

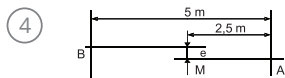
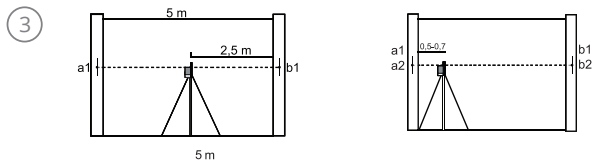
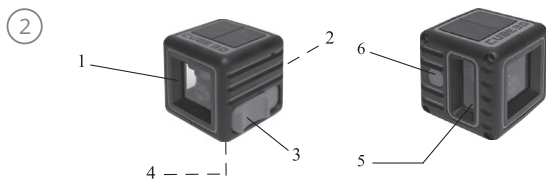
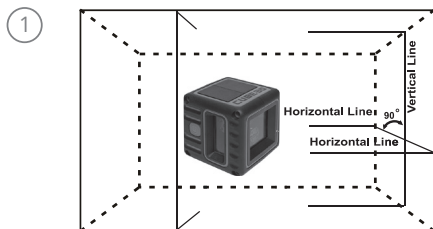


OPERATING MANUAL

CUBE 3D GREEN

Line Laser

adainstruments.com



THE MANUFACTURE RESERVES THE RIGHT TO MAKE CHANGES (NOT HAVING AN IMPACT ON THE SPECIFICATIONS) TO THE DESIGN, COMPLETE SET WITHOUT GIVING PRIOR WARNING.

APPLICATION

Line laser ADA CUBE 3D GREEN is designed to check the horizontal and vertical position of the surfaces of the elements of building structures and also to transfer the angle of inclination of the structural part to similar parts during construction and installation works.

SPECIFICATIONS FOR ARMO MINI

Laser beam	2 vertical lines/1 horizontal line
Light sources	2 laser diodes, 515 nm
Laser safety class	Class 2, <1mW
Accuracy	±2mm/10m
Self-leveling range	±3°
Operating range with/without receiver	230/130 ft (70/40 m)
Power source	3xAAA 1,5V
Tripod thread	1/4"
Operating temperature	14° F to 113° F (-10°C +45°C)
Weight	0,53 lb (240 g)

① LASER LINES

② FEATURES

1. Laser emitting window
2. Battery cover
3. Compensator switch
4. Tripod mount 1/4"
5. Vertical laser window
6. Laser lines on/off and receiver mode

FUNCTIONAL DESCRIPTION

1. Emitting a horizontal and vertical laser line.
2. Quick self-leveling: when line accuracy is out of the range the laser line flashes and the warning sound is produced.
3. Compensator locking system for safe transportation.
4. Intermediate compensator locking system for slope operation.
5. Indoor and outdoor performance function.

SAFETY REQUIREMENTS AND CARE

Follow safety requirements! Don't face and stare at laser beam!

Line laser is an accurate laser tool, which should be stored and used with care. Avoid shaking and vibrations! Store the Instrument and It's accessories only In the carrying case. In case of high humidity and low temperature, dry out the Instrument and clean It after the usage. Do not store the line laser at a temperature below -20°C and above 50°C , otherwise the Instrument can be out of action.

Don't put the line laser Into the carrying case If the Instrument or case are wet. To avoid moisture condensation Inside the Instrument- dry out the case and laser line laser ! Check regularly line laser adjustment! Keep the lens clean and dry. To clean the line laser use a soft cotton napkin!

OPERATION

Cube 3D GREEN is a reliable and convenient line laser . It will be irreplaceable line laser for many years. Open battery compartment. Insert batteries into the battery compartment. Observe the polarity. Close the battery compartment. Take out batteries if you are not going to use the tool for a long time. -Place the line laser on the working surface or mount it on the tripod/pillar or wall mount.

Switch on the line laser. Turn the compensator switch (3) to the position "ON" (the line laser is turned off in the position OFF). Visual alarm (blinking line) and audible signal indicate that the device was not installed within the compensation range $\pm 3^{\circ}$. To properly work align the unit in a horizontal plane. At that compensator of the instrument will be in free position (it will be blocked in the position OFF). When switching on, one horizontal and one vertical lines will be projected. Press button (6) to turn on additional vertical line.

Press button (6) again to have only one additional vertical line. Press button (6) one more time to turn off additional vertical line and switch on horizontal line. Use the receiver (supplied separately) mode to enlarge the working mode and for the operation in bright illumination. **TO CHECK THE ACCURACY**

3 TO CHECK THE ACCURACY OF LINE LASER (SLOPE OF PLANE)

Set up the line laser between two walls, the distance is 5m. Turn on the Line Laser and mark the point of cross laser line on the wall. Set up the line laser 0,5-0,7m away from the wall and make, as described above, the same marks. If the difference $\{a_1-b_2\}$ and $\{b_1-b_2\}$ is less than the value of "accuracy" (see specifications), there is no need in calibration. Example: when you check the accuracy of Line Laser the difference 3 is $\{a_1-a_2\}=5$ mm and $\{b_1-b_2\}=7$ mm. The line laser's error: $\{b_1-b_2\}-\{a_1-a_2\}=7-5=2$ mm. Now you can compare this error with standard error. If the accuracy of Line Laser isn't corresponding with claimed accuracy, contact the authorized service center.

