

CONDROL

- EN** Cross line laser
- RU** Лазерный нивелир
- PL** Laser krzyżowy



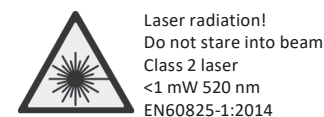
GFX 200/300/360/360³

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CONDROL Cross line laser GFX 200/300/360/360³

Congratulations on your purchase of laser levels GFX 200/GFX 300/GFX 360/GFX 360³ CONDROL. Safety instructions can be found in the end of this user manual and should be carefully read before you use the device for the first time.

1. SAFETY REGULATIONS
The user manual should be read carefully before you use the device for the first time. Unintended use of the device can be dangerous for human's health and cause serious injury. Keep this user manual. If the device is given to somebody for temporary use, be sure to enclose user manual to it.
- Do not misuse the device.
- Do not remove warning signs and protect them from abrasion, because they contain information about safe operation of the device.



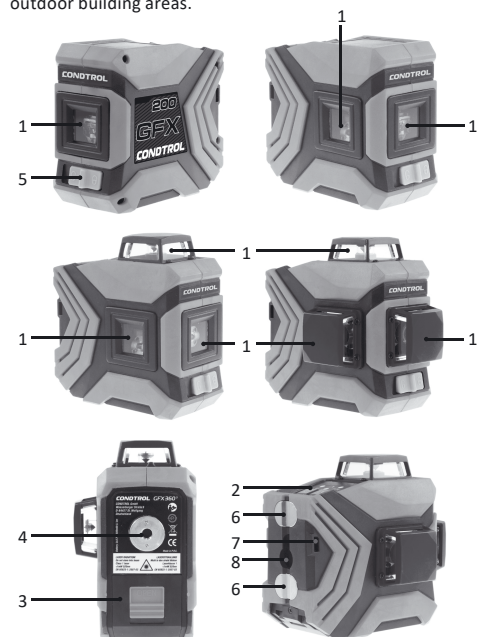
- Do not look into the laser beam or its reflection, with unprotected eye or through an optical instrument. Do not point the laser beam at people or animals without the need. You can dazzle them.
- To protect your eyes close them or look aside.
- Always install the product in such a way, so that the laser line is below or above the eye level.
- Do not let unauthorized people enter the zone of product operation.
- Store the product beyond reach of children and unauthorized people.
- It is prohibited to disassemble or repair the product yourself. Entrust product repair to qualified personnel and use original spare parts only.
- Do not use the product in explosive environment, close to flammable materials.

- Avoid heating the batteries to avoid the risk of explosion and electrolyte leakage. In case of liquid contact with skin, wash it immediately with soap and water. In case of contact with eyes, flush with clean water during 10 minutes and consult the doctor.

2. PRODUCT DESCRIPTION
Laser levels GFX 200/GFX 300/GFX 360/GFX 360³ CONDROL are designed for projecting and controlling of vertical and horizontal planes and lines.

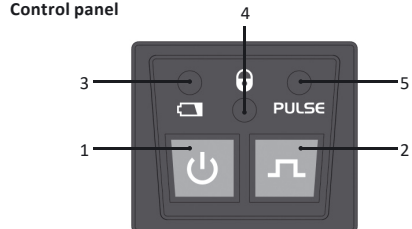
The laser levels have 2 operating modes:
- Locked compensator, to project inclined planes and lines;
- Automatic leveling, which allows to automatically compensate irregularities within self-leveling range of $\pm 5^\circ$.
Pulse mode allows to increase working range of the laser level by using the laser receiver or to work when laser is hard to define in bright lighting conditions.

These laser levels are suitable for use at both indoor and outdoor building areas.



