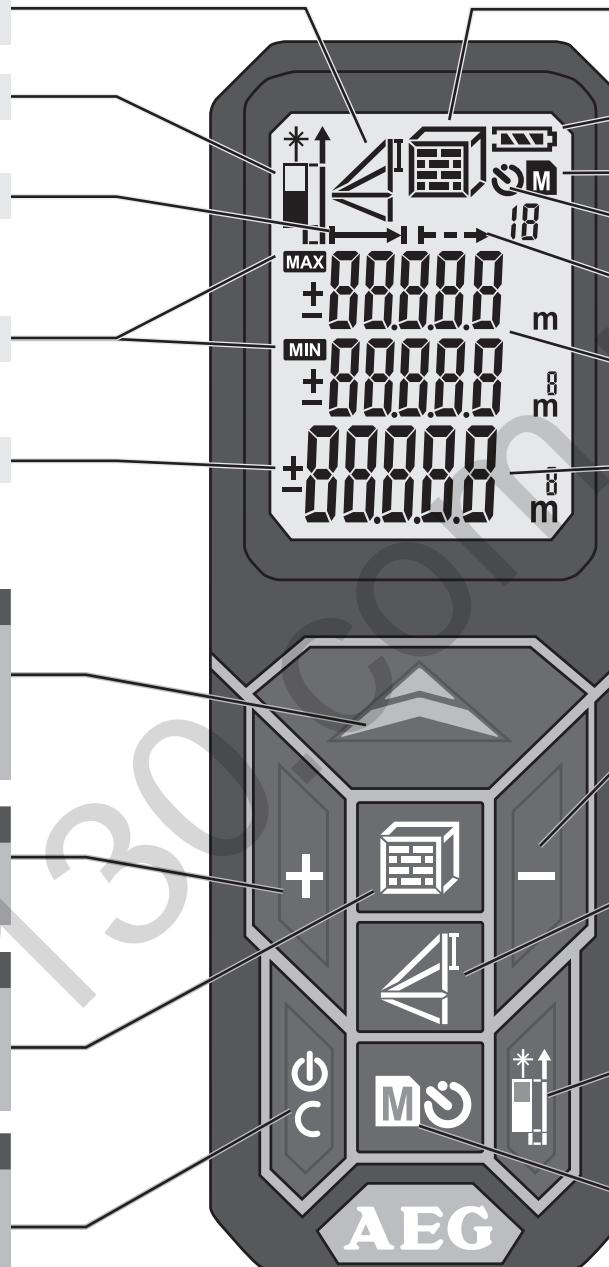
- Addere verdi
- Navigere i minne

OVERFLATE / VOLUM

- Overflate (trykk 1x)
- Volum (trykk 2x)
- Indirekte overflatemåling (trykk 3x / 4x)

SLÅ PÅ

- På
- Av (trykk i 2 sekund)
- Tilbakesette



Flate / volum
Indirekt overflatemåling

Batteristatus

Minne

Tidsinnstiller

Kontinuerlig måling

Mellomverdier

Total verdi

SUBTRAKSJON

- Subtrahere verdi
- Navigere i minne

PYTHAGORAS

- Pythagoras 1 (trykk 1x)
- Pythagoras 2 (trykk 2x)
- Pythagoras 3 (trykk 3x)

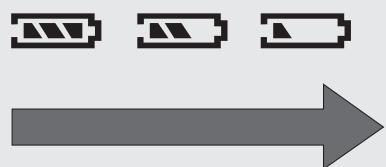
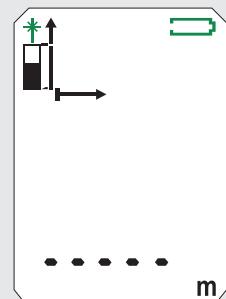
SKIFT MÅLE NIVÅ

- Foran
- Bak
- Hjørnestift

MINNE

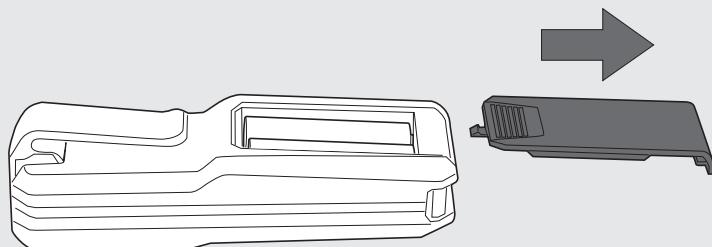
- Tidsinnstiller 3-15 sek (trykk 1x)
- Minne 1-20 (trykk 1x 2 sekund)
- Bruk +/- tastene for å navigere i minne

SKIFTE BATTERI

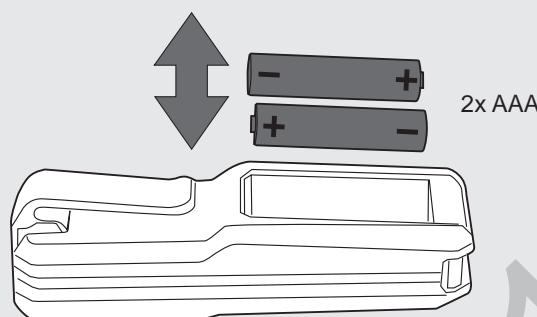


Skift batteri, når
symbolet blinker.

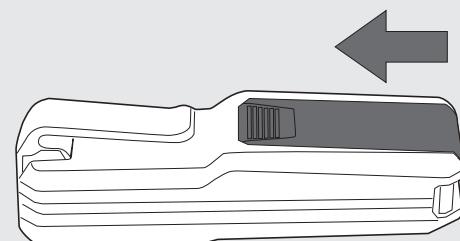
1



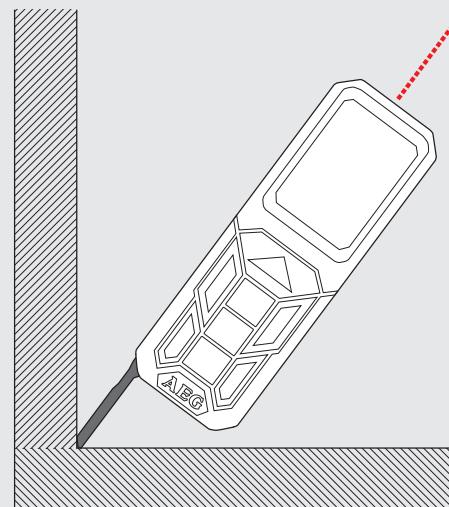
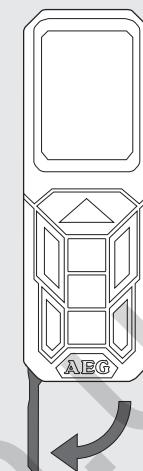
2



3

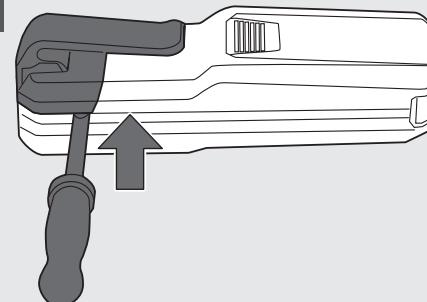


HJØRNESTIFT

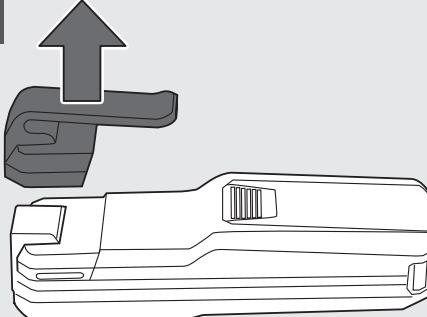


BELTEHOLDER

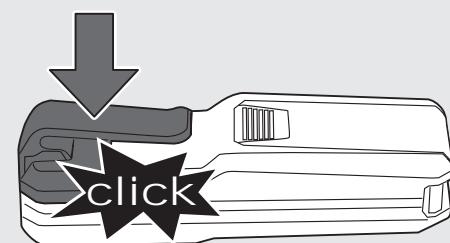
1



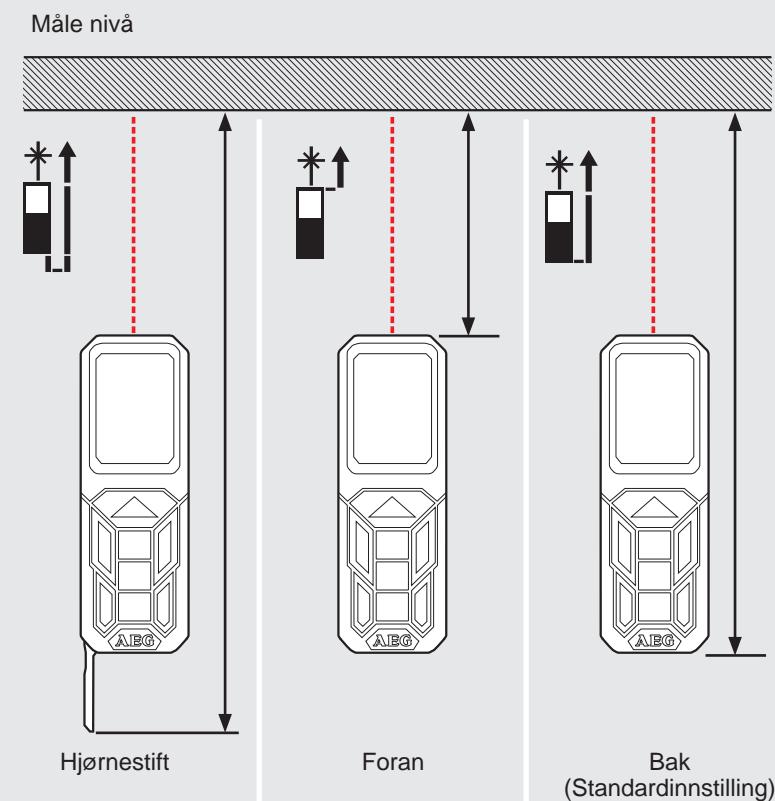
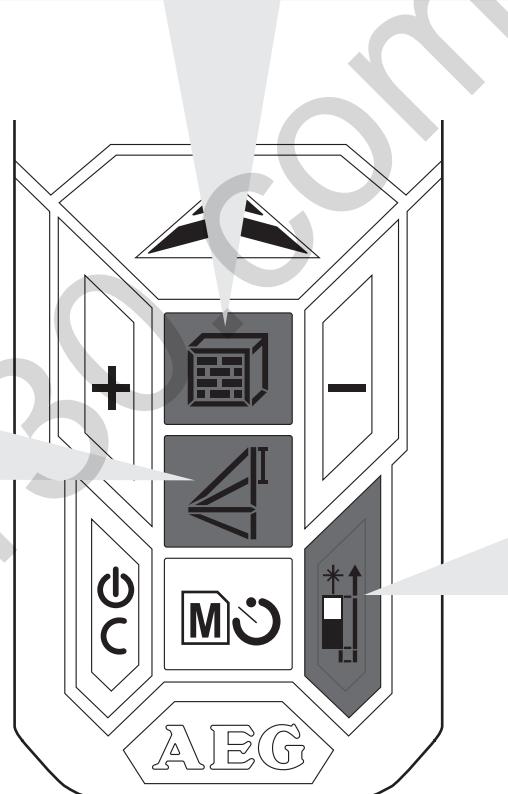
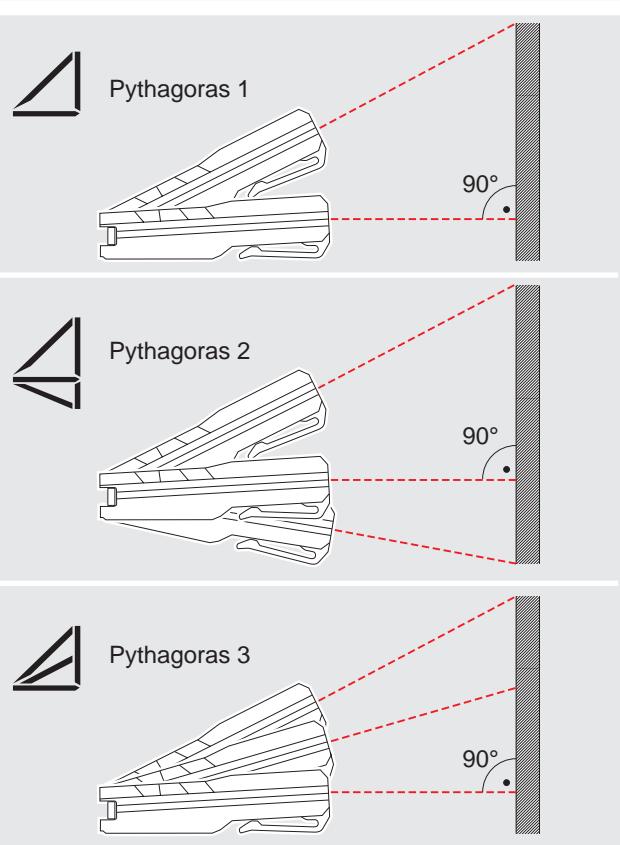
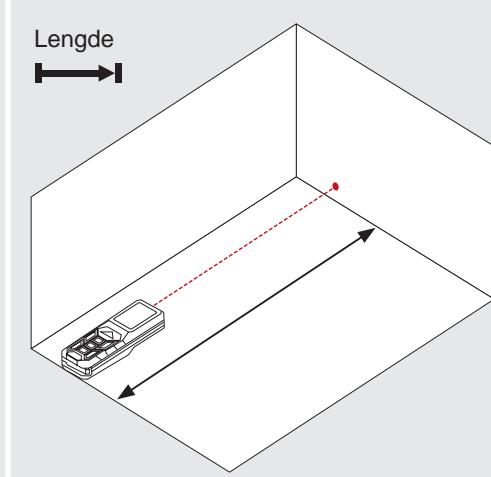
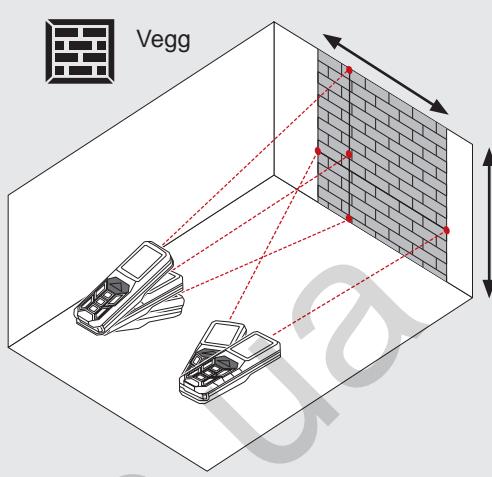
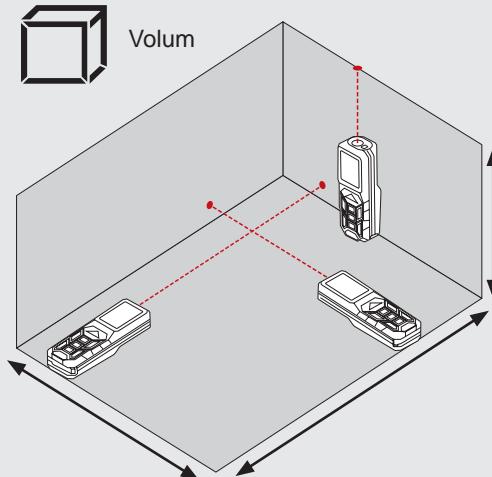
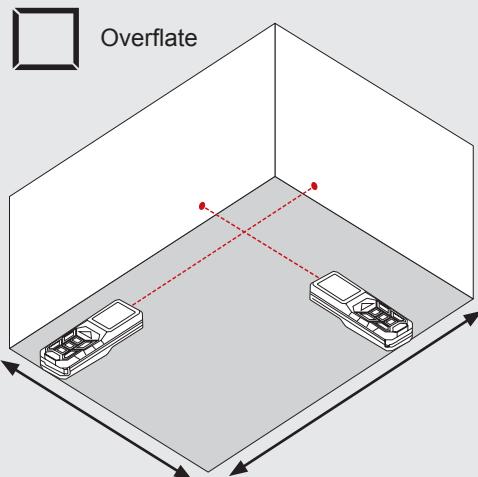
2



3

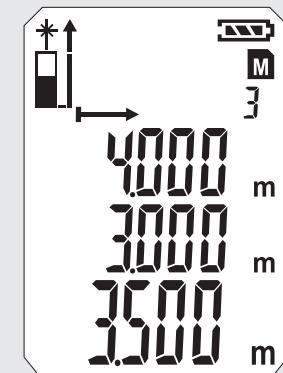
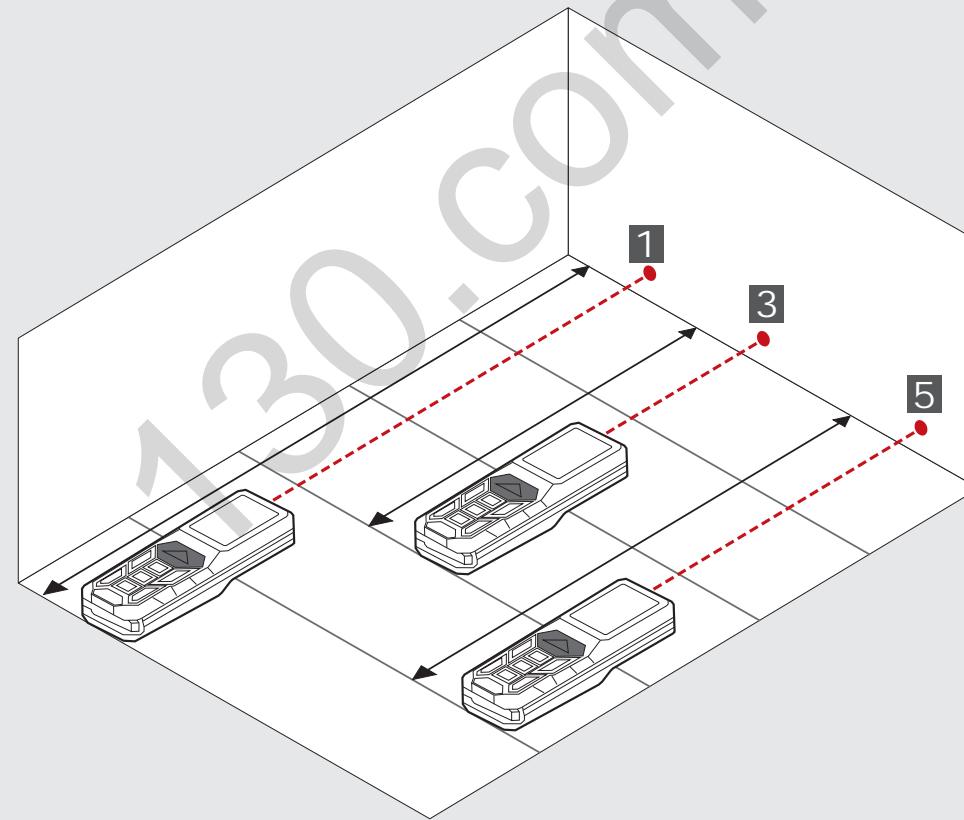
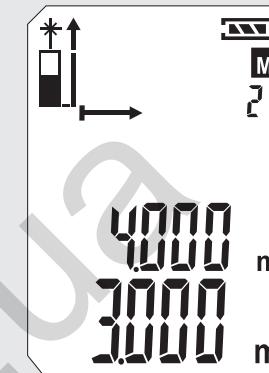
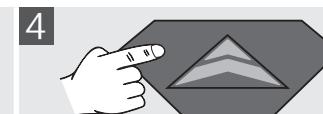
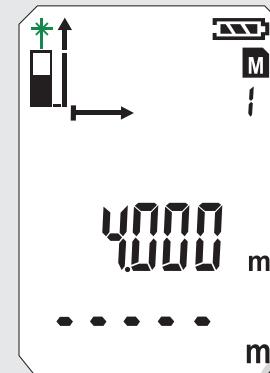
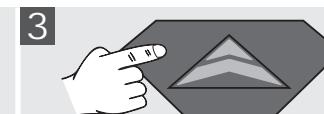
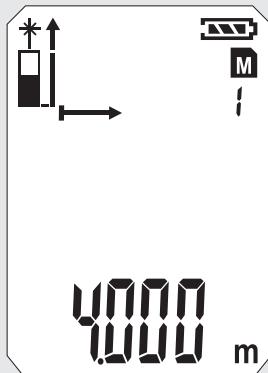
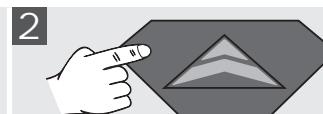
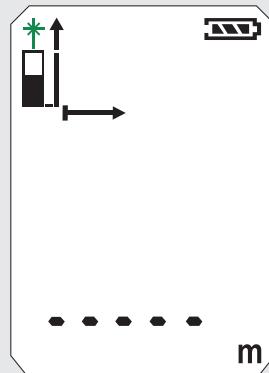


FUNKSJONSTAST, PYTHAGORAS, MÅLE NIVÅ



ENKEL LENGDEMÄLING

0

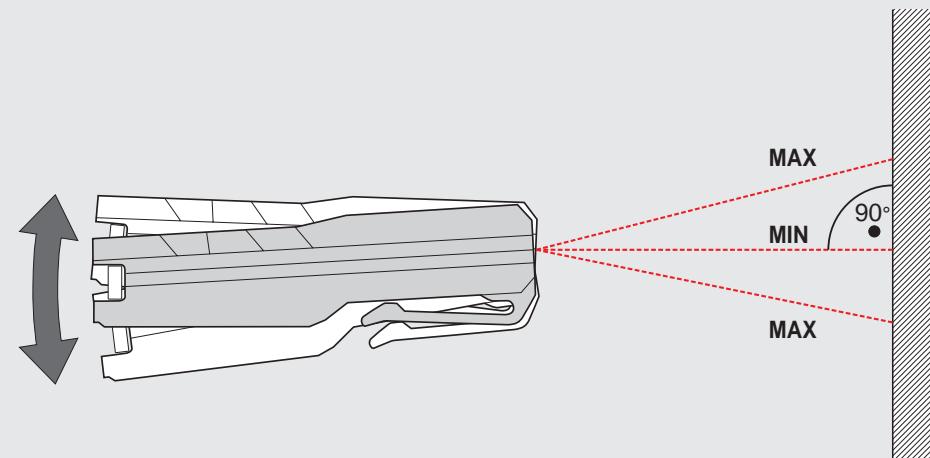
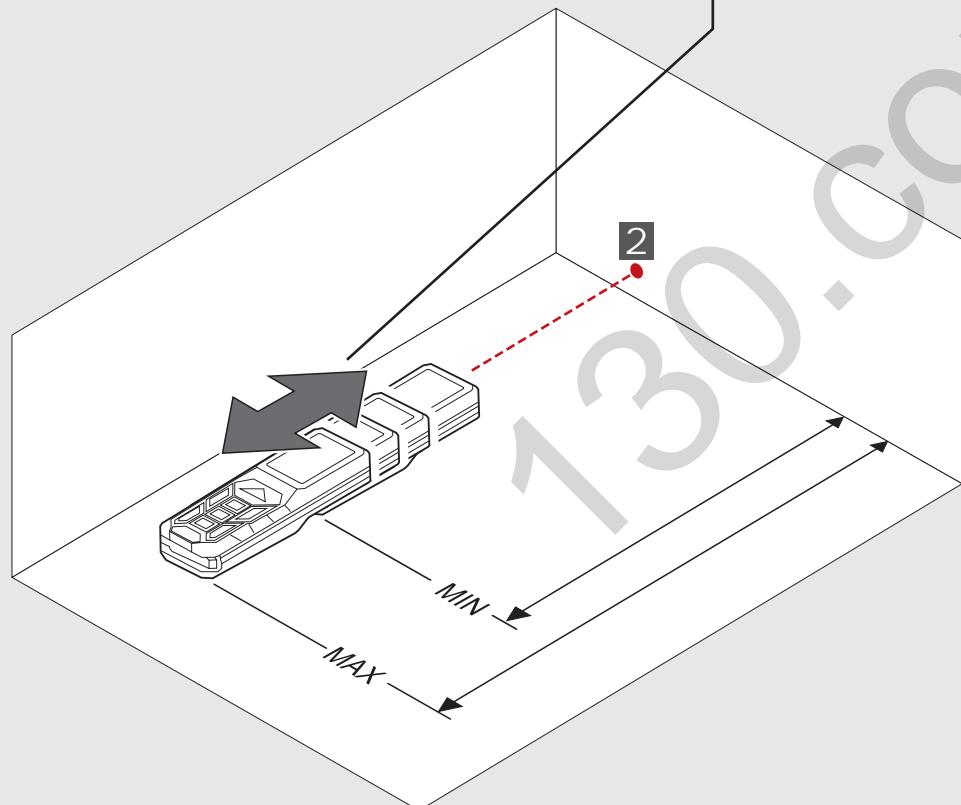
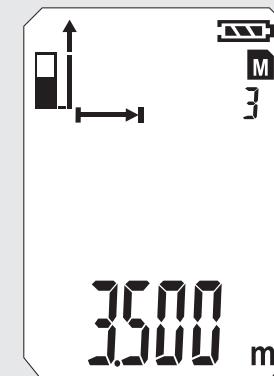
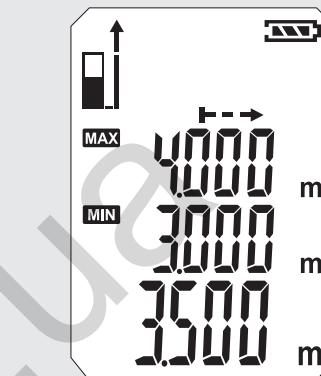
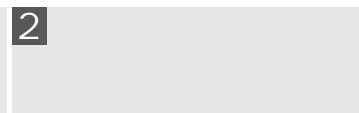
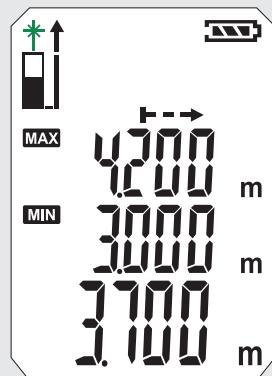
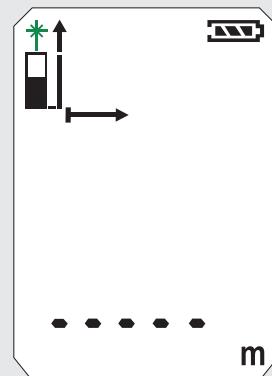


KONTINUERLIG MÄLING / MINIMUM-MAKSIMUM MÄLING

0

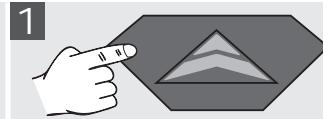


2

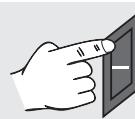


ADDISJONS- / SUBTRAKSJONSMÅLING

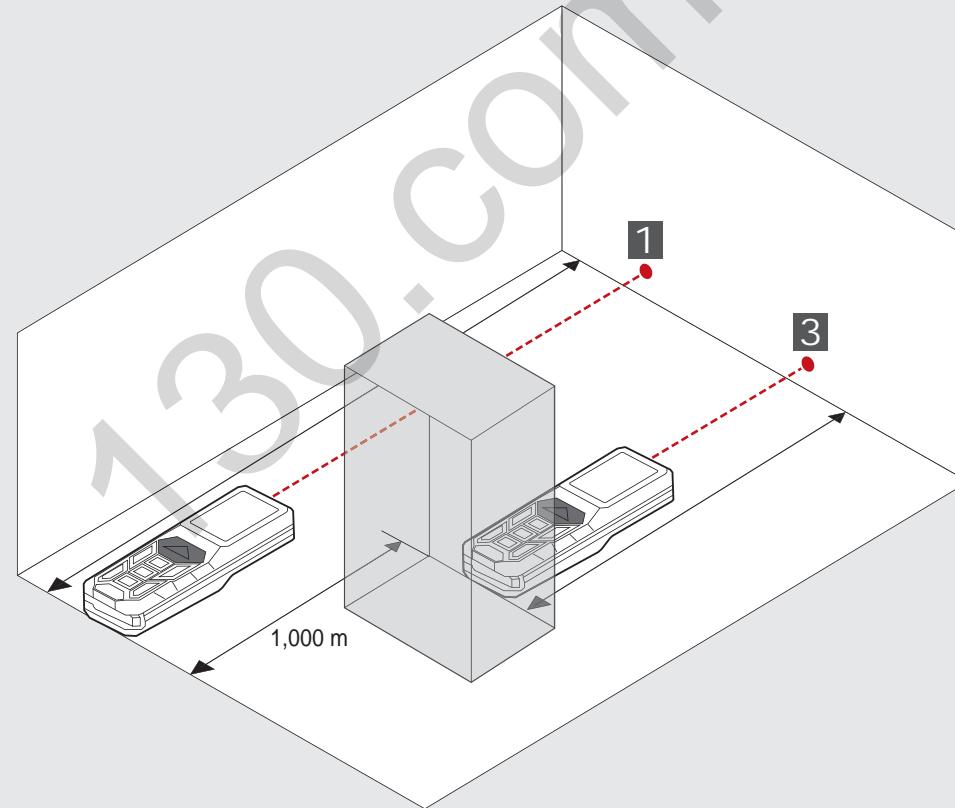
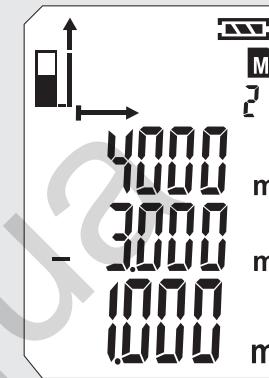
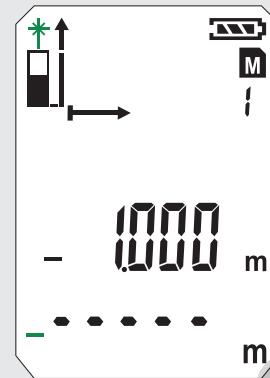
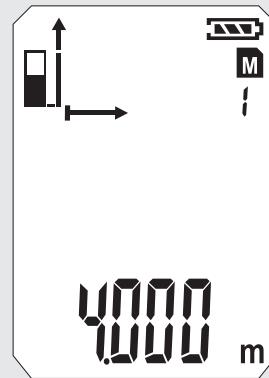
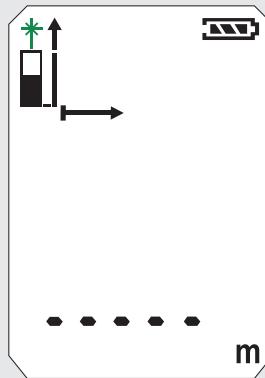
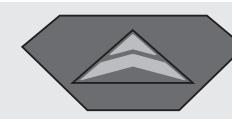
0



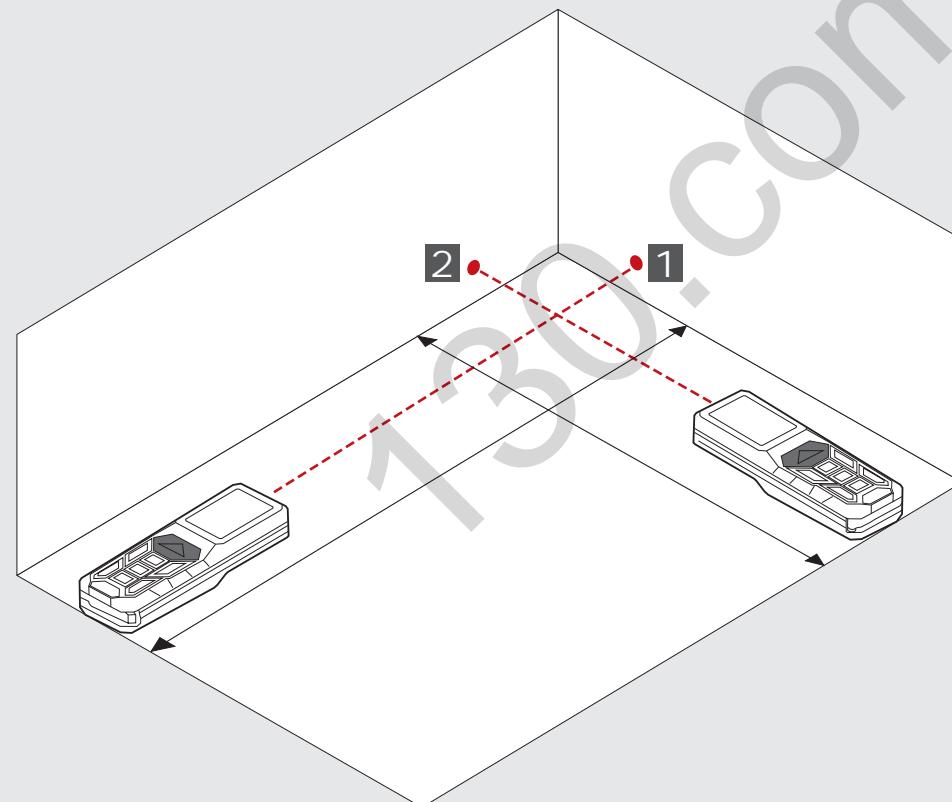
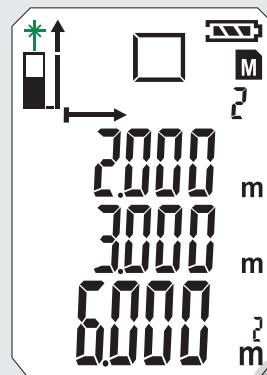
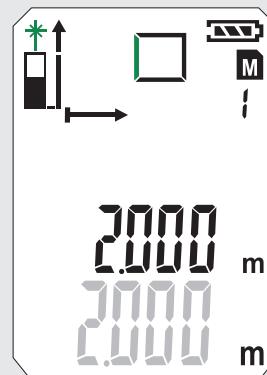
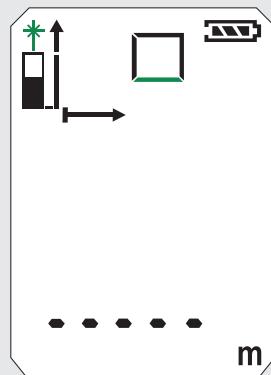
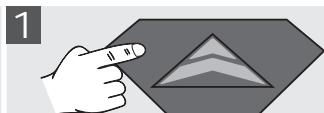
2



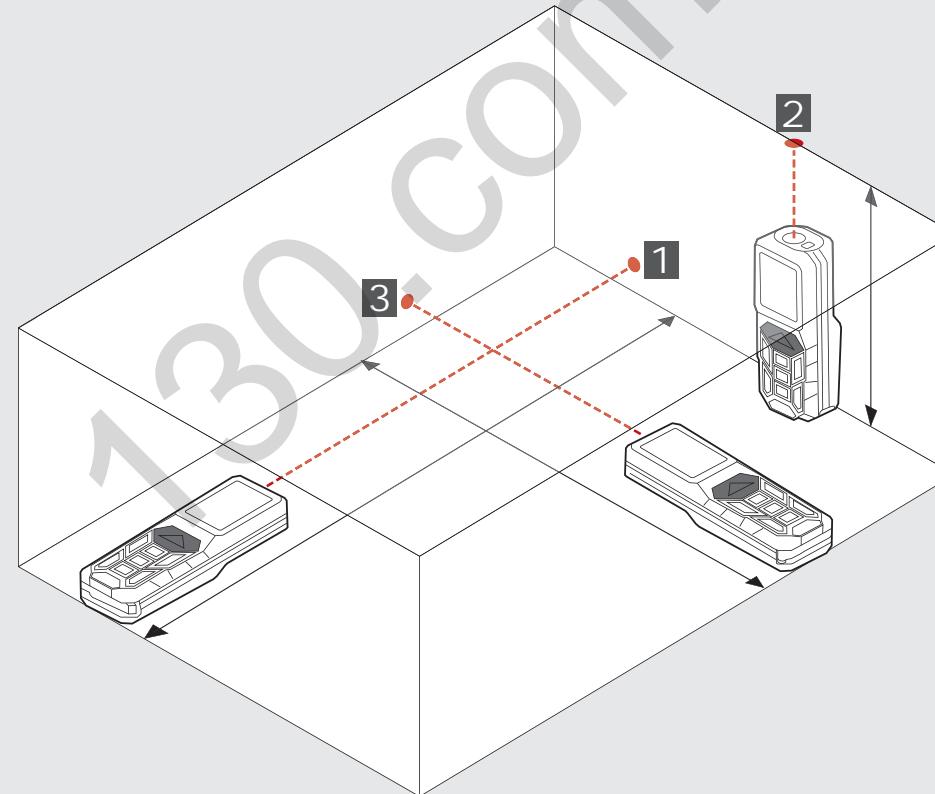
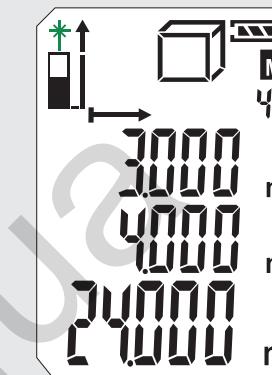
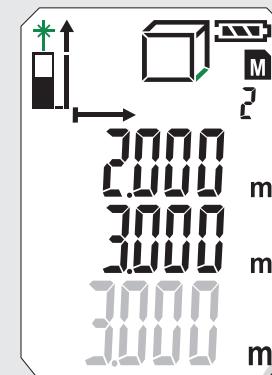
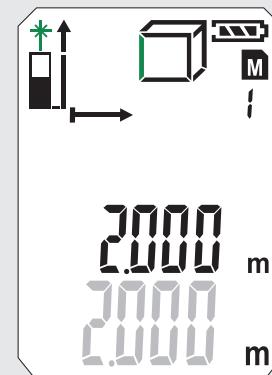
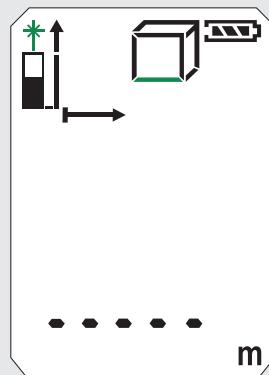
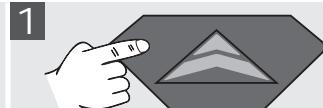
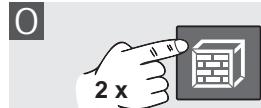
3



OVERFLATEMÅLING



VOLUMMÅLING



INDIREKTE MÄLING (PYTHAGORAS 1)

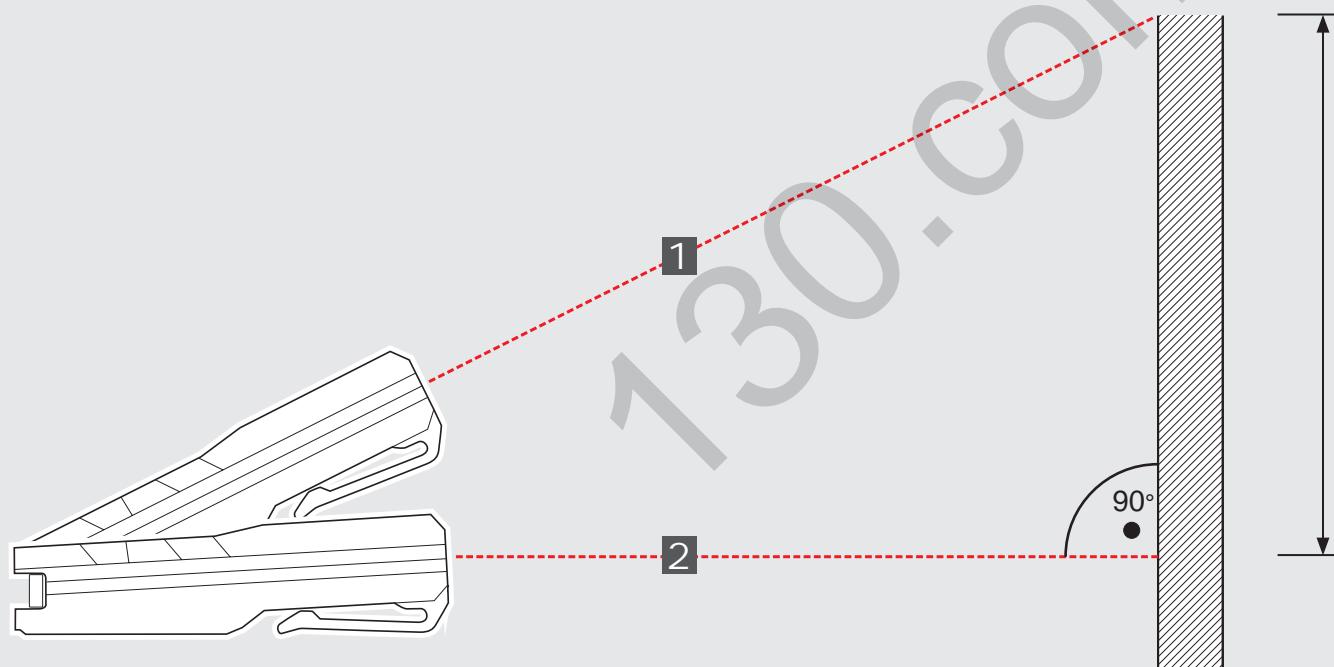
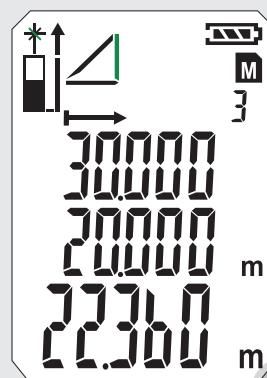
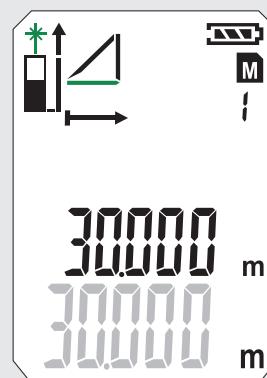
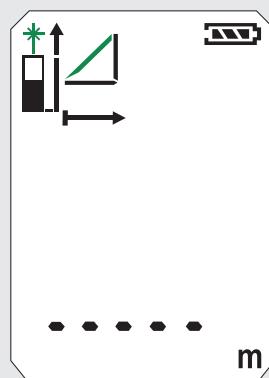
0



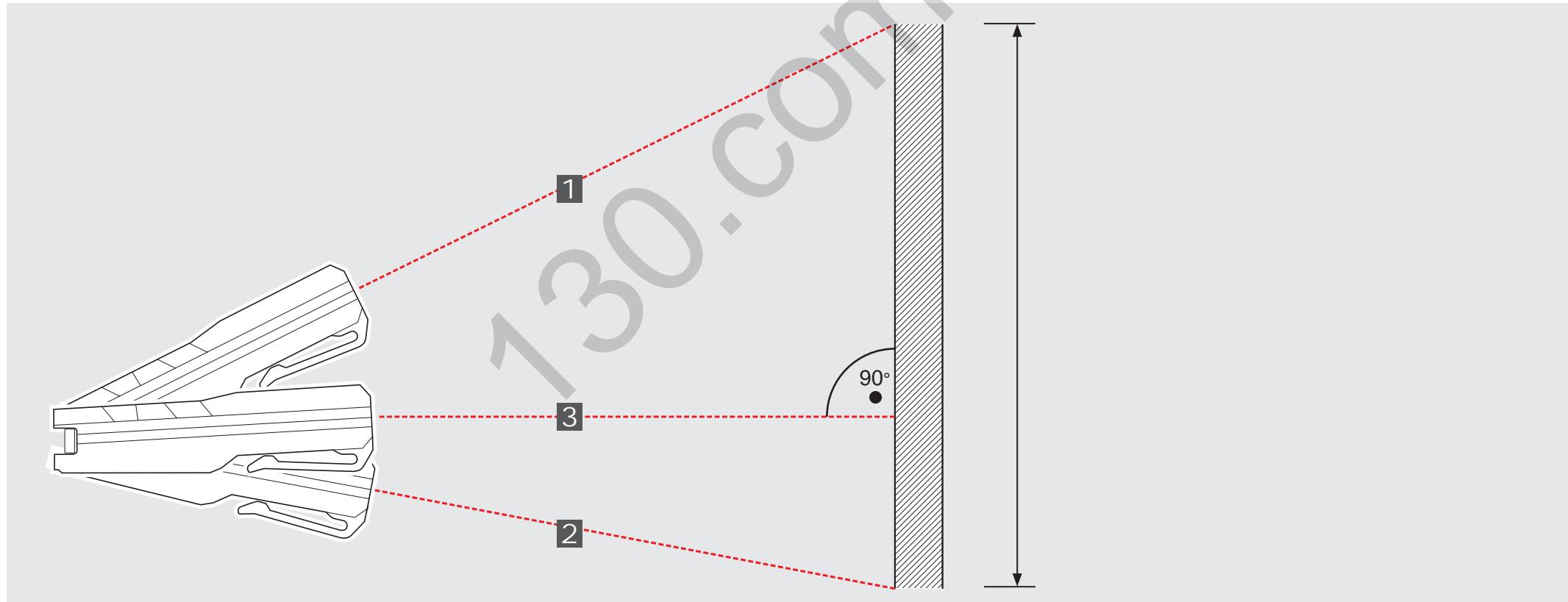
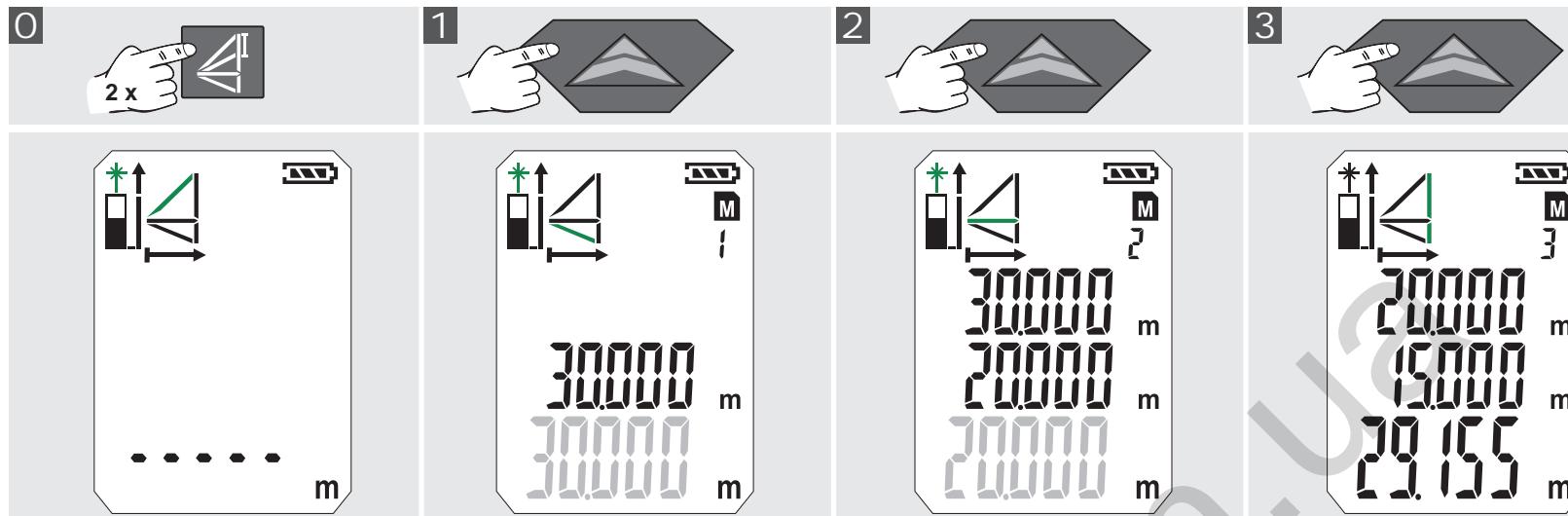
1



2



INDIREKTE MÄLING (PYTHAGORAS 2)

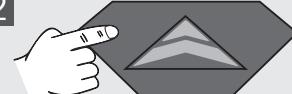


INDIREKTE MÄLING (PYTHAGORAS 3)

1



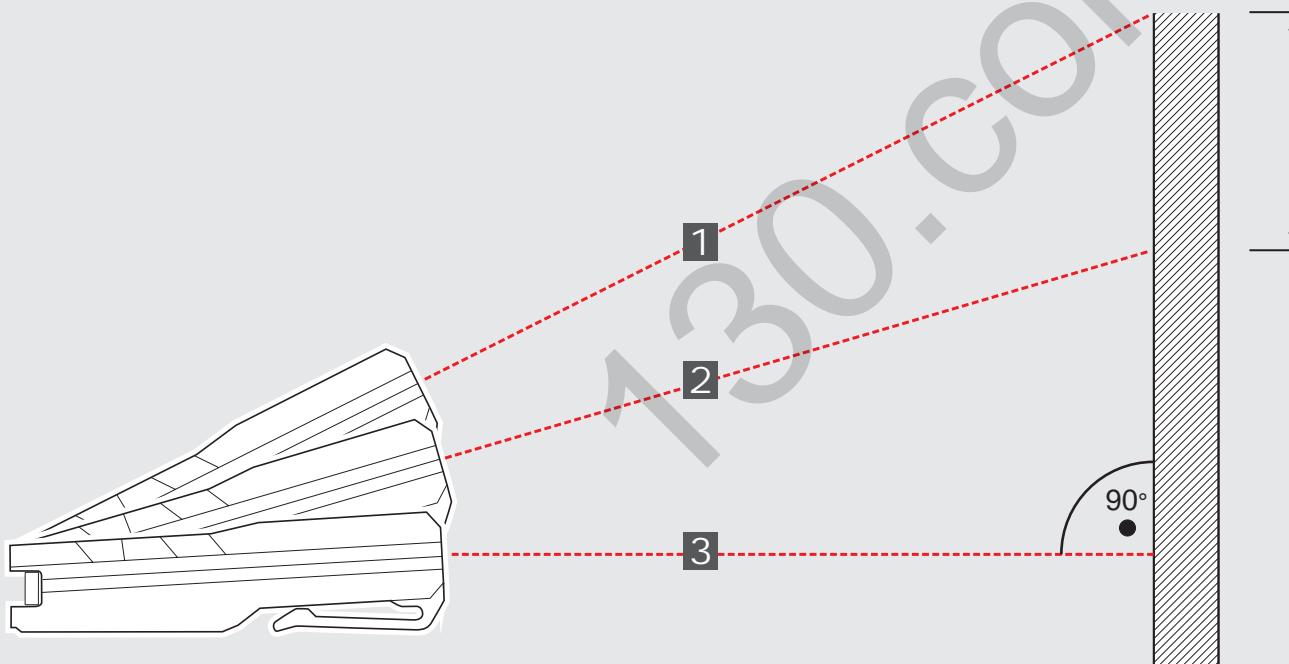
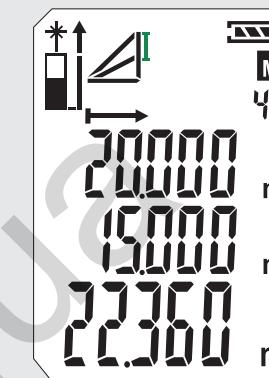
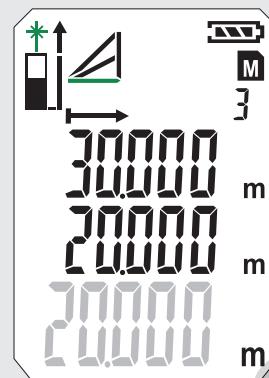
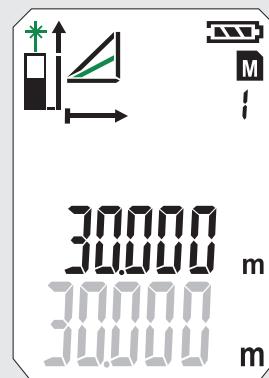
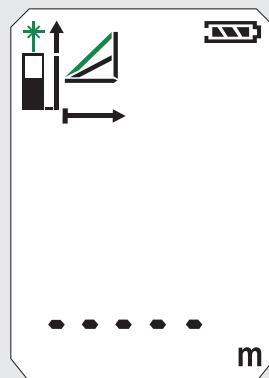
2



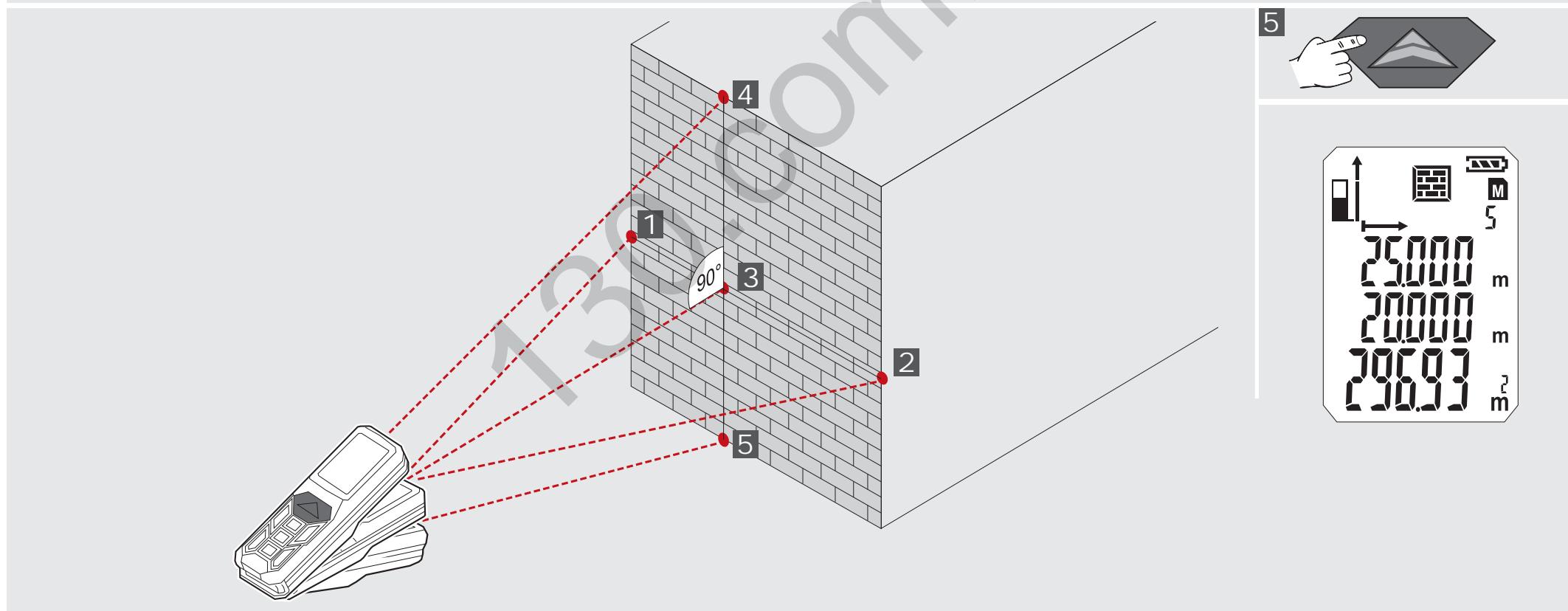
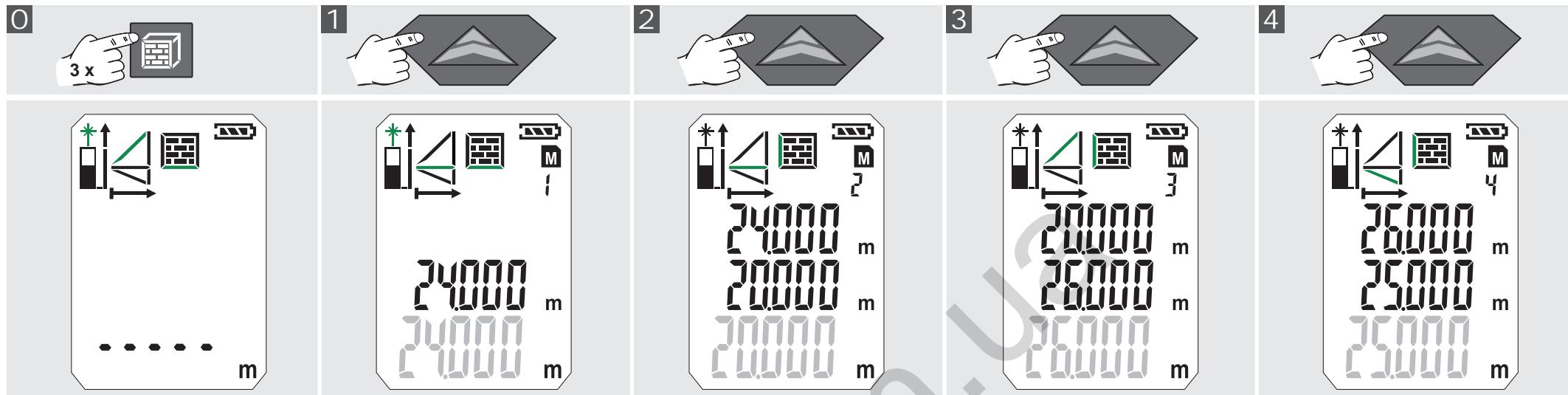
3



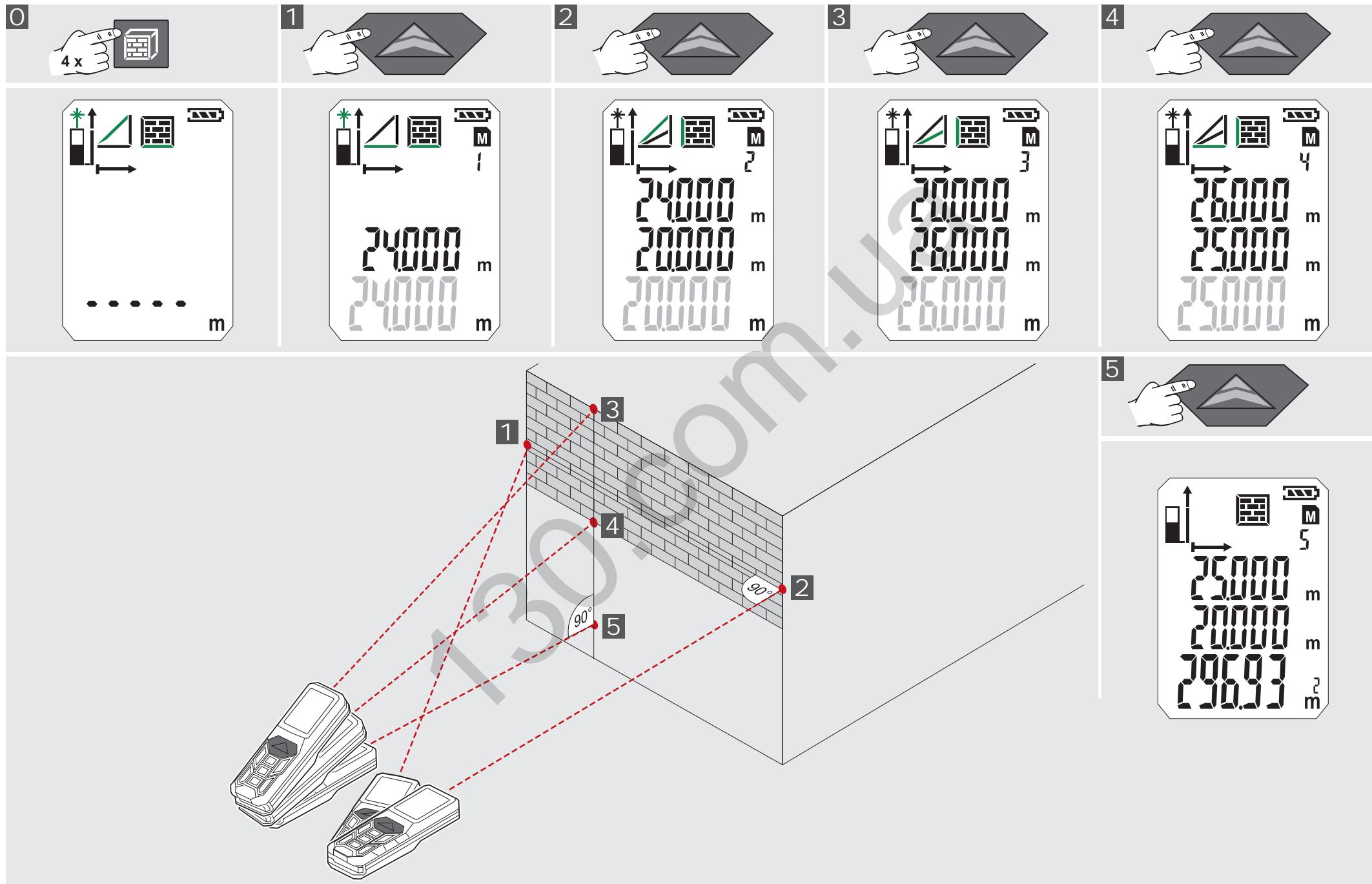
4



VEGGFLATE MÅLING (SCENARIO 1)



VEGGFLATE MÅLING (SCENARIO 2)



TIDSINNSTILLER

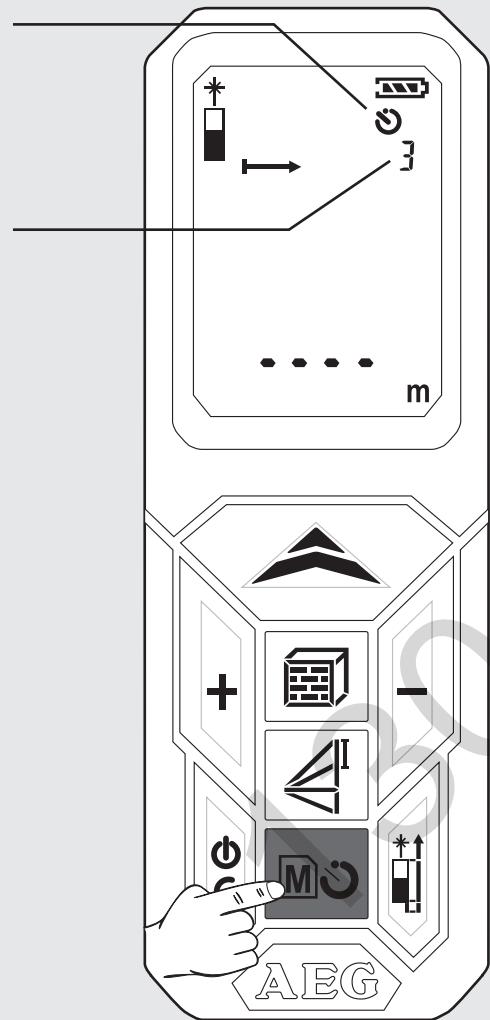
Med tidsinnstilleren kan målingen utløses forsinket, for f.eks. å posisjonere et byggeelement i målestrålen.

Trykk tast 

- Symbolet vises i displayet
- Ved å trykke tast  kan tidinnstilleren innstilles mellom 3 og 15 sekund.

Trykk tast 

- Sekundene telles ned til målingen starter.
- Ved 0 starter målingen.



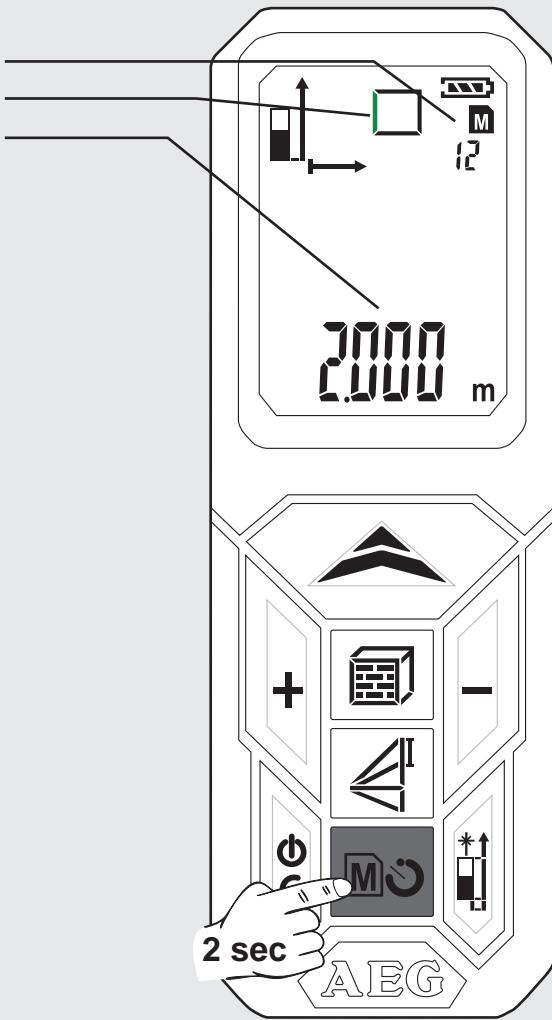
MINNE

Måleverdiene blir automatisk lagret fortløpende i minne.

De lagrede verdiene kan hentes fram ved å trykke tast .

Trykk tast  i 2 sekund

- Symbol og minneplass vises.
- Tilhørig målestørrelse blir vist.
- Lagret verdi blir vist i hovedlinjen.
- Naviger med +/- tasten



GRUNNLEGGENDE BRUKSBESKRIVELSE AV EKSEMPEL TIL EN OVERFLATEMÅLING (1)

1 Slå på

Trykk tast .
OBS! Laserstrålen er slått på!
 Ikke rett den mot personer!

- Lasersymbol blinker
 (blinking blir vist i grønt).

2 Velg måle nivå

Standardinnstilling etter påslåing:
 bak
 trykk 1x -> Hjørnestift
 trykk 2x -> foran
 trykk 3x -> bak

- Symbol blir vist i displayet

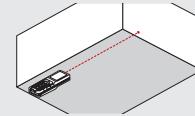
3 Velg funksjon

Når apparatet slås på, står det alltid på lengdemåling.
 trykk 1x - Overflatemåling

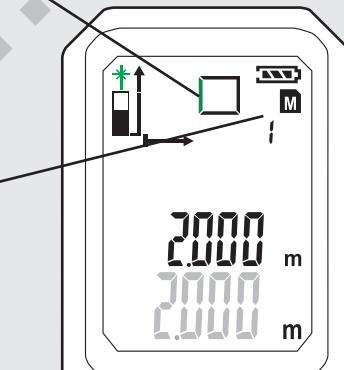
- Symbol vises
 Målestørrelsen blinker
 (blinking blir vist i grønt)

4 Lengde måling

Innstill apparatet
 og trykk
 tast 

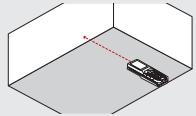


- Måleverdien vises kort i hovedlinjen.
 - Måleverdien hopper etter 1 sekund i linjen over.
 Måleverdien lagres i minne etter fortløpende nummer.
 Målestørrelse nummer to blinker
 Apparatet er klart for måling av verdi nummer to.

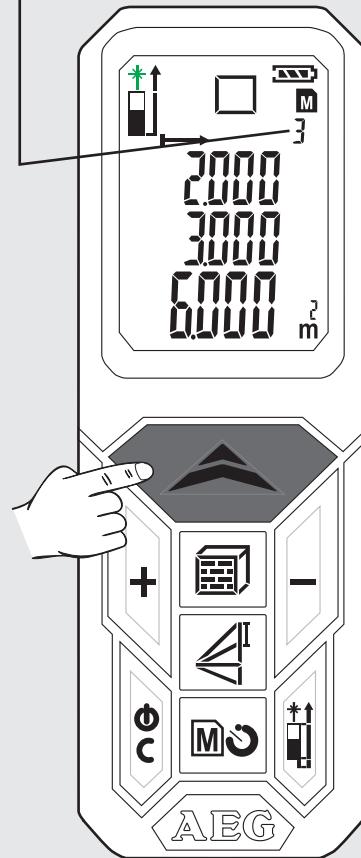
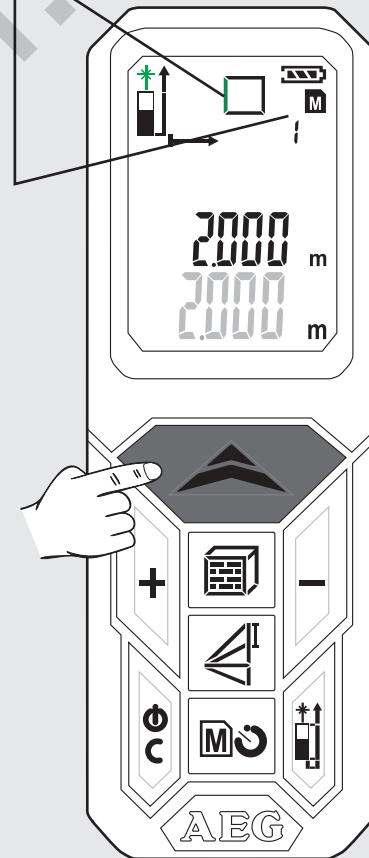
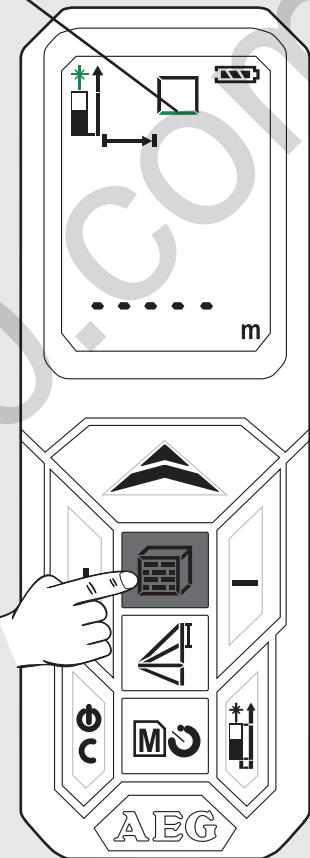
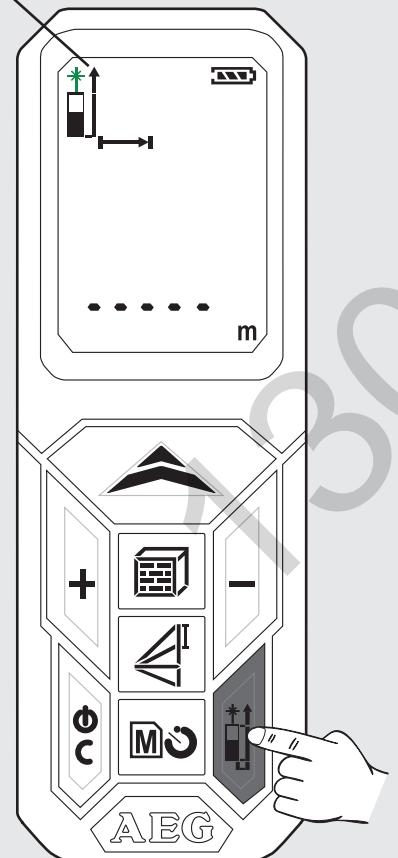
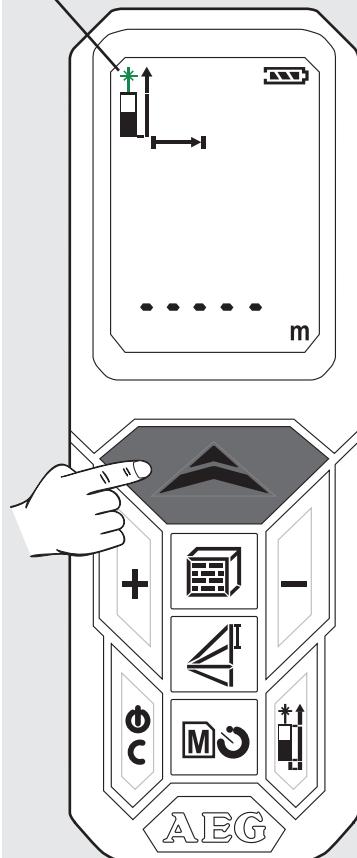
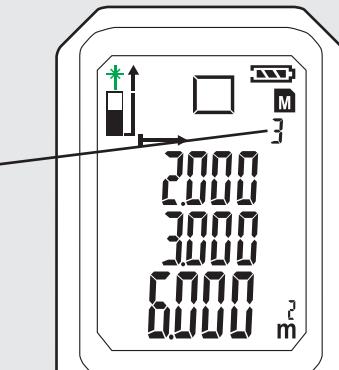


5 Måle bredde

Innstill apparatet
 og trykk 



- Måleverdien vises kort i hovedlinjen.
 - Måleverdien hopper etter 1 sekund i linjen over.
 Måleverdien lagres i minne etter fortløpende nummer.
 - Resultat blir vist i hovedlinjen og lagres i minne etter fortløpende nummer.



GRUNNLEGGENDE BRUKSBEKRIVELSE AV EKSEMPEL TIL EN OVERFLATEMÅLING (2)

6 Hente fram lagret verdi

Trykk tast  i 2 sekund.

Trykk tast + eller -

- Lagrede verdier blir vist i hovedlinjen.

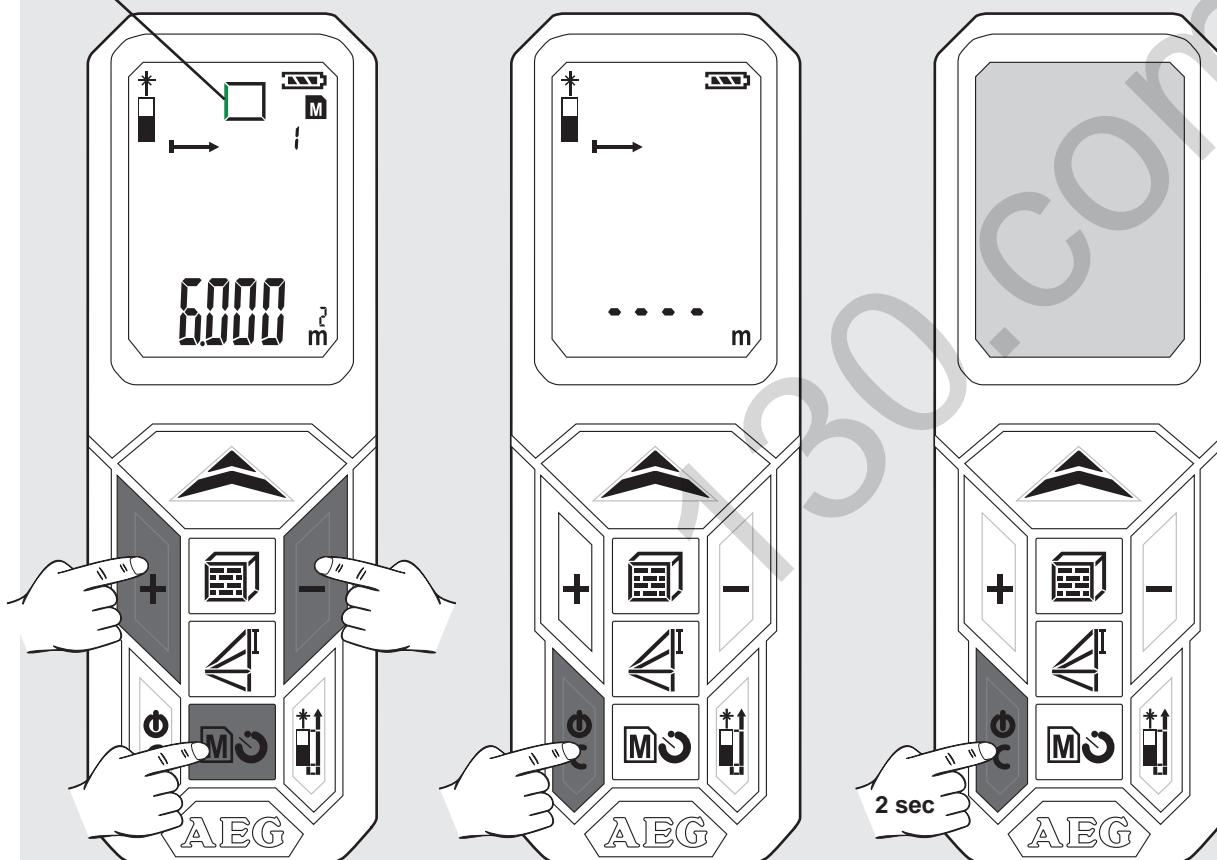
- Det symbol som hører til blir vist og målestørrelsen blinker (blinking blir vist i grønt).

7 Forlat minne

Trykk tast 

8 Slå av

Trykk tast  i 2 sekund
(Minne må forlates først).



TEKNISKA DATA

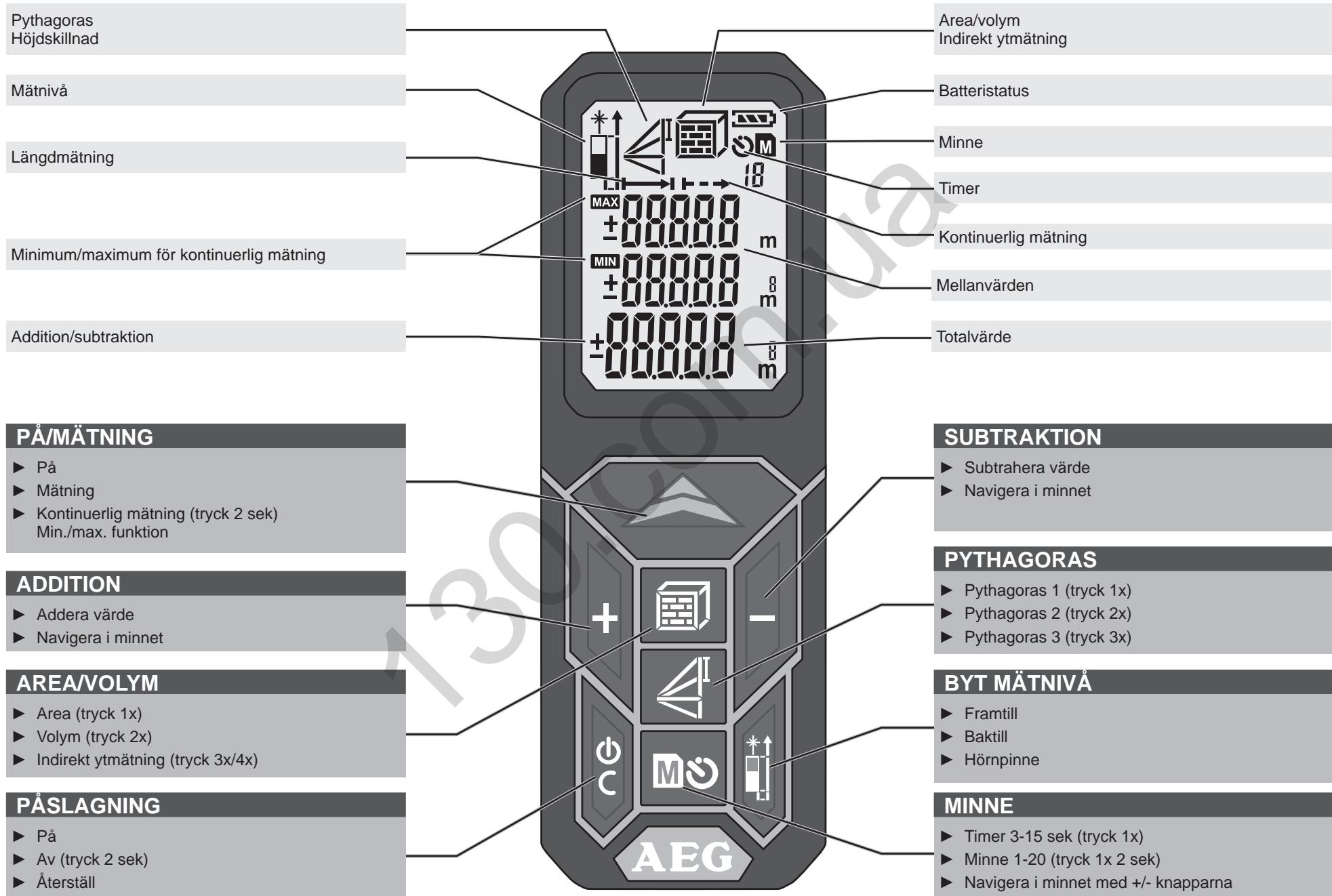
Skyddsklass	IP54 (damm- och stänkvattenskydd)
Optik	14 mm
Brännpunkt	35 mm
Mätområde max.	50 Meter (tolerans: 55 m)
Mätområde min.	0,05 meter
Absolut noggrannhet @ < 10m	± 1,5 mm (max)
Repeter noggrannhet @ < 10m	± 1,5 mm (typisk max. 2σ)
Repeter noggrannhet @ > 10m	Stigning ± 0,25 mm / meter (typisk max. 2σ)
Mättid	0,5 s
Displaytyp	LCD (22,7 mm x 31 mm)
Strömförsörjning	AAA 2x (alkali-batteri)
Batteriets livstid	10000 (enskild mätning)
Laser uteffekt	0,6 mW ~ 0,95 mW (Klass 2, 650nm)
Laserpunktstorlek	25 x 30 mm @ 16 m (max)
Laserstråle vertikalvinkel	+1 grad
Laserstråle horisontalvinkel	±1 grad
Automatisk apparatavstångning	180 sekunder
Automatisk laseravstångning	30 sekunder
Arbetstemperaturområde	-10°C till +50°C
Lagertemperaturområde	-25°C till +70°C
Vikt utan batteri	80 g

TABELL MED FELKODER

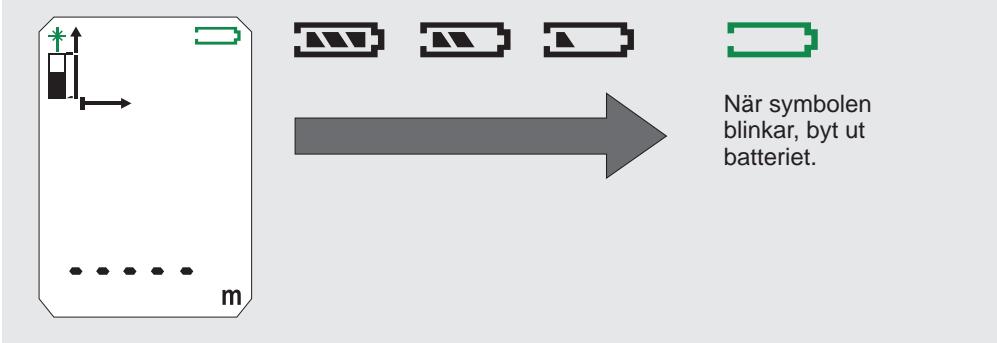
Kod	Beskrivning	Lösning
Err01	Utanför mätområdet	Utför mätningen inom det avsedda området.
Err02	Reflekterad signal är för svag	Välj en bättre yta.
Err03	Utanför visningsområdet (max. värde: 99.999) t.ex. ligger resultatet av arean eller volymen utanför visningsområdet	Kontrollera om värdena och stegen är korrekt.
Err04	Fel i Pythagorasberäkningen	Kontrollera om värdena och stegen är korrekt.
Err05	Batteri svagt	Sätt i nya batterier.
Err06	Utanför arbetstemperaturområdet	Utför mätningen inom det angivna arbetstemperaturområdet.
Err07	För ljus omgivningsljus	Fördunkla delområde

ANVÄND MASKINEN ENLIGT ANVISNINGARNA

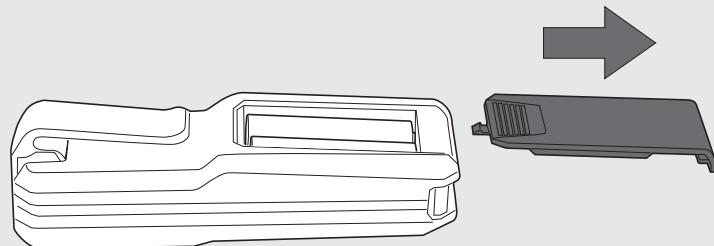
Lasermätnstrumentet är avsett att användas för mätning av avstånd och lutningar.
Maskinen får endast användas för angiven tillämpning.



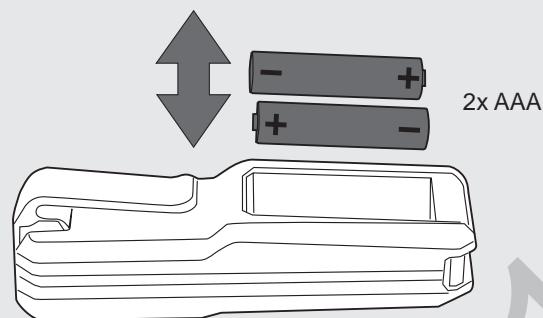
BYTE AV BATTERI



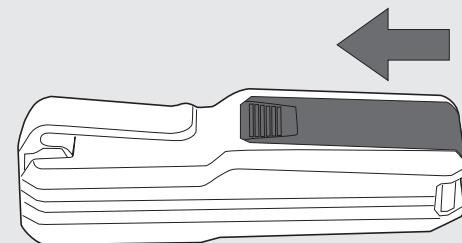
1



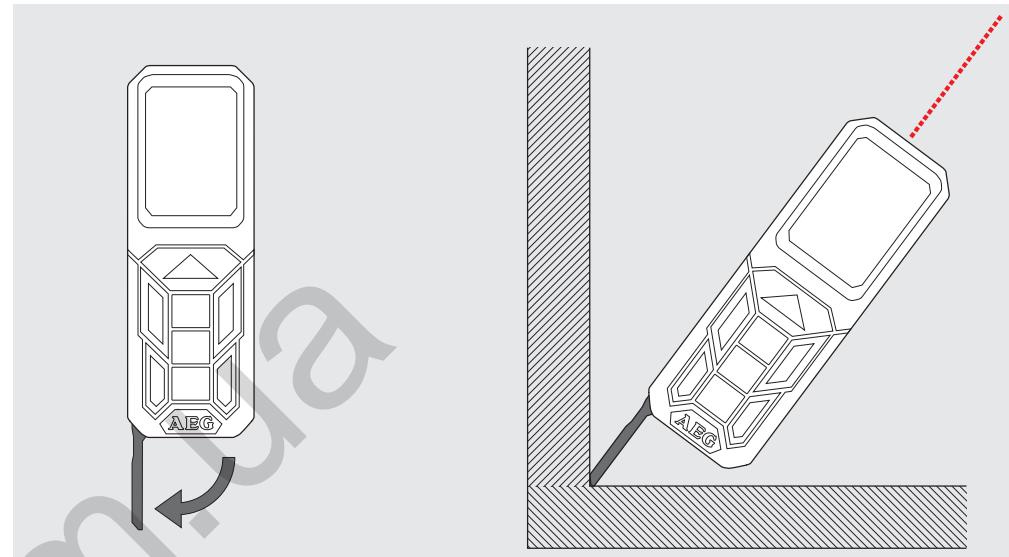
2



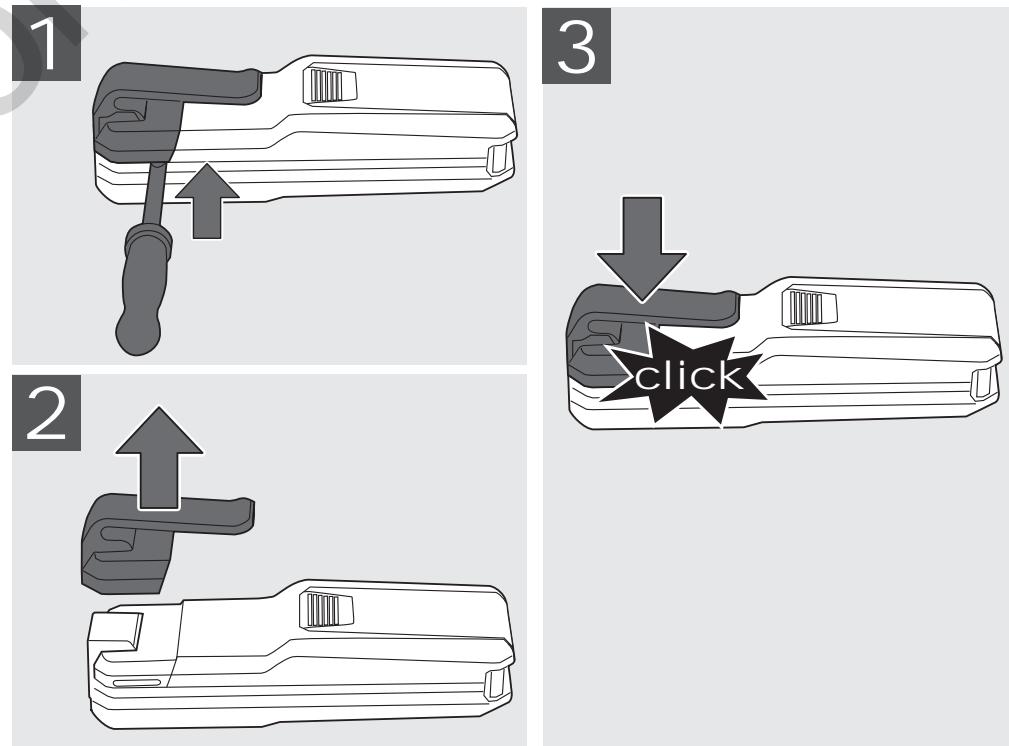
3



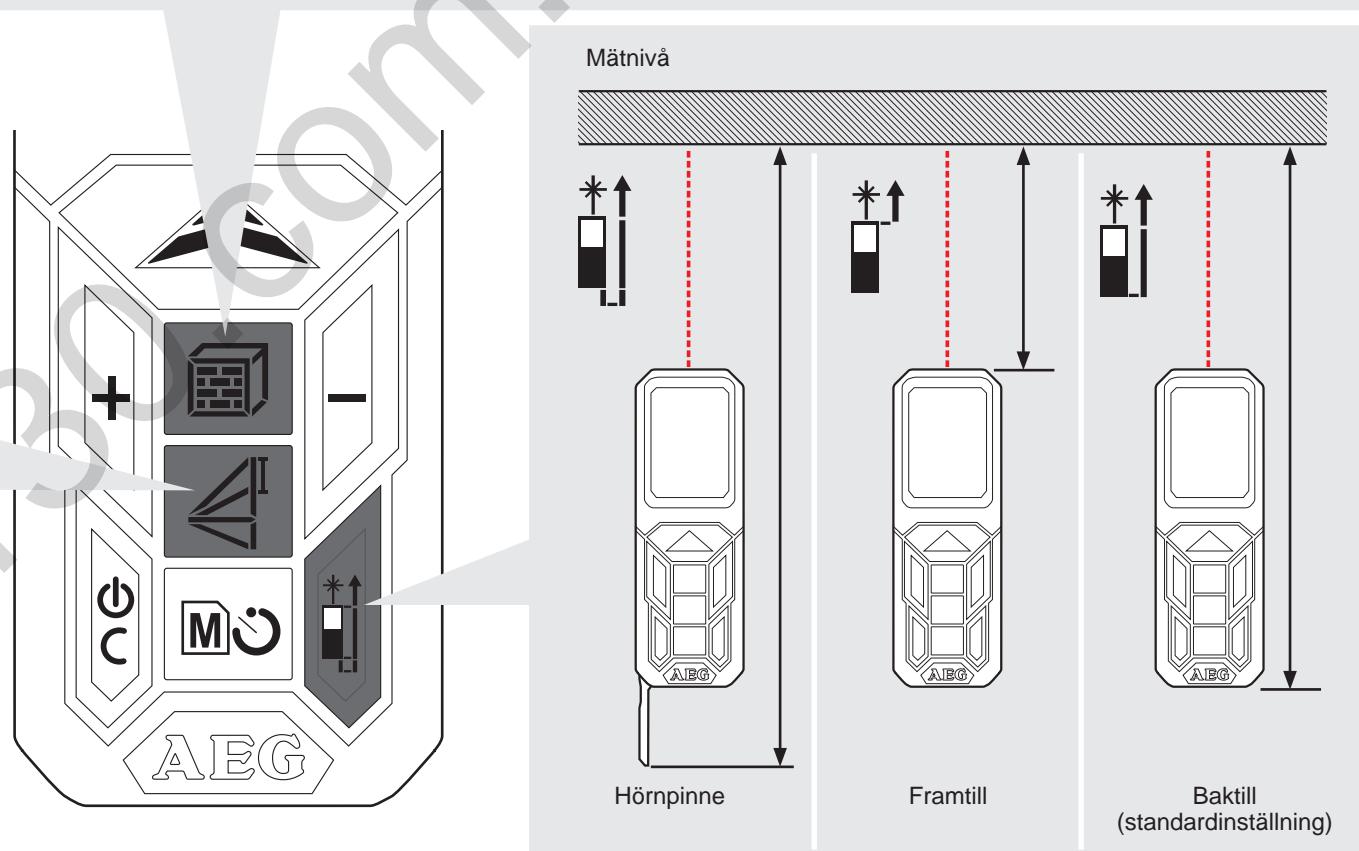
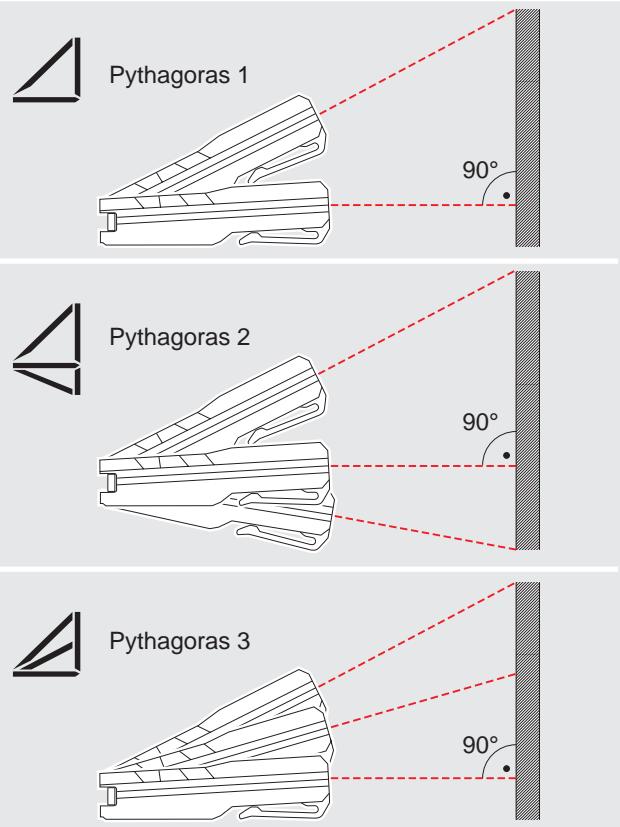
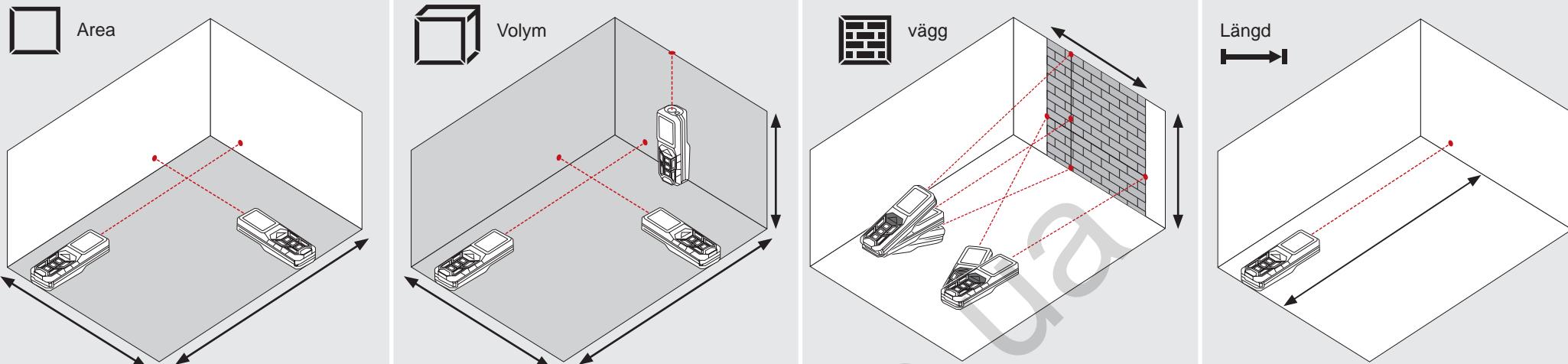
HÖRNPINNE



BÄLTESHÅLLARE

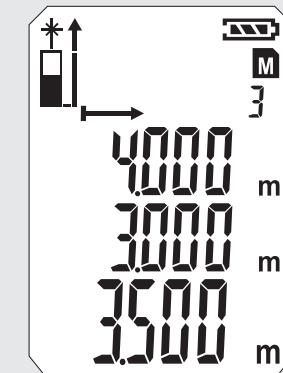
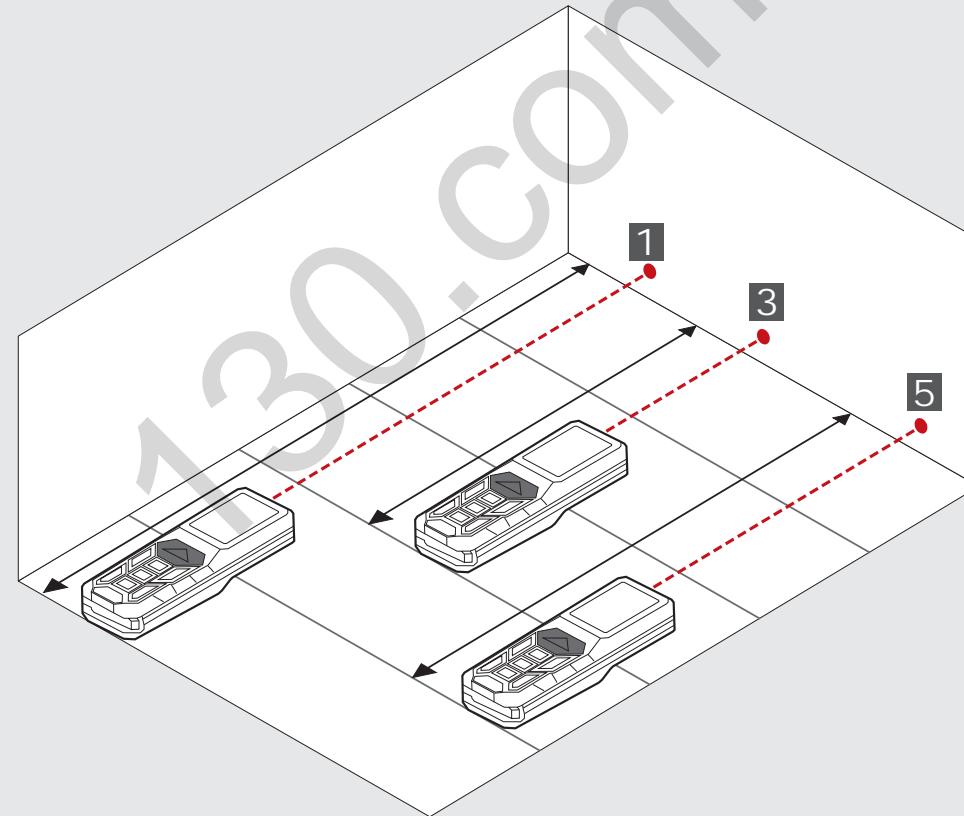
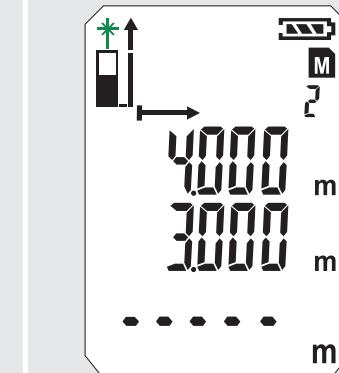
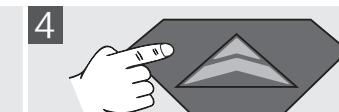
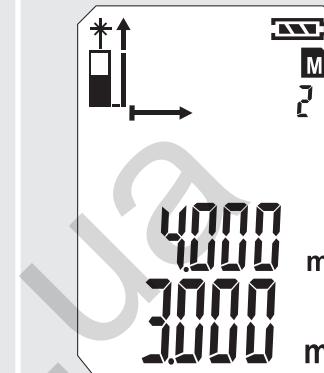
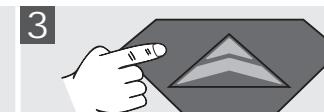
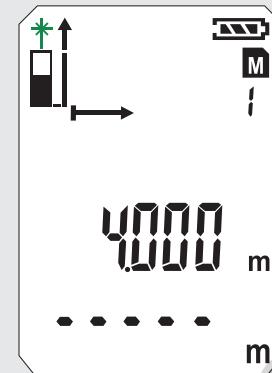
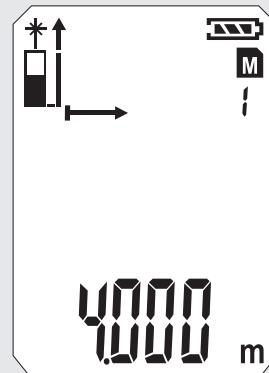
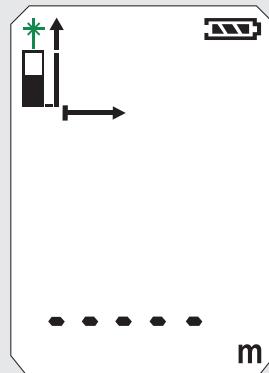


FUNKTIONSKNAPP, PYTHAGORAS, MÄTNIVÅ



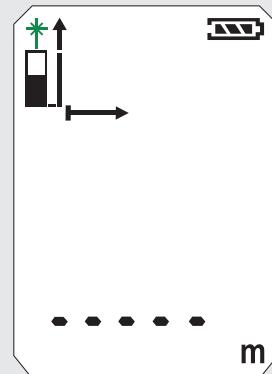
ENKEL LÄNGDMÄTNING

0

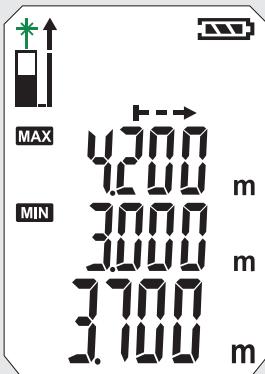


KONTINUERLIG MÄTNING/MINIMUM-MAXIMUM MÄTNING

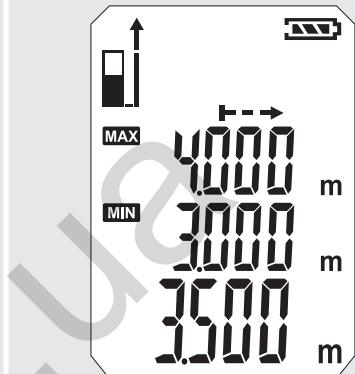
0



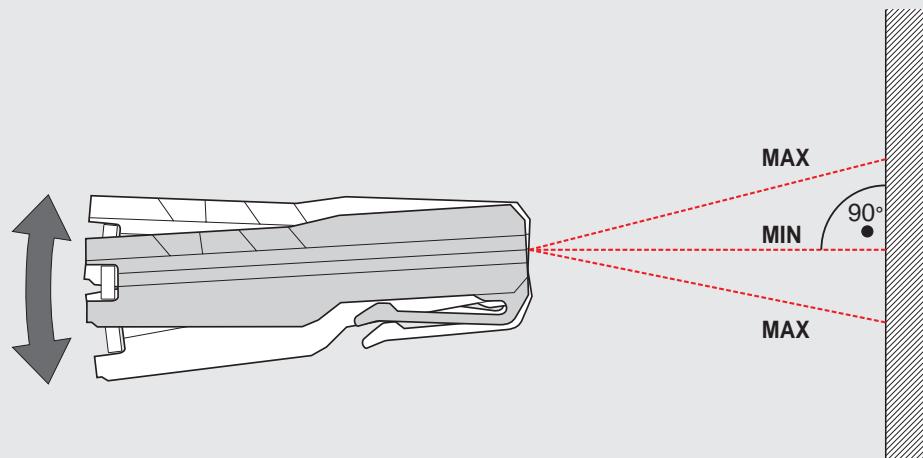
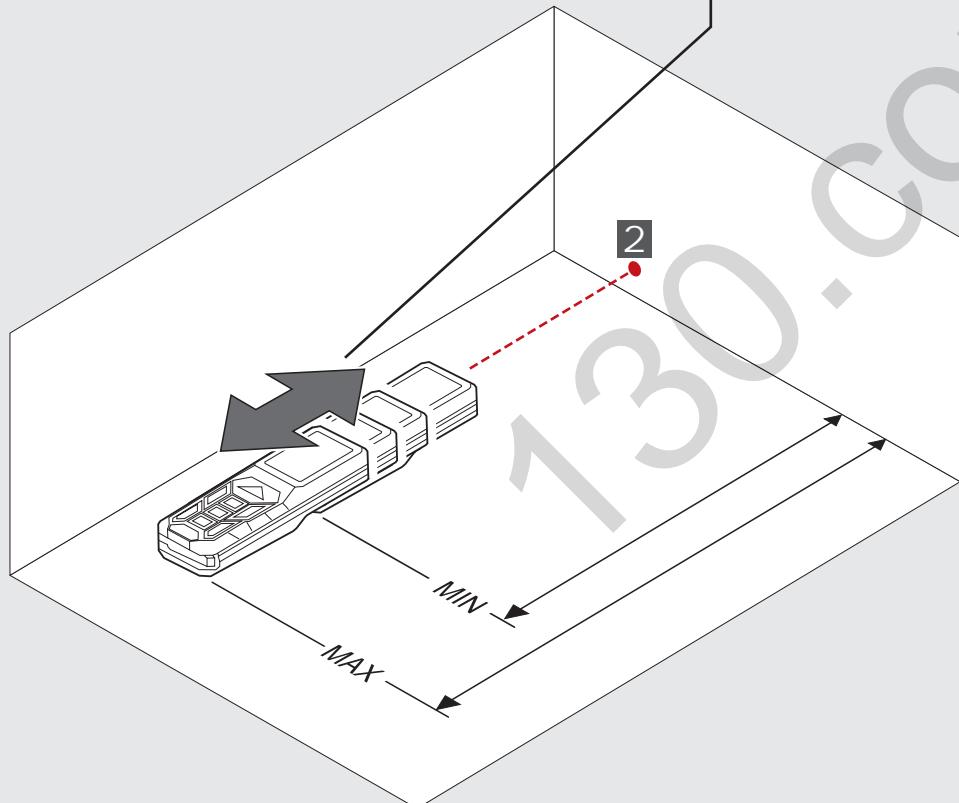
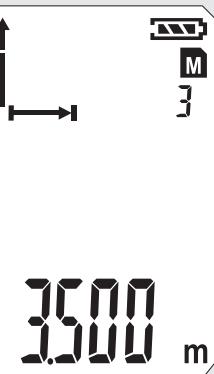
2



3

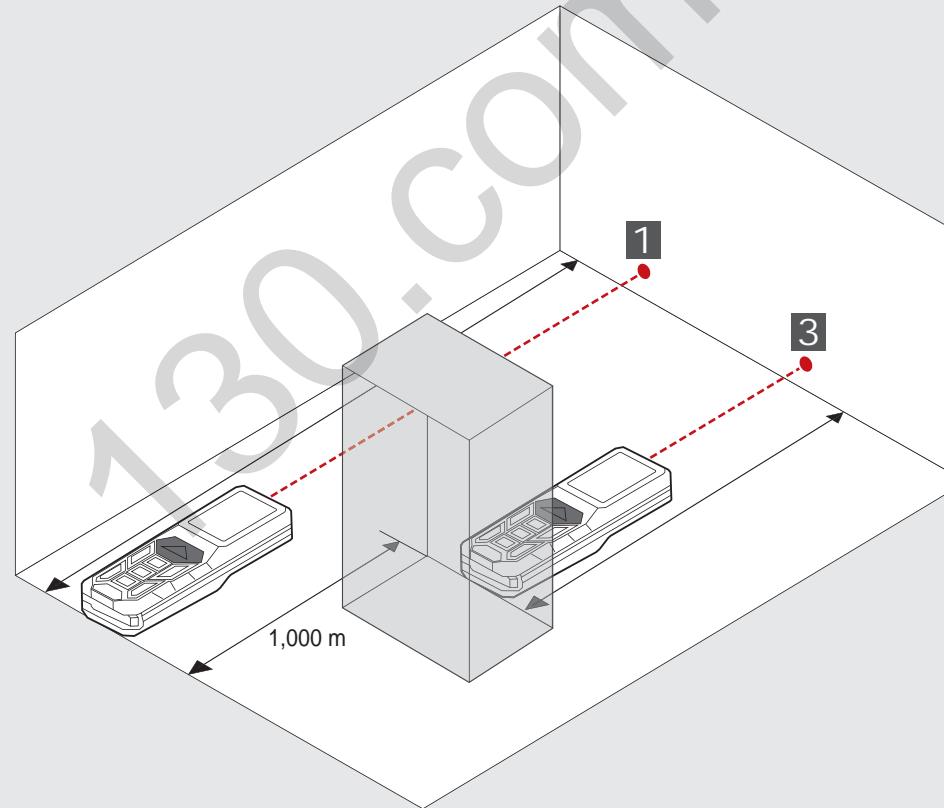
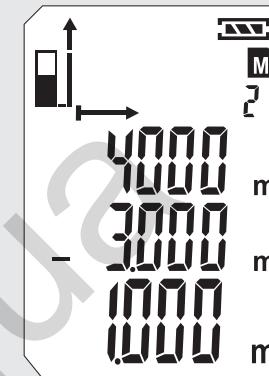
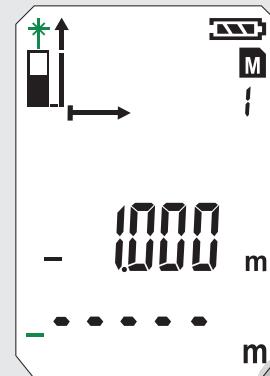
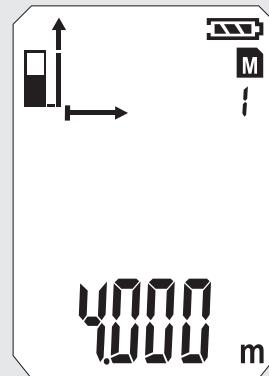
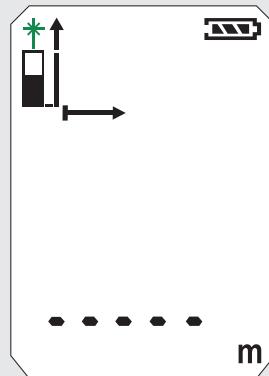
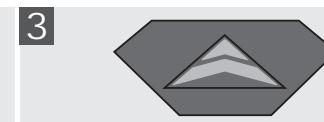
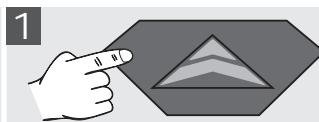


4

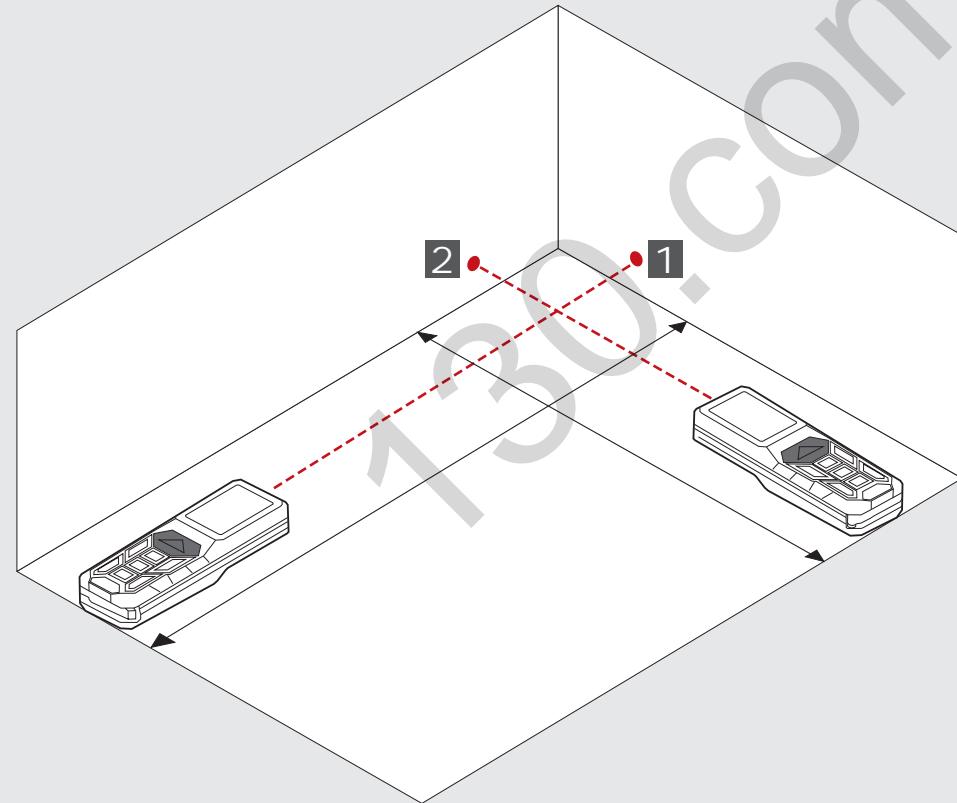
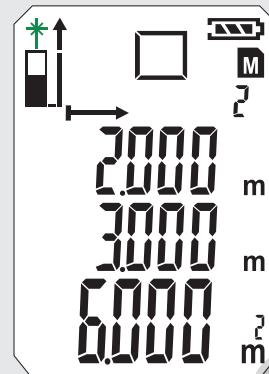
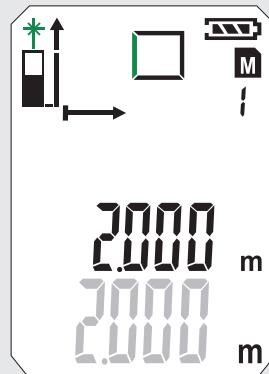
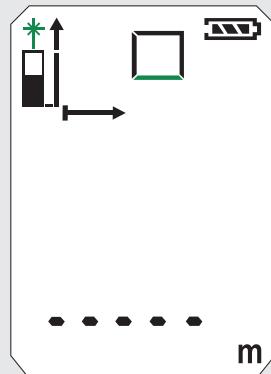
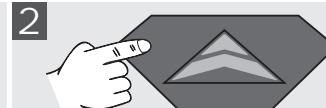


ADDITIONS- / SUBTRAKTIONSMESSUNG

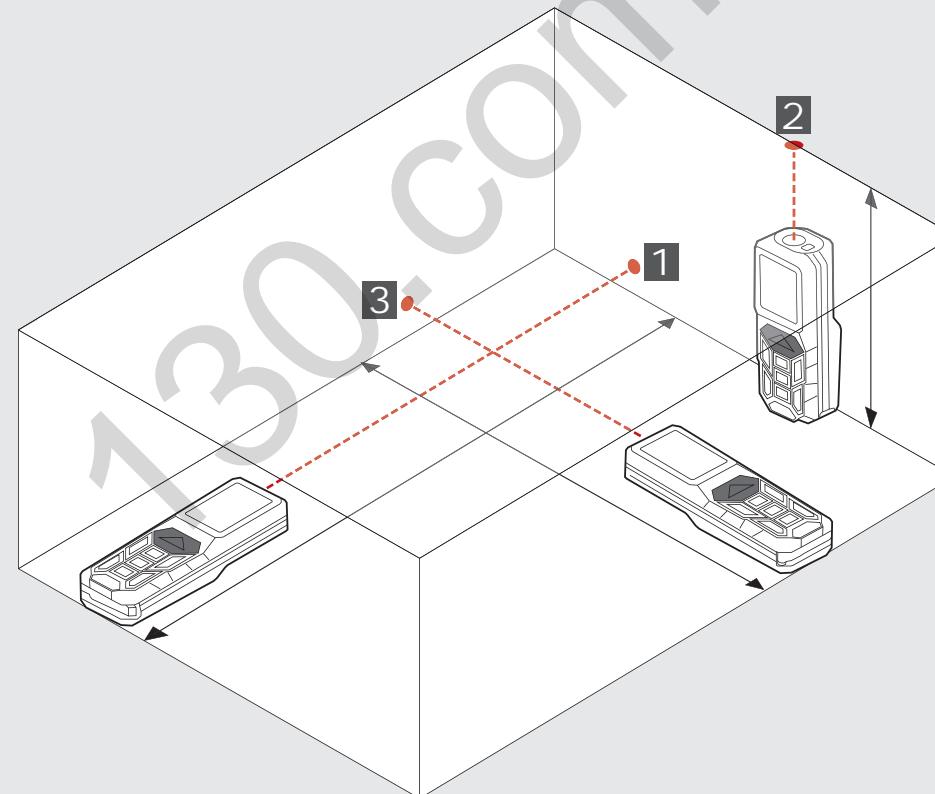
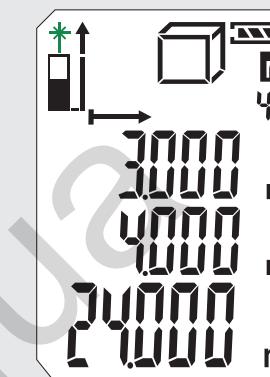
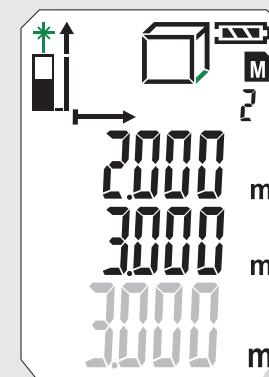
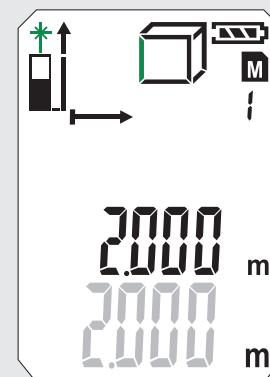
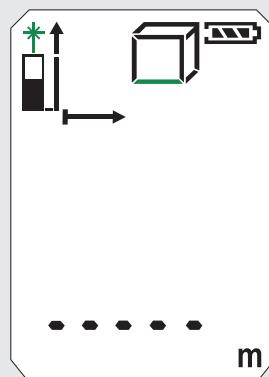
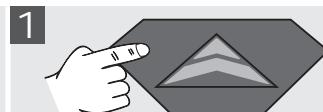
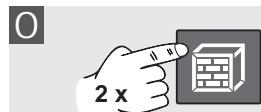
0



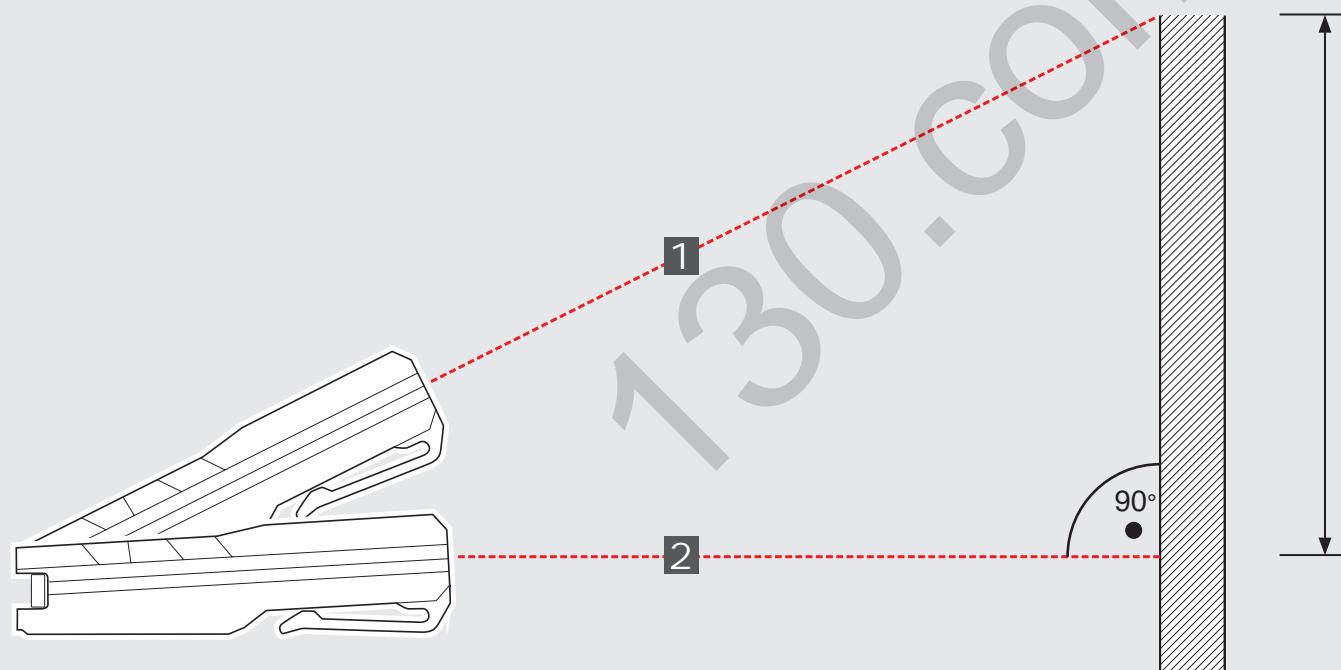
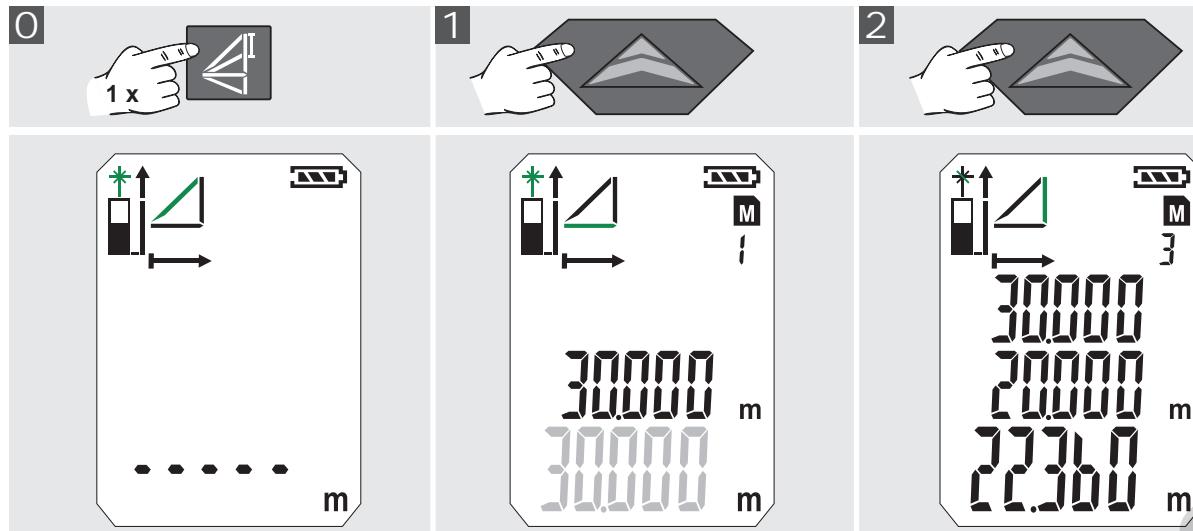
AREAMÄTNING



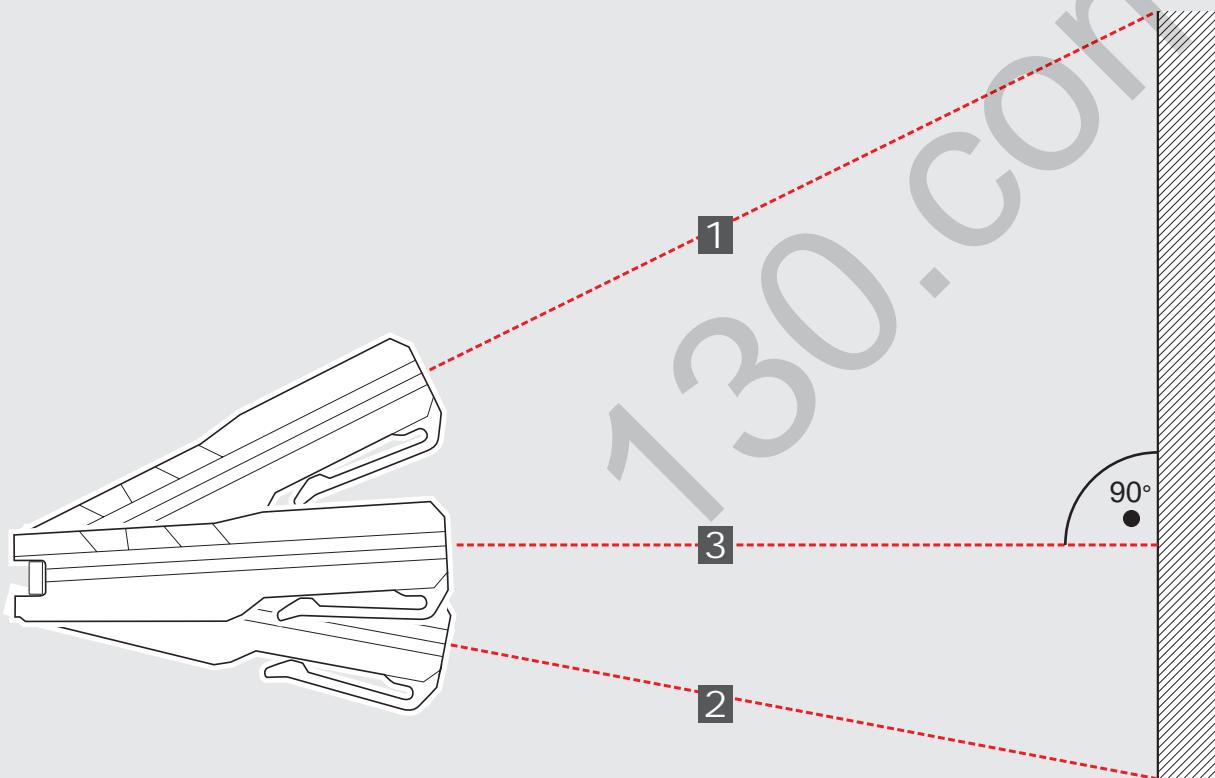
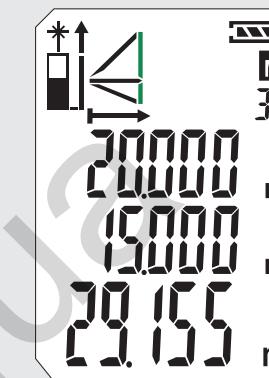
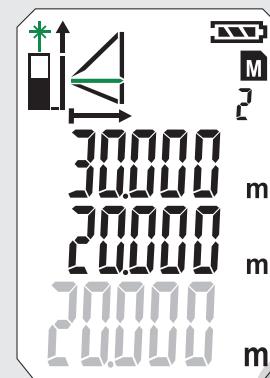
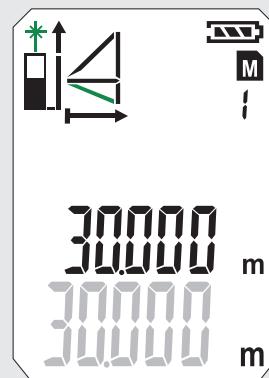
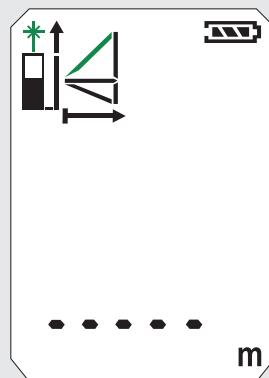
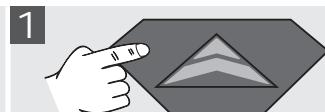
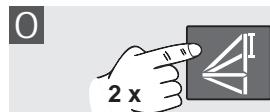
VOLYMMÄTNING



INDIREKT MÄTNING (PYTHAGORAS 1)



INDIREKT MÄTNING (PYTHAGORAS 2)

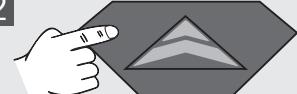


INDIREKT MÄTNING (PYTHAGORAS 3)

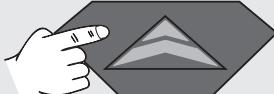
1



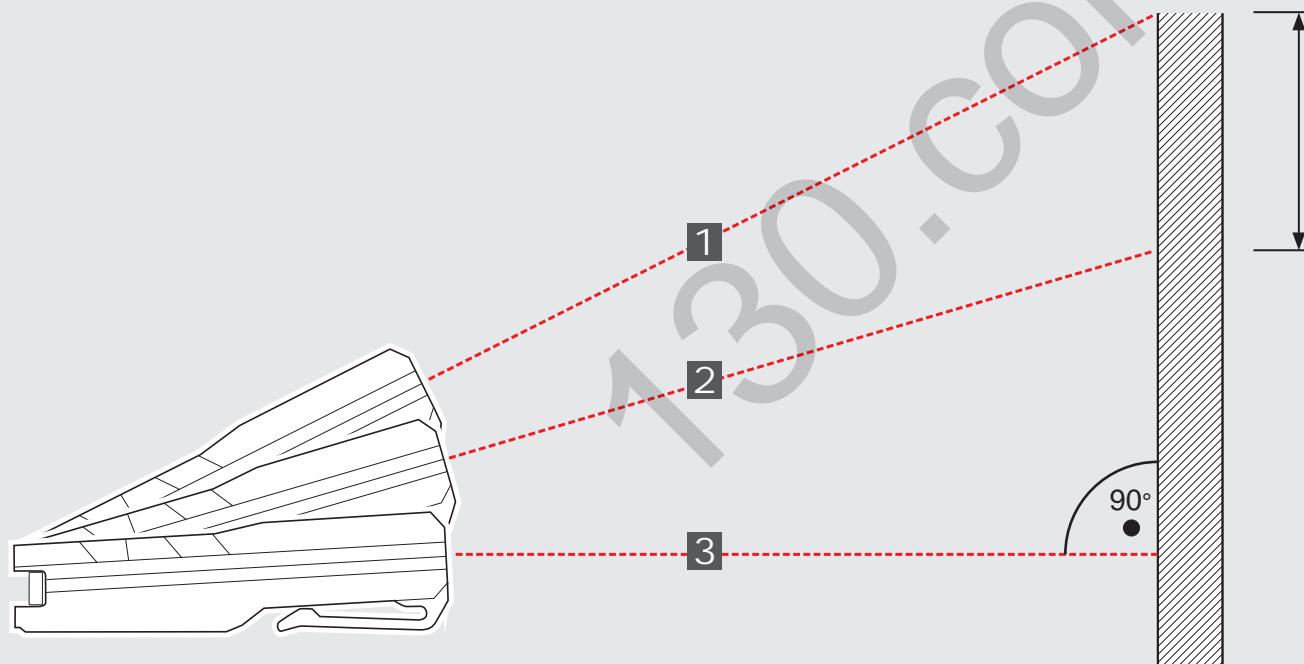
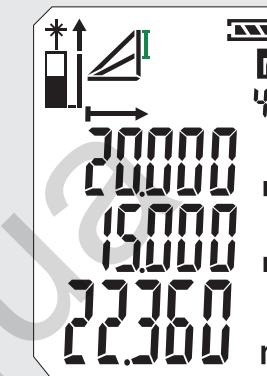
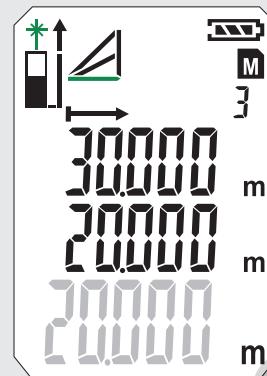
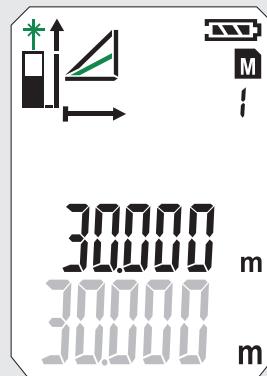
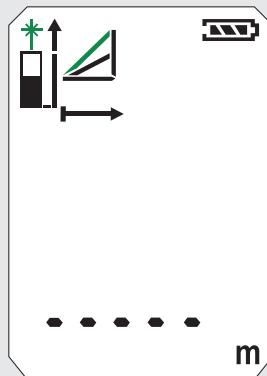
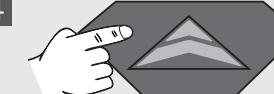
2



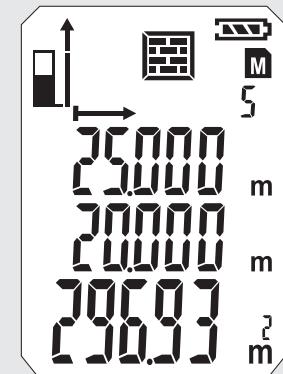
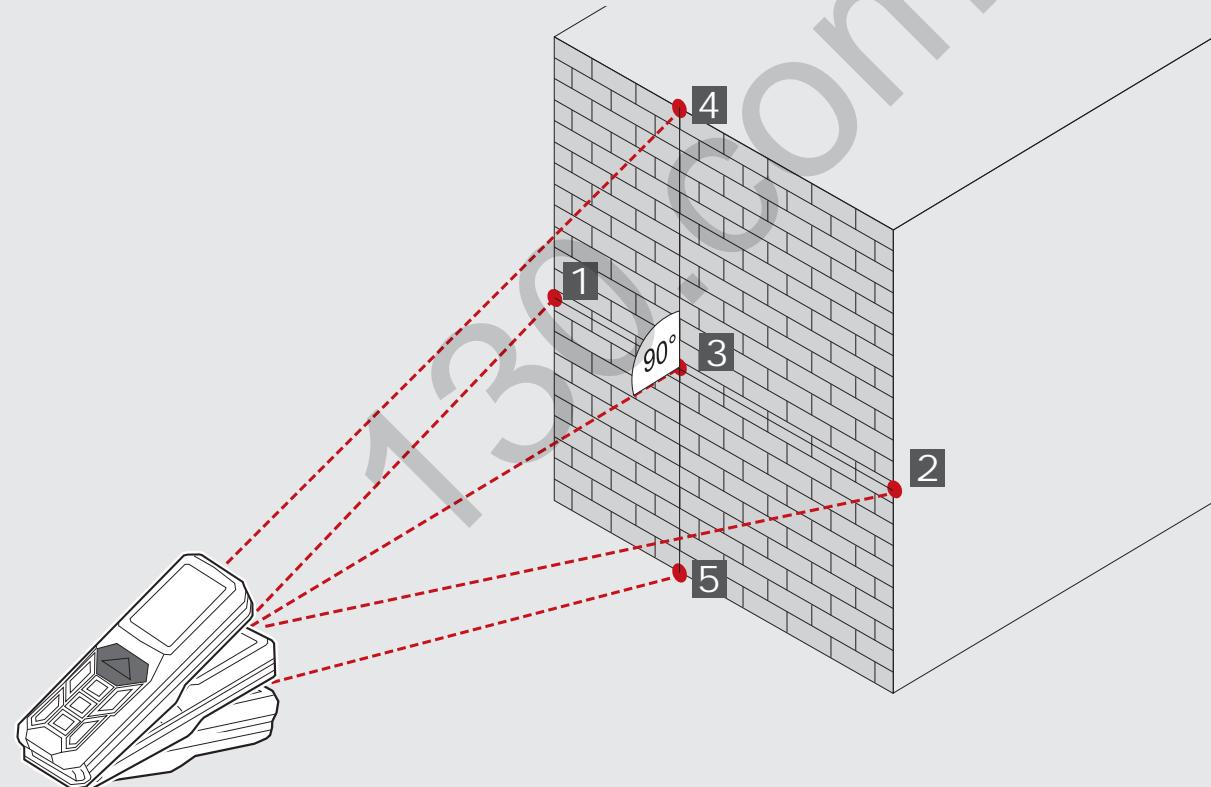
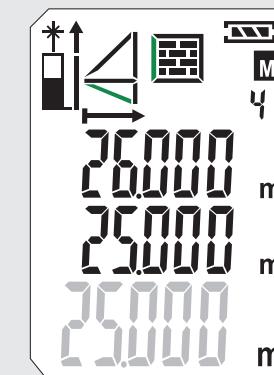
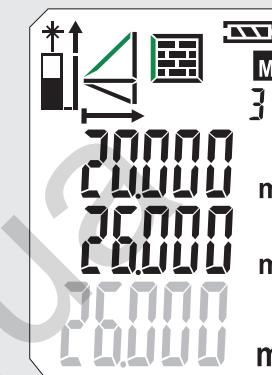
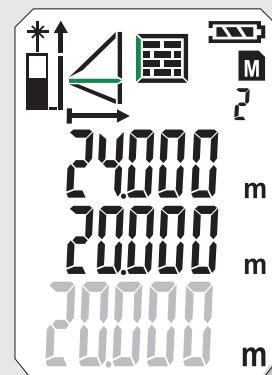
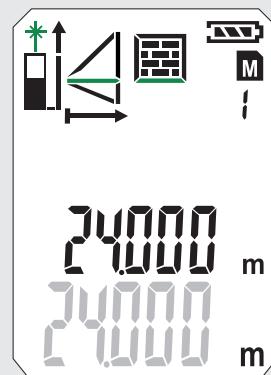
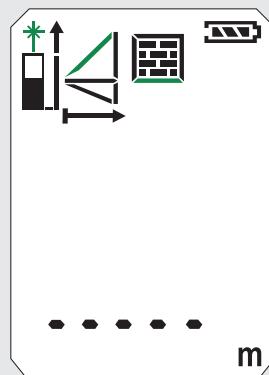
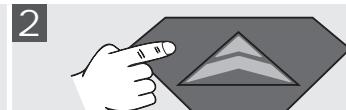
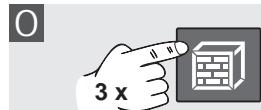
3



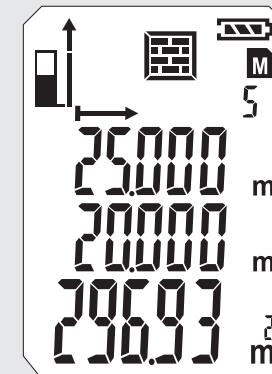
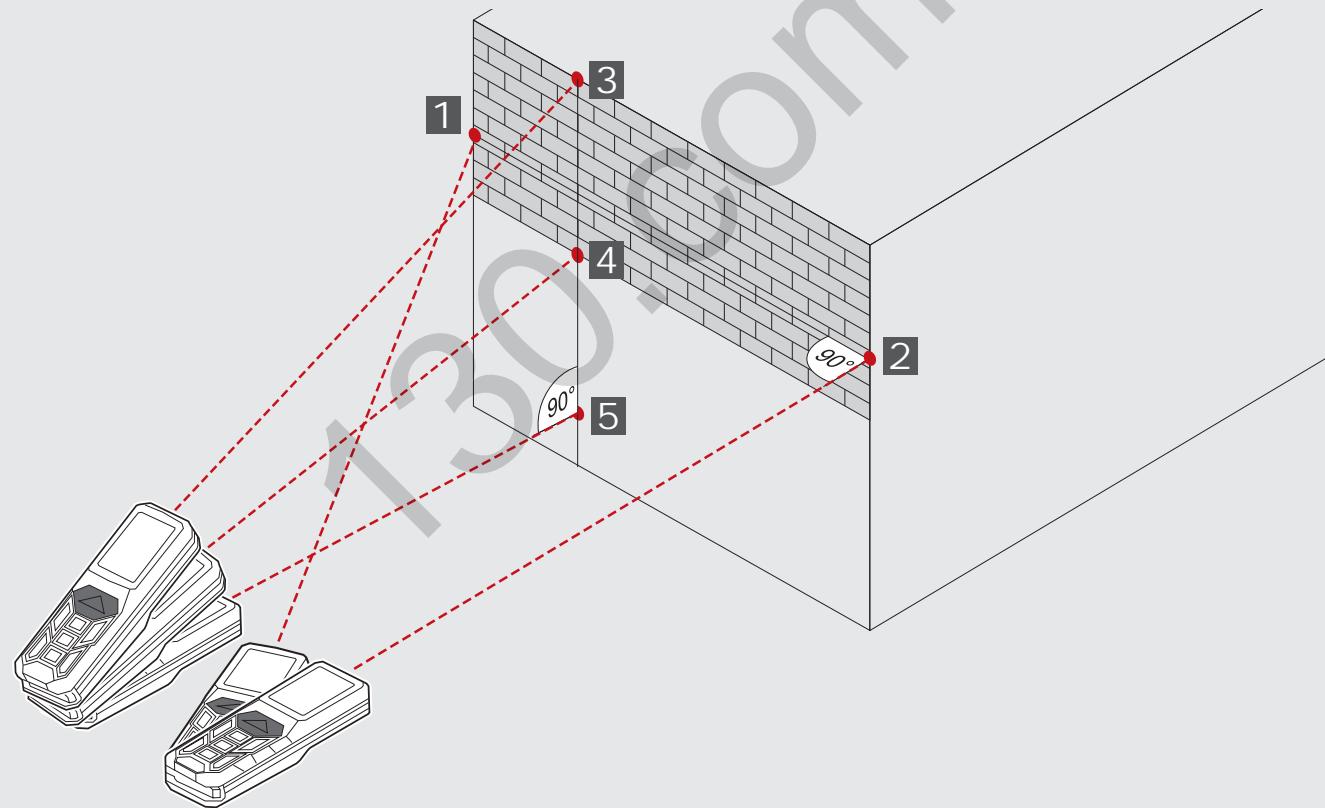
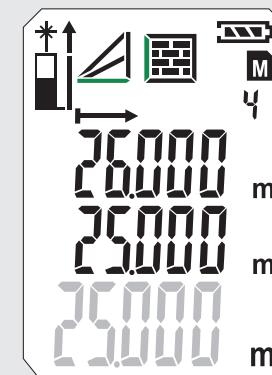
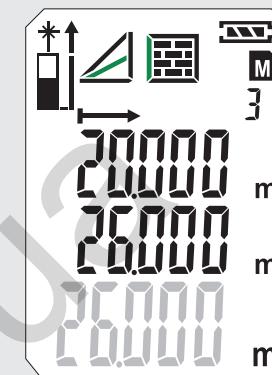
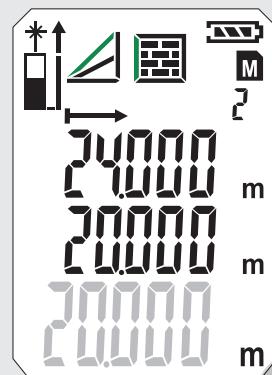
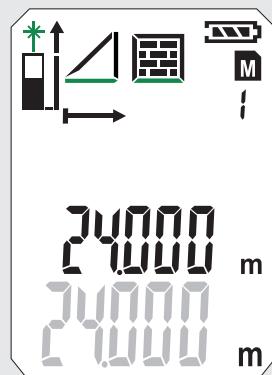
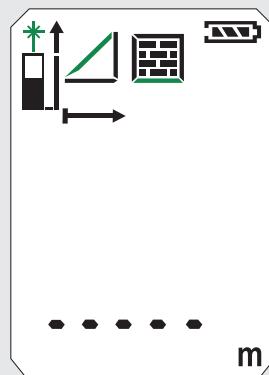
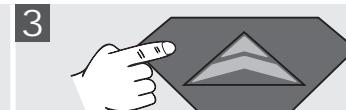
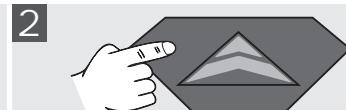
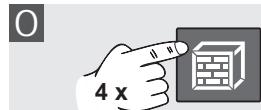
4



MÄTNING VÄGGAREA (SCENARIO 1)



MÄTNING VÄGGAREA (SCENARIO 2)



TIMER

Med timern kan mätningen utlösas tidsfördröjt för att t.ex. placera en byggnadsdel i mätstrålen.

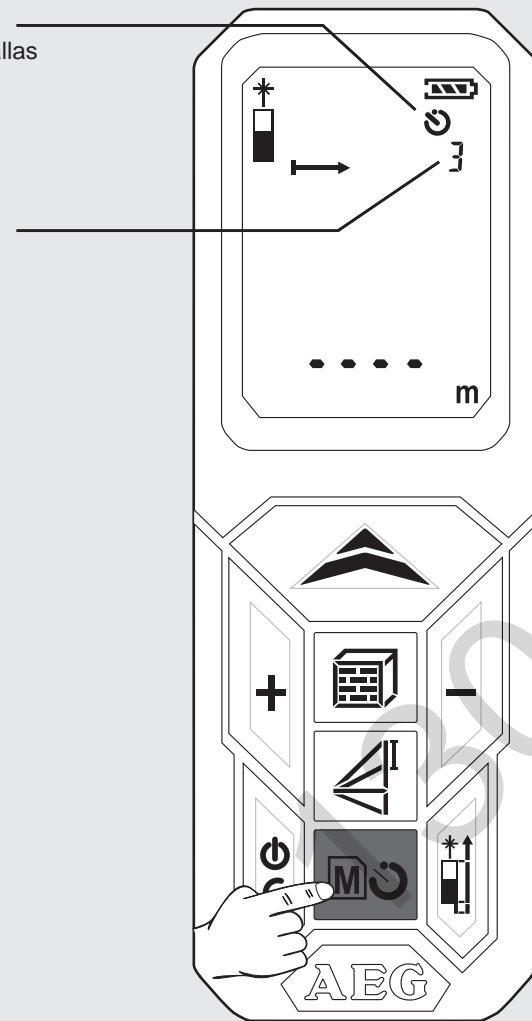
Tryck på knappen .

- Symbol visas

Genom att man trycker på knappen  kan timern ställas in på mellan 3 och 15 sek.

Tryck på knappen .

- Sekunderna räknas ner till mätningen.
- Vid 0 utförs mätningen.



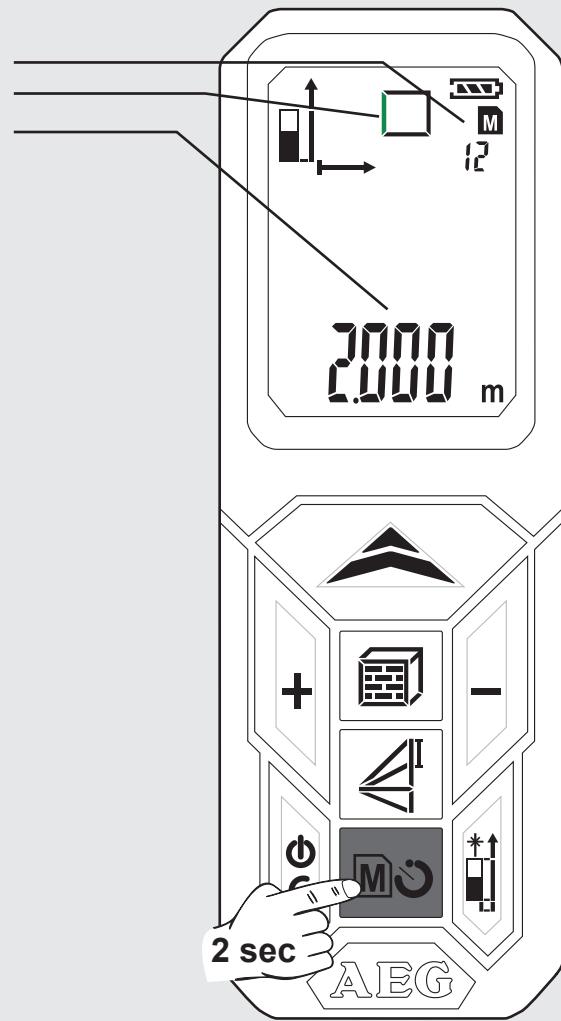
MINNE

Mätvärdena sparas automatiskt fortlöpande i minnet.

De sparade värdena kan hämtas med knappen .

Tryck på knappen  under 2 sek

- Symbol och minnesplats visas.
- Tillhörande mätstorlek visas.
- Det sparade värdet visas på huvudraden.
- Navigera med +/- knapparna



GRUNDLÄGGANDE FUNKTIONSSÄTT BESKRIVET MED EN AREAMÄTNING SOM EXEMPEL (1)

1 Start

Tryck på knappen .

OBS! Laserstrålen är påslagen!
Rikta inte mot personer!

2 Välj mätnivå

Standardinställning efter
påslagning: bak till

- * Tryck 1x -> hörnpinne
- Tryck 2x -> fram till
- Tryck 3x -> bak till

- Lasersymbolen blinkar
(blinkljuset visas här grönt).

3 Välj funktion

Efter att instrumentet slås på står
det alltid på längdmätning.

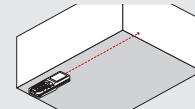
- Tryck 1x - areamätning

- Symbol visas

Mätstorlek blinkar
(blinkljuset visas här grönt).

4 Mäta längd

Rikta in
instrumentet och
tryck på
knappen

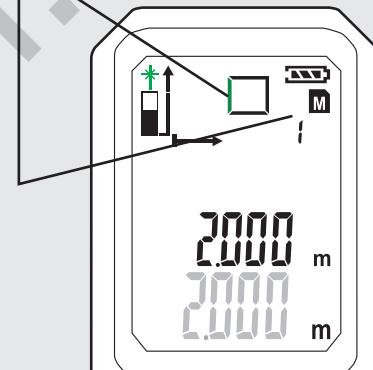


- Mätvärdet visas kort på
huvudraden.

- Mätvärdet hoppar efter 1 sek till
raden ovanför.

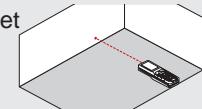
Mätvärdet sparas i minnet under
det fortlöpande numret.

Den andra mätstorleken blinkar.
Instrumentet är redo för mätning
av det andra värdet.



5 Mäta bredd

Rikta in instrumentet
och tryck på
knappen

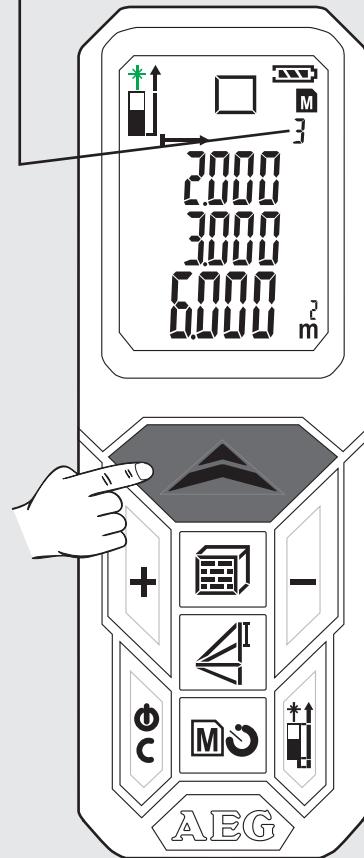
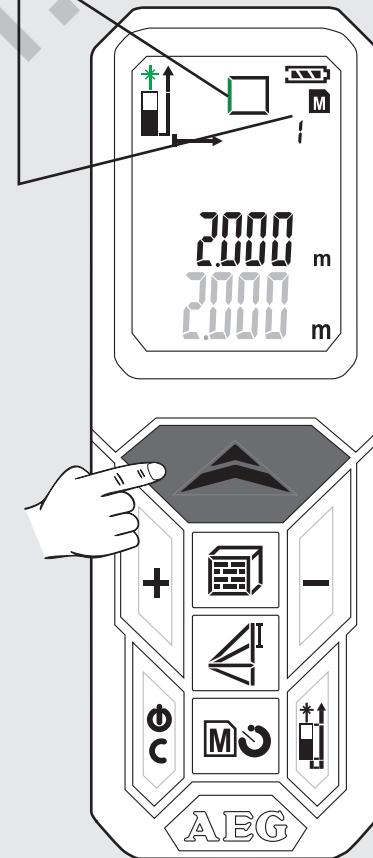
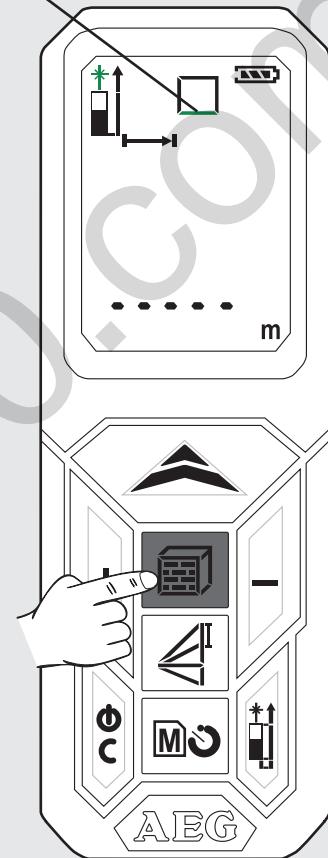
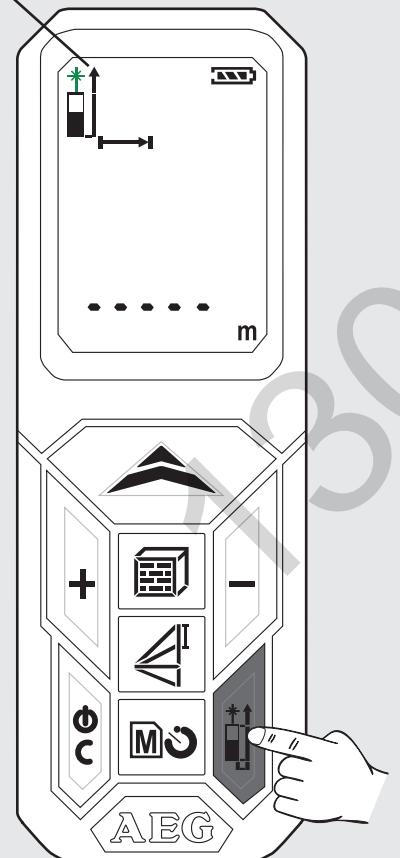
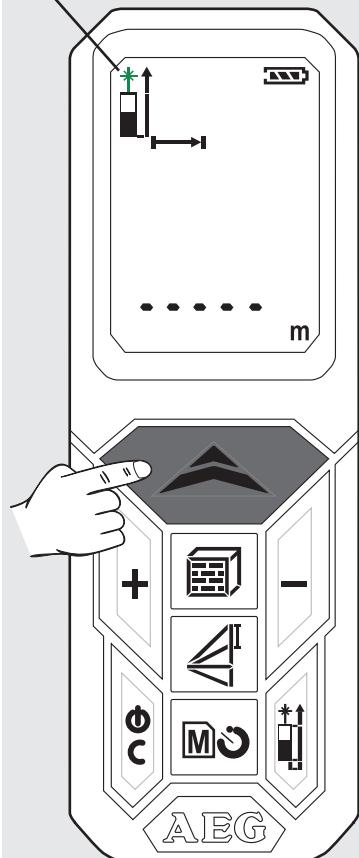
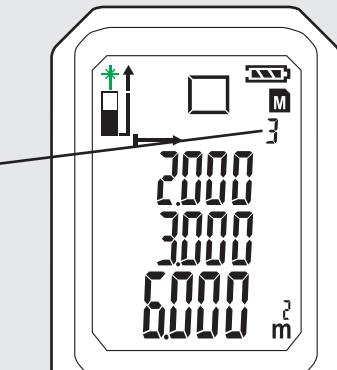


- Mätvärdet visas kort på
huvudraden.

- Mätvärdet hoppar efter 1 sek till
raden ovanför.

Mätvärdet sparas i minnet under
det fortlöpande numret.

Resultatet visas på huvudraden
och sparas i minnet under det
ftrolöpande numret.



GRUNDLÄGGANDE FUNKTIONSSÄTT BESKRIVET MED EN AREAMÄTNING SOM EXEMPEL (2)

6 Hämta sparade värden

Tryck på knappen  under 2 sek.

Tryck på knappen + eller -

- De sparade värdena visas på huvudrulen.

- Den tillhörande symbolen visas och mätstorleken blinkar (blinkljuset visas här grönt).

7 Stänga minnet

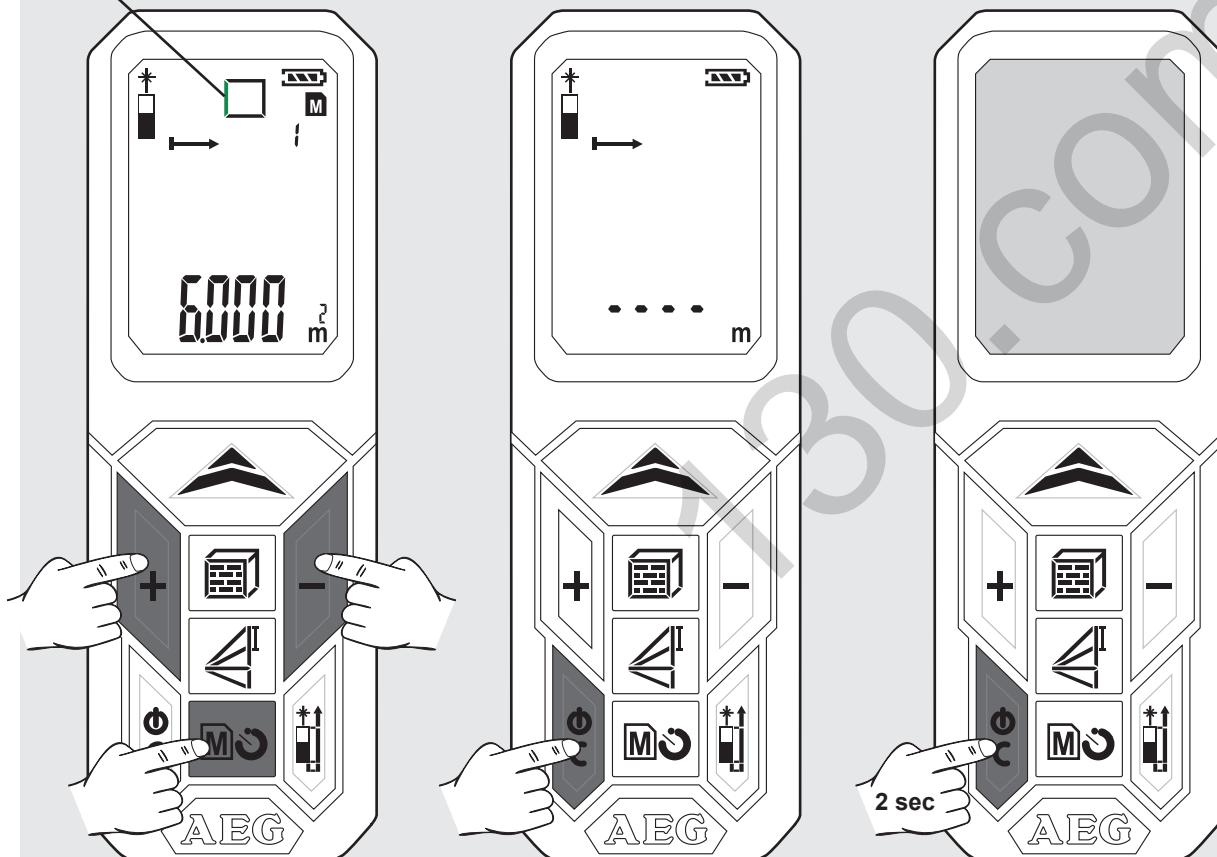
Tryck på knappen .

8 Stänga av

Tryck på knappen  under 2 sek
(minnet måste stängas först).

- Instrumentet stängs av.

- Om ingen knapp tryck in under 3 sek stängs instrumentet av automatiskt.



SISÄLTÖ

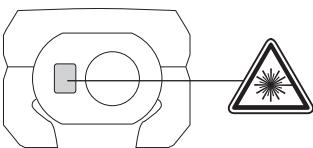
Tärkeitä turvallisuusohjeita	1
Tekniset arvot	2
Tarkoitukseenmukainen käyttö	2
Virhekooditaulukko	2
Yleiskuva	3
Paristojen vaihtaminen	4
Nurkkapuikko	4
Vyökannatin	4
Toimintonaapäin, Pythagoras, mittaustaso	5
Yksinkertainen pituusmittaus	6
Jatkuva mittaus / minimi-maksimi-mittaus	7
Lisäys- / vähennysmittaus	8
Pinta-alamittaus	9
Tilavuusmittaus	10
Epäsuora mittaus (Pythagoras 1)	11
Epäsuora mittaus (Pythagoras 2)	12
Epäsuora mittaus (Pythagoras 3)	13
Seinän pinta-alamittaus (malli 1)	14
Seinän pinta-alamittaus (malli 2)	15
Ajastin	16
Muisti	16
Perusuontoinen toimintatapa pinta-alamittauksen (1) esimerkillä näytettyvä	17
Perusuontoinen toimintatapa pinta-alamittauksen (2) esimerkillä näytettyvä	18

TÄRKEITÄ TURVALLISUUSOHJEITA



Älä käytä tuotetta ennen kuin olet tutkinut Turvallisuusohjeet ja Käyttäjän käsikirjan oheiselta CD-levyltä.

Laserluokka



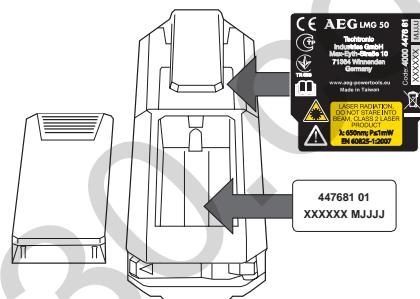
VAROITUS:

Se on Luokan 2 laser-tuote normin IEC 60825-1:2007 mukaan.



Tekstitys

Liimaa ennen ensimmäistä käyttöönottoa mukana toimitettu maasi kielinen tarra laitteen tyypkilivelen englanninkielisen tekstin päälle.



Varoitus:

Vältä katsomasta suoraan laseriin. Lasersäde saattaa häikäistä silmät salaman tavoin ja aiheuttaa ohimenevän sokaistumisen.

Älä katso suoraan lasersäteeseen, äläkä suuntaa sitä tarpeettomasti kohti muita ihmisiä.

Älä tähtää muihin henkilöihin.

Varoitus:

Älä käytä laserlaitetta lasten lähettyvillä äläkä anna lasten käyttää laserlaitetta.

Huomio! Heijastava pinta saattaisi heijastaa lasersäteen takaisin käyttäjään tai muihin henkilöihin.

Pidä raajat turvallisen matkan päässä liikkuvista osista.

Suorita säännöllisesti koemittausten. Erityisesti ennen, aikana järkeiden mittausten jälkeen.

Tarkkaile virheellisiä mittauksia, jos tuote on vial-linen, tai se on pudonnut, tai sitä on väärinkäytetty tai muuttettu.

Huom! Tutustu puutarhalaitteen käyttöelementteihin ja asianmukaiseen käyttöön.

Lasermittarin käyttöalue on rajoitettu. (Katso kohtaa "Tekniset tiedot"). Jos yrität mitata pienimmän tai suurimman alueen ulkopuolelta, niin tulokset ovat epätarkkoja. Jos laitetta käytetään vaikeissa olosuhteissa, kuten liian kuumassa, liian kylmässä, hyvin kirkkaassa auringonvalossa, sateessa, lumisateessa, sumussa tai muissa näkyvyyttä rajoittavissa olosuhteissa, niin mittaustulokset voivat olla epätarkkoja.

Kun tuot lasermittarin lämpimästä tilasta kylmään tilaan (tai päinvastoin), odota, kunnes laite on sopeutunut ympäristön muuttuneeseen lämpötilaan.

Säilytä lasermittaria aina sisätiloissa ja suojaa laitetta iskuilta, tärinältä tai äärimmäisiltä lämpötiloilta.

Suojaa lasermittaria pölyltä, kosteudelta ja suurelta ilmankosteudeelta. Se saattaa tuhota laitteen sisäiset osat tai vaikuttaa sen tarkkuuteen.

Älä käytä mitään syövyttäviä puhdistusaineita tai liuotteita. Puhdista laite vain puhtaalla, pehmeällä rievulla.

Vältä lasermittariin kohdistuvia iskuja tai sen putoamista. Laitteen tarkkuus tulee tarkastaa, jos se on pudonnut tai siihen on kohdistunut muunlaista mekaanista rasitusta.

Vain valtuutettu ammattiherkilöstö saa suorittaa tämän laserlaitteen tarvittavat korjaustyöt.

Älä käytä tuotetta räjähdyssvaarallisilla alueilla tai aggressiivisissä ympäristöissä.

KKäytä vain valmistajan suosittelemia latureita akkujen lataamiseen.

Tyhjiä paristoja ei saa hävittää talousjätteen mukana. Huolehdi ympäristöstä ja vie ne kansallisten ja paikallisten säännösten mukaisesti järjestetyihin keräyspisteisiin. Tuotetta ei saa hävittää kotitalousjätteen mukana. Hävitä laite asianmukaisesti maassasi voimassa olevien sääädösten mukaisesti. Noudata kansallisia ja maakohtaisia määräyksiä. Ota yhteyttä paikallisiin viranomaisiin tai kauppiaseesi saadaksesi tietoa hävittämisestä.

CE-merkki

TEKNISET ARVOT

Suojuokka	IP54 (pöly- ja roiskevesisuojattu)
Optiikka	14 mm
Polttopiste	35 mm
Mittausalue enint.	50 metriä (toleranssi: 55 m)
Mittausalue väh.	0,05 metriä
Absoluuttinen tarkkuus @ < 10 m	± 1,5 mm (max)
Toistotarkkuus @ < 10 m	± 1,5 mm (tyypillisesti enint. 2σ)
Toistotarkkuus @ > 10 m	nousu ± 0,25 mm / metri (tyypillisesti enint. 2σ)
Mittausaika	0,5 s
Näyttötyyppi	LCD (22,7 mm x 31 mm)
Virransyöttö	AAA 2x (alkaline-paristo)
Pariston kestoaika	10000 (yksittäismittausta)
Laserin lähtöteho	0,6 mW ~ 0,95 mW (luokka 2, 650 nm)
Laserpisteen koko	25 x 30 mm @ 16 m (max)
Lasersäteen pystykulma	+1 aste
Lasersäteen vaakakulma	1 aste
Automaattinen laitteen sammus	180 sekuntia
Automaattinen laserin sammus	30 sekuntia
Työlämpötila-alue	-10°C - +50°C
Säilytyslämpötila-alue	-10°C - +70°C
Paino ilman paristoa	80 g

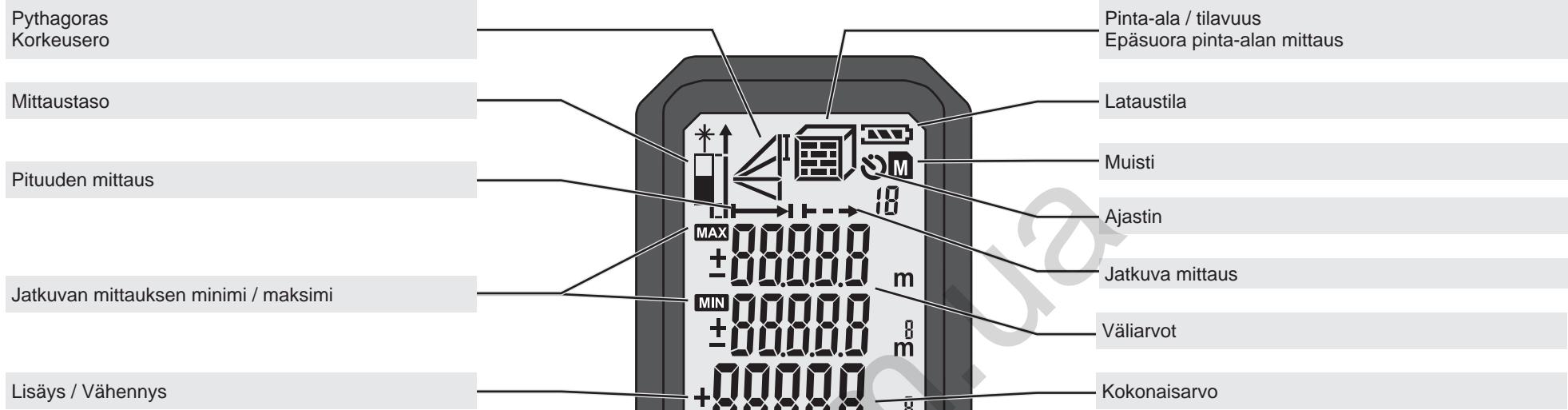
VIRHEKOODITAULUKKO

Koodi	Kuvaus	Poisto
Err01	Mittausalueen ulkopuolella	Suorita mittaus sille määrätyllä alueella.
Err02	Heijastettu signaali on liian heikko	Valitse sopivampi pinta.
Err03	Näyttöalueen ulkopuolella (suurin arvo: 99.999) esim. pinta-alan tai tilavuuden tulos on näyttöalueen ulkopuolella	Tarkasta, ovatko arvot ja vaiheet oikein.
Err04	Virhe Pythagoras-laskelmassa	Tarkasta, ovatko arvot ja vaiheet oikein.
Err05	Paristo heikko	Pane uudet paristot laitteeseen.
Err06	Työlämpötila-alueen ulkopuolella	suorita mittaus sille määrätyllä työlämpötila-alueella.
Err07	Ympäristö liian valoisa	Tummenna kohdealue.

TARKOITUKSENMUKAINEN KÄYTÖ

Lasermittaria voidaan käyttää etäisyyskien ja kaltevuuskien mittamiseen.

Älä käytä tuotettaa ohjeiden vastaisesti.



PÄÄLLE / MITTAUS

- ▶ Päälle
- ▶ Mittaus
- ▶ Jatkuva mittaus (painaa 2 sek.)
Min.-/max.-toiminto

YHTEENLASKU

- ▶ Lisää arvo
- ▶ Liikkuminen muistissa

PINTA-ALA / TILAVUUS

- ▶ Pinta-ala (painaa 1x)
- ▶ Tilavuus (painaa 2x)
- ▶ Epäsuora pinta-alan mittaus (painaa 3x / 4x)

KÄYNNISTYS

- ▶ Päälle
- ▶ Pois (painaa 2 sek.)
- ▶ Takaisin

VÄHENNYS

- ▶ Vähennä arvo
- ▶ Liikkuminen muistissa

PYTHAGORAS

- ▶ Pythagoras 1 (painaa 1x)
- ▶ Pythagoras 2 (painaa 2x)
- ▶ Pythagoras 3 (painaa 3x)

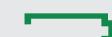
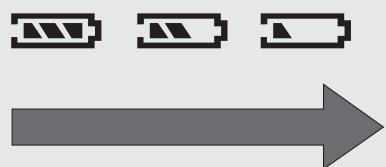
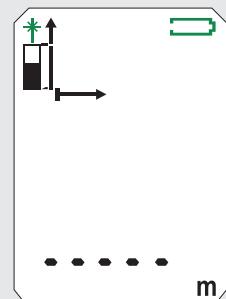
VAIHDA MITTAUSALUETTA

- ▶ Eteen
- ▶ Taakse
- ▶ Nurkkapiukko

MUISTI

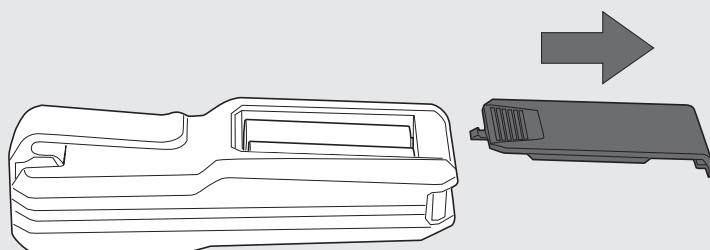
- ▶ Ajastin 3-15 sek. (painaa 1x)
- ▶ Muisti 1-20 (painaa 1x 2 sek.)
- ▶ Liiku muistissa +/- näppäimillä

PARISTOJEN VAIHTAMINEN

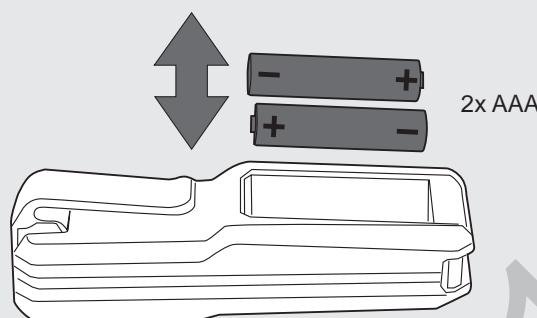


Kun symboli
vilkkuu, vaihda
paristo uuteen

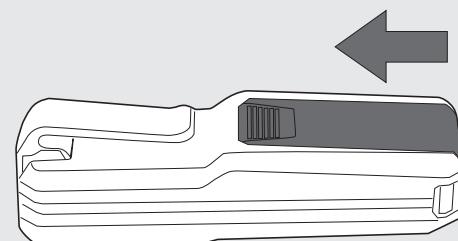
1



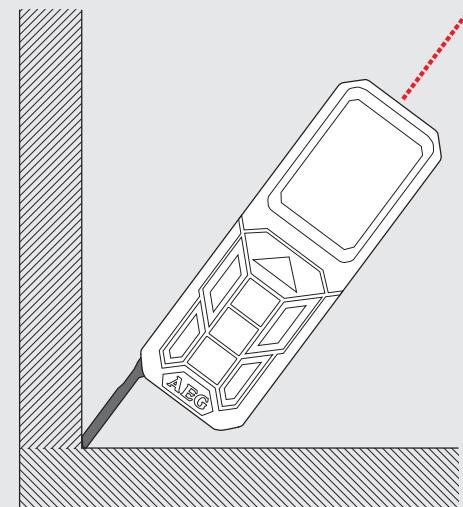
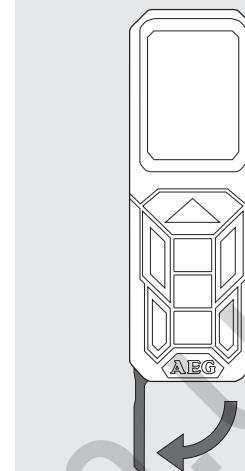
2



3

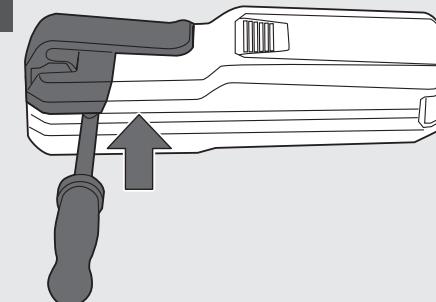


NURKKAPUIIKKO

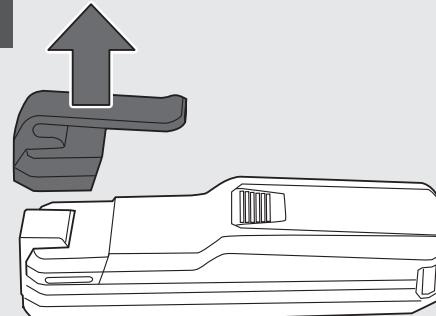


VYÖKANNATIN

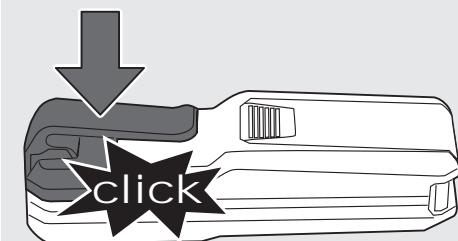
1



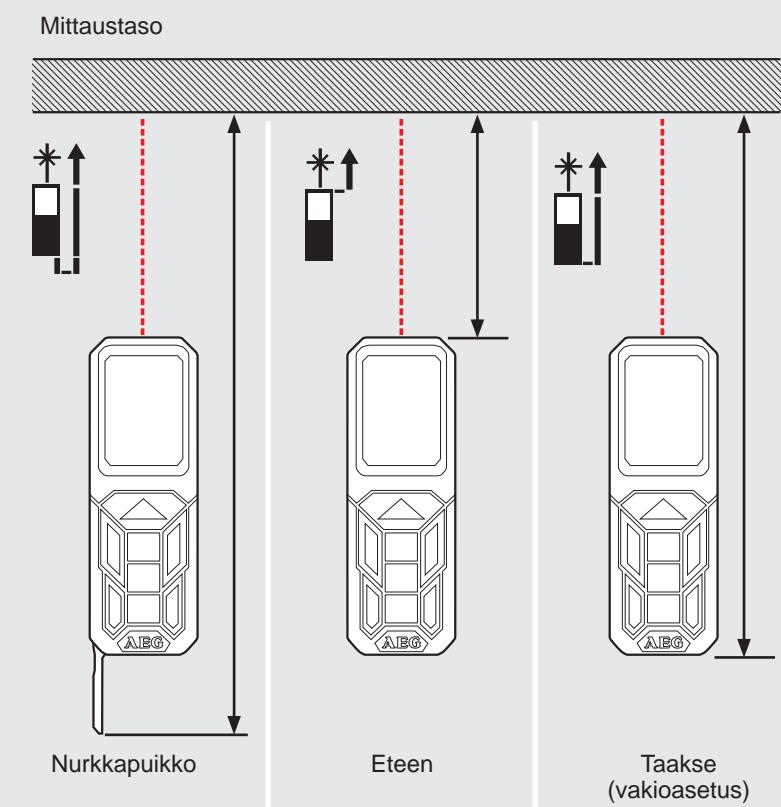
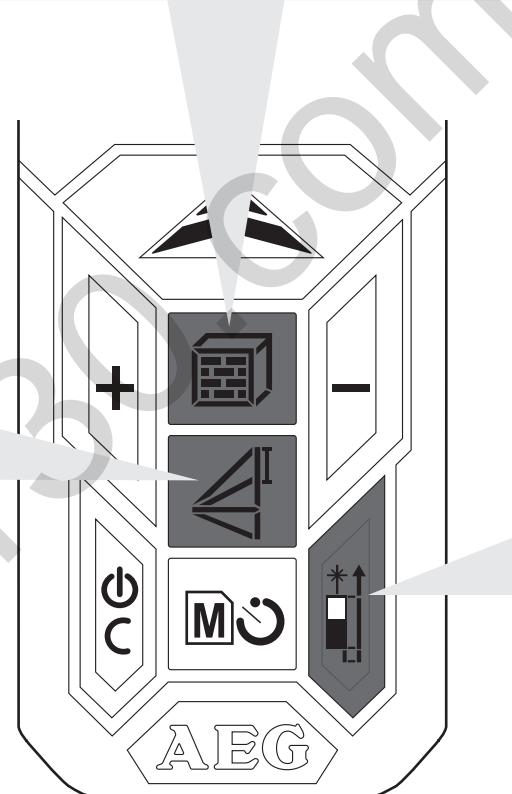
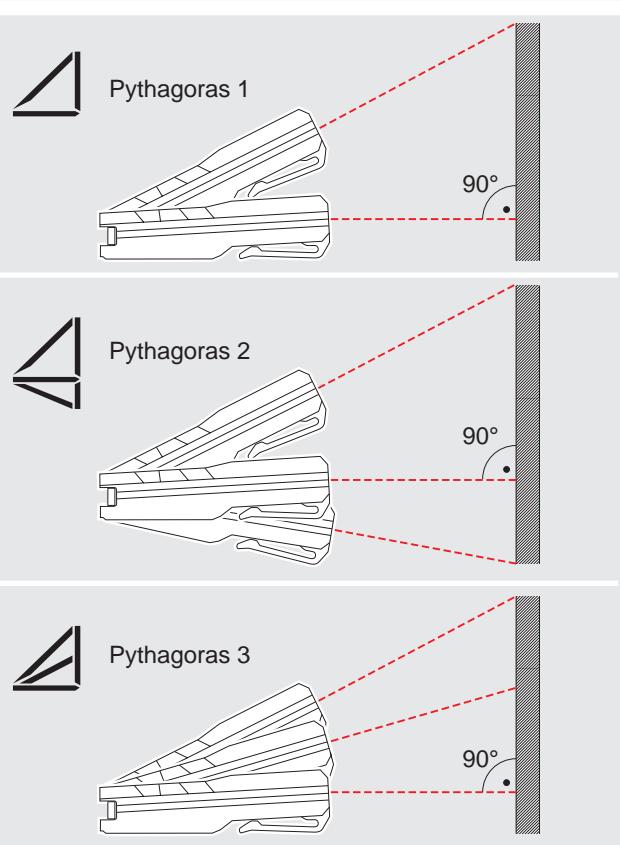
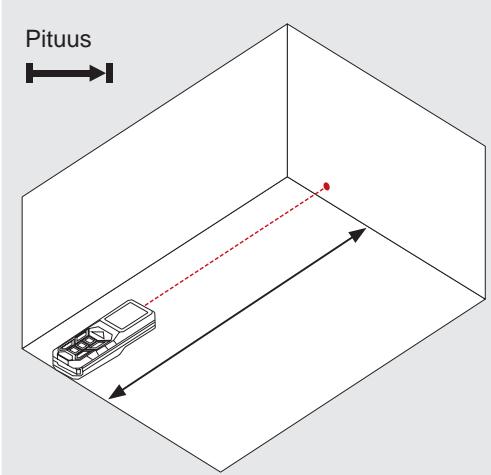
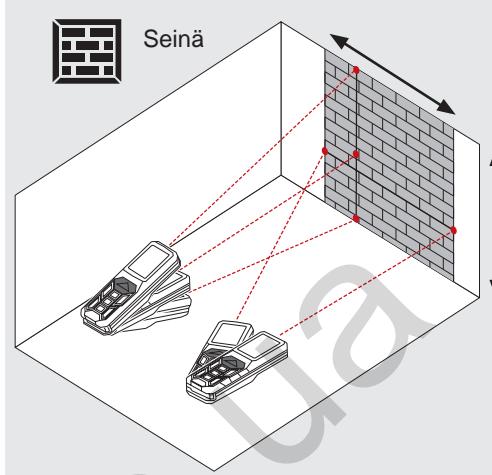
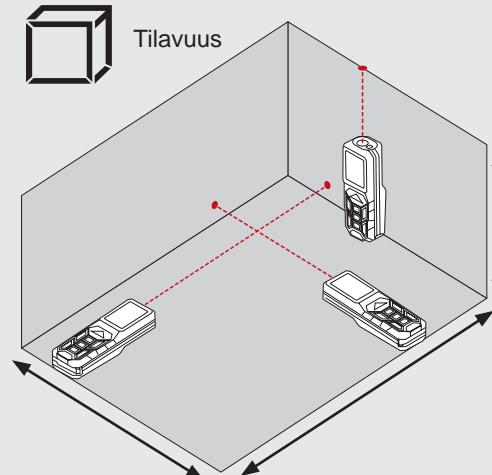
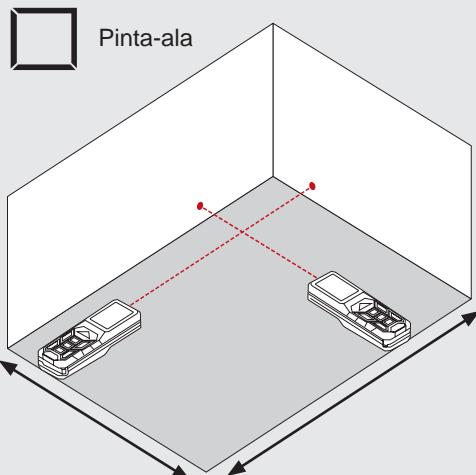
2



3

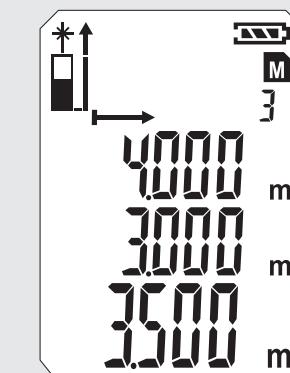
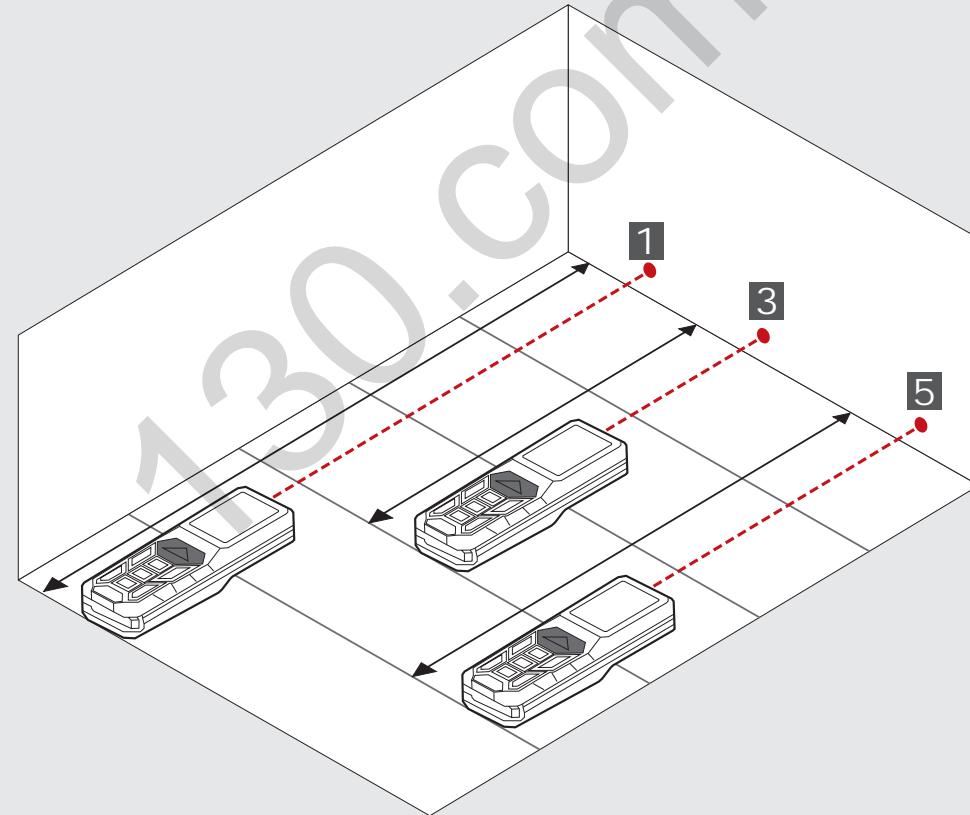
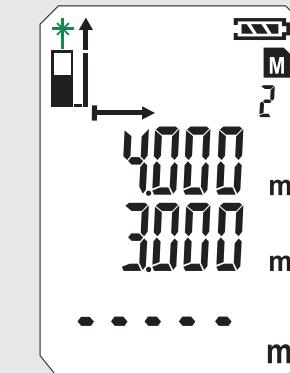
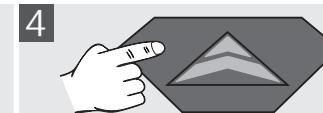
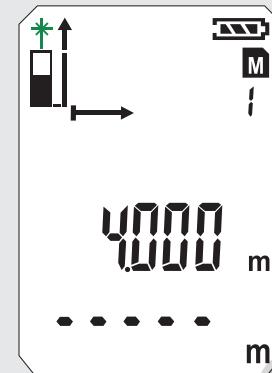
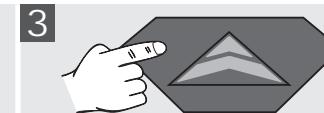
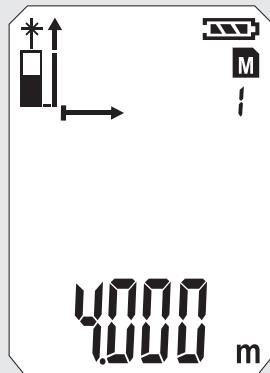
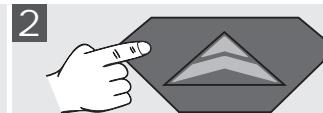
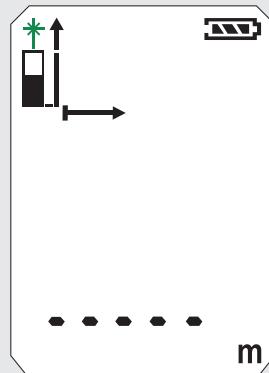
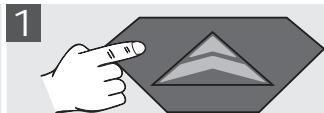


TOIMINTONÄPPÄIN, PYTHAGORAS, MITTAUSTASO



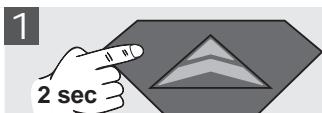
YKSINKERTAINEN PITUUSMITTAUS

0

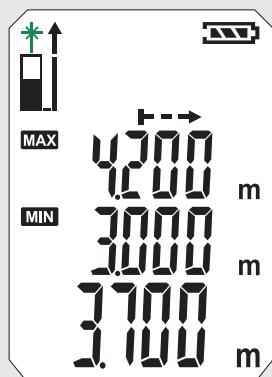
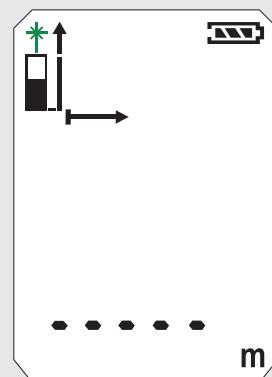


JATKUVA MITTAUS / MINIMI-MAKSIMI-MITTAUS

0



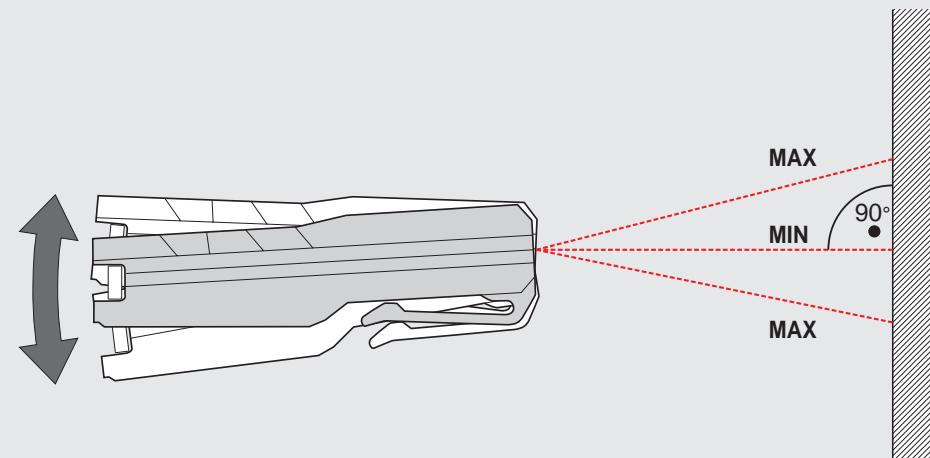
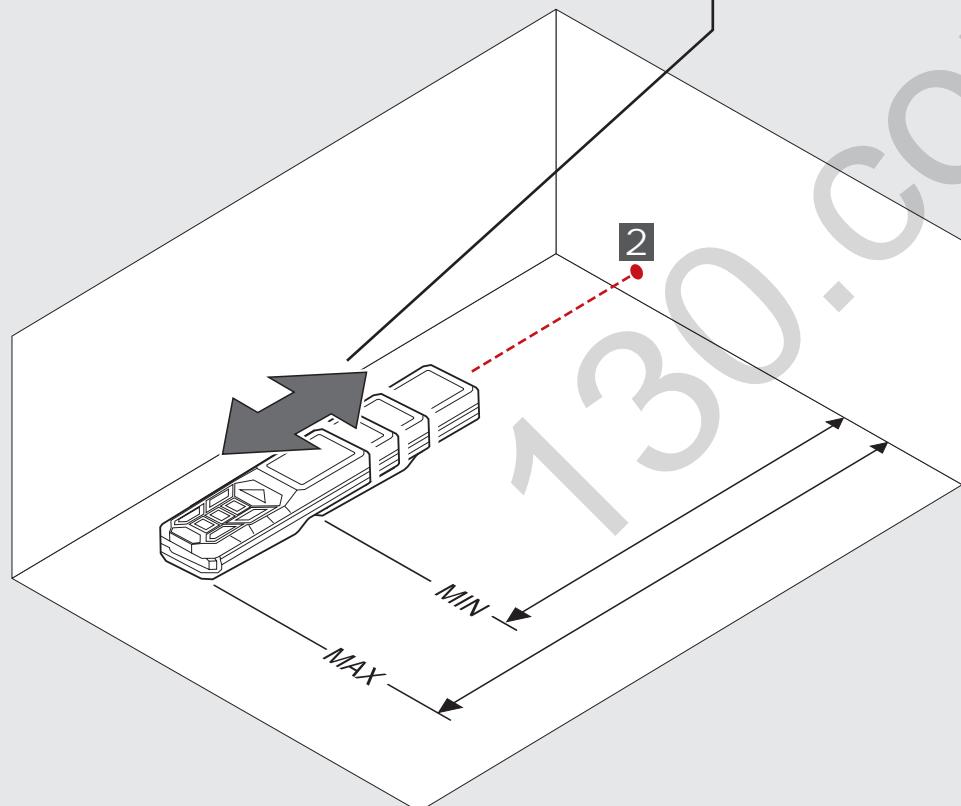
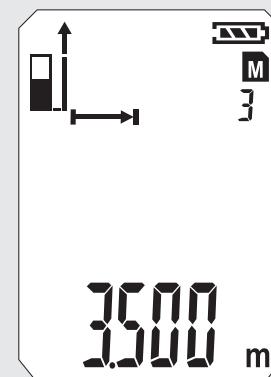
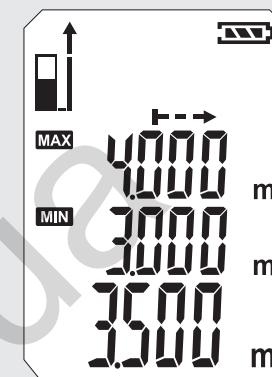
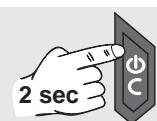
2



3

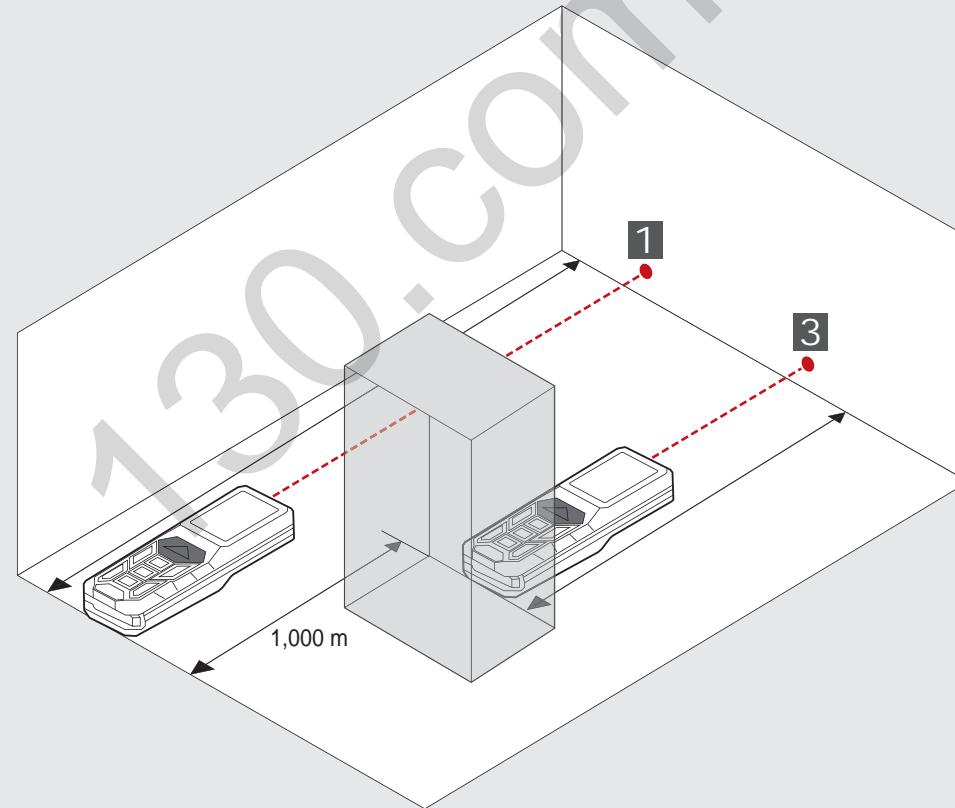
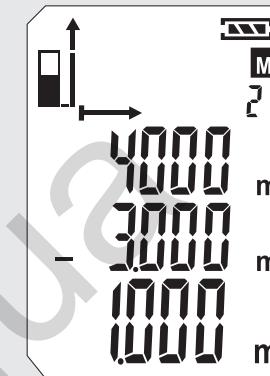
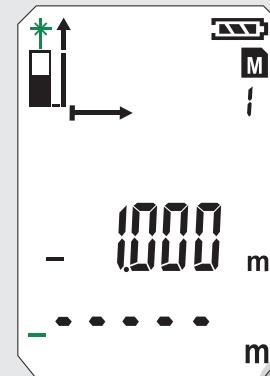
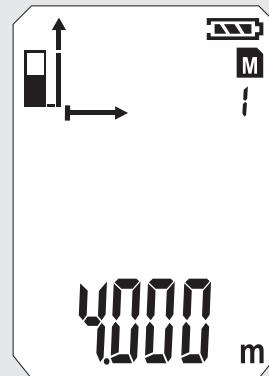
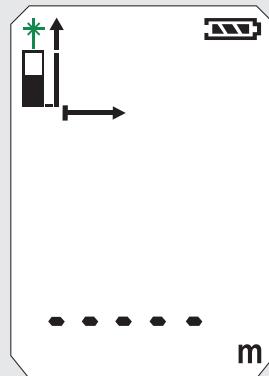
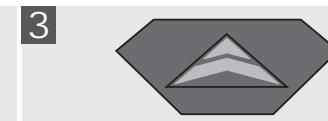
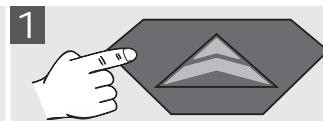


4

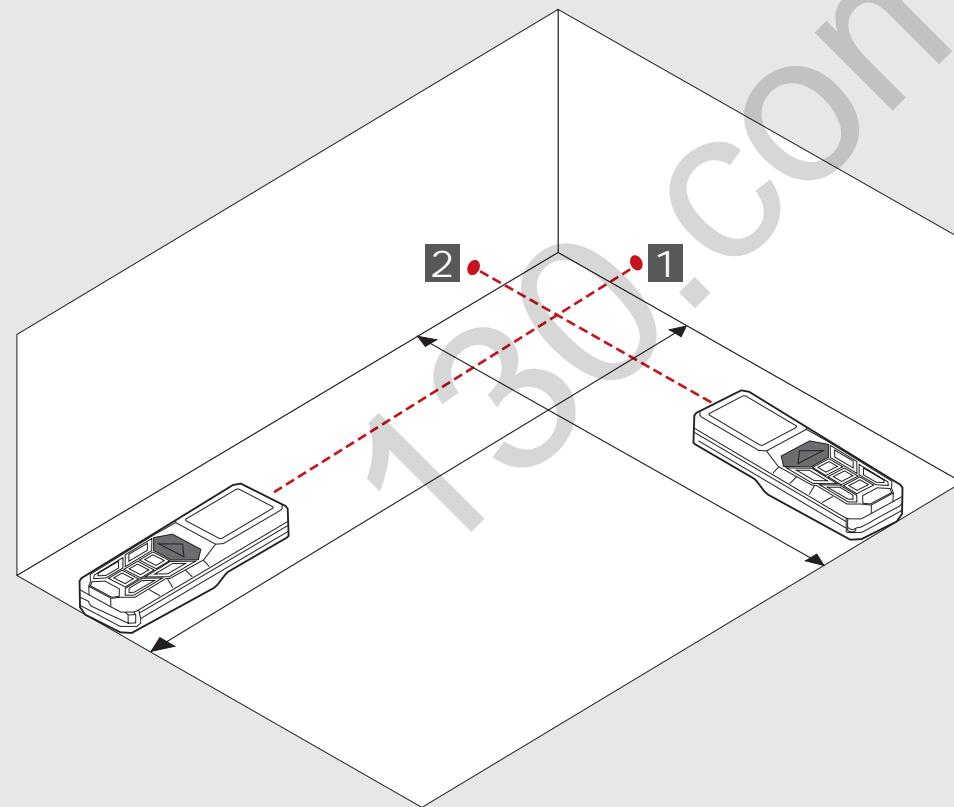
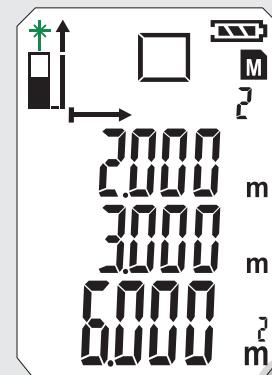
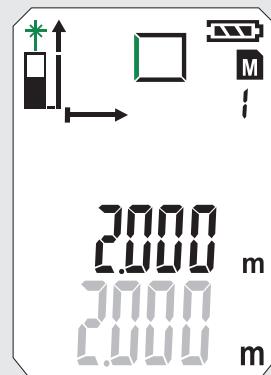
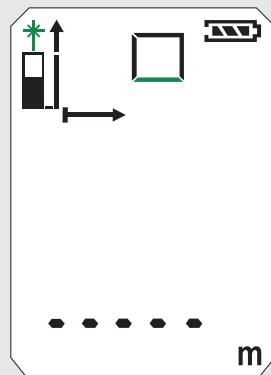
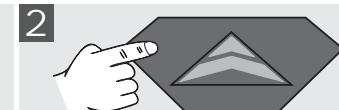
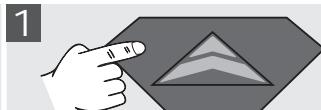
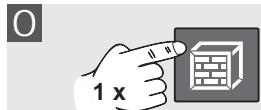


LISÄYS- / VÄHENNYSMITTAUS

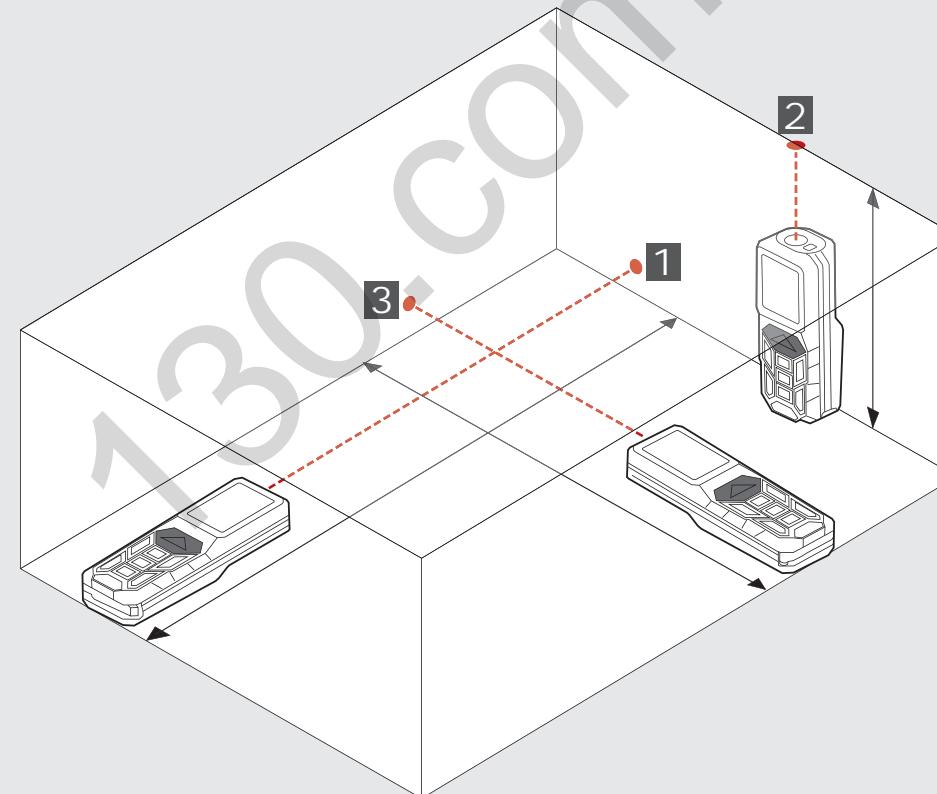
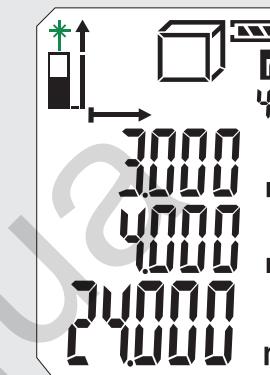
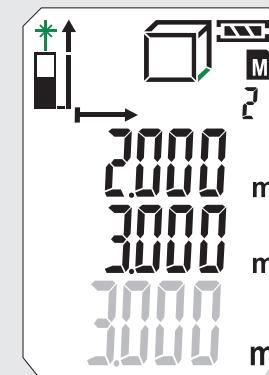
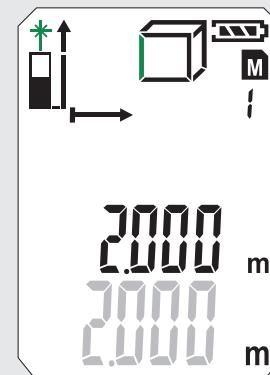
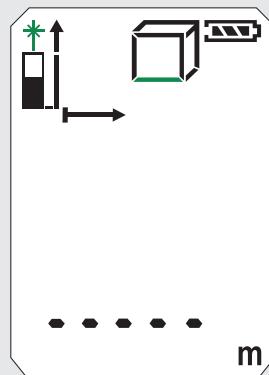
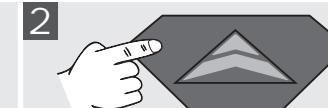
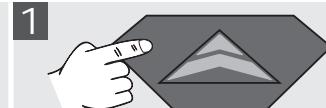
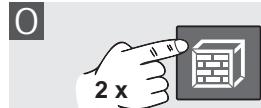
0



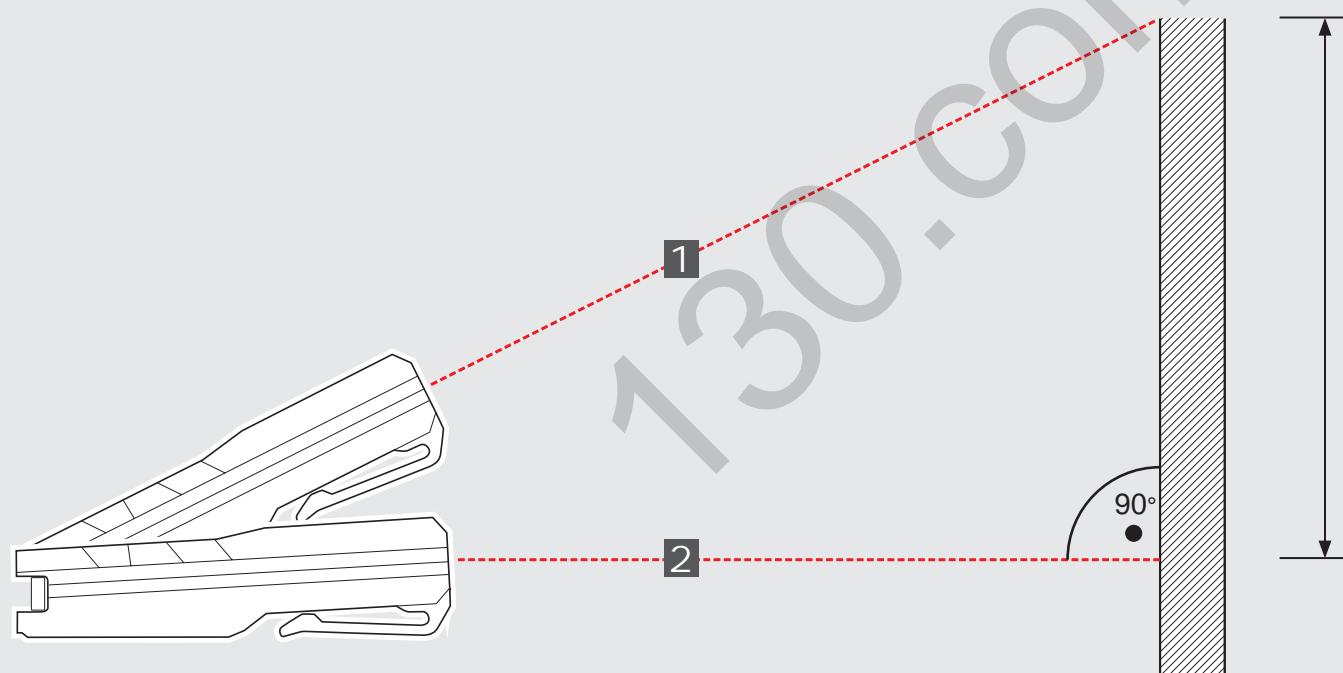
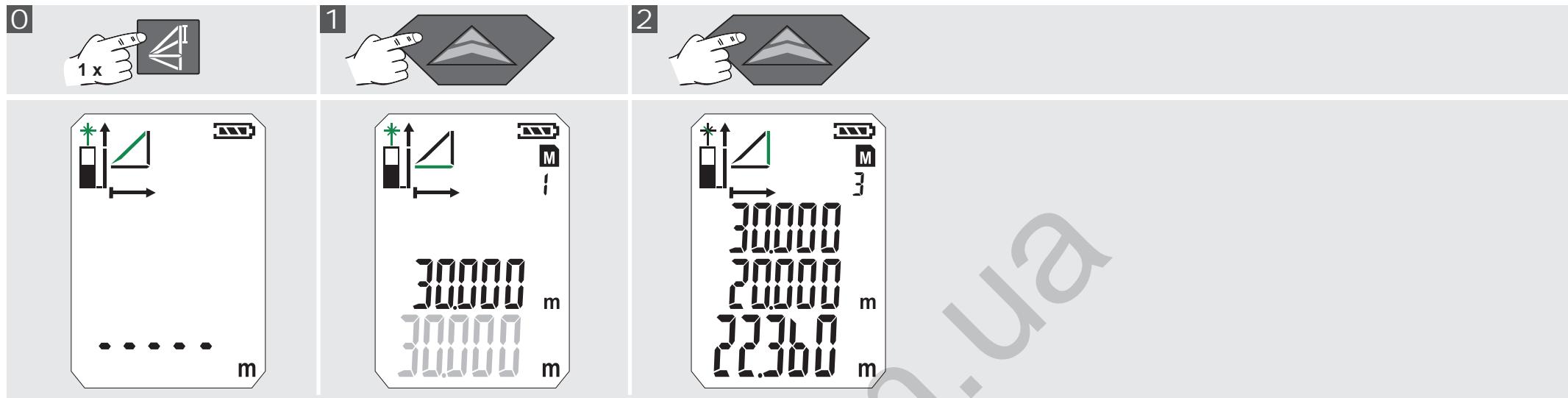
PINTA-ALAMITTAUS



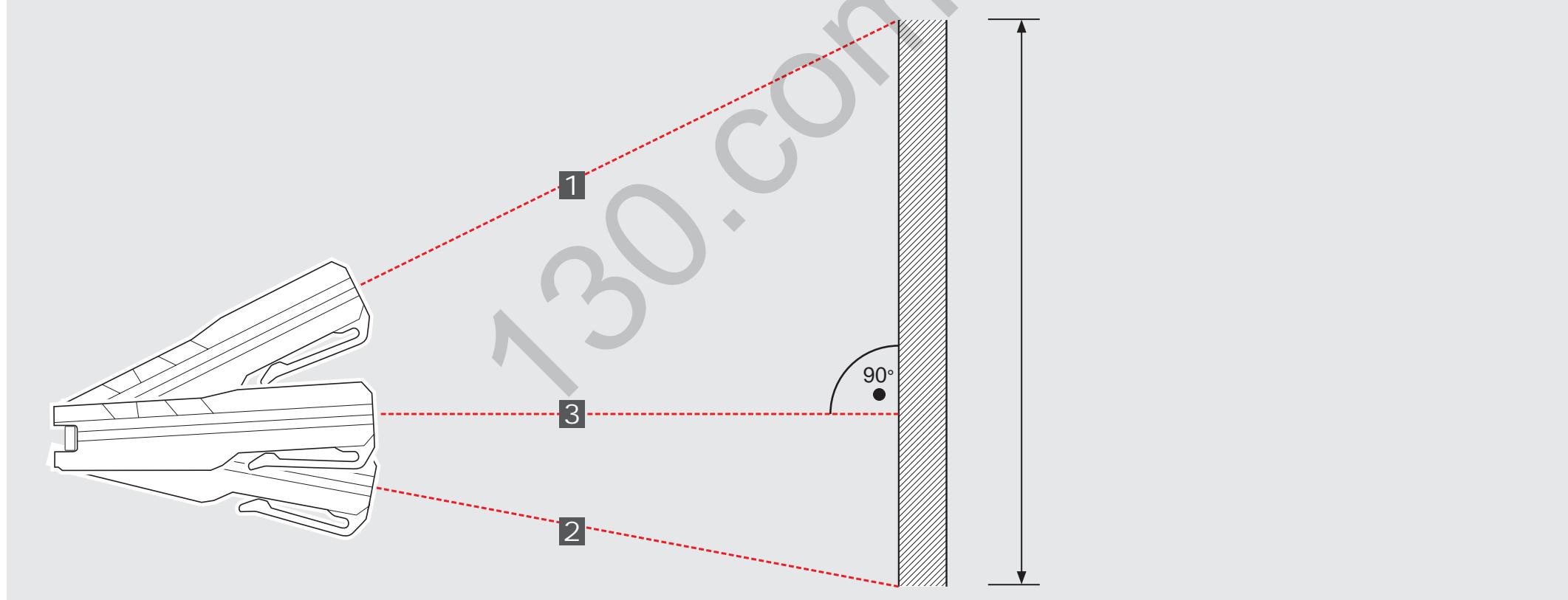
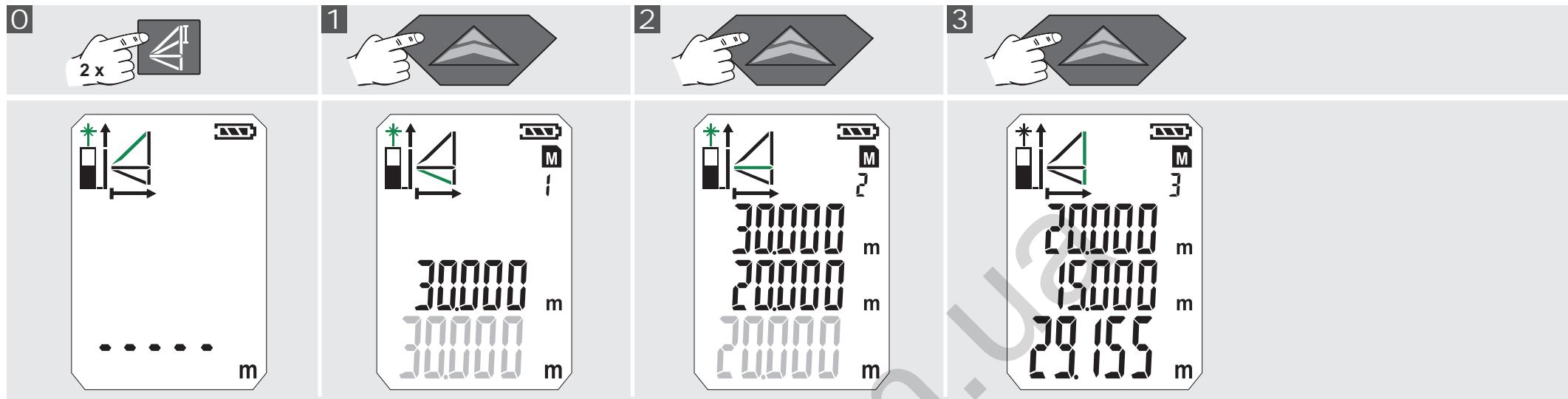
TILOVUUSMITTAUS



EPÄSUORA MITTAUS (PYTHAGORAS 1)



EPÄSUORA MITTAUS (PYTHAGORAS 2)

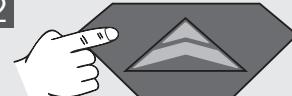


EPÄSUORA MITTAUS (PYTHAGORAS 3)

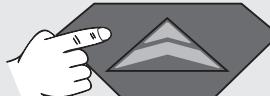
1



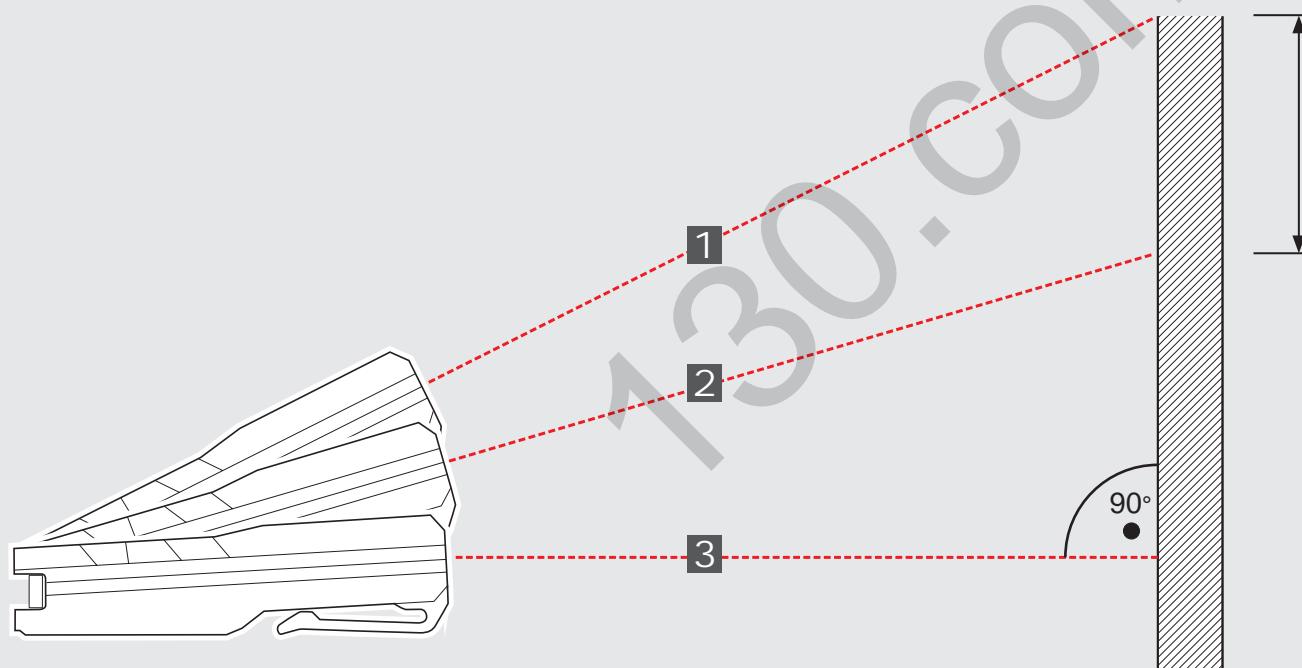
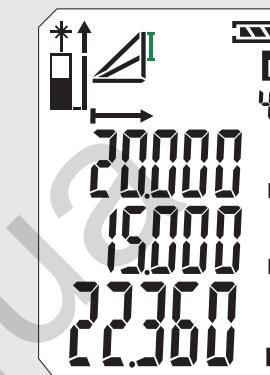
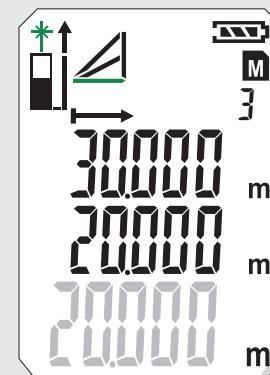
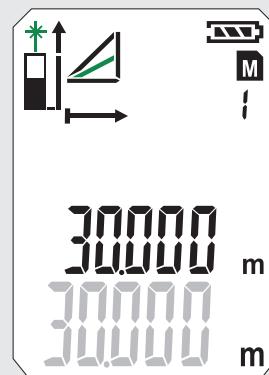
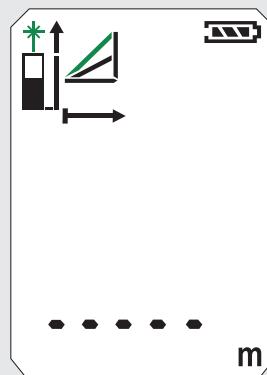
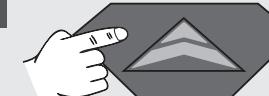
2



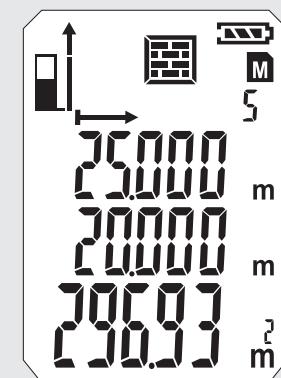
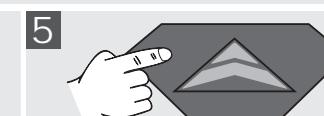
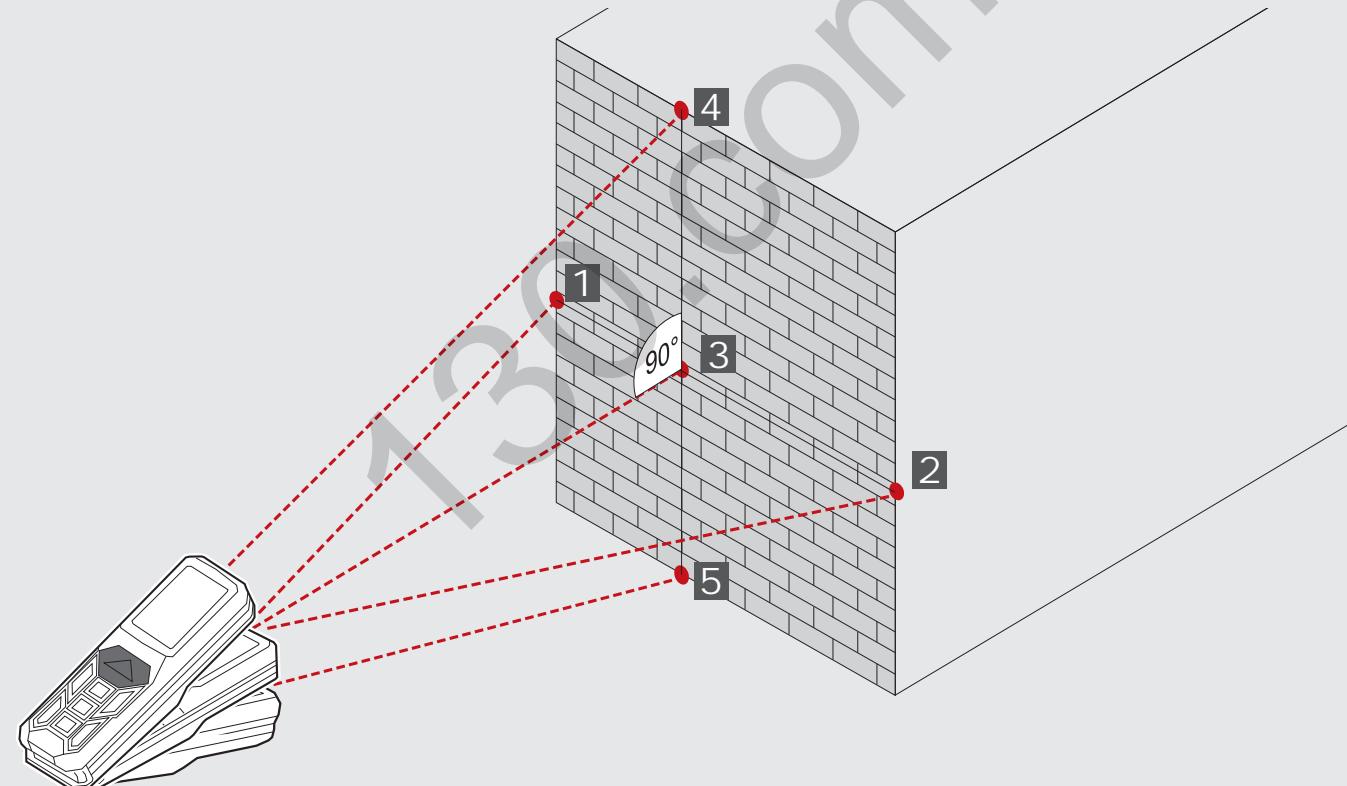
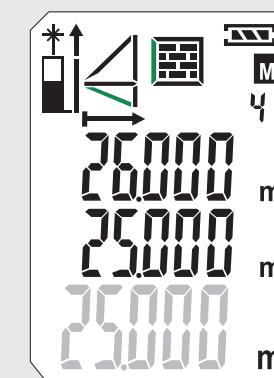
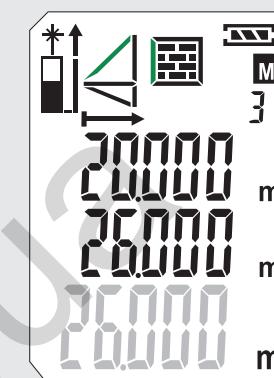
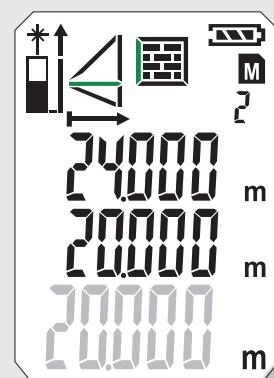
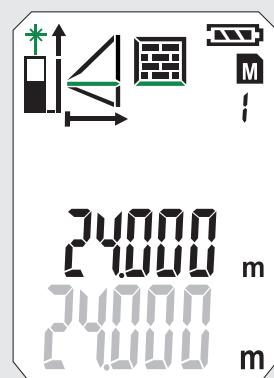
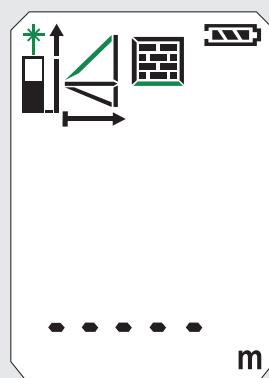
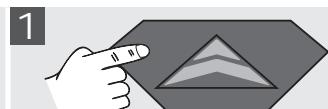
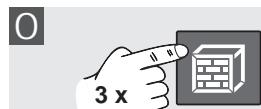
3



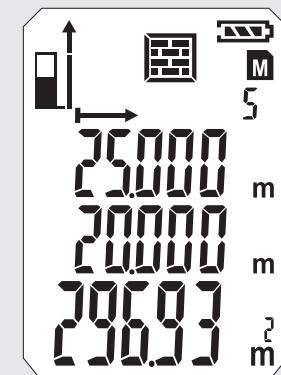
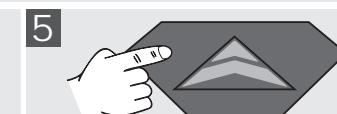
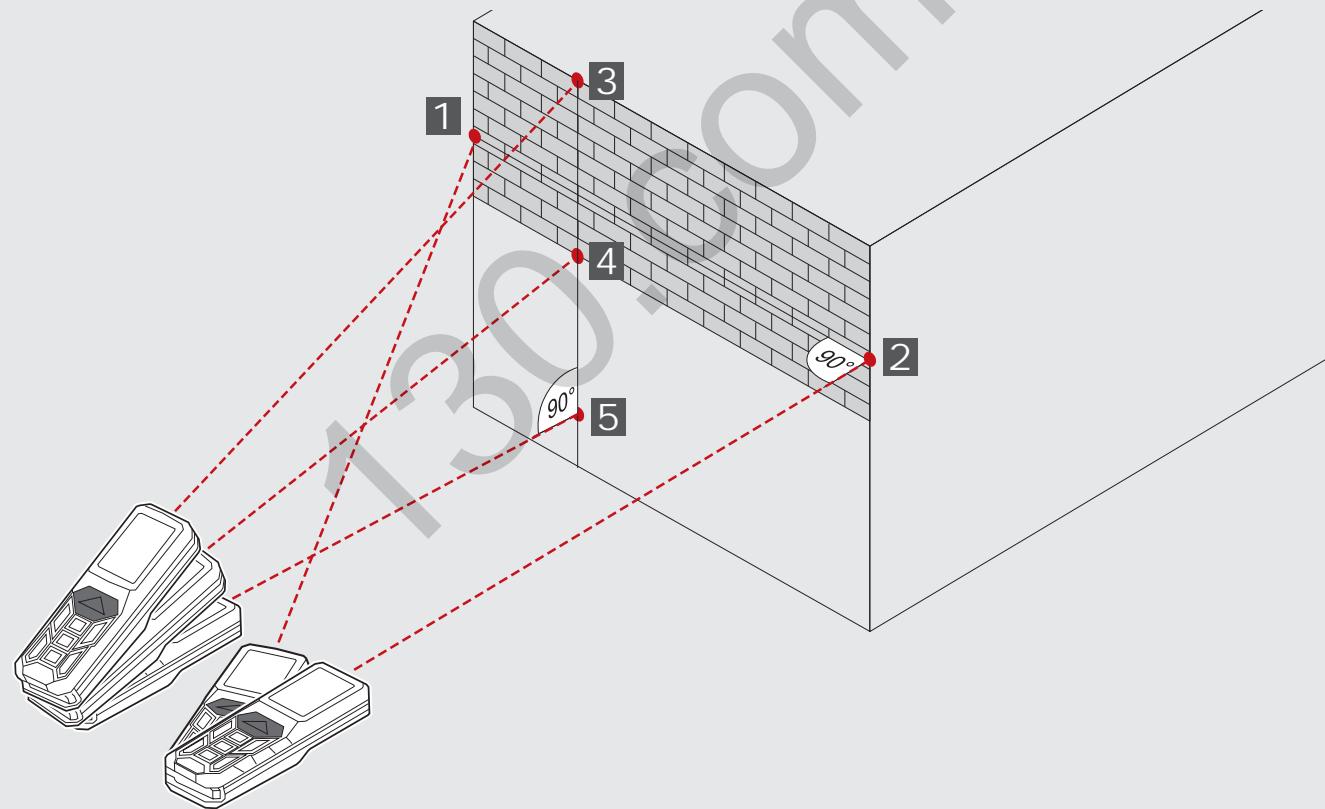
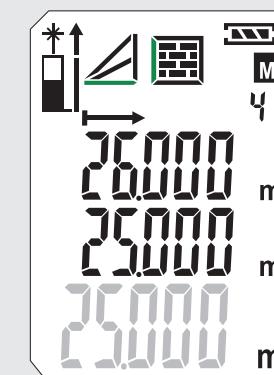
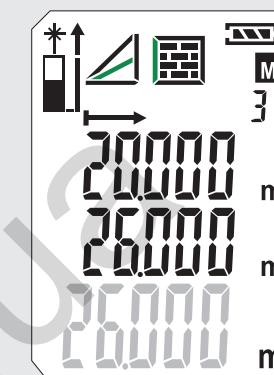
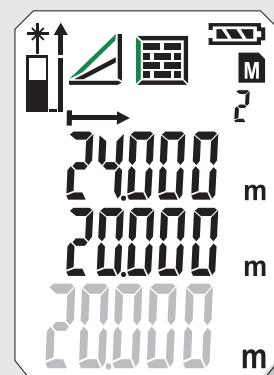
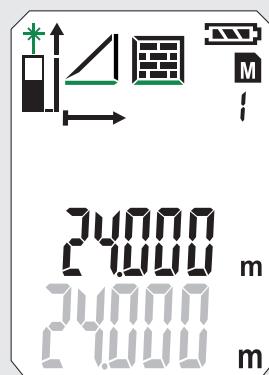
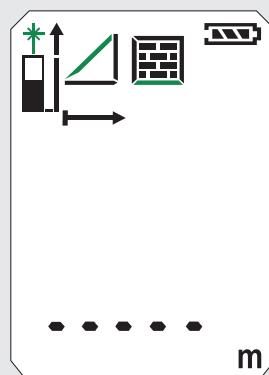
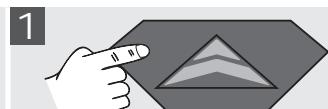
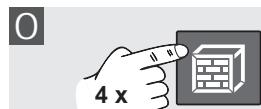
4



SEINÄN PINTA-ALAMITTAUS (MALLI 1)



SEINÄN PINTA-ALAMITTAUS (MALLI 2)



AJASTIN

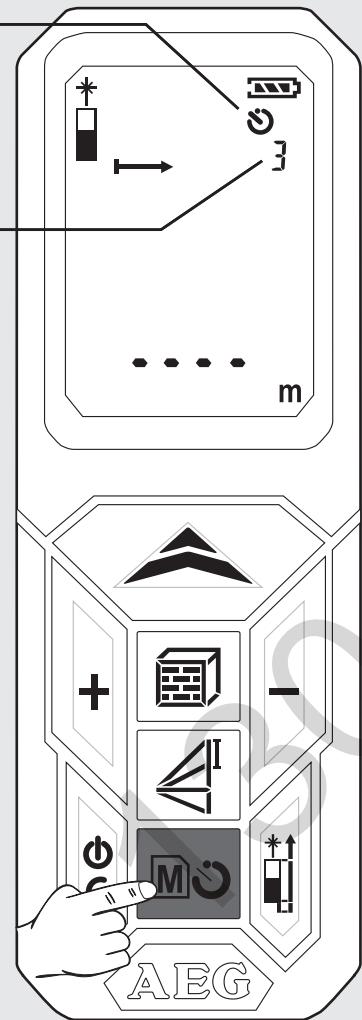
Ajastimen avulla mittaus voidaan suorittaa viiveellä, esim. rakenneosan sijoittamiseksi mittaussäteeseen.

