



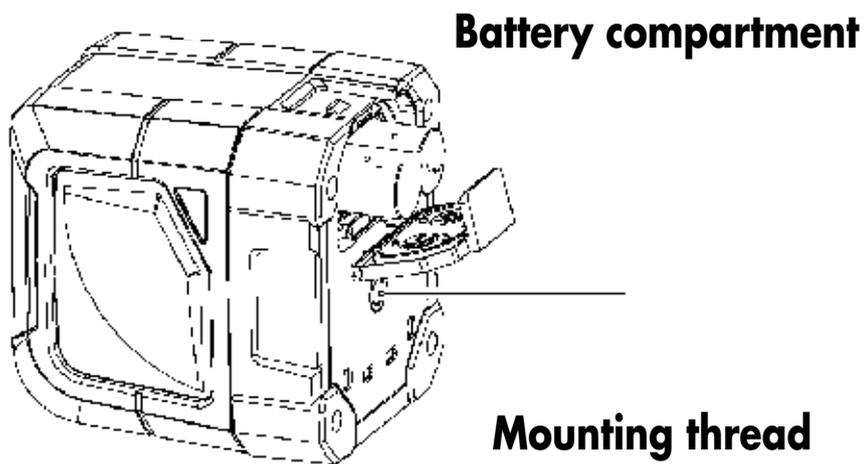
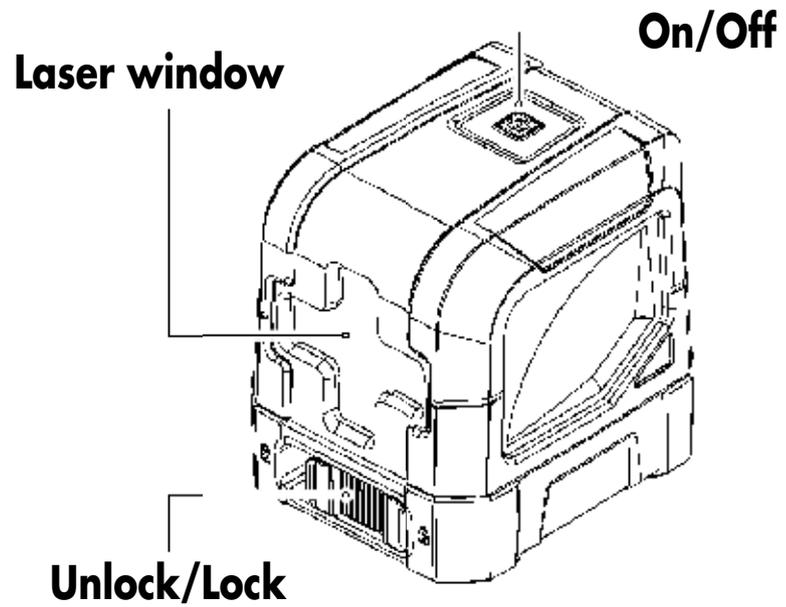
# **Eurotec<sup>®</sup>**