- 1 – Laser beam exit windows
- 2 – Control panel
- 3 – Battery door
- 4 – Tripod thread 1/4"
- 5 – Switch bar
- 6 – Magnets for fixing on vertical structures
- 7 – Hole for fixing by the cable tie
- 8 – Hole for fixing on a screw/nail

Control panel



- 1 – Switch on/off the laser lines
- 2 – Switch on off the pulse mode
- 3 – Power indicator
- 4 – Locked mode indicator
- 5 – Pulse mode indicator

3. TECHNICAL SPECIFICATIONS

	GFX200	GFX300	GFX360	GFX360 ³
Working range/ with receiver*	20/40m			
Leveling accuracy	± 0.3 mm/m			
Self-leveling range	$\pm 5^\circ$			
Operating temperature	-10°C ... +50°C			
Storage temperature	-20°C ... +70°C			
Relative humidity	90%			
Dust and water protection rate	IP54			
Tripod thread	1/4"			
Laser	Class II 520nm < 1 mW			

Battery	3.7V 3000 mAh Li-ion rechargeable		
Dimensions	97x50x85 mm	97x50x98 mm	112x64x98 mm
Weight	0.28kg	0.29kg	0.35kg

* The working range may differ from the declared depending on the lighting conditions.

4. DELIVERY PACKAGE
Laser level – 1 pc.
Cable tie – 1 pc.
Pouch – 1 pc.
Battery (3.7V 3000 mAh Li-ion) – 1 pc.
Charging cable – 1 pc.
User manual – 1 pc.

5. BEFORE START OPERATION

5.1. Power supply
The device is powered via a 3.7V 3000 mAh Li-ion rechargeable battery included in the delivery package.

5.2. Install/charge the Li-ion battery
Install the battery in the battery compartment, observing the polarity. Use only the battery included in the delivery package. If the power indicator on the control panel becomes red, charge the battery. The battery should be charged in the following way:
1) Remove the battery from the device.
2) The battery charging time depends on the current of the adapter used:

#	Current	Charging time
1	500 mA	6 hours
2	1000 mA	3 hours
3	2A	1.5 hours

Note: It is forbidden to use adapters with an output voltage of more than 5V! It may lead to damage of the battery.

4) As soon as the charging time runs out, disconnect the charger and put the battery in the battery compartment.

6. OPERATION

Install the device on a firm and stable surface or tripod. Move the switch bar to select the required operation mode:

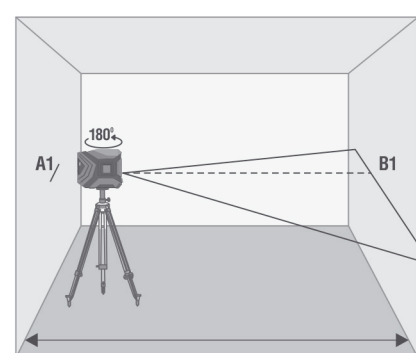
1) Unlocked mode (self-leveling)
Move the switch bar to position **ON**. The laser level will switch on. Short press to switch on required laser lines. Short press to switch on/off the pulse mode. Move the switch bar to position **OFF** to switch off the laser level.

2) Locked mode (projection of inclined planes)
The switch bar is in position **OFF**. Press and hold during 3 seconds to switch on the laser. Long press to switch on required laser lines. After all possible combinations of lines are switched on, the next long press will switch off the laser level. Press and hold during 3 seconds to switch on/off the pulse mode.

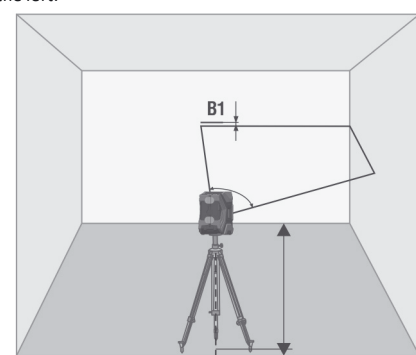
Note: To increase the operating time and avoid the risk of unintentional blinding switch on the laser only before start operation. If operated near objects or airflows different from the environment temperature the laser line may tremble due to heterogeneity of the atmosphere. The longer the distance, the more trembling can be observed. The width of the laser line increases with the increasing of the operating distance. The marking should be made along the axis of the laser line. For maximum accuracy, use the middle portion of the laser line. It should be noted that the shape of the laser line on the object's surface (e.g. walls, ceilings) depends on the curvature and slope of the surface relative to the laser plane.

