

The safety regulations and instructions along with the operating manual should be read carefully before initial operation. The person responsible for the instrument must ensure that equipment is used in accordance with the instructions. This person is also accountable for the deployment of personnel and for their training and for the safety of the equipment when in use. To read the full version of the operating manual, scan QR-code.

SAFETY INSTRUCTION

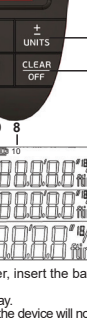
Prohibited use
Please follow up instructions given in operating manual.
Do not use instrument in explosive environment (filling station, gas equipment, chemical production and so on).
Do not remove warning labels or safety instructions.
Do not open instrument housing; do not change it's construction or modification.
Do not stare at beam. Laser beam can lead to eye injury (even from greater distances).
Do not aim laser beam at persons or animals.
Opening of the equipment by using tools (screwdrivers, etc.), as far as not specifically permitted for certain cases.
Inadequate safety precautions at the surveying site (e.g. when measuring on the roads, construction sites and so on).
Use the instrument in the places where it could be dangerous: on the air transport, near manufacturers, production facilities, in the places where the work of laser distance meter can lead to the harmful effects on people or animals.

START UP

Keypad
1) ON / Measure/ Continuous measurement
2) Area / Volume / Pythagorean measure
3) Reference
4) Clear / OFF
5) Addition / Subtraction/ Units



Display
1. Laser ON
2. Reference (front/rear/end piece)
3. Area / volume/ Pythagorean
4. Main line
5. Line 2
6. Line 1
7. Units
8. Angle of slope
9. Battery level
10. Error



Inserting / Replacing Batteries
Remove the end piece on 180°. Remove the battery cover, insert the battery correctly. Pay attention to correct polarity. Close the battery compartment.
Replace the battery when symbol constantly blinks in the display.
Batteries should be removed in case of danger of corrosion, if the device will not be used for a long time.

MENU FUNCTIONS

Switch on and off
Press the button (1) to switch on the instrument and laser. Press and hold key for about 2 seconds to start continuous measuring. To switch off the instrument press and hold button (4) for about 2 sec.

Reference Setting
Default reference setting is from the rear of the device. Press the button (3) to set the reference: the front, the rear, end-piece. You will see the reference symbol on the display.

Selecting Units
Press and hold the button (5) for 2 sec. until the desired unit is displayed.

Clear-Key
Cancel the last action. Press button (4).

MEASUREMENTS

Single distance measurement
Press button (1) to activate the laser. When in continuous laser mode, press this button to trigger the distance measurement directly. The instrument will give acoustical signal. The result is displayed immediately.

Continuous Measurement
Press and hold the button (1) for about 2 seconds to start continuous measuring.

Minimum/ Maximum measurement
This function allows the user to measure the minimum or maximum distance from a fixed measuring point. It is commonly used to measure room diagonals (maximum values) or horizontal distances (minimum values). Press and hold down the button (1), until you will hear acoustical signal. Then slowly sweep the laser back and forth and up and down over the desired target point (e.g. into the corner of a room). Press (1) to stop continuous measurement. The values for maximum and minimum distances are shown on the display as well as the last measured value in the main line.

FUNCTIONS
Addition/Subtraction
Press button (5), next measurement is added to the previous one. Press button (5): next measurement is subtracted from the previous one. To complete this function press button (1). Repeat this function to measure distances. The result is displayed in the main display area. Previous measured value is displayed in the first line, last measured value is displayed in the second line. To finish working in this mode press button (4).

Area
Press button (2) once. The symbol "area" is displayed. Press button (1) to take the first measurement (for example, length). Measured value is displayed in the second line.
Press button (1) to take the second measurement (for example, width). Measured value is displayed in the second line. First measurement (e.g. length) is displayed in the first line. The result of measured area is displayed in the main display area.

Addition / Subtraction of areas
Area measuring – see Area.
Take the first measurement of area. Press button (5) to enter into the Addition mode or button (5) once more to enter into the Subtraction mode. Area value is displayed in the second line.
Press button (1) to take the first measurement (for example, length). Press button (1) to take the second measurement (for example, width).
After the completion of area, press button (1), the result of addition/subtraction of areas is displayed in the main display area. If the measurements are not finished, press button (5) (addition) or (5) (subtraction) to continue calculations.

Volume
For volume measurements, press button (2) twice until the indicator for volume measurement appears on the display.
Press button (1) to take the first measurement (for example, length). Measured value is displayed in the second line.
Press button (1) to take the second measurement (for example, width). Measured value is displayed in the second line. Area value is displayed in the first line.
Press button (1) to take the third measurement (for example, height). Measured value is displayed in the second line. The volume value will be displayed in the main display area and the previous area value is displayed in the first line.

Indirect measurement
Pythagorean measurement is used in the condition that the objective needing to be measured is covered or has no effective reflecting surface and can't be measured directly.
Make sure you adhere to the prescribed sequence of measurement:
All target points must be in a horizontal or vertical plane.
The best results are achieved when the instrument is rotated about a fixed point (e.g. with the positioning bracket fully folded out and the instrument placed on a wall) or the instrument is mounted on a tripod.
The minimum / maximum function can be used. The minimum value must be used for measurements at right angles to the target; the maximum distance for all other measurements.
The best results are achieved when the instrument is rotated about a fixed point (e.g. with the positioning bracket fully folded out and the instrument placed on a wall) or the instrument is mounted on a tripod.
Continuous measurements can be used. This function is used for minimum/maximum measurements. The minimum value must be used for measurements at right angles to the target; the maximum distance for all other measurements. Be sure that the first measurement and distance are measured at right angles. Use continuous measurement function.

