

AutoCross-Laser ACL 3C / ACL 3C RX



8.031.96.10.1 / Rev.1208

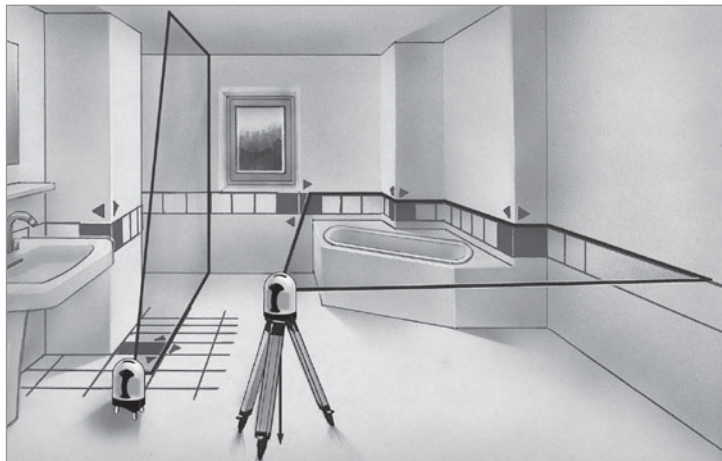
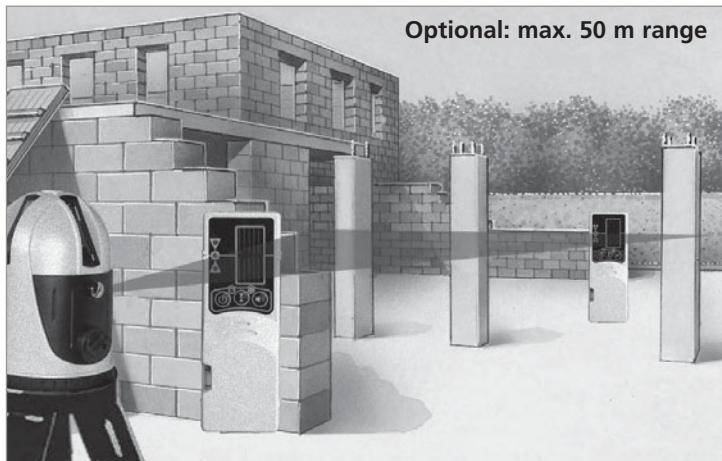
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**AUTOMATIC
LEVEL**



Laserliner®
Innovation in Tools

AutoCross-Laser ACL 3C / ACL 3C RX



The crossline laser with 90° reference line and laser receiver (optional): Crossline laser with 3 line lasers and additional plumb line laser, 635 nm. With the laser receiver, the laser lines can be easily recognised in all light conditions — ideal for all indoor and outdoor applications. Through the laser cross at the top and the plumb laser, a plumb line can be drawn from the ceiling to the floor. Automatic alignment through magnetically damped pendulum system, 3° self-levelling range. The rotatable housing allows exact position of the laser. Precision: 2 mm / 10 m, maximum range of laser receiver: up to 50 m radius (optional ACL 3C).

General safety instructions

Caution: Do not look directly into the beam. Lasers must be kept out of reach of children. Never intentionally aim the device at people. This is a quality laser measuring device and is 100% factory adjusted within the stated tolerance. For reasons of product liability, we must also draw your attention to the following: Regularly check the calibration before use, after transport and after extended periods of storage. We also wish to point out that absolute calibration is only possible in a specialist workshop. Calibration by yourself is only approximate and the accuracy of the calibration will depend on the care with which you proceed.



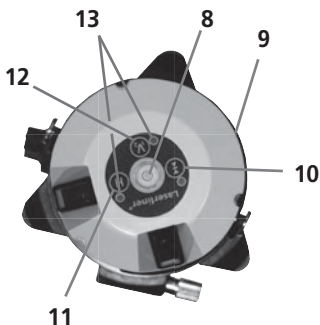
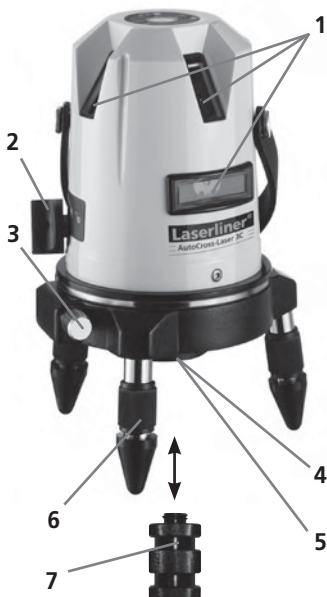
Laser radiation!
Do not stare into the
beam or observe it directly
with optical instruments.
Laser class 2 M
EN60825-1:2007-10

Note: This product is a precision instrument that must be handled and treated with care. Avoid shocks and impact. Always keep and carry in the case! Switch all lasers off and secure the pendulum. For cleaning, use a soft cloth and glass cleaner.