Paina **M**-näppäintä

- Symboli tulee näyttöön
- Painamalla **M**-näppäintä voit säätää ajastimen keston 3 ja 15 sekunnin välille.

Paina **▲**-näppäintä

- Sekunnit lasketaan alasäin mittaukseen saakka.
- Arvossa 0 mittaus laukaistaan.



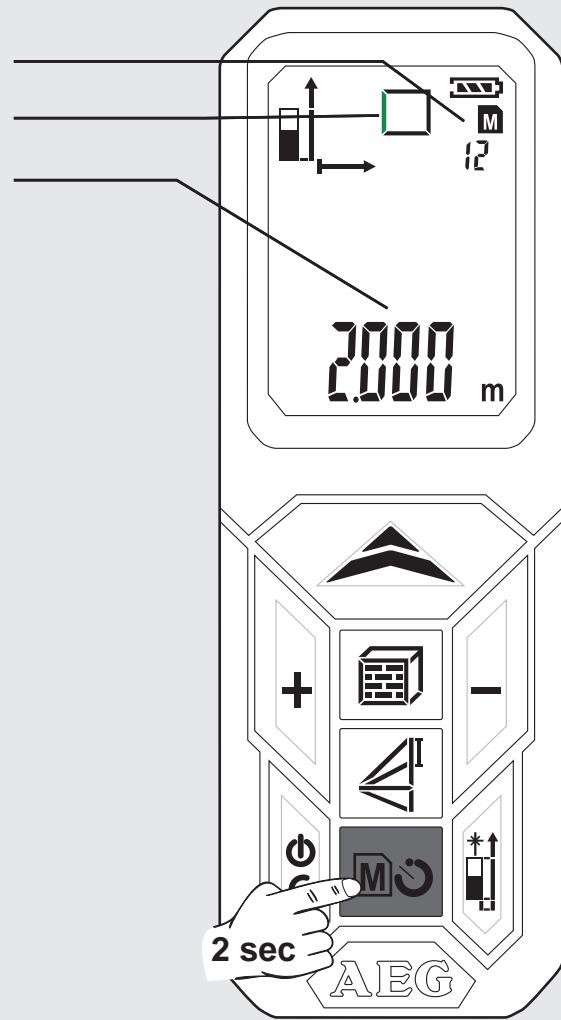
MUISTI

Mittausarvot tallennetaan automaattisesti jatkuvasti muistiin.

Tallennetut arvot saadaan näyttöön painamalla **M**-näppäintä.

Paina **M**-näppäintä 2 sek.

- Näyttöön tulee symboli ja muistipaikka.
- Siihen kuuluva mittausarvo tulee näyttöön.
- Tallennettu arvo tulee näyttöön pääriville.
- Liiku +/- näppäimillä



PERUSLUONTOINEN TOIMINTATAPA PINTA-ALAMITTAUKSEN (1) ESIMERKILLÄ NÄYTETTYNÄ

1 Päälekytkentä

Paina -näppäintä.
A Huomio! Lasersäde on päällä!
 Älä kohdista sitä ihmisiin!

Lasersymboli vilkkuu
 (vilkkuminen esitetään vihreänä).

2 Valitse mittaustaso

Vakioasetus päälekytkennän jälkeen: takana
 Paina 1x -> nurkkapuikko
 Paina 2x -> edessä
 Paina 3x -> takana

Näyttöön tulee symboli

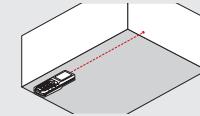
3 Valitse toiminto

Käynnistämisen jälkeen laite on aina asetettu pituusmittaukselle. Paina 1x -> pinta-alamittaus

- Näyttöön tulee symboli
 Mittaussuure vilkkuu
 (vilkkuminen esitetään vihreänä).

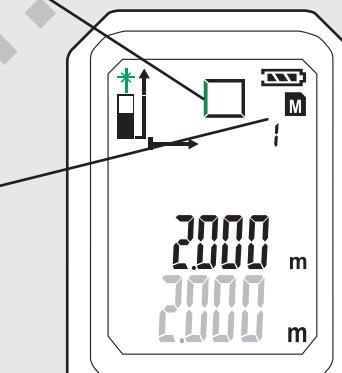
4 Mittaa pituus

Kohdista laite ja paina -näppäintä



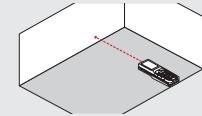
- Mittausarvo tulee lyhyesti näkyviin päärivillä
 - Mittausarvo siirtyy 1 sekunnin jälkeen sen yläpuolella olevalle riville

Mittausarvo tallennetaan muistiin jatkuvalla numeroinilla.
 Toinen mittaussuure vilkkuu. Laite on valmis toisen arvon mittaukseen.



5 Mittaa leveys

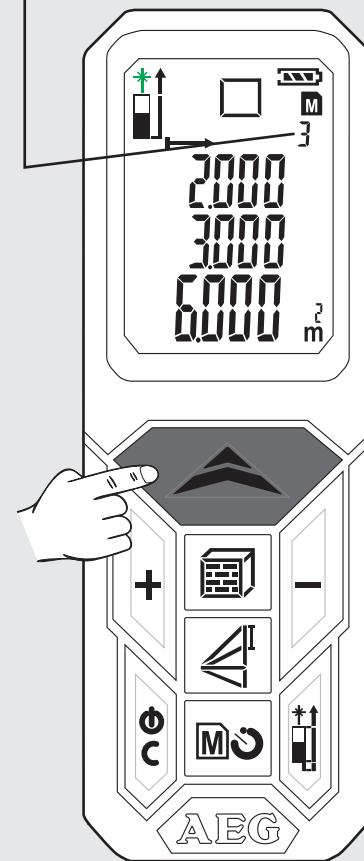
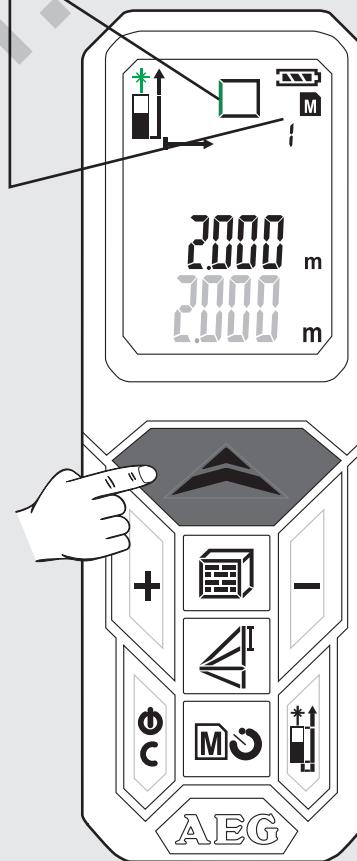
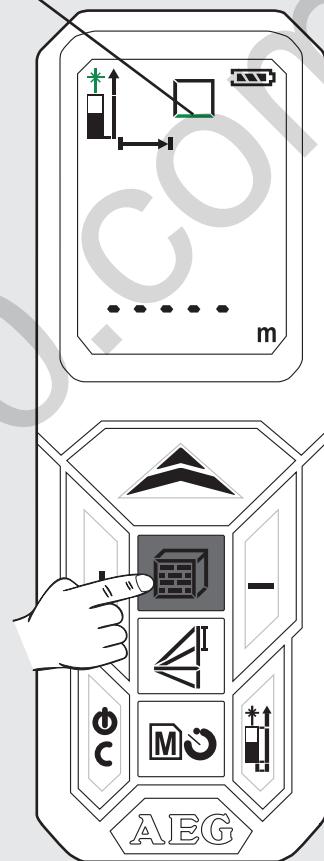
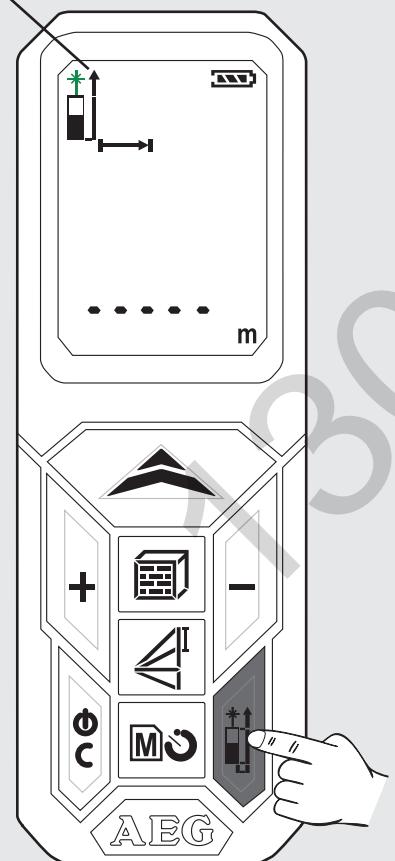
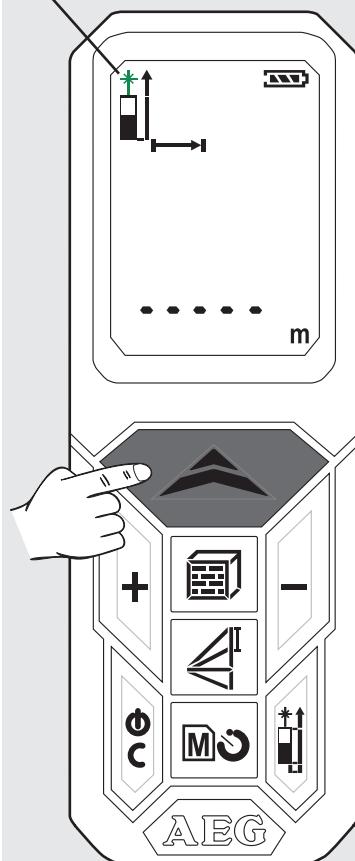
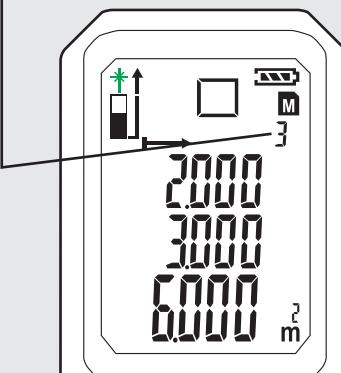
Kohdista laite ja paina -näppäintä



- Mittausarvo tulee lyhyesti näkyviin päärivillä

- Mittausarvo siirtyy 1 sekunnin jälkeen sen yläpuolella olevalle riville

Mittausarvo tallennetaan muistiin jatkuvalla numeroinilla.
 - Tulos näytetään päärivillä ja tallennetaan muistiin jatkuvalla numeroinilla.



PERUSLUONTOINEN TOIMINTATAPA PINTA-ALAMITTAUKSEN (2) ESIMERKILLÄ NÄYTETTYNÄ

6 Hae tallennetut arvot näyttöön

Paina **M**-näppäintä 2 sek. ajan.

Paina + tai - näppäintä

- Tallennetut arvot tulevat näyttöön pääriiville.

Siihen kuuluva symboli tulee näyttöön ja mittaussuure vilkkuu (vilkkuminen esitetään vihreänä).

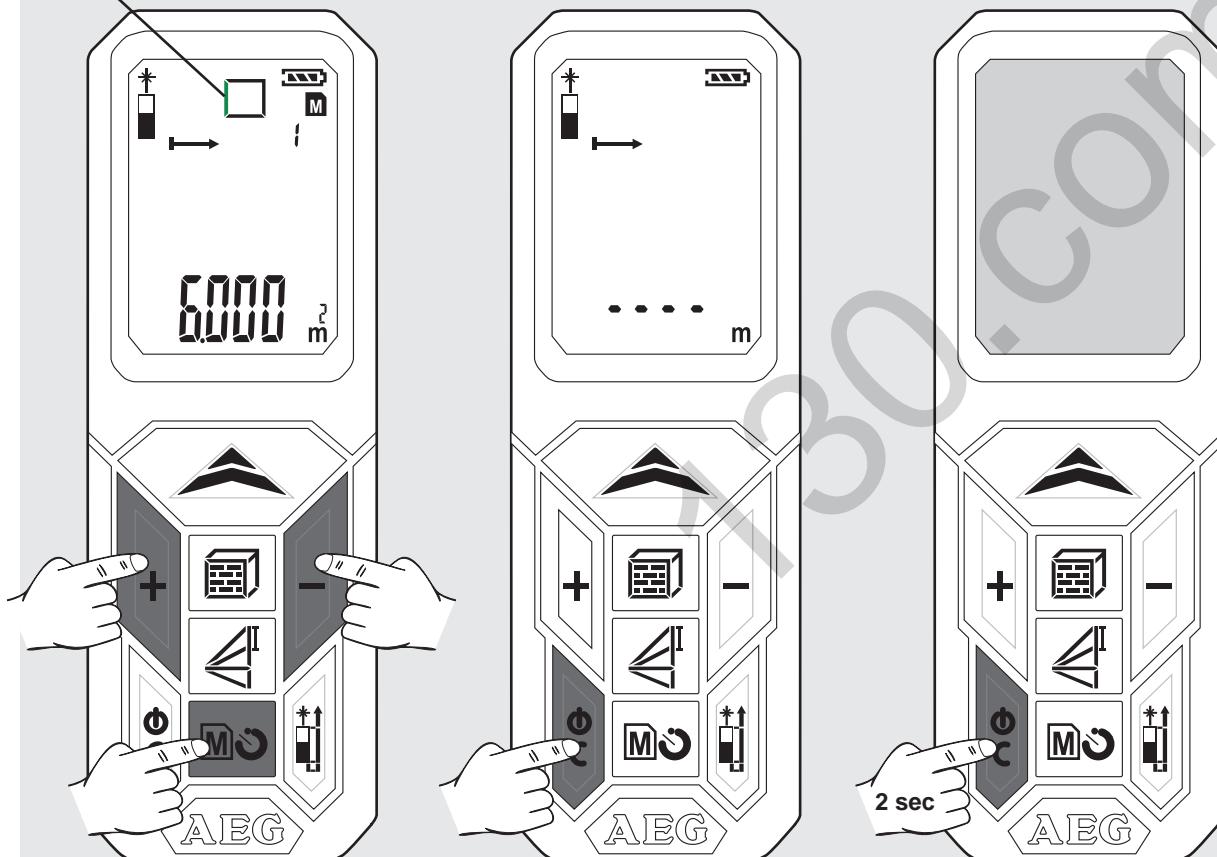
7 Poistu muistista

Paina **∅**-näppäintä

8 Sammuttaminen

Paina **∅**-näppäintä 2 sek. ajan (sitä ennen täytyy poistua muistista).

- Laite sammuu.
- Jos 3 minuutin aikana ei paineta mitään näppäintä, niin laite sammuu automaattisesti.



ΤΕΧΝΙΚΑ ΣΤΟΙΧΕΙΑ

Κατηγορία αντοχής για σκόνη και νερό	IP54
Φακός	14 mm
Εστιακό σημείο	35 mm
Μέγιστη απόσταση μέτρησης	50 μέτρα (ανοχή: 55 m)
Ελάχιστη απόσταση μέτρησης	0,05 μέτρα
Απόλυτη ακρίβεια @ < 10m	± 1,5 mm (Max)
Ακρίβεια επανάληψης @ < 10	± 1,5 mm (τιμή αναφοράς max. 2σ)
Ακρίβεια επανάληψης @ > 10	αύξηση κατά ± 0,25 mm / μέτρο (τιμή αναφοράς max. 2σ)
Χρόνος μέτρησης	0,5 s
Τύπος οθόνης	LCD (22,7mm x 31 mm)
Ηλεκτρική τροφοδοσία	AAA 2x (αλκαλική μπαταρία)
Χρόνος ζωής μπαταρίας	10000 (μεμονωμένες μετρήσεις)
Ισχύς εξόδου laser	0,6 mW ~ 0,95 mW (κλάση 2, 650nm)
Μέγεθος στίγματος laser	25 x 30 mm @ 16 m (Max)
Κατακόρυφη γωνία ακτίνας laser	+1 μοίρα
Οριζόντια γωνία ακτίνας laser	±1 μοίρα
Αυτόματη απενεργοποίηση συσκευής	180 δευτερόλεπτα
Αυτόματη απενεργοποίηση laser	30 δευτερόλεπτα
Περιοχή θερμοκρασίας λειτουργίας	-10°C μέχρι +50°C
Περιοχή θερμοκρασίας αποθήκευσης	-25°C μέχρι +70°C
Βάρος χωρίς μπαταρία	80 g

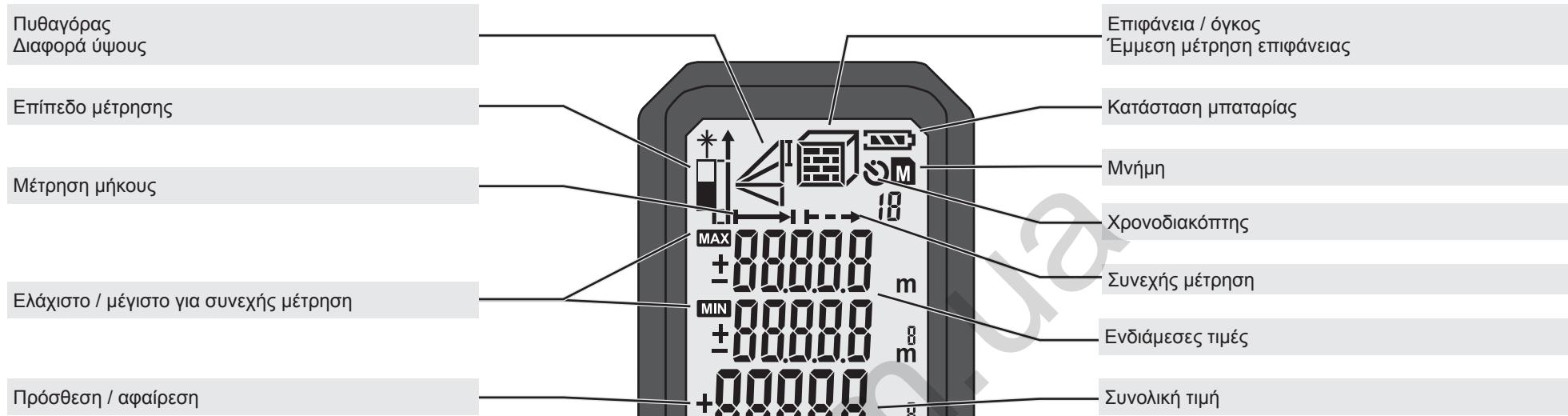
ΠΙΝΑΚΑΣ ΚΩΔΙΚΩΝ ΣΦΑΛΜΑΤΩΝ

Κωδικός	Περιγραφή	Λύση
Err01	Εκτός περιοχής μέτρησης	Διεξάγετε την μέτρηση μέσα στην προβλεπόμενη περιοχή μέτρησης.
Err02	Το ανακλώμενο σήμα είναι πολύ αδύναμο	Διαλέξτε μια καλύτερη επιφάνεια.
Err03	Εκτός περιοχής ένδειξης (μεγ. τιμή: 99.999) π.χ.το αποτέλεσμα της επιφάνειας ή του όγκου ξεπερνά τη μέγιστη τιμή ένδειξης	Ελέγξτε αν οι τιμές και τα βήματα της διαδικασίας είναι σωστά.
Err04	Σφάλμα στον πυθαγόρειο υπολογισμό	Ελέγξτε αν οι τιμές και τα βήματα της διαδικασίας είναι σωστά.
Err05	Αδύναμη μπαταρία	Βάλτε καινούριες μπαταρίες
Err06	Εκτός περιοχής θερμοκρασίας λειτουργίας	Διεξάγετε την μέτρηση μέσα στην προβλεπόμενη περιοχή θερμοκρασίας.
Err07	Περιβάλλον πολύ φωτεινό	Φροντίστε ώστε η περιοχή μέτρησης να μην είναι πολύ φωτεινή.

ΧΡΗΣΗ ΣΥΜΦΩΝΑ ΜΕ ΤΟ ΣΚΟΠΟ ΠΡΟΟΡΙΣΜΟΥ

Η συσκευή μέτρησης αποστάσεως με ακτίνα laser είναι κατάλληλη για μετρήσεις απόστασης και κλίσης.

Αυτή η συσκευή επιτρέπεται να χρησιμοποιηθεί μόνο σύμφωνα με τον αναφερόμενο σκοπό προορισμού.



ON / ΜΕΤΡΗΣΗ

- On
- Μέτρηση
- Συνεχής μέτρηση (πιέστε για 2 δευτερόλεπτα)
Μέγιστο / ελάχιστο Λειτουργία

ΠΡΟΣΘΕΣΗ

- Πρόσθεση τιμής
- Πλοήγηση στη μνήμη

ΕΠΙΦΑΝΕΙΑ / ΟΓΚΟΣ

- Επιφάνεια (πιέστε 1x)
- Όγκος (πιέστε 2x)
- Έμμεση μέτρηση επιφάνειας (πιέστε 3x / 4x)

ΕΝΕΡΓΟΠΟΙΗΣΗ

- On
- Off (πιέστε για 2 δευτερόλεπτα)
- Διαγραφή

ΑΦΑΙΡΕΣΗ

- Αφαίρεση τιμής
- Πλοήγηση στη μνήμη

ΠΥΘΑΓΟΡΑΣ

- Πυθαγόρας 1 (πιέστε 1x)
- Πυθαγόρας 2 (πιέστε 2x)
- Πυθαγόρας 3 (πιέστε 3x)

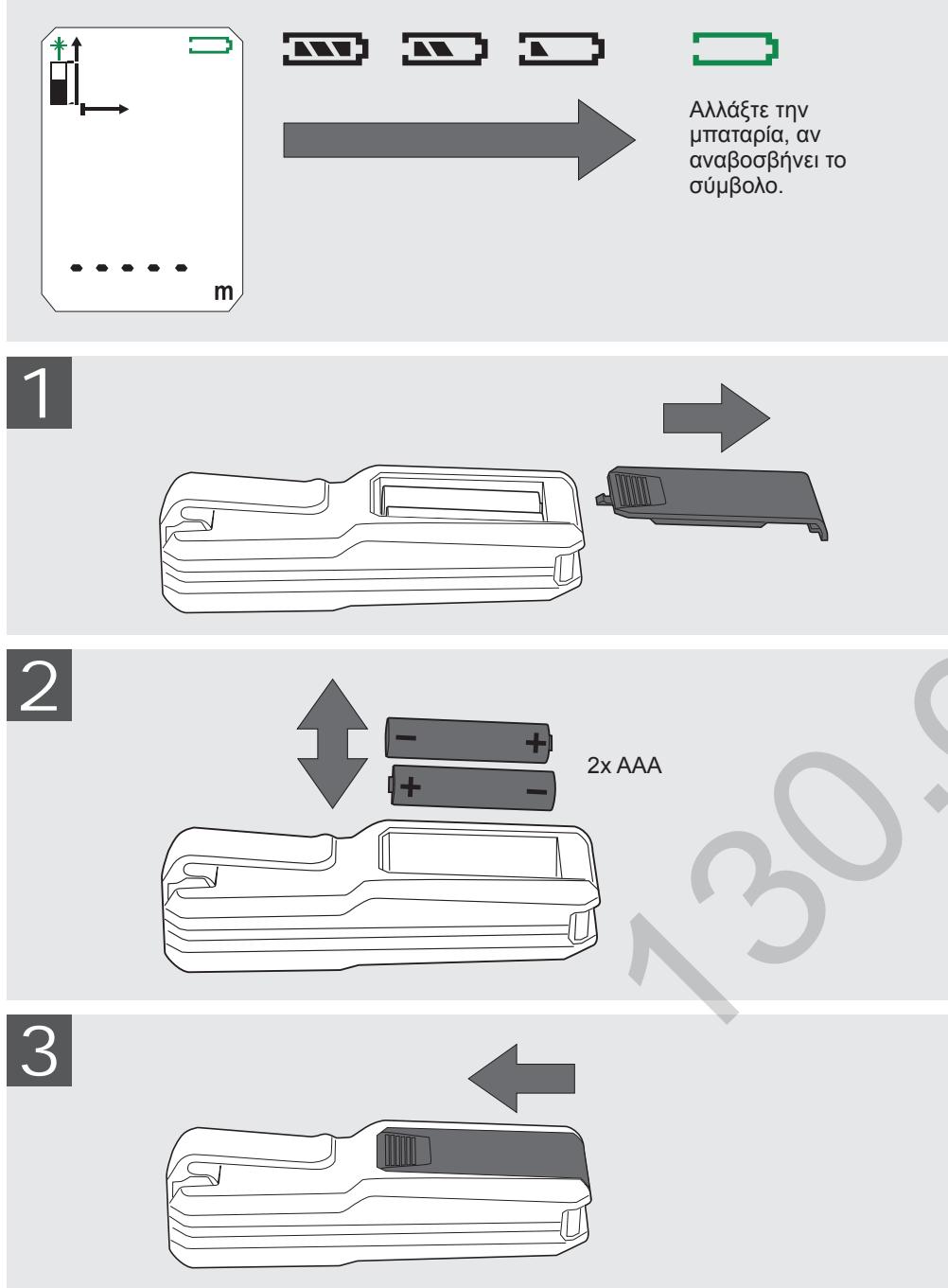
ΑΛΛΑΓΗ ΕΠΙΠΕΔΟΥ ΜΕΤΡΗΣΗΣ

- Μπροστά
- Πίσω
- Ακίδα γωνίας

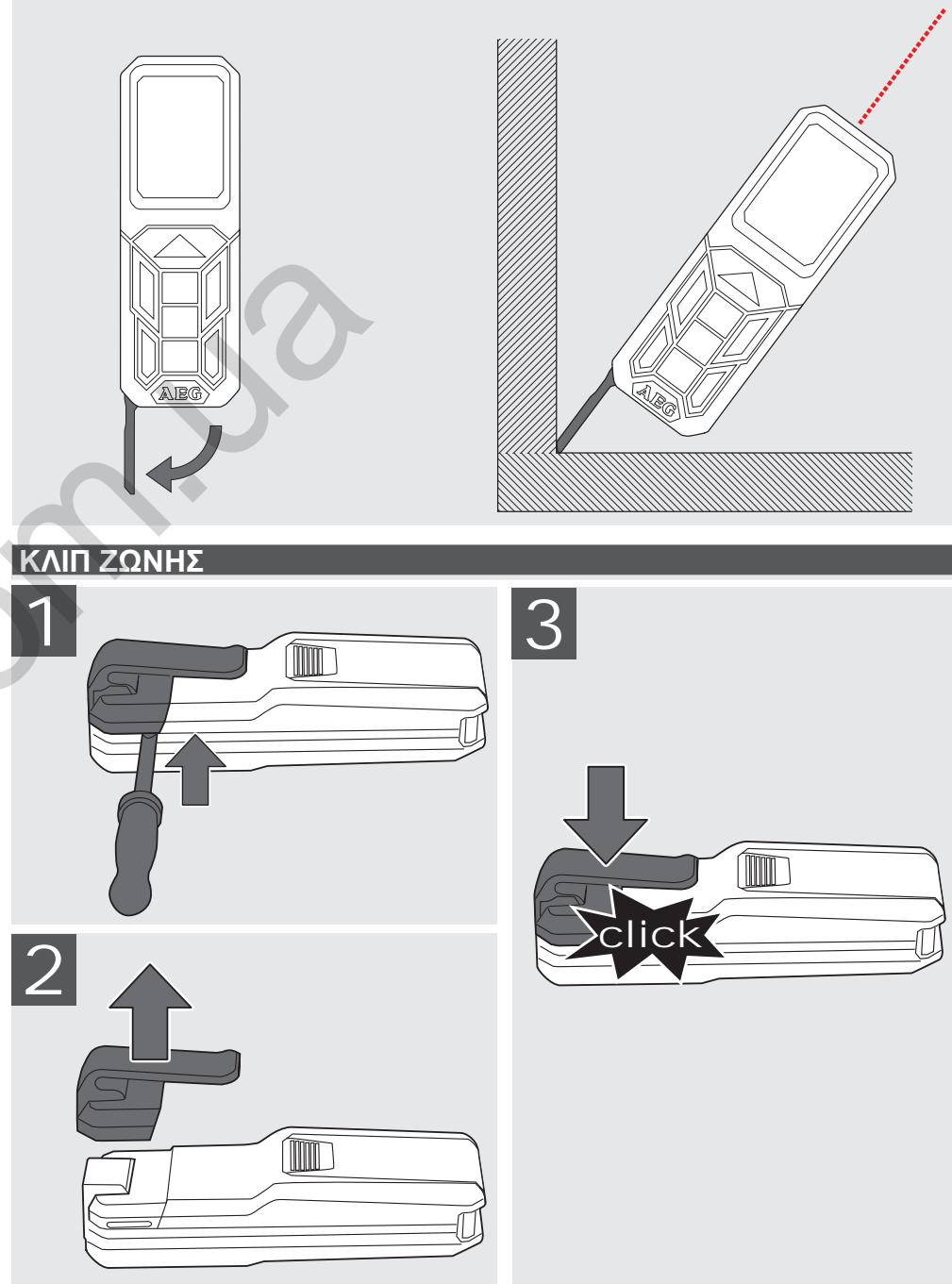
ΜΝΗΜΗ

- Χρονοδιακόπτης 3-15 δευτερόλεπτα (πιέστε 1x)
- Μνήμη 1-20 (πιέστε 1x για 2 δευτερόλεπτα)
- Πλοήγηση στη μνήμη πιέζοντας τα πλήκτρα +/-

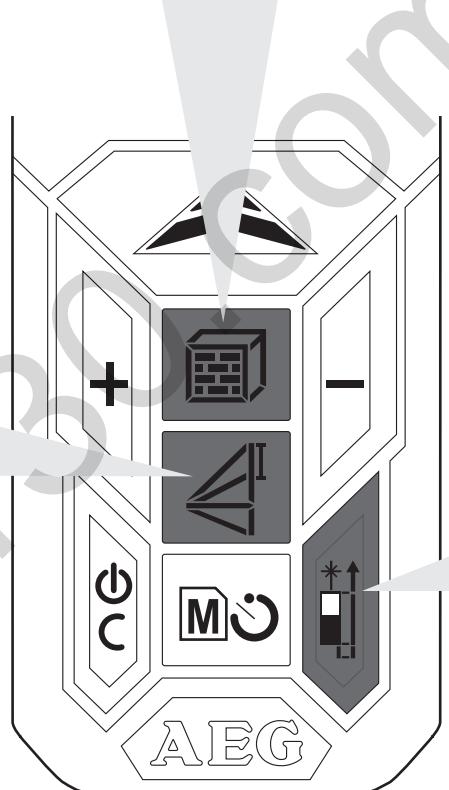
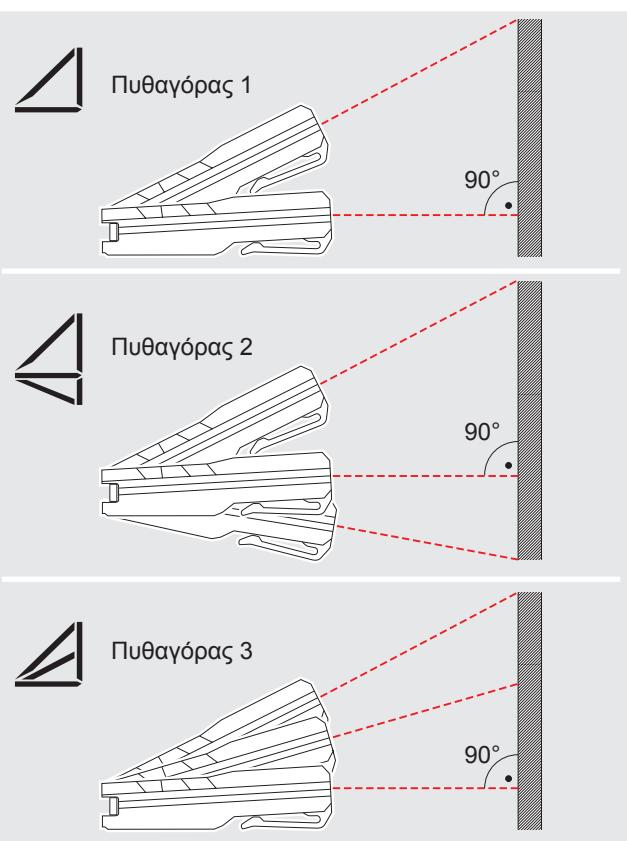
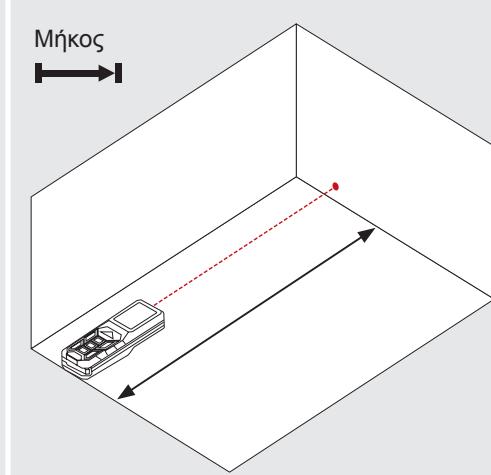
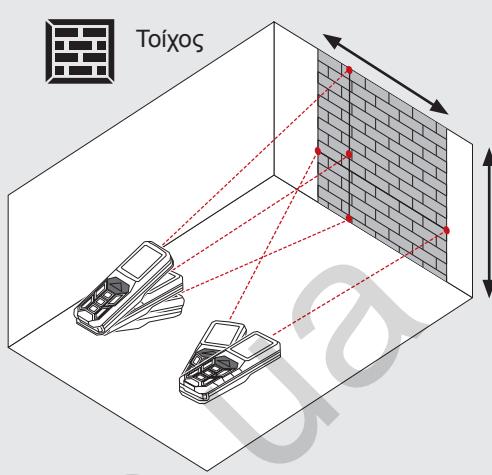
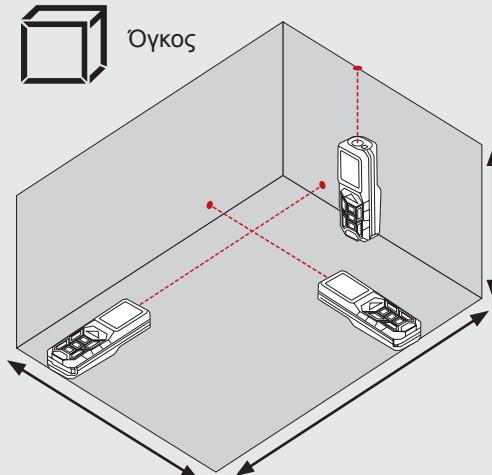
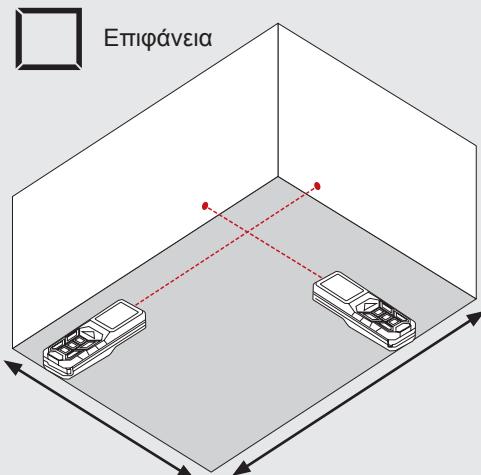
ΑΛΛΑΓΗ ΜΠΑΤΑΡΙΑΣ



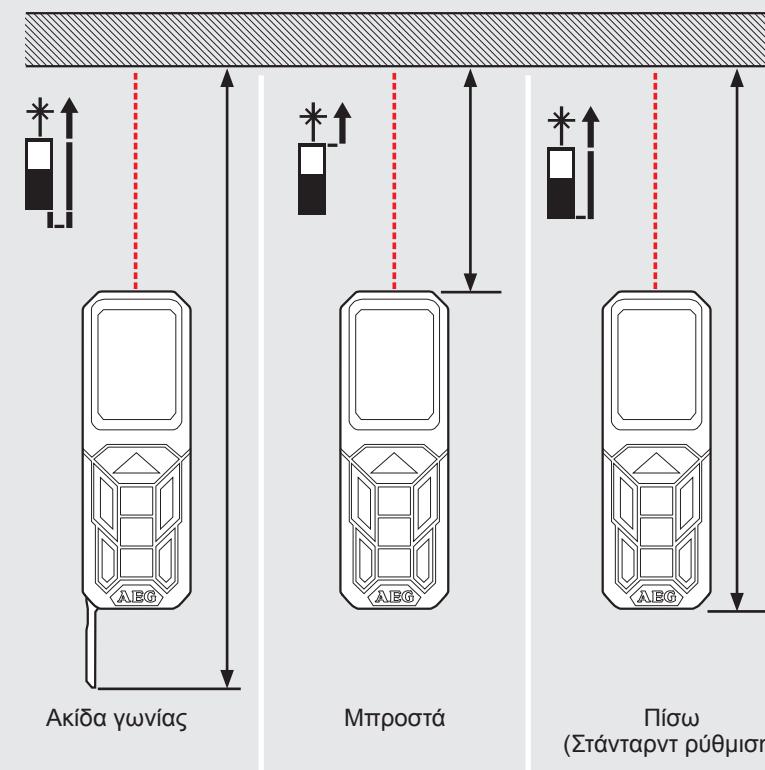
ΑΚΙΔΑ ΓΩΝΙΑΣ



ΠΛΗΚΤΡΟ ΛΕΙΤΟΥΡΓΙΑΣ, ΠΥΘΑΓΟΡΑΣ, ΕΠΙΠΕΔΟ ΜΕΤΡΗΣΗΣ

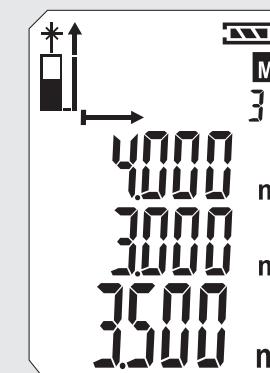
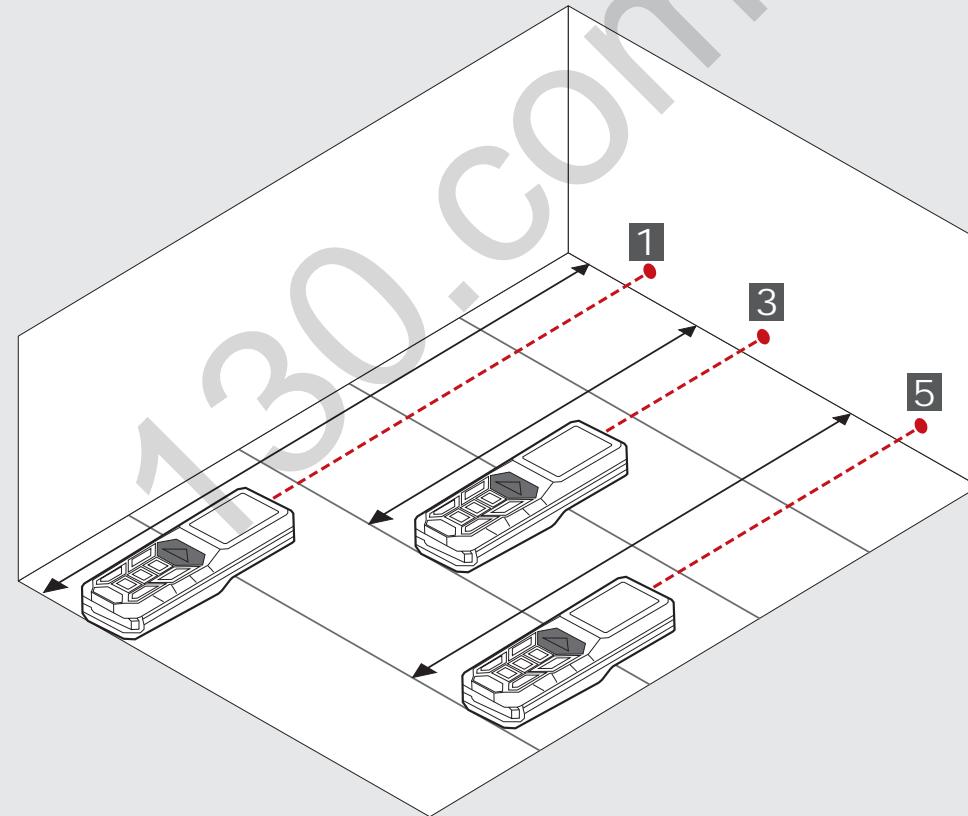
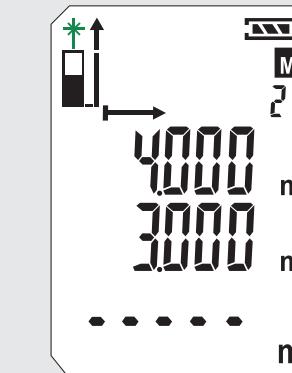
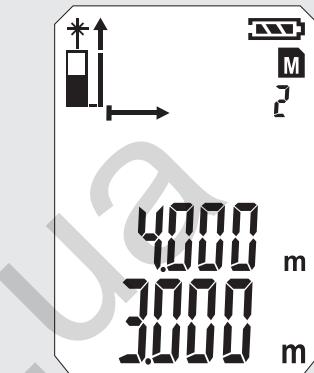
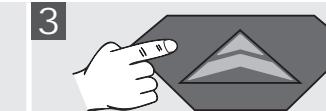
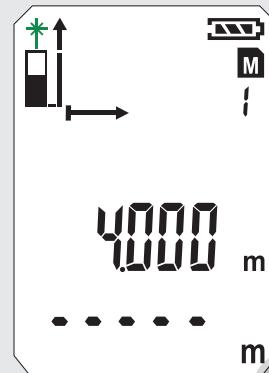
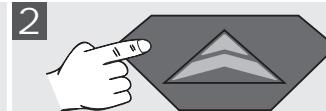
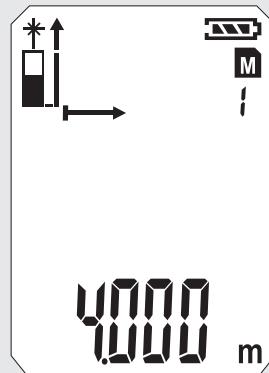
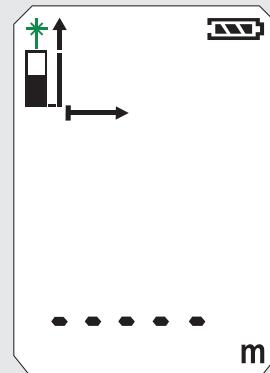


Επίπεδο μέτρησης



ΑΠΛΗ ΜΕΤΡΗΣΗ ΑΠΟΣΤΑΣΗΣ

0

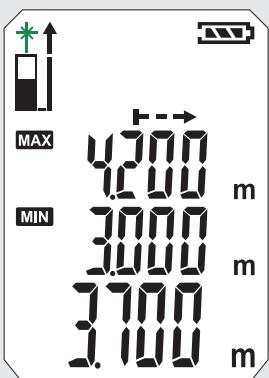


ΣΥΝΕΧΗΣ ΜΕΤΡΗΣΗ / ΜΕΤΡΗΣΗ ΜΕΓΙΣΤΟΥ-ΕΛΑΧΙΣΤΟΥ

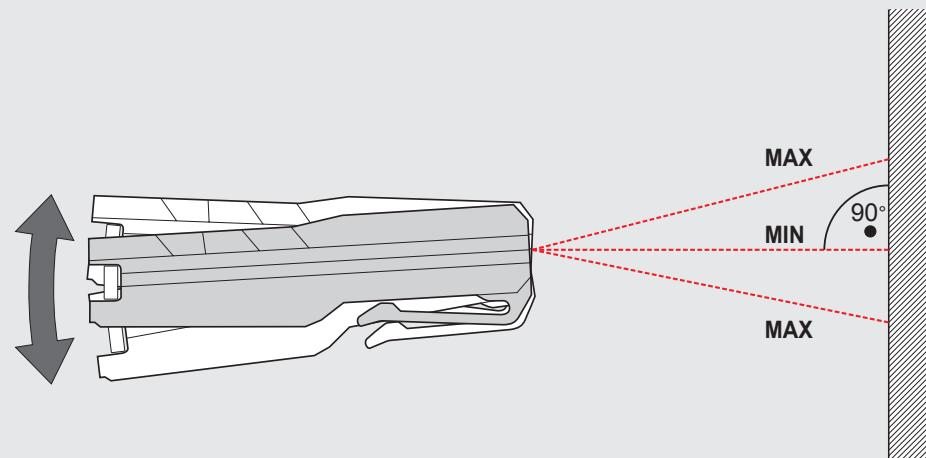
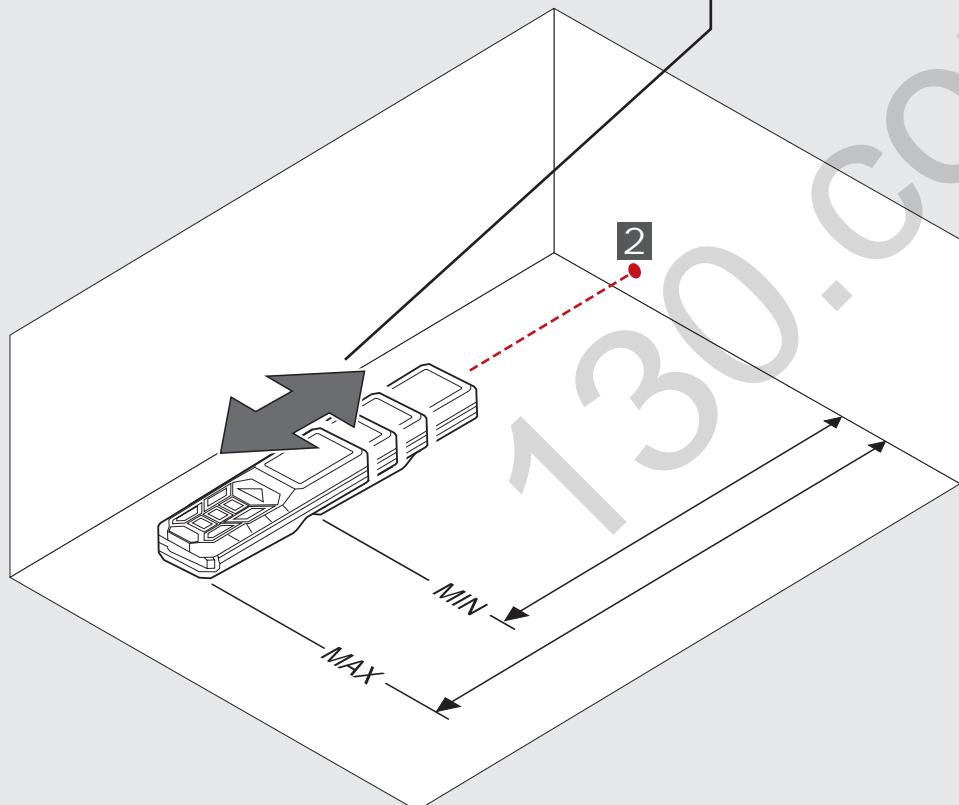
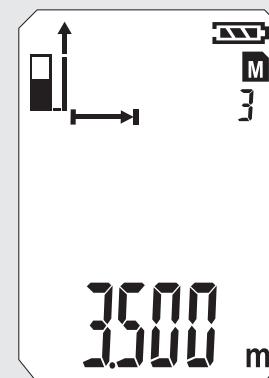
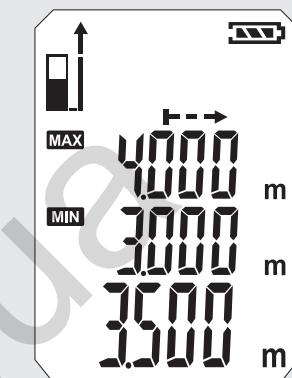
0



2

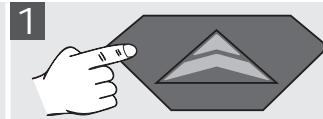


4

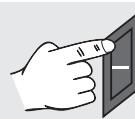


ΜΕΤΡΗΣΗ ΜΕ ΠΡΟΣΘΕΣΗ / ΑΦΑΙΡΕΣΗ

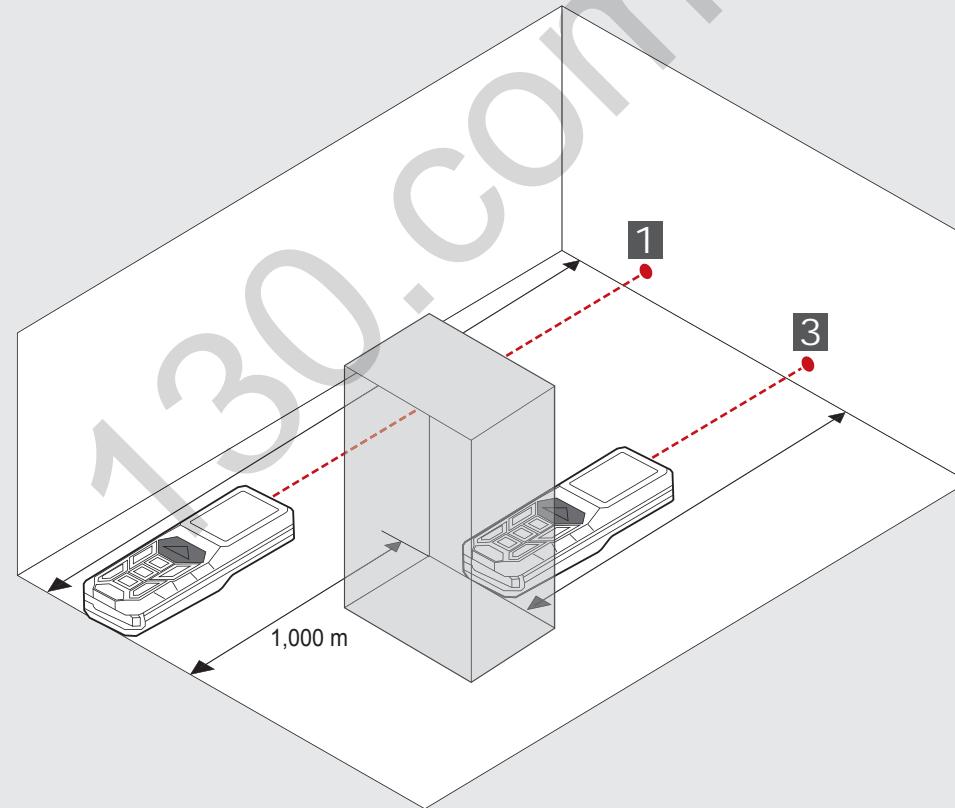
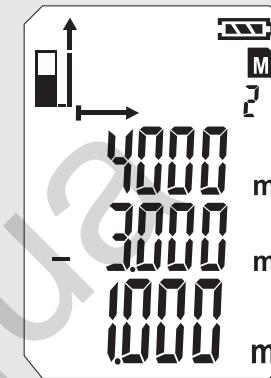
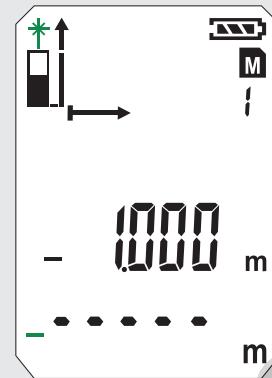
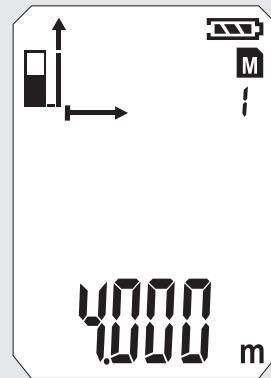
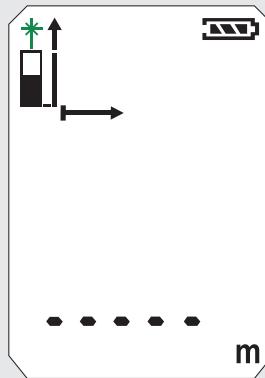
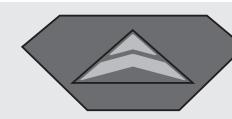
0



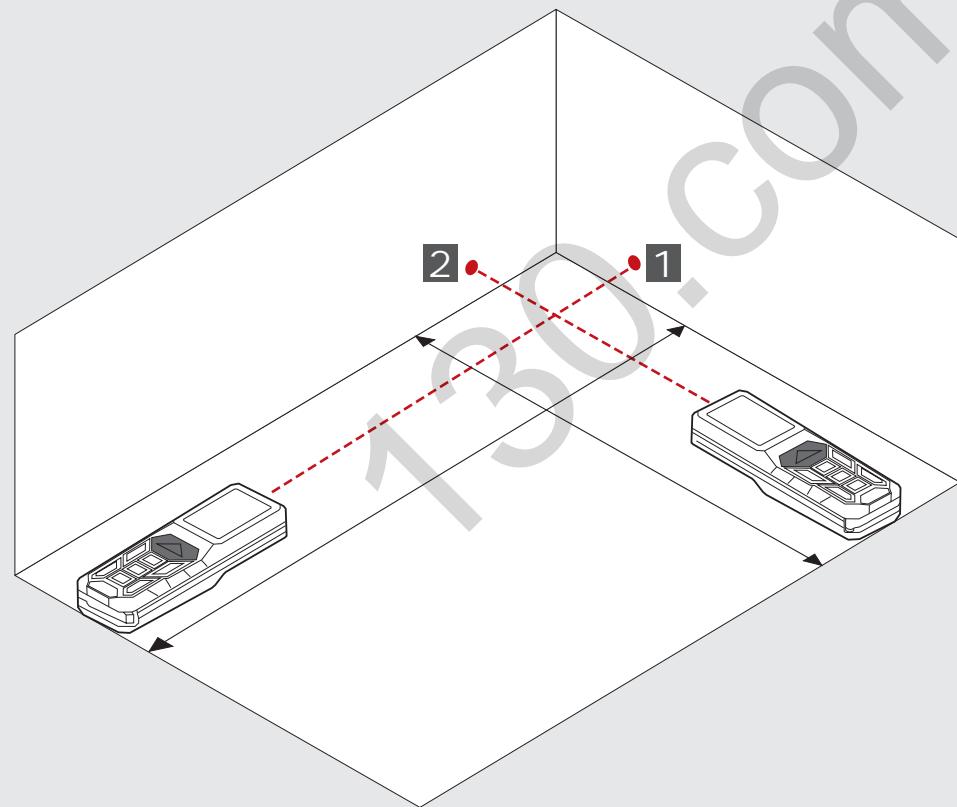
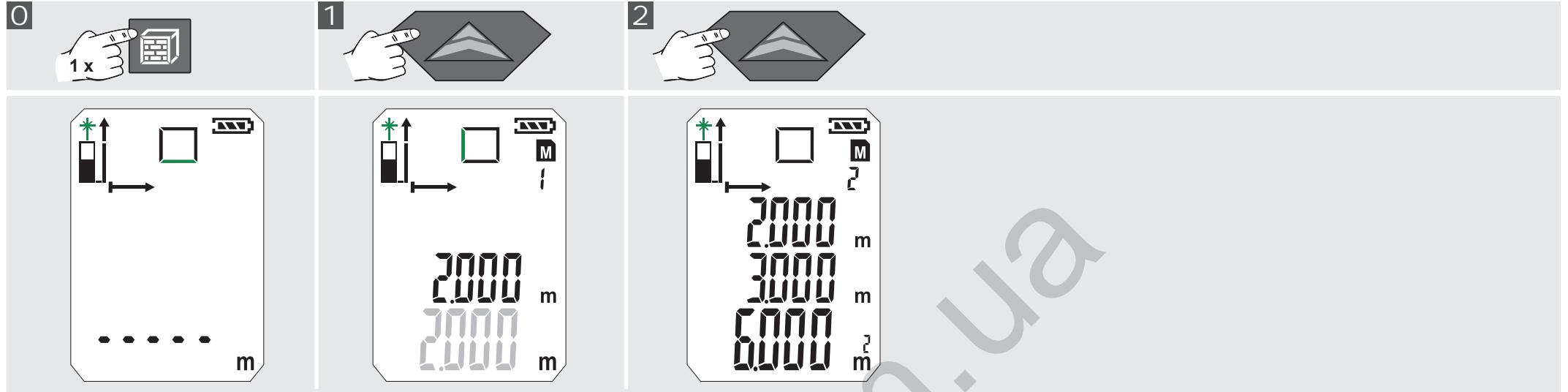
2



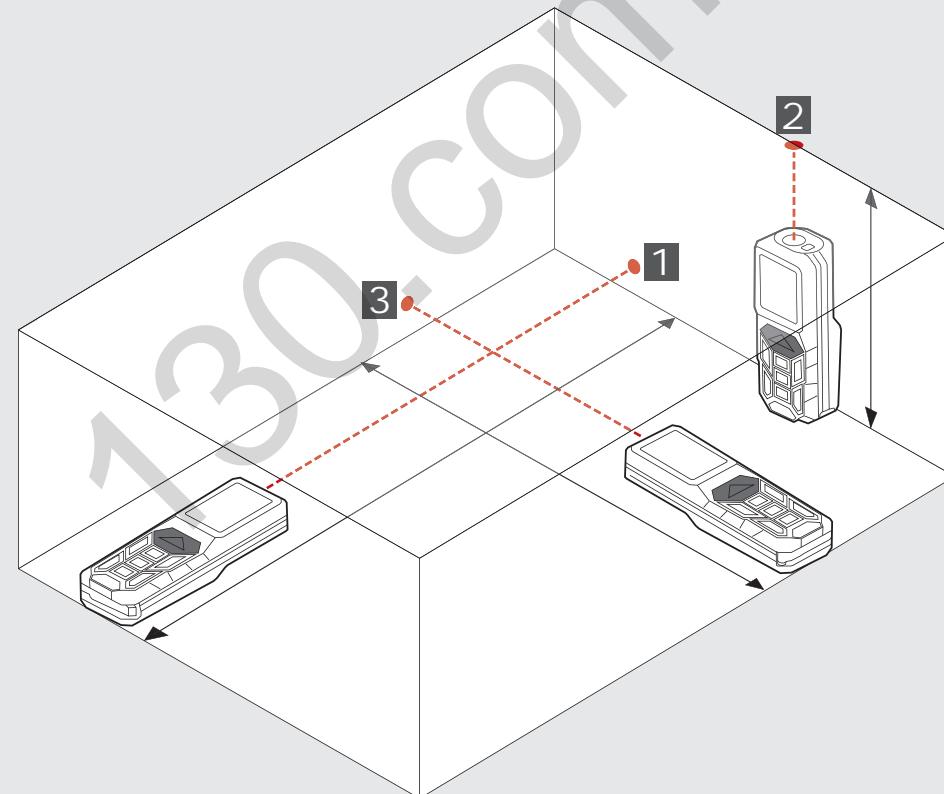
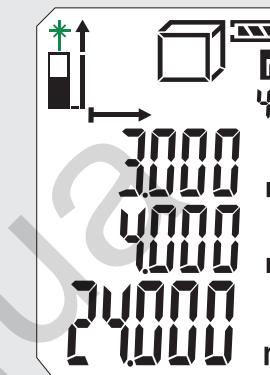
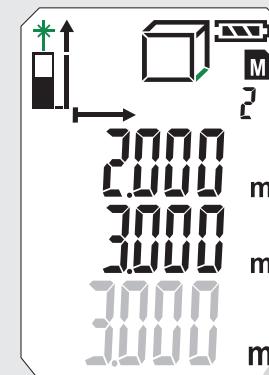
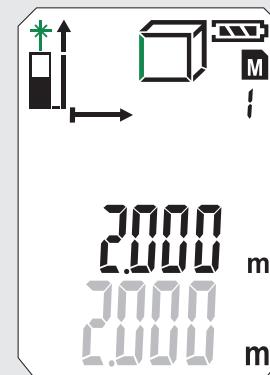
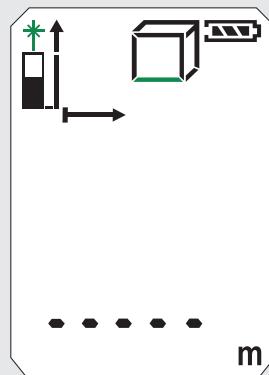
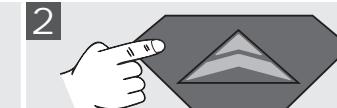
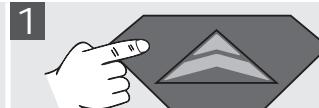
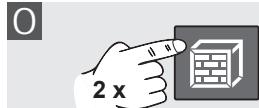
3



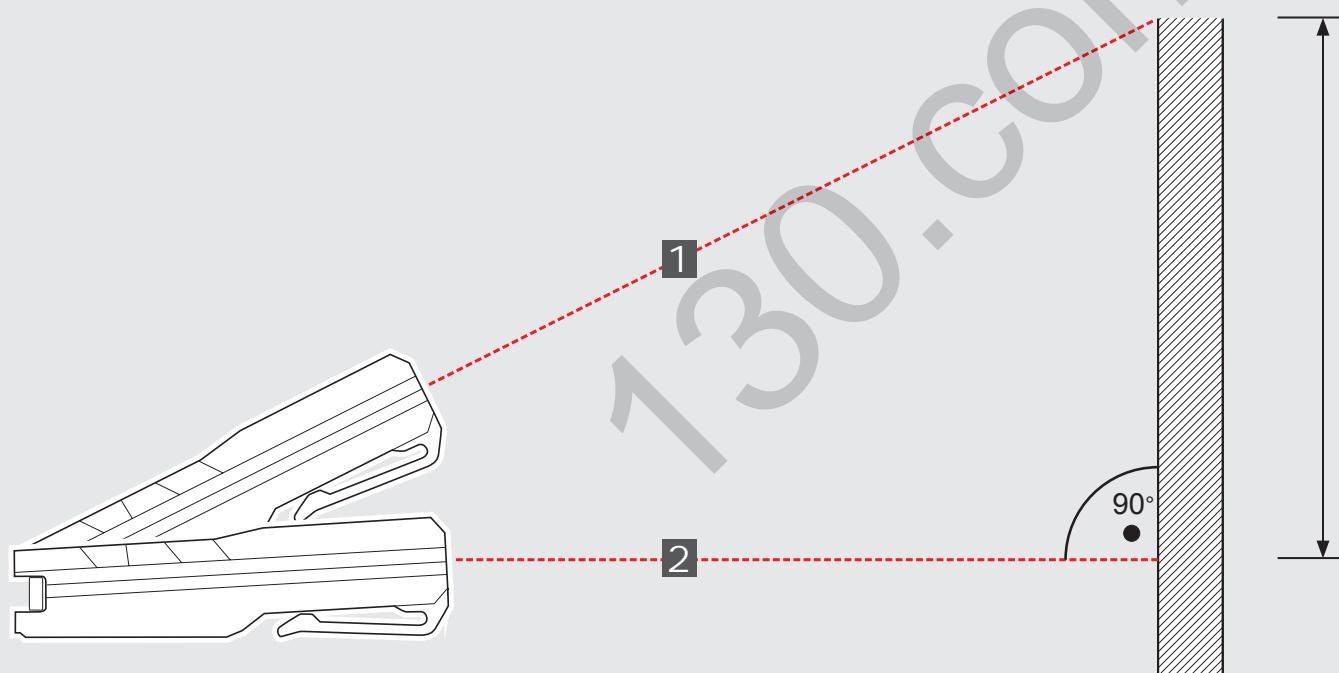
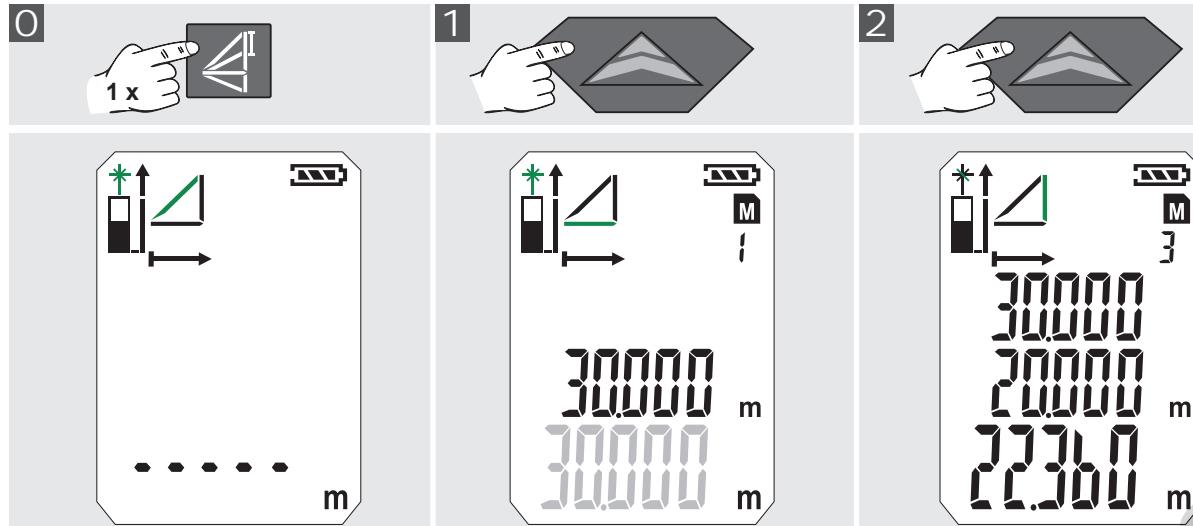
ΜΕΤΡΗΣΗ ΕΠΙΦΑΝΕΙΑΣ



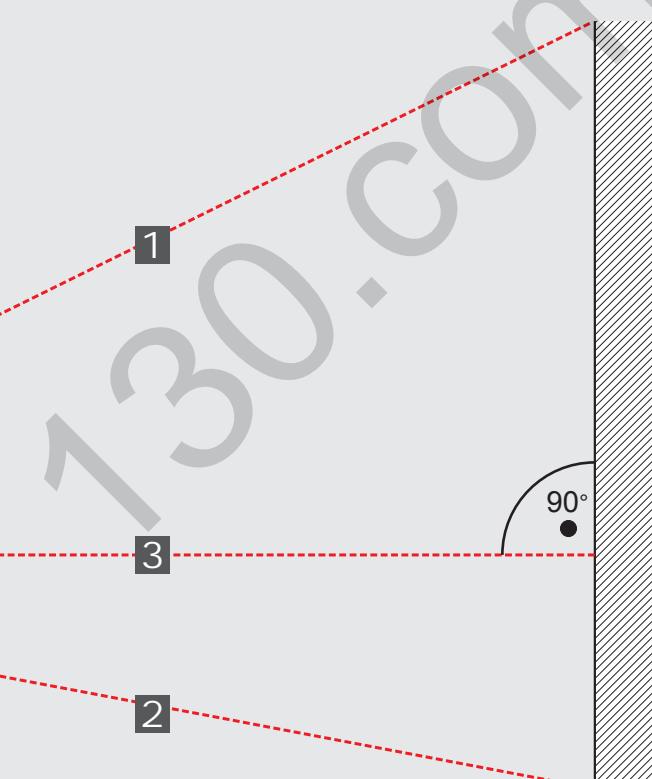
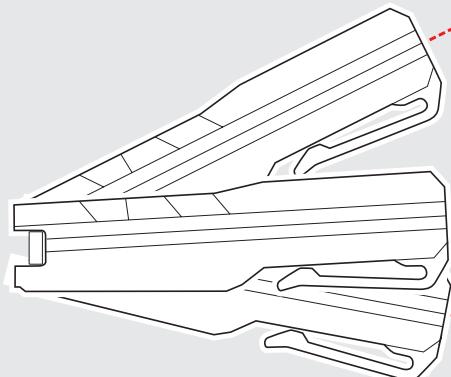
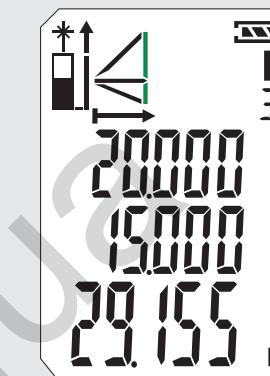
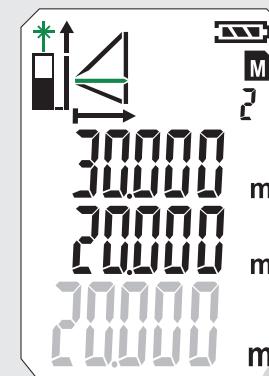
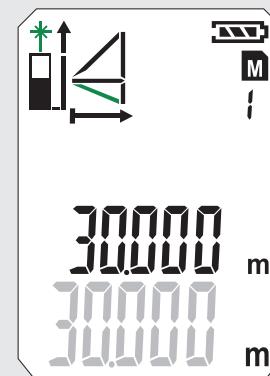
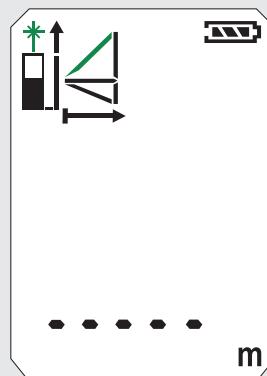
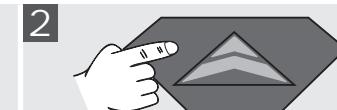
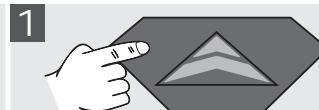
ΜΕΤΡΗΣΗ ΟΓΚΟΥ



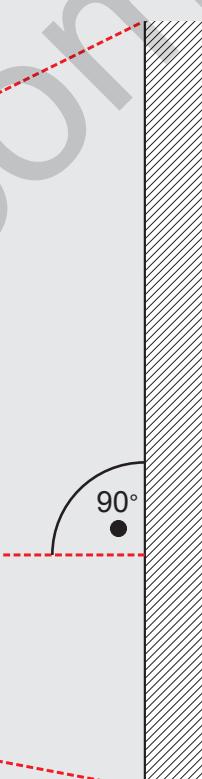
ΕΜΜΕΣΗ ΜΕΤΡΗΣΗ (ΠΥΘΑΓΟΡΑΣ 1)



ΕΜΜΕΣΗ ΜΕΤΡΗΣΗ (ΠΥΘΑΓΟΡΑΣ 2)



2

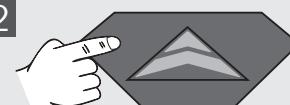


ΕΜΜΕΣΗ ΜΕΤΡΗΣΗ (ΠΥΘΑΓΟΡΑΣ 3)

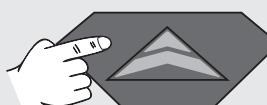
1



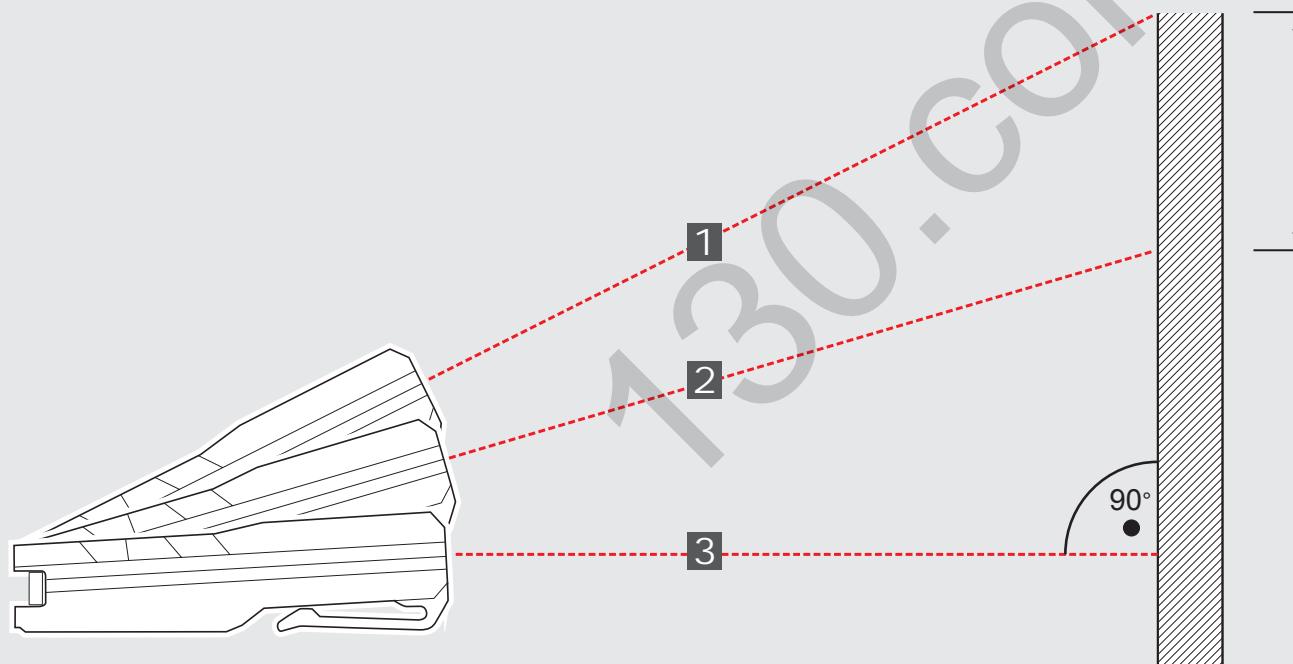
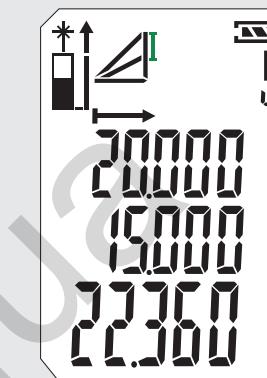
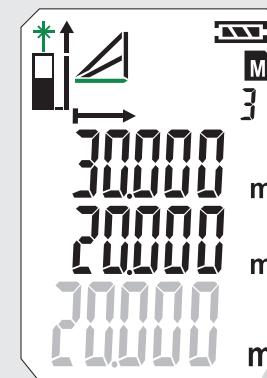
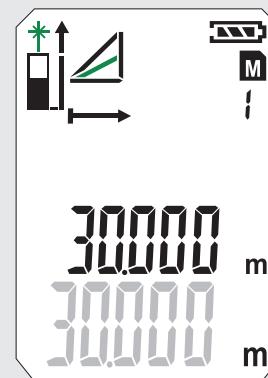
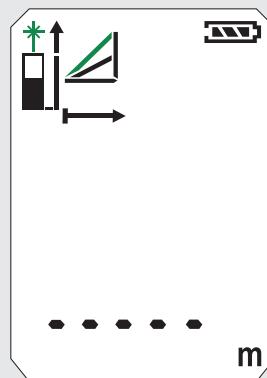
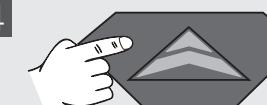
2



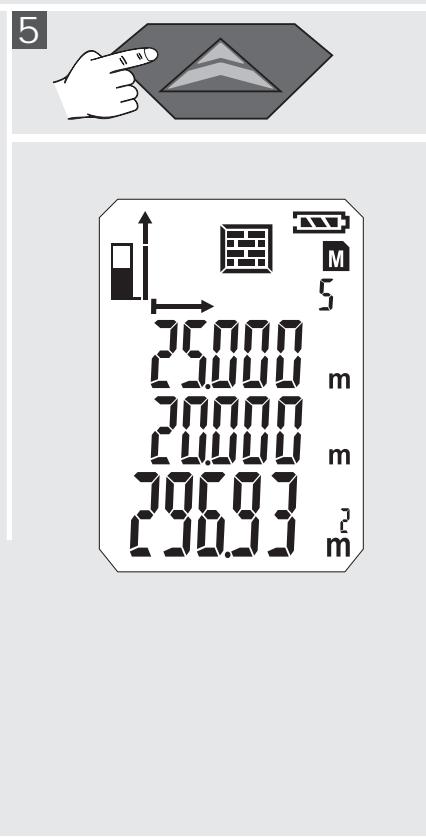
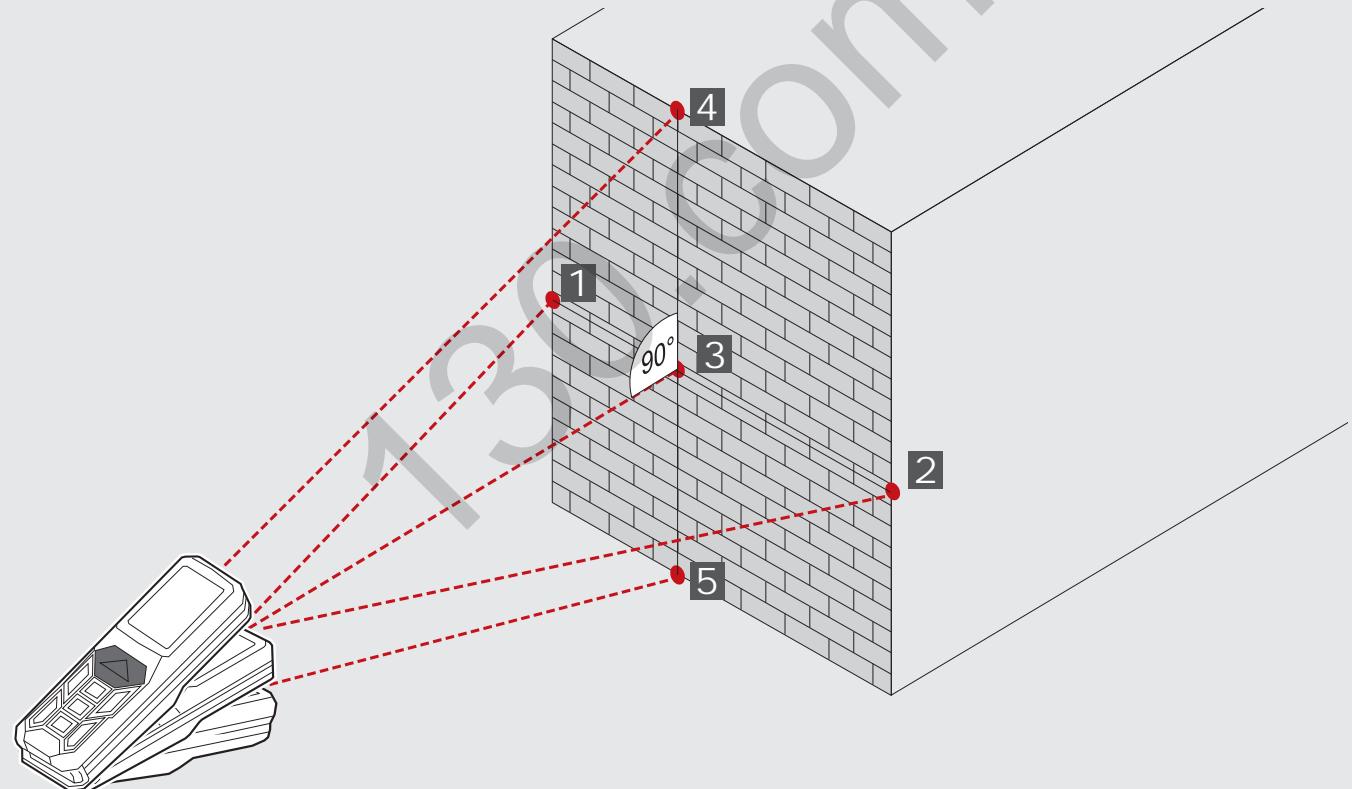
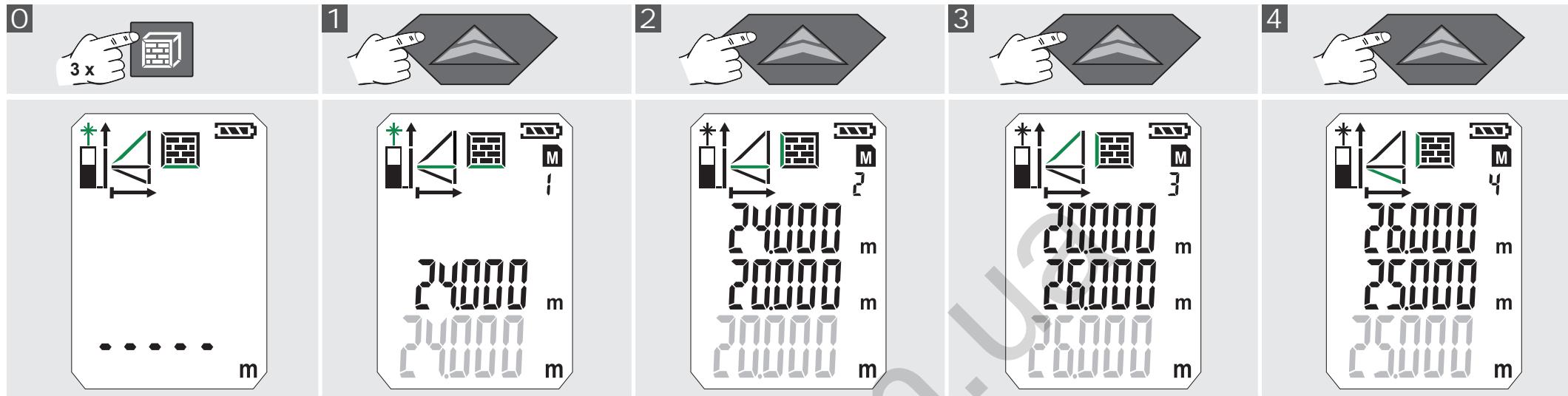
3



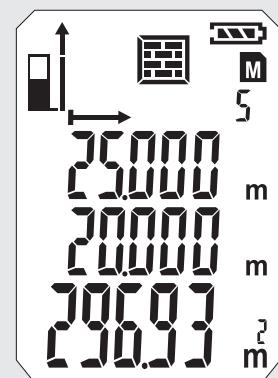
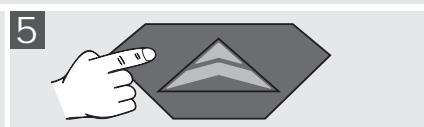
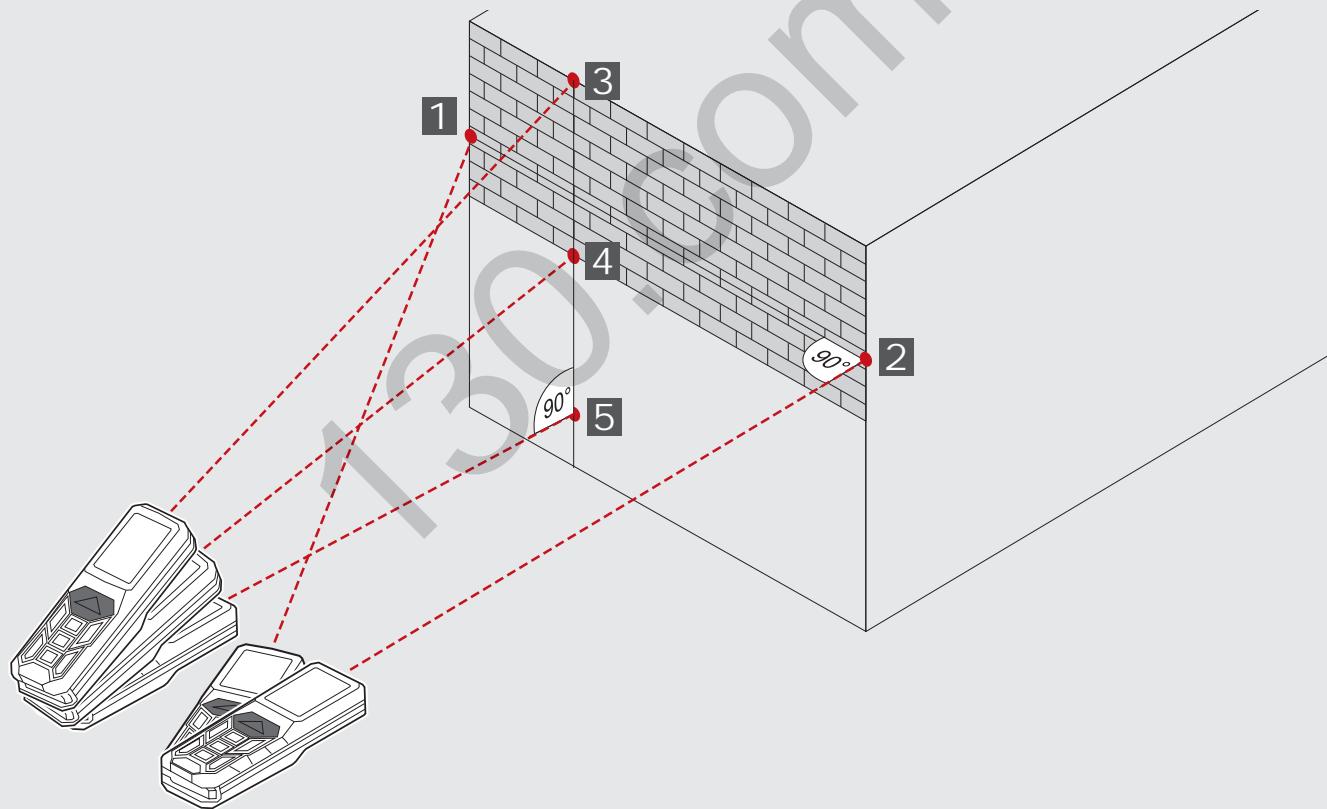
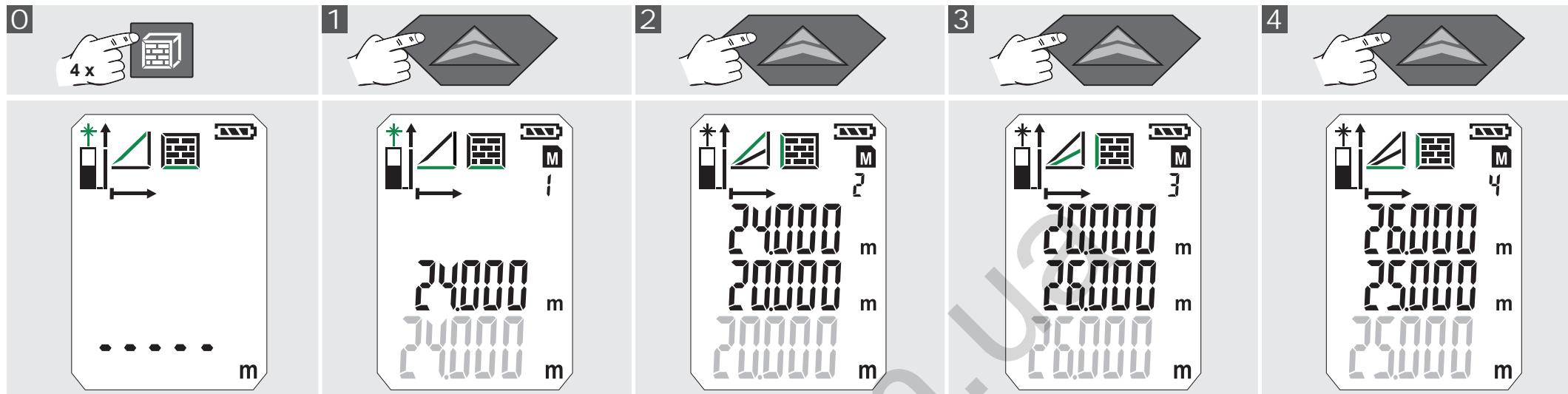
4



ΜΕΤΡΗΣΗ ΕΠΙΦΑΝΕΙΑΣ ΤΟΙΧΟΥ (ΔΙΑΔΙΚΑΣΙΑ 1)



ΜΕΤΡΗΣΗ ΕΠΙΦΑΝΕΙΑΣ ΤΟΙΧΟΥ (ΔΙΑΔΙΚΑΣΙΑ 2)



ΧΡΟΝΟΔΙΑΚΟΠΗΣ

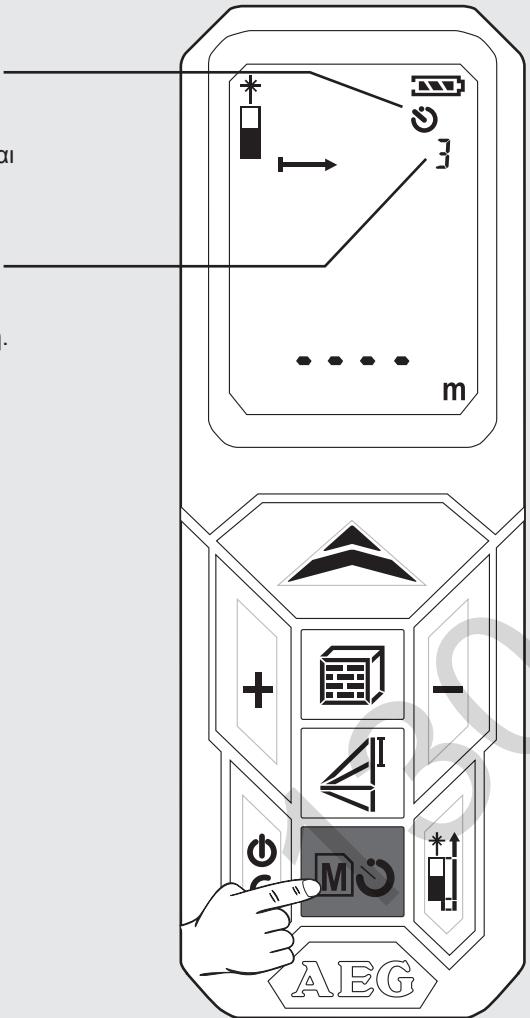
Χρησιμοποιώντας τον χρονοδιακόπη μπορείτε να διενεργήσετε την μέτρηση με καθυστέρηση, ούτως ώστε να τοποθετήσετε π.χ. ένα εξάρτημα στην ακτίνα μέτρησης

Πιέστε το πλήκτρο

- Το σύμβολο εμφανίζεται
- Πιέζοντας το πλήκτρο μπορείτε να ρυθμίσετε τον χρονοδιακόπη ανάμεσα σε 3 και 15 δευτερόλεπτα.

Πιέστε το πλήκτρο

- Αντίστροφη μέτρηση των δευτερολέπτων μέχρι την μέτρηση.
- Στο 0 λαμβάνει χώρα η μέτρηση.



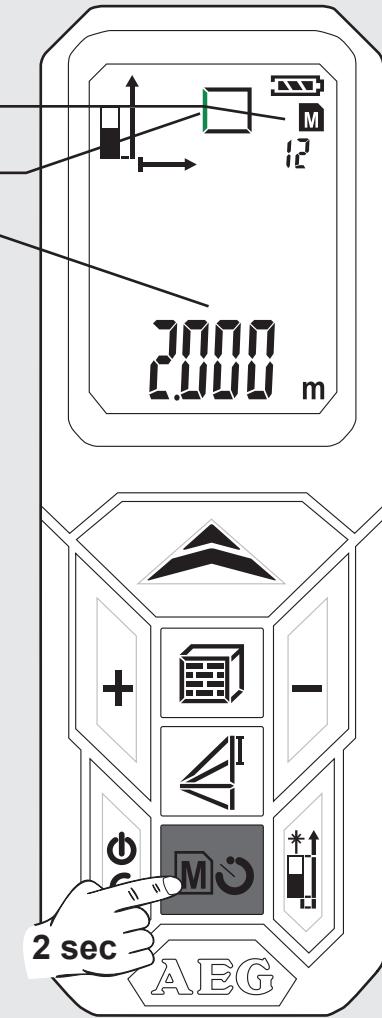
MΝΗΜΗ

Οι τιμές μέτρησης αποθηκεύονται διαδοχικά και αυτόματα στην μνήμη.

Οι αποθηκευμένες τιμές μπορούν να ανακληθούν πιέζοντας το πλήκτρο .

Πιέστε το πλήκτρο για 2 δευτερόλεπτα.

- Εμφανίζεται το σύμβολο και ο αριθμός θέσης μνήμης.
- Εμφανίζεται το αντίστοιχο μέγεθος μέτρησης.
- Εμφανίζεται η αποθηκευμένη τιμή στην κύρια γραμμή.
- Πλοϊγηση με τα πλήκτρα +/-



ΠΕΡΙΓΡΑΦΗ ΤΗΣ ΒΑΣΙΚΗΣ ΔΙΑΔΙΚΑΣΙΑΣ ΜΕΤΡΗΣΗΣ ΧΡΗΣΙΜΟΠΟΙΩΝΤΑΣ ΤΟ ΠΑΡΑΔΕΙΓΜΑ ΜΙΑΣ ΜΕΤΡΗΣΗΣ ΕΠΙΦΑΝΕΙΑΣ (1)

1 Ενεργοποίηστε

Πιέστε το πλήκτρο .

Προσοχή! Το laser είναι ενεργό! Μην το στρέφετε πάνω σε ανθρώπους!

2 Επιλογή επιπέδου μέτρησης

Στάνταρντ ρύθμιση μετά την ενεργοποίηση: Πίσω

*↑ Πιέστε 1x -> Ακίδα γωνίας
Πιέστε 2x -> Μπροστά
Πιέστε 3x -> Πίσω

- Το σύμβολο laser αναβοσβήνει (Στην εικόνα το πράσινο σύμβολο)

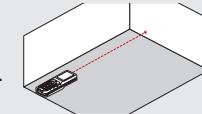
- Εμφανίζεται το σύμβολο

- Εμφανίζεται το σύμβολο
Το μέγεθος της μέτρησης αναβοσβήνει
(Στην εικόνα το πράσινο σύμβολο)

- Η τιμή μέτρησης εμφανίζεται για λίγο στην κύρια γραμμή.

4 Μέτρηση μήκους

Ευθυγραμμίστε την συσκευή και πιέστε .

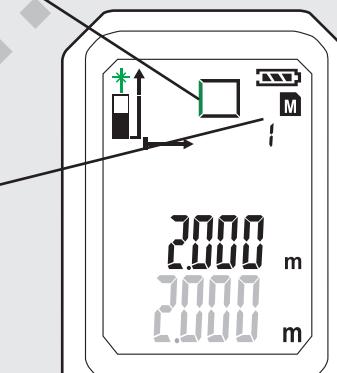


- Η τιμή μέτρησης εμφανίζεται για λίγο στην κύρια γραμμή.

- Μετά από 1 δευτερόλεπτο η τιμή μέτρησης αλλάζει θέση στην γραμμή από πάνω.

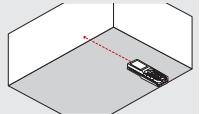
- Η τιμή μέτρησης αποθηκεύεται στην μνήμη με αύξοντα αριθμό.

- Αναβοσβήνει το δεύτερο μέγεθος μέτρησης. Η συσκευή είναι έτοιμη για τη μέτρηση της δεύτερης τιμής.



5 Μέτρηση πλάτους

Ευθυγραμμίστε την συσκευή και πιέστε .

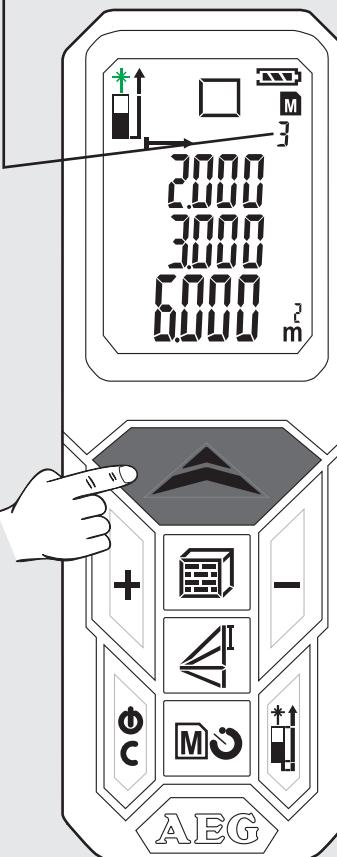
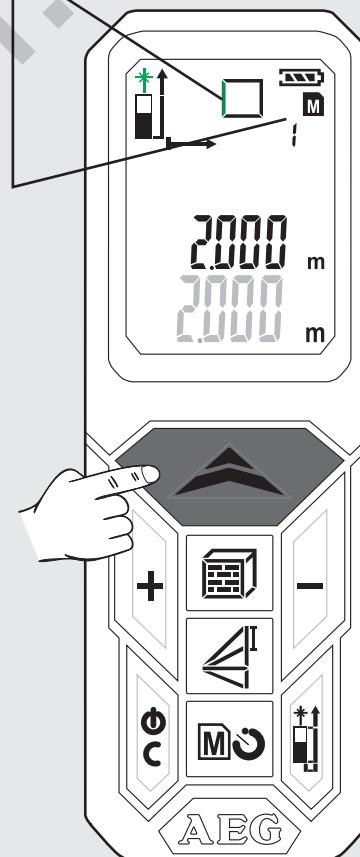
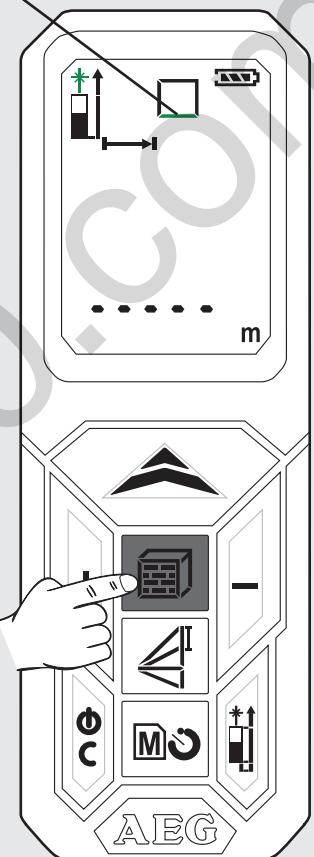
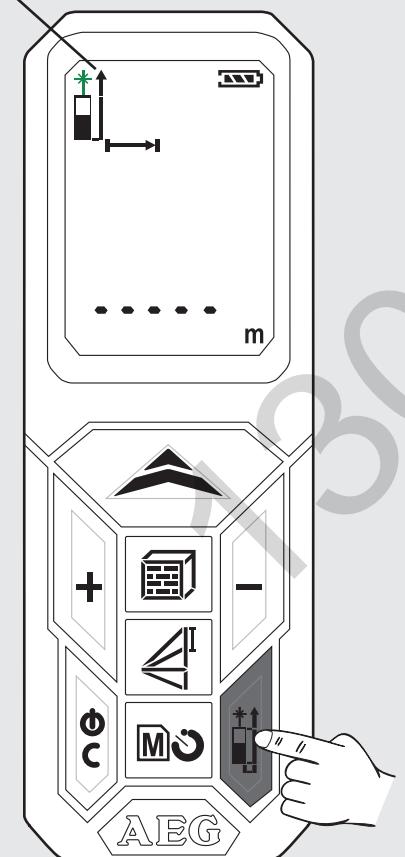
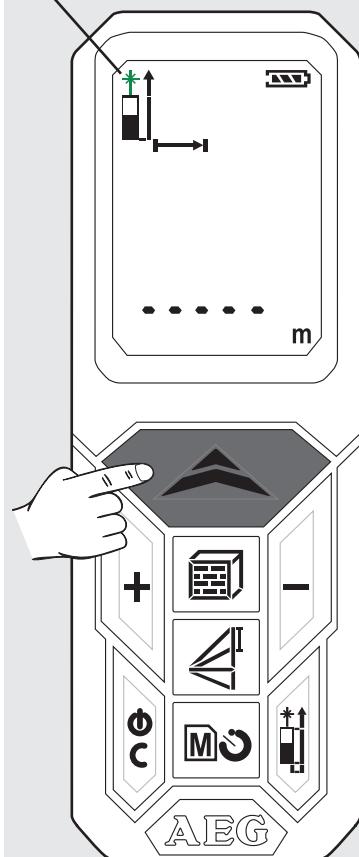
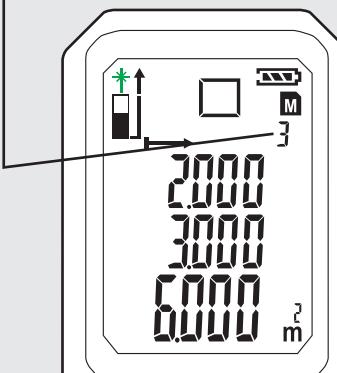


- Η τιμή μέτρησης εμφανίζεται για λίγο στην κύρια γραμμή.

- Μετά από 1 δευτερόλεπτο η τιμή μέτρησης αλλάζει θέση στην γραμμή από πάνω.

- Η τιμή μέτρησης αποθηκεύεται στην μνήμη με αύξοντα αριθμό.

- Το αποτέλεσμα εμφανίζεται στην κύρια γραμμή και αποθηκεύεται στην μνήμη με αύξοντα αριθμό.



ΠΕΡΙΓΡΑΦΗ ΤΗΣ ΒΑΣΙΚΗΣ ΔΙΑΔΙΚΑΣΙΑΣ ΜΕΤΡΗΣΗΣ ΧΡΗΣΙΜΟΠΟΙΩΝΤΑΣ ΤΟ ΠΑΡΑΔΕΙΓΜΑ ΜΙΑΣ ΜΕΤΡΗΣΗΣ ΕΠΙΦΑΝΕΙΑΣ (2)

6 Εμφάνιση αποθηκευμένων τιμών

Πιέστε το πλήκτρο **M** για 2 δευτερόλεπτα.

Πιέστε το πλήκτρο + ή -

- Οι αποθηκευμένες τιμές εμφανίζονται στην κύρια γραμμή.

Εμφανίζεται το αντίστοιχο σύμβολο και το μέγεθος μέτρησης αναβοσβήνει (στην εικόνα το πράσινο σύμβολο)

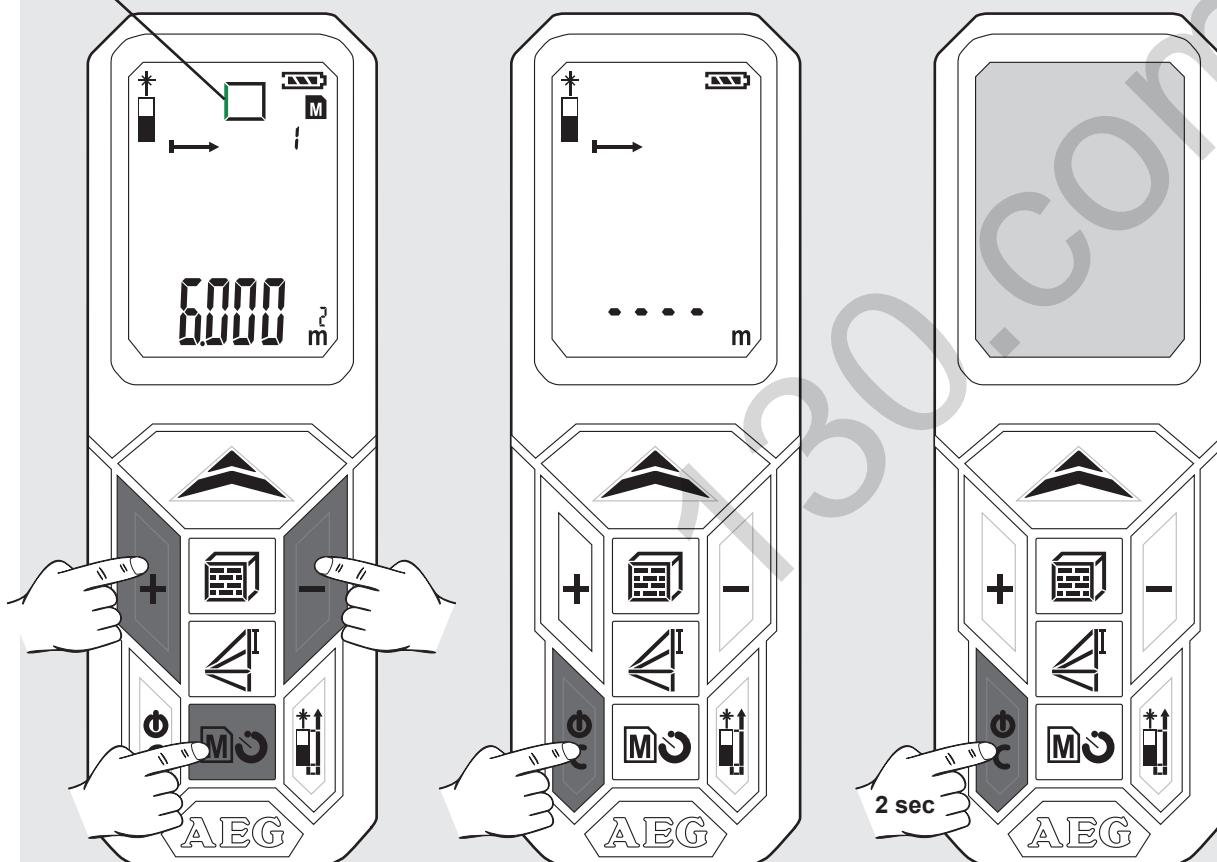
7 Έξοδος από την μνήμη

Πιέστε το πλήκτρο **ψ**

8 Απενεργοποίηση

Πιέστε το πλήκτρο **ψ** για 2 δευτερόλεπτα
(Πριν αυτού πρέπει να έχετε βγει από την λειτουργία μνήμης)

- Η συσκευή σβήνει.
- Αν δεν πιέσετε κάποιο πλήκτρο για 3 λεπτά, η συσκευή απενεργοποιείται αυτόματα.



İÇİNDEKİLER

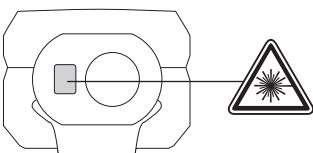
Önemli Emniyet Talimatnamesi	1
Teknik veriler.....	2
Kullanım.....	2
Hata Kodu Tablosu	2
Genel Bakış.....	3
Pillerin değiştirilmesi	4
Köşe Pimi	4
Kemer Klipsi	4
Fonksiyon Düğmesi, Pisagor, Ölçüm Referansı	5
Münferit Mesafe Ölçümü	6
Sürekli / Minimum-Maksimum Ölçüm	7
Eklemeli / Çıkmalı Ölçüm	8
Alan Ölçümü	9
Hacim Ölçümü	10
Dolaylı Ölçüm (Pisagor 1).....	11
Dolaylı Ölçüm (Pisagor 2).....	12
Dolaylı Ölçüm (Pisagor 3).....	13
Duvar Alanı Ölçümü (Senaryo 1).....	14
Duvar Alanı Ölçümü (Senaryo 2).....	15
Zamanlayıcı	16
Bellek.....	16
Alan ölçümü örneği (1) ile ilgili Temel Açıklama	17
Alan ölçümü örneği (2) ile ilgili Temel Açıklama.....	18

ÖNEMLİ EMNIYET TALIMATNAMESİ



Ürünle birlikte verilen CD'deki Emniyet talimatnamesini ve Kullanma kılavuzunu okumadan önce ürünü kullanmayın.

Lazer Sınıfı



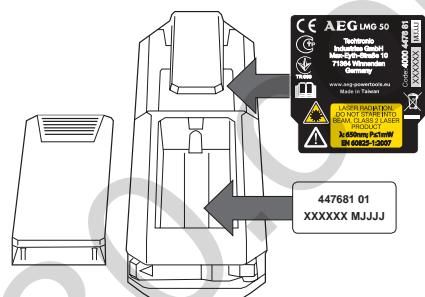
İKAZ:

Bu ürün, IEC 60825-1:2007 standardına göre, **Sınıf 2** lazer kategorisine girer.



Etiket

İlk defa çalıştırılmaya başlamadan önce birlikte gönderilen yapıştırıcı ile kendi ülke lisanızda İngilizce metni verim tabelasının üzerine yapıştırınız.



Uyarı:

Doğrudan ışına bakmayın. Lazer ışını ışık körlüğüne yol açabilir.

Gözünüzü, gereksiz yere lazer ışınına dikmeyiniz ve bu işinleri başkalarının üzerine tutmayın.

Diğer şahıslara yöneltmeyin.

Uyarı:

Lazer cihazını çocukların yakınında kullanmayın veya çocukların lazer cihazını kullanmalarına izin vermeyin.

Dikkat! Yansıma yapan bir yüzey lazer ışınıni kullanıcıya veya başka kişilere geri yansıtabilir.

Dönen parçalarla aranızda emniyetli bir mesafe bulundurun.

Periyodik olarak denetleme ölçümleri yapın. Özellikle, önemli ölçümleri yapmadan önce, yaparken ve yaptıktan sonra.

Cihazın düşürülmesinden veya uygun olmayan alanda kullanılmasından ya da üzerinde yapılan değişiklikten kaynaklanan bir arıza sebebiyle, hatalı ölçümlerden sakınınız.

Dikkat! Bahçe aletinin usulüne uygun olarak kullanımını ve kumanda elemanlarının işlevlerini tam olarak öğrenin.

Lazerli mesafe ölçerin kullanımıyla ilgili sınırlar vardır. (Bkz. "Teknik Veriler" bölümü). Maksimum ve minimum aralık arasındaki ölçüm denemeleri yanlış sonuçlara neden olacaktır. Çok sıcak, çok soğuk, çok parlak güneş ışığı, yağmur, kar, sis veya diğer görüşü kısıtlayan koşullar gibi olumsuz koşullarda kullanım, yanlış ölçüm değerlerinin elde edilmesine yol açacaktır.

Lazerli mesafe ölçer çok soğuk koşullardan sıcak bir ortama getirilirse veya tam tersi bir durumda, kullanımdan önce cihaz ortam sıcaklığına gelene kadar bekleyiniz.

Lazerli mesafe ölçeri daima kapılı ortamda saklayınız, cihazı şok, sürekli titreşim veya aşırı sıcaklıklara maruz bırakmayın.

Aleti daima toz, sıvılar ve yüksek nem koşullarından uzakta tutunuz. Bunlar, iç bileşenlere zarar verebilir veya doğruluk hassasiyetini etkileyebilir.

Aşındırıcı temizlik maddeleri veya çözeltilerini kullanmayın. Temizlik için yalnızca temiz, yumuşak bir bez kullanınız.

Ölçüm aletinin ağır bir darbeye uğramasını veya yere düşmesini önleyiniz. Cihaz yere düşürülmüşse veya diğer mekanik gerilimlere maruz kalmışsa, kullanımdan önce aletin doğruluğu kontrol edilmelidir.

Bu lazer cihazında gerekli olan tamirler sadece yetkili servis personeli tarafından yapılabilir.

Agresif veya patlayıcı ortamlarda çalıştmayın.

Bataryaları şarj etmek için sadece imalatçı tarafından önerilen şarj cihazını kullanın.

Bitmiş piller, evsel atıkla birlikte elden çıkarılmamalıdır. Çevreye karşı gereken özeni göstererek, bitmiş pilleri ulusal ya da yerel yönetmeliklere uygun olarak temin edilen atık toplama merkezlerine bırakın. Ürün, evsel atıkla birlikte elden çıkarılmamalıdır. Ürünu ülkenizde yürürlükte bulunan ulusal yönetmeliklere uygun olarak elden çıkarın.

Ulusal ve spesifik yönetmeliklere göre hareket edin. Elden çıkarılmalarıyla ilgili bilgiler almak için mahalli makama veya satıcınıza başvurun.



CE işaretü

TEKNİK VERİLER

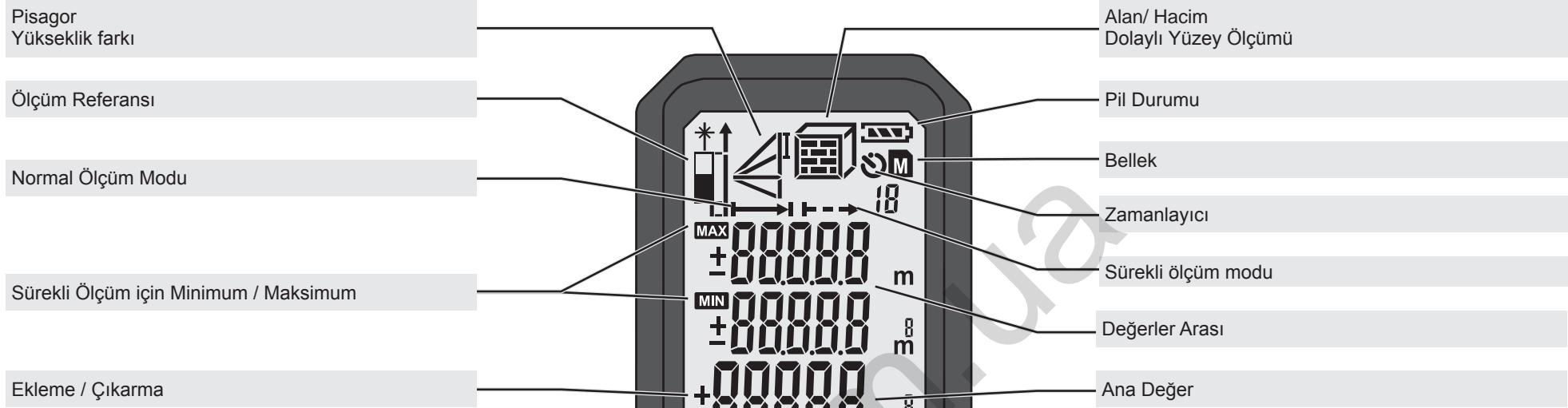
Toz ve Su direnci	IP54
Alicı Mercekler	14 mm
Odak noktası	35 mm
Maksimum Ölçüm Aralığı	50 metre (Tolerans: 55m)
Minimum Ölçüm Aralığı	0.05 metre
< 10m'de Mutlak Ölçüm Hassasiyeti	± 1.5 mm (Maks.)
< 10m'de Tekrar Elde Edilebilir Hassasiyet	± 1.5 mm (Maks. Tipik 2σ)
> 10m'de Tekrar Elde Edilebilir Hassasiyet	Artış ± 0.25 mm / metre (Maks. Tipik 2σ)
Ölçme Süresi	0.5 sn.
Ekran Tipi	LCD (22.7 mm x 31 mm)
Güç Türü	AAA 2x (Kalem Pil)
Pil Ömrü	10000 (Münferit Ölçüm)
Lazer Çıkış Gücü	0.6 mW ~ 0.95 mW (Sınıfı 2, 650nm)
Lazer Hedef Noktası Büyüklüğü	25 x 30 mm @ 16 m (Maks.)
Lazer Işınımı Düşey Açısı	+1 derece
Lazer Işınımı Yatay Açısı	± 1 derece
Cihazın otomatik kapanma süresi	180 saniye
Lazerin otomatik kapanma süresi	30 saniye
Çalışma Sıcaklığı Aralığı	-10°C ila +50°C
Saklama Sıcaklığı Aralığı	-25°C ila +70°C
Pilsiz Ağırlığı	80 g

HATA KODU TABLOSU

Kod	Tanım	Çözüm
Hata01	Ölçüm aralığı dışında	Uygun bir aralıkta ölçüm yapın
Hata02	Alınan sinyal çok zayıf	Daha iyi bir yüzey seçin
Hata03	Görüntüleme aralığı dışında(maks. değer: 99.999) yani alan veya hacim sonucu ekranda görüntülenemiyor	Değerlerin ve adımları kontrol edin ve doğru olduklarından emin olun
Hata04	Pisagor hesaplama hatası	Değerler ve adımları kontrol edin ve doğru olduklarından emin olun
Hata05	Pil zayıf	Yeni piller takın
Hata06	Çalışma sıcaklığı dışında	Belirtilen çalışma sıcaklığındaki bir ortamda ölçüm yapın
Hata07	Ortam ışığı çok güçlü	Daha karanlık bir yerde ölçüm yapın (hedefe gölge yapın)

KULLANIM

Lazerli mesafe ölçer, uzaklıklar ve eğimlerin ölçümü için kullanılabilir.
Bu alet sadece belirttiği gibi ve usulüne uygun olarak kullanılabilir.



AÇIK / ÖLÇÜM

- Açık
- Ölçüm
- Sürekli Ölçüm (2 sn basın) + Min / Maks. Fonksiyonu

EKLE

- Değer ekle
- Bellek menüsünde gezin

ALANLAR / HACİMLER

- Alan (1 kez basın)
- Hacim (2 kez basın)
- Dolaylı Yüzey Ölçümü (3 kez / 4 kez basın)

GÜC

- Açık
- Kapalı (2 sn basın)
- Sil

ÇIKAR

- Değer çıkar
- Bellek menüsünde gezin

PISAGOR

- Pisagor 1 (1 kez basın)
- Pisagor 2 (2 kez basın)
- Pisagor 3 (3 kez basın)

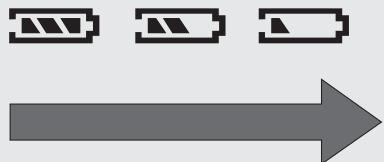
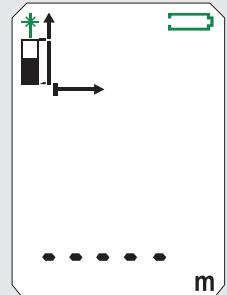
ÖLÇÜM NOKTASINI DEĞİŞTİR

- Ön
- Arka (Standart otomatik)
- Köşe pimi

BELLEK

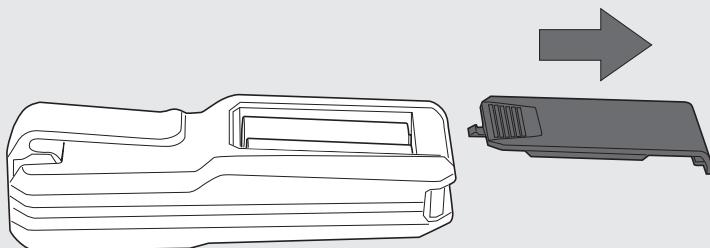
- Zamanlayıcı 3-15 sn (1 kez basın)
- Bellek 1-20 (1 kez, 2 sn basın)
- Bellekteki ölçümlerde gezinmek için, +/-'yi kullanın

PILLERİN DEĞİŞTİRİLMESİ

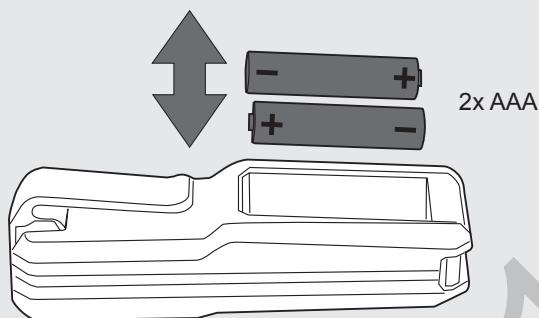


Pil işaretin yanıp söndüğünde pilleri değiştirin.

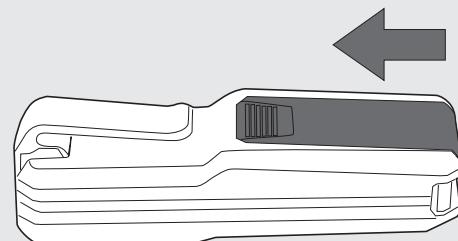
1



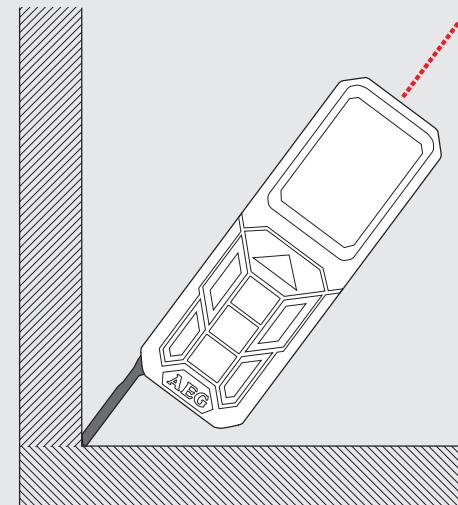
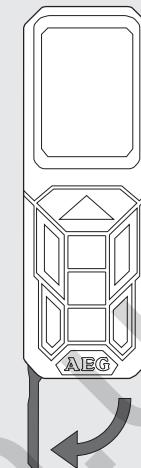
2



3

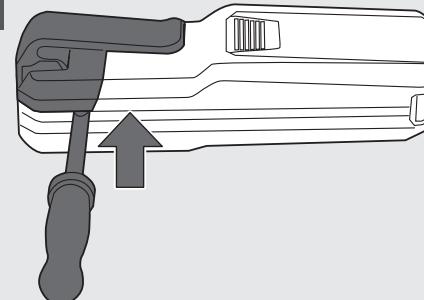


KÖŞE PİMİ

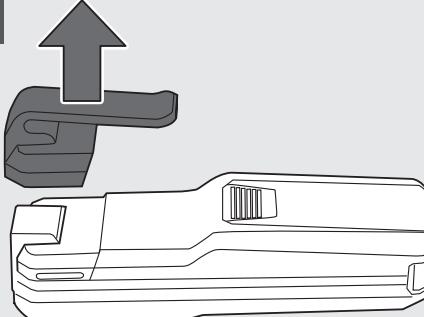


KEMER KLIPSI

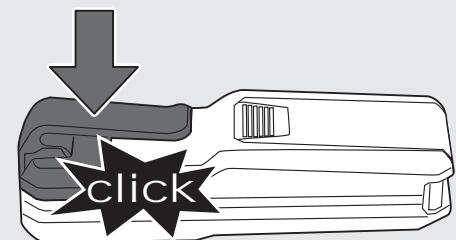
1



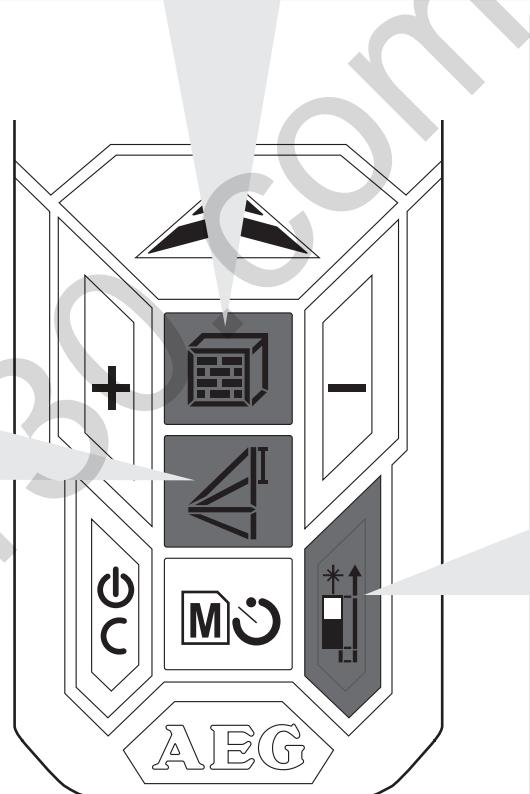
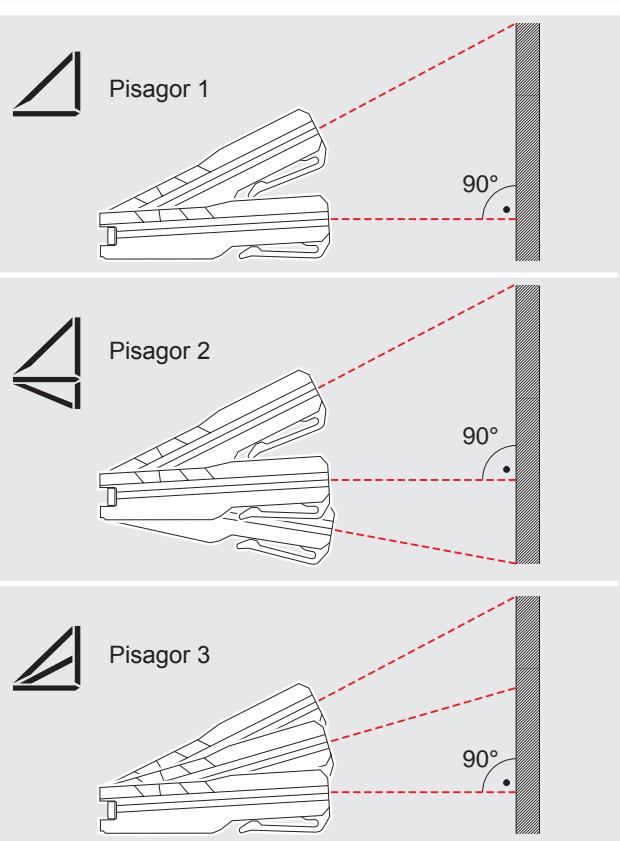
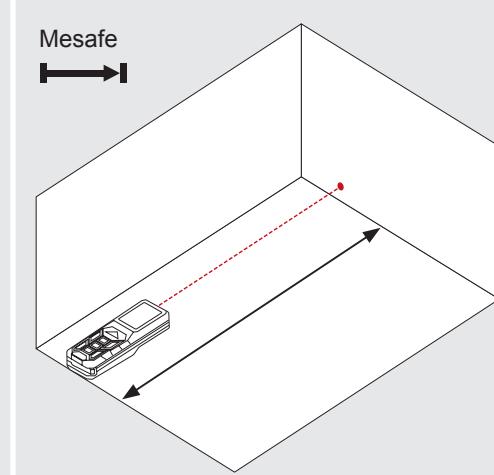
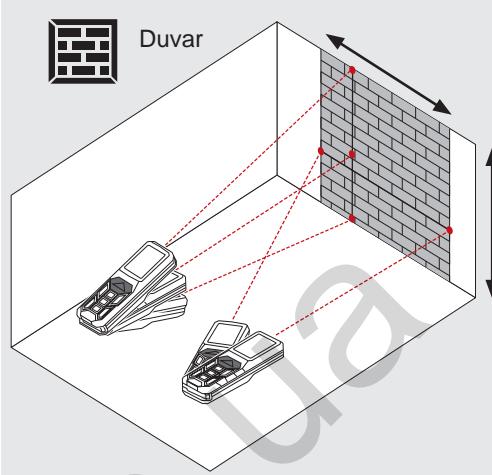
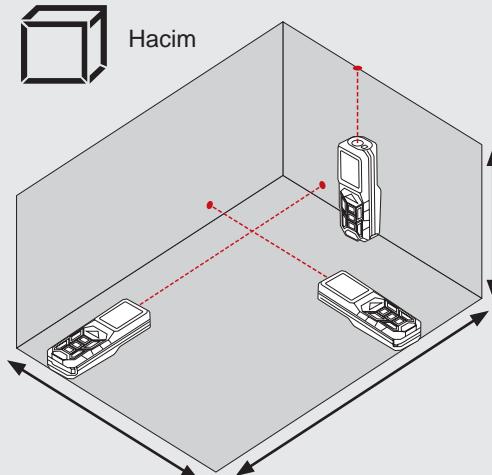
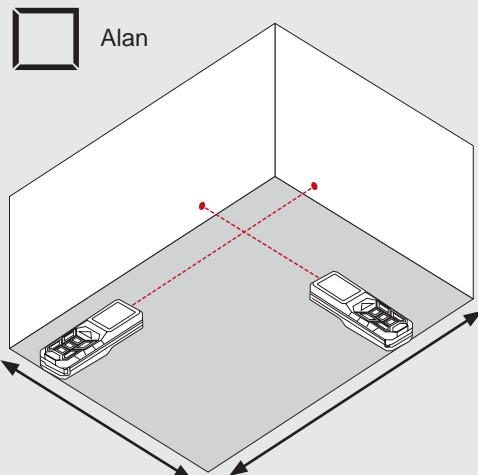
2



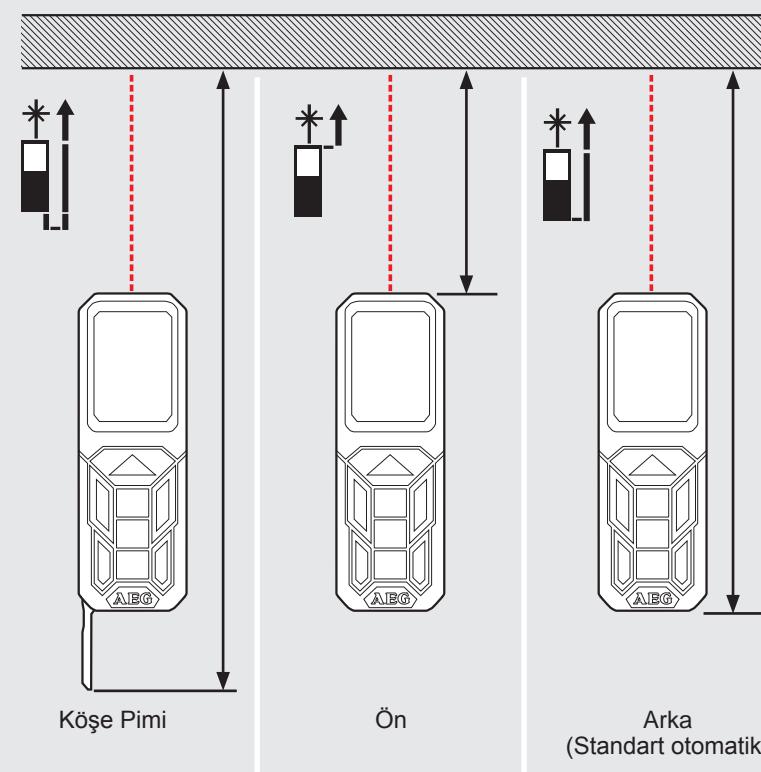
3



FONKSİYON DÜĞMESİ, PİSAGOR, ÖLÇÜM REFERANSI

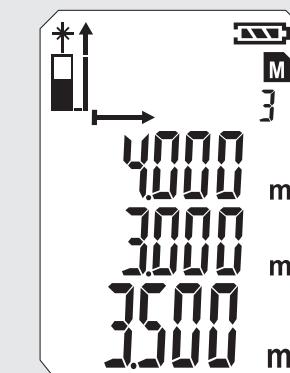
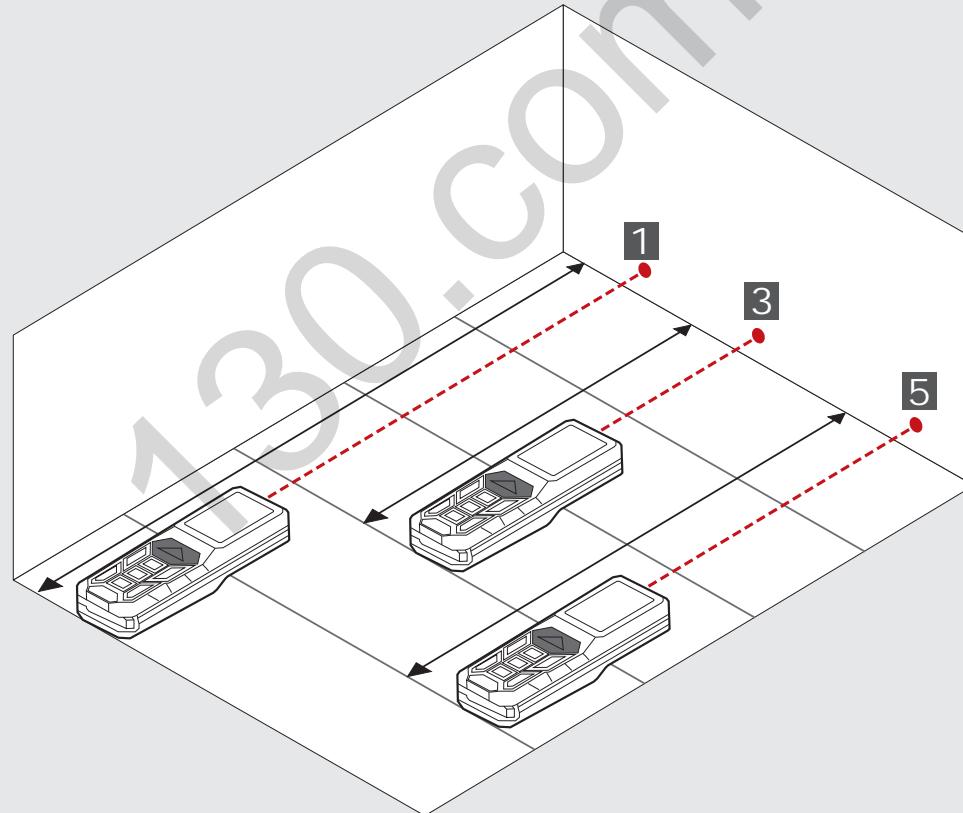
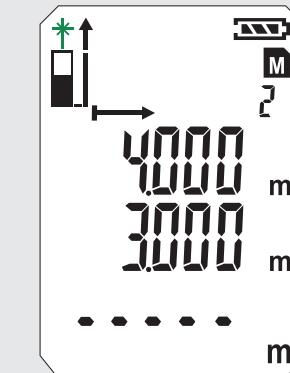
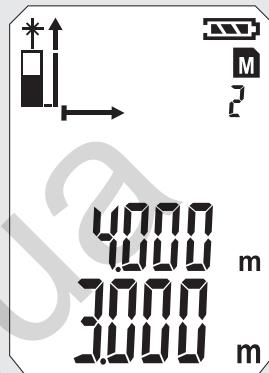
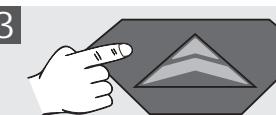
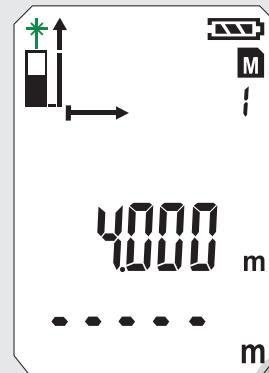
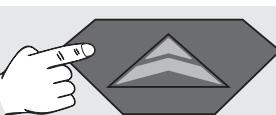
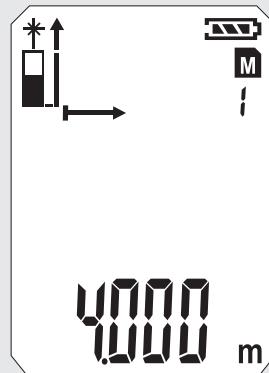
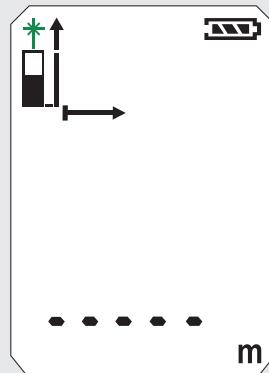


Ölçüm Başlangıç Noktası



MÜNFERİT MESAFE ÖLÇÜMÜ

0



SÜREKLİ / MINIMUM-MAKSİMUM ÖLÇÜM

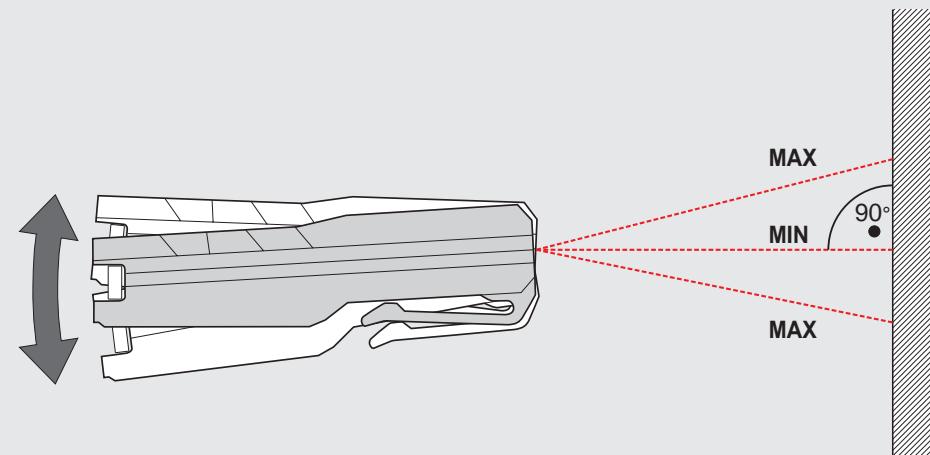
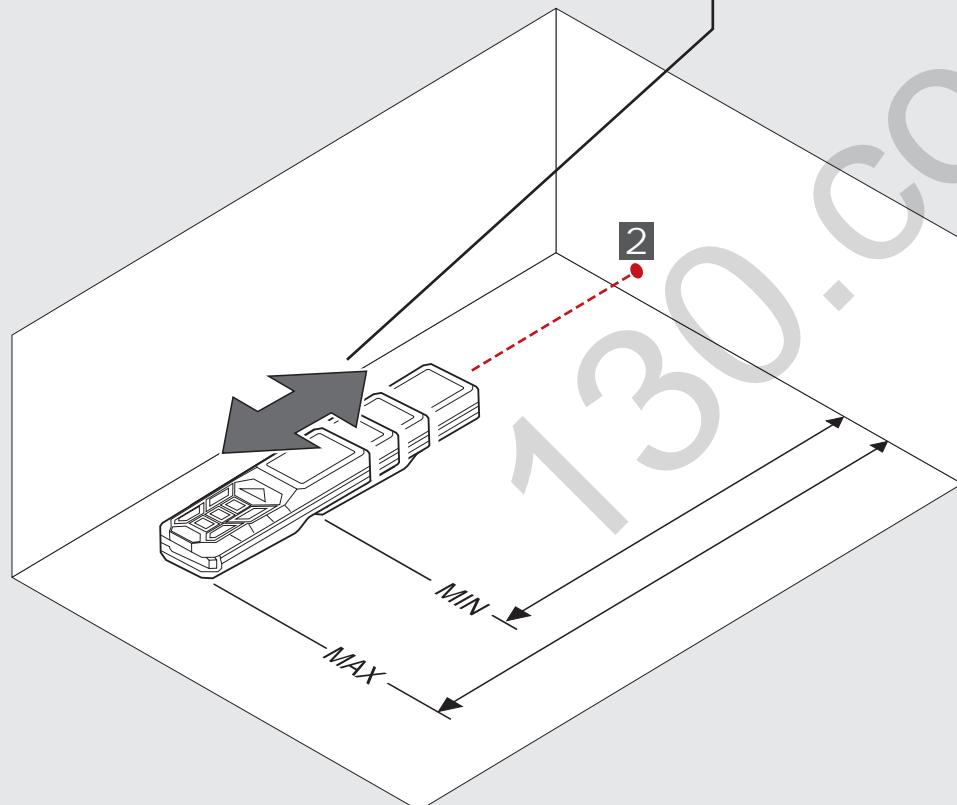
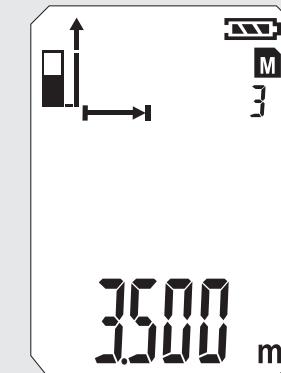
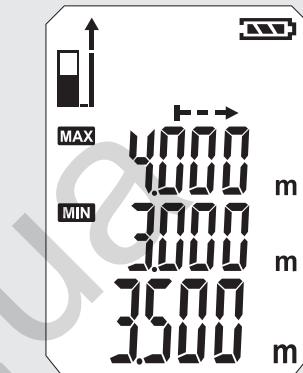
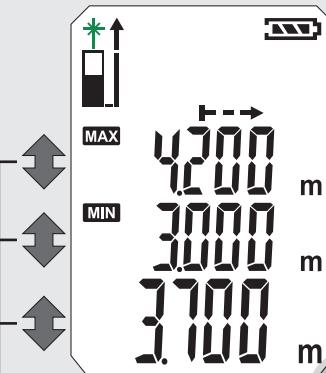
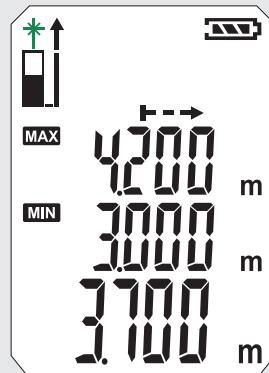
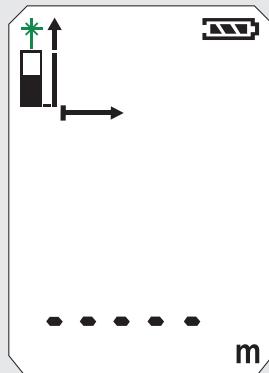
0



2

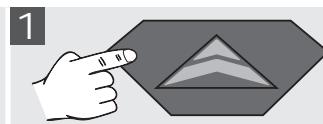


4

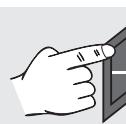


EKLEMELİ / ÇIKARMALI ÖLÇÜM

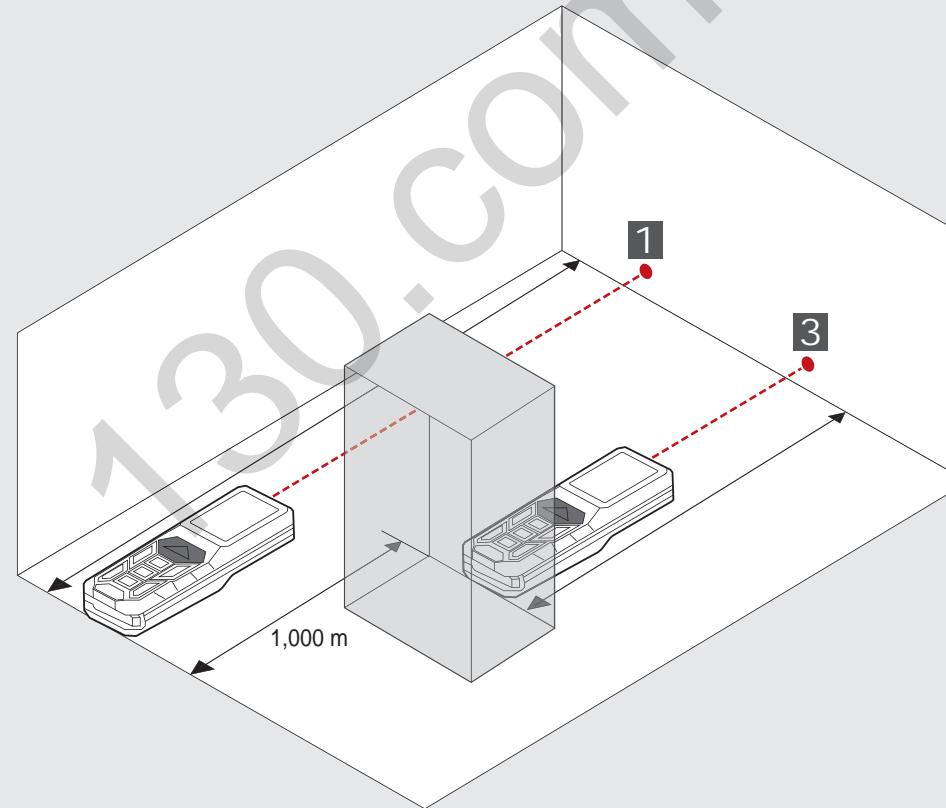
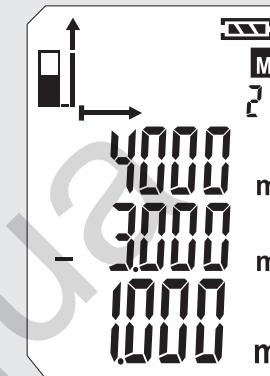
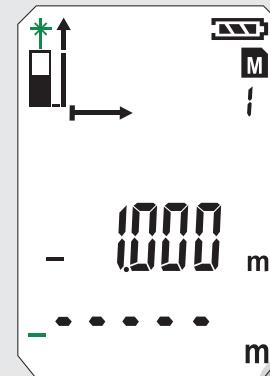
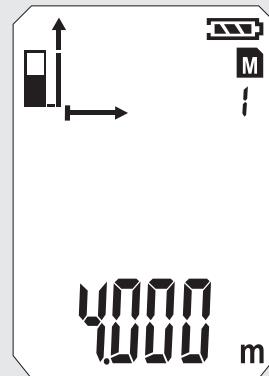
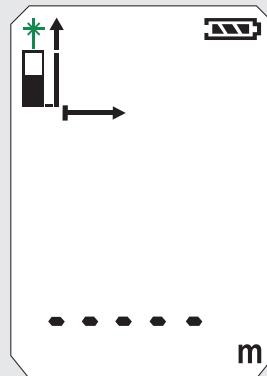
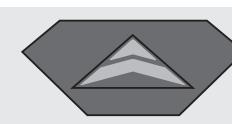
0



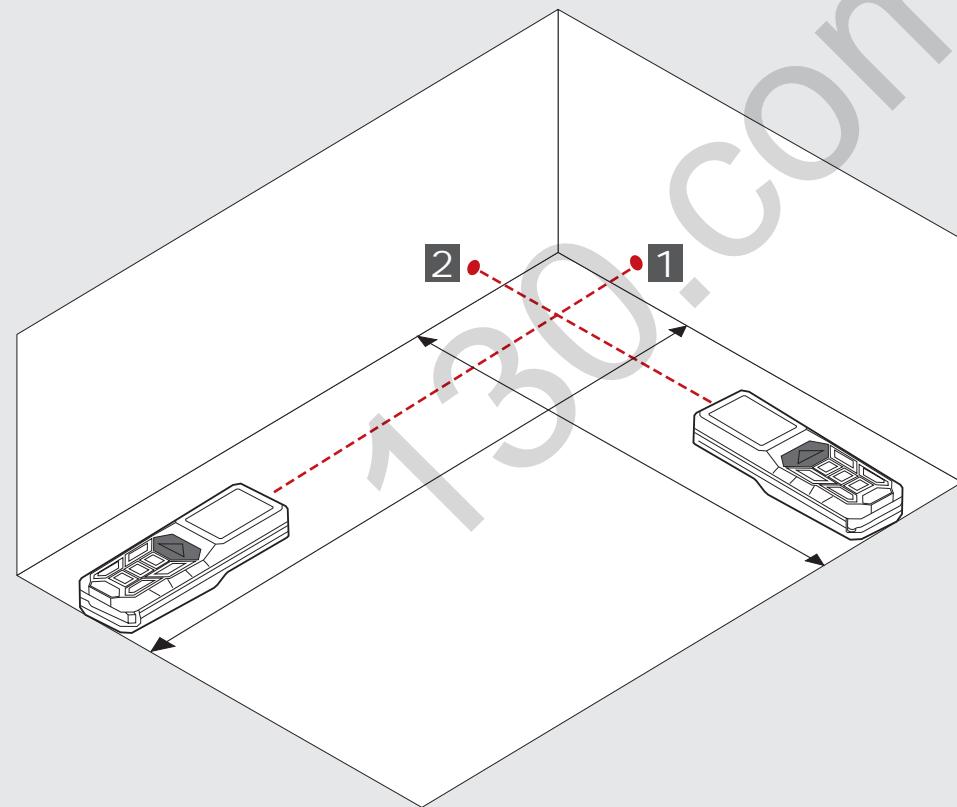
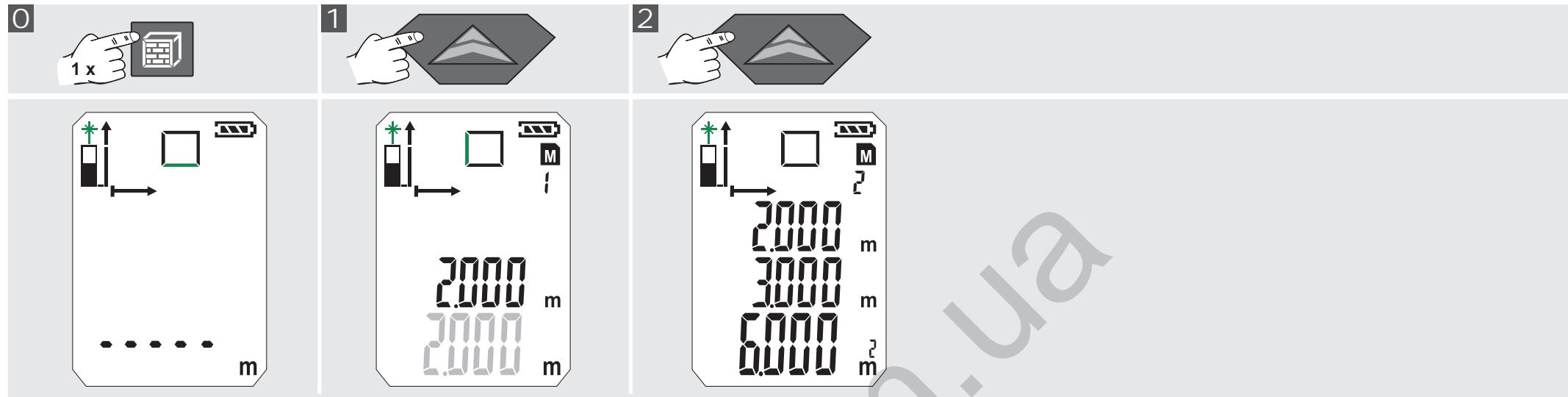
2



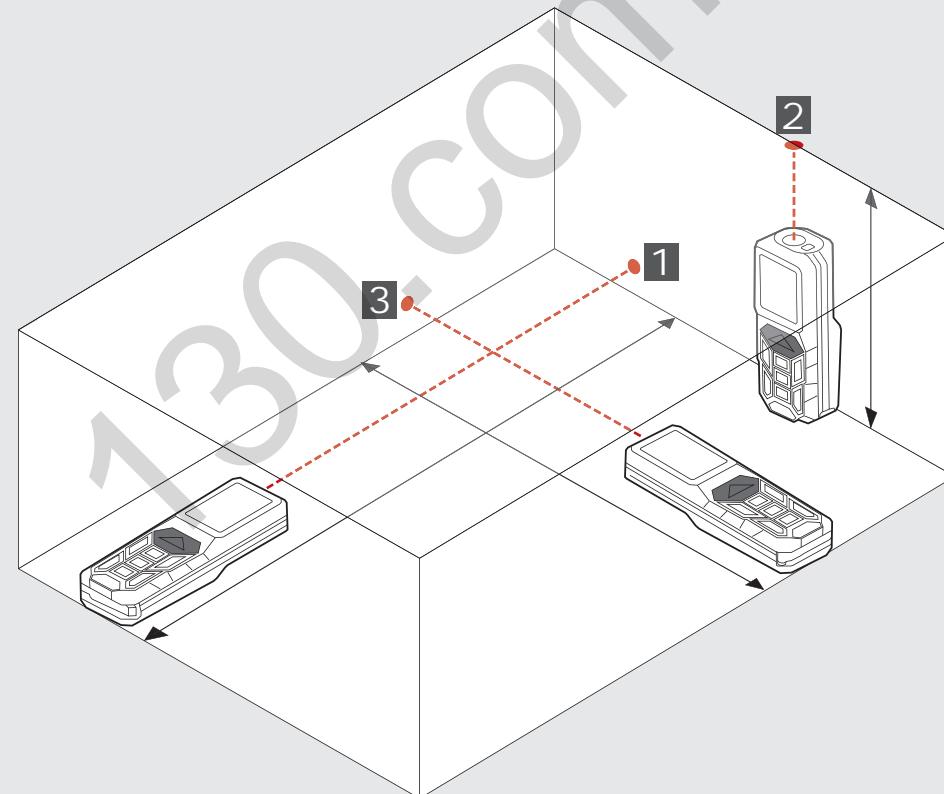
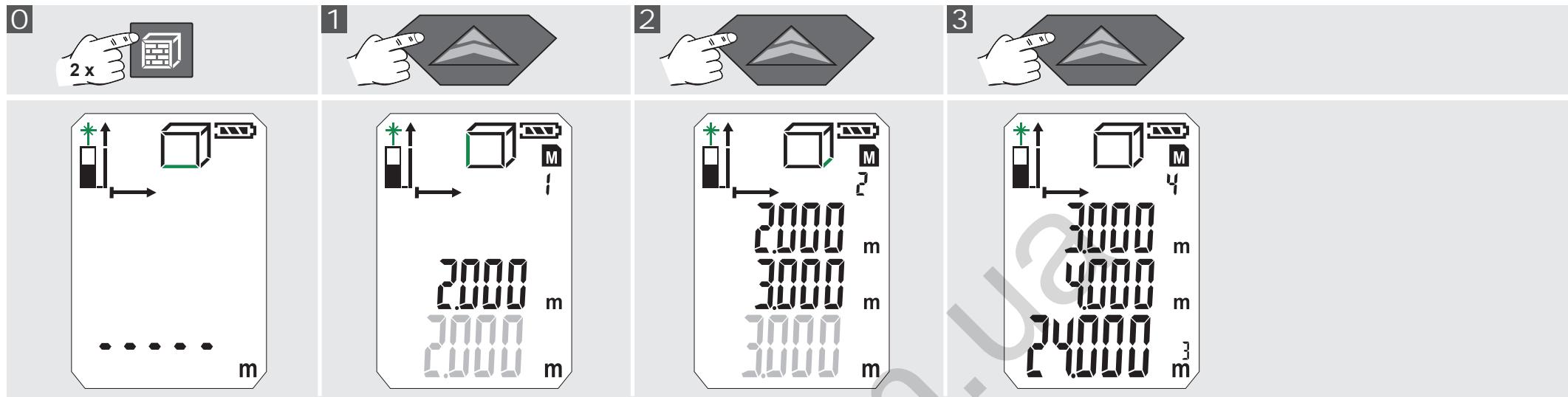
3



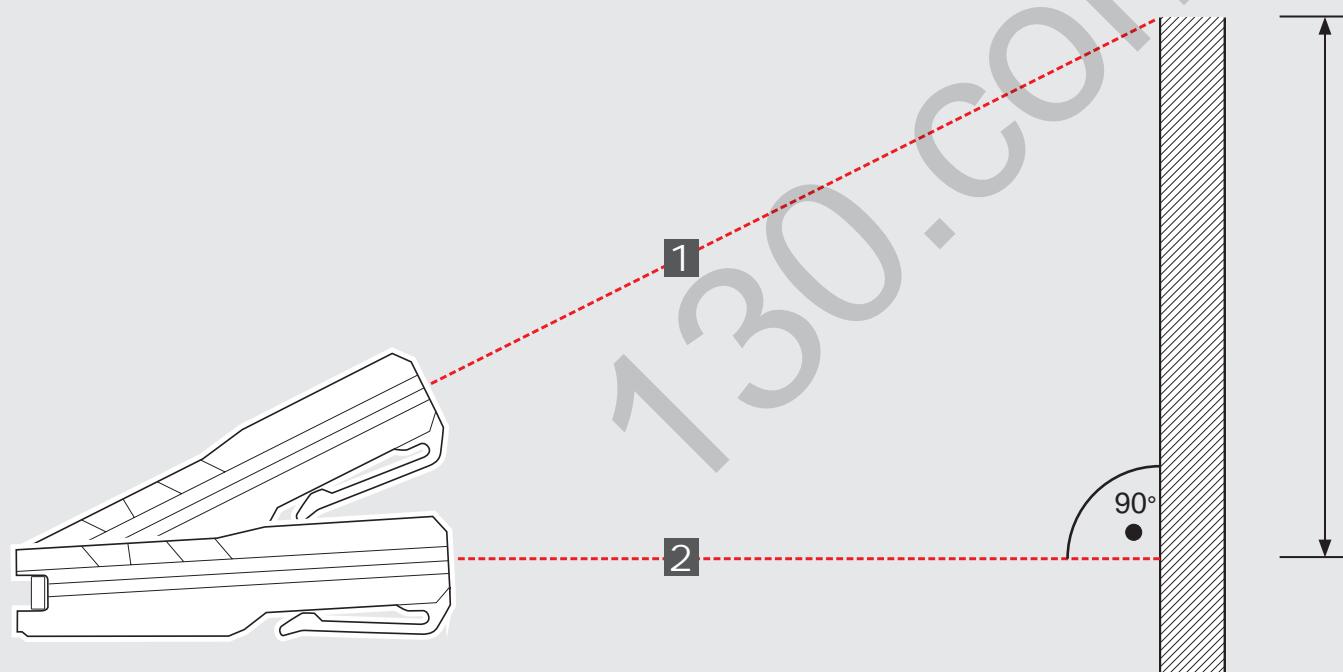
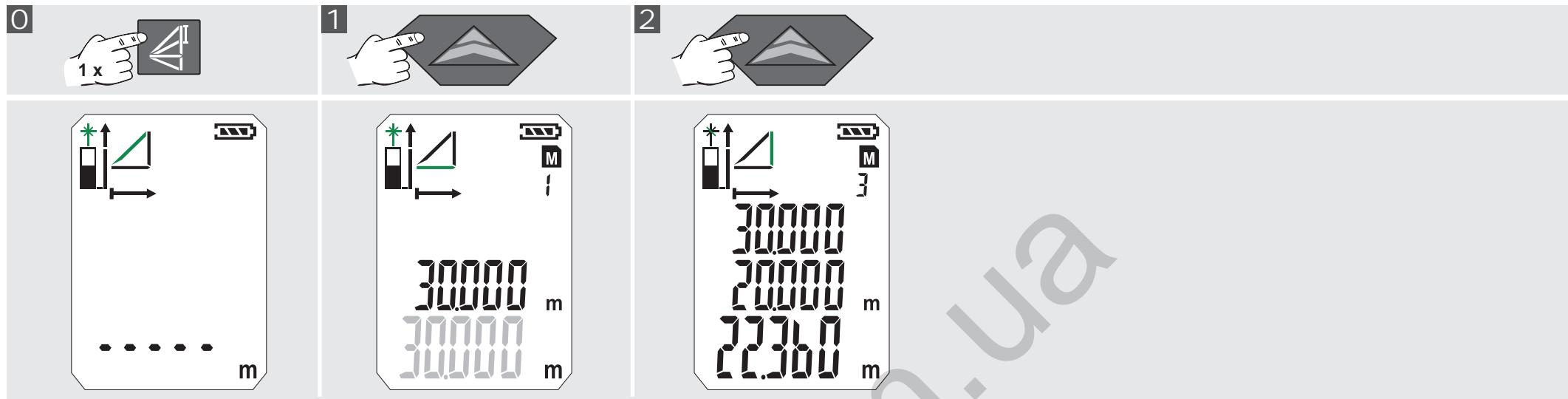
ALAN ÖLÇÜMÜ



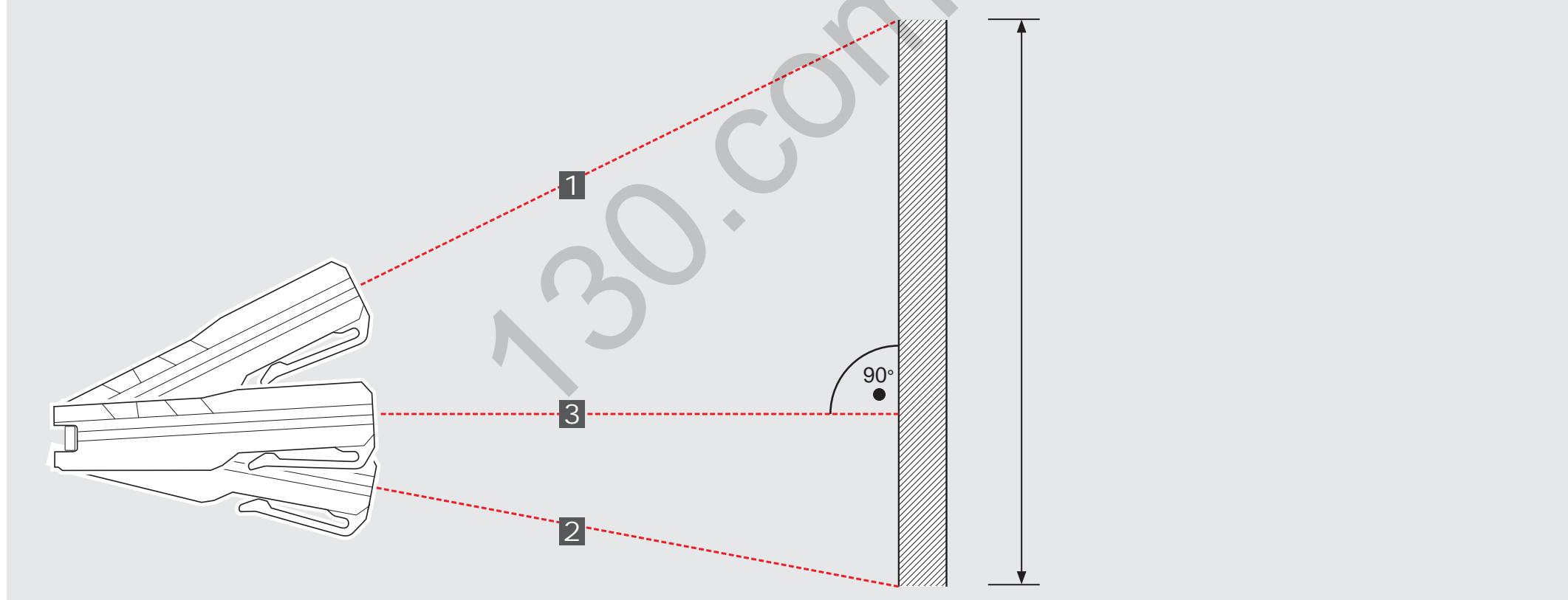
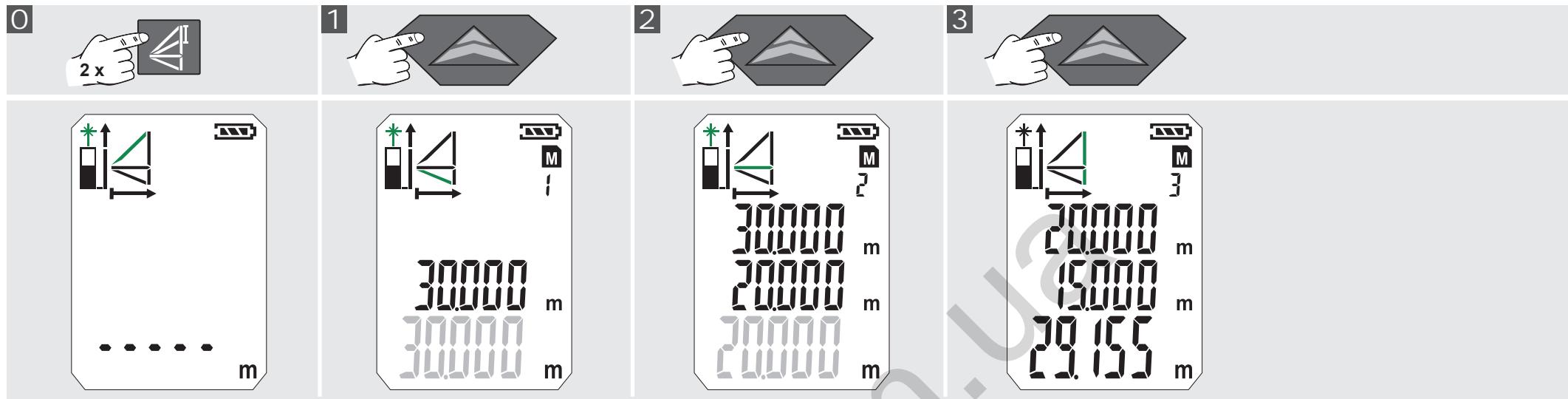
HACIM ÖLÇÜMÜ



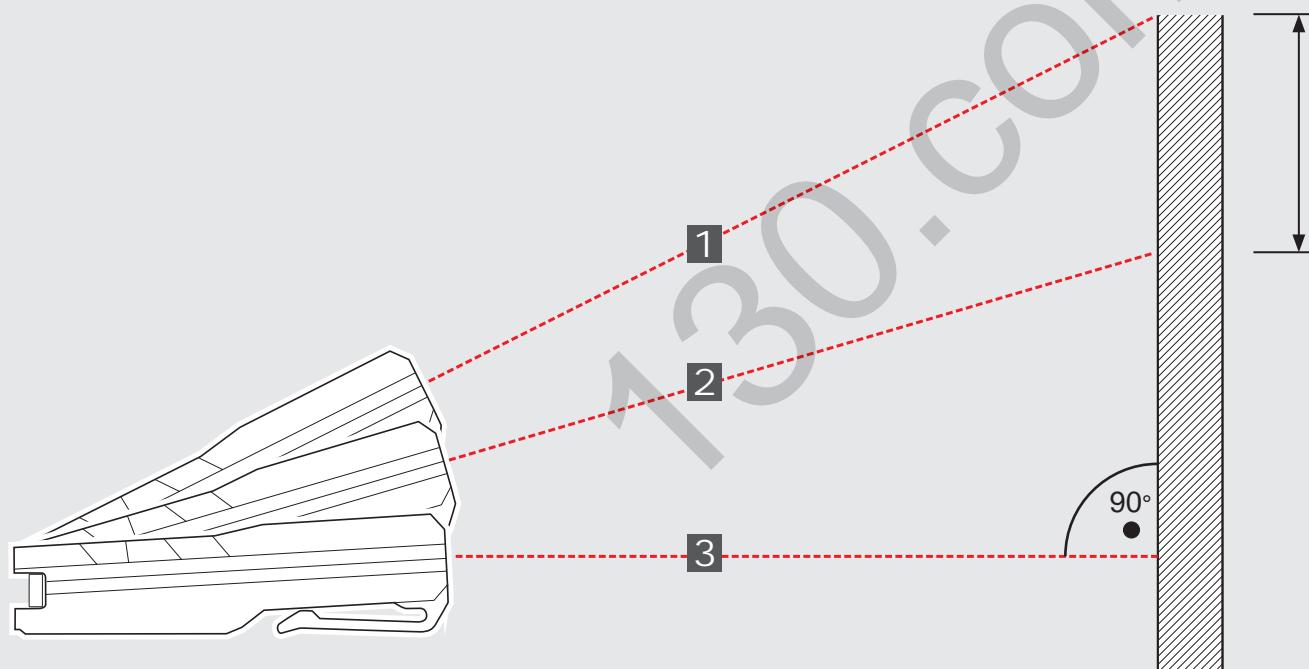
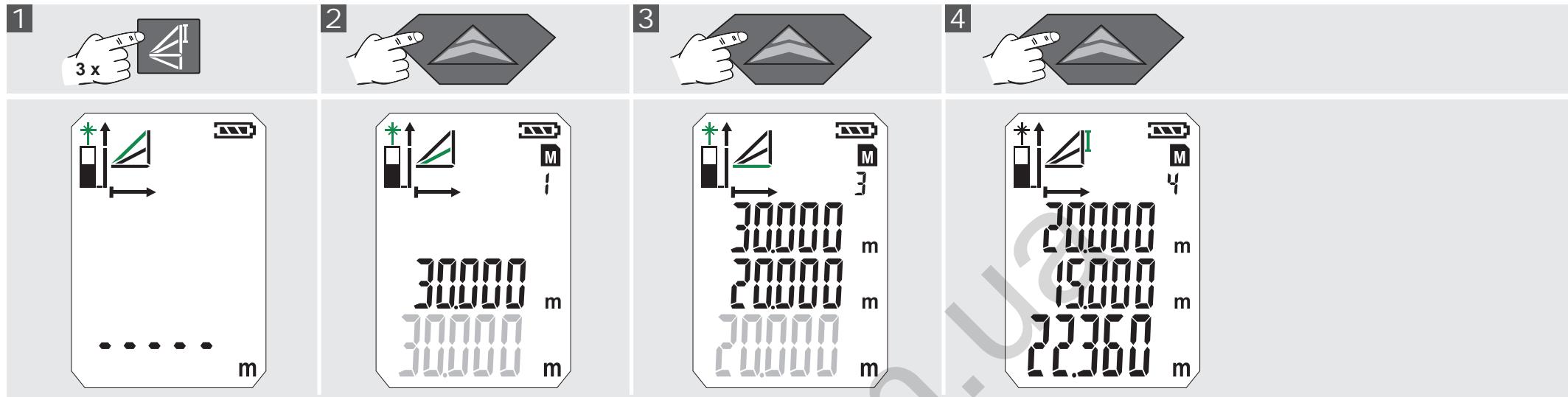
DOLAYLI ÖLÇÜM (PİSAGOR 1)



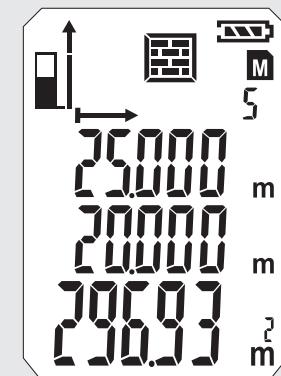
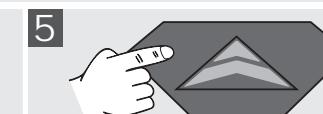
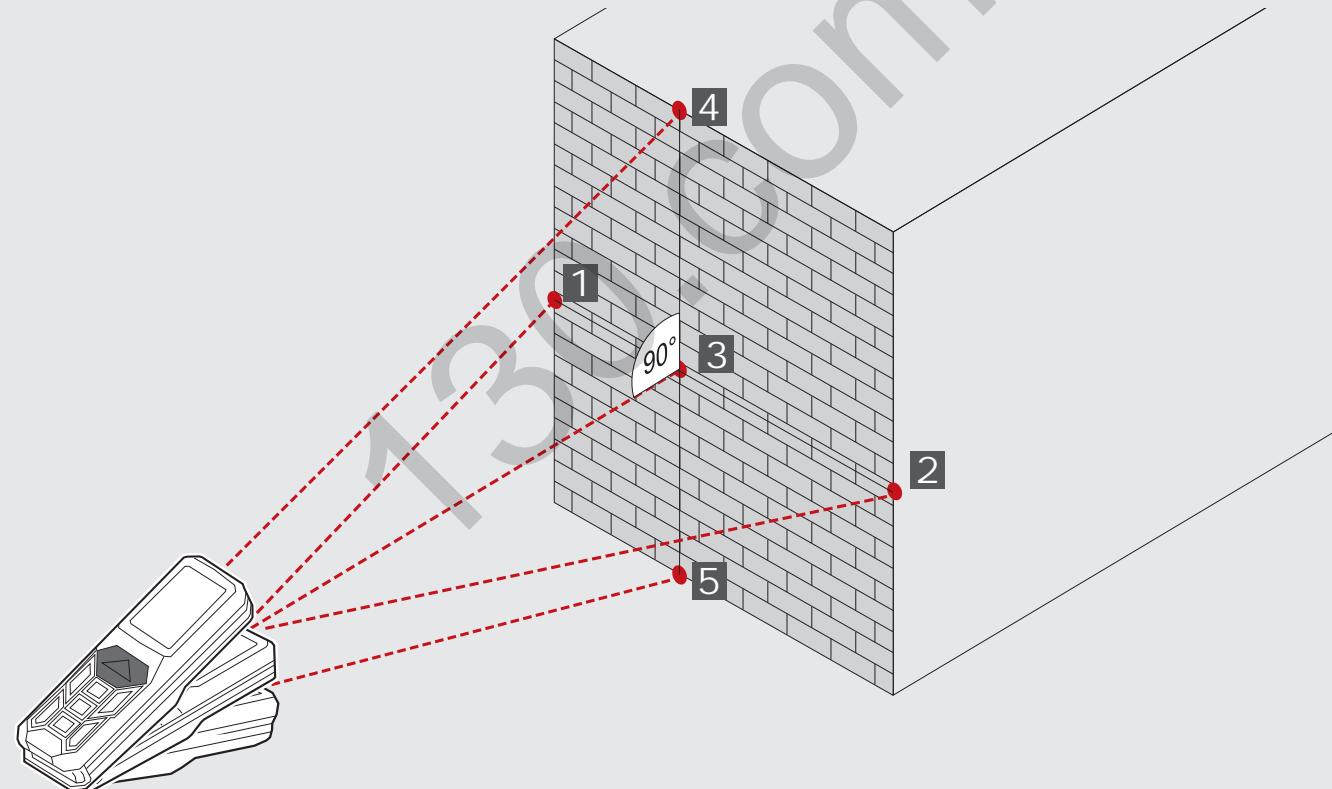
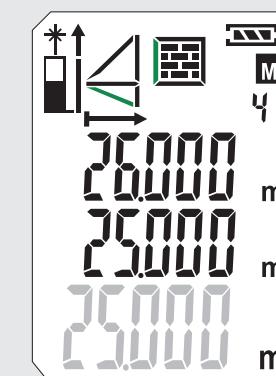
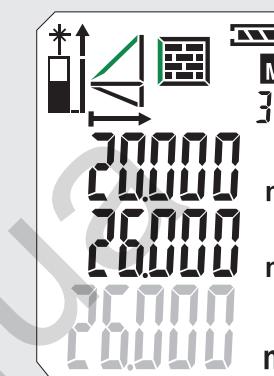
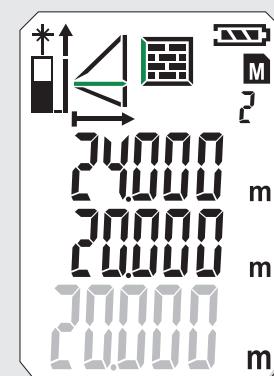
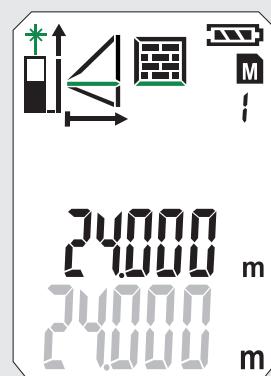
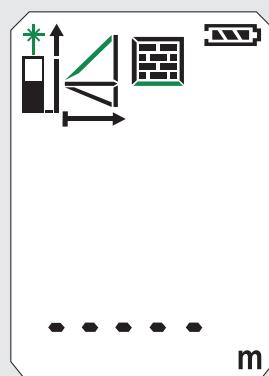
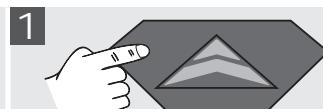
DOLAYLI ÖLÇÜM (PİSAGOR 2)



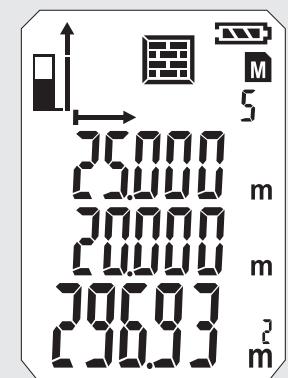
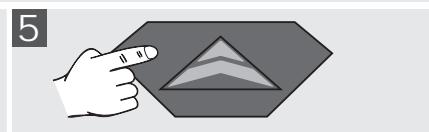
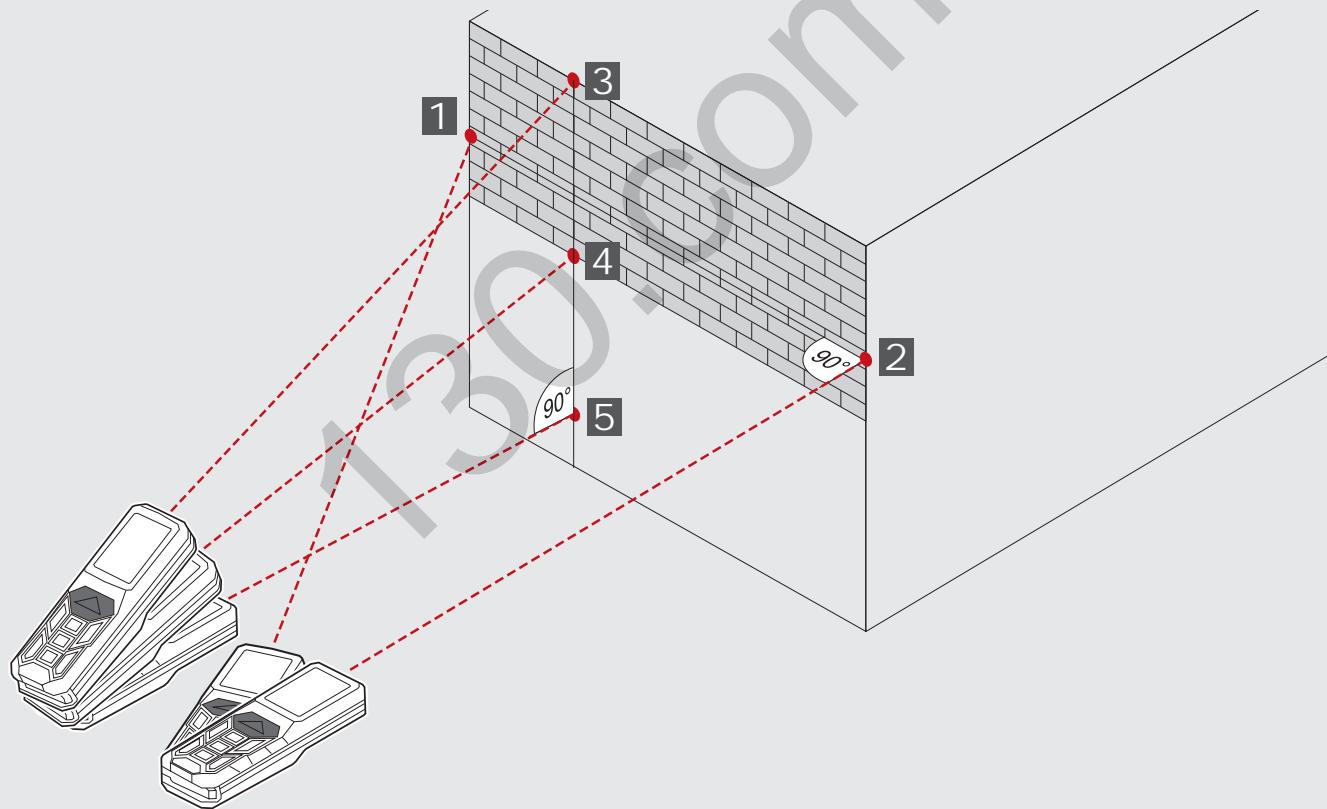
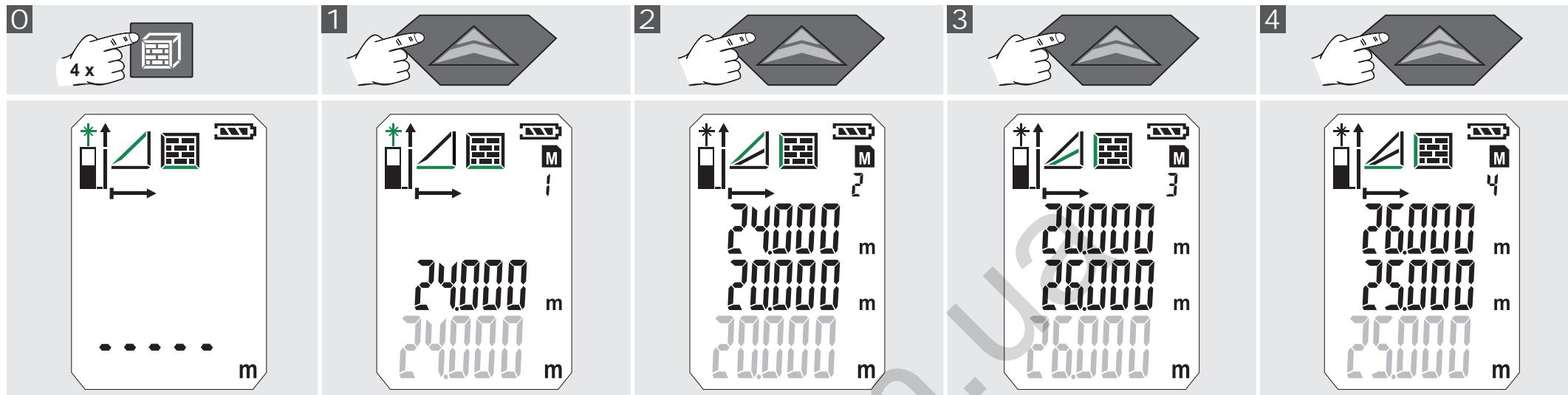
DOLAYLI ÖLÇÜM (PİSAGOR 3)



DUVAR ALANI ÖLÇÜMÜ (SENARYO 1)



DUVAR ALANI ÖLÇÜMÜ (SENARYO 2)



ZAMANLAYICI

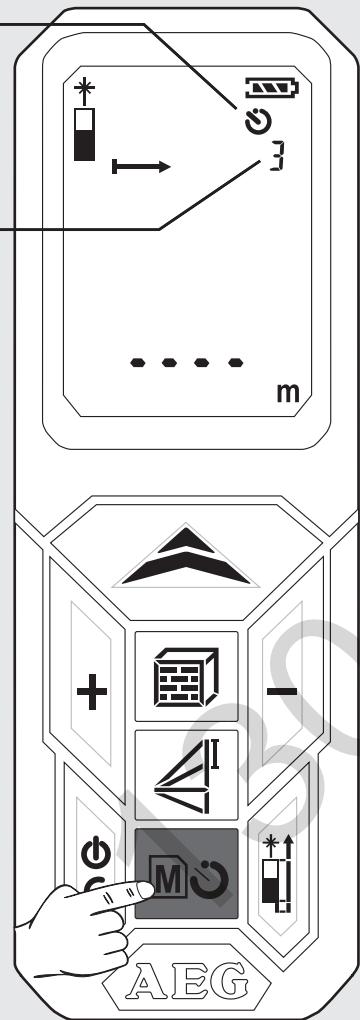
Zamanlayıcı ile ölçüm geç başlatılabilir. Örneğin, ölçüm işinına bir parçanın yerleştirilmesi için.