7. ACCURACY CHECK

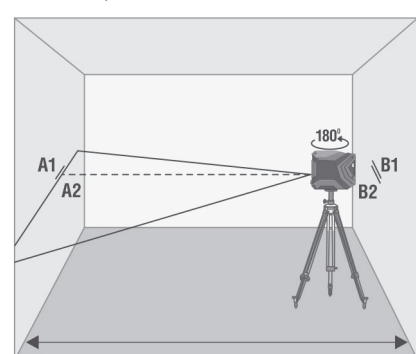
7.1. Check of horizontal line
GFX200/GFX300
Check of horizontal line is carried out by using 2 walls located opposite each other at a 5m distance.
1. Put the laser level as close as possible to the wall so that laser emitters are located opposite the wall.
2. Move the switch bar to position **ON** and switch on the horizontal line.
Mark location of horizontal line on the wall as A1.
3. Rotate the laser level by 180° and mark location of horizontal line on the opposite wall as B1.



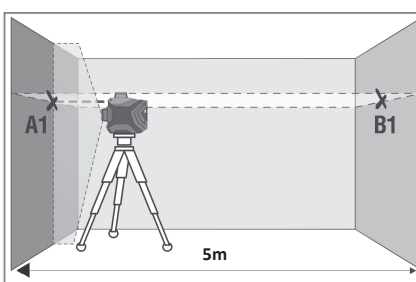
4. Turn the laser level to the right. Measure vertical deviation of the horizontal line from the point B1. If deviation exceeds 1.5 mm, – please contact the service center.
5. Repeat actions described in point 4 by turning the laser level to the left.



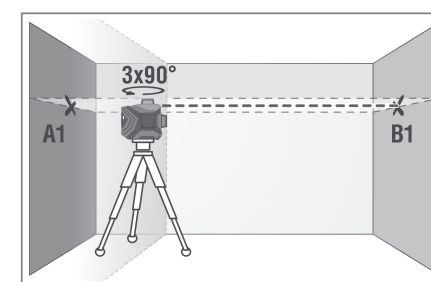
6. Move the laser level closer to the opposite wall. Mark location of horizontal line on the wall as B2.
7. Rotate the laser level by 180° and mark location of horizontal line on the opposite wall as A2.
8. Measure the distance dA, dB between points A1, A2 and B1, B2 accordingly. If the difference between values dA, dB exceeds 3 mm – please contact the service center.



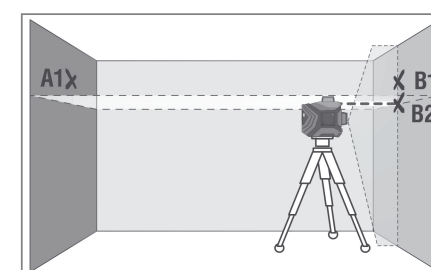
GFX360/GFX360³
Check of horizontal line is carried out by using 2 walls located opposite each other at a 5m distance.
1. Put the laser level to one of the walls as close as possible. Move the switch bar to position **ON** and switch on both vertical and horizontal planes. Rotate the laser level so that laser emitters are located opposite to the near wall and laser lines cross each other. Mark location of laser lines crossing as A1. Mark location of laser lines crossing on another wall as B1.



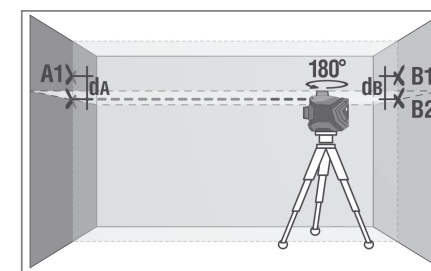
2. Rotate the laser level by 90°, measure deviation of a laser line from point B1. If deviation exceeds 1.5 mm – please contact the service center.



3. Repeat actions described in point 2 twice, rotating the laser level in one direction.
4. Install the laser level closer to the opposite wall. Mark location of laser lines crossing as B2 (points B1, B2 must be located at the same vertical).