Warranty:

The warranty period is 2 years from the date of purchase. The warranty covers all material or manufacturing defects occurring during this time. The following are excluded from warranty: Damage due to improper use (e.g. operation with wrong type of current/voltage, connection to unsuitable power source, fall onto hard surface, etc.) or improper storage, normal wear and tear, and defects which only insignificantly impair the value or suitability for use. Any tampering by unauthorised persons will render this warranty void. In the event that you need to claim warranty, please take the complete device together with all information and the invoice to one of our dealers or send it in to Umarex-Laserliner.

AutoCross-Laser ACL 3C / ACL 3C RX



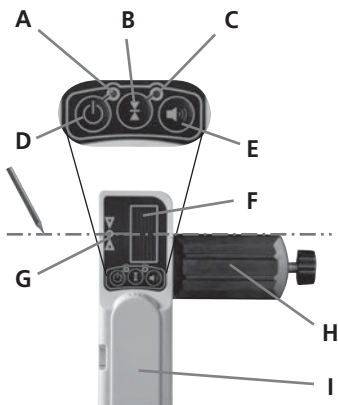
1	Windows for line lasers
2	ON / OFF switch Transport securing device
3	Knob for precision adjustment
4	5/8" thread (underside)
5	Window for plumb laser (underside)
6	Adjustable feet with removable rubber caps
7	Tripod adapter
8	Round vial for rough adjustment
9	Battery compartment
10	Hand receiver mode
11	Horizontal laser line
12	Vertical laser lines
13	Low battery charge when the LED's flash alternately (low bat. display)

IMPORTANT!

In order to get the best usage out of rechargeable batteries and to preserve them, they should be removed/charged when a low charge level is indicated.

Note:

For transport, the ACL 3C must always be switched off with the transport securing device (2) so as to protect device from damage.



A	Power indicator
B	Switch accuracy short range / long range
C	LED for accuracy green / red
D	ON / OFF switch
E	Sound ON / OFF
F	Receiver field for laser beam
G	LED's for Laserindication (front, side, backside)
H	Universal mount
I	Battery compartment (backside)

Inserting the batteries ACL 3C and Laserreceiver RX 51 (optional):

Open the battery compartment (9, I) and insert the batteries in accordance with the installation symbols, ensuring the correct polarity. Close the cover. Low battery charge: Replace the ACL 3C batteries when the LED's (13) flash alternately.

Aligning the ACL 3C: For approximate adjustment of the lasers, the top part of the ACL 3C can be turned on the base. Precise positioning can then be done with the precision adjustment knob (3). The adjustable feet (6) allow the device to be positioned on sloping surfaces.

Switching on the ACL 3C: Turn the ON/OFF switch (2) to the right, thereby releasing the transport securing device. The lasers can now be individually activated via buttons 11, 12. To obtain maximum visibility of the laser line, the hand receiver mode must be switched off (button 10). In this case, it is not possible to work with the laser receiver.

Note:

If the device is too far off the horizontal (more than 3°), the lasers will switch off. Align the device using the adjustable feet (6) or place on a more level surface. The round vial (8) is provided as an aid to alignment.

AutoCross-Laser ACL 3C / ACL 3C RX

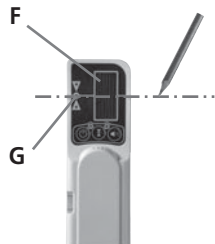
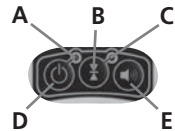
Optional: Working with the laser receiver RX 51:

For levelling over longer distances or in conditions of bright light, use the laser receiver RX 51. Switch on with button D; control lamp A will light up.

IMPORTANT: Set the ACL 3C to hand receiver mode (button 10). The laser lines will now pulsate with high frequency (10 kHz), making the laser lines darker. The laser receiver can detect these pulsating laser lines up to a maximum distance of 50 m.

Now move the receiver field (F) of the laser receiver through the laser lines upwards and downwards (horizontal laser line) and/or sideways (vertical laser line) until the centre LED (G) lights up. Now mark the horizontal and/or vertical reference dimension.

Adjust the sensitivity of the laser receiver with button B. Green LED (C) for close-range working up to max. 15 m, red LED (C) for distance-range working up to max. 50 m. The sound can be switched on or off with button E.



Note:

The light intensity of the laser lines is highest in the middle and lessens towards the edges. The maximum range of the laser receiver therefore also changes accordingly: Green LED max. 7 — 15 m, red LED max. 30 — 50 m.