M (bellek) düğmesine bas

- Simge görüntülenir.
Zamanlayıcı, **M** düğmesine basılarak, 3 ila 15 sn aralığında ayarlanabilir.

↑ düğmesine bas

- Ölçüm başlayana kadar saniyeler geriye doğru sayılır.
- 0'da ölçüm başlar.



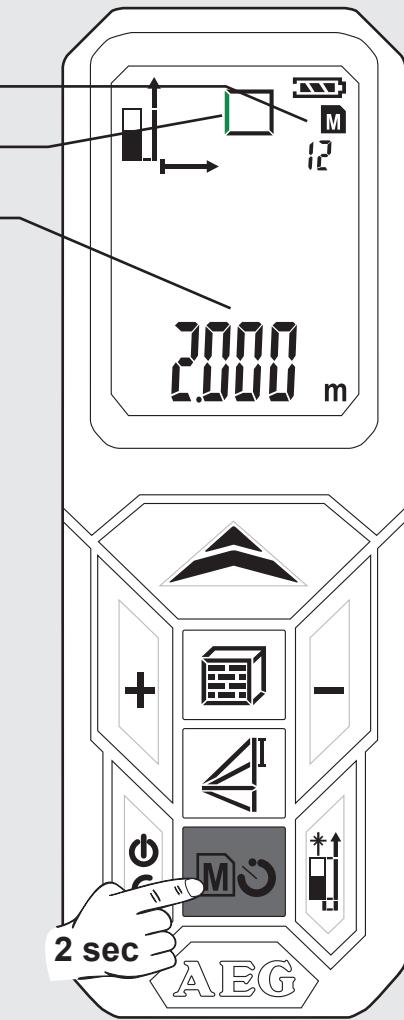
BELLEK

Ölçülen değerler, sürekli ve otomatik olarak bellekte kaydedilir.

Kaydedilen değerlere **M** (bellek) düğmesine basılarak ulaşılabilir.

M (bellek) düğmesine 2 sn basın.

- Simge ve bellek sayısı ekranda görünür.
- İlişkili ölçülmüş parametre gösterilir.
- Kaydedilmiş değer, ana satırda gösterilir.
- + / - düğmeleriyle gezinin.

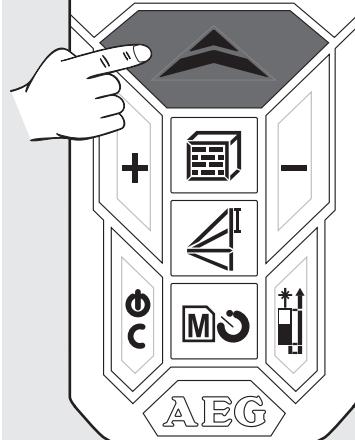
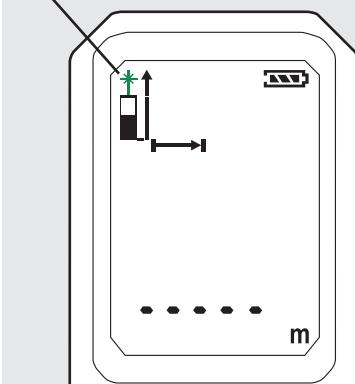


ALAN ÖLÇÜMÜ ÖRNEĞİ (1) ILE İLGİLİ TEMEL AÇIKLAMA

1 Cihazı Aç

Düğmesine bas
 Dikkat! Lazer açık!
Başkasına doğrultmayın!

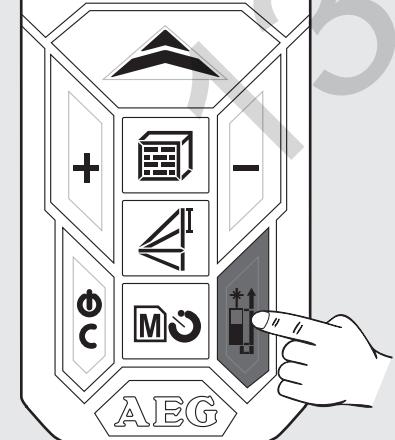
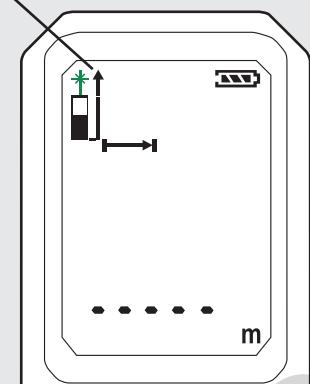
- Lazer simgesi yanıp söner
(yanıp sönen yeşil ışıkla gösterilir).



2 Ölçüm Aralığını Seç

Cihazın açılmasından sonra standart: Alt
*↑ 1 kez basın -> Köşe Pimi
2 kez basın -> Üst
3 kez basın -> Alt

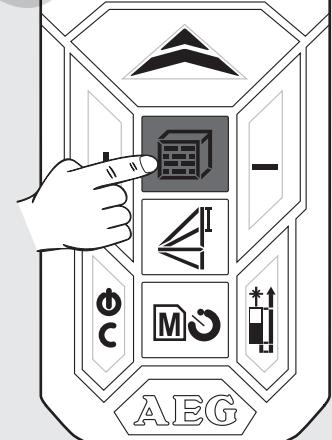
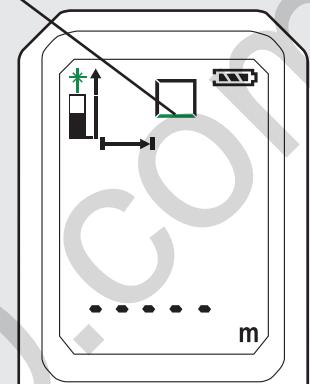
- Simge görüntülenir.



3 Fonksiyonu Seç

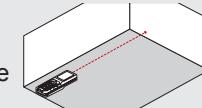
Cihaz açıldıktan sonra daima münferit mesafe ölçümüne ayarlıdır
1 kez basın – Alan Ölçümü.

- Simge görüntülenir.
Ölçülen parametre yanıp söner
(yanıp sönen yeşil ışıkla gösterilir)



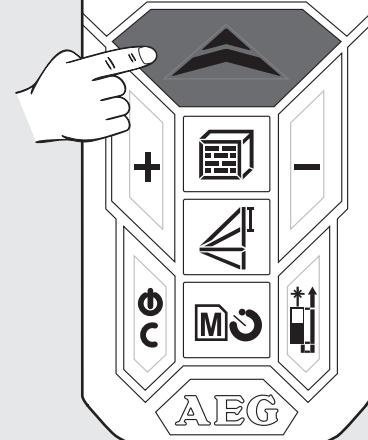
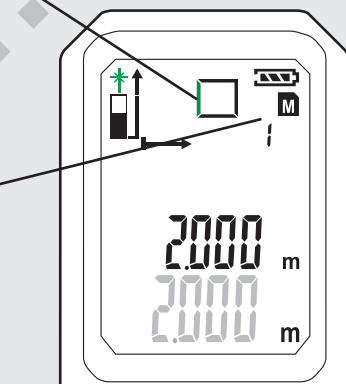
4 Uzunluğu ölç

Cihazı hedefe doğru yönett ve düzmesine bas.



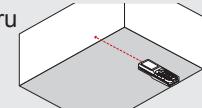
- Ölçülen değer kısa bir süre için ana satırda görüntülenir.
- Ölçülen değer, yukarıdaki satırda 1 saniye atlar.

Ölçülen değer, ardışık sayılar halinde belleğe kaydedilir.
İkinci ölçülen parametre yanıp söner. Cihaz ikinci değerin ölçümü için hazırlıdır.



5 Genişliği ölç

Cihazı hedefe doğru yönett ve düzmesine bas.

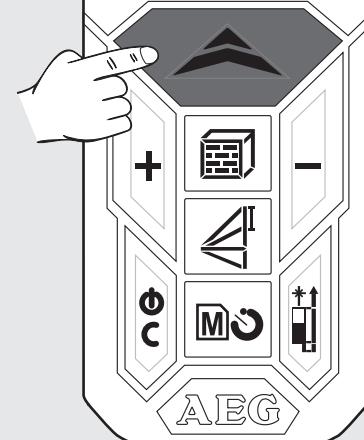
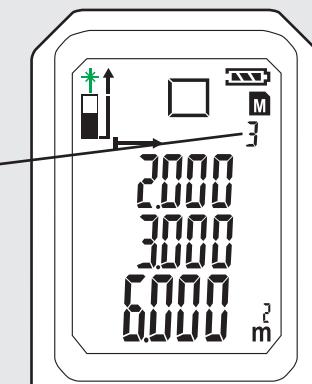


- Ölçülen değer kısa bir süre için alt satırda görüntülenir.

- Ölçülen değer, yukarıdaki satırda 1 saniye atlar.

Ölçülen değer, ardışık sayılar halinde belleğe kaydedilir.

- Sonuç ana satırda görüntülenen ve ardışık sayılar halinde belleğe kaydedilir.



ALAN ÖLÇÜMÜ ÖRNEĞİ (2) İLE İLGİLİ TEMEL AÇIKLAMA

6 Kaydedilen değerleri görüntüle

M (bellek) düğmesine 2 sn basın.

+’ya basın veya –’ye basın

- Kaydedilmiş değerler, ana satırda gösterilir.

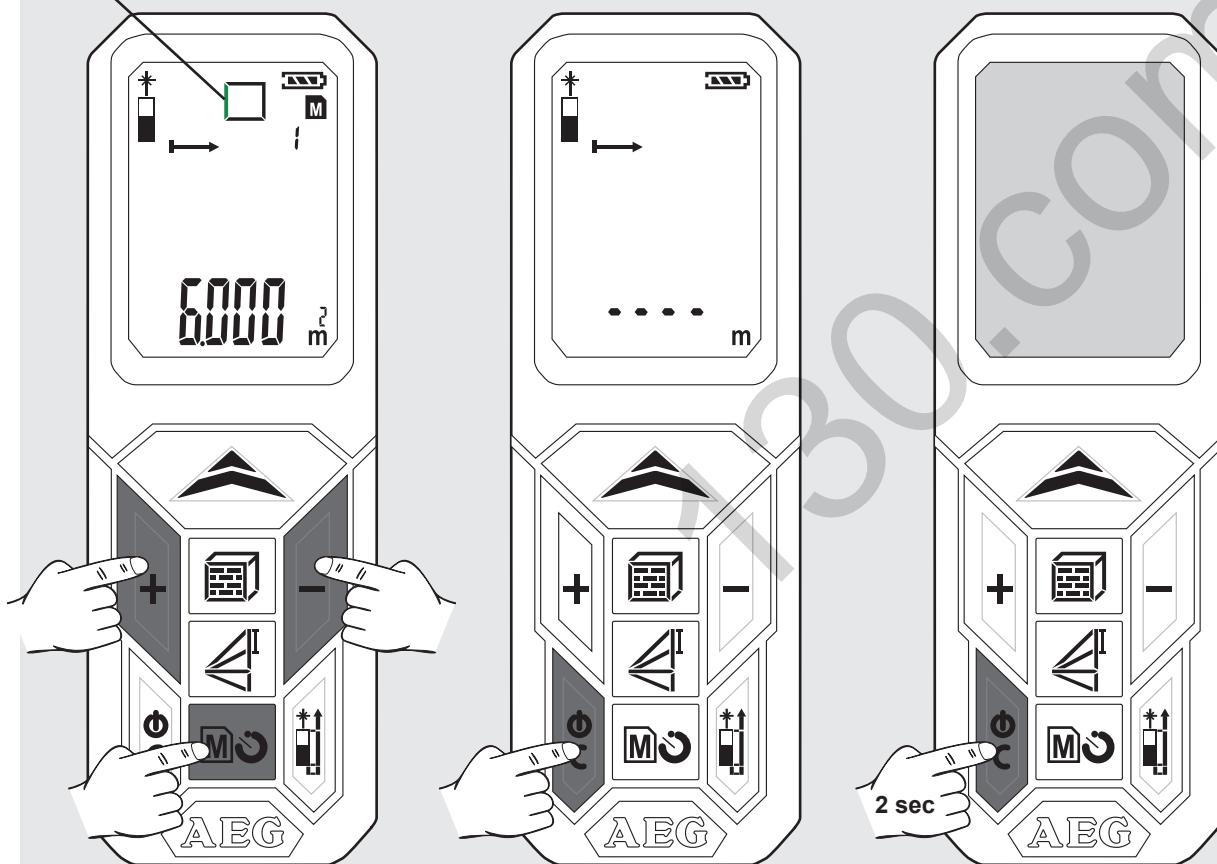
İlişkili simge ekranda belirir ve ölçülen parametre yanıp söner (yanıp sönen yeşil ışıkla gösterilir)

7 Bellekten çıkış

∅ (güç) düğmesine basın

8 Cihazı kapat

∅ düğmesine 2 sn basın
(Önce bellekten çıkış olmalıdır)



OBSAH

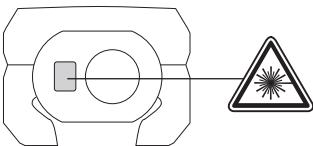
Důležité bezpečnostní pokyny.....	1
Technická data	2
Oblast Využití	2
Tabulka chybových kódů	2
Přehled	3
Výměna baterií	4
Rohový kolík	4
Držák na opasek.....	4
Funkční tlačítko, Funkce Pythagoras, Úroveň měření.....	5
Jednoduché měření délky	6
Kontinuální měření / měření minima - maxima.....	7
Měření připočítáním / měření odpočítáním.....	8
Měření plochy	9
Měření objemu.....	10
Nepřímé měření (funkce Pythagoras 1)	11
Nepřímé měření (funkce Pythagoras 2)	12
Nepřímé měření (funkce Pythagoras 3)	13
Měření plochy stěny (scénář 1)	14
Měření plochy stěny (scénář 2)	15
Časovač.....	16
Paměť.....	16
Základní způsob fungování na příkladu měření plochy (1).....	17
Základní způsob fungování na příkladu měřené plochy (2).....	18

DŮLEŽITÉ BEZPEČNOSTNÍ POKYNY



Než začnete výrobek používat, prostudujte si bezpečnostní pokyny a návod k obsluze na přiloženém CD.

Klasifikace laseru



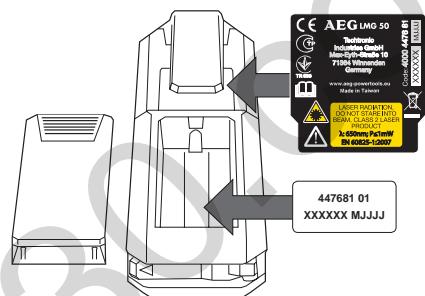
UPOZORNĚNÍ:

Jedná se o laserový výrobek **třídy 2** podle normy IEC 60825-1:2007.



Etiketa

Před prvním zprovozněním přelepte anglický text na výkonovém štítku samolepkou s českým textem, která je součástí dodávky.



Výstraha:

Vyhnete se přímému kontaktu s očima. Laserový paprsek může poškodit oči zábleskem a vést ke krátkodobému oslenění.

Nedívejte se přímo do laserového paprsku ani jej nesměřujte zbytečně na jiné osoby.

Neoslňujte jiné osoby.

Výstraha:

Laserový přístroj neprovozujte v blízkosti dětí a dětem nedovolte, aby laserový přístroj používaly.

Pozor! Reflexní povrch by mohl laserový paprsek odrazit zpět na obsluhu nebo jiné osoby.

Udržujte bezpečnou vzdálenost končetin od pohyblivých součástí.

Provádějte pravidelná zkušební měření. Zejména před důležitými měřeními, během nich a po nich.

Dávejte pozor na chybná měření, jestliže je výrobek vadný nebo pokud byl upuštěn či nesprávně používán nebo upravován.

Pozor! Seznamte se s obslužnými prvky a řádným používáním zahradního nářadí.

Laserový měřící přístroj má omezenou oblast použití. (Viz odstavec "Technické údaje"). Pokusy měřit mimo maximální a minimální rozsah způsobí nepřesnosti. Použití přístroje za nepříznivých podmínek, jako je příliš vysoká a příliš nízká teplota, velmi ostré sluneční světlo, dešť, sníh, mlha nebo jiné podmínky omezující viditelnost, může vést k nepřesným měřením.

Pokud bude přístroj přenesený z teplého prostředí do studeného prostředí (nebo naopak), musíte počkat, až se přístroj přizpůsobí nové teplotě okolního prostředí.

Laserový měřící přístroj vždy uskladňujte v místnosti, přístroj chráňte před otřesy, vibracemi a extrémními teplotami.

Laserový měřící přístroj chráňte před prachem, mokrým prostředím a vysokou vzdušnou vlhkostí. Tyto vlivy mohou zničit vnitřní součástky nebo ovlivnit přesnost měření.

Nepoužívejte žádné agresivní čisticí prostředky nebo rozpouštědla. Čistěte jen čistým měkkým hadříkem.

Vyhnete se silným úderům do přístroje nebo pádu laserového měřícího přístroje. Přesnost přístroje by se měla zkontrolovat tehdy, jestliže přístroj spadl nebo byl vystaven jinému mechanickému zatížení.

Potřebné opravy na tomto laserovém přístroji smí realizovat jen autorizovaný odborný personál.

Nepoužívejte výrobek v prostorách s nebezpečím výbuchu nebo v agresivním prostředí.

K nabíjení baterií používejte pouze nabíječky doporučené výrobcem.

Vybité baterie nesmí být likvidovány jako komunální odpad. Pečujte o životní prostředí a baterie odevzdejte na sběrných místech ustanovených v souladu s národními nebo místními předpisy. Výrobek nevhazujte do komunálního odpadu. Výrobek patří zlikvidovat v souladu s národními předpisy platnými ve vaší zemi. Dodržujte národní předpisy a doporučení. Ohledně získání informací o likvidaci se obraťte na místní úřady nebo na vašeho prodejce.



TECHNICKÁ DATA

Třída ochrany	IP54 (chráněný proti prachu a stříkající vodě)
Optika	14 mm
Ohnisko	35 mm
Max. měřený rozsah	50 metrů (tolerance: 55 m)
Min. měřený rozsah	0,05 metru
Absolutní přesnost @ < 10m	± 1,5 mm (Max)
Opakovaná přesnost @ < 10m	± 1,5 mm (typicky max. 2σ)
Opakovaná přesnost @ > 10m	vzestup ± 0,25 mm / metr (typicky max. 2σ)
Doba měření	0,5 s
Typ displeje	LCD (22,7 mm x 31 mm)
Napájení	AAA 2x (alkalické baterie)
Životnost baterií	10000 (jednotlivých měření)
Výstupní výkon laseru	0,6 mW ~ 0,95 mW (třída 2, 650 nm)
Velikost laserového bodu	25 x 30 mm @ 16 m (Max)
Laserový paprsek vertikální úhel	+1 stupeň
Laserový paprsek horizontální úhel	±1 stupeň
Automatické vypnutí přístroje	180 sekund
Automatické vypnutí laseru	30 sekund
Rozsah provozní teploty	-10°C do +50°C
Rozsah teploty na uskladnění přístroje	-25°C do +70°C
Hmotnost bez baterií	80 g

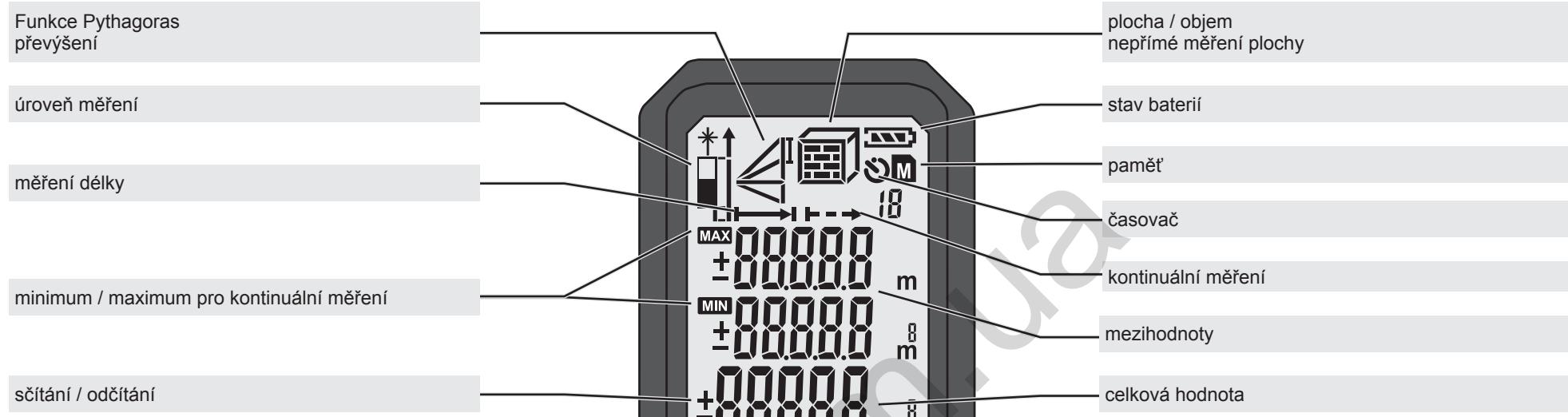
TABULKA CHYBOVÝCH KÓDŮ

Kód	Popis	Řešení
Err01	Mimo měřený rozsah	Měření provedte ve stanoveném rozsahu.
Err02	Odražený signál je příliš slabý	Vyberte si lepší povrch.
Err03	Mimo interval zobrazování (max. hodnota: 99.999) např. když je výsledek plochy nebo objemu mimo interval zobrazování	Zkontrolujte, jestli jsou hodnoty a kroky správně.
Err04	Chyba ve výpočtu podle Pythagorovy věty	Zkontrolujte, jestli jsou hodnoty a kroky správně.
Err05	Slabé baterie	Vložte nové baterie.
Err06	Mimo rozsah provozní teploty	Měření zrealizujte ve stanoveném rozsahu provozní teploty.
Err07	Příliš jasné světlo okolního prostředí	Cílovou zónu zatemněte.

OBLAST VYUŽITÍ

Laserový měřicí přístroj je vhodný na měření vzdáleností a sklonů.

Toto zařízení lze používat jen pro uvedený účel.



ZAP / MĚŘIT

- Zap
- Měřit
- Kontinuální měření (tisknout 2 sek)
Min. / Max. funkce

SCÍTÁNÍ

- Sčítat hodnotu
- Navigovat v paměti

PLOCHA / OBJEM

- Plocha (stisknout 1x)
- Objem (stisknout 2x)
- Nepřímé měření plochy (stisknout 3x / 4x)

ZAPNUTÍ

- Zap
- Vyp (tisknout 2 sek)
- Vrátit do původního stavu

ODČÍTÁNÍ

- Odčítat hodnotu
- Navigovat v paměti

FUNKCE PYTHAGORAS

- Funkce Pythagoras 1 (stisknout 1x)
- Funkce Pythagoras 2 (stisknout 2x)
- Funkce Pythagoras 3 (stisknout 3x)

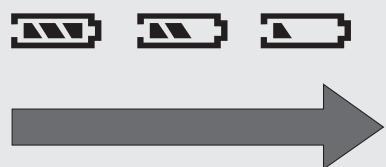
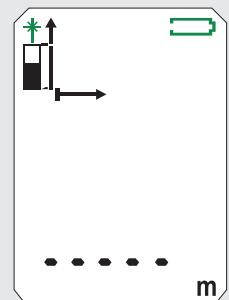
ZMĚNA ÚROVNĚ MĚŘENÍ

- od přední části
- od zadní části
- od rohového kolíku

PAMĚŤ

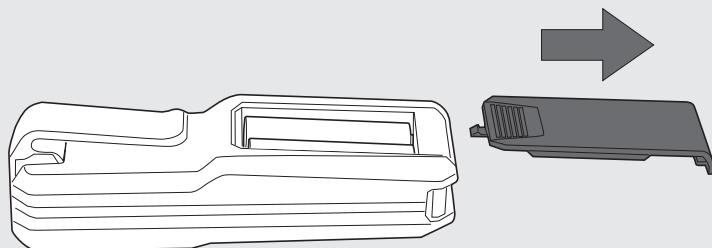
- Časovač 3-15 sek (stisknout 1x)
- Paměť 1-20 (stisknout 1x 2 sek)
- Pomocí tlačítek +/- navigujte v paměti

VÝMĚNA BATERIÍ

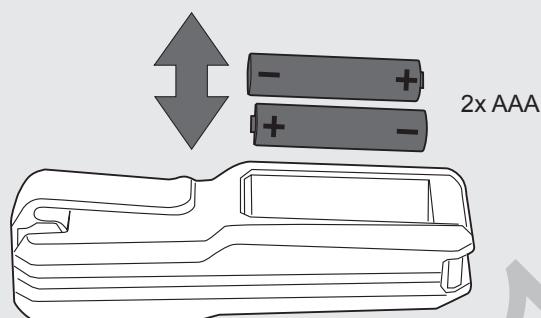


Když bliká symbol,
je třeba vyměnit
baterie.

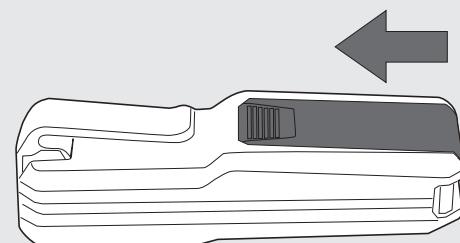
1



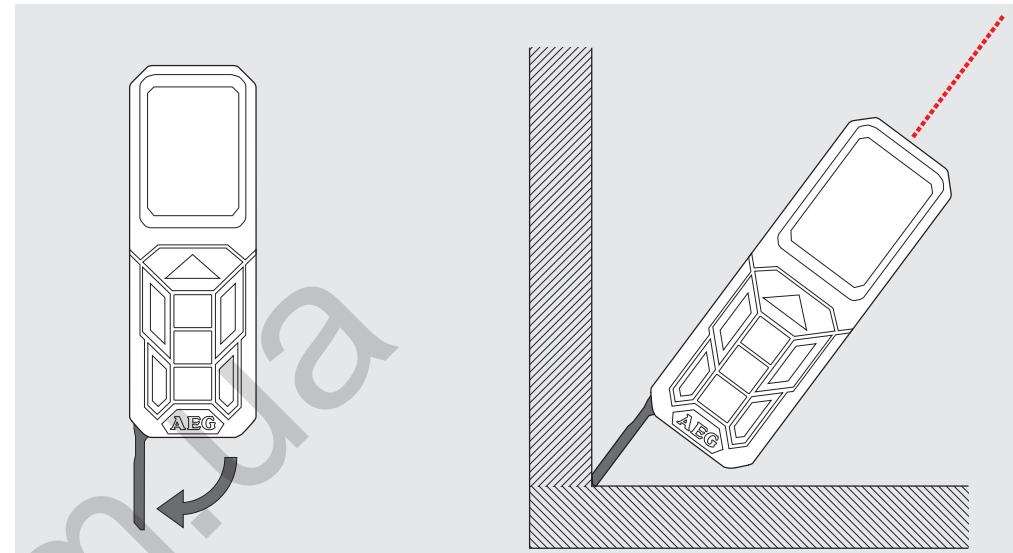
2



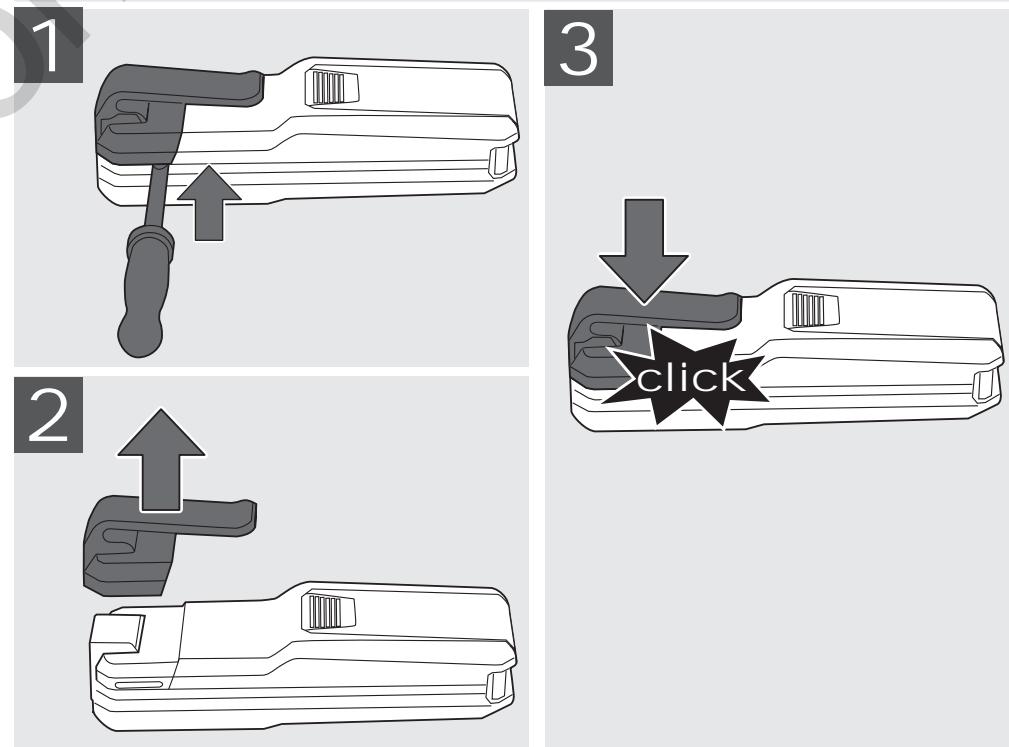
3



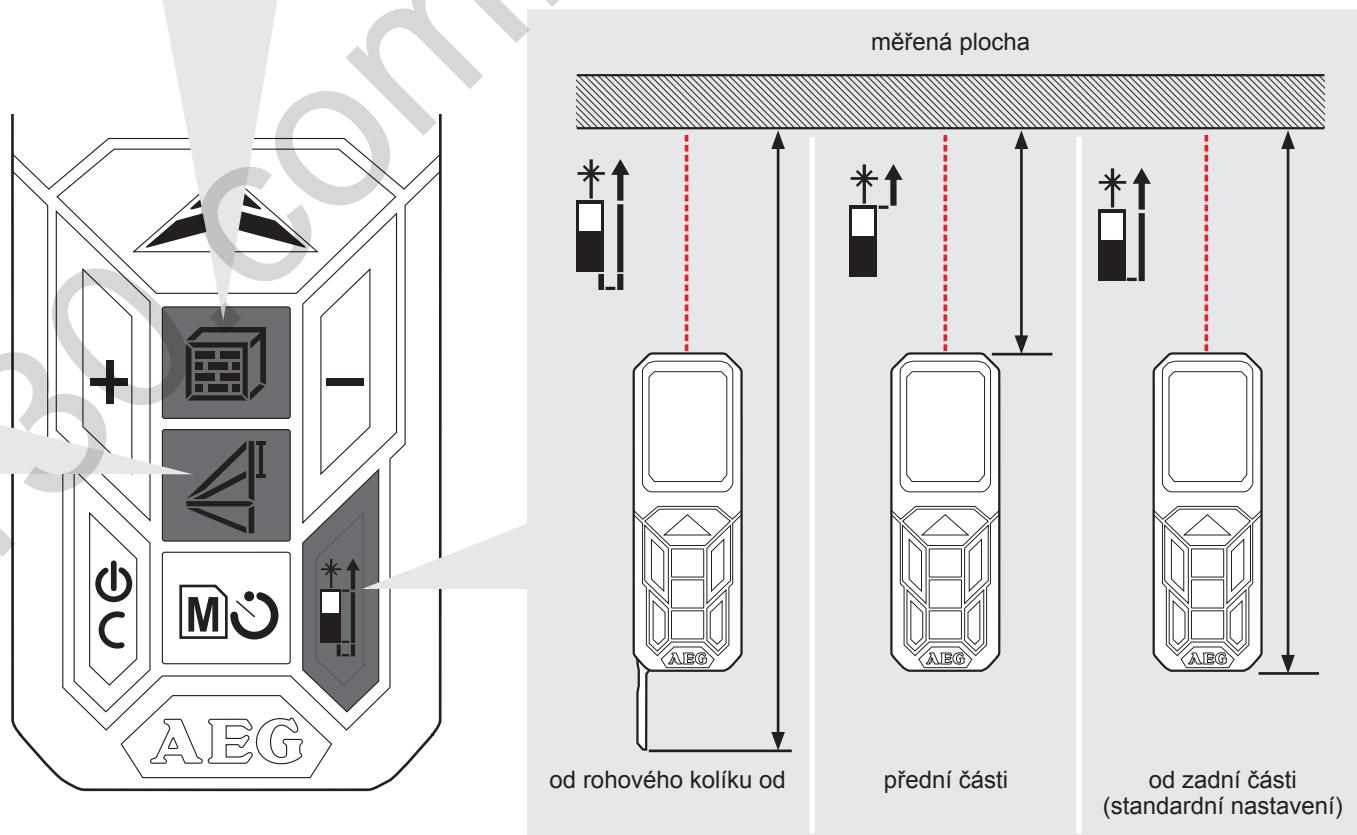
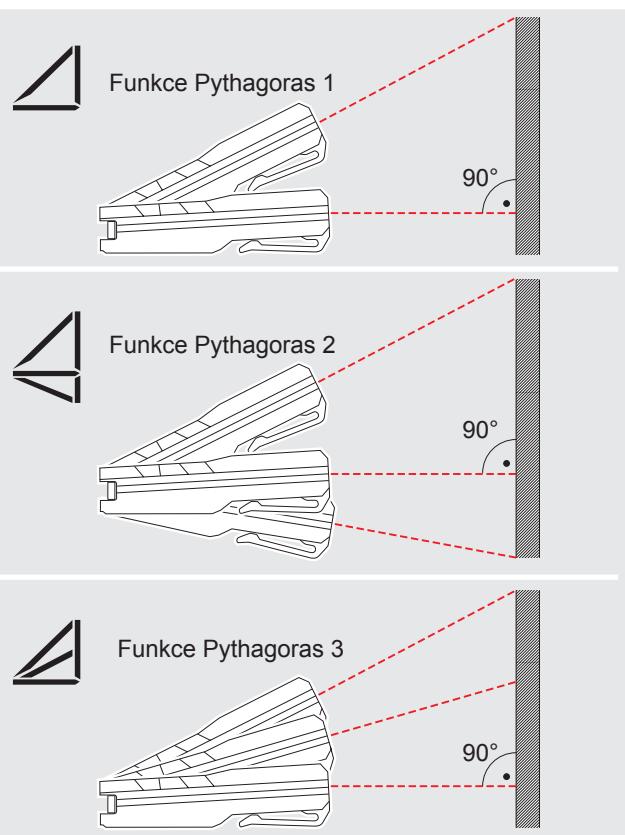
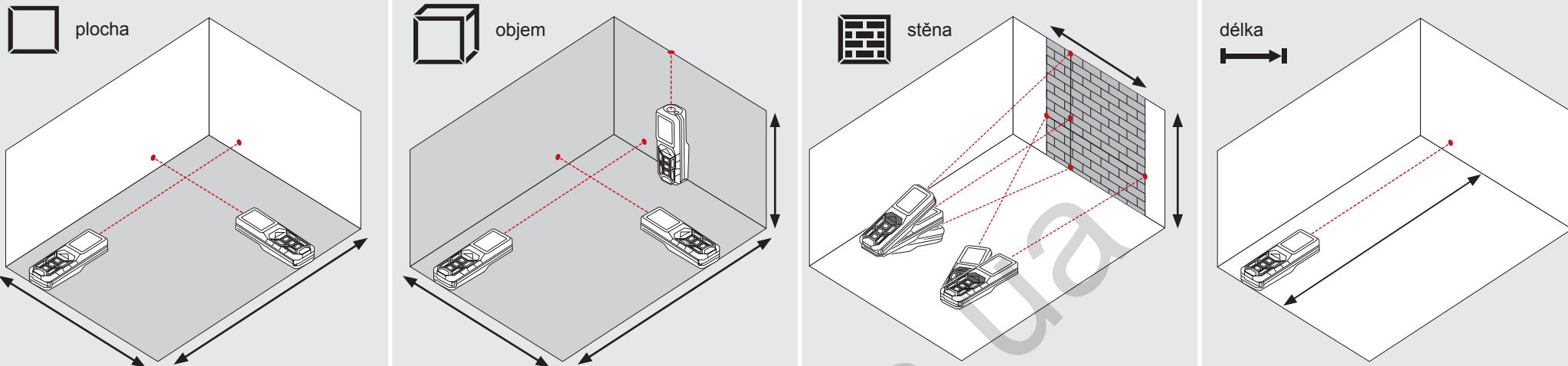
ROHOVÝ KOLÍK



DRŽÁK NA OPASEK

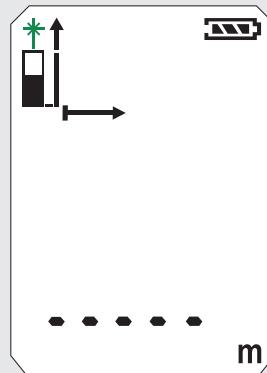
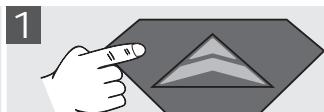


FUNKČNÍ TLAČÍTKO, FUNKCE PYTHAGORAS, ÚROVEN MĚRENÍ

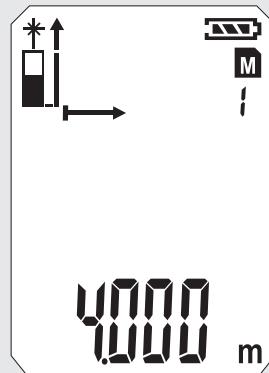


JEDNODUCHÉ MĚŘENÍ DĚLKY

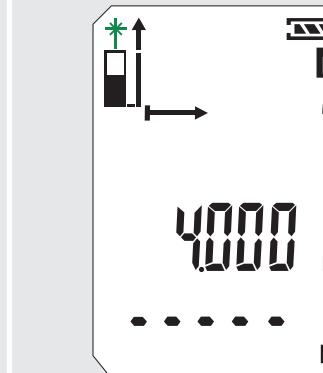
0



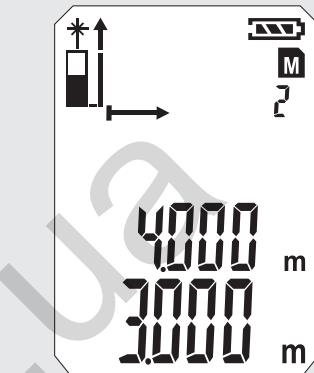
1



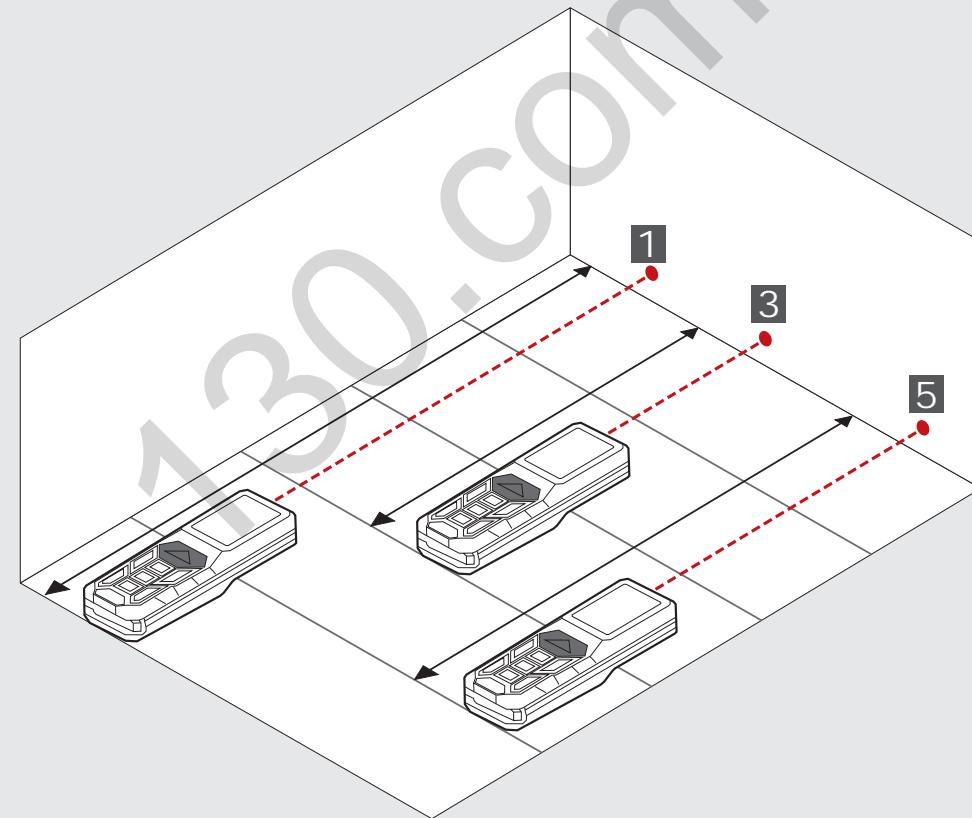
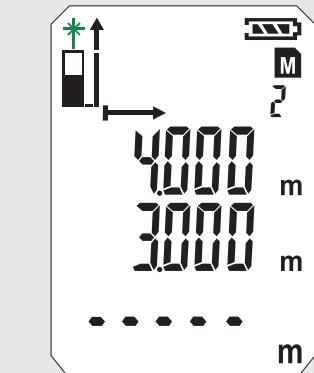
2



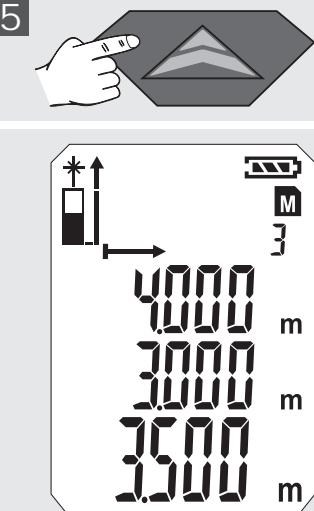
3



4



5

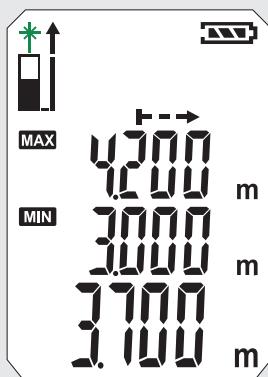
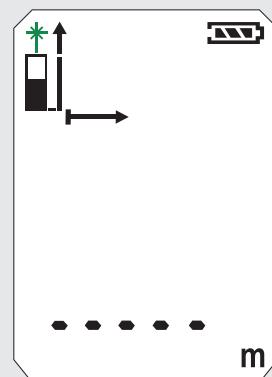


KONTINUÁLNÍ MĚŘENÍ / MĚŘENÍ MINIMA - MAXIMA

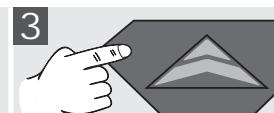
0



2

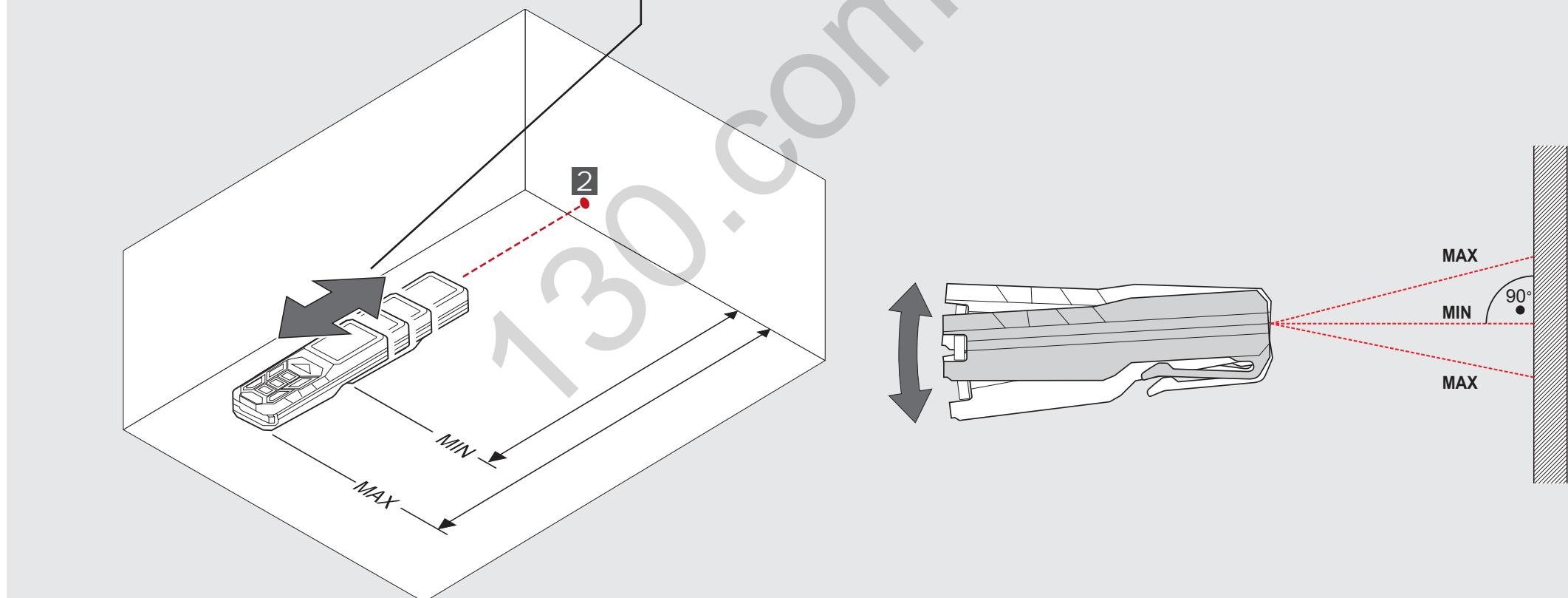


3



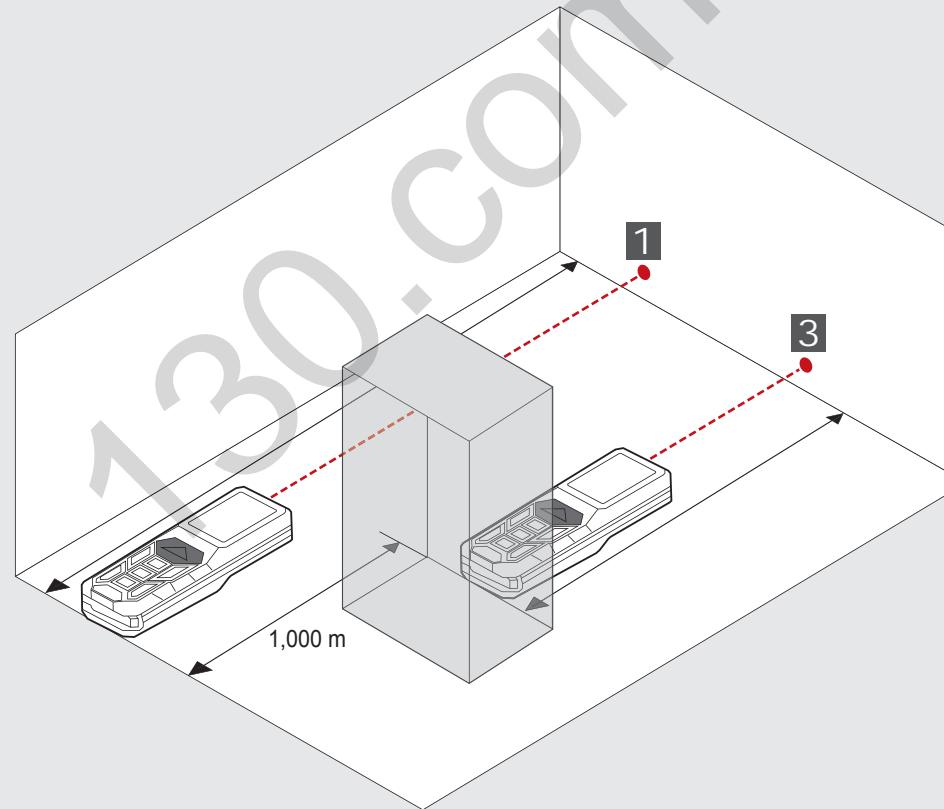
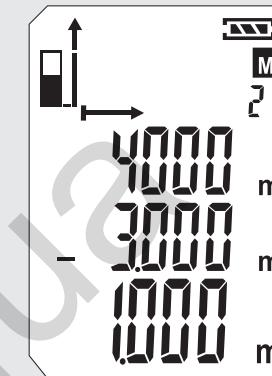
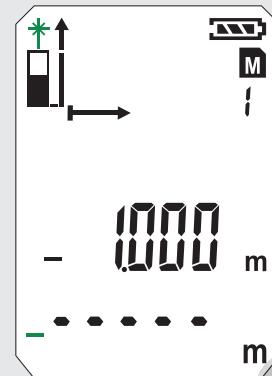
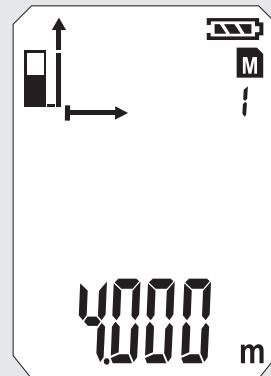
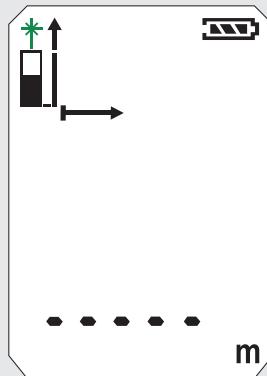
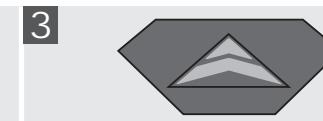
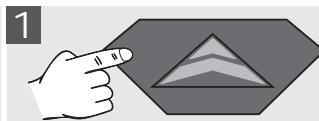
Stop
MIN / MAX

4

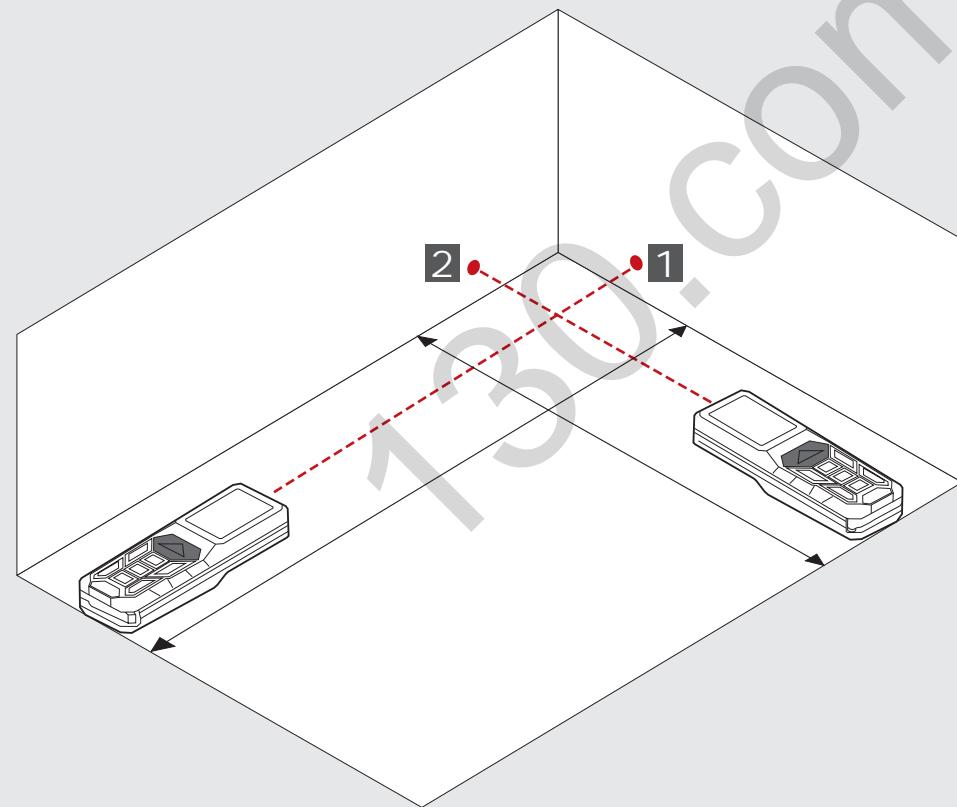
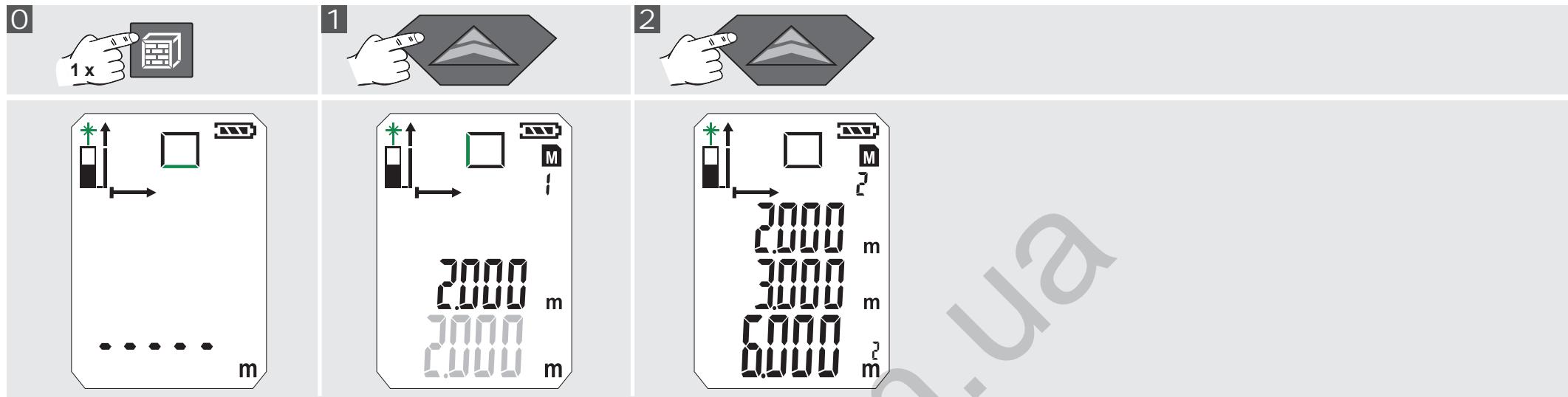


MĚŘENÍ PŘIPOCÍTÁNÍM / MĚŘENÍ ODPOCÍTÁNÍM

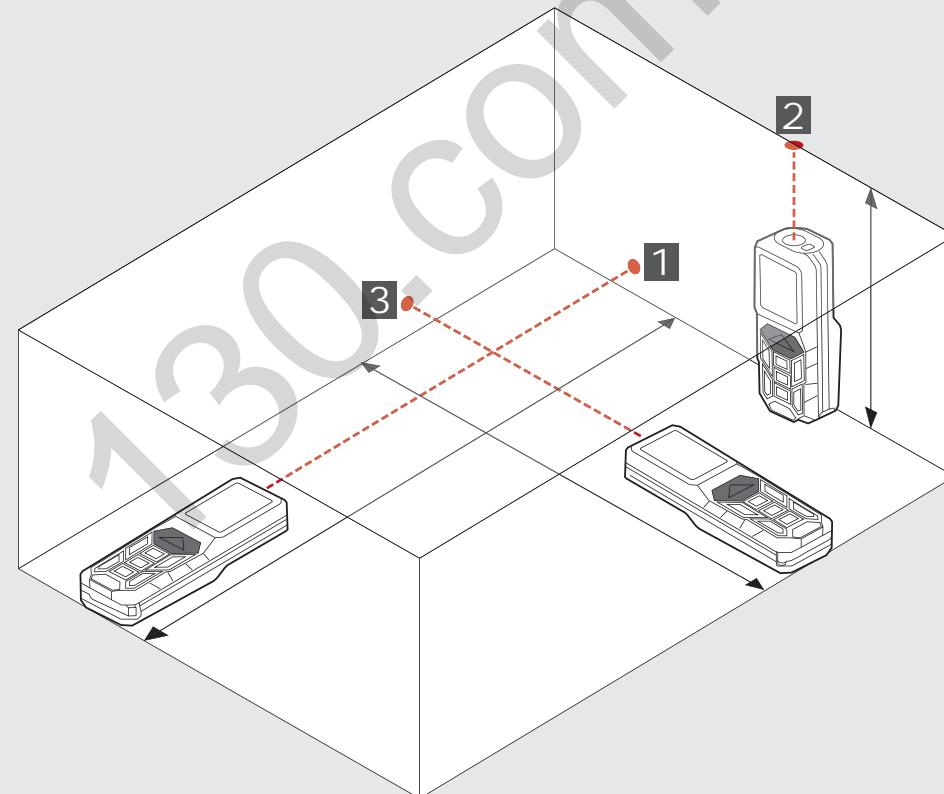
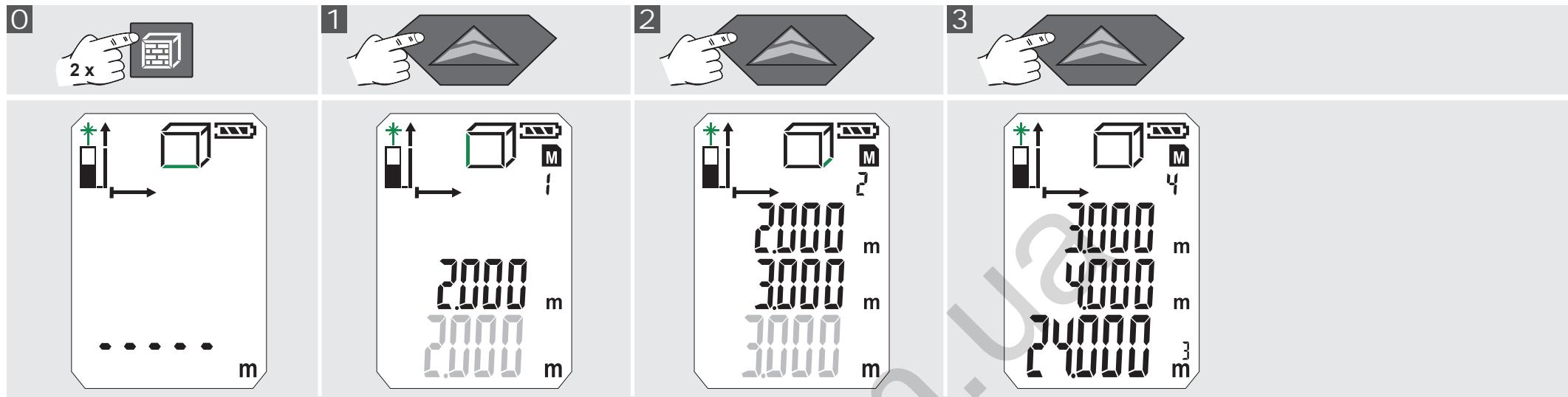
0



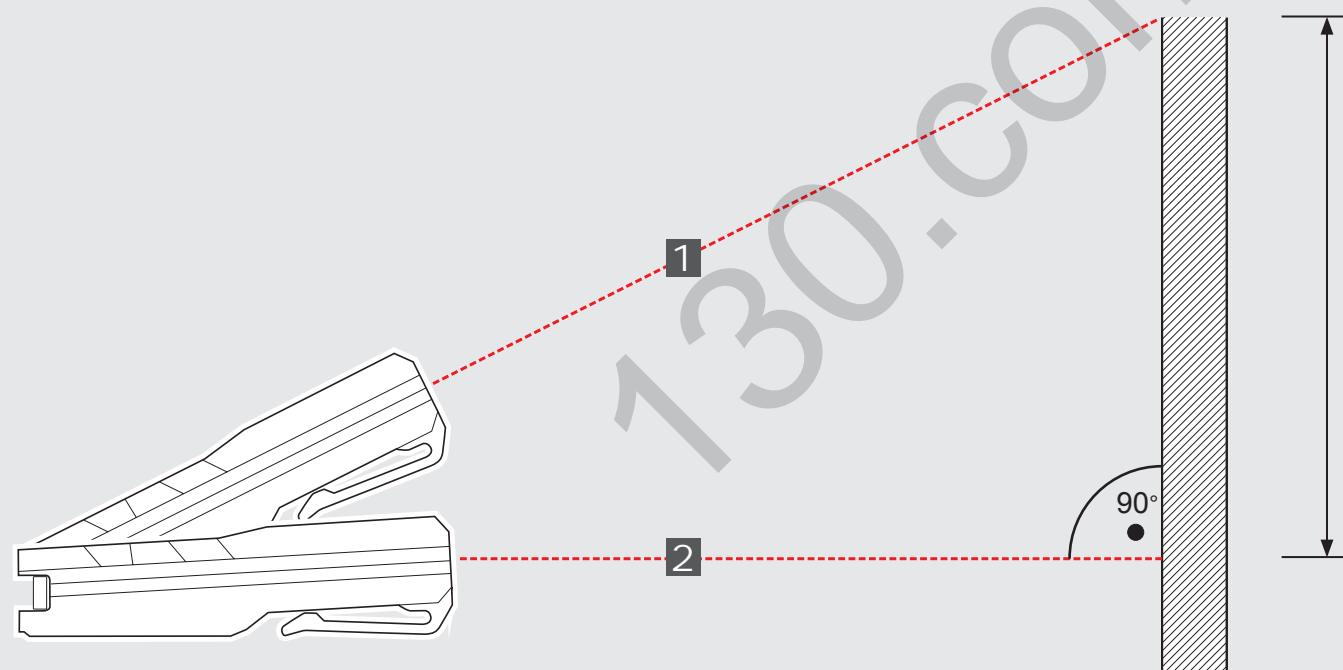
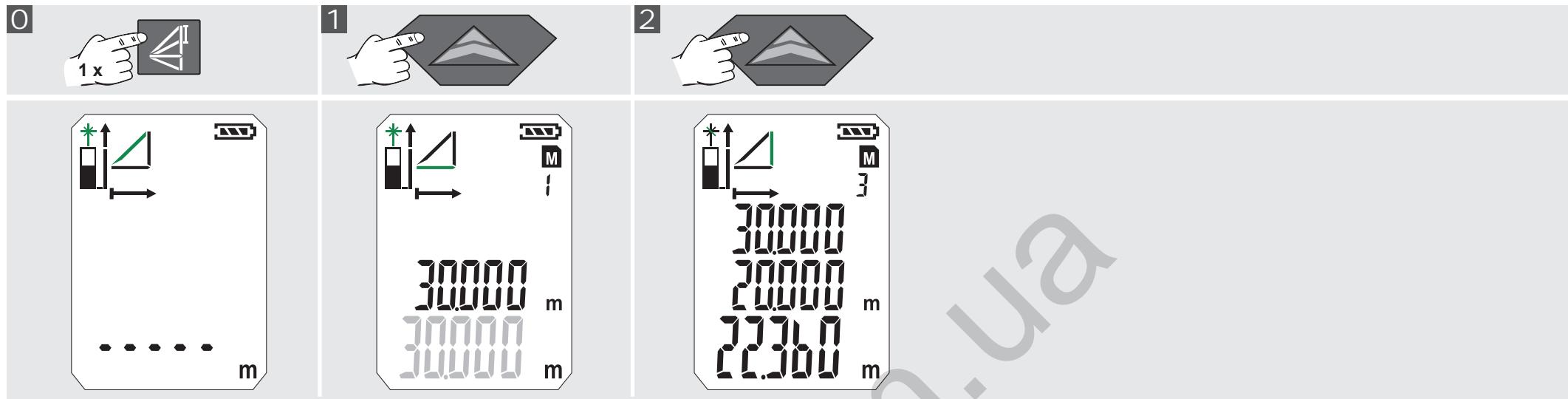
MĚŘENÍ PLOCHY



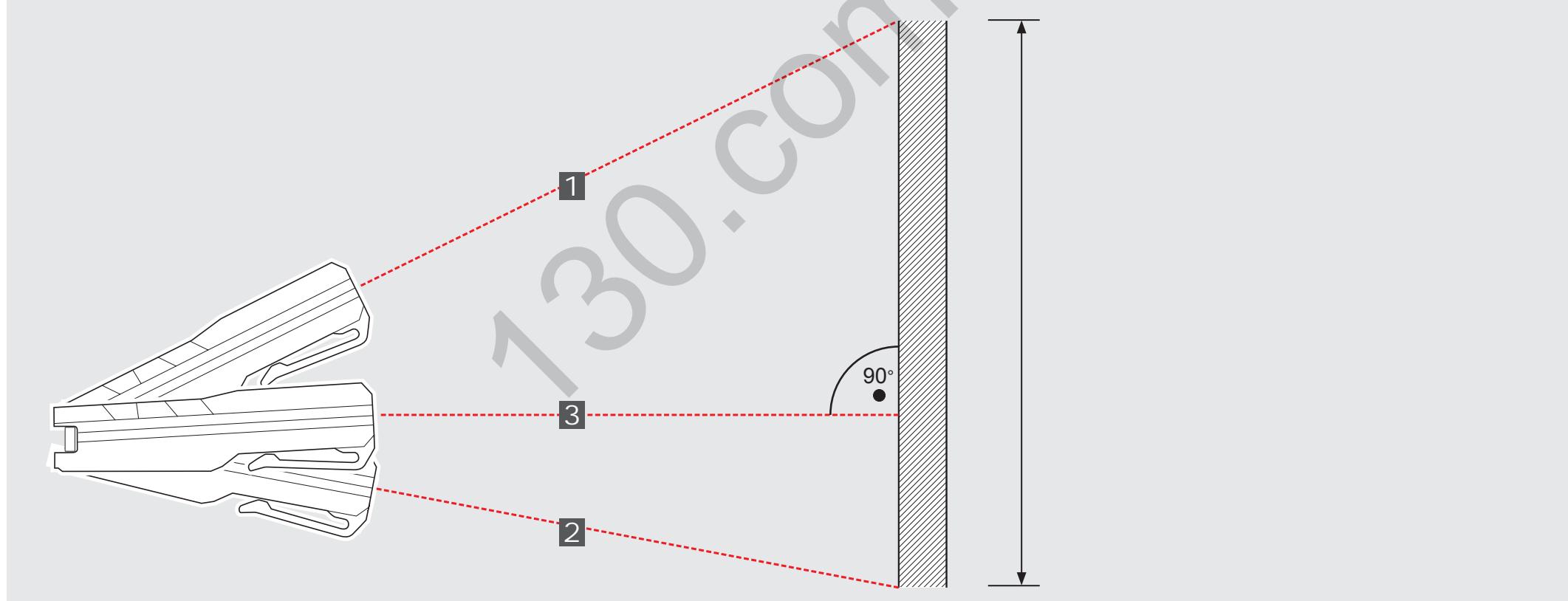
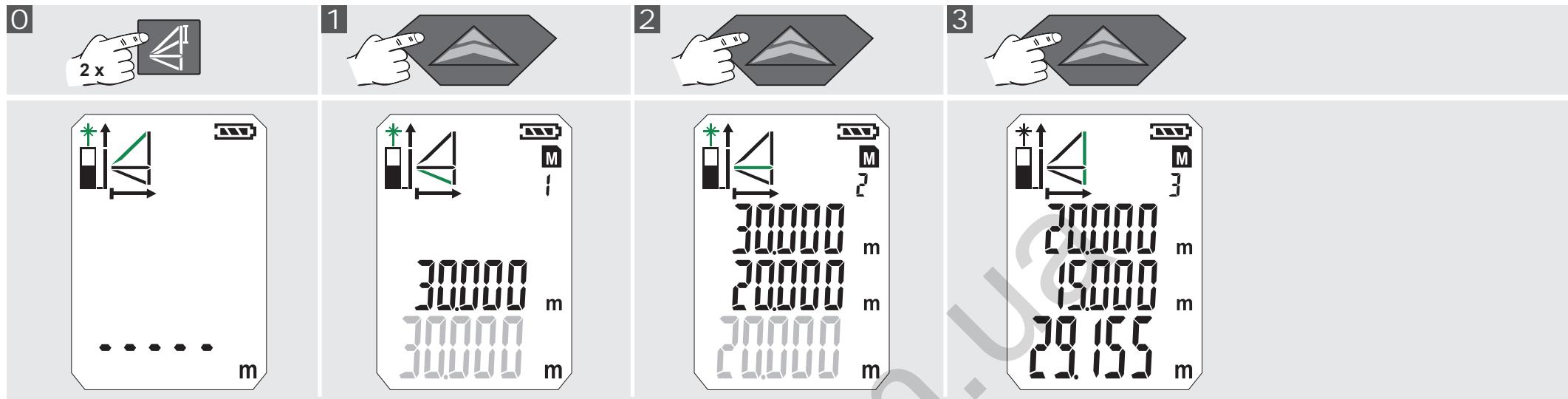
MĚŘENÍ OBJEMU



NEPŘÍMÉ MĚŘENÍ (FUNKCE PYTHAGORAS 1)

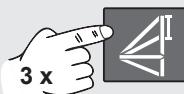


NEPRÍMÉ MĚŘENÍ (FUNKCE PYTHAGORAS 2)



NEPŘÍMÉ MĚŘENÍ (FUNKCE PYTHAGORAS 3)

1



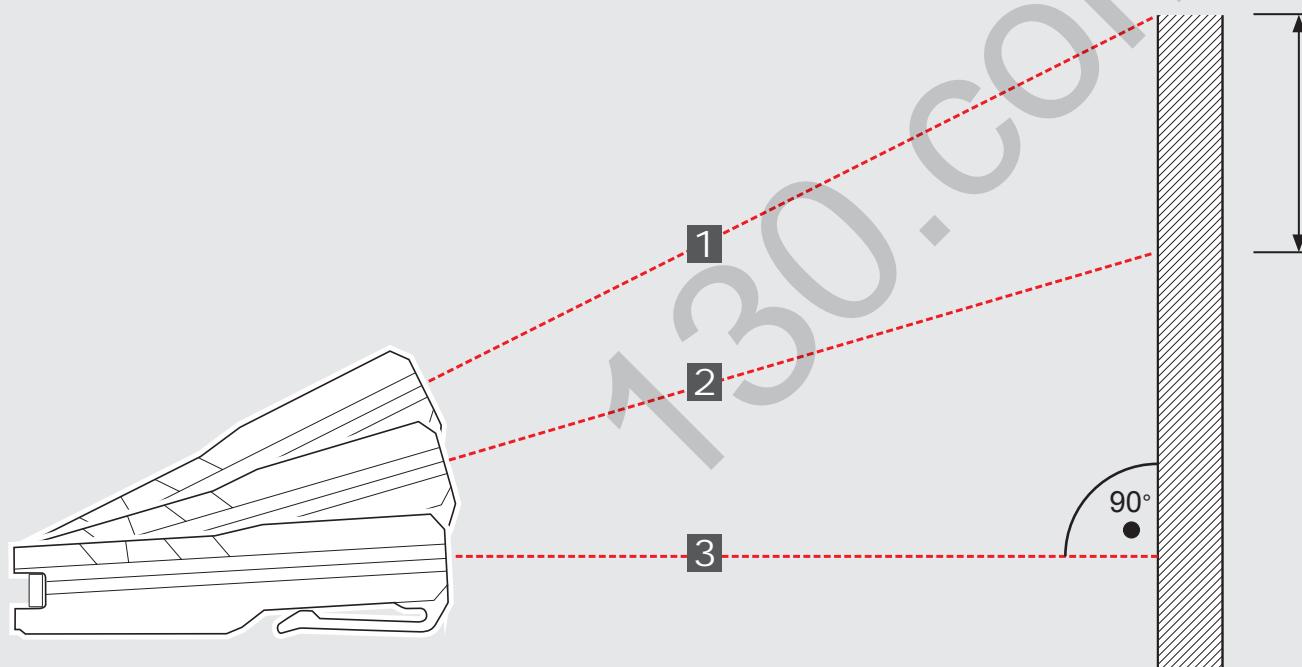
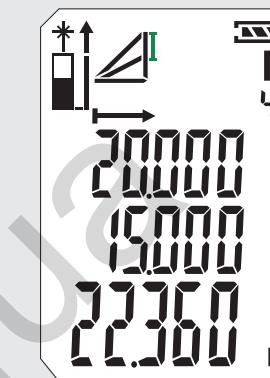
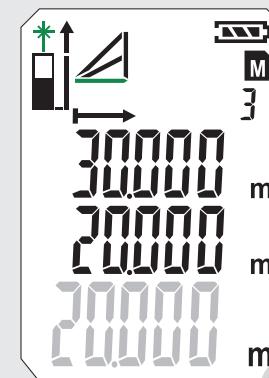
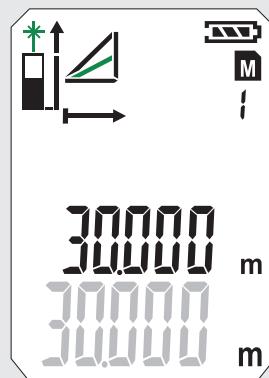
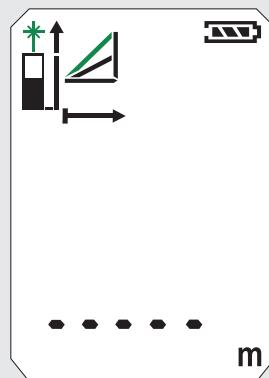
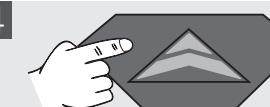
2



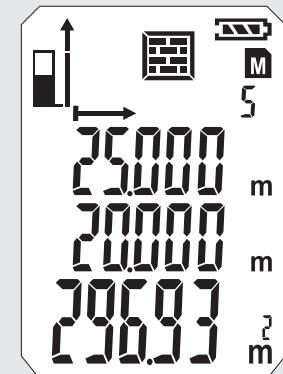
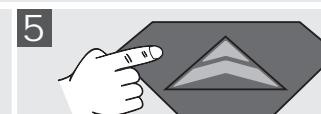
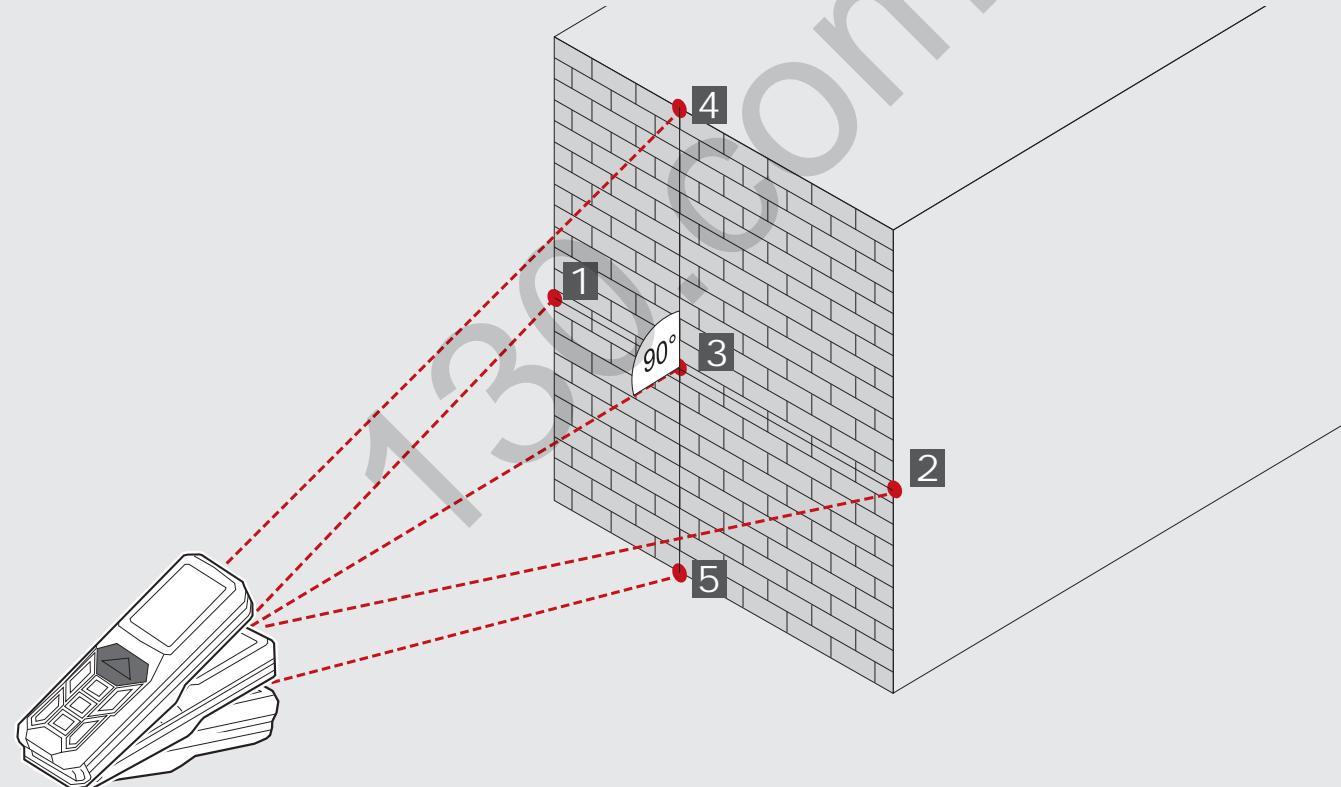
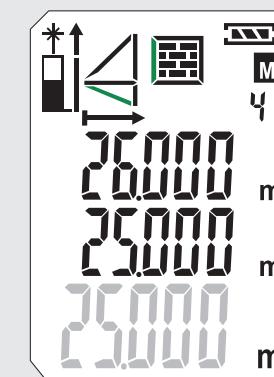
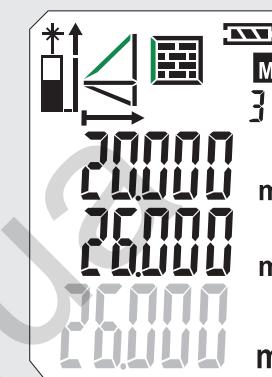
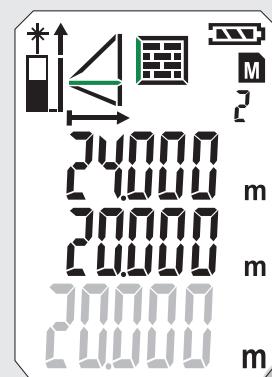
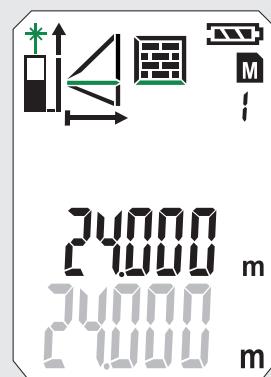
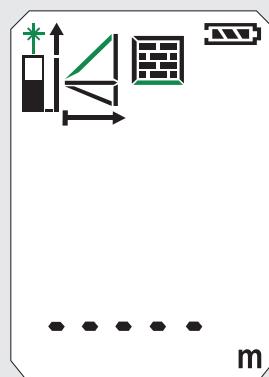
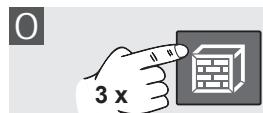
3



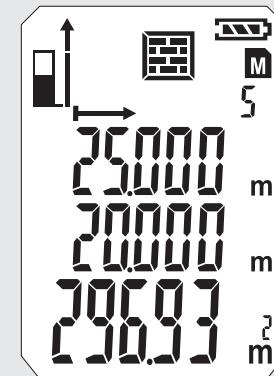
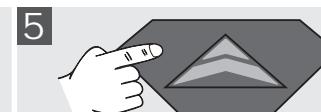
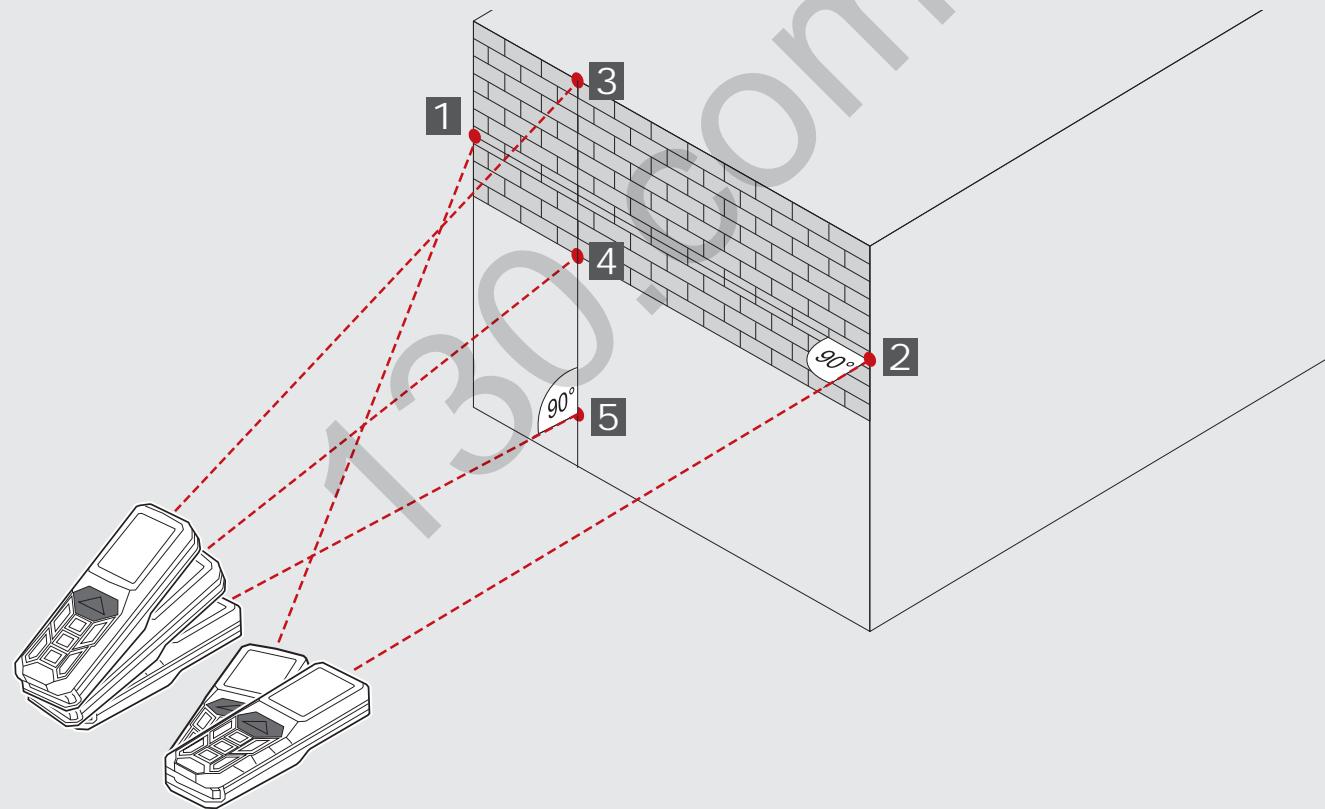
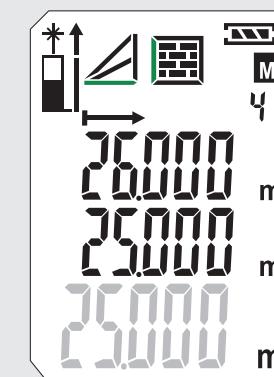
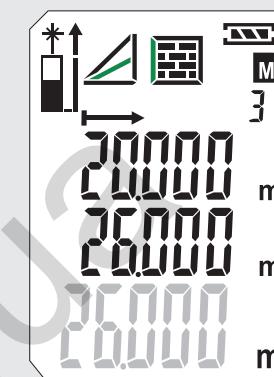
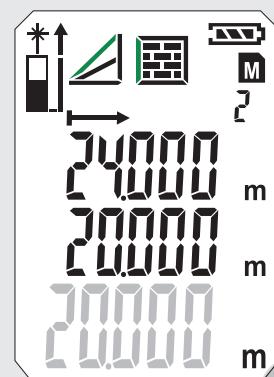
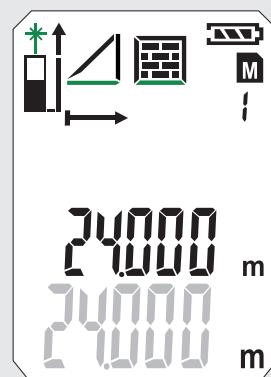
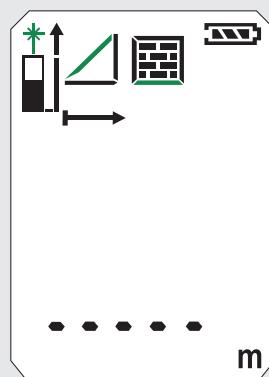
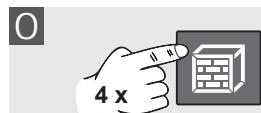
4



MĚŘENÍ PLOCHY STĚNY (SCÉNÁŘ 1)



MĚŘENÍ PLOCHY STĚNY (SCÉNÁŘ 2)



ČASOVAC

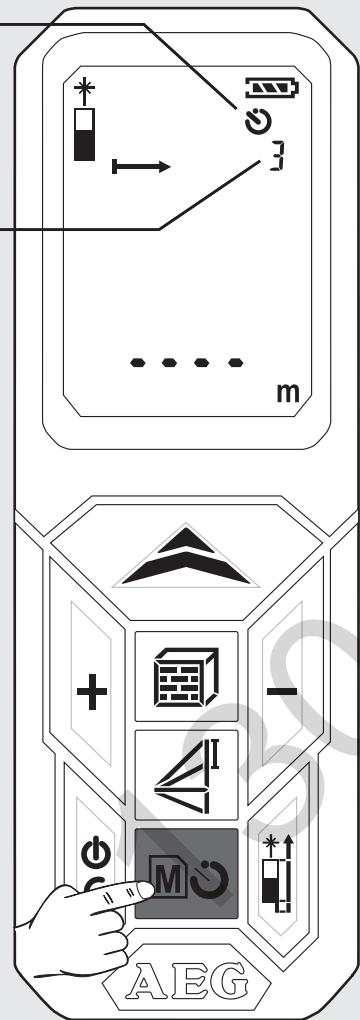
Pomocí časovače se dá měření spustit s pozdějším startem, aby se např. na konstrukční díl mohl umístit měřený paprsek.

Stiskněte tlačítko 

- Objeví se symbol 
- Stisknutím tlačítka  se časovač dá nastavit v rozpětí od 3 do 15 sekund.

Stiskněte tlačítko 

- Sekundy se budou odpočítávat do měření.
- Při 0 se spustí měření.



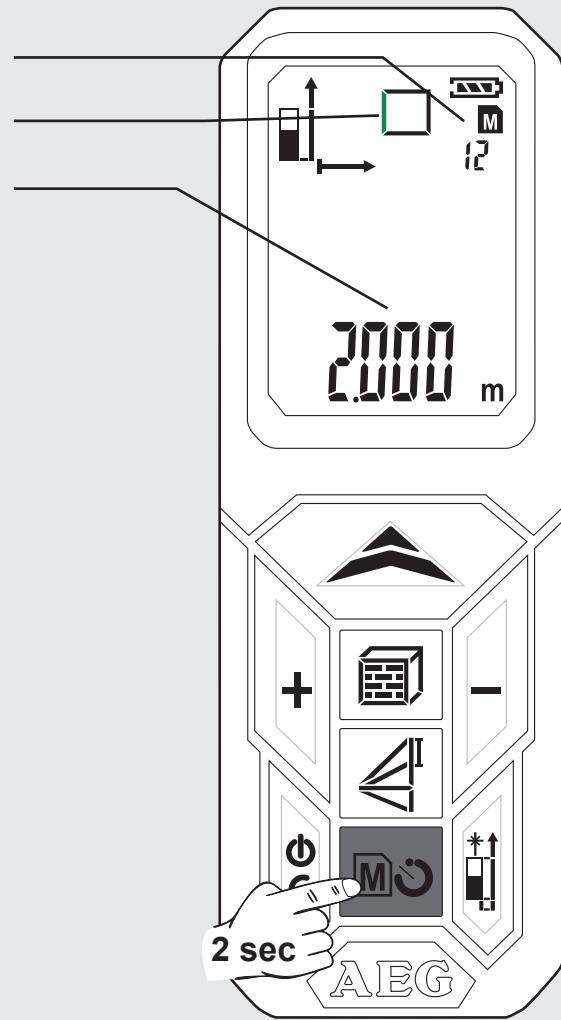
PAMĚТЬ

Naměřené hodnoty se automaticky průběžně ukládají do paměti.

Hodnoty uložené v paměti je možné vyvolat tlačítkem .

Stiskněte tlačítko  na 2 sekundy

- Objeví se symbol a místo v paměti.
- Zobrazí se příslušná měřená veličina.
- V paměti uložená hodnota se zobrazí v hlavním řádku.
- Pomocí tlačítek +/- se naviguje



ZÁKLADNÍ ZPŮSOB FUNGOVÁNÍ NA PŘÍKLADU MĚŘENÍ PLOCHY (1)

1 Zapnutí

Stiskněte tlačítko .
A Pozor! Laserový paprsek je zapnutý!
 Nemiřte jím na osoby!

Bliká symbol laseru (blikání zobrazené zelenou barvou).

2 Výběr úrovně měření

Po zapnutí standardní nastavení: měření od zadní části měřiče
 stisknout 1x -> od rohového kolíku
 stisknout 2x -> měření od přední části měřiče
 stisknout 3x -> měření od zadní části měřiče

Zobrazí se symbol

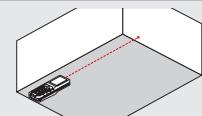
3 Výběr funkce

Po zapnutí je přístroj vždy nastavený na měření délky.
 stisknout 1x - měření plochy

- Objeví se symbol
 Bliká měřená hodnota (blikání zobrazené zelenou barvou)

4 Měření délky

Přístroj vyrovnejte a stiskněte tlačítko



- Naměřená hodnota se krátce zobrazí v hlavním řádku.

- Naměřená hodnota po 1 sekundě přeskočí do řádku ležícího výše.

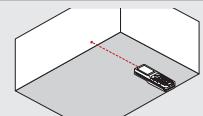
Naměřená hodnota se uloží do paměti pod pořadovým číslem.

Bliká druhá měřená hodnota. Přístroj je připravený na měření druhé hodnoty.

2000 m
2000 m

5 Měření šířky

Přístroj vyrovnejte a stiskněte tlačítko



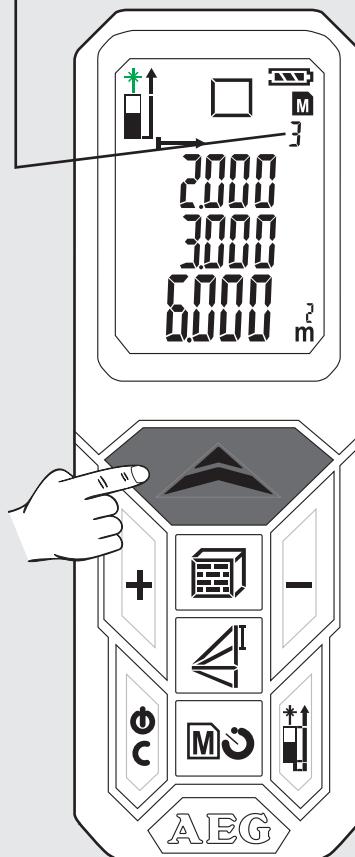
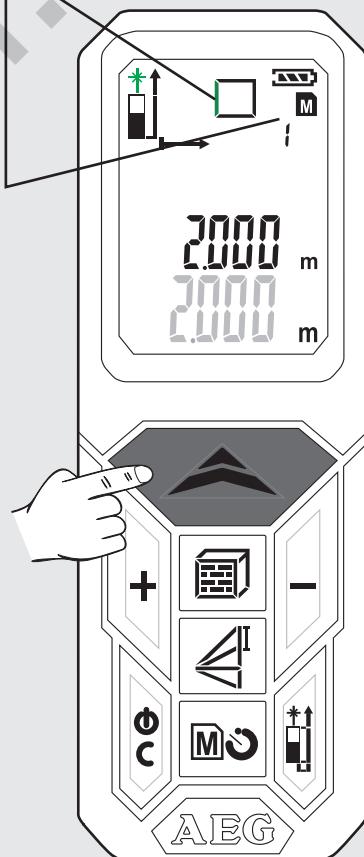
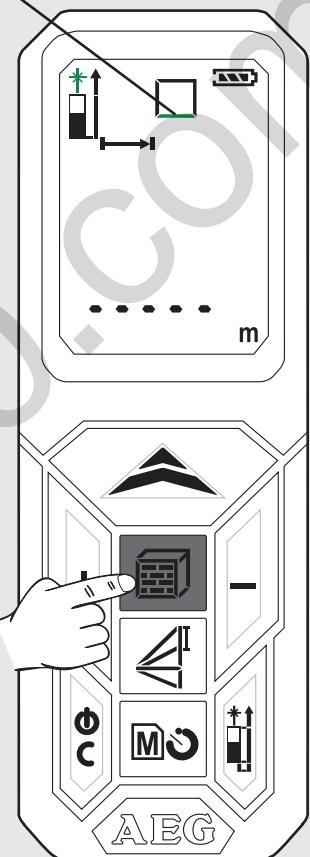
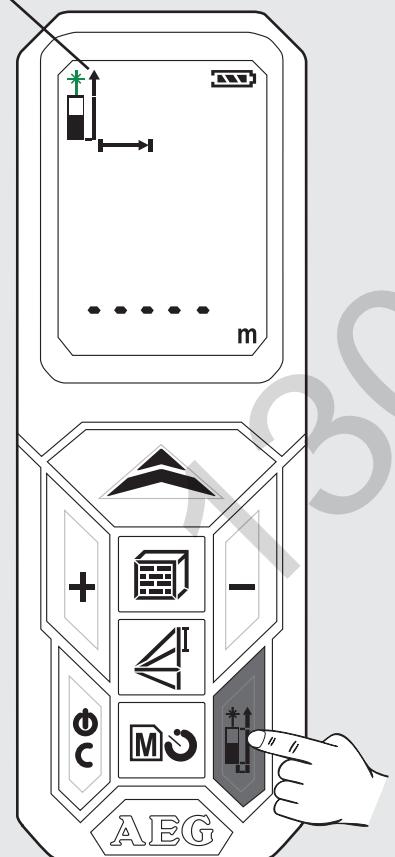
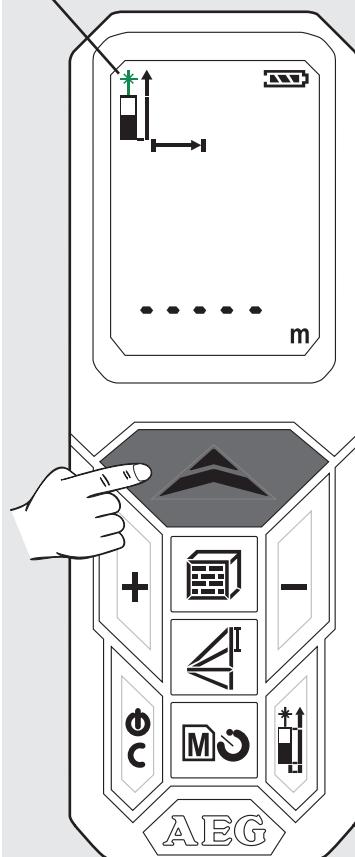
- Naměřená hodnota se krátce zobrazí v hlavním řádku.

- Naměřená hodnota po 1 sekundě přeskočí do řádku ležícího výše.

Naměřená hodnota se uloží do paměti pod pořadovým číslem.

- Výsledek se zobrazí v hlavním řádku a uloží se do paměti pod pořadovým číslem.

2000
3000
6000 m²



ZÁKLADNÍ ZPŮSOB FUNGOVÁNÍ NA PŘÍKLADU MĚŘENÉ PLOCHY (2)

6 Vyzvednutí hodnot uložených v paměti

Tlačítko stiskněte na 2 sekundy.

Stiskněte tlačítko + nebo -

- Hodnoty uložené v paměti se zobrazí v hlavním řádku.

Zobrazí se příslušný symbol a bliká měřená hodnota (blikání zobrazené zelenou barvou).

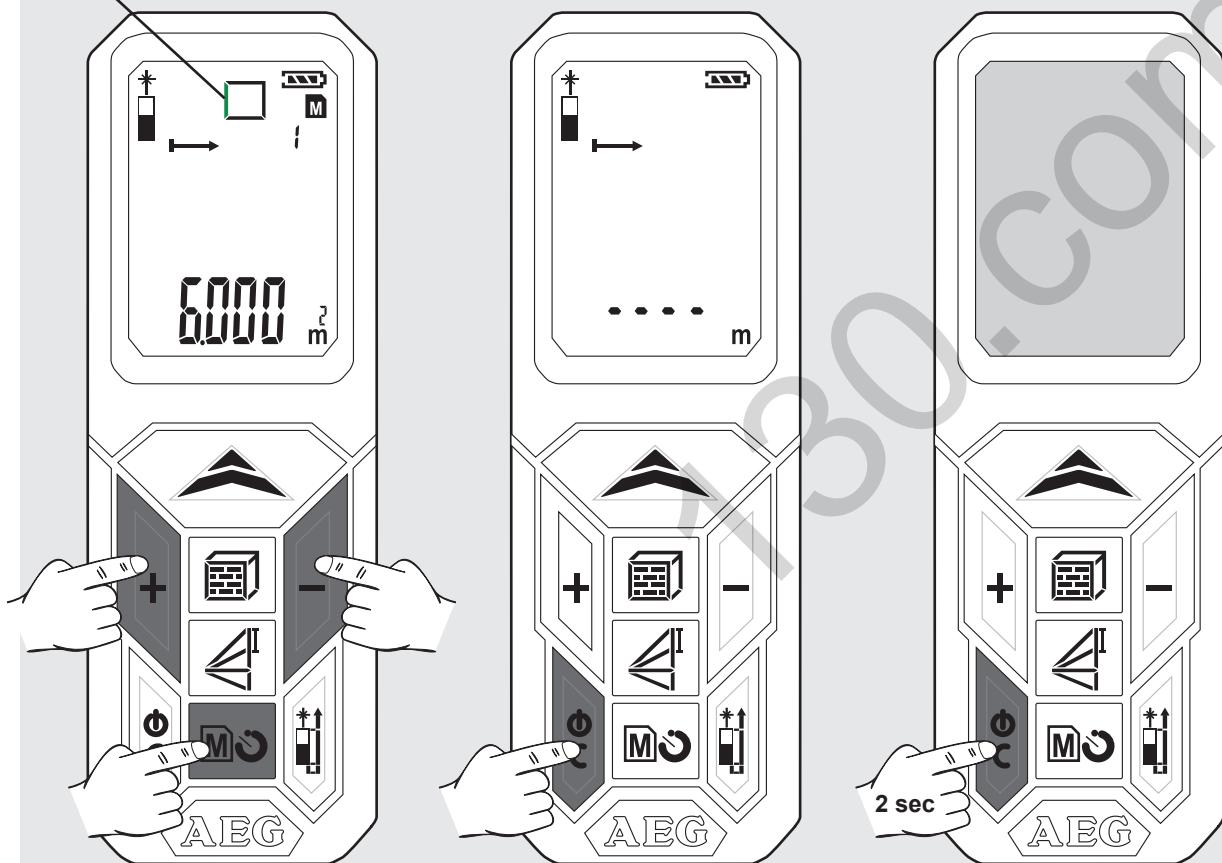
7 Opuštění paměti

Stiskněte tlačítko

8 Vypnutí

Tlačítko stiskněte na 2 sekundy
(Předtím se musí odejít z paměti).

- Přístroj se vypne.
- Pokud se v průběhu 3 minut nestiskne žádné tlačítko, přístroj se vypne automaticky.



TECHNICKÉ ÚDAJE

Trieda ochrany	IP54 (chránený proti prachu a striekajúcej vode)
Optika	14 mm
Ohnisko	35 mm
Max. meraný rozsah	50 metrov (tolerancia: 55 m)
Min. meraný rozsah	0,05 metra
Absolútна presnosť @ < 10m	± 1,5 mm (Max)
Opakovaná presnosť @ < 10m	± 1,5 mm (typicky max. 2σ)
Opakovaná presnosť @ > 10m	vzostup ± 0,25 mm / meter (typicky max. 2σ)
Doba merania	0,5 s
Typ displeja	LCD (22,7 mm x 31 mm)
Napájanie	AAA 2x (alkalické batérie)
Životnosť batérií	10000 (jednotlivých meraní)
Výstupný výkon lasera	0,6 mW ~ 0,95 mW (trieda 2, 650 nm)
Veľkosť laserového bodu	25 x 30 mm @ 16 m (Max)
Laserový lúč vertikálny uhol	+1 stupeň
Laserový lúč horizontálny uhol	±1 stupeň
Automatické vypnutie prístroja	180 sekúnd
Automatické vypnutie lasera	30 sekúnd
Rozsah prevádzkovej teploty	-10°C do +50°C
Rozsah teploty na uskladnenie prístroja	-25°C do +70°C
Hmotnosť bez batérií	80 g

TABUĽKA CHYBOVÝCH KÓDOV

Kód	Popis	Riešenie
Err01	Mimo meraného rozsahu	Meranie uskutočnite v stanovenom rozsahu.
Err02	Odrazený signál je príliš slabý	Vyberte si lepší povrch.
Err03	Mimo intervalu zobrazovania (max. hodnota: 99.999) napr. ak je výsledok plochy alebo objemu je mimo intervalu zobrazovania	Skontrolujte, či sú hodnoty a kroky správne.
Err04	Chyba vo výpočte podľa Pythagorovej vety	Skontrolujte, či sú hodnoty a kroky správne.
Err05	Slabé batérie	Vložte nové batérie.
Err06	Mimo rozsahu prevádzkovej teploty	Meranie zrealizujte v stanovenom rozsahu prevádzkovej teploty.
Err07	Príliš jasné svetlo okolitého prostredia	Cieľovú zónu zatemnite.

POUŽITIE PODĽA PREDPISOV

Laserový merací prístroj je vhodný na meranie vzdialenosťí a spádov.

Tento prístroj sa smie používať len v súlade s uvedenými predpismi.

Funkcia Pythagoras
prevýšenie

úroveň merania

meranie dĺžky

minimum / maximum pre kontinuálne meranie

sčítanie / odčítanie

ZAP / MERAT

- ▶ Zap
- ▶ Merat'
- ▶ Kontinuálne meranie (tlačiť 2 sek)
Min. / Max. funkcia

SČÍTANIE

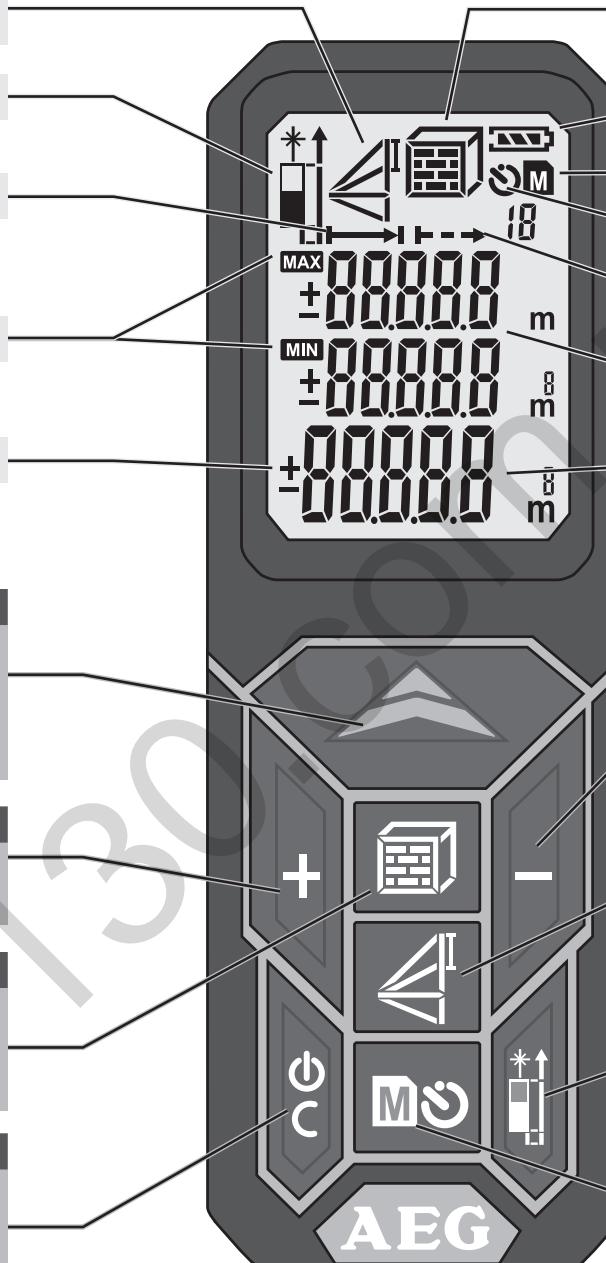
- ▶ Sčítať hodnotu
- ▶ Navigovať v pamäti

PLOCHA / OBJEM

- ▶ Plocha (stlačiť 1x)
- ▶ Objem (stlačiť 2x)
- ▶ Nepriame meranie plochy (stlačiť 3x / 4x)

ZAPNUTIE

- ▶ Zap
- ▶ Vyp (tlačiť 2 sek)
- ▶ Vrátiť do pôvodného stavu



plocha / objem
nepriame meranie plochy

stav batérií

pamäť

časovač

kontinuálne meranie

medzhodnoty

celková hodnota

ODČÍTANIE

- ▶ Odčítať hodnotu
- ▶ Navigovať v pamäti

FUNKCIA PYTAGORAS

- ▶ Funkcia Pythagoras 1 (stlačiť 1x)
- ▶ Funkcia Pythagoras 2 (stlačiť 2x)
- ▶ Funkcia Pythagoras 3 (stlačiť 3x)

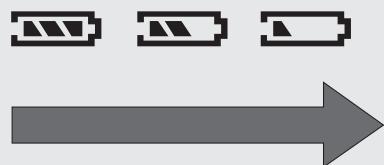
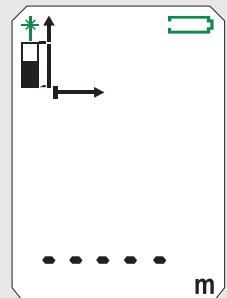
ZMENA ÚROVNE MERANIA

- ▶ od prednej časti
- ▶ od zadnej časti
- ▶ od rohového kolíka

PAMÄŤ

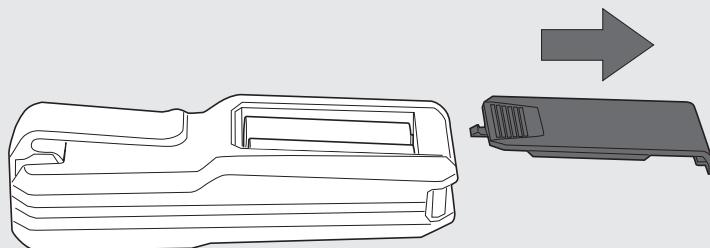
- ▶ Časovač 3-15 sek (stlačiť 1x)
- ▶ Pamäť 1-20 (stlačiť 1x 2 sek)
- ▶ Pomocou tlačidiel +/- navigujte v pamäti

VÝMENA BATÉRIÍ

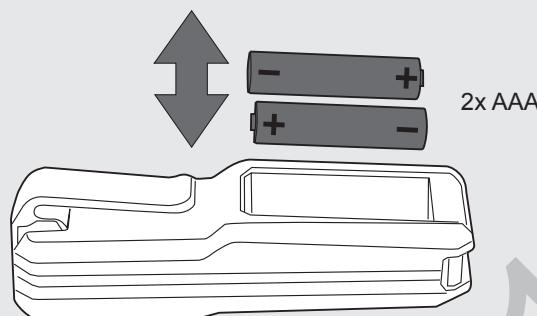


Ked' bliká symbol,
treba vymeniť
batérie.

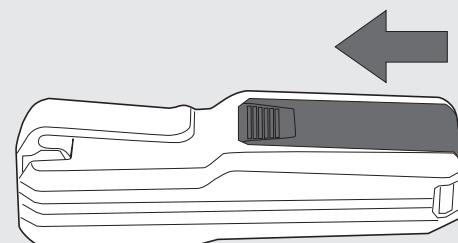
1



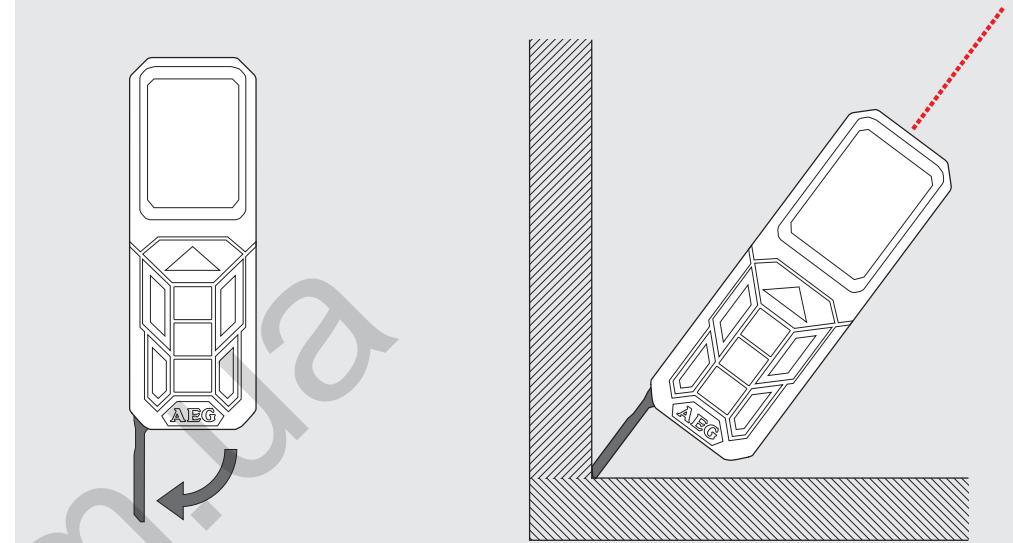
2



3

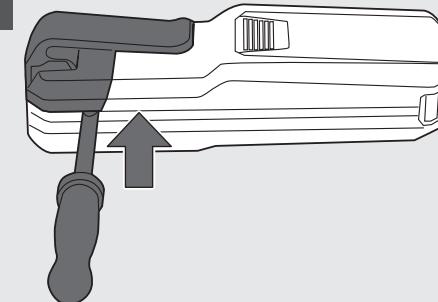


ROHOVÝ KOLÍK

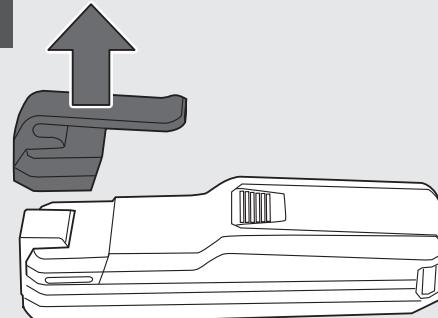


DRŽIAK NA OPASOK

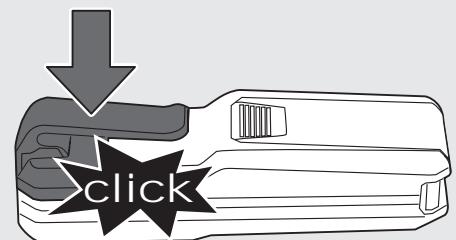
1



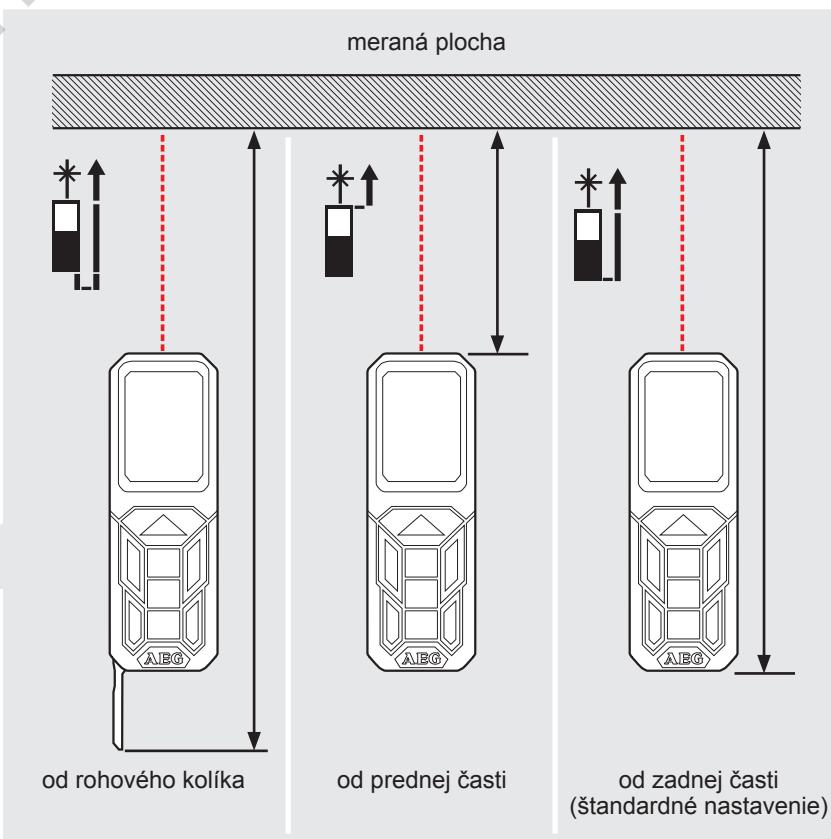
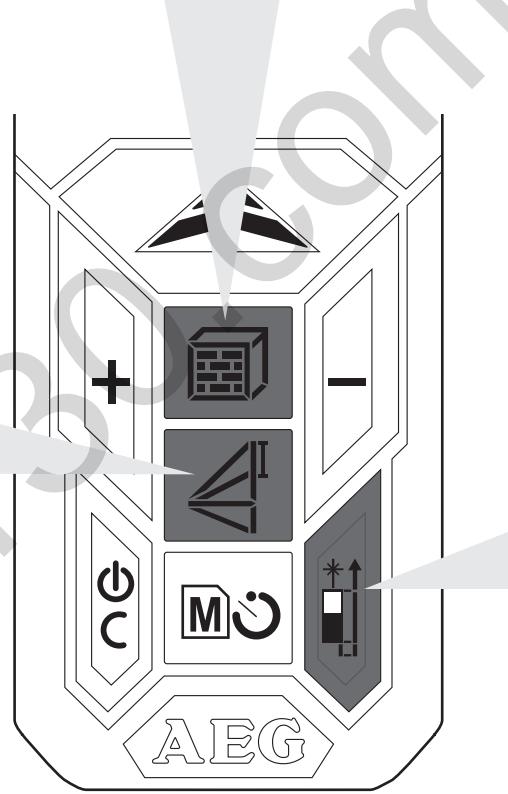
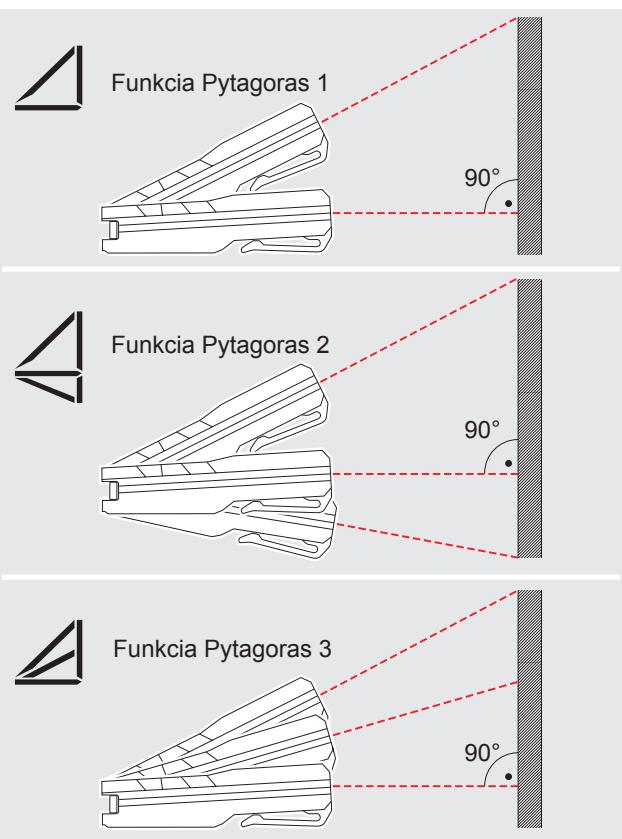
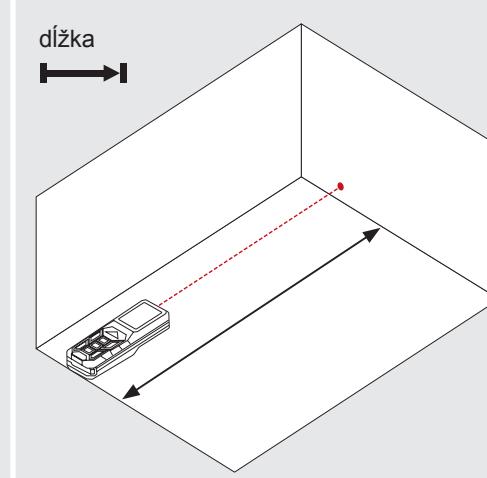
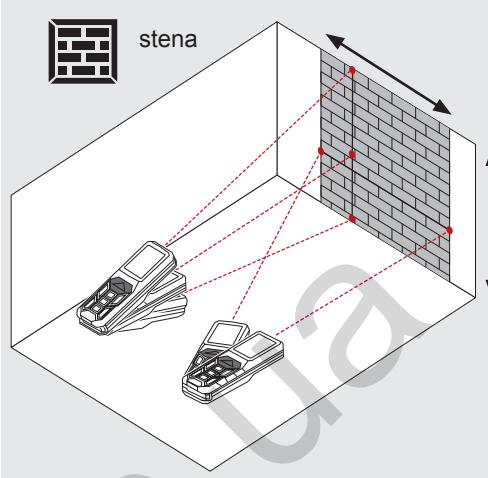
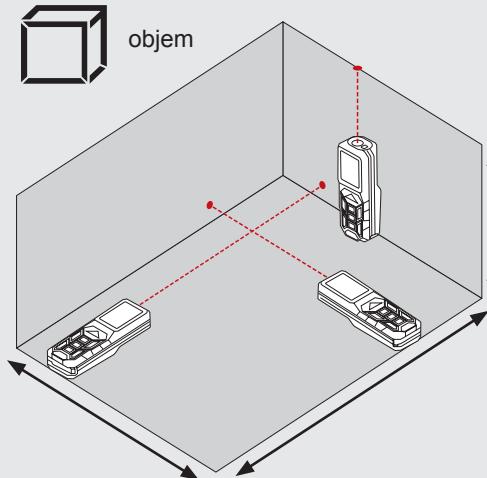
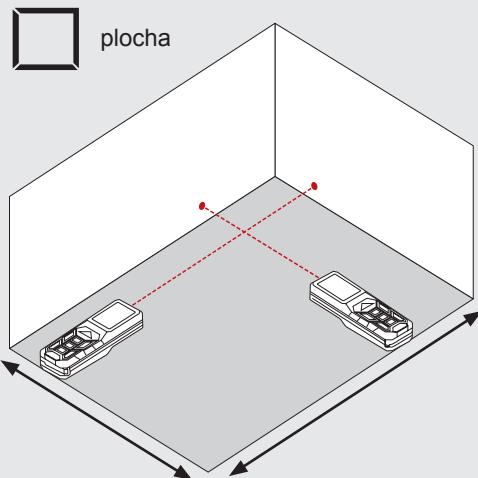
2



3

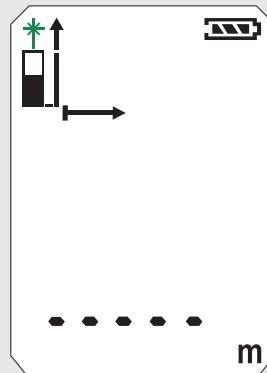
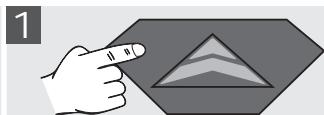


FUNKČNÉ TLAČIDLO, FUNKCIA PYTAGORAS, ÚROVEN MERANIA

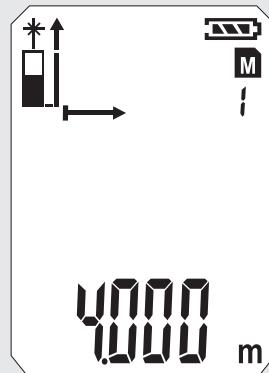
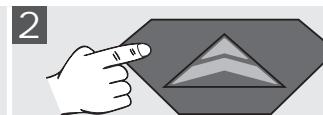


JEDNODUCHÉ MERANIE DĽŽKY

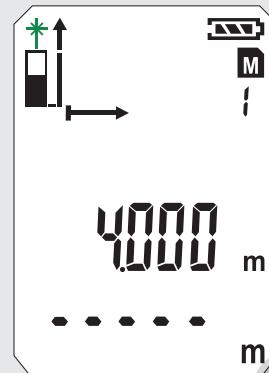
0



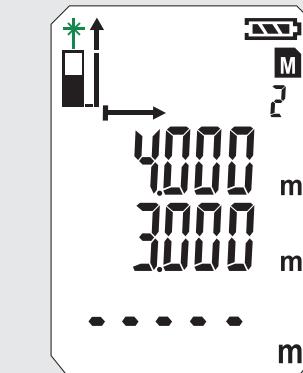
1



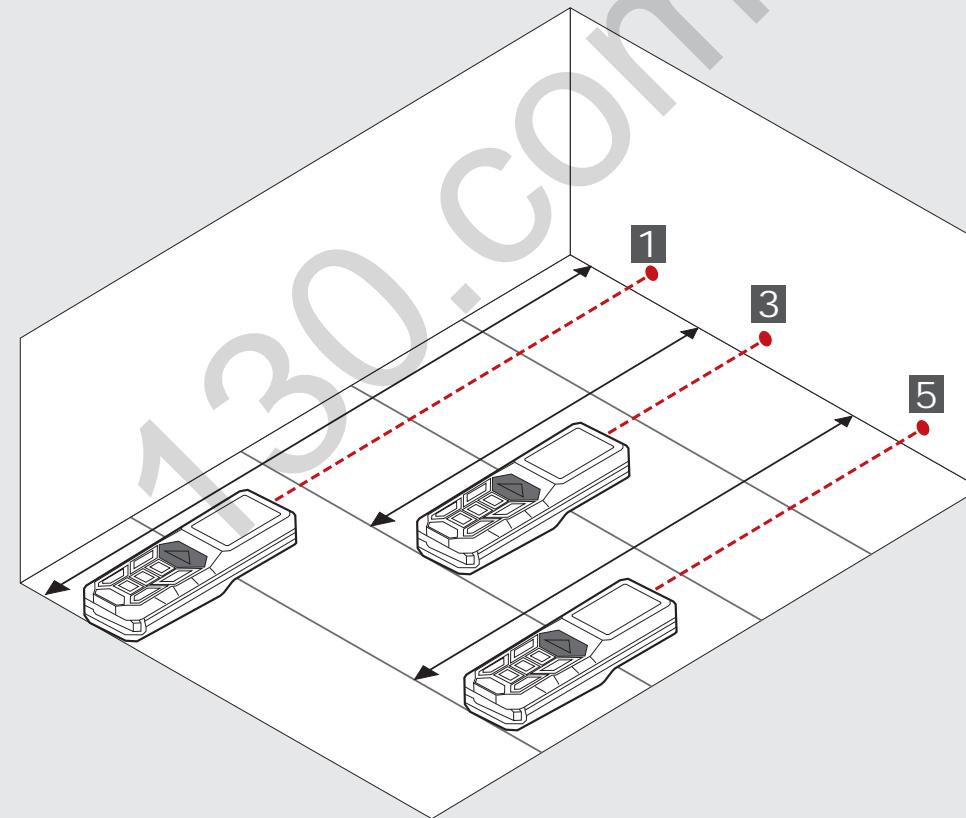
2



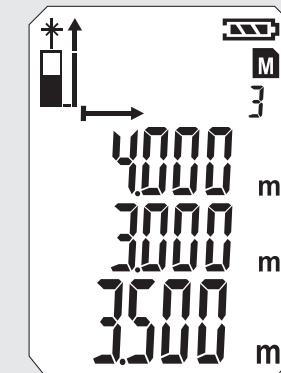
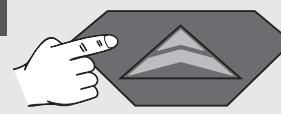
3



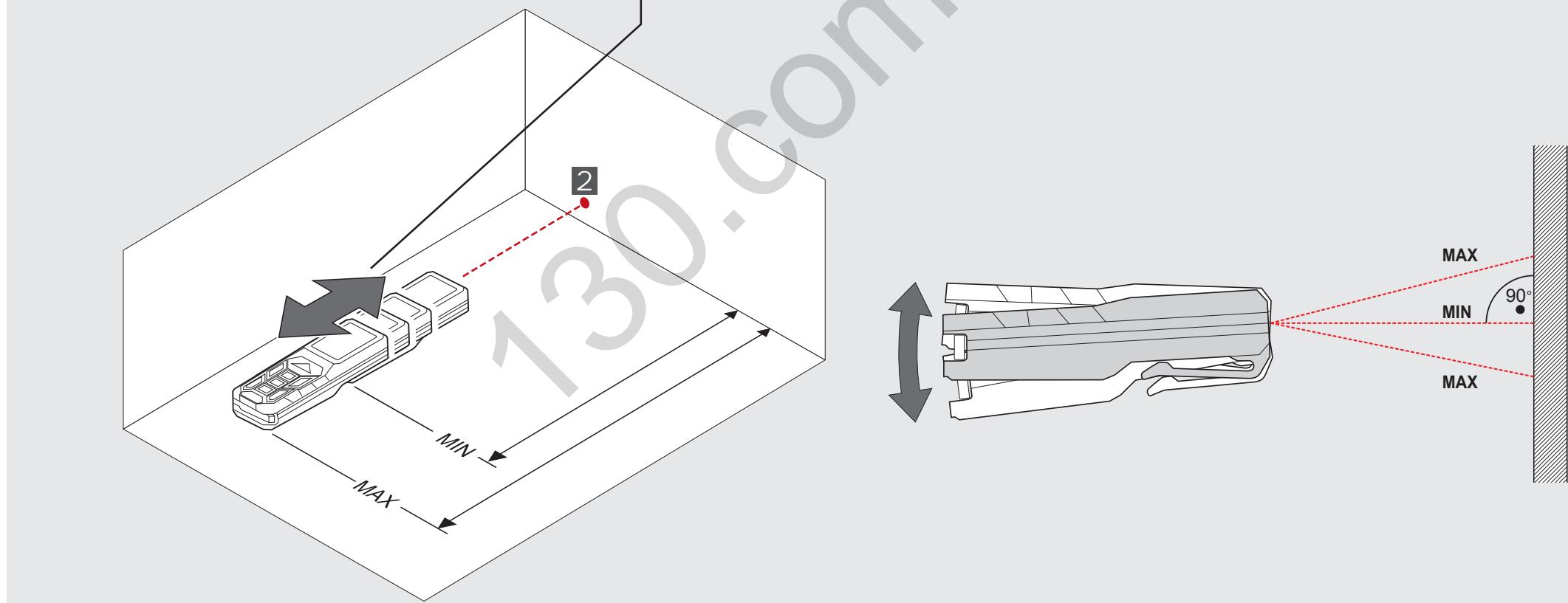
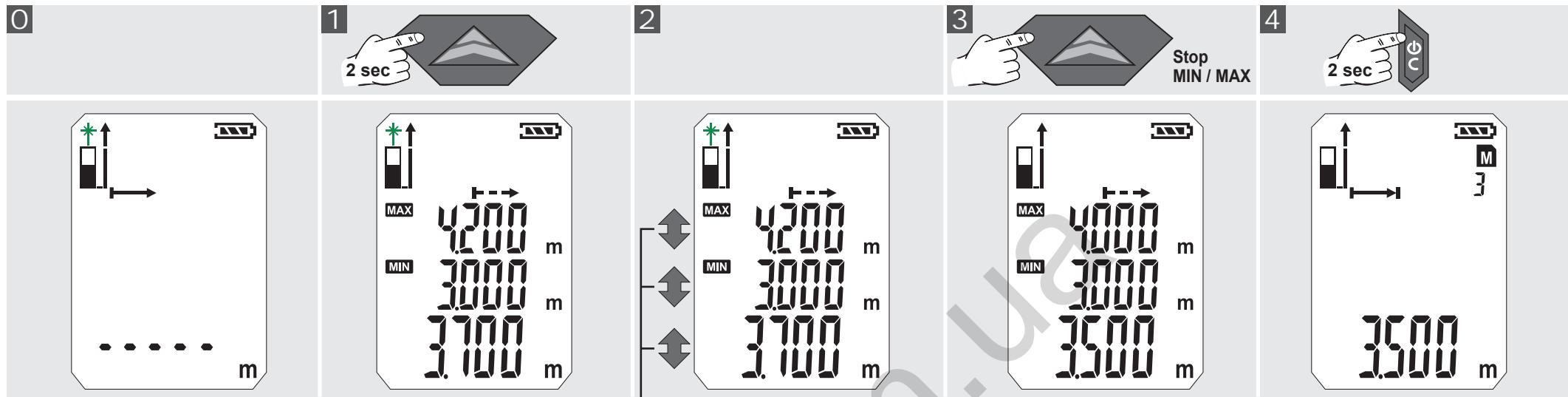
4



5

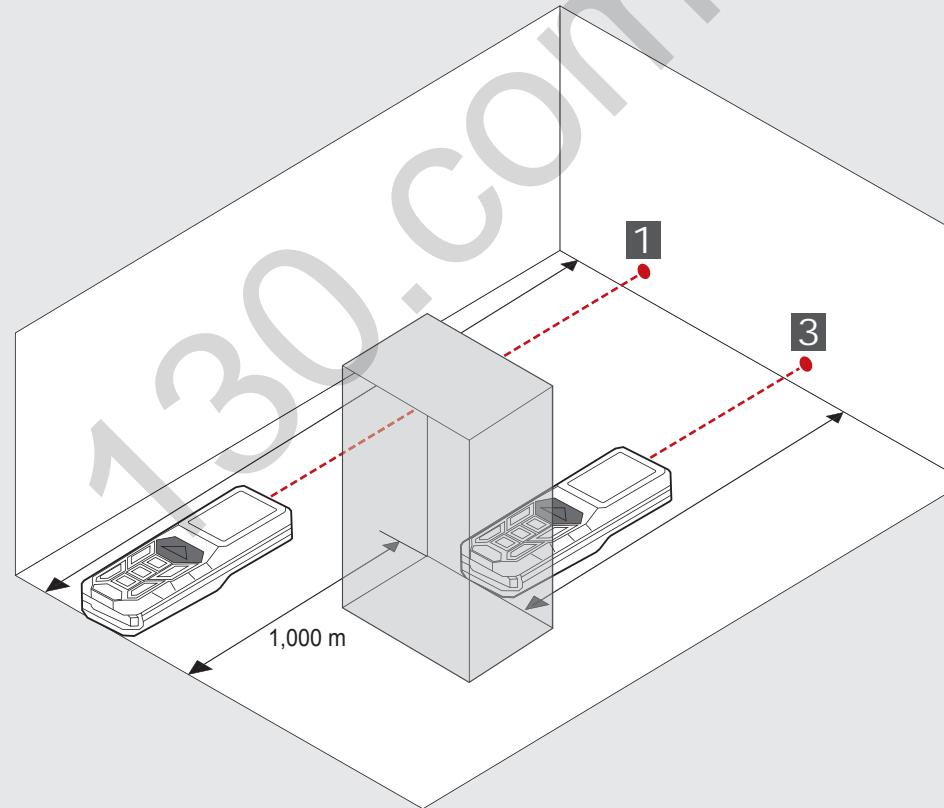
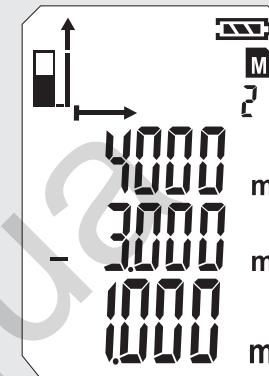
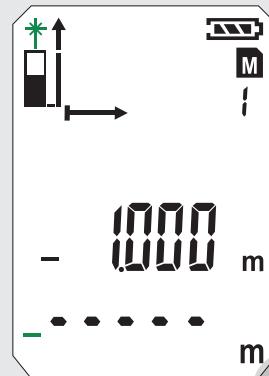
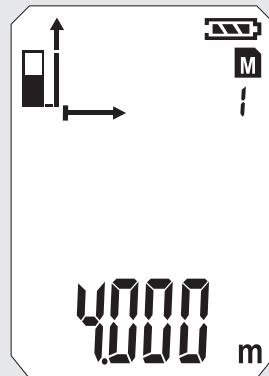
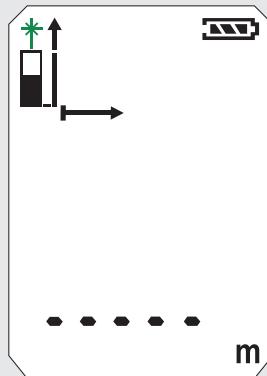
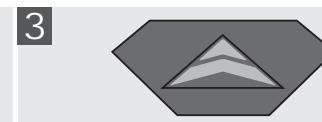
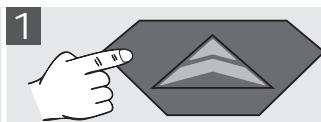


KONTINUÁLNE MERANIE / MERANIE MINIMA - MAXIMA

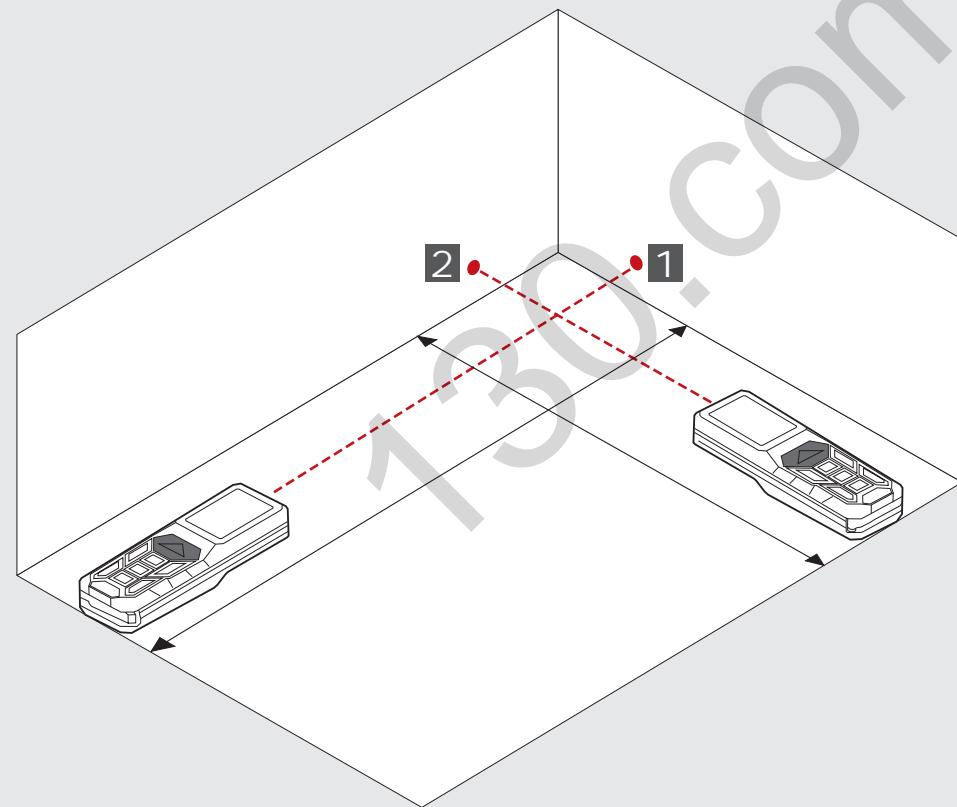
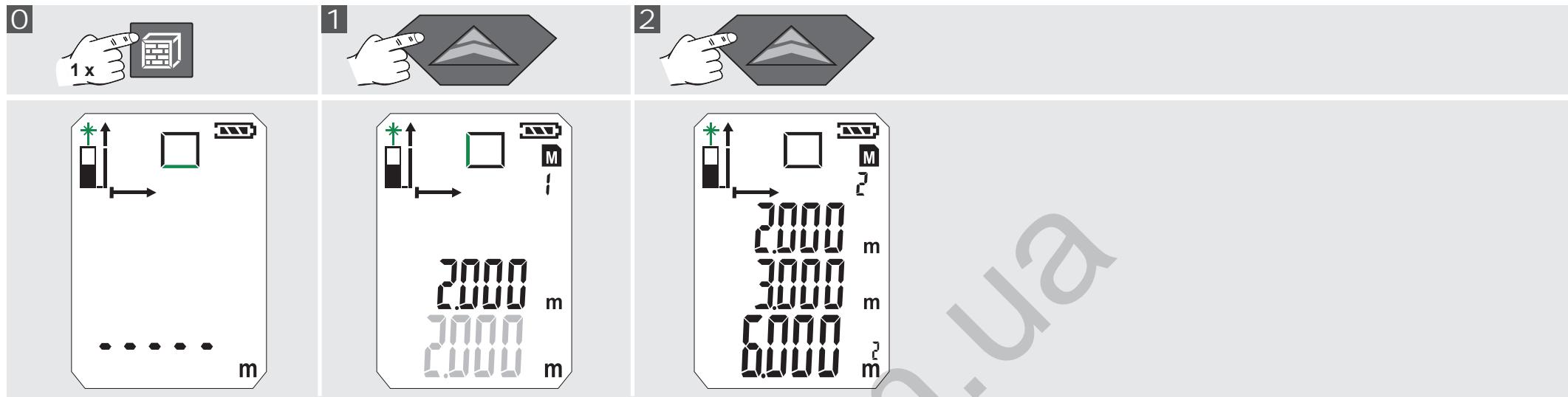


MERANIE PRIPOČÍTANÍM / MERANIE ODPOČÍTANÍM

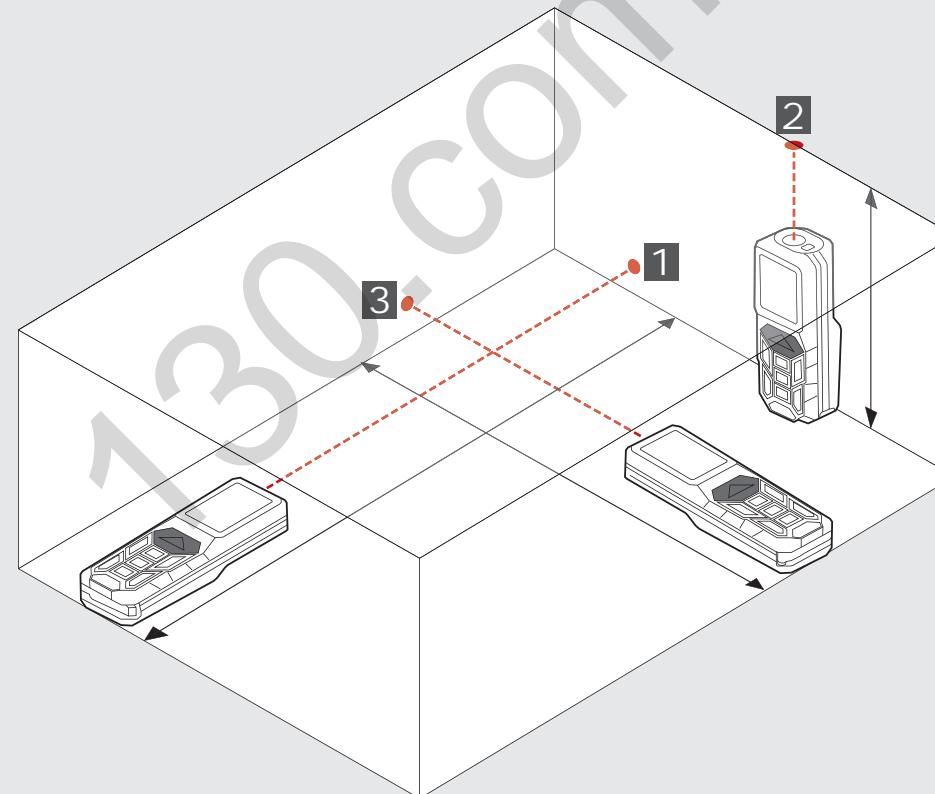
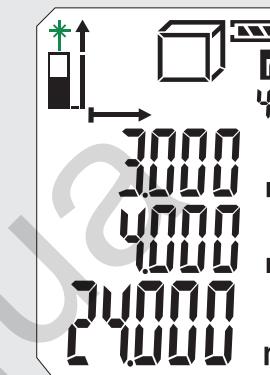
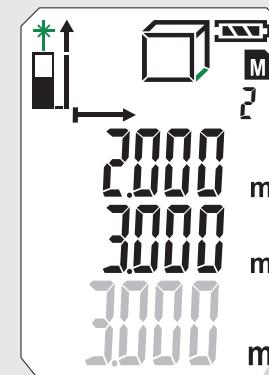
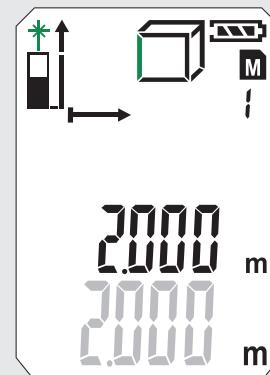
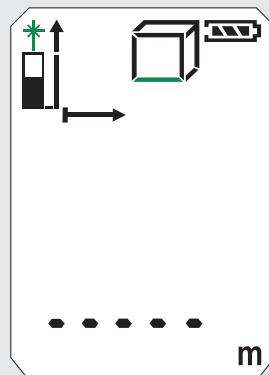
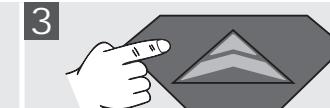
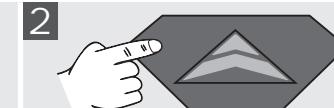
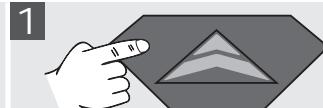
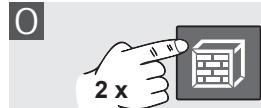
0



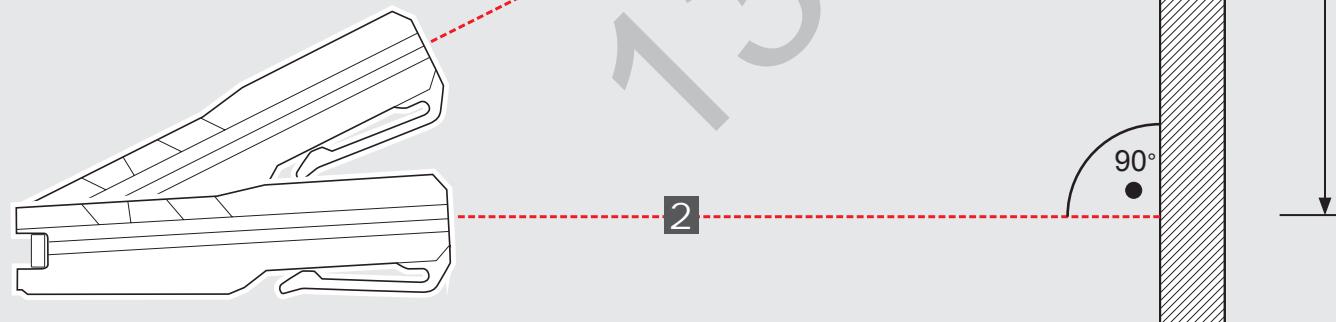
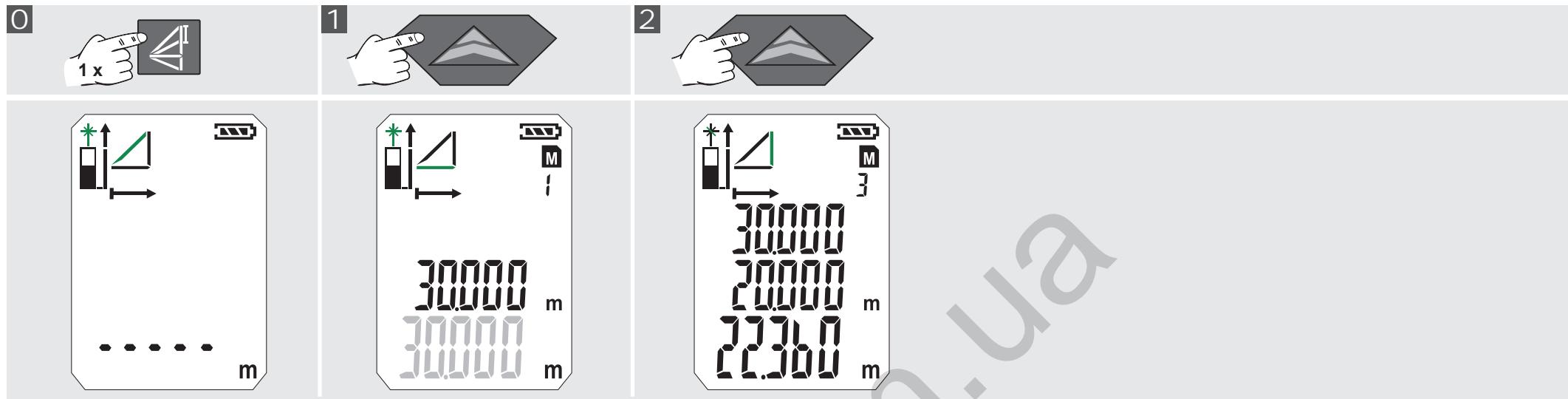
MERANIE PLOCHY



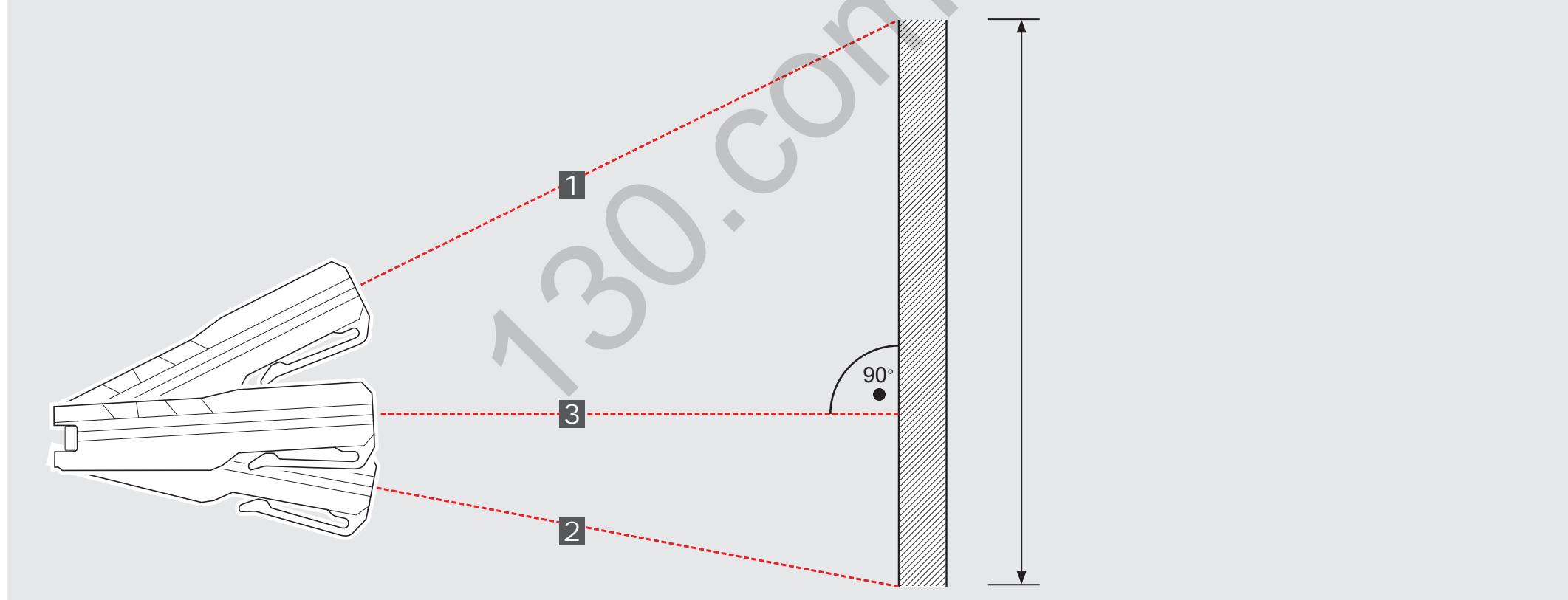
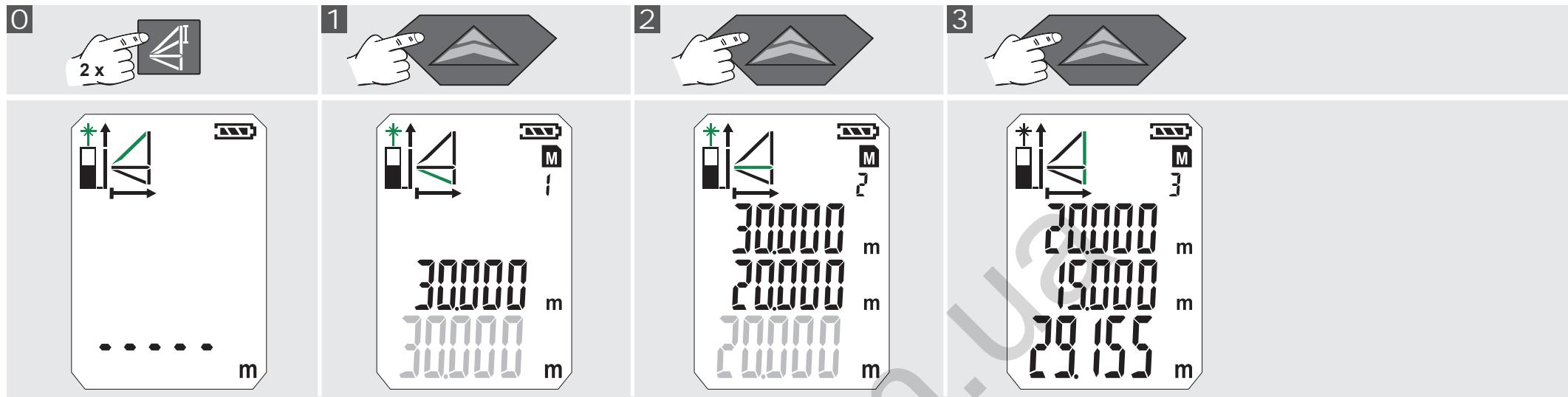
MERANIE OBJEMU



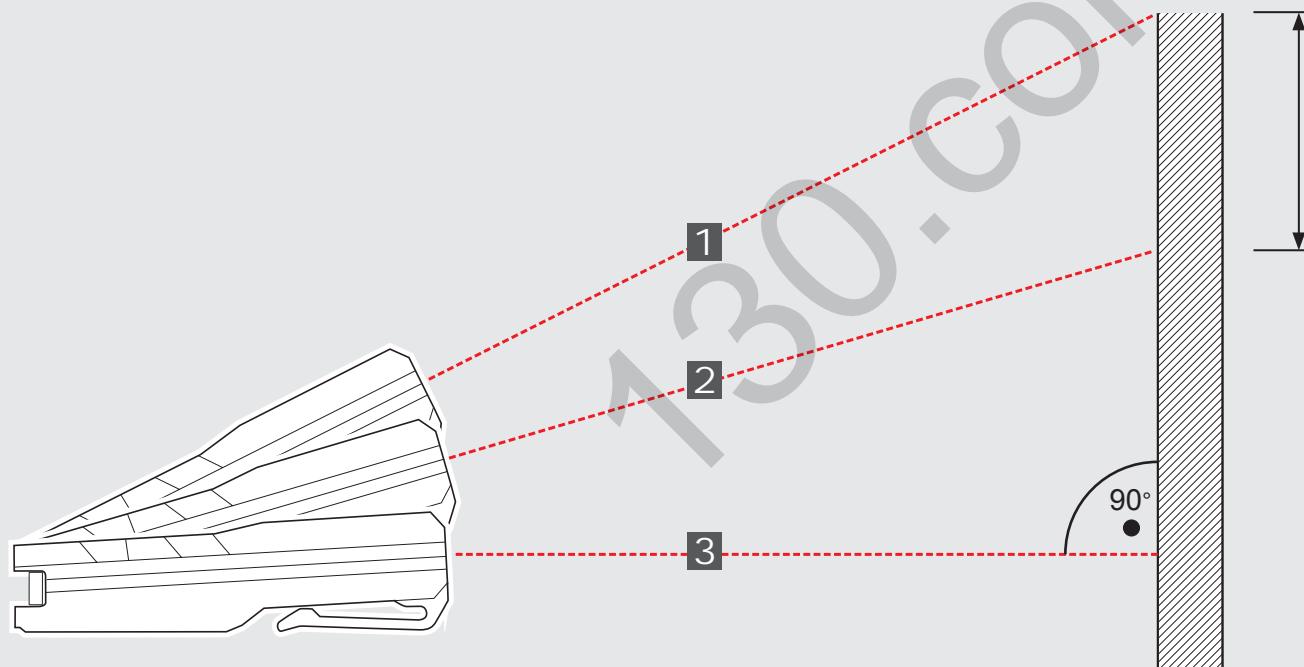
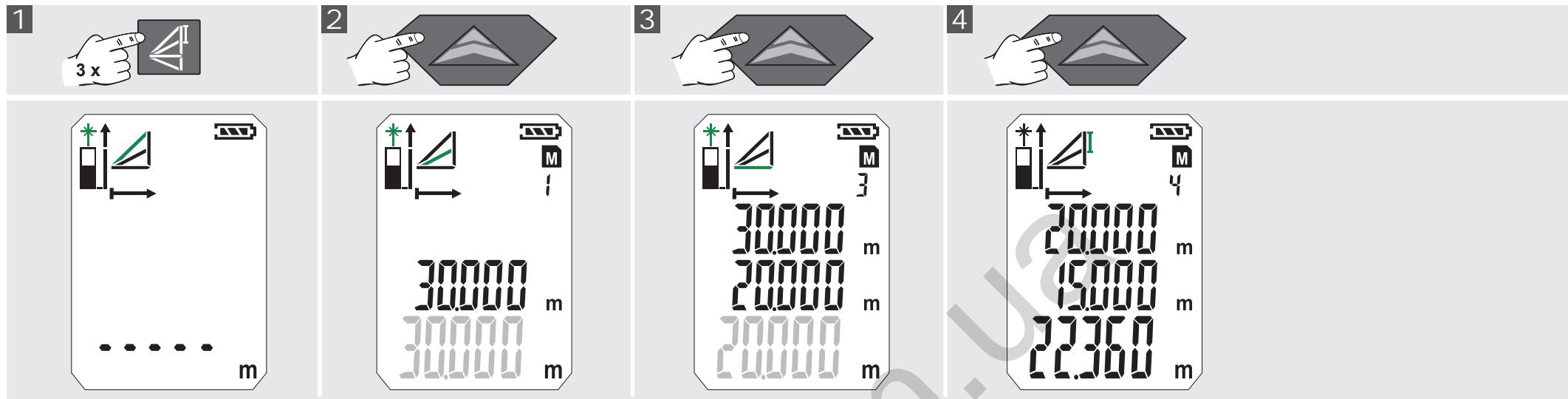
NEPRIAME MERANIE (FUNKCIA PYTAGORAS 1)



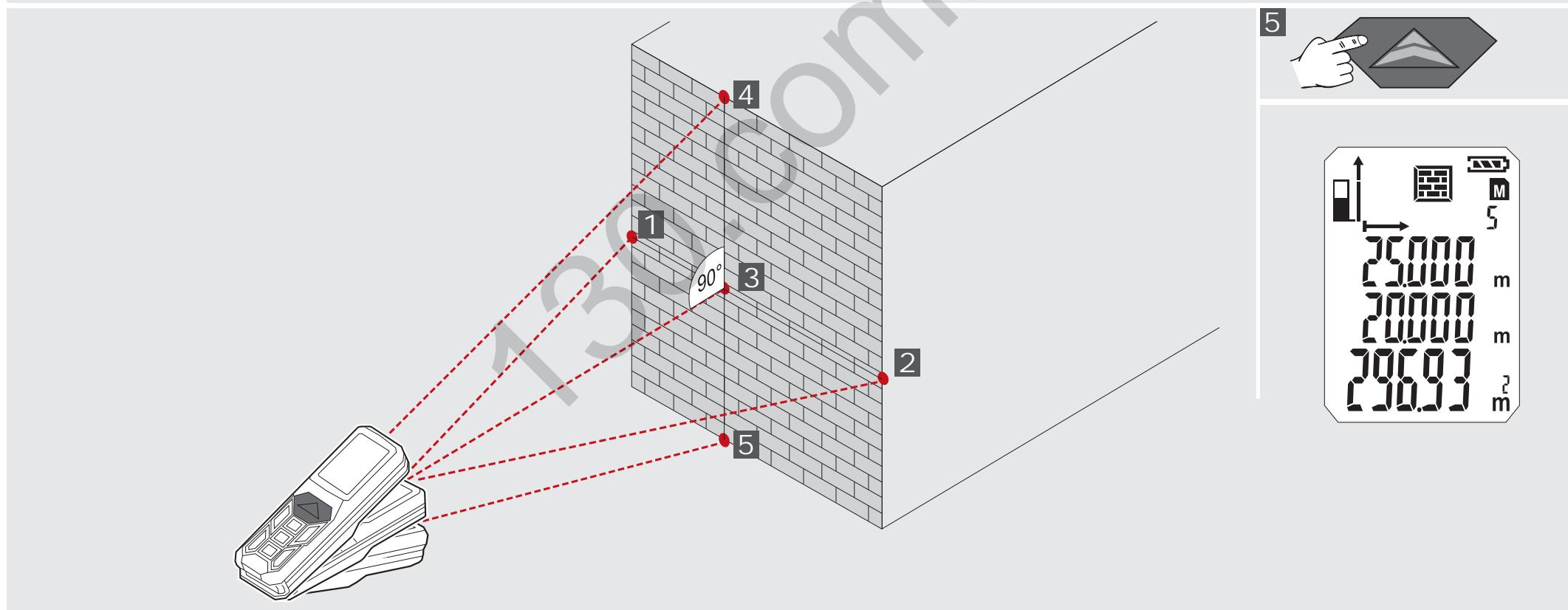
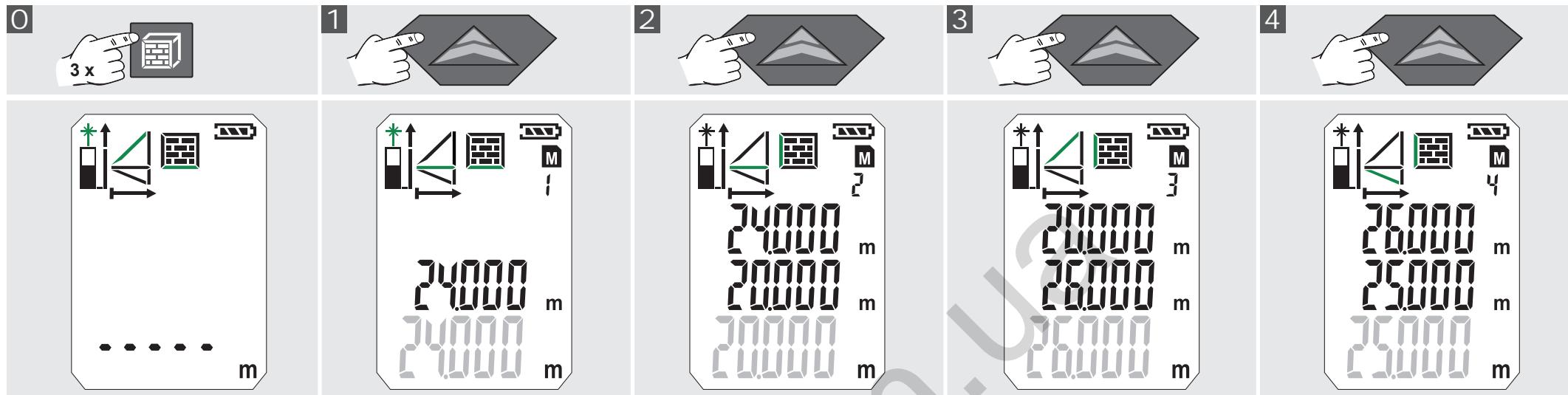
NEPRIAME MERANIE (FUNKCIA PYTAGORAS 2)



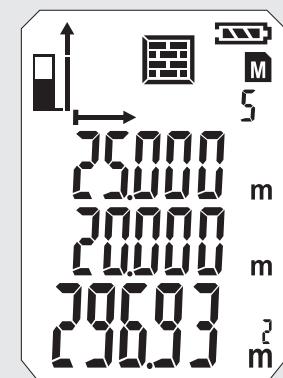
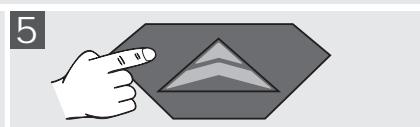
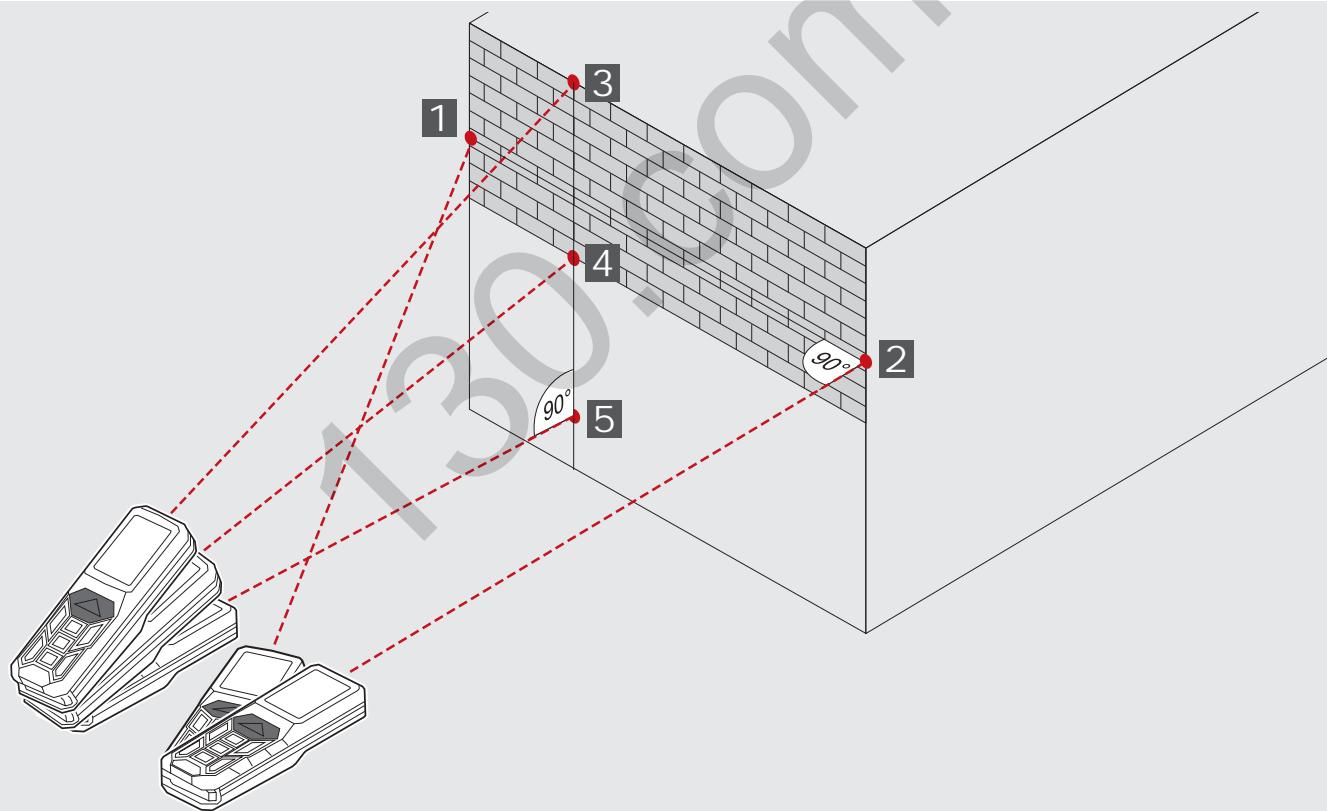
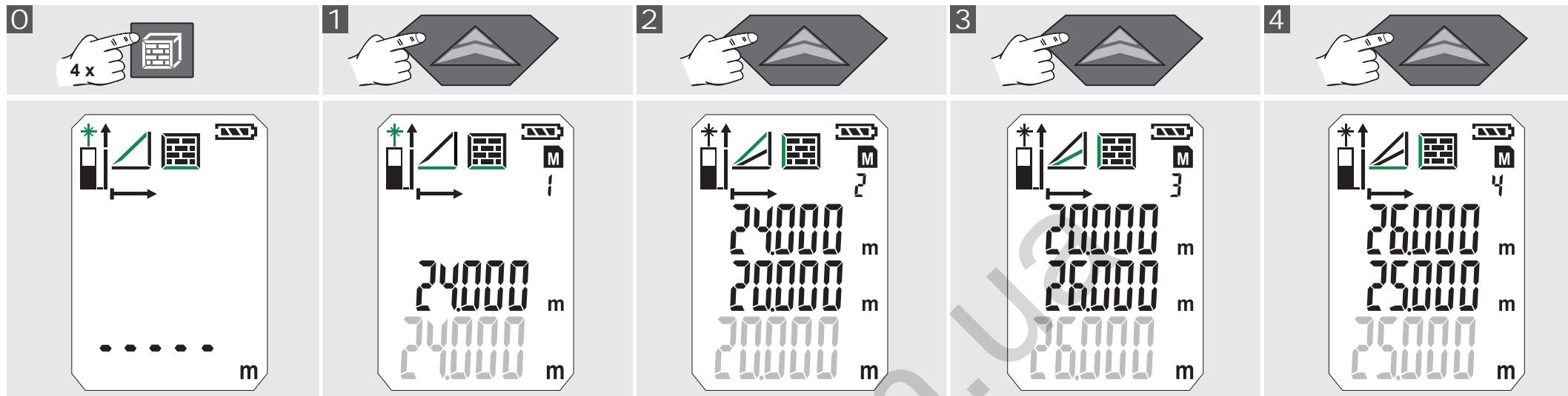
NEPRIAME MERANIE (FUNKCIA PYTAGORAS 3)



MERANIE PLOCHY STENY (SCENÁR 1)



MERANIE PLOCHY STENY (SCENÁR 2)



ČASOVAC

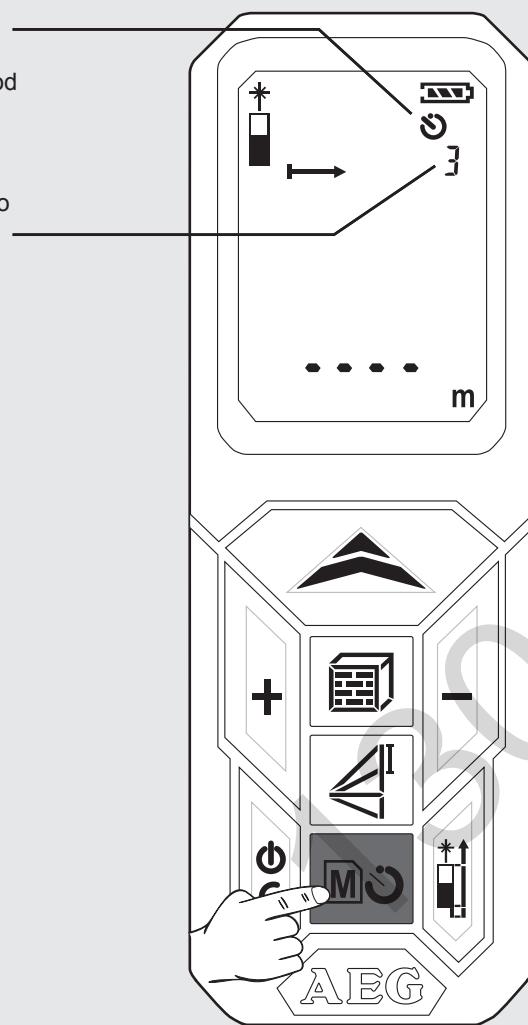
Pomocou časovača sa dá meranie spustiť s neskorším štartom, aby sa napr. na konštrukčný diel mohol umiestniť meraný lúč.

Stlačte tlačidlo 

- Objaví sa symbol 
- Stlačením tlačidla  sa časovač dá nastaviť v rozpäť od 3 do 15 sekúnd.

Stlačte tlačidlo 

- Sekundy budú odpočítavané do merania.
- Pri 0 sa spustí meranie.



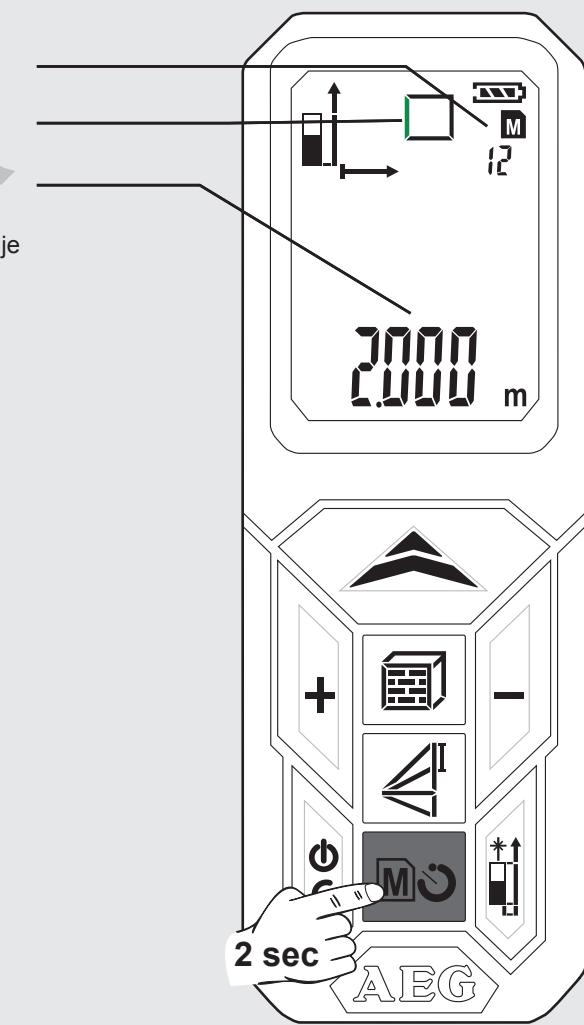
PAMÄŤ

Namerané hodnoty sa automaticky priebežne ukladajú do pamäte.

V pamäti uložené hodnoty si možno vyvolať tlačidlom .

Stlačte tlačidlo  na 2 sekundy

- Objaví sa symbol a miesto v pamäti.
- Zobrazí sa príslušná meraná veličina.
- V pamäti uložená hodnota sa zobrazí v hlavnom riadku.
- Pomocou tlačidiel +/- sa naviguje

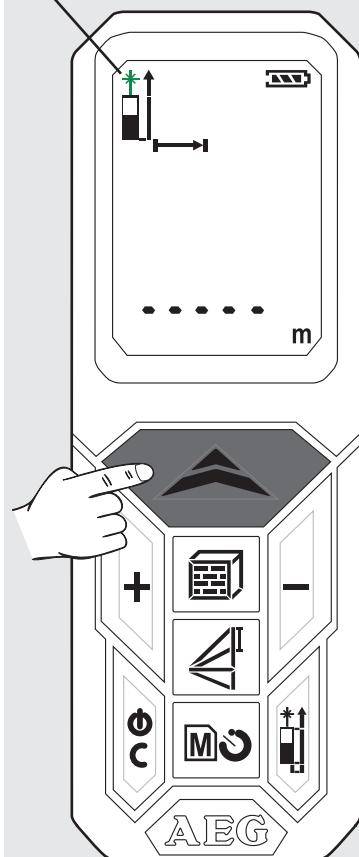


ZÁKLADNÝ SPÔSOB FUNGOVANIA NA PRÍKLADE MERANIA PLOCHY (1)

1 Zapnutie

Stlačte tlačidlo  .

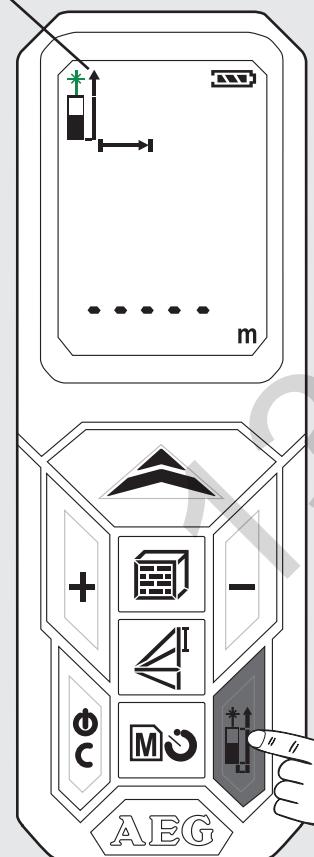
**⚠ Pozor! Laserový lúč je zapnutý!
Nemírite ním na osoby!**



2 Výber úrovne merania

Po zapnutí štandardné nastavenie:
meranie od zadnej časti merača

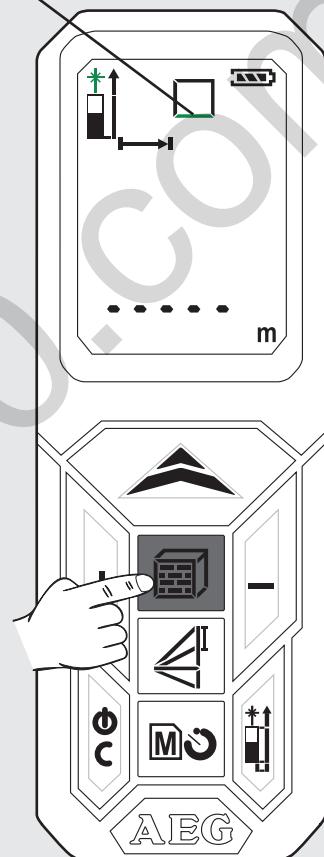
- * stlačiť 1x -> od rohového kolíka
 - stlačiť 2x -> meranie od prednej časti merača
 - stlačiť 3x -> meranie od zadnej časti merača



3 Výber funkcie

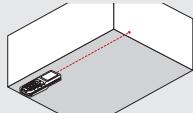
Po zapnutí je prístroj vždy nastavený na meranie dĺžky.

- stlačit' 1x -



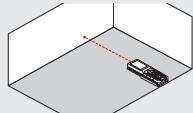
4 Meranie dĺžky

Prístroj vyrovnejte
a stlačte
tlačidlo



5 Meranie šírky

Prístroj vyrovnejte
a stlačte
tlačidlo



- Bliká symbol lasera
(blikanie zobrazené zelenou farbou).

◀ Zobrazí sa symbol

- Objaví sa symbol
- Bliká meraná veličina
(blikanie zobrazené zelenou farbou)

- Nameraná hodnota sa krátko zobrazí v hlavnom riadku.
- Nameraná hodnota po 1 sekunde preskočí do riadku ležiaceho vyššie.

- Nameraná hodnota sa krátko zobrazí v hlavnom riadku.
- Nameraná hodnota po 1 sekunde preskočí do riadku ležiaceho vyššie.
- Nameraná hodnota sa uloží do pamäte pod poradovým číslom.
- Výsledok sa zobrazí v hlavnom riadku a uloží sa do pamäte pod poradovým číslom.

- Nameraná hodnota sa uloží do pamäte pod poradovým číslom.
- Bliká druhá meraná veličina.
Prístroj je pripravený na meranie druhej hodnoty.

A diagram of a digital display screen. The screen shows a battery icon at the top right, followed by a 'M' symbol. Below these are two small rectangular boxes with arrows pointing upwards between them. The main part of the screen displays the number '2000' four times in a large font, with 'm' symbols at the bottom right of each group.

ZÁKLADNÝ SPÔSOB FUNGOVANIA NA PRÍKLADE MERANIA PLOCHY (2)

6 Vyzvanie hodnôt uložených v pamäti

Tlačidlo stlačte na 2 sekundy.
Stlačte tlačidlo + alebo -

- Hodnoty uložené v pamäti sa zobrazia v hlavnom riadku.

Zobrazí sa príslušný symbol a bliká meraná veličina (blikanie zobrazené zelenou farbou).

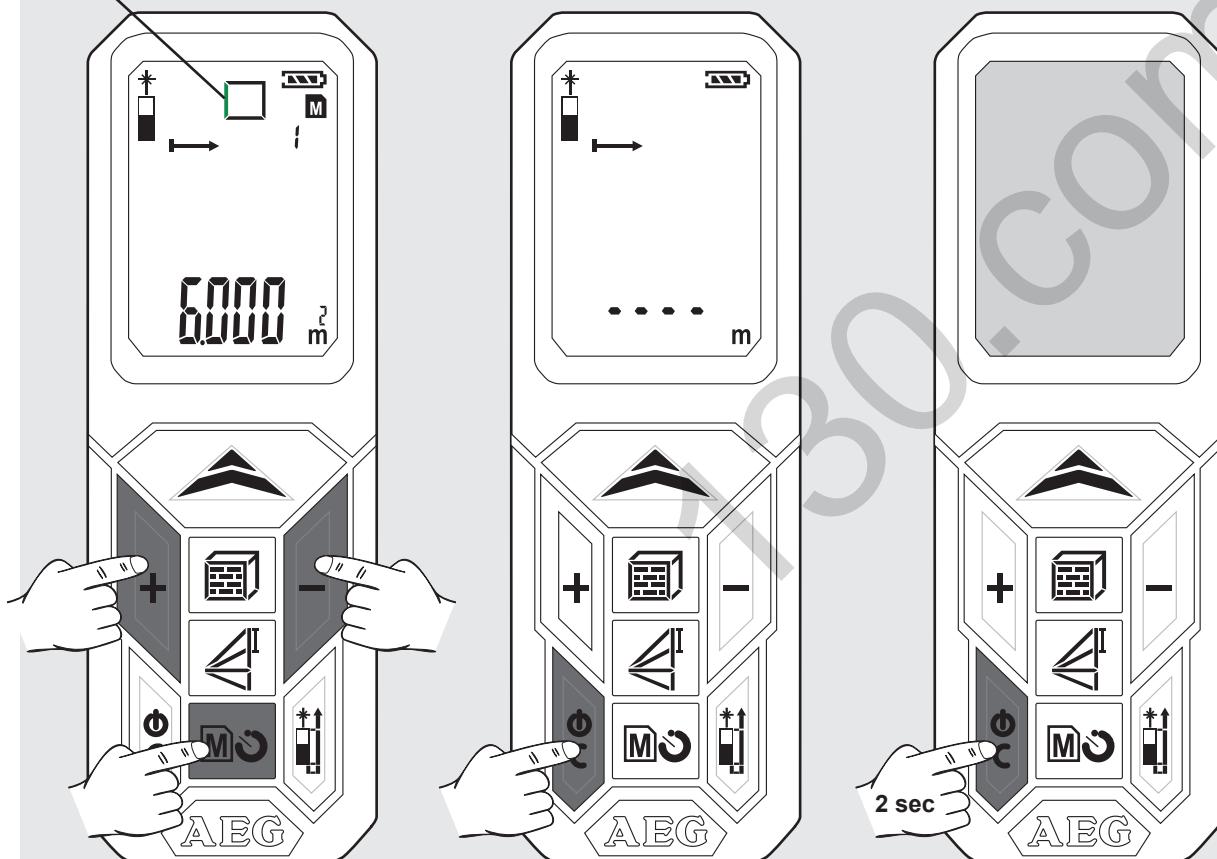
7 Opustenie pamäte

Stlačte tlačidlo

8 Vyplnenie

Tlačidlo stlačte na 2 sekundy
(Predtým sa musí odísť z pamäte).

- Prístroj sa vypne.
- Ak sa v priebehu 3 minút nestlačí žiadne tlačidlo, prístroj sa vypne automaticky.



TREŚĆ

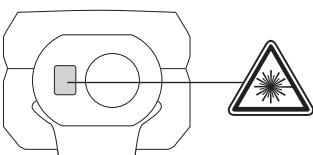
Ważne wskazówki bezpieczeństwa.....	1
Dane techniczne.....	2
Warunki użytkowania.....	2
Tabela kodów błędów	2
Zestawienie	3
Wymiana baterii.....	4
Kołek kątowy	4
Pasek uchwytu	4
Przycisk funkcyjny, pomiar pośredni wartości geometrycznych, płaszczyzna pomiaru.....	5
Zwykły pomiar długości	6
Pomiar ciągły / Pomiar Minimum-Maksimum	7
Pomiar sumujący / różnicujący	8
Pomiar powierzchni	9
Pomiar objętości.....	10
Pomiar pośredni (wartości geometrycznych 1).....	11
Pomiar pośredni (wartości geometrycznych 2).....	12
Pomiar pośredni (wartości geometrycznych 3).....	13
Pomiar powierzchni ściany (scenariusz 1)	14
Pomiar powierzchni ściany (scenariusz 2)	15
Zegar sterujący.....	16
Pamięć.....	16
Zasadniczy sposób działania na przykładzie pomiaru powierzchni (1)	17
Zasadniczy sposób działania na przykładzie pomiaru powierzchni (2)	18

WAŻNE WSKAŻÓWKI BEZPIECZEŃSTWA



Urządzenia nie wolno używać przed zapoznaniem się z treścią procedur bezpieczeństwa oraz instrukcji obsługi znajdującej się na dołączonej płycie CD.

Klasifikacja lasera



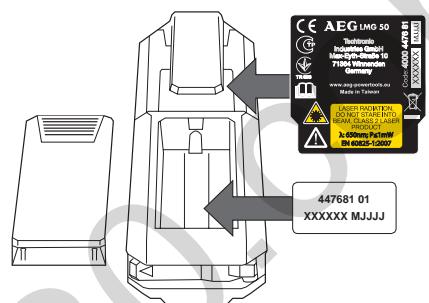
OSTRZEŻENIE:

Urządzenie emituje laser klasy 2 w zgodności z normą IEC 60825-1:2007.



Napisy

Przed pierwszym uruchomieniem należy nakleić na angielski tekst tabliczki mocy załączoną naklejkę w języku Państkiego kraju.



Ostrzeżenie:

Unikać bezpośredniego kontaktu wzrokowego. Promień lasera może porazić oczy i prowadzić do krótkotrwałego oślepienia.

Nie wolno spoglądać bezpośrednio w wiązkę lasera lub też kierować jej niepotrzebnie w stronę innych osób.

Nie wolno oślepiać laserem innych osób.

Ostrzeżenie:

Niniejsze urządzenie laserowe nie może być eksploatowane w pobliżu dzieci.

Nie wolno też pozwolić dzieciom na użytkowanie niniejszego urządzenia.

Uwaga! Powierzchnia odbijająca promień mogłaby spowodować odbicie promienia lasera z powrotem ku osobie obsługującej urządzenie lub ku innym osobom.

Należy uważać, aby nie dotykać poruszających się części urządzenia.

Należy przeprowadzać okresowe testy kontrolne. Czynność tę powtarzać bezpośrednio przed wykonaniem ważnych pomiarów, w ich trakcie oraz po zakończeniu.

Zwrócić szczególną uwagę na okoliczność występowania błędów pomiarowych, szczególnie gdy instrument został wcześniej uszkodzony lub upuszczony na ziemię również wówczas gdy został użyty niezgodnie z przeznaczeniem lub był poddany modyfikacjom.

Uwaga! Należy zapoznać się z elementami sterującymi i prawidłową obsługą narzędzia ogrodowego.

Miernik laserowy ma ograniczony zakres zastosowania. (Patrz rozdział "Dane techniczne"). Próby dokonywania pomiarów poza maksymalnym i minimalnym zakresem powodują niedokładności. Zastosowanie w niekorzystnych warunkach, takich jak: wysoka lub zbyt niska temperatura, zbyt jaskrawe światło słoneczne, deszcz, śnieg, mgła lub w innych warunkach ograniczenia widoczności mogą prowadzić do niedokładnych pomiarów.

W przypadku przeniesienia miernika laserowego z ciepłego do zimnego otoczenia (lub odwrotnie) należy odczekać, dopóki miernik nie dostosuje się do nowej temperatury otoczenia.

Miernik laserowy należy zawsze przechowywać w pomieszczeniach, należy go chronić przed wstrząsami, wibracjami lub ekstremalnymi temperaturami.

Miernik laserowy należy chronić przed zapyleniem, wilgotnością i wysoką wilgotnością powietrza. Może to powodować uszkodzenie wewnętrznych elementów lub mieć niekorzystny wpływ na dokładność.

Nie należy używać żadnych agresywnych środków czyszczących lub rozpuszczalników. Czyścić tylko czystą, miękką ściereczką.

Unikać mocnych uderzeń lub upadeków miernika laserowego. W przypadku upuszczenia na ziemię lub innych narażeń mechanicznych należy sprawdzić dokładność przyrządu.

Niezbędne naprawy urządzenia laserowego mogą być wykonywane wyłącznie przez autoryzowany personel specjalistyczny.

Urządzenia nie wolno używać w środowisku zagrożonym wybuchem lub w miejscu działania substancji żarzących.

Do ładowania baterii należy używać wyłącznie ładowarek rekomendowanych przez producenta.

 Nie wyrzucać wyczerpanych baterii wraz z odpadami domowymi. Dla zapewnienia ochrony środowiska należy zanieść je do punktu zbiórki elektroodpadów zgodnie z przepisami krajowymi lub lokalnymi. Nie wyrzucać lasera wraz z odpadami domowymi.

Produkt należy utylizować zgodnie z przepisami obowiązującymi w kraju użytkowania. Przestrzegać obowiązujących przepisów krajowych. Aby uzyskać informacje dot. usuwania zużytych baterii do odpadów należy skontaktować się z lokalnymi władzami albo ze sprzedawcą.



Znak CE

DANE TECHNICZNE

Klasa ochrony	IP54 ochrona przed zapyleniem i wodą rozpryskową)
Układ optyczny	14 mm
Ognisko	35 mm
Maksymalny zakres pomiarowy	50 metrów (tolerancja: 55m)
Minimalny zakres pomiarowy	0,05 metrów
Dokładność bezwzględna @ < 10m	± 1,5 mm (maks.)
Dokładność powtarzalności @ < 10m	± 1,5 mm (typowa maks. 2σ)
Dokładność powtarzalności @ > 10m	Przyrost ± 0,25 mm / metrów (typowa maks. 2σ)
Czas pomiaru	0,5 s
Wyświetlacz typ	LCD (22,7 mm x 31 mm)
Zasilanie prądowe	AAA 2x (bateria alkaliczna)
Trwałość baterii	10000 (pojedynczych pomiarów)
Moc wyjściowa lasera	0,6 mW ~ 0,95 mW (klasa 2, 650nm)
Wielkość punktu lasera	25 x 30 mm @ 16 m (maks.)
Kąt pionowy promienia lasera	+1 stopień
Kąt poziomy promienia lasera	±1 stopień
Automatyczne wyłączanie przyrządu	180 sekund
Automatyczne wyłączanie lasera	30 sekund
Zakres temperatury roboczej	-10°C do +50°C
Zakres temperatury przechowywania	-25°C do +70°C
Ciężar bez baterii	80 g

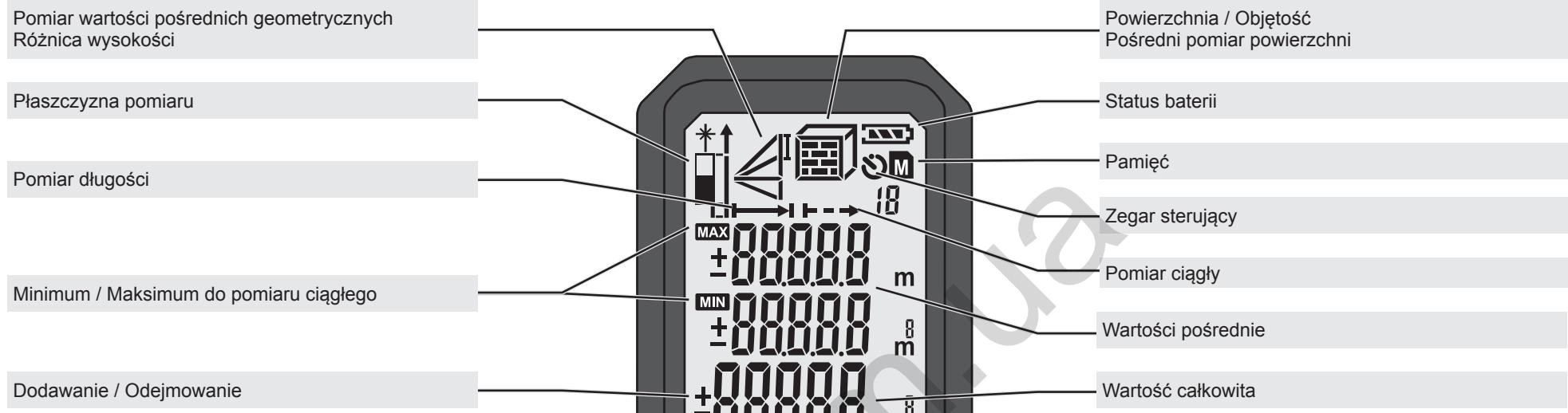
WARUNKI UŻYTKOWANIA

Miernik laserowy jest przeznaczony do pomiaru odległości i kątów nachylenia.

Produkt można użytkować wyłącznie zgodnie z jego normalnym przeznaczeniem.

TABELA KODÓW BŁĘDÓW

Opis	kodu	Rozwiązańe
Err01	Poza zakresem pomiarowym	Pomiar należy prowadzić w przewidzianym zakresie pomiarowym.
Err02	Odbity sygnał jest za słaby	Wybrać lepszą powierzchnię.
Err03	Poza zakresem wskazania (maks. wartość: 99.999) np. jeśli wynik powierzchni lub objętości jest poza zakresem wskazania	Należy sprawdzić, czy wartości i czynności są prawidłowe.
Err04	Błąd w obliczeniu wartości w przypadku pomiaru pośredniego	Należy sprawdzić, czy wartości i czynności są prawidłowe.
Err05	Słaba bateria	Założyć nową baterię.
Err06	Poza zakresem temperatury roboczej	Dokonywać pomiarów w podanym zakresie temperatur.
Err07	Światło otoczenia za jasne	Przyciemnić obszar celu.



WŁĄCZONE / POMIAR

- Włączone
- Pomiar
- Pomiar ciągły (nacisnąć i przytrzymać przez 2 sek.)
Funkcja Min. / Maks.

DODAWANIE

- Dodać wartość
- Poruszanie się po pamięci

POWIERZCHNIA / OBJĘTOŚĆ

- Powierzchnia (nacisnąć 1x)
- Objętość (nacisnąć 2x)
- Pośredni pomiar powierzchni (nacisnąć (3x / 4x))

WŁĄCZANIE

- Włączone
- Wyłączanie (nacisnąć przez 2 sek.)
- Zerowanie

ODEJMOWANIE

- Odejmowanie wartości
- Poruszanie się po pamięci

POMIAR POŚREDNI WARTOŚCI GEOMETRYCZNYCH

- Pomiar pośredni wartości geometrycznych 1 (nacisnąć 1x)
- Pomiar pośredni wartości geometrycznych 2 (nacisnąć 2x)
- Pomiar pośredni wartości geometrycznych 3 (nacisnąć 3x)

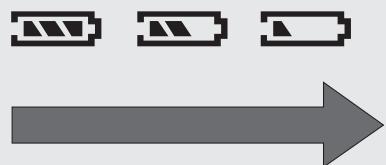
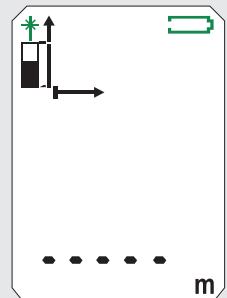
ZMIANA PŁASZCZYZNY POMIARU

- Przód
- Tył
- Kołek kątowy

PAMIĘĆ

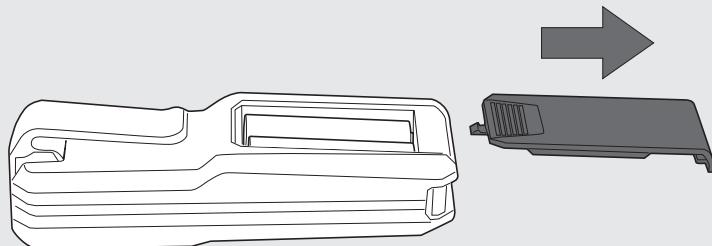
- Zegar sterujący 3-15 sek. (nacisnąć 1x)
- Zegar sterujący 1-20 (nacisnąć 1x 2 sek.)
- Poruszanie się po pamięci za pomocą przycisków +/-

WYMIANA BATERII

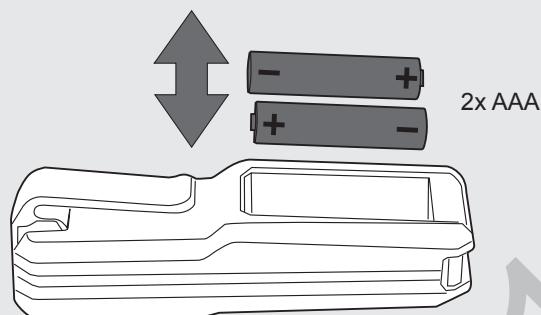


Jeśli miga symbol,
wymienić baterię.