Indirect measurement – determining a distance using 2 auxiliary measurements
This function is used when height and distance can't be measured directly.
Press button (2) 3 times. The symbol "triangle" is displayed. The distance to be measured is blinking in the symbol triangle. Press button (1) to take distance measuring (hypotenuse of triangle). The result is displayed in the second line. This measurement can be taken in the indirect measurement function. Press and hold button (1) for 2 sec. After second pressure of the button (1) maximum value is fixed.
The second distance to be measured is blinking in the symbol triangle. Press button (1) to take distance measuring. There is a right angle between laser beam and the length you need to measure. That's why you should work in continuous mode. Press and hold button (1) for 2 sec. After second pressure of the button (1) maximum distance is fixed. The result of the measurement is displayed in the second line. Previous measurement is displayed in the first line. The result of the function is displayed in the main display area.

Indirect measurement – determining a distance using 3 measurements
This function is used when it's necessary to measure diagonals of rectangular areas, and also for calculation of the length of frameworks, inclined distances and so on.
Press button (2) 4 times. The symbol "triangle" is displayed. The distance to be measured is blinking in the symbol triangle. Press button (1) to take distance measuring (side of the triangle). The result of the function is displayed in the second line. This measurement can be taken in the mode of continuous measurement. Press and hold button (1) for 2 sec. After second pressure of the button (1) maximum value is fixed.
The second distance to be measured is blinking in the symbol triangle. It's very important to have right angle between laser beam and the length you need to measure. That's why you should work in continuous mode. Press and hold button (1) for 2 sec. After second pressure of the button (1) maximum distance is fixed. The result of the function is displayed in the main display area. Previous measurement is displayed in the first line.

WORKING WITH THE MOBILE APPLICATION (OPTION. CHECK AVAILABILITY OF THIS FUNCTION WITH THE SUPPLIER)
The measured distances can be transferred to a mobile device. To get started, install the ADA PHOTO PLAN software. Search online app stores.
In the application, you can take photos of the measured objects or a drawing. On the lines indicating the dimensions, you can put the values obtained from the laser distance meter.

MESSAGE CODES

All message codes are displayed with either "Info" or symbol "telephone receiver" (Error). Following mistakes can be corrected.

INFO	CAUSE	REMEDY
204	Calculation overflow	Repeat procedure
205	Out of measuring range	Choose measuring distance within measuring range
252	Temperature too high	Cool down instrument
253	Temperature too low	Warm up instrument
255	Receiver signal too weak	Use target plate
256	Received signal too strong	Use target plate (grey side)
257	Wrong measurement	Use target plate (brown side)
258	Wrong initialization	Switch on – off the instrument
	Hardware error	Switch on/off the device several times and check if the symbol still appears. If so please call your dealer for assistance.

TECHNICAL DATA

Range, without target, m	0.05 to 60
Accuracy, mm	±1,5*
Smallest unit displayed	1 mm
Laser class	2
Laser type	515 nm, <1 mW
IP rating	IP54
Automatic switch off	3 minutes of inactivity
Temperature range: Storage Operating	-25° to +70° -10° to +50°

* In favourable conditions (good target surface properties, room temperature). Maximum deviation occurs under unfavorable conditions such as bright sunlight or when measuring to poorly reflecting or very rough surfaces.

PRECAUTIONS

Please, handle the instrument with care. Avoid vibrations, hits, water, effect of heat. During transportation put the instrument into the soft bag.
Note: the instrument should be dry!

Care and cleaning

Do not immerse the instrument in water. Wipe off dirt with a damp, soft cloth. Do not use aggressive cleaning agents or solutions.

Laser classification

ADA COSMO 60 Green projects visible laser beam from the front part of the instrument. The instrument is a laser class 2 laser product according to DIN IEC 6082 5-1:2014. It is allowed to use unit following further safety precautions (see operating manual).



Date of manufacture, contact information about the manufacturer, country of origin are indicated on the sticker of the product.
ADA International Group Ltd.
Nanjiang West Road #128, building N6
Changzhou New District, Jiangsu, China
made in China
You can get complete and up-to-date information on service or product use:
- by calling ADA technical support 8 800 100 4 170 (free call within Russia)
- on the official website www.adainstruments.com

WARRANTY

This product is warranted by the manufacturer to the original purchaser to be free from defects in material and workmanship under normal use for a period of two (2) years from the date of purchase.
During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or similar model at manufacturer's option), without charge for either parts of labour. In case of a defect please contact the dealer where you originally purchased this product.
The warranty will not apply to this product if it has been misused, abused or altered. Without limiting the foregoing, leakage of the battery, bending or dropping the unit are presumed to be defects resulting from misuse or abuse.

EXCEPTIONS FROM RESPONSIBILITY

The user of this product is expected to follow the instructions given in operators' manual.
Although all instruments left our warehouse in perfect condition and adjustment the user is expected to carry out periodic checks of the product's accuracy and general performance.
The manufacturer, or its representatives, assumes no responsibility of results of a faulty or intentional usage or misuse including any direct, indirect, consequential damage, and loss of profits.
The manufacturer, or its representatives, assumes no responsibility for consequential damage, and loss of profits by any disaster (earthquake, storm, flood ...), fire, accident, or an act of a third party and/or a usage in other than usual conditions.
The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits due to a change of data, loss of data and interruption of business etc., caused by using the product or an unusable product.
The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits caused by usage other than explained in the users' manual.
The manufacturer, or its representatives, assumes no responsibility for damage caused by wrong movement or action due to connecting with other products.