

Laserliner 081.336A SmartVision-Laser Set Cross Line Laser Self Leveling Range User Manual

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Manual 👼

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Laserliner

Laserliner 081.336A SmartVision-Laser Set Cross Line Laser Self Leveling Range



OverView

Completely read through the operating instructions, the "Warranty and Additional Information" booklet as well as the latest information under the internet link at the end of these instructions. Follow the instructions they contain. This document must be kept in a safe place and if the laser device is passed on, this document must be passed on with it.

Function / Application

This cross line line laser produces two individually switchable, green laser lines, providing precise alignment of horizontal and vertical surfaces. The laser is easy to deploy due to the adjustable clamping bracket. The device has an integral handheld receiver mode.

General safety instructions

- The device must only be used in accordance with its intended purpose and within the scope of the specifications.
- The measuring tools and accessories are not toys. Keep out of reach of children.
- Modifications or changes to the device are not permitted, this will otherwise invalidate the approval and safety specifications.
- Do not expose the device to mechanical stress, extreme temperatures, moisture or significant vibration.
- The device must no longer be used if one or more of its functions fail or the battery charge is weak.

Safety instructions

Using class 2 lasers Laser radiation! Do not stare into the beam! Class 2 laser < 1 mW \cdot 515 nm EN 60825-1:2014/AC:2017

- Attention: Do not look into the direct or reflected beam.
- Do not point the laser beam towards persons.
- If a person's eyes are exposed to class 2 laser radiation, they should shut their eyes and immediately move away from the beam.
- Under no circumstances should optical instruments (magnifying glass, microscope, binoculars) be used to look at the laser beam or reflections.
- Do not use the laser at eye level (1.40 ... 1.90 m)
- Reflective, specular or shiny surfaces must be covered whilst laser devices are in operation.
- In public areas shield off the laser beam with barriers and partitions wherever possible and identify the laser area with warning signs.

Dealing with electromagnetic radiation

- The measuring device complies with electromagnetic compatibility regulations and limits in accordance with the EMC Directive 2014/30/EU.
- Local operating restrictions for example, in hospitals, aircraft, petrol stations or in the vicinity of people with pacemakers – may apply. There is a possibility of a dangerous impact on – or interference with – electronic devices.

Special product features

- Automatic alignment of the device with a magnetically dampened pendulum system. The device is brought into the initial position and aligns itself autonomously.
- Transport LOCK: The device is protected with a pendulum lock during transport.
- **GRX-READY** technology enables line lasers to be used even in unfavourable light conditions. The laser lines pulsate at a high frequency and this can be picked up by special laser receivers over long distances.

Green laser technology

- **Devices with PowerGreen** technology feature bright green high-performance diodes that allow very good visibility of laser lines at great distances, on dark surfaces and in bright ambient light conditions.
- Approx. 6 times brighter than a typical red laser with 630 660 nm

Inserting batteries



Open the battery compartment and insert batteries (2 x type AA) according to the symbols. Be sure to pay attention to polarity.

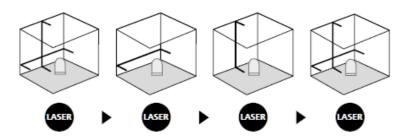


- 1. Laser line selection button / Hand receiver mode
- 2. LED levelling
 - · red: levelling off
 - · green: levelling on
- 3. Battery compartment (backside)
- 4. ON / OFF switch, transport retainer
- 5. Laser output windows
- 6. 1/4" tripod threads (bottom)
- 7. LED hand receiver mode

When transporting always switch off all lasers, secure pendulum and push the ON/OFF switch (4) to the right.

Horizontal and vertical levelling

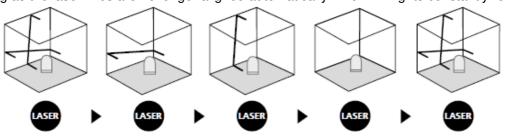
Release the transport restraint, move the ON/OFF switch (4) to the left. The laser cross will appear. The laser lines can be switched individually with the selection button.



The transport restraint must be released for horizontal and vertical levelling. The LED shows a permanent green light. The laser lines flash and the LED lights red as soon as the device is outside the automatic levelling range of 5°. Position the device such that it is within the levelling range. The LED switches back to green and the laser lines stop flashing (steady light).

Slope mode

Do not release transport safety, push ON/OFF switch (4) to the right. Select and switch on the laser with the selection button. Sloping planes can now be measured. This mode cannot be used to perform horizontal or vertical levelling as the laser lines are no longer aligned automatically. The LED lights constantly red.