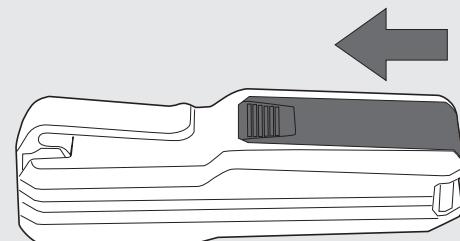
1



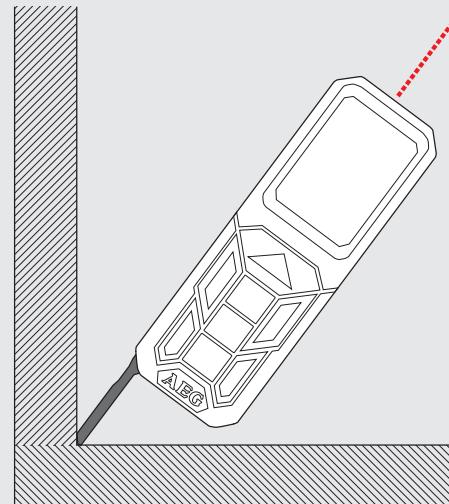
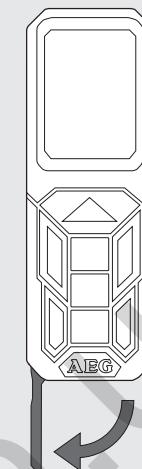
2



3

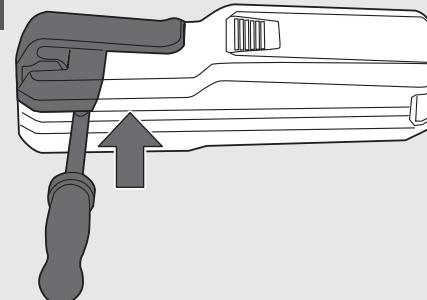


KOŁEK KĄTOWY

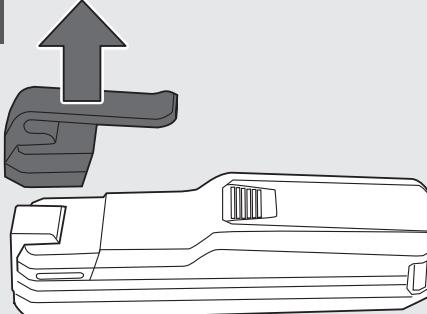


PASEK UCHWYTU

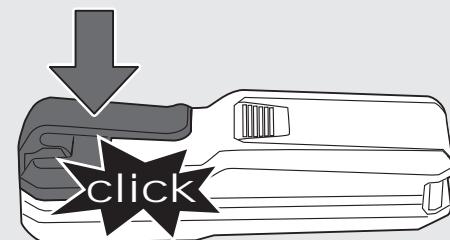
1



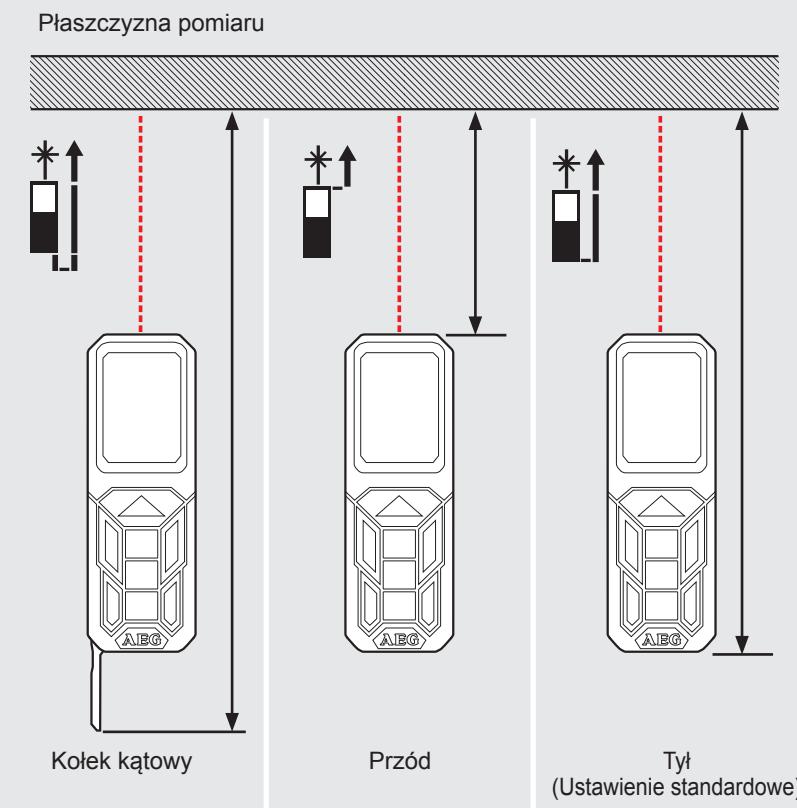
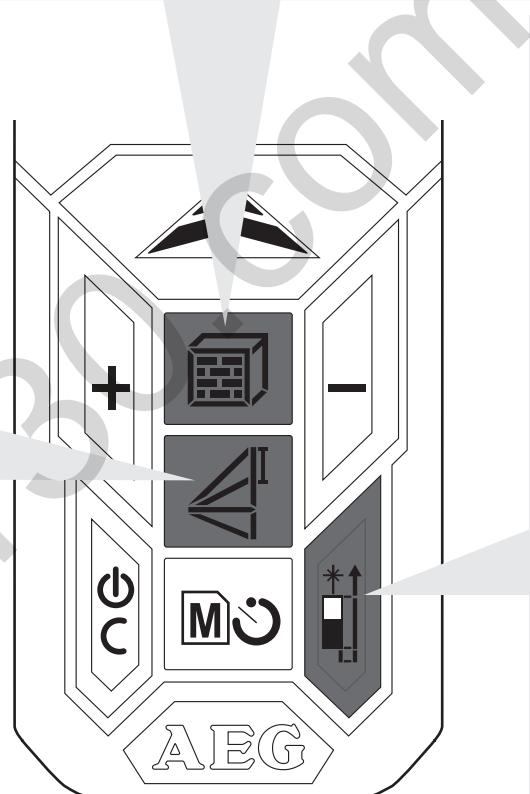
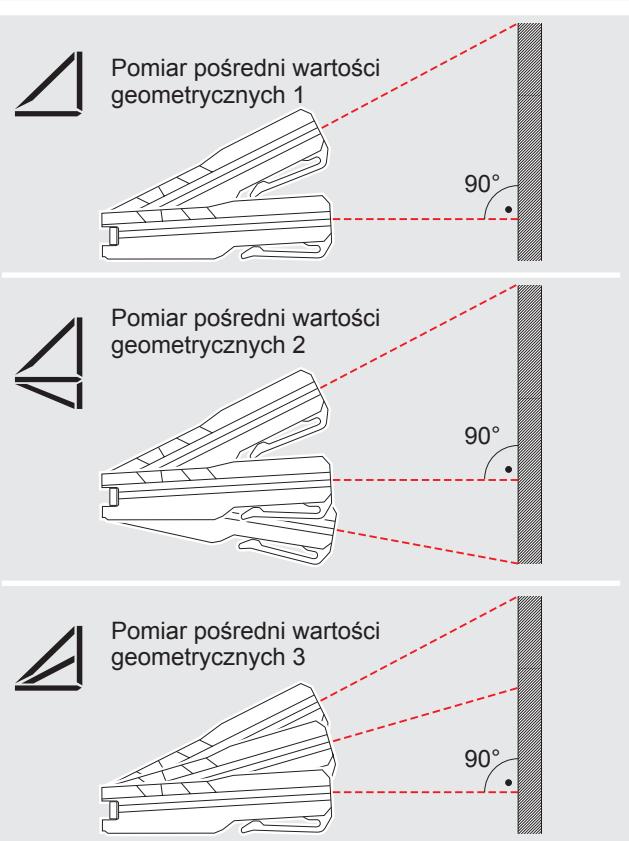
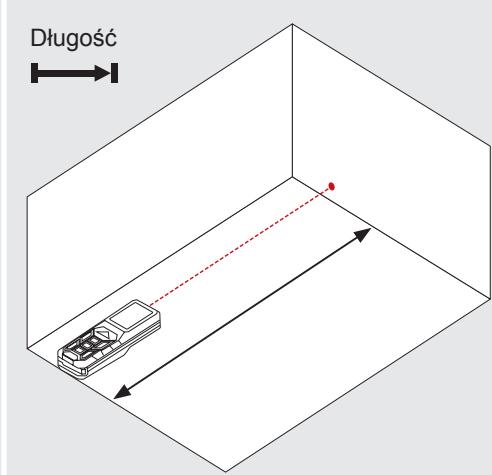
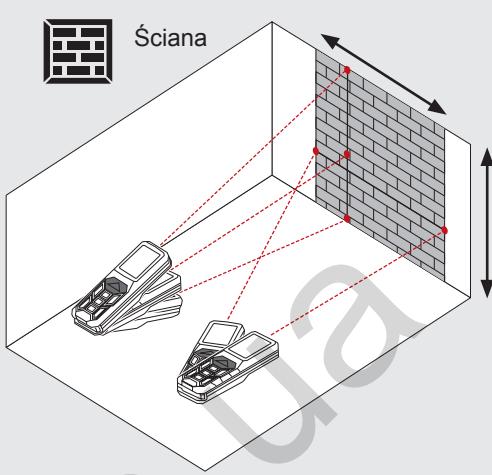
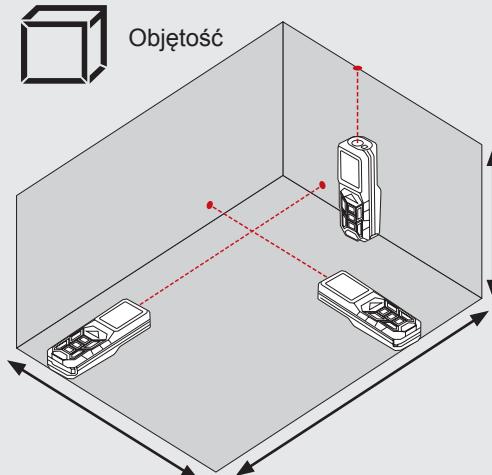
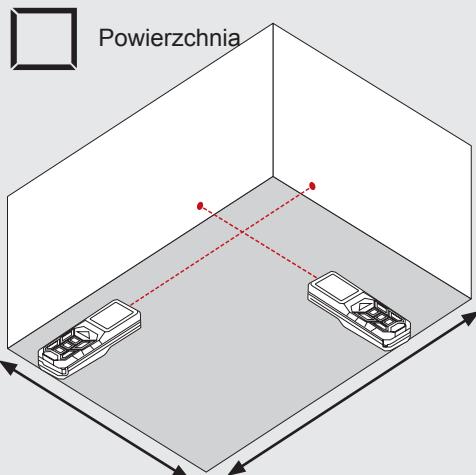
2



3

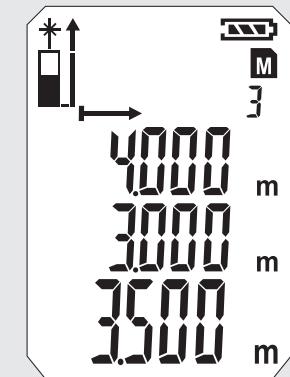
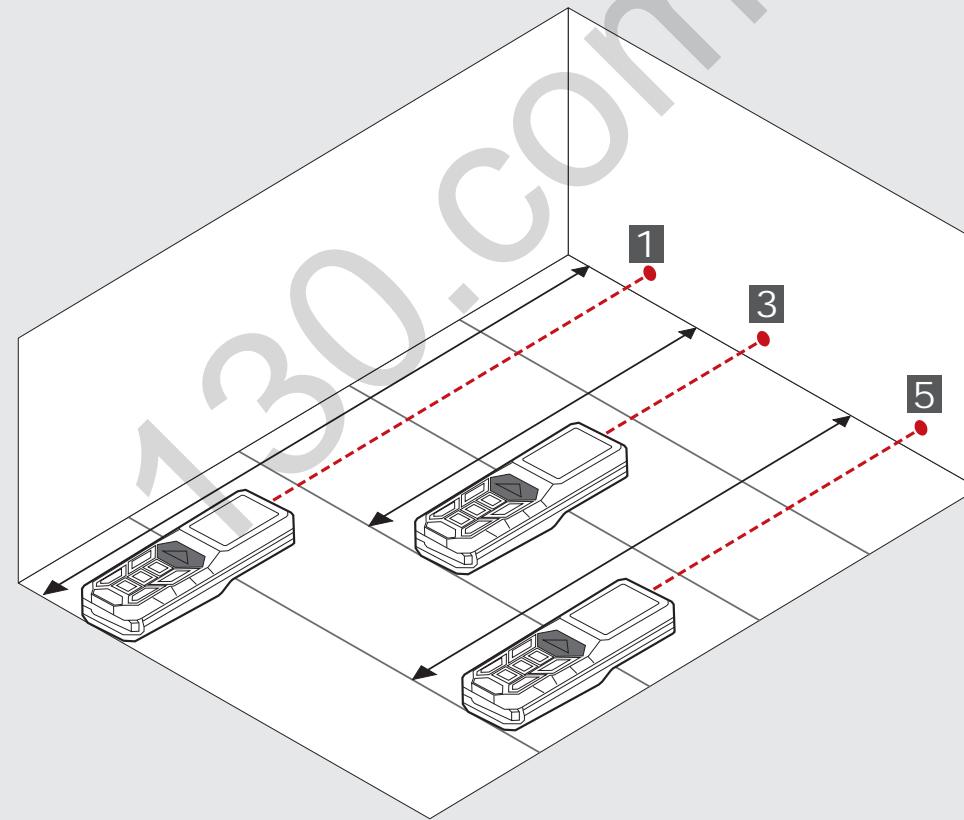
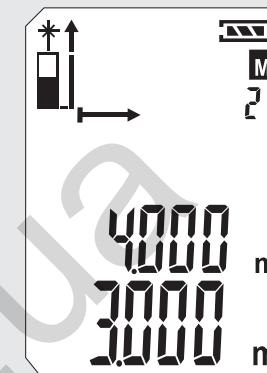
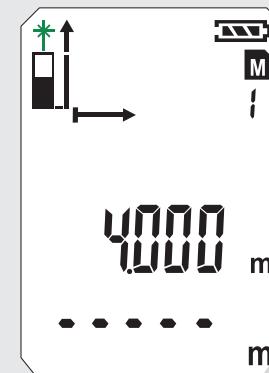
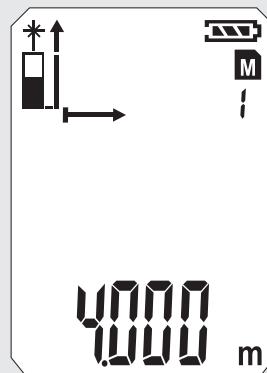
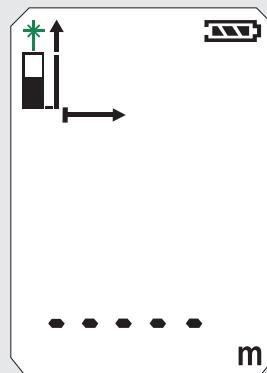


PRZYCISK FUNKCYJNY, POMIAR POŚREDNI WARTOŚCI GEOMETRYCZNYCH, PŁASZCZYZNA POMIARU



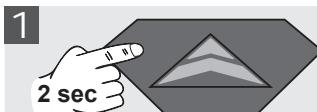
ZWYKŁY POMIAR DŁUGOŚCI

0

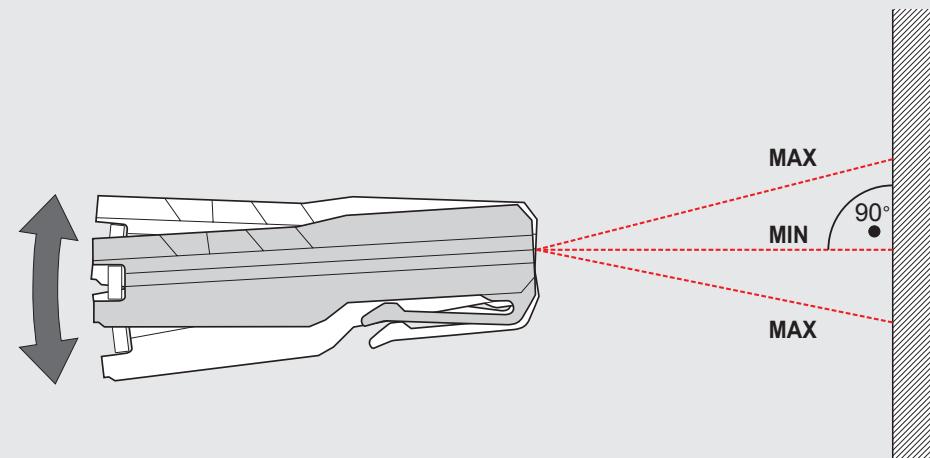
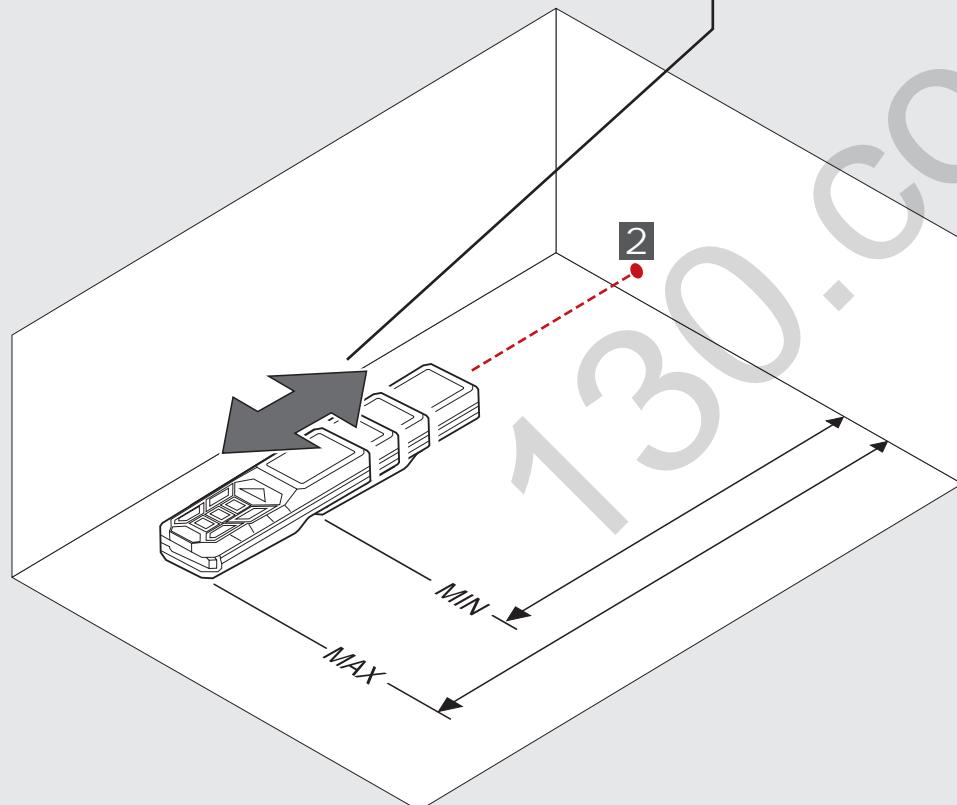
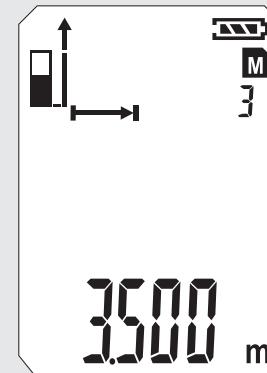
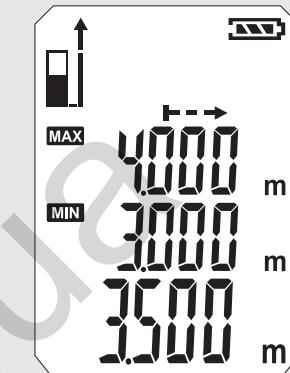
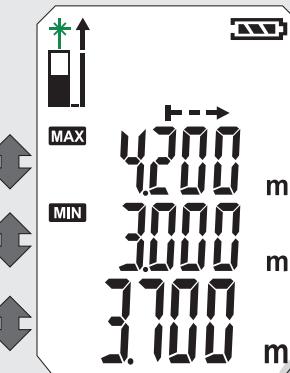
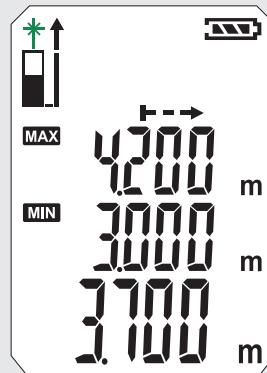
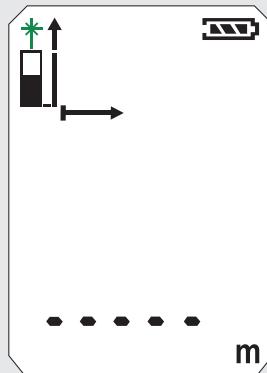


POMIAR CIĄGŁY / POMIAR MINIMUM-MAKSIMUM

0

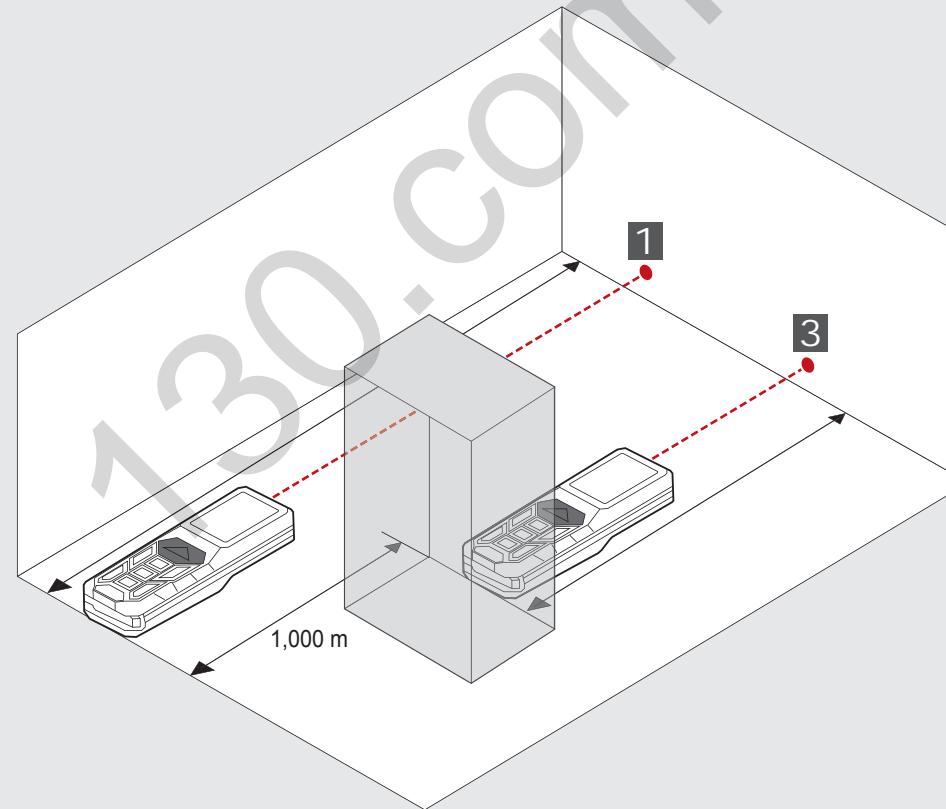
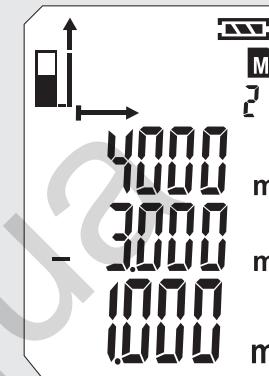
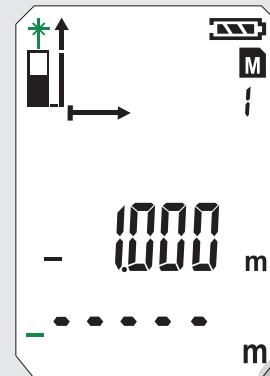
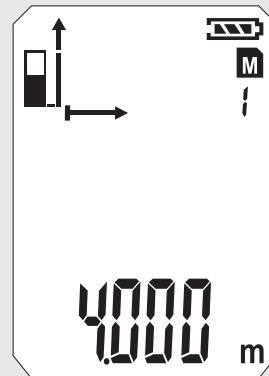
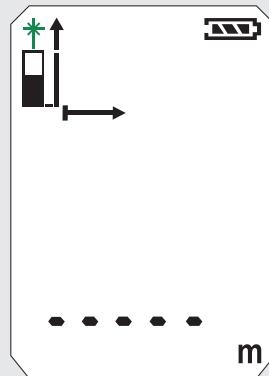
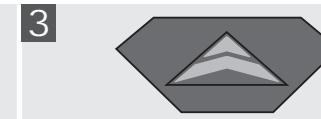
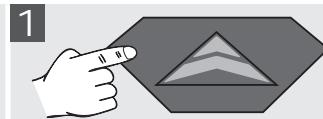


2

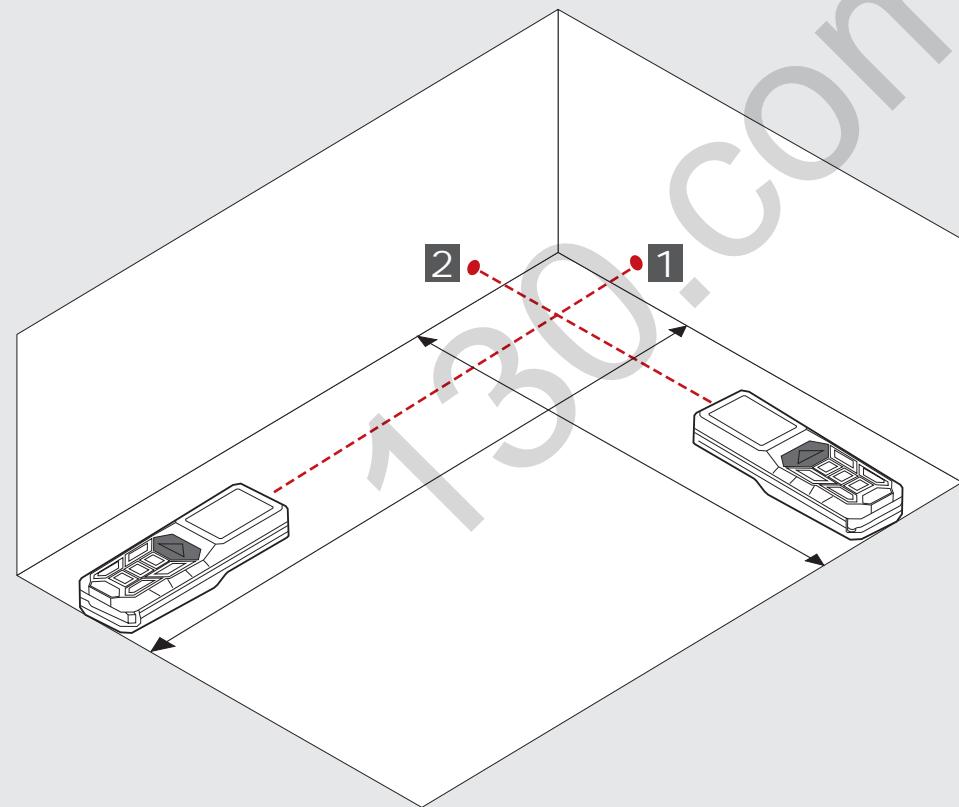
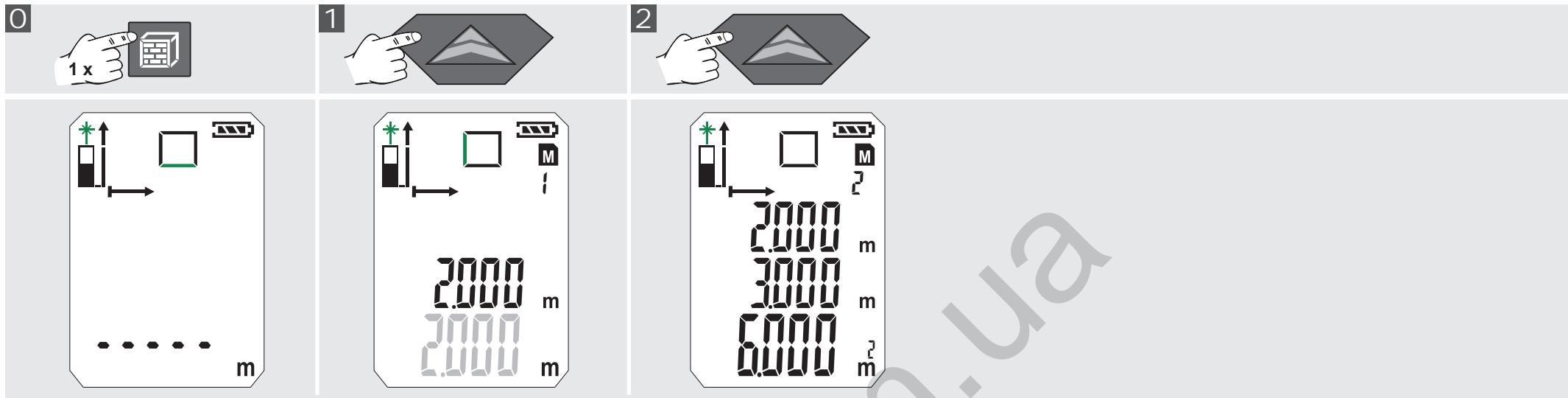


POMIAR SUMUJĄCY / RÓŻNICUJĄCY

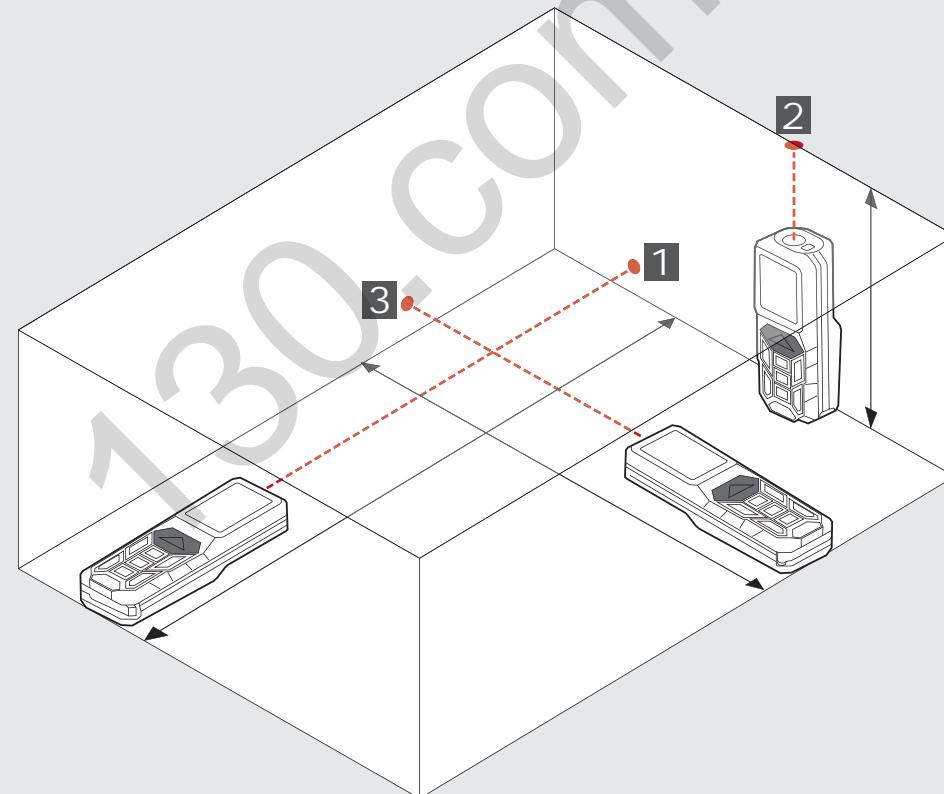
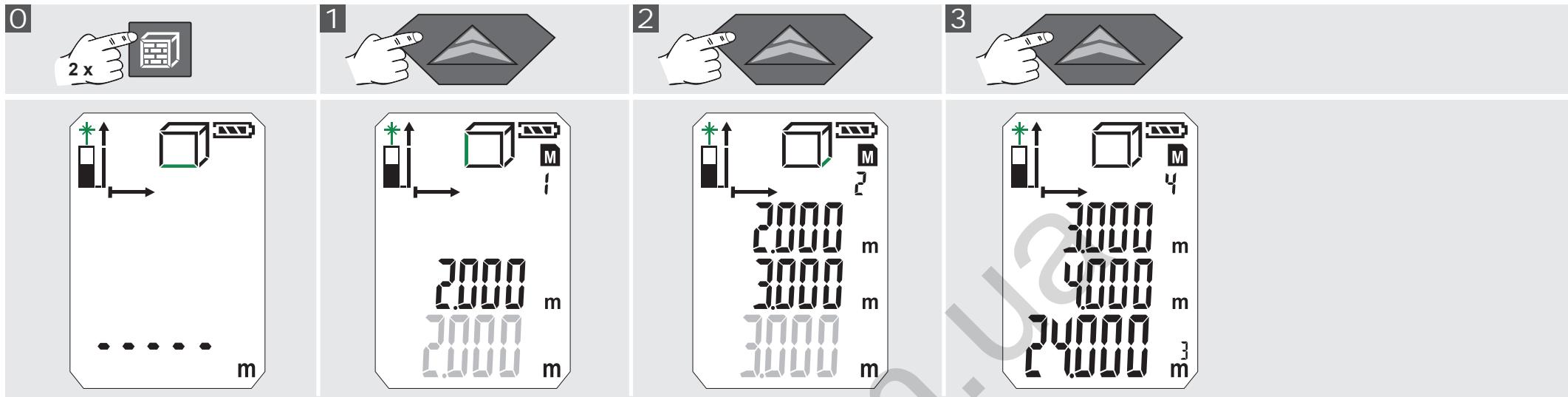
0



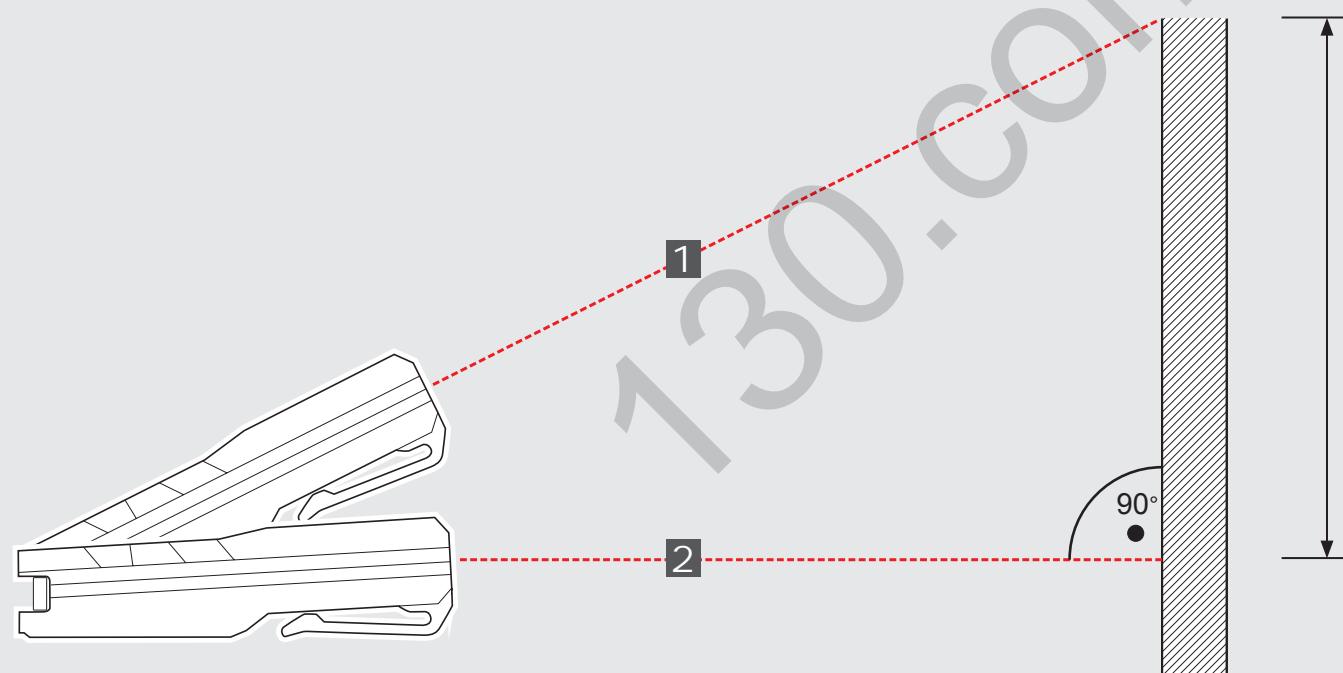
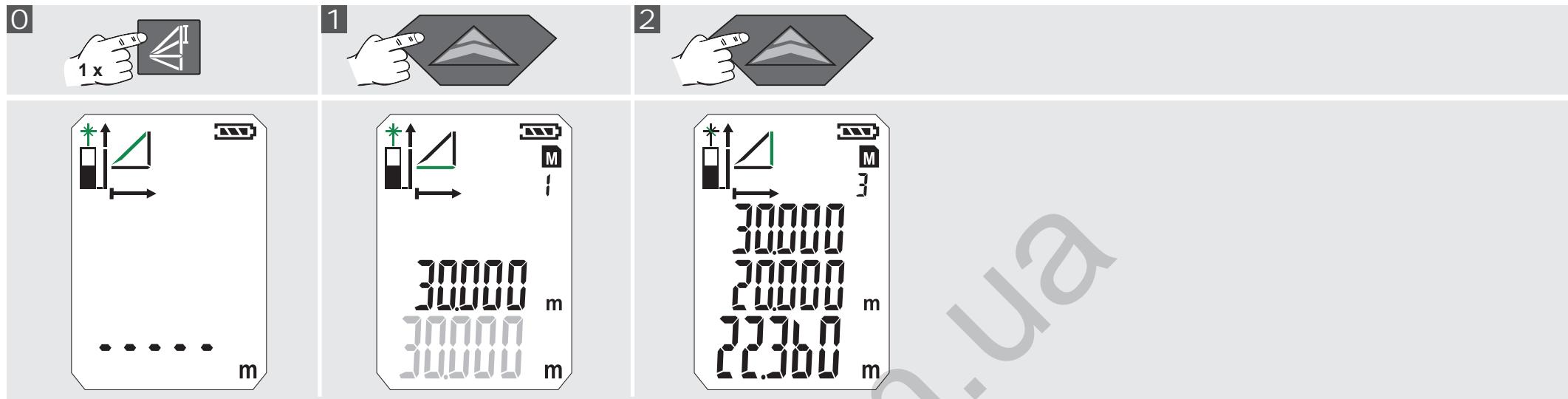
POMIAR POWIERZCHNI



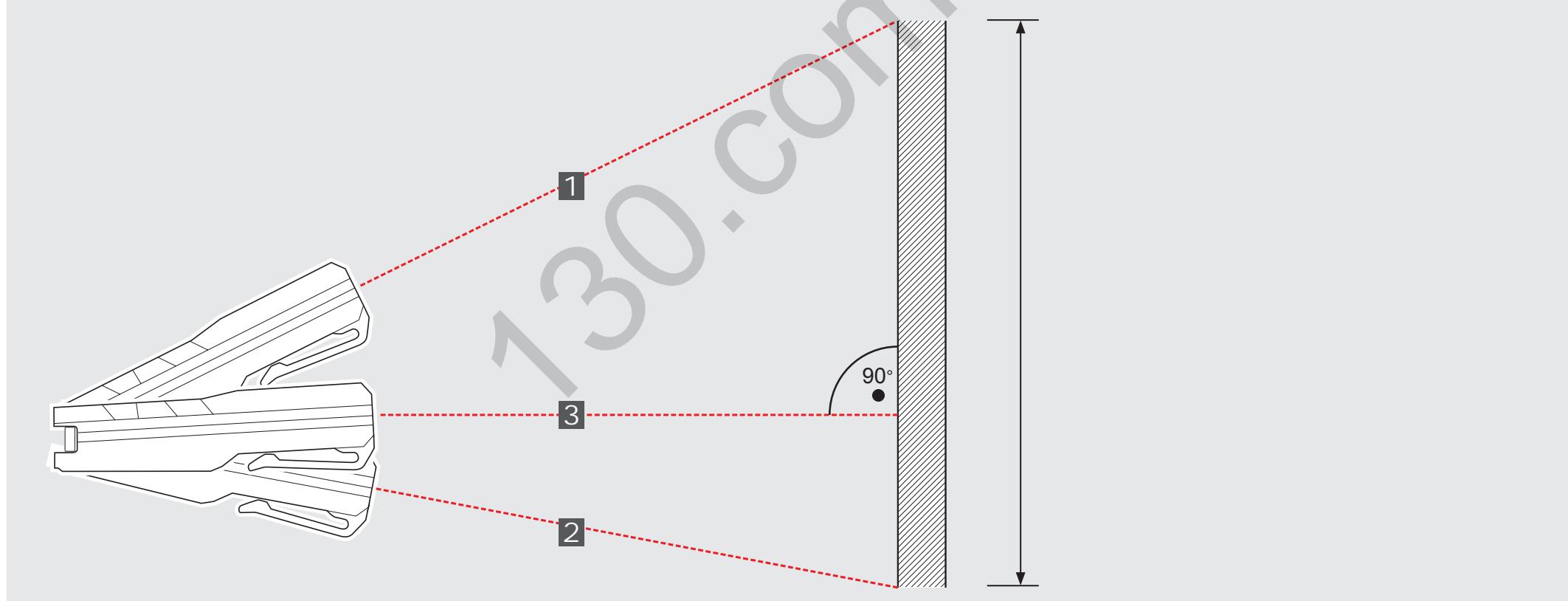
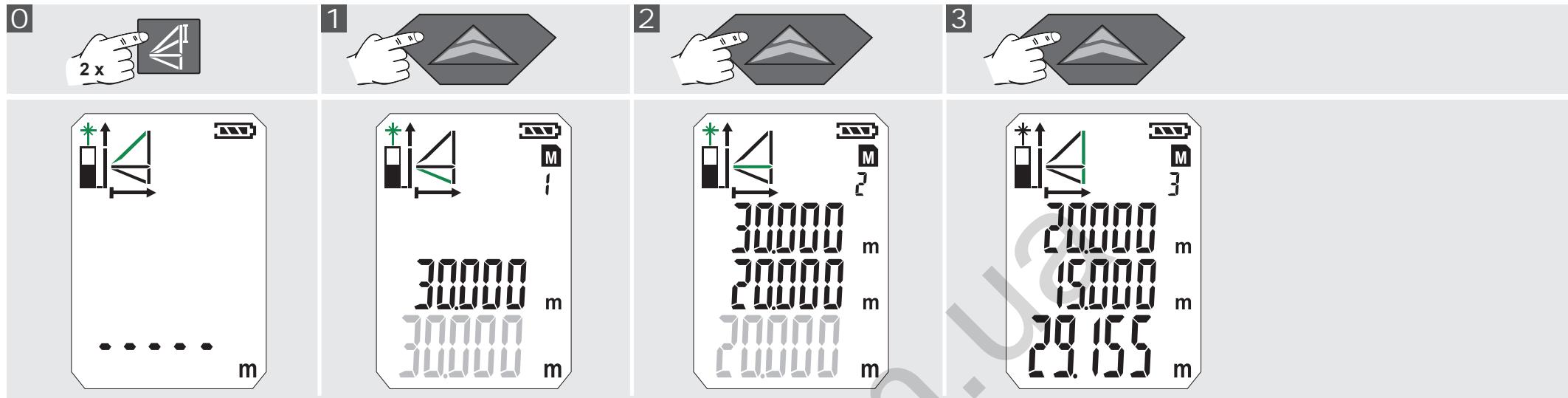
POMIAR OBJĘTOŚCI



POMIAR POŚREDNI (WARTOŚCI GEOMETRYCZNYCH 1)



POMIAR POŚREDNI (WARTOŚCI GEOMETRYCZNYCH 2)

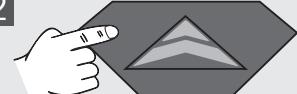


POMIAR POŚREDNI (WARTOŚCI GEOMETRYCZNYCH 3)

1



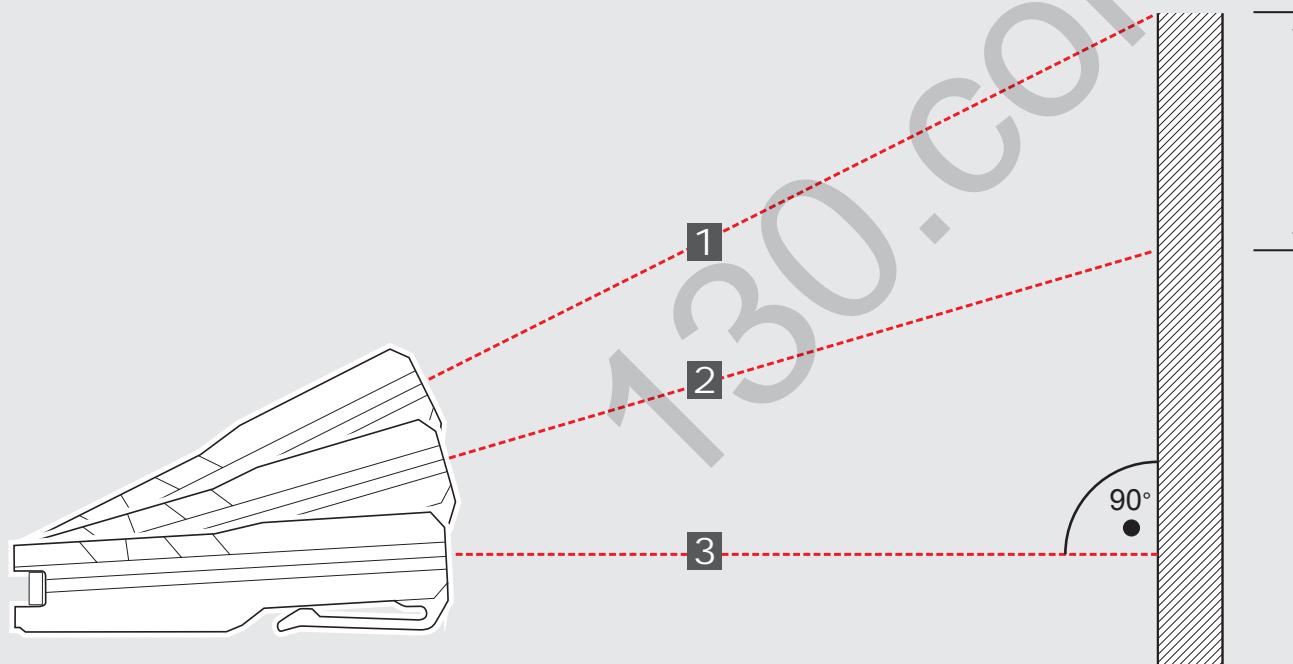
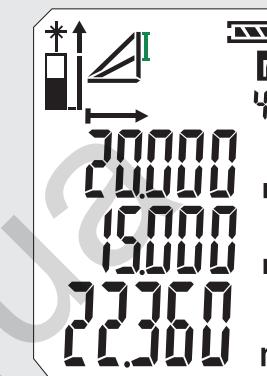
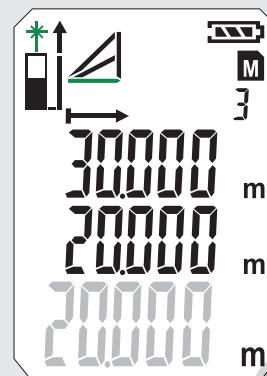
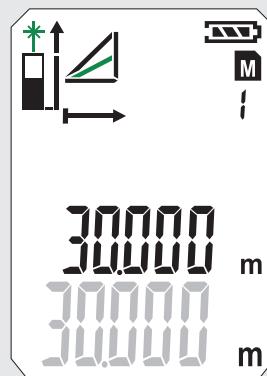
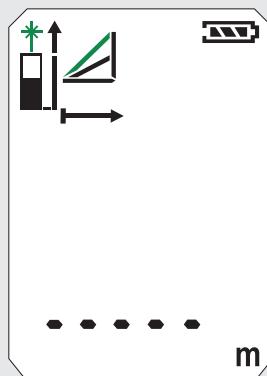
2



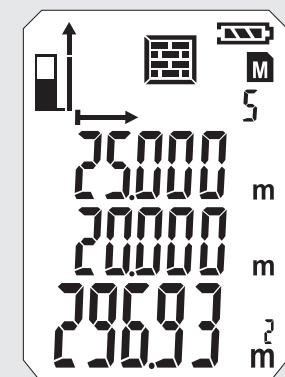
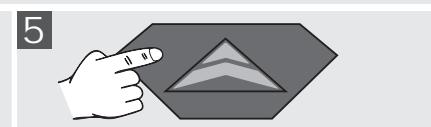
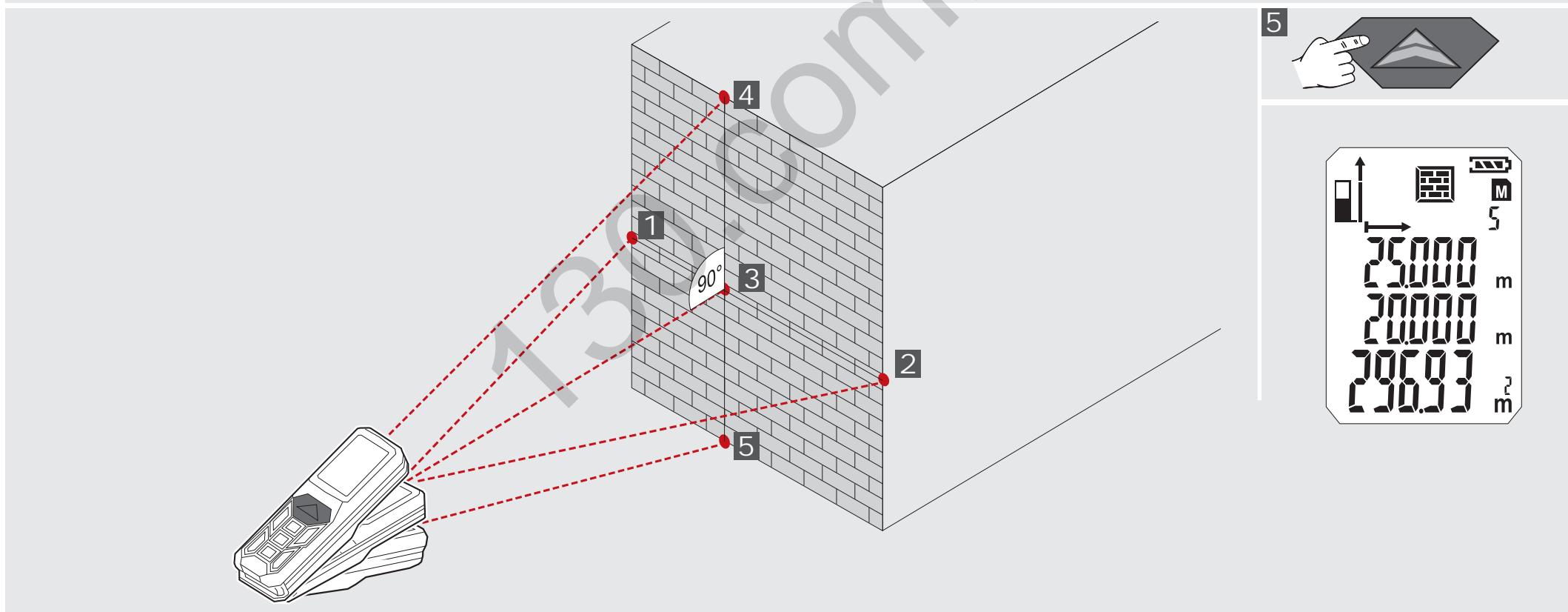
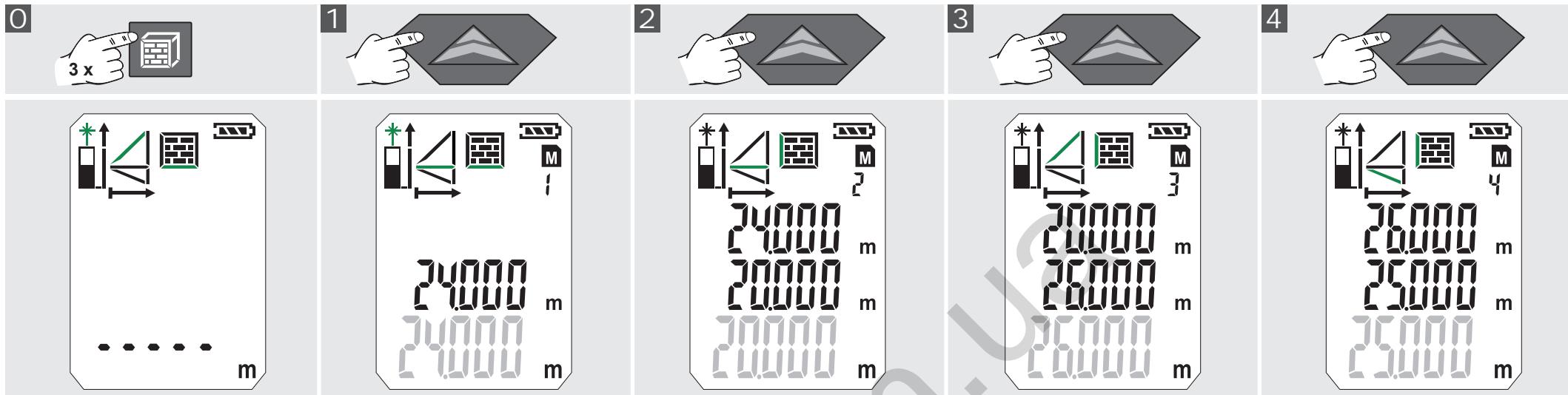
3



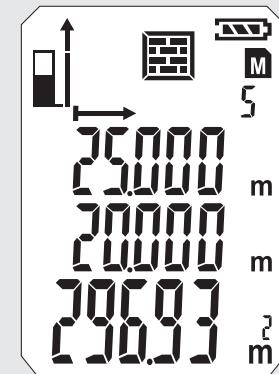
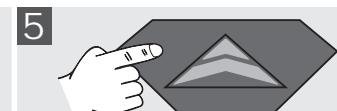
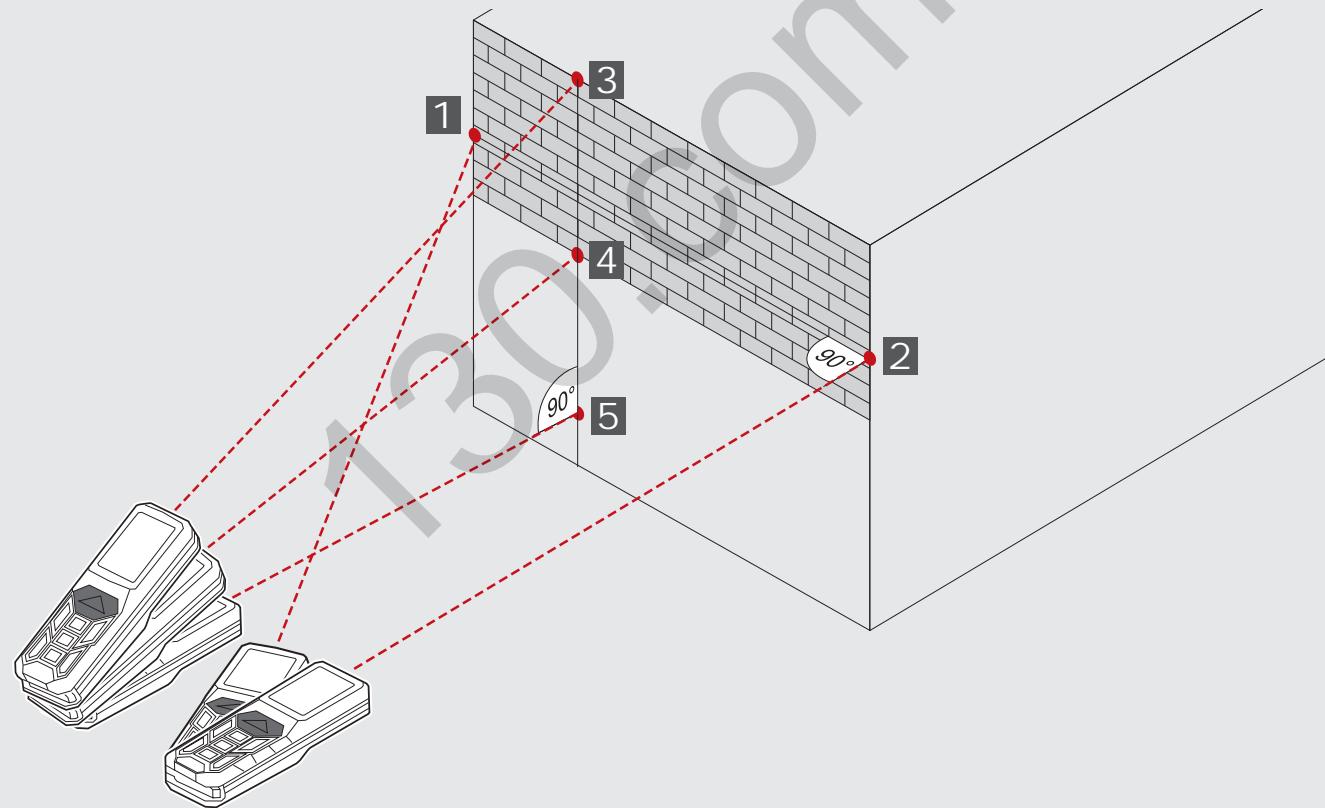
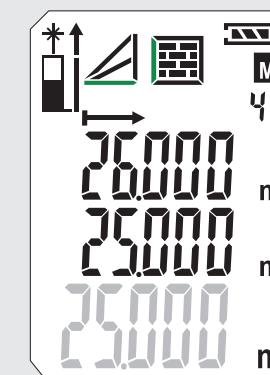
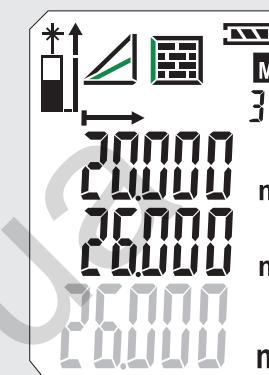
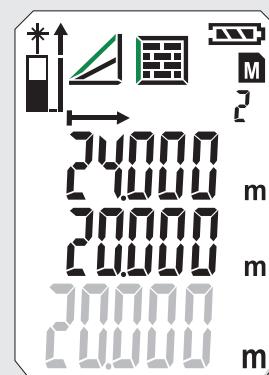
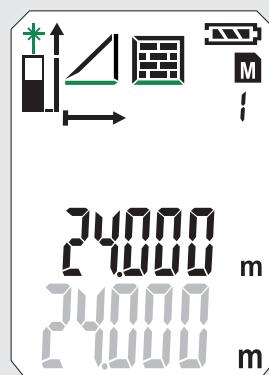
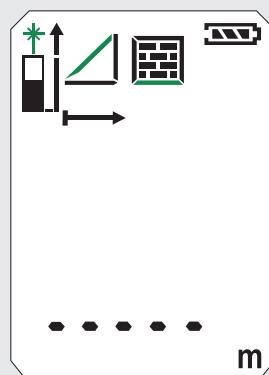
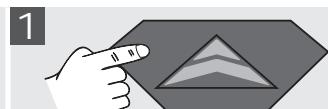
4



POMIAR POWIERZCHNI ŚCIANY (SCENARIUSZ 1)



POMIAR POWIERZCHNI ŚCIANY (SCENARIUSZ 2)



ZEGAR STERUJĄCY

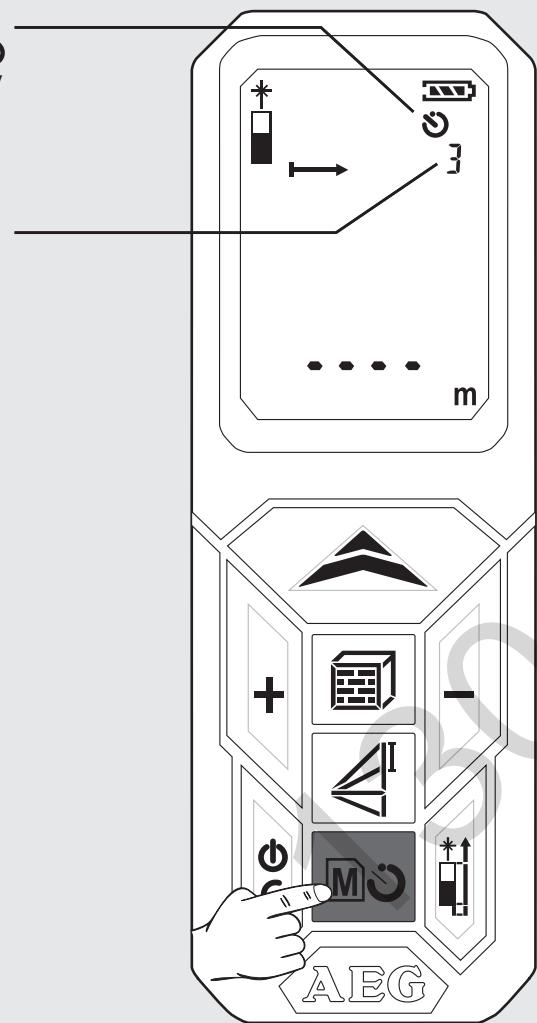
Za pomocą zegara sterującego można uruchomić pomiar z opóźnieniem np. aby ustawić element w promieniu pomiarowym.

Nacisnąć przycisk

- Pojawia się symbol
- Po naciśnięciu przycisku można ustawić zegar sterujący pomiędzy 3 i 15 sek.

Nacisnąć przycisk

- Liczone są sekundy do rozpoczęcia pomiaru.
- W przypadku 0 pomiar jest uruchamiany natychmiast.



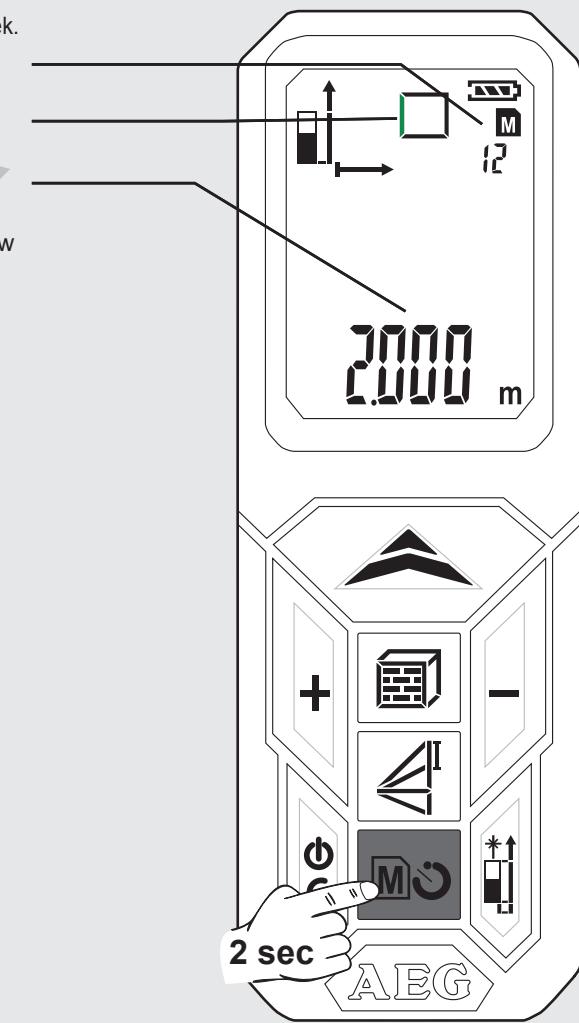
PAMIĘĆ

Wartości pomiarowe są zapisywane automatycznie w pamięci na bieżąco.

Zapisane wartości można wywołać za pomocą przycisku .

Nacisnąć przycisk przez 2 sek.

- Pojawia się symbol i miejsce w pamięci.
- Wyświetlana jest przynależna wartość pomiarowa.
- Zapisana wartość wyświetlana jest w wierszu głównym
- Przewijać za pomocą przycisków +/-

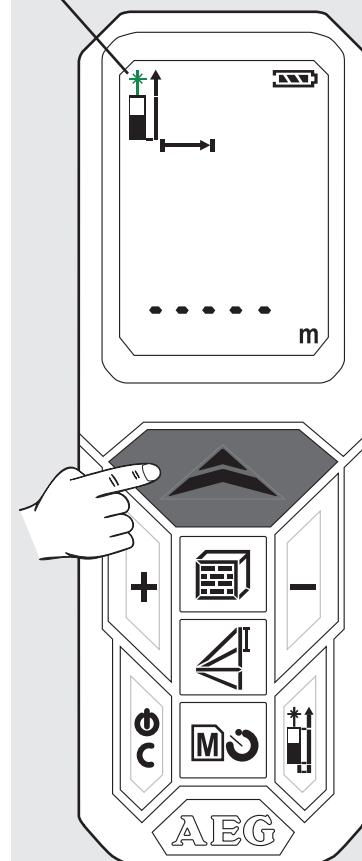


ZASADNICZY SPOSÓB DZIAŁANIA NA PRZYKŁADZIE POMIARU POWIERZCHNI (1)

1 Włączyć

Nacisnąć przycisk .
Awaga! Włączony promień lasera!
 Nie kierować na osoby!

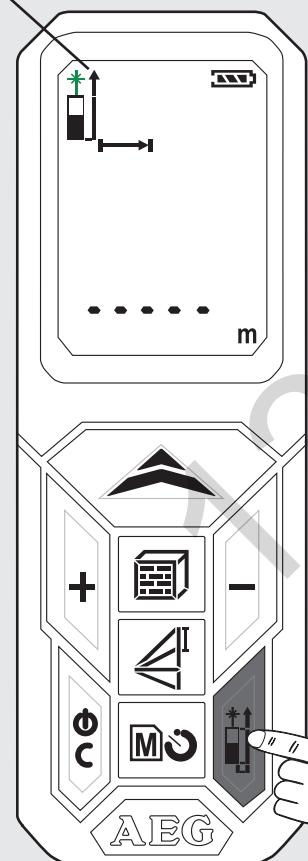
Miga symbol lasera
 (miganie wyświetlane jest na zielono).



2 Wybrać płaszczyznę pomiaru

Ustawienie standardowe po włączeniu: tył
 ↑ Nacisnąć 1x -> Kołek kątowy
 Nacisnąć 2x -> przód
 Nacisnąć 3x -> tył

Wyświetlony zostanie symbol

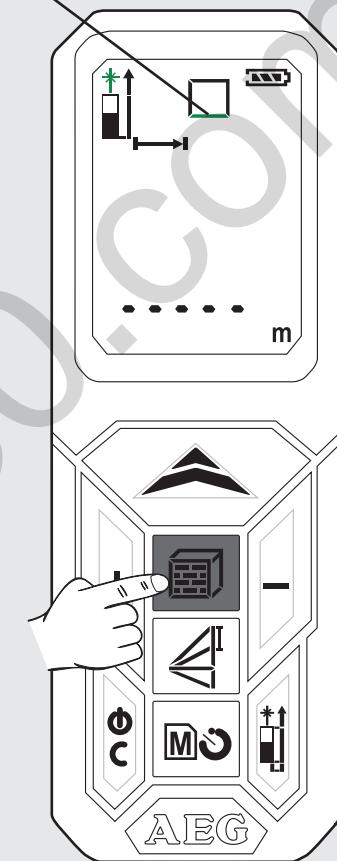


3 Wybrać funkcję

Po włączeniu przyrząd zawsze ustawiony jest na pomiar długości.
 Nacisnąć 1 x - Pomiar powierzchni

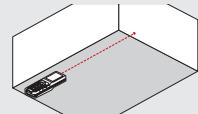
- Pojawia się symbol
 Wielkość mierzona migła (miganie wyświetlane jest na zielono)

- Wartość mierzona pojawia się na chwilę w wierszu głównym.
 - Po upływie 1 sek. wartość mierzona przeskakuje do wiersza położonego wyżej.
 Wartość mierzona zapisana zostaje do pamięci pod kolejnym numerem.
 Miga druga wartość mierzona.
 Przyrząd jest gotowy do pomiaru drugiej wartości.

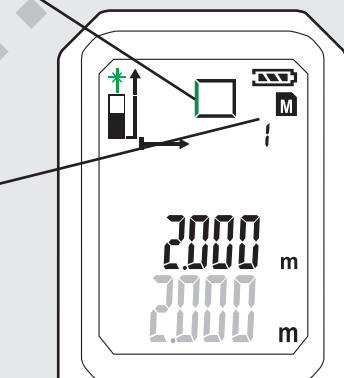


4 Pomiar długości

Ustawić przyrząd i nacisnąć przycisk .

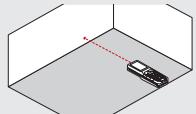


- Wartość mierzona pojawia się na chwilę w wierszu głównym.
 - Po upływie 1 sek. wartość mierzona przeskakuje do wiersza położonego wyżej.



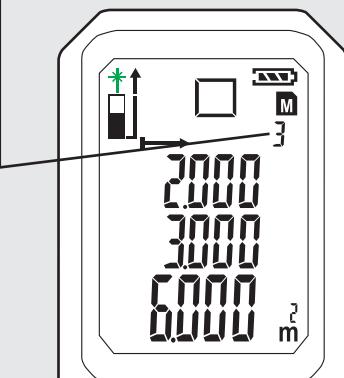
5 Pomiar szerokości

Ustawić przyrząd i nacisnąć przycisk .



- Wartość mierzona pojawia się na chwilę w wierszu głównym.
 - Po upływie 1 sek. wartość mierzona przeskakuje do wiersza położonego wyżej.

Wartość mierzona zostaje zapisana w pamięci pod kolejnym numerem.
 - Wynik zostaje wyświetlony w wierszu głównym i zapisany w pamięci pod kolejnym numerem.



ZASADNICZY SPOSÓB DZIAŁANIA NA PRZYKŁADZIE POMIARU POWIERZCHNI (2)

6 Wywołanie wartości zapisanych w pamięci

Nacisnąć przycisk **M** przez 2 sek.

Nacisnąć przycisk + lub -

7 Wyjście z pamięci

Nacisnąć przycisk ϕ

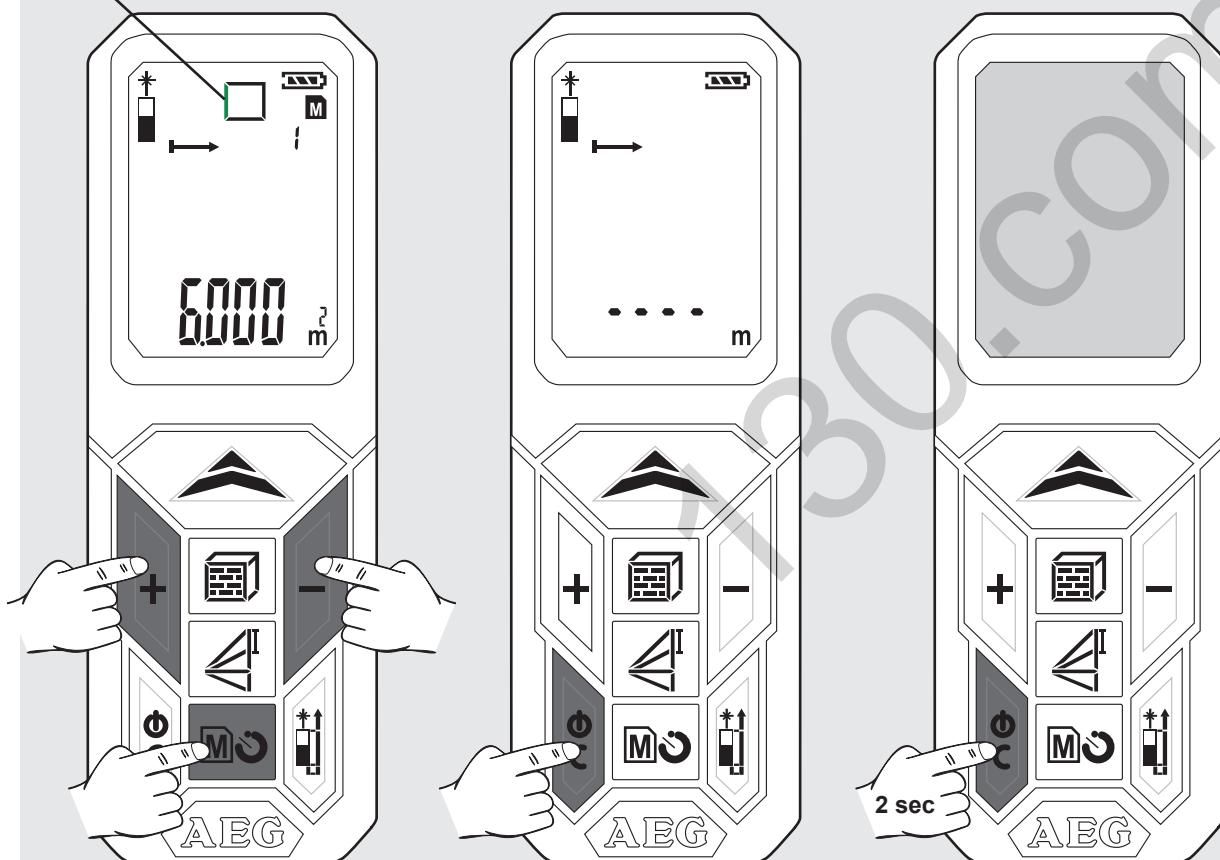
- Wartości zapisane w pamięci wyświetlane zostaną w wierszu głównym.

- Wyświetlony zostaje przynależny symbol a wartość mierzona mig (miganie wyświetlane jest na zielono).

8 Wyłączanie

Nacisnąć przycisk ϕ przez 2 sek.
(Należy uprzednio wyjść z pamięci).

- Przyrząd się wyłącza.
- W przypadku gdy w ciągu 3 minut nie zostanie naciśnięty żaden przycisk przyrząd wyłączy się automatycznie.



TARTALOM

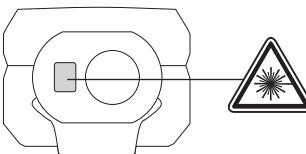
Fontos biztonsági előírások.....	1
Műszaki adatok.....	2
Rendeltetésszerű használat	2
Hibakód táblázat.....	2
Áttekintés.....	3
Elemcseré.....	4
Sarok stift.....	4
Övcspipesz.....	4
Funkciógomb, Pitagorasz, mérési sík.....	5
Egyszerű hosszmérés	6
Folyamatos mérés/ Minimum-Maximum mérés.....	7
Összeadó / kivonó mérés.....	8
Felületmérés.....	9
Térfogatmérés	10
Indirekt mérés (Pitagorasz 1)	11
Indirekt mérés (Pitagorasz 2)	12
Indirekt mérés (Pitagorasz 3)	13
Falfelület mérése (1. forgatókönyv).....	14
Falfelület mérése (2. forgatókönyv).....	15
Időzítő.....	16
Memória.....	16
Alapvető működésmód felületmérés példáján (1)	17
Alapvető működésmód felületmérés példáján (2)	18

FONTOS BIZTONSÁGI ELŐÍRÁSOK



A termék használata előtt tanulmányozza a mellékelt CD-n található Biztonsági előírásokat és Használati útmutatót.

Lézer osztályozás



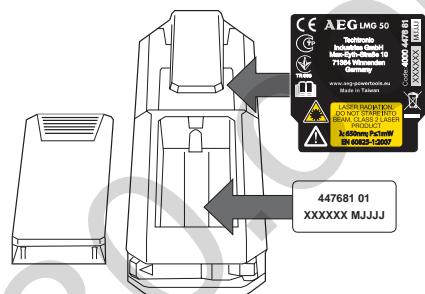
FIGYELMEZTETÉS:

Ez a 2. lézerosztályú termék megfelel az IEC 60825-1:2007 előírásainak.



Feliratozás

Ragassza az első üzembe helyezés előtt az anyanyelvén mellékelt matricát a teljesítménytáblán lévő angol nyelvű szövegre.



Figyelmeztetés:

Ne nézzen közvetlenül a lézersugárba. A lézersugár rövid időre vakságot okozhat.

Ne nézzen a lézersugárba, és ne irányítsa feleslegesen mások felé.

Ne vaktíton el vele másokat.

Figyelmeztetés:

A lézeres eszközt ne használják gyermekek közelében, és nem szabad gyermeknek megengedni a használatát.

Figyelem! Visszaverő felületekről visszaverődhet a lézersugár a kezelőre vagy más személyekre.

Tartson biztonságos távolságot a forgó részektől.

Végezzen időnként ellenőrző méréseket, különösen fontos mérések előtt, alatt és után.

Ha a műszert leejtették, nem megfelelően használták vagy átalakították, hibás mérés történhet.

Figyelem! Ismerkedjen meg a kezelőelemekkel és a kerti kisgép előírásszerű használatával.

A lézeres mérőműszer alkalmazási területe korlátozott. (Lásd a „Műszaki adatok” c. részt). A maximális és minimális tartományon kívül megkísérelt mérések pontatlanságokat okoznak. Ha a készüléket szélsőséges körülmények között, pl. túl nagy forróság, hideg, nagyon erős napsugárzás, eső, hó, köd vagy más látást korlátozó körülmények esetén használják, akkor a mérések pontatlanoak lehetnek.

Ha lézeres mérőműszert meleg környezetből hidegre viszik (vagy fordítva), akkor meg kell vární, hogy a készülék alkalmazkodjon az új környezeti hőmérsékletthez.

A lézeres mérőműszert olyan helyen kell tárolni, amely megvédi az eszközt a rázkódásoktól, vibrációktól vagy szélsőséges hőmérsékletektől.

A lézeres mérőműszert védeni kell portól, nedvességtől és magas páratartalomtól. Az ilyen körülmények tönkrethetik a belső alkatrészeket, vagy befolyásolhatják a pontosságot.

Ne használjon agresszív tisztítószereket vagy oldószereket. A tisztítást csak tiszta, puha kendővel végezze.

Kerülje a lézeres mérőműszert érő erős ütéseket, vagy az eszöző leesését. Ellenőrizni kell az eszköz pontosságát, ha az leesett vagy más mechanikus terheléseknek volt kitéve.

A lézeres eszközön szükséges javításokat csak felhatalmazott szakember végezhet.

A terméket tilos robbanásveszélyes vagy agresszív környezetben használni.

Az akkumulátorok töltéséhez kizárolag a gyártó által ajánlott töltőt használjon.

A lemerült elemeket nem szabad a háztartási hulladékkel együtt ártalmatlanítani. Az elhasznált elemeket környezetkímélő ártalmatlanítás céljából a nemzeti vagy helyi előírások szerint az arra kijelölt gyűjtőhelyeken kell leadni. A készüléket nem szabad a háztartási hulladékkel együtt ártalmatlanítani. A készülék ártalmatlanítását szakszerűen kell végezni. Be kell tartani az ártalmatlanításra vonatkozó országspecifikus előírásokat. Az ártalmatlanításra vonatkozó információkért forduljon a helyi hatósághoz vagy kereskedőjéhez.



MŰSZAKI ADATOK

Védelmi osztály	IP54 (por és fröccsenő víz ellen védett)
Optika	14 mm
Gyűjtőpont	35 mm
Mérési tartomány max.	50 méter (tűrés: 55m)
Mérési tartomány min.	0,05 méter
Abszolút pontosság @ < 10m	± 1,5 mm (max.)
Ismétlési pontosság @ < 10m	± 1,5 mm (tipikusan max. 2σ)
Ismétlési pontosság @ > 10m	emelkedés ± 0,25 mm / méter (tipikusan max. 2σ)
Mérési idő	0,5 mp
Kijelző típusa	LCD (22,7 mm x 31 mm)
Áramellátás	AAA 2x (alkáli elem)
Elemek élettartama	10000 (egyes mérés)
Lézer kimeneti teljesítménye	0,6 mW ~ 0,95 mW (2-es osztály, 650 nm)
Lézer pontméret	25 x 30 mm @ 16 m (max.)
Lézersugár függőleges szög	+1 fok
Lézersugár vízszintes szög	±1 fok
A készülék automatikus lekapcsolása	180 másodperc
A lézersugár automatikus lekapcsolása	30 másodperc
Üzemelő hőmérséklet	-10°C-tól +50°C-ig
Tárolási hőmérséklet	-25°C-tól +70°C-ig
Súly elemek nélkül	80 g

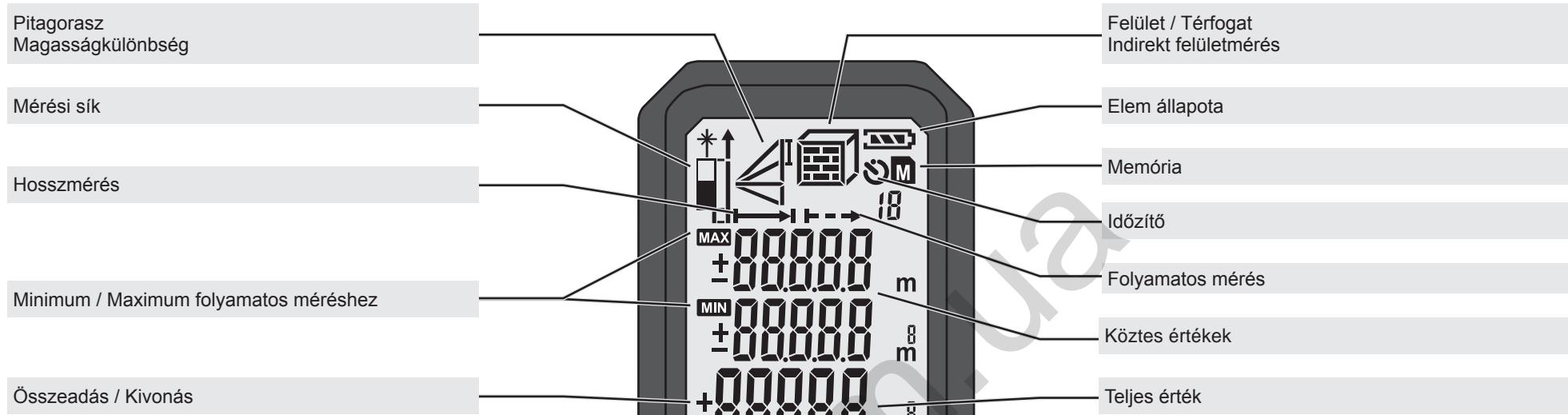
RENDELTELÉSSZERŰ HASZNÁLAT

A lézeres mérőműszer távolságok és elhajlások mérésére alkalmas.

A készüléket kizártlag az alábbiakban leírtaknak megfelelően szabad használni.

HIBAKÓD TÁBLÁZAT

Kód	Leírás	Elhárítás
Err01	Mérési tartományon kívül	A mérést az előírt tartományban kell elvégezni.
Err02	A visszavert jel túl gyenge	válasszon jobb felületet.
Err03	Érték a kijelzési tartományon kívül (max. érték: 99.999) pl. annak az eredménye, hogy a felület vagy a térfogat a kijelzési tartományon kívül van	Ellenőrizze, hogy az értékek és a lépések megfelelők-e.
Err04	Hiba a Pitagorasz-számításban	Ellenőrizze, hogy az értékek és a lépések megfelelők-e.
Err05	Merülő elem	Helyezzen be új elemeket.
Err06	Az üzemi hőmérsékleti tartományon kívül	Végezze el a mérést az előírt üzemi hőmérsékleti tartományban.
Err07	A környezeti fény túl erős	Sötétítse le a célterületet.



BE / MÉRÉS

- ▶ Be
- ▶ Mérés
- ▶ Folyamatos mérés (2 mp-ig nyomja)
Min. / Max. funkció

ÖSSZEADÁS

- ▶ Érték hozzáadása
- ▶ Navigálás a memoriában

FELÜLET / TÉRFOGAT

- ▶ Felület (1x nyomja meg)
- ▶ Térfogat (2x nyomja meg)
- ▶ Indirekt felületmérés (3x / 4x nyomja meg)

BEKAPCSOLÁS

- ▶ Be
- ▶ Ki (2 mp-ig nyomja)
- ▶ Törlés

KIVONÁS

- ▶ Érték kivonása
- ▶ Navigálás a memoriában

PITAGORASZ

- ▶ Pitagorasz 1 (1x nyomja meg)
- ▶ Pitagorasz 2 (2x nyomja meg)
- ▶ Pitagorasz 3 (3x nyomja meg)

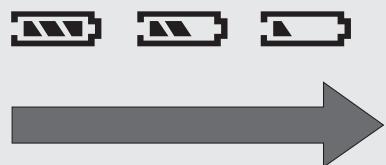
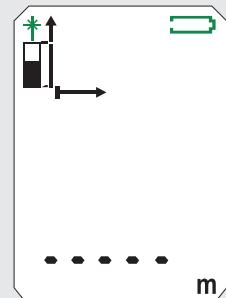
MÉRÉSI SÍK VÁLTÁSA

- ▶ Elöl
- ▶ Hátul
- ▶ Sarok stift

MEMÓRIA

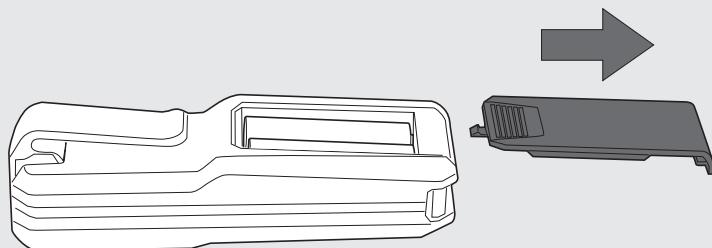
- ▶ Időzítő 3-15 mp (1x nyomja meg)
- ▶ Memória 1-20 (1x 2 mp-ig nyomja)
- ▶ Navigálás a memoriában a +/- gombokkal

ELEMCSERE

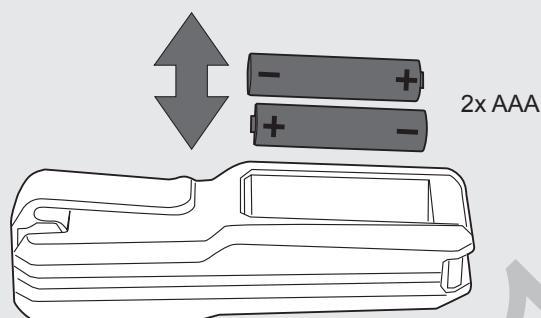


Ha a szimbólum villog, cserélje ki az elemet.

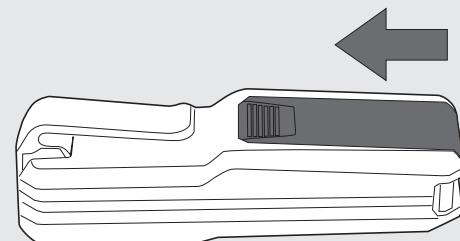
1



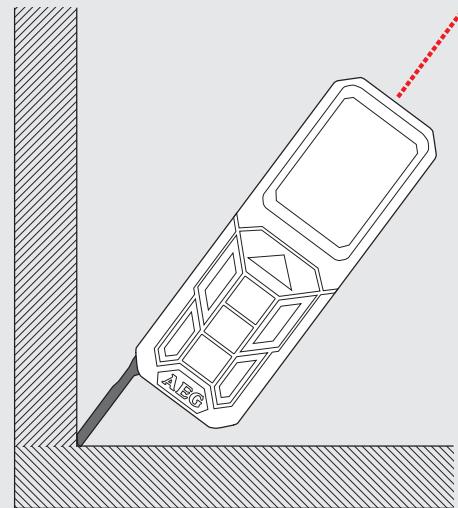
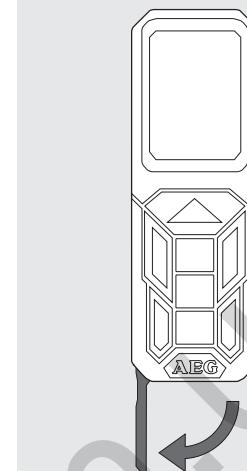
2



3

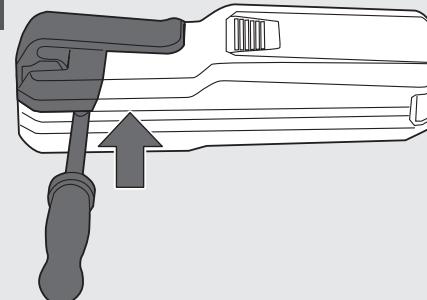


SAROK STIFT

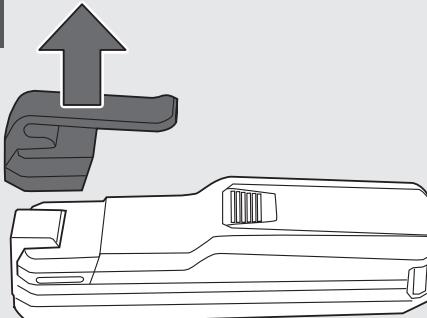


ÖVCSIPESZ

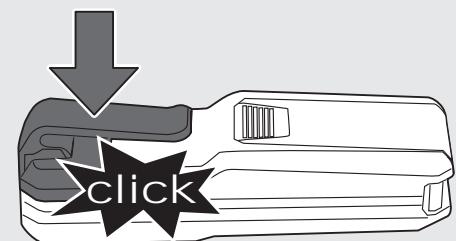
1



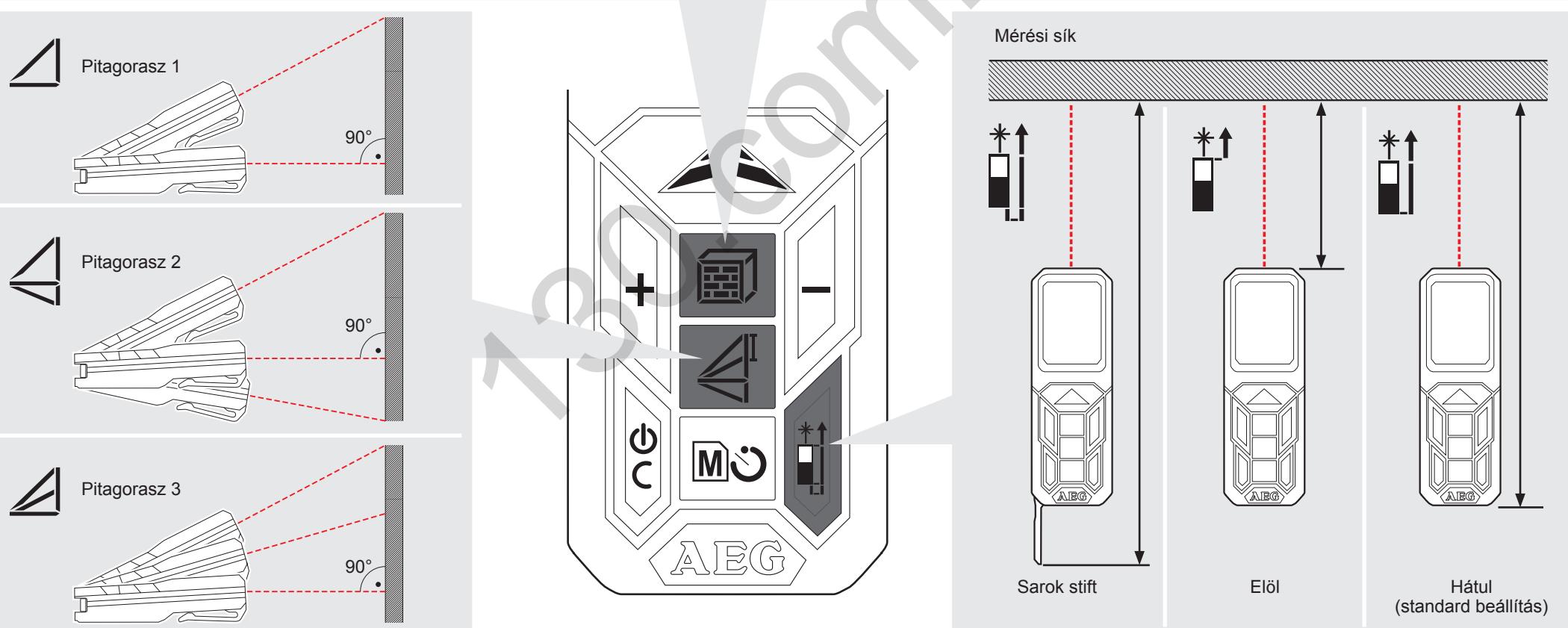
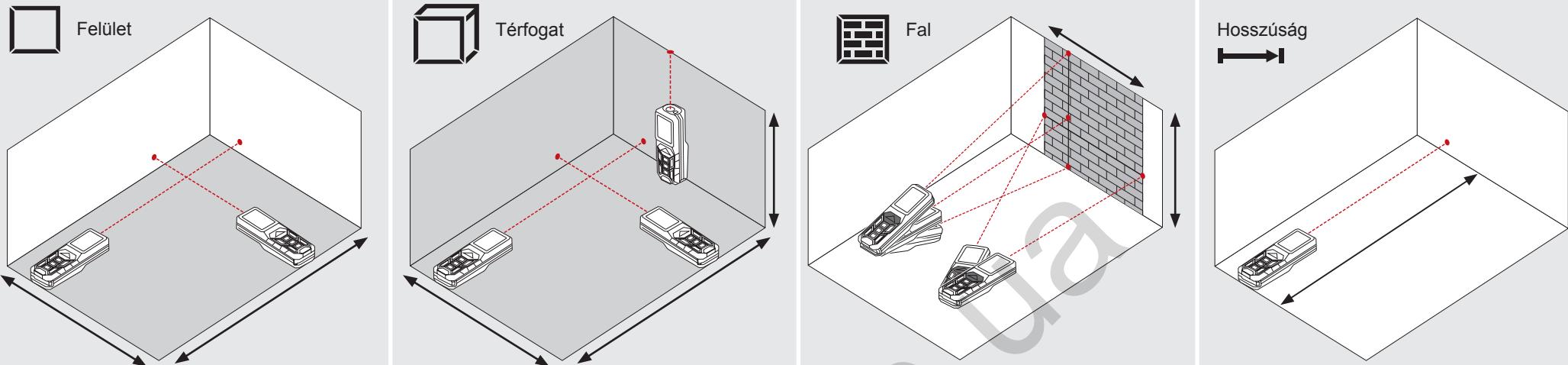
2



3



FUNKCIÓGOMB, PITAGORASZ, MÉRÉSI SÍK



EGYSZERŰ HOSSZMÉRÉS

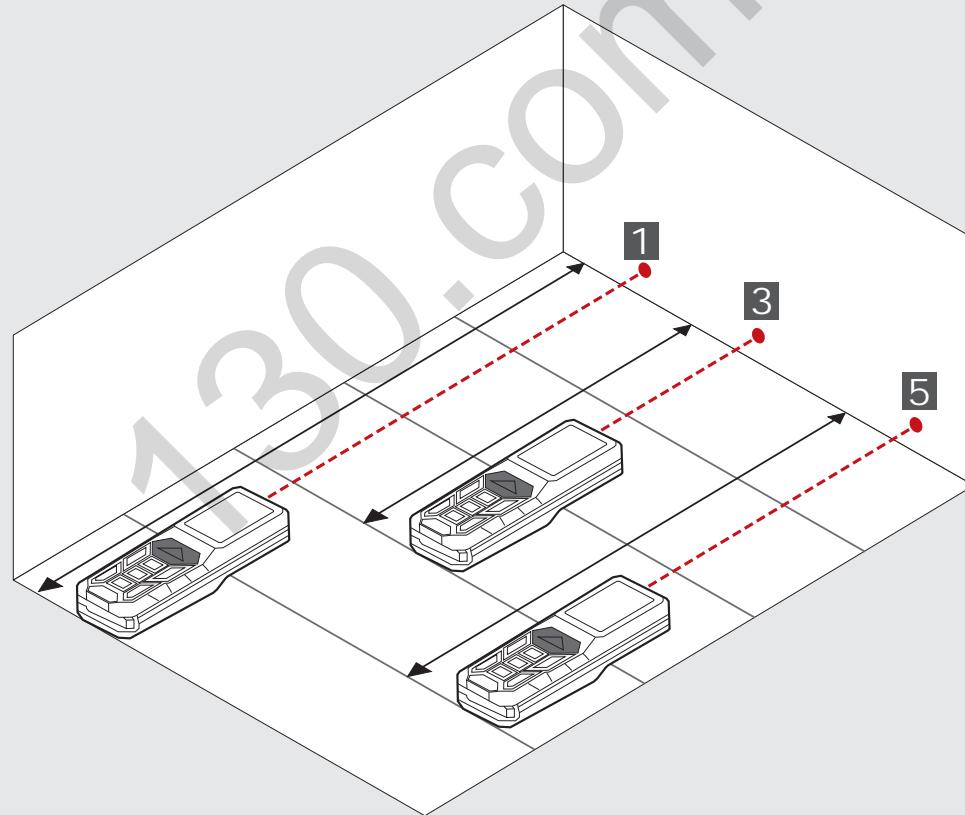
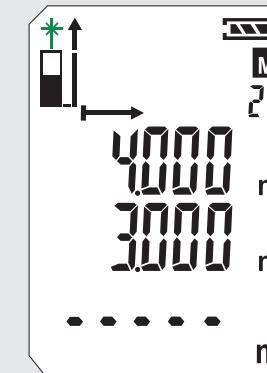
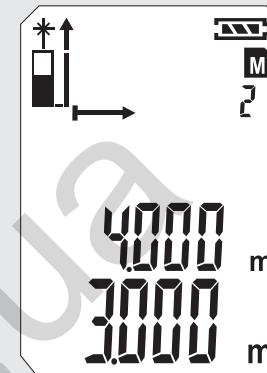
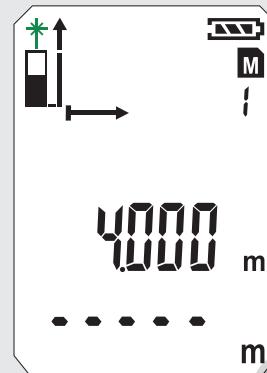
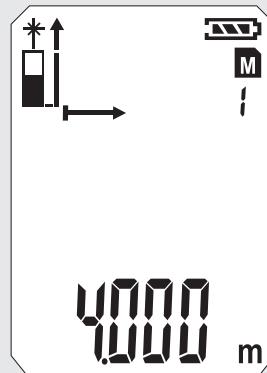
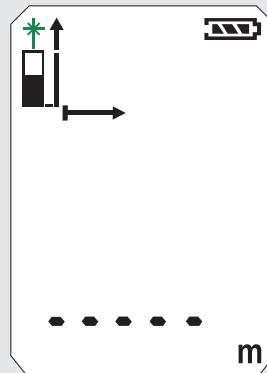
0

1

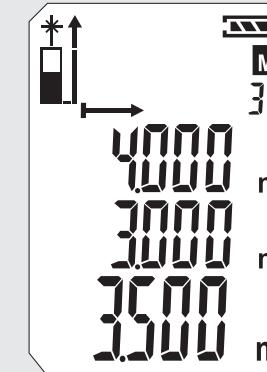
2

3

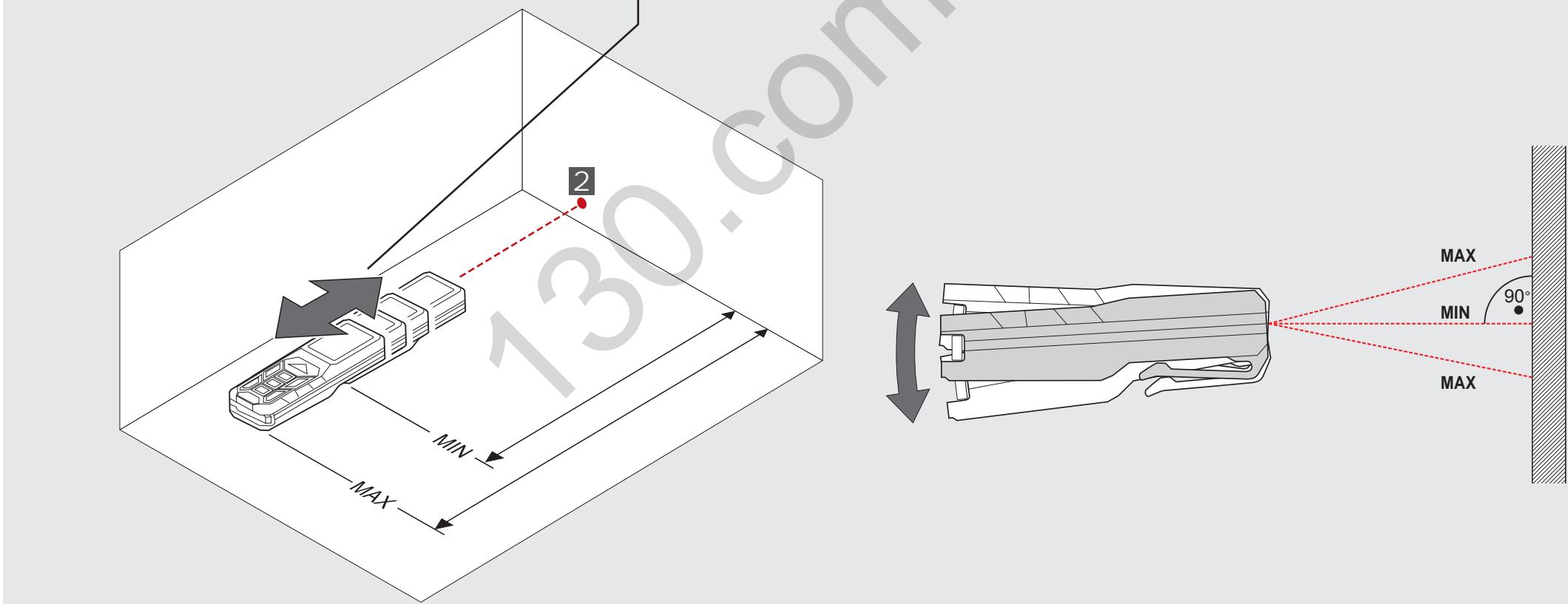
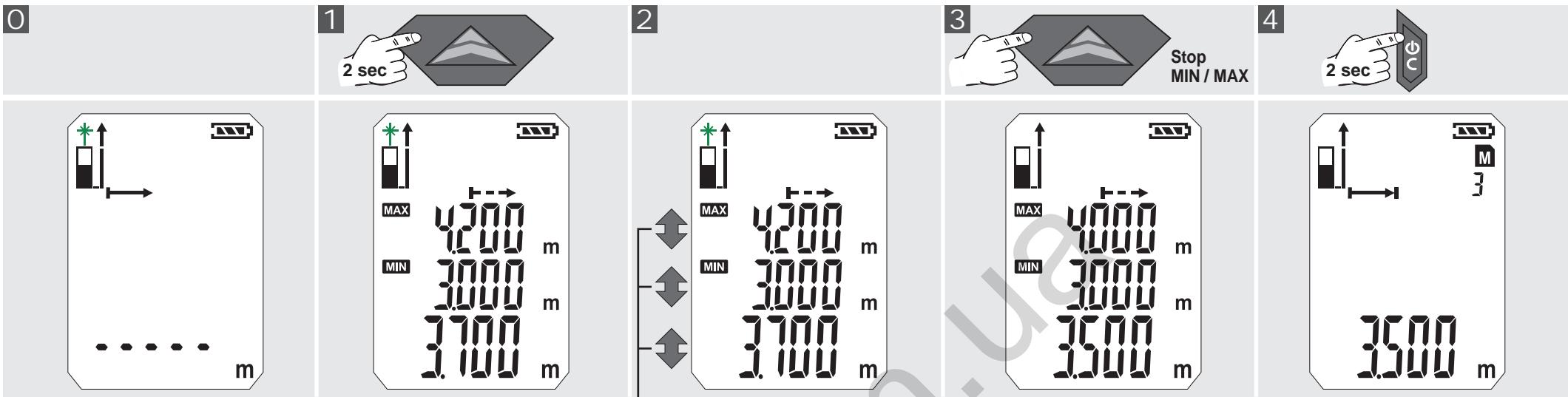
4



5

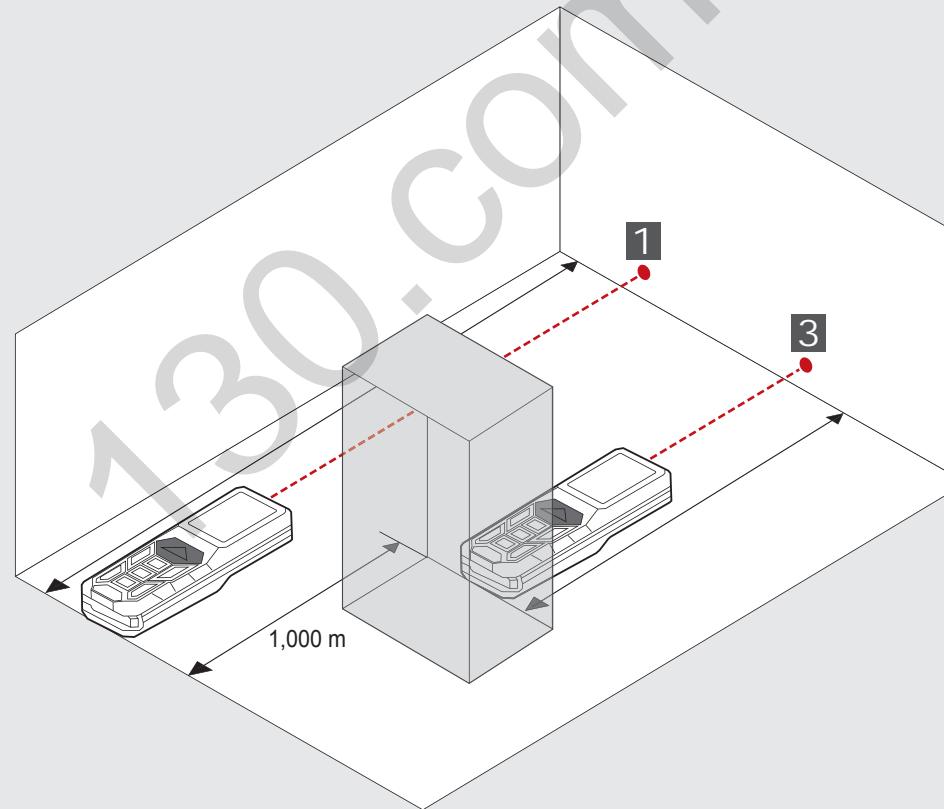
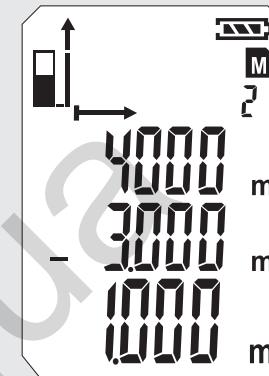
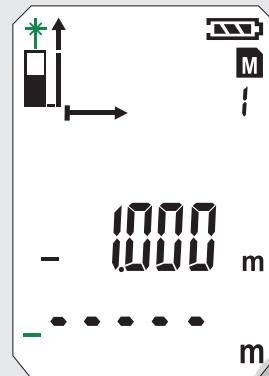
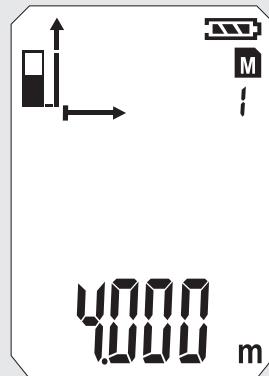
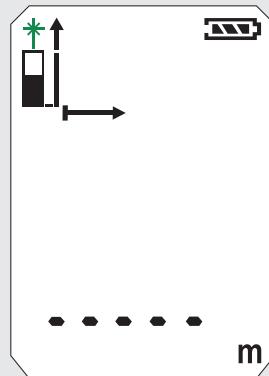
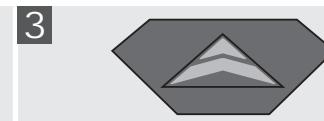
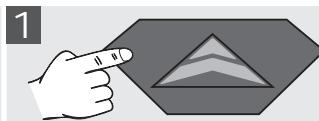


FOLYAMATOS MÉRÉS/ MINIMUM-MAXIMUM MÉRÉS

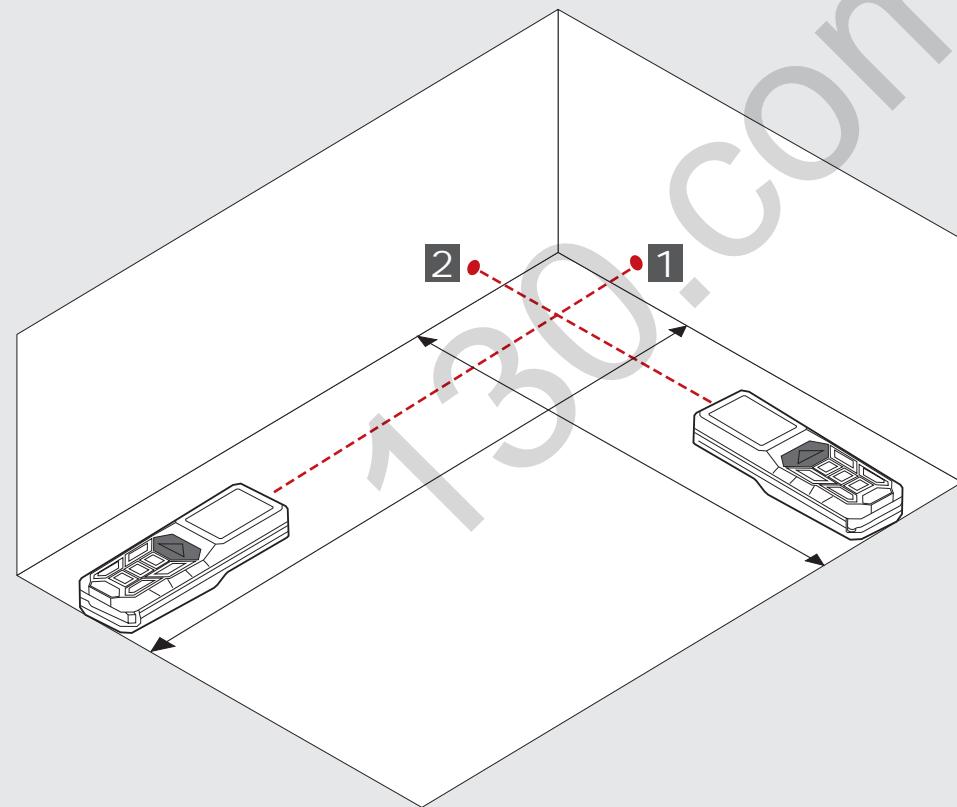
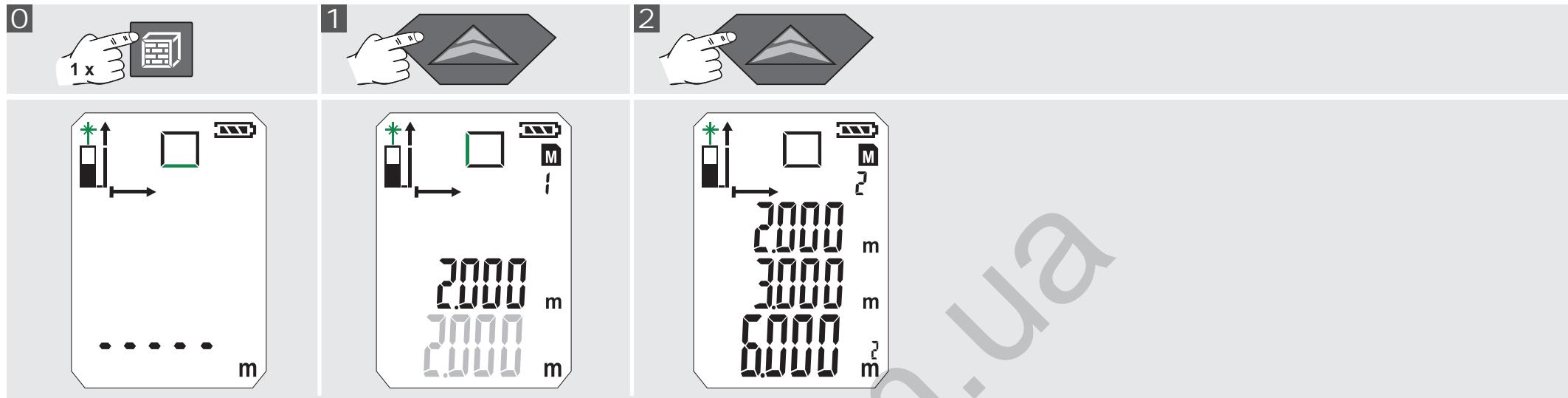


ÖSSZEADÓ / KIVONÓ MÉRÉS

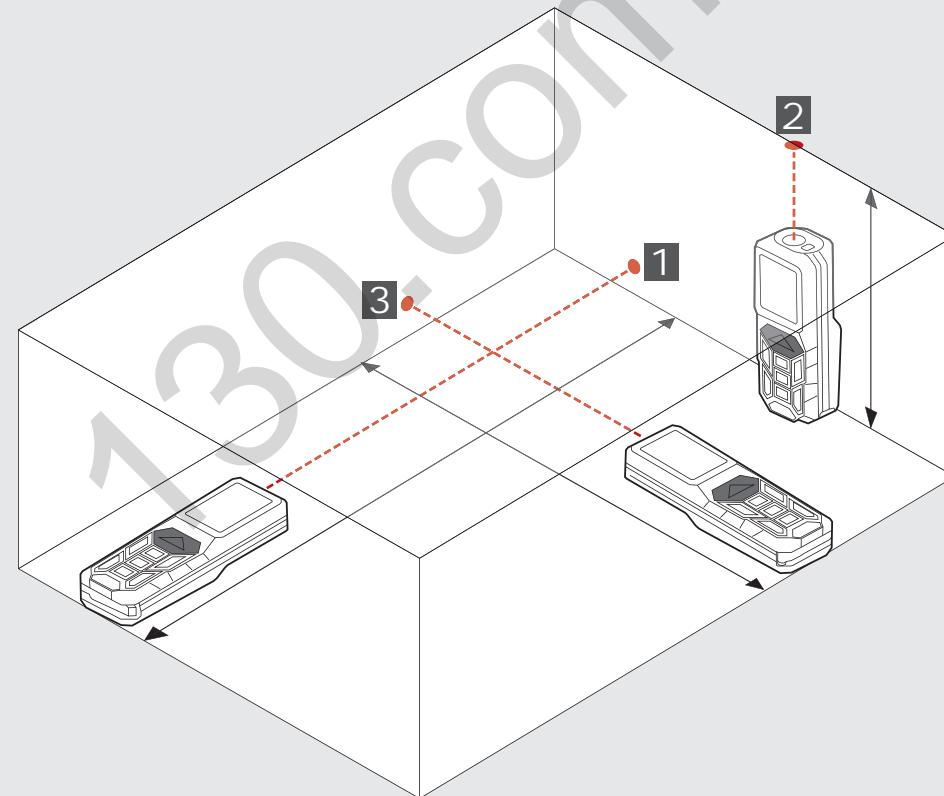
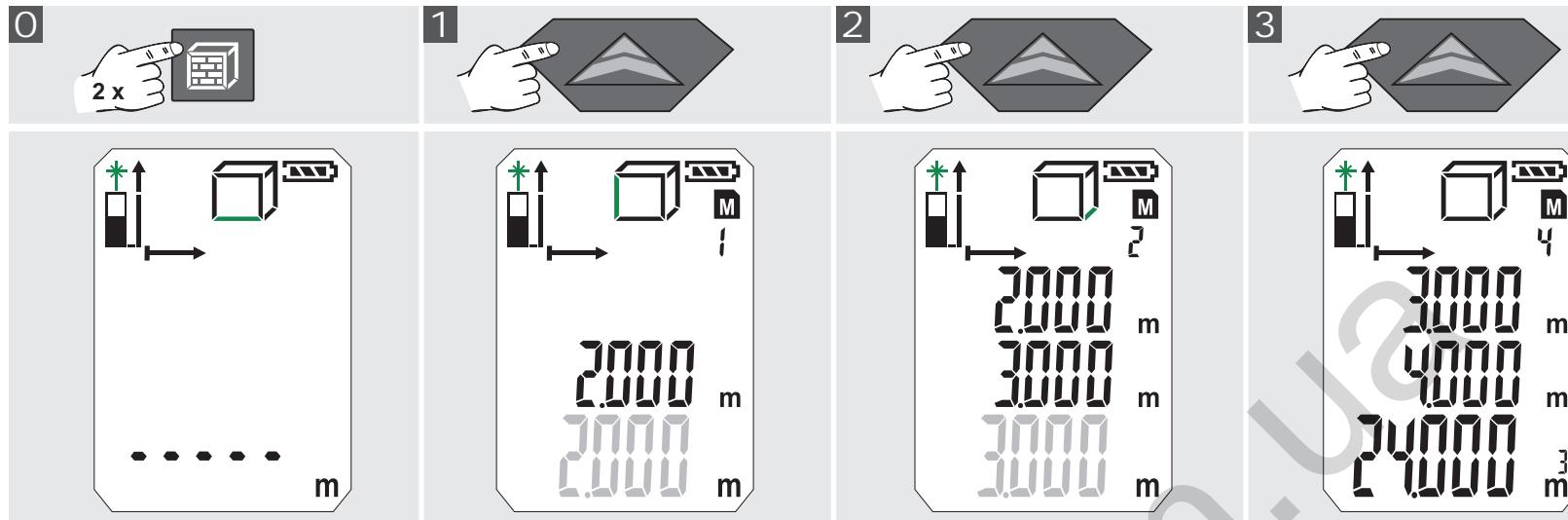
0



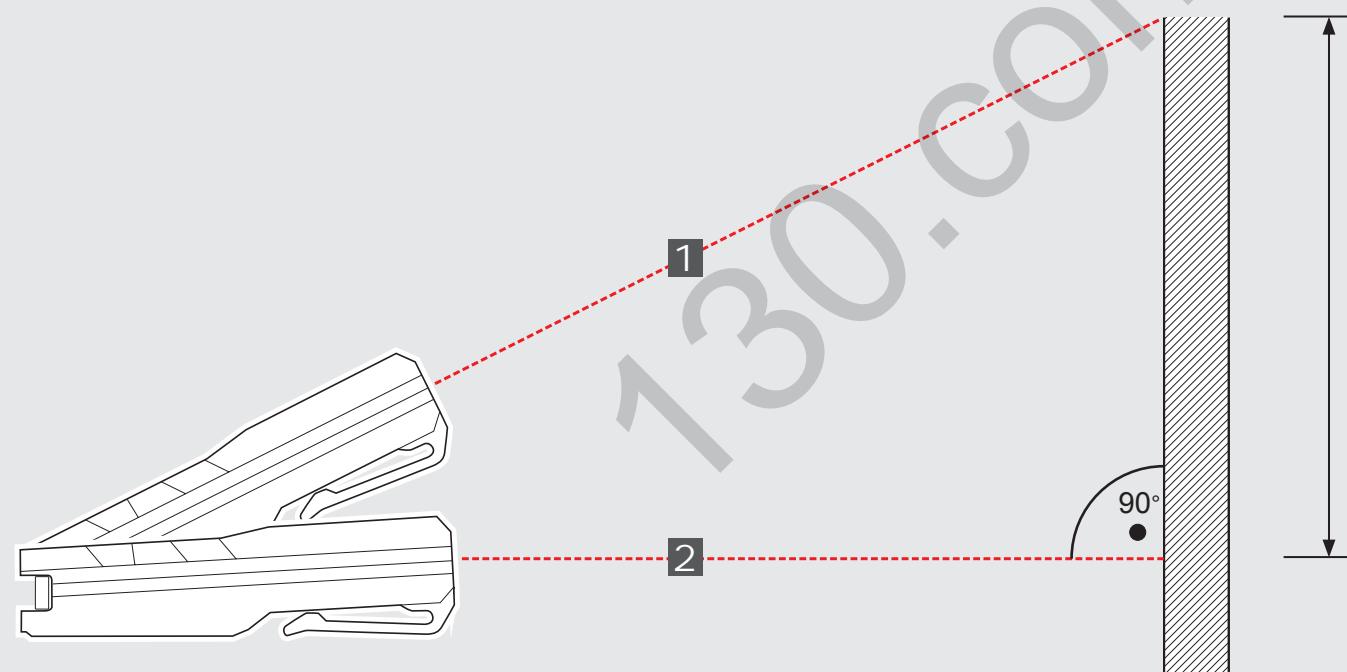
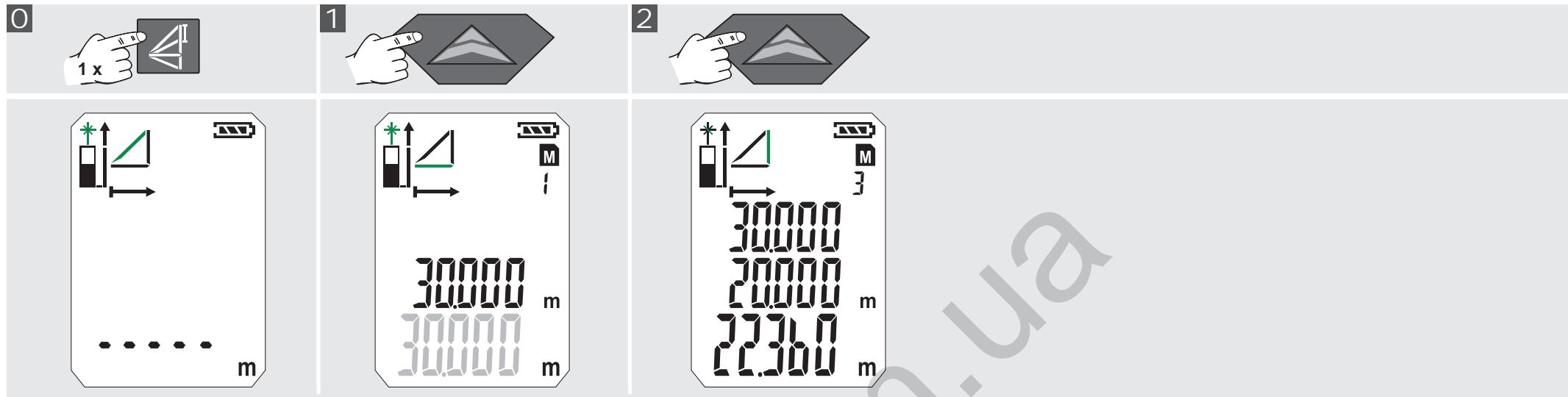
FELÜLETMÉRÉS



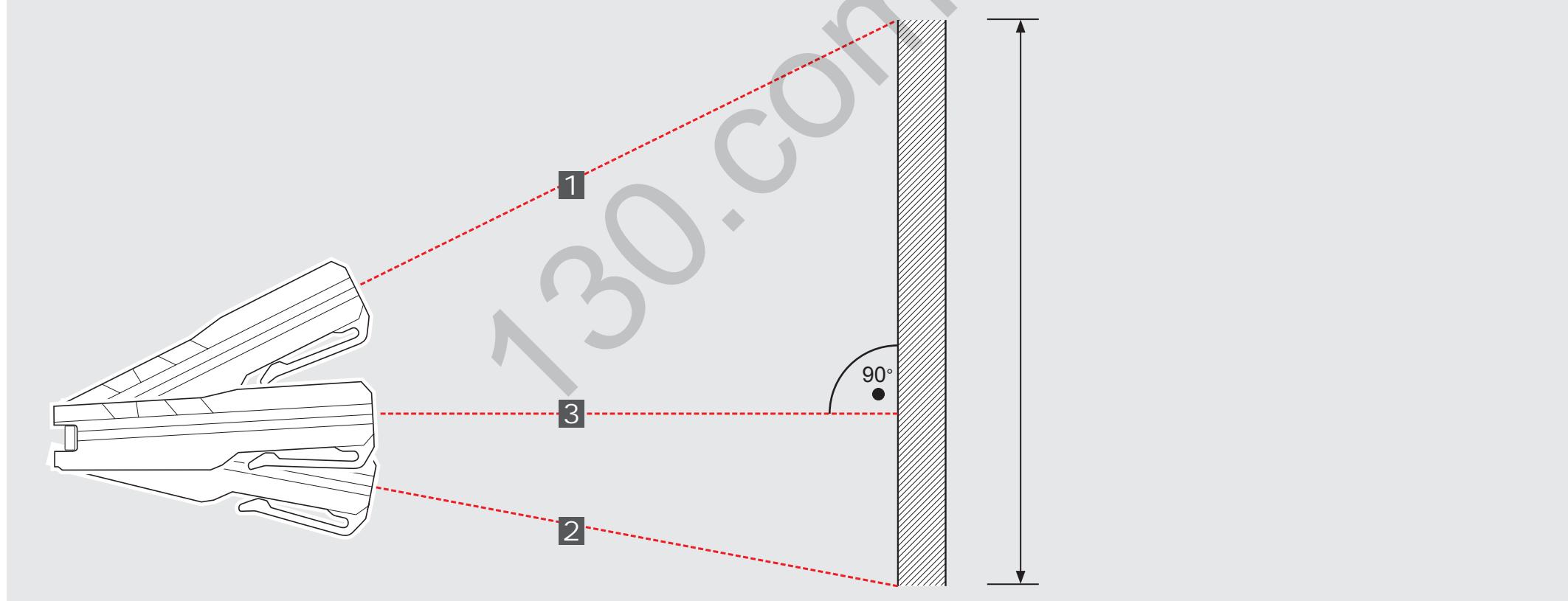
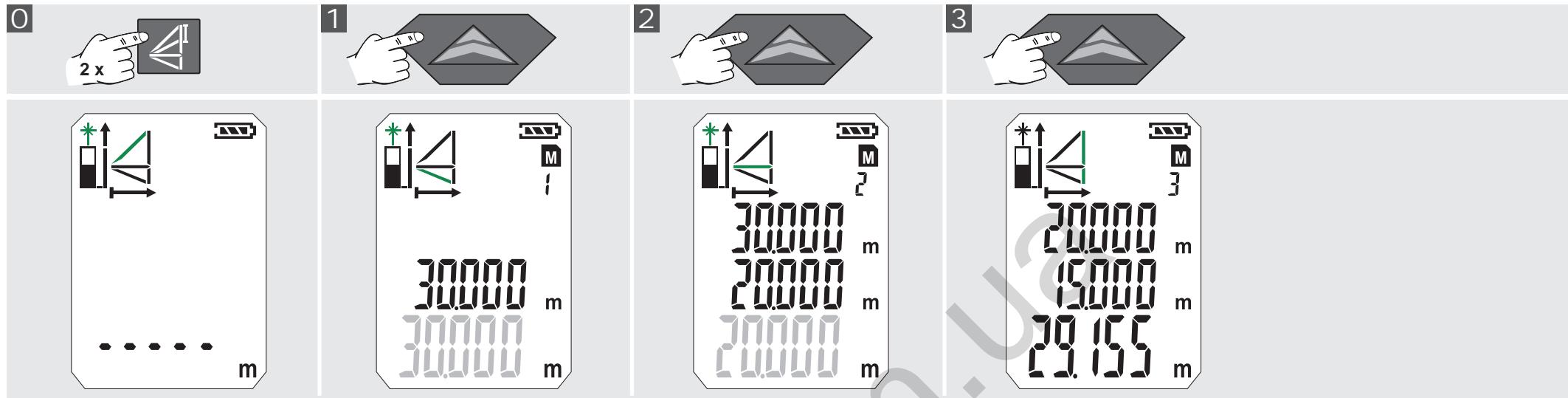
TÉRFOGATMÉRÉS



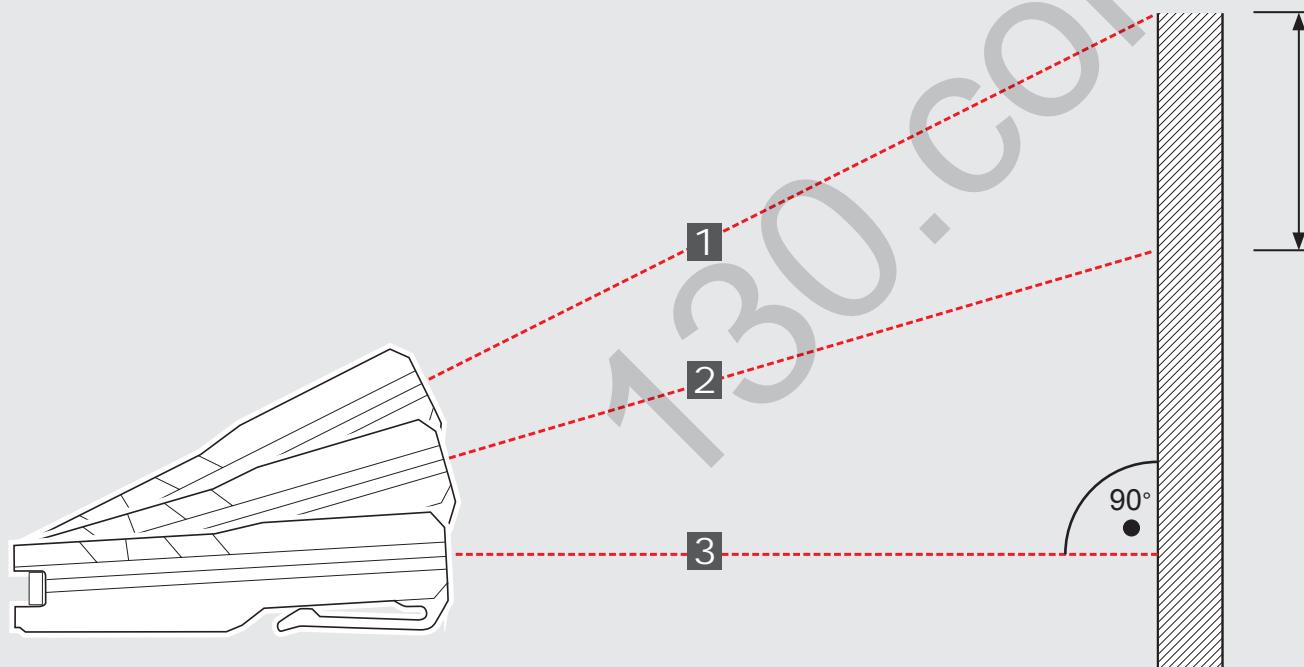
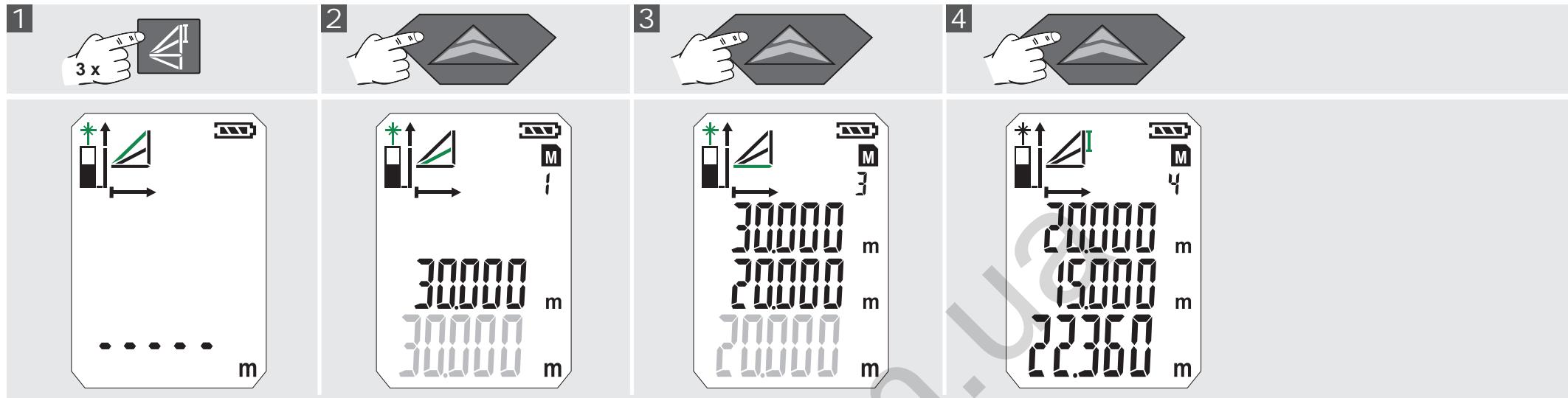
INDIREKT MÉRÉS (PITAGORASZ 1)



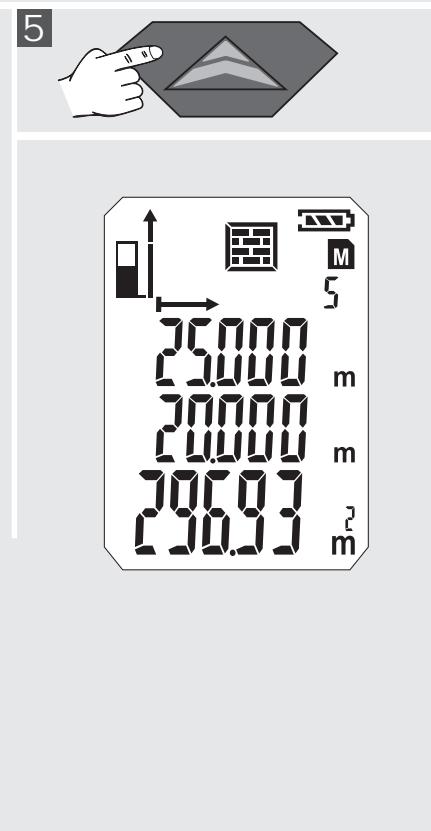
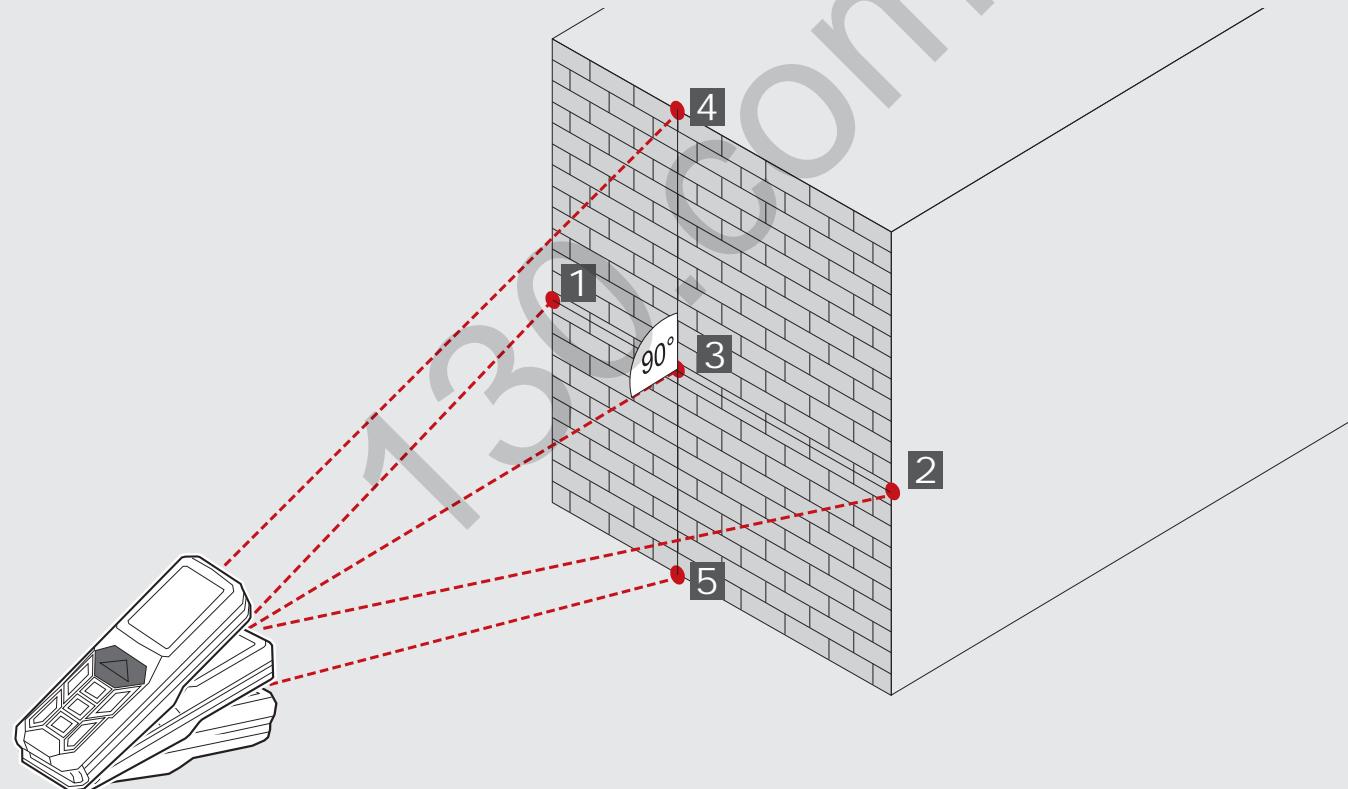
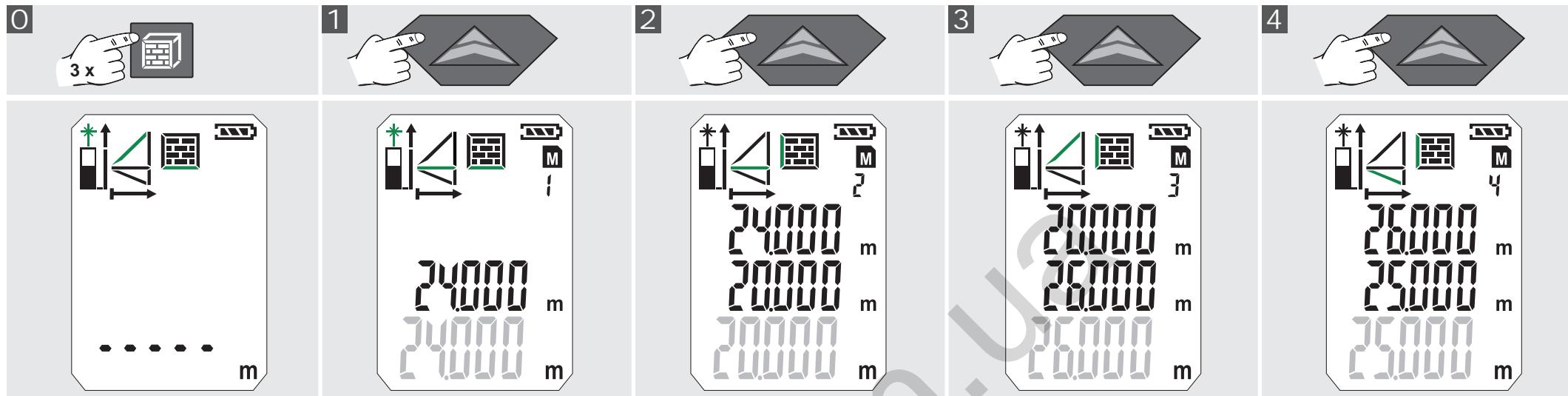
INDIREKT MÉRÉS (PITAGORASZ 2)



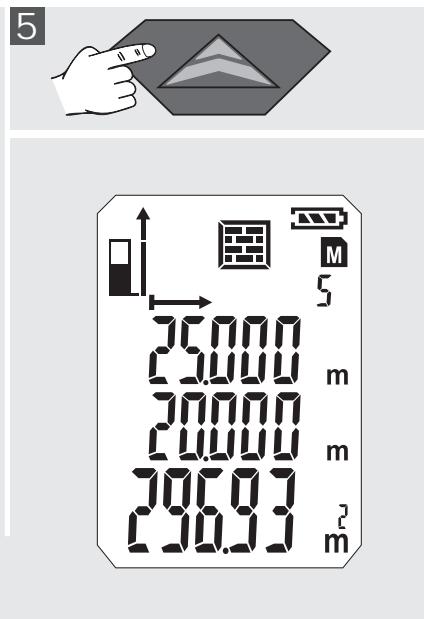
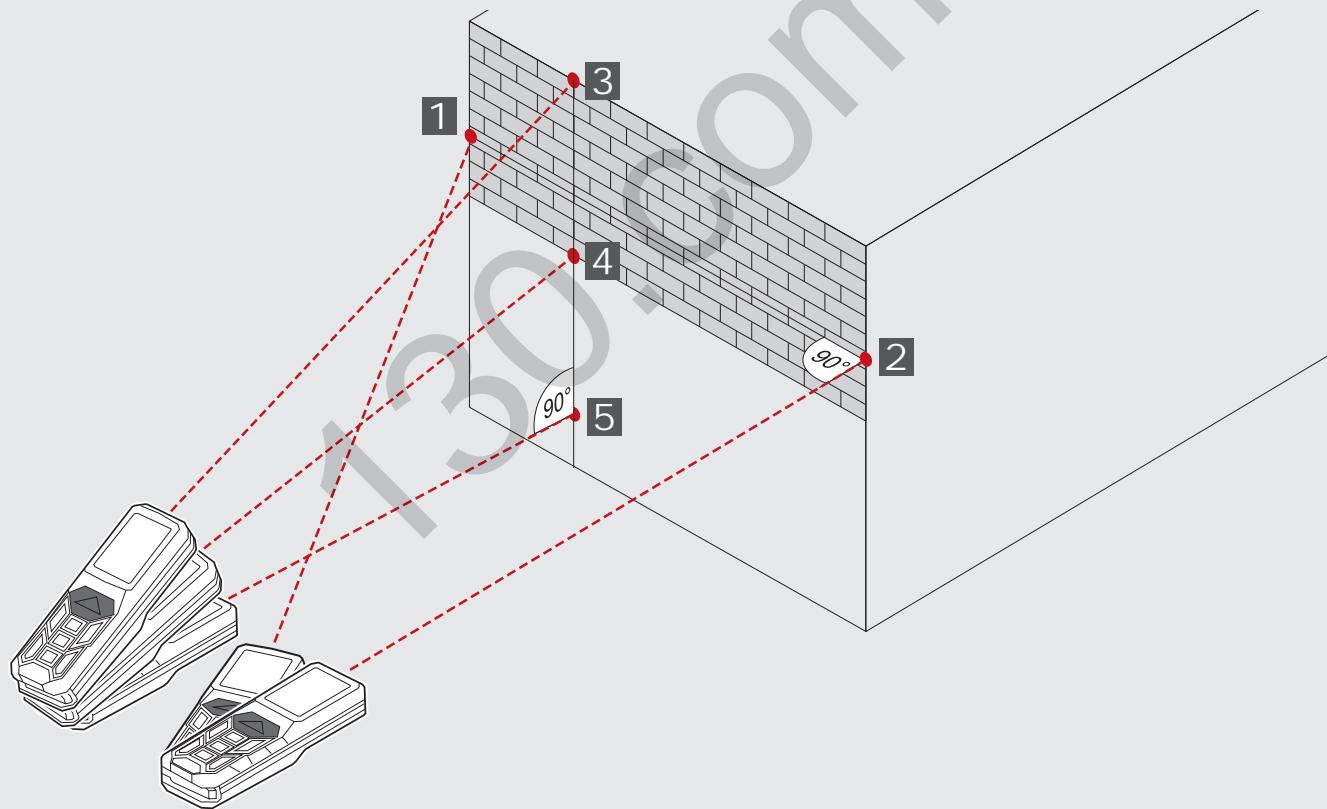
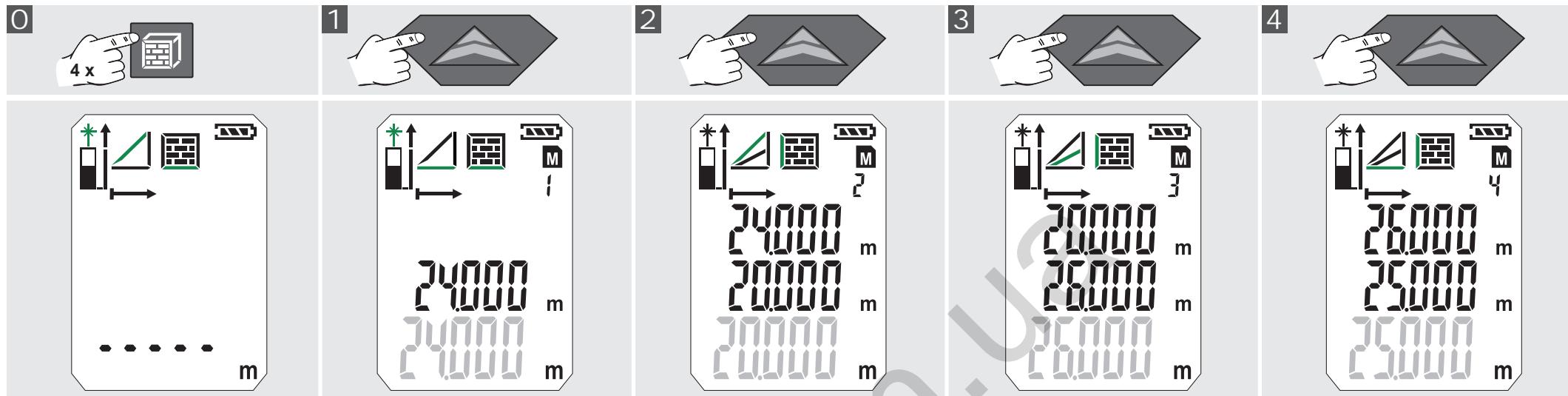
INDIREKT MÉRÉS (PITAGORASZ 3)



FALFELÜLET MÉRÉSE (1. FORGATÓKÖNYV)



FALFELÜLET MÉRÉSE (2. FORGATÓKÖNYV)



IDŐZÍTŐ

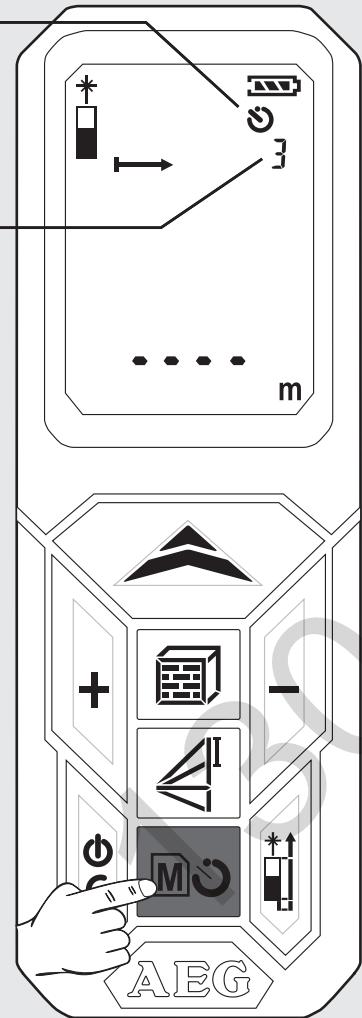
Az időzítővel a mérés késleltetve indítható, pl. egy adott szerkezeti elem/alkatrész mérősugárban történő pozicionálásához.

A gomb lenyomása

- Megjelenik a szimbólum
- A gomb lenyomásával az időzítő 3 és 15 mp közötti értékre állítható be.

A gomb lenyomása

- A másodpercek visszaszámlálódnak a mérésig.
- 0 esetén elkezdődik a mérés.



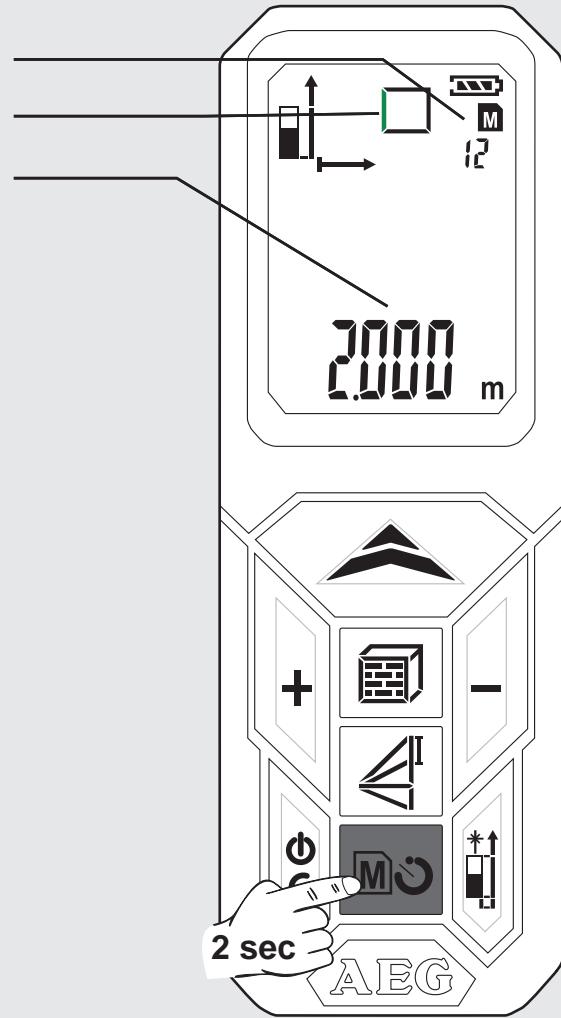
MEMÓRIA

A mért értékek automatikusan, folyamatosan tárolódnak el a memoriában.

Az eltárolt értékek a gombbal hívhatók le.

A gomb lenyomása 2 mp-ig

- Megjelenik a szimbólum és a memória helye.
- Megjelenik a hozzá tartozó mért mennyiség.
- Az eltárolt érték a fő sorban jelenik meg.
- Navigálás a +/- gombokkal

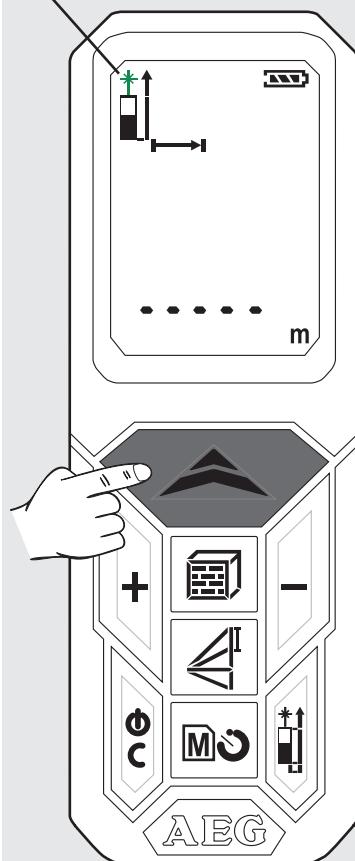


ALAPVETŐ MŰKÖDÉSMÓD FELÜLETMÉRÉS PÉLDÁJÁN (1)

1 Bekapcsolás

Nyomja meg a gombot.
Figyelem! A lézersugár be van kapcsolva!
 Ne irányítsa személyekre!

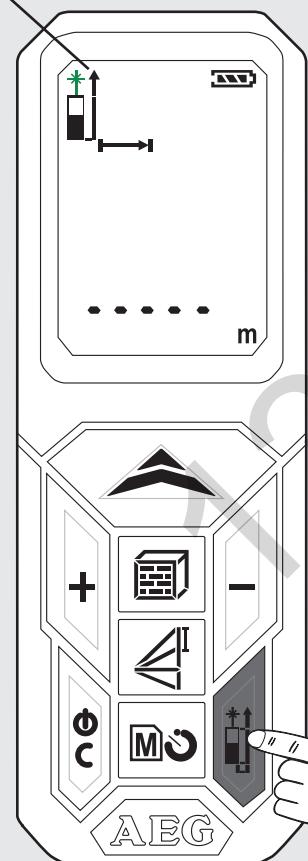
- Lézer szimbólum villog (villogó zöld színnel ábrázolva).



2 Mérési sík választása

Standard beállítás bekapcsolás után: hátul
 megnyomása 1x -> sarok stift
 megnyomása 2x -> elől
 megnyomása 3x -> hátul

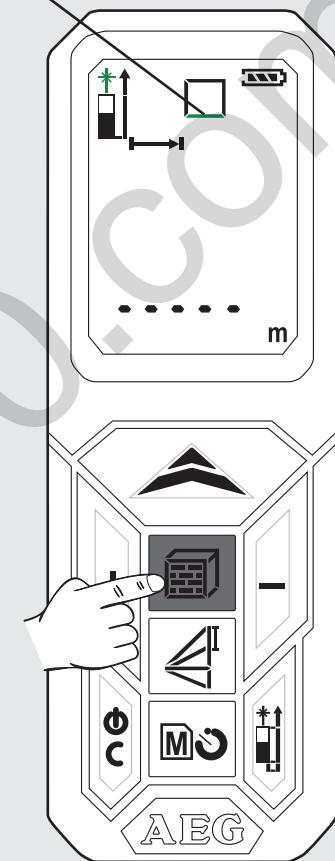
- Megjelenik a szimbólum



3 Funkció választása

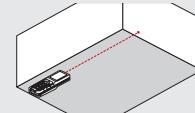
Bekapcsolás után a készülék minden hosszmérésen áll.
 megnyomása 1x - Felületmérés

- Megjelenik a szimbólum
 A mért mennyiség villog (villogó zöld színnel ábrázolva)



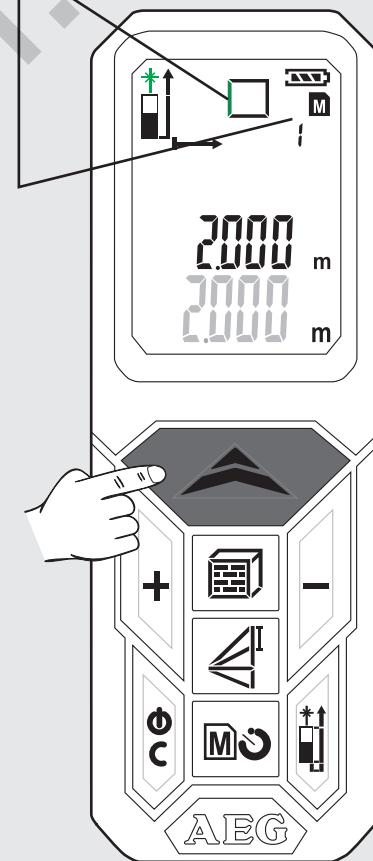
4 Hosszúság mérése

A készülék beállítása és a gomb lenyomása



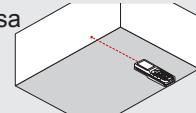
- A mért érték röviden megjelenik a fő sorban.
 - A mért érték 1 mp után a felette lévő sorba ugrik.

A mért érték a memoriában folyamatos számozással tárolódik el.
 Villog a második mért mennyiség.
 A készülék kész a második érték mérésére.



5 Szélesség mérése

A készülék beállítása és a gomb lenyomása

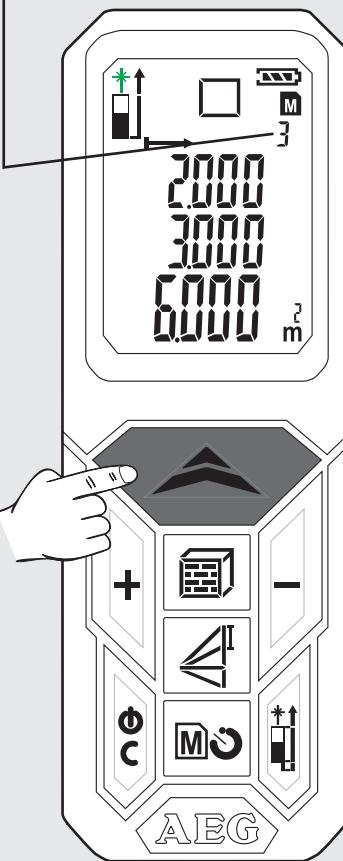


- A mért érték röviden megjelenik a fő sorban.

- A mért érték 1 mp után a felette lévő sorba ugrik.

A mért érték a memoriában folyamatos számozással tárolódik el.

- Az eredmény megjelenik a fő sorban, és a memoriában folyamatos számozással eltárolódik.



ALAPVETŐ MŰKÖDÉSMÓD FELÜLETMÉRÉS PÉLDÁJÁN (2)

6 Tárolt értékek lehívása

Nyomja le a  gombot 2 mp-ig.
+ vagy - gomb lenyomása

7 Kilépés a memóriából

A  gomb lenyomása

8 Kikapcsolás

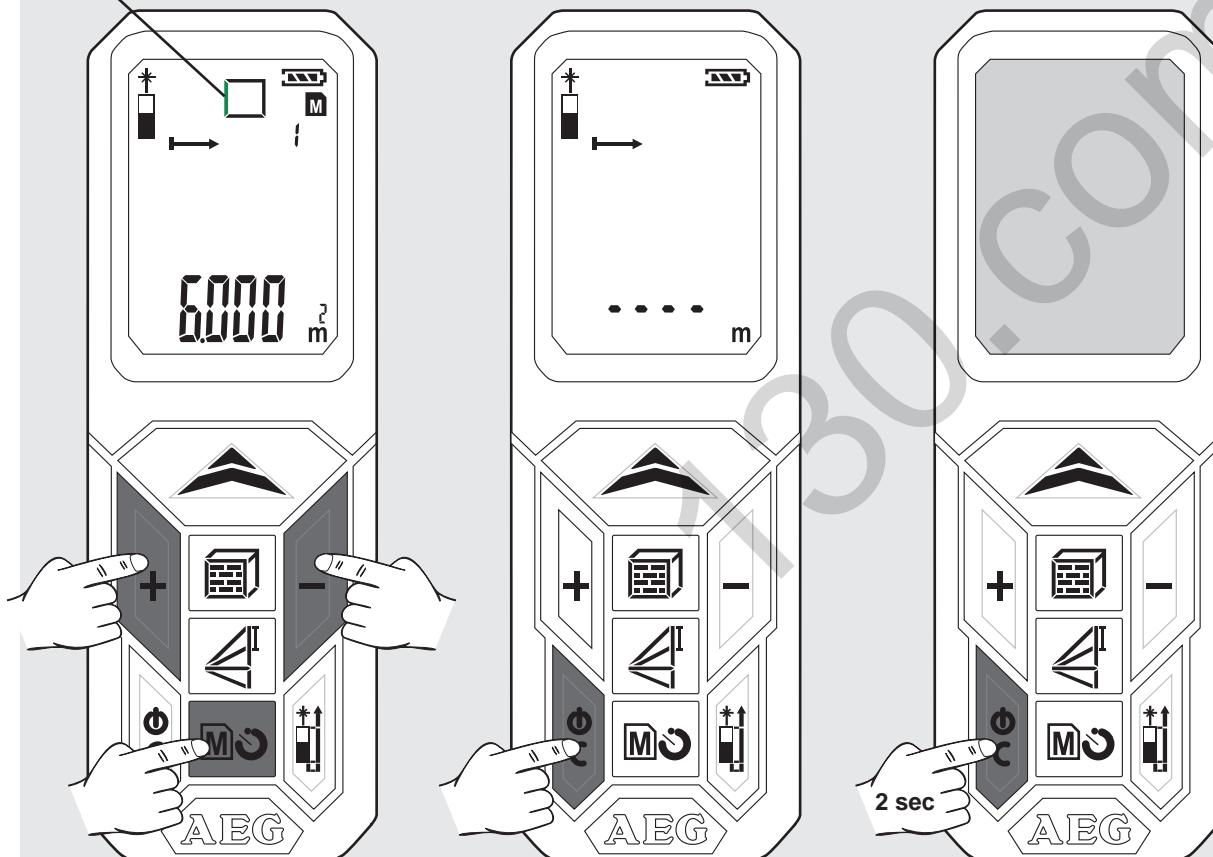
Nyomja le a  gombot 2 mp-ig
(előzőleg ki kell lépni a memóriából).

- Az eltárolt értékek a fő sorban jelennek meg.

Megjelenik a hozzá tartozó szimbólum, és a mért mennyiség villog (villogó zöld színnel ábrázolva).

- A készülék lekapcsol.

- Ha 3 másodpercig nem nyomnak le egyetlen gombot sem, akkor a készülék automatikusan lekapcsol.



VSEBINA

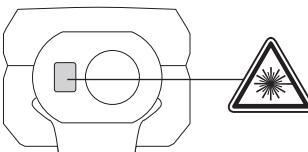
Pomembna varnostna navodila	1
Tehnični podatki	2
Uporaba v skladu z namembnostjo	2
Kodna tabela napak	2
Pregled	3
Zamenjava baterij	4
Kotni zatič	4
Držalo pasu	4
Funkcijska tipka, Pitagora, Merilna ploskev	5
Enostavna meritev dolžine	6
Kontinuirano merjenje / Meritev minimuma-maksimuma	7
Meritev z dodajanjem / Subtrاكcijo	8
Merjenje površin	9
Merjenje volumna	10
Posredna meritev (Pitagora 1)	11
Posredna meritev (Pithagora 2)	12
Posredna meritev (Pitagora 3)	13
Meritev zidne površine (Scenarij 1)	14
Meritev zidne površine (Scenarij 2)	15
Timer	16
Pomnilnik	16
Osnovno delovanje na primeru merjenja površine (1)	17
Osnovno delovanje na primeru merjenja površine (2)	18

POMEMBNA VARNOSTNA NAVODILA



Izdelka ne uporabljajte preden ne preučite varnostnih navodil in uporabniškega priročnika na priloženi zgoščenki.

Klasifikacija laserja



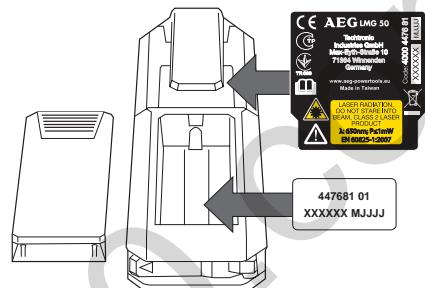
OPOZORILO:

To je laserski proizvod **razreda 2** v skladu s IEC 60825-1:2007.



Napis

Pred prvim zagonom prelepite angleško besedilo na podatkovni tablici z dobavljeno nalepkou v jeziku vaše države.



Opozorilo:

Izogibajte se neposrednemu stiku z očmi. Laserski žarek lahko z bliskom obsije oči in privede do kratkočasne zaslepitve.

Ne zrite v laserski žarek ali ga usmerjajte neposredno v druge osebe.

Pazite, da ne zaslepite drugih oseb.

Opozorilo:

Laserske naprave ne uporabljajte v bližini otrok ali otrokom dovoljevati uporabo le te.

Pozor! Odsevna površina lahko laserski žarek zrcali nazaj k upravljalcu ali v druge osebe.

Ohranite varno razdaljo med okončinami in premičnimi deli.

Izvajajte občasna testna merjenja. Še posebno med in po pomembni meritvi.

Bodite pozorni na nepravilne merilne razdalje, v primeru, da naprava ne deluje pravilno, da je padla na tla oziroma, da je bila nepravilno uporabljenata ali spremenjena.

Pozor! Seznanite se z upravljalnimi elementi in s pravilno uporabo vrtnegor orodja.

Laserska merilna naprava ima omejeno območje uporabe. (glej razdelek "Tehnični podatki"). Preizkus meritev izven maksimalnega in minimalnega območja, povzročajo nenatančnosti. Uporaba v vremenskih pogojih, kot je v prevročem, prehladnem, pri zelo močni sončni svetlobi, v dežu, snegu, megli ali drugih pogojih z omejeno vidljivostjo, lahko privedejo do nenatančnih meritev.

Kadar lasersko merilno napravo prenesemo iz toplega okolja v hladno (ali obratno), počakajte, dokler se naprava ni prilagodila novi temperaturi okolice.

Lasersko merilno napravo zmeraj shranujte v notranjosti prostorov, napravo zaščitite pred tresljaji, vibracijami ali zunanjimi temperaturami.

Lasersko merilno napravo zaščitite pred prahom, mokrotino in visoko zračno vlažnostjo. Le ti lahko uničijo notrenje komponente ali vplivajo na natančnost.

Ne uporabljajte agresivnih čistilnih sredstev ali redčil. Čistite zgolj s čisto, mehko krpo.

Izogibajte se močnih udarcev in padcev laserske merilne naprave. V kolikor je padla na tla ali je bila izpostavljena drugim mehanskim obremenitvam, prevrite natančnost naprave.

Potrebnal popravila sme na laserski napravi izvajati zgolj strokovno osebje.

Izdelka ne uporabljajte v eksplozivnih nevarnih področjih ali v agresivnih okoljih.

Baterijske vložke polnite s polnilniki, ki jih priporoča proizvajalec.



Ploskih baterij ne smete zavreči skupaj z gospodinjskimi odpadki. Skrbite za okolje in izdelek odnesite na zbiralne točke, ki so na voljo v skladu z državnimi ali lokalnimi uredbami. Izdelka ne smete zavreči skupaj z gospodinjskimi odpadki. Izdelek primerno zavrzite, v skladu z veljavnimi državnimi uredbami vaše države. Upoštevajte nacionalne in državne predpise posamezne države. Za informacije glede odstranjevanja se obrnite na krajevni urad ali vašega trgovca.



TEHNIČNI PODATKI

Zaščitni razred	IP54 (zaščita pred prahom in pršenjem vode)
Optika	14 mm
Fokus	35 mm
Merilno območje maks.	50 metrov (toleranca: 55m)
Merilno območje min.	0,05 metrov
Absolutna natančnost @ < 10m	± 1,5 mm (maks)
Natančnost ponovitve @ < 10m	± 1,5 mm (tipično maks. 2σ)
Natančnost ponovitve @ > 10m	porast ± 0,25 mm / metrov (tipično maks. 2σ)
Čas meritve	0,5 s
Tip displeja	LCD (22,7 mm x 31 mm)
Napajanje	AAA 2x (alkalne baterije)
Obratovalna doba	10000 (posamična meritev)
Izhodna moč laserja	0,6 mW ~ 0,95 mW (razred 2, 650nm)
Velikost laserske točke	25 x 30 mm @ 16 m (maks)
Navpični kot laserskega žarka	+1 stopinja
Vodoravni kot laserskega žarka	±1 stopinja
Avtomatski izklop naprave	180 sekund
Avtomatski izklop laserja	30 sekund
Območje delovne temeprature	-10°C do +50°C
Območje temperature shranjevanja	-25°C do +70°C
Teža brez baterij	80 g

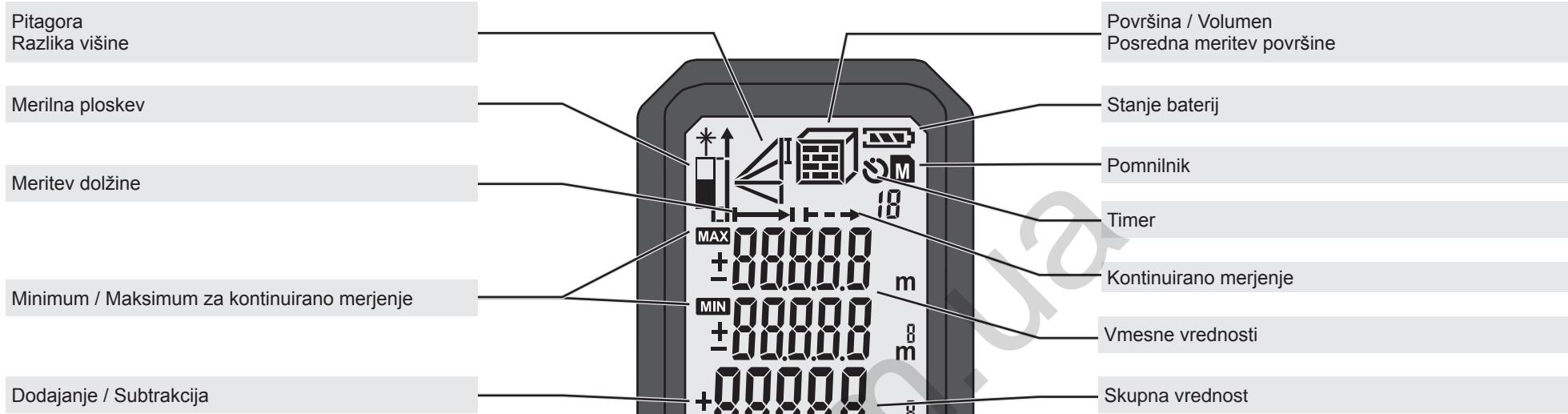
KODNA TABELA NAPAK

Code	Opis	Rešitev
Err01	Izven območja meritve	Meritev izvedite v predvidenem območju.
Err02	Odsevni signal je prešibek	Izberite boljšo površino.
Err03	Izven območja prikaza (maks. Wert: 99.999) npr. izid površine ali volumna je izven območja prikaza	Preverite, ali so vrednosti in koraki pravilni.
Err04	Napaka v Pitagora izračunu	Preverite, ali so vrednosti in koraki pravilni.
Err05	Oslabljena baterija	Vstavite nove baterije.
Err06	Izven temperature delovnega območja	Meritev izvedite v navedenem delovnem območju temperature.
Err07	Prevelika svetloba okolice	Ciljno obmčje zatemniti.

UPORABA V SKLADU Z NAMENBNOSTJO

Laserska merilna naprava je namenjena merjenju razdalj in naklonov.

Ta naprava se sme uporabiti samo v skladu z namembnostjo uporabiti samo za navede namene.



VKLJOP / MERJENJE

- Vklop
- Merjenje
- Kontinuirano merjenje (pritisnite 2 sekundi)
Min. / Maks. funkcija

DODAJANJE

- Dodaj vrednost
- Navigiranje po pomnilniku

POVRŠINA / VOLUMEN

- Površina (pritisnite 1x)
- Volumen (pritisnite 2x)
- Posredna meritev površine (pritisnite 3x / 4x)

VKLAPLJANJE

- Vklop
- Izklop (pritisnite 2 sekundi)
- Prestavite nazaj

SUBTRAKCIJA

- Subtrahiranje vrednosti
- Navigacija po pomnilniku

PITAGORA

- Pitagora 1 (pritisnite 1x)
- Pitagora 2 (pritisnite 2x)
- Pitagora 3 (pritisnite 3x)

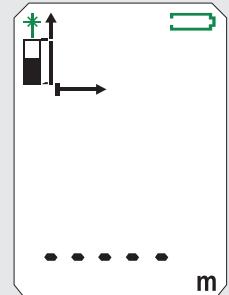
MENJAVA MERILNE PLOSKVE

- Spredaj
- Zadaj
- Kotni zatič

POMNILNIK

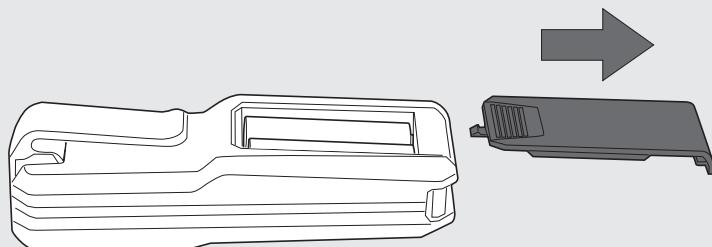
- Timer 3-15 sek (pritisnite 1x)
- Pomnilnik 1-20 (pritisnite 1x 2 sekundi)
- S tipkama +/- navigirajte po pomnilniku

ZAMENJAVA BATERIJ

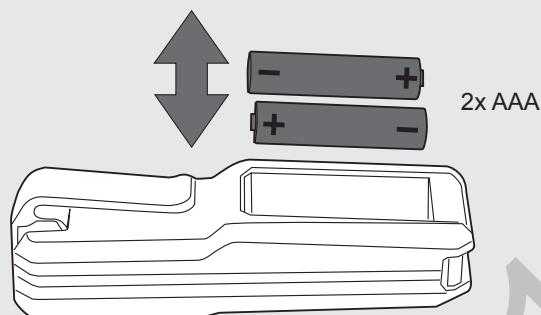


Kadar sibmol
utripa, zamenjajte
baterijo.

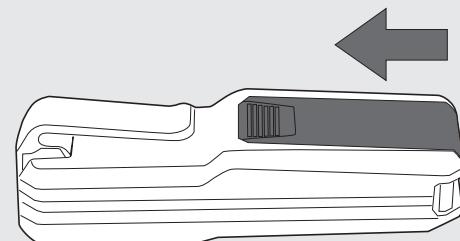
1



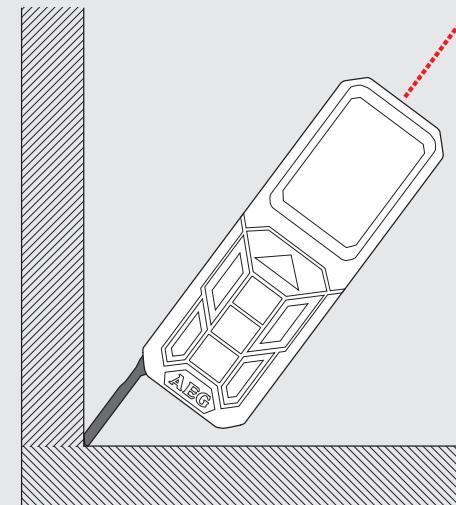
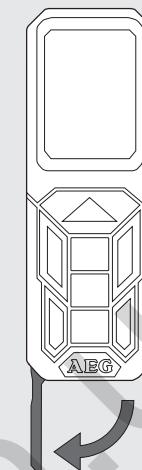
2



3

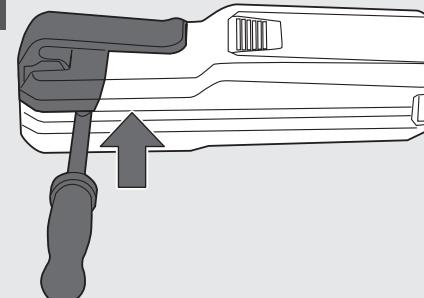


KOTNI ZATIČ

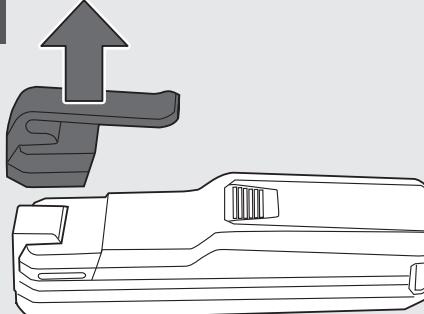


DRŽALO PASU

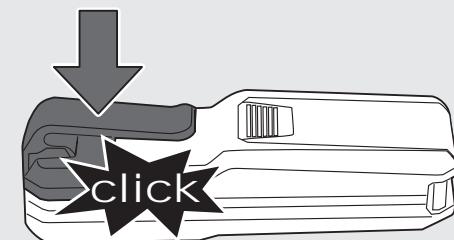
1



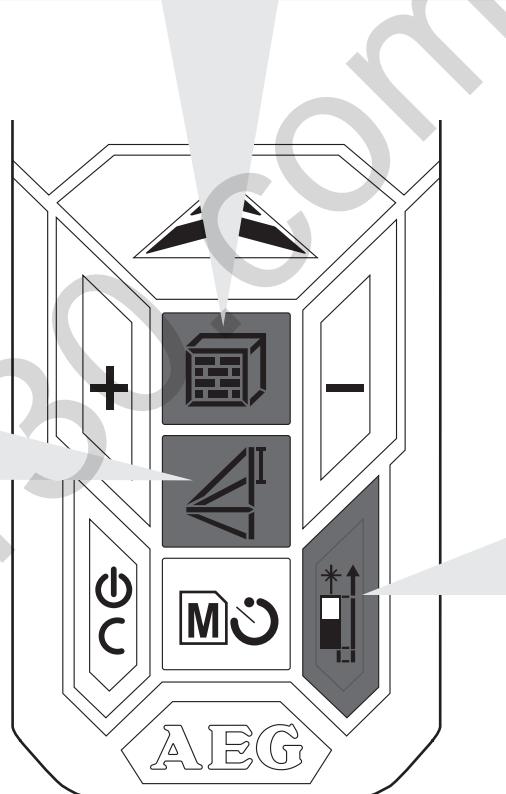
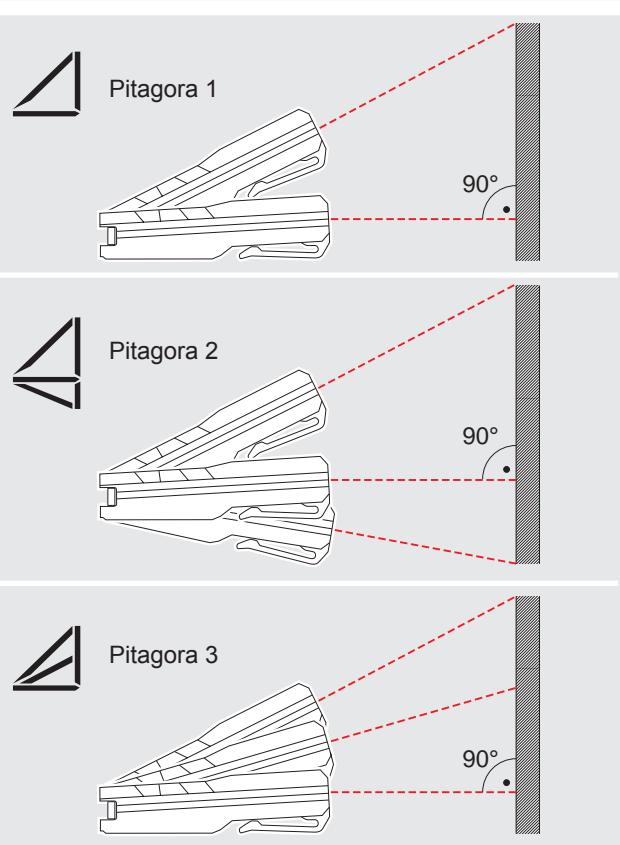
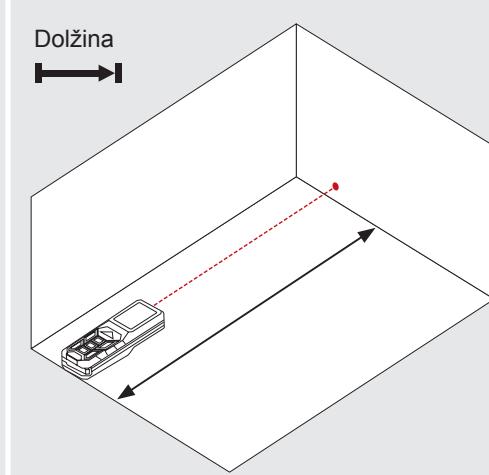
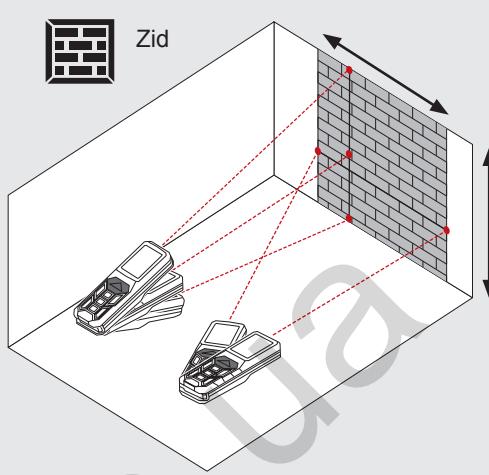
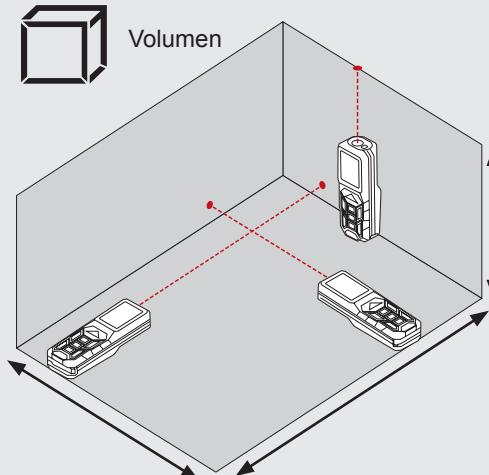
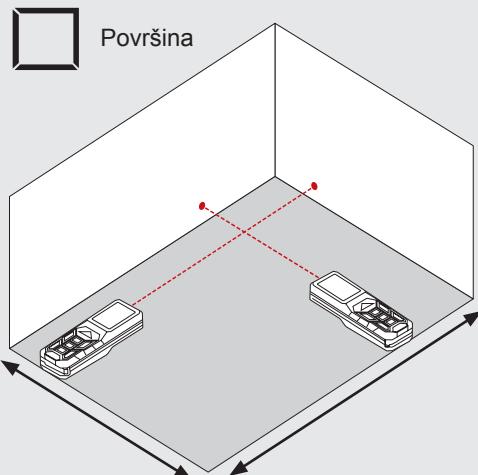
2



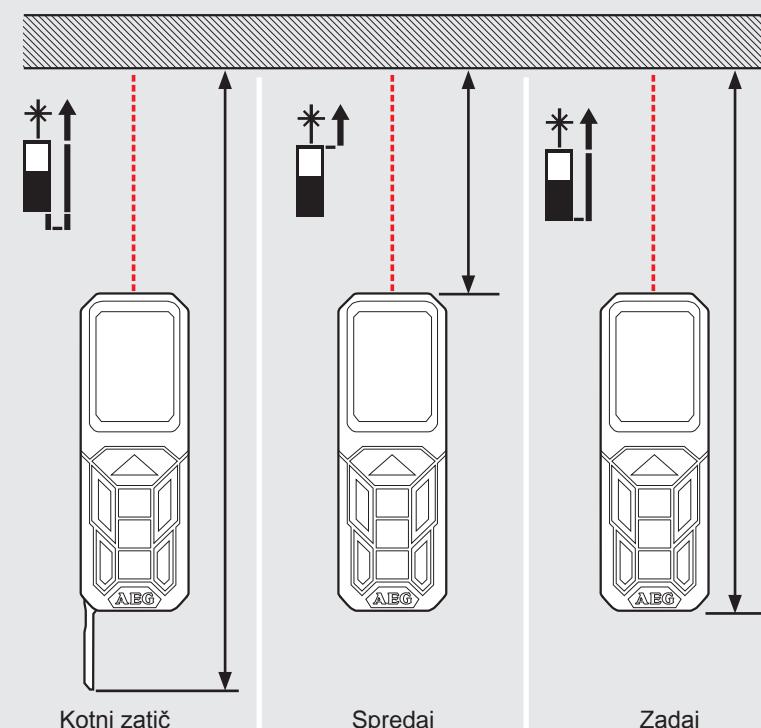
3



FUNKCIJSKA TIPKA, PITAGORA, MERILNA PLOSKEV

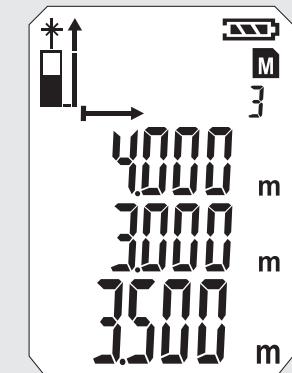
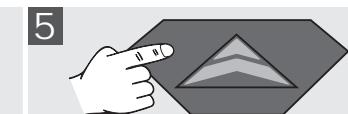
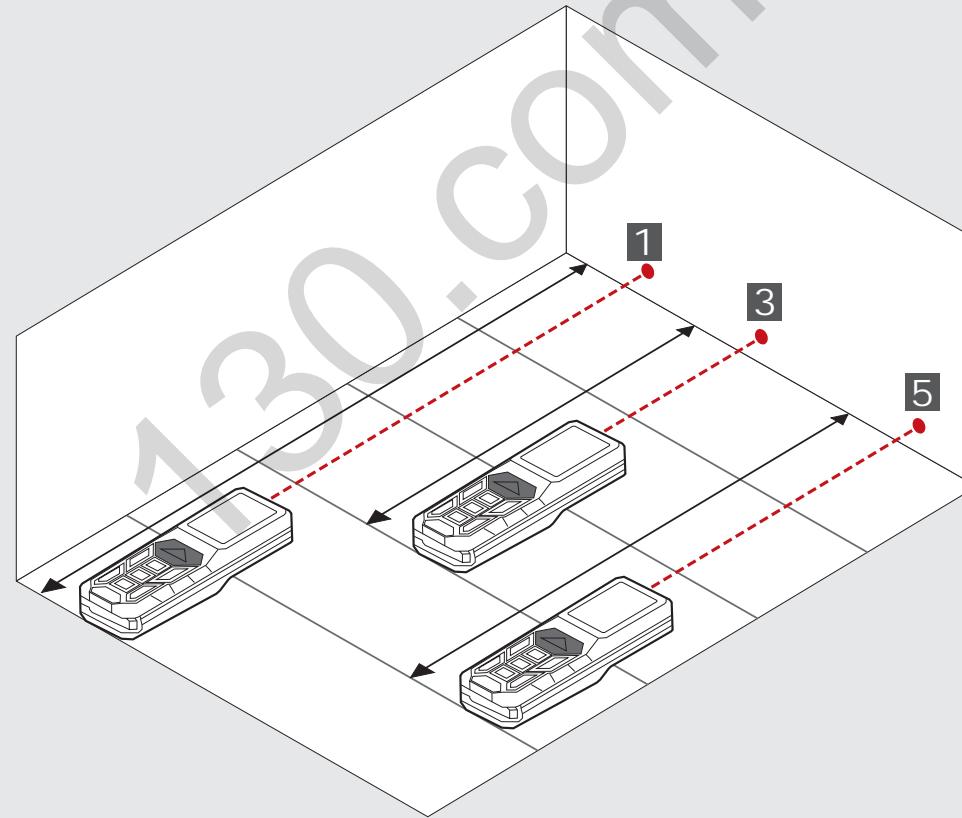
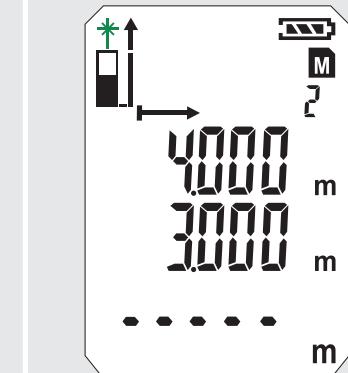
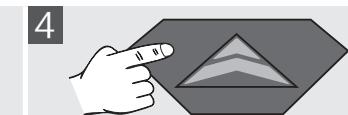
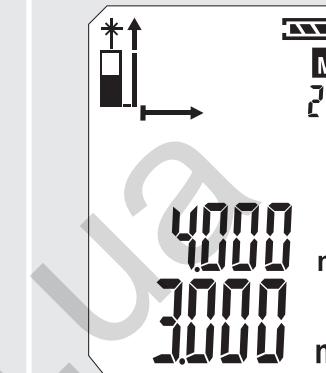
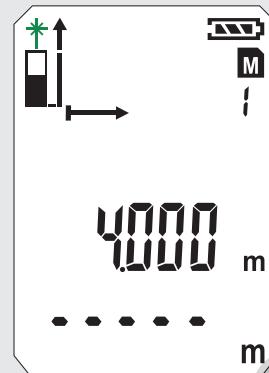
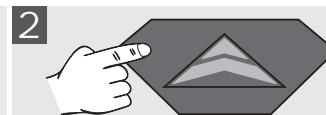
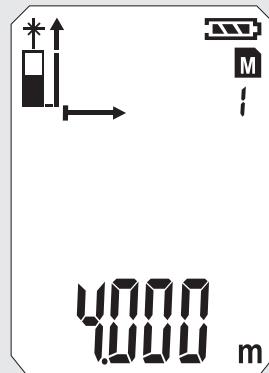
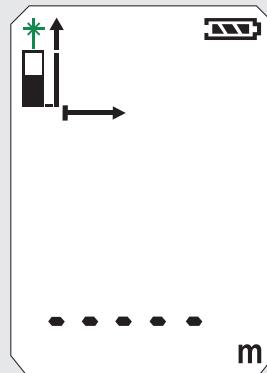


Merilna ploskev



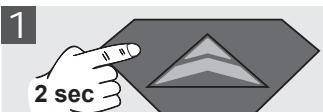
ENOSTAVNA MERITEV DOLŽINE

0

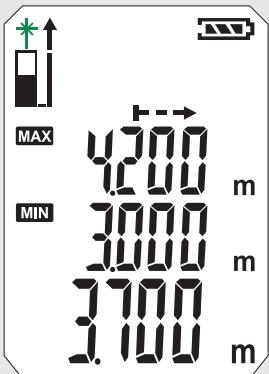
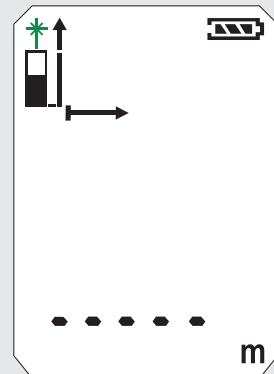


KONTINUIRANO MERJENJE / MERITEV MINIMUMA-MAKSIMUMA

0



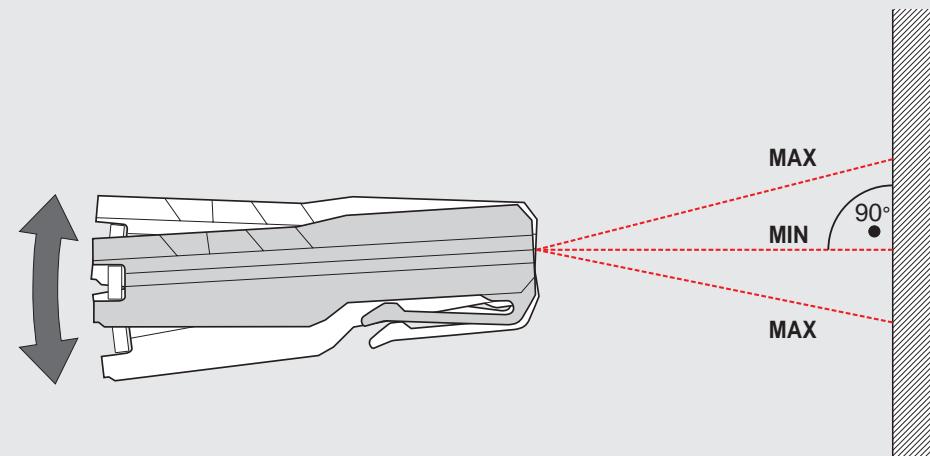
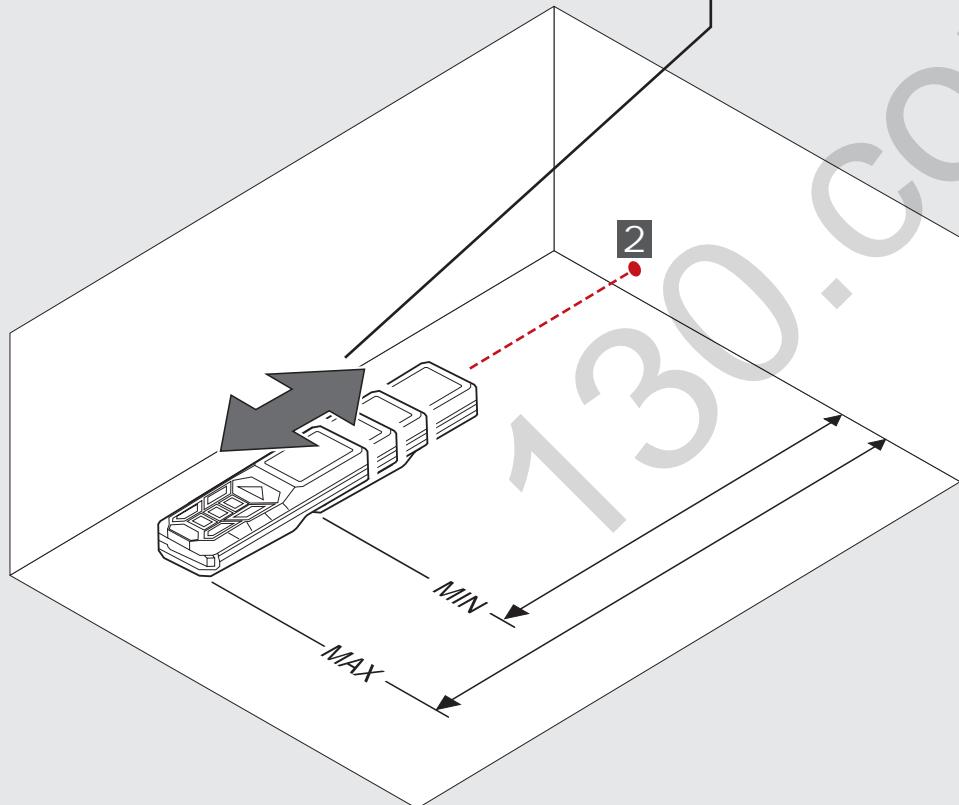
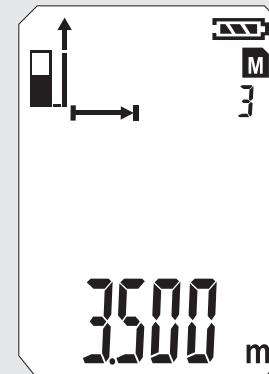
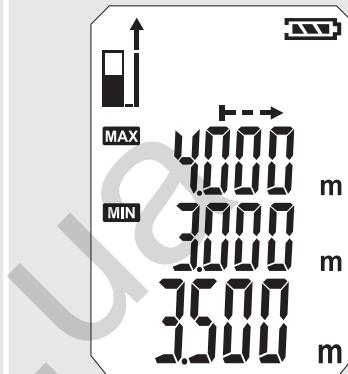
2



3

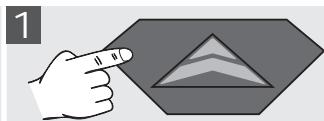


4

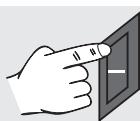


MERIETV Z DODAJANJEM / SUBTRAKCIJO

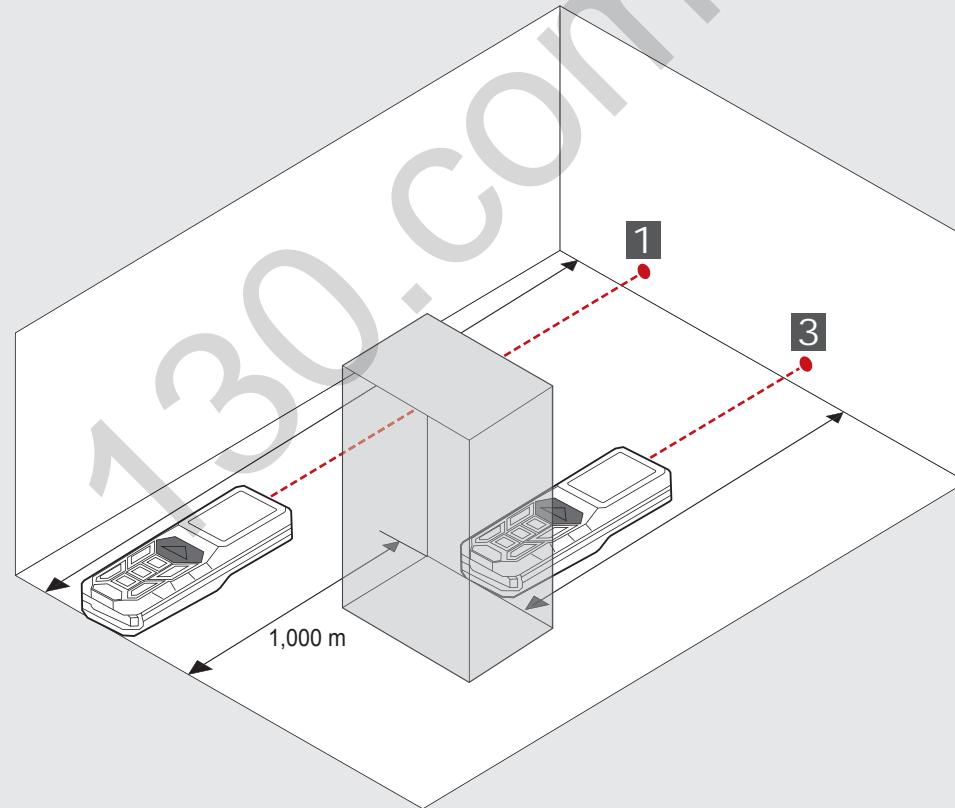
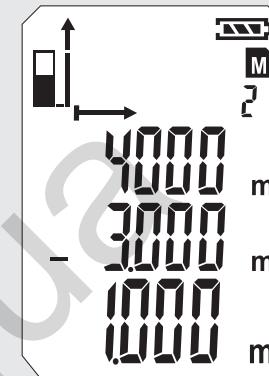
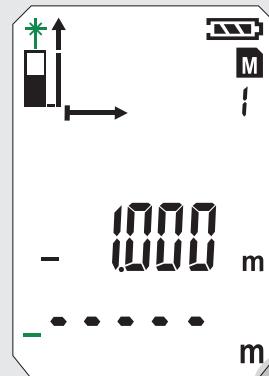
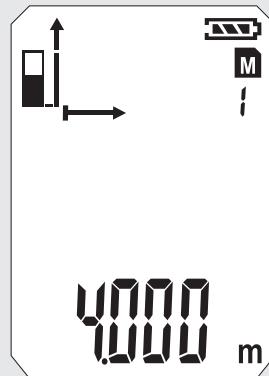
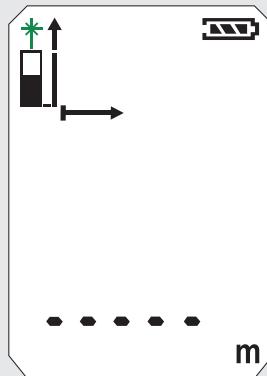
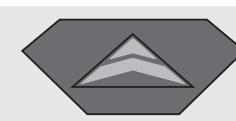
0



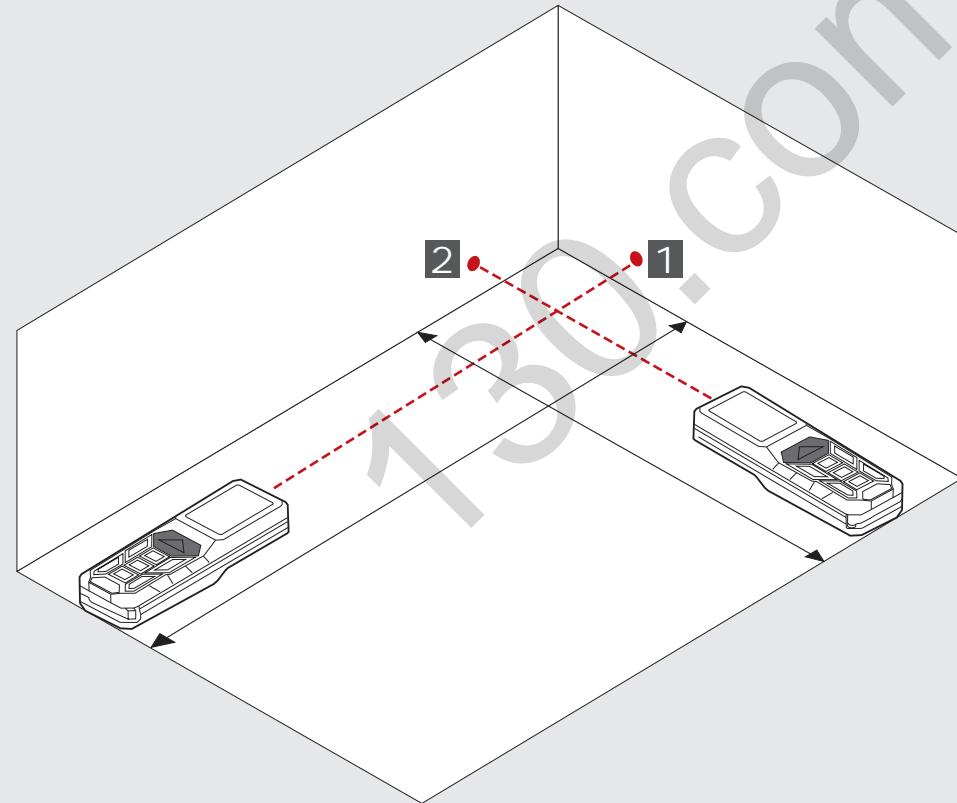
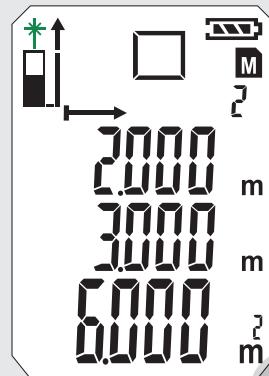
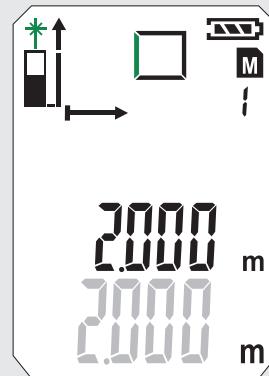
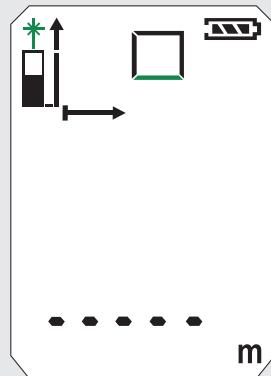
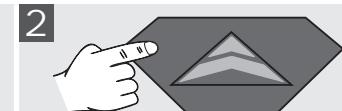
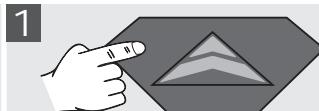
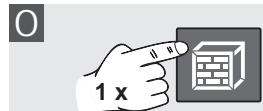
2



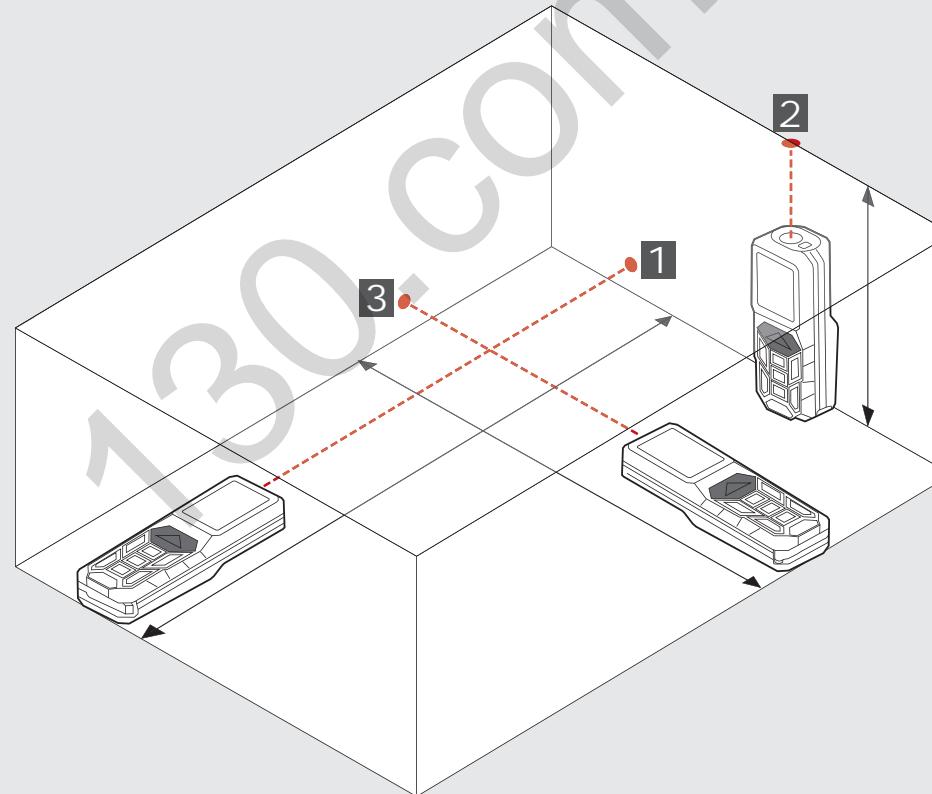
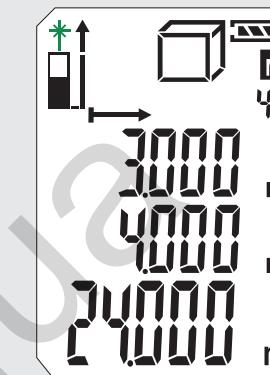
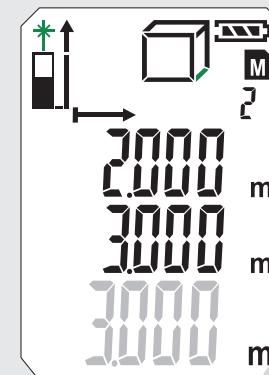
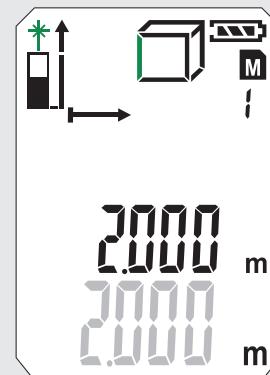
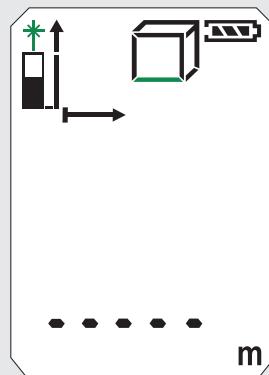
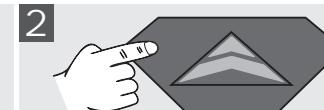
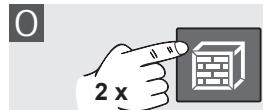
3



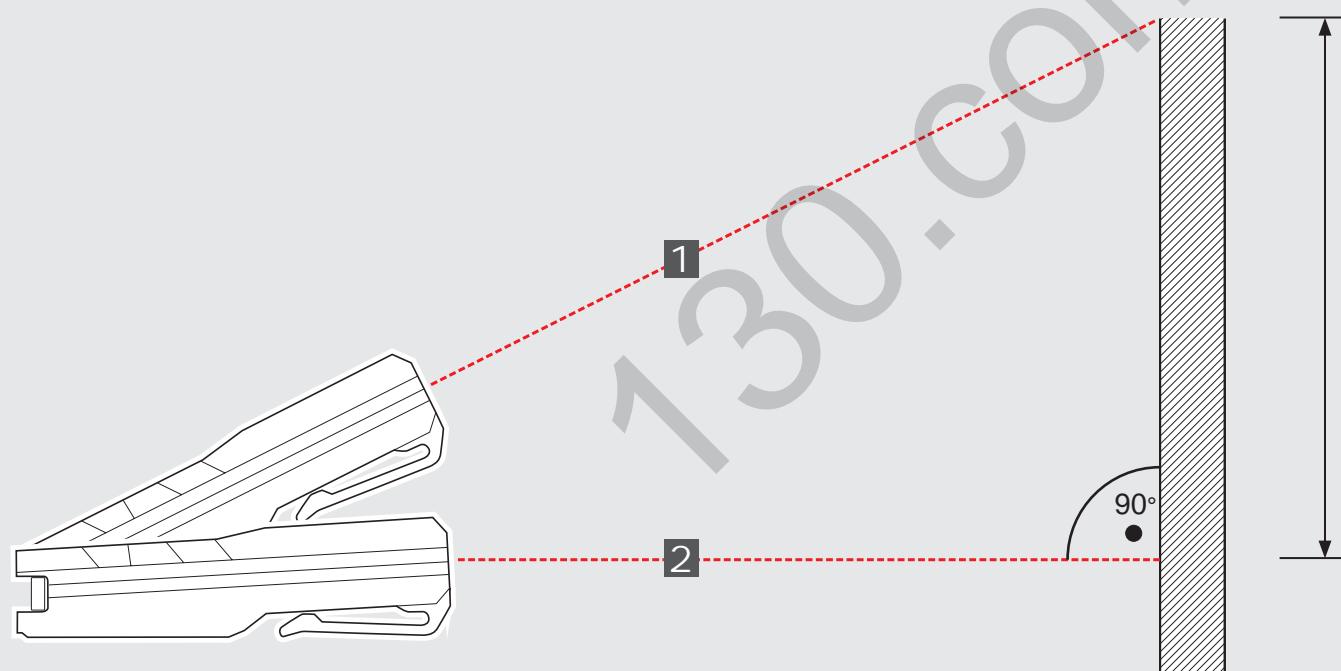
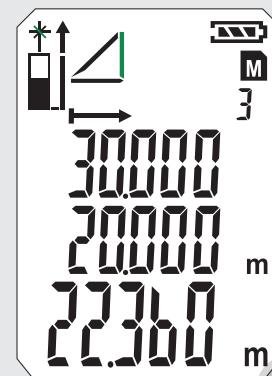
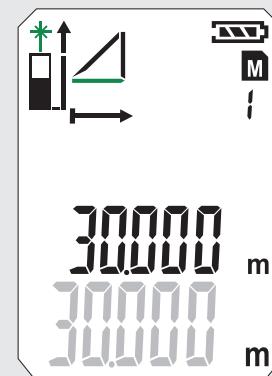
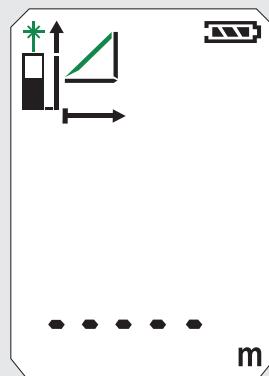
MERJENJE POVRŠIN



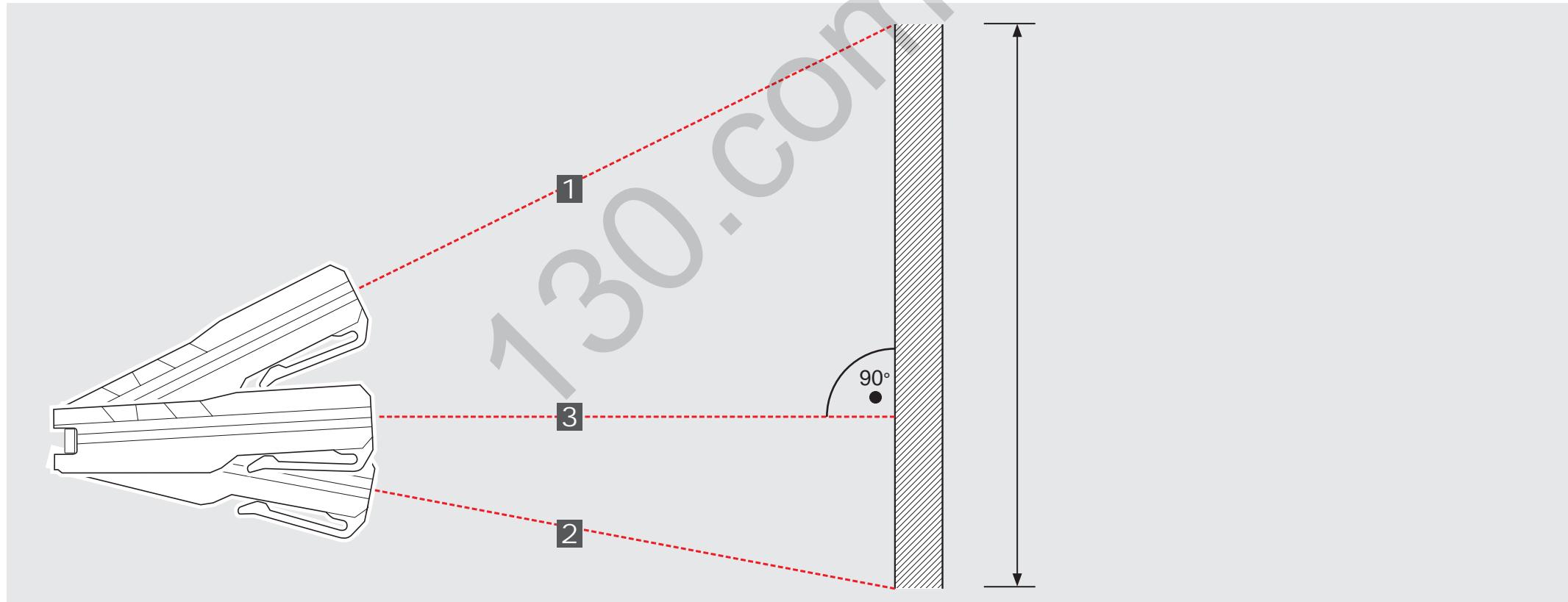
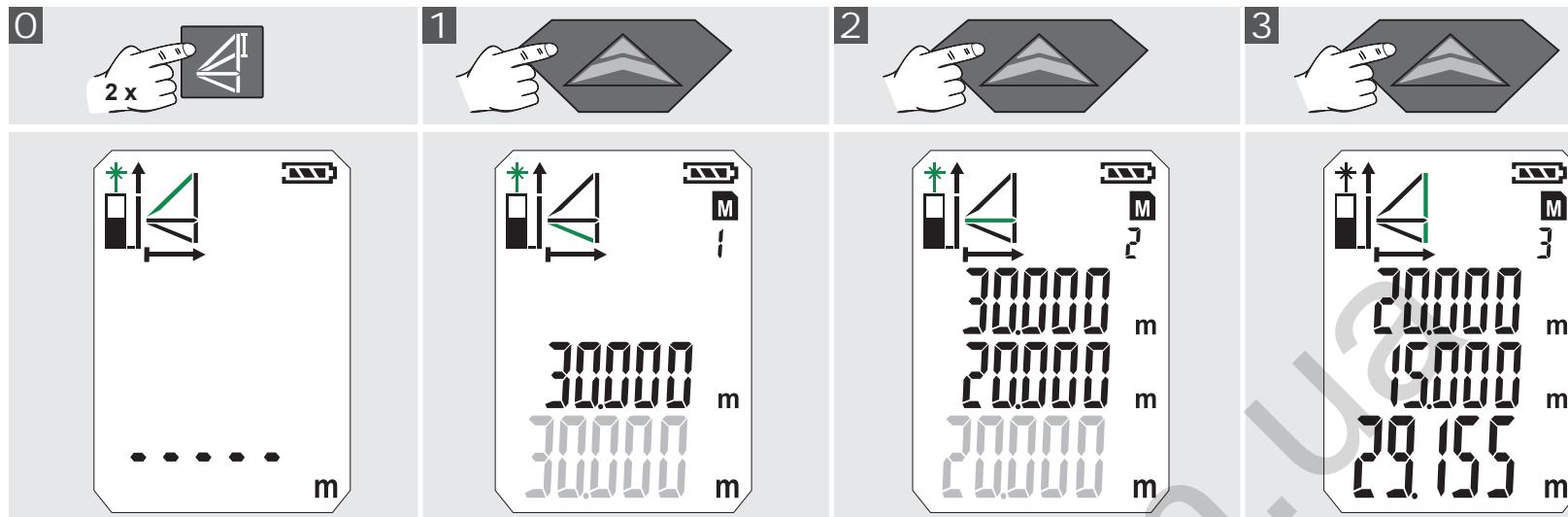
MERJENJE VOLUMNA



POSREDNA MERITEV (PITAGORA 1)



POSREDNA MERITEV (PITHAGORA 2)

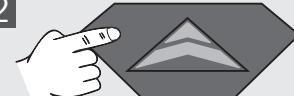


POSREDNA MERITEV (PITAGORA 3)

1



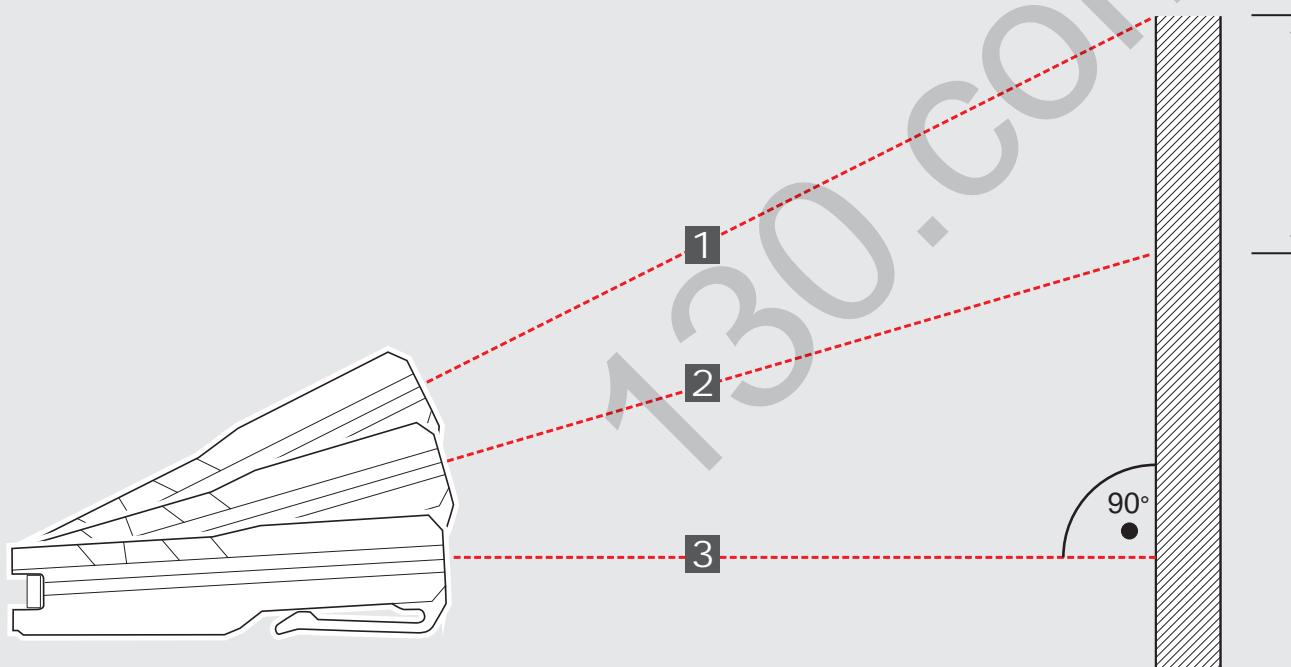
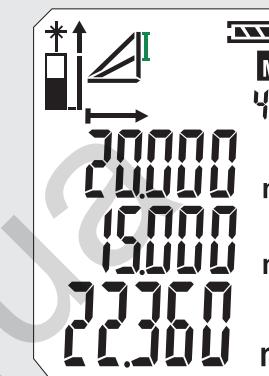
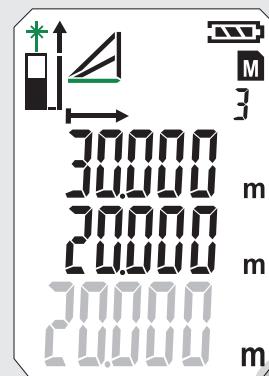
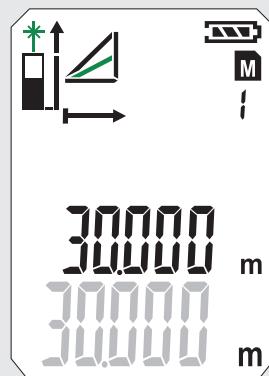
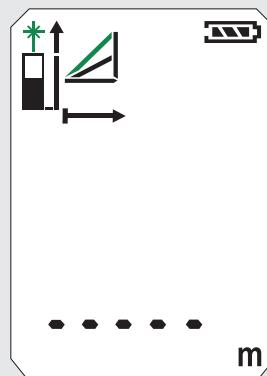
2



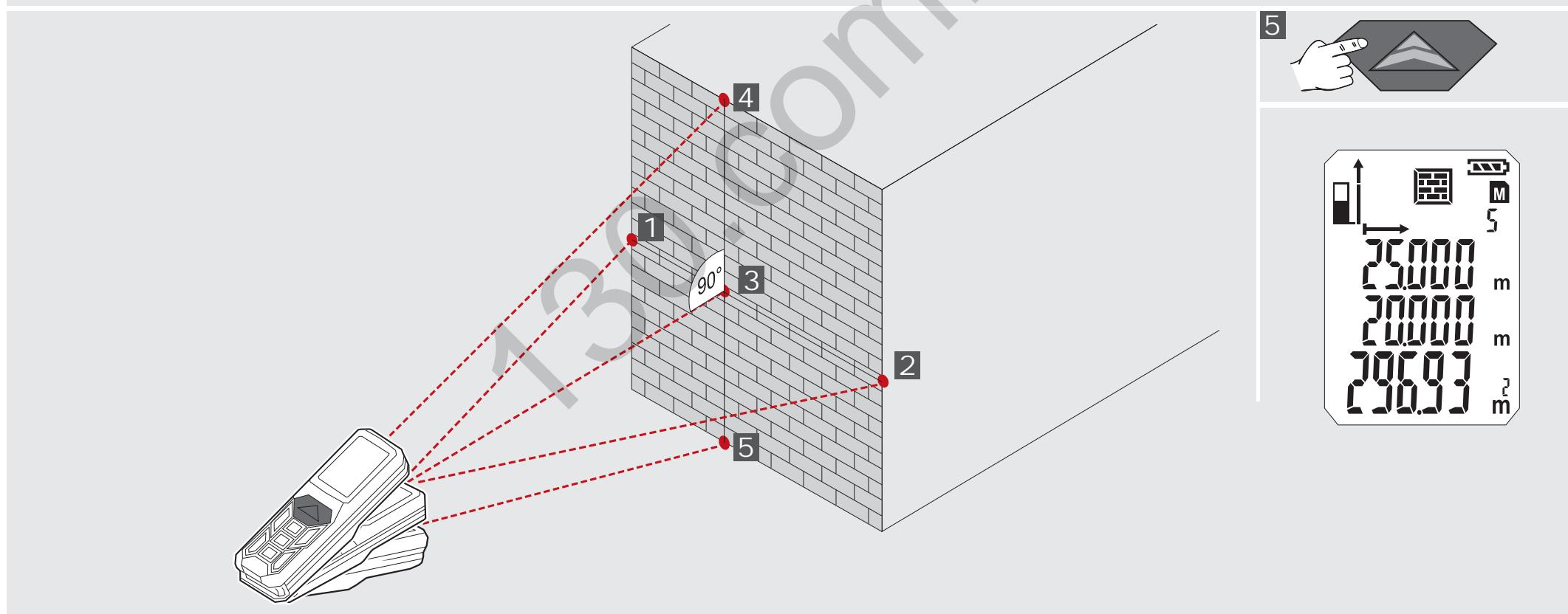
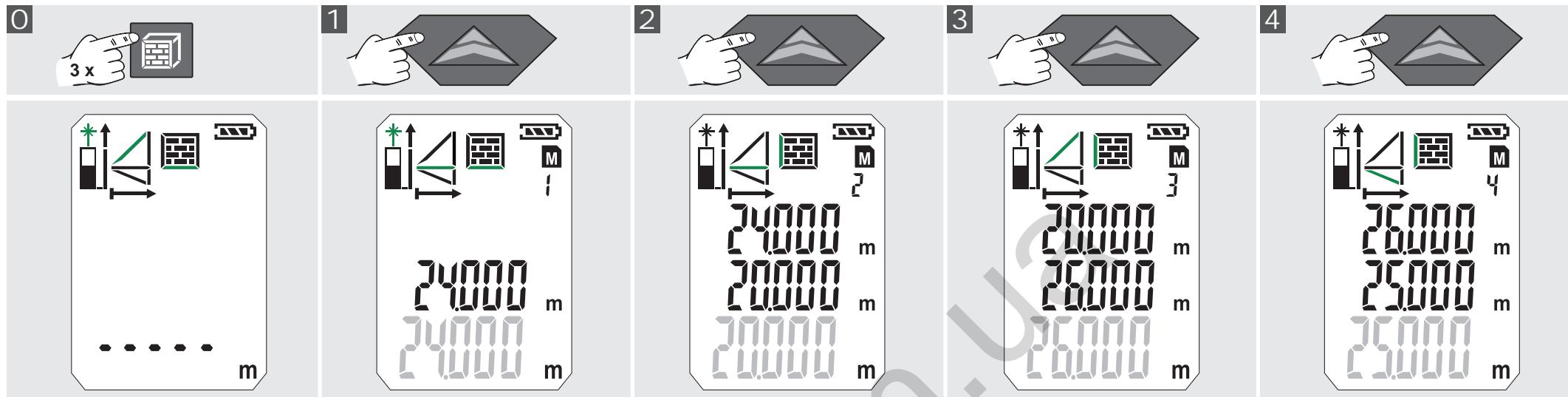
3



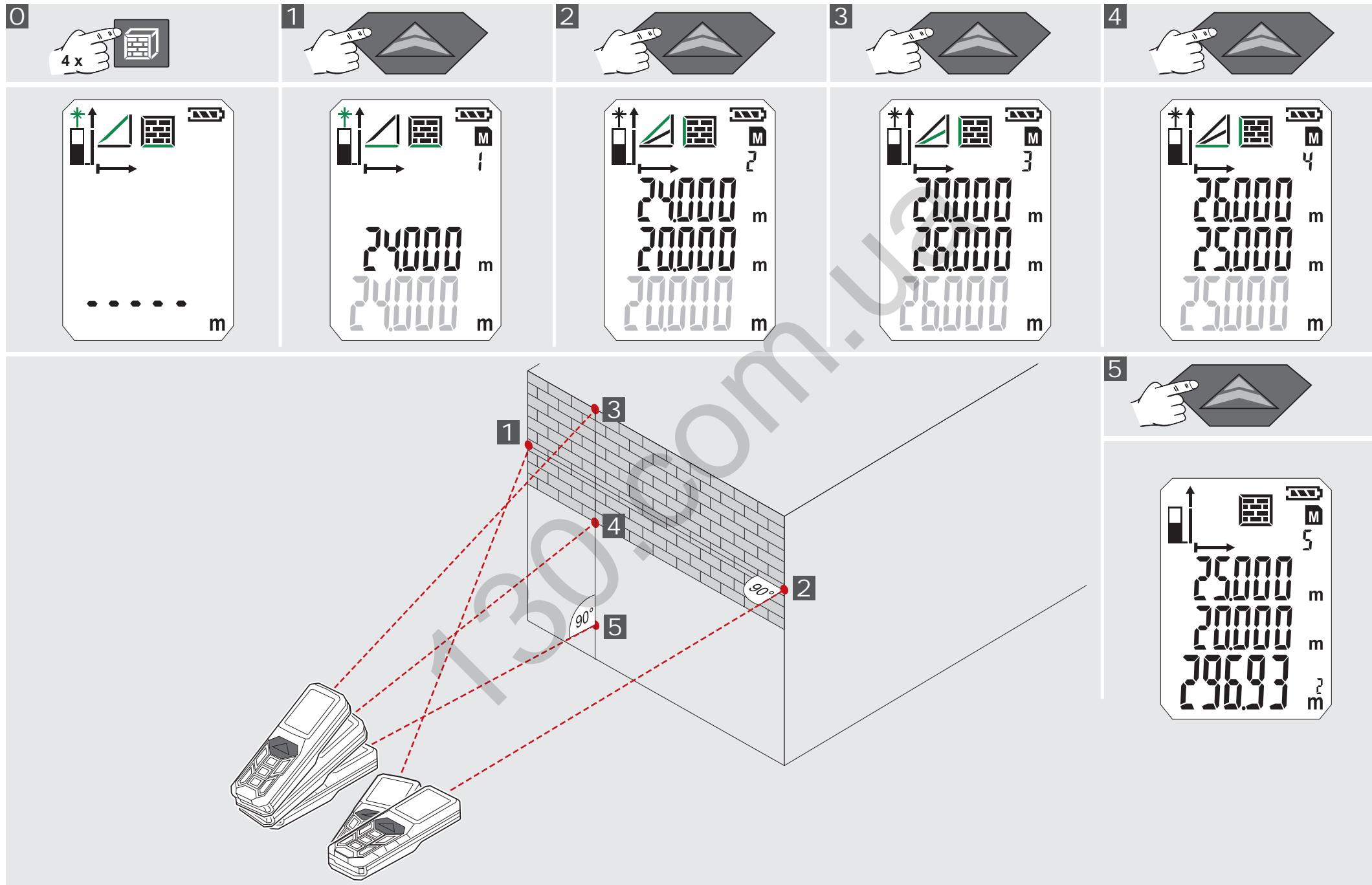
4



MERITEV ZIDNIE POVRŠINE (SCENARIJ 1)



MERITEV ZIDNE POVRŠINE (SCENARIJ 2)



TIMER

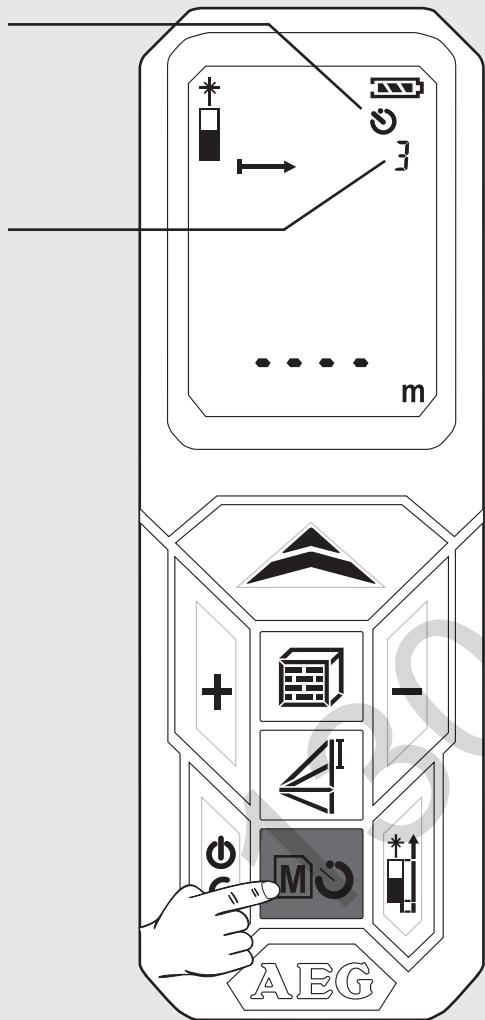
S timer-jem lahko meritev zakasnite ali sprožite, da npr. komponento pozicionirate na merilnem žarku.

