Laser Distance Meter
Laser-Distanzmesser
Laser distance-mètre
Metro di distanza laser
Medidor Láser de Distancia

User Manual

Please read this manual before switching the unit on.
Important safety information inside.

Content

The compact and handy base model was specifically designed for indoor applications. Shortcut and Soft grip keys for addition, subtraction, area and volume calculation make measuring fast and very reliable.

1.Safety Instruction

Permitted Use

- Measuring distances
- Computing functions, e. g. areas and volumes

Prohibited Use

- Using the instrument without instruction
- Using outside the stated limits
- Deactivation of safety systems and removal of explanatory and hazard labels
- Opening of the equipment by using tools (screwdrivers, etc.), as far as not specifically permitted for certain cases
- Carrying out modification or conversion of the product
- Use of accessories from other manufacturers without the express approval of CEM Technology.
- Deliberate or irresponsible behavior on scaffolding, when using ladders, when measuring near machines which are running, or near parts of machines or installations which are unprotected
- Aiming directly into the sun
- Inadequate safeguards at the surveying site (e.g. when measuring on roads, construction sites, etc.)

Laser Classification

The CEM produced a visible laser beam which emerges from the front of the instrument.

Laser Class 2 products:

Do not stare into the laser beam or direct it towards other people unnecessarily. Eye's protection is normally afforded by aversion responses including the blink reflex.

⚠ WARNING:

Looking directly into the beam with optical aids
(e.g. binoculars, telescopes) can be hazardous.

Precautions:

Do not look directly into the beam with optical aids.

⚠ CAUTION:

Looking into the laser beam may be hazardous to the eyes.

Precautions:

Do not look into the laser beam. Make sure the laser is aimed above or below eye level.

2.Start-Up

Inserting/Replacing Batteries (See "Figure A")

1) Remove battery compartment lid.
2) Insert batteries, observing correct polarity.
3) Close the battery compartment again.

- Replace the batteries when the symbol " ⊐ " flashes permanently in the display.
- Use alkaline batteries only.
- Remove the batteries before any long period of non-use to avoid the danger of corrosion

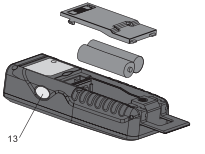

Figure A

Keypad (See "Figure B")

1- **ON/MEAS** button
2- **Bluetooth/Timer** button
3- **Single/Continous Distance measurement** button
4- **Area/Volume** button
5- **Storage** button
6- **Plus (+)** button
7- **Clear/Off** button
8- **Reference** button
9- **Tilt/Stake out** button
10- **Indirect measurement** button
11- **Minus (–)** button
12- **Illuminating/UNITS** button
13-**Side MEAS** button

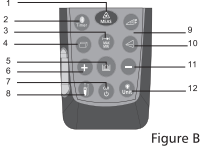

Figure B

LCD Display (See "figure C")

1- Laser active
2- Reference level (front)
3- Reference level (rear)
4- Reference level (tripod)
5- Reference level (end piece)
6- Area/Volume measuring functions
   - Area measurement
   - Volume measurement
5- Single distance measurement
6- Battery status
7- Variable Indirect measuring functionsory
   - Single Pythagorean measurement
   - Double Pythagorean measurement
   - Double Pythagorean (partial height) measurement
   - Tilt measurement
8- Stake out function
9- Battery status
10- Single distance measurement
11- Continuous measurement & Max and Min measurement
12- Instrument error warning
13- Historical memory
14- Bluetooth
15- Timer
16- Tilt
17- Intermediate line 1
18- Intermediate line 2
19- Intermediate line 3
20- Summary line

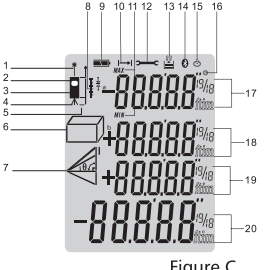

Figure C

3.Initial Operation and Setting

Switching On and Off

MEAS Switches on the instrument and laser.

CLR Press this button longer to switch off the instrument.
The instrument switches off automatically after three minutes of inactivity.

Clear Button

CLR The last action is cancelled or the data display is cleared. If in the mode of History storage, press Storage button and Clear button simultaneously will clear all storage data in the memory.

Reference Level Setting (See "Figure D")

The default reference setting is from the rear of the instrument.
Press this button to take the selection from the front edge ,
A special beep sounds whenever the reference setting is changed. After a re-startup the reference returns automatically to the default setting (rear reference).