Hand receiver mode

Optional: Working with the laser receiver GRX



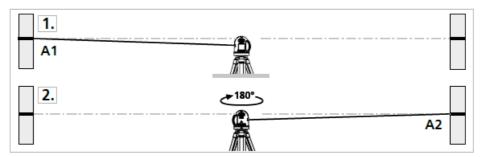
Use an GRX laser receiver (optional) to carry out levelling at great distances or when the laser lines are no longer visible. To work with a laser receiver, switch the line laser to hand-held receiver mode by keeping button 1 (handheld receiver mode on / off) pressed. The laser lines will now pulsate with high frequency, making the laser lines darker. The laser receiver can detect these pulsating laser lines. Observe the laser receiver's operating instructions for line lasers.

Calibration

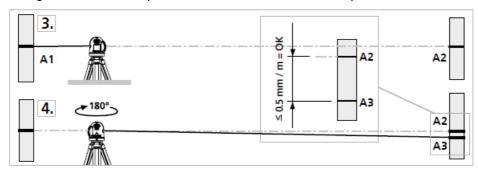
The measuring device must be calibrated and tested on a regular basis to ensure it is accurate and working properly. We recommend carrying out calibration once a year. Contact your distributor or the UMAREX-LASER LINER service department.

It is possible for you to check the calibration of the laser. To do this, position the device midway between 2 walls, which must be at least 5 metres apart. Switch the device on (LASER CROSS ON). The best calibration results are achieved if the device is mounted on a tripod.

- 1. Mark point A1 on the wall.
- 2. Turn the device through 180° and mark point A2. You now have a horizontal reference between points A1 and A2.

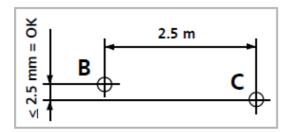


- 3. Position the device as near as possible to the wall at the height of point A1.
- 4. Turn the device through 180° and mark point A3. The difference between points A2 and A3 is the tolerance.



When A2 and A3 are more than 0.5 mm / m apart, an adjustment is necessary. If necessary, contact your distributor or the UMAREX-LASERLINER service department.

Checking the vertical line Position the device about 5 m from a wall. Fix a plumb bob with a line of 2.5 m length on the wall, making sure that the bob can swing freely. Switch on the device and align the vertical laser to the plumb line. The precision is within the specified tolerance if the deviation between the laser line and the plumb line is not greater than \pm 2,5 mm.



Checking the horizontal line 2.5 m Position the device about 5 m from a wall and switch on B C the cross laser. Mark point B on the wall. Turn the laser cross approx. 2.5 m to the right and mark point C. Check whether the horizontal line from point C is level with point B to within ± 2.5 mm. Repeat the process by turning the laser to the left. Regularly check the calibration before use, after transport and after extended periods of storage.

Information on maintenance and care

Clean all components with a damp cloth and do not use cleaning agents, scouring agents and solvents. Remove the battery(ies) before storing for longer periods. Store the device in a clean and dry place.

Technical data Subject to technical alterations. 21W08	
Self-levelling range	± 5°
Accuracy	± 0.5 mm / m
Levelling	automatic
Visibility (typical)*	40 m
Working range with hand receiver	(depends on how the technology affects the difference in bright ness) 60 m
Laser wavelength	515 nm
Laser class	2 / < 1 mW (EN 60825-1:2014/AC:2017)

Degree of protection	IP 40
Power supply	2 x 1.5V LR6 (AA)
Operating time	approx. 3 h
Operating conditions	0°C 50°C, max. humidity 80% rH, no condensation, max. wo rking altitude 4000 m above sea level
Storage conditions	-10°C 70°C, max. humidity 80% rH
Dimensions (W x H x D)	77 x 90 x 60 mm
Weight	275 g (incl. batteries)

EU directives and disposal This device complies with all necessary standards for the free movement of goods within the EU. This product is an electric device and must be collected separately for disposal according to the European Directive on waste electrical and electronic equipment. Further safety and supplementary notices at: http://laserliner.com/info?an=AFE

Documents / Resources



<u>Laserliner 081.336A SmartVision-Laser Set Cross Line Laser Self Leveling Range</u> [pdf] Us er Manual

081.336A, SmartVision-Laser, Set Cross Line Laser Self leveling Range, 081.336A SmartVisio n-Laser Set Cross Line Laser Self leveling Range, Laser Self leveling Range, leveling Range

References

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