Pritisnite  tipko

- Simbol se prikaže
- S pritiskom tipke  lahko timer nastavite med 3 in 15 sekund.

Pritisnite  tipko

- Sekunde se odštevajo do meritve.
- Pri 0 se meritve sproži.

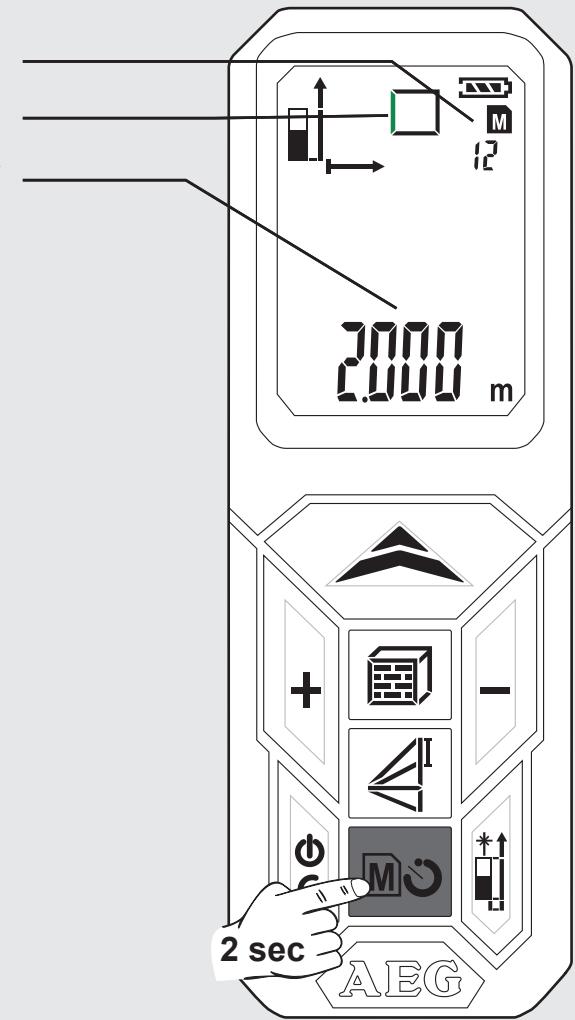


POMNILNIK

Merilne vrednosti se neprestano avtomatsko odlagajo v pomnilnik. Shranjene vrednosti lahko s tipko  prikličete.

Pritisnitee  tipko 2 sekundi

- Simbol in mesto shranitve se prikažeta.
- Pripadajoča velikost meritve se prikaže.
- Shranjena vrednost se prikaže v glavnih vrstici.
- S tipkama +/- navigirate

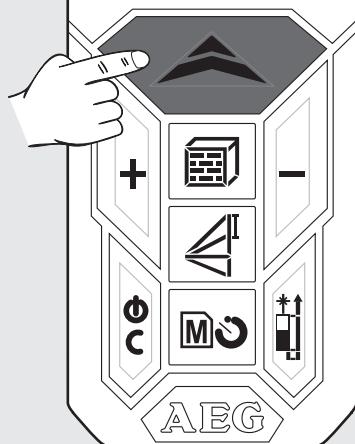
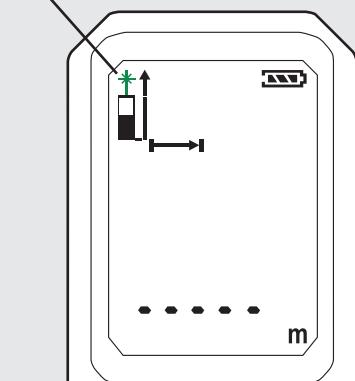


OSNOVNO DELOVANJE NA PRIMERU MERJENJA POVRŠINE (1)

1 Vklapljanje

Pritisnite tipko.
A Pozor! Laserski žarek je vklapljen!
 Ne usmerjajte proti ljudem!

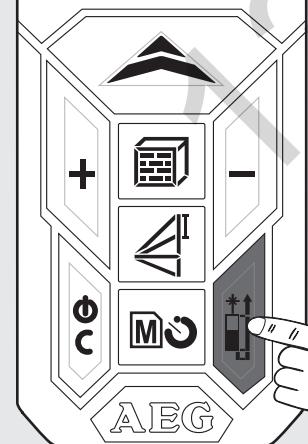
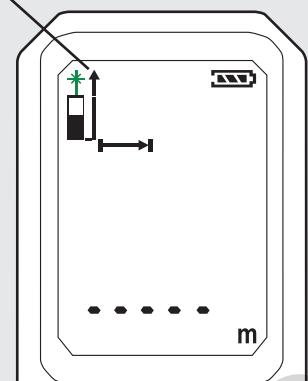
Simbol laserja uripa
 (utripanje je prikazano z zeleno).



2 Izberi merilno ploskev

Standardna nastavitev po vklopu:
 zadaj
 pritisnite 1x -> kotni zatič
 pritisnite 2x -> spredaj
 pritisnite 3x -> zadaj

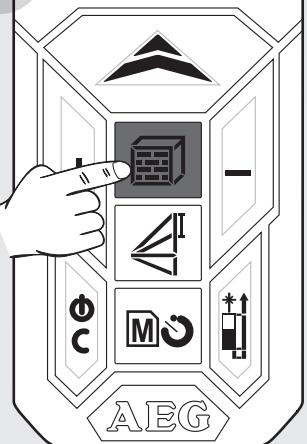
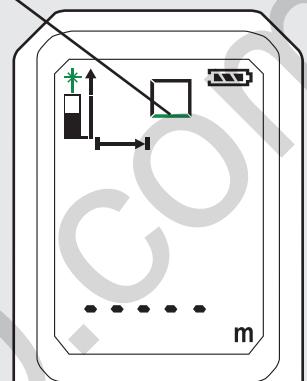
Simbol je prikazan



3 izberi funkcijo

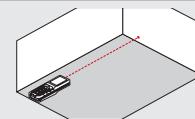
Po vklopu je naprava zmeraj v načinu merjenja dolžine.
 pritisnite 1x - merjenje površine

- Simbol se prikaže
 Velikost meritve utripa
 (utripanje je prikazano z zeleno)



4 Merjenje dolžine

Napravo usmerite in pritisnite tipko



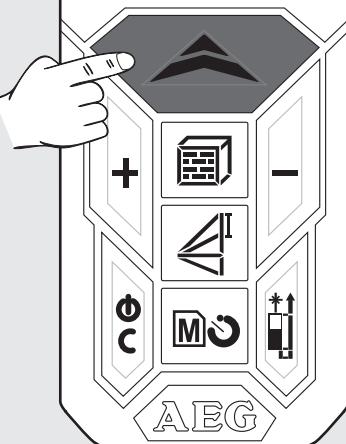
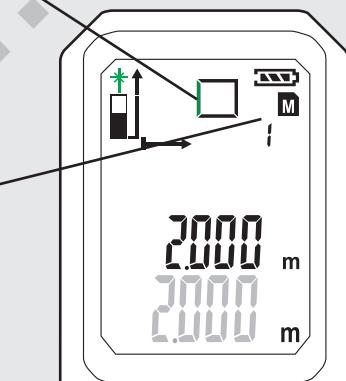
- Vrednost meritve se prikaže na kratko v glavni vrstici.

- Merilna vrednost preskoči po 1 sekundi v nad njo ležeče vrstico.

Merilna vrednost se odloži v pomnilniku pod sledečo številko.

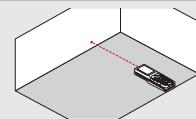
Druga velikost meritve utripa.

- Naprav je pripravljena na meritev druge vrednosti.



5 Meritev širine

Napravo usmerite in pritisnite tipko

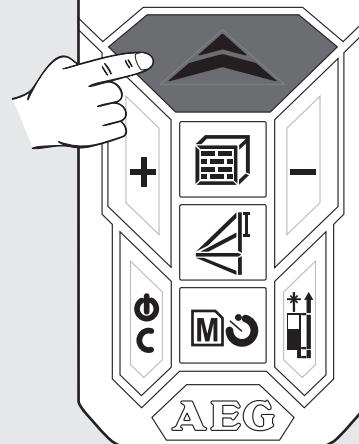
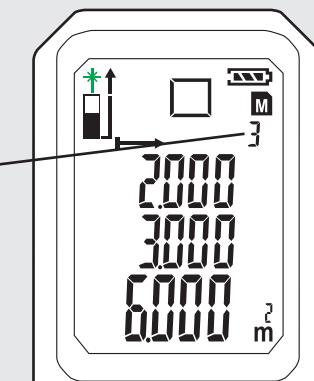


- Merilna vrednost se prikaže na kratko v glavni vrstici.

- Merilna vrednost preskoči po 1 sekundi v nad njo ležeče vrstico.

Merilna vrednost se odloži v pomnilniku pod sledečo številko.

- Izid se prikaže v glavni vrstici in se odloži v pomnilniku pod sledečo številko.



OSNOVNO DELOVANJE NA PRIMERU MERJENJA POVRŠINE (2)

6 priklov shranjenih vrednosti

Pritisnite **M** tipko 2 sekundi.

Pritisnite tipko + ali -

7 Zapusti pomnilnik

Pritisni **∅** tipko

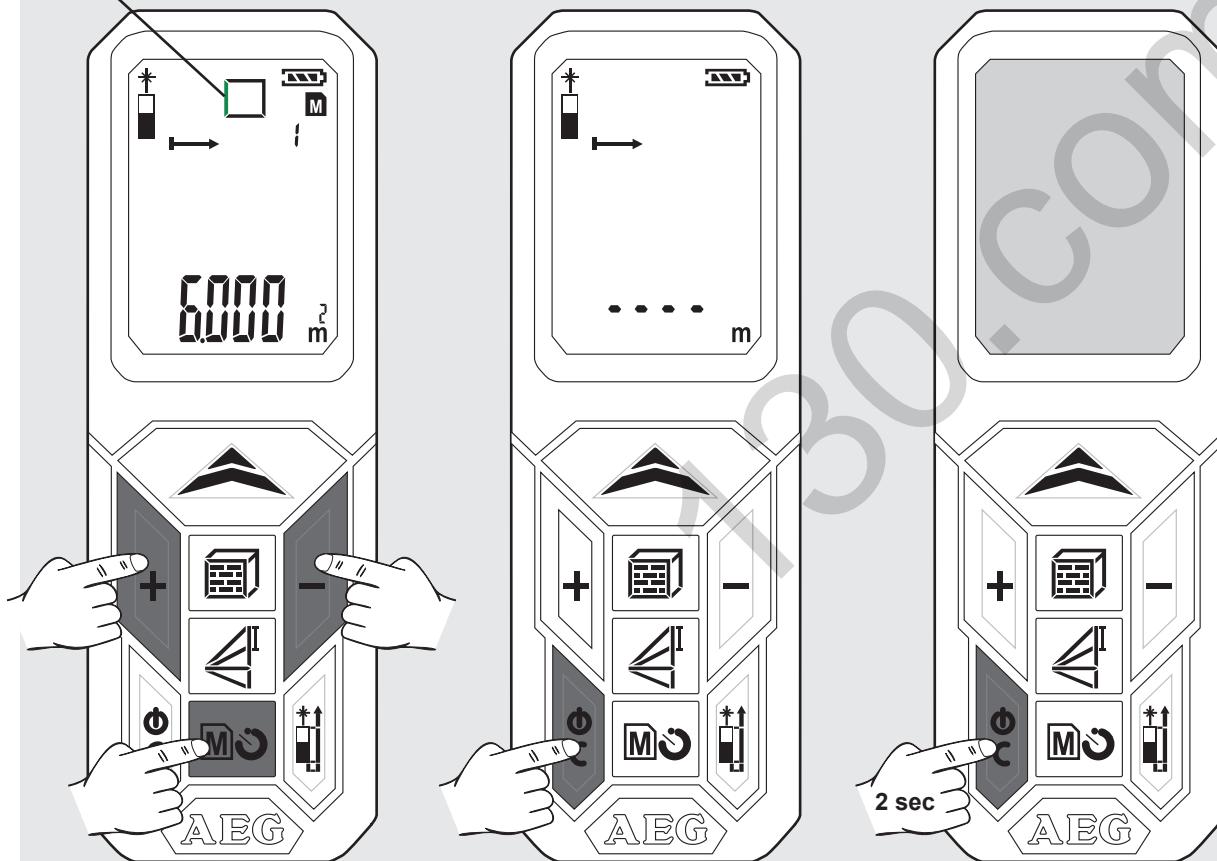
- Shanjene vrednosti se prikažejo v glavni vrstici.

- Pripadajoč simbol se prikaže in velikost meritve utripa (utripanje je prikazano z zeleno).

8 Izklapljanje

Pritisnite **∅** tipko 2 sekundi
(Pomnilnik je poprej treba zapustiti).

- Naprava se izklopi.
- V kolikor 3 minute ne pritisnemo nobene tipke, se naprava avtomsatsko izklopi.



SADRŽAJ

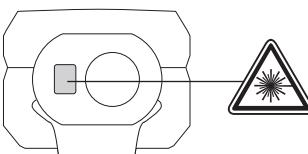
Važne upute o sigurnosti	1
Tehnički podaci	2
Propisna upotreba	2
Tabela kodova pogreške	2
Pregled	3
Promijeniti bateriju	4
Kutni zatik	4
Držač pojasa	4
Tipka funkcije, Pitagora, mjerna ravnina	5
Jednostavno mjerenje duljine	6
Kontinuirano mjerenje / Mjerenje Minimum-Maximum	7
Mjerenje zbrajanja / oduzimanja	8
Mjerenje površine	9
Mjerenje volumena	10
Indirekno mjerenje (Pitagora 1)	11
Indirektno mjerenje (Pitagora 2)	12
Indirektno mjerenje (Pitagora 3)	13
Mjerenje zidne površine (Scenario 1)	14
Mjerenje zidne površine (Scenario 2)	15
Timer	16
Memorija	16
Temeljiti način funkcije na primjeru jednog mjerenja površine (1)	17
Temeljiti način funkcije na primjeru jednog mjerenja površine (2)	18

VAŽNE UPUTE O SIGURNOSTI



Ne koristite proizvod prije nego što proučite upute o sigurnosti te korisnički priručnik na priloženom CD-u.

Klasifikacija lasera



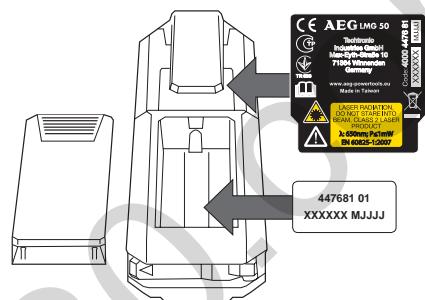
UPOZORENJE:

Ovo je laserski proizvod **klase 2** u skladu s IEC 60825-1:2007.



Natpis

Oblijepite engleski tekst na pločici snage prije prvotnog puštanja
u rad sa suisporučenom naljepnicom na Vašem jeziku.



Pozor:

Izbjegavajte direktni kontakt sa očima. Laserska zraka može zabiljesnuti oči i nakratko dovesti do zasljepljenja.

Ne zurite u lasersku zraku i ne upravljaljite je bespotrebno prema drugim ljudima.

Ne bljeskajte prema drugim osobama.

Upozorenje:

Ovaj laserski uređaj ne poganjati u blizini djece i djeci ne dozvoliti da koriste ovaj laserski uređaj.

Pažnja! Jedna reflektirajuća površina bi lasersku zraku mogla reflektirati nazad na poslužioca i druge osobe.

Ekstremite držite na sigurnoj udaljenosti od pomičnih dijelova.

Provedite povremena probna mjerenja. Posebno prije, tijekom i nakon važnih mjerenja.

Ako je proizvod oštećen, ako je pao ili ako je neispravno korišten i mijenjan, pratite postoje li pogrešna mjerenja.

Pažnja! Upoznajte se sa elementima posluživanja i propisnom uporabom vrtlog uređaja.

Laserski mjerni instrument ima ograničeno područje uporabe. (vidi odsječak "Tehnički podaci"). Probe, mjeriti izvan maksimalnog i minimalnog područja, uzrokuju netočnosti. Uporaba pod lošim uvjetima, kao što je prevruće, prehladno, sunčeva svjetlost, kiša, snieg, magla ili drugi uvjeti koji ograničavaju vidljivost, mogu voditi do netočnih mjerenja.

Ako se laserski mjerni instrument iz tople sredine prenosi u hladnu sredinu (ili obrnuto), pričekajte da se uređaj uskladi na novu temperaturu sredine.

Laserski mjerni instrument čuvati uvijek unutar prostorija i štitiga protiv potresa, vibracija i ekstremnih temperatura.

Laserski mjerni instrument štititi od prašine, vlage i visoke vlage zraka. To može uništiti unutarnje elemente i utjecati na točnost.

Nemojte koristiti nikakva agresivna sredstva za čišćenje ili otapala. Čistiti samo jedno čistom mekom krpom.

Izbjegavajte snažne udarce po instrumentu i padove laserskog uređaja. Točnost uređaja se mora provjeravati ako je pao na pod ili ako je bio izložen drugim mehaničkim opterećenjima.

Potrebne povrpavke na ovom laserskom uređaju smije izvoditi samo autorizirano stručno osoblje.

Proizvodom ne upravljajte u područjima u kojima postoji opasnost od eksplozije ili u agresivnim okolinama.

Koristite samo punjače koje je preporučio proizvođač za punjenje baterija.

Prazne baterije se ne smiju odstraniti skupa sa kućnim smećem. Rabljene baterije dati na zbrinjavanje odgovarajuće okolici prema nacionalnim ili lokalnim propisima na predviđena mjesta skupljanja. Aparat se ne smije zbrinuti sa kućnim smećem. Aparat zbrinuti na stručan način. Poštivati propise zbrinjavanja specifične za dotičnu državu. Obratite se mjesnim vlastima ili trgovcu u svezi informacijama o zbrinjavanju.



TEHNIČKI PODACI

Zaštitna klasa	IP54 (zaštićen protiv prašine i štrcajuće vode)
Optika	14 mm
Žarište	35 mm
Mjerno područje max.	50 metara (Tolerancija: 55m)
Mjerno područje min.	0,05 metara
Apsolutna točnost @ < 10m	± 1,5 mm (Max)
Ponovljena točnost @ < 10m	± 1,5 mm (tipično max. 2σ)
Ponovljena točnost @ > 10m	Porast ± 0,25 mm / metar (tipično max. 2σ)
Mjerno vrijeme	0,5 s
Display tip	LCD (22,7 mm x 31 mm)
Opskrba strujom	AAA 2x (Alkaline baterija)
Rok trajanja baterije	10000 (pojedinačno mjerjenje)
Izlazna snaga lasera	0,6 mW ~ 0,95 mW (Class 2, 650nm)
Veličina laserske točke	25 x 30 mm @ 16 m (Max)
Laserska zraka okomiti kut	+1 stupanj
Laserska zraka vodoravni kut	±1 stupanj
Automasko isklapanje instrumenta	180 sekunda
Automatsko isklapanja lasera	30 sekunda
Područje radne temperature	-10°C do +50°C
Područje temperature ležaja	-25°C to +70°C
Težina bez baterije	80 g

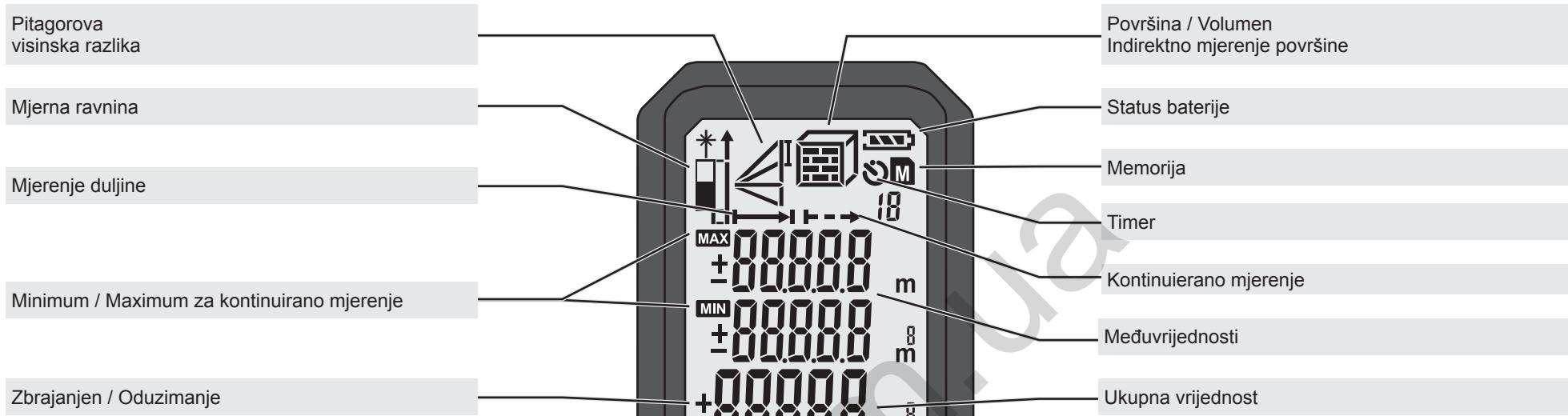
TABELA KODOVA POGREŠKE

Kod	Opis	Rješenje
Err01	Izvana mjernog područja	Mjerenje sprovesti u predviđenom području.
Err02	Reflektirani signal je preslab	Odabrati jednu bolju površinu.
Err03	Izvan područja pokazivanja (max. vrijednost: 99.999) npr. ako je rezultat ili volumen izvan područja pokazivanja	provjeriti da li su vrijednost i koraci korektni.
Err04	Pogreška u Pitagora proračunur	Provjeriti da li su vrijednosti i koraci korektni.
Err05	Baterija slaba	Umetnuti nove baterije.
Err06	Izvan područja radne temperature	Izvesti mjerjenje na zadanim području radne temperature.
Err07	Svjetlo okoline presvjetlo	Ciljno područje potamniti.

PROPISSNA UPOTREBA

Laserski instrument je prikladan za mjerjenje distancija i nagiba.

Ovaj aparat se smije upotrijebiti samo u određene svrhe kao što je navedeno.



UKLJUČI / MJERITI

- Uključi
- Mjeriti
- Kontinuirano mjerjenje (2 sek. pritiskati)
Min. / Max. Funktion

ZBRAJANJE

- Zbrojiti vrijednost
- Navigirati u memoriji

POVRŠINA / VOLUMEN

- Površina (1x pritisnuti)
- Volumen (2x pritisnut)
- Indirektno mjerjenje površine (3x / 4x pritisnuti)

UKLJUČITI

- Uključeno
- Isključeno (2 sek. pritiskati)
- Vratiti

ODUZIMANJE

- Vrijednost oduzeti
- Navigirati u memoriji

PITAGORA

- Pitagora 1 (1x pritisnuti)
- Pitagora 2 (2x pritisnuti)
- Pitagora 3 (3x pritisnuti)

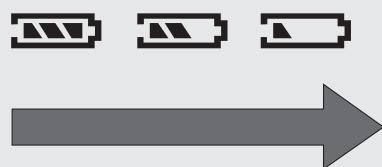
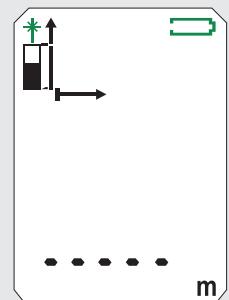
MJERNU RAVNINU PROMIJENITI

- Sprijeda
- Odzada
- Kutni zatik

MEMORIJA

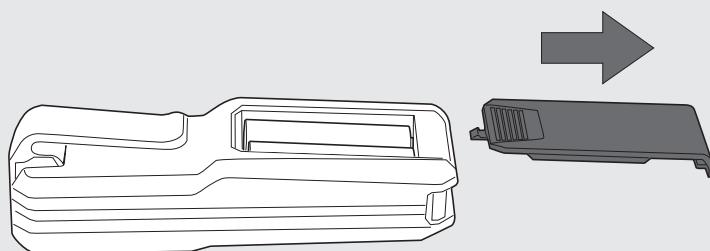
- Timer 3-15 sek. (1x pritisnuti)
- Memorija 1-20 (1x 2 sek. pritisnuti)
- Sa tipkama +/- navigirati u memoriji

PROMIJEНИТИ БАТЕРИЈУ

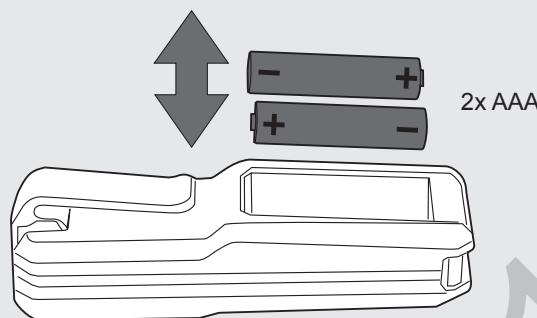


Kada ovaj simbol
treperi, promijeniti
bateriju.

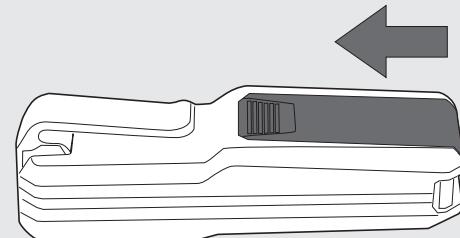
1



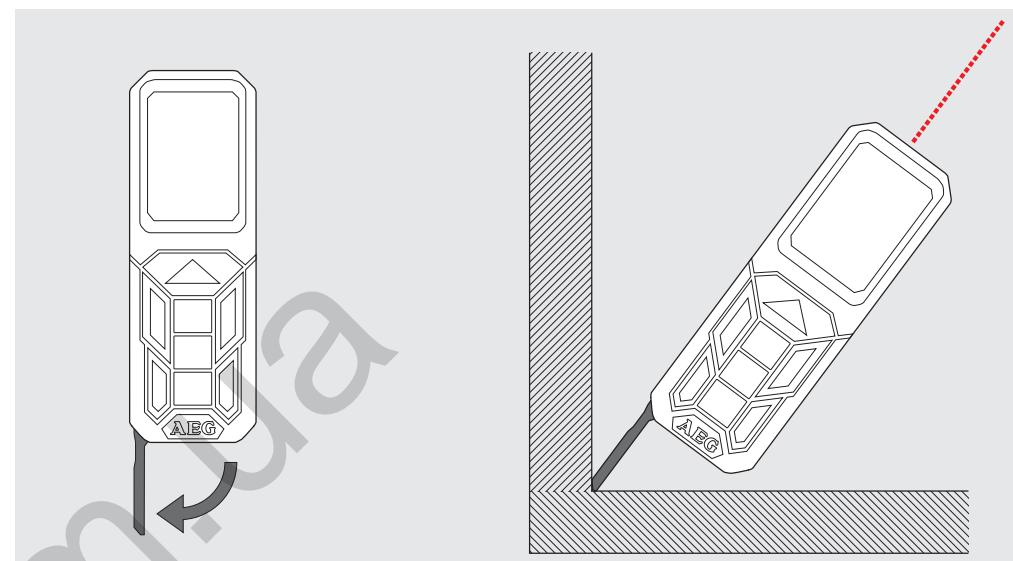
2



3

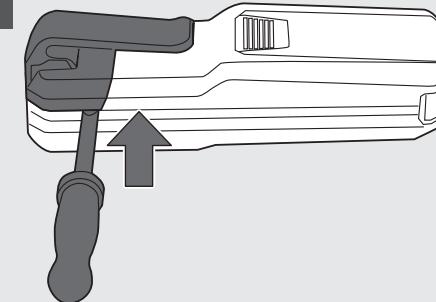


KUTNI ZATIK

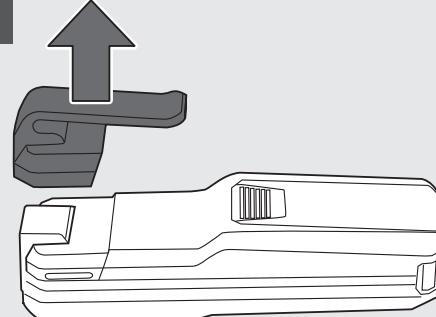


DRŽAČ ПОЈАСА

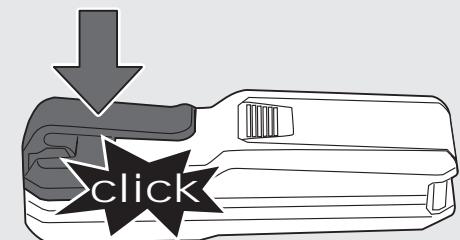
1



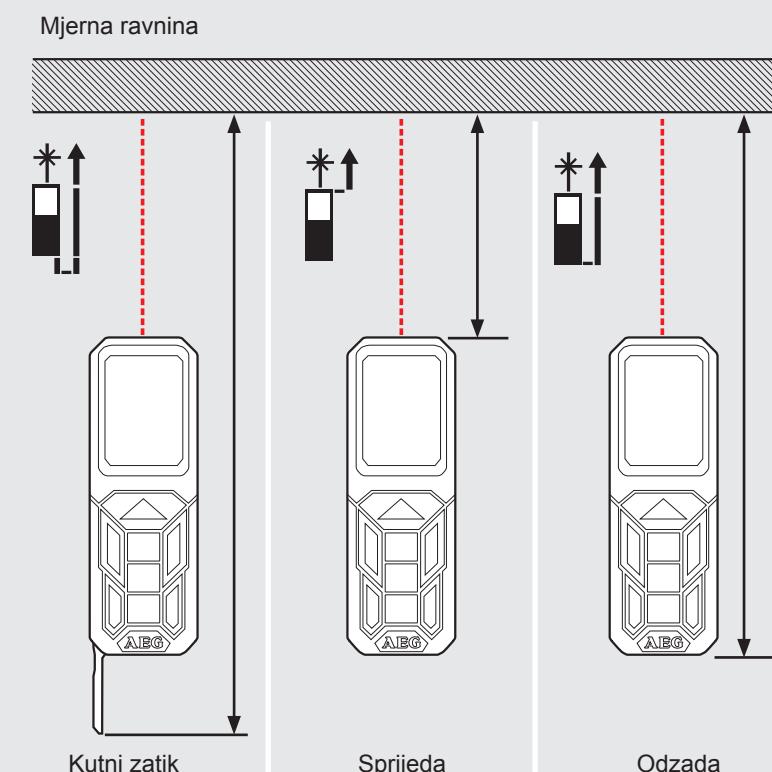
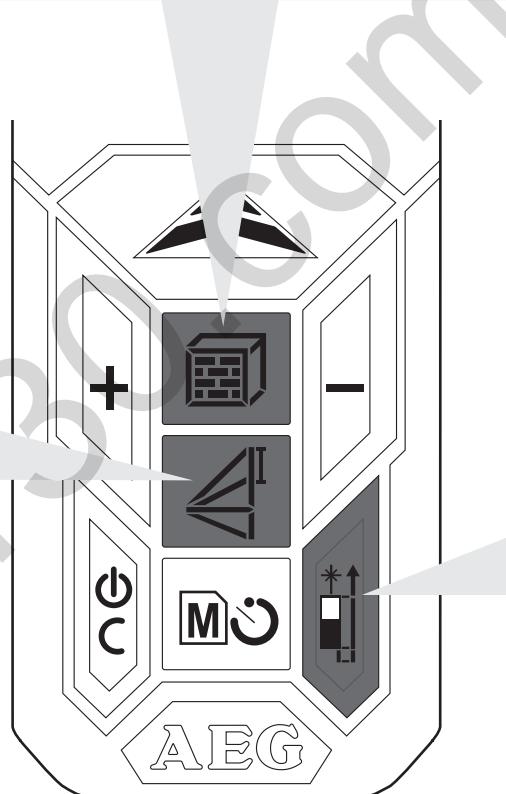
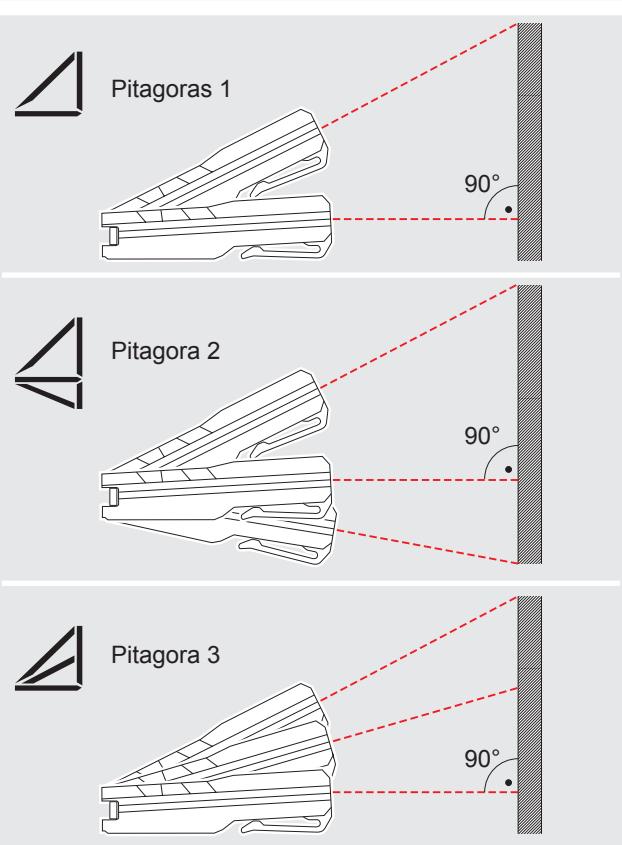
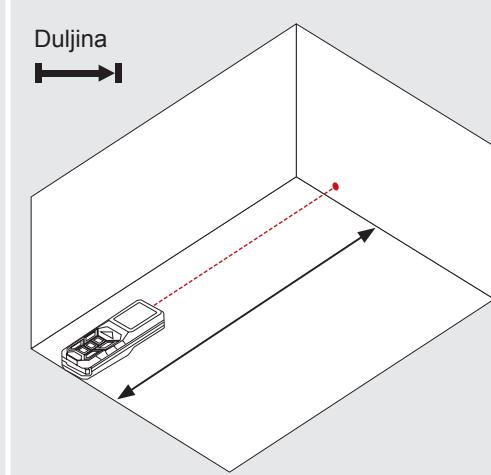
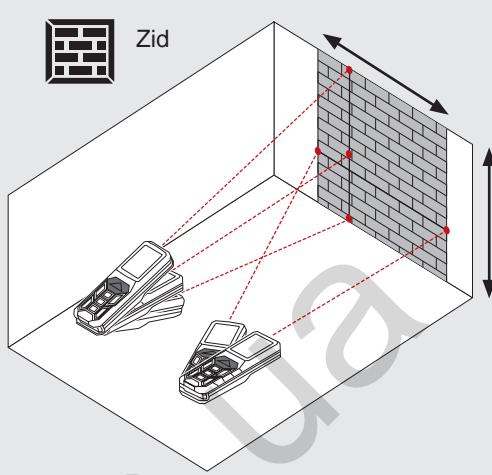
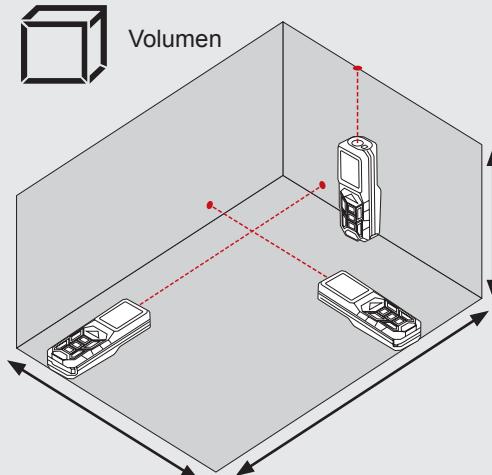
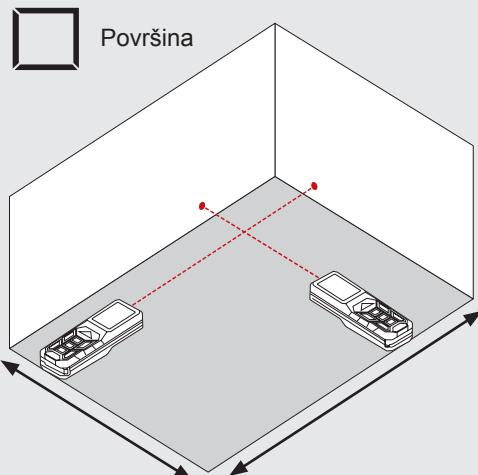
2



3

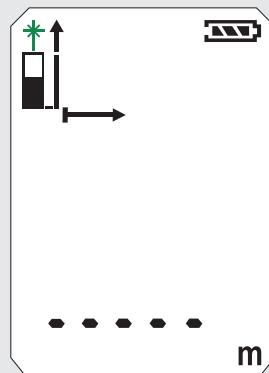
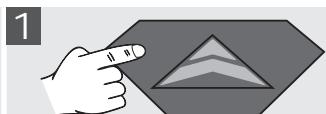


TIPKA FUNKCIJE, PITAGORA, MJERNA RAVNINA

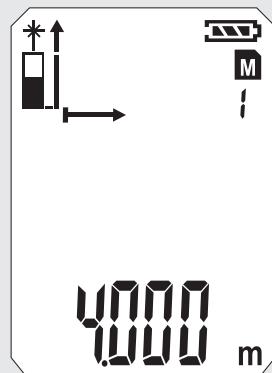
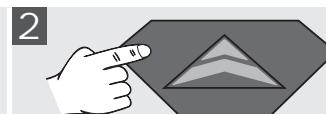


JEDNOSTAVNO MJERENJE DULJINE

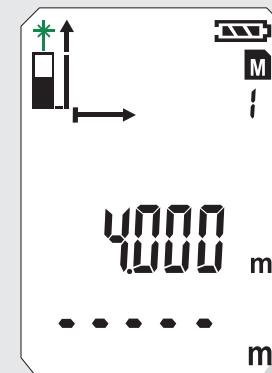
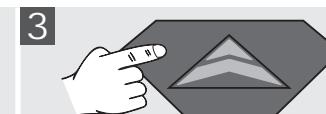
0



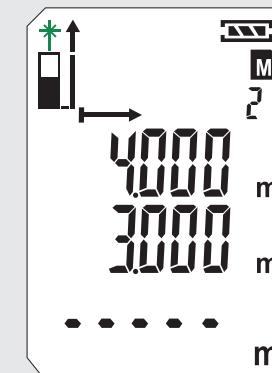
1



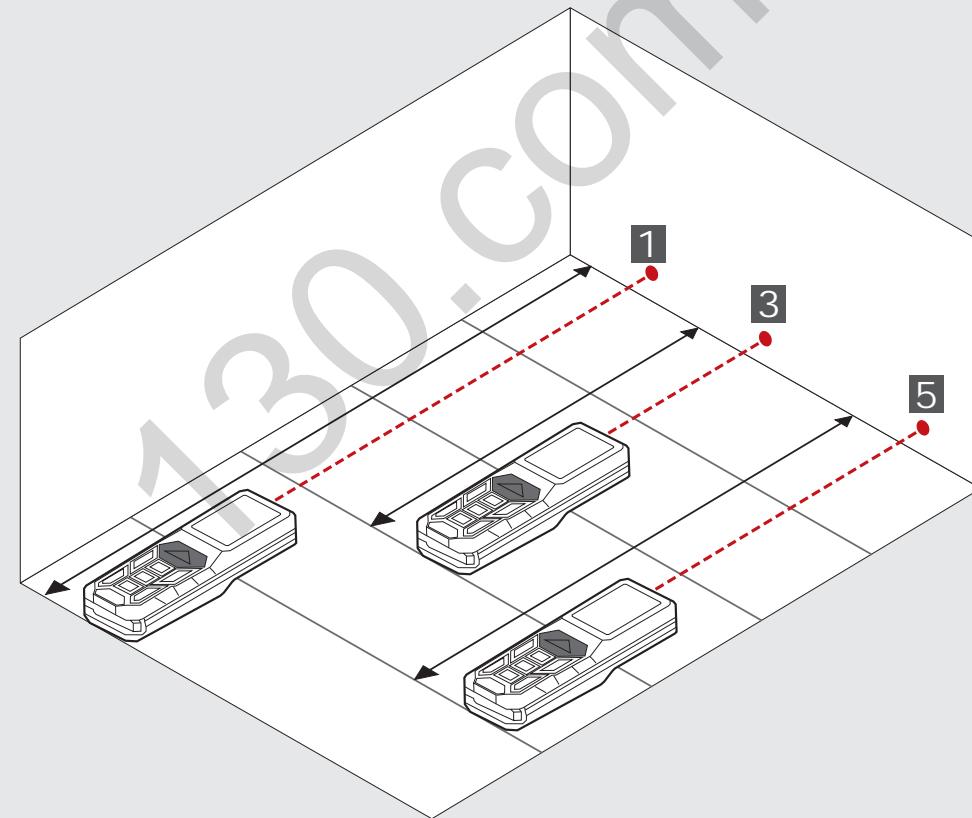
2



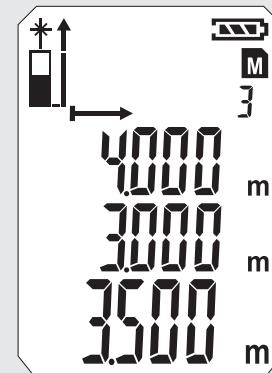
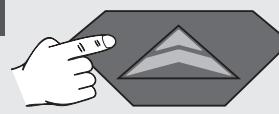
3



4



5



KONTINUIRANO MJERENJE / MJERENJE MINIMUM-MAXIMUM

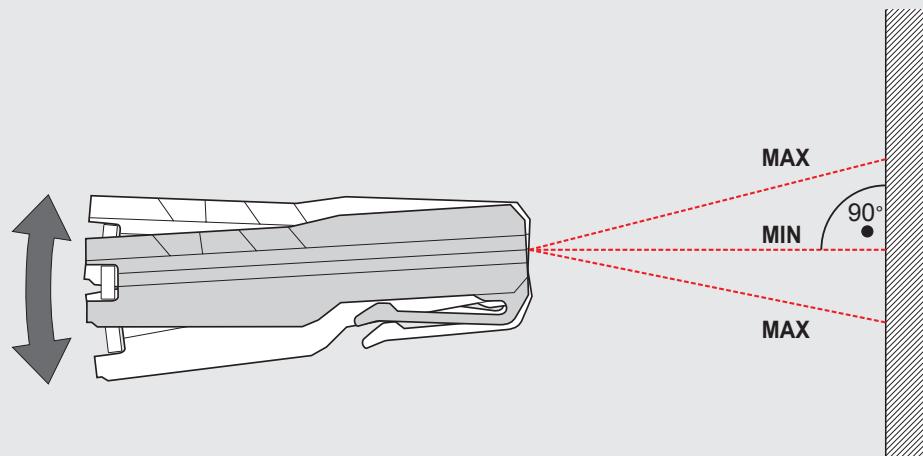
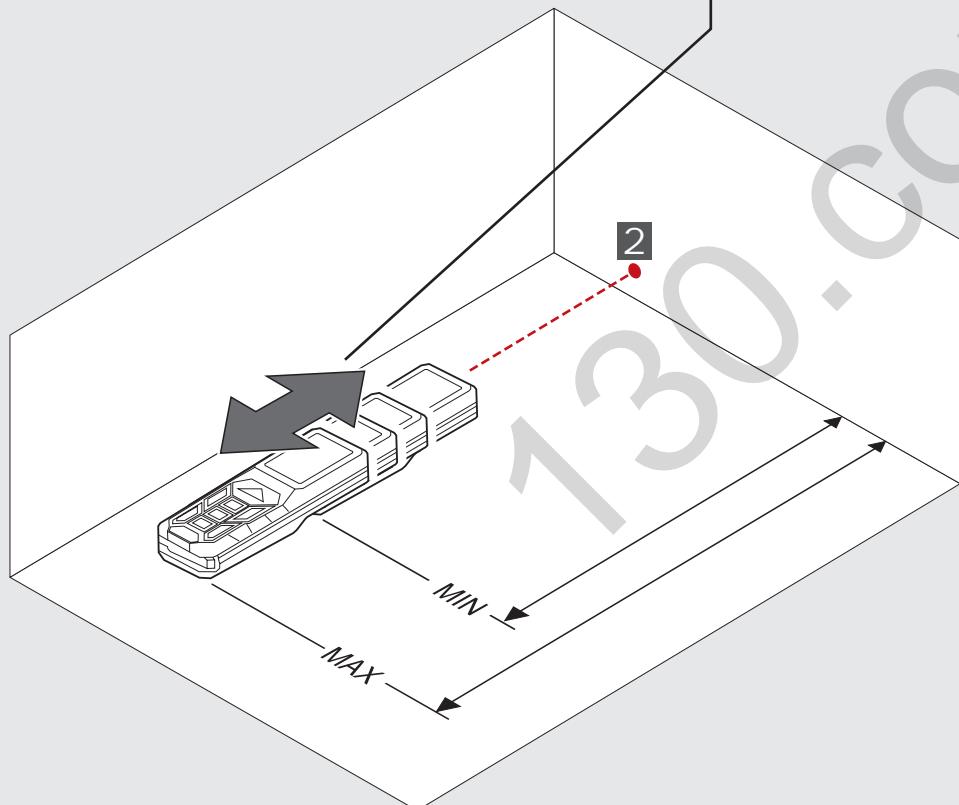
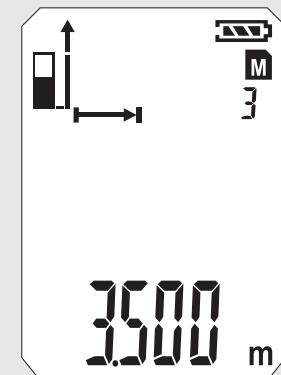
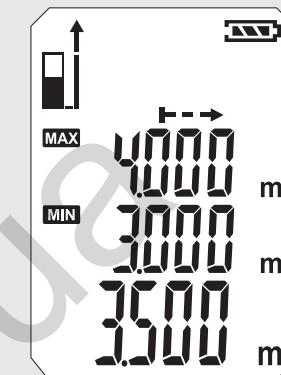
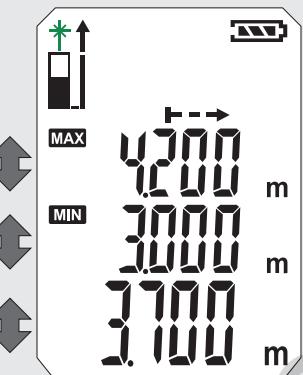
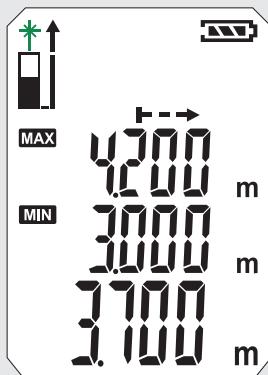
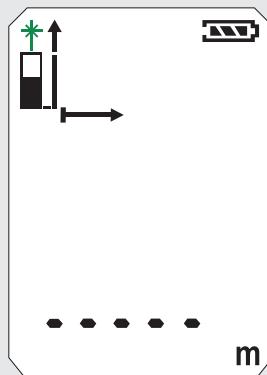
0



2

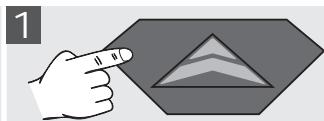


4

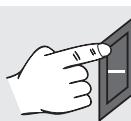


MJERENJE ZBRAJANJA / ODUZIMANJA

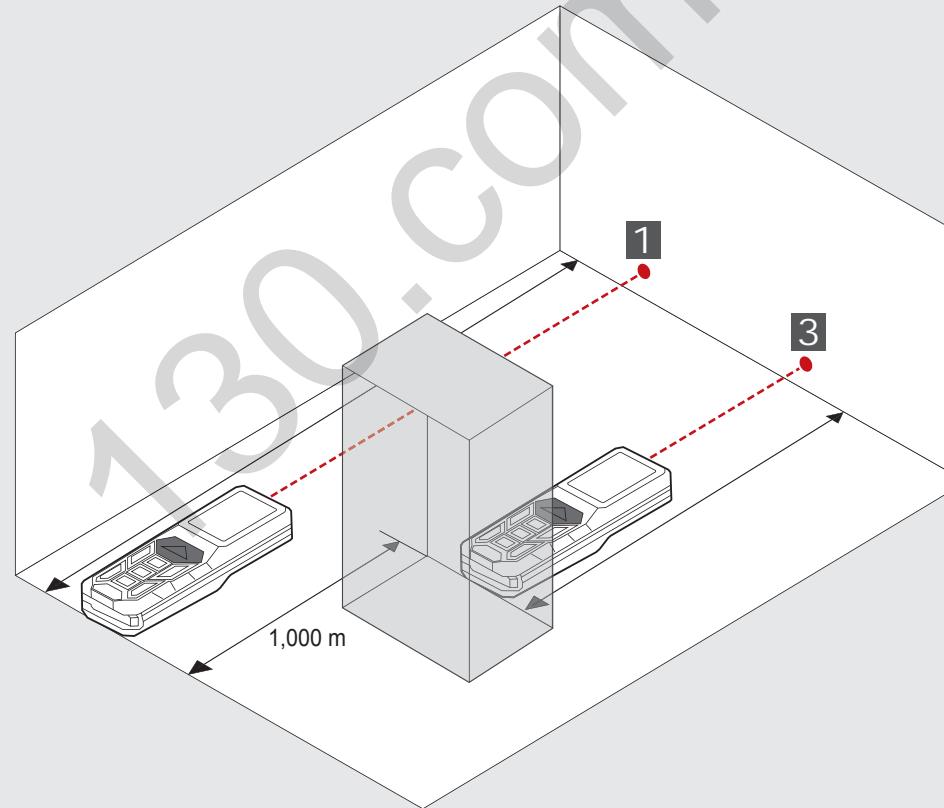
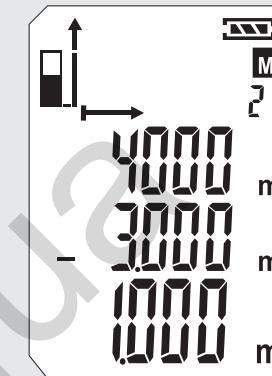
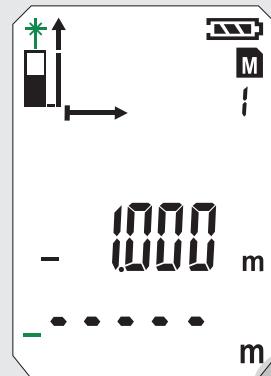
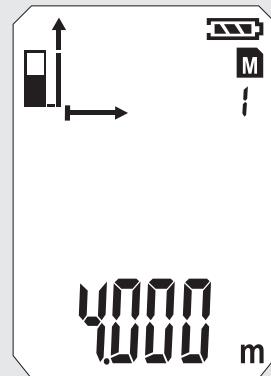
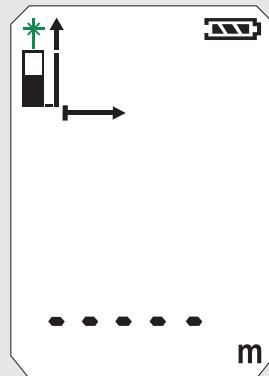
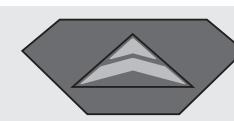
0



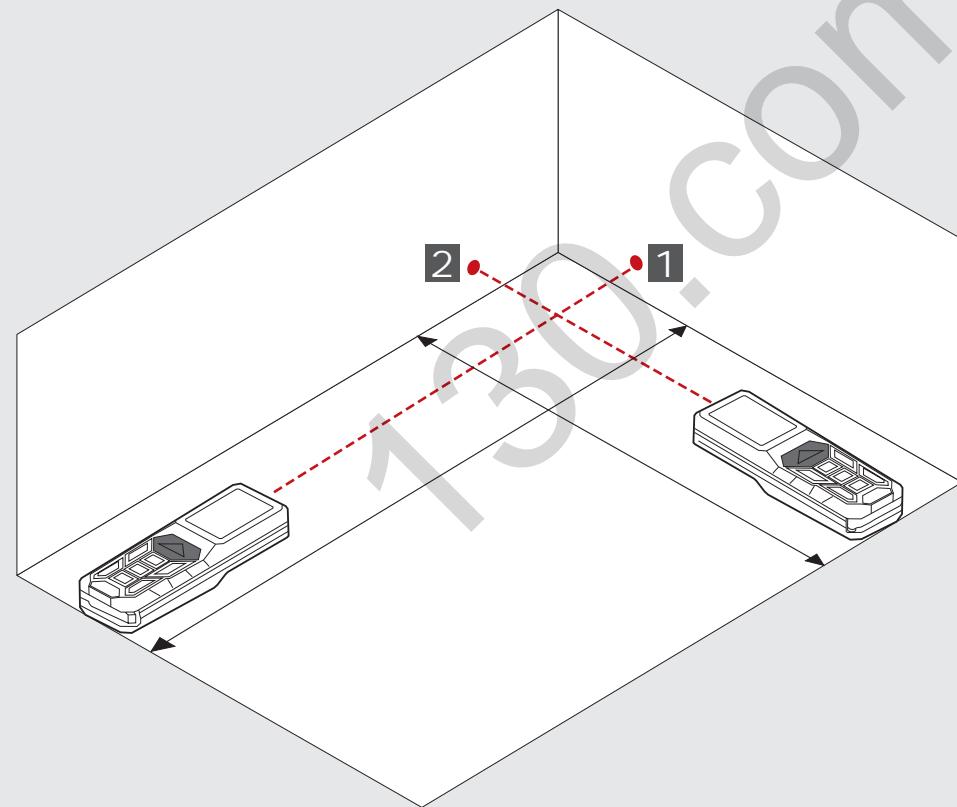
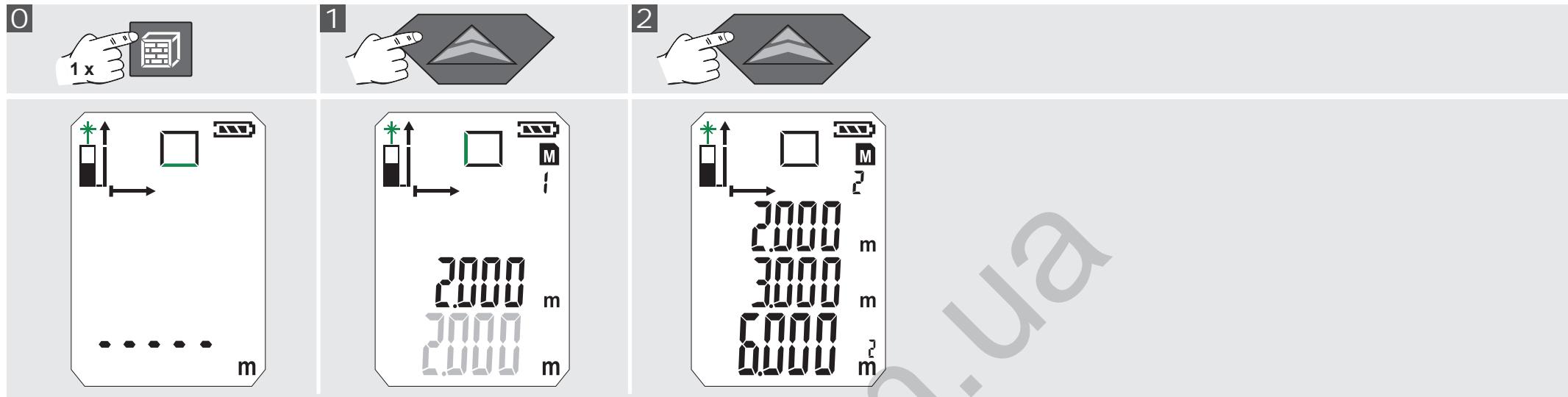
2



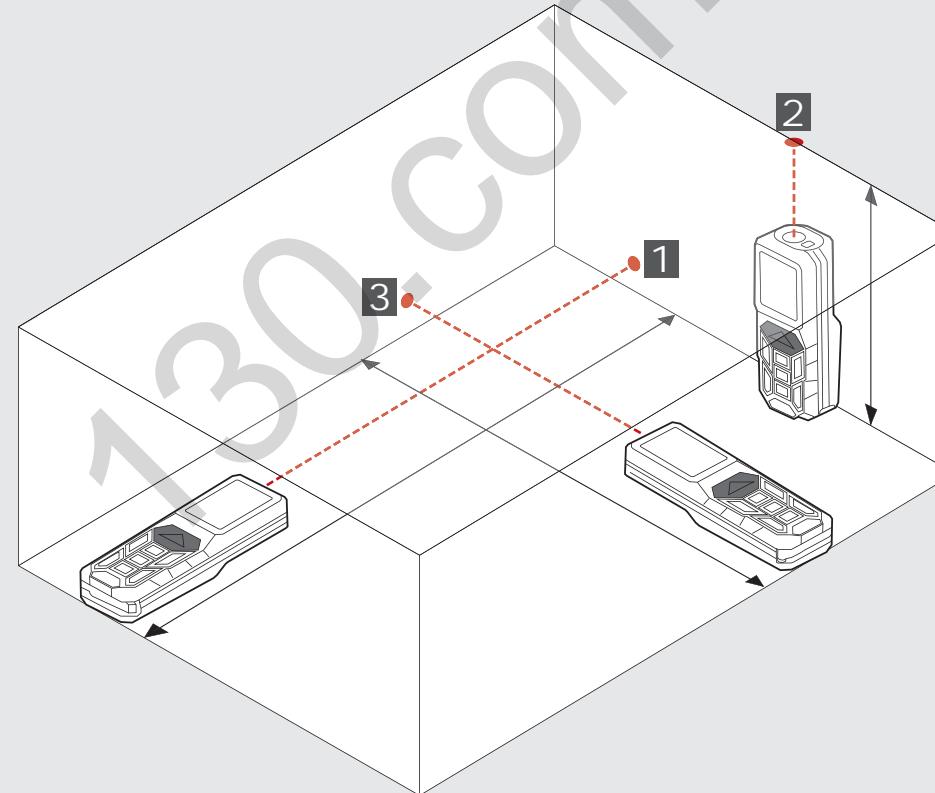
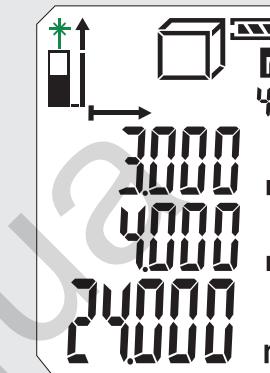
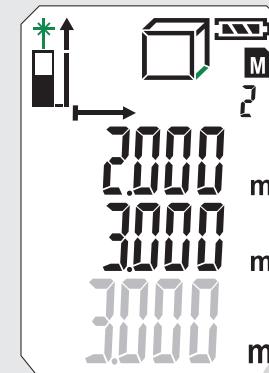
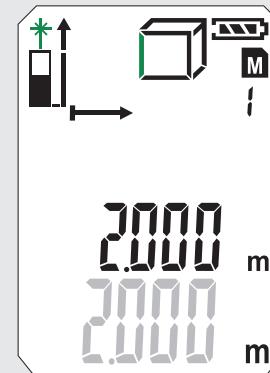
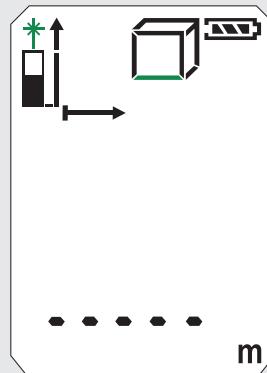
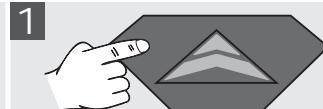
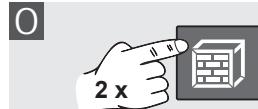
3



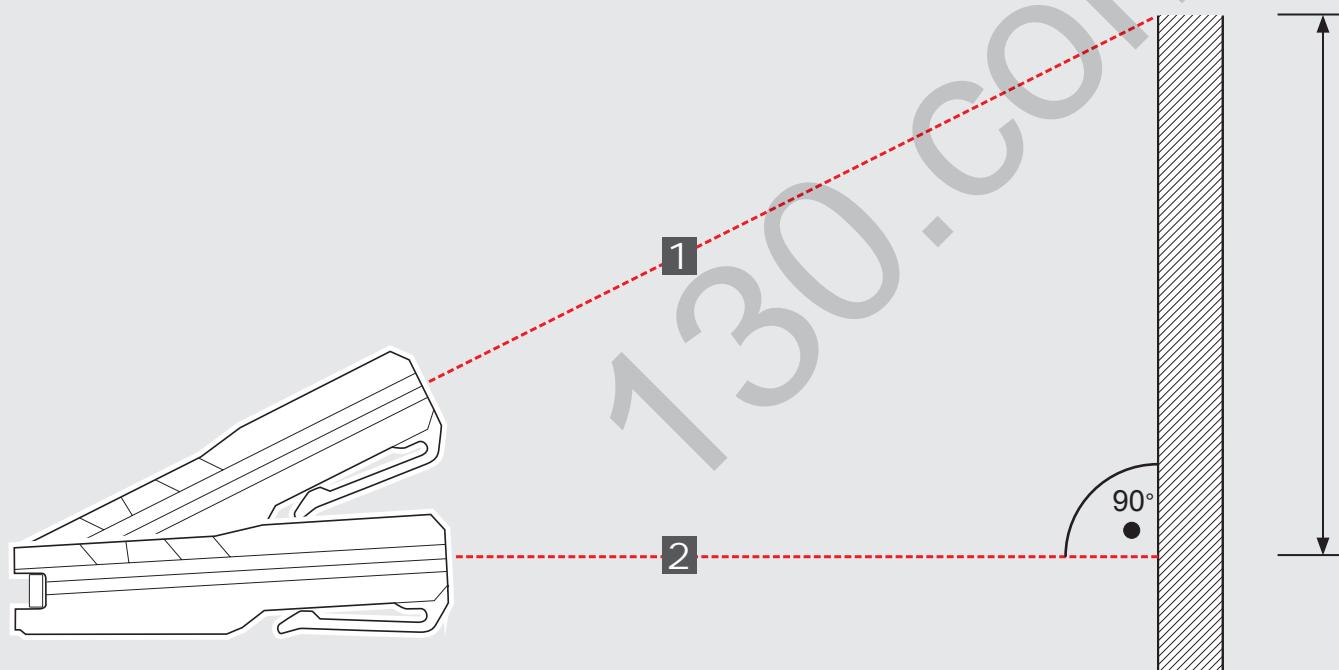
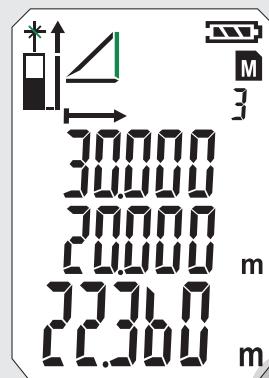
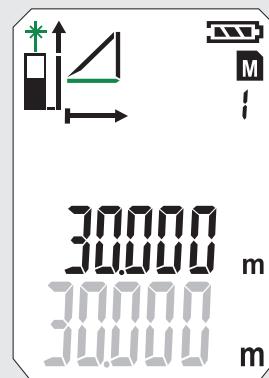
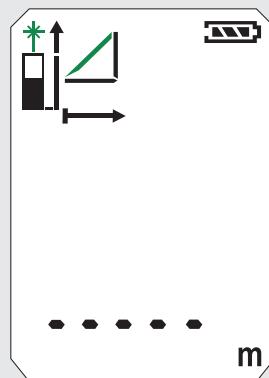
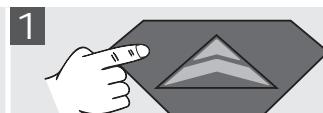
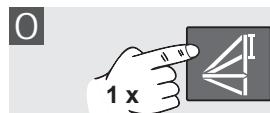
MJERENJE POVRŠIINE



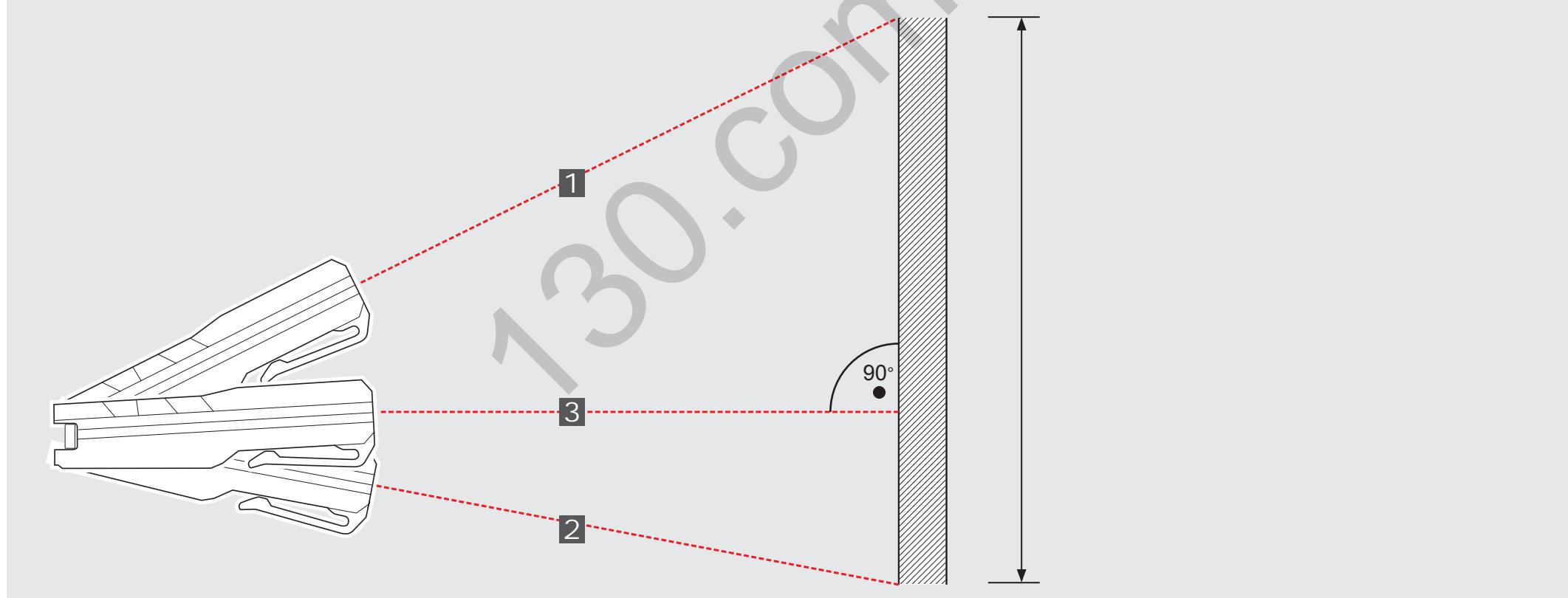
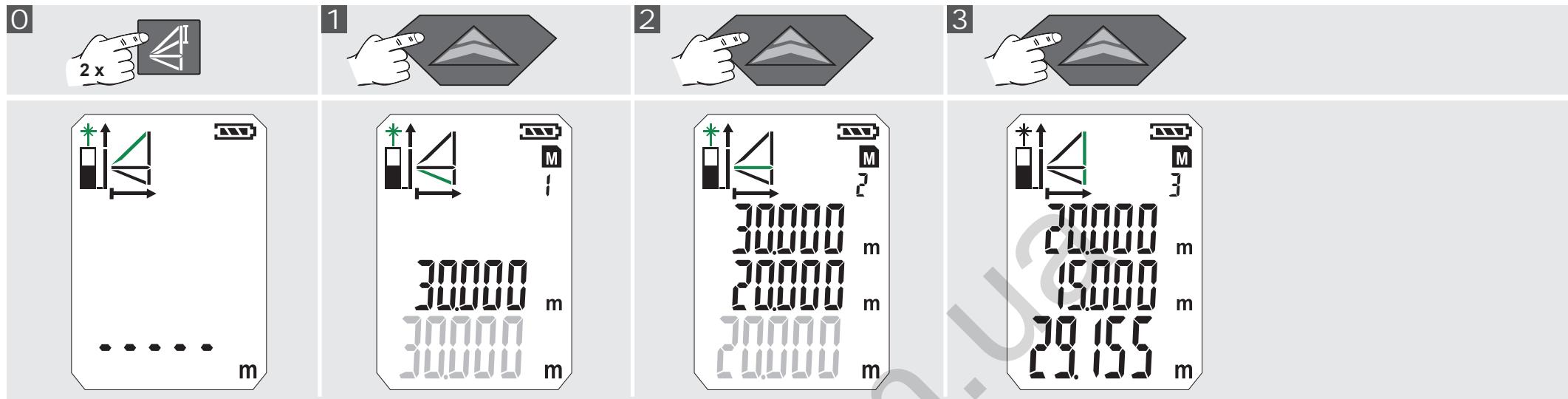
MJERENJE VOLUMENA



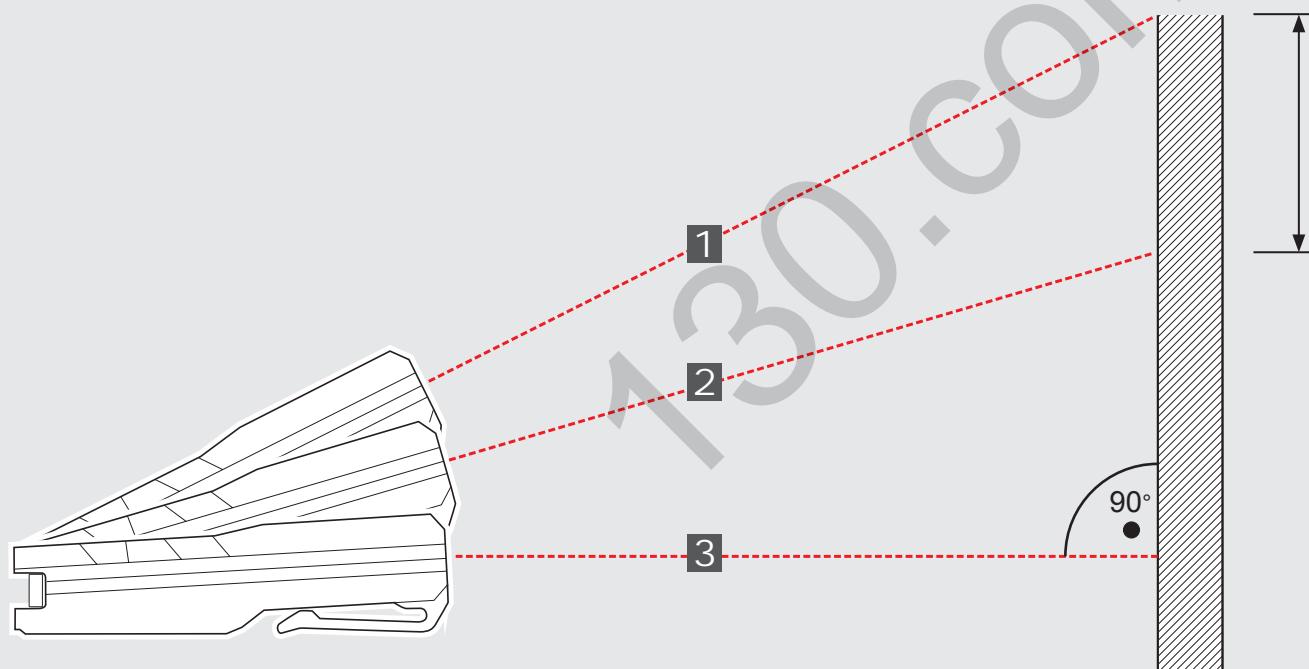
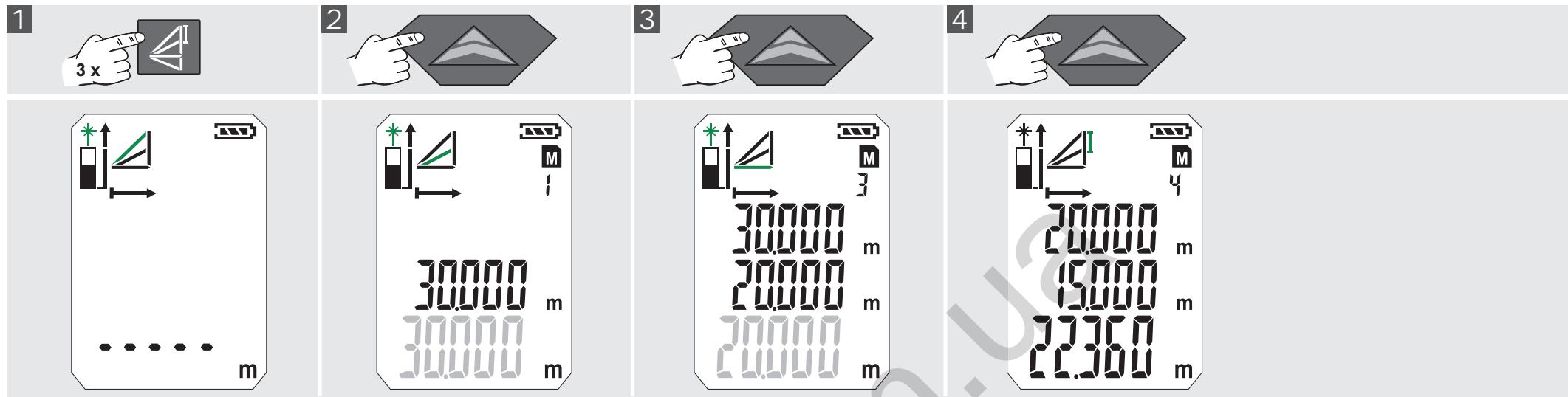
INDIREKNO MJERENJE (PITAGORA 1)



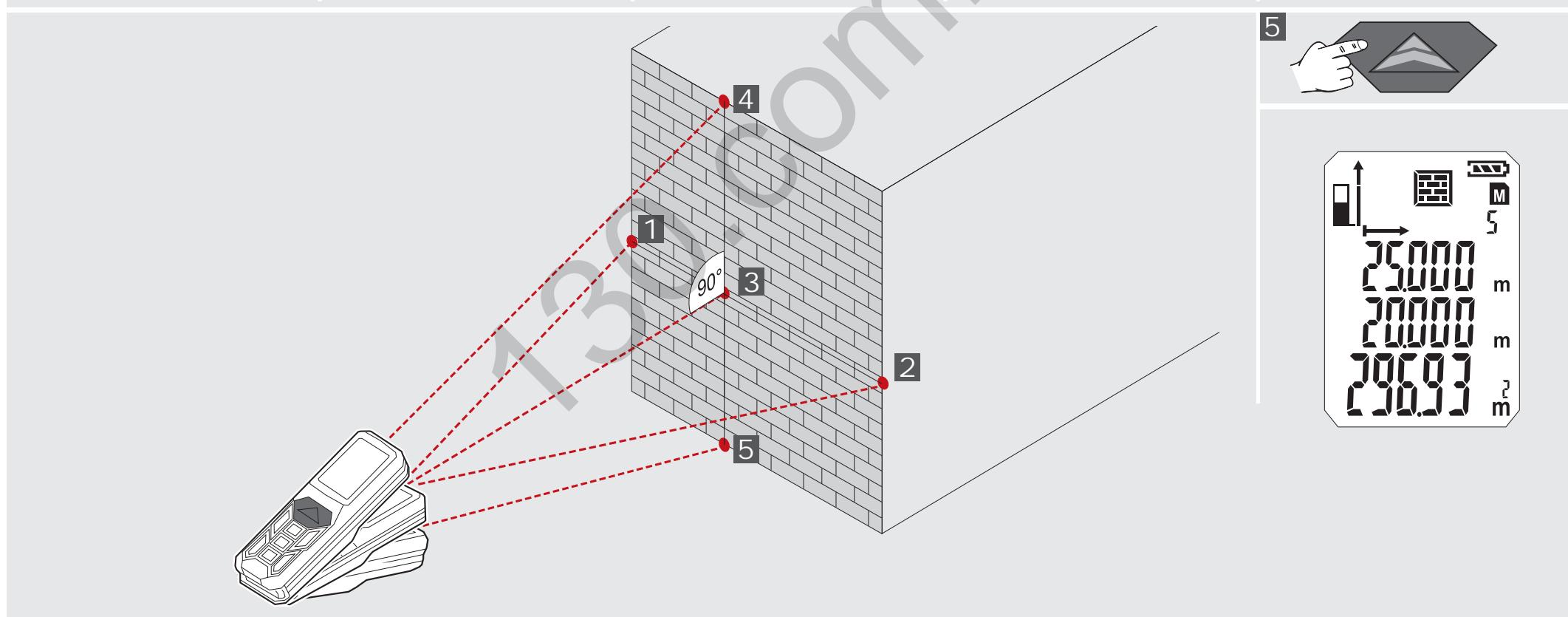
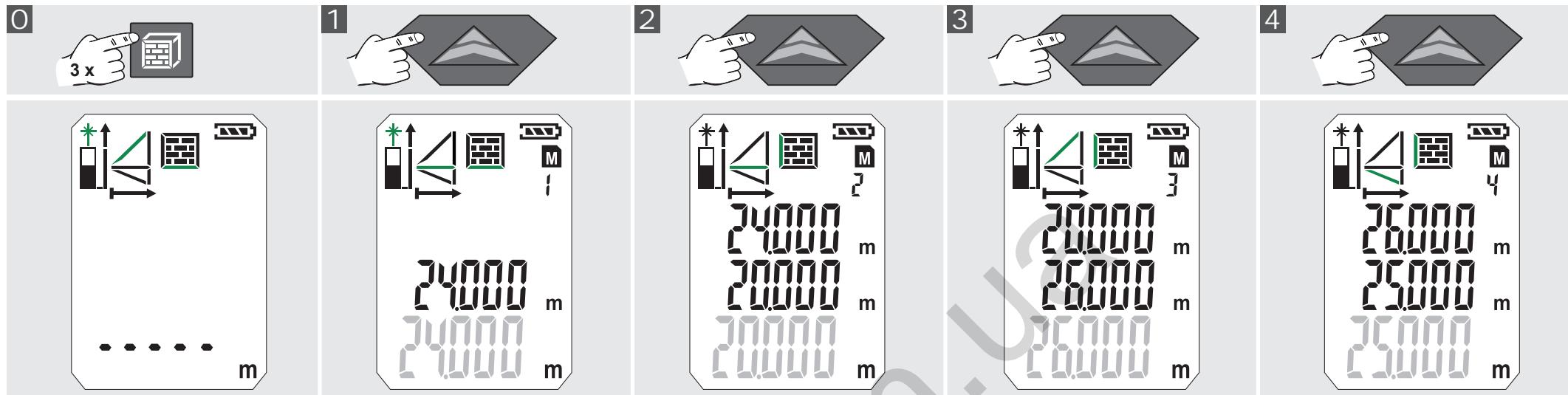
INDIREKTNO MJERENJE (PITAGORA 2)



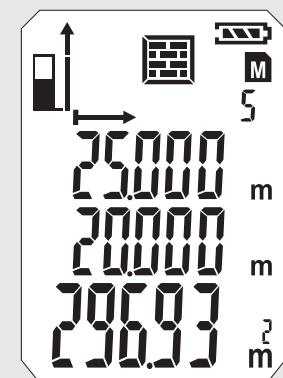
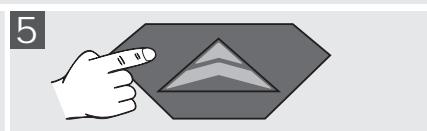
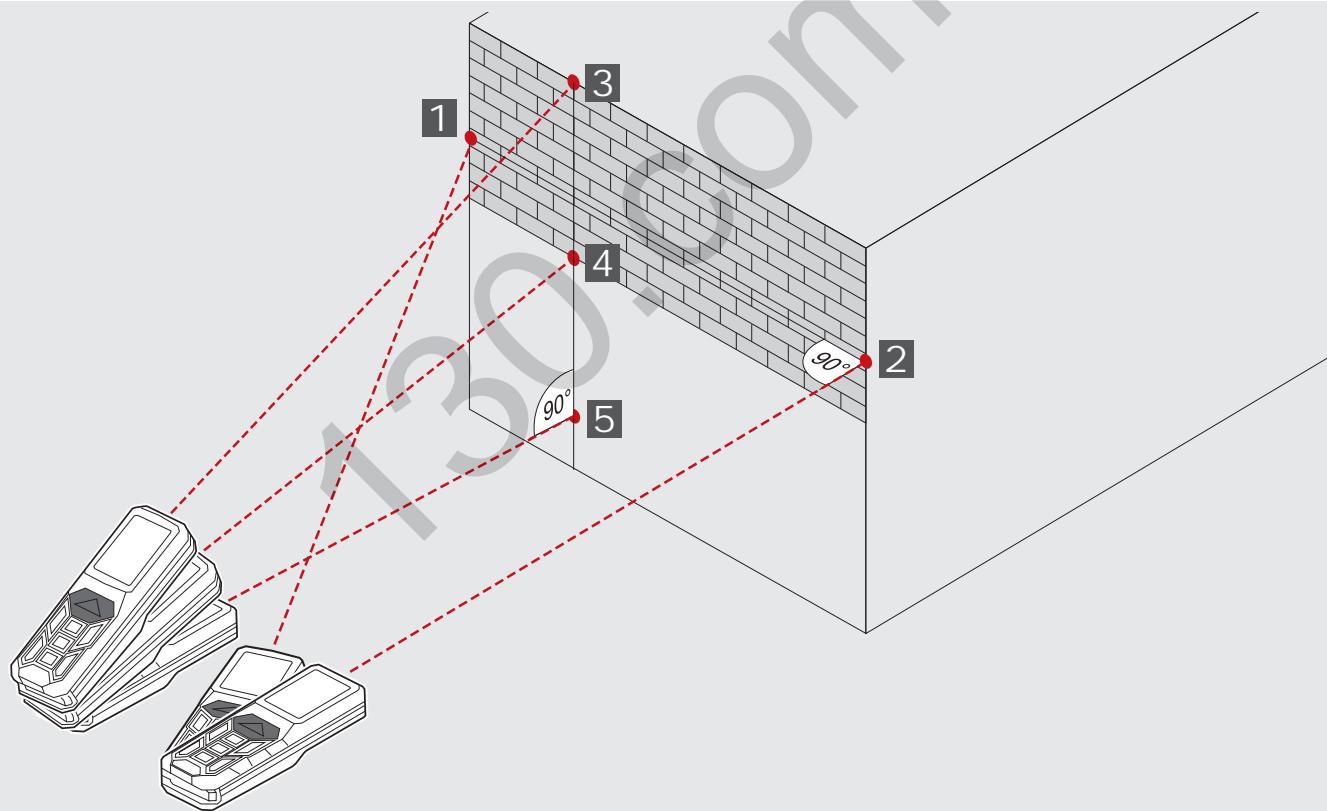
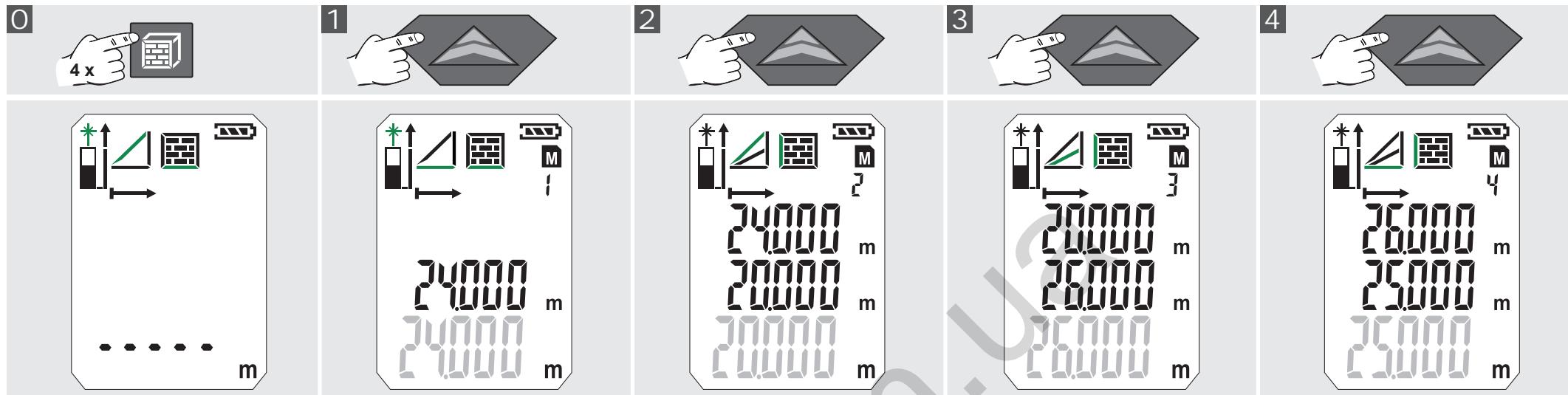
INDIREKTNO MJERENJE (PITAGORA 3)



MJERENJE ZIDNE POVRŠINE (SCENARIO 1)



MJERENJE ZIDNE POVRŠINE (SCENARIO 2)



TIMER

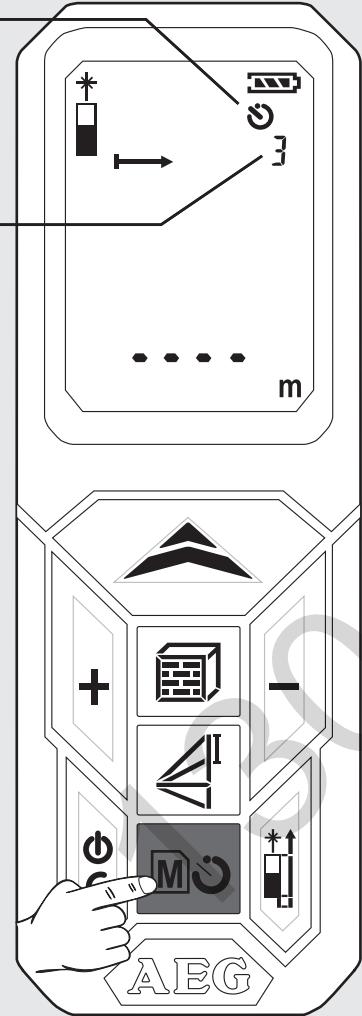
Sa Timerom se mjerjenje može usporeno aktivirati, da bi se npr. jedan element pozicionirao u mjernej zraci.

Tipku  pritisnuti

- Pojaviti se simbol 
- Pritiskom tipke  se Timer može podešiti između 3 i 15 sek.

Pritisnuti tipku 

- Sekunde će se do mjerjenja brojiti naniže.
- Kod 0 se mjerjenje aktivira.



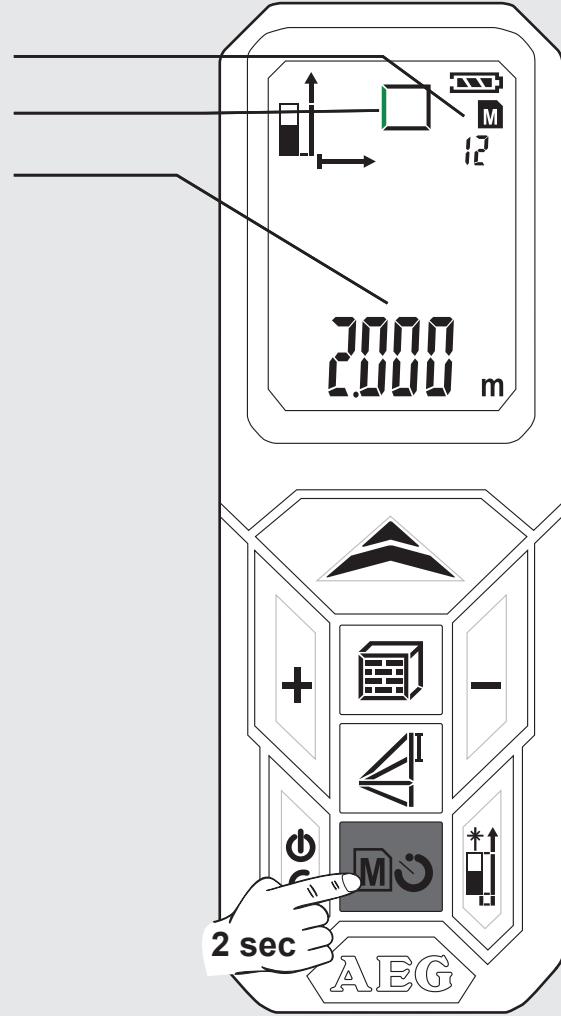
MEMORIJA

Mjerne vrijednosti će automatski neprekidno biti odložene u memoriju.

Memorirane vrijednosti se sa tipkom  mogu pozvati.

Tipku  2 sek. pritiskati

- Pojave se simbol i mjesto memorije.
- Prikazuje se pripadajuća merna veličina.
- Memoriran vrijednost će biti prikazana u glavnom retku.
- Navigirati sa tipkama +/-

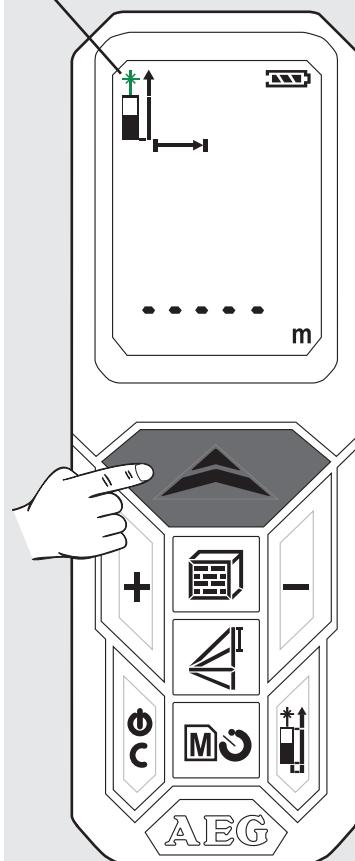


TEMELJITI NAČIN FUNKCIJE NA PRIMJERU JEDNOG MJERENJA POVRŠINE (1)

1 Uključiti

Pritisnuti tipku .
Pažnja! Laserska zraka uključena!
 Ne uperiti na osobe!

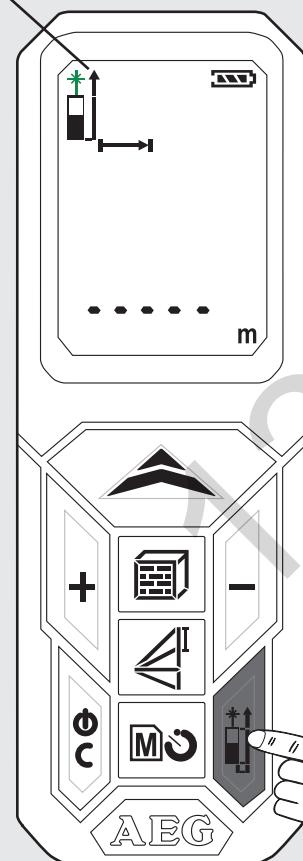
- Laserski simbol treperi (blitzen grün dargestellt).



2 Odabrani mjeru ravninu

Standardno namještanje nakon uključenja: straga
 1x pritisnuti -> kutni zatik
 2x pritisnuti -> sprijeda
 3x pritisnuti -> straga

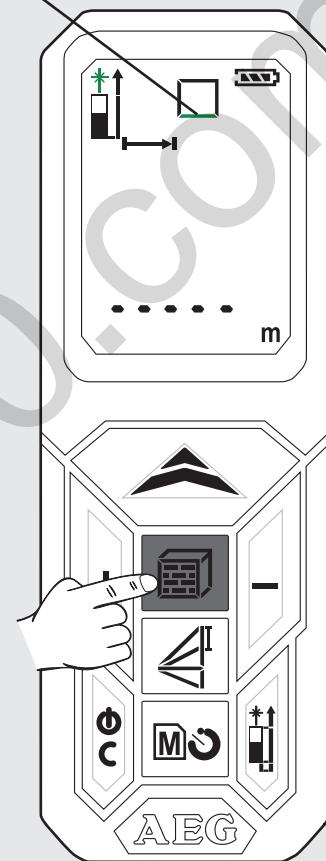
- Prikazuje se simbol



3 Odabrali funkciju

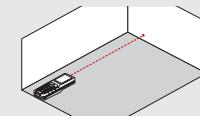
Nakon uključivanja aparat stoji uvijek na mjerenu duljine.
 1x pritisnuti - mjerene površine

- Pojavljuje se simbol
 Mjerna veličina treperi (blitzen grün dargestellt)

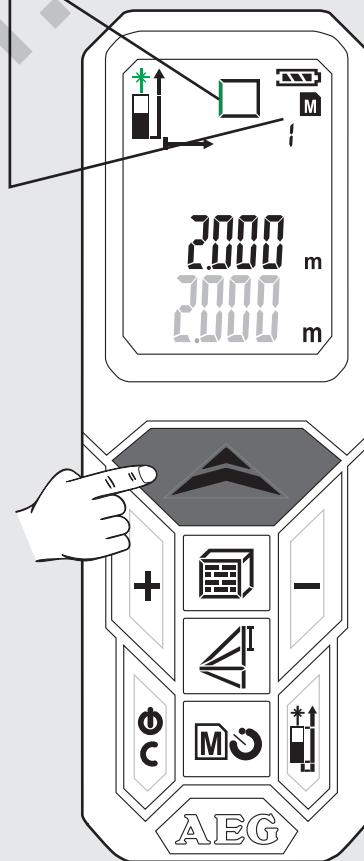


4 Mjeriti duljinu

Aparat usmjeriti i pritisnuti tipku .

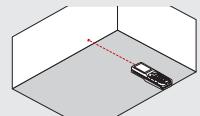


- Mjerna vrijednost se nakratko prikazuje u glavnom retku.
 - Mjerna vrijednost poslije 1 sek. skače u iznad toga ležeći redak.
 Mjerna vrijednost će u memoriji biti odložena pod rednim brojem.
 Druga mjerna veličina treperi. Aparat je spreman za mjerjenje druge vrijednosti.

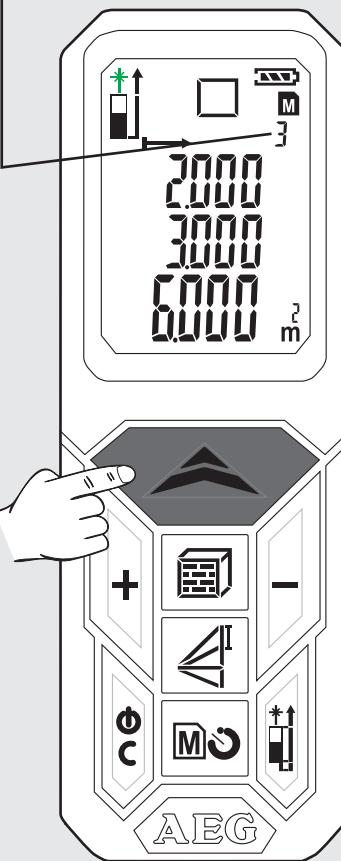


5 Mjerene širine

Aparat usmjeriti i tipku pritisnuti



- Mjerna vrijednost se nakratko pojavi u glavnom retku.
 - Mjerna vrijednost poslije 1 sek. skače u iznad toga ležeći redak.
 Mjerna vrijednost će u memoriji biti odložena pod rednim brojem.
 - Rezultat će biti prikazan u glavnom retku i odložen u memoriju pod rednim brojem.



TEMELJITI NAČIN FUNKCIJE NA PRIMJERU JEDNOG MJERENJA POVRŠINE (2)

6 Pozvati memorirane vrijednosti

Tipku  pritiskati 2 sek.

Pritisnuti tipku + ili -

7 Napustiti memoriju

Pritisnuti tipku 

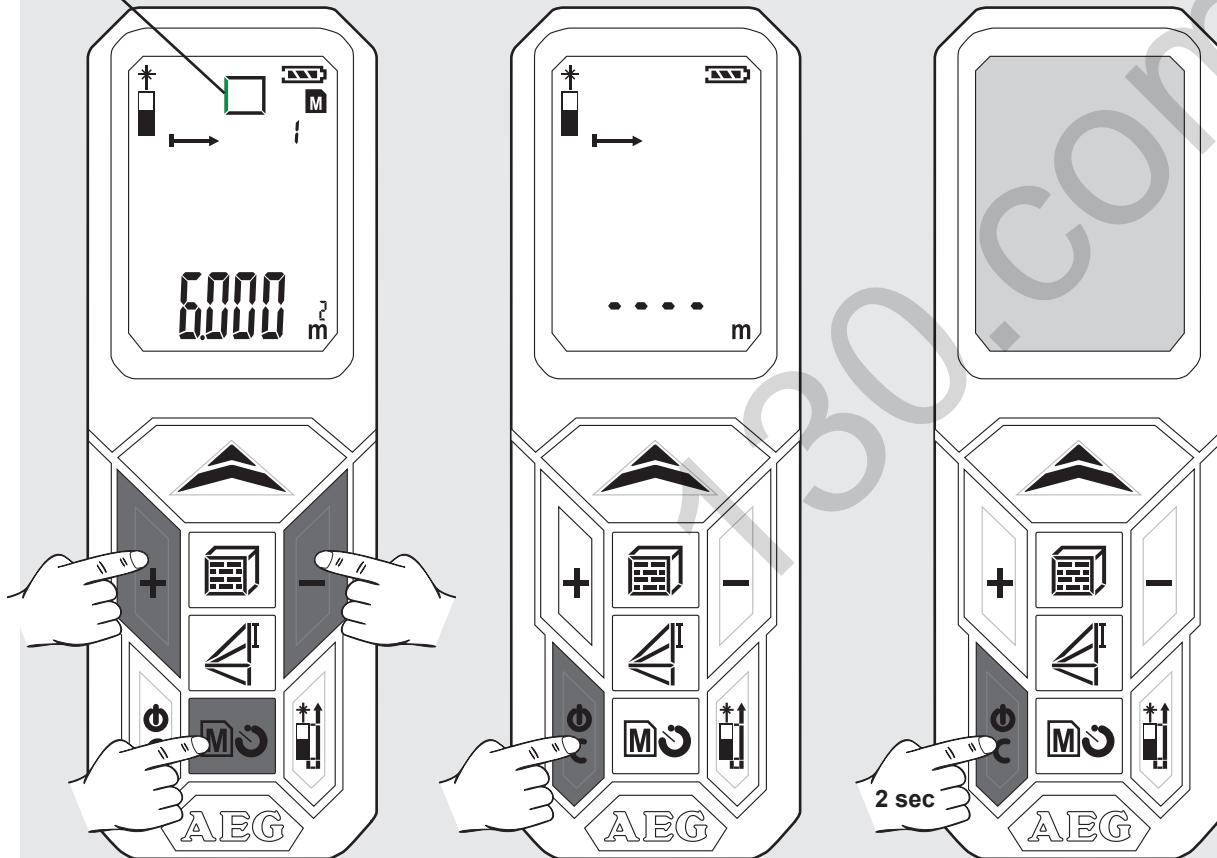
8 Isključiti

Tipku  pritiskati 2 sek.
(Speicher muss vorher verlassen werden).

- Memorirane vrijednosti će biti prikazane u glavnom retku.

Pripadajući simbol će biti prikazan i mjerna veličina treperi (blinking grün dargestellt).

- Aparat se isključuje.
- Ako se 3 minute dugu ne pritišće nikakva tipka, aparat se automatski isključuje.



SATURS

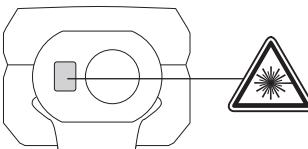
SVARĪGI DROŠĪBAS NOTEIKUMI.....	1
Tehniskie dati.....	2
Noteikumiem atbilstošs izmantojums	2
Klūdu kodu tabula.....	2
Pārskats.....	3
Bateriju nomaņa.....	4
Stūra kāja	4
Jostas turētājs	4
Funkcijas taustiņi, Pitagors, mēriņuma līmenis	5
Vienkāršā garuma mērišana	6
Nepārtrauktā mērišana/ Minimuma-maksimuma mērišana....	7
Mērišana pieskaitot/ atņemot	8
Laukuma mērišana.....	9
Tilpuma mērišana	10
Netiešā mērišana (Pitagors 1).....	11
Netiešā mērišana (Pitagors 2).....	12
Netiešā mērišana (Pitagors 3).....	13
Sienas laukuma mērišana (1. variants).....	14
Sienas laukuma mērišana (2. variants).....	15
Taimeris	16
Atmiņa	16
Pamata darbības uz virsmas mēriņuma pamata (1).....	17
Pamata darbības uz virsmas mēriņuma pamata (2).....	18

SVARĪGI DROŠĪBAS NOTEIKUMI



Pirms šī produkta lietošanas uzmanīgi izlasiet drošības instrukcijas un lietošanas rokasgrāmatu.

Lāzera klasifikācija



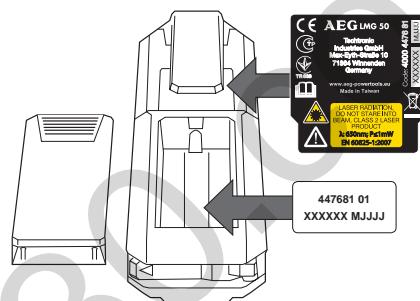
BRĪDINĀJUMS:

Tas ir 2. klases lāzeru produkts saskaņā ar IEC 60825-1:2007.



Marķējums

Pirms pirmās pieņemšanas ekspluatācijā angļu valodas teksts firmas dēļītī ir jāaižlīmē ar piegādāto uzlīmi Jūsu dzimtā valodā.



Brīdinājums:

Izvairieties no tieša acu kontakta. Lāzera stars var Jūs apžilbināt un izraisīt īslaicīgu aklumu.

Neskatieties uz lāzera staru un nevērsiet to bez vajadzības uz citiem cilvēkiem.

Neapžilbiniet citus cilvēkus.

Brīdinājums: Nedarbiniet lāzera ierīci bērnu tuvumā, kā arī nejaujiet bērniem pašiem to izmantot.

Uzmanību! Atstarojoša virsma var atstarot lāzera ierīces staru uz citām ierīcēm vai cilvēkiem.

Turiel ekstremitātes drošā attālumā no kustīgajā daļām.

Periodiski veiciet pārbaudes mēriņumus. It sevišķi, mēriju laikā vai pirms svarīgiem mēriņumiem.

Ja instruments sabojājas, bija nokritis, nepareizi pielietots vai tika pārveidots, pārbaudiet, vai attāluma mēriņumi nav kļūdaini.

Uzmanību! Lepazīstieties ar dārza instrumenta vadības elementiem un tā pareizu lietošanu.

Lāzera mēriņīcei ir ierobežots pielietojums. (Skatīt sadaļu "Tehniskā informācija"). Veicot mēriņumus ārpus minimālā un maksimālā mērišanas apgabala, iegūtie rezultāti būs neprecīzi. Izmantojot ierīci nelabvēlīgos apstākļos, piemēram, karstumā, lielā aukstumā, joti spožā saules gaismā, lietū, sniegā, miglā vai citos redzamību ierobežojošos apstākļos, iegūtie rezultāti var būt neprecīzi.

Ienesot lāzera mēriņīci no siltas apkārtējās vides aukstā vidē (un otrādāk), pagaidiet, līdz ierīce ir pielāgojusies attiecīgās vides apkārtējai temperatūrai.

Vienmēr uzglabājet lāzera mēriņīci telpās, kas sniedz aizsardzību pret satricinājumiem, vibrācijām vai ekstrēmām temperatūrām.

Nepakļaut lāzera mēriņīci putekļu, mitruma un augsta relatīvā gaisa mitruma ietekmei. Šie faktori var nodarīt bojājumus ierīces iekšienē, līdz ar to var tikt ietekmēta mēriņumu precīzitāte.

Tīrīšanai neizmantojiet agresīvus tīrīšanas līdzekļus vai šķīdinātājus. Tīrīt tikai ar tīru, mīkstu lupatiņu.

Rūpējieties, lai mēriņīce nesaņemtu stiprus triecienus vai nenokristu no bīstama augstuma. Ja ierīce tomēr ir nokritusi vai ir tikusi pakļauta cita veida mehāniskajai slodzei, pārbaudiet tās precīzitāti.

Nepieciešamos lāzera ierīces remontdarbus var veikt tikai apmācīti darbinieki.

Nelietojiet to sprādzenībīstamās vietās vai agresīvā vidē.

Lai uzlādētu baterijas, izmantojiet tikai ražotāja apstiprinātus lādētājus.

Tukšās baterijas nedrīkst izmest sadzīves atkritumu tvertnē. Rūpējieties par vidi un aizvediet tās uz speciālajiem savākšanas punktiem, kas ir izveidoti saskaņā ar nacionālo vai vietējo likumdošanu. Ierīci nedrīkst izmest sadzīves atkritumu tvertnē. Izvietojiet produktu atbilstoši spēkā esošajiem nacionālajiem noteikumiem. Stingri ievērojiet valsts un vietējos specifiskos noteikumus. Par ierīces nodošanu pārstrādei, sazinieties ar tuvāko veikalu vai savu izplatītāju.

CE markējums

TEHNISKIE DATI

Aizsardzības klase	IP54 (aizsargāta pret putekļiem un šķakatām)
Optika	14 mm
Fokuss	35 mm
Maksimālais mēriņumu apgabals	50 metri (tolerance: 55m)
Minimālais mēriņumu apgabals	0,05 metri
Absolūtā precīzitāte @ < 10m	± 1,5 mm (maksimāli)
Atkārtota precīzitāte @ < 10m	± 1,5 mm (parasti maksimāli 2σ)
Atkārtota precīzitāte @ > 10m	kāpums ± 0,25 mm / metrā (parasti maksimāli 2σ)
Mērišanas laiks	0,5 s
Dispela veids	LCD (22,7 mm x 31 mm)
Strāvas avots	AAA 2x (sārmu baterijas)
Bateriju resurss	10000 (atsevišķi mēriņumi)
Lāzera izejošā jauda	0,6 mW ~ 0,95 mW (2. klase, 650nm)
Lāzera punkta lielumse	25 x 30 mm @ 16 m (maksimāli)
Lāzera stara vertikālais leņķis	+1 grāds
Lāzera stara horizontālais leņķis	±1 grāds
Ierīces automātiskā izslēgšana	180 sekundes
Automātiskā lāzera izslēgšana	30 sekundes
Darba temperatūra	-10°C to +50°C
Uzglabāšanas temperatūra	no -25°C līdz +70°C
Svars bez baterijām	80 g

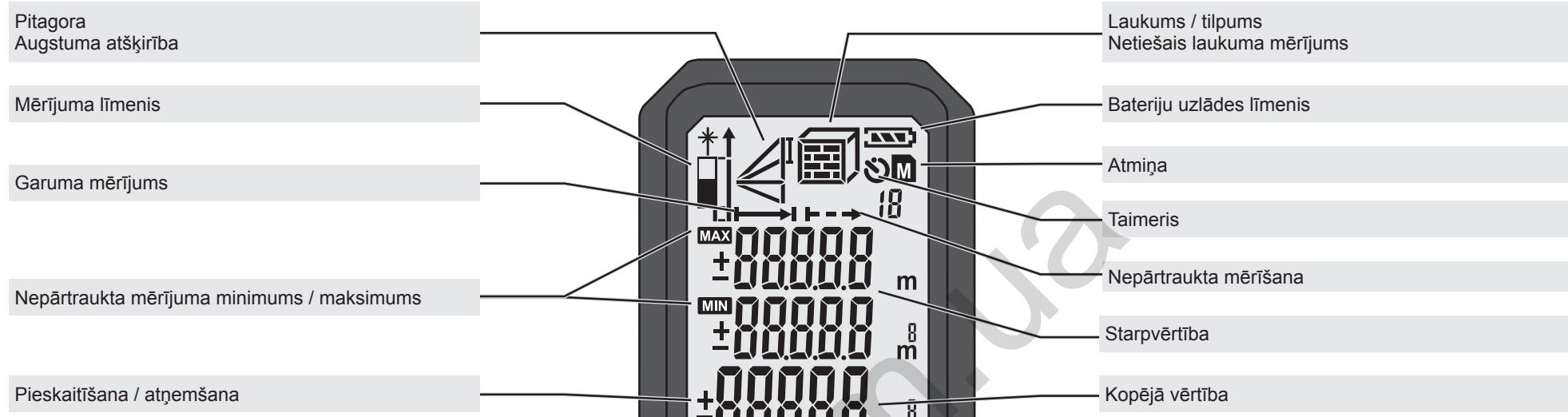
KĻŪDU KODU TABULA

Kods	Apraksts	Risinājums
Err01	Ārpus mēriņuma apgabala	Veiciet mēriņumu pieļaujamā apgabala robežās.
Err02	Atstarotais signāls ir pārāk vājš	Izvēlieties labāku virsmu.
Err03	Ārpus rādījumu apgabala (maksimālā vērtība: 99.999), piemēram, laukuma vai tilpuma iznākums ir ārpus parādāmās vērtības	Pārbaudiet, vai vērtības un darbības ir pareizas.
Err04	Kļūda Pitagora aprēķinā	Pārbaudiet, vai vērtības un darbības ir pareizas.
Err05	Zems bateriju līmenis	Ieviecojet jaunas baterijas.
Err06	Ārpus pieļaujamās darba temperatūras	Veiciet mēriņumus norādītās darba temperatūras diapazonā.
Err07	Pārāk gaišs	Aptumšojiet mērķa apgabalu.

NOTEIKUMIEM ATBILSTOŠS IZMANTOJUMS

Lāzera mērīce ir piemērota attālumu un slīpuma mērišanai

Šo instrumentu drīkst izmantot tikai saskaņā ar minētajiem lietošanas noteikumiem.



IESLĒGŠANA/ MĒRĪŠANA

- Ieslēgt
- Mērīt
- Nepārtrauktā mēriņšana (turēt 2 sekundes)
Minimuma/ maksima funkcija

PIESKAITĪŠANA

- Vērtības pieskaitīšana
- Pārvietošanās atmiņā

LAUKUMS / TILPUMS

- Laukums (nospiest 1x)
- Tilpums (nospiest 2x)
- Netiešais virsmas mēriņums (nospiest 3x / 4x)

IESLĒGŠANA

- Ieslēgt
- Izslēgt (turēt 2 sekundes)
- Dzēst

ATŅEMŠANA

- Atņemt vērtību
- Pārvietošanās atmiņā

PITAGORS

- Pitagors 1 (nospiest 1x)
- Pitagors 2 (nospiest 2x)
- Pitagors 3 (nospiest 3x)

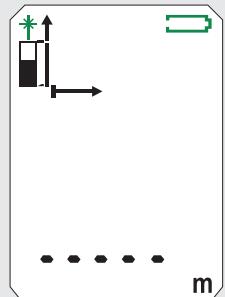
MAINĪT MĒRĪJUMA LĪMENI

- Priekšā
- Aizmugure
- Stūra kāja

ATMIŅA

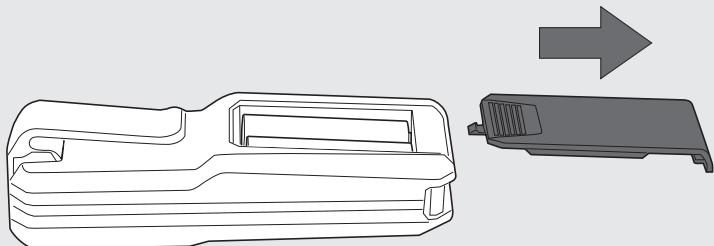
- Taimeris 3-15 sekundes (nospiest 1x)
- Atmiņa 1-20 (nospiest 1x un turēt 2 sekundes)
- Pārvietoties pa atmiņu ar +/- taustījiem

BATERIJU NOMAINĀ

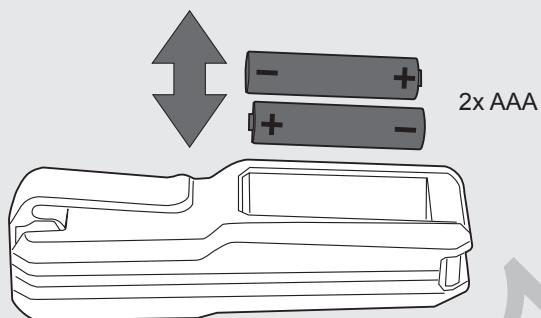


Kad baterijas simbols mirgo, ir pienācis laiks tās nomainīt.

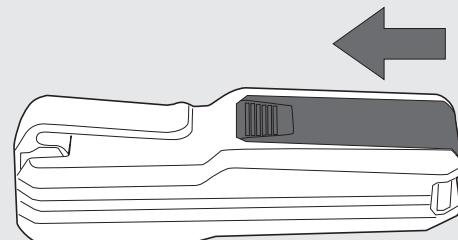
1



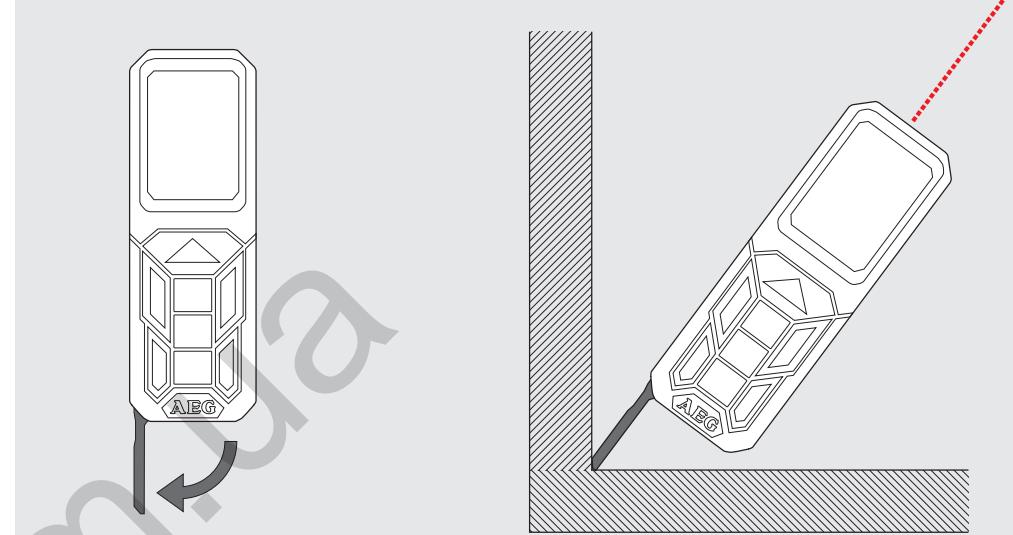
2



3

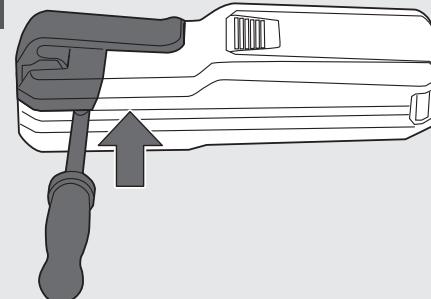


STŪRA KĀJA

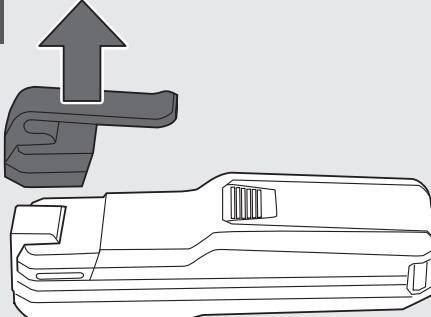


JOSTAS TURĒTĀJS

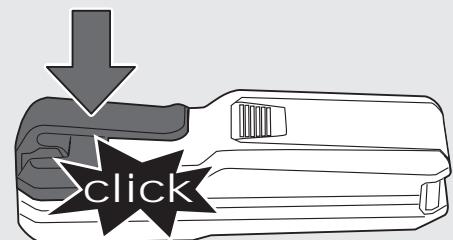
1



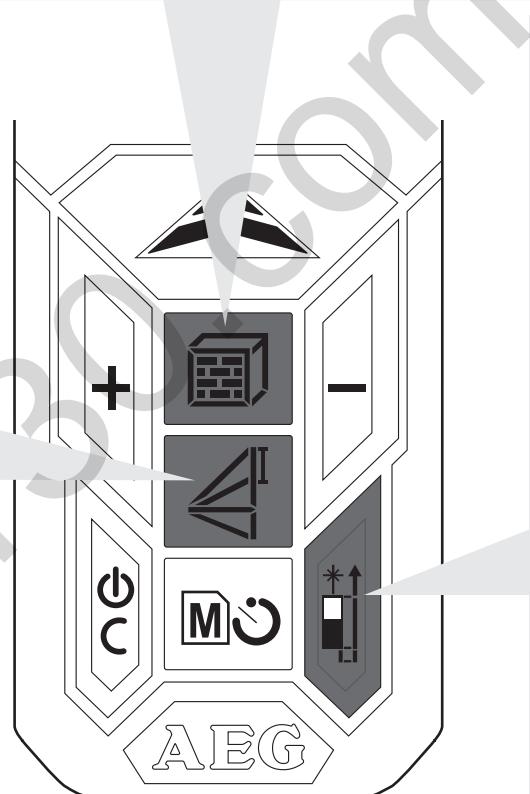
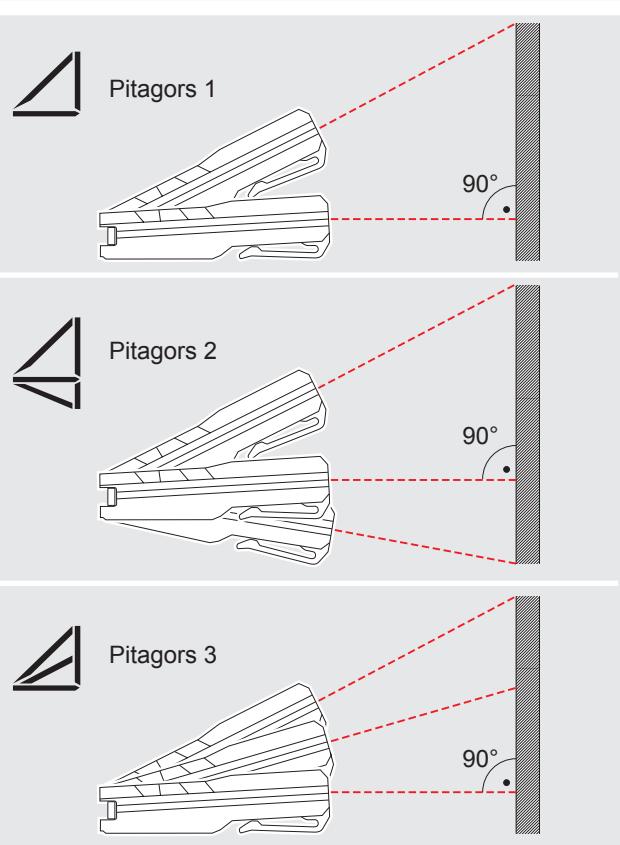
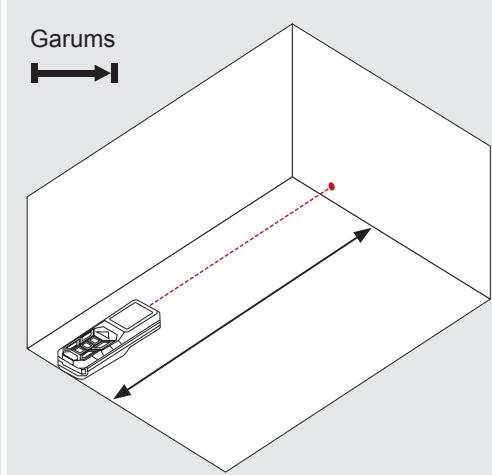
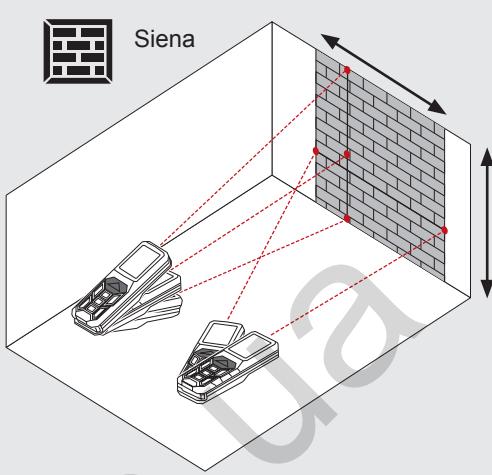
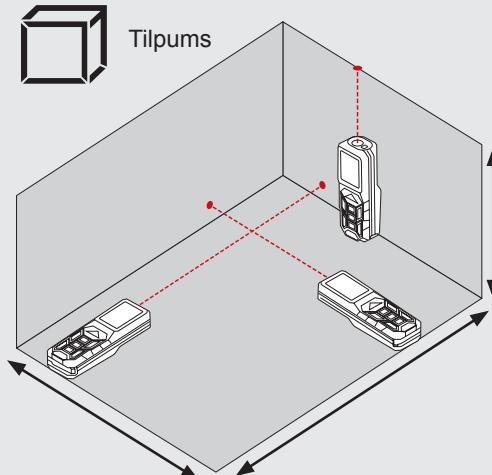
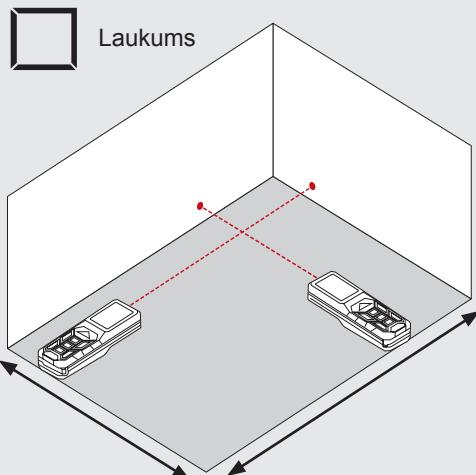
2



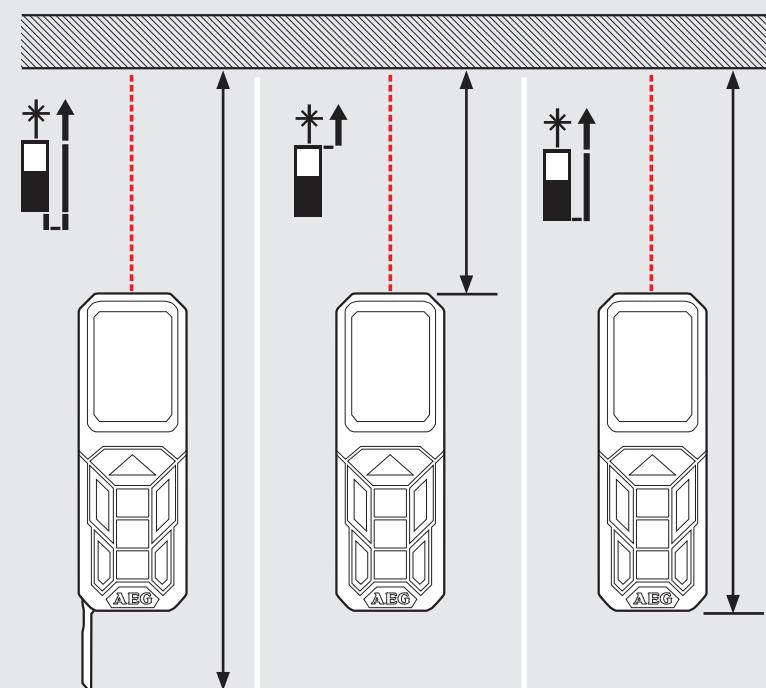
3



FUNKCIJAS TAUSTINI, PITAGORS, MĒRĪJUMA LĪMENIS

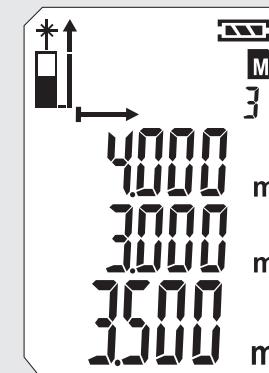
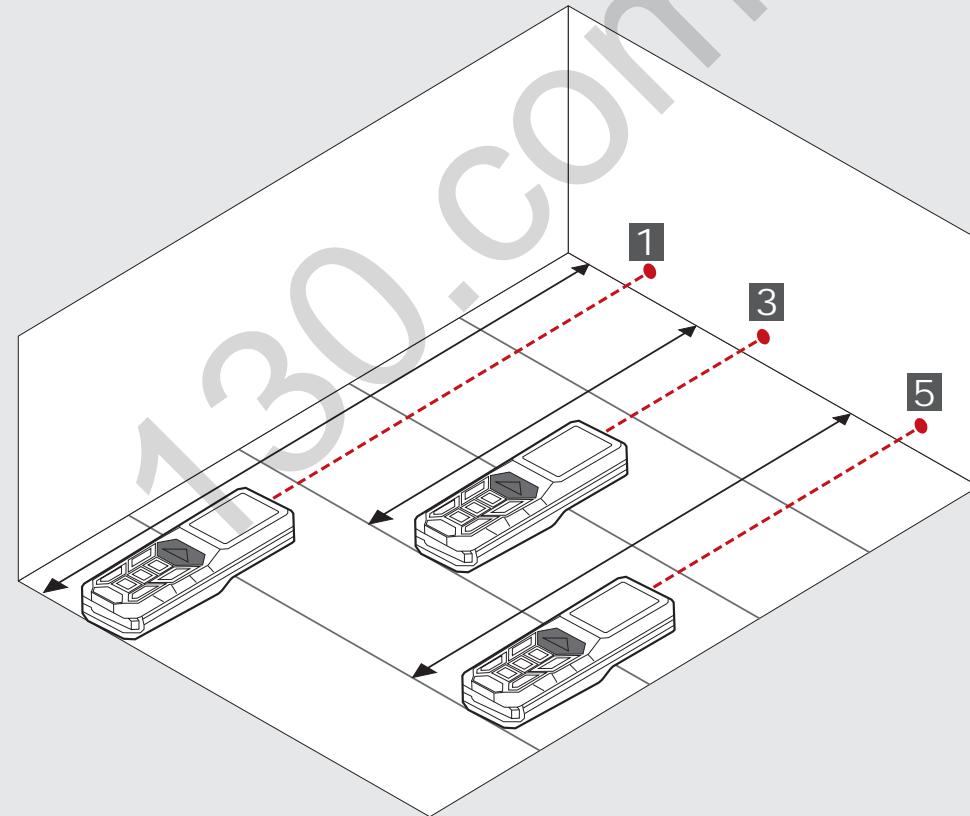
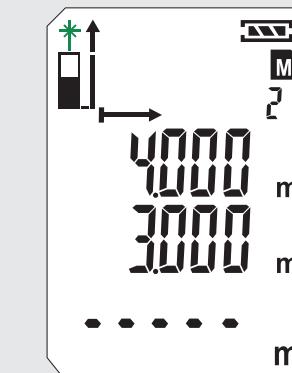
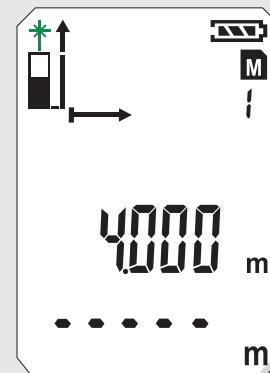
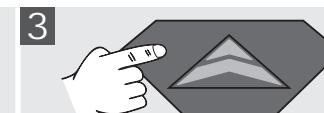
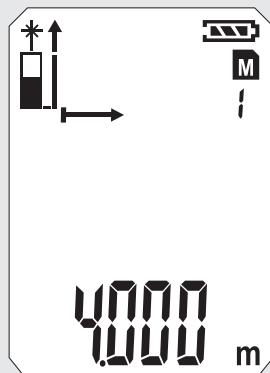
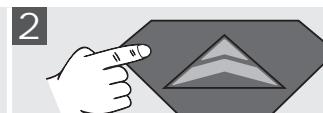
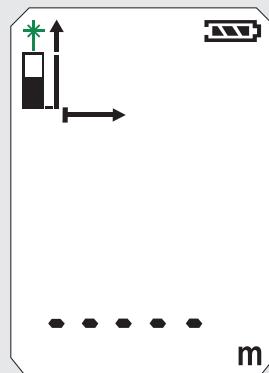
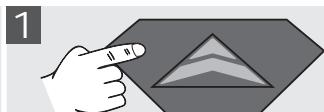


Mērījuma līmenis



VIENKĀRSĀ GARUMĀ MĒRĪŠANA

0

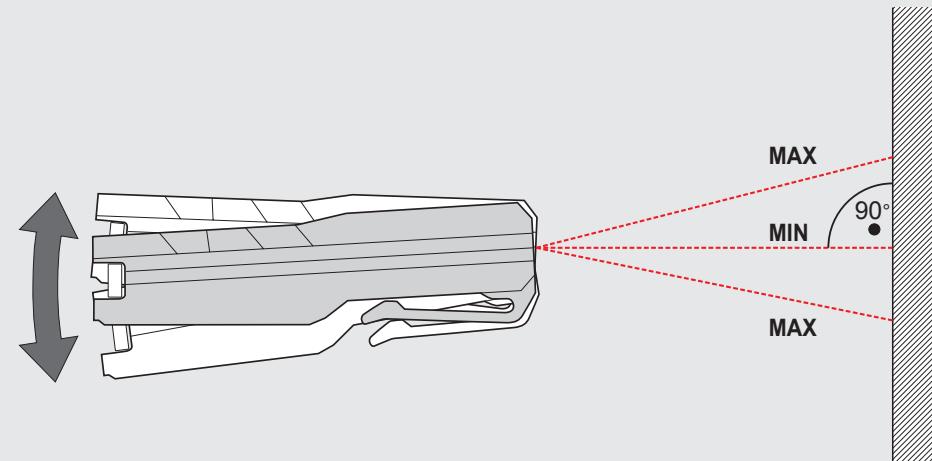
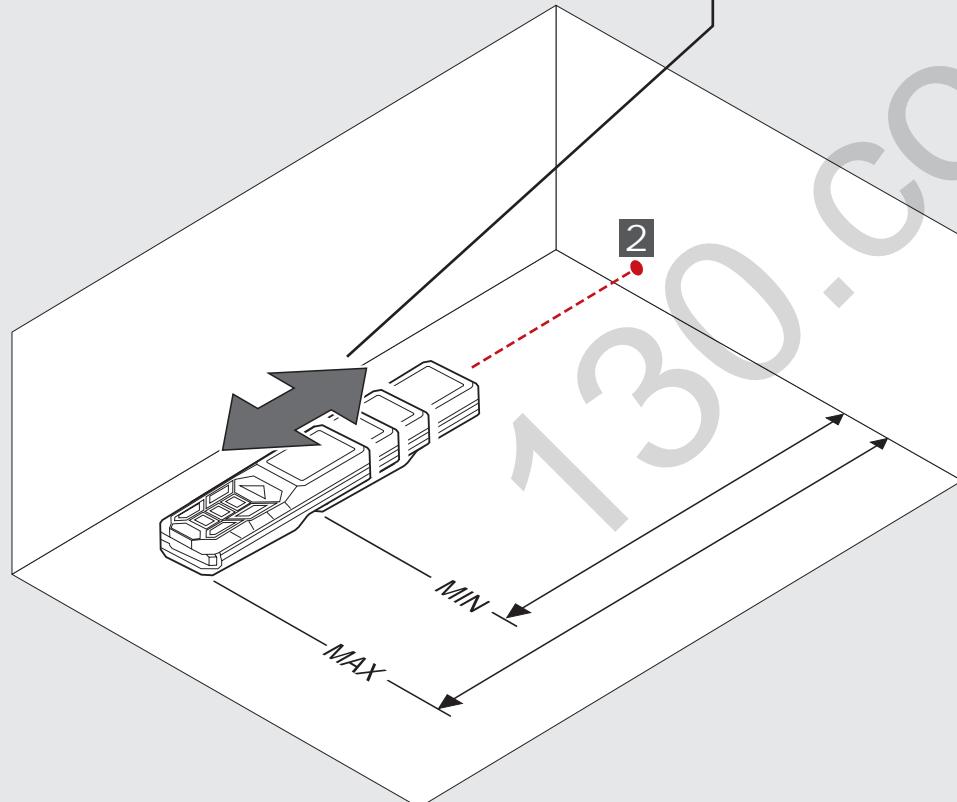
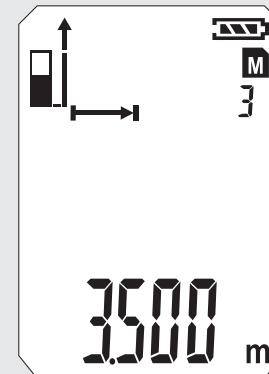
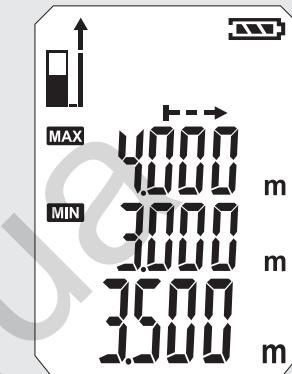
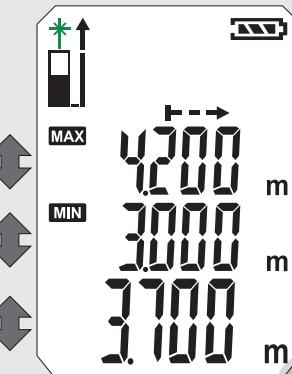
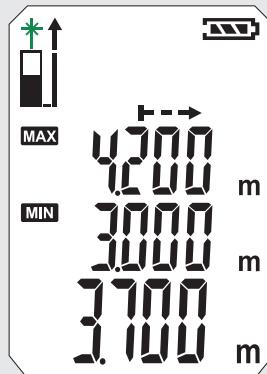
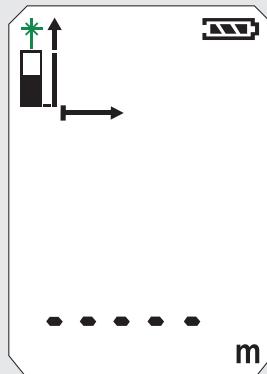


NEPĀRTRAUKTA MĒRĪŠANA/ MINIMUMA-MAKSIMUMA MĒRĪŠANA

0

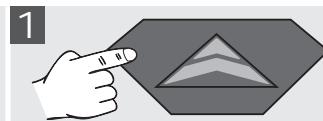


2

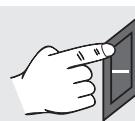


MĒRĪŠANA PIESKAITOT/ ATNEMOT

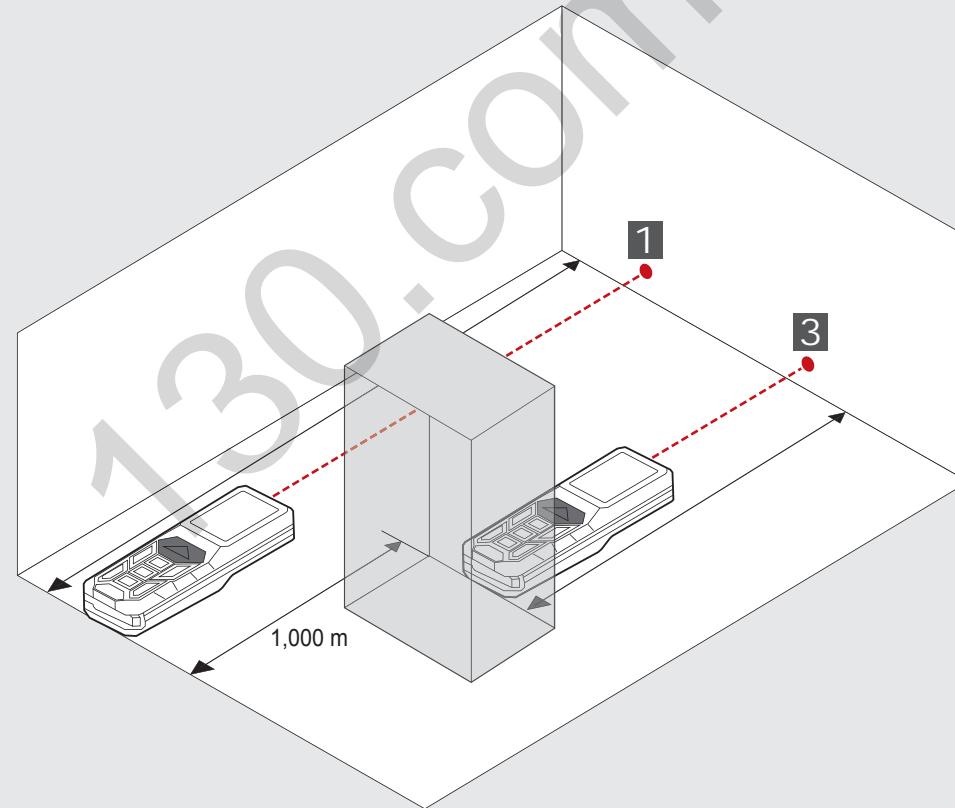
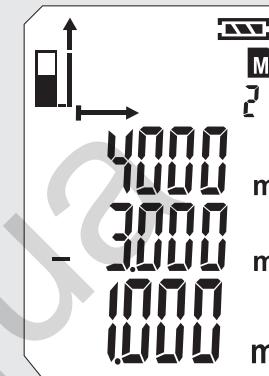
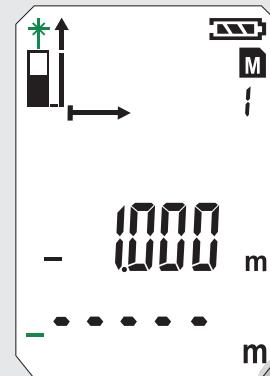
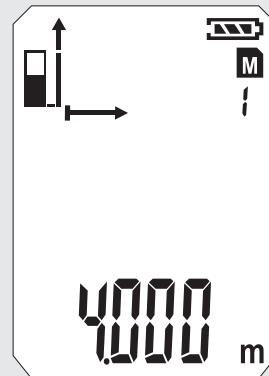
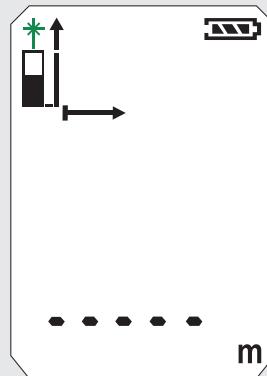
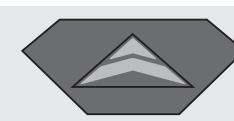
0



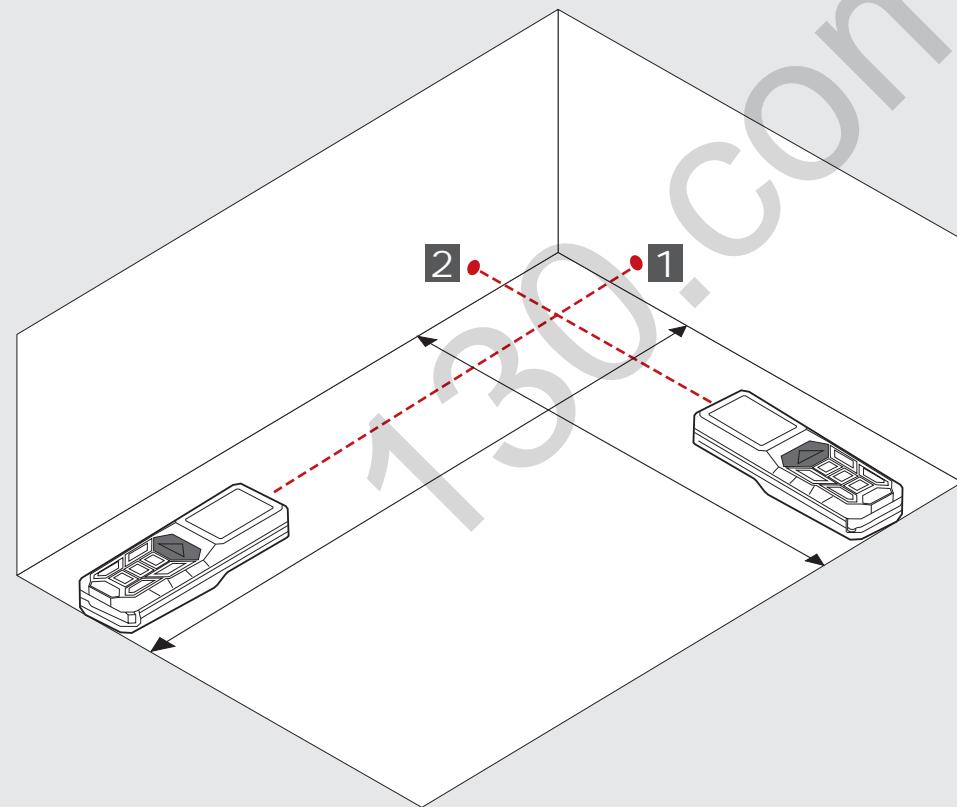
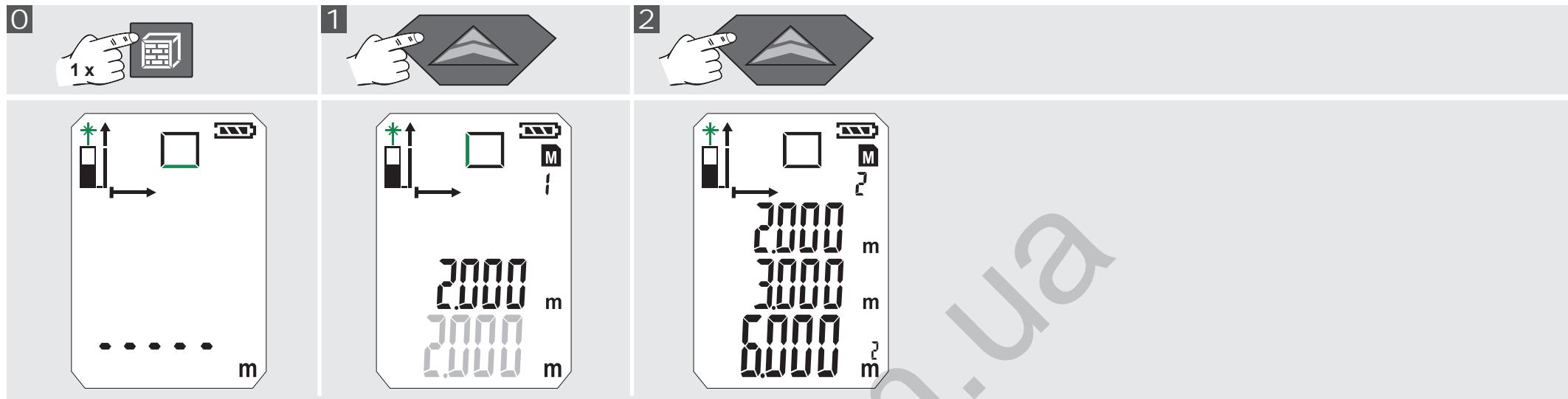
2



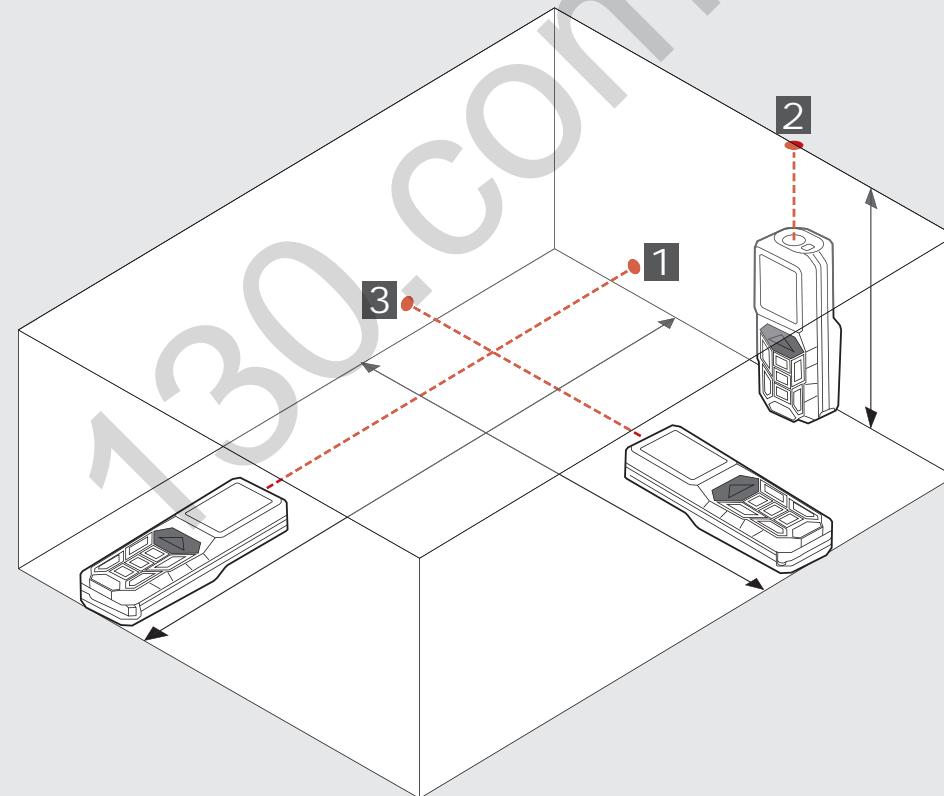
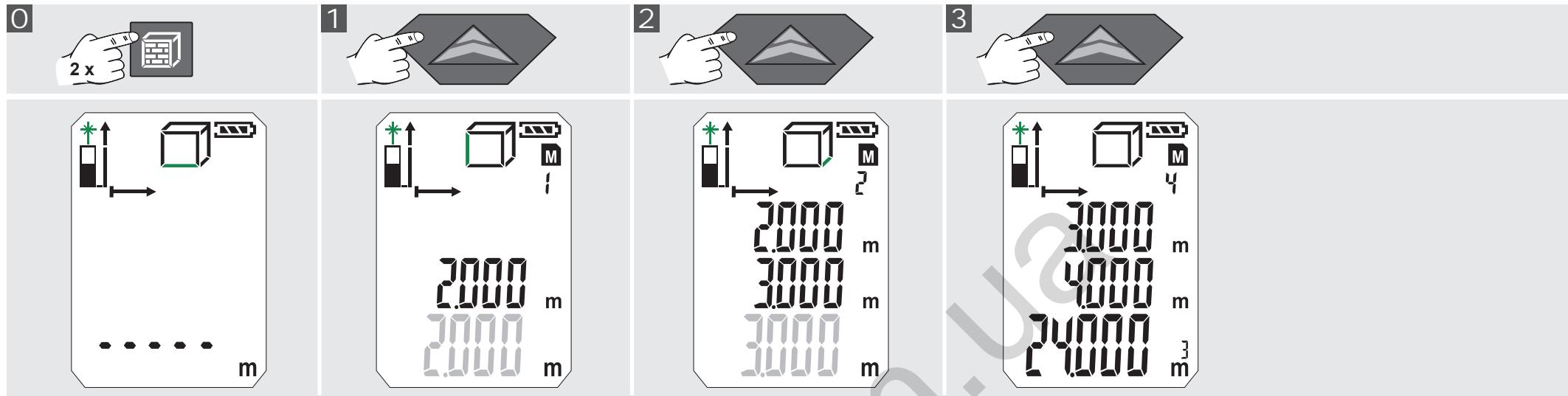
3



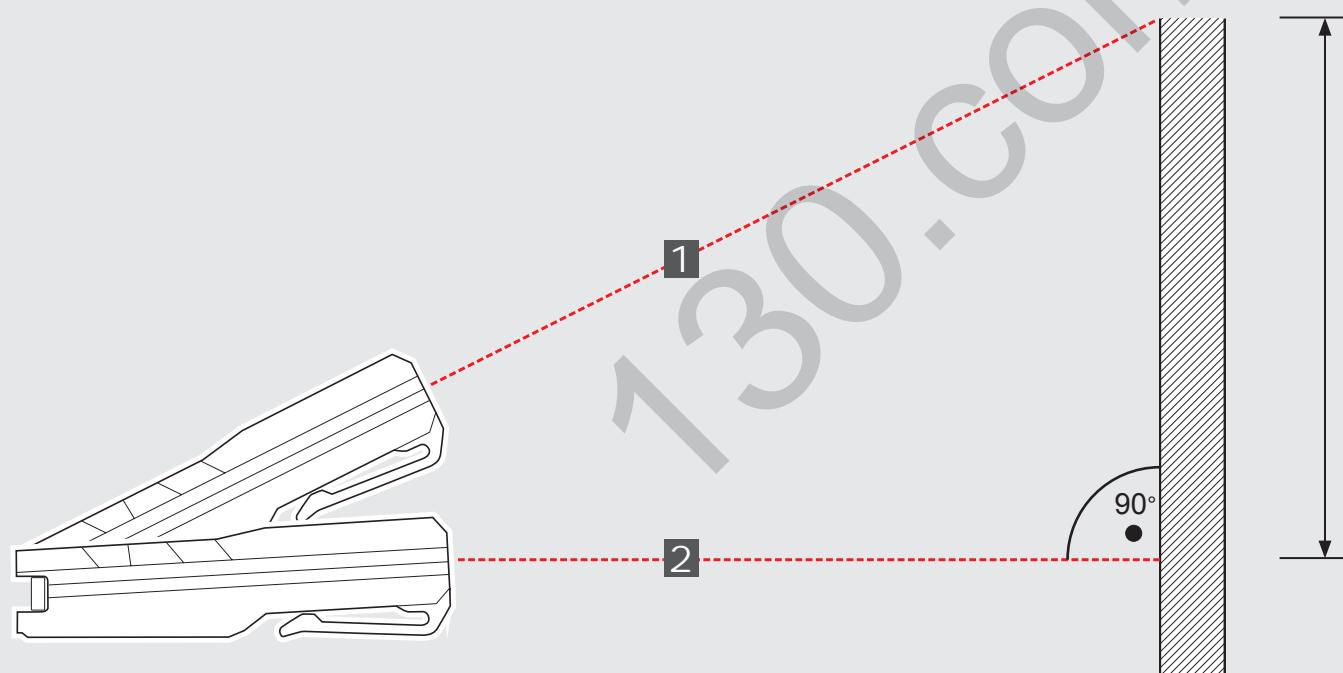
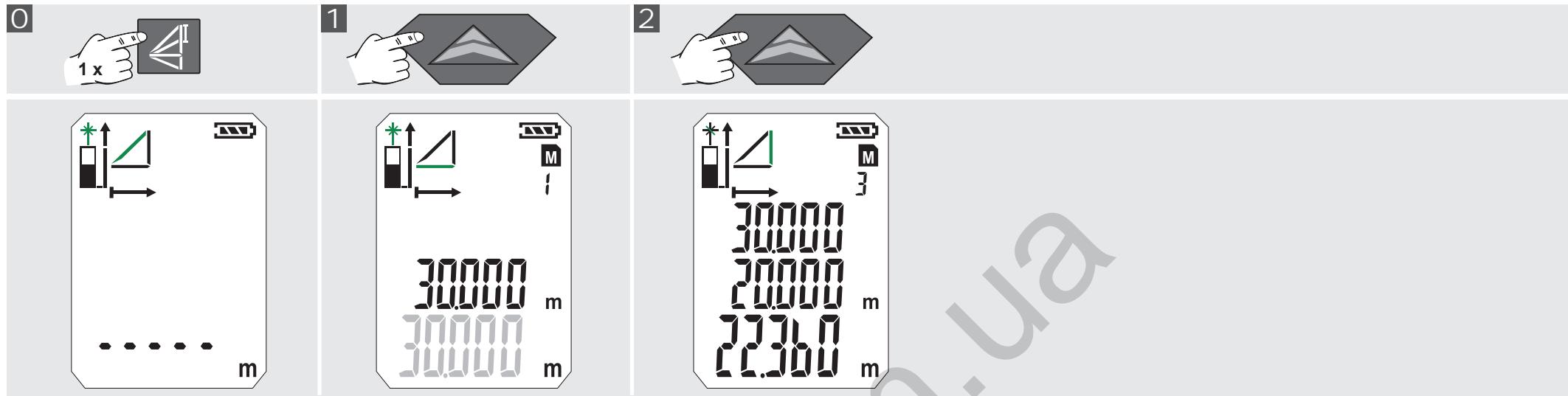
LAUKUMA MĒRĪŠANA



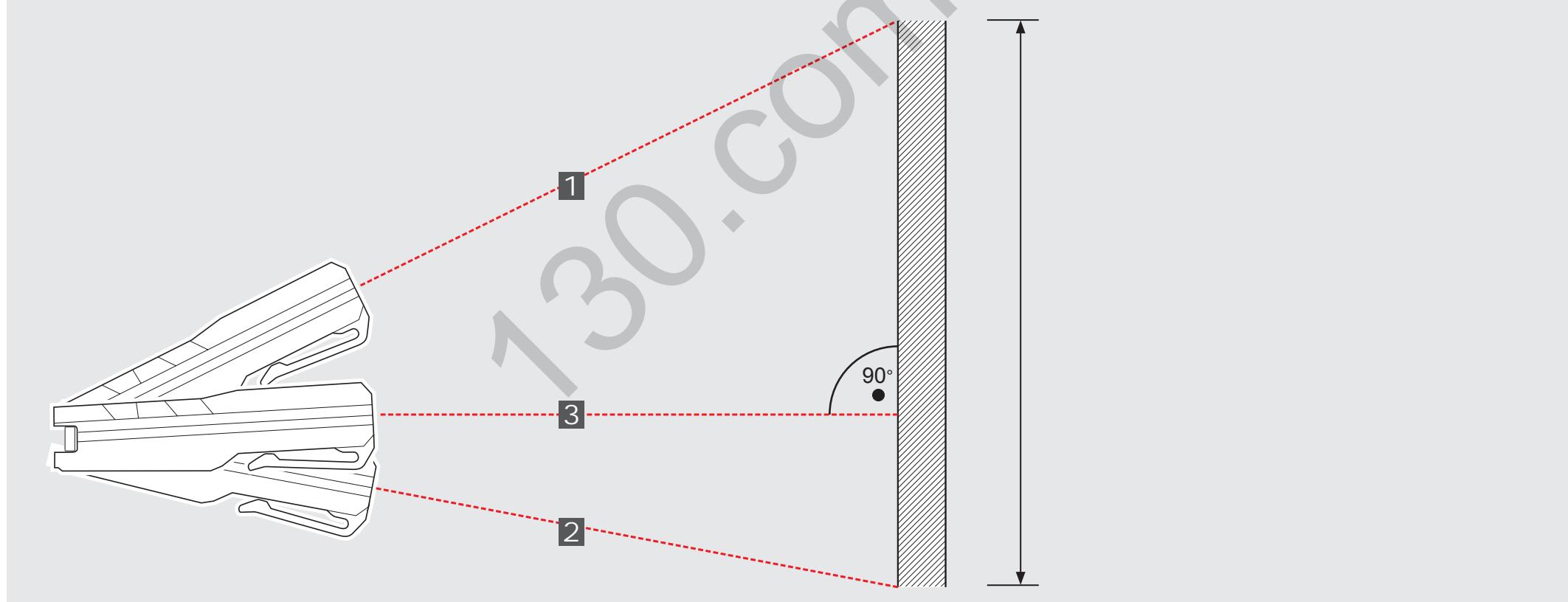
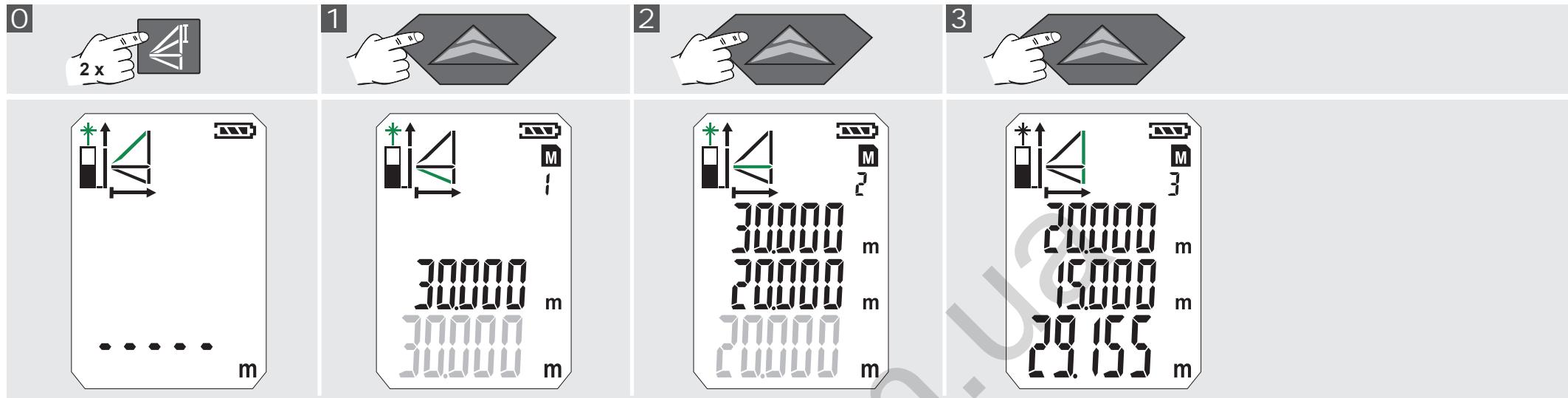
TILPUMA MĒRĪŠANA



NETIEŠA MĒRĪŠANA (PITAGORS 1)



NETIEŠA MĒRĪŠANA (PITAGORS 2)

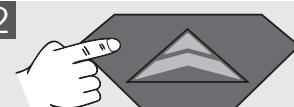


NETIEŠA MĒRĪŠANA (PITAGORS 3)

1



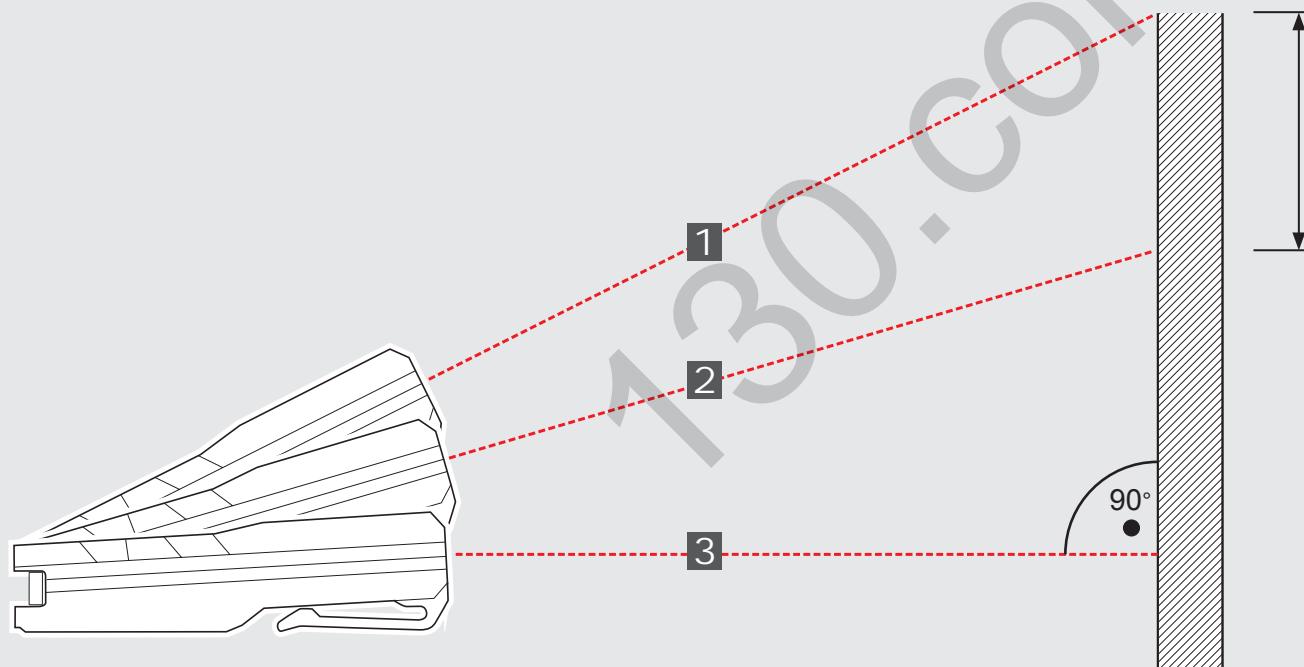
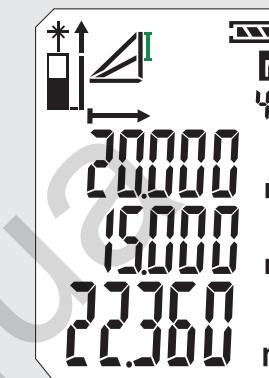
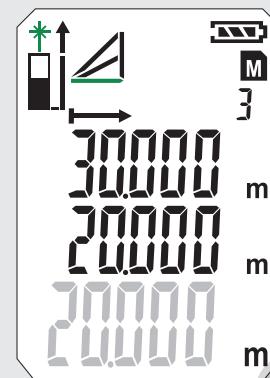
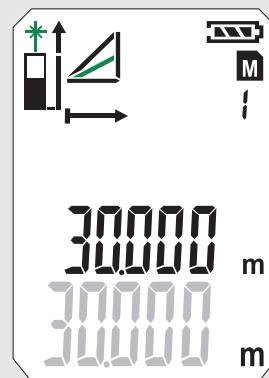
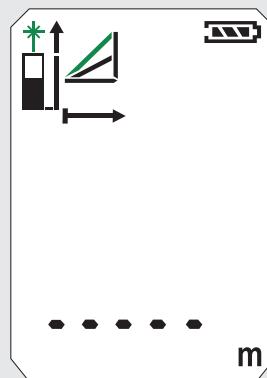
2



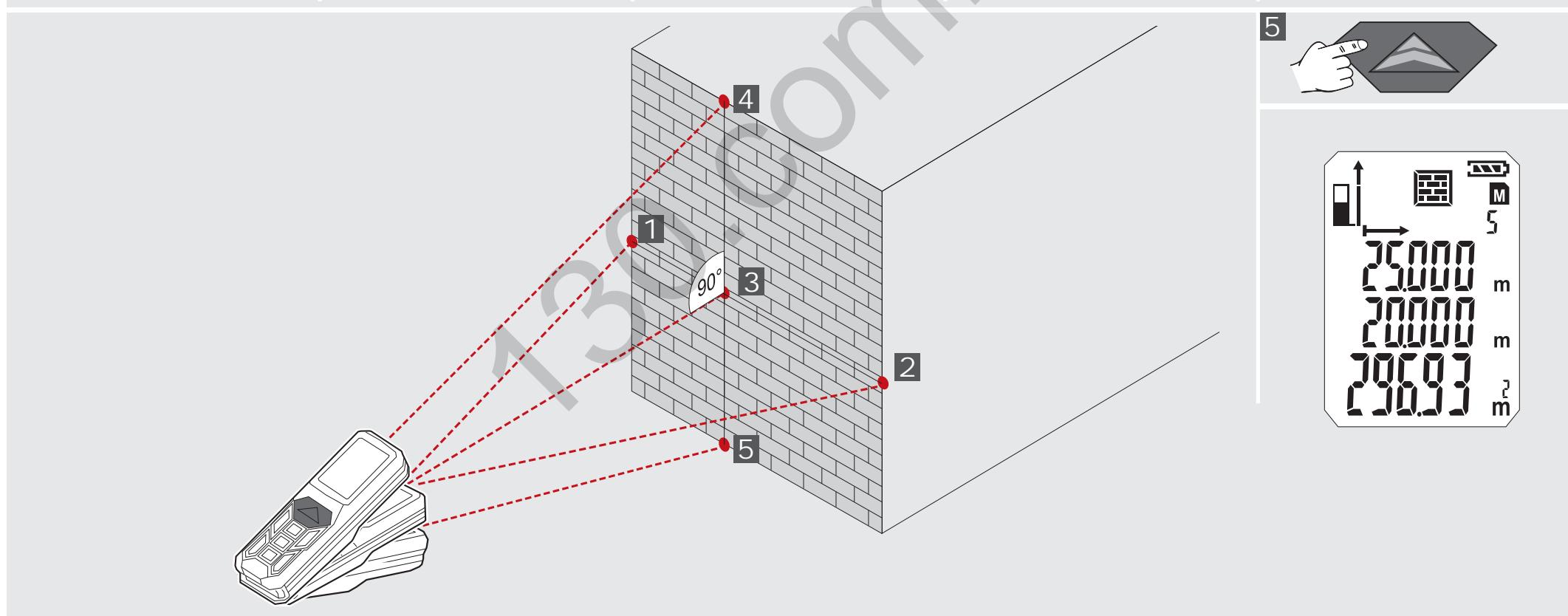
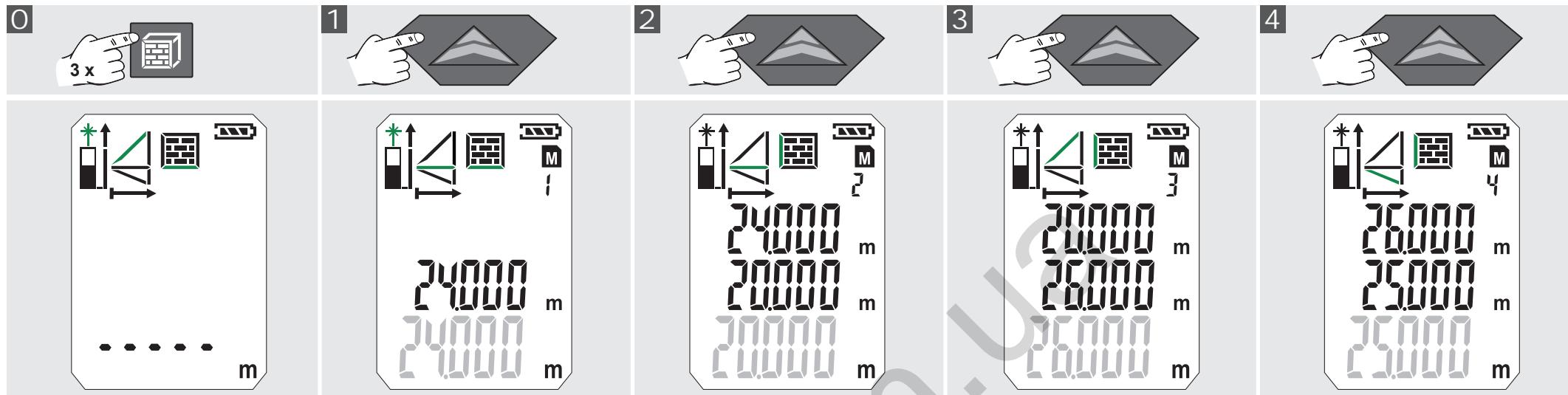
3



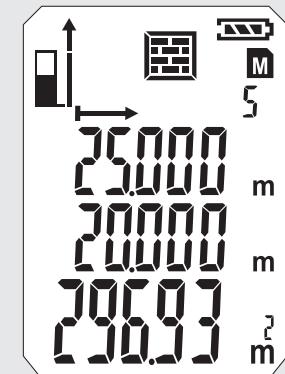
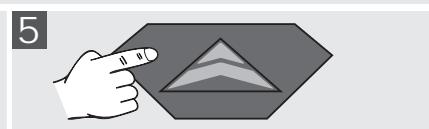
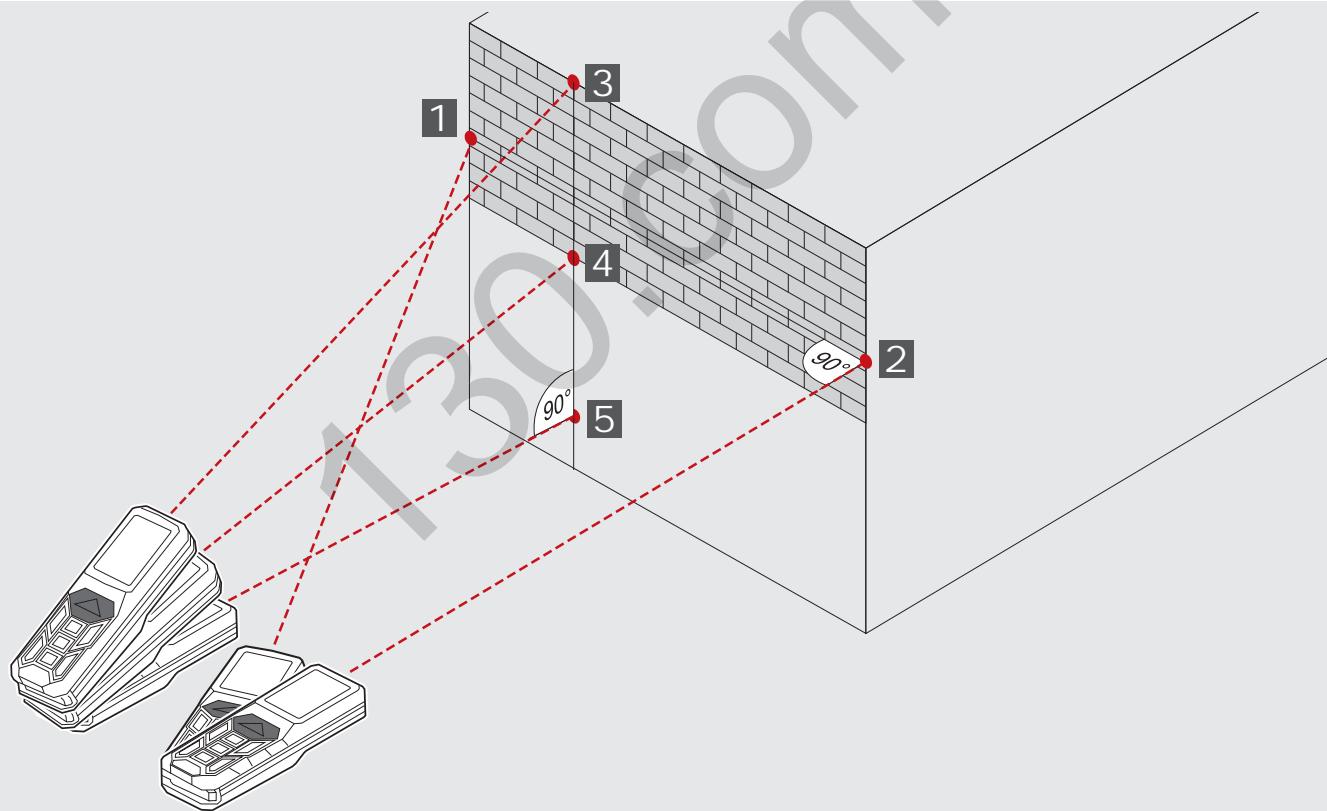
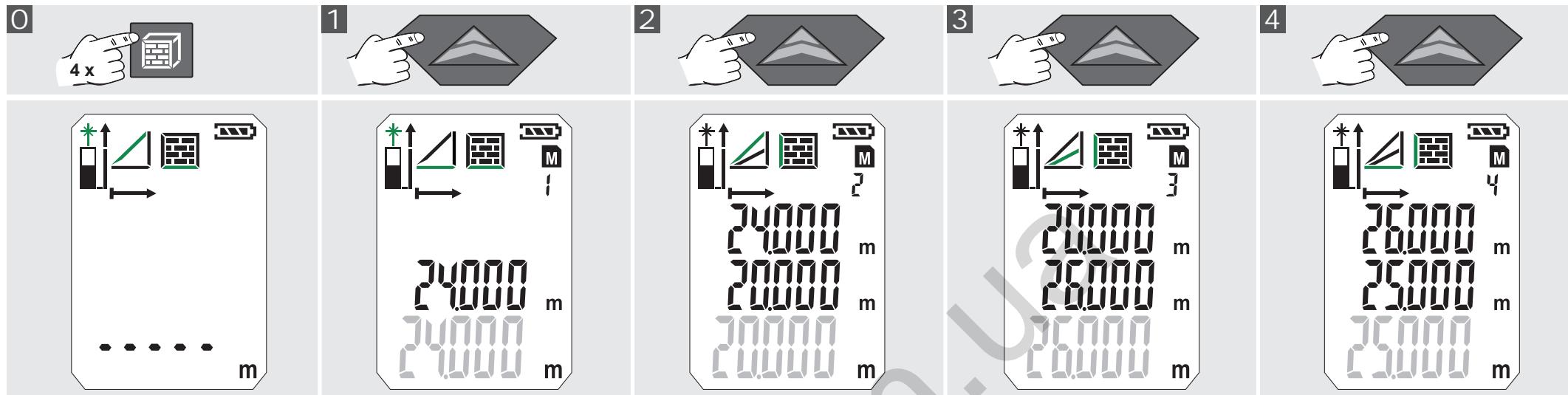
4



SIENAS LAUKUMA MĒRĪŠANA (1. VARIANTS)



SIENAS LAUKUMA MĒRĪŠANA (2. VARIANTS)



TAIMERIS

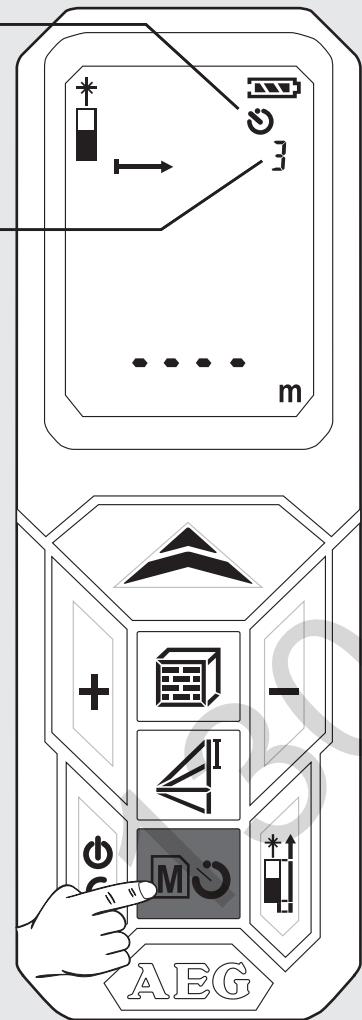
Ar taimera palīdzību ir iespējams sākt mērījumu ar aizturi, piemēram, lai mērījuma starā noliktu būvobjektu.

Nospiest taustiņu 

- Parādās simbols
- Spiežot taustiņu  taimeri ir iespējams iestatīt no 3 līdz 15 sekundēm.

Nospiest taustiņi 

- Tieki uzsākta laika atskaite līdz mērījuma veikšanai.
- Sasniedzot 0, tiek veikts mērījums.



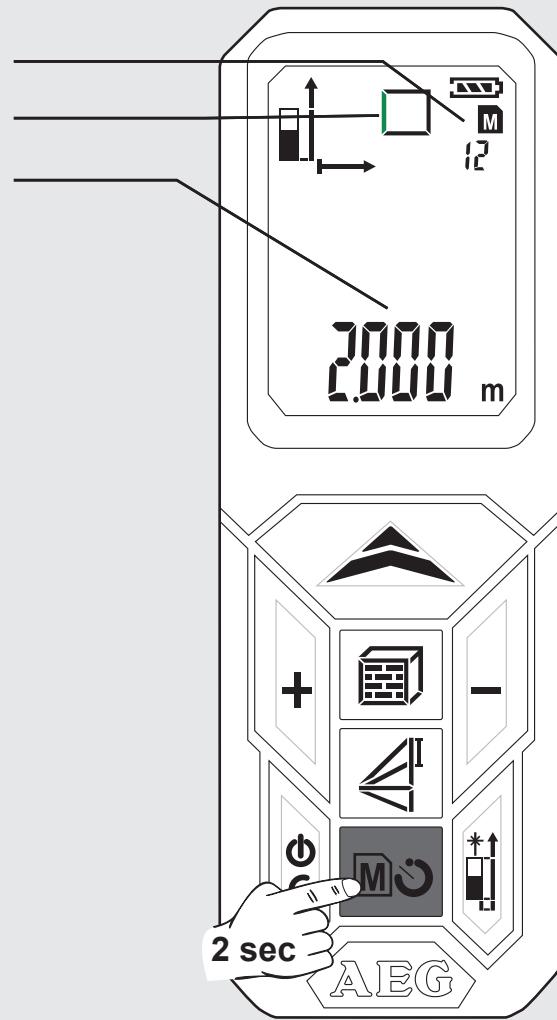
ATMINA

Mērījumu vērtības automātiski un secīgi tiek saglabātas atmiņā.

Saglabātās vērtības ir iespējams apskatīties, nospiežot taustiņu .

Turēt taustiņu  2 sekundes

- Parādās simbols un ieraksta numurs.
- Tieki attēlots attiecīgā mērījuma vērtība.
- Saglabātā vērtība tiek attēlota galvenajā līnijā.
- Pārvietojieties, izmantojot taustiņus +/-



PAMATA DARBĪBAS UZ VIRSMAS MĒRĪJUMA PAMATA (1)

1 Ieslēgt

Nospiezt taustiņu .
A! Uzmanību! Ieslēgts lāzera stars!
 Nevērst pret cilvēkiem!

2 Izvēlēties mērījuma līmeni

Noklusējuma izvēle ieslēdzot ierīci:
 aizmugure
 *↑ 1x nospiežot -> stūra kāja
 2x nospiežot -> priekša
 3x nospiežot -> aizmugure

Mirgo lāzera simbols
 (attēlots zaļā krāsā).

Tiek attēlots simbols

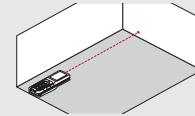
3 Izvēlēties funkciju

Ieslēdzot ierīce vienmēr atrodas garuma mērīšanas režīmā.
 1x nospiežot - laukuma mērīšana

- Parādās simbols
 Mērāmais apgabals mirgo
 (attēlots zaļā krāsā)

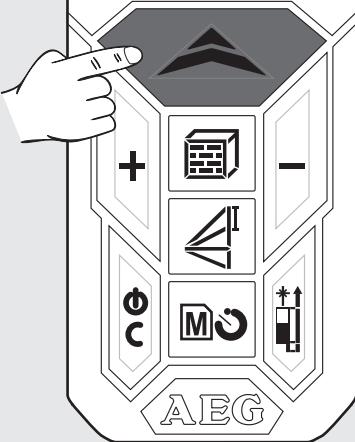
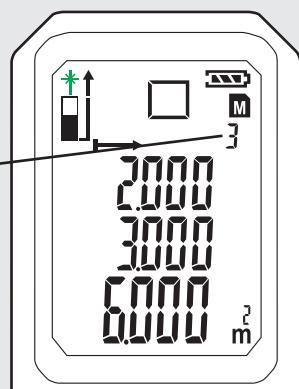
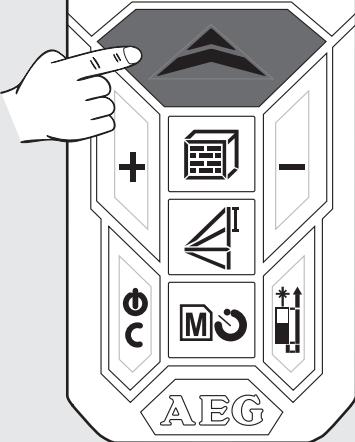
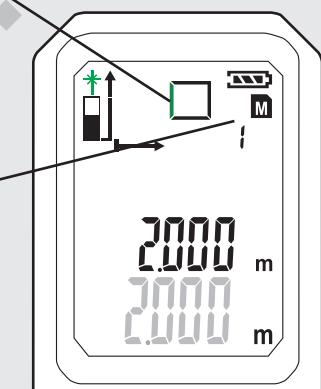
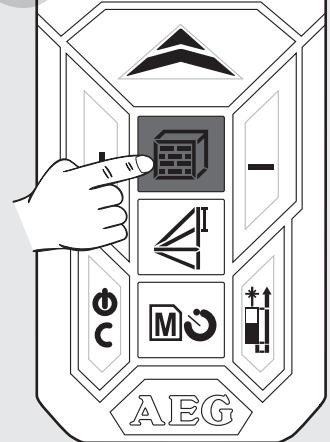
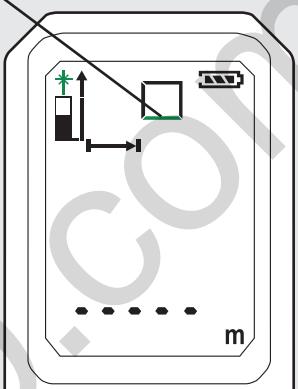
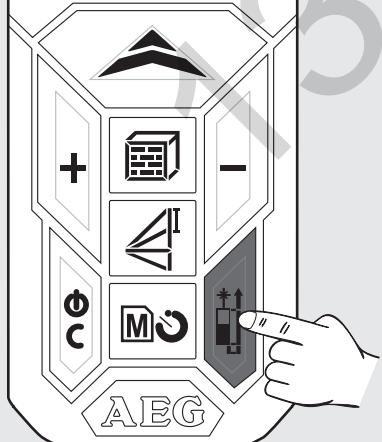
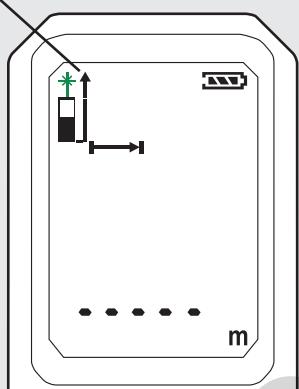
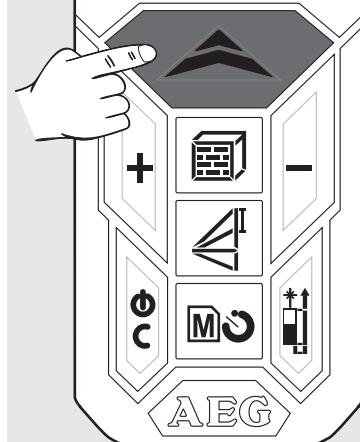
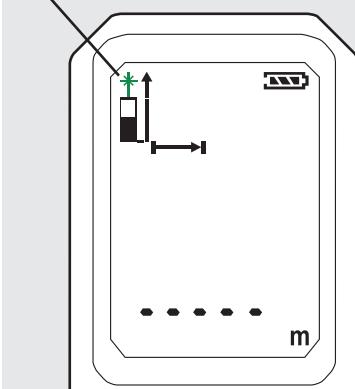
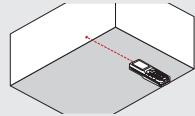
4 Garuma mērīšana

Novietot ierīci un
 nospiezt
 taustiņu



5 Platuma mērīšana

Novietot ierīci un
 nospiezt
 taustiņu



PAMATA DARBĪBAS UZ VIRSMAS MĒRĪJUMA PAMATA (2)

6 Attēlot saglabātās vērtības

Turēt taustiņu  2 sekundes.

Nospiest taustiņu 

Nospiest taustiņus + vai -

- Saglabātās vērtības tiek attēlotas galvenajā līnijā.

Tiek attēlots attiecīgais simbols, un mērāmais apgabals mirgo (attēlots zaļā krāsā).