## **USER MANUAL** Cross-line Laser

Eurotec<sup>®</sup>

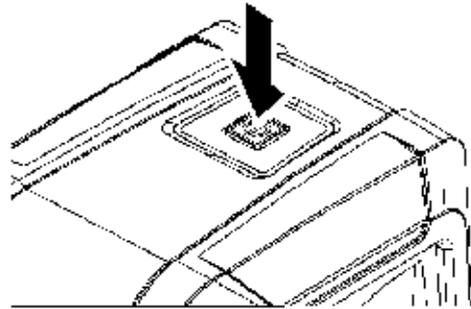
More than  
**20**  
YEARS  
of quality

**Product information**



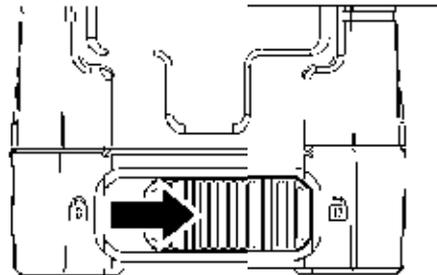
# Procedure

**On/Off**

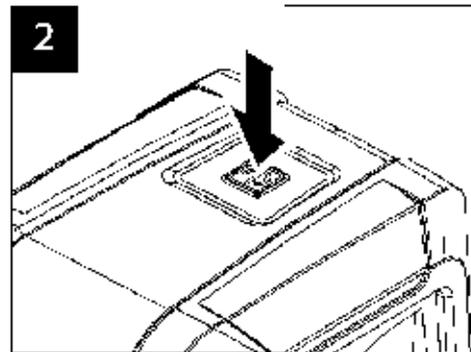
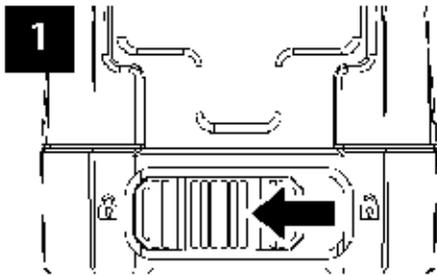