4 TO CHECK THE ACCURACY OF HORIZONTAL BEAM

Choose a wall and set laser 5m away from the wall. Turn on the laser and cross laser line is marked A on the wall. Find another point M on the horizontal line, the distance is around 2.5m. Swivel the laser, and another cross point of cross laser line is marked B. Please note the distance of B to A should be 5m. Measure the distance between M to cross laser line, if the difference is over 3mm, the laser is out of calibration, please contact with seller to calibrate the laser.

TO CHECK PLUMB

Choose a wall and set laser 5m away from the wall. Mark point A on the wall, please note the distance from point A to ground should be 3m. Hang a plumb line from A point to ground and find a plumb point B on ground. Turn on the laser and make the vertical laser line meet the point B, along the vertical laser line on the wall and measure the distance 3m from point B to another point C. Point C must be on the vertical laser line, it means the height of C point is 3m. Measure the distance from point A to point C, if the distance is over 2 mm, please, contact with seller to calibrate the laser.

PRODUCT LIFE

Product life of the tool is 7 years. The battery and the tool should never be placed in municipal waste. Date of production, manufacturer's contact information, country of origin are indicated on the product sticker.

CARE AND CLEANING

Please handle line laser with care. Clean with soft cloth only after any use. If necessary damp cloth with some water. If instrument is wet clean and dry it carefully. Pack it up only if it is perfectly dry. Transport in original container/case only.

Note: During transport On/Off compensator lock (3) must be set to position "OFF". Disregard may lead to damage of compensator.

SPECIFIC REASONS FOR ERRONEOUS MEASURING RESULTS

- Measurements through glass or plastic windows;
- Dirty laser emitting window;
- After instrument has been dropped or hit. Please check the accuracy.
- Large fluctuation of temperature: if instrument will be used in cold areas after it has been stored in warm areas (or the other way round) please wait some minutes before carrying out measurements.

ELECTROMAGNETIC ACCEPTABILITY (EMC)

- It cannot be completely excluded that this instrument will disturb other instruments (e.g. navigation systems);
- will be disturbed by other instruments (e.g. intensive electromagnetic radiation nearby industrial facilities or radio transmitters).



LASER CLASS 2 WARNING LABELS ON THE LASER INSTRUMENT

LASER CLASSIFICATION

The line laser is a laser class 2 laser product according to DIN IEC 60825-1:2014. It is allowed to use unit without further safety precautions.

SAFETY INSTRUCTIONS

Please follow up instructions given in operating manual. Do not stare into beam. Laser beam can lead to eye injury (even from greater distances). Do not aim laser beam at persons or animals. The laser plane should be set up so that the beam path is not at normal eye level. Use the instrument for

measuring jobs only. Do not open instrument housing. Repairs should be carried out by authorized workshops only. Please contact your local dealer. Do not remove warning labels or safety instructions. Keep instrument away from children. Do not use instrument in explosive environment.

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 or 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 leave 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.

WARRANTY DOESN'T EXTEND TO FOLLOWING CASES:

1. If the standard or serial product number will be changed, erased, removed or will be unreadable.
2. Periodic maintenance, repair or changing parts as a result of their normal runout.
3. All adaptations and modifications with the purpose of improvement and expansion of normal sphere of product application, mentioned in the service instruction, without tentative written agreement of the expert provider.
4. Service by anyone other than an authorized service center.
5. Damage to products or parts caused by misuse, including, without limitation, misapplication or negligence of the terms of service instruction.
6. Power supply units, chargers, accessories, wearing parts.
7. Products, damaged from mishandling, faulty adjustment, maintenance with low-quality and non-standard materials, presence of any liquids and foreign objects inside the product.
8. Acts of God and/or actions of third persons.
9. In case of unwarranted repair till the end of warranty period because of damages during the operation of the product, it's transportation and storing, warranty doesn't resume.

WARRANTY CARD

Name and model of the product _____

Serial number _____ Date of sale _____

Name of commercial organization _____

stamp of commercial organization

Warranty period for the instrument exploitation is 24 months after the date of original retail purchase.

During this warranty period the owner of the product has the right for free repair of his instrument in case of manufacturing defects.

Warranty is valid only with original warranty card, fully and clear filled (stamp or mark of the seller is obligatory).

Technical examination of instruments for fault identification which is under the warranty, is made only in the authorized service center. In no event shall manufacturer be liable before the client for direct or consequential damages, loss of profit or any other damage which occur in the result of the instrument outage.

The product is received in the state of operability, without any visible damages, in full completeness. It is tested in my presence. I have no complaints to the product quality. I am familiar with the conditions of warranty service and I agree.

purchaser signature _____

Before operating you should read service instruction!

If you have any questions about the warranty service and technical support contact seller of this product



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