7 Iziet no atmiņas

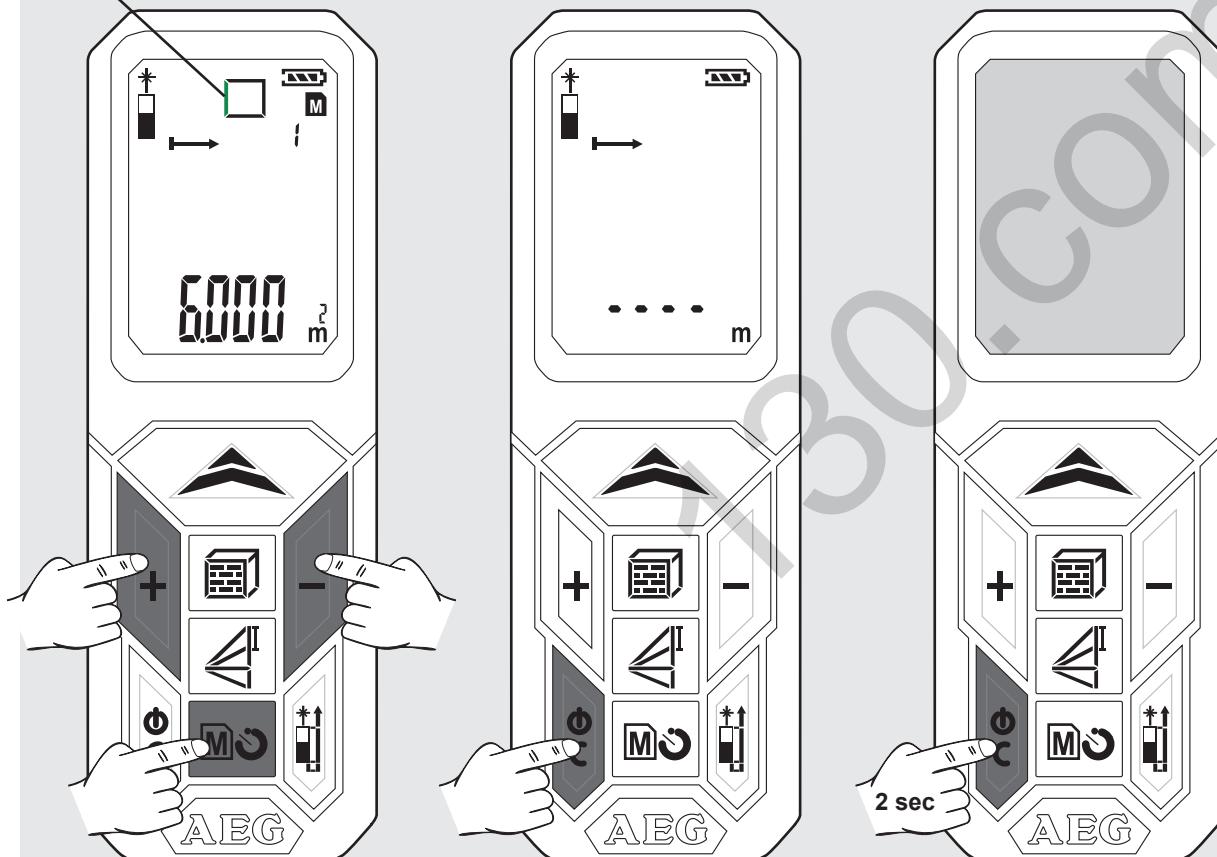
Nospiest taustiņu 

8 Izslēgt

Turēt taustiņu  2 sekundes
(Pirms tam ir jāiziet no atmiņas).

- Ierīce izslēdzas.

- Ja 3 minūšu laikā netiek nospiests neviens taustiņš, ierīce izslēdzas automātiski.



TURINYS

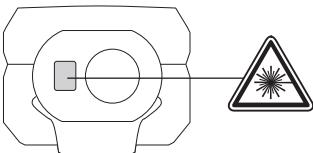
Svarbios saugumo instrukcijos	1
Techniniai duomenys	2
Naudojimas pagal paskirtį	2
Gedimų kodų lentelė	2
Apžvalga	3
Baterijos pakeitimai	4
Kampinis kaištis	4
Diržo laikiklis	4
Funkcinis mygtukas, Pitagoras, matavimo lygis	5
Paprastas ilgių matavimas	6
Tęstinis matavimas / min. ir maks. matavimas	7
Suminis / išskaičiuojamas matavimas	8
Ploto matavimas	9
Tūrio matavimas	10
Netiesioginis matavimas (Pitagoras 1)	11
Netiesioginis matavimas (Pitagoras 2)	12
Netiesioginis matavimas (Pitagoras 3)	13
Sienelės ploto matavimas (1 scenarijus)	14
Sienelės ploto matavimas (2 scenarijus)	15
Laikmatis	16
Atmintis	16
Su pagrindinės funkcijos ploto matavimo pavyzdžiu (1)	17
Su pagrindinės funkcijos ploto matavimo pavyzdžiu (2)	18

SVARBOS SAUGUMO INSTRUKCIJOS



Nenaudokite produkto, jei neperskaite saugumo instrukciją ir vartotojui skirtą ekspluatacijos vadovo, pridėtame kompaktiniame diske.

Lazerio klasifikavimas



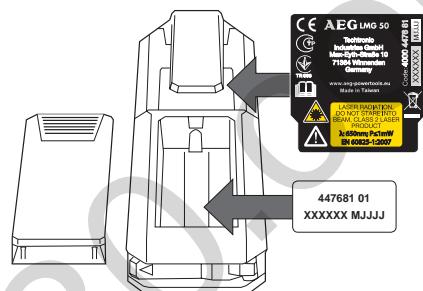
ISPĖJIMAS:

Tai **2-osios klasės** lazerinis produktas, kuriam taikomi IEC 60825-1:2007 saugumo reikalavimai.



Ženklinimas

Prieš pradédami ekspluatuoti, užklijuokite pridėtą lipduką valstybine kalba ant teksto anglų kalba duomenų lentelėje.



Ispėjimas:

Venkite tiesioginio vizualaus kontakto. Lazerio spinduliai gali apakinti ir sukelti trumpalaikį apakimą.

Nežiūrėti į lazerio skleidžiamą spindulį ar be priežasties nukreipti į jį kitus žmones.

Juo negalima apakinti.

Ispėjimas:

Nenaudokite lazerinio prietaiso, jei šalia yra vaikų ir neleiskite vaikams patims naudotis šiuo lazeriniu prietaisu.

Dėmesio! Atspindintis paviršius gali nukreipti lazerio spindulį atgal į vartotoją arba kitus asmenis.

Savo galūnes laikykite saugiu atstumu nuo judančių dalių.

Periodiškai atlikti bandomuosius matavimus. Ypač jei atliksite, atliekate ar atlikote svarbius matavimus.

Jei produktas sugedės ar buvo nukritęs, neteisingai panaudotas ar rekonstruotas, jo parodymai gali būti klaidingi.

Dėmesio! Susipažinkite su sodo priežiūros įrankio valdymo elementais bei išmokite tinkamai juo naudotis.

Lazerinio matavimo prietaiso pritaikymo sritis yra apribota. (Žr. skyrių „Techniniai duomenys“). Bandymai matuoti už maksimalios ir minimalios zonos ribų sukelia netikslumą. Naudojant sudėtingomis sąlygomis, pavyzdžiu, kai per karšta, per šalta, per daug intensyvi saulės šviesa, lyja, sninga, rūkas ar kitomis matymą apsunkinančiomis sąlygomis, galimi matavimų netikslumai.

Jei lazerinis matavimo prietaisas perkeliamas iš šiltos aplinkos į šaltą (arba atvirščiai), palaukite, kol prietaisas prisitaikys prie naujos aplinkos temperatūros.

Lazerinį matavimo prietaisą laikykite visada patalpų viduje, prietaisą saugokite nuo sukrėtimų, vibracijų ar ribinių temperatūrų.

Lazerinį matavimo prietaisą saugokite nuo dulkių, drėgmės ir didelės oro drėgmės. Tai gali pažeisti vidines konstrukcines dalis arba turėti įtakos matavimų netikslumui.

Nenaudokite agresyvių valiklių ar tirpiklių. Valykite tik švaria, minkšta šluoste.

Venkitė stiprių smūgių, saugokite, kad lazerinis matavimo prietaisas nenukristų. Prietaiso tikslumas turi būti iš naujo patikrintas, jeigu jis nukrito ar patyrė mechanines apkrovas.

Būtinus šio lazerinio prietaiso remonto darbus gali atlikti tik igaliotas kvalifikuotas personalas.

Neeksploatuokite produkto sprogioje ar agresyvioje aplinkoje. Baterijoms įkrauti naudokite tik gamintojo rekomenduojamus įkroviklius.



Išsikrovusias baterijas draudžiama išmesti su buitinėmis atliekomis. Rūpinkitės aplinka ir nuneškite jas į surinkimo punktą, vadovaudamiesi valstybiniais arba vietiniiais nuostatais. Produktą draudžiama išmesti su buitinėmis atliekomis. Produktą utilizuokite adovaudamiesi šalyje galiojančiais nuostatais. Laikykiteis valstybinių ir regioninių nuostatų. Jei norite gauti detalesnę informaciją apie utilizavimą, kreipkitės į vietas įstaigą arba į savo prekybos atstovą.



CE ženklas

TECHNINIAI DUOMENYS

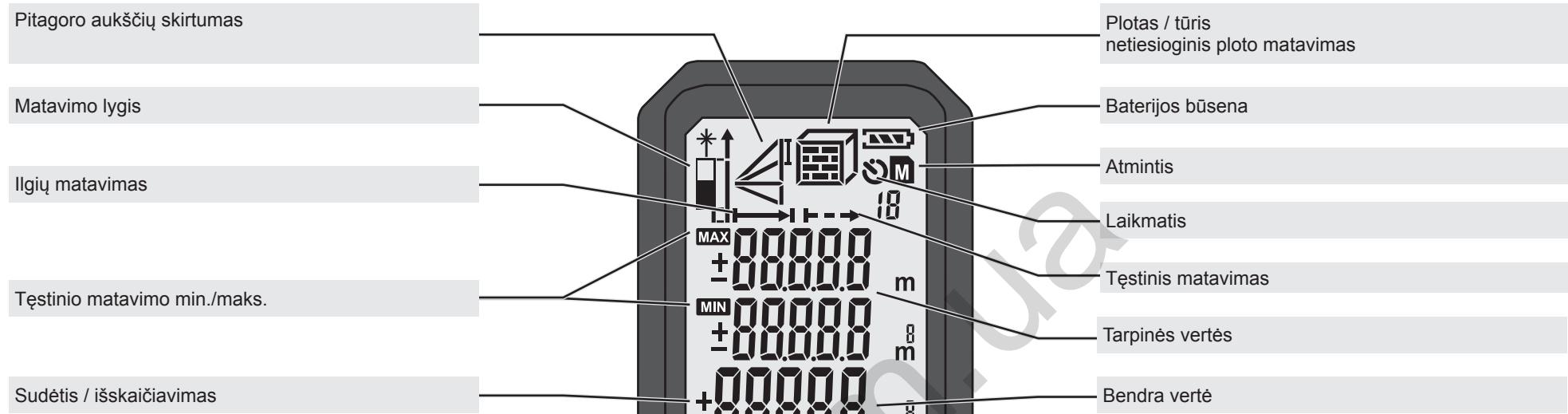
Apsaugos klasė	IP54 (apsauga nuo dulkių ir vandens purslų)
Optika	14 mm
Degimo taškas	35 mm
Matavimo sritis maks.	50 metrų (paklaida: 55 m)
Matavimo sritis min.	0,05 metro
Absoliutus tikslumas @ < 10 m	± 1,5 mm (Maks.)
Kartotinis tikslumas @ < 10 m	± 1,5 mm (tipinis maks. 2σ)
Kartotinis tikslumas @ > 10 m	pakilimas ± 0,25 mm / metro (tipinis maks. 2σ)
Matavimo laikas	0,5 s
Ekrano tipas	LCD (22,7 mm x31 mm)
Elektros energijos tiekimas	AAA 2x (šarminės baterijos)
Baterijos eksploatavimo trukmė	10 000 (pavienis matavimas)
Lazerio galia ties išvadu	0,6 mW ~ 0,95 mW (klasė 2, 650 nm)
Lazerio taško dydis	25x30 mm @ 16 m (Maks.)
Lazerio spindulio vertikalus kampus	+1 laipsnis
Lazerio spindulio horizontalus kampus	±1 laipsnis
Automatinis prietaiso išsijungimas	180 sekundžių
Automatinis lazerio išsijungimas	30 Sekundžių
Darbinės temperatūros diapazonas	-10 °C iki +50 °C
Laikymo temperatūros diapazonas	-25 °C iki +70 °C
Svoris be baterijos	80 g

GEDIMU KODU LENTELĖ

Kodas	aprašymas	sprendimas
Err01	už matavimo srities ribų	Matavimą atlikti numatytoje zonoje.
Err02	Reflektuojantis signalas per silpnas	Pasirinkite geresnį paviršių.
Err03	Už indikacijų zonas (maks. vertė: 99.999)pvz., ploto ar tūrio rezultatas už indikacijos zonas ribų	Patikrinkite, ar vertės ir žingsniai teisingi.
Err04	Gedimas Pitagoro apskaičiavime	Patikrinkite, ar vertės ir žingsniai teisingi.
Err05	Baterija išsikrovusi	Įdėkite naują bateriją.
Err06	Už darbinės temperatūros zonas	Išmatuokite nustatytoje darbinės temperatūros zonoje.
Err07	Per stipri aplinkos šviesa	Užtemdykite matuojamą zoną.

NAUDOJIMAS PAGAL PASKIRTĮ

Lazerinės matavimo prietaisas skirtas matuoti atstumus ir polinkius.
Ši prietaisą leidžiama naudoti tik pagal nurodytą paskirtį.



I / MATAVIMAS

- I
- Matavimas
- Tęstinis matavimas (2 sek. paspauskite) min./maks. funkcija

SUDĖTIS

- Vertę pridėkite
- Perkėlimas atmintyje

PLOTAS / TŪRIS

- Plotas (1x paspausti)
- Tūris (2x paspausti)
- Netiesioginis plotų matavimas (3x/4x paspausti)

IJUNGTI

- I
- Iš (2 sek. paspausti)
- Grąžinti

İŞSKAIČIAVIMAS

- Vertės išskaičiavimas
- Perkėlimas akumulatoriuje

PITAGORO

- Pitagoras 1 (1x paspausti)
- Pitagoras 2 (2x paspausti)
- Pitagoras 3 (3x paspausti)

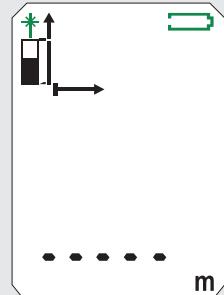
MATAVIMO LYGIO PAKEITIMAS

- Priekyje
- Užpakalyje
- Kampinis kaištis

AKUMULATORIUS

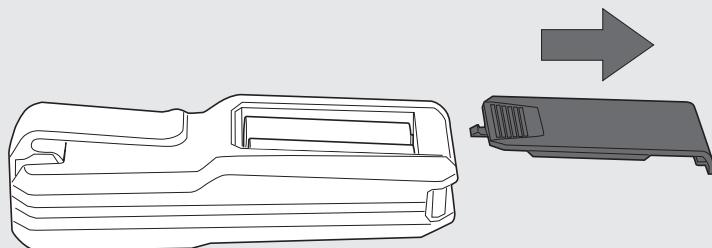
- Laikmatis 3-15 sek. (1x paspausti)
- Akumulatorius 1-20 (1x 2 sek . paspausti)
- Mygtukais +/- perkelti akumulatoriuje

BATERIJOS PAKEITIMAS

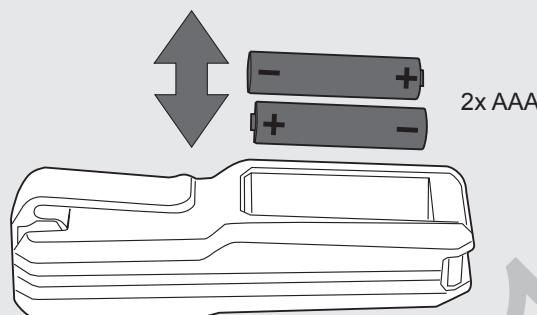


Jei simbolis mirksi,
bateriją pakeiskite.

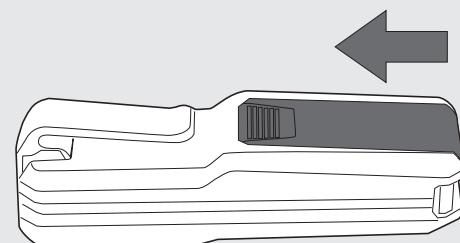
1



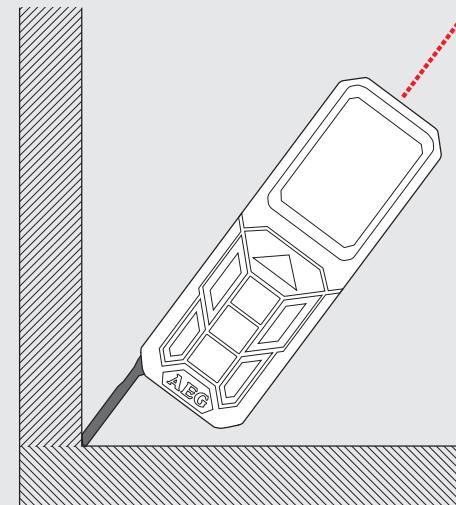
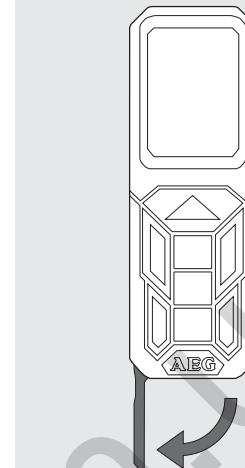
2



3

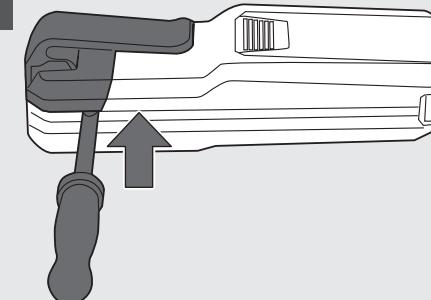


KAMPINIS KAĬSTIS

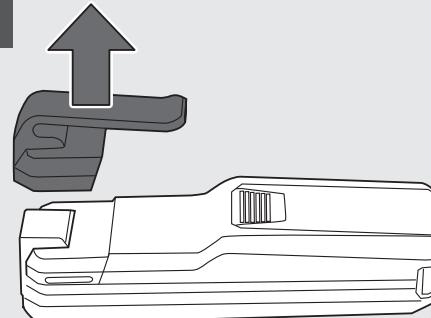


DIRŽO LAIKIKLIS

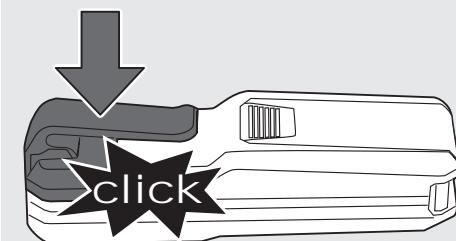
1



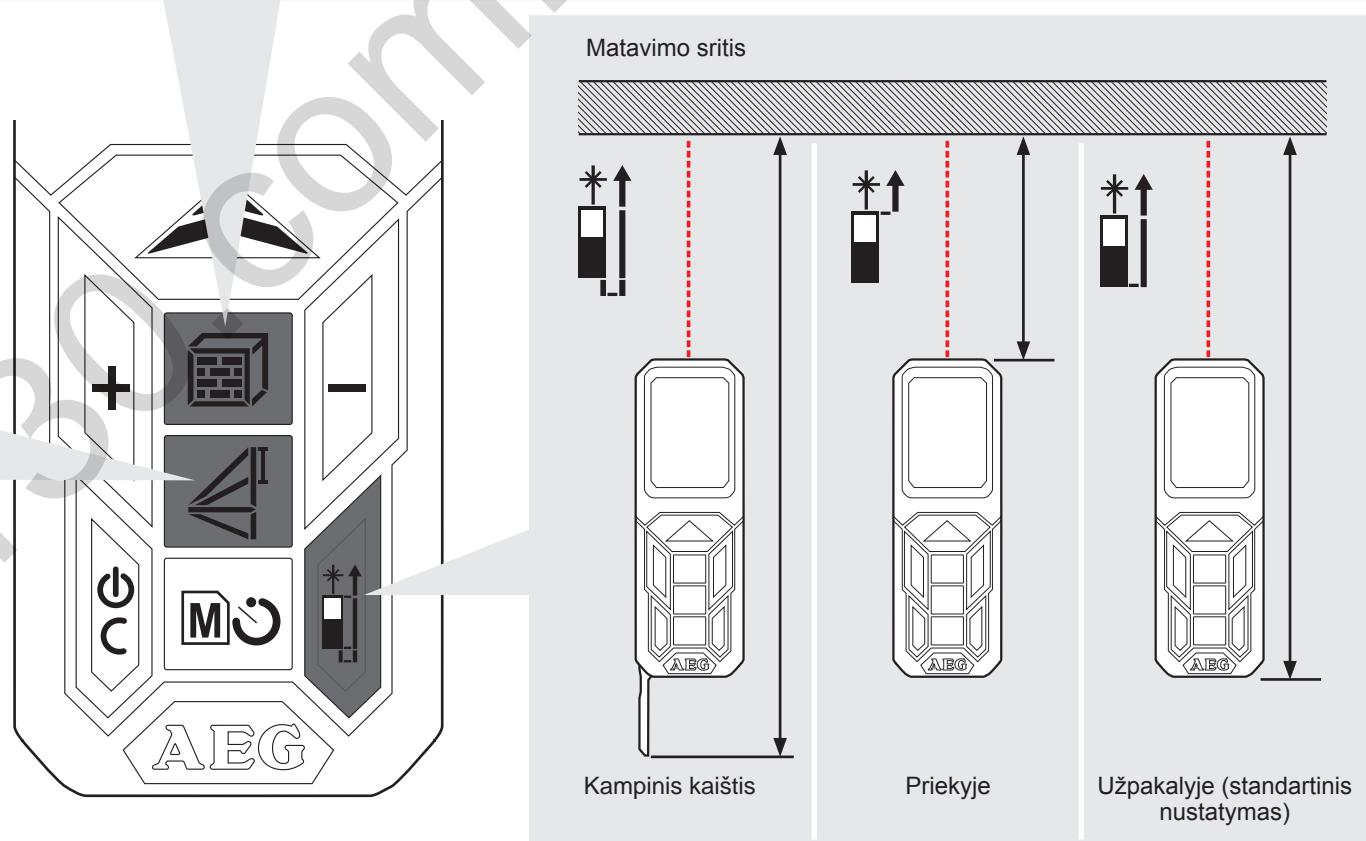
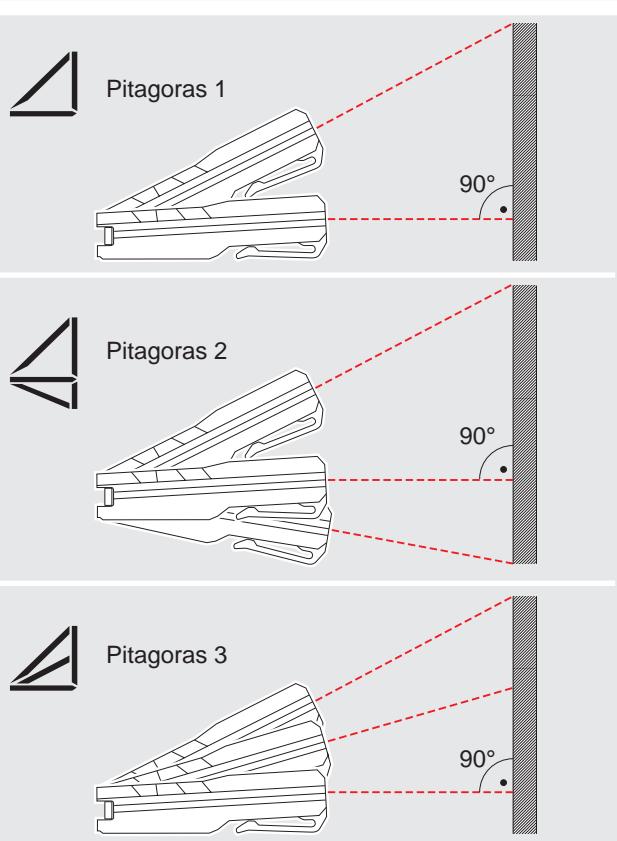
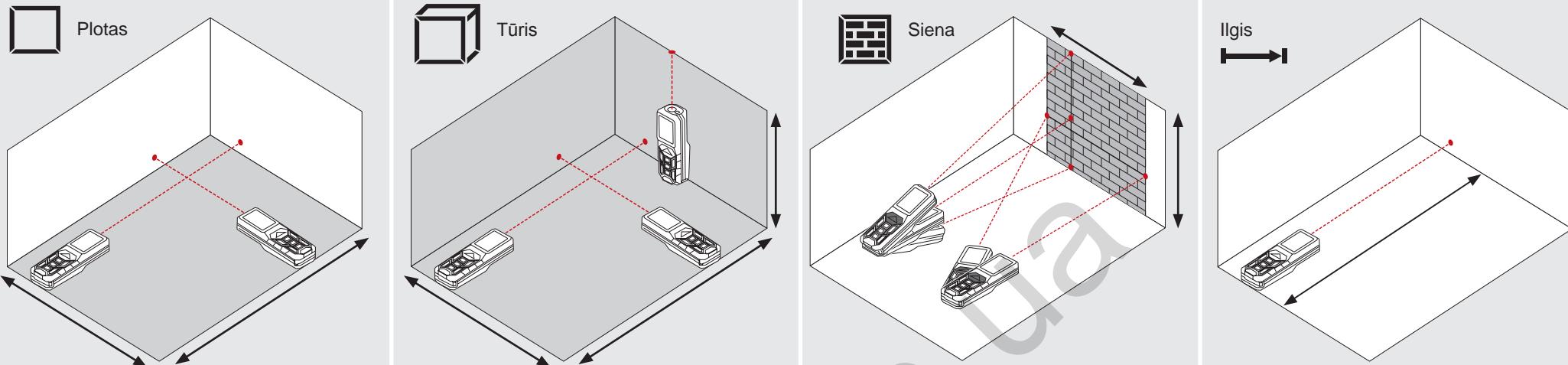
2



3

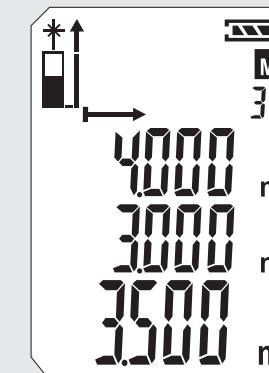
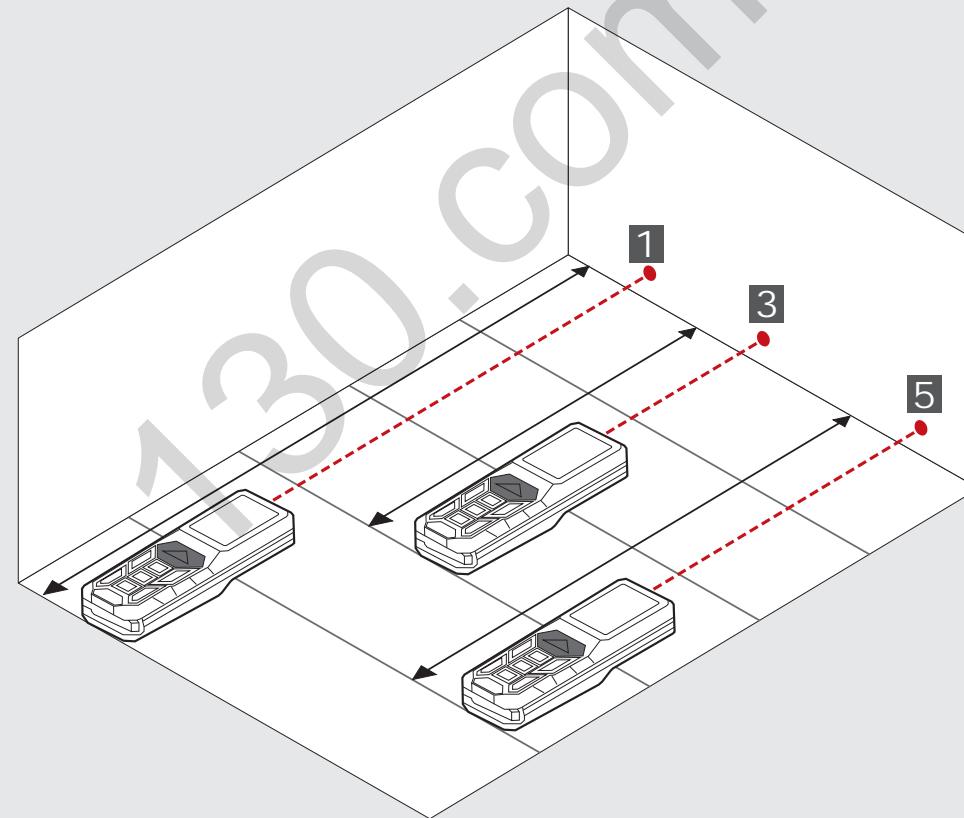
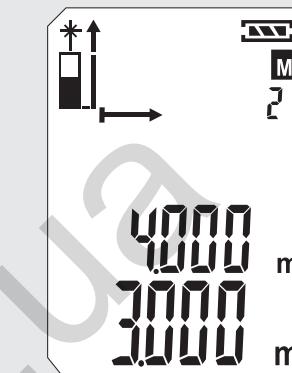
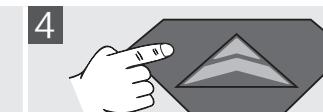
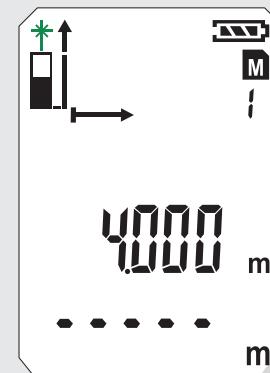
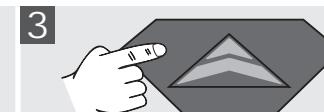
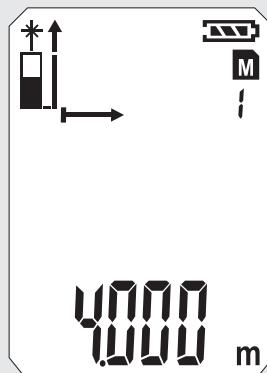
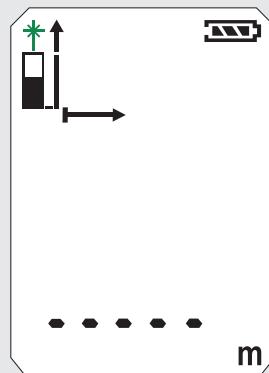
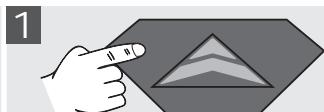


FUNKCINIS MYGTUKAS, PITAGORAS, MATAVIMO LYGIS



PAPRASTAS ILGIŲ MATAVIMAS

0

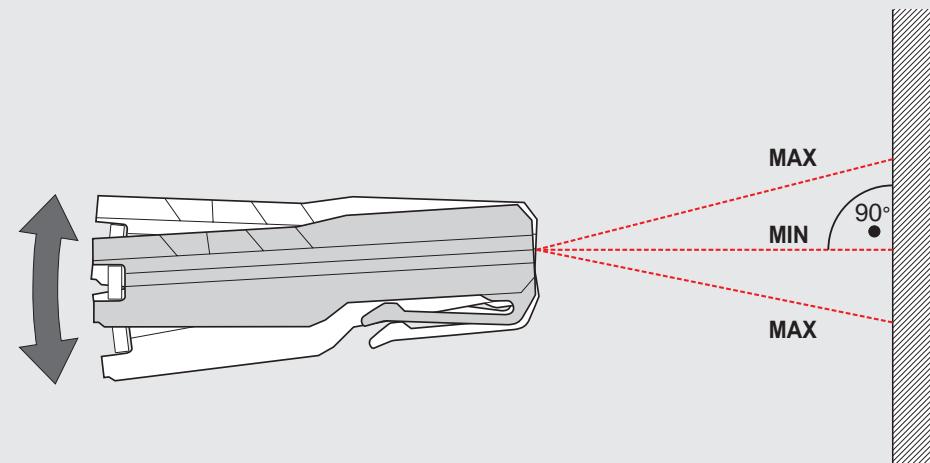
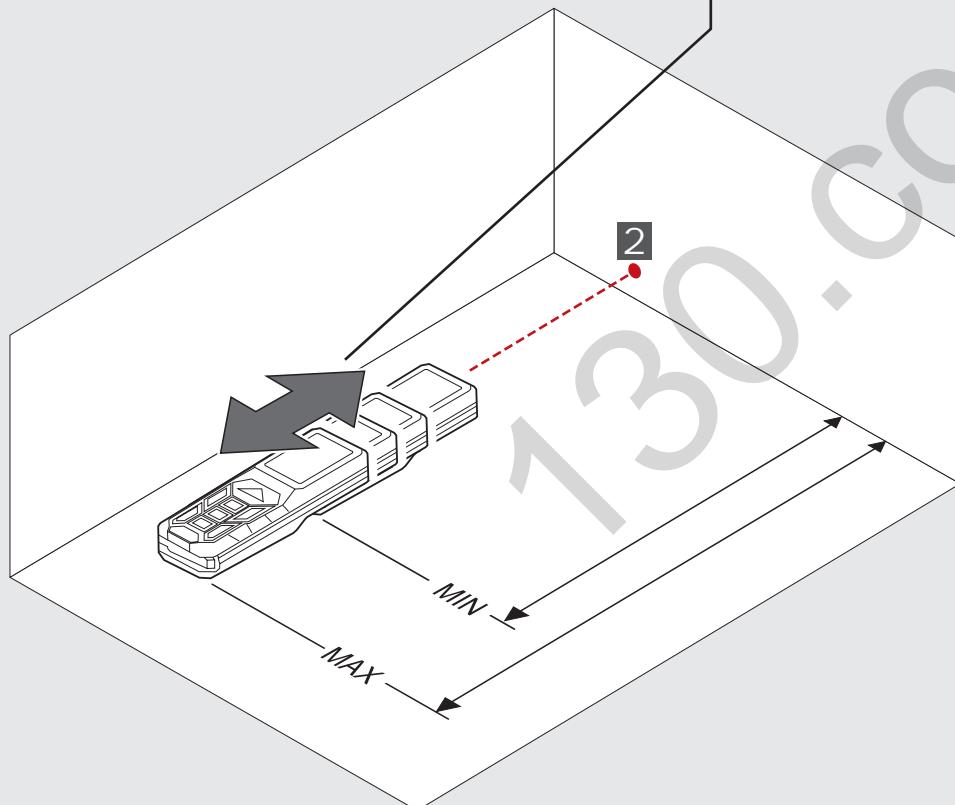
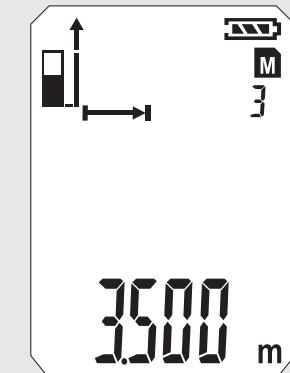
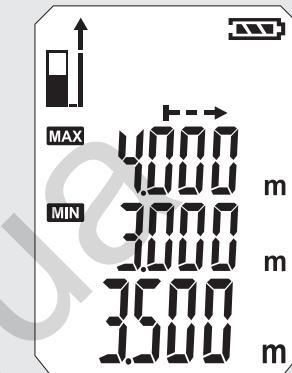
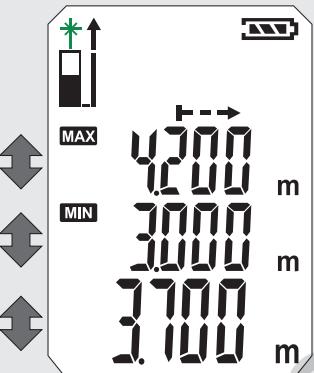
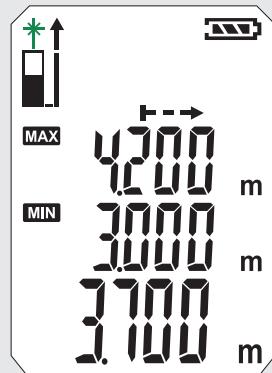
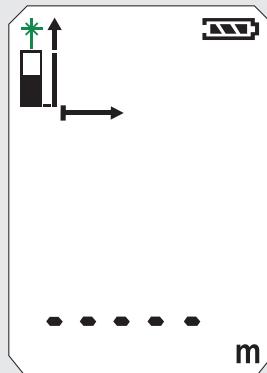
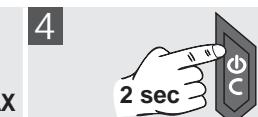


TĘSTINIS MATAVIMAS / MIN. IR MAKS. MATAVIMAS

0

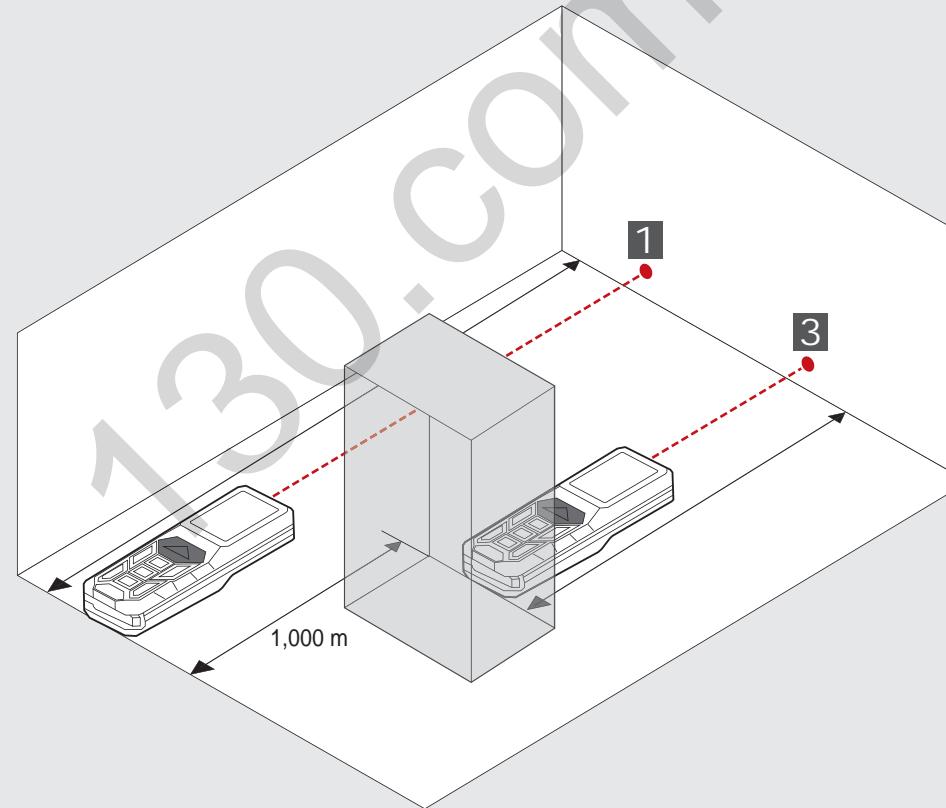
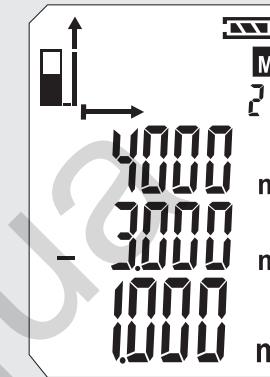
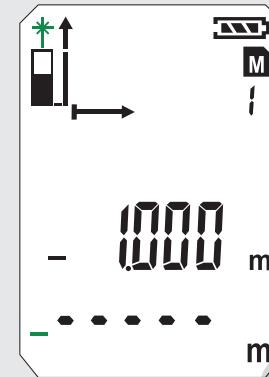
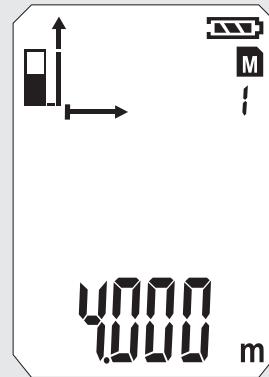
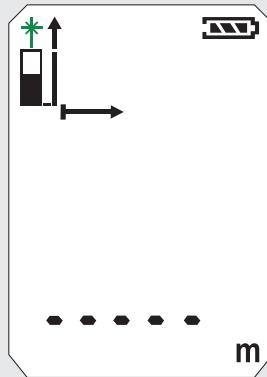
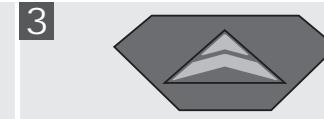
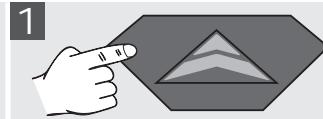


2

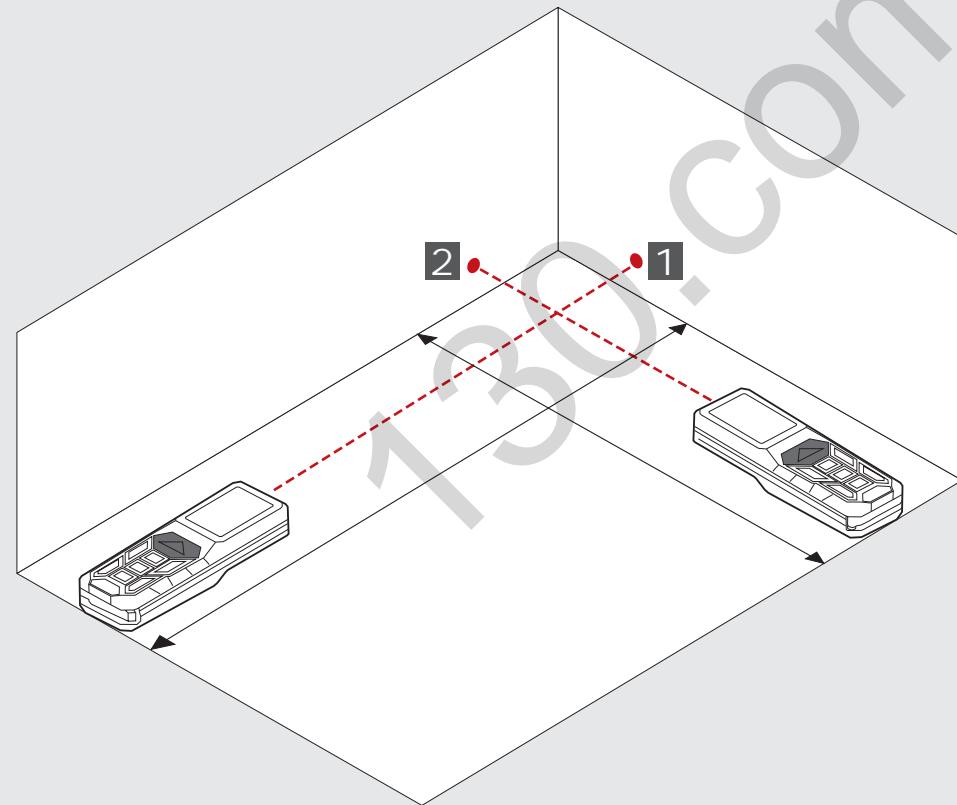
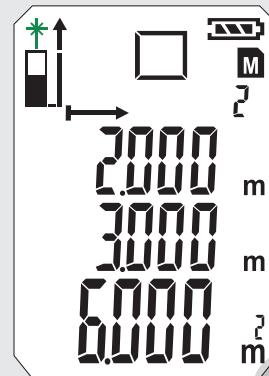
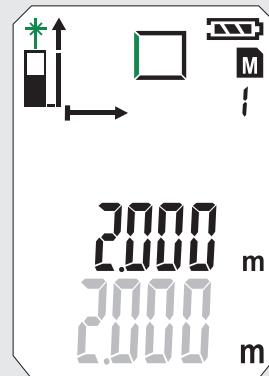
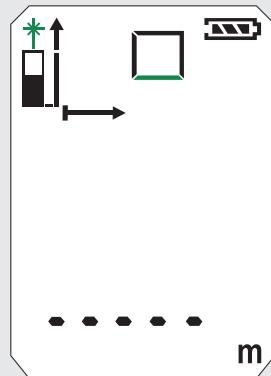
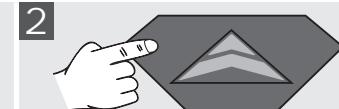
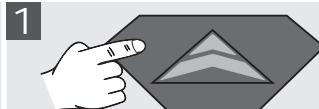
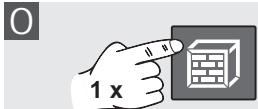


SUMINIS / IŠSKAIČIUJAMAS MATAVIMAS

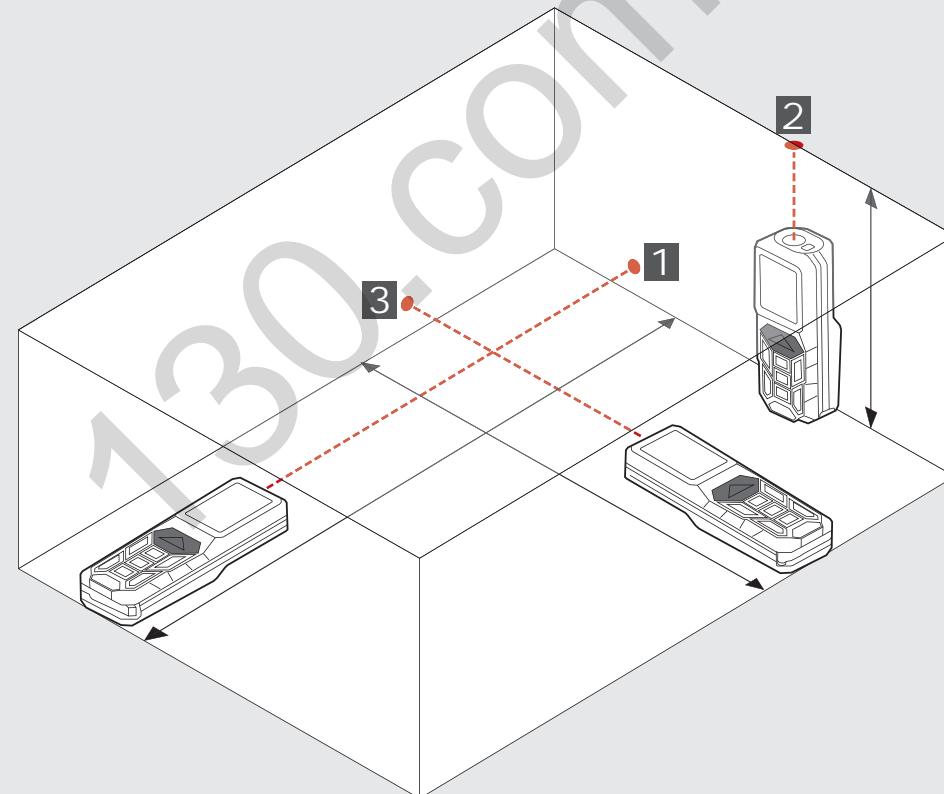
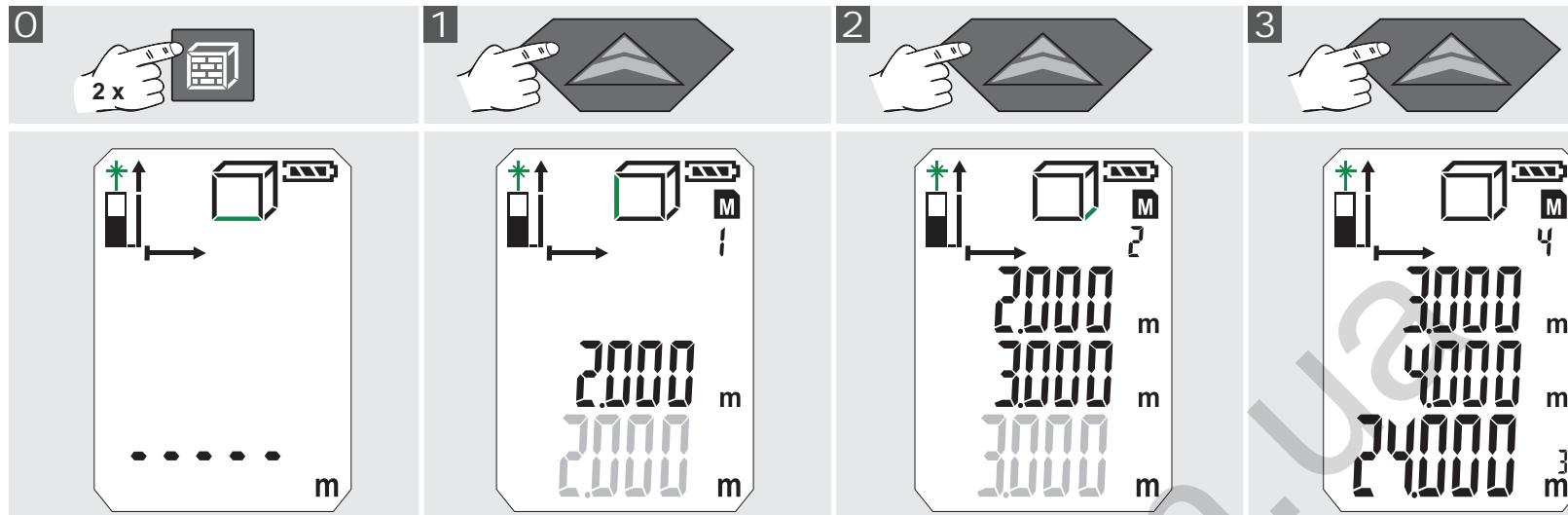
0



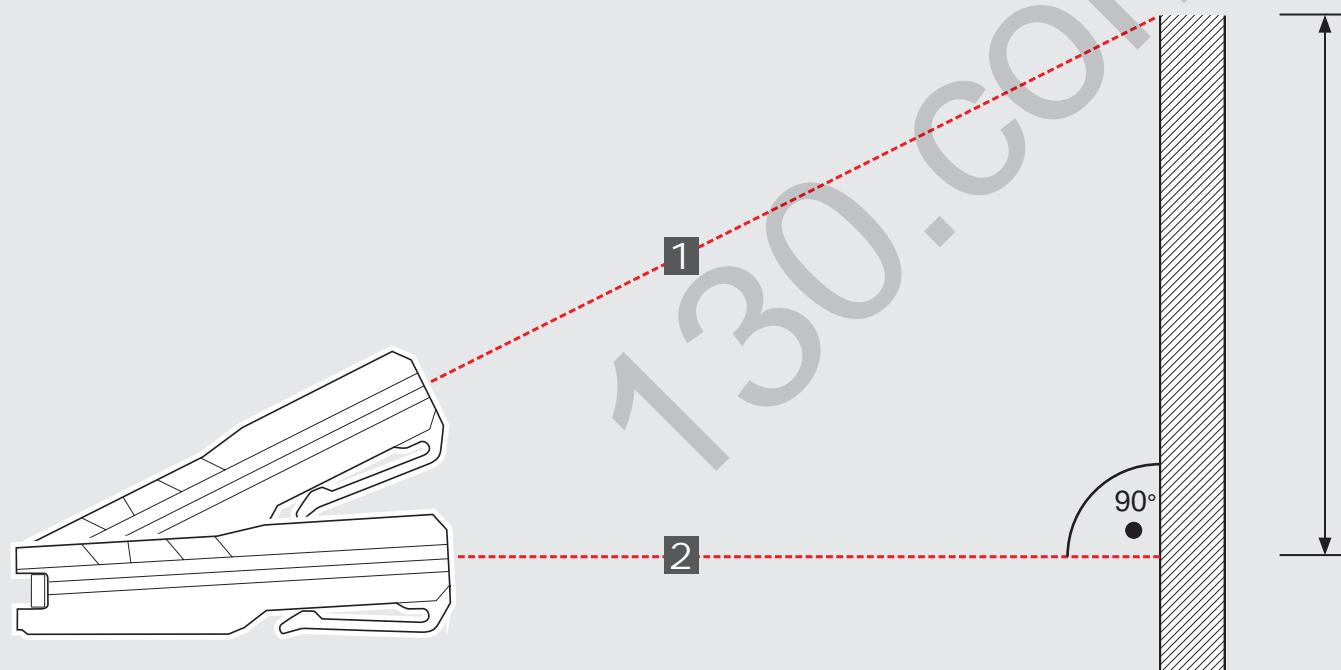
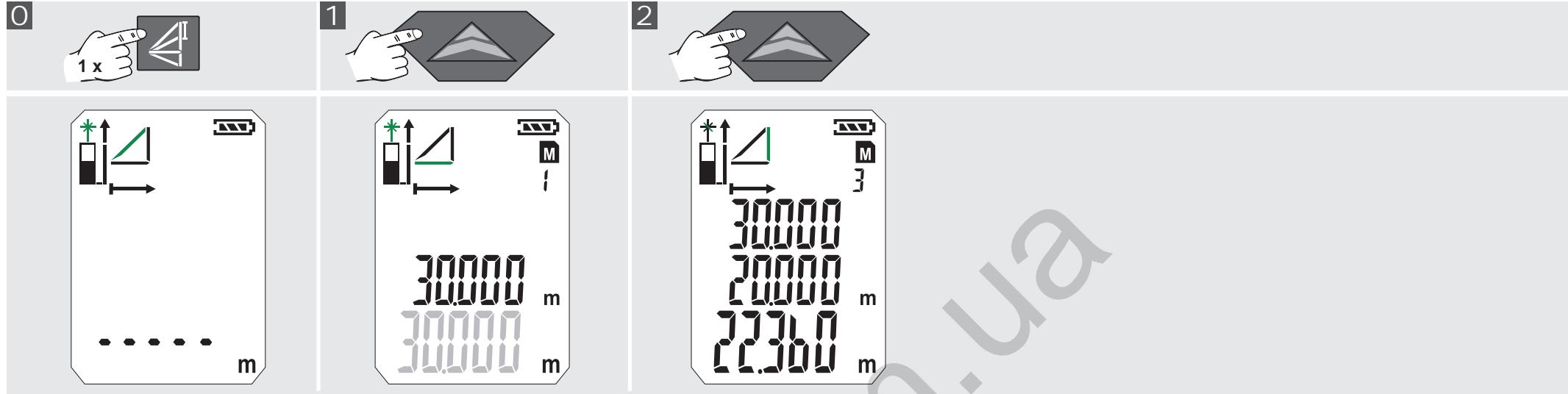
PLOTO MATAVIMAS



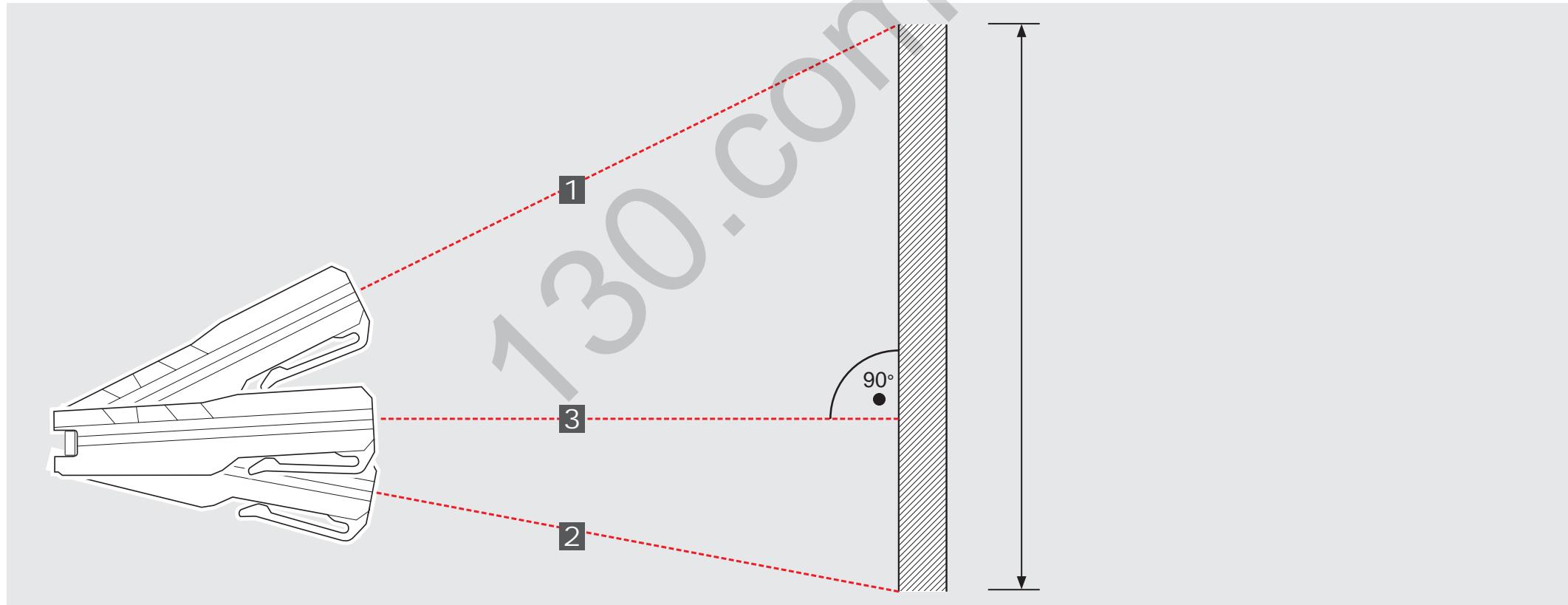
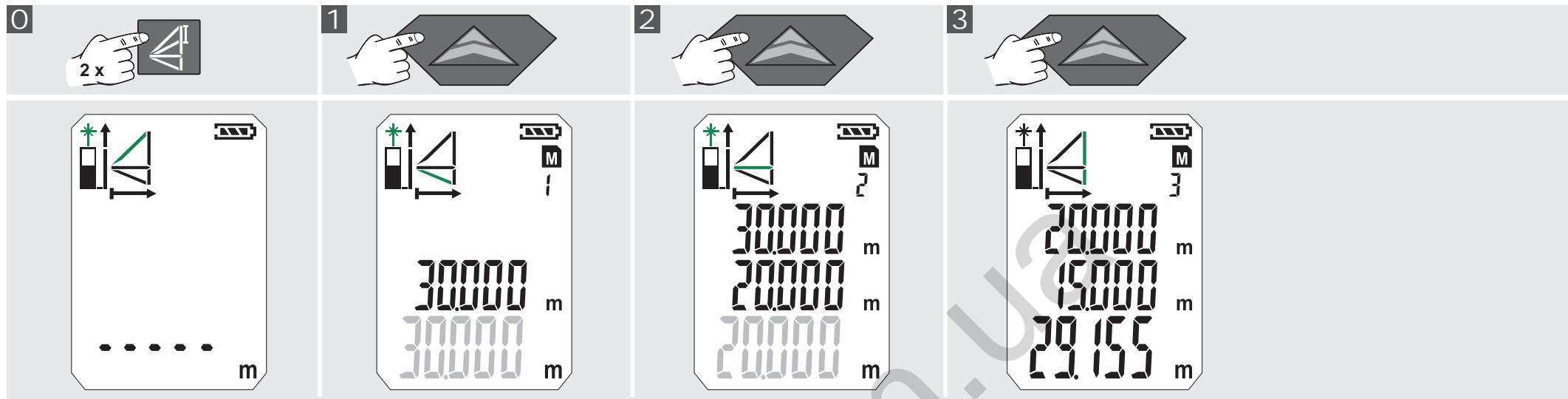
TŪRIO MATAVIMAS



NETIESIOGINIS MATAVIMAS (PITAGORAS 1)



NETIESIOGINIS MATAVIMAS (PITAGORAS 2)

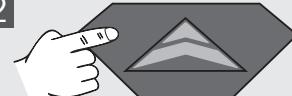


NETIESIOGINIS MATAVIMAS (PITAGORAS 3)

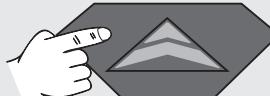
1



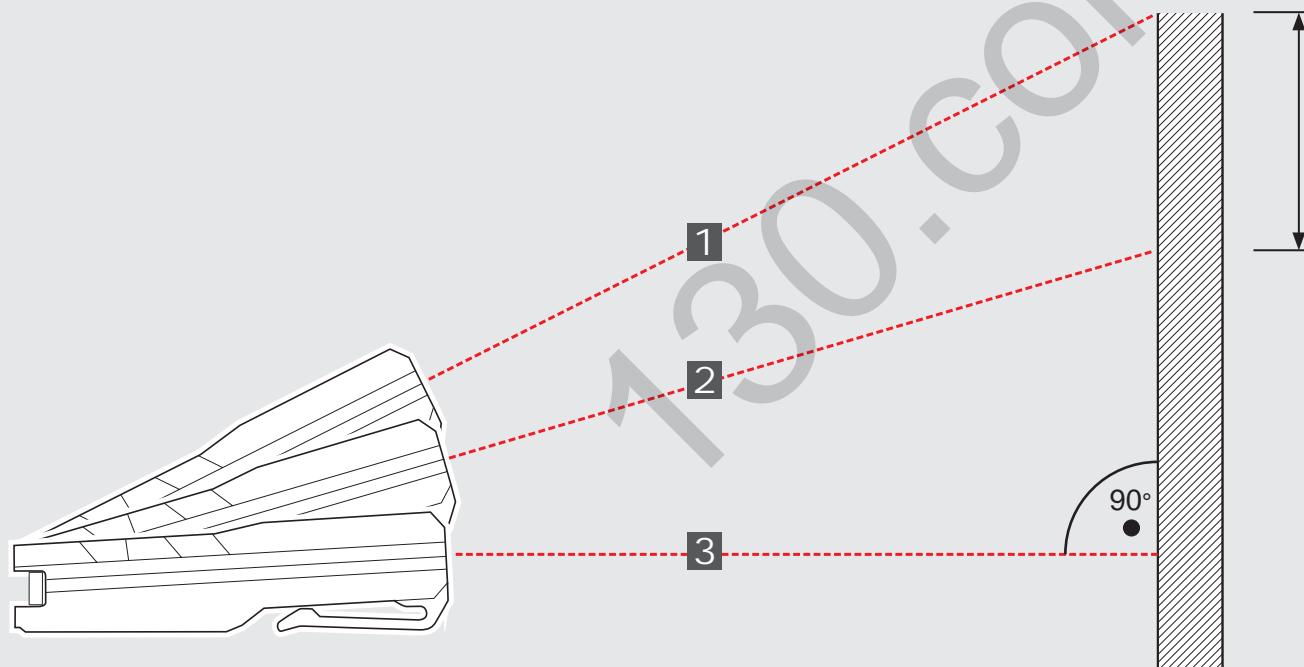
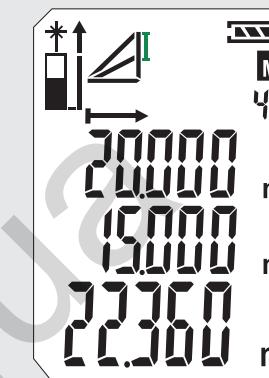
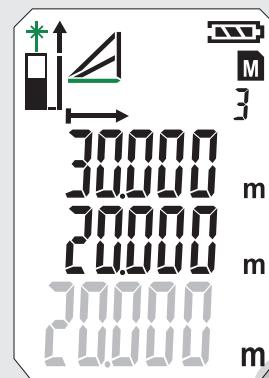
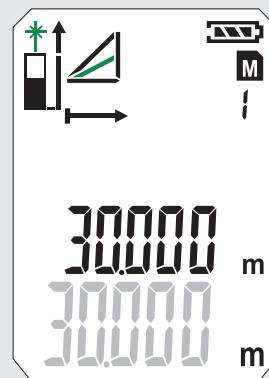
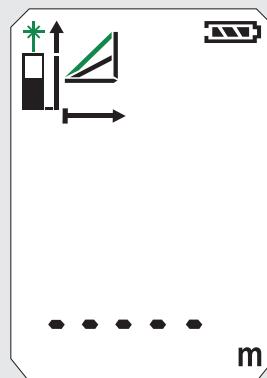
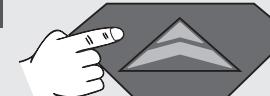
2



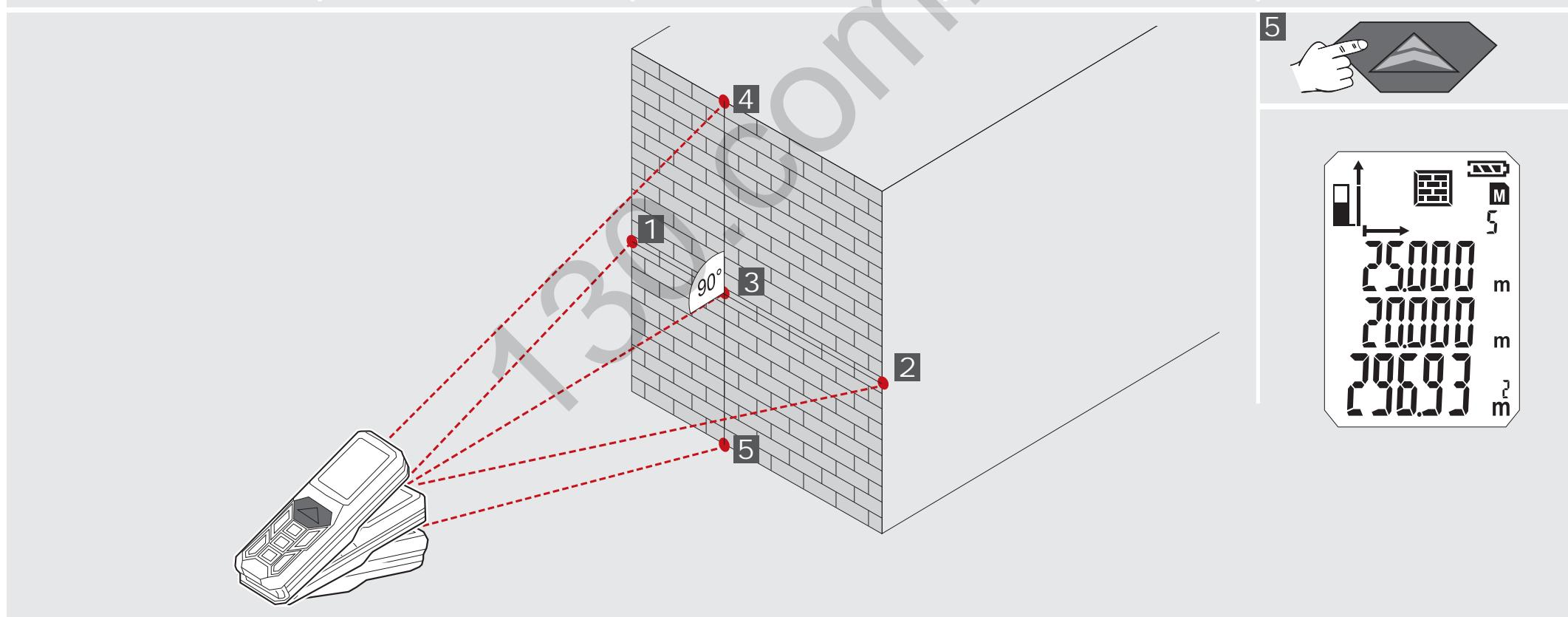
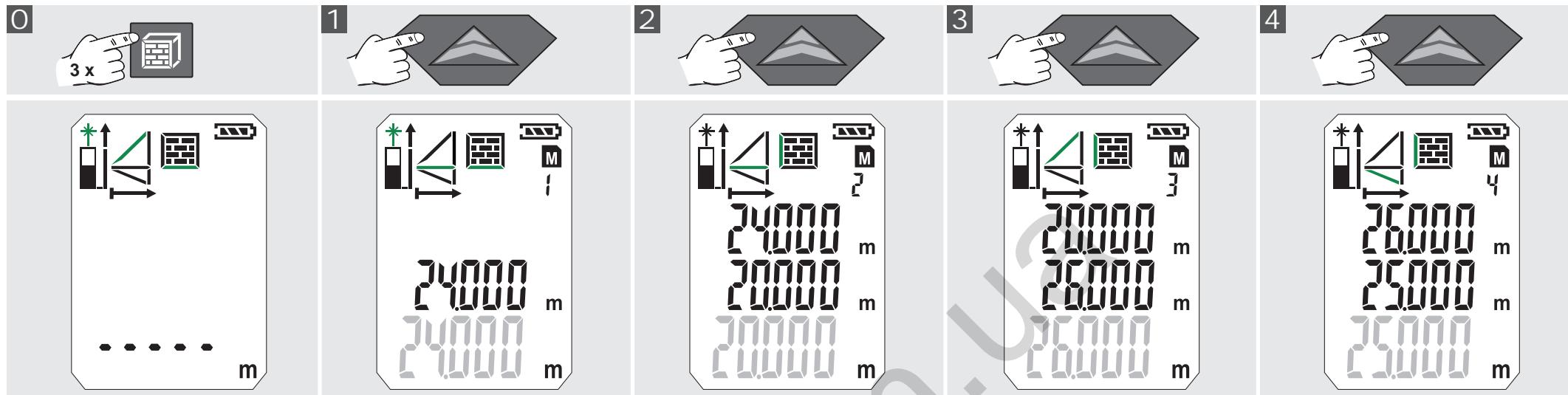
3



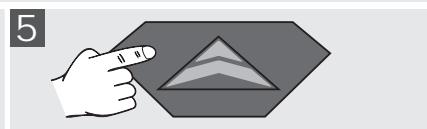
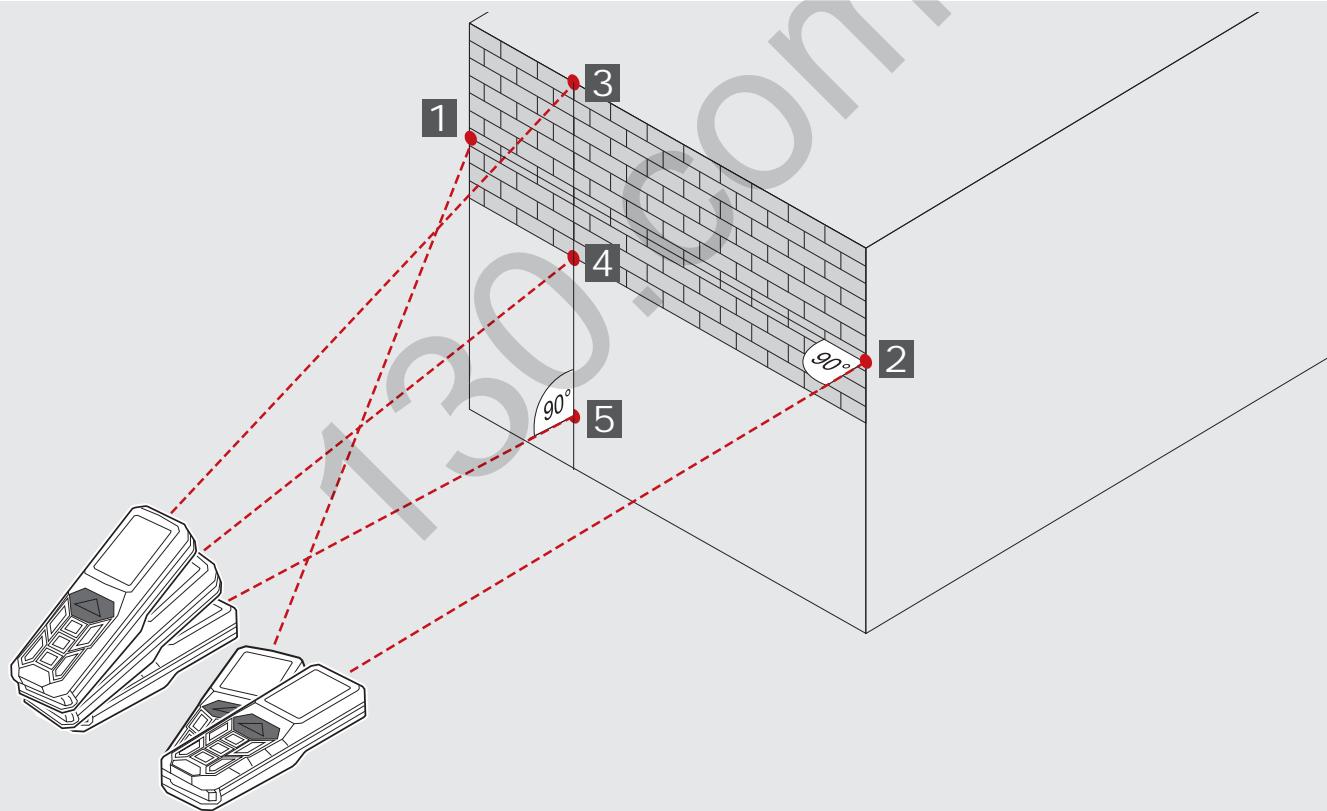
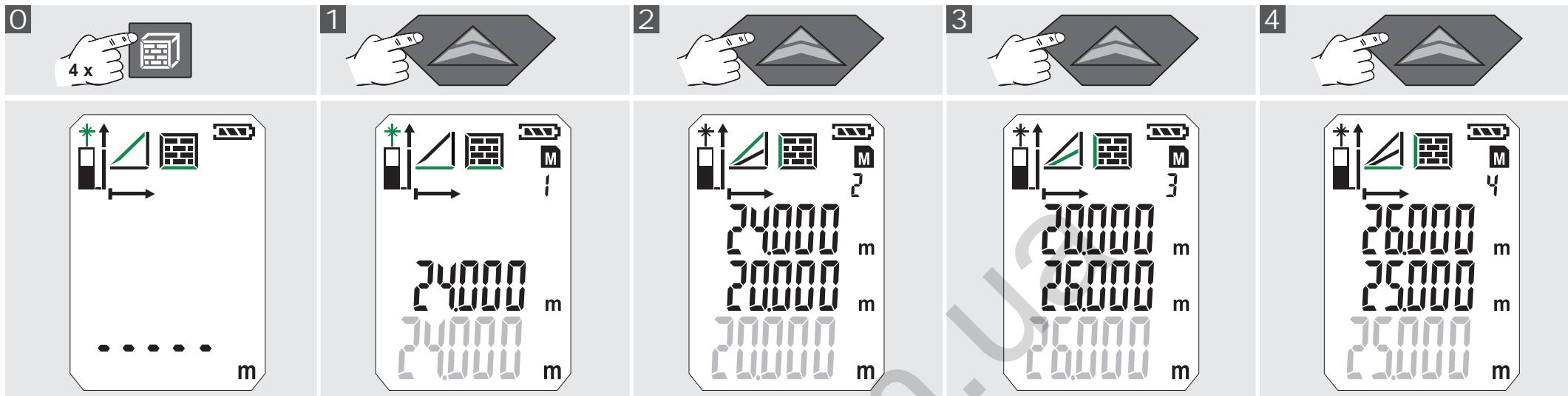
4



SIENELĖS PLOTO MATAVIMAS (1 SCENARIJUS)



SIENELĖS PLOTO MATAVIMAS (2 SCENARIJUS)



LAIKMATIS

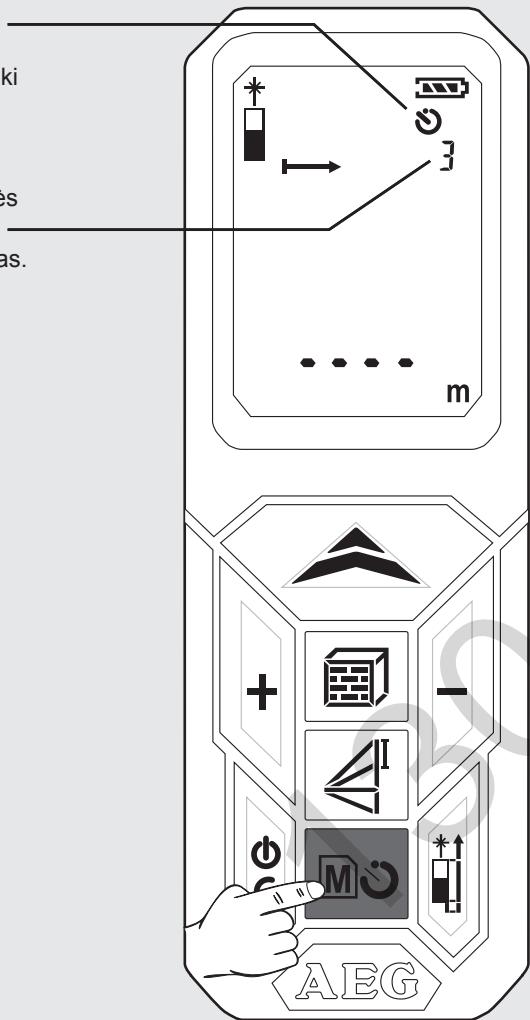
Laikmačiu galima matavimą užlaikyti, norint, pavyzdžiu, nustatyti konstrukcinę dalį matavimo spindulyje.

Mygtuką  paspausti

- Užsidega simbolis 
- Paspaudus mygtuką  laikmatį galima nustatyti nuo 3 iki 15 sek.

Mygtuką  paspausti

- Pradedamos skaičiuoti sekundės iki matavimo
- 0 pozicijoje prasideda matavimas.



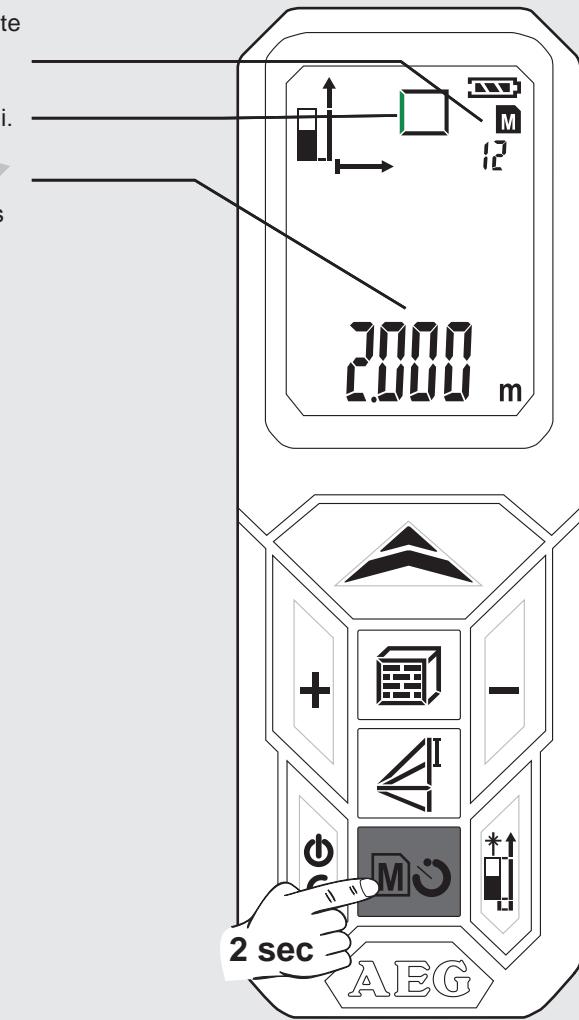
ATMINTIS

Matavimo vertė automatiškai išsaugoma atmintyje.

Išsaugotas vertės galima mygtuku  atšaukti.

Mygtuką  2 sek. nuspauskite

- Užsidega simbolis ir atminties laukas.
- Rodomi susiję matavimo dydžiai.
- Pagrindinėje eilutėje rodoma išsaugota vertė.
- Judėkite +/- "Tasten" mygtukais



SU PAGRINDINĖS FUNKCIJOS PLOTO MATAVIMO PAVYZDŽIU (1)

1 išjungti

Mygtuką paspausti.
⚠ Dėmesio! Lazerinis spindulys!
Nenukreipkite į žmogų!

2 pasirinkti matavimo lygi

Standartinis nustatymas įjungus: užpakalyje
 1x paspausti -> kampinis kaištis
 2x paspausti -> priekyje
 3x paspausti -> užpakalyje

Mirkxi lazerio simbolis (mirkxi žalia spalva).

Šviečia simbolis

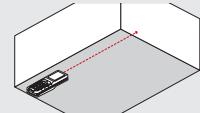
3 funkcijos pasirinkimas

Įjungus, prietaisas visada nustatytais matuoti ilgius.
 1x paspausti - plotų matavimas

- Užsidega simbolis
Mirkxi matavimo dydis (mirkxi žalia spalva)

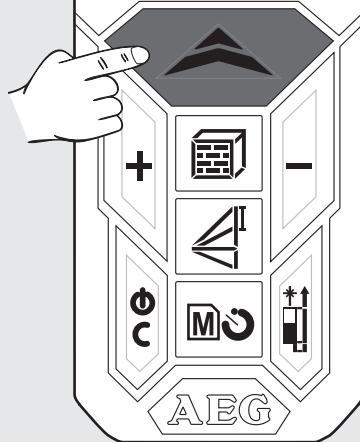
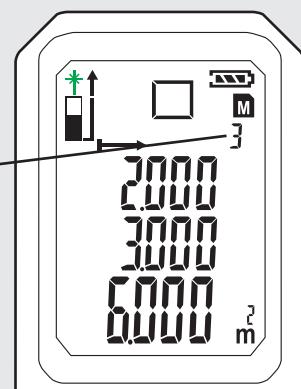
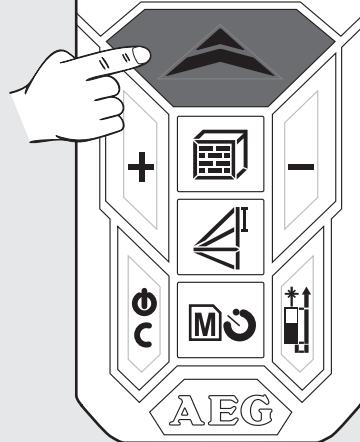
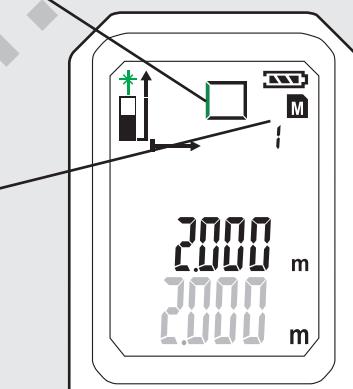
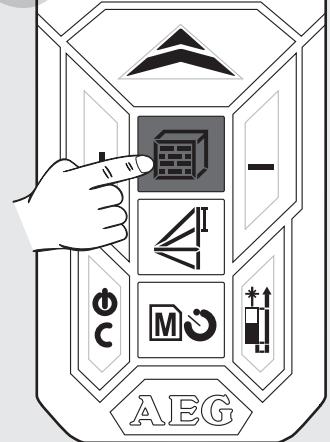
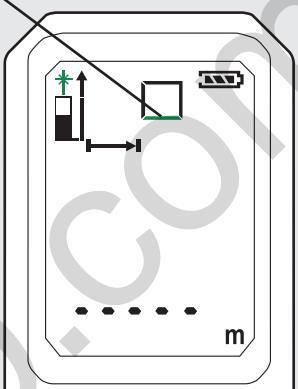
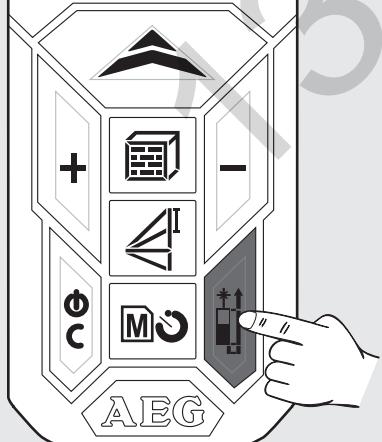
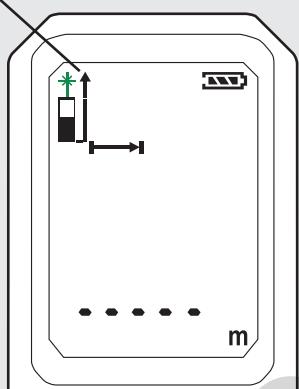
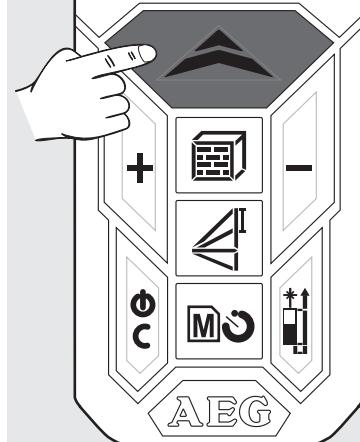
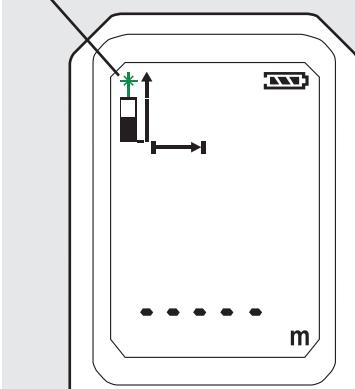
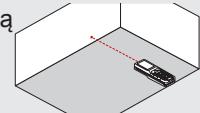
4 ilgio matavimas

Išlygiuokite prietaisą ir mygtuką paspauskite



5 pločio matavimas

Išlygiuokite prietaisą ir mygtuką paspauskite



SU PAGRINDINĖS FUNKCIJOS PLOTO MATAVIMO PAVYZDŽIU (2)

6 išsaugotų verčių atšaukimas

Mygtuką  2 sek. paspauskite.
Paspauskite mygtuką + arba -

7 išeiti iš atminties

Mygtuką  paspausti

8 išjungti

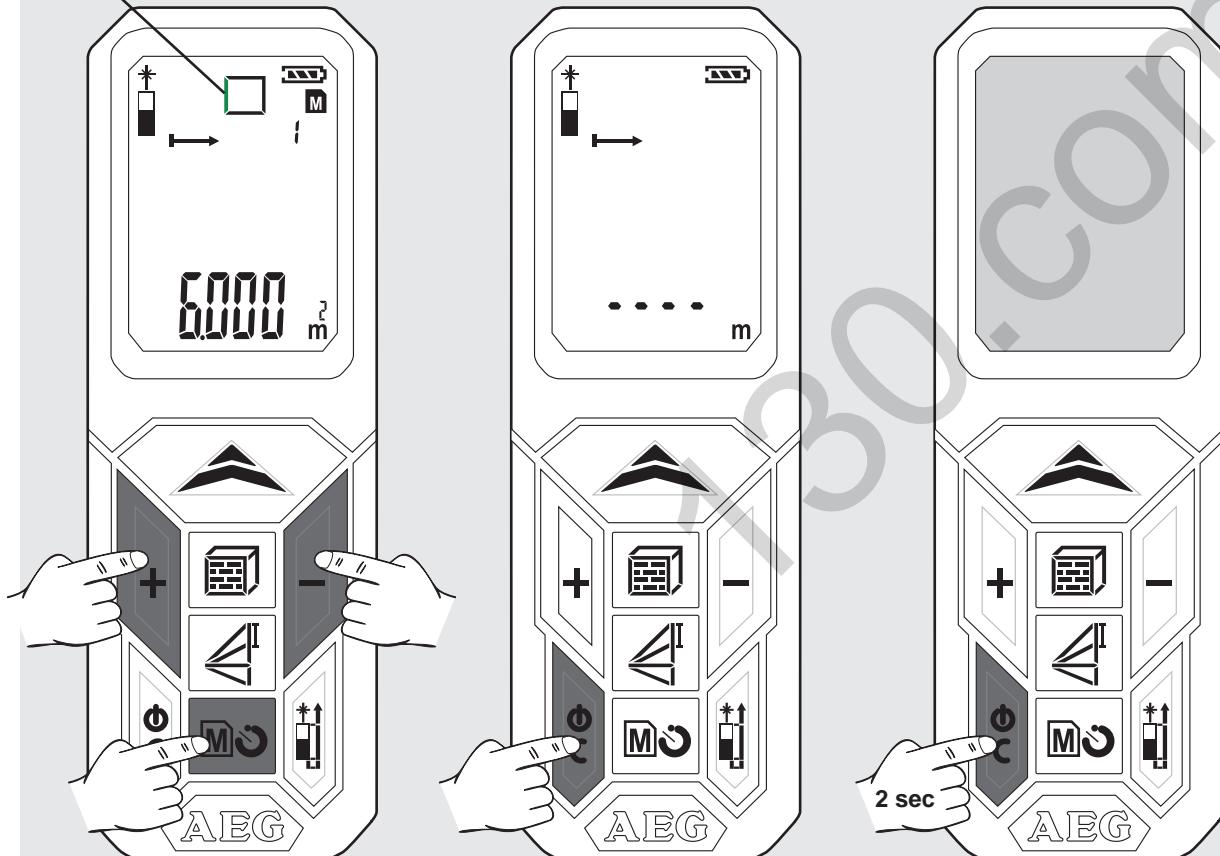
Mygtuką  2 sek. paspausti
(iš atminties prieš tai išeikite).

- Pagrindinėje eilutėje rodomas išsaugotos vertės.

- Susijęs simbolis rodomas, o matavimo vertė mirksi (mirksi žalia spalva).

- Prietaisas išsijungia.

- Jeigu 3 minutes nepaspaudžiamas joks mygtukas, prietaisas automatiškai išsijungia.



SISU

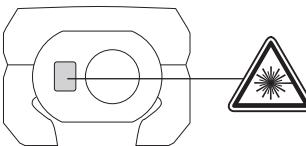
Olulised ohutusjuhised	1
Tehnilised andmed.....	2
Kasutamine vastavalt otstarbele.....	2
Veakoodide tabel.....	2
Ülevaade	3
Patarei vahetamine.....	4
Nurgapliiats.....	4
Rihmahoidik.....	4
Funktsooniklahv, Pythagoras, mõõtmistasand	5
Lihtrase pikkuse mõõtmine	6
Pidev mõõtmine / miinimum-maksimum-mõõtmine	7
Lahutamis- / liitmismõõtmine	8
Pindala mõõtmine	9
Ruumala mõõtmine	10
Kaudne mõõtmine (Pythagoras 1).....	11
Kaudne mõõtmine (Pythagoras 2).....	12
Kaudne mõõtmine (Pythagoras 3).....	13
Seina pindala mõõtmine (stsenaarium 1).....	14
Seina pindala mõõtmine (stsenaarium 2).....	15
Taimer.....	16
Mälu.....	16
Põhililine talitusviisi pindala mõõtmise (1) näitel	17
Põhililine talitusviisi pindala mõõtmise (2) näitel	18

OLULISED OHUTUSJUHISED



Ärge kasutage toodet enne, kui olete lugenud kaasasoleval CD'l olevalt Ohutusjuhiseid ja Kasutusjuhendit.

Laseri klassifikatsioon



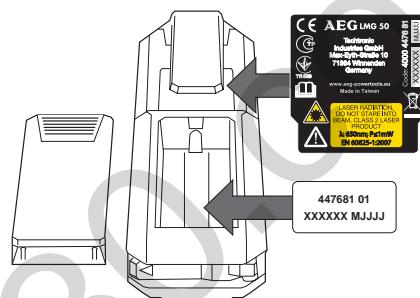
HOIATUS:

Tegemist on **2. klassi** lasertootega, mis vastab dokumendile IEC 60825-1:2007.



Kirjad

Enne ekspluatatsiooni võtmist tuleb ingliskeelsele tekstile firmalaual peale liimida vastav kleebis Teie emakeelles.



Hoiaitus:

Vältige vahetut silmsidet. Laserkiir võib silmadele kiirguskahjustusi tekitada ja põhjustab lühiajalist pimestamist. Ärge vaadake laserkiirt ega suunake seda asjatult teiste isikute suunas.

Ärge pimestage teisi inimesi.

Hoiaitus:

Ärge käitage laserseadet laste läheduses ega lubage lastel laserseadet kasutada.

Tähelepanu! Peegeldav pind võib laserkiirt operaatori või teiste inimeste suunas tagasi peegeldada.

Hoidke jäsemed liikuvatest osadest ohutus kauguses.

Teostage korrapäraselt testmõõtmisi. Seda eriti enne olulisi mõõtmistöid, nende ajal ja järel.

Olge tähelepanelik mõõtmisvigade suhtes, kui toode on defektne või see on maha kukkunud või seda on valesti kasutatud või muudetud.

Tähelepanu! Tutvuge aiatööriista käsitelementide ja nõuetekohase kasutamisega.

Lasermõõteseadmel on piiratud kasutusvaldkond. (vt lõiku "Tehnilised andmed"). Katsed väljaspool maksimaalset ja minimaalset piirkonda mõõtmisi läbi viia, põhjustavad ebätäpsusi. Kasutamine ebasoodsates tingimustes nagu liiga kuumas, liiga külmas, väga eredas päikesevalguses, vihmas, lumes, uodus või muudes nähtavust piiravates tingimustes võib ebätäpseid mõõtmisi põhjustada.

Kui lasermõõteseade viiakse soojast ümbruskonnast külma ümbruskonda (või vastupidi), siis oodake, kuni seade on uue ümbrustemperatuuriga kohanenud.

Säilitage lasermõõteseadet alati ruumides ja kaitske seadet rapustuse, vibratsioonide ning äärmeiliste temperatuuride eest. Kaitske lasermõõteseadet tolmu, märja ja kõrge õhuniiskuse eest. See võib sisemisi koostatedetaile rikkuda või täpsust mõjutada.

Ärge kasutage agressiivseid puhastusvahendeid ega lahusteid. Puhastage ainult puhta, pehme lapiga.

Vältige lasermõõteseadme puhul tugevaid lööke või mahakukkumist. Seadme täpsus tuleks üle kontrollida, kui see oli maha kukkunud või muudele mehaanilistele koormustele allutatud.

Antud laserseadmel tohib nõutavaid remonditöid teostada üksnes volitatud erialapersonal.

Ärge kasutage toodet plahvatusohtlikes kohtades ega agressiivses keskkonnas.

Kasutage akude laadimiseks ainult tootja soovitatud laadijaid.

Tühjasid patareisid ei tohi visata majapidamisjäätmete hulka. Säästke keskkonda ja viige need kogumispunktidesse, nagu on sätestatud riiklike ja kohalikes eeskirjadest. Seadet ei tohi visata majapidamisjäätmete hulka. Kõrvadage toode kasutuselt riigis kehtivate eeskirjade järgi. Täitke vastavaid kohalikke ja riiklikke eeskirju. Pöörduge kohaliku ameti või edasimüüja poole, et utiliseerimise kohta teavet saada.



TEHNILISED ANDMED

Kaitseklass	IP54 (tolmu ja veepritsmete eest kaitstud)
Optika	14 mm
Fookuskaugus	35 mm
Mõõtevahemik max	50 meetrit (tolerants: 55m)
Mõõtevahemik min	0,05 meetrit
Absoluutne täpsus @ < 10m	± 1,5 mm (max)
Korduvtäpsus @ < 10m	± 1,5 mm (tüüpiliselt max 2σ)
Korduvtäpsus @ > 10m	tõus ± 0,25 mm / meetri kohta (tüüpiliselt max 2σ)
Mõõtmisaeg	0,5 s
Displei tüüp	LCD (22,7 mm x 31 mm)
Voolutoide	AAA 2x (Alkaline patarei)
Patarei eluiga	10000 (üksikmõõtmine)
Laseri väljundvõimsus	0,6 mW ~ 0,95 mW (klass 2, 650nm)
Laserpunkt suurus	25 x 30 mm @ 16 m (max)
Laserkiire vertikaalnurk	+1 kraad
Laserkiire horisontaalnurk	±1 kraad
Seadme automaatne väljalülitus	180 sekundit
Laseri automaatne väljalülitus	30 sekundit
Töötemperatuuri vahemik	-10°C kuni +50°C
Ladustamistemperatuuri vahemik	-25°C kuni +70°C
Kaal patareita	80 g

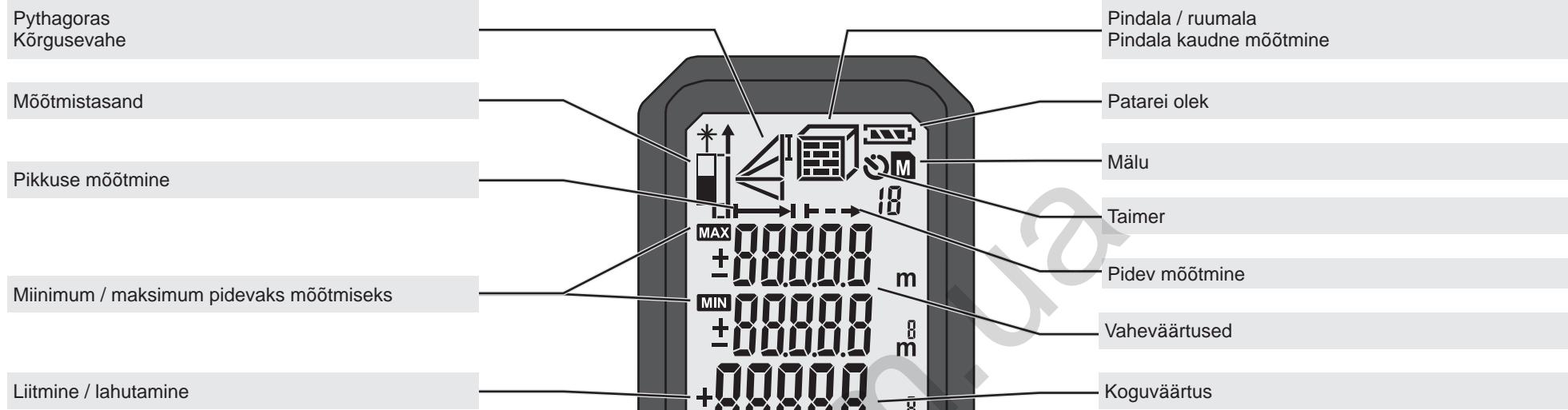
VEAKOODIDE TABEL

Kood	Kirjeldus	Lahendus
Err01	Väljaspool mõõtevahemikku	Viige mõõtmine läbi ettenähtud vahemikus.
Err02	Peegeldav signaal on liiga nõrk	Valige parem pealispind.
Err03	Väljaspool näiduvahemikku (max väärthus: 99 999) nt on pindala või ruumala tulemus väljaspool näiduvahemikku	Kontrollige, kas väärused ja sammud on korrektsed.
Err04	Viga Pythagorase arvutamisel	Kontrollige, väärused ja sammud on korrektsed.
Err05	Patarei tühi	Pange uued patareid sisse.
Err06	Väljaspool töötemperatuuri vahemikku	Viige mõõtmine läbi etteantud töötemperatuuri vahemikus.
Err07	Ümbrusvalgus liiga ere	Pimendage sihtpiirkond.

KASUTAMINE VASTAVALT OTSTARBELE

Lasermõõteseade sobib distantside ja kallete mõõtmiseks.

Antud seadet tohib kasutada ainult vastavalt äranäidatud otstarbele.



SISSE / MÕÕTMINE

- Sisse
- Mõõtmine
- Pidev mõõtmine (vajutage 2 sek)
Min / max funktsioon

LIITMINE

- Väärtuse liitmine
- Mälus navigeerimine

PINDALA / RUUMALA

- Pindala (vajutage 1x)
- Ruumala (vajutage 2x)
- Pindala kaudne mõõtmine (vajutage 3x / 4x)

SISSELÜLTAMINE

- Sisse
- Välja (vajutage 2 sek)
- Lähtestamine

LAHUTAMINE

- Väärtuse lahutamine
- Mälus navigeerimine

PYTHAGORAS

- Pythagoras 1 (vajutage 1x)
- Pythagoras 2 (vajutage 2x)
- Pythagoras 3 (vajutage 3x)

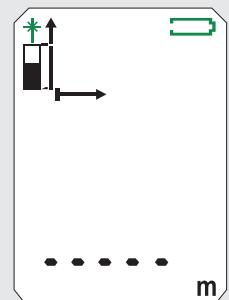
MÕÕTMISTASANDI VAHETAMINE

- Ees
- Taga
- Nurgapliiats

MÄLU

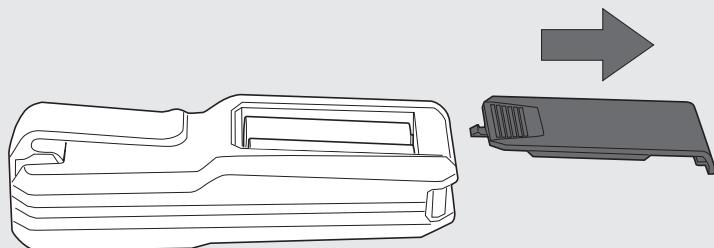
- Taimer 3-15 sek (vajutage 1x)
- Mälу 1-20 (vajutage 1x 2 sek)
- Navigeerige mälus +/- klahvidega

PATAREI VAHETAMINE

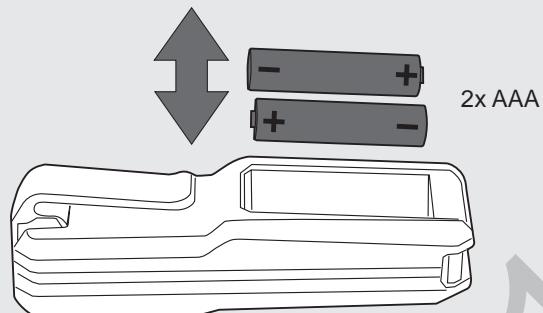


Kui sümbol vilgub,
siis vahetage
patarei.

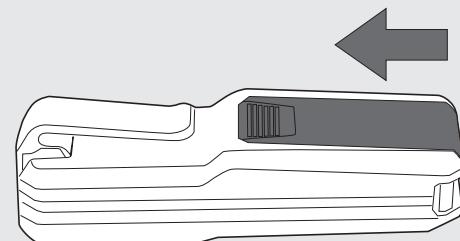
1



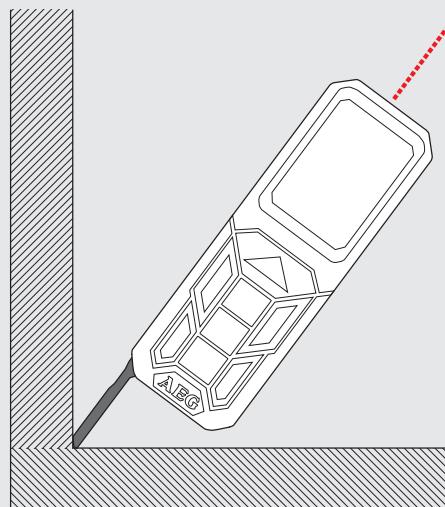
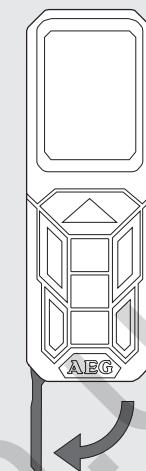
2



3

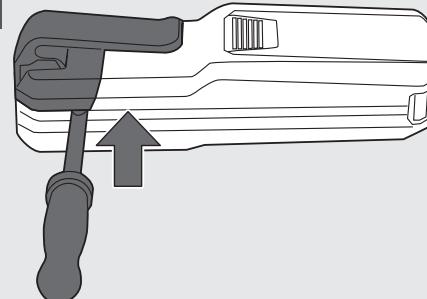


NURGAPLIIATS

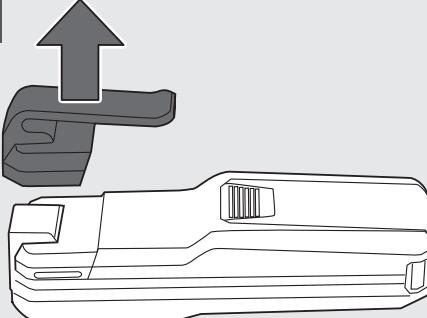


RIHMAHOIDIK

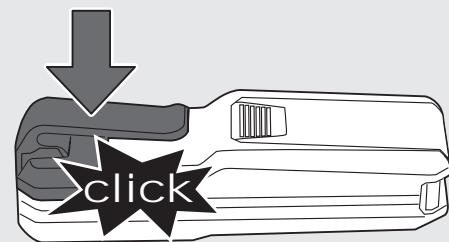
1



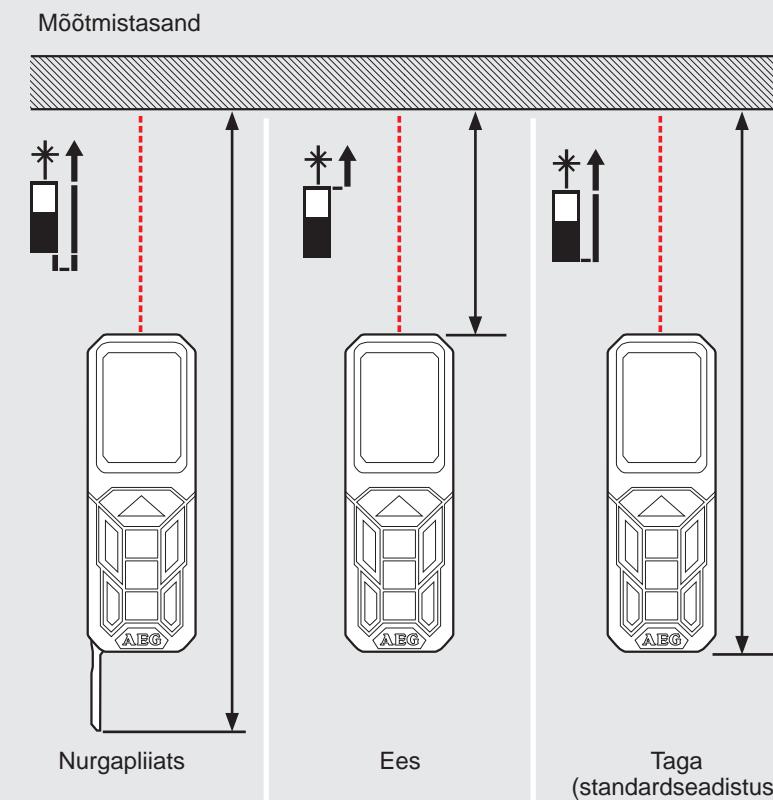
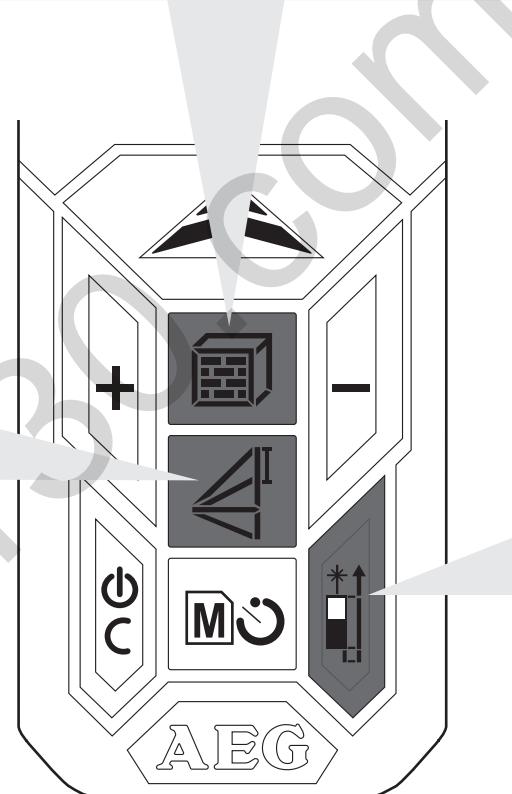
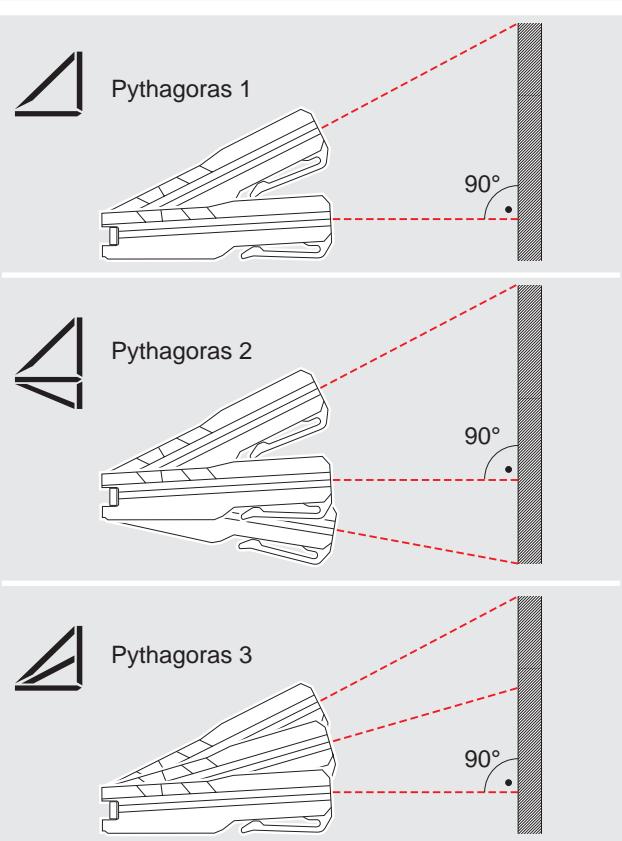
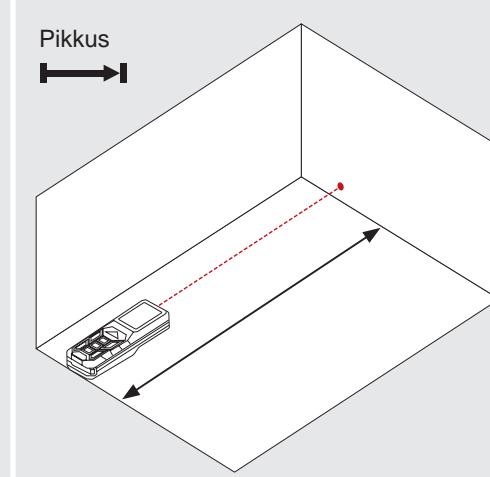
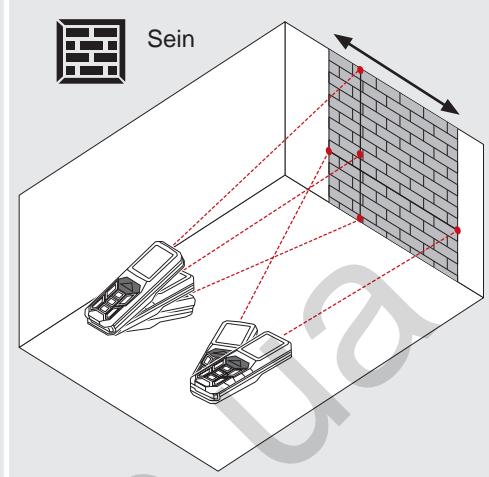
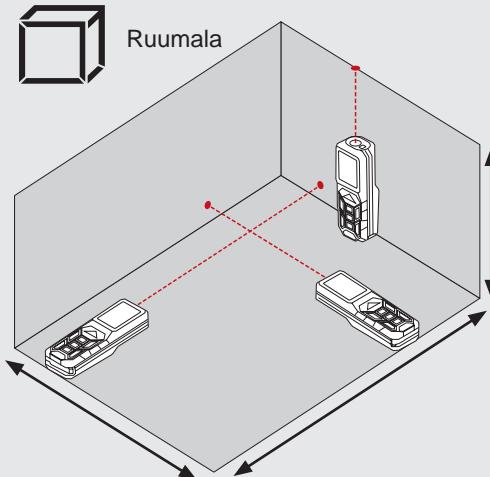
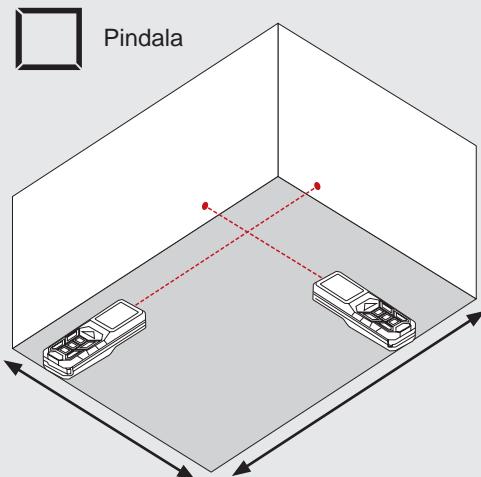
2



3

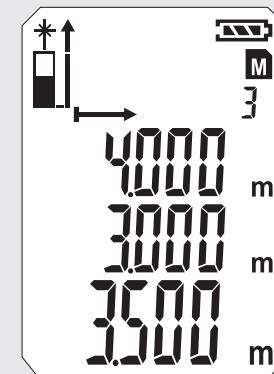
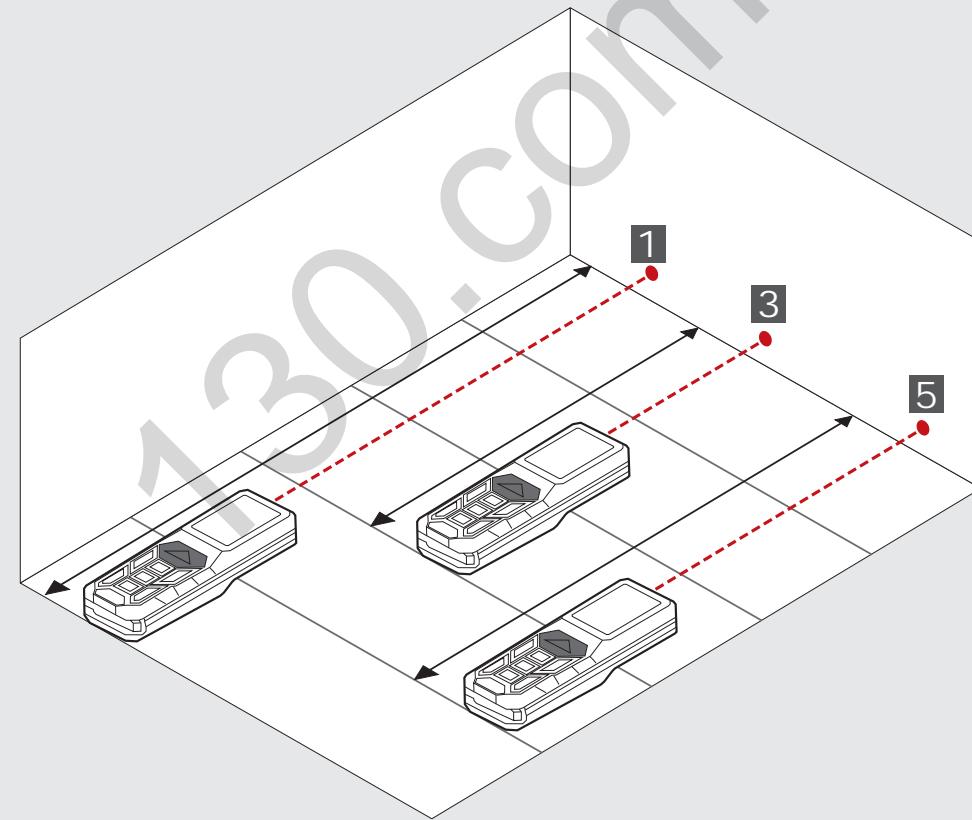
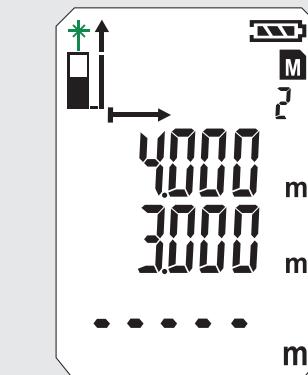
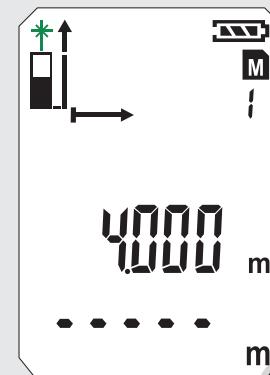
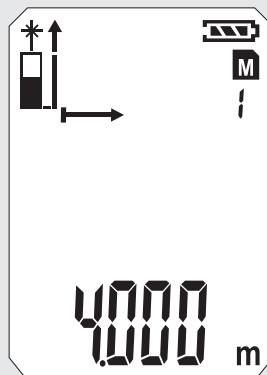
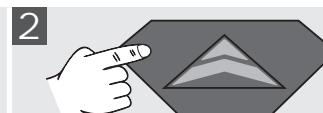
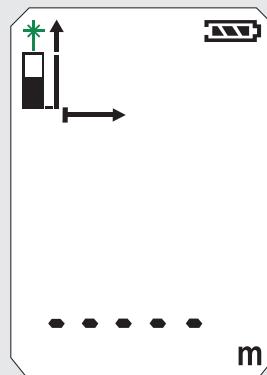
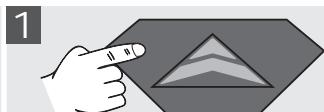


FUNKTSIOONIKLAHV, PYTHAGORAS, MÖÖTMISTASAND



LIHTNE PIKKUSE MÖÖTMINE

0

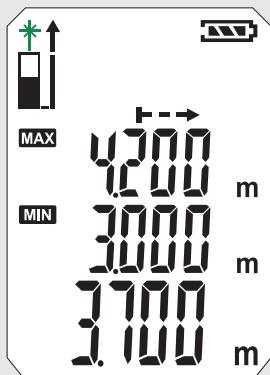
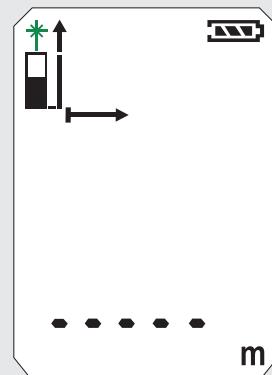


PIDEV MÖÖTMINE / MIINIMUM-MAKSIMUM-MÖÖTMINE

0



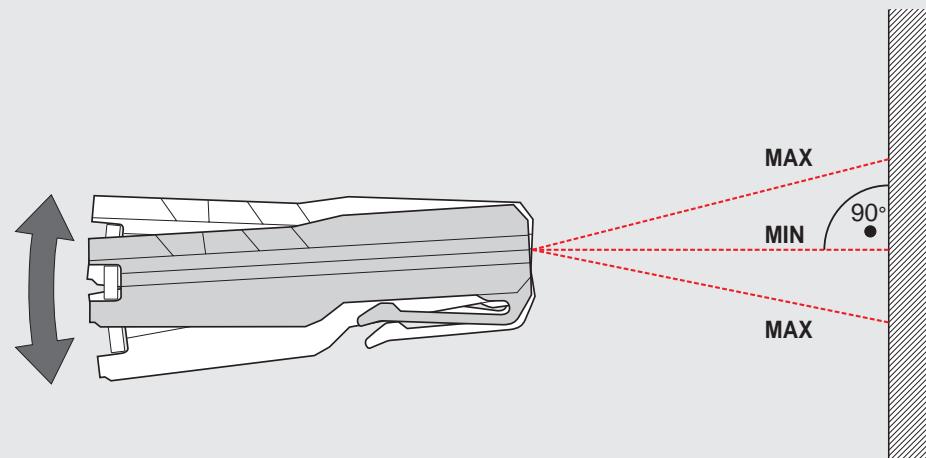
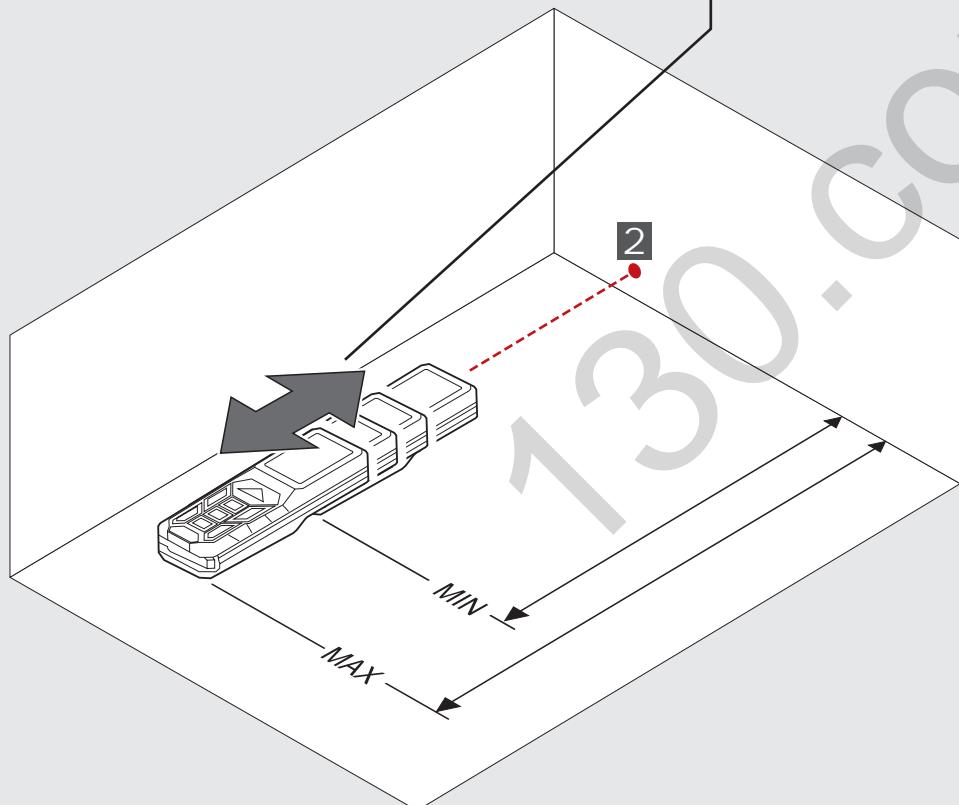
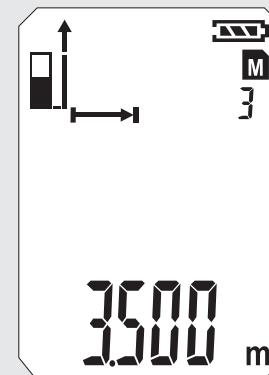
2



3

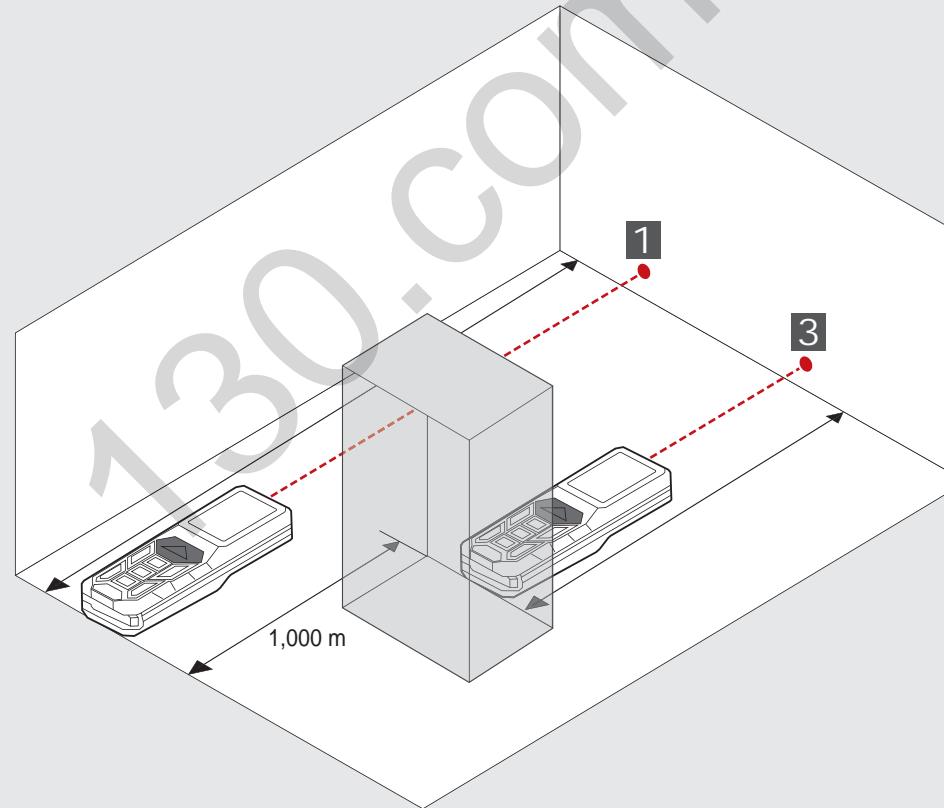
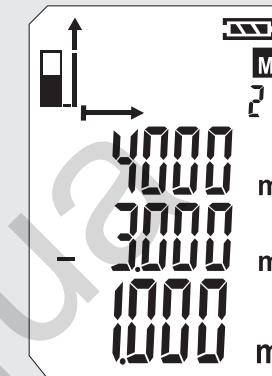
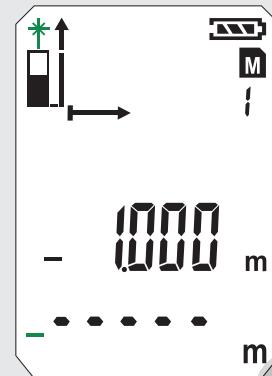
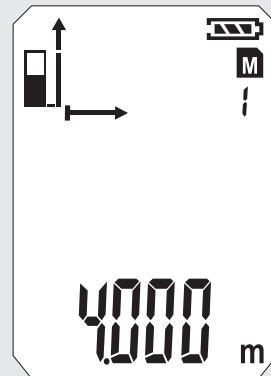
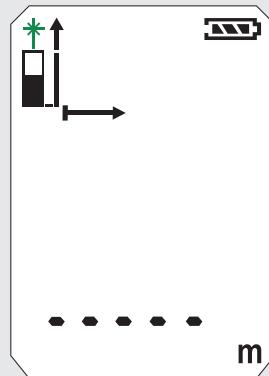
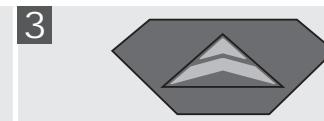
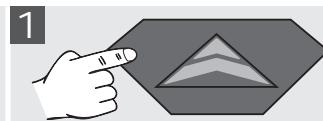
Stop
MIN / MAX

4

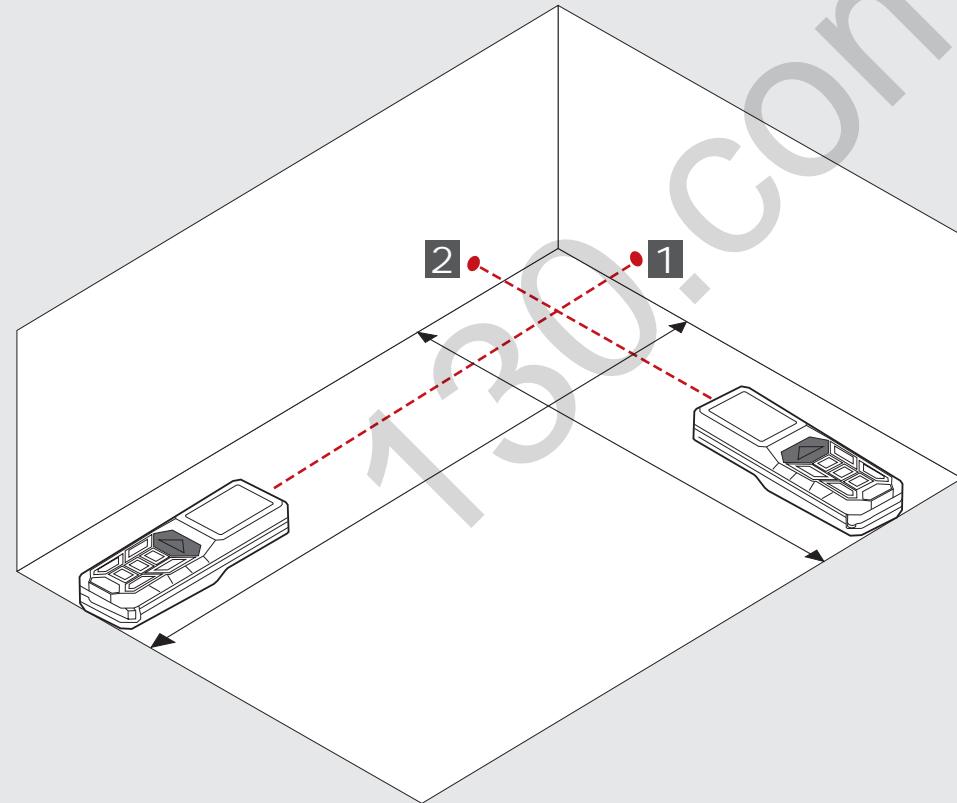
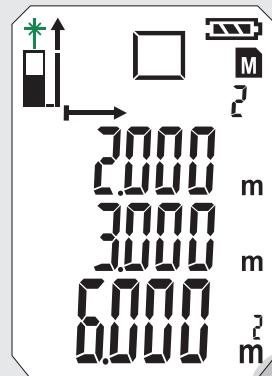
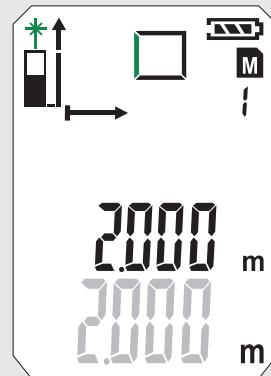
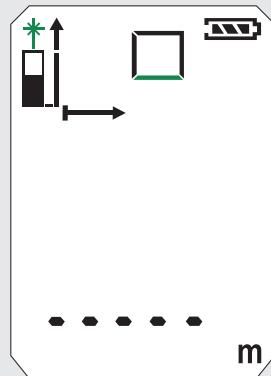
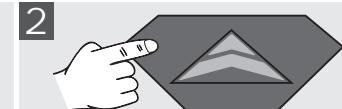
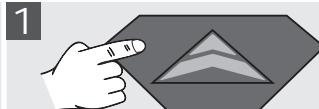
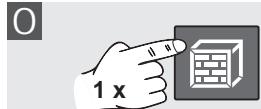


LAHUTAMIS- / LIITMISMÖÖTMINE

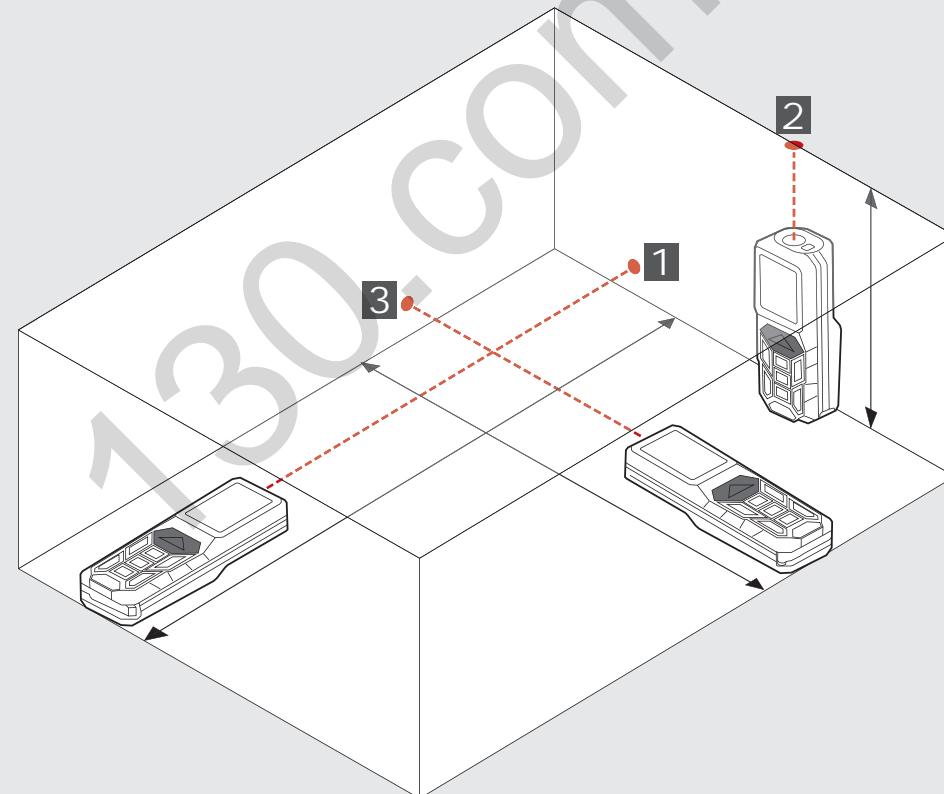
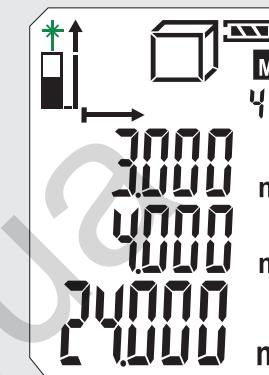
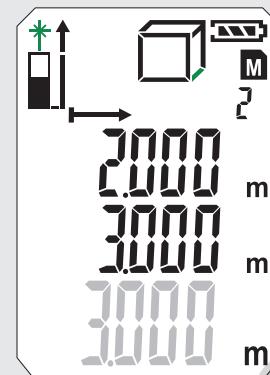
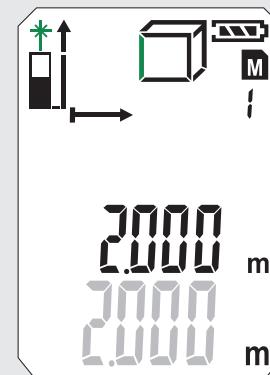
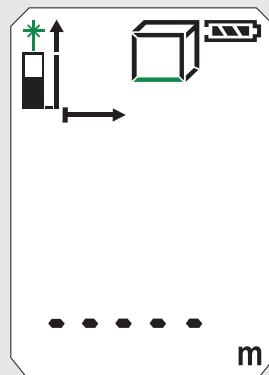
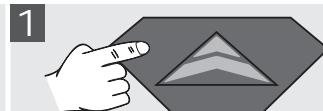
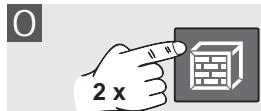
0



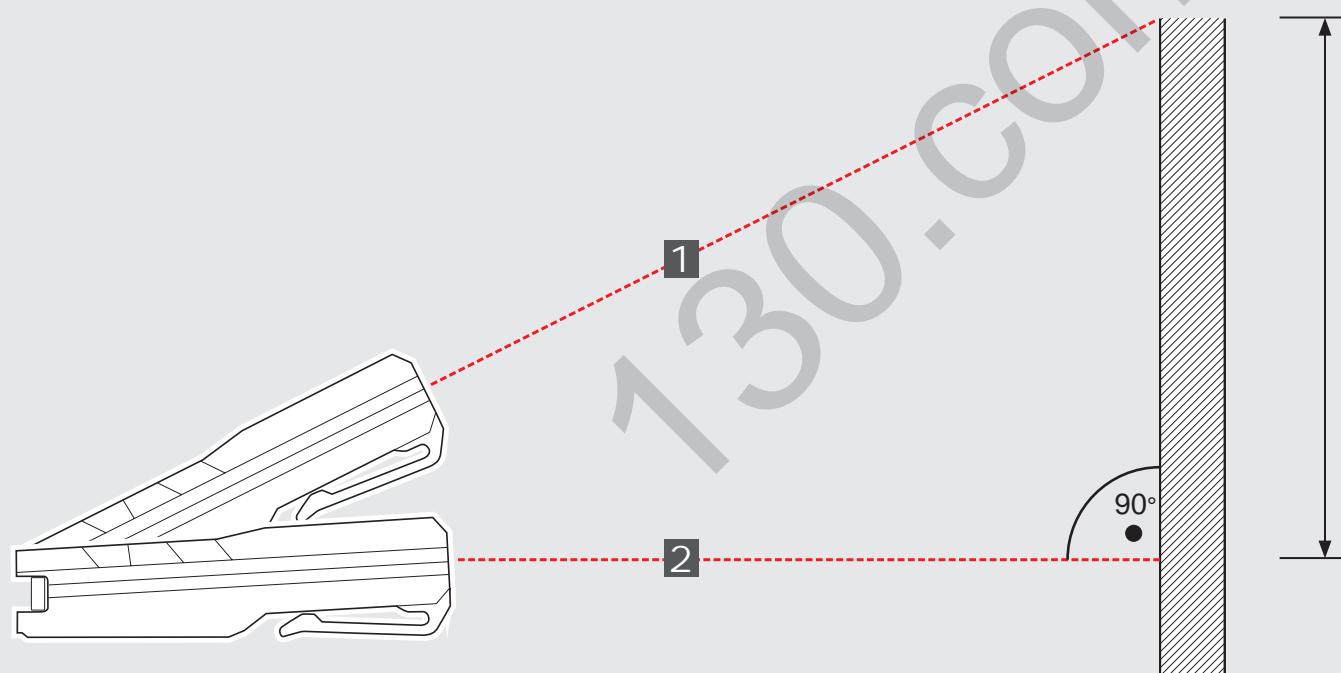
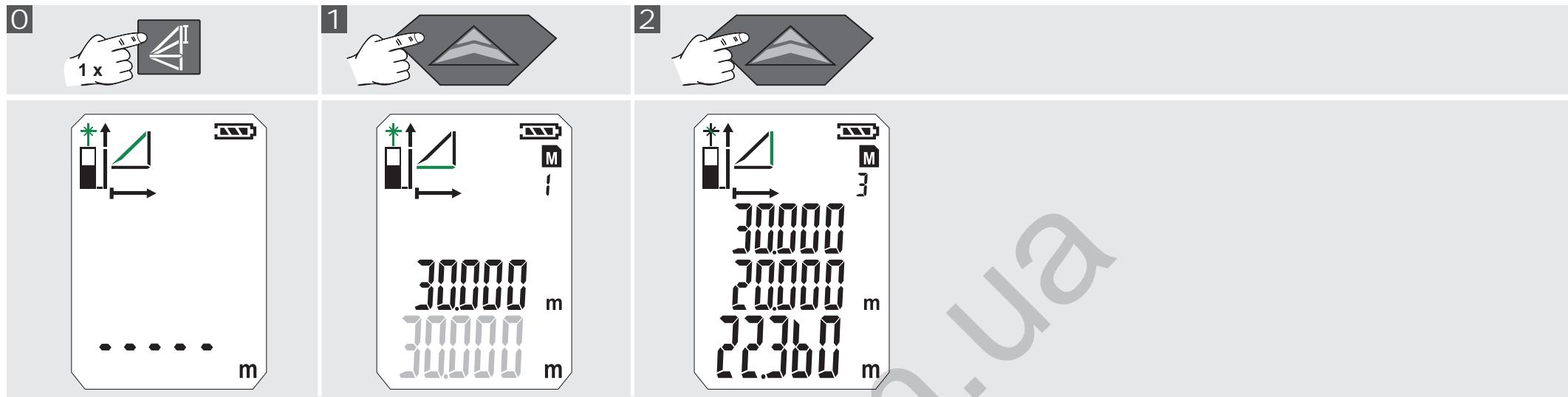
PINDALA MÖÖTMINE



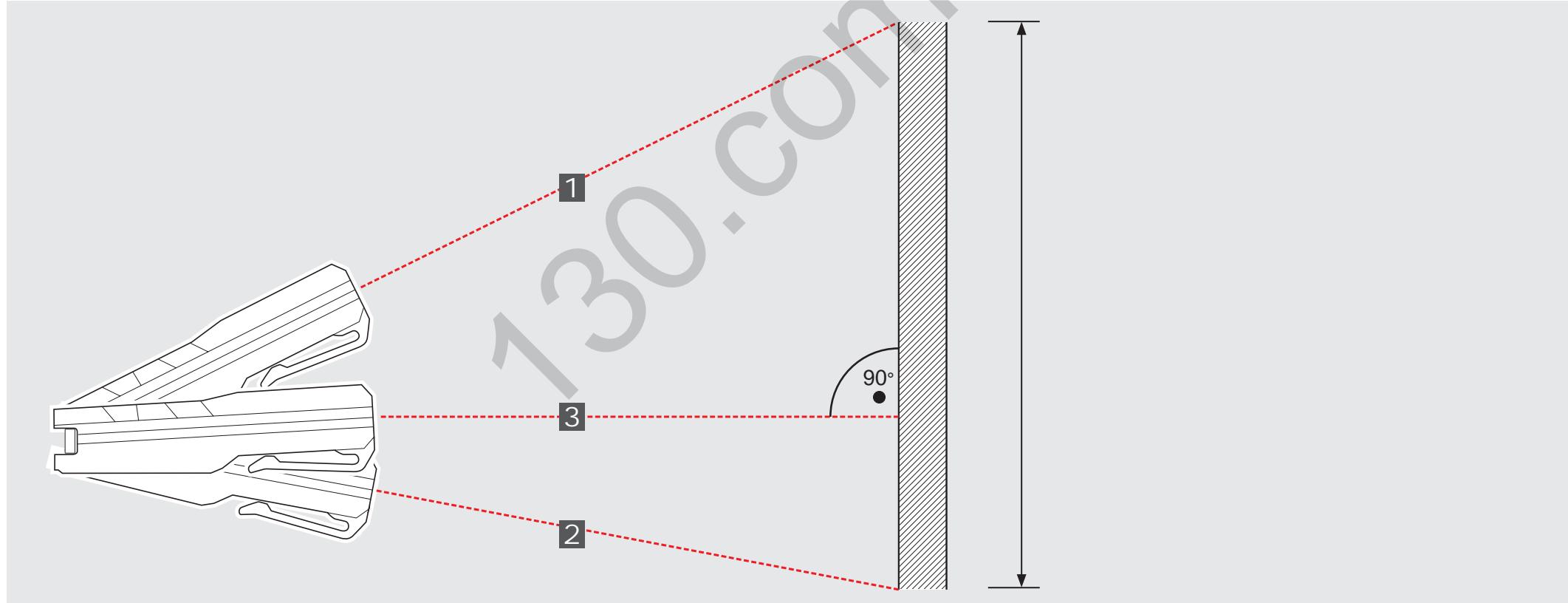
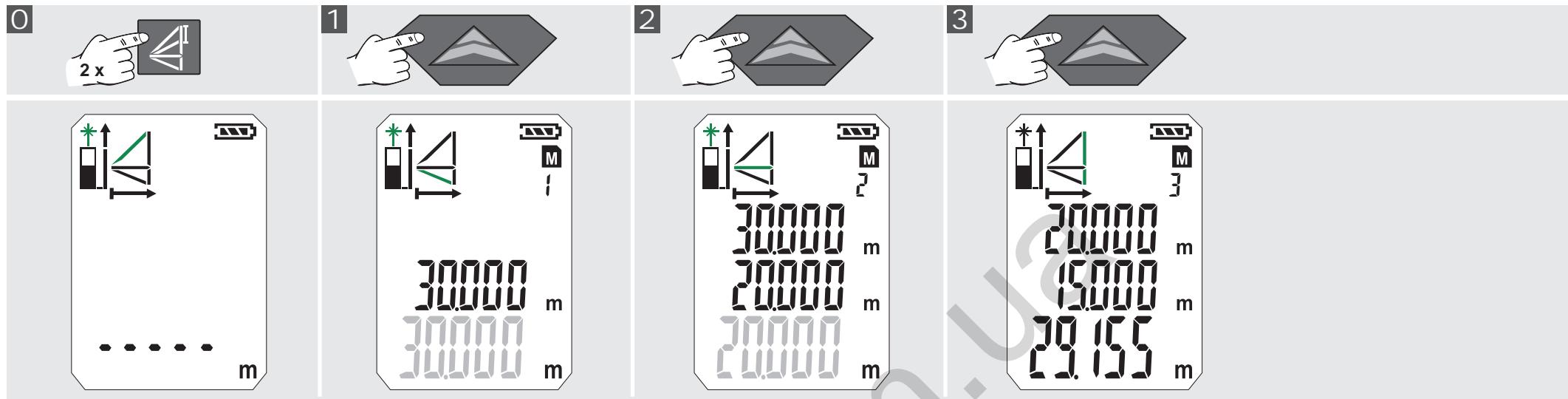
RUUMALA MÖÖTMINE



KAUDNE MÖÖTMINE (PYTHAGORAS 1)



KAUDNE MÖÖTMINE (PYTHAGORAS 2)



KAUDNE MÖÖTMINE (PYTHAGORAS 3)

1



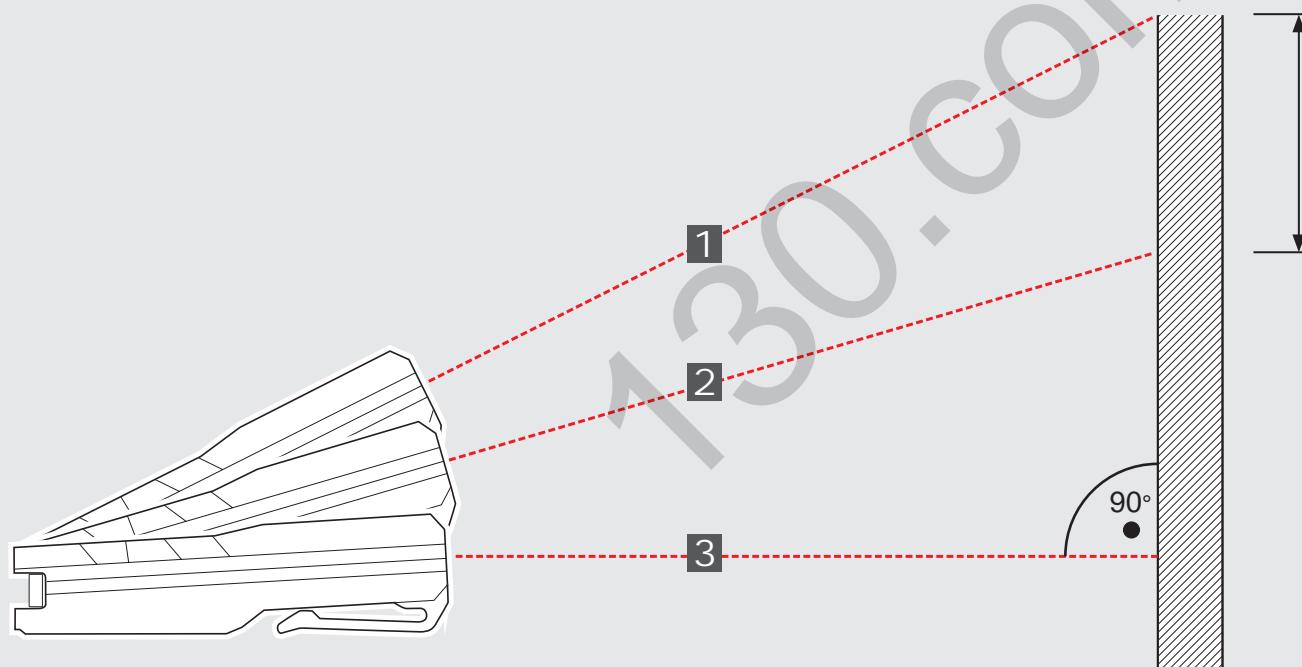
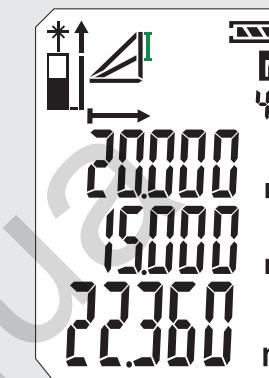
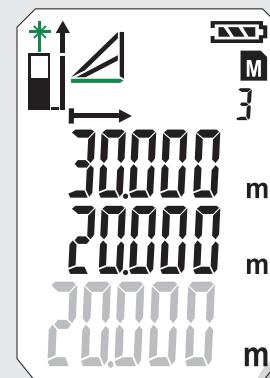
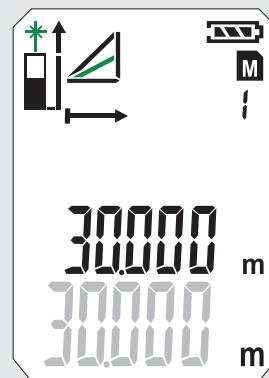
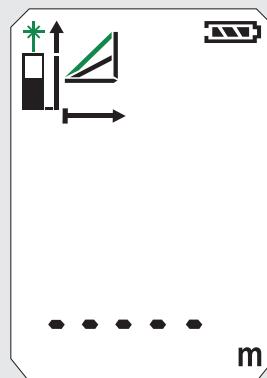
2



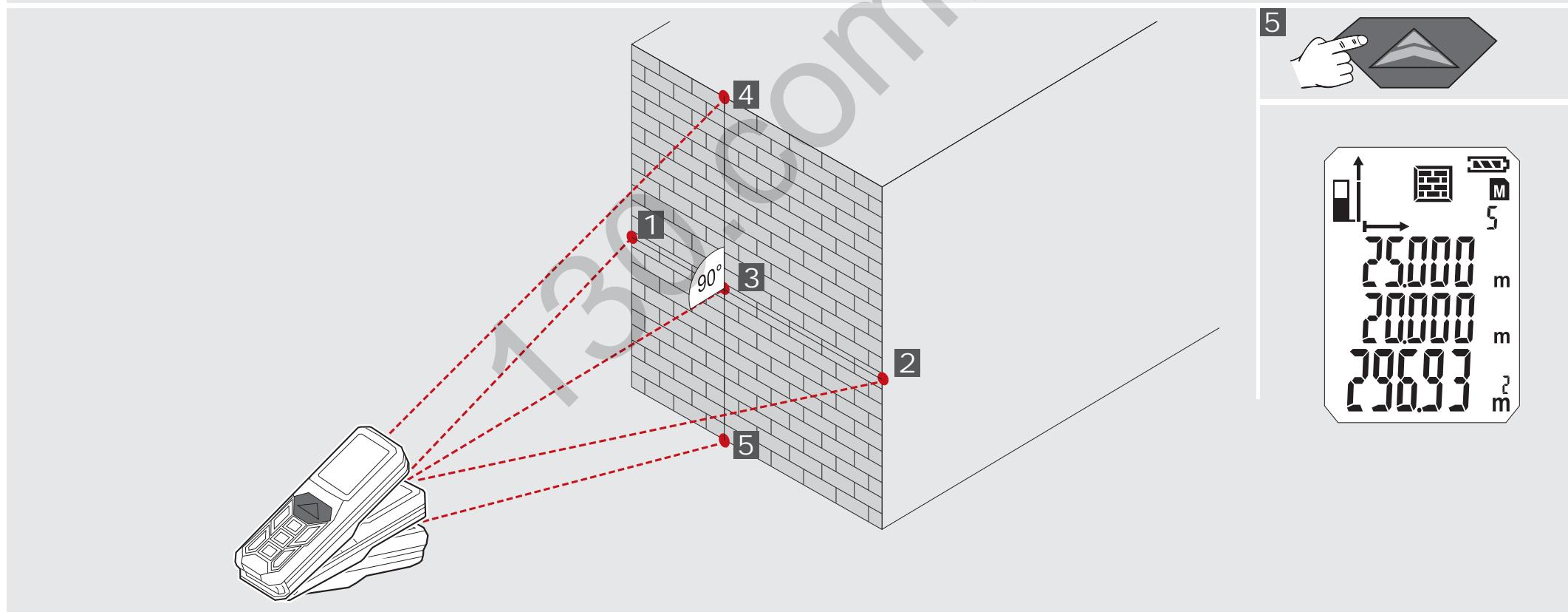
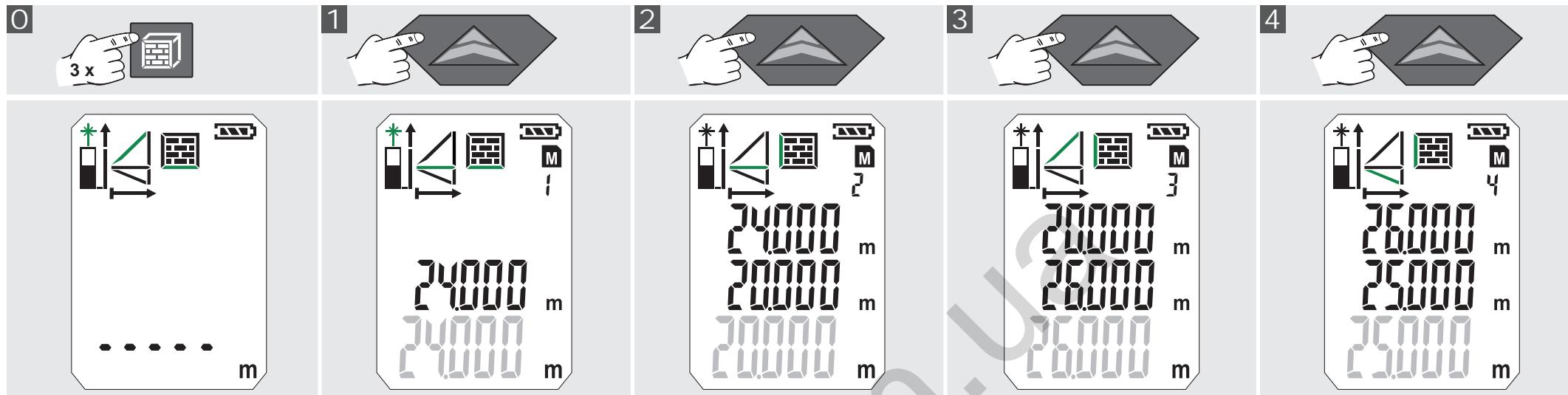
3



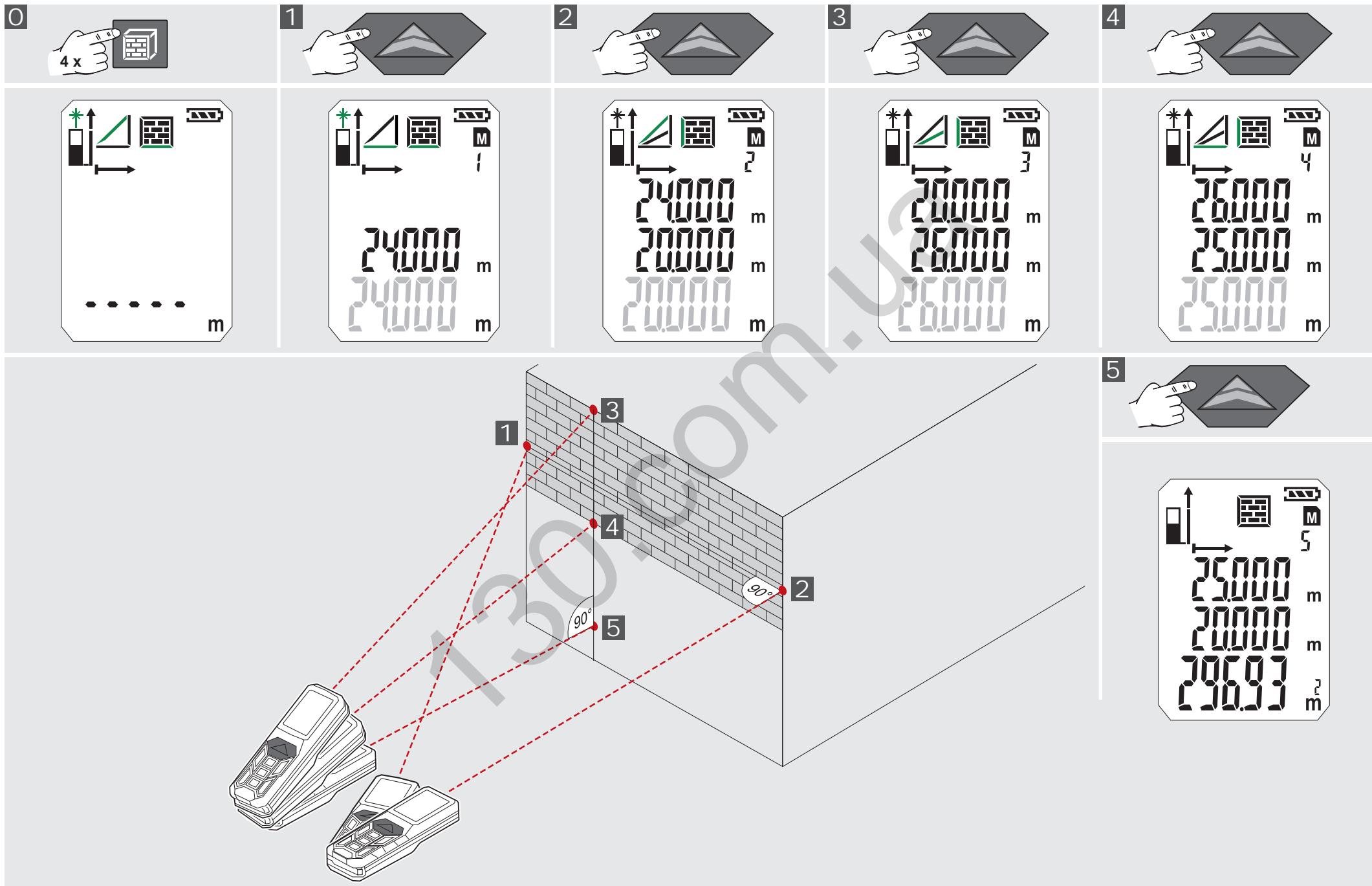
4



SEINA PINDALA MÖÖTMINE (STSENAARIUM 1)



SEINA PINDALA MÖÖTMINE (STSENAARIUM 2)



TIMER

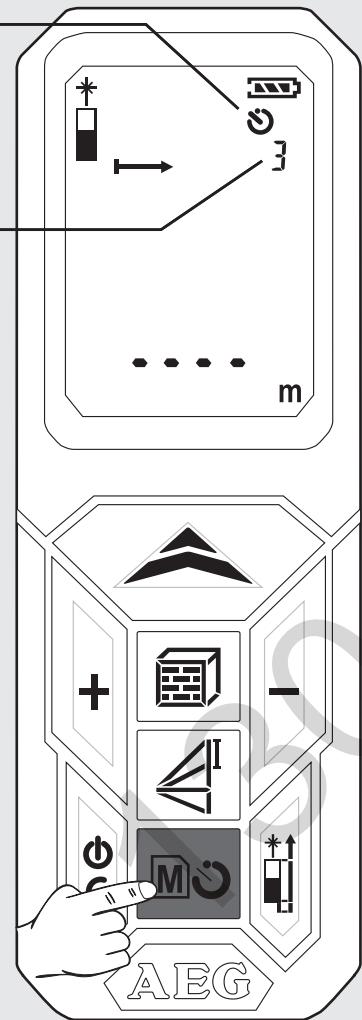
Taimeriga on võimalik mõõtmist viivitusega vallandada, et nt koostedetaili mõõtekiires positsioneerida.

Vajutage klahvi

- Ilmub sümbol
- Klahvi vajutamisega saab taimerit vahemikus 3 kuni 15 sek seadistada.

Vajutage klahvi

- Sekundeid loendatakse kuni mõõtmiseni alla.
- 0 juures käivitatakse mõõtmine.



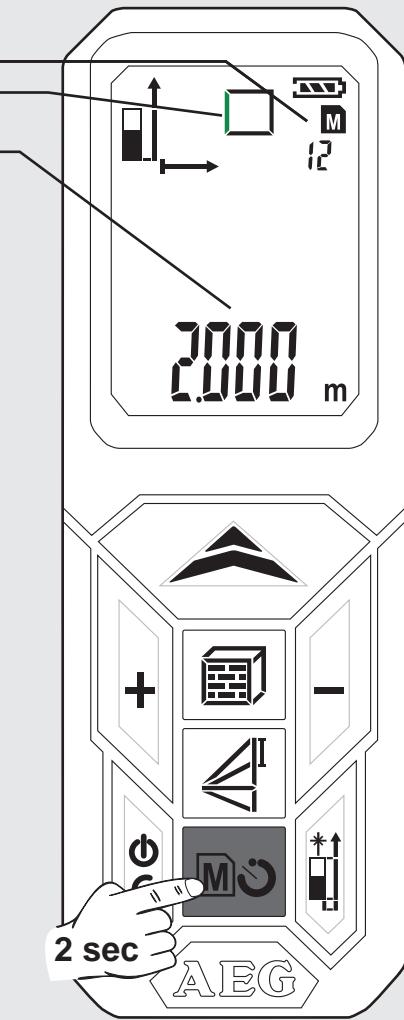
MÄLU

Mõõteväärtsused talletatakse automaatselt jooksvalt mällu.

Salvestatud väärtsusi saab klahviga ette kutsuda.

Vajutage 2 sek klahvi

- Ilmuvald sümbol ja mälukoht.
- Näidatakse juurdekuuluvat mõõtesuurust.
- Salvestatud väärust näidatakse peareal.
- Navigeerige +/- klahvidega



PÖHILINE TALITLUSVIIS PINDALA MÖÖTMISE (1) NÄITEL

1 Sisselülitamine

Vajutage klahvi .

A! Tähelepanu! Laserkiir sees!
Ärge suunake inimeste peale!

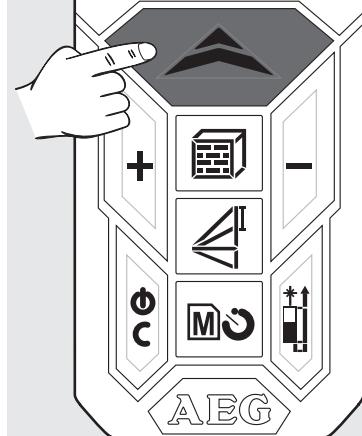
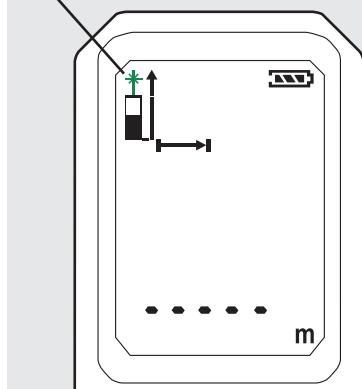
Laseri sümbol vilgub
(vilkumist kujutatakse roheliselt).

2 Möötmistasandi valimine

Standardseadistus pärast sisselülitamist: taga

- *↑ 1x vajutamine -> nurgapliiats
- 2x vajutamine -> ees
- 3x vajutamine -> taga

Näidatakse sümbolit



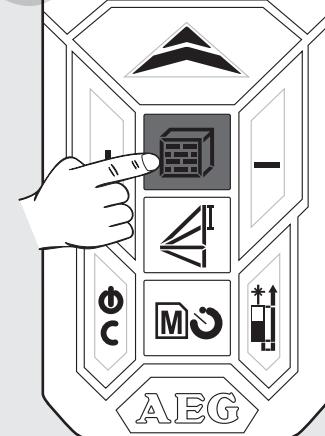
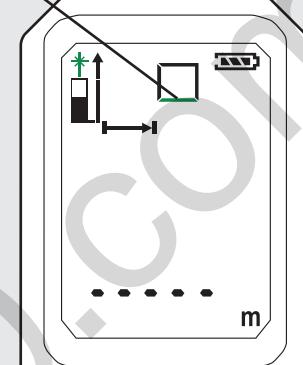
3 Funktsiooni valimine

Pärast sisselülitamist on seade alati pikkuse möõtmise peal.

- 1x vajutamine - pikkuse möõtmine

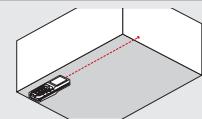
- Ilmub sümbol

Möötesuurus vilgub
(vilkumist kujutatakse roheliselt)



4 Pikkuse möõtmine

Joondage seade välja ja vajutage klahvi .

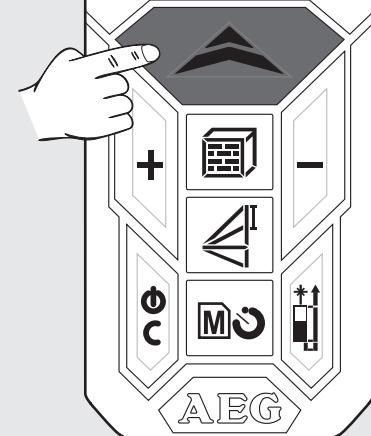
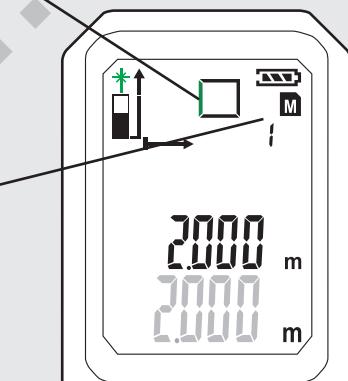


- Möõteväärustus ilmub hetkeks peareale.

- Möõteväärustus hüppab 1 sek pärast selle kohal asuvale reale.

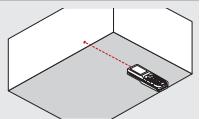
Möõteväärused talletatakse jooksvate numbrite all mällu.

Teine möötesuurus vilgub.
Seade on valmis teise vääruse möõtmiseks.



5 Laiuse möõtmine

Joondage seade välja ja vajutage klahvi .

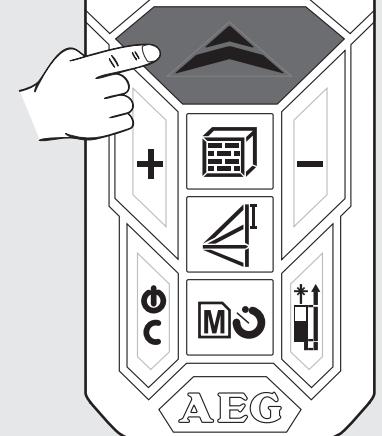
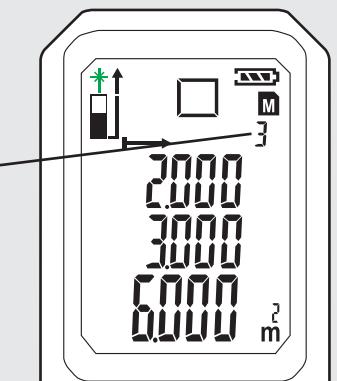


- Möõteväärustus ilmub hetkeks peareale.

- Möõteväärustus hüppab 1 sek pärast selle kohal asuvale reale.

Möõteväärused talletatakse jooksvate numbrite all mällu.

- Tulemust näidatakse peareal ja talletatakse jooksva numbriga all mällu.



PÖHILINE TALITLUSVIIS PINDALA MÖÖTMISE (2) NÄITEL

6 Salvestatud väärustete ettekutsumine

Vajutage 2 sek klahvi .

Vajutage klahvi + või -

7 Mälust lahkumine

Vajutage klahvi .

- Salvestatud väärustusi näidatakse peareal.

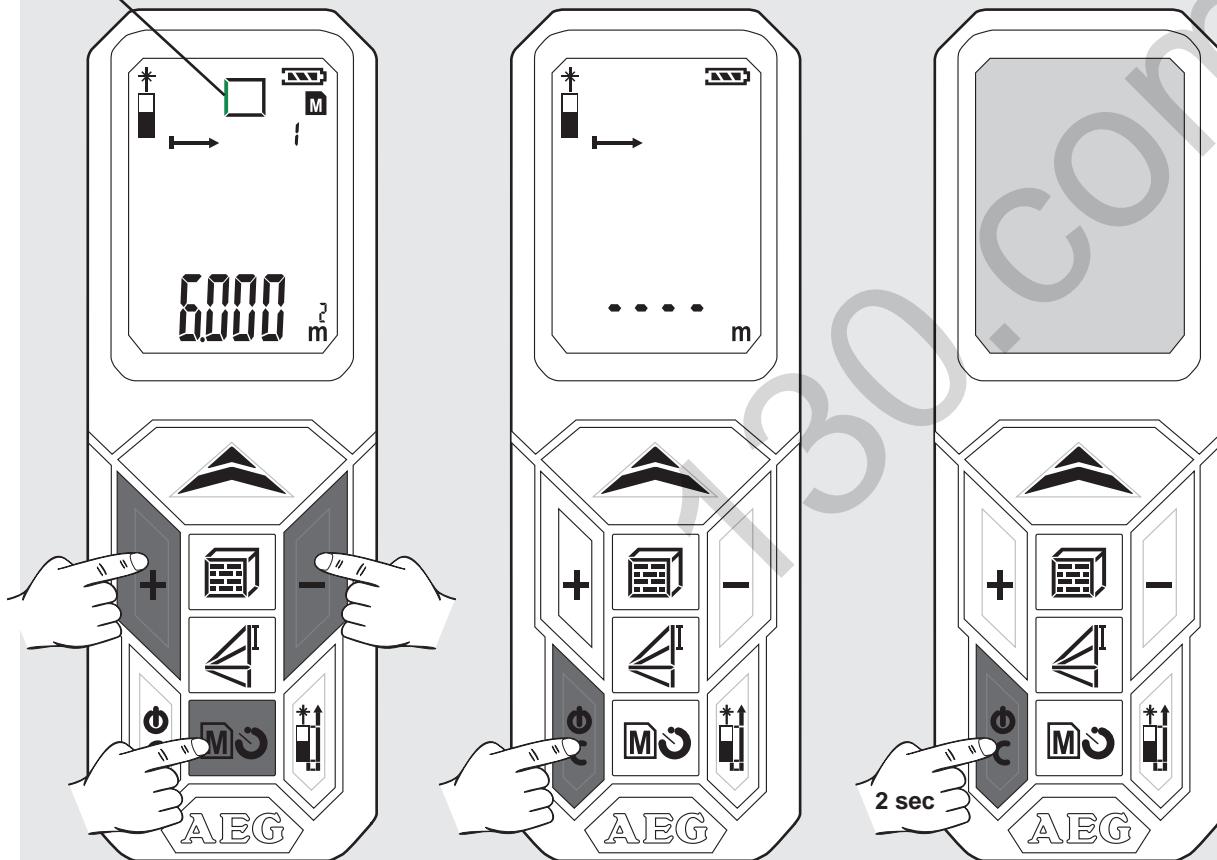
- Näidatakse juurdekuuluvat sümbolit ja mõõtesuurus vilgub (vilkumist kujutatakse roheliselt).

8 Väljalülitamine

Vajutage 2 sek klahvi .

(eelnevalt tuleb mälust lahkuda).

- Seade lülitub välja.
- Kui 3 minuti jooksul ei vajutata ühtki klahvi, siis lülitub seade automaatselt välja.



СОДЕРЖАНИЕ

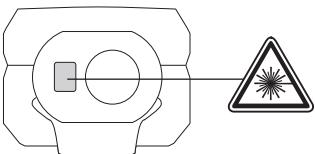
Важные инструкции по технике безопасности.....	1
Технические данные	2
Использование	2
Таблица кодов неисправностей.....	2
Обзор	3
Замена батареи	4
Угловой штифт	4
Поясной держатель	4
Функциональная кнопка, Пифагор, плоскость измерения.....	5
Простое измерение длины.....	6
Непрерывное измерение / измерение минимум-максимум	7
Измерение со сложением / вычитанием.....	8
Измерение площади.....	9
Измерение объема	10
Косвенное измерение (Пифагор 1)	11
Косвенное измерение (Пифагор 2)	12
Косвенное измерение (Пифагор 3)	13
Измерение площади стены (сценарий 1)	14
Измерение площади стены (сценарий 2)	15
Таймер	16
Память	16
Основной принцип действия на примере измерения площади (1)	17
Основной принцип действия на примере измерения площади (2).....	18

ВАЖНЫЕ ИНСТРУКЦИИ ПО ТЕХНИКЕ БЕЗОПАСНОСТИ



Перед использованием продукции внимательно ознакомьтесь с инструкциями по технике безопасности и руководством пользователя, которые прилагаются на CD.

Классификация лазера



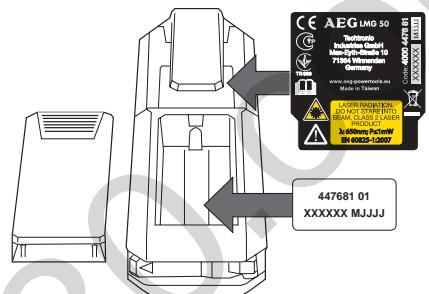
ВНИМАНИЕ!

Данное устройство является лазерным изделием **класса 2** и соответствует IEC 60825-1:2007.



Надпись

Перед первым вводом в эксплуатацию заклейте английский текст на фирменной табличке прилагаемой наклейкой на вашем языке.



Предупреждение:

Не допускать непосредственного визуального контакта. Лазерный луч может ослепить и привести к кратковременной потере зрения.

Не смотрите в лазерный луч и не направляйте его без надобности на других людей.

Не ослепляйте лучом других людей.

Предупреждение:

Не пользоваться лазерным прибором рядом с детьми и не разрешать детям использовать его.

Внимание! Лазерный луч может отражаться от определенных поверхностей и попадать на оператора или других людей.

Держите конечности на безопасном расстоянии от движущихся частей.

Периодически проводите контрольные измерения. В частности, проводите их перед, в течение или после важных измерений.

Будьте внимательны! Если устройство неисправно, падало, было использовано по назначению или в его конструкцию были внесены изменения, результаты измерений могут быть неверными.

Внимание! Ознакомьтесь с элементами управления и правильным использованием садового инструмента.

Лазерный измерительный прибор имеет ограниченную область применения. (См. раздел "Технические характеристики"). Попытки выполнения измерений за пределами максимального и минимального диапазона могут привести к погрешностям. Использование при неблагоприятных условиях, например, при сильной жаре, сильном холода, очень ярком солнечном свете, дожде, снеге, тумане или прочих снижающих безопасность условиях может привести к погрешностям измерения.

Если лазерный измерительный прибор перемещается из теплых условий в холодные (или наоборот), необходимо подождать, пока прибор не адаптируется к новой температуре.

Лазерный измерительный прибор всегда следует хранить в помещениях, защищать от тряски, вибраций или экстремальных температур.

Защищать лазерный измерительный прибор от пыли, влаги и высокой влажности воздуха. Они могут повредить внутренние компоненты или повлиять на точность.

Запрещается использовать агрессивные чистящие средства или растворители. Очищать только с помощью чистой мягкой салфетки.

Избегать сильных ударов по лазерному измерительному прибору или его падения. Точность прибора следует проверять, если он упал или подвергся другим механическим нагрузкам.

Необходимые ремонтные работы на этом лазерном приборе разрешается выполнять только авторизованному квалифицированному персоналу.

Эксплуатировать устройство в опасных зонах или в агрессивных средах запрещается.

Для зарядки батареи используйте только зарядные устройства, рекомендованные производителем.

Использованные батареи не подлежат утилизации с бытовыми отходами. Позаботиться об окружающей среде, сдать их на сборный пункт, организованный в соответствии с государственными или местными нормами. Изделие не подлежит утилизации с бытовыми отходами. Утилизировать изделие надлежащим образом в соответствии с государственными нормами, действующими в вашей стране. Придерживаться национальных или местных нормативов. За информацией по утилизации обращайтесь в местные органы или к вашему дилеру.



ТЕХНИЧЕСКИЕ ДАННЫЕ

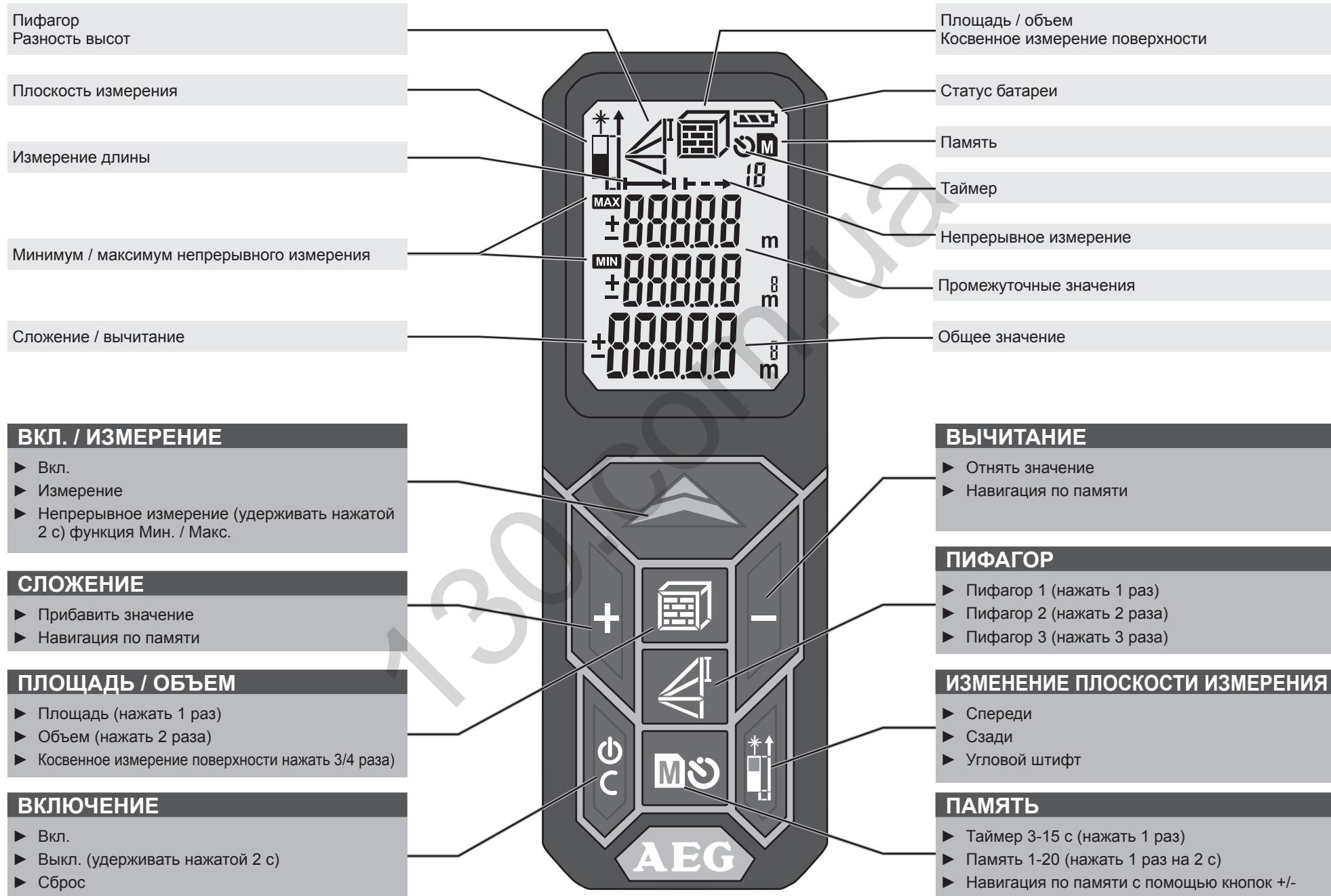
Класс защиты	IP54 (пыле и брызгозащищенный)
Оптика	14 мм
Фокус	35 мм
Диапазон измерений макс.	50 метров (допуск: 55 м)
Диапазон измерений мин.	0,05 метра
Абсолютная точность при < 10 м	± 1,5 мм (макс.)
Стабильность повторяемости при < 10 м	± 1,5 мм (типовично макс. 2σ)
Стабильность повторяемости при > 10 м	повышение ± 0,25 мм / метр (типовично макс. 2σ)
Время измерения	0,5 с
Тип дисплея	ЖК (22,7 мм x 31 мм)
Электропитание	AAA 2x (щелочная батарея)
Длительность работы батареи	10000 (единичное измерение)
Выходная мощность лазера	0,6 мВт ~ 0,95 мВт (класс 2, 650нм)
Размер лазерной точки	25 x 30 мм при 16 м (макс.)
Вертикальный угол лазерного луча	+1 градус
Горизонтальный угол лазерного луча	±1 градус
Автоматическое отключение прибора	180 секунд
Автоматическое отключение лазера	30 секунд
Диапазон рабочих температур	от -10°C до +50°C
Диапазон температуры хранения	от -25°C до +70°C
Вес без батареи	80 г

ИСПОЛЬЗОВАНИЕ

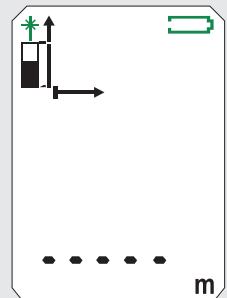
Лазерный измерительный прибор подходит для измерения дистанции и наклона.
Не пользуйтесь данным инструментом способом, отличным от указанного для нормального применения.

ТАБЛИЦА КОДОВ НЕИСПРАВНОСТЕЙ

Код	Описание	Устранение
Err01	За пределами диапазона измерений	Выполнить измерение в предусмотренном диапазоне.
Err02	Слишком слабый отражаемый сигнал	Выбрать лучшую поверхность.
Err03	За диапазона индикации (макс. значение: 99.999), например, результат площади или объема за пределами индикации	Проверить, правильные ли значения и этапы.
Err04	Ошибка в пифагоровом измерении	Проверить, правильные ли значения и этапы.
Err05	Слабый заряд батареи	Вставить новые батарейки.
Err06	За пределами диапазона рабочих температур	Выполнить измерение в заданном диапазоне рабочих температур.
Err07	Слишком светлый окружающий свет	Затемнить целевую область.

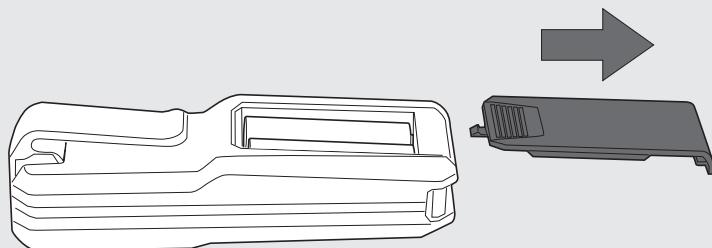


ЗАМЕНА БАТАРЕИ

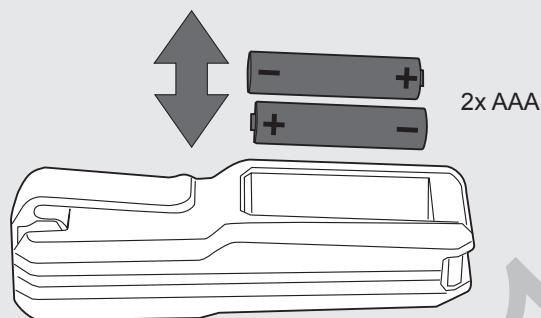


Если символ
мигает, заменить
батарею.