**On/Off**

**On**

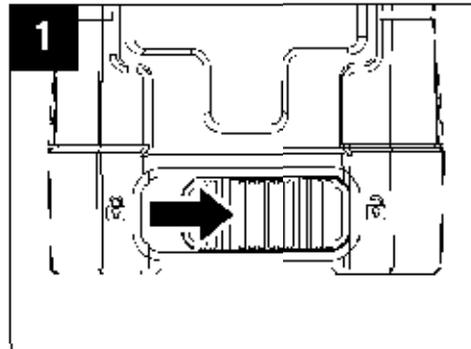


**Off**

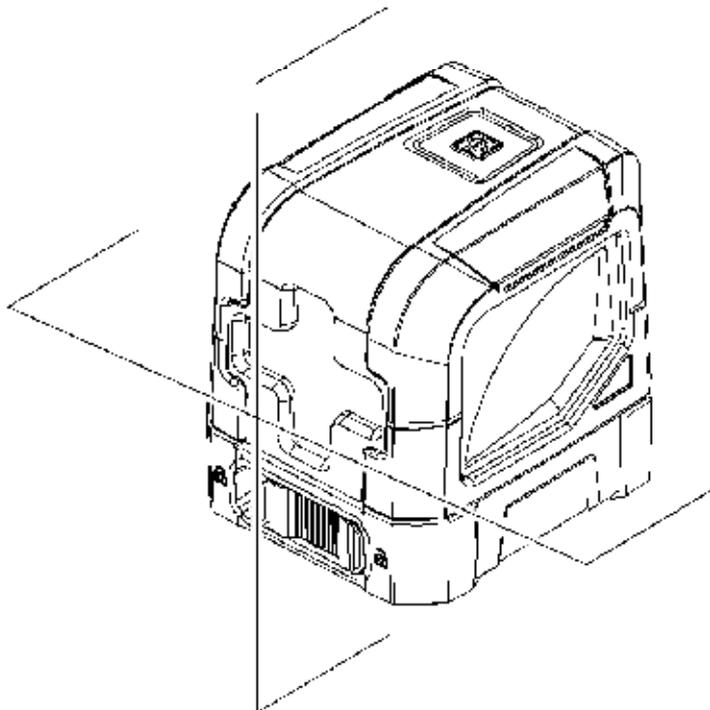


## Self-alignment mode

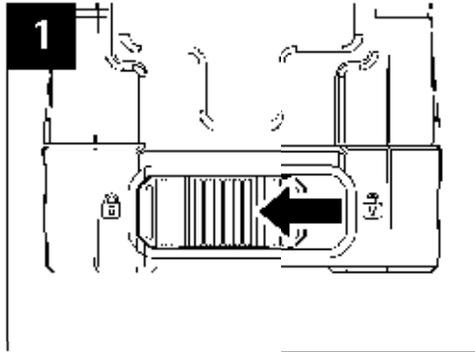
**Position the laser horizontally.**



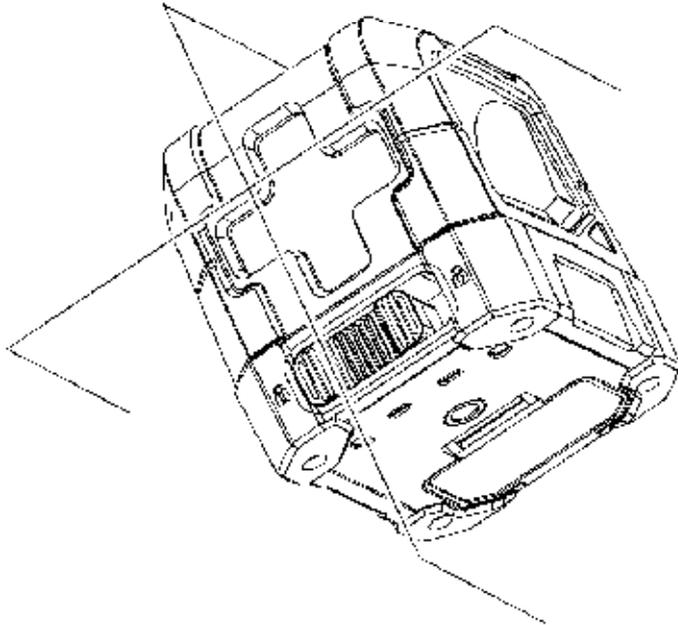
**2**



# Manual mode



**2**



## Technical information

Cross-line Laser	
Laser colour	Green
Laser diode	Osram 30mW
Laser hazard class	Class 2
Laser max. output	≤ 1mW
Wave length	510 – 530 nm
Laser wave length	± 3 mm / 10 m
Laser module	Single
Compensation range	4° ± 1°
Self-leveling time	≤ 4s
Self-leveling method	Magnetic damping
Operating distance	30 m
Operating temperature	-10 °C – 50 °C
Storage temperature	-20 °C – 70 °C
Operating time	4 hours
Battery type	2 x 1.5 V LR 06 ( AA ), 400 mA max
Ingress protection	IP 54
Device weight	260 g

## Important information

- The laser device is mounted firmly in the holder and calibrated with the indicated tolerances.
- It is recommended to perform an accuracy test prior to initial use and regular checks during subsequent use, especially for more accurate planning.
- If the device is not in use, switch it off and move the pendulum lock to its locked position.
- The pendulum lock is switched off in manual mode. It is not guaranteed that the accuracy of the beam is levelled.
- Remove the batteries if the device will not be in use for several months.
- Do not store the laser device in direct sunlight or expose it to high temperatures. Because the housing and some internal parts are made of plastic, there is a risk of plastic deformation under high temperatures.
- External plastic components can be wiped clean with a damp cloth. Use a soft, dry cloth to remove moisture and dirt before storage.
- Store the device in its packaging when it is not in use.

## Safety instructions

### Used symbols

The following symbols are used to identify precautionary measures based on the degree of injury or damage that may be caused if the precautionary measures are not followed.

#### **WARNING**

This symbol indicates a potentially hazardous situation or an unintended use which, if not avoided, will result in death or serious injury.

#### **ATTENTION**

This symbol indicates a potentially hazardous situation or an unintended use which, if not avoided, will result in death or serious injury and/or material damage to the environment or property.



Important information to be observed when using the device, as it allows the product to be used in a correct and efficient manner:

Possible risks when using the device:

- The laser beam damages the eyes when aimed directly at the eyes.
- If the device is directed at dust or gas, it may produce a spark and/or light.
- The laser beams can cause radiation damage.
- Die Laserstrahlung kann Strahlenschäden verursachen.

**CAUTION:**

- Do not look directly into the laser beam.
- Do not use the device in highly flammable and explosive environments.
- Take out the batteries in order to prevent electrolyte leakage when not using the device.
- Do not attempt to use any other functions not provided by the machine.
- Do not attempt to change the functions of the machine in any form.

**Maintenance:**

Clean and wipe the surface with a soft, damp cloth. If a damp cloth is insufficient, use a cloth with an alcohol-based solution to remove any soiling. Be careful with the optical components (e. g. the optical lens). Use a clean, soft cloth or cotton swabs with purified water for cleaning. Never use aggressive cleaning materials.

**Permitted uses:**

- Horizontal surveying
- Vertical surveying
- Oblique surveying

**Prohibited uses:**

- Using the device without a user manual.
- Use for purposes other than those specified.
- Damage to the safety precaution system and removal of instruction and danger signs.
- Disassembly of the device using tools (screwdriver, etc.), unless expressly permitted in certain cases.
- Carrying out any modifications or changes to the product.
- Use of accessories from other manufacturers without explicit approval by the manufacturer.
- Intentional or unintentional work on scaffolding or when using ladders, when measuring in the vicinity of machines in operation or unprotected equipment.
- Aiming directly at the sun.
- Conscious aiming at other people's eyes, even in the dark.
- Use at the place of surveying without adequate safety precautions (e. g. when surveying roads, construction sites, etc.).