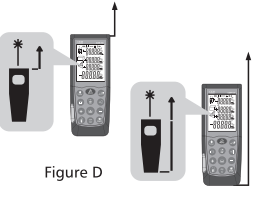

Figure D

Using the Tripod reference

The reference must be appropriately adjusted in order to be able to take correct measurements with a tripod. You can switch the reference on the tripod on or off by longer pressing the reference button.

Multifunctional end piece

The instrument can be adapted for the following measuring situations See figure {E}..

• For measurements from an edge, fold out the positioning bracket until it first locks in place.

• For measurements from a corner, open the positioning bracket until it locks in place, then push the positioning bracket lightly to the right to fold it out fully.

See figure {F}.

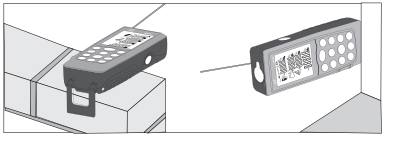

Figure E

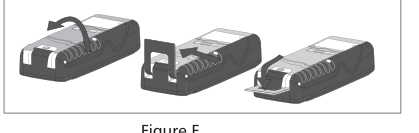

Figure F

Display Illumination

Click illumination/UNITS button of the display can be switched on or off, user can trigger the function when he/she is in darkness situation.

Distance Unit Setting For Instrument

Click the button longer to change the next type of unit. The following unit can be set:

	Distance	Area	Volume
1	0.000 m	0.000 m^2	0.000 m^3
2	0.0 in	0.000 ft^2	0.000 ft^3
3	0 1/16 in	0.000 ft^2	0.000 ft^3
4	0.000 ft	0.000 ft^2	0.000 ft^3
5	0’ 00” 1/16	0.000 ft^2	0.000 ft^3

4.Measuring

Single Distance Measurement

MEAS Press to activate the laser.
Press again to trigger the distance measurement. The measured value is displayed immediately.

Continuous laser

MEAS Press and hold down the key until the Laser active character appears permanently in the display and a beep sounds. Every further press of the key releases a distance measurement. You can switch the continuous laser function on or off by press this button longer.

CLR Or you can press the key to switch the device and Laser continuous operation off.
If the laser is in continuous operation mode, the laser automatically switches off after 3 minutes.

Continuous Measurement (Tracking) & Max and Min Measurement (See "Figure G")

The continuous measurement function (tracking) is used for the transferring of measurements, e.g., from construction plans. In continuous measurement mode, the measuring tool can be moved to the target, whereby the measured value is updated approx. every 0.5 seconds in the third line. The corresponding minimum and maximum values are displayed dynamically in the first and second line.

As an example, the user can move from a wall to the required distance, while the actual distance can be read continuously. For continuous measurement, push button until the indicator for continuous measurement appears in the display. And press MEAS or Clear but

ton again to stop the function. The function is terminated automatically after continuous 100 times measurement.

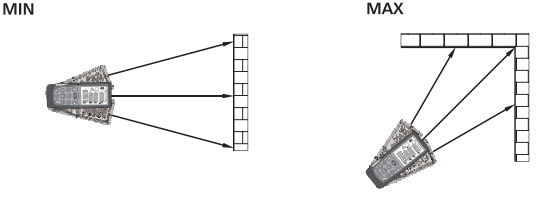

Figure G

5.Functions

Addition / Subtraction

Distance measuring.

- The next measurement is added to the previous one.
- The next measurement is subtracted from the previous one.
- The last step is cancelled.
- Return to the single distance measurement

Area Measurement

Press theArea/Volume button once. The ▱ symbol appears in the display.
Press MEAS button to take the first length measurement (e.g. length).
Press MEAS again to take the second length measurement (e.g. width).
The result of the function is displayed in the summary line.

Volume Measurement

For volume measurements, push Area/Volume button twice until the  indicator for volume measurement appears in the display.

 press to takes first distance measurement (e.g. length)

 press to takes second distance measurement(e.g. width)

 press to takes the third distance measurement(e.g. height).

The result of the function is displayed in the summary line.

Indirect Measurement (See "Figure H")

Indirect measurement - determining a distance using 2 auxiliary measurements.

e.g. when measuring heights that require the measurement of two or three measurements as following step:

Press this button once, the display shows. The distance to be measured flashes in the symbol.

MEAS Aim at the upper point (1) and trigger the measurement.

After the first measurement the value is adopted. Keep the instrument as horizontal as possible.

MEAS Press to measurement the distance result of the horizontal point (2).

The result of the function is displayed in the summary line.

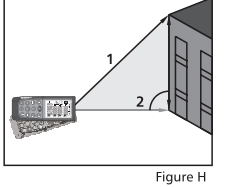

Figure H