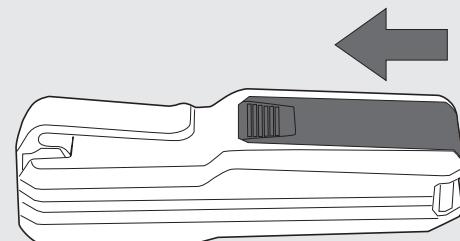
1



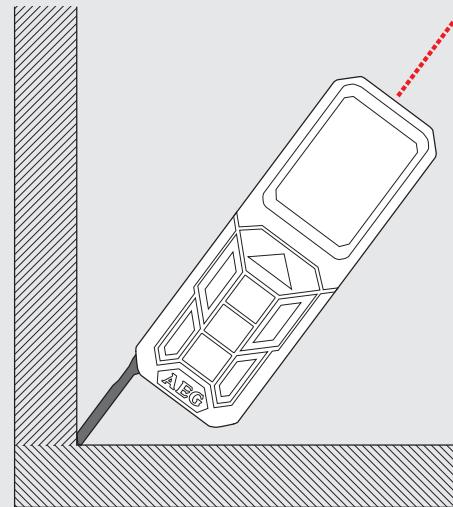
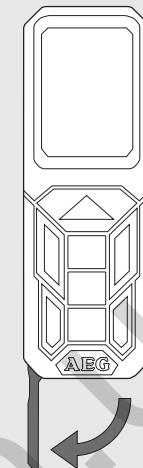
2



3

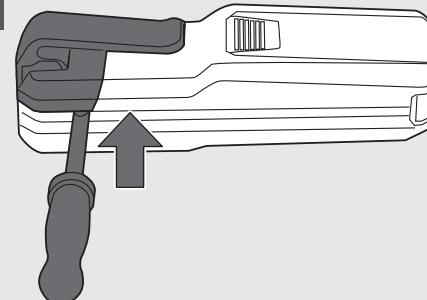


УГОЛОВОЙ ШТИФТ

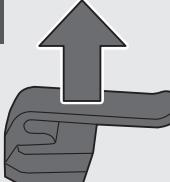


ПОЯСНОЙ ДЕРЖАТЕЛЬ

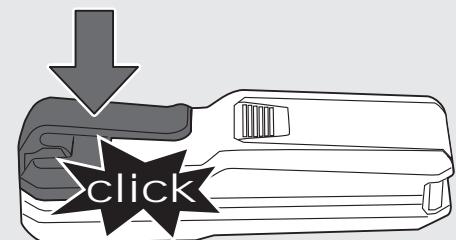
1



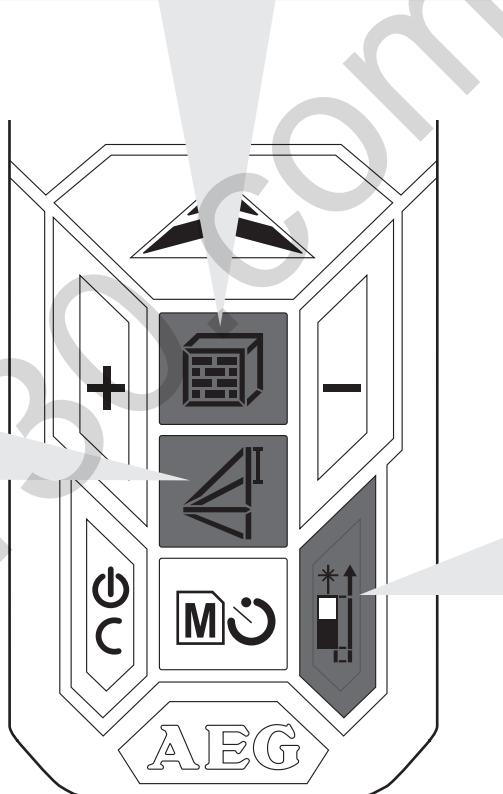
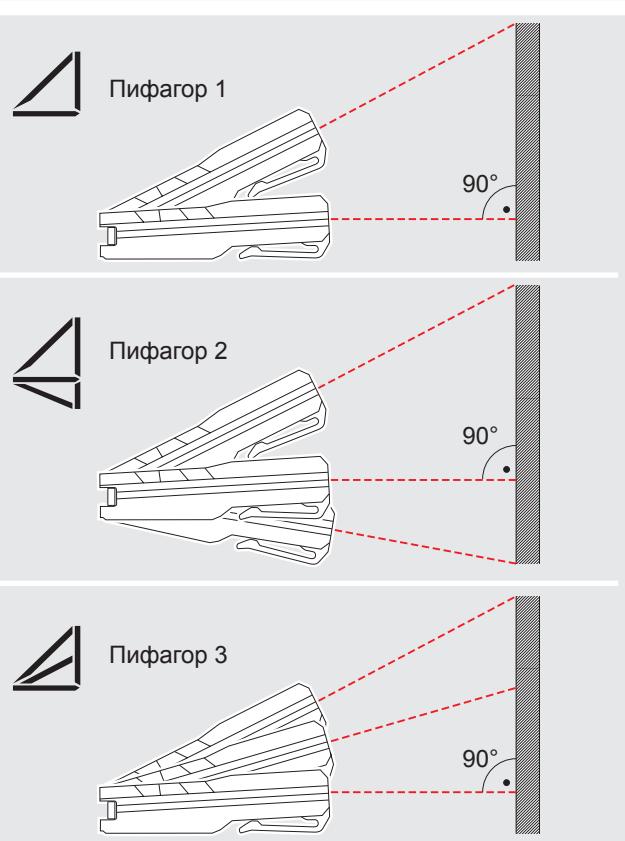
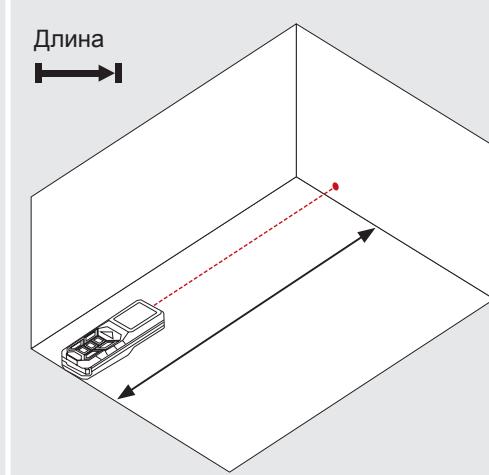
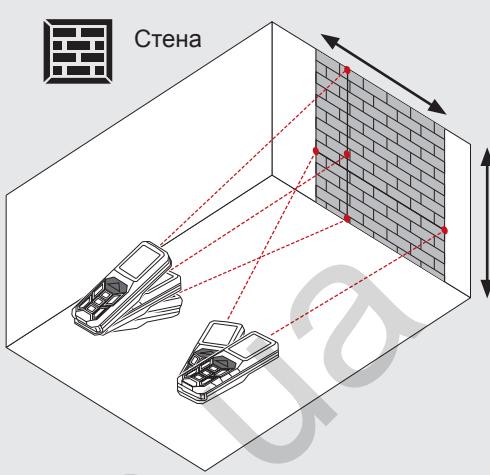
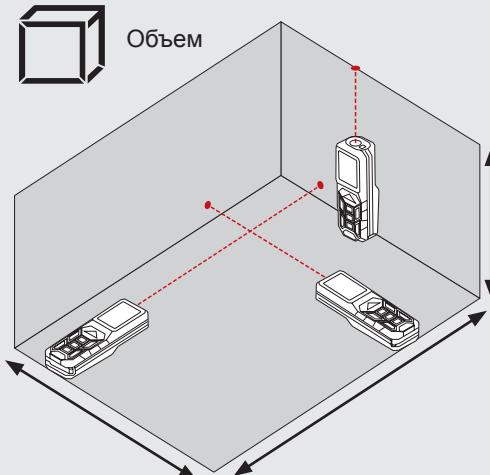
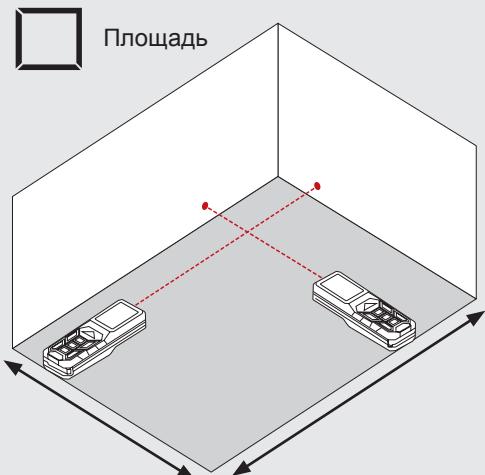
2



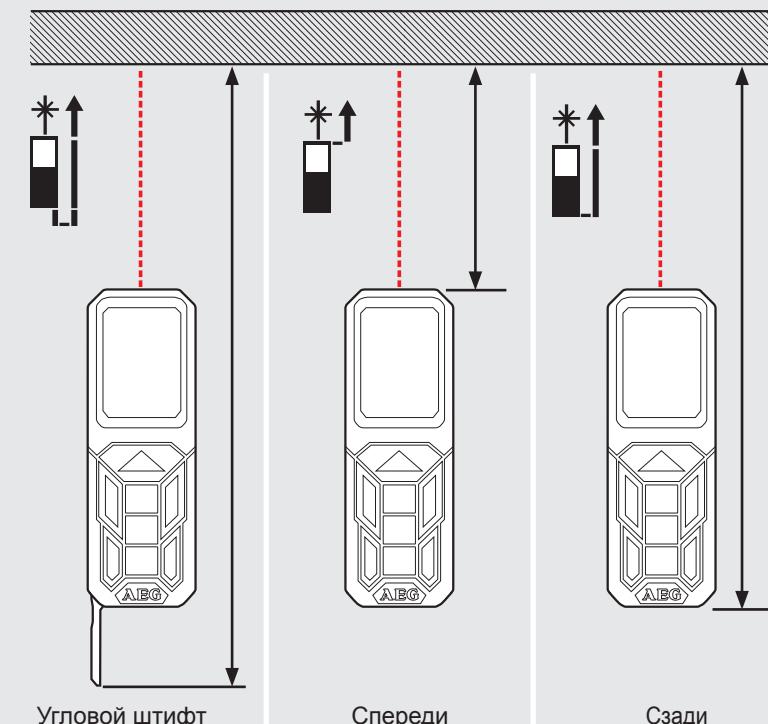
3



ФУНКЦИОНАЛЬНАЯ КНОПКА, ПИФАГОР, ПЛОСКОСТЬ ИЗМЕРЕНИЯ

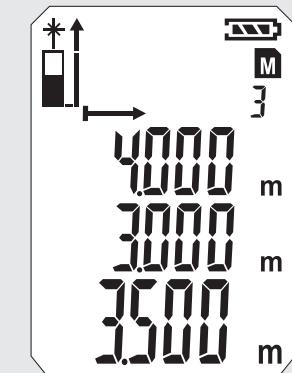
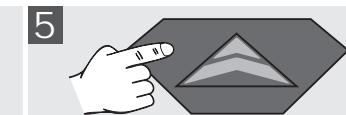
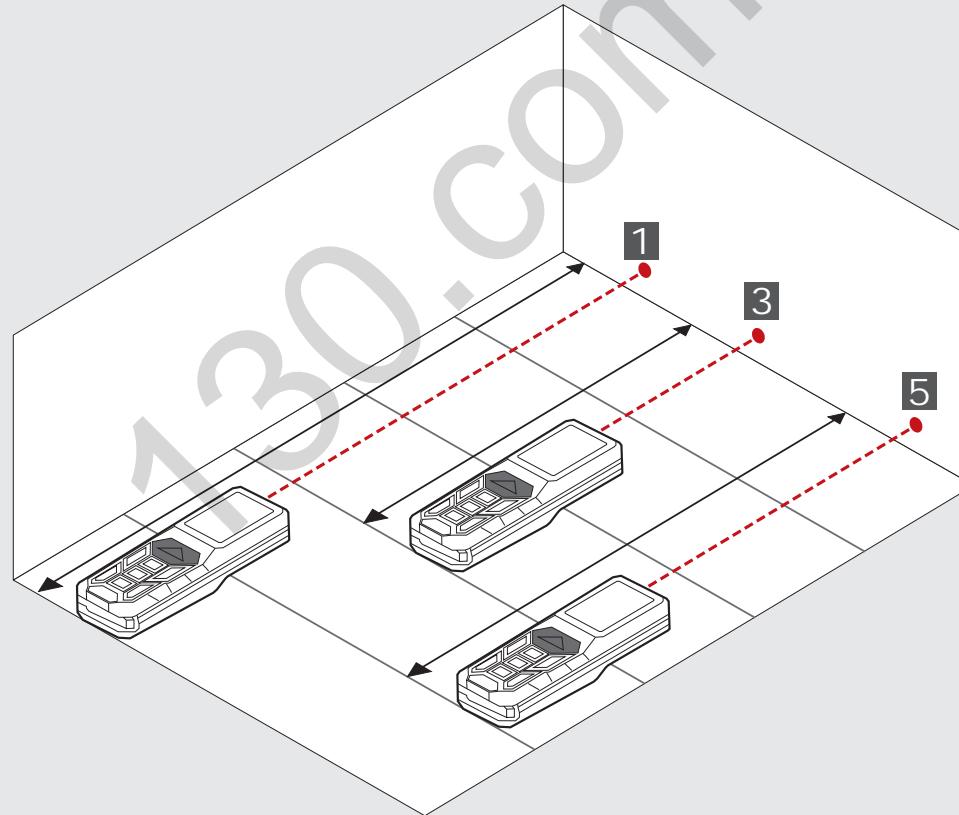
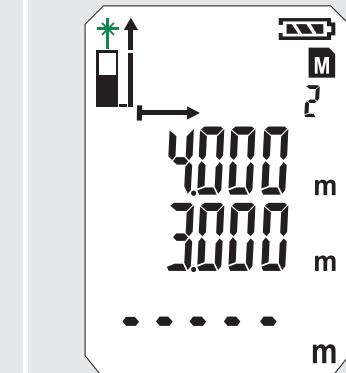
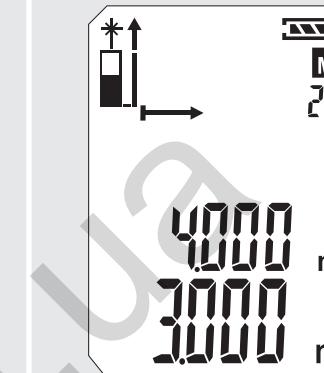
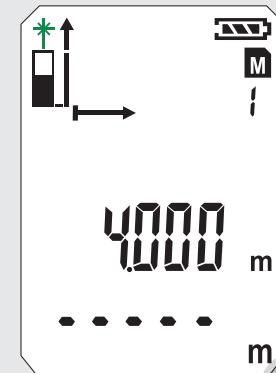
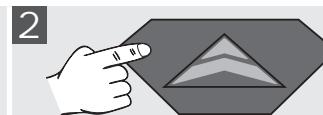
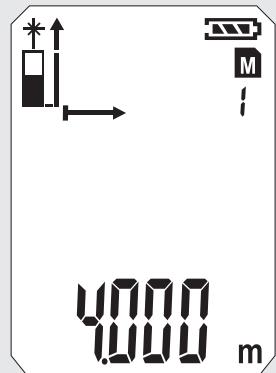
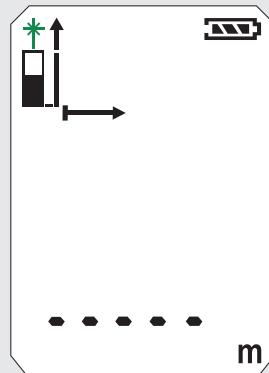


Плоскость измерения



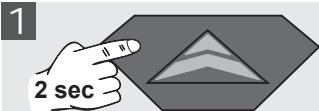
ПРОСТОЕ ИЗМЕРЕНИЕ ДЛИНЫ

0

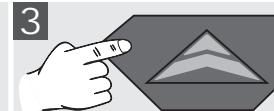


НЕПРЕРЫВНОЕ ИЗМЕРЕНИЕ / ИЗМЕРЕНИЕ МИНИМУМ-МАКСИМУМ

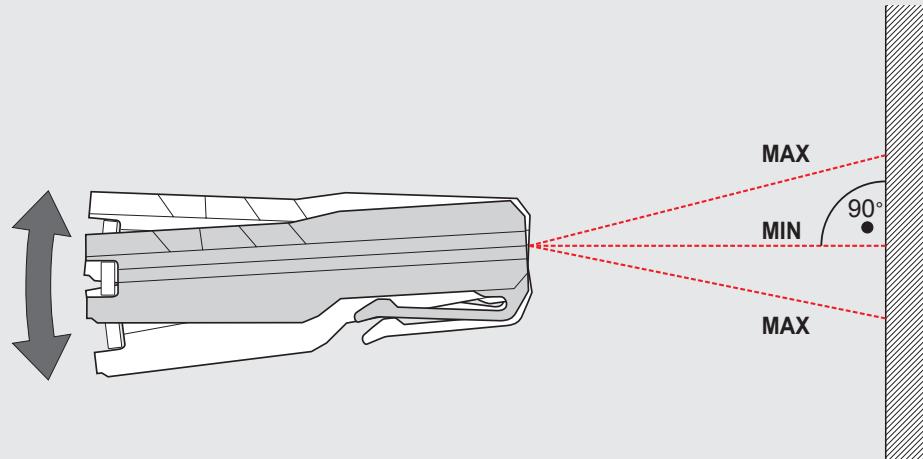
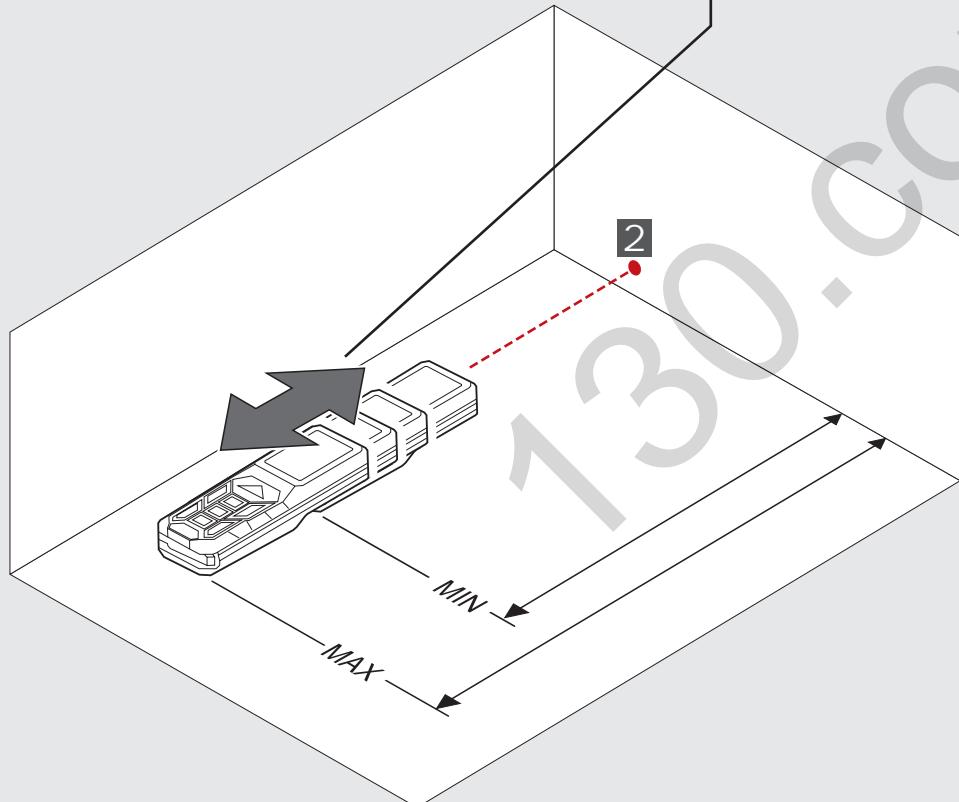
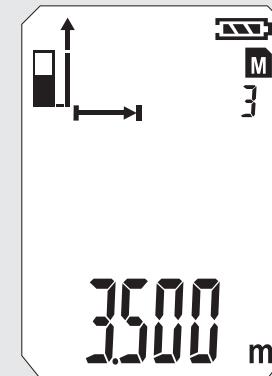
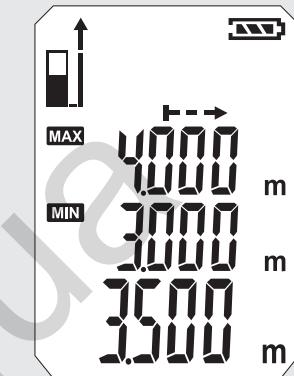
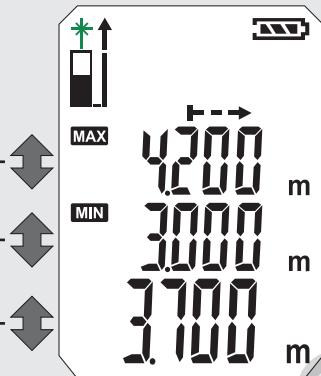
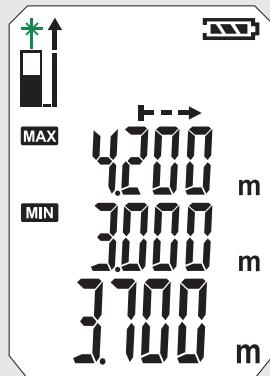
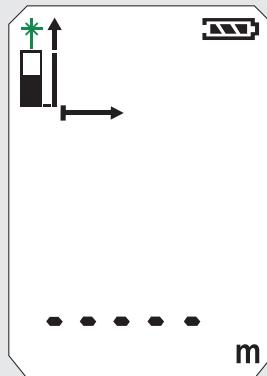
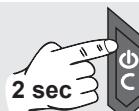
0



2

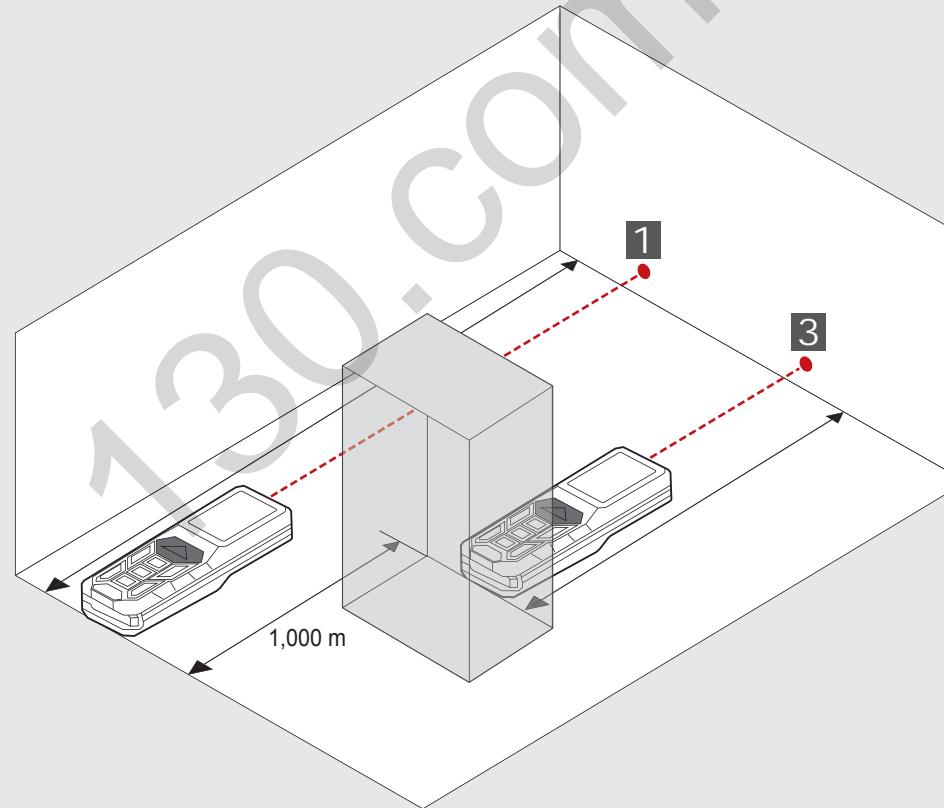
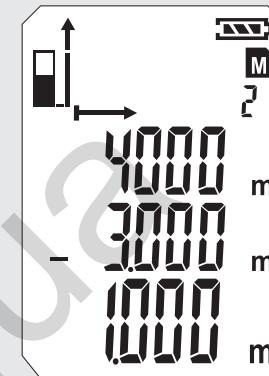
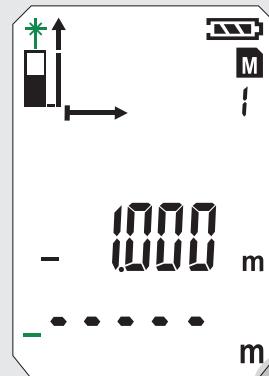
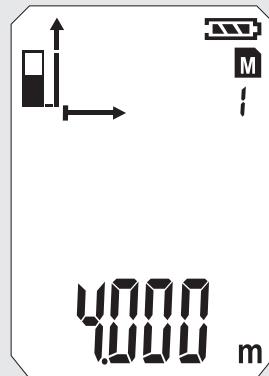
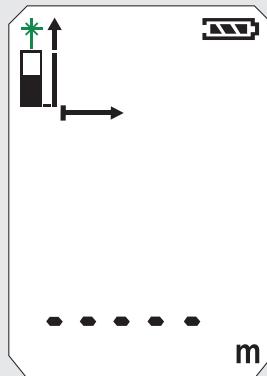
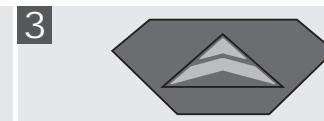
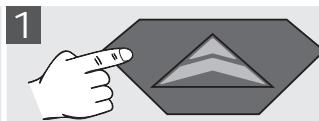


4

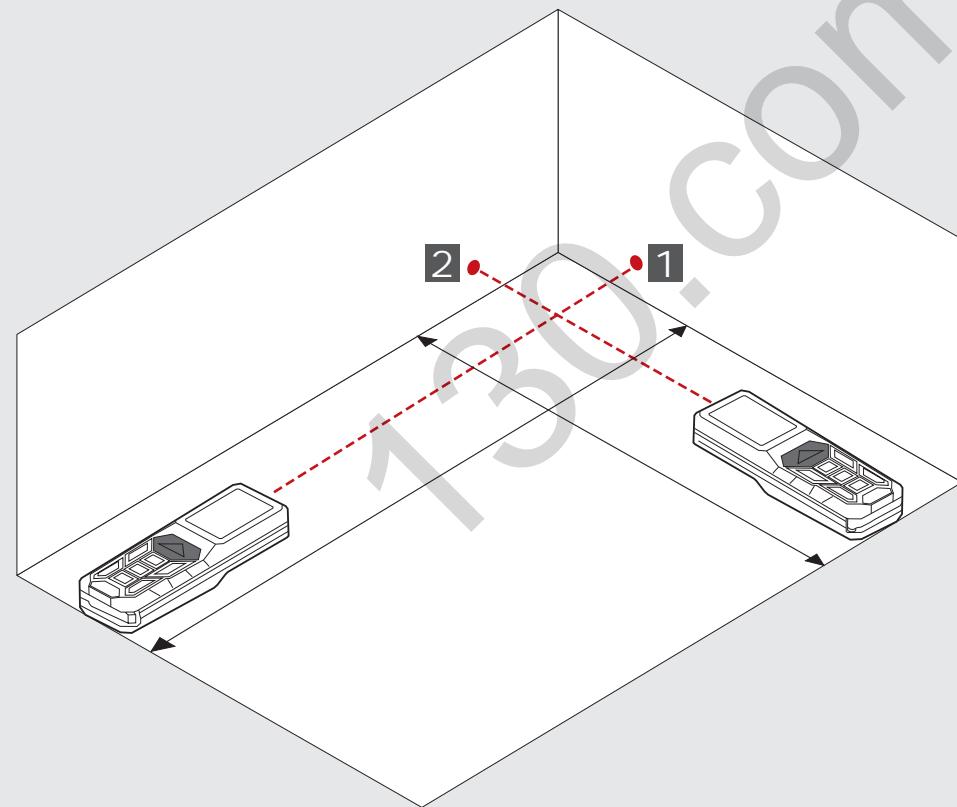
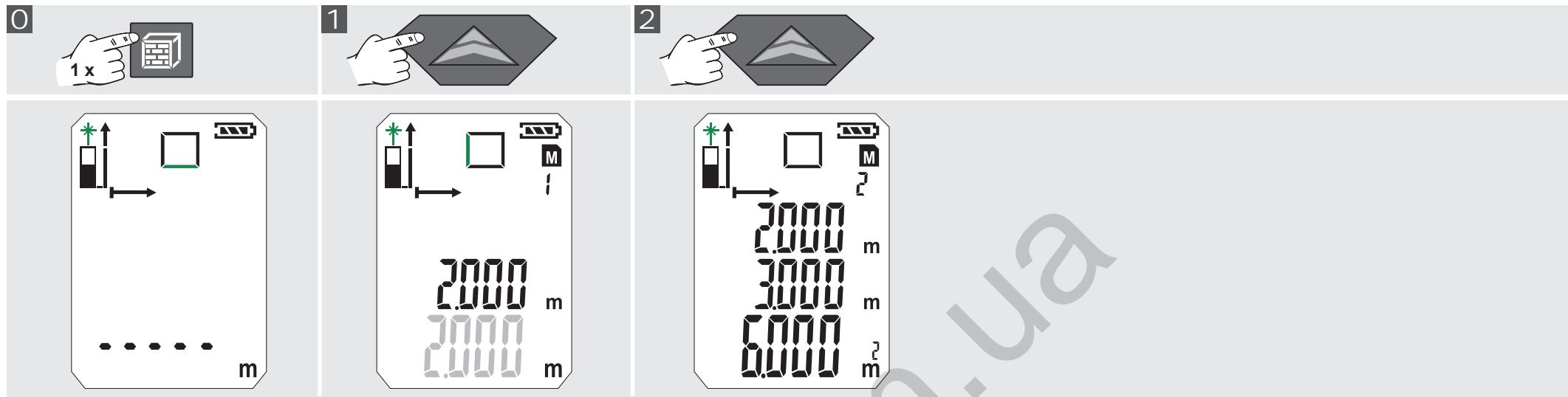


ИЗМЕРЕНИЕ СО СЛОЖЕНИЕМ / ВЫЧИТАНИЕМ

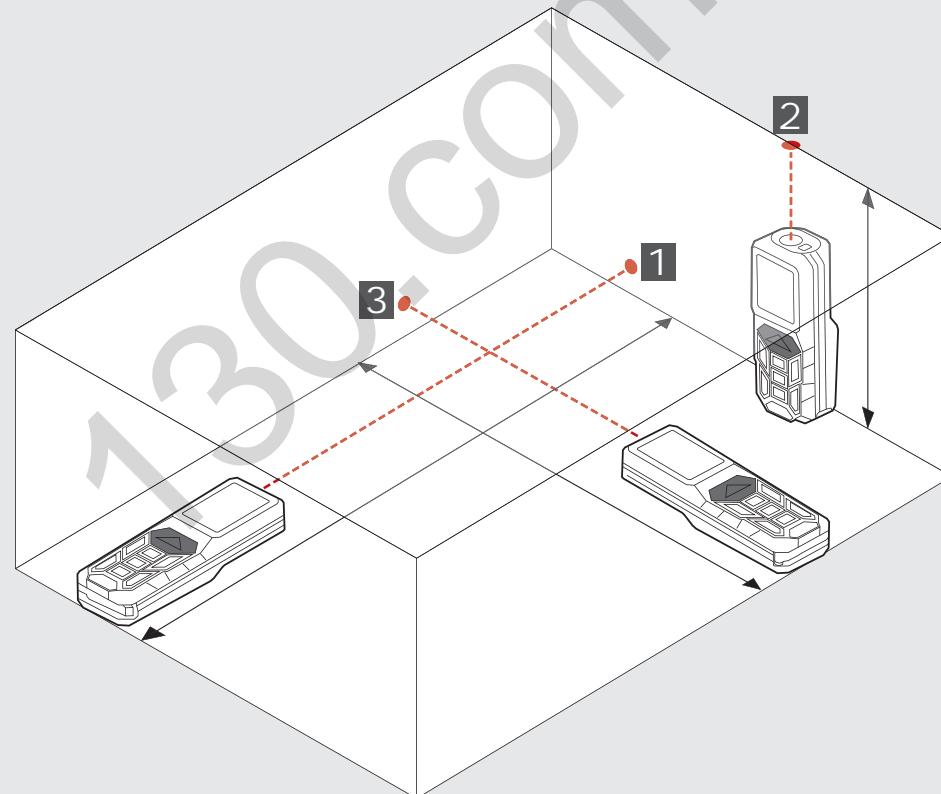
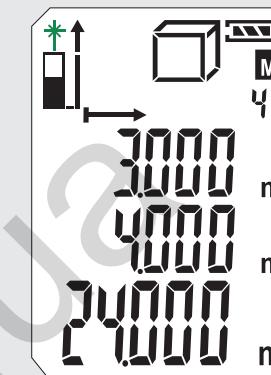
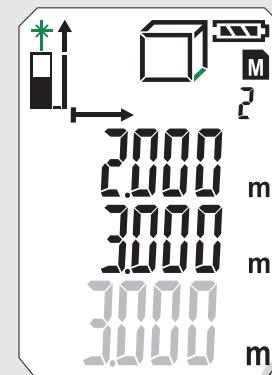
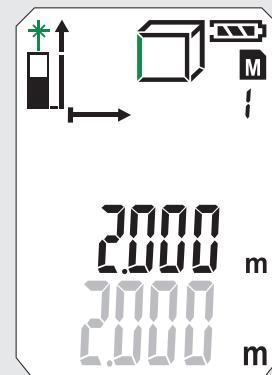
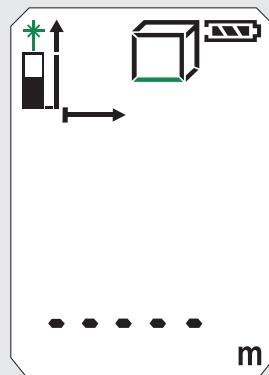
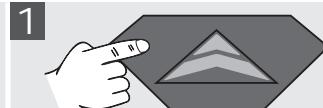
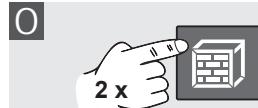
0



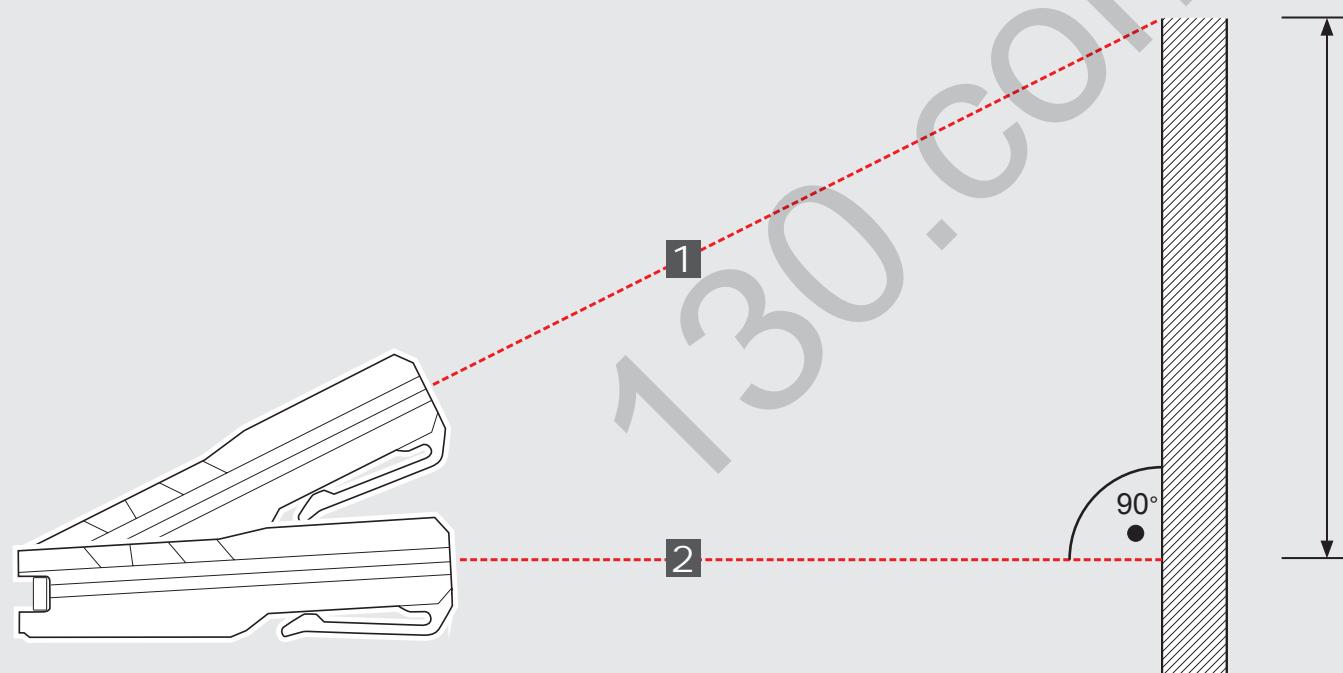
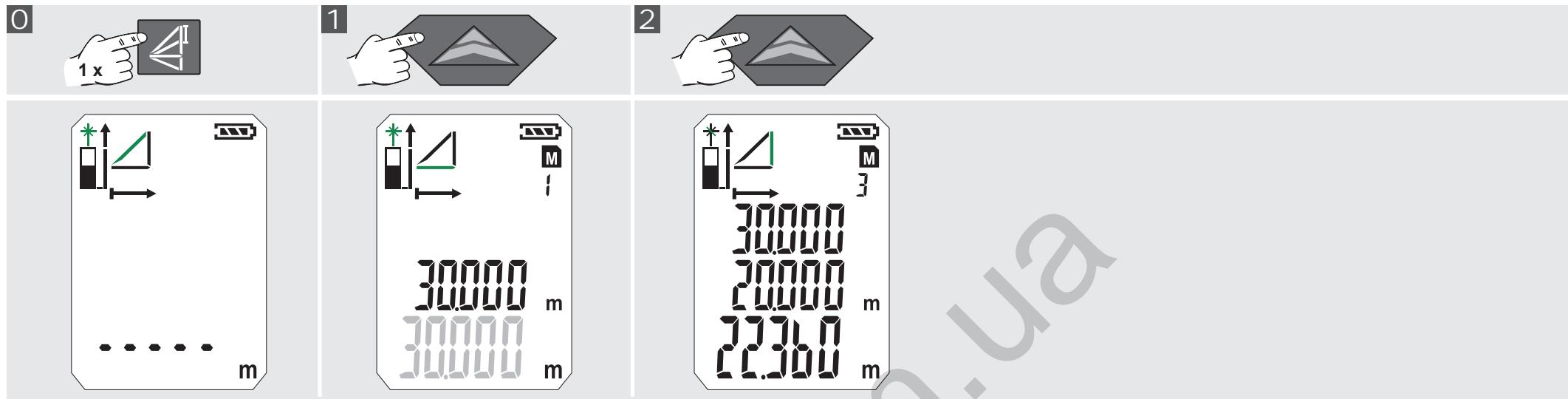
ИЗМЕРЕНИЕ ПЛОЩАДИ



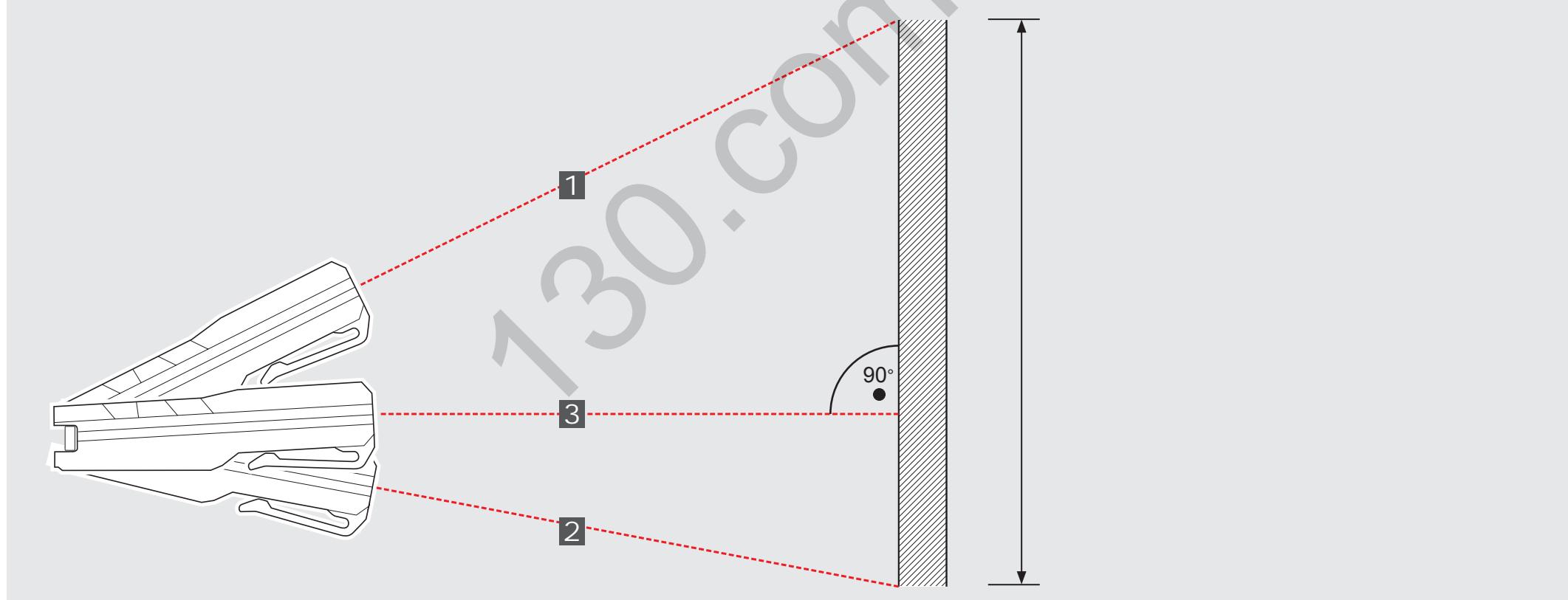
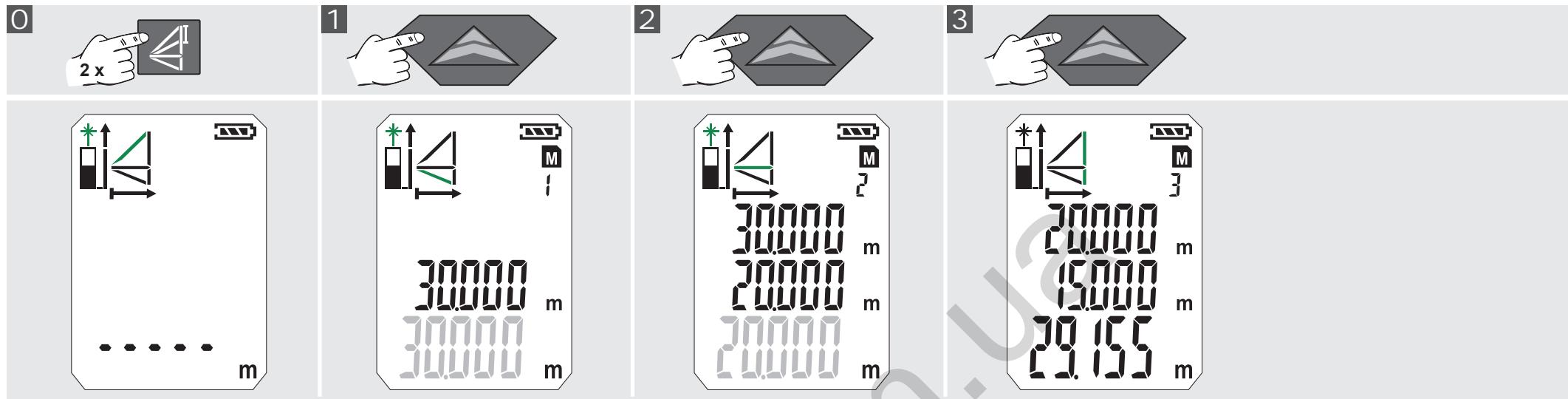
ИЗМЕРЕНИЕ ОБЪЕМА



КОСВЕННОЕ ИЗМЕРЕНИЕ (ПИФАГОР 1)



КОСВЕННОЕ ИЗМЕРЕНИЕ (ПИФАГОР 2)

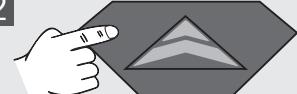


КОСВЕННОЕ ИЗМЕРЕНИЕ (ПИФАГОР 3)

1



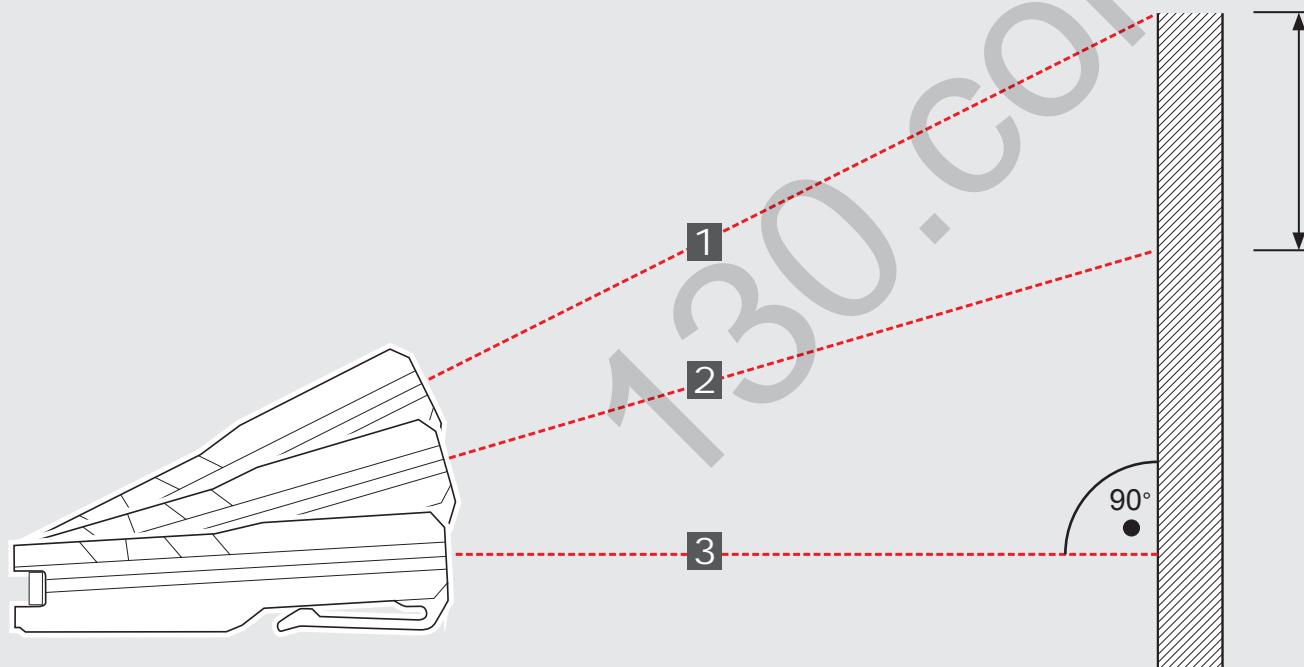
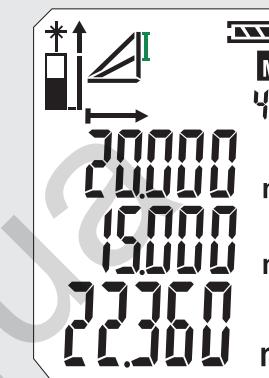
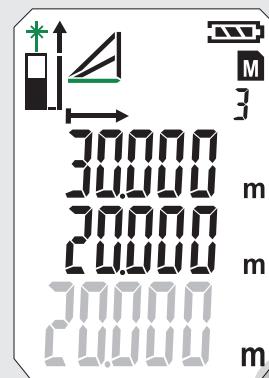
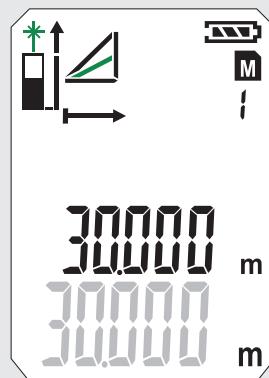
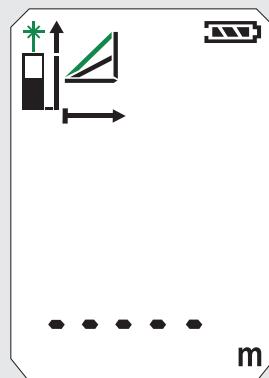
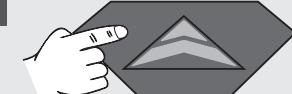
2



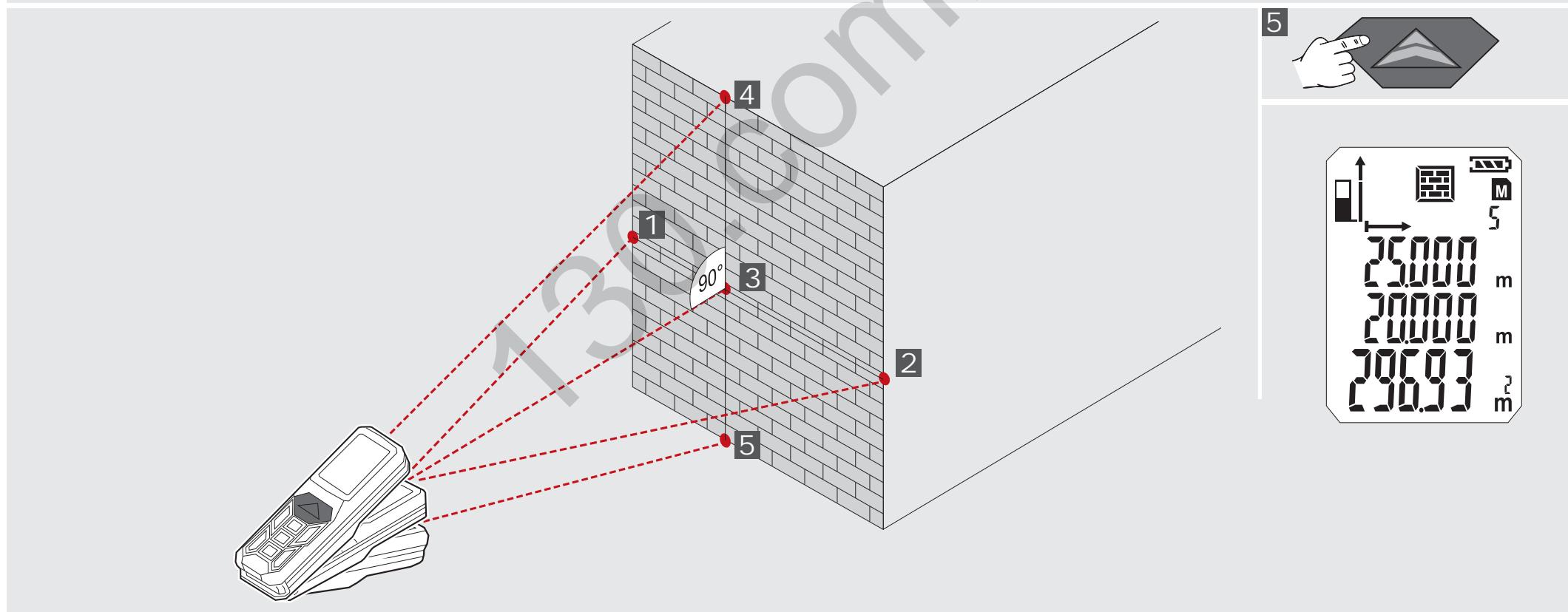
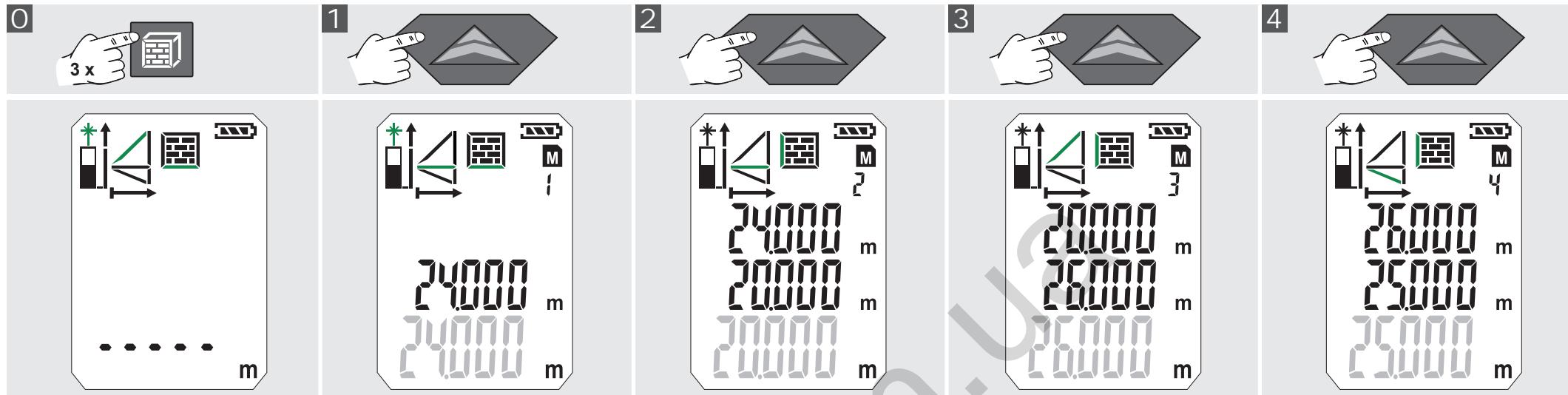
3



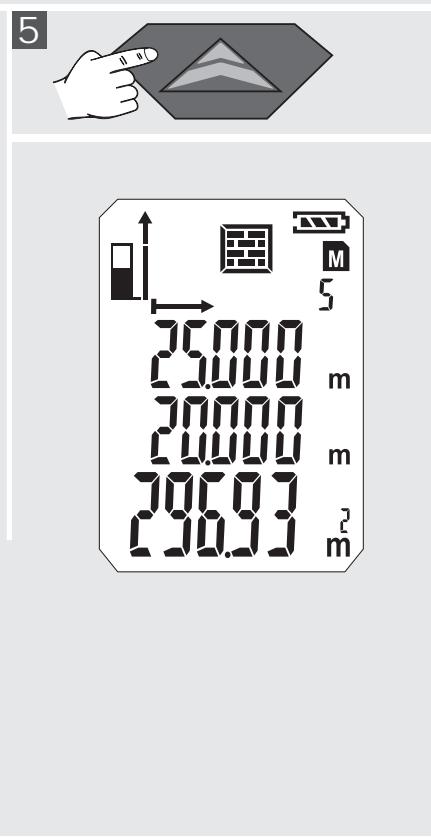
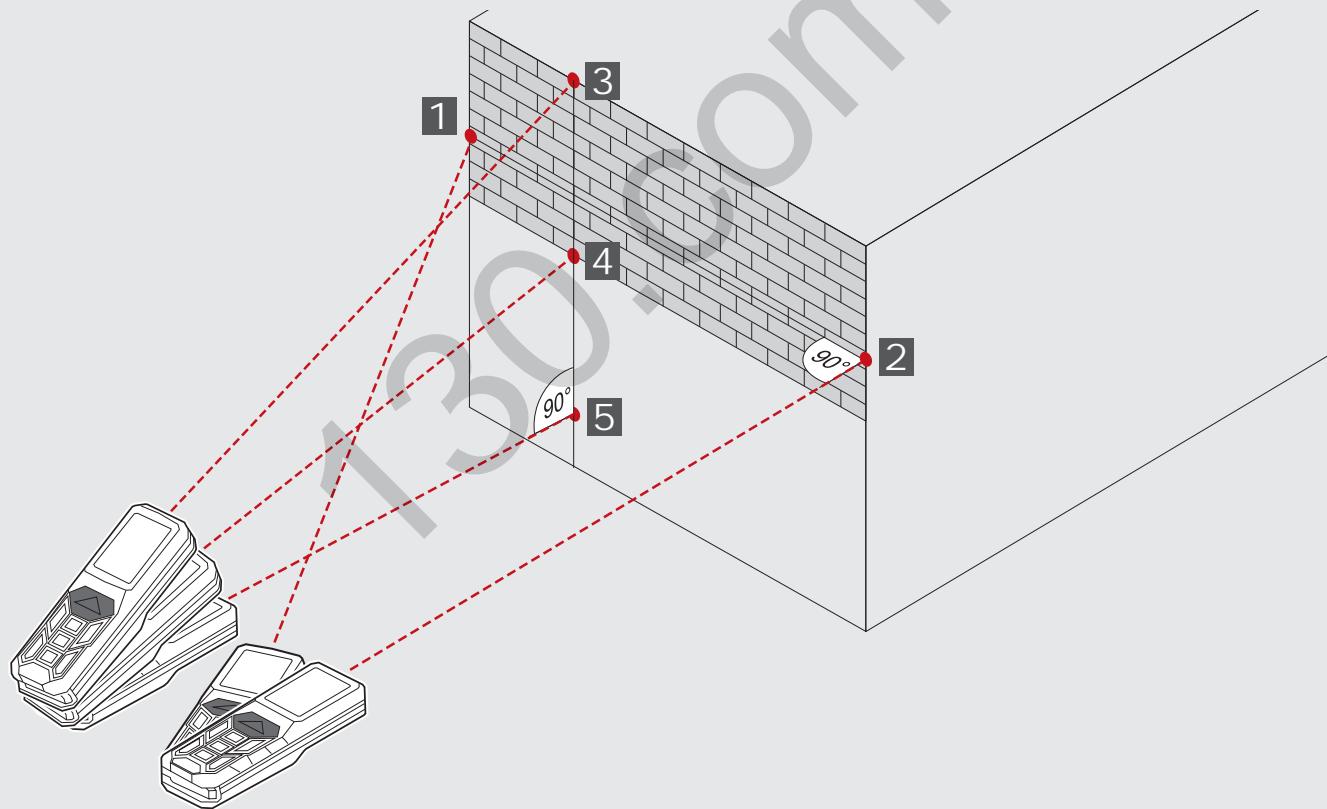
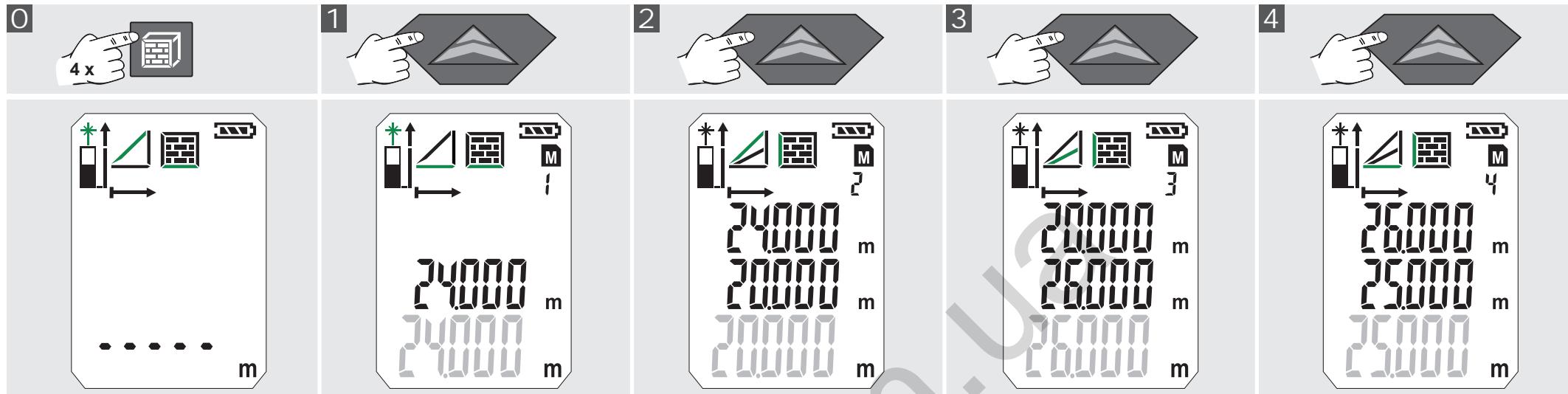
4



ИЗМЕРЕНИЕ ПЛОЩАДИ СТЕНЫ (СЦЕНАРИЙ 1)



ИЗМЕРЕНИЕ ПЛОЩАДИ СТЕНЫ (СЦЕНАРИЙ 2)



ТАЙМЕР

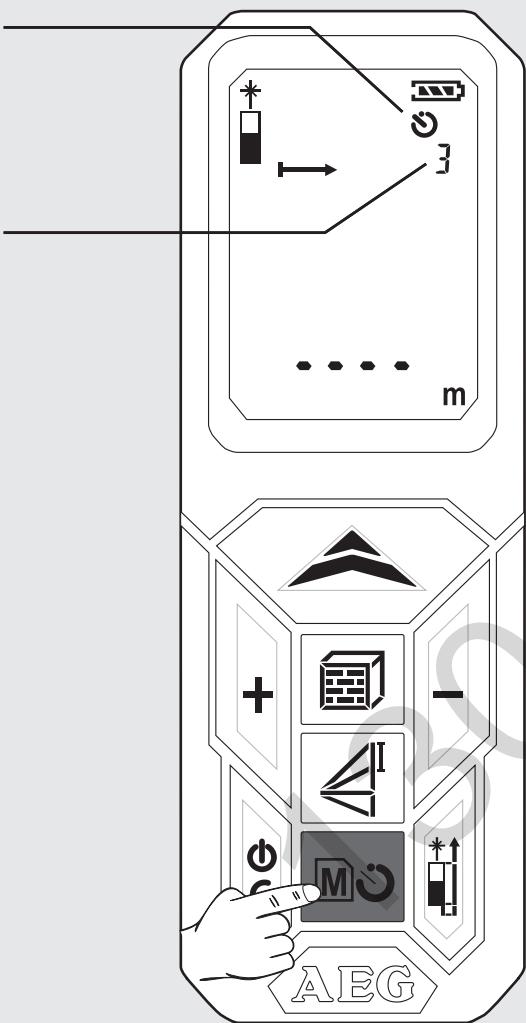
С помощью таймера можно включить измерение с отсрочкой, например, для расположения компонента в измерительном пучке.

Нажать кнопку 

- Появится символ 
- При нажатии кнопки  можно выставить таймер от 3 до 15 секунд.

Нажать кнопку 

- Идет обратный отсчет секунд до измерения.
- Измерение начинается при значении 0.



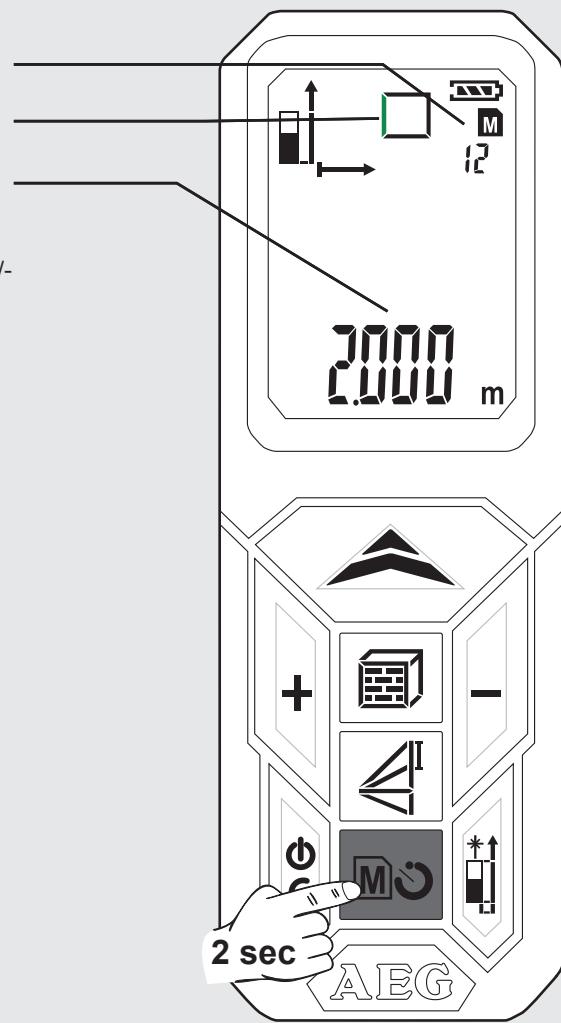
ПАМЯТЬ

Значения измерения автоматически сохраняются в памяти.

Сохраненные значения можно вызвать с помощью кнопки .

Нажать кнопку  на 2 с

- Появится символ и место хранения.
- Отобразится соответствующее значение измерения.
- Сохраненное значение отображается в основной строке.
- Навигация с помощью кнопок +/-



ОСНОВНОЙ ПРИНЦИП ДЕЙСТВИЯ НА ПРИМЕРЕ ИЗМЕРЕНИЯ ПЛОЩАДИ (1)

1 Включение

Нажать кнопку 
Внимание! Лазерный луч включен!
 Не направлять на людей!

Мигает символ лазера (мигание показано зеленым).

2 Выбор плоскости измерения

Стандартная установка после включения: сзади
 Нажать 1 раз -> угловой штифт
 Нажать 2 раза -> спереди
 Нажать 3 раза -> сзади

Отображается символ

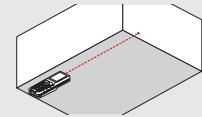
3 Выбор функции

После включения прибор всегда установлен на измерение длины.
 Нажать 1 раз - измерение площади

- Появится символ
 Значение измерения мигает (мигание показано зеленым)

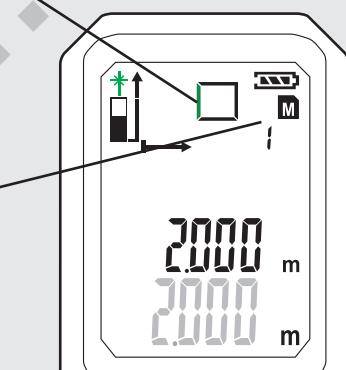
4 Измерение длины

Выровнять прибор и нажать кнопку 



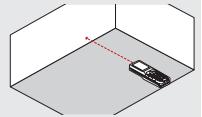
- Ненадолго появится значение измерения в основной строке.
 - Через 1 с значение измерения переместится на строку вверх.

Значение измерения сохраняется в памяти под порядковым номером.
 Мигает второе значение измерения. Прибор готов к измерению второго значения.



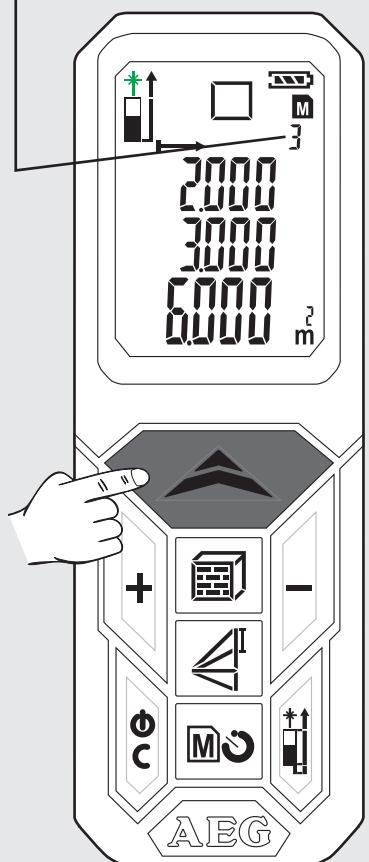
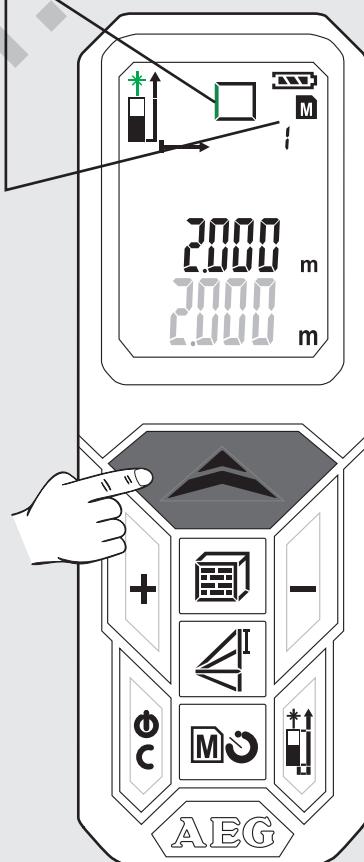
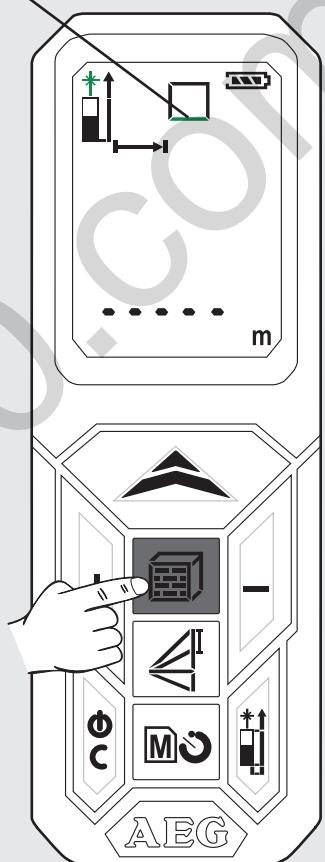
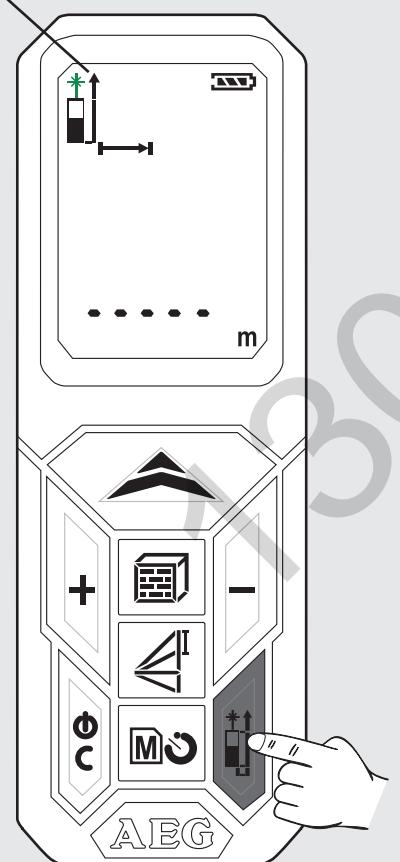
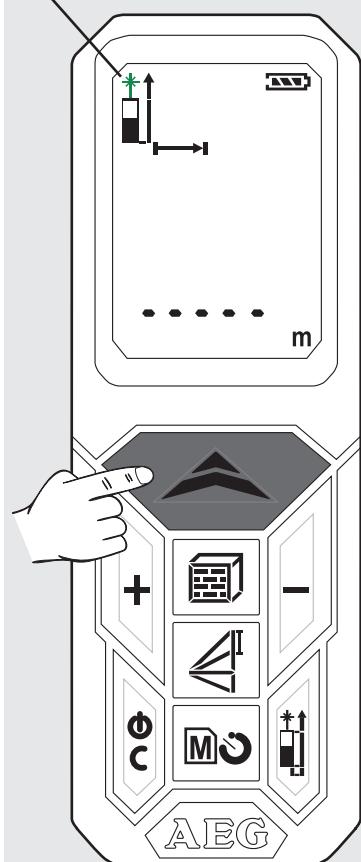
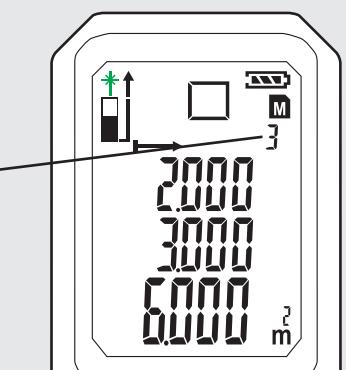
5 Измерение ширины

Выровнять прибор и нажать кнопку 



- Ненадолго появится значение измерения в основной строке.
 - Через 1 с значение измерения переместится на строку вверх.

Значение измерения сохраняется в памяти под порядковым номером.
 - Результат отображается в основной строке и сохраняется в памяти под порядковым номером.



ОСНОВНОЙ ПРИНЦИП ДЕЙСТВИЯ НА ПРИМЕРЕ ИЗМЕРЕНИЯ ПЛОЩАДИ (2)

6 Вызов сохраненных значений

Нажать кнопку **M** на 2 с.

Нажать кнопку + или -

7 Выход из памяти

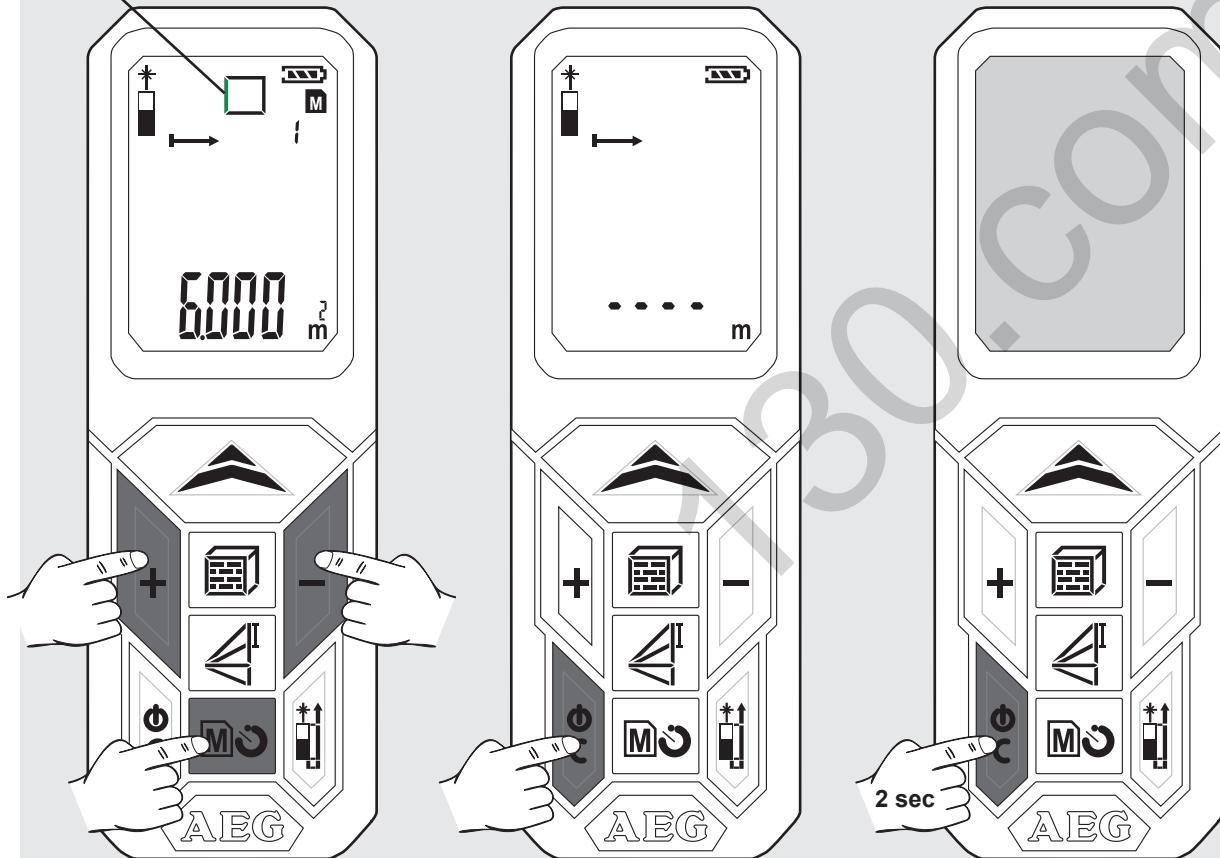
Нажать кнопку ϕ

8 Выключение

Нажать кнопку ϕ на 2 с
(Заранее необходимо выйти из памяти).

- Сохраненные значения отображаются в основной строке.
- Отображается соответствующий символ, и мигает значение измерения (мигание показано зеленым).

- Прибор выключается.
- Если в течение 3 минут не нажимаются кнопки, прибор автоматически отключается.



СЪДЪРЖАНИЕ

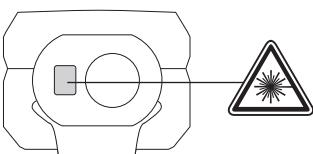
Важни инструкции за безопасност	1
Технически данни	2
Използване по предназначение	2
Таблица с кодове за грешки	2
Преглед	3
Сменете батерията	4
Ъглов щифт	4
Щипка за колан	4
Бутона за функции, Питагор, равнина на измерване	5
Единично измерване на дължина	6
Постоянно измерване / минимум-максимум измерване	7
Измерване чрез събиране / изважддане	8
Измерване на площ	9
Измерване на обем	10
Косвено измерване (Питагор 1)	11
Косвено измерване (Питагор 2)	12
Косвено измерване (Питагор 3)	13
Измерване на стенна повърхност (сценарий 1)	14
Измерване на стенна повърхност (сценарий 2)	15
Таймер	16
Памет	16
Основни операции по примера на измерване на площ (1)	17
Основни операции по примера на измерване на площ (2)	18

ВАЖНИ ИНСТРУКЦИИ ЗА БЕЗОПАСНОСТ



Не използвайте продукта преди да сте проучили Инструкциите за безопасност и Наръчника на потребителя, приложени на компакт диска.

Класификация на лазера



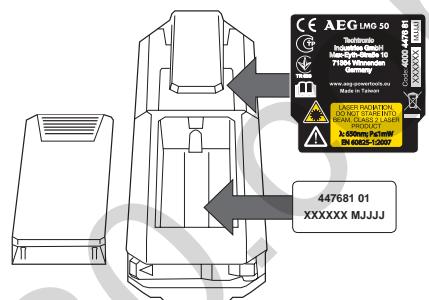
ПРЕДУПРЕЖДЕНИЕ:

Това е лазерен продукт Клас 2, съгласно IEC 60825-1:2007.



Надпис

Преди първото пускане в експлоатация залепете приложената лепенка на Вашия език върху английския текст на табелката с технически характеристики.



Предупреждение:

Избягвайте директен контакт с очите. Лазерният лъч може да доведе до флаш изгаряне на очите и до временно заслепяване.

Не гледайте в лазерния лъч, нито го насочвайте директно към други хора без това да е необходимо.

Не заслепявайте други лица.

Внимание:

Не работете с лазерния уред в непосредствена близост до деца и не им позволявайте да го използват.

Внимание! Рефлектиращи повърхности могат да рефлектират лазерния лъч обратно към оператора или към други лица.

Спазвайте безопасна дистанция от движещи се части.

Периодично провеждайте тестови измервания. Точно пред, по време на и след важни измервания.

Внимавайте за неправилни измервания, ако продуктът е дефектен или ако е бил изпускан, неправилно използван или модифициран.

Внимание! Запознайте се добре с обслужващите елементи и начинът на работа с Вашия градински електроинструмент.

Лазерният уред за измерване има ограничен обхват (виж раздел "технически характеристики"). Оптици за измерване извън максималния и минималния обхват водят до неточности. Употребата при неблагоприятни условия като твърде горещо, твърде студено, много ярка слънчева светлина, дъжд, сняг, мъгла или други ограничаващи видимостта условия може да доведе до неточни измервания.

Ако премествате лазерния уред за измерване от топло на студено (или обратно), изчакайте, докато уредът се адаптира към новата околната температура.

Винаги съхранявайте лазерния уред за измерване на закрито, предпазвайте го от удар, вибрации или екстремни температури.

Предпазвайте лазерния уред за измерване от прах, вода и висока влажност на въздуха. Такива могат да унищожат вътрешни компоненти или да повлияват на точността на измерване.

Не използвайте агресивни почистващи препарати или разтворители. Почиствайте само с чиста, мека кърпа.

Избягвайте силни удари по лазерния уред за измерване или изпускане на същия. Точността на уреда трябва да бъде проверена след изпускане или излагане на други механични натоварвания.

Необходими ремонти на този лазерен уред трябва да бъдат извършвани само от оторизиран сервизен персонал.

Не работете с продукта в опасни участъци или във враждебна среда.

Използвайте само зарядните устройства, препоръчани от производителя, за да заредите батерии.

Изтощени батерии не трябва да се изхвърлят заедно с битови отпадъци. Грижете се за околната среда и ги давайте в пунктове за събиране, съгласно националното и местно законодателство. Продуктът не трябва да се изхвърля заедно с битови отпадъци.

Изхвърляйте продукта по начин, който е в съответствие с валидните за вашата страна национални разпоредби в тази връзка. Спазвайте специфичното национално и местно законодателство. Обърнете се към местните власти или към Вашия търговец за повече информация относно изхвърлянето.



ТЕХНИЧЕСКИ ДАННИ

Клас на защита	IP54 (защита от прах и вода)
Оптичен компонент	14 мм
Фокус	35 мм
Максимален обхват на измерване	50 метра (допуск: 55м)
Минимален обхват на измерване	0,05 метра
Абсолютна точност @ < 10м	± 1,5 мм (макс.)
Повторяема точност @ < 10м	± 1,5 мм (типична макс. 2σ)
Повторяема точност @ > 10м	повишение ± 0,25 мм / метър (типична макс. 2σ)
Време на измерване	0,5 сек.
Дисплей тип	LCD (22,7 мм x 31 мм)
Електрозахранване	AAA 2x (алкална батерия)
Капацитет на батерията	10000 (единични измервания)
Изходна мощност на лазера	0,6 mW ~ 0,95 mW (Клас 2, 650nm)
Размер на лазерната точка	25 x 30 мм @ 16 м (макс.)
Вертикален ъгъл на лазерния лъч	±1 градус
Хоризонтален ъгъл на лазерния лъч	±1 градус
Автоматично изключване на уреда	180 секунди
Автоматично изключване на лазера	30 секунди
Температурен диапазон на работа	-10°C до +50°C
Температурен диапазон на съхранение	-25°C до +70°C
Тегло без батерия	80 гр.

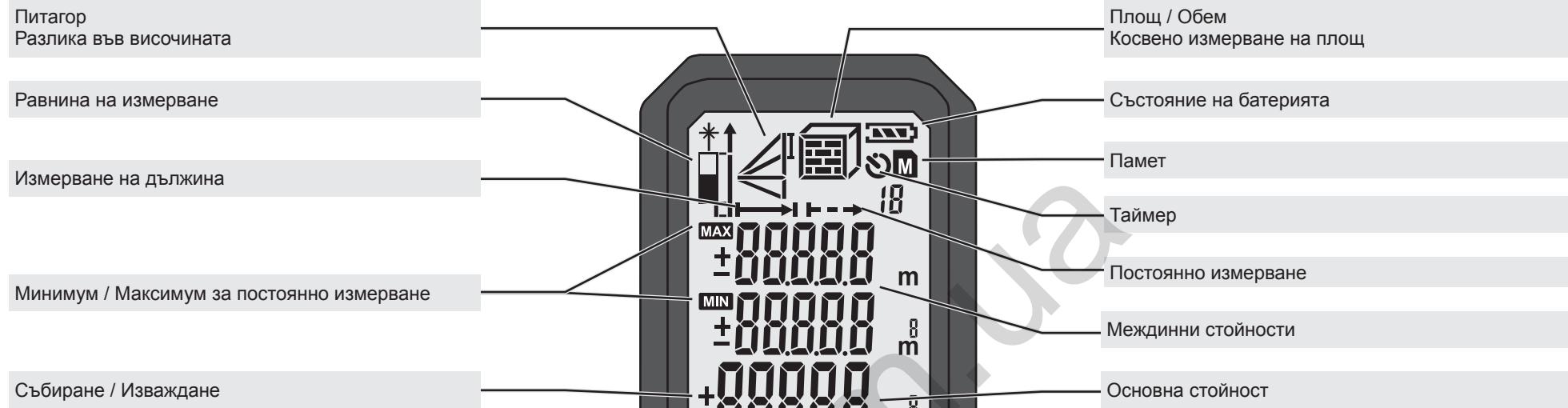
ТАБЛИЦА С КОДОВЕ ЗА ГРЕШКИ

Код	описание	решение
Грешка01	Извън обхват на измерване	Извършете измерването в предвидения обхват.
Грешка02	Рефлектирианият сигнал е твърде слаб	Изберете по-добра повърхност.
Грешка03	Извън обхвата на дисплея (макс. стойност: 99.999), напр. резултатът от площ или обем е извън обхвата на дисплея	Проверете, дали стойностите и стъпките са правилни.
Грешка04	Грешка в Питагоровото изчисление	Проверете, дали стойностите и стъпките са правилни.
Грешка05	Батерията е изтощена	Поставете нова батерия.
Грешка06	Извън температурния диапазон на работа	Извършете измерването в рамките на предвидения температурен диапазон на работа.
Грешка07	Околната светлина е твърде ярка	Затъмнете целевата зона.

ИЗПОЛЗВАНЕ ПО ПРЕДНАЗНАЧЕНИЕ

Лазерният уред за измерване е подходящ за измерване на разстояния и на наклони.

Този уред може да се използва по предназначение само както е посочено.

**ВКЛ. / ИЗМЕРВАНЕ**

- Вкл.
- Измерване
- Постоянно измерване (натиснете за 2 сек.)
мин. / макс. функция

СЪБИРАНЕ

- Добавяне на стойност
- Навигиране в менюто на паметта

ПЛОЩ / ОБЕМ

- Площ (натиснете 1x)
- Обем (натиснете 2x)
- Косвено измерване на площ (натиснете 3x / 4x)

ВКЛЮЧВАНЕ

- Вкл.
- Изкл. (натиснете за 2 сек.)
- Изтриване

ИЗВАЖДАНЕ

- Изваждане на стойност
- Навигиране в менюто на паметта

ПИТАГОР

- Питагор 1 (натиснете 1x)
- Питагор 2 (натиснете 2x)
- Питагор 3 (натиснете 3x)

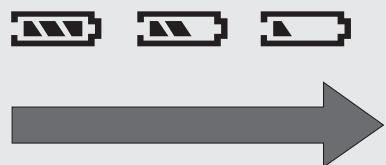
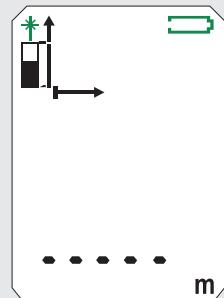
ПРОМЯНА НА РАВНИНАТА НА ИЗМЕРВАНЕ

- Отпред
- Отзад
- Ъглов щифт

ПАМЕТ

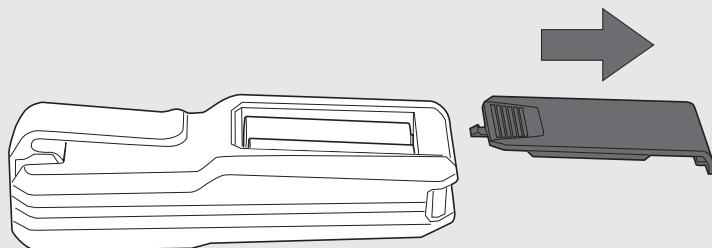
- Таймер 3-15 сек. (натиснете 1x)
- Памет 1-20 (натиснете 1x за 2 сек.)
- За навигиране в паметта използвайте бутоните +/-

СМЕНЕТЕ БАТЕРИЯТА

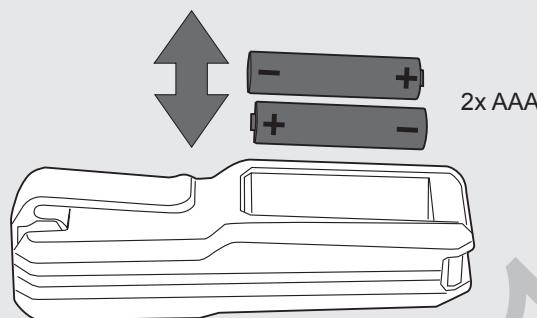


Когато иконата мига, сменете батерията.

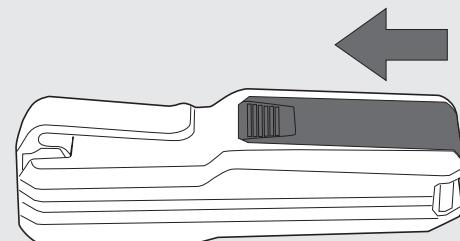
1



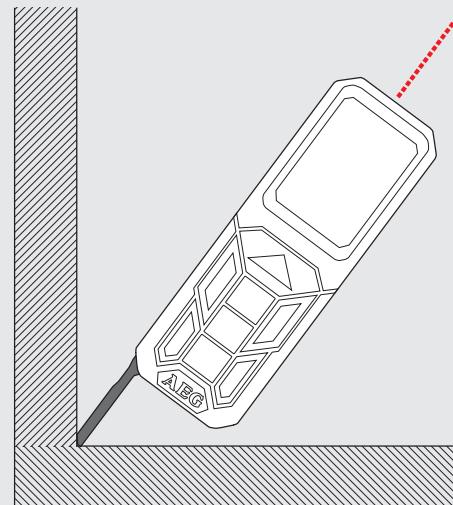
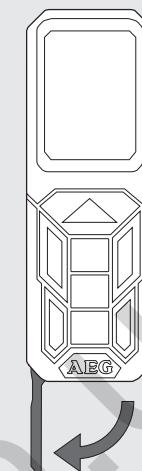
2



3

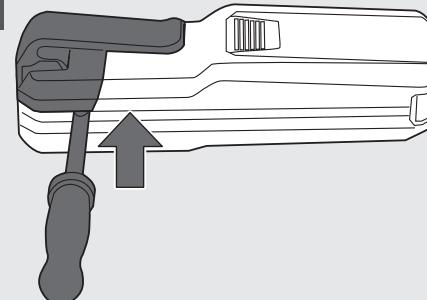


ЪГЛОВ ЩИФТ

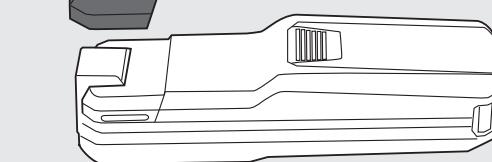
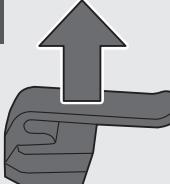


ЩИПКА ЗА КОЛАН

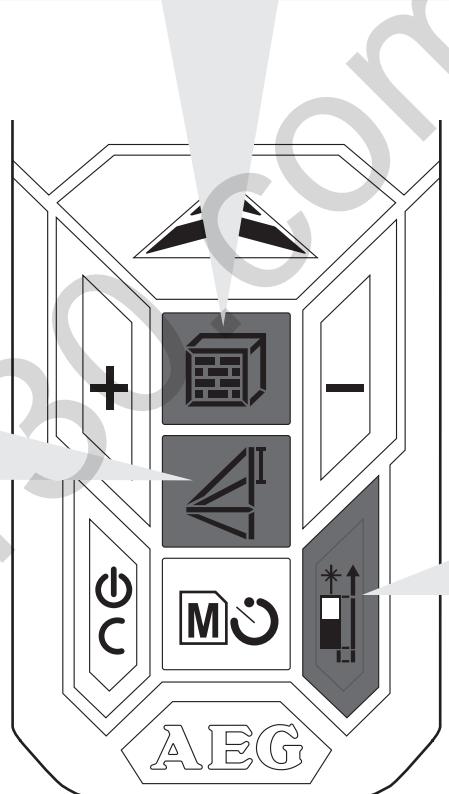
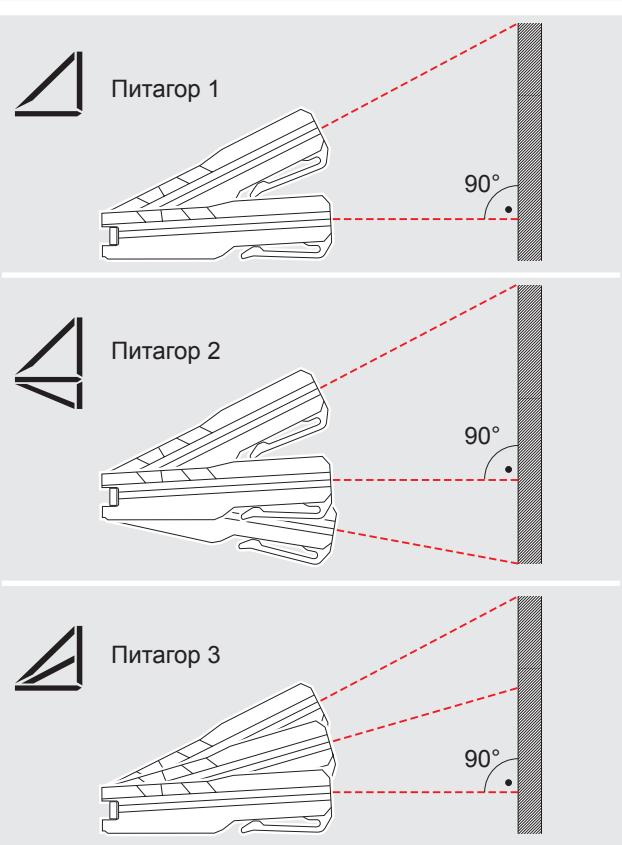
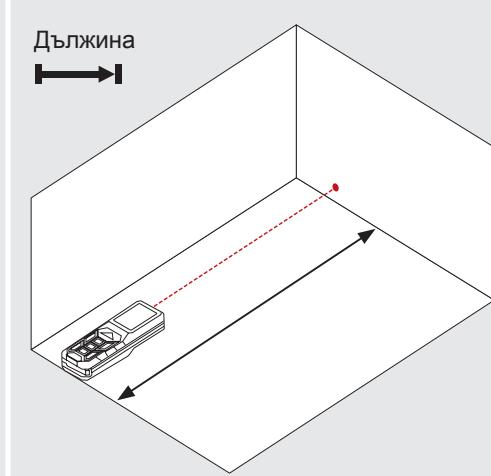
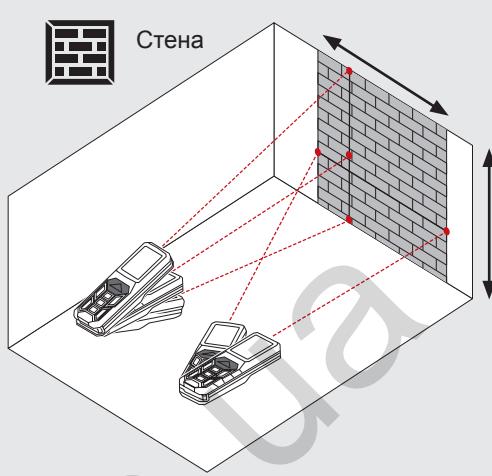
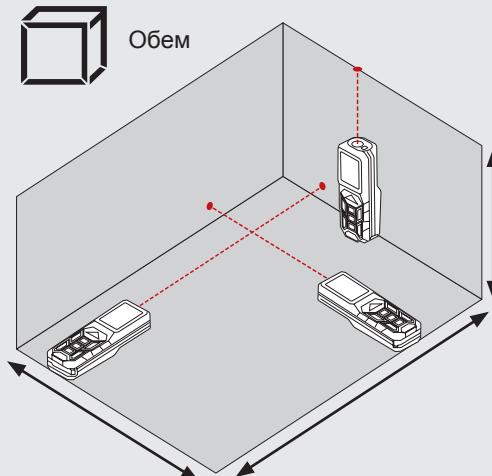
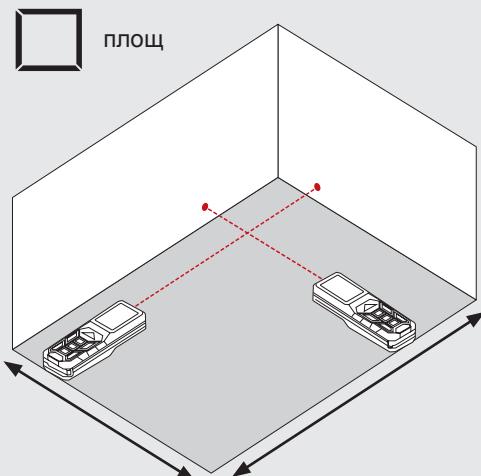
1



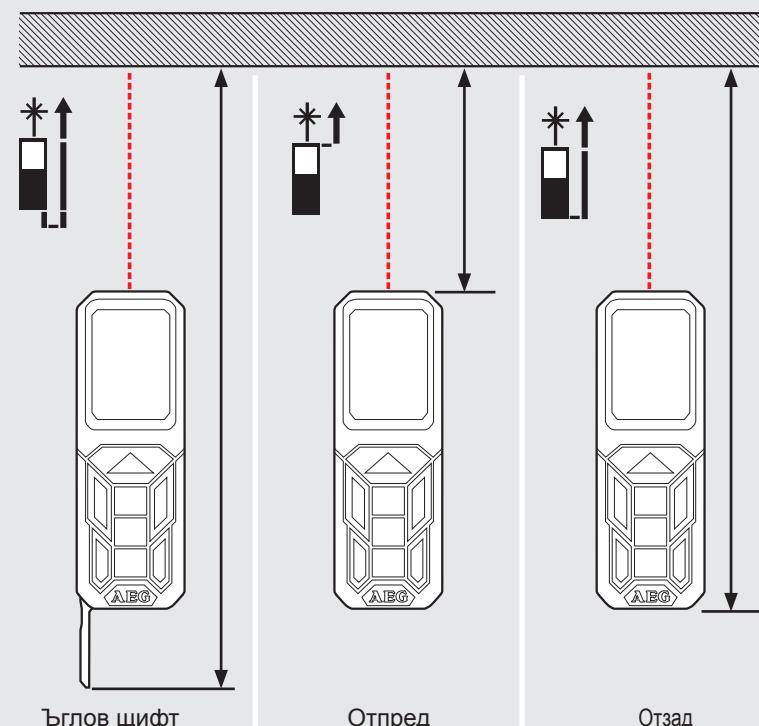
2



БУТОН ЗА ФУНКЦИИ, ПИТАГОР, РАВНИНА НА ИЗМЕРВАНЕ

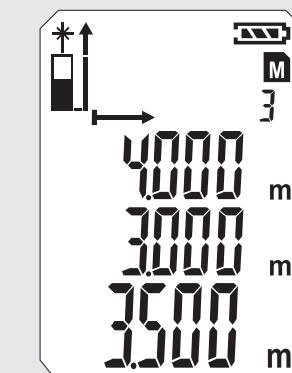
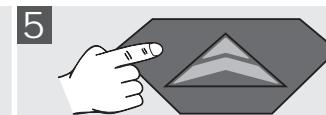
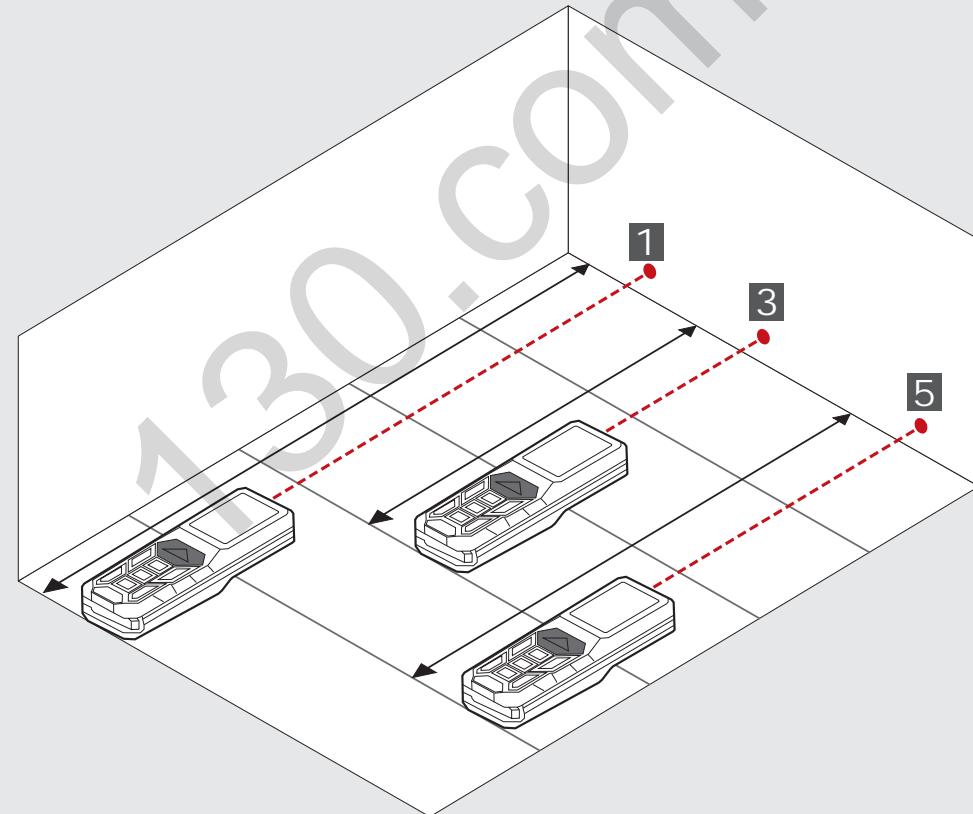
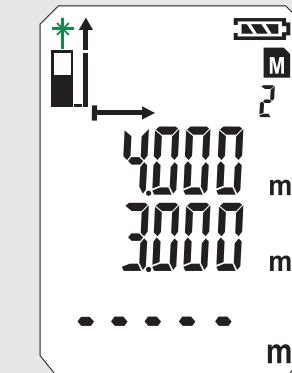
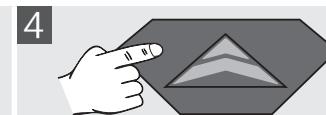
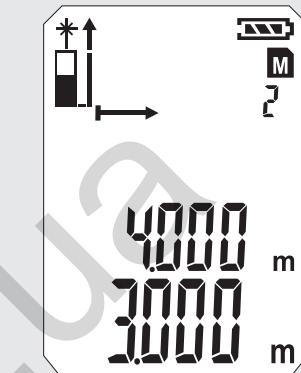
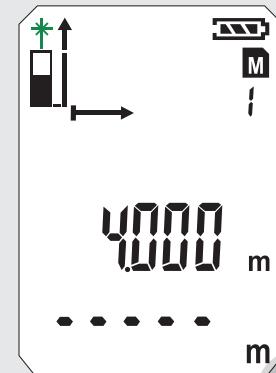
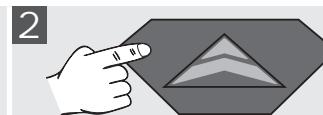
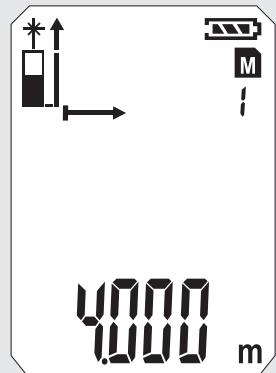
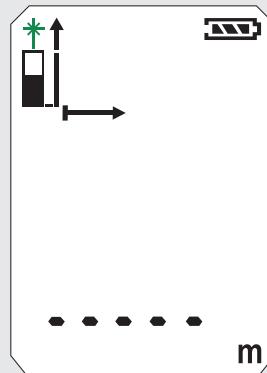
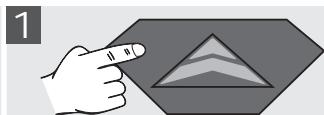


Равнина на измерване



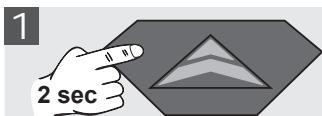
ЕДИНИЧНО ИЗМЕРВАНЕ НА ДЪЛЖИНА

0

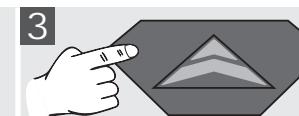


ПОСТОЯННО ИЗМЕРВАНЕ / МИНИМУМ-МАКСИМУМ ИЗМЕРВАНЕ

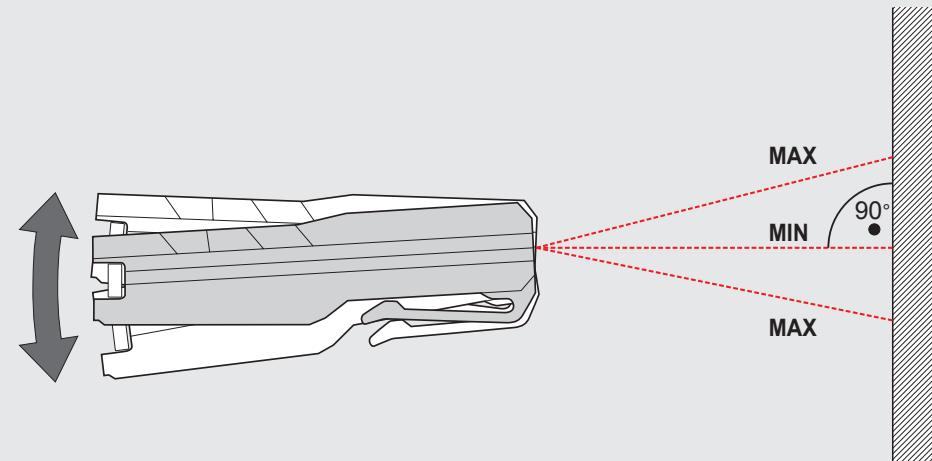
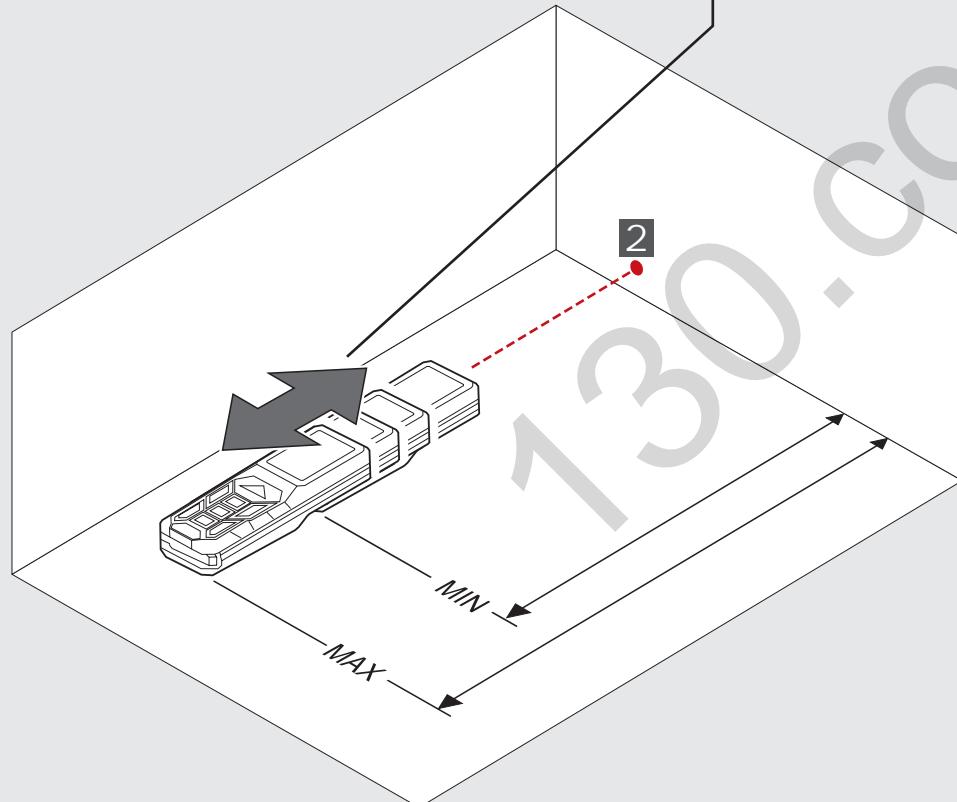
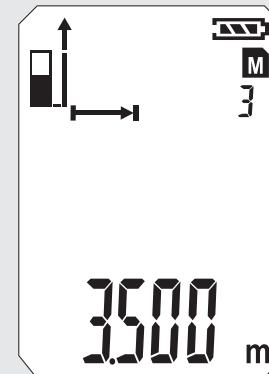
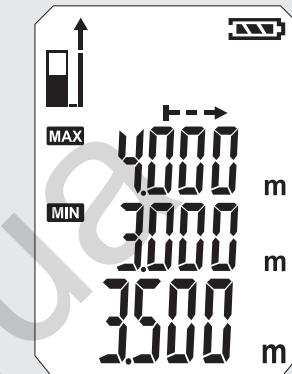
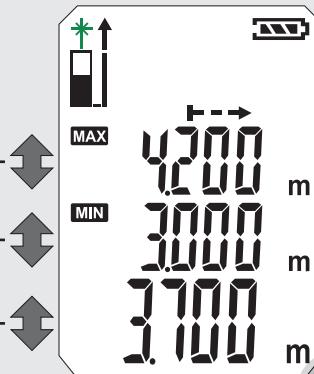
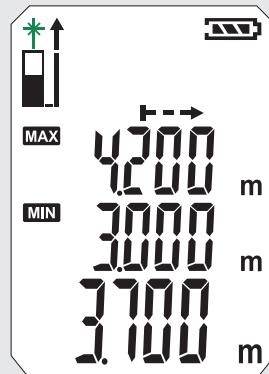
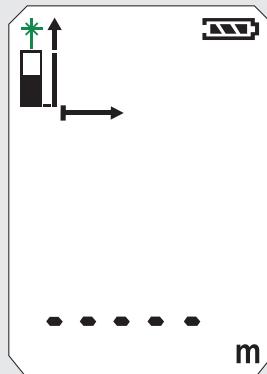
0



2

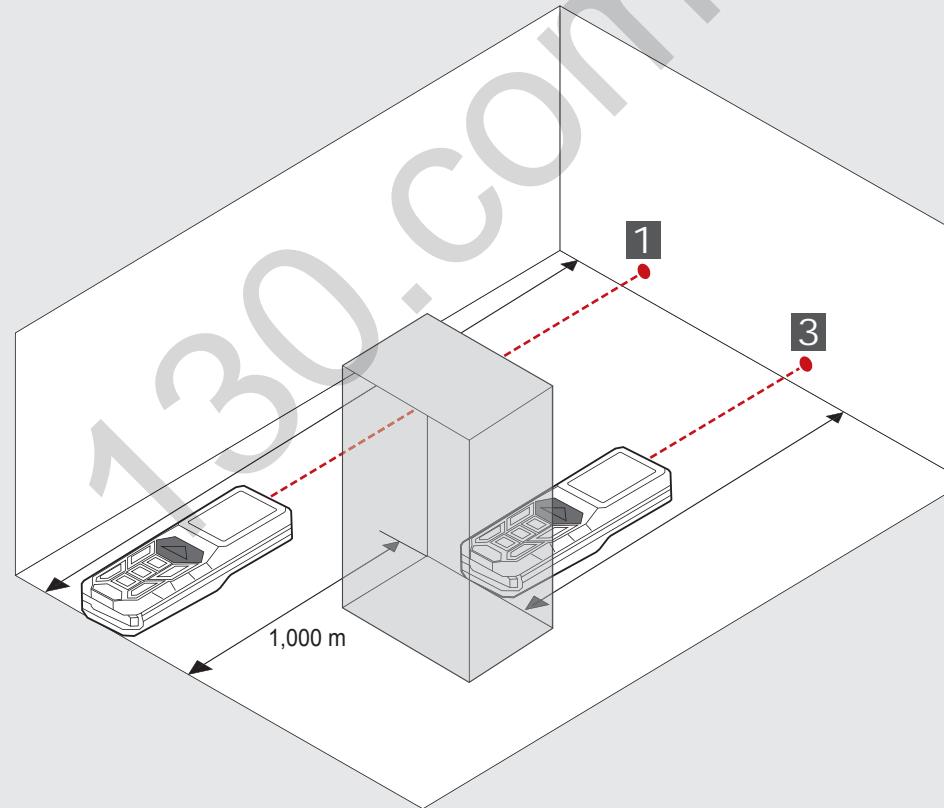
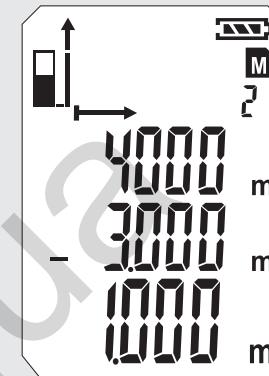
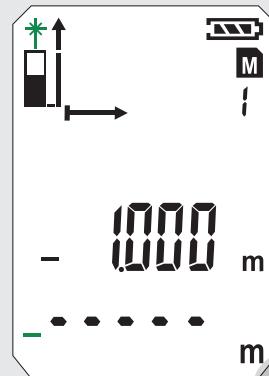
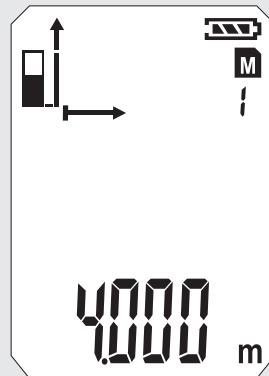
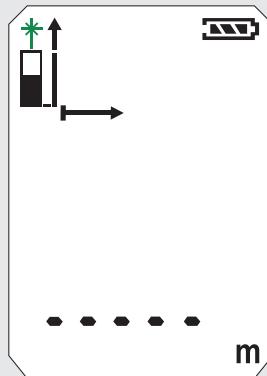
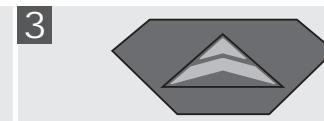
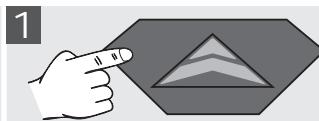


4

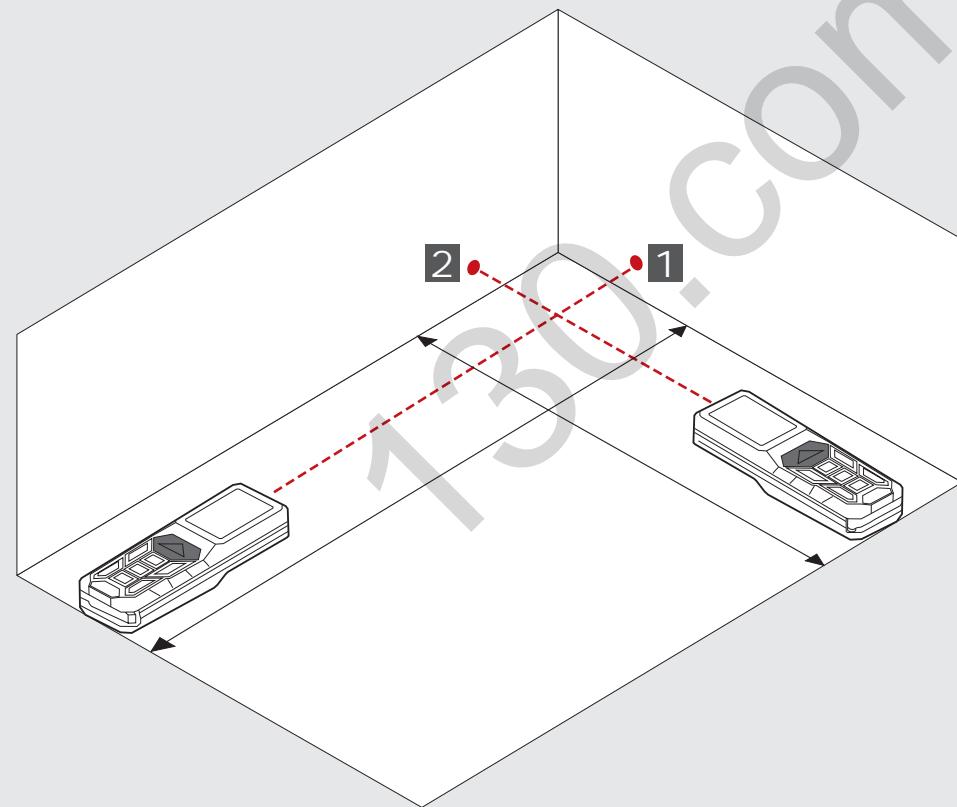
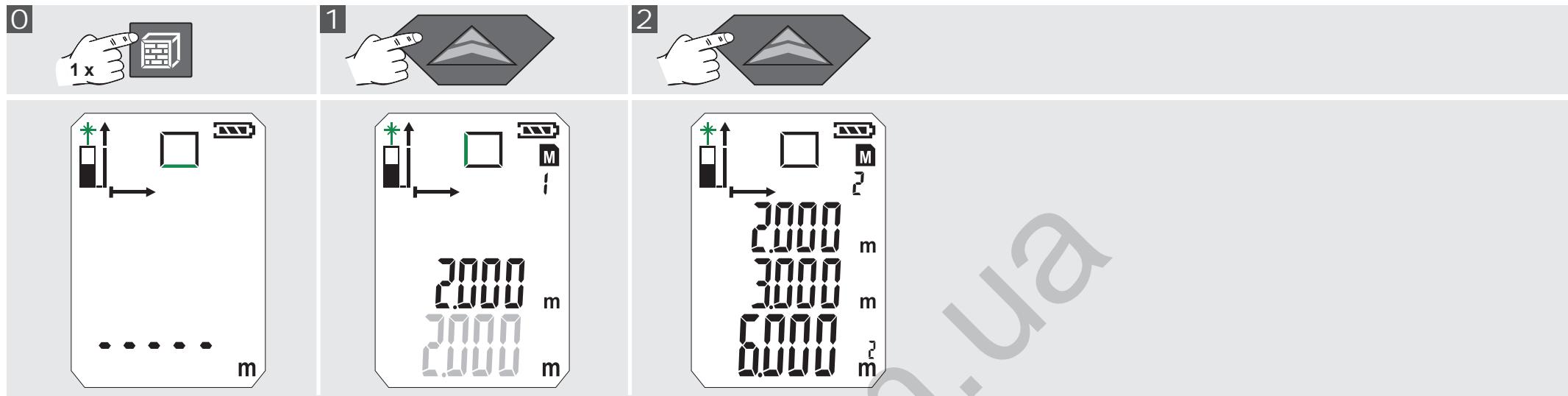


ИЗМЕРВАНЕ ЧРЕЗ СЪБИРАНЕ / ИЗВАЖДАНЕ

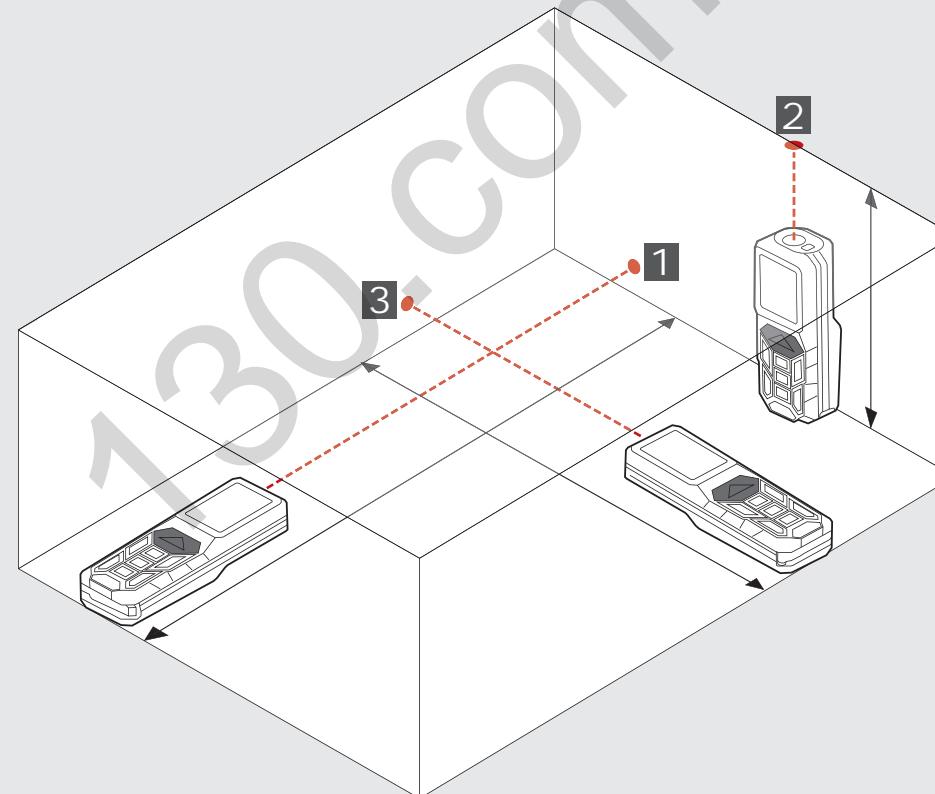
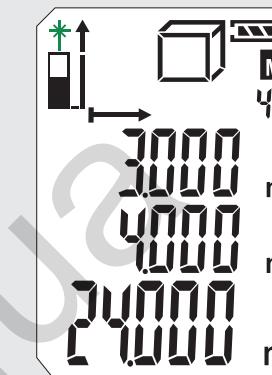
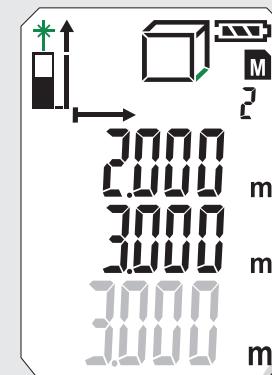
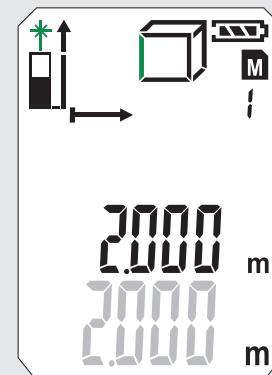
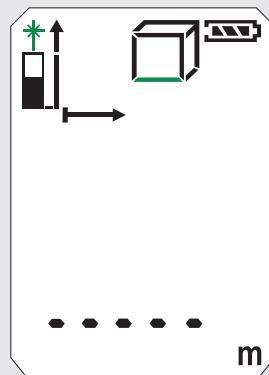
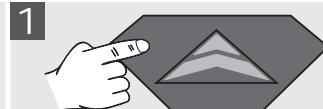
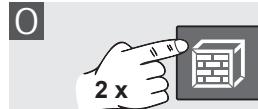
0



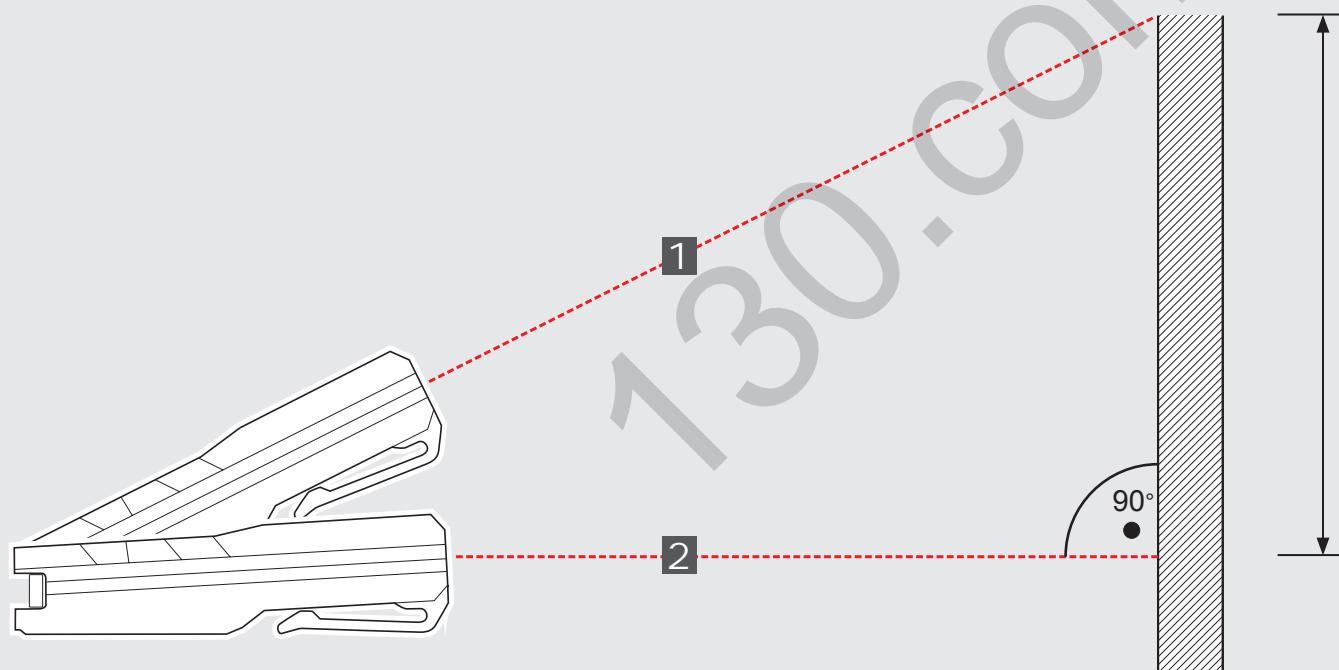
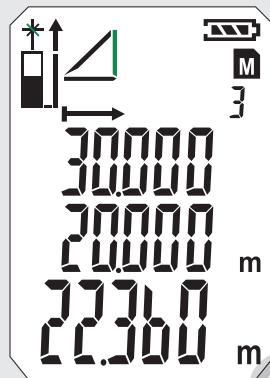
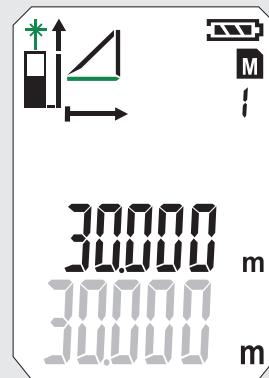
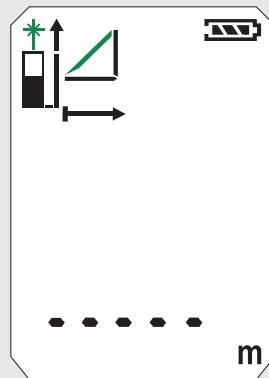
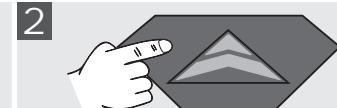
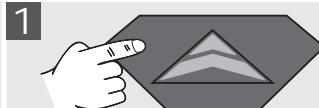
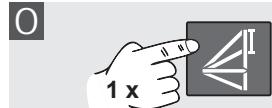
ИЗМЕРВАНЕ НА ПЛОЩ



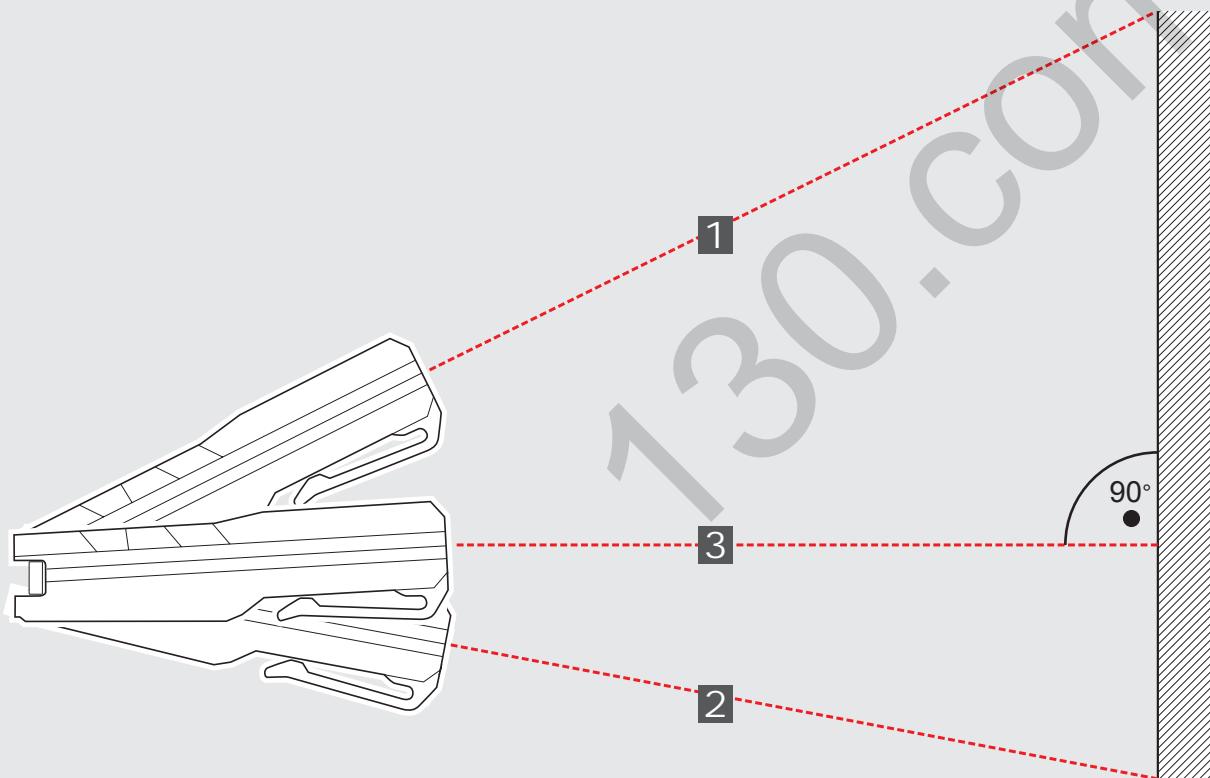
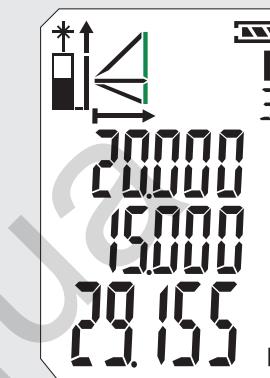
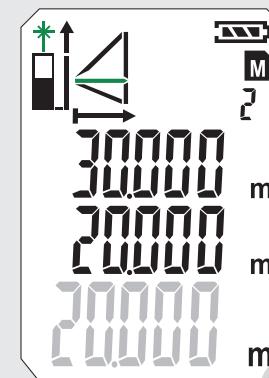
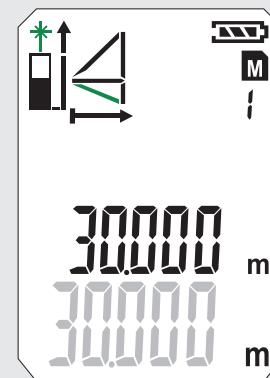
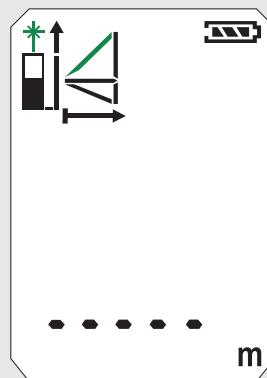
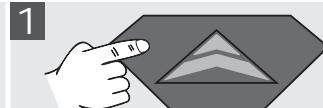
ИЗМЕРВАНЕ НА ОБЕМ



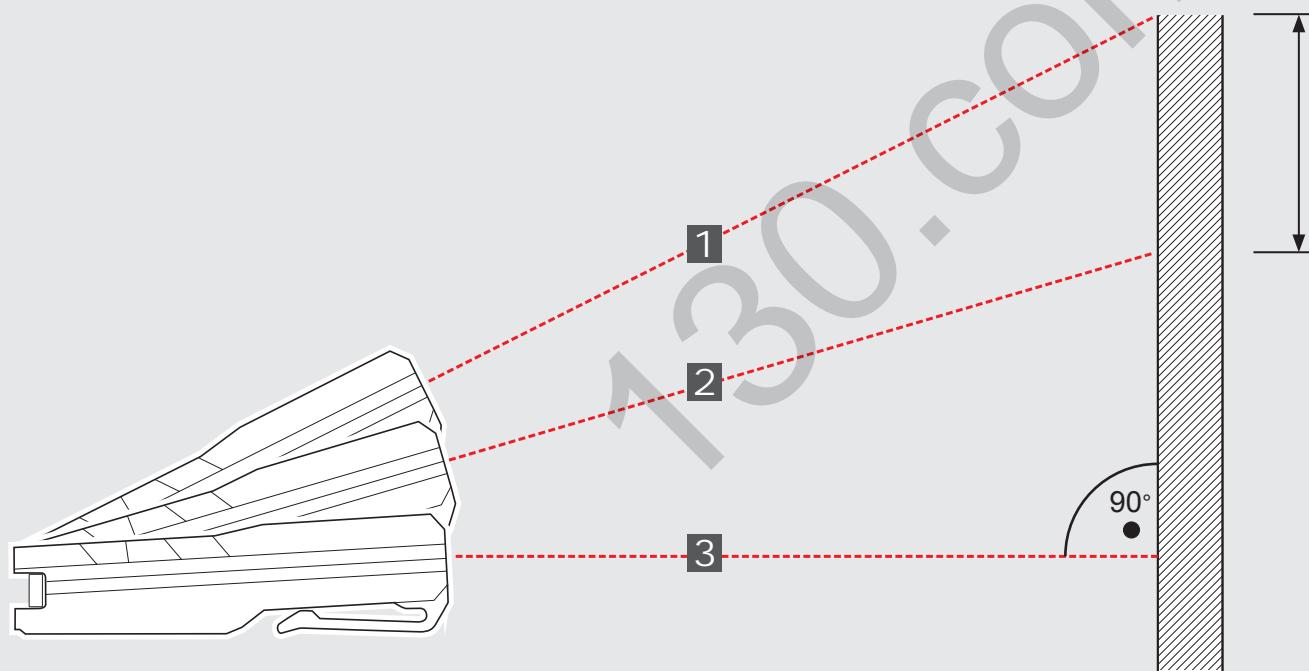
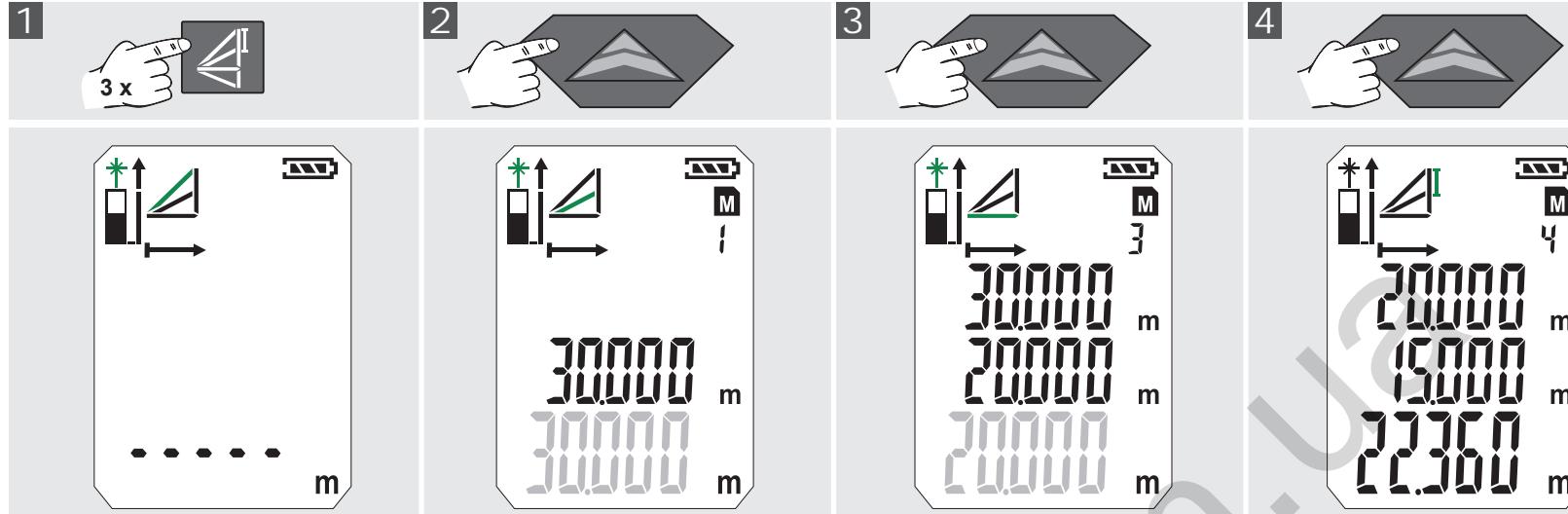
КОСВЕНО ИЗМЕРВАНЕ (ПИТАГОР 1)



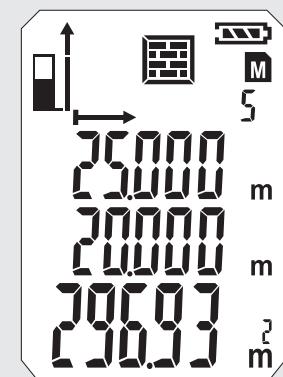
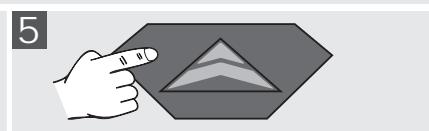
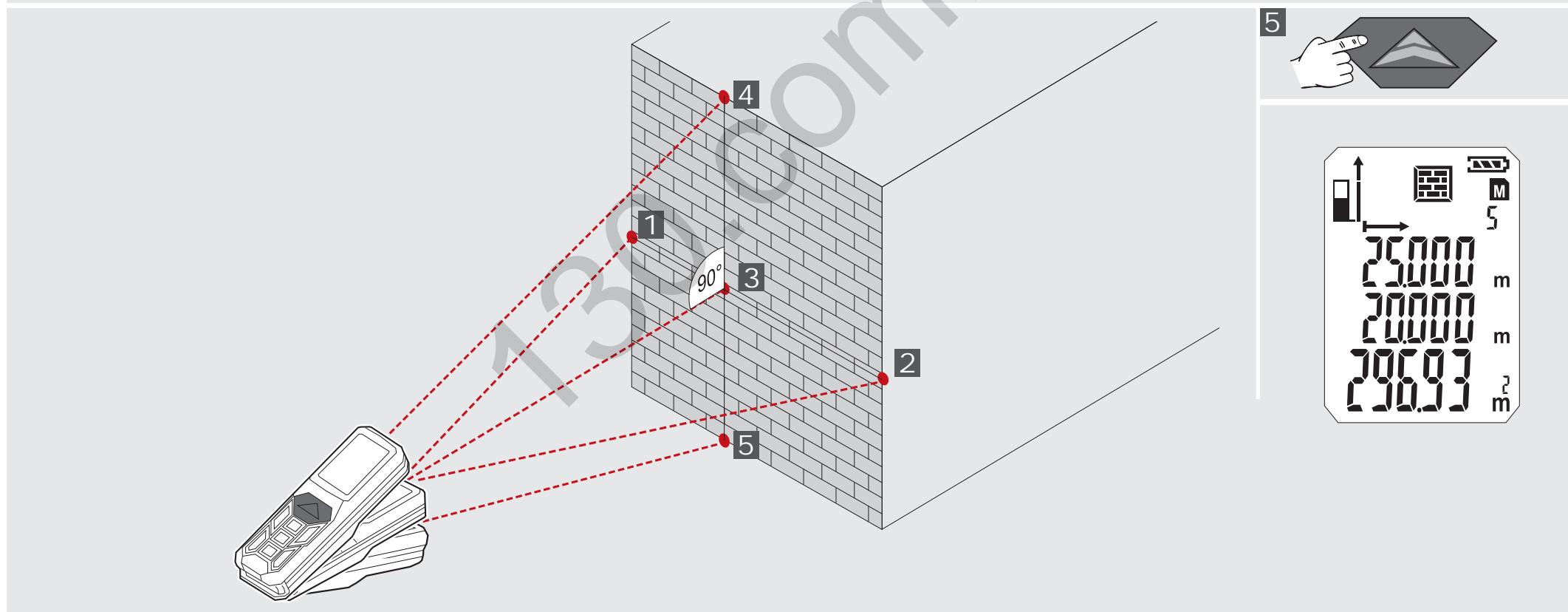
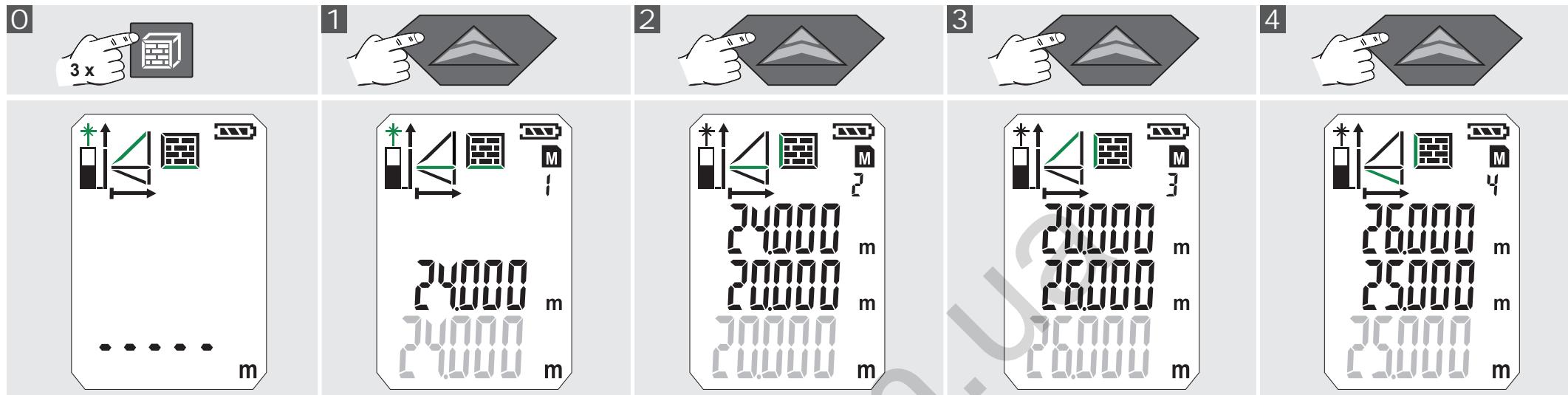
КОСВЕНО ИЗМЕРВАНЕ (ПИТАГОР 2)



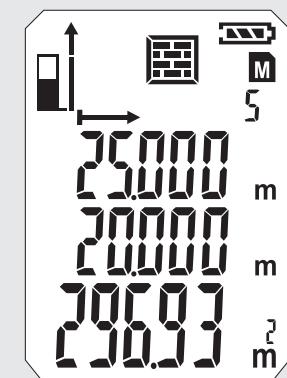
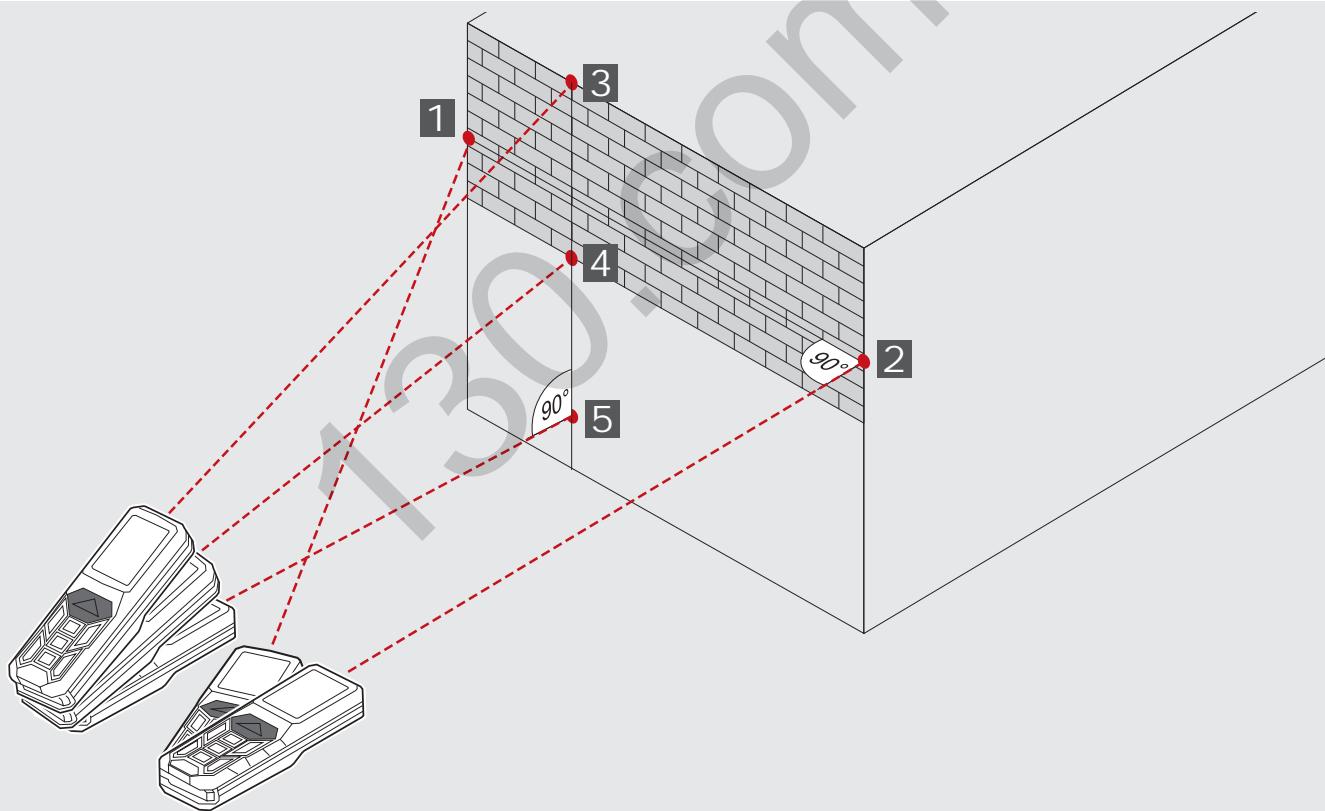
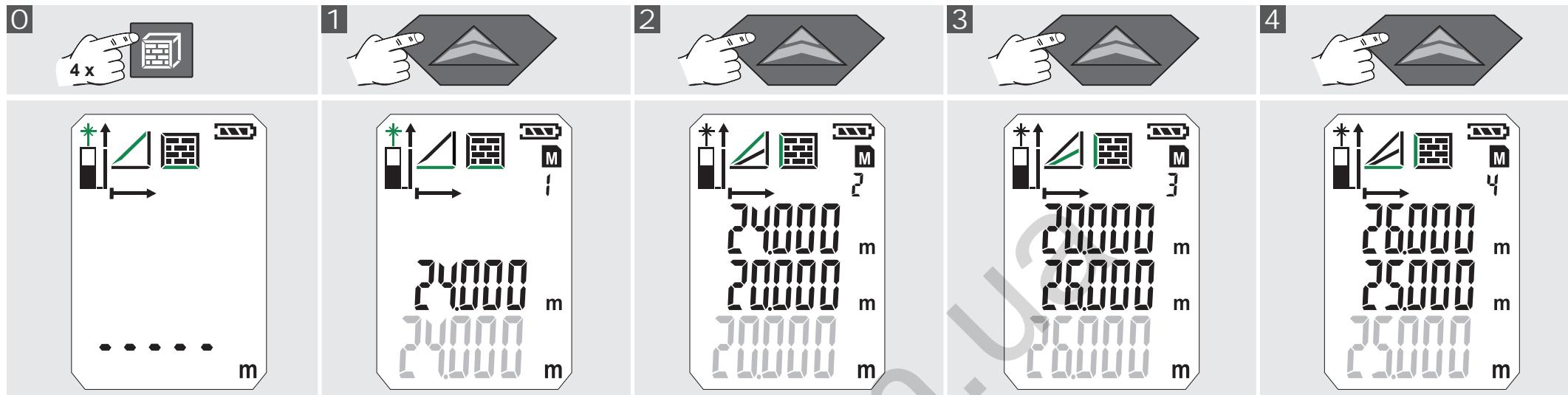
КОСВЕНО ИЗМЕРВАНЕ (ПИТАГОР 3)



ИЗМЕРВАНЕ НА СТЕННА ПОВЪРХНОСТ (СЦЕНАРИЙ 1)



ИЗМЕРВАНЕ НА СТЕННА ПОВЪРХНОСТ (СЦЕНАРИЙ 2)



ТАЙМЕР

Измерването може да бъде задействано забавено чрез таймера, напр. за да можете да поставите компоненти в измерващия лъч.

Натиснете бутона .

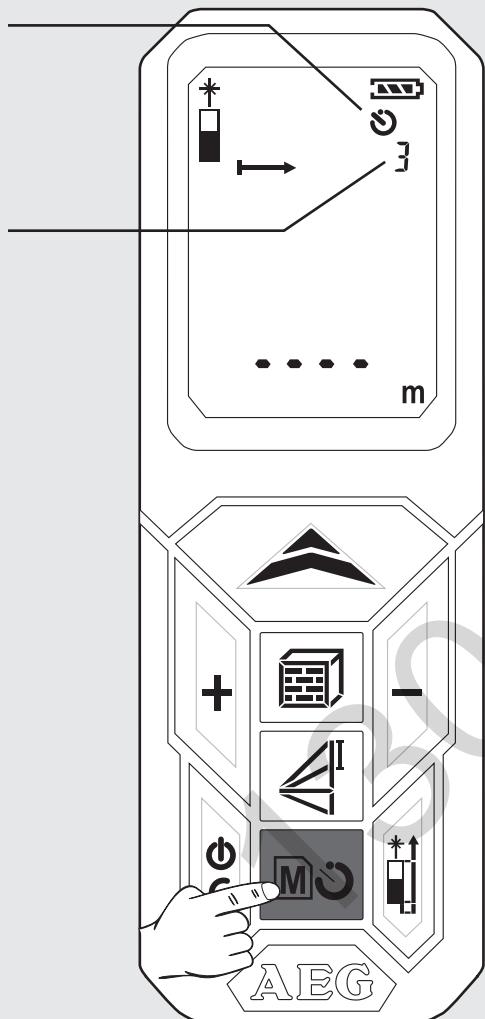
- Появява се икона.

Таймерът може да бъде настроен между 3 и 15 сек. чрез натискане на бутона .

Натиснете бутона .

- Секундите до започване на измерването се броят в обратен ред.

- Измерването започва при 0.



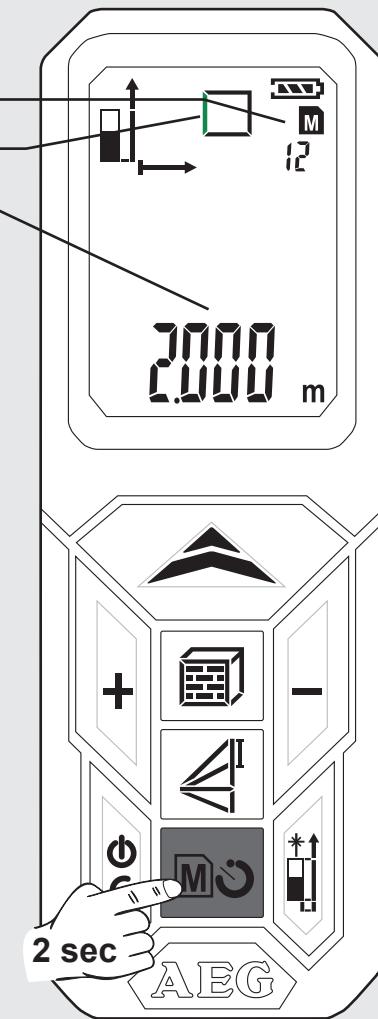
ПАМЕТ

Измерените стойности се запаметяват автоматично и последователно в паметта.

Запаметените стойности могат да бъдат изтеглени чрез бутона .

Натиснете бутона за 2 сек.

- Появяват се икона и номерът, под който измерването е запаметено.
- Съответният измерен параметър се показва.
- Запаметената стойност се показва на главния ред.
- За навигиране използвайте бутоните +/-

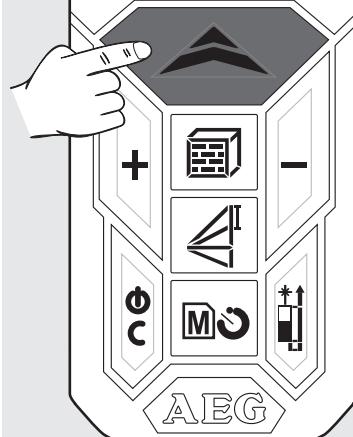
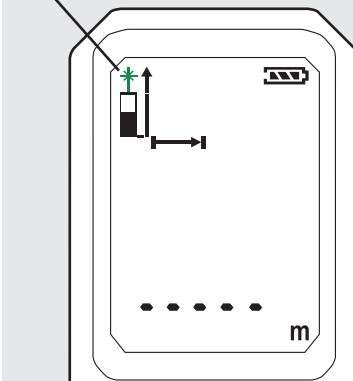


ОСНОВНИ ОПЕРАЦИИ ПО ПРИМЕРА НА ИЗМЕРВАНЕ НА ПЛОЩ (1)

1 Включване

Натиснете бутона .
Внимание! Лазерът е включен!
 Не насочвайте директно към хора!

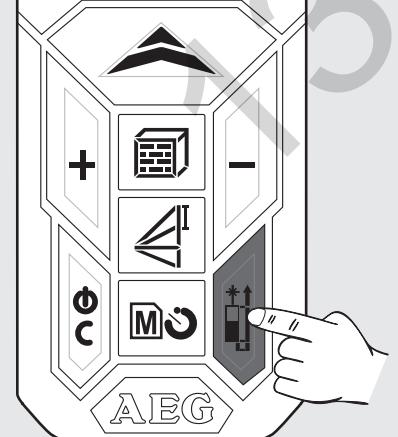
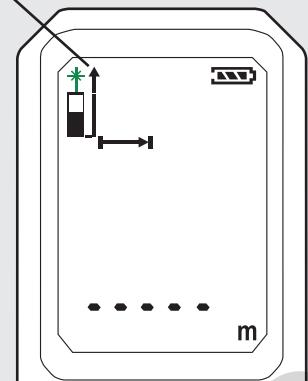
Иконата на лазера мига (мига в зелено).



2 Избор на равнина на измерване

Настройка по подразбиране след включване: долу
 *↑ натиснете 1x -> ъглов щифт
 Натиснете 2x -> горе
 Натиснете 3x -> долу

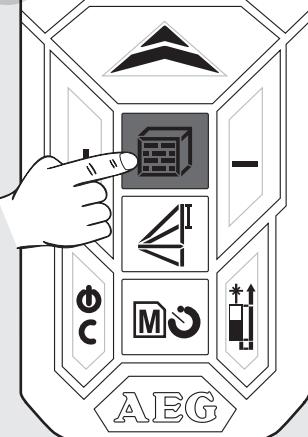
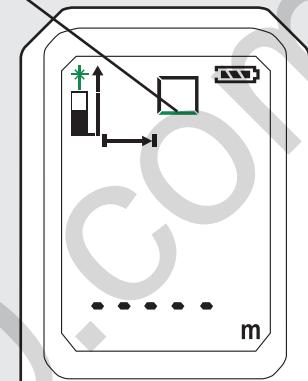
Появява се икона.



3 Избор на функция

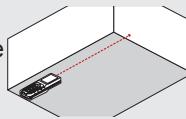
След включване уредът е винаги нагласен за измерване на дължина.
 Натиснете 1x  - измерване на дължина

- Появява се икона.
 Измереният параметър мига (мига в зелено).



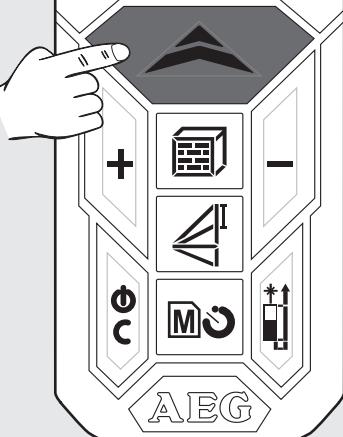
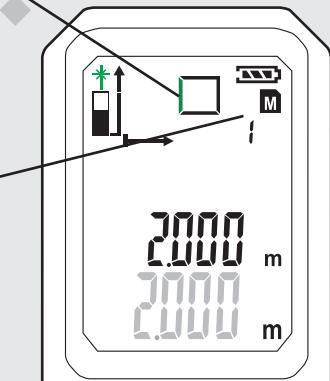
4 Измерване на дължина

Нивелирайте уреда и натиснете бутона .



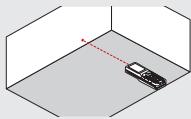
- Измерената стойност се появява за кратко на главния ред.
 - Измерената стойност скча след 1 сек. на горния ред.

Измерената стойност се запаметява в паметта под последователен номер.
 Вторият измерен параметър мига.
 Уредът е готов за измерване на втората стойност.



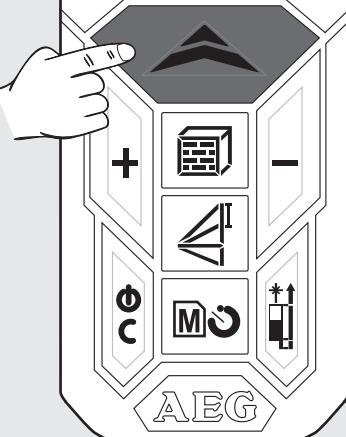
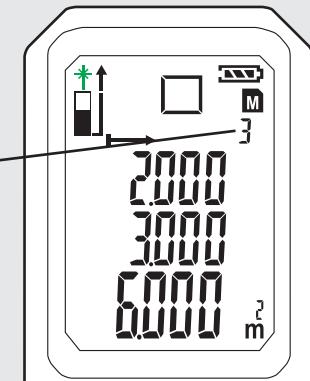
5 Измерване на ширина

Нивелирайте уреда и натиснете бутона .



- Измерената стойност се появява за кратко на главния ред.
 - Измерената стойност скча след 1 сек. на горния ред.

Измерената стойност се запаметява в паметта под последователен номер.
 - Резултатът се показва на главния ред и се запаметява в паметта под последователен номер.



ОСНОВНИ ОПЕРАЦИИ ПО ПРИМЕРА НА ИЗМЕРВАНЕ НА ПЛОЩ (2)

6 Изтегляне на запаметените стойности

Натиснете бутона **M** за 2 сек.

Натиснете бутона + или -

7 Излизане от паметта

Натиснете бутона ϕ

8 Изключване

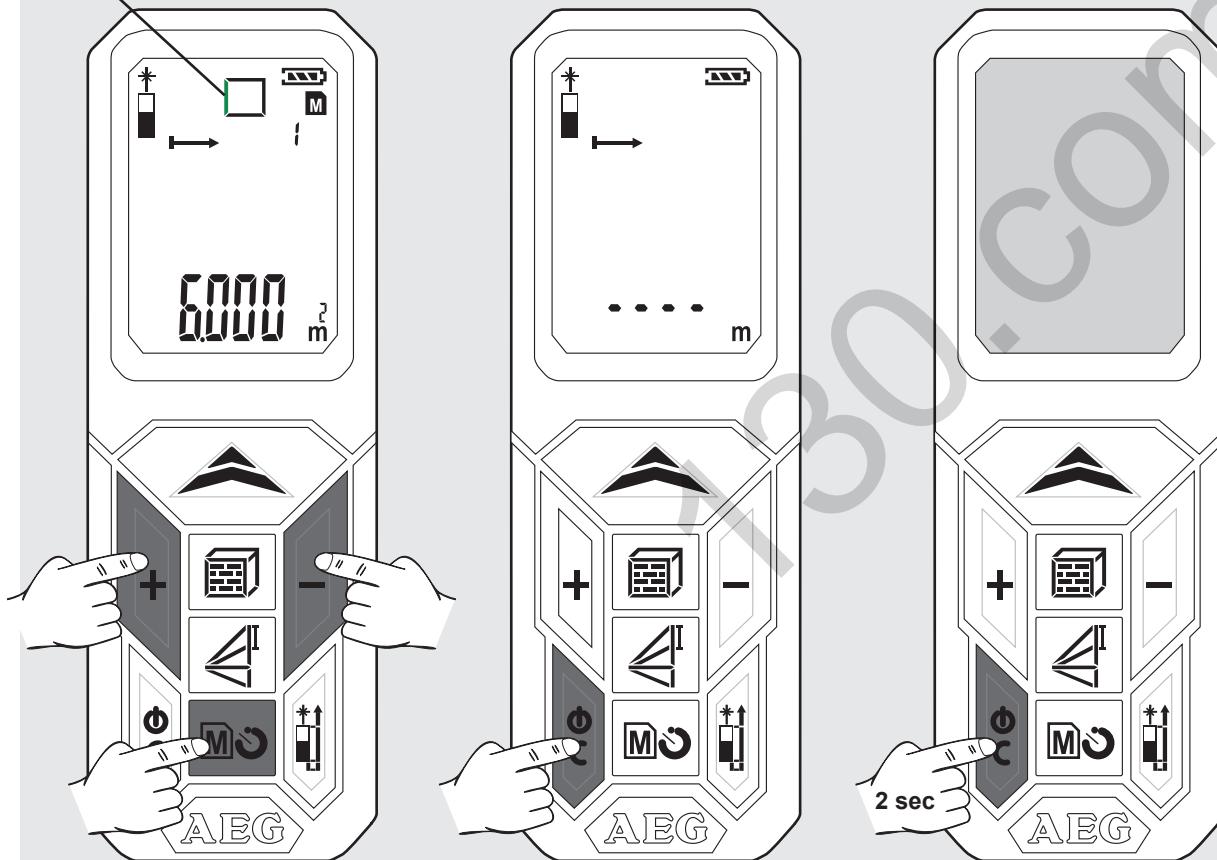
Натиснете бутона ϕ за 2 сек.
(трябва да сте излезли от
паметта преди това).

- Запаметените стойности се показват на главния ред.

Съответната икона се показва и измереният параметър мига (мига в зелено).

- Уредът се изключва.

- Ако не бъде натиснат бутон в продължение на 3 минути,
уредът се изключва автоматично.



CUPRINS

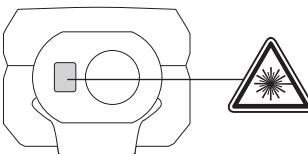
Importante instrucțiuni de securitate	1
Date tehnice	2
Condiții de utilizare specifice	2
Tabel cu codurile de eroare	2
Prezentare	3
Înlocuire baterii	4
Ştift colturi	4
Clemă de curea	4
Taste funcționale, Pitagora, nivel de măsurare	5
Măsurare simplă de lungime	6
Măsurare continuă / Măsurare minim-maxim	7
Măsurare cu adiție / scădere	8
Măsurare suprafață	9
Măsurare volum	10
Măsurare indirectă (Pitagora 1)	11
Măsurare indirectă (Pitagora 2)	12
Măsurare indirectă (Pitagora 3)	13
Măsurare suprafață perete (scenariu 1)	14
Măsurare suprafață perete (scenariu 2)	15
Timer	16
Memoria	16
Descrierea de bază pe un exemplu de măsurare a suprafeței (1)	17
Descrierea de bază pe un exemplu de măsurare a suprafeței (2)	18

IMPORTANTĂ INSTRUCȚIUNI DE SECURITATE



Nu utilizați produsul înainte de a fi studiat instrucțiunile de protecție și Manualul de utilizare din CD-ul anexat.

Clasificare laser



AVERTISMENT:

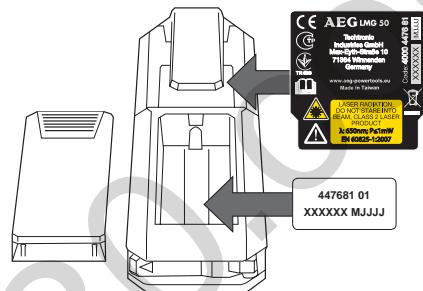
Acest produs corespunde normelor de securitate pentru lasere de **Categorie 2** IEC 60825-1:2007.



RADIATIE LASER
NU PRIVIȚI DIRECT ÎN
FASCICULUL LASER
CLASA PRODUSULUI LASER : 2
λ: 650nm; P<1mW
EN 60825-1:2007

Etichetare

Lipiți eticheta livrată în limba țării dvs., înainte de prima punere în funcționare, peste textul în engleză de pe tăblita indicatoare a caracteristicilor mașinii.



Avertisment:

Evități să priviți direct. Fascicul laser vă poate afecta ochii și poate duce la o orbire temporară.

Nu priviți fascicul laser și nu îl direcționați în mod inutil asupra altor persoane.

Nu-l direcționați în ochii altor persoane.

Avertisment:

Nu activați aparatul cu laser când sunt copii în apropiere și nu le permiteți copiilor să-l folosească.

Atenție! Este posibil ca suprafețe reflectante să redirecționeze fascicul laser înapoi la operator sau către alte persoane.

Tineți extremitățile la distanță sigură de piesele în mișcare.

Efectuați periodic măsurători de verificare. În mod deosebit înainte de a efectua măsurători importante, în timpul lor sau după ele.

Fiți atenți: măsurătorile pot fi eronate, dacă produsul este defect, dacă a fost scăpat din mâna, dacă a fost incorect folosit sau modificat.

Atenție! Familiarizați-vă cu elementele de operare și utilizarea reglementară a sculei electrice de grădină.

Aparatul de măsurare cu laser are un domeniu limitat de utilizare. (Vezi Secțiunea "Date tehnice"). Încercările de măsurare în afara domeniului maxim și minim conduc la imprecizie. Utilizarea în condiții neprielnice, cum ar fi de ex. prea cald, prea frig, lumină solară prea puternică, ploaie, zăpadă, ceață sau alte condiții ce limitează vizibilitatea duce la măsurători fără precizie.

Atunci când aparatul de măsurare cu laser este adus dintr-un mediu cald într-un mediu rece (sau invers), așteptați până se adaptează aparatul la noua temperatură a mediului.

Aparatul de măsurare cu laser se păstrează întotdeauna în spații închise, care să-l protejeze de șocuri, vibrații sau temperaturi extreme.

Aparatul de măsurat cu laser se va proteja împotriva prafului, umezelii și umidității ridicate din aer. Acestea pot deteriora componentele din interior sau influența precizia.

Nu folosiți agenți de curățire agresivi și nici solvenți. Se curăță doar cu o cârpă curată și moale.

Evități loviturile puternice pe aparat sau căderea aparatului. Precizia aparatului ar trebui verificată în cazul în care a căzut sau dacă a fost expus la alte solicitări mecanice.

Efectuarea de reparații la acest aparat cu laser este permisă numai persoanelor de specialitate autorizate.

Nu folosiți produsul în zone cu risc de explozie sau în medii agresive.

Pentru încărcarea bateriilor folosiți exclusiv încărcătoarele recomandate de producător.

Bateriile consumate nu trebuie aruncate împreună cu deșeurile menajere. Aveți grijă de mediul înconjurător și duceți-le la punctele de colectare, în conformitate cu reglementările naționale și locale. Produsul nu trebuie aruncat împreună cu deșeurile menajere.

Aruncați produsul în mod corespunzător, în conformitate cu reglementările naționale în vigoare în țara dvs. Respectați reglementările specifice de la nivel național și local. Adresați-vă autorităților locale sau comerciantului care v-a vândut aparatul pentru informații privind salubrizarea.



Marcaj CE

DATE TEHNICE

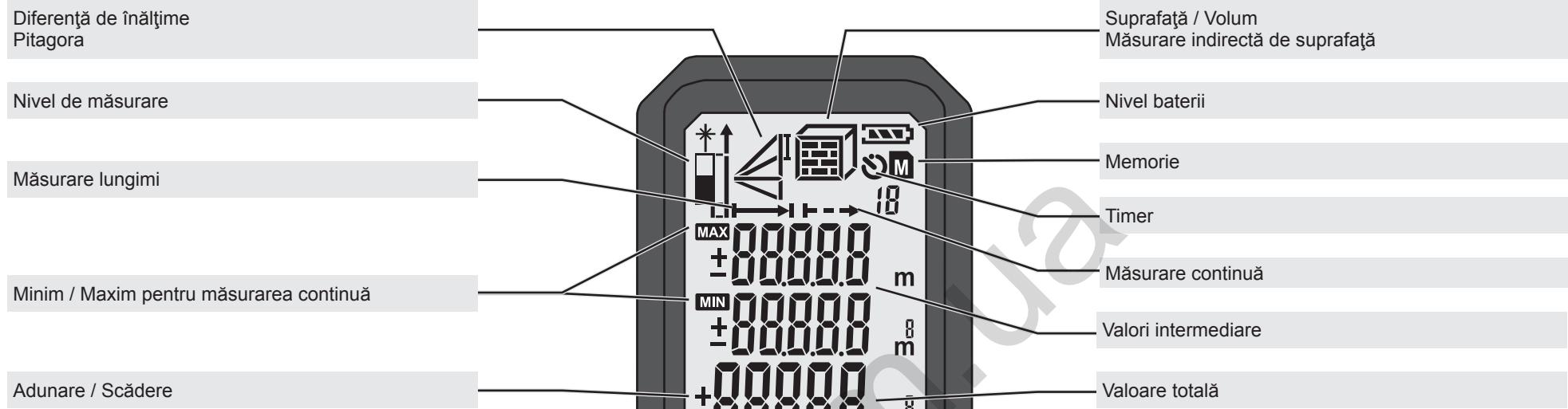
Clasa de protecție	IP54 (protejat la praf și stropi de apă)
Optica	14 mm
Focalizare	35 mm
Domeniu de măsurare max.	50 metri (toleranță: 55m)
Domeniu de măsurare min.	0,05 metri
Precizie absolută @ < 10m	± 1,5 mm (max)
Precizie repetare @ < 10m	± 1,5 mm (tipic max. 2σ)
Precizie repetare @ > 10m	creștere ± 0,25 mm / metru (tipic max. 2σ)
Timp de măsurare	0,5 s
Tip display	LCD (22,7 mm x 31 mm)
Alimentarea electrică	AAA 2x (baterii alcaline)
Durata de viață a bateriilor	10000 (măsurătoare singulară)
Putere de ieșire laser	0,6 mW ~ 0,95 mW (clasa 2, 650nm)
Dimensiune punct laser	25 x 30 mm @ 16 m (max)
Unghi vertical fascicul laser	+1 grad
Unghi orizontal fascicul laser	±1 grad
Deconectare automată a aparatului	180 secunde
Deconectare automată laser	30 secunde
Intervalul temperaturii de lucru	-10°C la +50°C
Intervalul temperaturii de depozitare	-25°C la +70°C
Greutate fără baterii	80 g

TABEL CU CODURILE DE EROARE

Cod	Descriere	Soluție
Err01	În afara domeniului de măsurare	Efectuați măsurătoarea în domeniul specificat.
Err02	Semnalul reflectat este prea slab	Alegeți o suprafață mai bună.
Err03	În afara domeniului de afișare (val. max.: 99.999) de ex. este rezultatul de la suprafață sau volum în afara domeniului de afișare	Verificați dacă sunt corecte valorile și sunt corectă pașii.
Err04	Eroare în calculul Pitagora	Verificați dacă sunt corecte valorile și sunt corectă pașii.
Err05	Baterie descărcată	Introduceți baterii noi.
Err06	În afara intervalului de temperatură de lucru	Efectuați măsurătoarea în intervalul de temperatură de lucru specificat.
Err07	Lumină ambientă prea puternică	Întunecați zona întă.

CONDIȚII DE UTILIZARE SPECIFICATE

Aparatul de măsurare cu laser este indicat pentru măsurarea distanțelor și înclinațiilor.
Nu utilizați acest produs în alt mod decât cel stabilit pentru utilizare normală



PORNIRE / MĂSURARE

- ▶ Pornire
- ▶ Măsurare
- ▶ Măsurare continuă (apăsare 2 sec.)
Funcție Min. / Max.

ADUNARE

- ▶ Adunare valoare
- ▶ Navigare în memorie

SUPRAFAȚĂ / VOLUM

- ▶ Suprafață (apăsare 1 dată)
- ▶ Volum (apăsare de 2 ori)
- ▶ Măsurare indirectă de suprafață (apăsare 3ori / 4ori)

CONECTARE

- ▶ Pornire
- ▶ Oprire (apăsare 2 sec)
- ▶ Anulare

SCĂDERE

- ▶ Scădere valoare
- ▶ Navigare în memorie

PITAGORA

- ▶ Pitagora 1 (apăsare 1 dată)
- ▶ Pitagora 2 (apăsare 2ori)
- ▶ Pitagora 3 (apăsare 3ori)

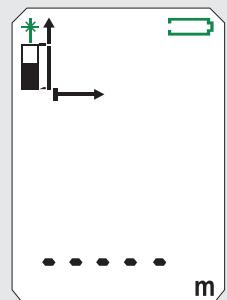
SCHIMBARE NIVEL DE MĂSURARE

- ▶ În față
- ▶ În spate
- ▶ Știft colțuri

MEMORIE

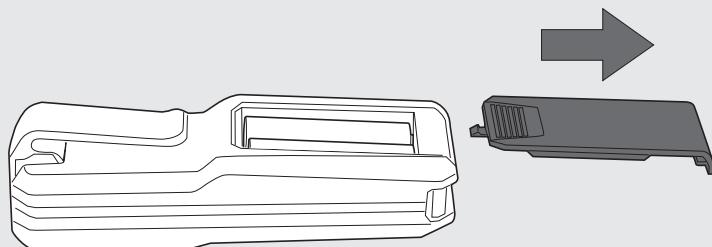
- ▶ Timer 3-15 sec (apăsare 1 dată)
- ▶ Memorie 1-20 (apăsare 1 dată x 2 sec)
- ▶ Navigare în memorie cu tastele +/-

ÎNLOCUIRE BATERII

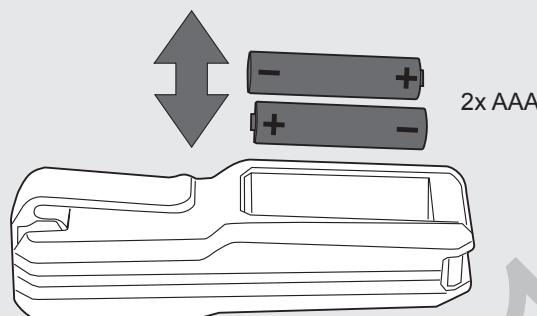


Când pălpăie simbolul trebuie schimba bateriile.

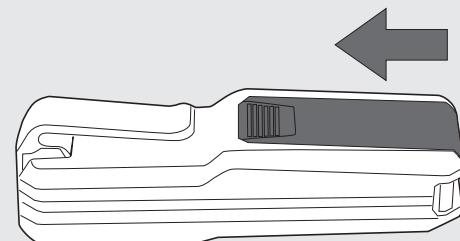
1



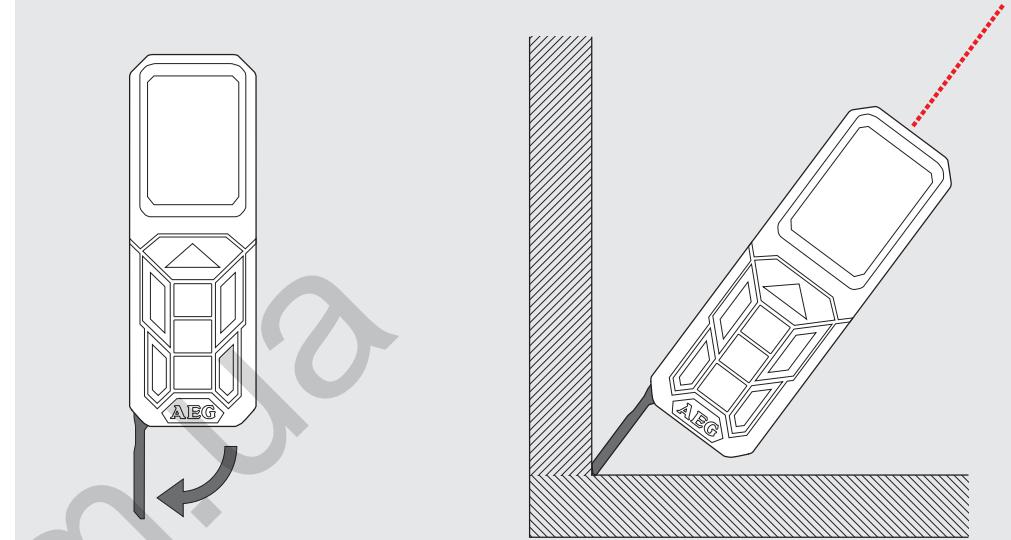
2



3

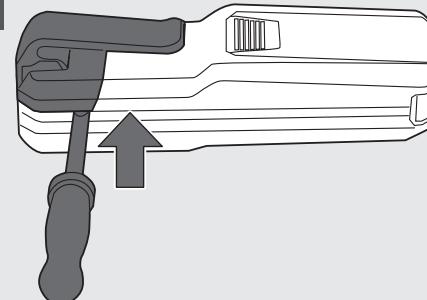


ȘTIIF COLȚURI

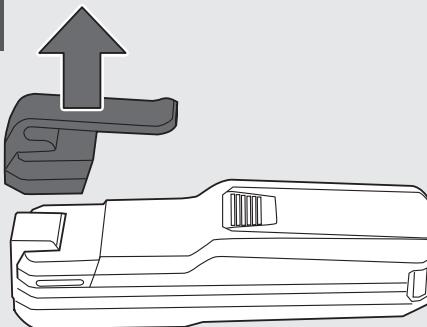


CLEMĂ DE CUREA

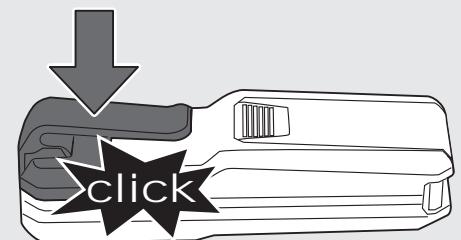
1



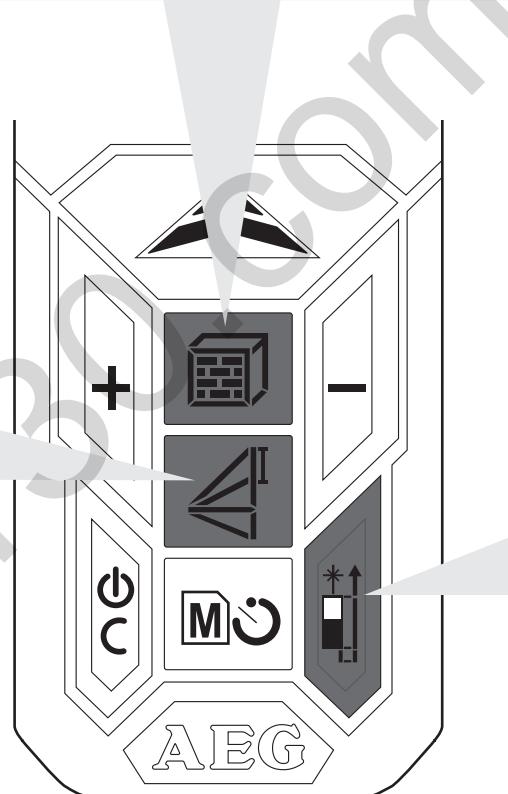
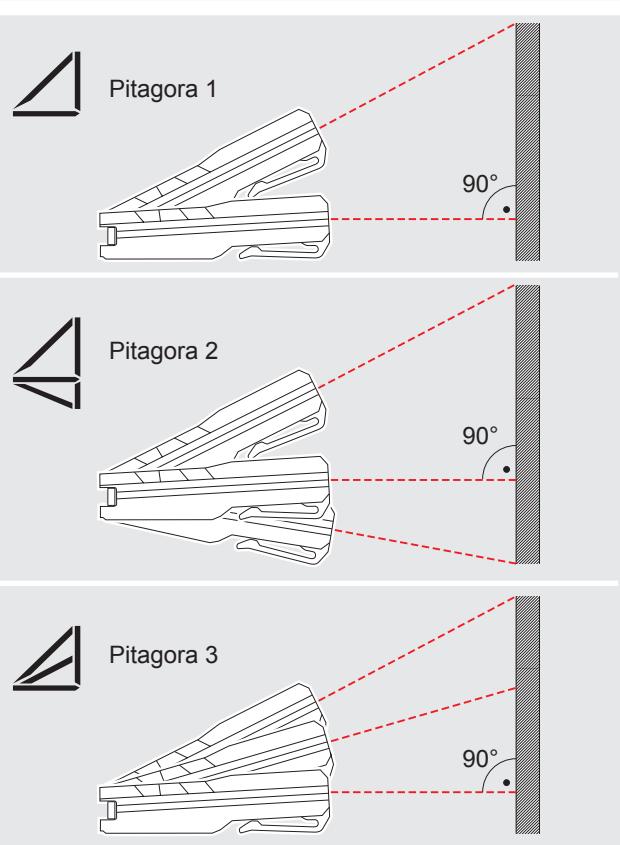
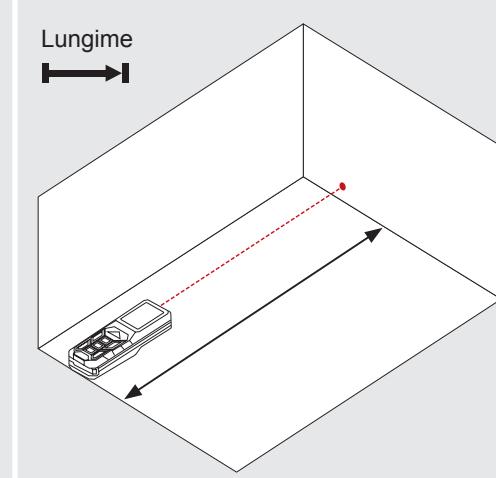
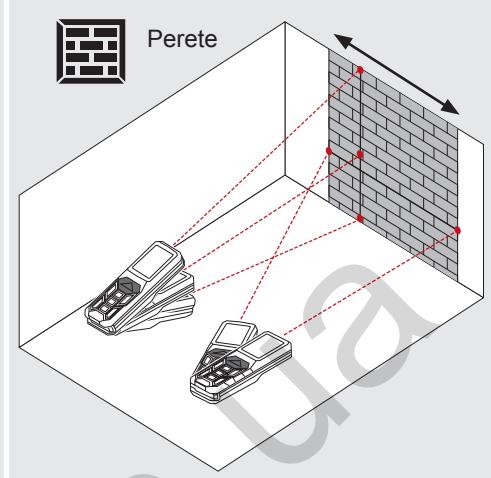
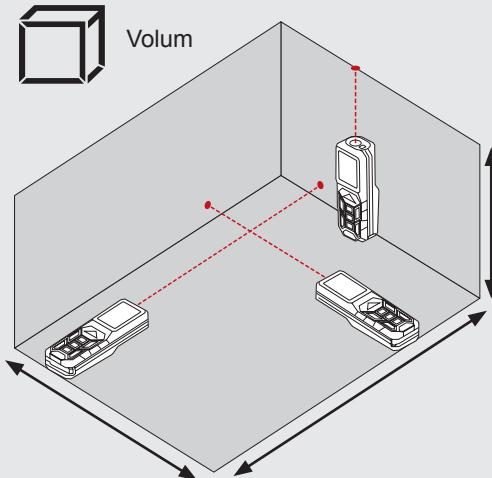
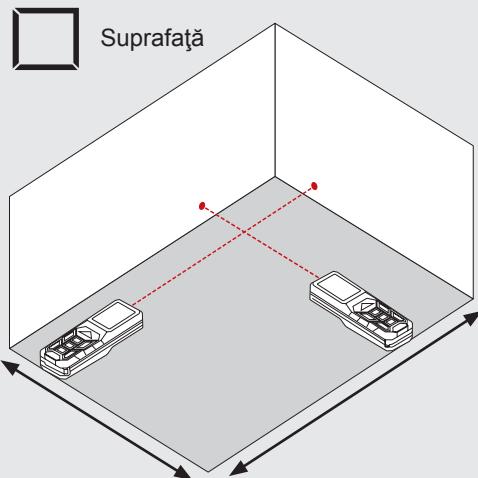
2



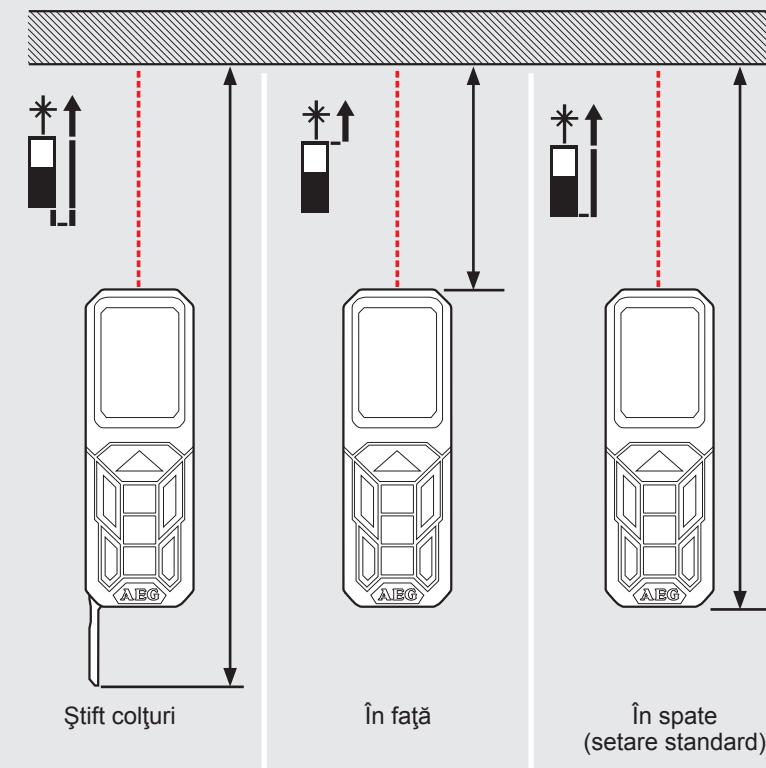
3



TASTE FUNCȚIONALE, PITAGORA, NIVEL DE MĂSURARE

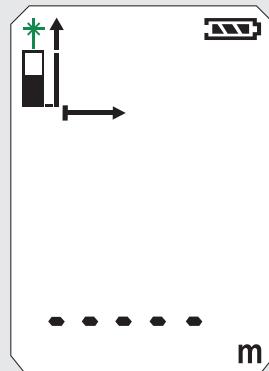


Nivel de măsurare

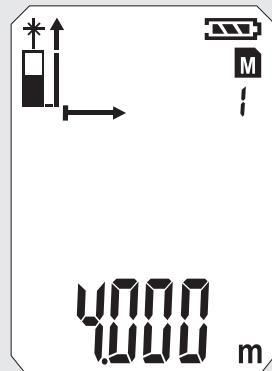


MĂSURARE SIMPLĂ DE LUNGIME

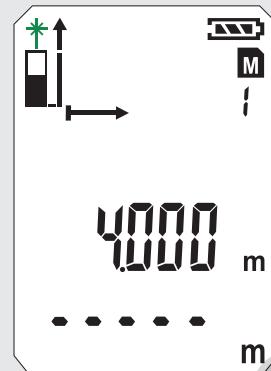
0



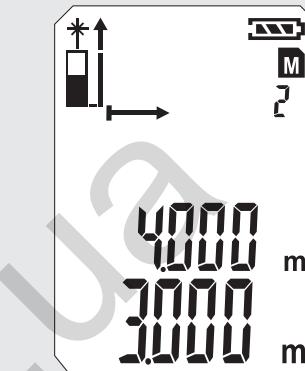
1



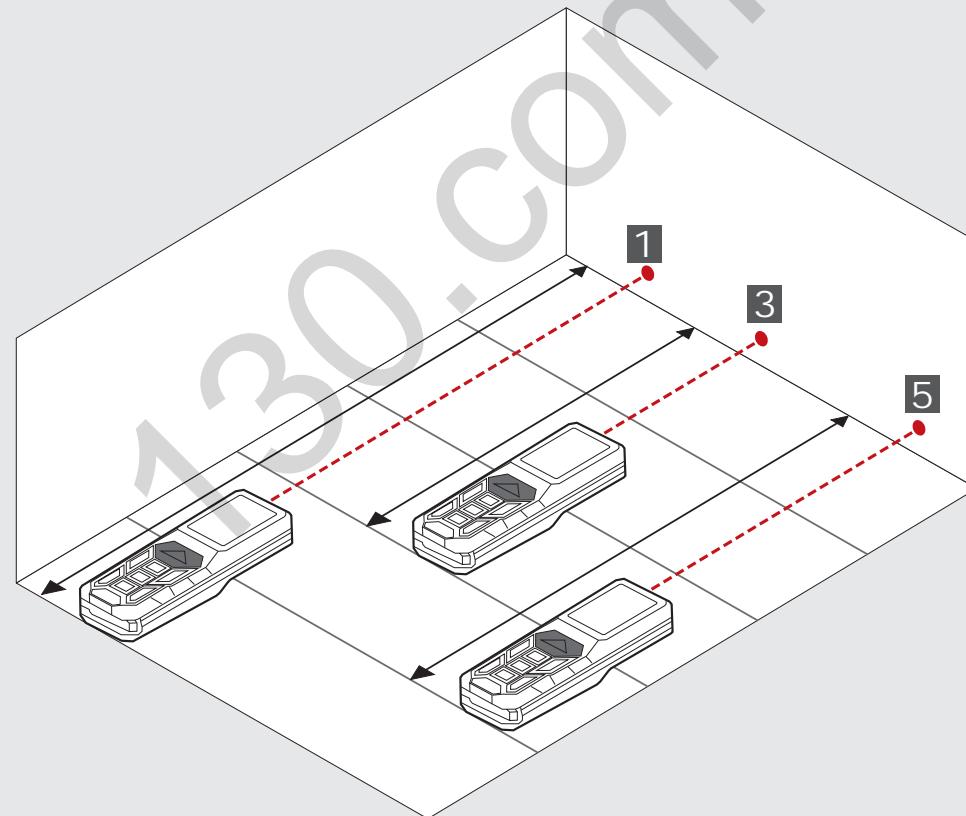
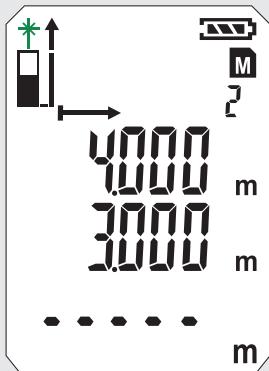
2



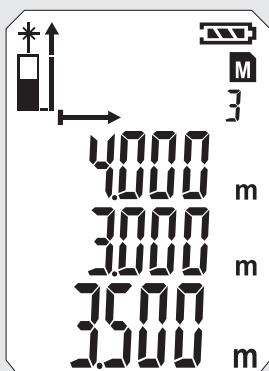
3



4

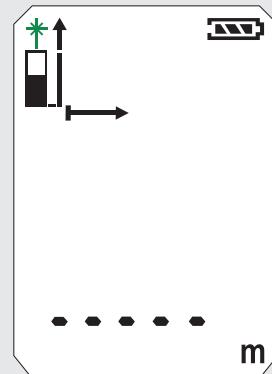


5

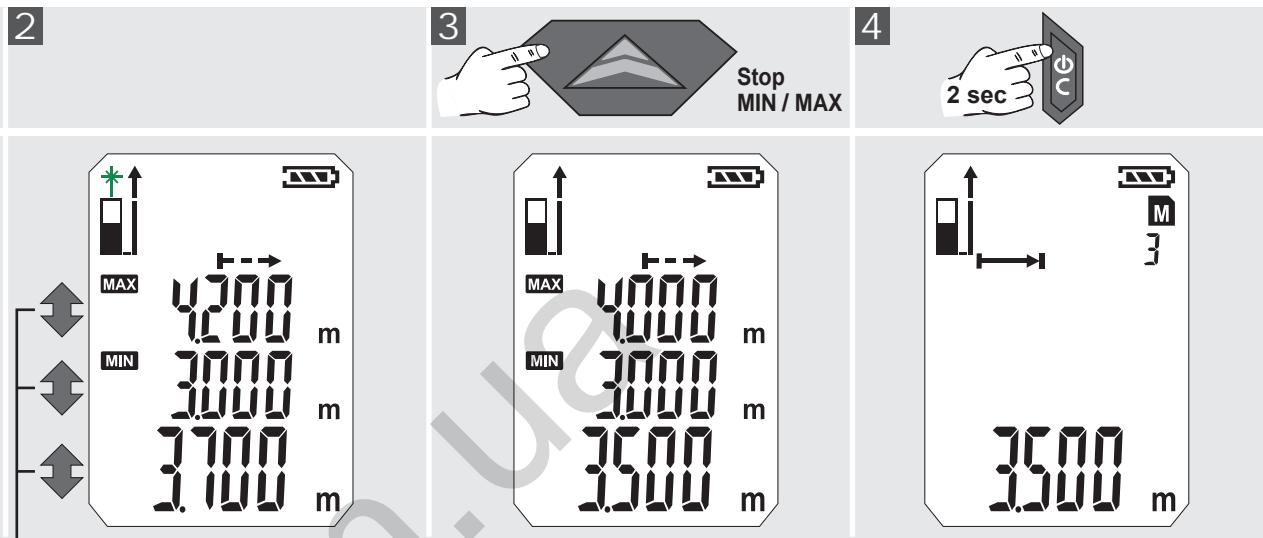
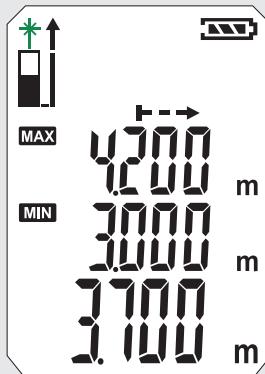


MĂSURARE CONTINUĂ / MĂSURARE MINIM-MAXIM

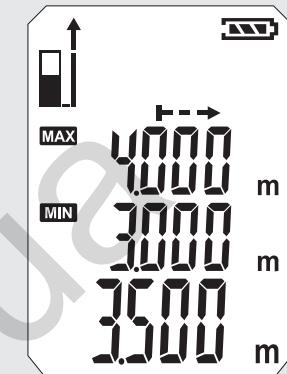
0



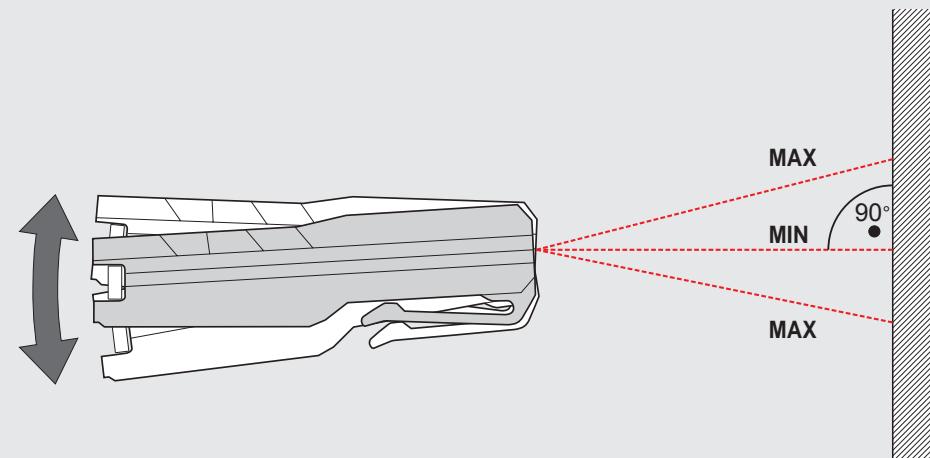
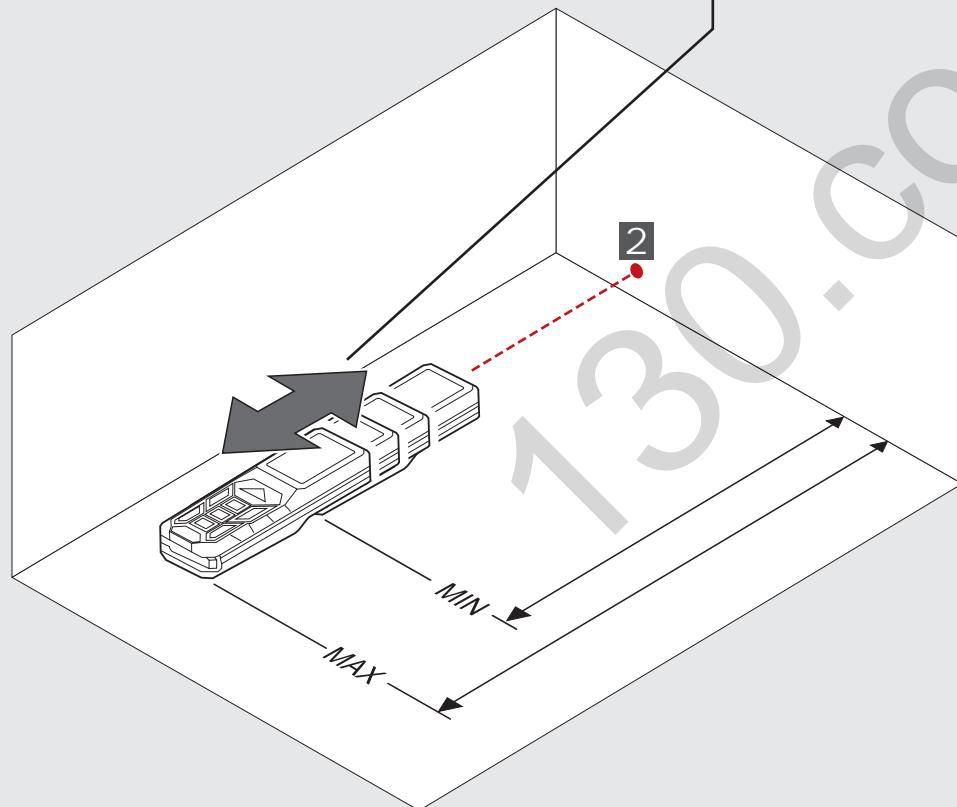
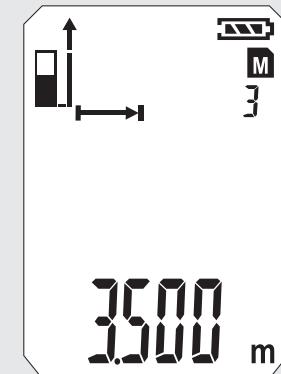
2



3

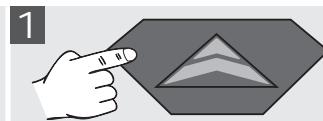


4

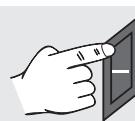


MĂSURARE CU ADITIE / SCĂDERE

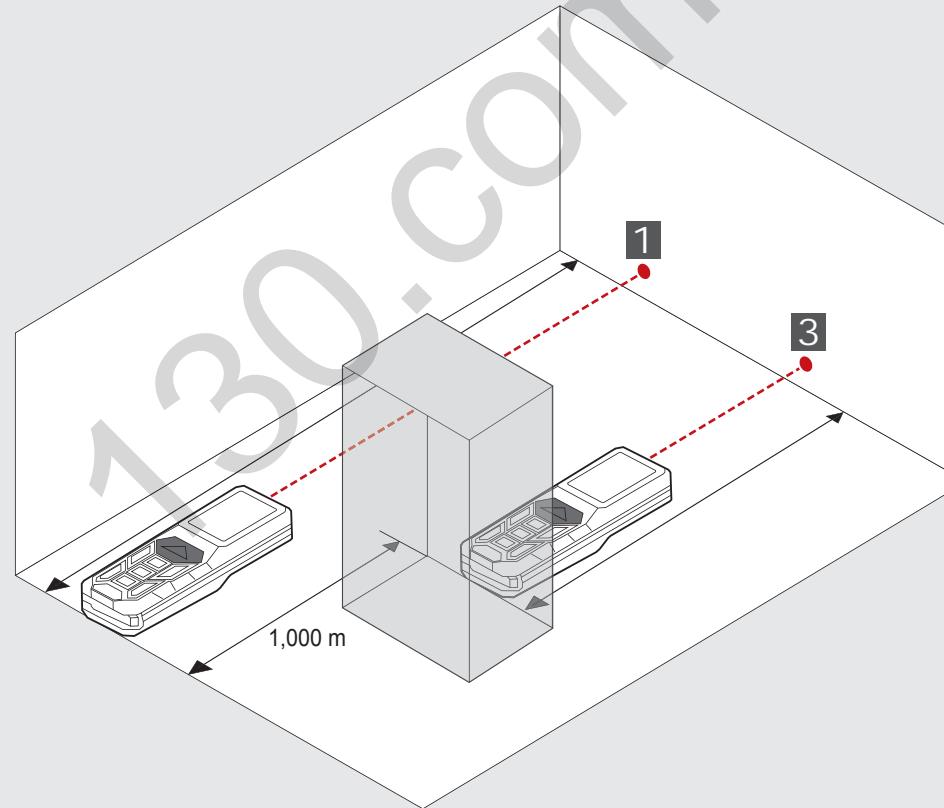
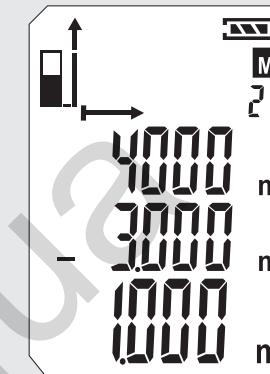
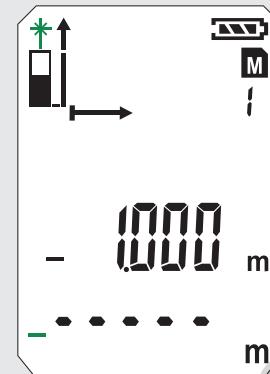
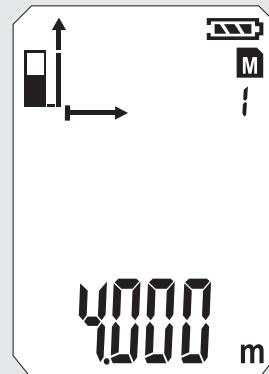
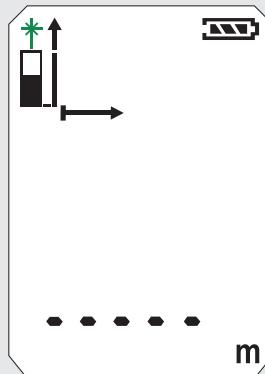
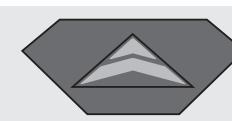
0



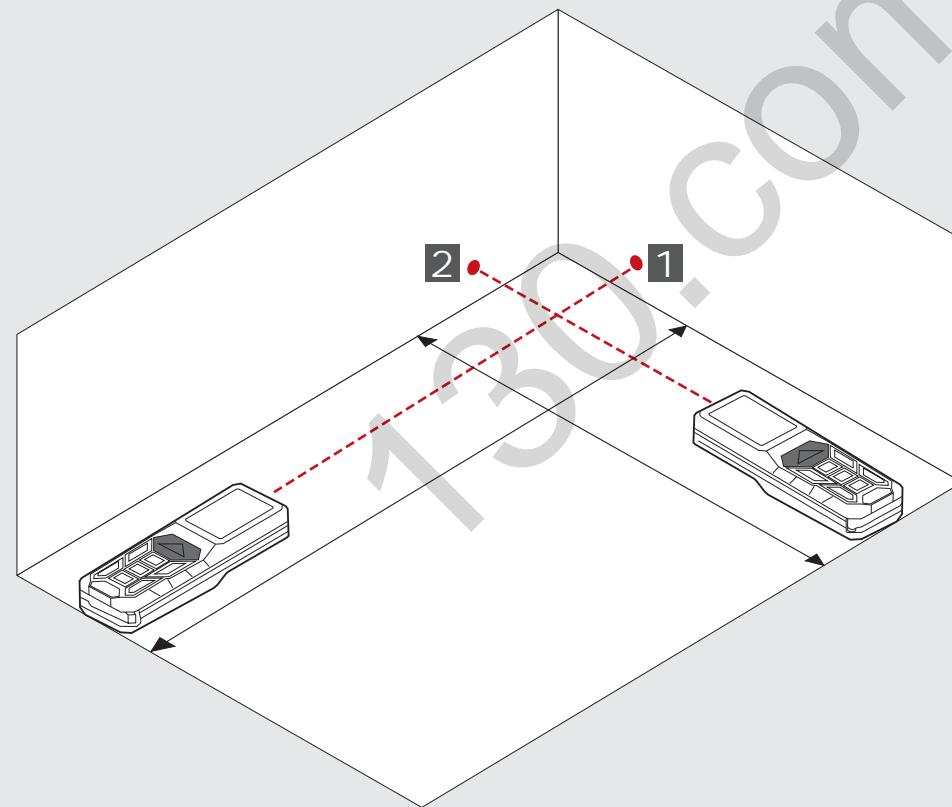
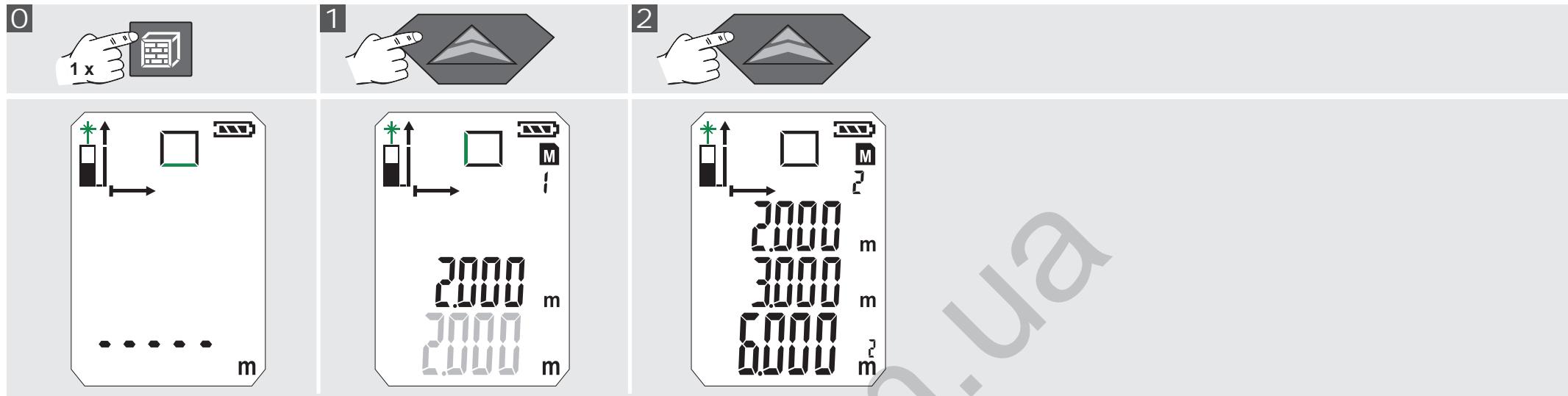
2



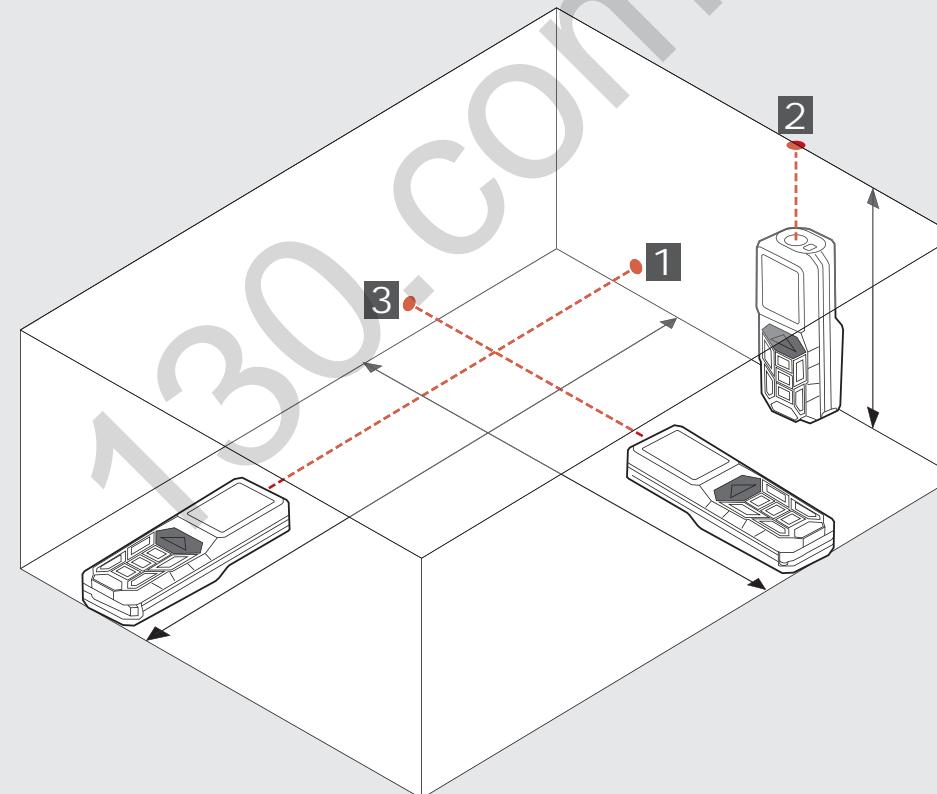
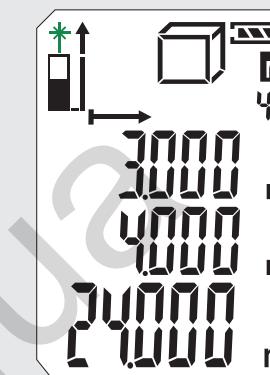
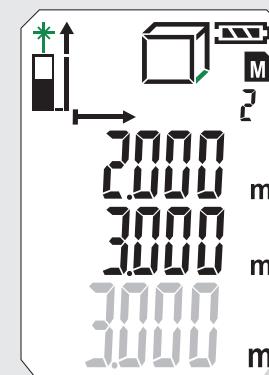
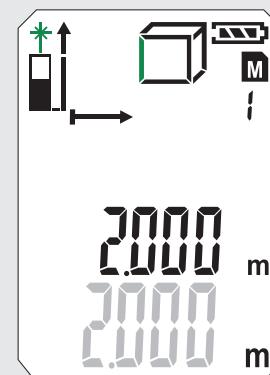
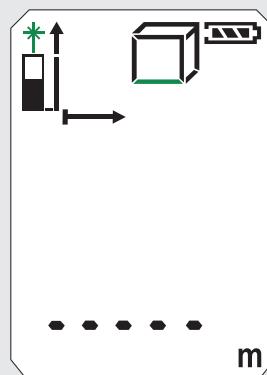
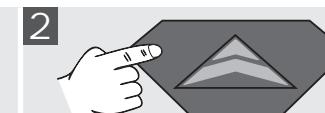
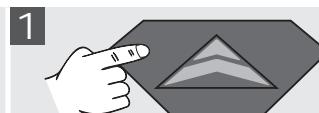
3



MĂSURARE SUPRAFAȚĂ



MĂSURARE VOLUM



MĂSURARE INDIRECTĂ (PITAGORA 1)

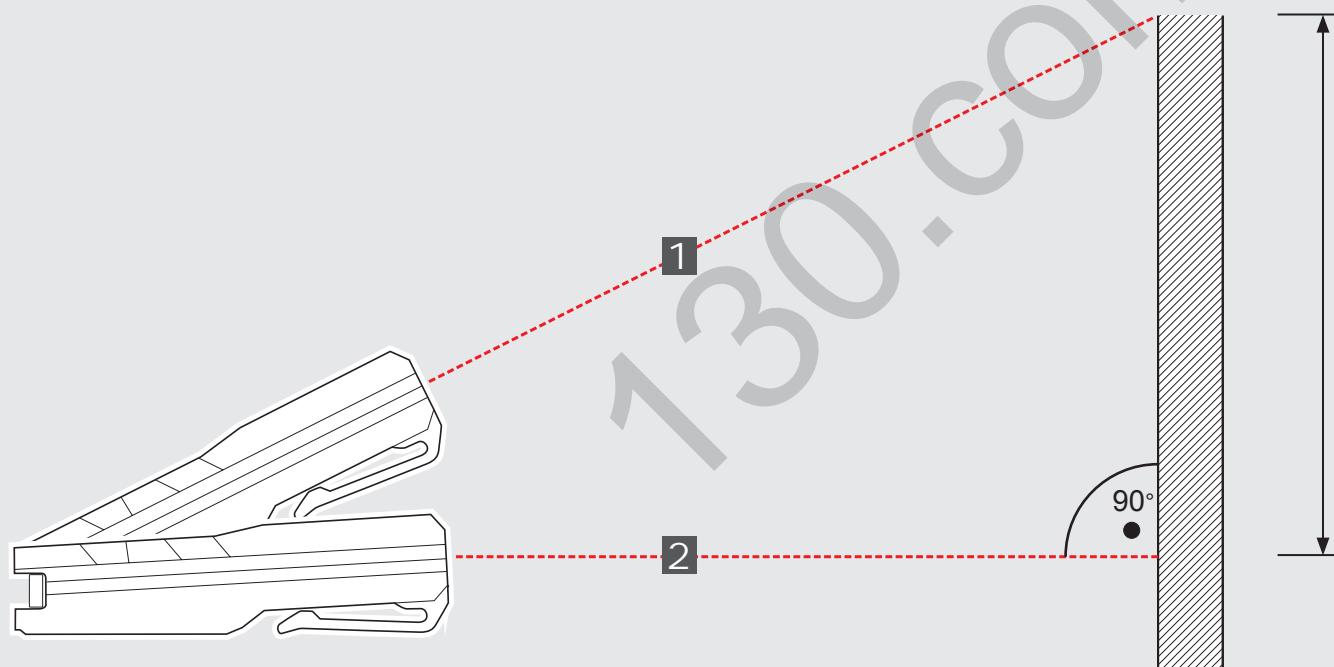
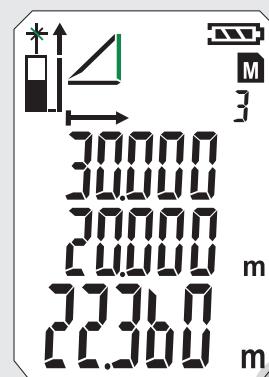
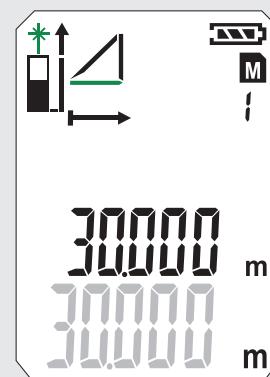
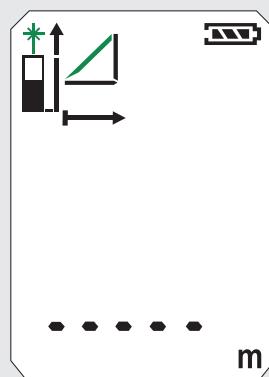
0



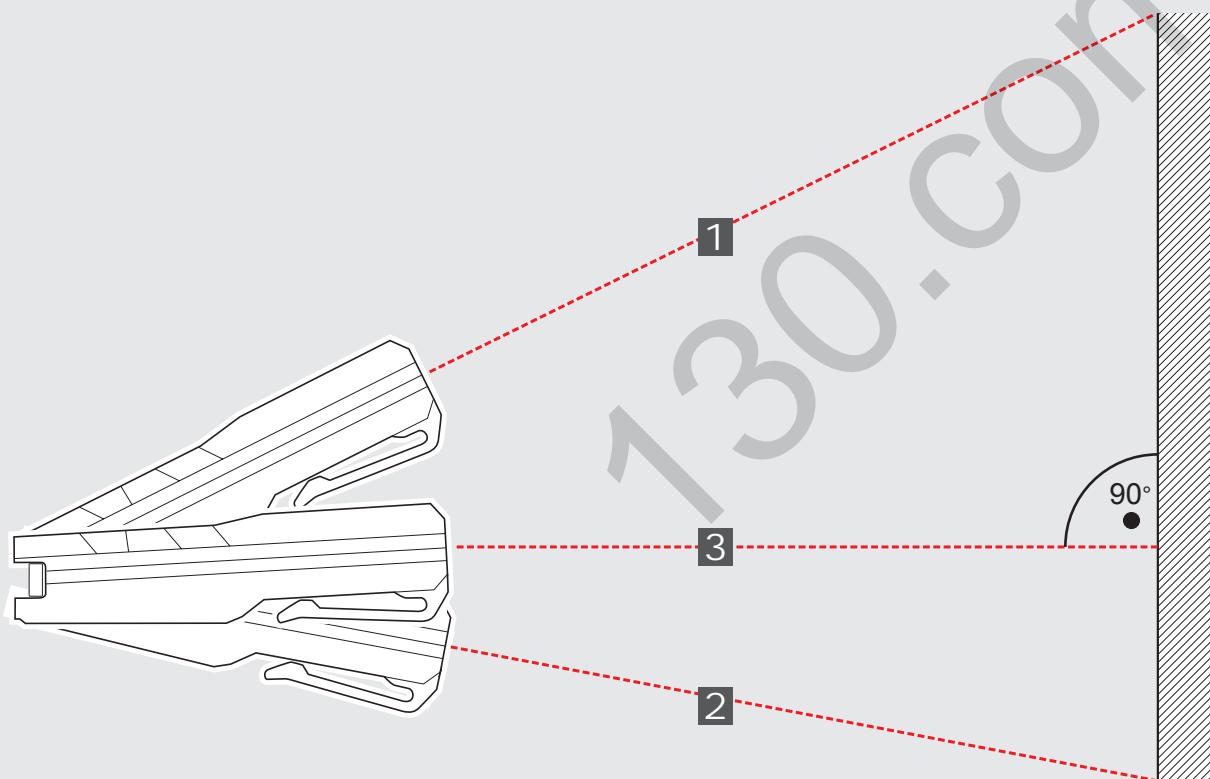
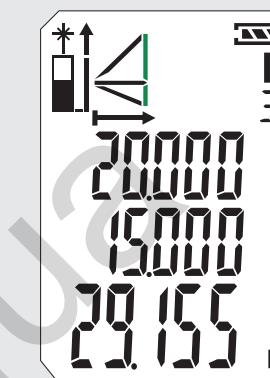
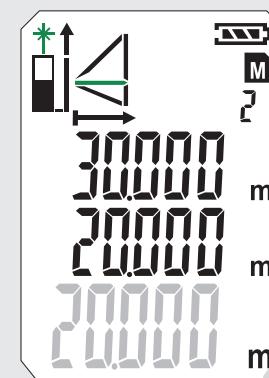
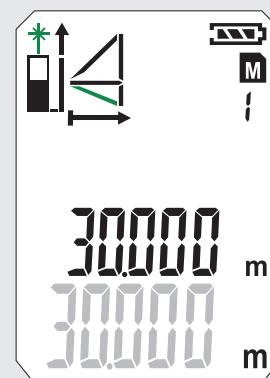
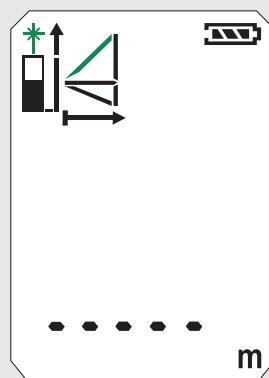
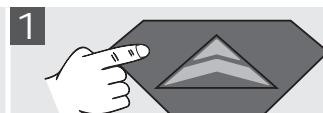
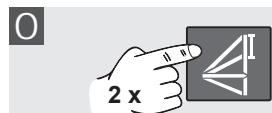
1



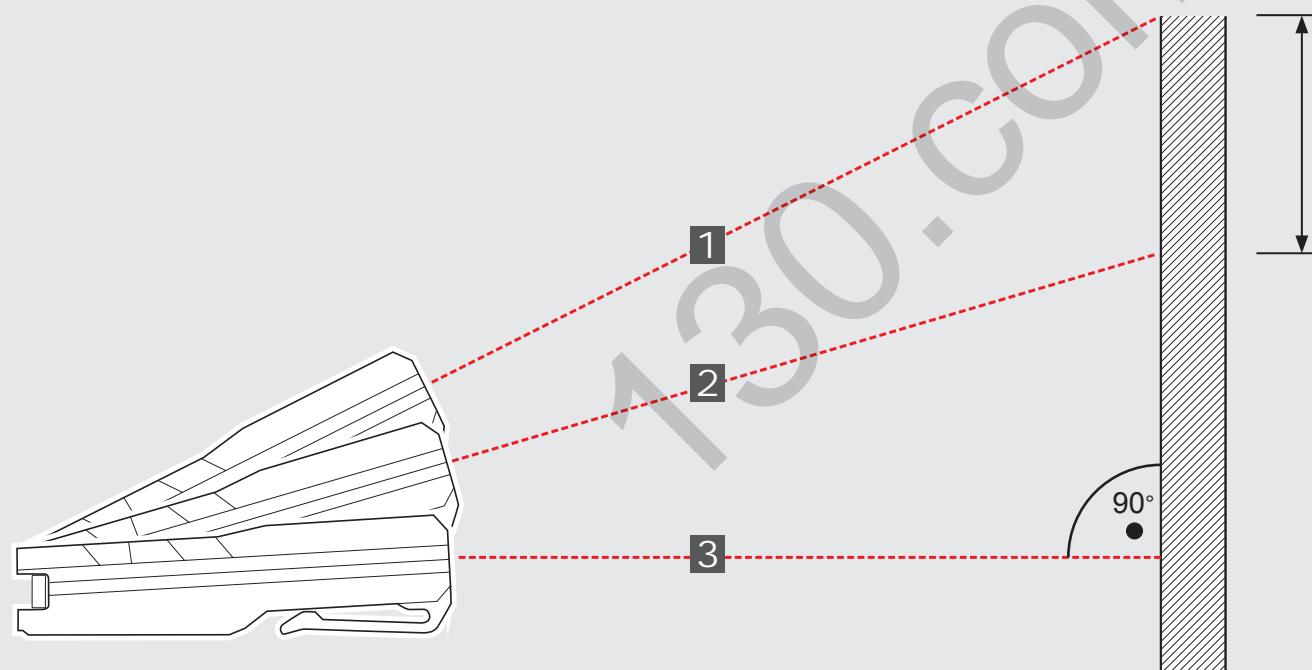
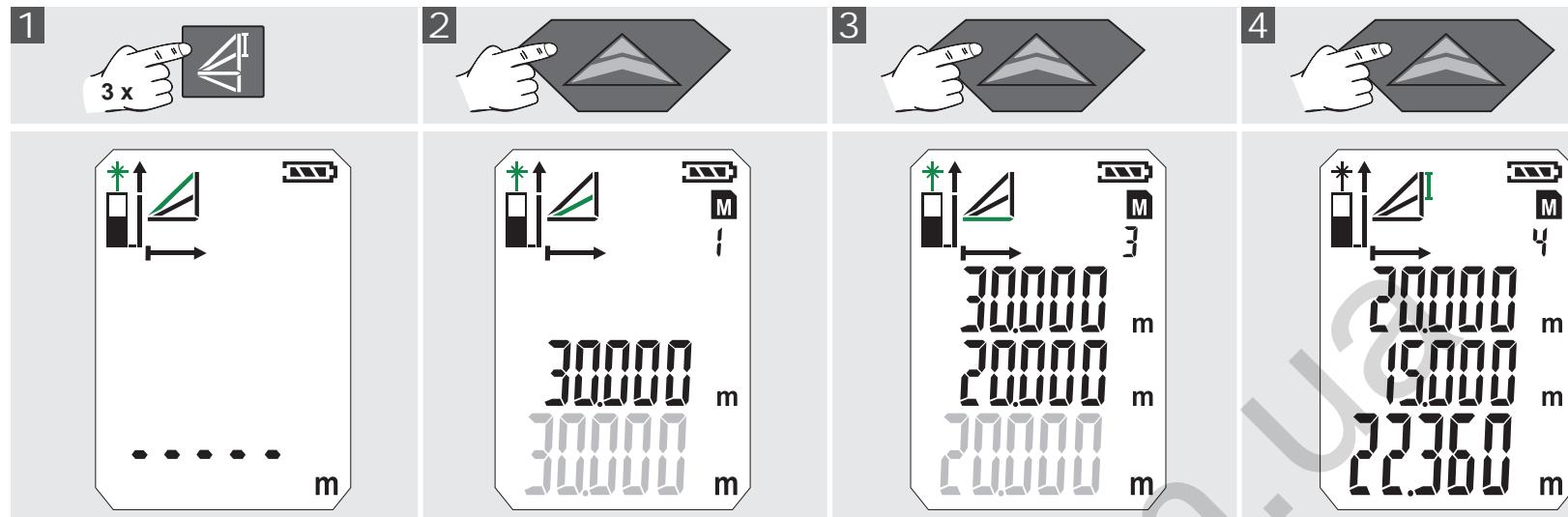
2



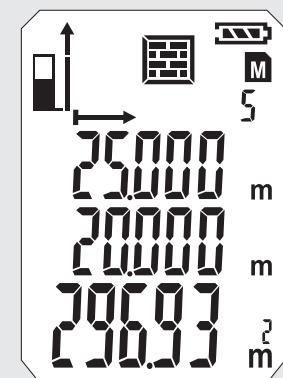
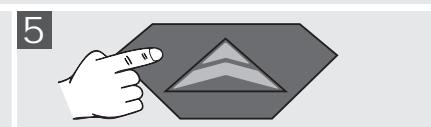
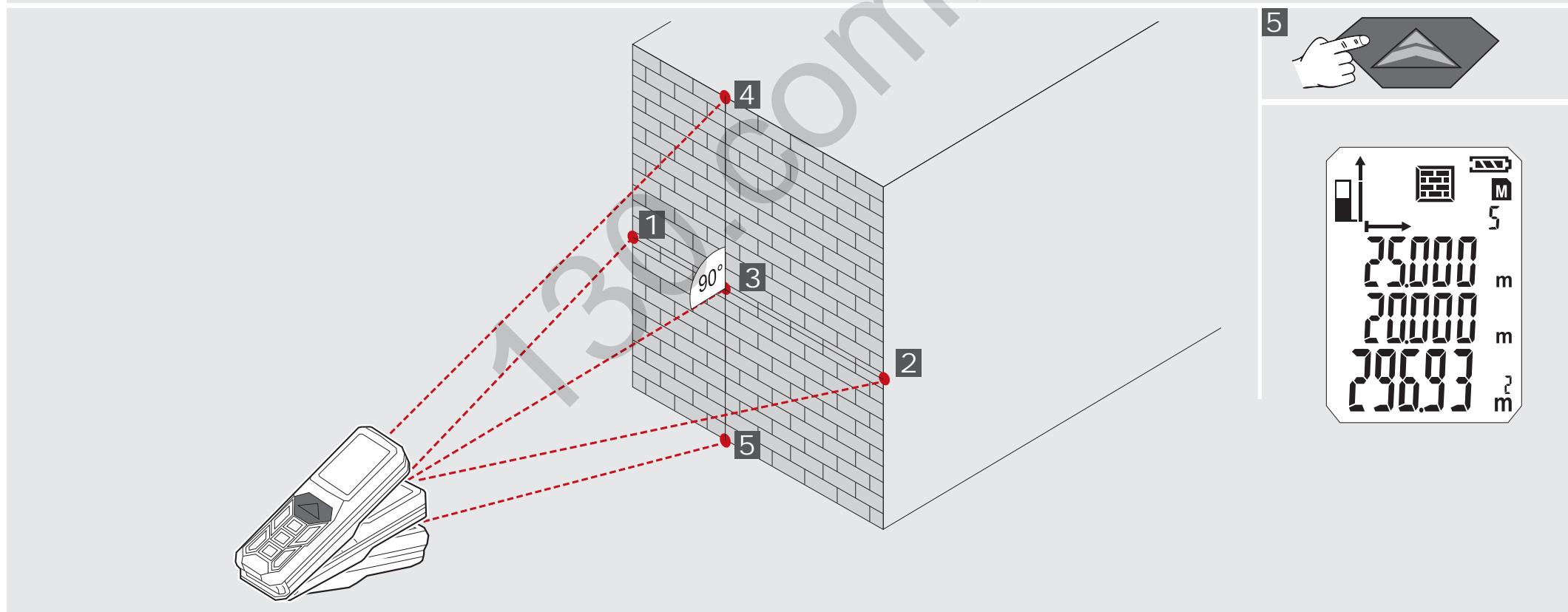
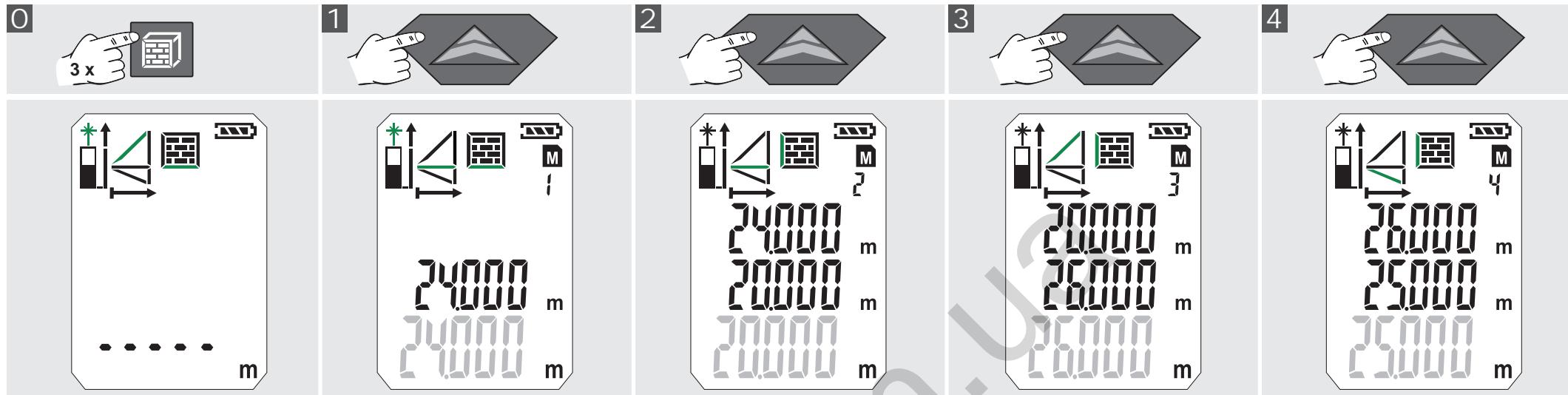
MĂSURARE INDIRECTĂ (PITAGORA 2)



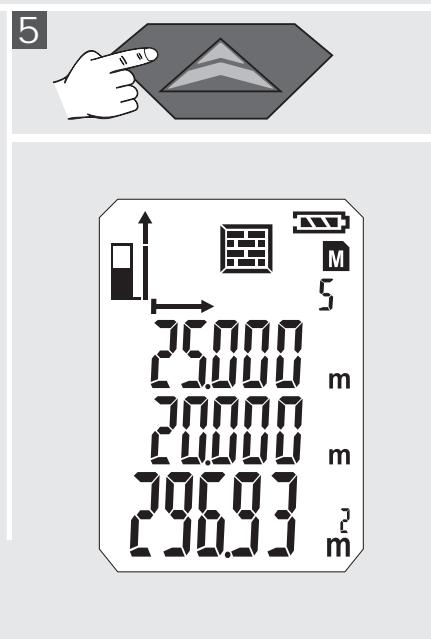
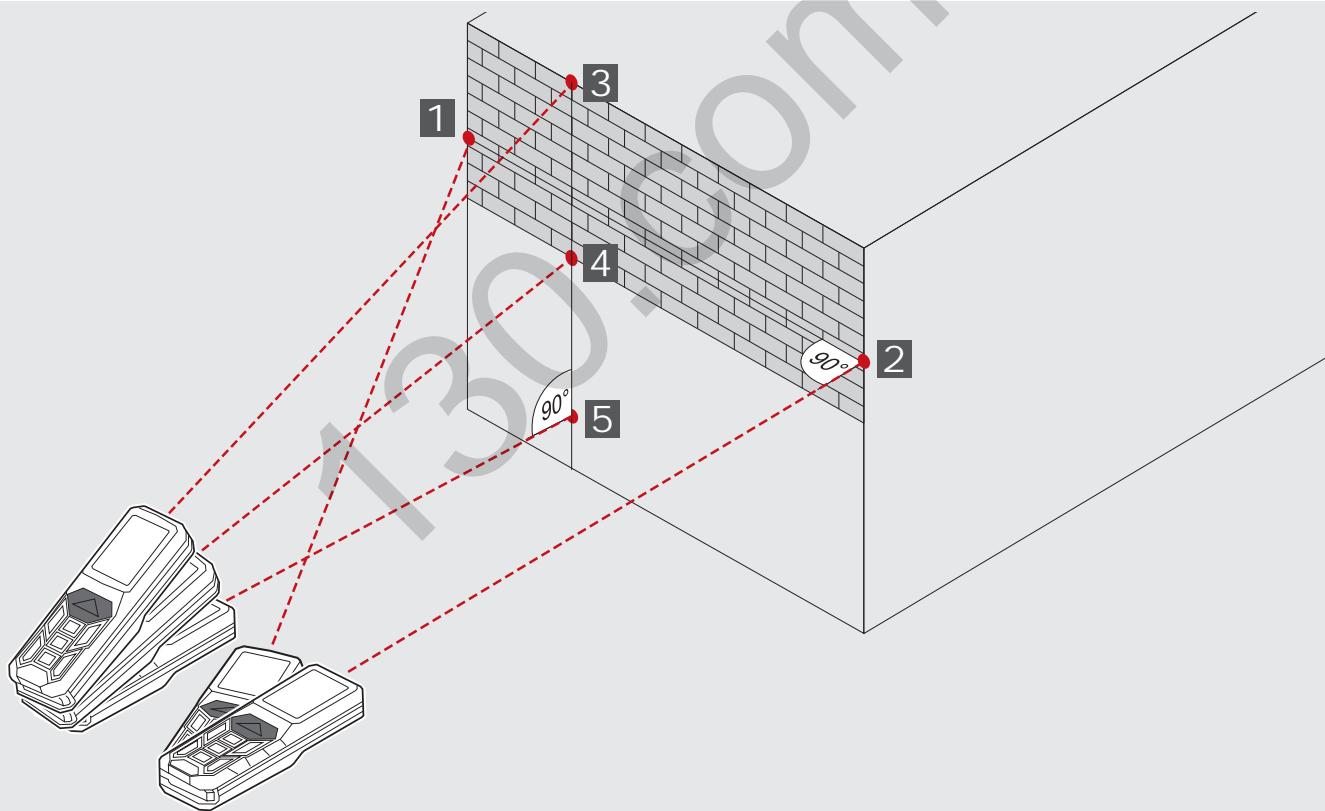
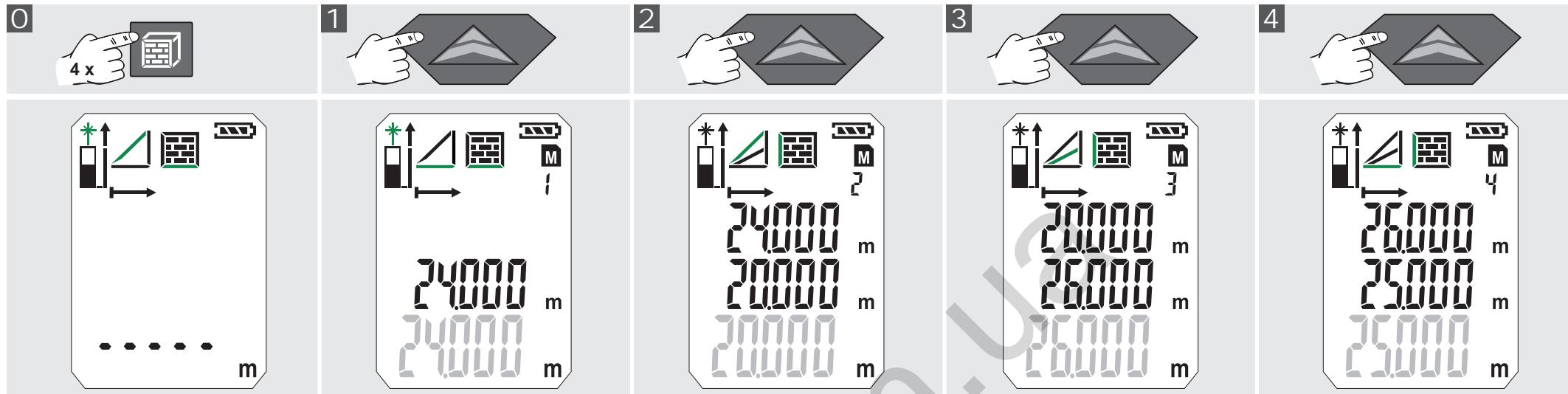
MĂSURARE INDIRECTĂ (PITAGORA 3)



MĂSURARE SUPRAFAȚĂ PERETE (SCENARIU 1)



MĂSURARE SUPRAFAȚĂ PERETE (SCENARIU 2)



TIMER

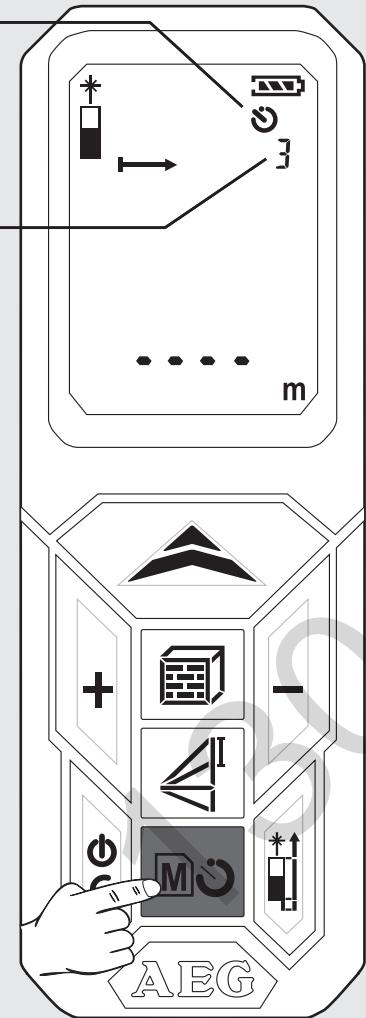
Cu timer-ul se poate amâna pornirea măsurătorii, de ex. pentru a poziționa un element constructiv în fasciculul de măsurare.