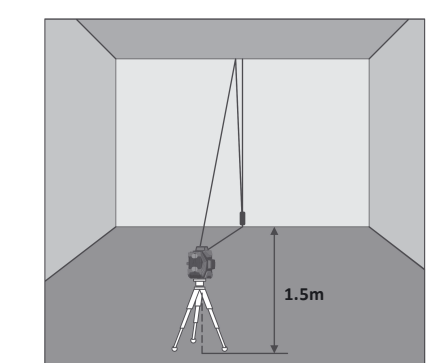


5. Rotate the laser level by 180° and mark location of laser lines crossing on the opposite wall as A2 (points A1, A2 must be located at the same vertical).
6. Measure distances dA, dB between points A1, A2 and B1, B2 accordingly. If difference between values dA, dB exceeds 3 mm – please contact the service center.



7.2. Check of vertical line

Use a plumb bob as a reference of a vertical line. Put the laser level at 1.5m distance from the plumb bob.
1. Move the switch bar on position **ON**, and align vertical laser line with the low point of plumb bob.
2. If deviation between the laser line and the plumb line exceeds 0,3 mm per 1m of plumb bob length (for a 2.5m plumb bob deviation shouldn't exceed 0.7 mm) – please contact the service center.



8. CARE AND MAINTENANCE

Attention! This laser level is a precise optic-mechanical device and requires careful handling. Before starting work, as well as after mechanical influences (falling, bumps), check the accuracy of the device.
Observation of the following recommendations will extend the life of the device:
- Store the device, spare parts and accessories away from children and unauthorized people.
- Transport the device with locked compensator only.
- Protect the device from bumps, falls, and excessive vibration; do not let moisture, construction dust and foreign objects get inside the device.
- In case moisture gets inside the device, first of all, remove the batteries and then contact the service center.
- Do not store or use the device for a long time in high humidity conditions.
- Check the accuracy of the device occasionally (check the paragraph «Accuracy check»).

- Clean the device with a soft wet cloth. Do not use harsh chemicals, cleaning solvents or cleaning agents.
- Wipe the laser aperture with a soft lint-free cloth and isopropyl alcohol.
- Remove the Li-ion battery or alkaline batteries from the device before connecting the charger, otherwise the device may fail.

Failure to observe the following rules may lead to electrolyte leakage from the batteries and failure of the device:

- Remove the battery from the device, if it's not used for a long time.
- Do not leave discharged battery in the device.
- Avoid heating the batteries to avoid the risk of explosion and electrolyte leakage. In case of liquid contact with skin, wash it immediately with soap and water. In case of contact with eyes, flush with clean water during 10 minutes and consult the doctor.

9. UTILIZATION
Expired tools, accessories and package should be passed for waste recycle. Please send the device to the following address for proper recycle:

CONDROL GmbH
Wasserburger Strasse 9
84427 Sankt Wolfgang
Germany

Do not throw the device in municipal waste!
According to European directive 2002/96/EC, expired measuring tools and their components must be collected separately and submitted to environmentally friendly recycle of wastes.

10. WARRANTY

All CONDROL GmbH devices go through post-production control and are governed by the following warranty terms. The buyer's right to claim about defects and general provisions of the current legislation do not expire.
1) CONDROL GmbH agrees to eliminate all defects in the device, discovered during the warranty period, that represent the defect in material or workmanship in full volume and at its own expense.
2) The warranty period is 24 months and starts from the date of purchase by the end customer (see the original supporting document).
3) The warranty doesn't cover defects resulting from wear and tear or improper use, malfunction of the device caused by failure to observe the instructions of this user manual, untimely maintenance and service and insufficient care, the use of non-original accessories and spare parts. Modifications in design of the device relieve the seller from responsibility for warranty works. The warranty does not cover cosmetic damage, that doesn't hinder normal operation of the device.
4) CONDROL GmbH reserves the right to decide on replacement or repair of the device.
5) Other claims not mentioned above, are not covered by the warranty.
6) After holding warranty works by CONDROL GmbH warranty period is not renewed or extended.
7) CONDROL GmbH is not liable for loss of profit or inconvenience associated with a defect of the device, the rental cost of alternative equipment for the period of repair.

This warranty applies to German law except provision of the United Nations Convention on contracts for the international sale of goods (CISG).
In warranty case please return the device to retail seller or send it with defect description to the following address:
CONDROL GmbH
Wasserburger Strasse 9
84427 Sankt Wolfgang
Germany

