# Лазерные дальномеры COSMO 60 GREEN Руководство по эксплуатации

# По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Волоград (844)278-03-48 Волоград (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89

Россия +7(495)268-04-70

Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)65-04-62 Киров (8332)65-04-40 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35

Казахстан +(727)345-47-04

Беларусь +(375)257-127-884

**Узбекистан** +998(71)205-18-59

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Черповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

эл.почта: auk@nt-rt.ru || сайт: http://adainstruments.nt-rt.ru/

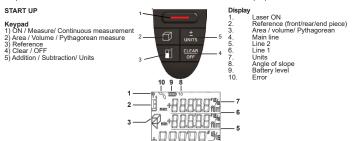
### **OPERATING MANUAL**

# LASER DISTANCE METER

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. MESSAGE CODES

- 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 stare as the 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 of 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.



+888/88″% Inserting / Replacing Batteries 4 Remove the end piece on 180°. Remove the battery cover, insert the battery correctly. Pay attention to correct polarity

Remove the end piece on 180°. Remove the battery cover, meet are battery concern, and battery concern, and the concern of the

### MENU FUNCTIONS

Swtich 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 mea-sure room diagonals (maximum values) or horizonial 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 comer 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/Substruction

Addition/Substruction Press button (5): next measurement is added to the previous one. Press button (5): next measurement is substracted from the previous one. To complete this function press button (1). Repeat this function to measure distances. The result is desplayed 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

Area Press the 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 overage with the second measurement (for example, length).

Press buildin (1) or large the met met mean mean mean and the second sec

### Volume

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.

Indervolume value with the outprive and 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 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 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 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 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 suced for measurements. The best results are achieved when the instrument is used for minimum/makem measurements. The minimum value must be used for measurements at right angles to the target; the maximum distance for all other measurements at right angles. Use continuous measurements. Be sure that the first measurement and distance are measured at right angles. Use continuous measurement function.

Indirect measurement – determing a distance using 2 auxilary 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 (hypothenuse of triangle). The result is displayed in the second line. This measurement can be taken in the indirect measuring (hypothenuse 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 continious 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 – determing 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 are to take in the mode of continious measurement. Press and hold button (1) for 2 sec. After second pressine 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

The measured distances can be transferred to a mobile device. To get started, install the AUA 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.

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
D	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	l mm
Laser class	2
Laser type	515 nm, <1 mW
IP rating	IP 54
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 viabrations, hits, water, effect of heat, During transportation put the instrument into e soft bar Note: the instrument should be dry!

CAUTION

are 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

Laser classification ADA COSMO 60 Greeen 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 produc

ADA International Group Ltd. Nanjiang West Rooad #128, building №6 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

 $\mathbb{A}$ 

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

manufactures 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. Withiut 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

The manufacturer, or its representatives, assumes no responsibility of results of a faulty of 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 thsn evaluated in the unperiment.

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

# По вопросам продаж и поддержки обращайтесь:

Алматы (727)345-47-04 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Волоград (844)278-03-48 Волоград (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89

Россия +7(495)268-04-70

Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35

Казахстан +(727)345-47-04

4 Беларусь +(375)257-127-884

Узбекистан +998(71)205-18-59

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Черповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

эл.почта: auk@nt-rt.ru || сайт: http://adainstruments.nt-rt.ru/