Apăsați tasta

- Apare simbolul
- Prin apăsarea tastei se poate regla timer-ul între 3 și 15 sec.

Apăsați tasta

- Numărătoarea inversă a secundelor până la măsurare
- La 0 se pornește măsurătoarea.



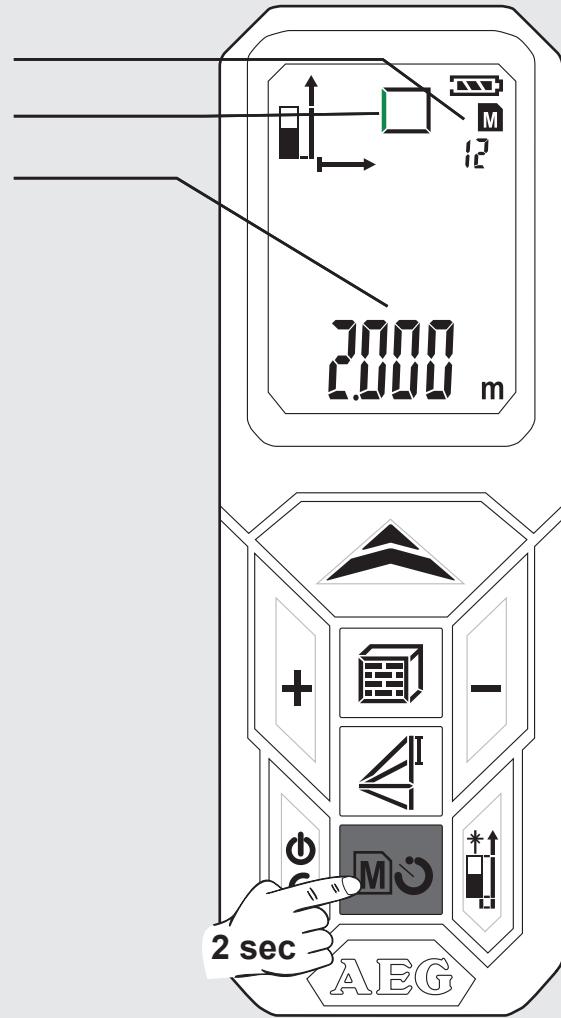
MEMORIA

Valorile sunt stocate continuu și automat în memorie.

Valorile stocate pot fi apelate cu tasta .

Apăsați tasta 2 sec

- Apare simbolul și numărul memoriei.
- Se afișează mărimea măsurată aferentă.
- Valoarea salvată este afișată în rândul principal.
- Navigați cu tastele +/-



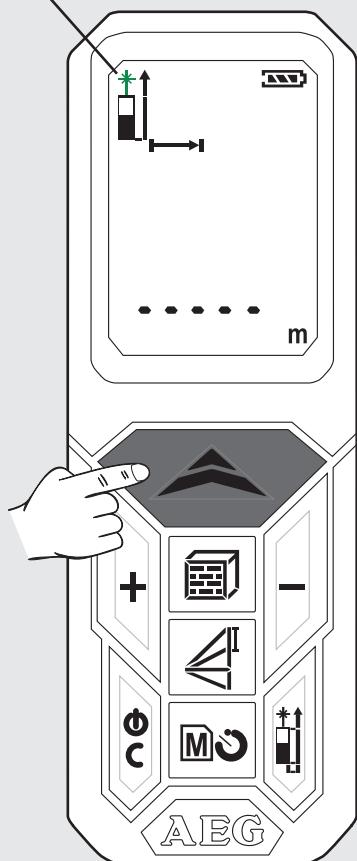
DESCRIEREA DE BAZĂ PE UN EXEMPLU DE MĂSURARE A SUPRAFETEI (1)

1 Porniți

Apăsați tasta .

Atenție! Fascicul laser pornit!
A nu se orienta înspre persoane!

Simbolul laser pâlpâie
(pâlpâire reprezentată cu verde).

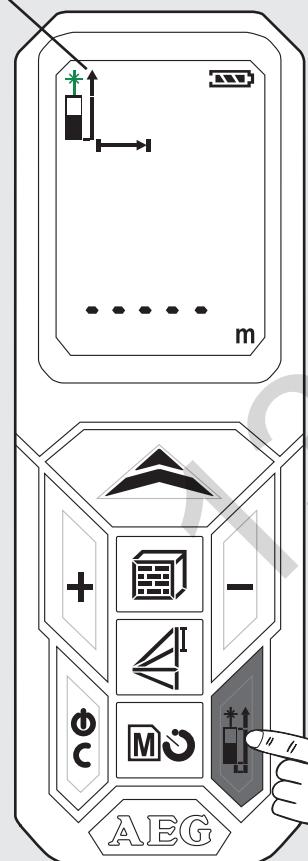


2 Selectați nivelul de măsurare

Setare standard după pornire: în spate

- * Apăsați 1 dată -> řift colțuri
- Apăsați de 2 ori -> în față
- Apăsați de 3 ori -> în spate

Se afișează simbolul



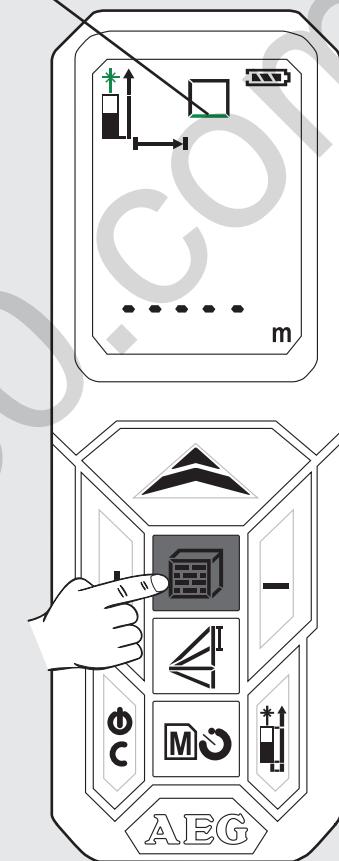
3 Selectați funcția

După pornire, aparatul e întotdeauna pe măsurare de suprafață.

Apăsați 1 dată  - Măsurare suprafață

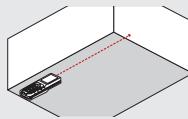
- Apare simbolul
Mărimea de măsurare pâlpâie
(pâlpâire reprezentată cu verde)

Valoarea măsurată apare pentru scurt timp în rândul principal.
Valoarea măsurată sare după cca. 1 sec. în rândul de deasupra.
Valoarea măsurată se stochează în memorie sub un număr curent.
Pâlpâie a două mărime de măsurare.
Aparatul este pregătit pentru măsurarea celei de-a doua valori.



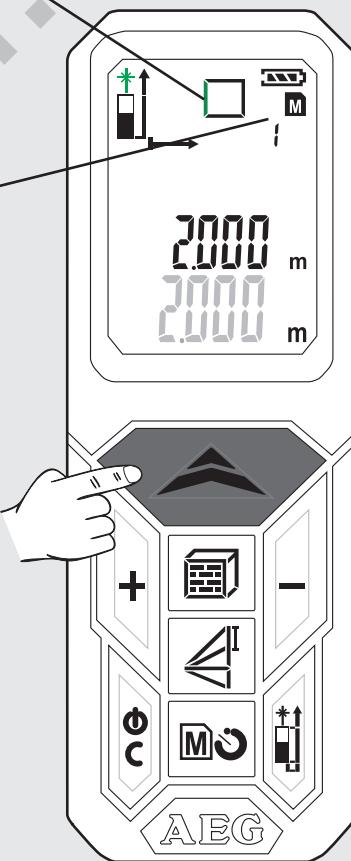
4 Măsurare lungime

Aparatul se aduce la nivel și se apasă tasta .



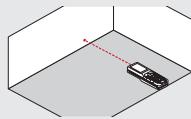
- Valoarea măsurată apare pentru scurt timp în rândul principal.
- Valoarea măsurată sare după cca. 1 sec. în rândul de deasupra.

Valoarea măsurată se stochează în memorie sub un număr curent.
Pâlpâie a două mărime de măsurare.
Aparatul este pregătit pentru măsurarea celei de-a doua valori.



5 Măsurare lățime

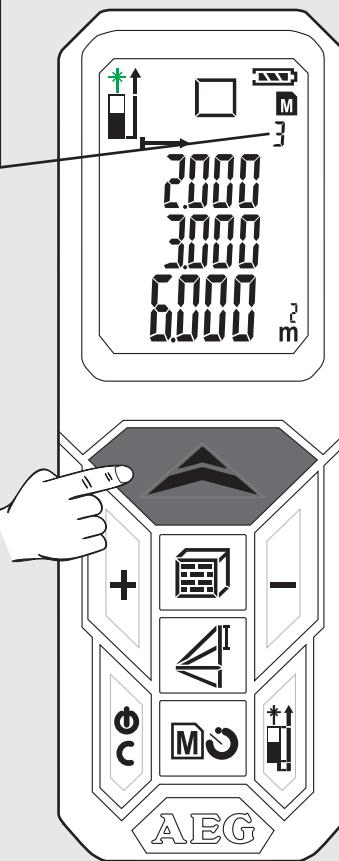
Aparatul se aduce la nivel și se apasă tasta .



- Valoarea măsurată apare pentru scurt timp în rândul principal.

- Valoarea măsurată sare după cca. 1 sec. în rândul de deasupra.

Valoarea măsurată se stochează în memorie sub un număr curent.
- Rezultatul este afișat în rândul principal și se stochează în memorie sub un număr curent.



DESCRIEREA DE BAZĂ PE UN EXEMPLU DE MĂSURARE A SUPRAFETEI (2)

6 Vizualizarea valorilor salvate

Apăsați 2 sec. tasta **M**.

Apăsați tasta + sau -

7 Părăsire memorie

Apăsați tasta **∅**.

8 Deconectarea

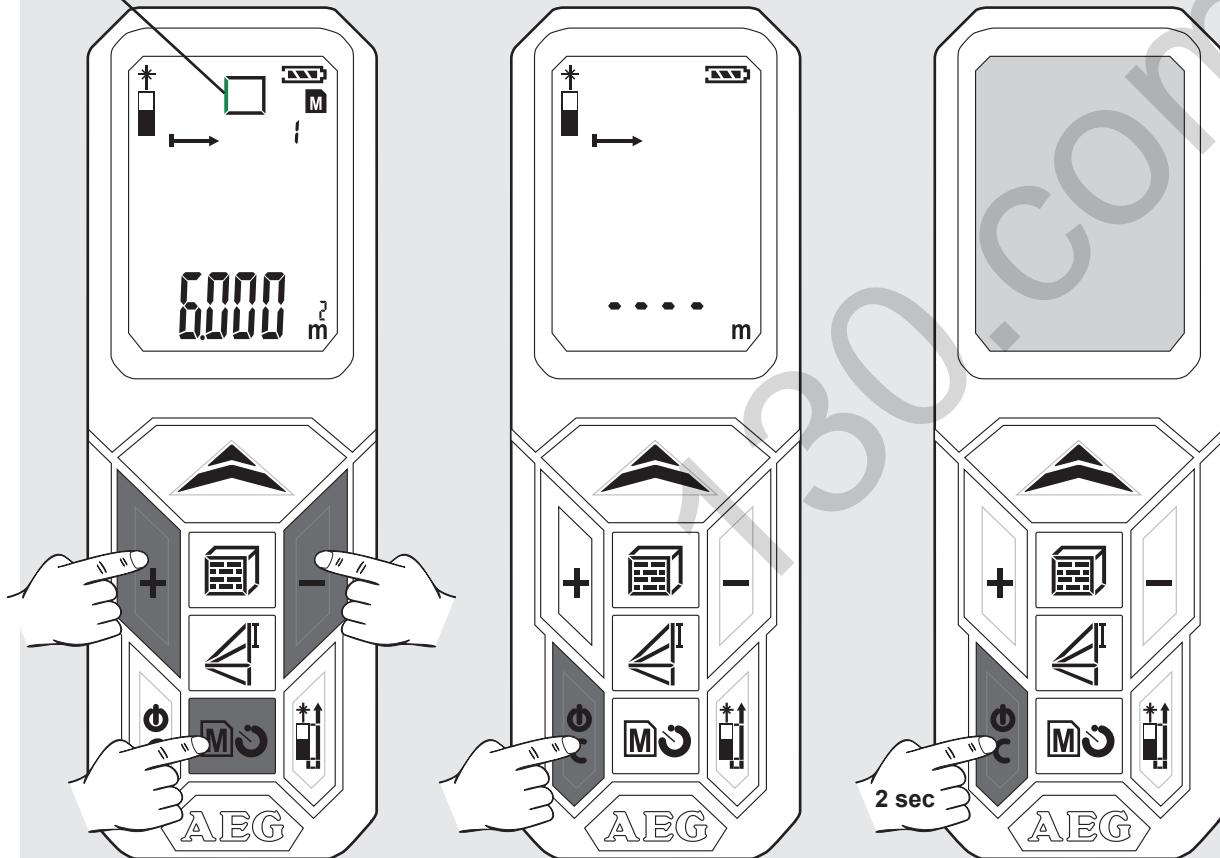
Apăsați 2 sec. tasta **∅**
(Memoria trebuie părăsită înainte).

- Valorile salvate vor fi afișate în rândul principal.

Este afișat simbolul aferent și pâlpâie mărimea de măsurare (pâlpâire reprezentată cu verde).

- Aparatul se oprește.

- Dacă timp de 3 minute nu se apasă nicio tastă, aparatul se deconectează automat.



СОДРЖИНА

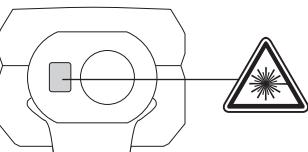
Важни напомени за безбедност.....	1
Технички податоци.....	2
Специфицирани услови на употреба	2
Табела со кодови на грешките.....	2
Преглед.....	3
Менување на батерија.....	4
Игличка за аголи	4
Држач на каишот	4
Копче за функции, Питагора, мерно ниво	5
Едноставно доделувачко мерене	6
Континуирано мерене / Мерене минимум-максимум	7
Мерене на додавање / одземање.....	8
Површинско мерене	9
Мерене на волуменот	10
Индиректно мерене (Питагора 1)	11
Индиректно мерене (Питагора 2)	12
Индиректно мерене (Питагора 3)	13
Мерене на површината на сидот (сценарио 1).....	14
Мерене на површината на сидот (сценарио 2).....	15
Таймер	16
Меморија	16
Основни начини на функционирање со примерот на површинско мерене (1).....	17
Основен начин на функционирање со примерот на површинско мерене (2).....	18

ВАЖНИ НАПОМЕНИ ЗА БЕЗБЕДНОСТ



Почнете да го употребувате производот дури откако ќе ги прочитате напомените за безбедност и упатството за употреба на приложеното ЦД.

Класификација на ласерите



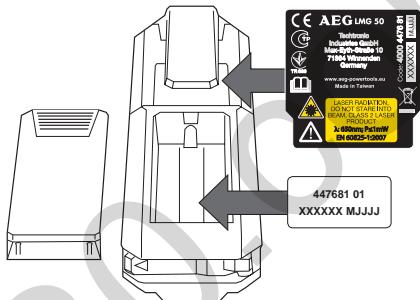
ПРЕДУПРЕДУВАЊЕ:

Производот одговара на ласерската класа 2 според EN 60825-1:2007.



Натпис

Пред првото пуштање во употреба поставете ја доставената лепенка на јазикот на вашата земја врз текстот на английски јазик што се наоѓа на плочката со карактеристики.



Предупредување:

Избегнувајте директен контакт со очите. Ласерскиот зрак може да ги заслепи очите и да доведе до краткорочно слепило.

Не погледнувајте во ласерскиот зрак и зракот не го усмерувајте непотребно према други лица.

Не заслепувајте други луѓе со светлината.

Предупредување:

Ласерскиот апарат не смее да се употребува во близина на деца ниту пак на деца смее да им се дозволи да го користат ласерскиот апарат.

Внимание! Рефлектирачка површина би можела да го врати ласерскиот зрак назад до корисникот или до други лица.

Одржувајте прикладно безбедносно растојание кон подвижните делови.

Редовните контролни мерења мора да се спроведуваат, посебно пред, за време и после важни мерни задачи.

Внимавајте на фалични мерења во случај на употреба на дефектен производ, после негово паѓање на земја или некоја друга недозволива примена односно измена на производот.

Внимание! Запознајте се добро со елементите на ракување и со уредната употреба на апаратот.

Ласерскиот мерен апарат има ограничено подрачје на употреба. (Види во делот "Технички податоци"). Секакви обиди да се вршат мерења вон максималното и минималното подрачје доведуваат до непрецизности. Примената во случај на лоши услови како што е на пример премногу жешко, премногу студено, многу силна сончева светлина, дожд, снег, магла или други услови кои што го ограничуваат видното поле, може да доведе до непрецизни мерења.

Кога ласерскиот мерен апарат од топла околина се донесува во студена околина (или обратно), почекајте додека апаратот да се прилагоди на температурата на новата околина.

Ласерскиот мерен апарат чувајте го секогаш во простории, а апаратот чувајте го од потреси, вибрации или екстремни температури.

Ласерскиот мерен апарат заштитете го од прав, влага и висока влажност на воздухот. Таквите услови можат да ги уништат внатрешните делови на апаратот или пак да извршат влијание врз прецизноста.

Не употребувајте агресивни средства за чистење или средства за растворување. Чистете исклучиво со чиста, мека крпа.

Избегнувајте силни удари на ласерскиот мерен апарат или негово паѓање. Прецизноста на апаратот треба веднаш да се провери доколку истиот Ви паднал или доколку бил изложен на друг вид механичко оптоварување.

Потребните поправки на овој ласерски апарат смеат да се изведуваат само од страна на авторизиран стручен персонал.

Производот не смее да се примени во околина во која што постои опасност од експлозии или е агресивна сама по себе.

За пополнување на батеријата треба да се употребуваат исклучиво апаратите за пополнување препорачани од страна на производителот.

Празни батерии не смеат да се фрлаат заедно со домашниот отпад. Потрошени батерии заради целта на нивно отстранување, а притоа запазувајќи ја околината во склад со националните и локалните прописи, се предаваат на за таа намена предвидените собирни места. Апаратот не смее да се фрли во домашниот отпад. Апаратот мора стручно да се отстрани. Притоа обратете внимание на прописите за фрлање кои што се однесуваат на конкретната земја. Обратете се до местните служби или до Вашите продавачи за да добиете информации во врска со фрлањето на овој отпад.



ТЕХНИЧКИ ПОДАТОЦИ

Заштитна класа	IP54 (заштитено од прав и вода што прска)
Оптика	14 mm
Средишна точка	35 mm
Мерно подрачје макс.	50 метри (толеранција: 55m)
Мерно подрачје мин.	0,05 метри
Апсолутна прецизност @ < 10m	± 1,5 mm (макс)
Прецизност на повторувања @ < 10m	± 1,5 mm (типично макс. 2σ)
Прецизност на повторувања @ > 10m	пораст ± 0,25 mm / метри (типично макс. 2σ)
Мерно време	0,5 секунда
Дисплеј тип	ЛЦД (22,7 mm x 31 mm)
Снабдување со струја	AAA 2x (алкална батерија)
Рок на траење на батеријата	10000 (поединечно мерење)
Лазер појдовен учинок	0,6 mW ~ 0,95 mW (Class 2, 650nm)
Големина на лазерска точка	25 x 30 mm @ 16 m (макс)
Лазерски зрак Вертикален агол	+1 степен
Лазерски зрак Хоризонтален агол	±1 степен
Автоматско исклучување на апаратот	180 секунди
Автоматско исклучување на лазерот	30 секунди
Подрачје на работна температура	-10°C to +50°C
Подрачје на температурата на складирање	-25°C to +70°C
Тежина без батерија	80 г

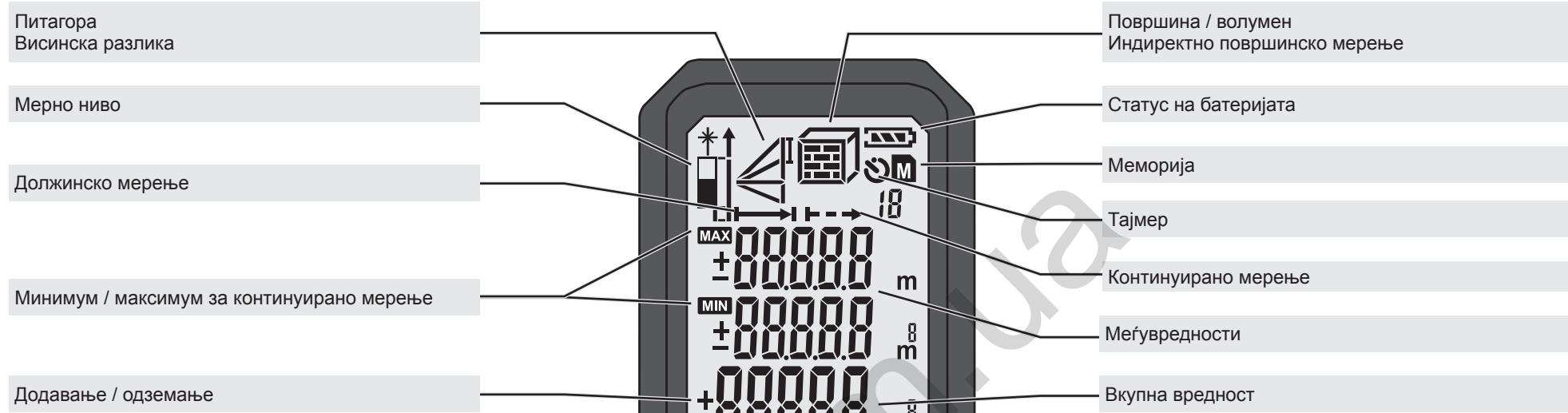
ТАБЕЛА СО КОДОВИ НА ГРЕШКИТЕ

Код	Опис	Решение
Err01	Надвор од мерното подрачје	Мерењето да се изврши во предвиденото подрачје.
Err02	Рефлектиралиот сигнал е премногу слаб	Изберете подобра површина.
Err03	Надвор од индикаторското подрачје (макс. вредност: 99.999) на пр. резултатот од површината или од волуменот се наоѓа надвор од индикаторското подрачје	Проверете дали вредностите и чекорите се исправни.
Err04	Грешка во питагорината пресметка	Проверете дали вредностите и чекорите се исправни.
Err05	Батеријата е слаба	Ставете нови батерии.
Err06	Надвор од подрачјето на работна температура	Мерењето да се спроведе во предвиденото подрачје на работна температура.
Err07	Околното осветлување е премногу светло	Затемнете го целното подрачје.

СПЕЦИФИЦИРАНИ УСЛОВИ НА УПОТРЕБА

Лазерскиот мерен апарат е погоден за мерење на дистанци и нагиби.

Не го користете овој производ на било кој друг начин освен пропишаниот за нормална употреба.

**ВКЛУЧЕНО / МЕРЕЊЕ**

- Вклучено
- Мерење
- Континуирано мерење (притискај 2 сек)
Функција на мин. / макс.

ДОДАВАЊЕ

- Додавање на вредноста
- Навигирање во меморијата

ПОВРШИНА / ВОЛУМЕН

- Површина (притисни 1x)
- Волумен (притисни 2x)
- Индиректно површинско мерење (притисни 3x / 4x)

ВКЛУЧУВАЊЕ

- Вклучено
- Исклучено (притисни 2 сек.)
- Ресетирање

ОДЗЕМАЊЕ

- Одземање на вредноста
- Навигирање во меморијата

ПИТАГОРА

- Питагора 1 (притиски 1x)
- Питагора 2 (притиски 2x)
- Питагора 3 (притиски 3x)

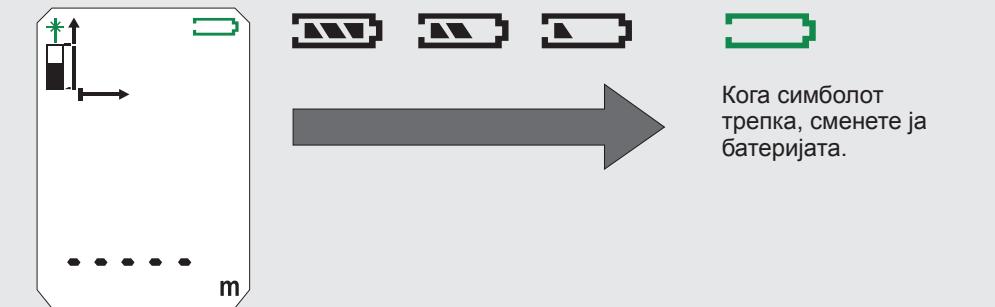
МЕНУВАЊЕ НА МЕРНОТО НИВО

- Напред
- Назад
- Игличка за аголи

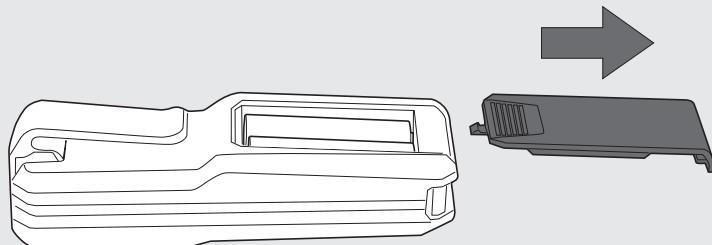
МЕМОРИЈА

- Таймер 3-15 сек (притиски 1x)
- Меморија 1-20 (притиски 2 сек 1x)
- Навигирај со копчињата +/- во меморијата

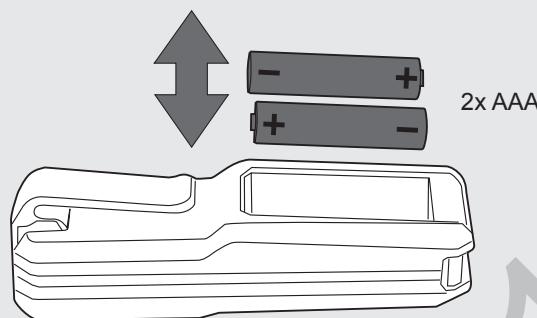
МЕНУВАЊЕ НА БАТЕРИЈА



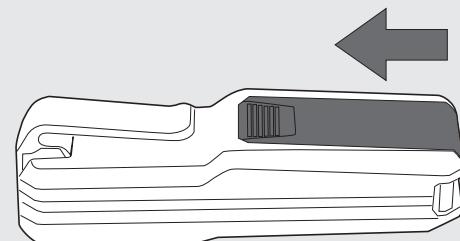
1



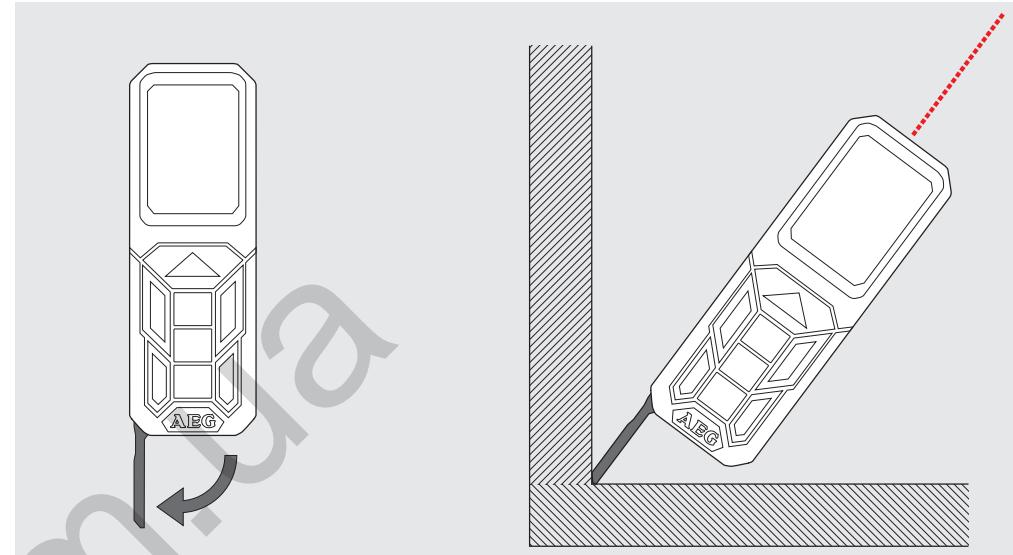
2



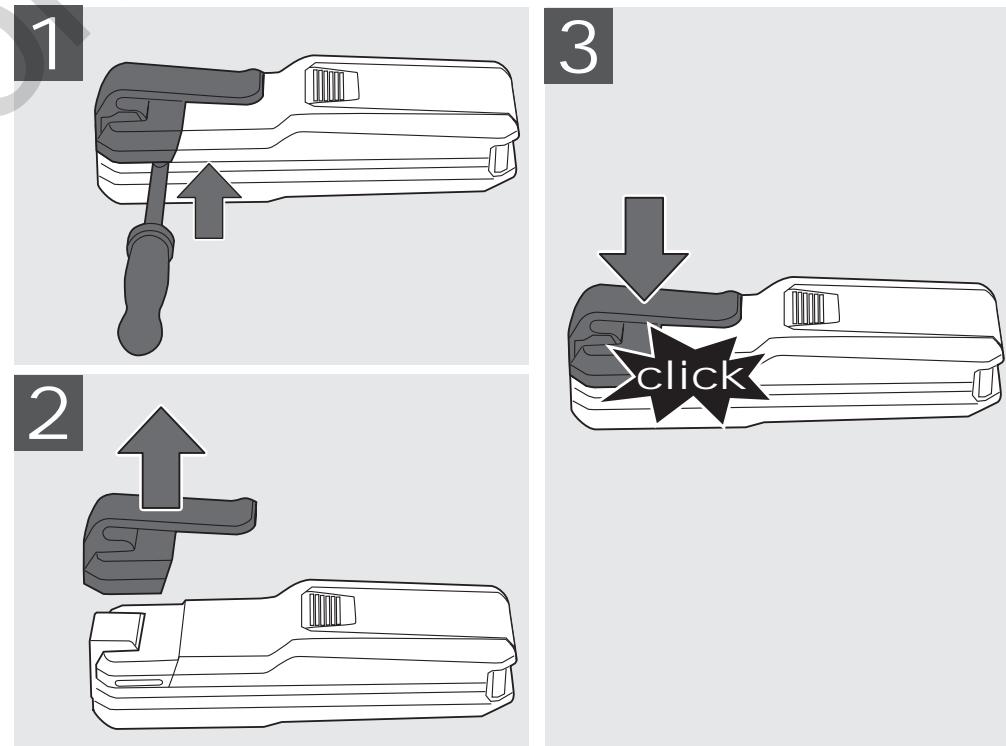
3



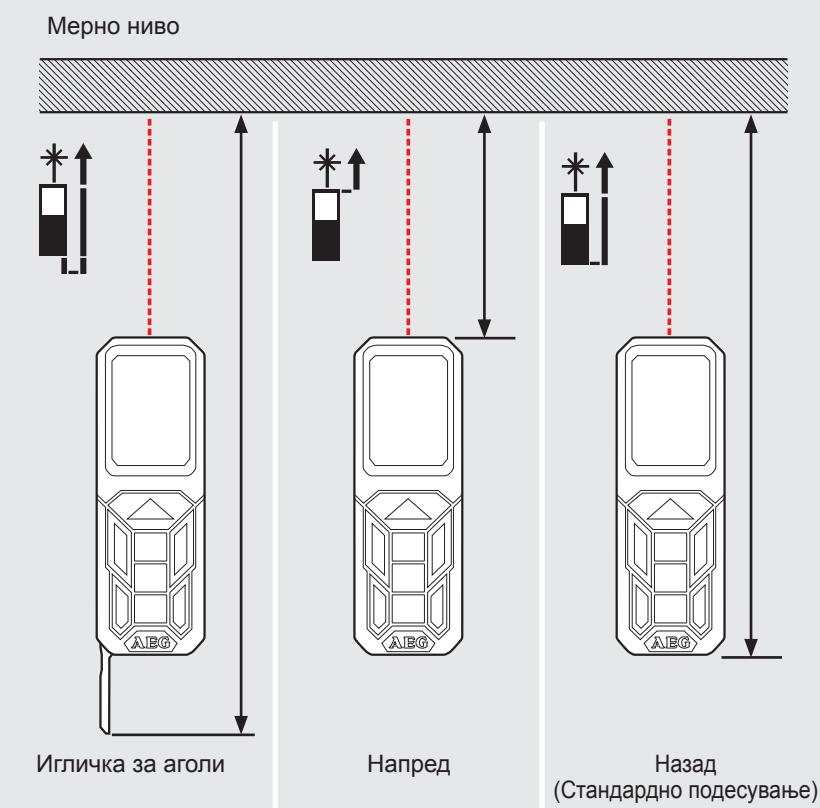
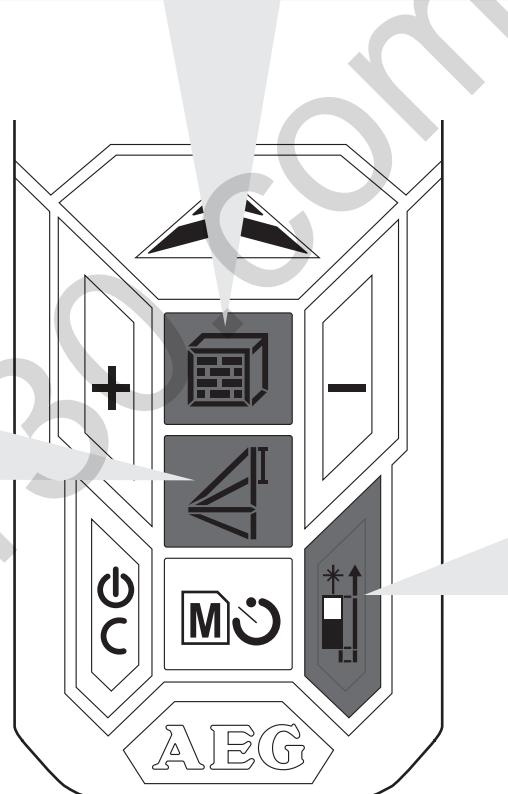
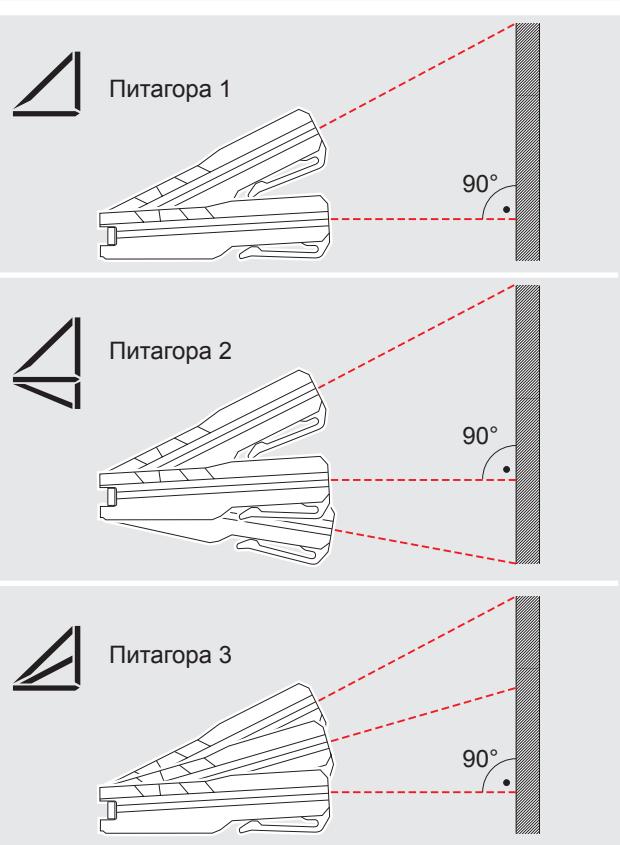
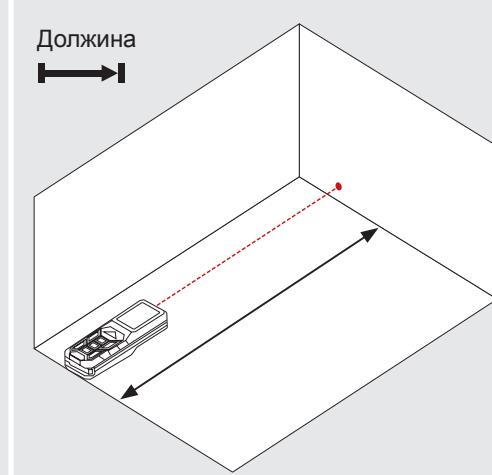
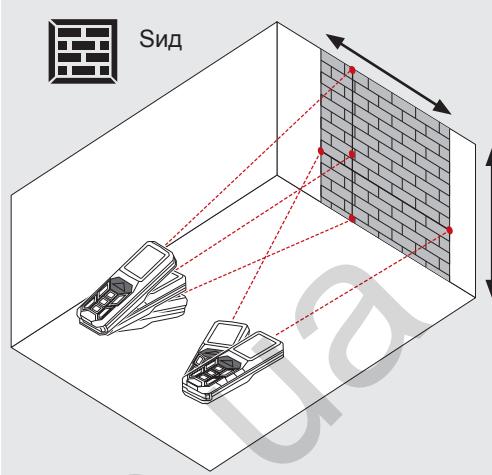
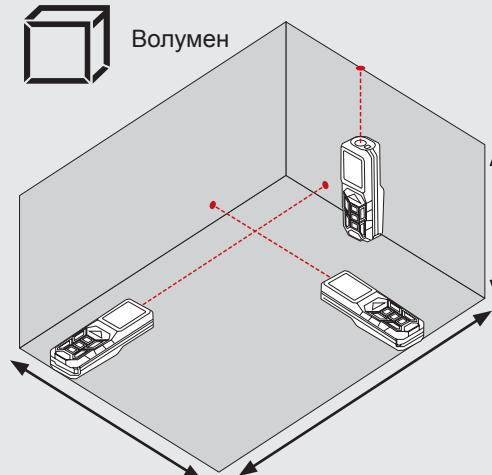
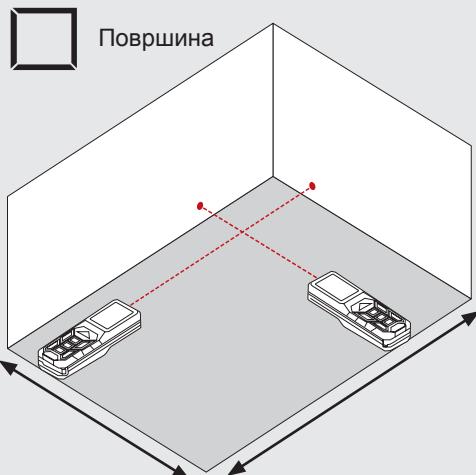
ИГЛИЧКА ЗА АГОЛИ



ДРЖАЧ НА КАИШОТ

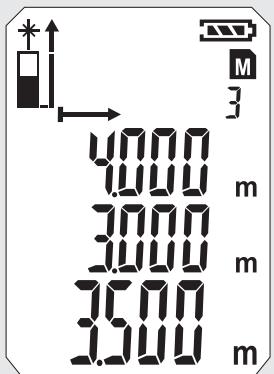
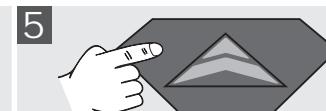
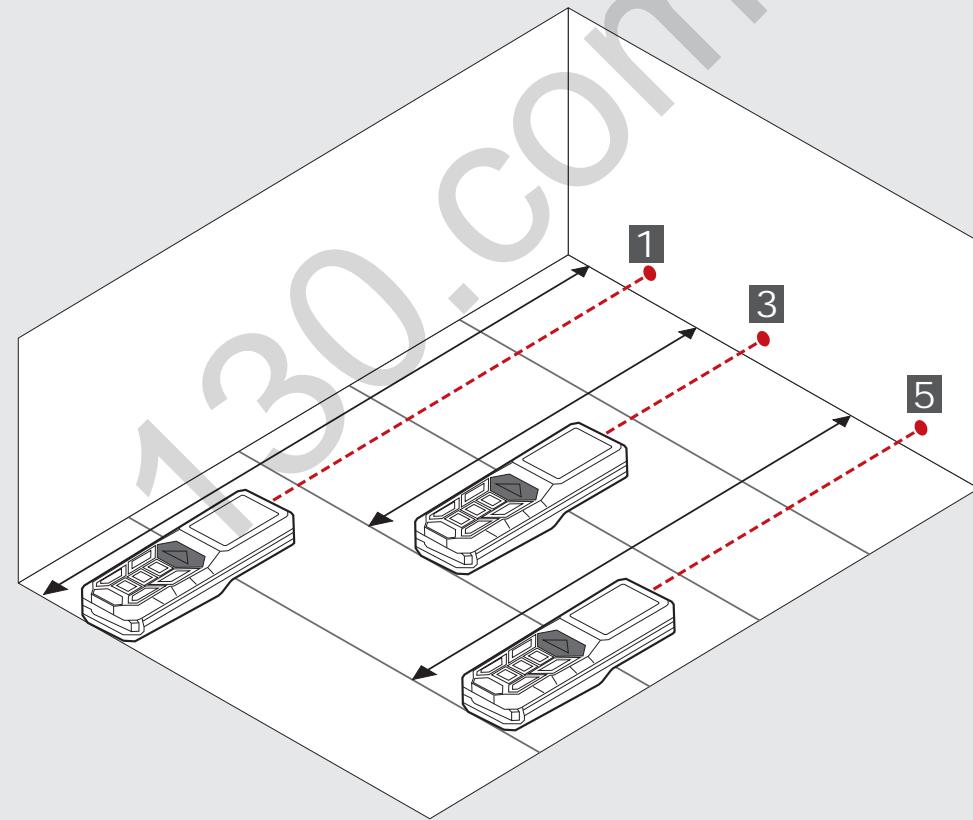
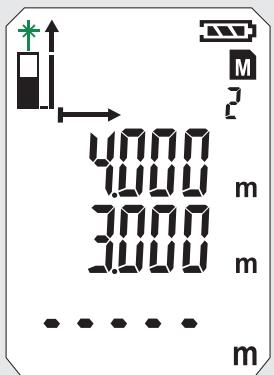
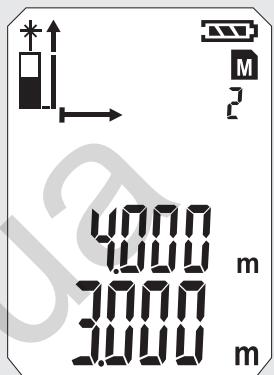
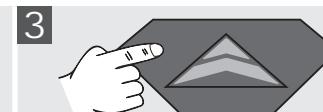
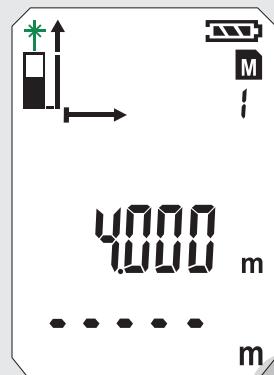
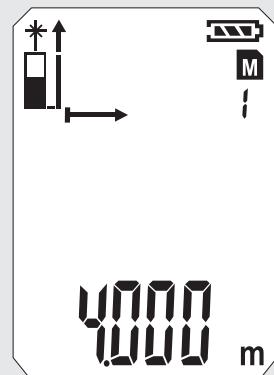
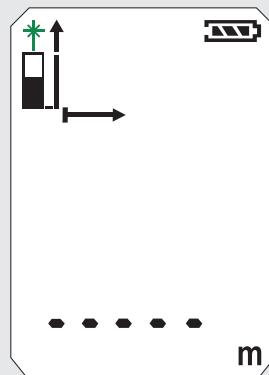
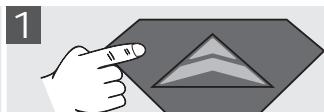


КОПЧЕ ЗА ФУНКЦИИ, ПИТАГОРА, МЕРНО НИВО



ЕДНОСТАВНО ДОЛЖИНСКО МЕРЕЊЕ

0

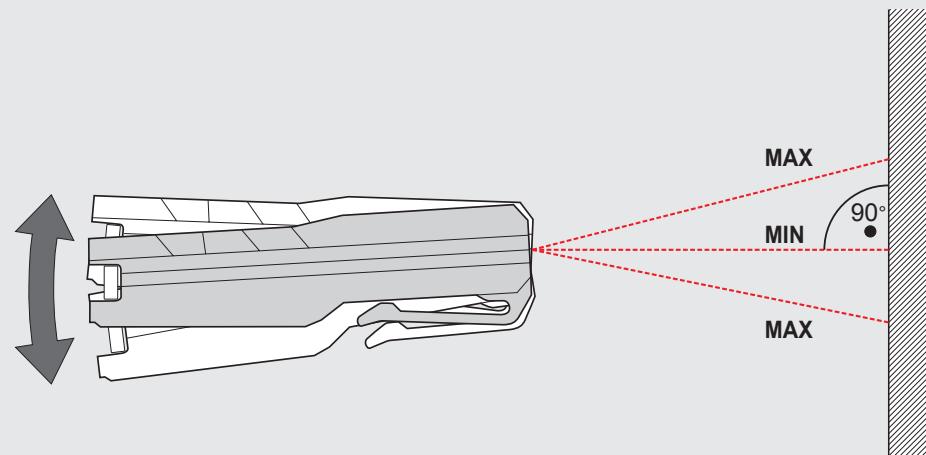
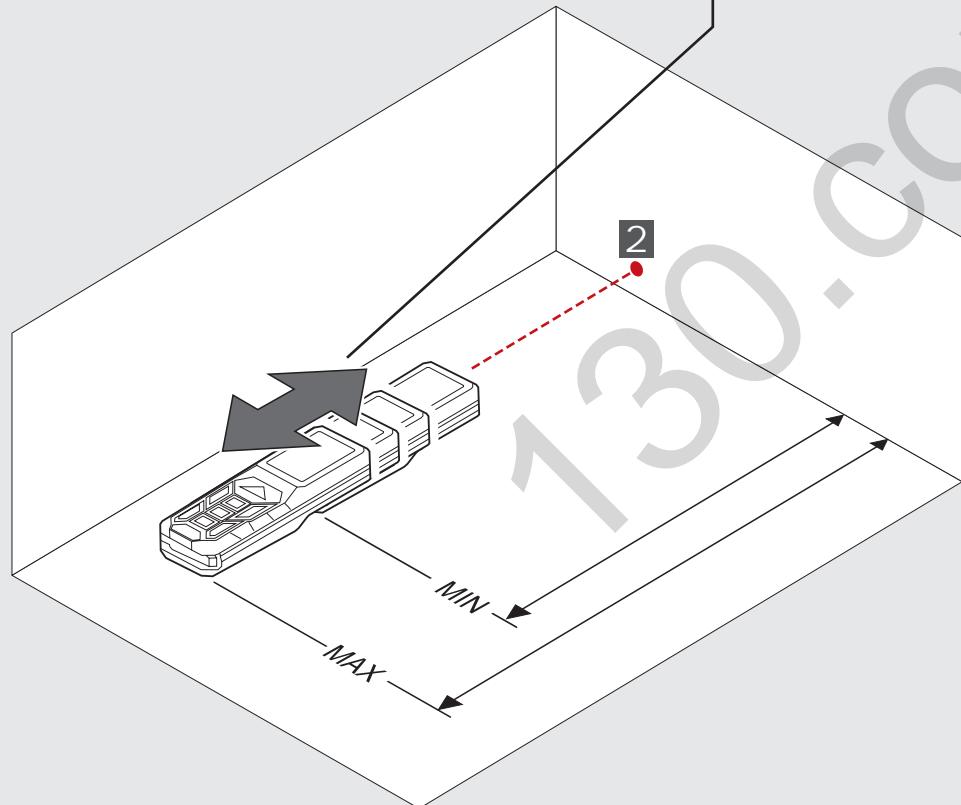
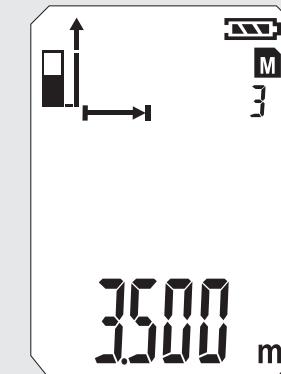
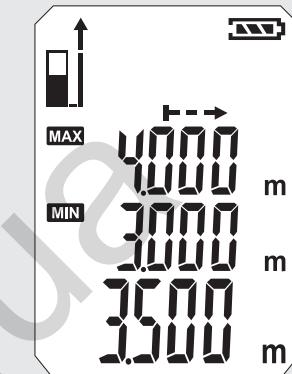
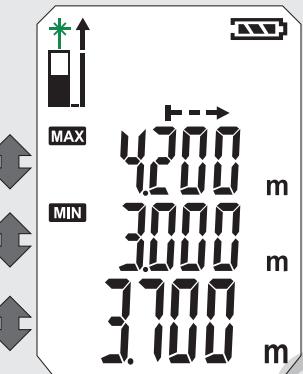
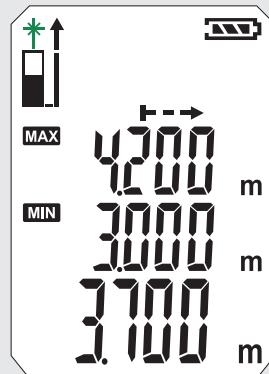
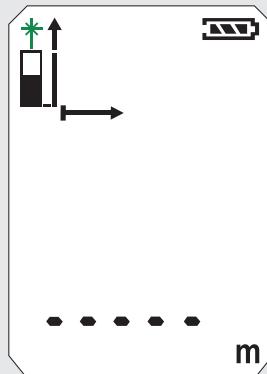
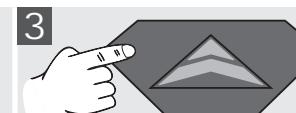


КОНТИНУИРАНО МЕРЕЊЕ / МЕРЕЊЕ МИНИМУМ-МАКСИМУМ

0

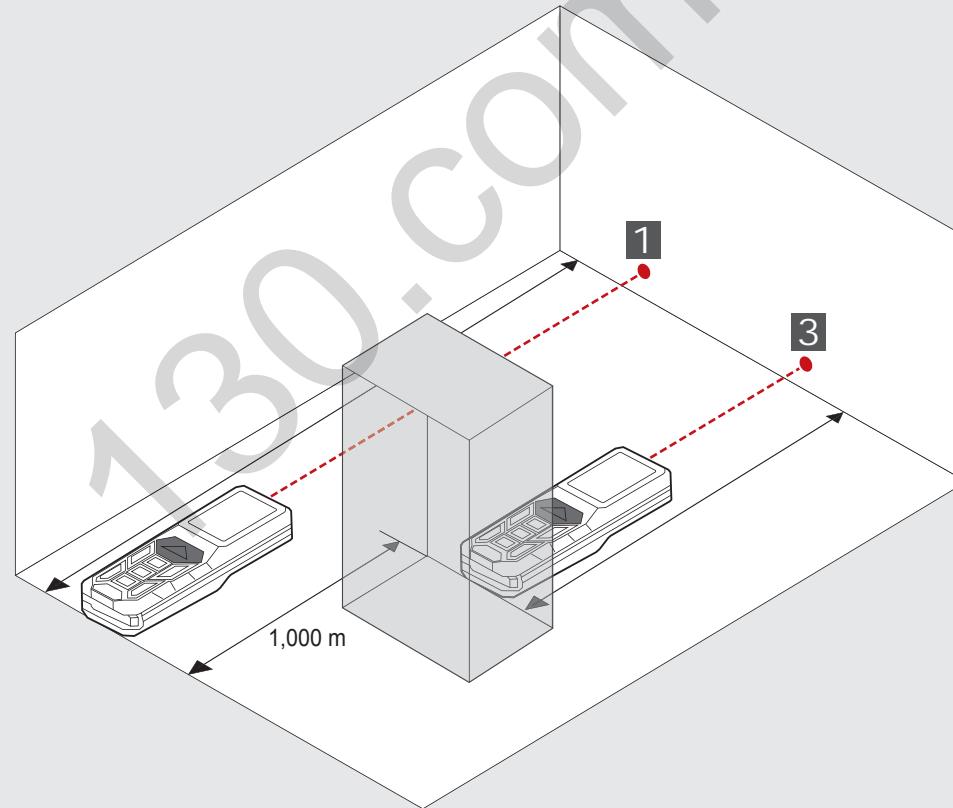
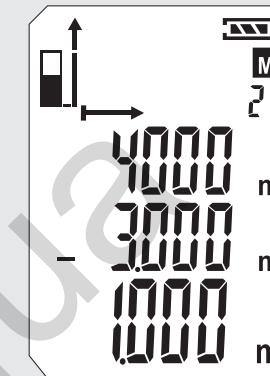
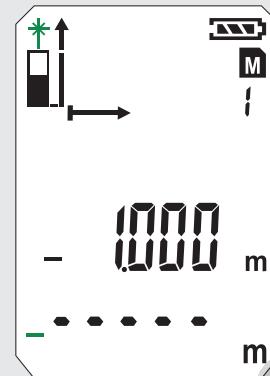
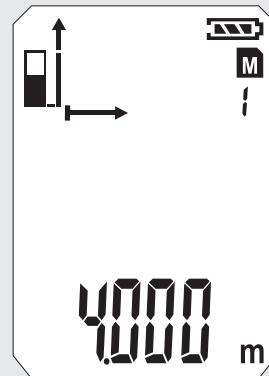
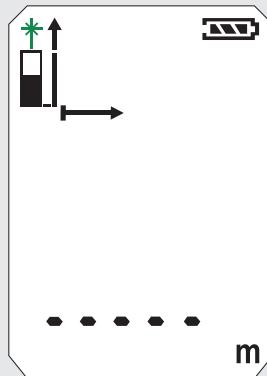
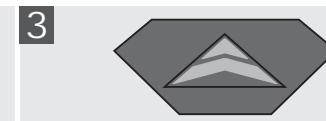
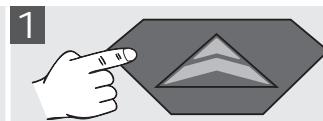


2

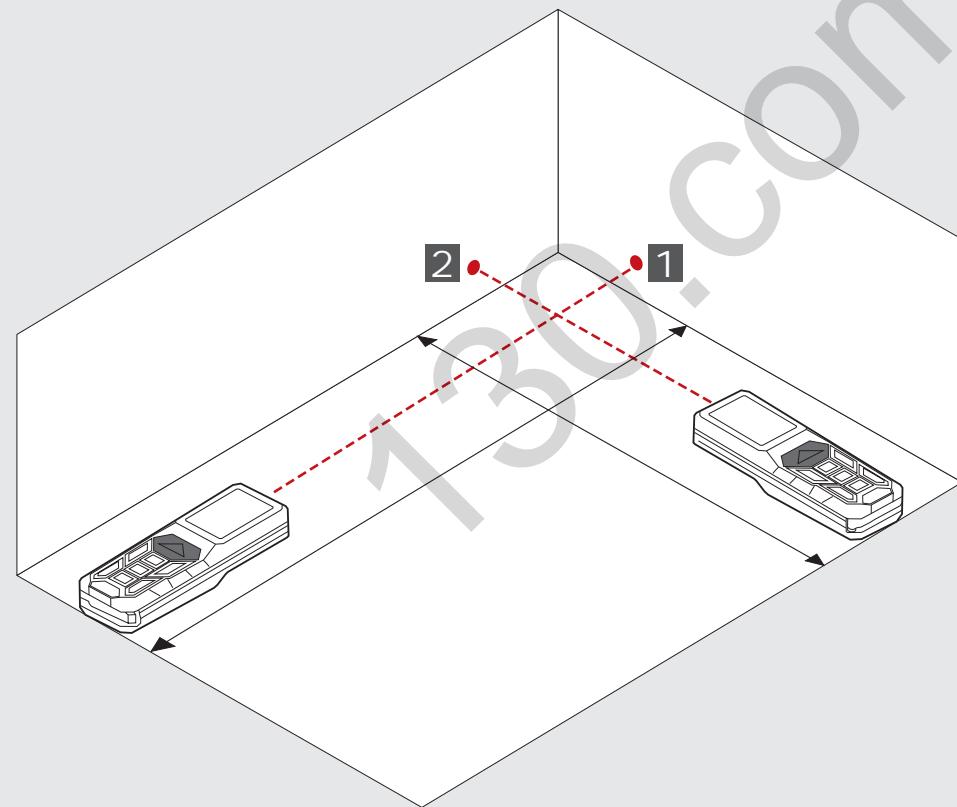
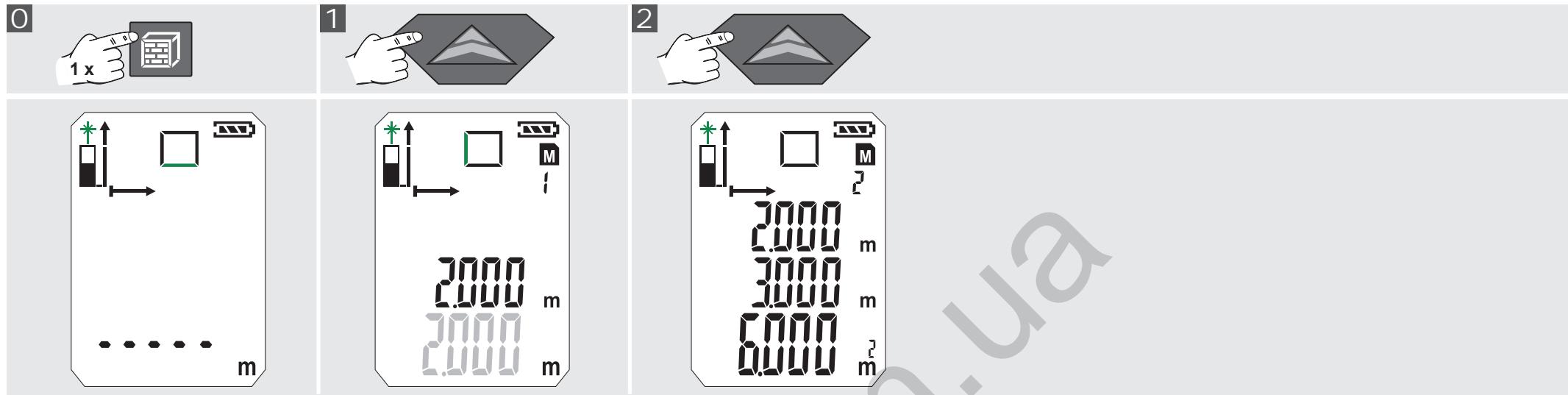


МЕРЕЊЕ НА ДОДАВАЊЕ / ОДЗЕМАЊЕ

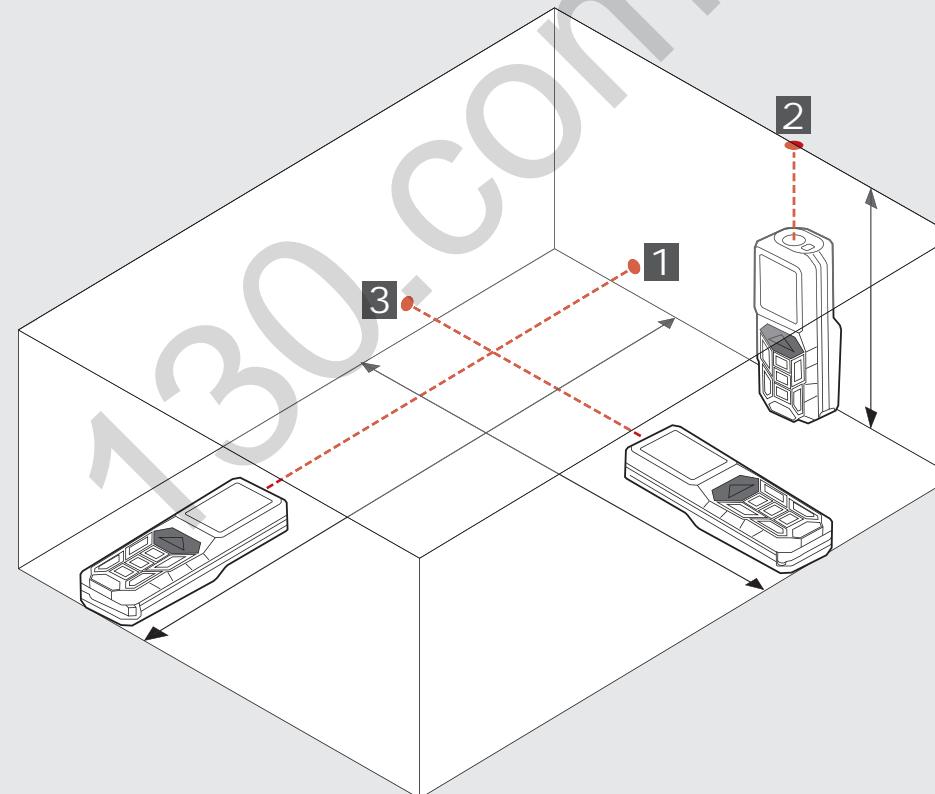
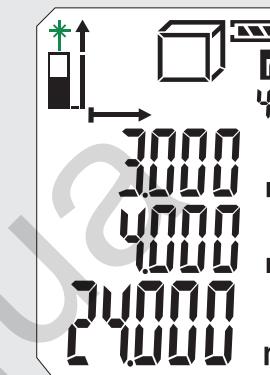
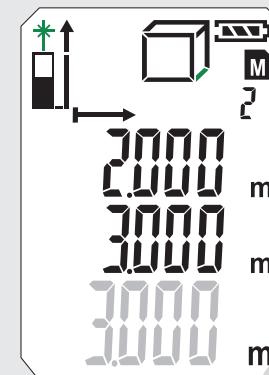
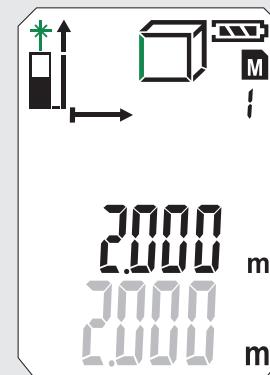
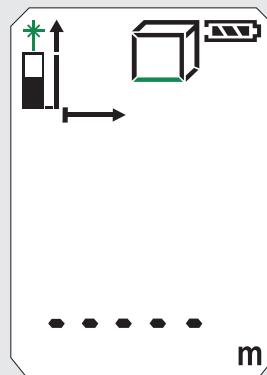
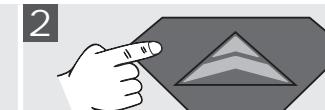
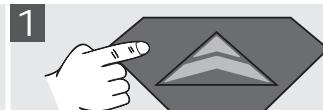
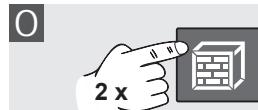
0



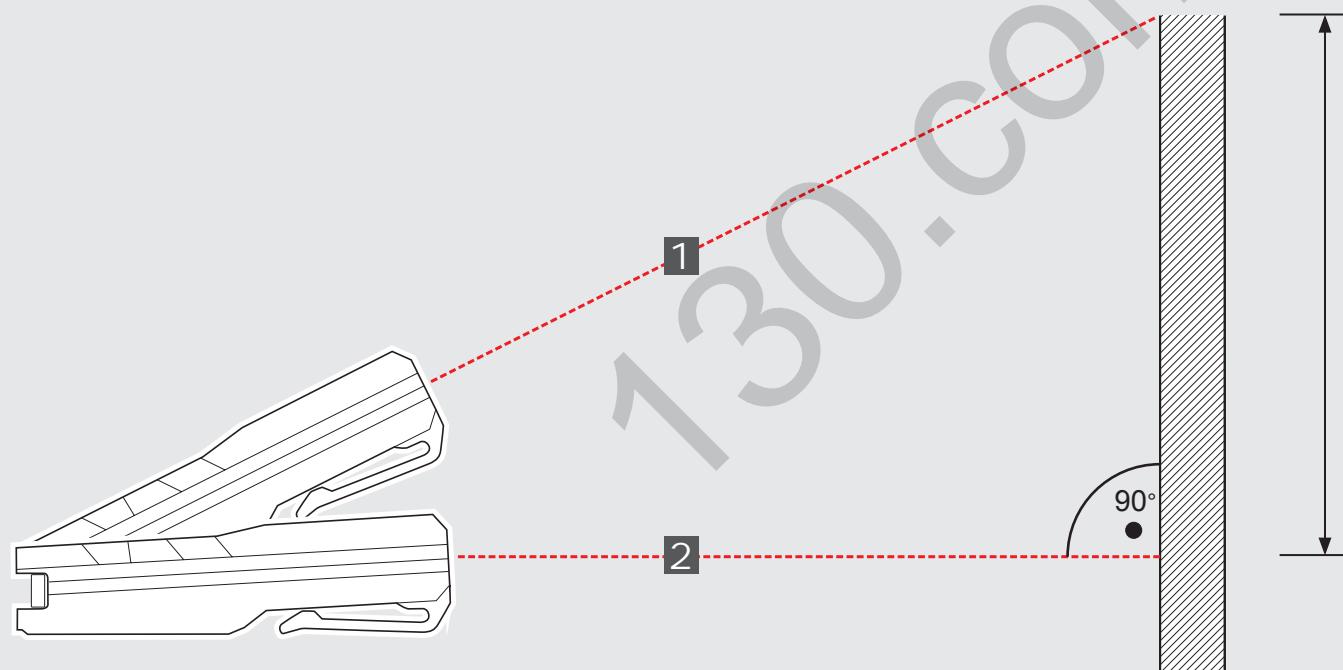
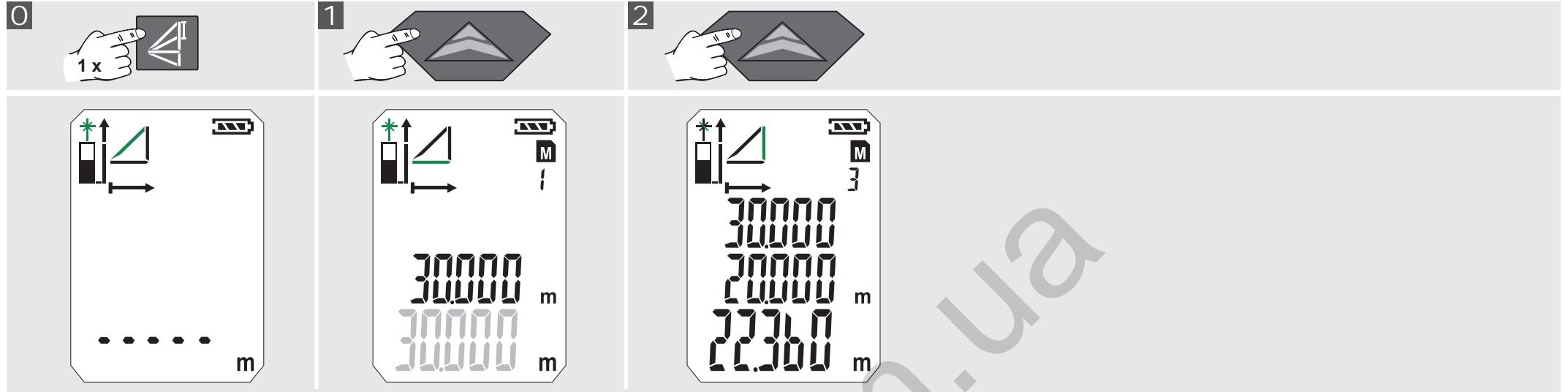
ПОВРШИНСКО МЕРЕЊЕ



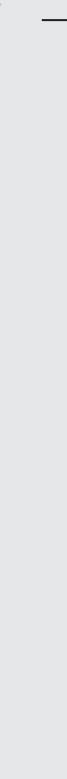
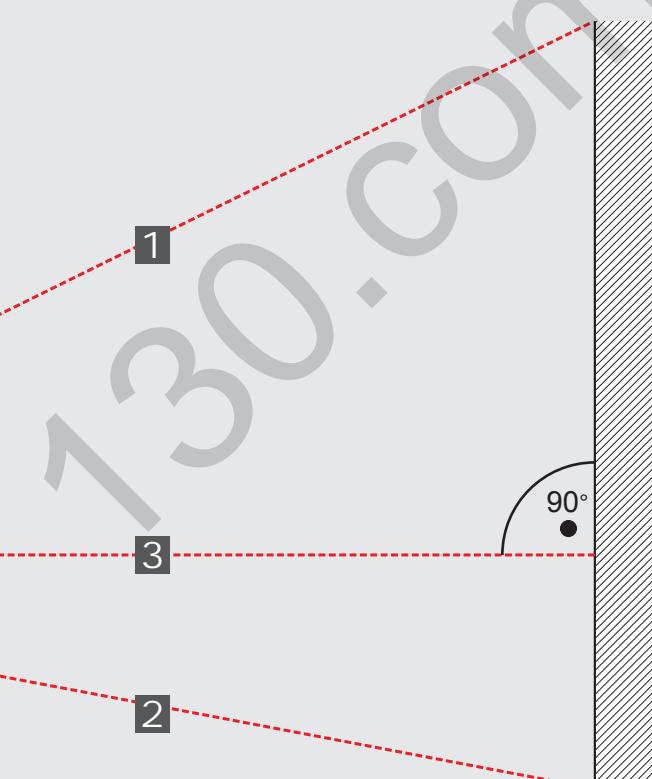
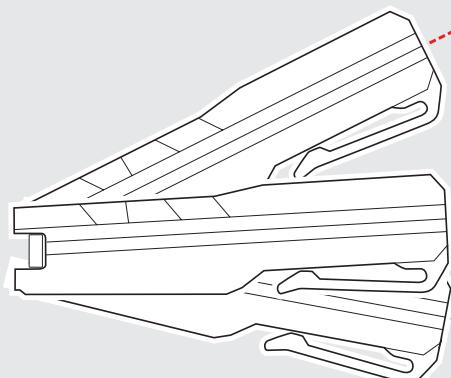
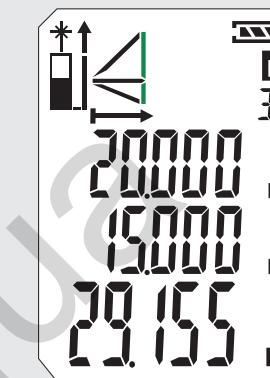
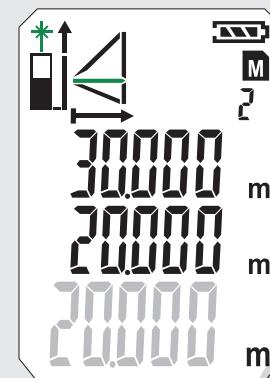
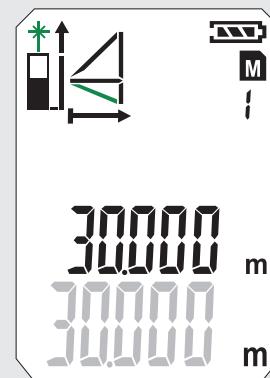
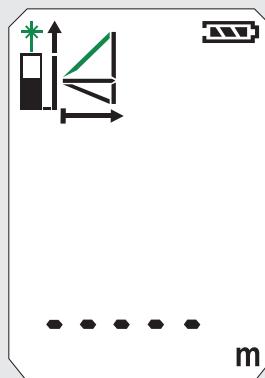
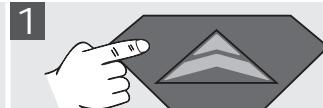
МЕРЕЊЕ НА ВОЛУМЕНОТ



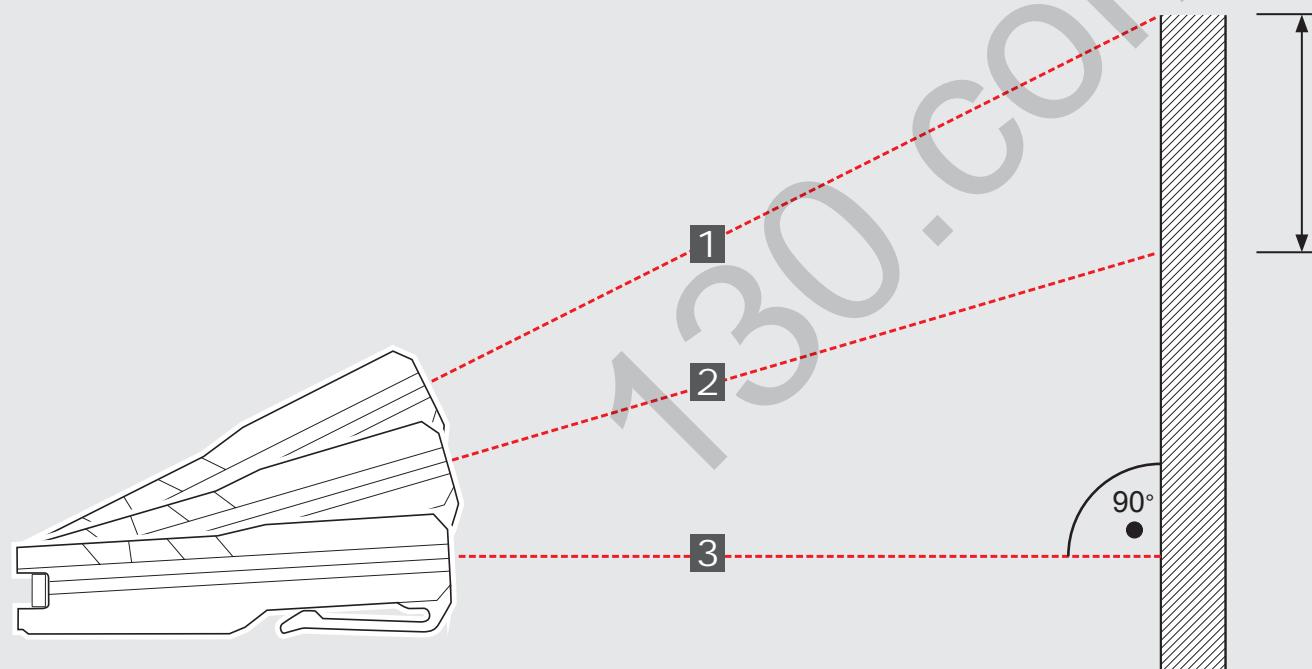
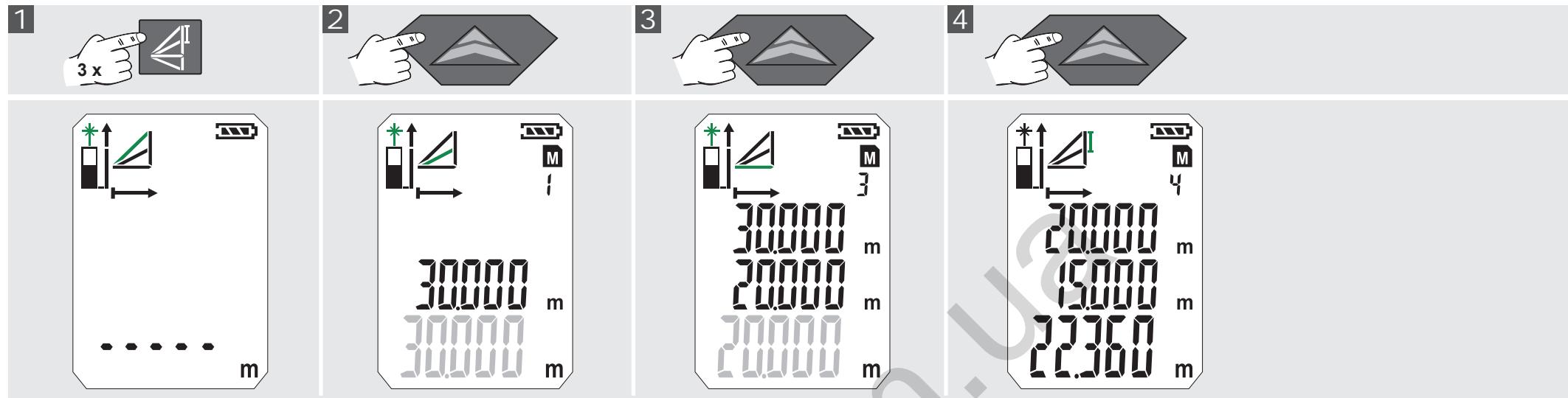
ИНДИРЕКТНО МЕРЕЊЕ (ПИТАГОРА 1)



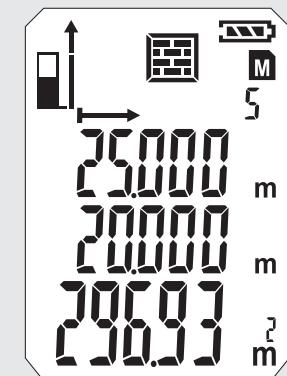
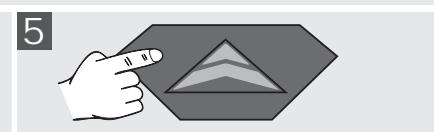
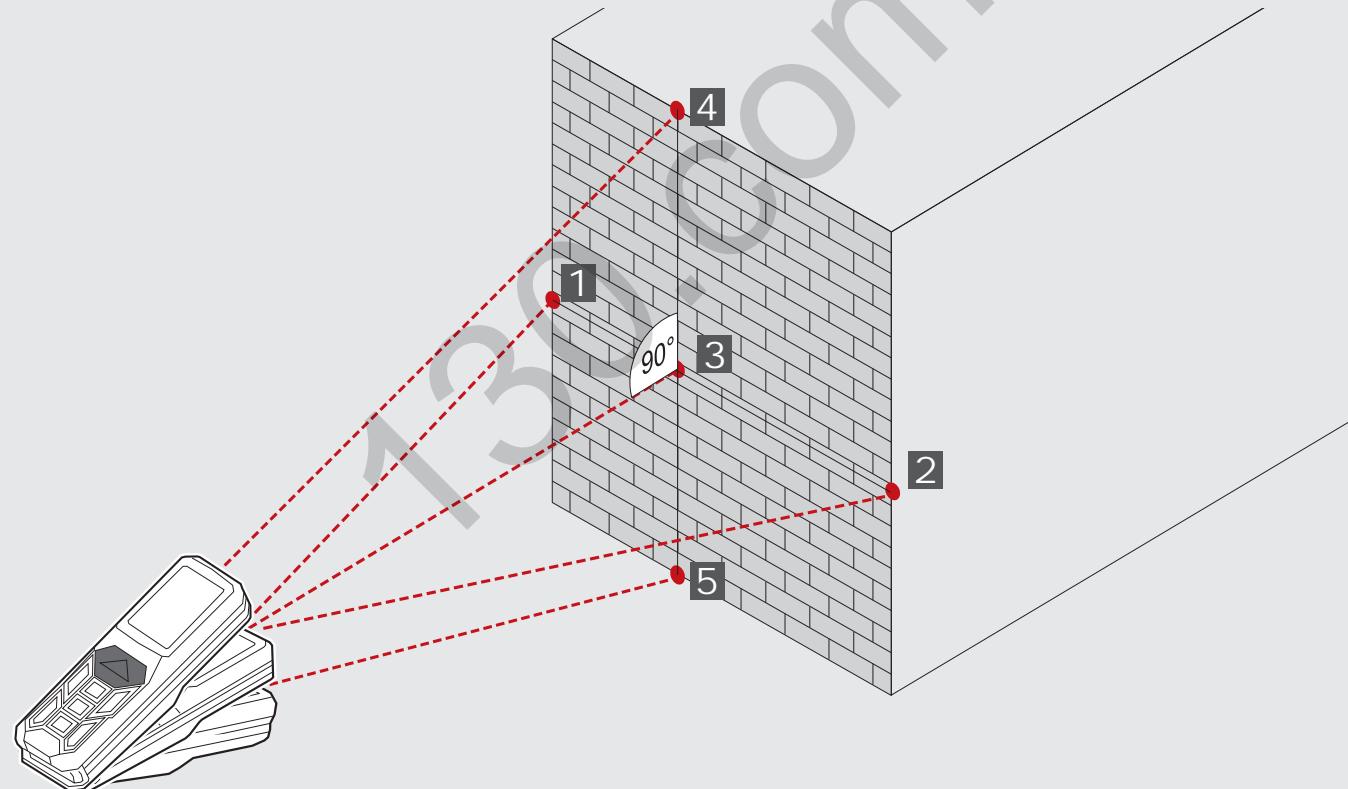
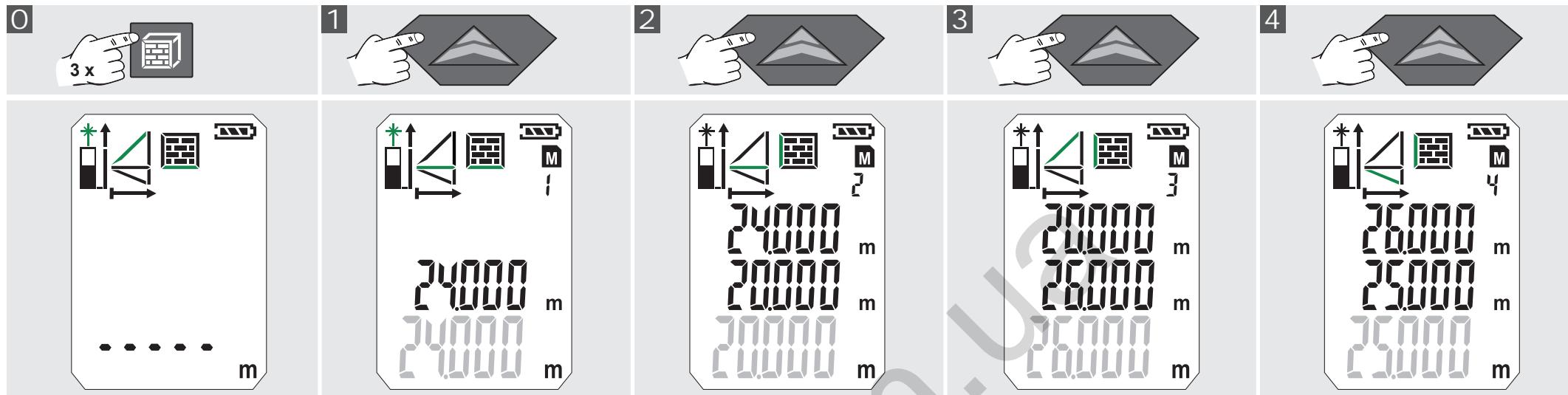
ИНДИРЕКТНО МЕРЕЊЕ (ПИТАГОРА 2)



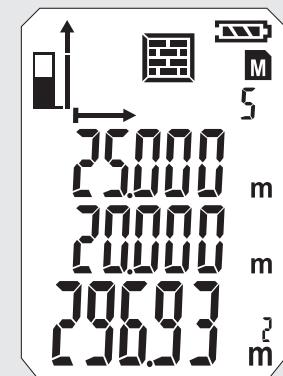
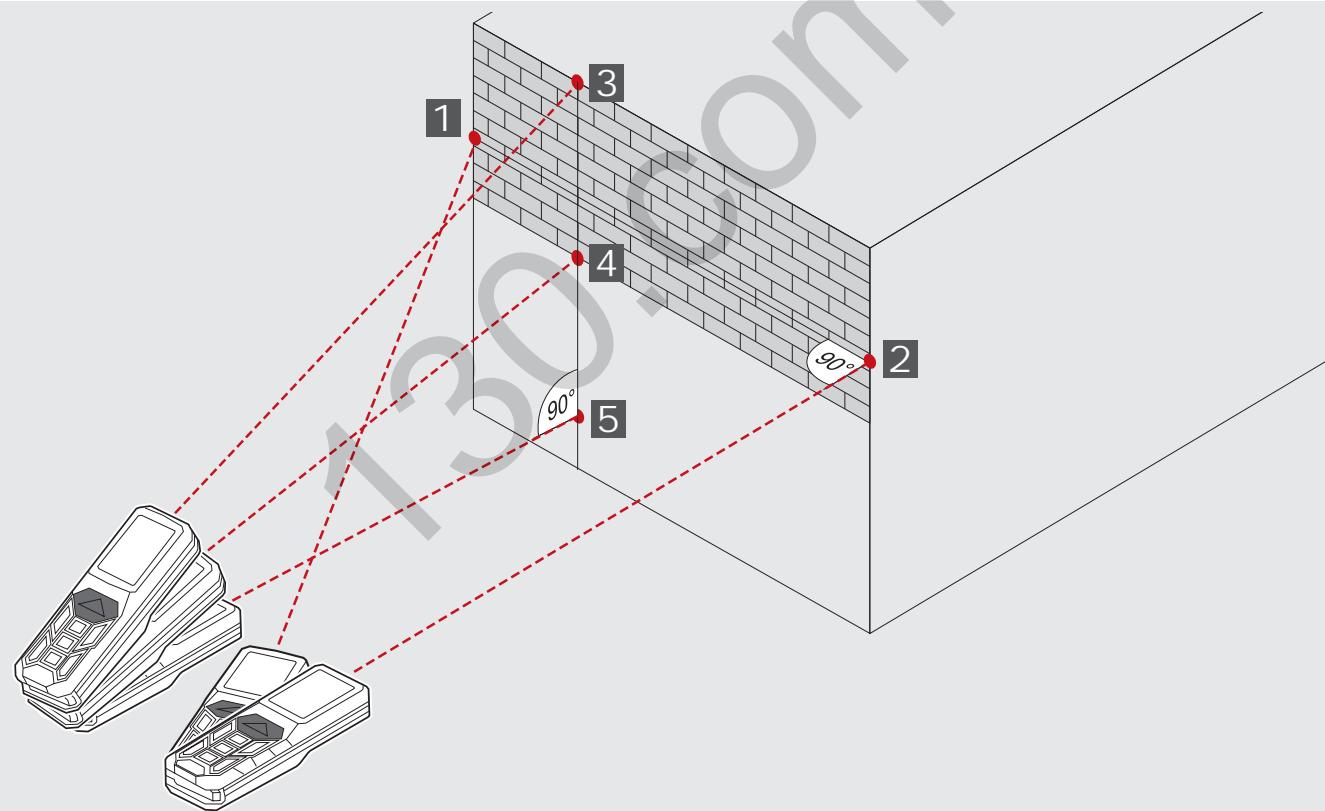
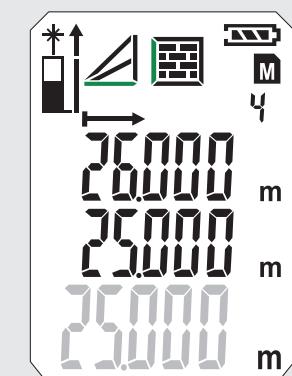
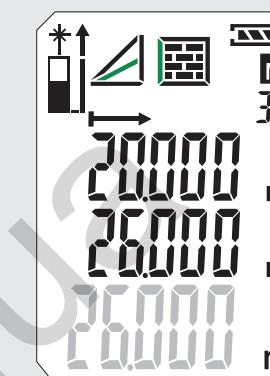
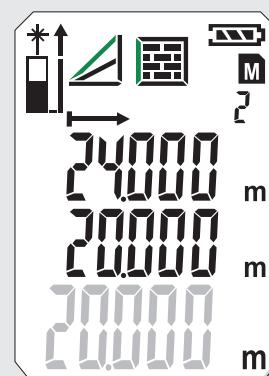
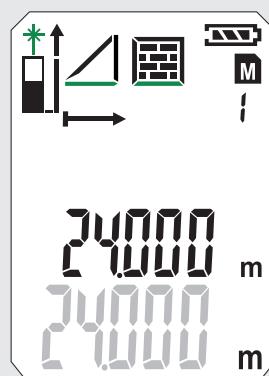
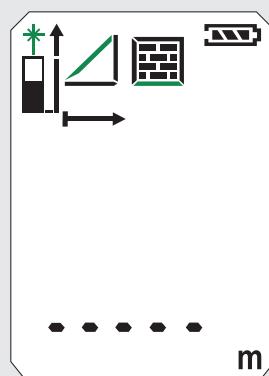
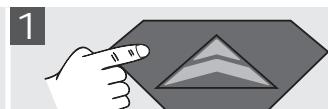
ИНДИРЕКТНО МЕРЕЊЕ (ПИТАГОРА 3)



МЕРЕЊЕ НА ПОВРШИНАТА НА СИДОТ (СЦЕНАРИО 1)



МЕРЕЊЕ НА ПОВРШИНАТА НА СИДОТ (СЦЕНАРИО 2)



ТАЈМЕР

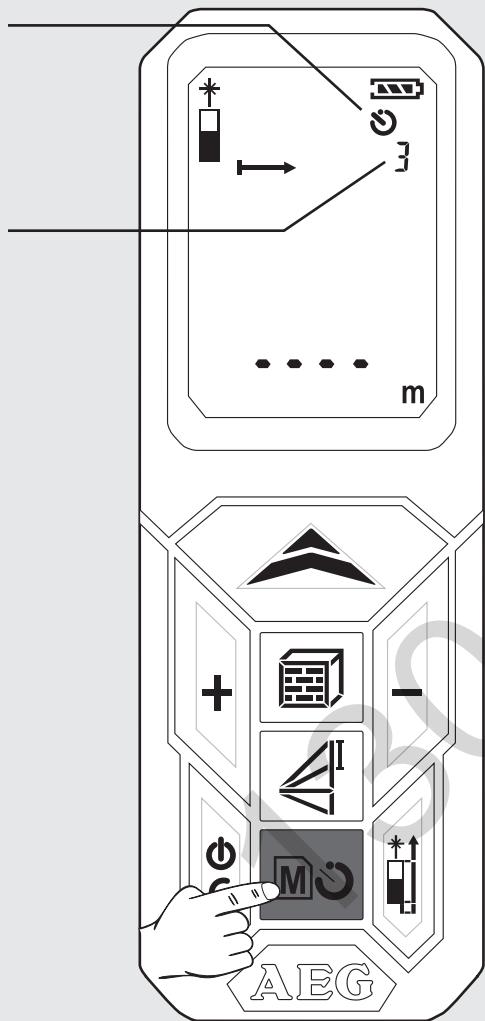
Со тајмерот, мерењето може да се активира со одложување, на пример за да се позиционира некој дел од апаратот во мерниот зрак.

Притиснете го копчето 

- Се појавува симболот
- Со притискање на копчето  тајмерот може да се подеси помеѓу 3 и 15 сек.

Притиснете го копчето 

- Секундите се броат надолу до мерењето.
- Кај 0 се активира мерењето.



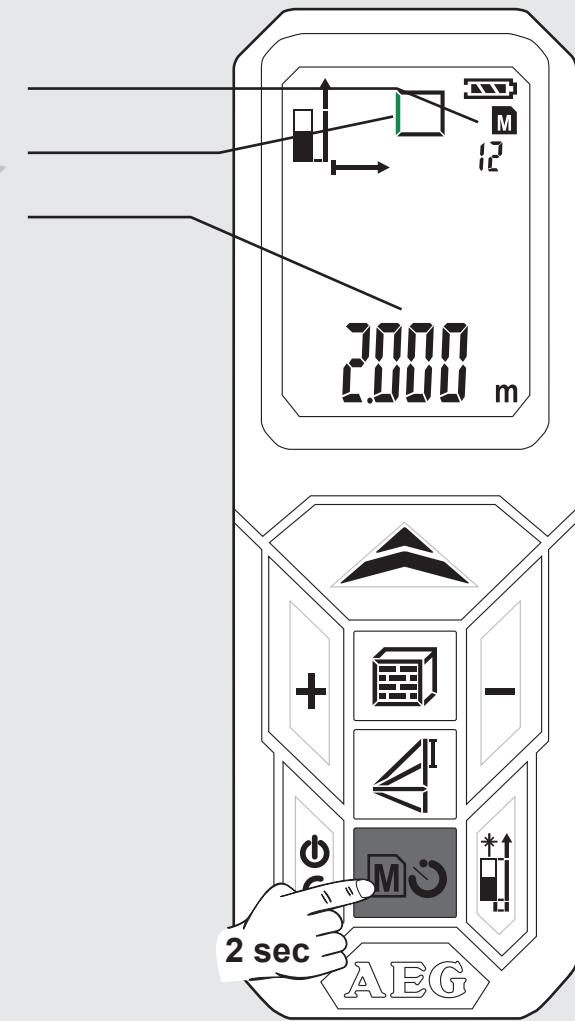
МЕМОРИЈА

Мерните вредности се снимаат автоматски и редоследно во меморијата.

Меморираните вредности можат да се повикаат со копчето .

Притиснете го копчето  цели 2 сек.

- Се појавуваат симболот и местото на меморирање.
- Се прикажува конкретната мерна големина.
- Меморираната вредност се прикажува во главната келија.
- Навигирајте со копчињата +/-



ОСНОВНИ НАЧИНИ НА ФУНКЦИОНИРАЊЕ СО ПРИМЕРОТ НА ПОВРШИНСКО МЕРЕЊЕ (1)

1 Вклучување

Притиснете го копчето .
Внимание! Лазерскиот зрак е вклучен!
 Не го усмртувајте према други лица!

2 Изберете мерно ниво

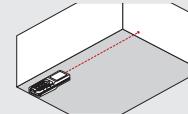
Стандардно подесување после вклучувањето: позади
 1x притисни -> игличка за агли
 2x притисни -> напред
 3x притисни -> позади

3 Избери функција

После вклучувањето апаратот секогаш стои на должинското мерење.
 1x притисни - површинско мерење

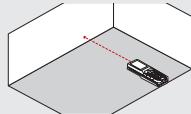
4 Мерење на должината

Апаратот се центрира и се притиска копчето



5 Мерење на ширината

Апаратот се центрира и се притиска копчето



- Лазерскиот симбол трепка (трепкањето е прикажано зелено).

- Се прикажува симболот

- Се појавува симболот
 Мерната големина трепка (трепкањето е претставено зелено)

- Мерната вредност кратко време се покажува во главната келија.

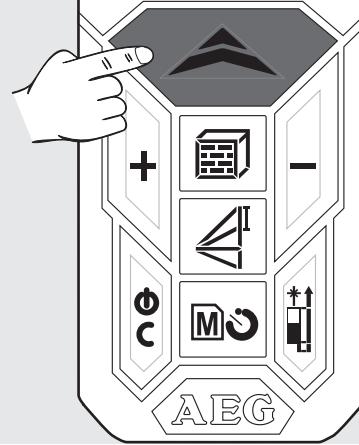
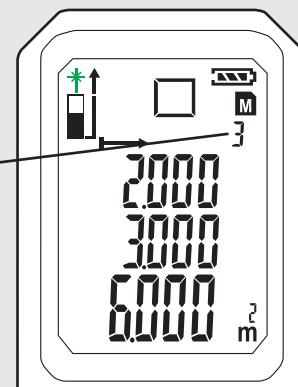
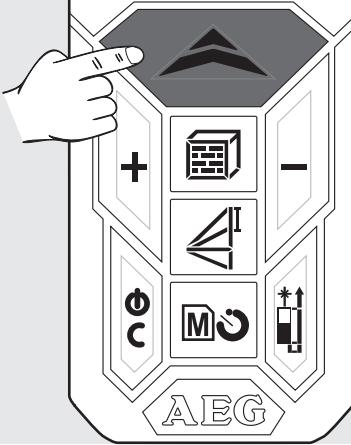
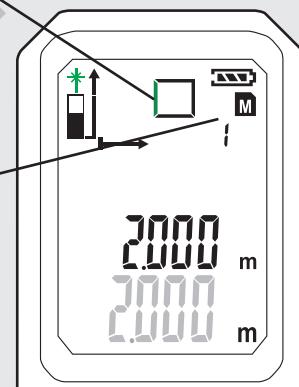
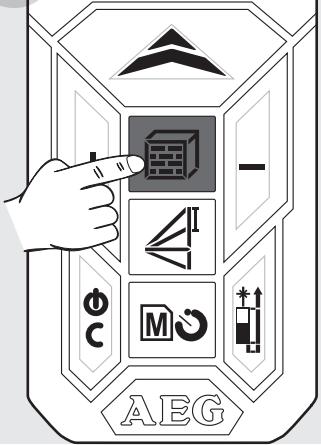
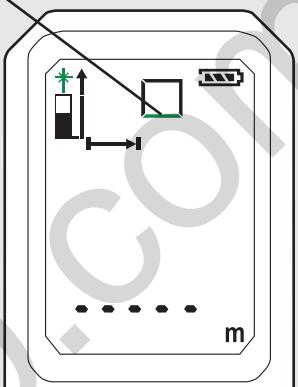
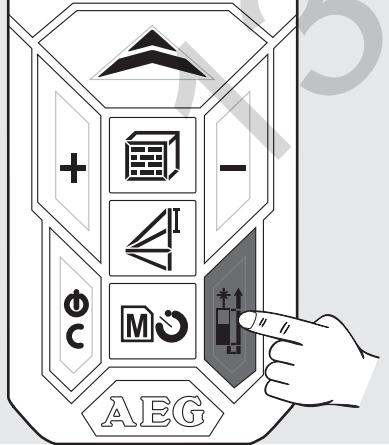
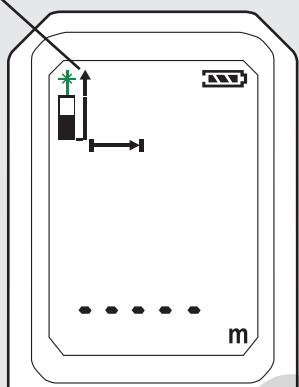
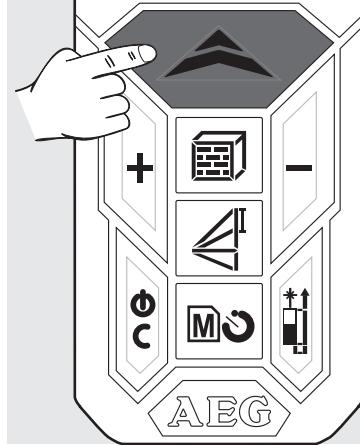
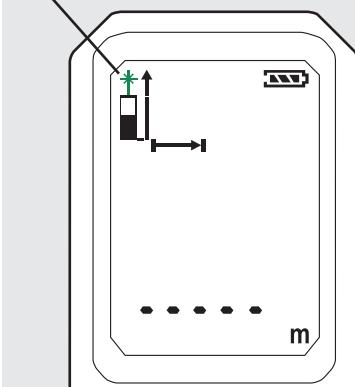
- Мерната вредност после 1 сек преминува една келија погоре.

Мерната вредност се снима во меморијата со редоследен број.
 Втората мерна големина трепка.
 Апаратот е спремен за мерење на втората вредност.

- Мерната вредност кратко време се појавува во главната келија.

- Мерната вредност после 1 сек преминува една келија погоре.

Мерната вредност се снима во меморијата со редоследен број.
 - Резултатот се прикажува во главната келија и се снима во меморијата под редоследен број.



ОСНОВЕН НАЧИН НА ФУНКЦИОНИРАЊЕ СО ПРИМЕРОТ НА ПОВРШИНСКО МЕРЕЊЕ (2)

6 Повикување на сниманите вредности

2 сек притискајте го копчето .

Притиснете го копчето + или -

- Меморираните вредности се прикажуваат во главната келија
- Конкретниот симбол се прикажува и мерната големина трепка (трепкањето е претставено зелено).

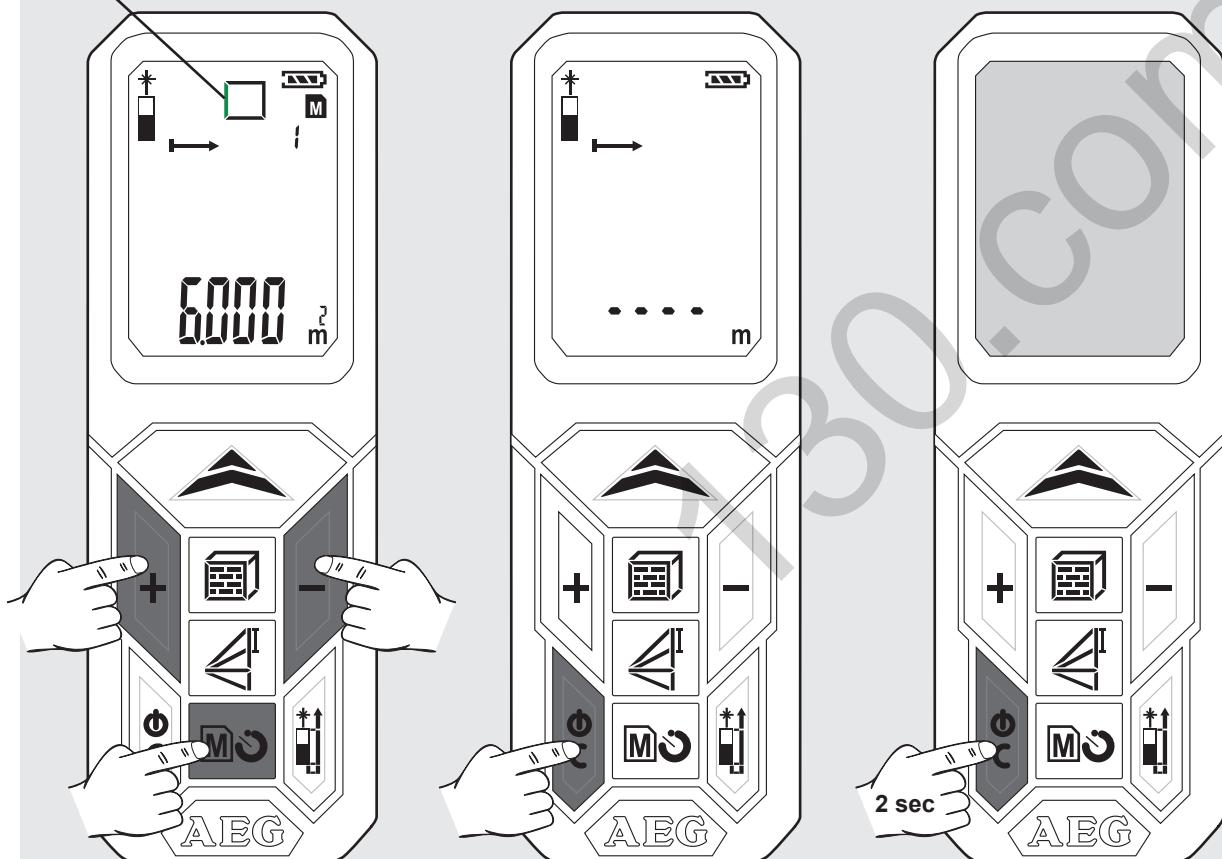
7 Напуштање на меморијата

Притиснете го копчето .

8 Исклучување

2 сек притискајте го копчето  (Претходно мора да се напушти меморијата).

- Апаратот се исключува.
- Ако во текот на 3 минути не биде притиснато ниту едно копче, апаратот автоматски се исключува.



内容

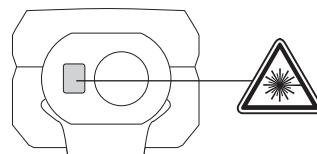
重要安全提示.....	1
技术数据.....	2
正确地使用机器.....	2
错误代码表.....	2
概览.....	3
更换电池.....	4
边角定位.....	4
皮带扣.....	4
功能按键，毕达哥拉斯，测量平面.....	5
普通长度测量.....	6
连续测量／最高最低值测量.....	7
加法／减法测量.....	8
面积测量.....	9
体积测量.....	10
间接测量（毕达哥拉斯1）.....	11
间接测量（毕达哥拉斯2）.....	12
间接测量（毕达哥拉斯3）.....	13
墙面面积测量（用例1）.....	14
墙面面积测量（用例2）.....	15
倒计时器.....	16
内存.....	16
按面积测量的例子说明基本工作原理（1）.....	17
按面积测量的例子说明基本工作原理（2）.....	18

重要安全提示



阅读附加提供光碟上的安全提示和操作说明书后，才可以开始使用此产品。

激光分类



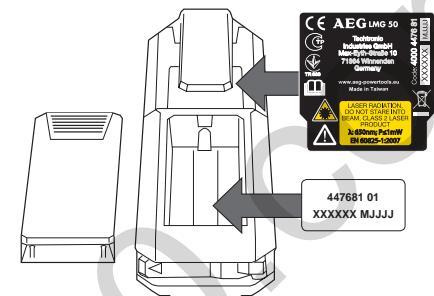
警告：

依照EN60825-1:2007，此产品符合2级激光。



标记

最初操作前请将附送的贵国语言贴纸贴到英文铭牌上。



警告：

由于激光光束会导致暂时闪光盲，必须避免直视激光光束。

切勿注视激光光束或无必要而把光束指向别人。

切勿向别人发出耀眼光束。

警告！

严禁在儿童附近操作激光机器或让儿童操作此激光机器。

注意！反射面可能会把激光束向操作者或其他人员反映。

确保跟活动部件的相应安全距离。

请定期进行测试性测量，尤其进行重要测量前、中、后。

产品掉落、进行不允许操作或产品改造后，请注意到缺陷产品引起的测量错误。

注意！请仔细地阅读下列指示以了解机器的操作元件和其正确使用。

此激光测量仪的操作范围有限制。（请见“技术数据”）。在最大或最小测量范围之外尝试进行测量会引起不正确的测量。把仪器使用在太热、太冷、日光太亮、下雨、下雪、雾气等不良或限制目光条件下，会引起不正确的测量。

如果把激光测量仪从温暖环境移到寒冷的环境（或相反），应等待到仪器适应新的环境温度。

激光测量仪必须室内保存并确保仪器不会受到震动、震荡或极端温度的影响。

必须确保仪器免受粉尘、潮湿或高空气湿度侵入以避免仪器的内部器件被损害或测量精度受到不良影响。

不要使用腐蚀性清洁剂或溶剂。只要使用干净软布清洁仪器。

必须避免光机测量仪遭受强烈撞击或掉落。仪器掉落或遭受其他机械荷载后，应检查仪器的测量精度。

此激光机器上所需修理工作必须由授权专业人员进行。

切勿在有爆炸危险或腐蚀性环境条件下使用产品。

务必只通过制造者推荐的充电器向蓄电池充电。

严禁将废电池与生活垃圾一起弃置。保护环境，根据国家或地方法规将废电池弃置在指定的垃圾收集站。本产品不可与生活垃圾一同回收处理。根据您所在国家/地区实施的法规，恰当地弃置本产品。遵守国家或当地相关规定。有关正确回收处理，请询问主管地方当局或购买机器的商店。

欧洲共同体标志

技术数据

保护等级	IP54 (粉尘和喷水保护)
光学接收镜头	14mm
焦点	35mm
最大测量范围	50米(公差:55m)
最小测量范围.	0,05米
绝对精度@<10m	±1,5mm(最大)
重复精度@<10m	±1,5mm(标准最大 2σ)
重复精度@ > 10m	升高±0,25mm/米(标准最大 2σ)
测量时间	0,5s
显示器型式	LCD(22,7mmx31mm)
供电	AAA2x(碱性电池)
电池寿命	10000(单位测量)
激光机输出功率	0,6mW~0,95mW(2级,650nm)
激光光斑尺寸	25x30mm@16m(最大)
激光光束垂直角	+1度
激光光束水平角	±1度
自动仪器关闭	180秒
自动激光关闭	30秒
工作温度范围	-10°C至+50°C
储存温度范围	-25°C至+70°C
无电池重量	80g

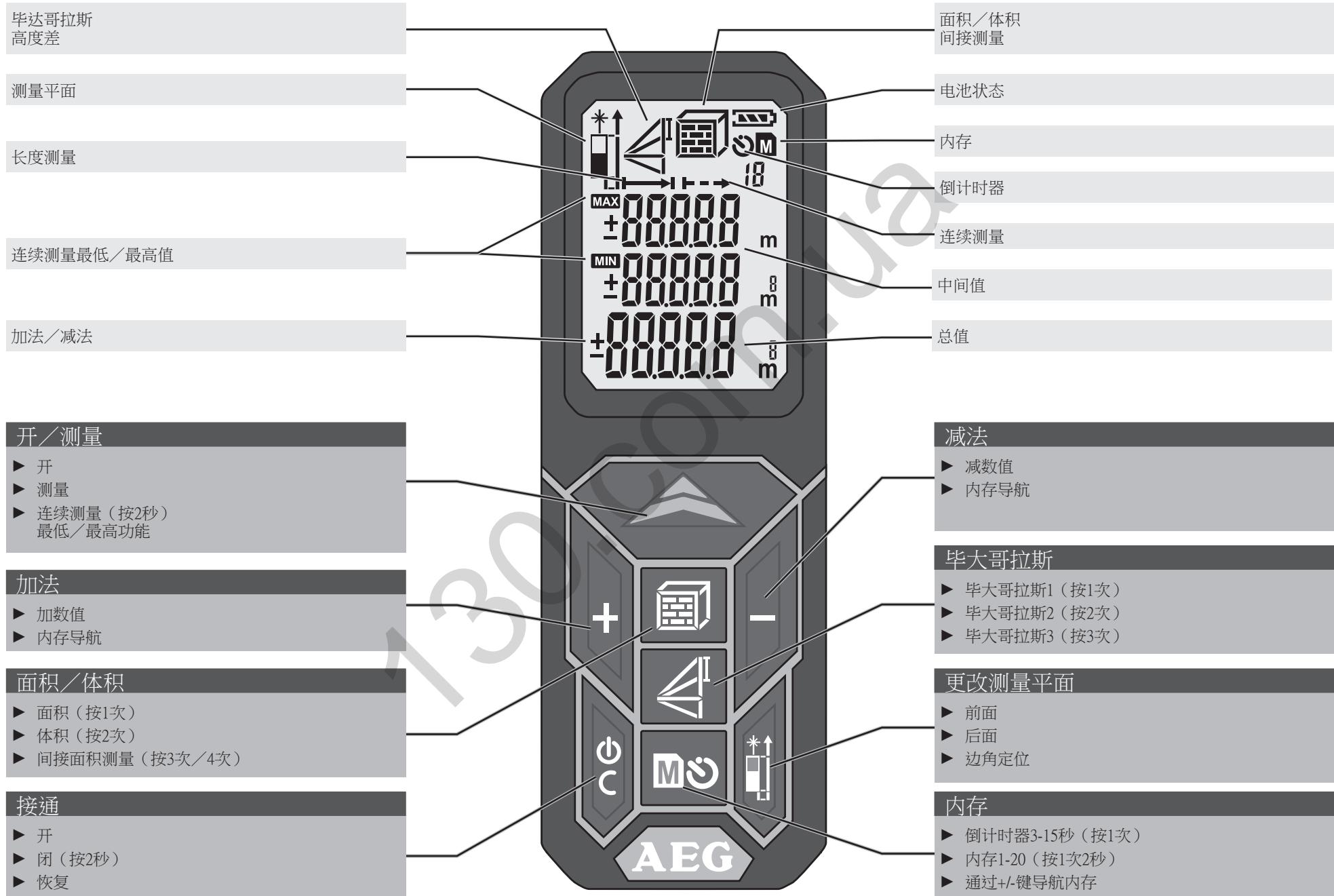
错误代码表

代码	说明	解决
Err01	测量范围以外	测量范围之内进行测量。
Err02	被反应的信号太弱	选择较好的表面。
Err03	显示范围之外 (最大数值为99.999) 比如面积或体积在显示范围之外	检查数值和步骤是否正确。
Err04	毕达哥拉斯计算有错误	检查数值和步骤是否正确。
Err05	电池过弱	装进新电池。
Err06	工作温度范围之外	规定工作温度范围之内进行测量。
Err07	环境光太亮	变暗目标区域。

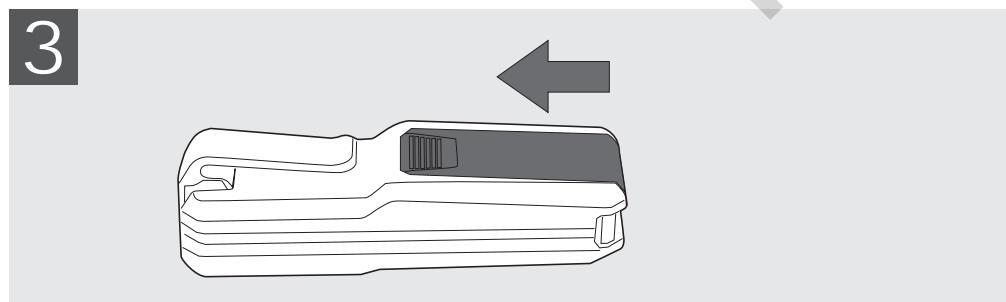
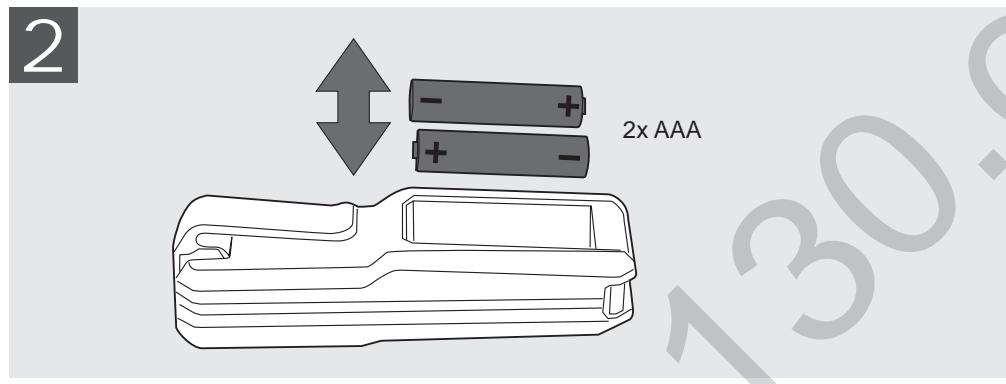
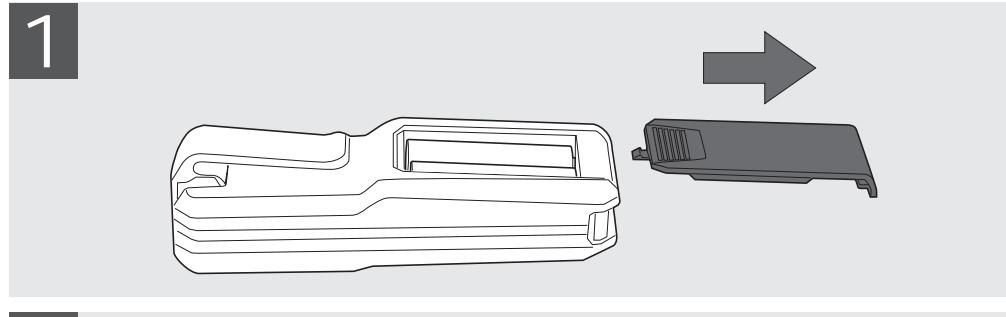
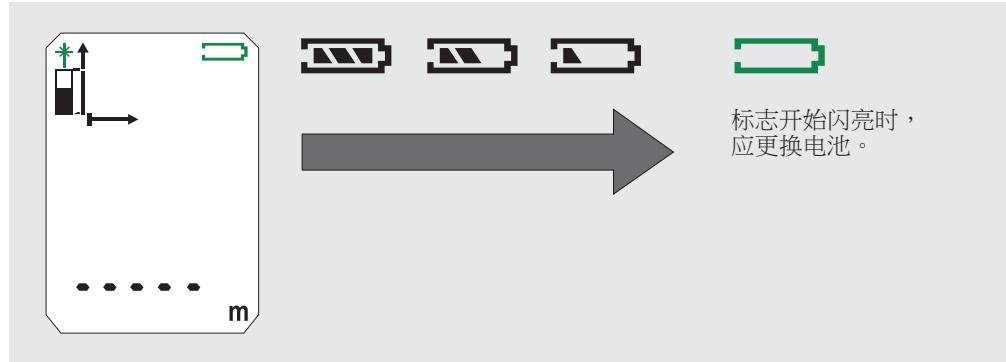
正确地使用机器

此激光测量仪适用于测量距离和倾斜度。

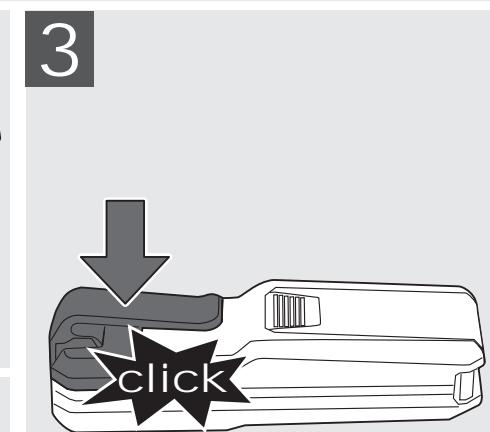
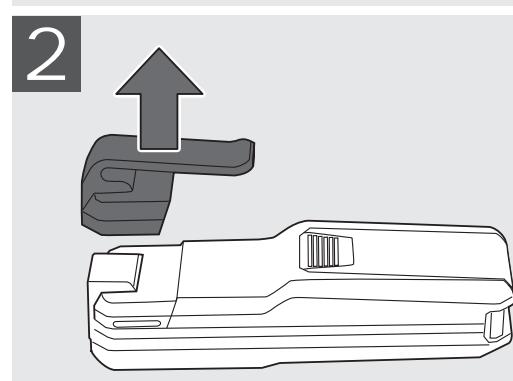
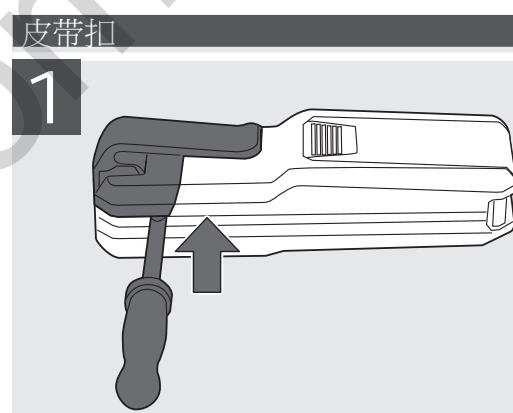
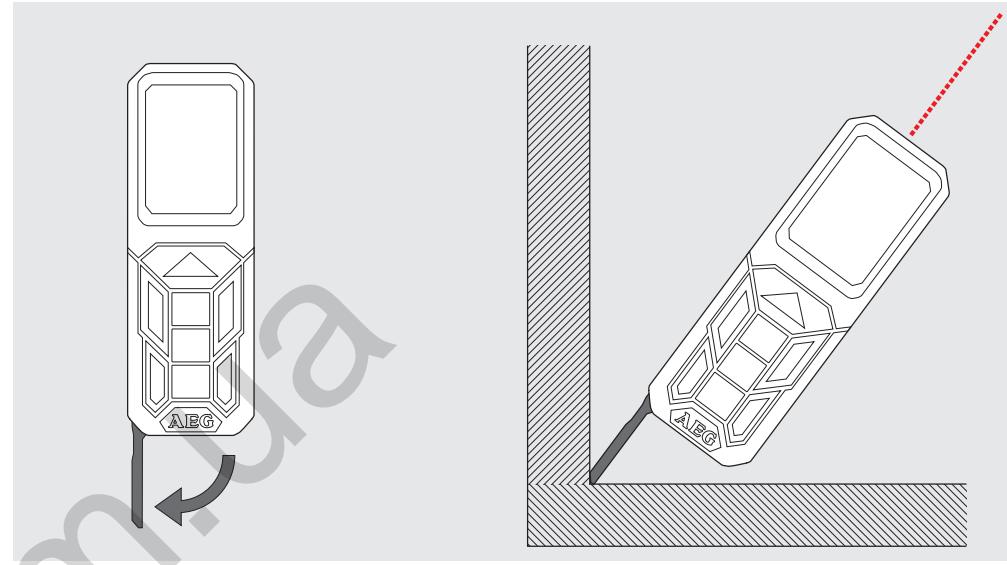
请依照本说明书的指示使用此机器。

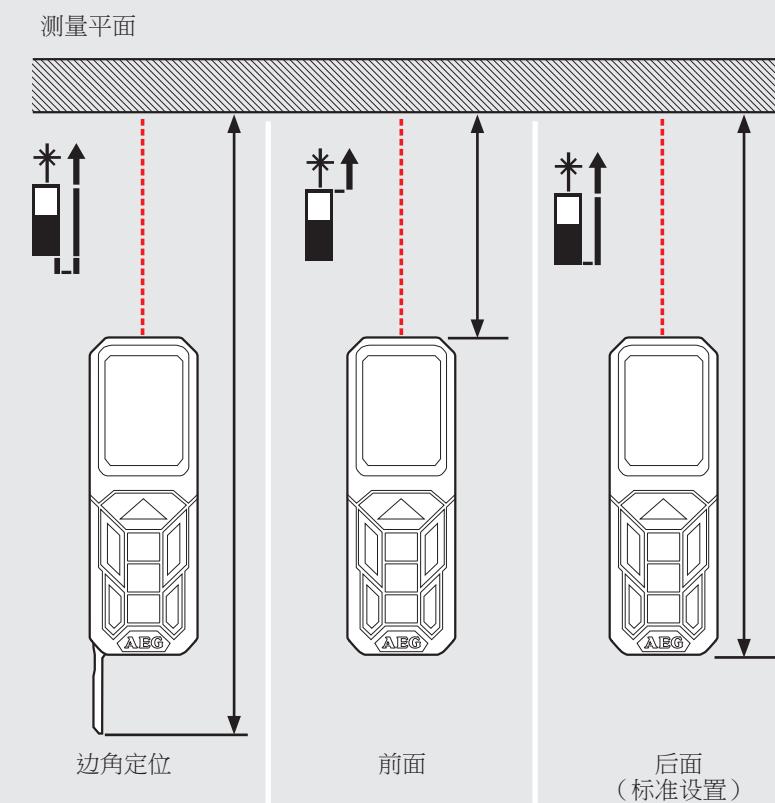
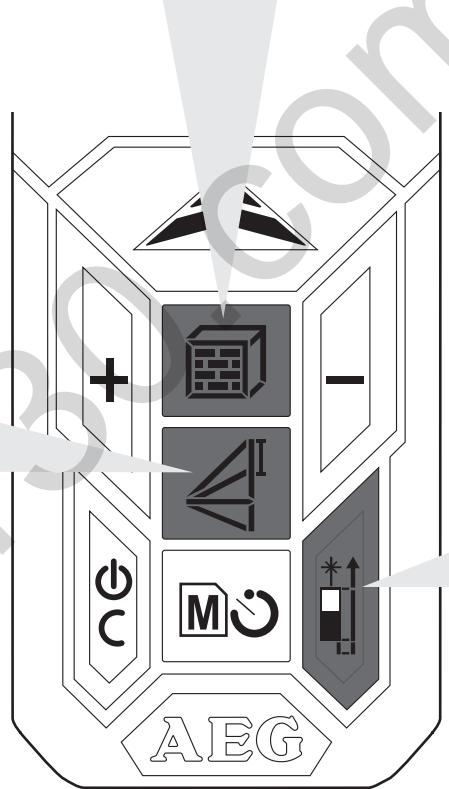
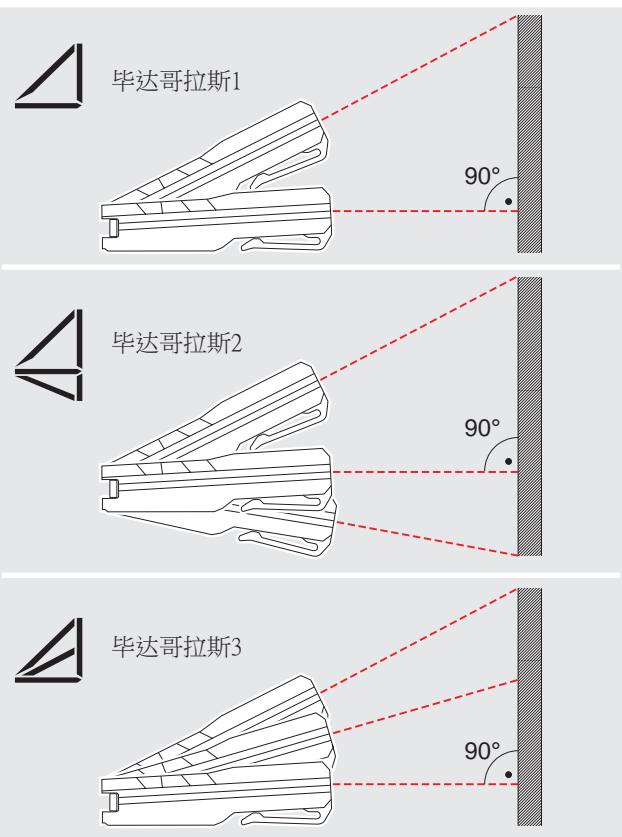
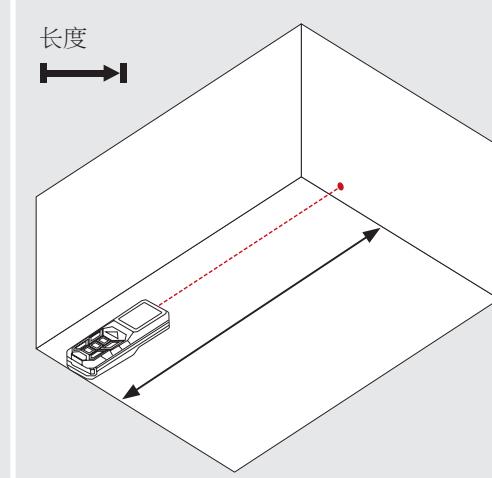
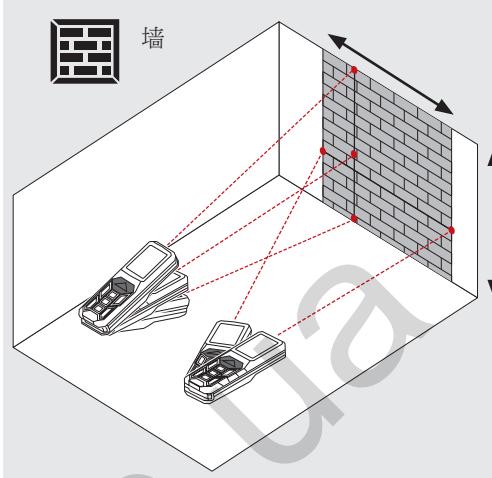
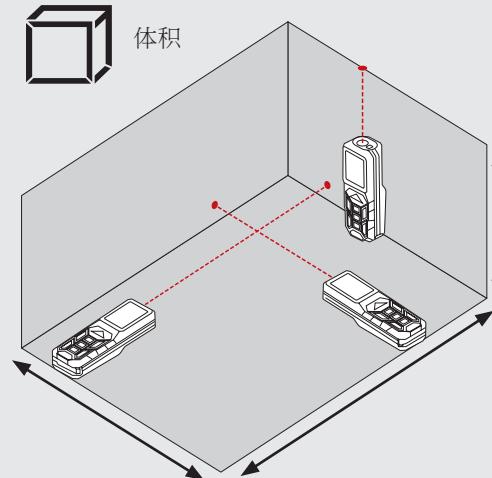
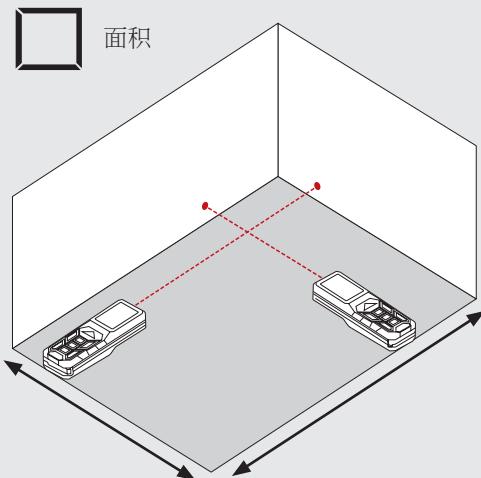


更换电池



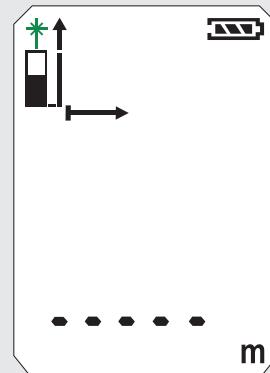
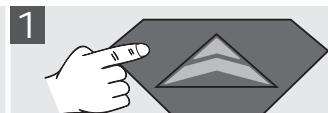
边角定位



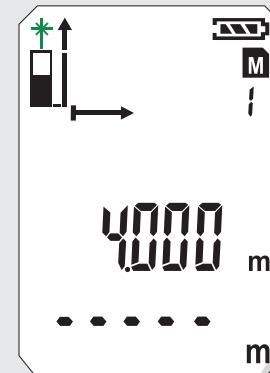
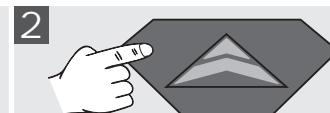
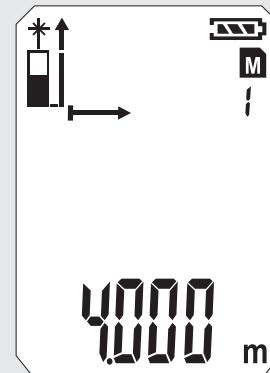
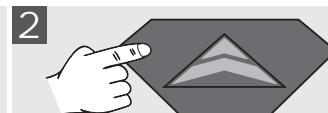


普通长度测量

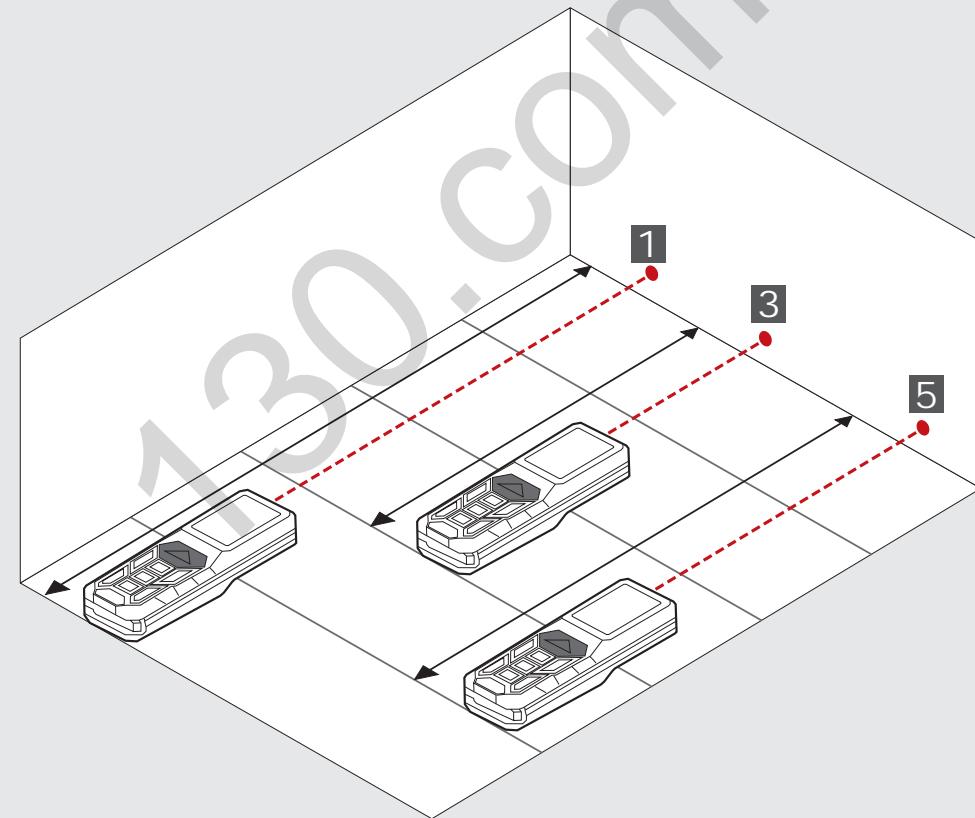
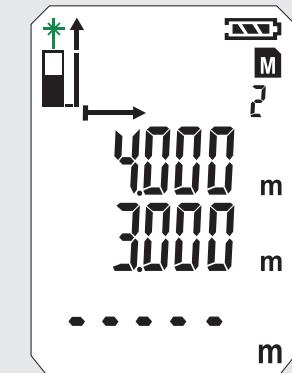
0



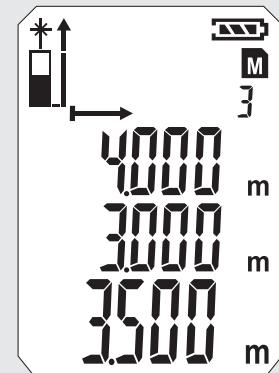
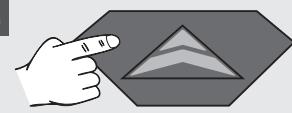
1



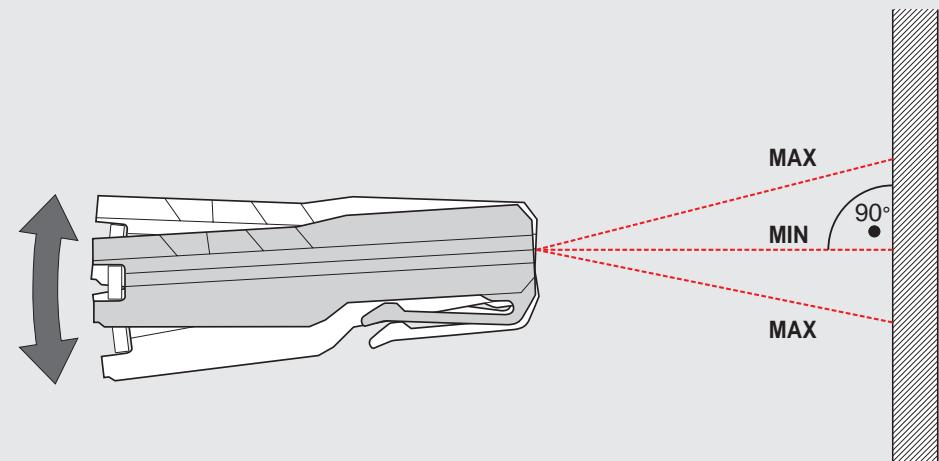
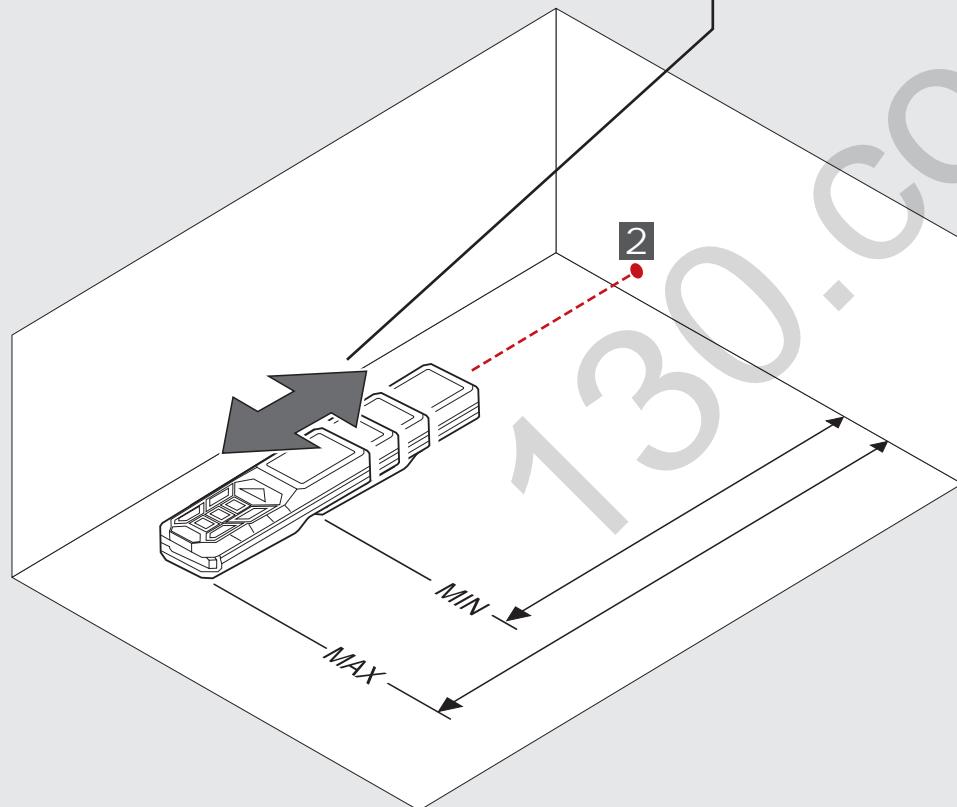
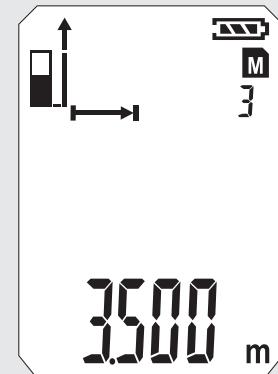
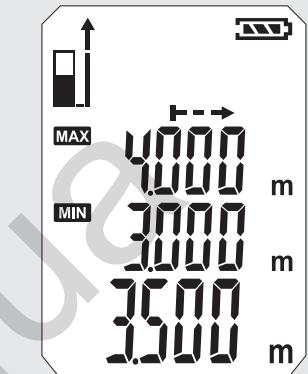
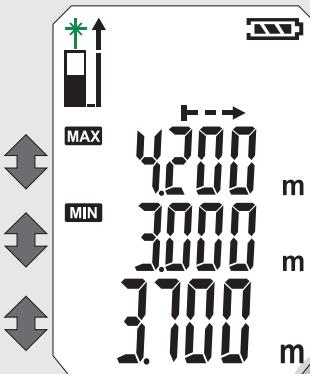
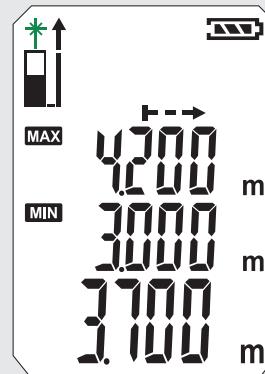
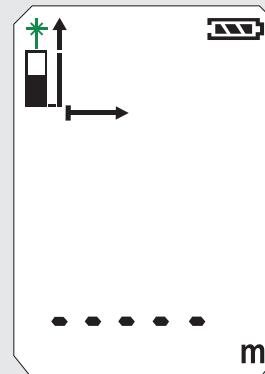
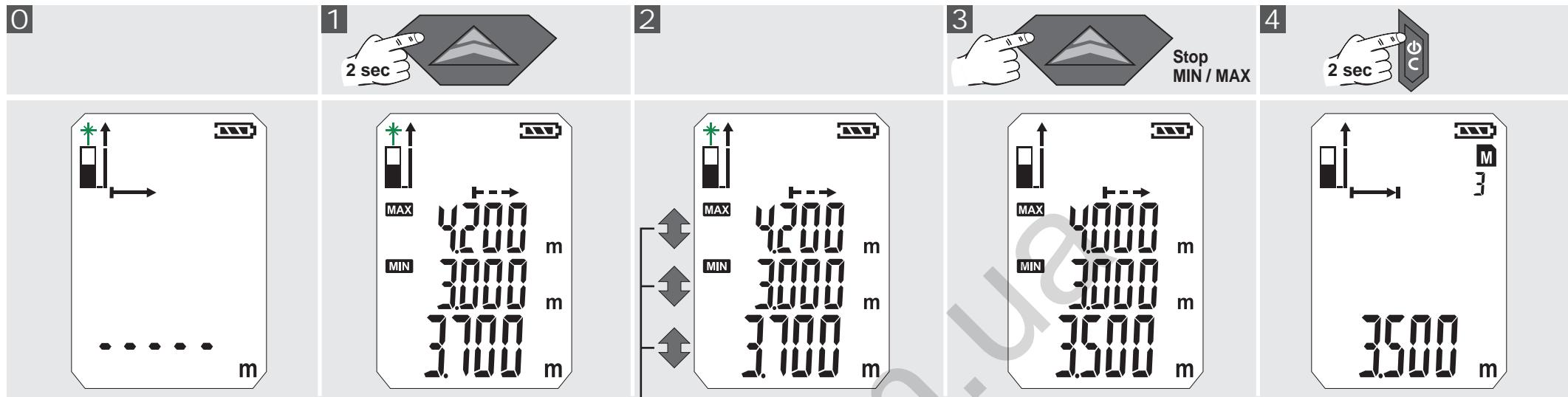
4

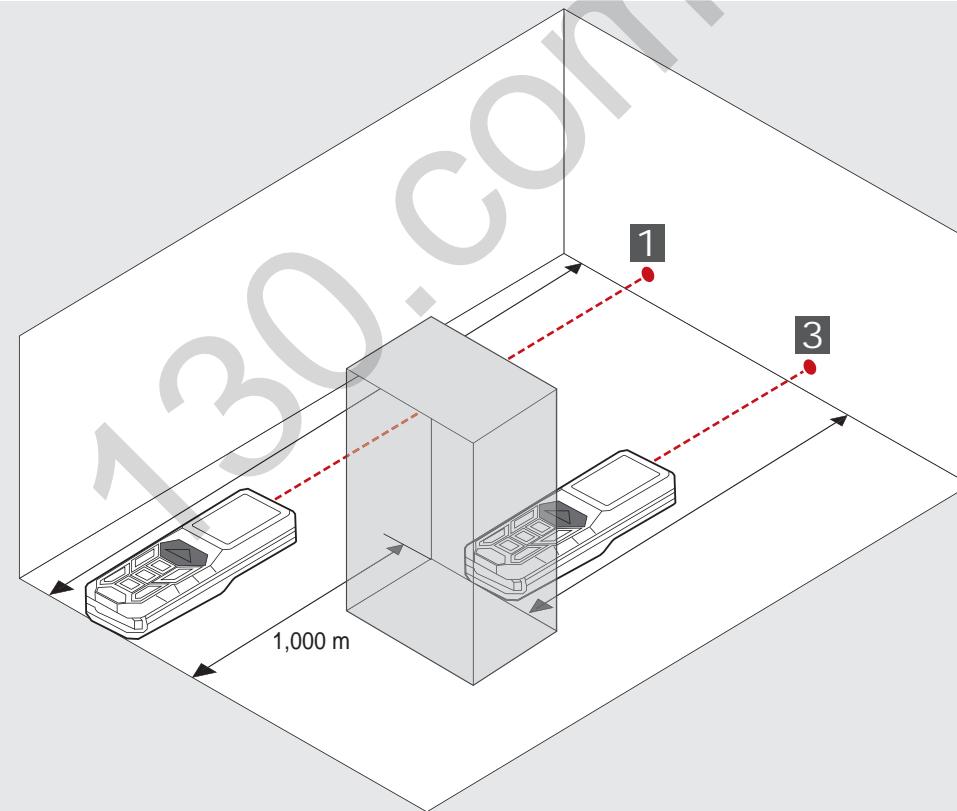
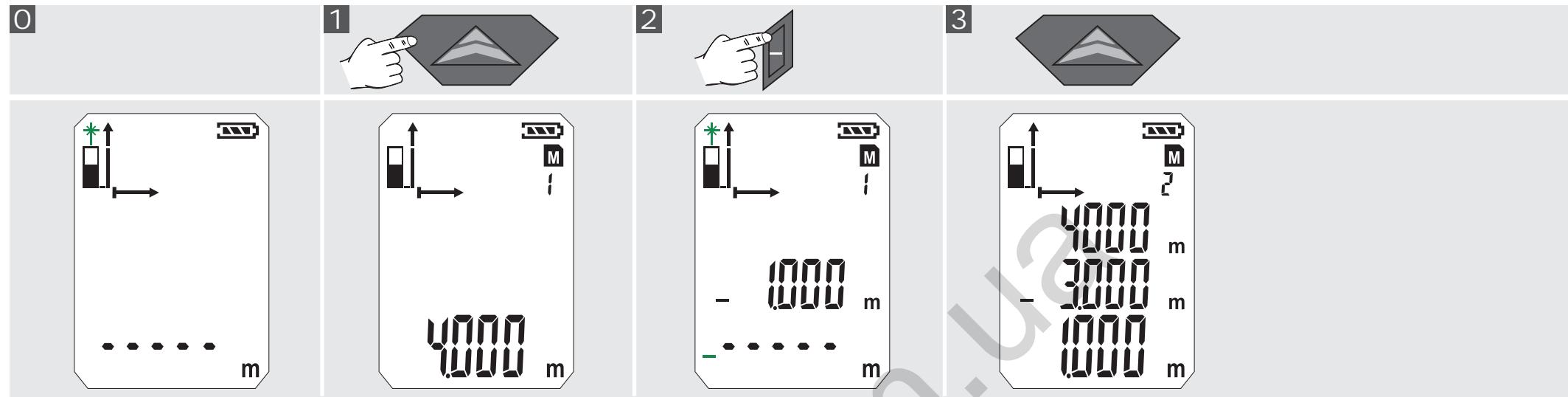


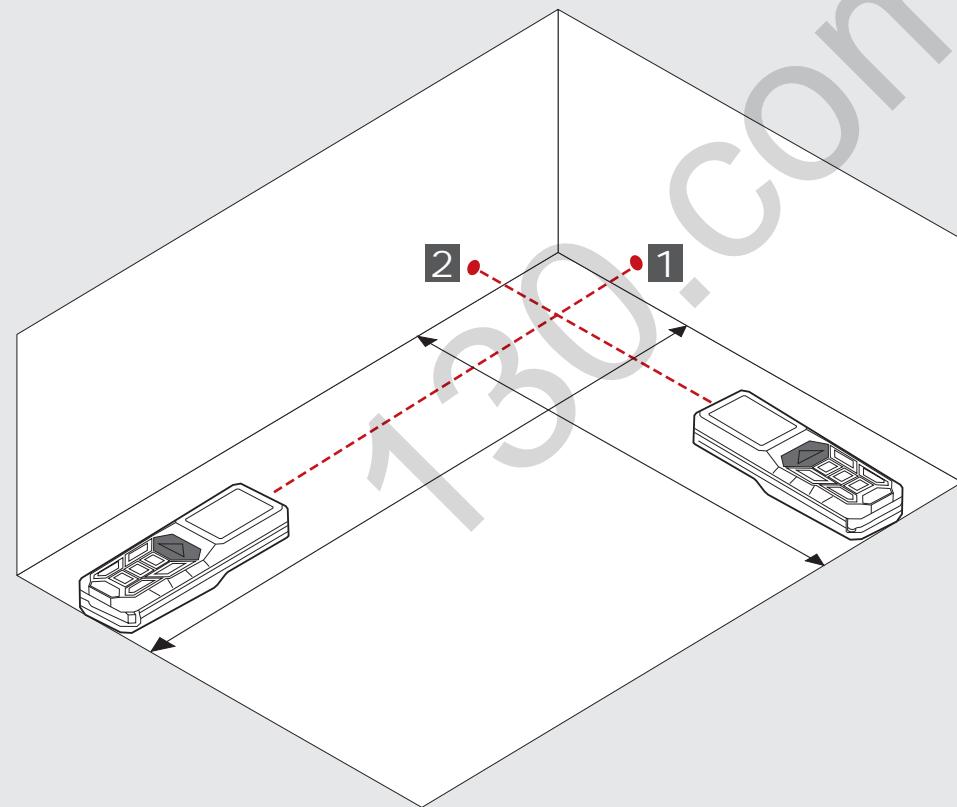
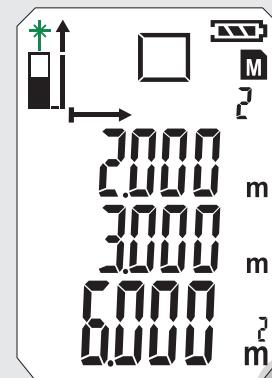
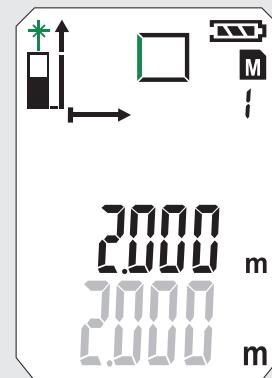
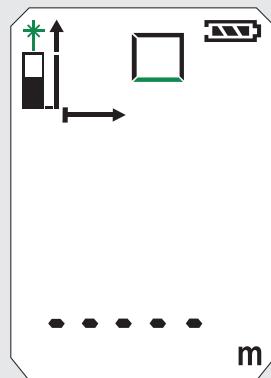
5

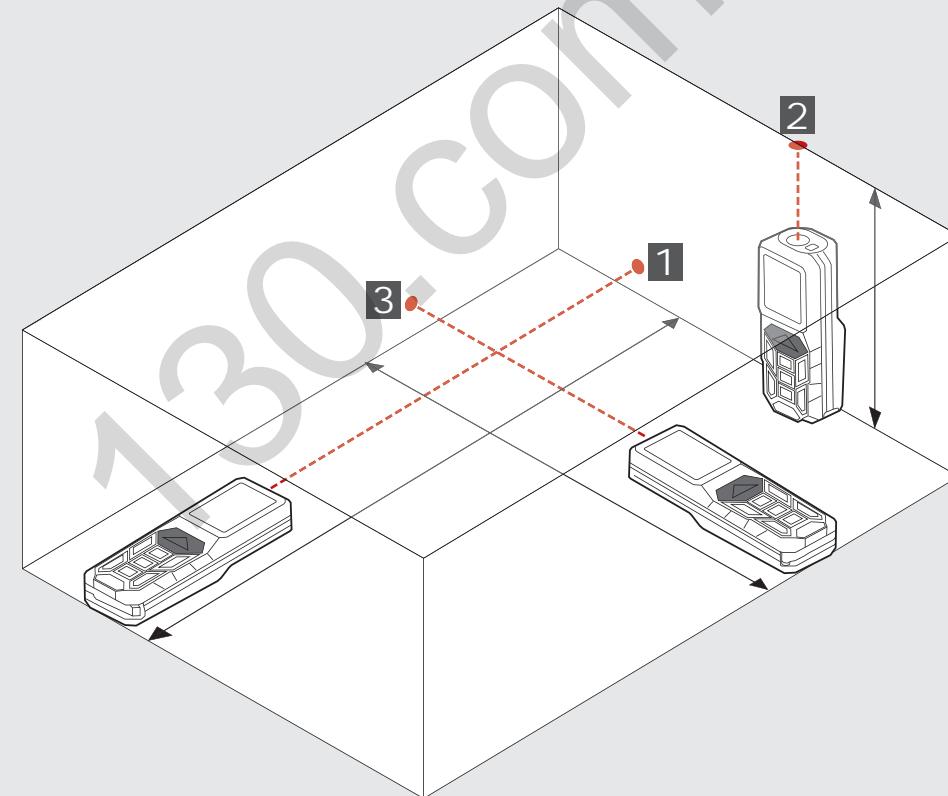
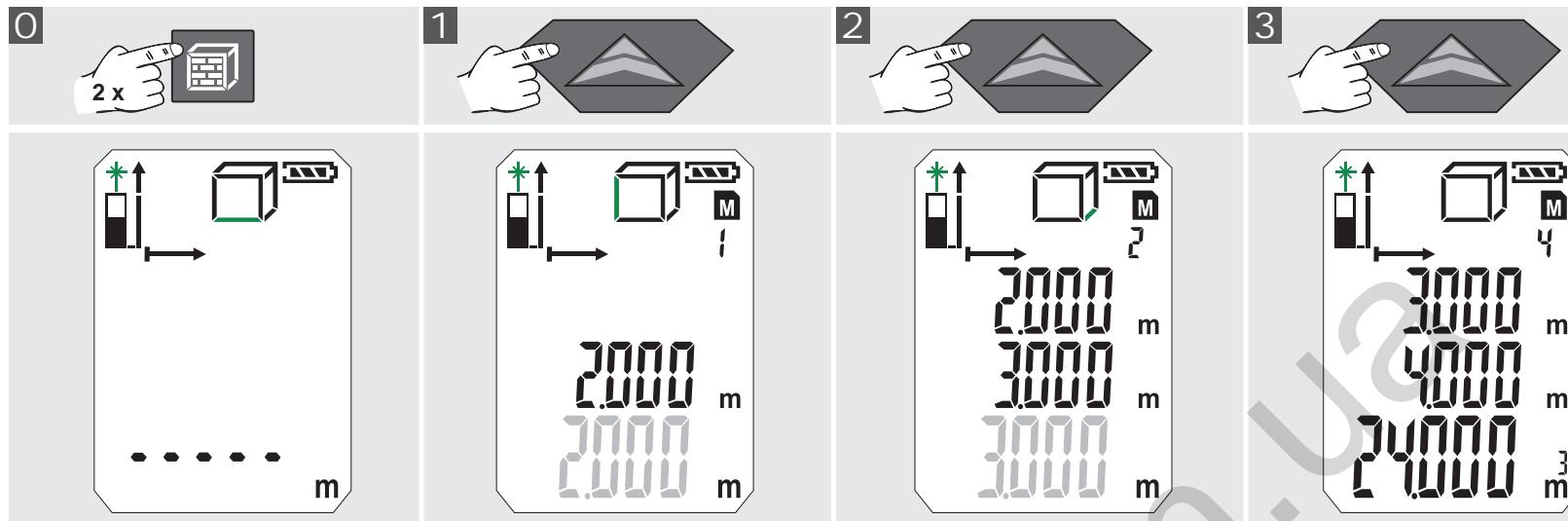


连续测量／最高最低值测量

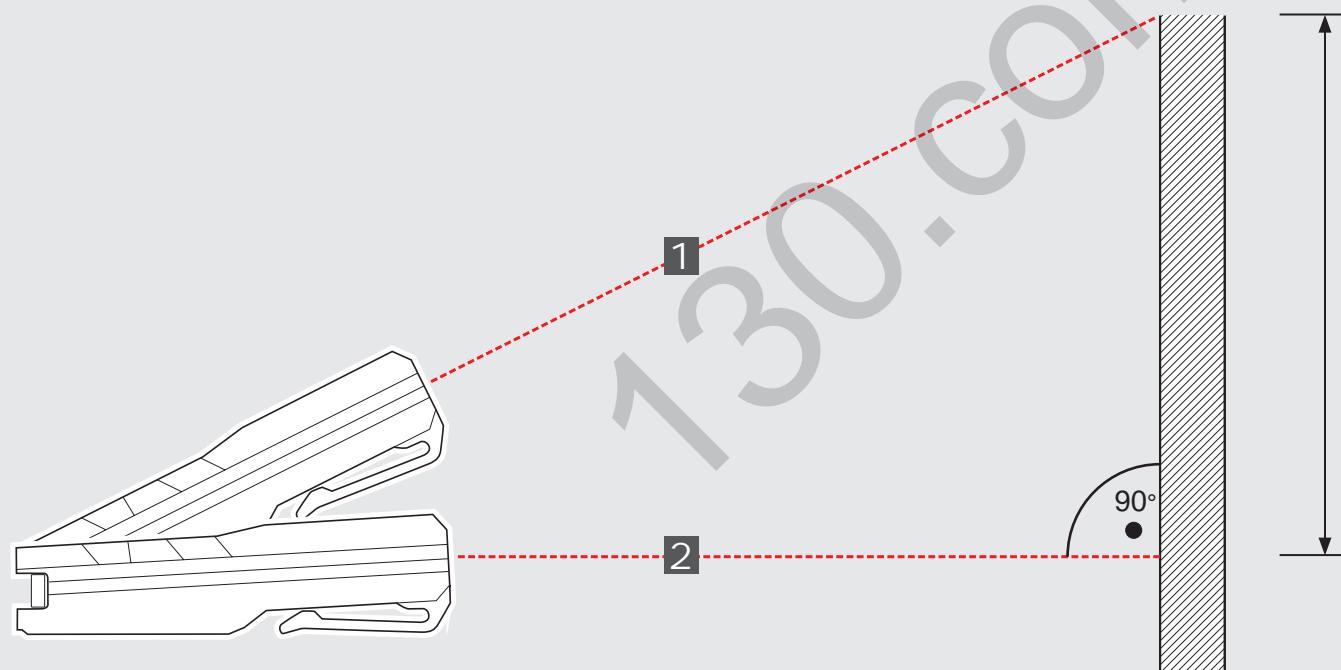
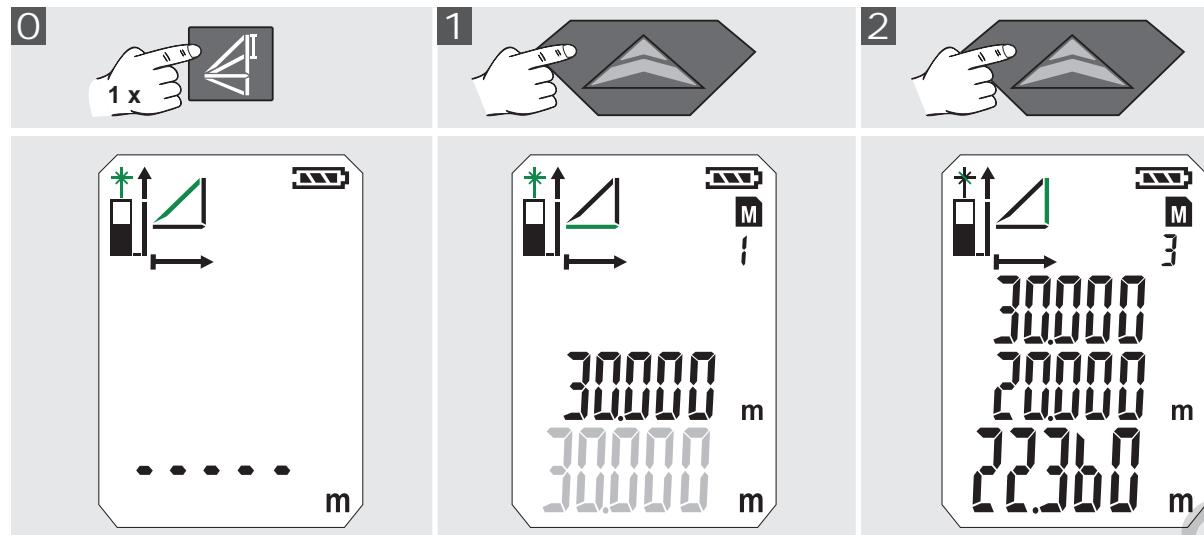




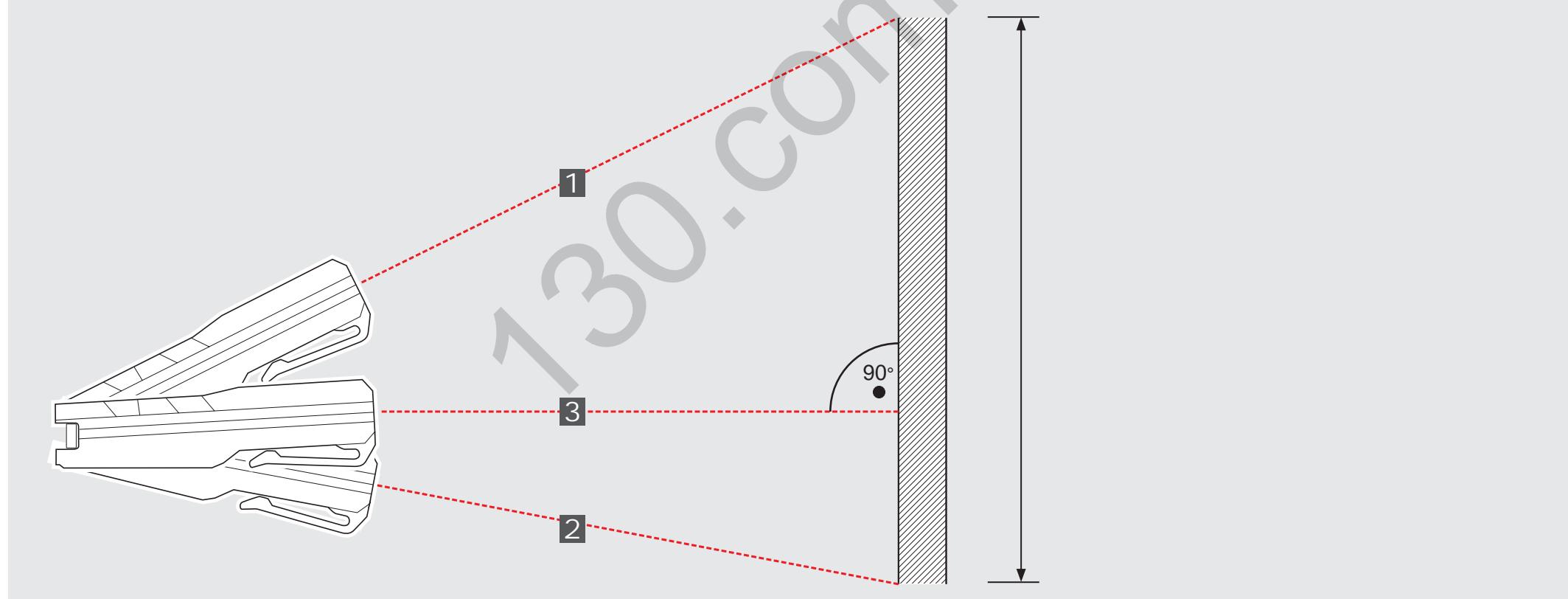
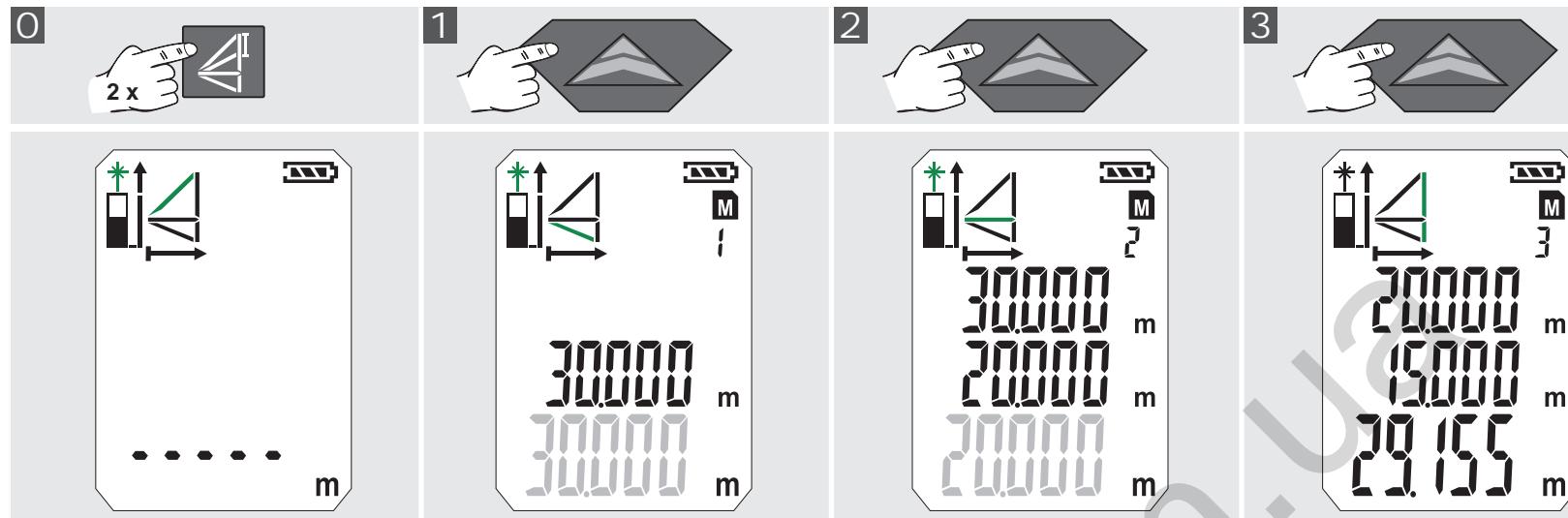




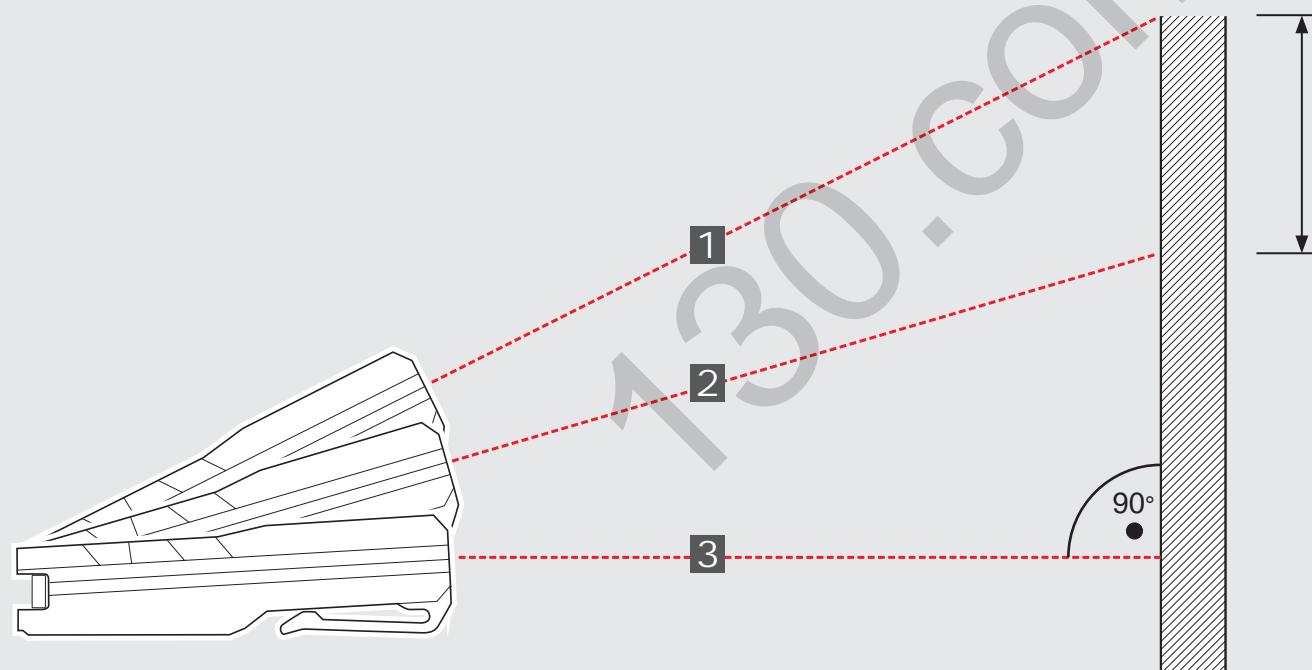
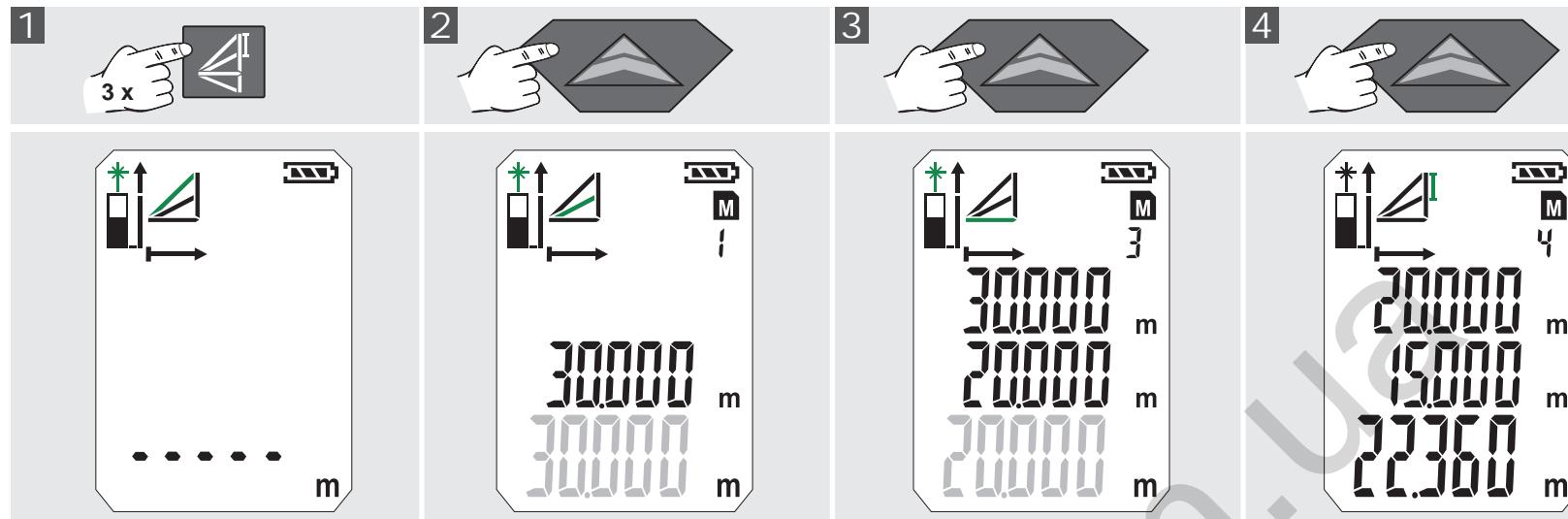
间接测量 (毕达哥拉斯1)



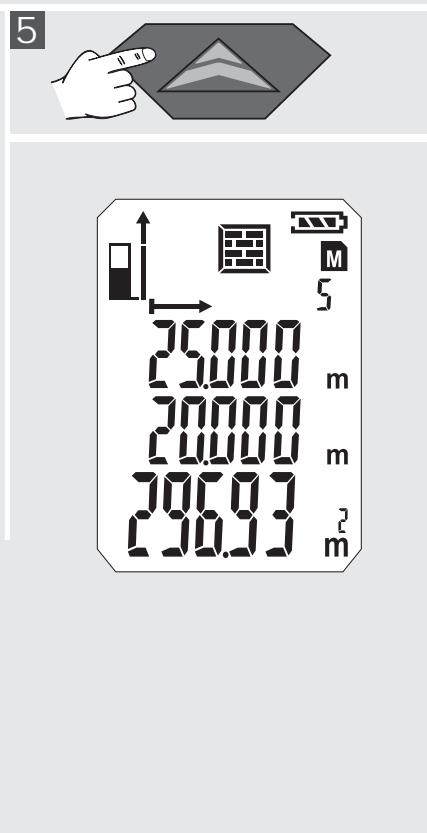
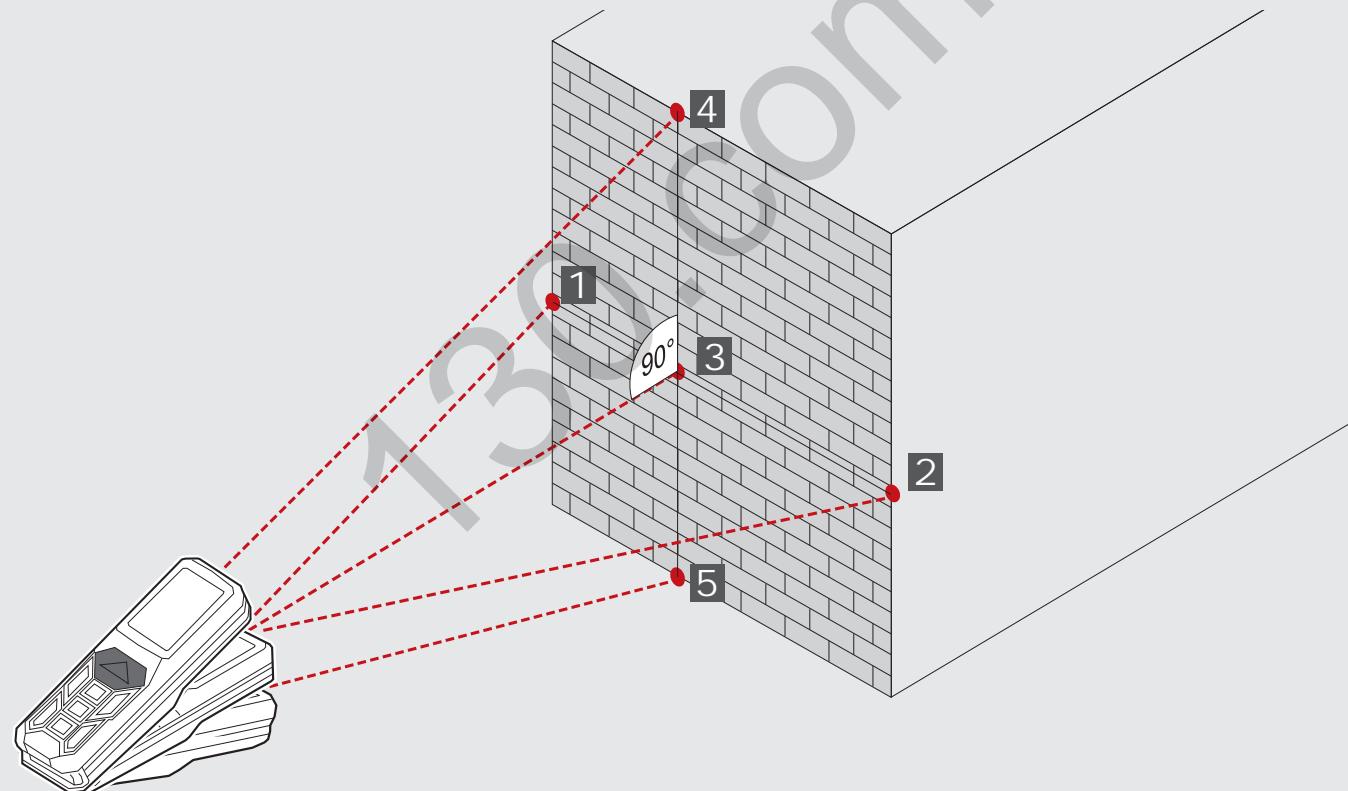
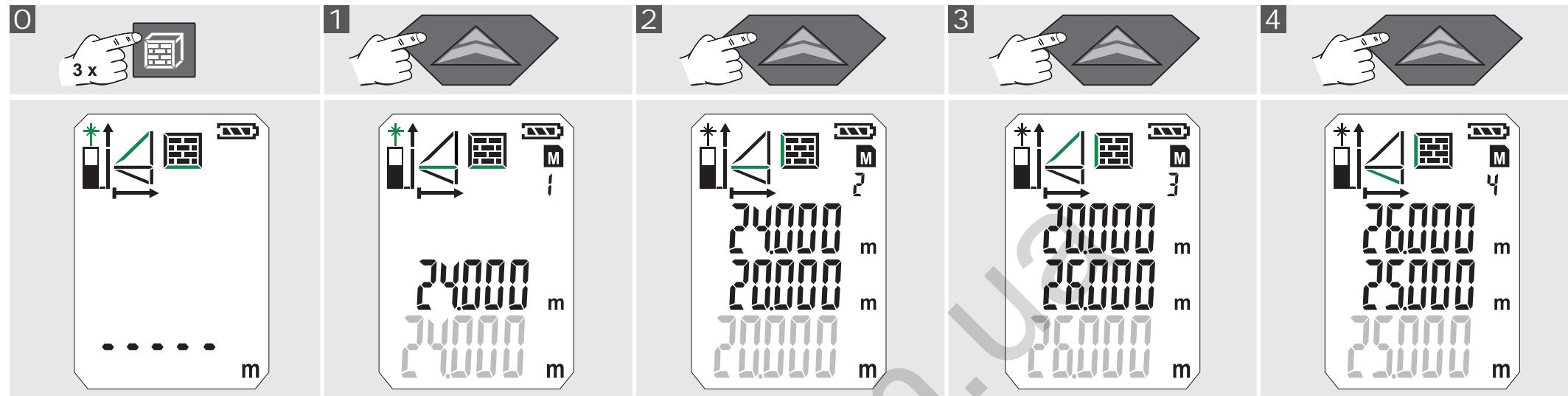
间接测量 (毕达哥拉斯2)



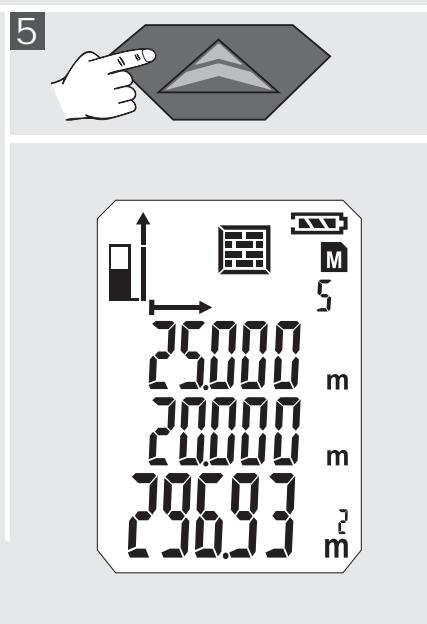
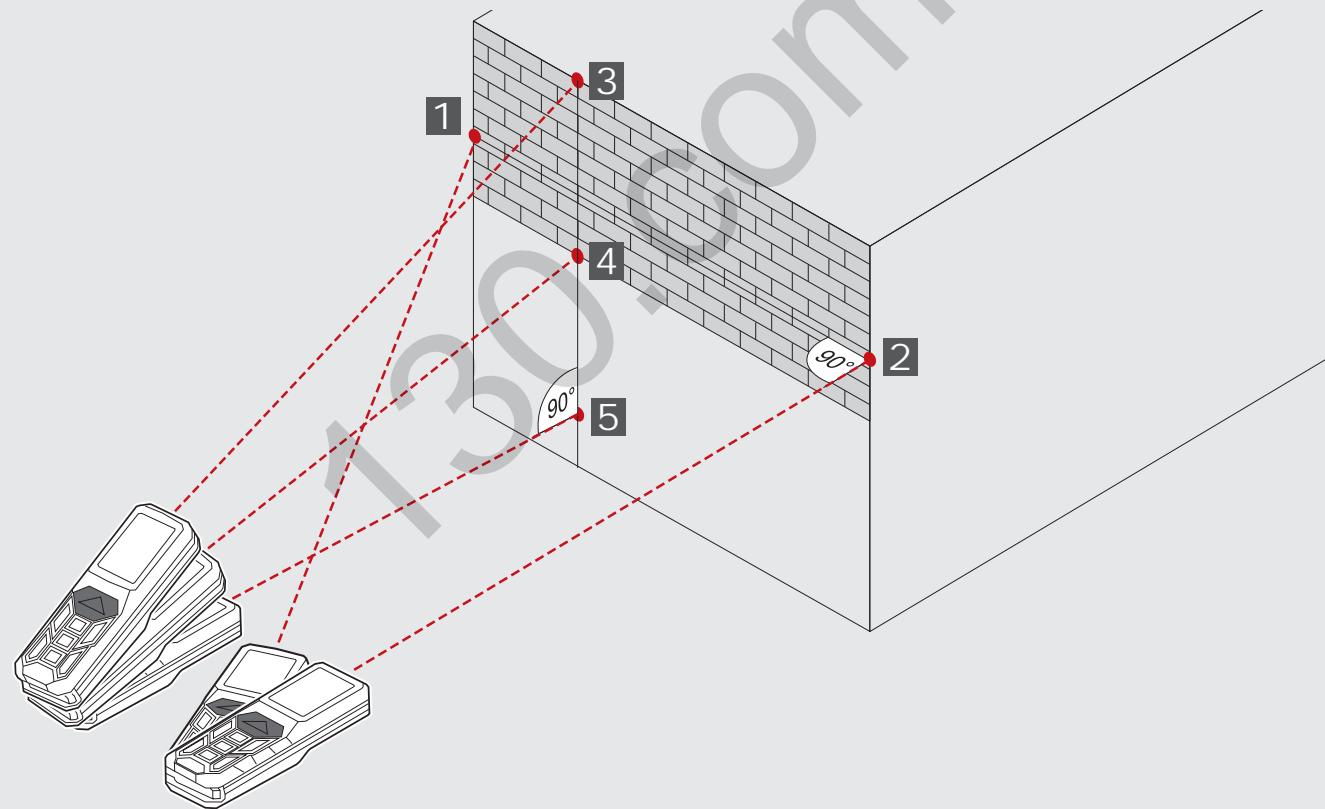
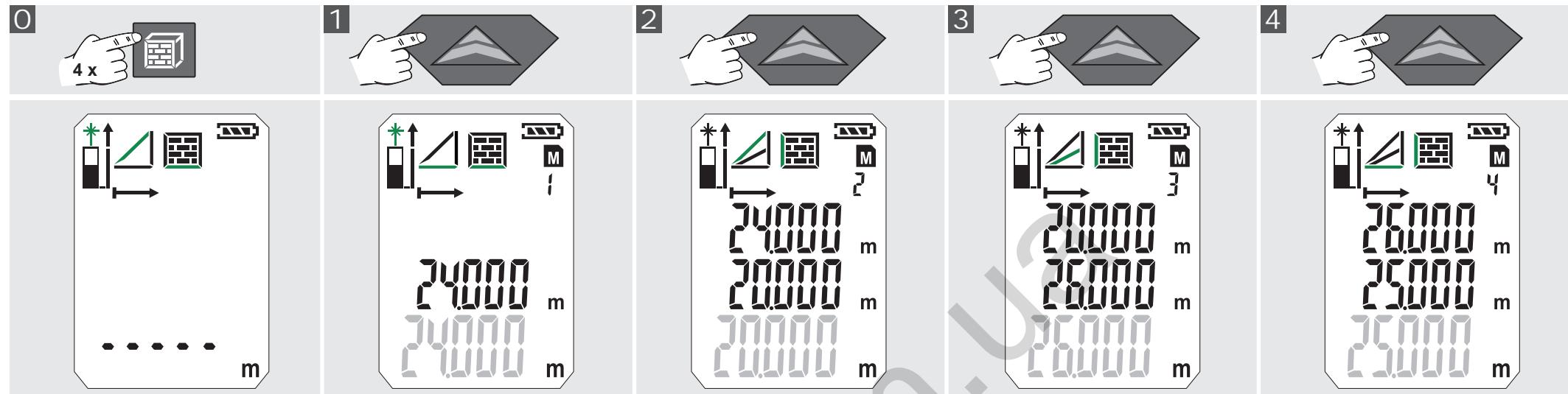
间接测量 (毕达哥拉斯3)



墙面面积测量（用例1）



墙面面积测量 (用例2)



倒计时器

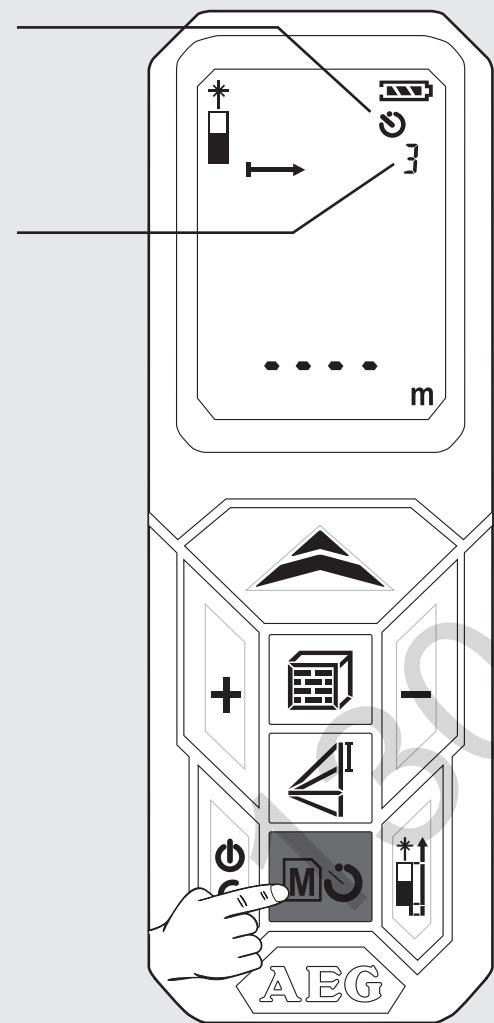
为放置部件等在测量光束中，可以通过倒计时器延迟触发测量程序。

按 **M** 键

标志将被显示按 **M** 键以调整倒计时器到3至15秒。

按 **▲** 键

- 倒计秒数一直到测量将被触发。
- 到0同时，测量将被触发。



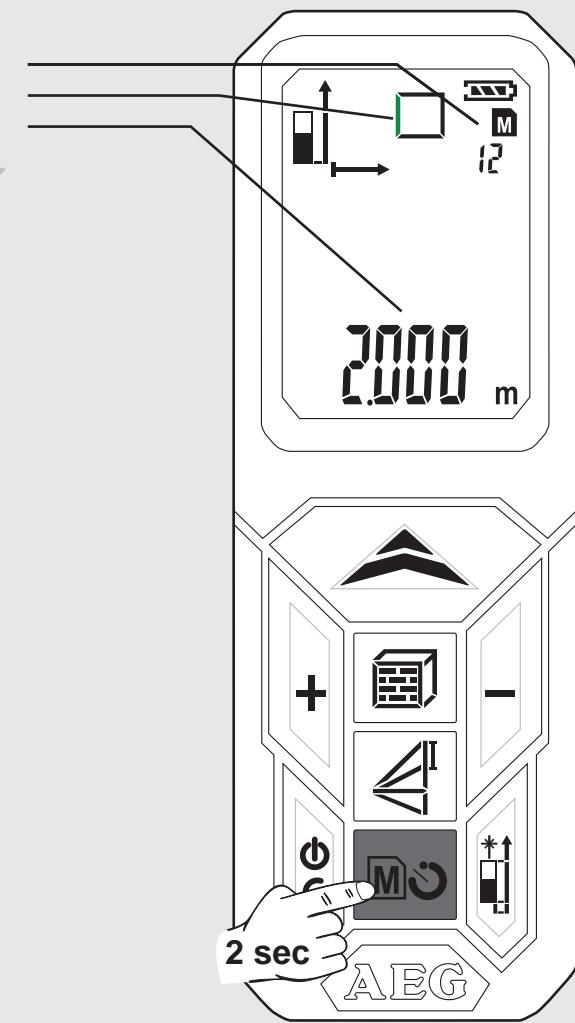
内存

测量数值将自动连续地储存到内存。

通过 **M** 键可以读出所储存的数值。

按 **M** 键2秒

- 标志和内存位号将被显示。
- 相应测量参数将被显示。
- 被储存数值将被显示在主行内。
- 按+/-键以导航。



按面积测量的例子说明基本工作原理（1）

1 接通

按  键。
小心！激光辐射！
严禁对准人员！

2 选择测量平面

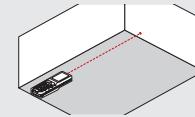
接通后标准设置：后面
 按1次->边角定位
 按2次->前面
按3次->后面

3 选择功能

接通后仪器标准设置为长度测量。
 按1次 - 面积测量

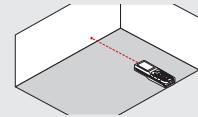
4 长度测量

把仪器对准并
按  键



5 宽度测量

把仪器对准并
按  键



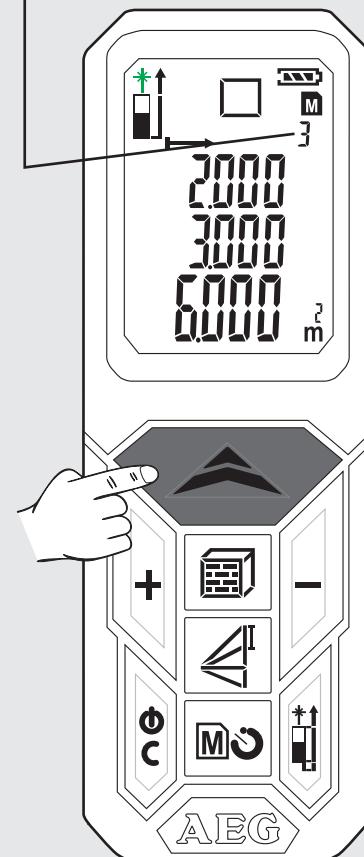
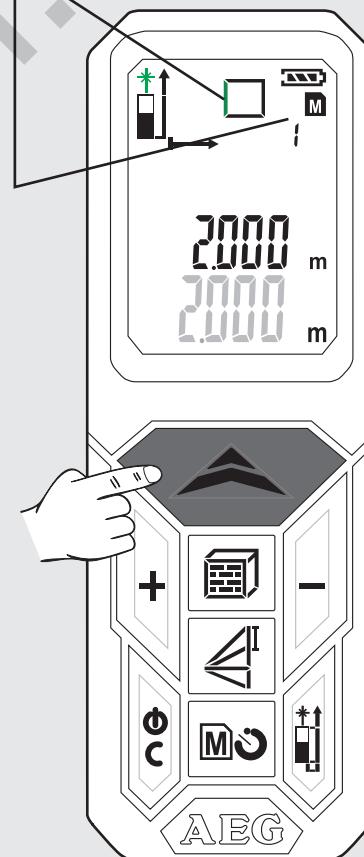
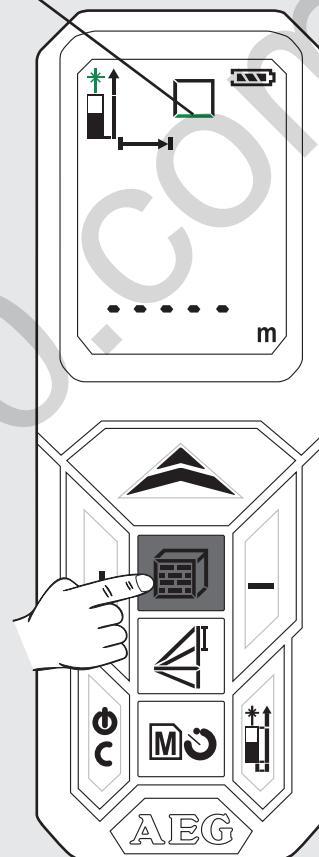
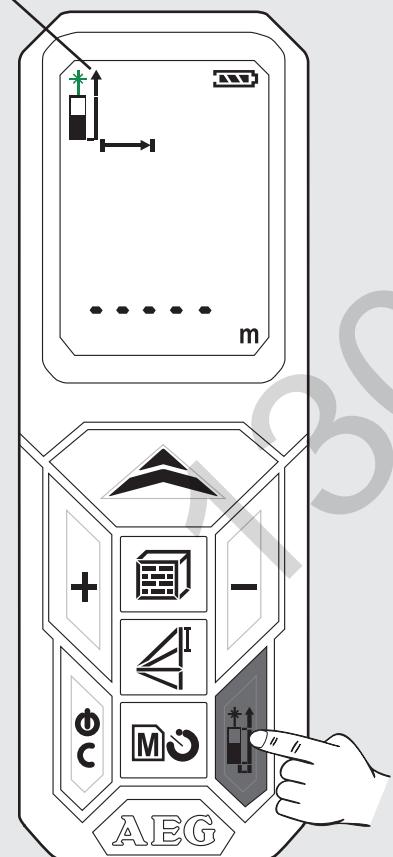
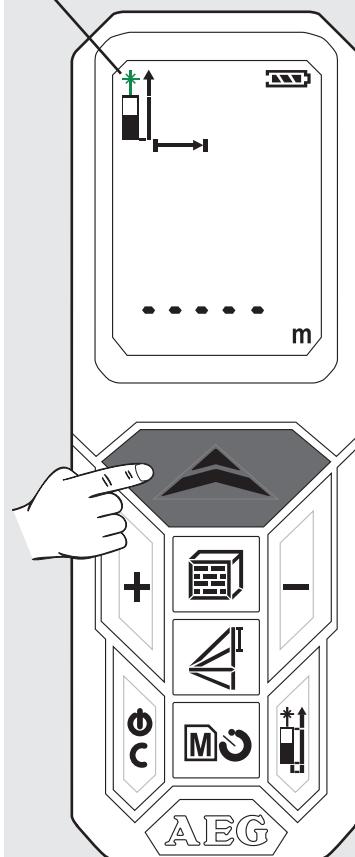
激光标志开始闪亮
(绿色闪亮显示)

标志将被显示

- 标志将被显示
参数将被显示 (绿色闪亮显示)

- 测量值将暂时被显示在主行内。
- 1秒后测量值跳到上面一行。
测量值将按编号被存储到内存。
第二测量参数开始闪亮。
仪器待第二数值的测量。

- 测量值将暂时被显示在主行内。
- 1秒后测量值跳到上面一行。
测量值将按编号被存储到内存。
- 结果将被显示在主行内并按编号存
储到内存。



按面积测量的例子说明基本工作原理（2）

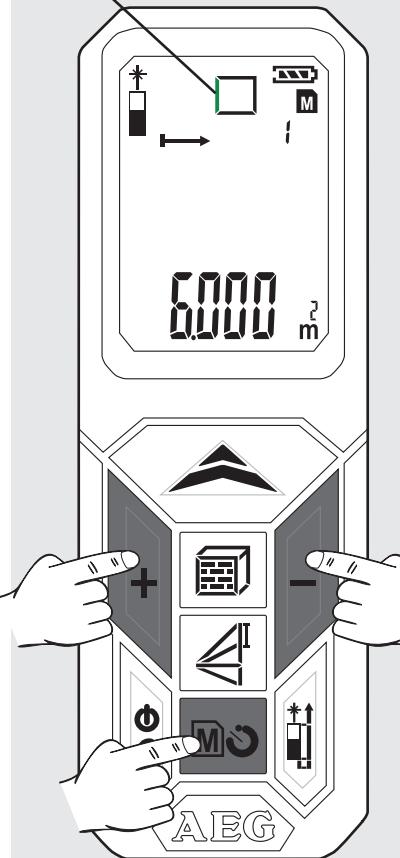
6 读出被存储数值

按 **M** 键2秒。

按+或-键。

- 被存储的数值将被显示在主行内。

相应的标志将被显示，参数开始闪亮（绿色闪亮显示）。



7 退出内存

按 **c** 键

8 关闭

按 **c** 键2秒（退出内存后）

- 仪器将关闭。

- 如果3分钟不按任何键，仪器将自动关闭。