**Restrictions of use:**

See "Technical data" section.

Do not use the product in corrosive or explosive environments.

**Responsibilities:**

Responsibility of the original manufacturer:

Responsible for providing safe products including manuals and original parts.

Manufacturer responsibilities for non-original accessories:

The manufacturers of non-original accessories for the products are responsible for the development, implementation and communication of safety requirements for their respective products. They are also responsible for the effectiveness of these safety systems when used with the equipment of the products.

## Responsibilities of the user:

### **WARNING**

The person responsible for the device must guarantee that other persons use the device according to the user manual. The person responsible for the product has the following obligations:

- Understand the safety instructions on the product and the instructions in the user manual.
- Be familiar with the local safety regulations for accident prevention.
- Inform the local retailer without delay if the device is defective.

## Dangers during use:

### **ATTENTION**

Take note of incorrect survey measurements, if the device is defective or if it has been dropped, misused or modified. Carry out regular test surveys. This is especially important if the device has not been exposed to normal use, before, during and after important surveys. Ensure that the optical lenses are clean and that there is no mechanical damage to the device.

## Precautionary measures:

Use this product only as a measuring device, not as a control device. Your system must be designed and operated in a manner that ensures that safety measures are in place in the event of an error, a malfunction of the device or a power failure (e. g. safety limit switch), ensuring that no damage is caused.

### **WARNING**

Used batteries must not be disposed of with household waste. Dispose of or recycle used batteries in compliance with the relevant national or local regulations.



Do not dispose of or recycle this product with the household waste. Recycle this product in an appropriate manner. Prevent access to the product by unauthorised personnel at all times. Take it to collection points provided in accordance with national or local regulations.

For technical support, contact your local retailer.

## Electro-magnetic compatibility (EMC):

The term "electromagnetic compatibility" refers to the ability of the product to operate in an environment in which electromagnetic radiation and electrostatic discharges are likely to be present and without causing electromagnetic interference to other devices.

### **WARNING**

The product complies with the relevant standards and regulations. There is, however, the possibility that there may be interference with other devices.

### **ATTENTION**

Never attempt to repair the product yourself. Contact the local retailer in the event of damage.

## Class of laser



The cross-line laser generates a visible laser beam that emerges from the front of the device. It is a class 2 laser product according to IEC60825-1: 2014 "Radiation safety of laser products" Class 2 laser products. Do not stare directly at the laser beam and do not point it unnecessarily at other people. The eyes move away or instinctively blink for protection.

### **WARNING**

Direct exposure to the laser beam with optical glasses (e. g. binoculars, telescopes) can be dangerous.

### **Precautionary measures:**

Do not look directly into the laser beam with optical glasses.

### **CAUTION**

Looking into the laser beam can be dangerous for the eyes.

### **Precautions:**

Ensure that the laser is positioned above or below eye level, especially when attaching the device to machines etc.

## Warranty

We are satisfied with the quality of our products and offer a great warranty for professional users. This statement is made in addition to and in no way prejudices your contractual rights as a professional user or your legal rights as a private non-professional user. We guarantee for a period of one year as of the purchase date the quality of our laser measuring device(s) against defects in material and/or manufacturing, provided that:

- proof of purchase is provided.
- service/repairs were not carried out by unauthorised persons.
- the product has been subjected to appropriate use.
- the product has not been misused.

Defective products will be repaired or replaced at no charge or at our discretion, provided that they are sent to our authorised retailer(s) together with proof of purchase. This warranty does not apply to defects caused by accidental damage, unjustified wear and tear and use outside the instructions provided by the manufacturer.

In the event of damage to the product caused by improper use, we will charge for the repair in full.  
Any repair or replacement covered by this warranty will not affect the expiry date of the warranty. As far as permitted by law, we are not liable under this warranty for indirect or secondary damage resulting from any defects of this product. This guarantee cannot be modified without our approval.  
Calibration and maintenance are not covered by the warranty.

**NOTE:**

The customer is responsible for the correct use and maintenance of the device. In addition, the customer is solely responsible for regularly checking the accuracy of the laser and thus for the calibration of the device.



Thank you for purchasing our product.

Read the Safety Instructions and the Manual carefully before using this product.

The person responsible for the device must ensure that all users read, understand and follow these instructions.

**E.u.ro.Tec GmbH**

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