Universal mount (optional):

The laser receiver RX 51 can be fitted on measuring staffs with the universal mount. The Flexi measuring staff (Art. No. 080.50) is always recommended when measuring from floor heights. It also allows you to determine heights directly without any need for calculation.



Note:

Regularly check the calibration before use, after transport and after extended periods of storage.



Technical data

Self-levelling range	$\pm 3^\circ$
Precision	$\pm 2 \text{ mm} / 10 \text{ m}$
Optional: Working range with laser receiver	max. 50 m
Laser wavelength	635 nm
Laser class / Laser output rating line lasers	2M / < 5 mW
Laser class / Laser output rating plumb laser	2 / < 1 mW
Power supply ACL 3C / battery life	3 x 1,5V AA / ca. 16 h
Power supply laser receiver RX 51	1 x 9V Block
Weight ACL 3C	1,4 kg
Operating temperature	0°C ... +50°C
Storage temperature	-10°C ... +70°C
Order number ACL 3C / ACL 3C RX	031.21 / 031.211A
Subject to technical alterations	12/2008

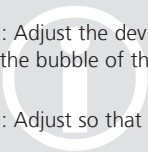
Information on precision:



Precision 2 mm / 10 m: Adjust the device using the adjusting screws (6) in such a way that the bubble of the circular level (8) is exactly in the middle.



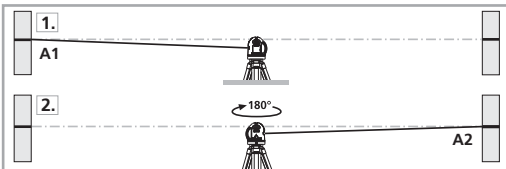
Precision 3 mm / 10 m: Adjust so that the bubble of the circular level is within the ring.



AutoCross-Laser ACL 3C / ACL 3C RX

Preparing the calibration check:

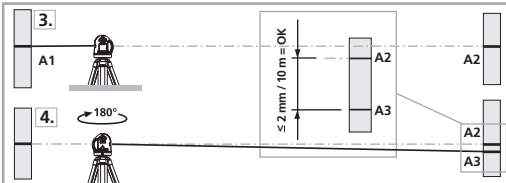
It is possible for you to check the calibration of the laser. To do this, position the device **midway** between 2 walls, which must be at least 5 metres apart. Switch the device on (Laser cross ON). The best calibration results are achieved if the device is mounted on a tripod. **1.** Mark point A1 on the wall.



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

Performing the calibration check:

3. Position the device as near as possible to the wall at the height of point A1.



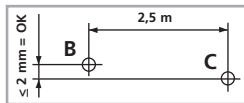
4. Turn the device through 180° and mark point A3. The difference between points A2 and A3 is the tolerance.

Note: If points A2 and A3 are more than 2 mm / 10 m, the device is in need of calibration. Contact your authorised dealer or else 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 ± 1.5 mm.

Checking the horizontal line:

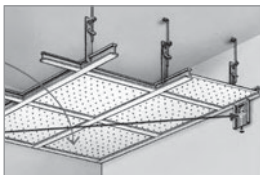
Position the device about 5 m from a wall and switch on the cross laser. Mark point B on the wall. Turn the laser cross approx. 2.5 m to the right and mark point C. Check whether the horizontal line from point C is level with point B to within ± 2 mm. Repeat the process by turning the laser to the left.



- DE **Zubehör (optional)**
- GB **Accessories (optional)**
- NL **Accessoires (optioneel)**
- DK **Tilbehør (flere typer)**
- FR **Accessoires (en option)**

- ES **Accesorios (opcional)**
- IT **Accessori (optional)**
- PL **Akcesoria (opcja)**
- FI **Lisämahdollisuuksia valinnaisvarusteilla**
- PT **Acessórios (opcional)**

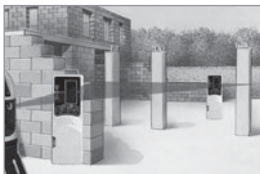
Art.-Nr: 023.61A



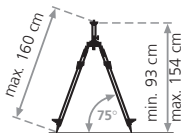
Art.-Nr: 090.120A



Art.-Nr: 033.20-1



ACL 3C: optional
ACL 3C RX: inclusive



Art.-Nr: 080.30



max. ca. 330 cm

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Laserstrahlung!
Nicht in den Strahl blicken
oder direkt mit optischen
Instrumenten betrachten.
Laser Klasse 2 M
EN60825-1:2007-10

Laser radiation!
Do not look into the
beam or observe it directly
with optical instruments.
Laser class 2 M
EN60825-1:2007-10



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|--|---|
| DE Service- und Versand-Anschrift | ES Dirección de servicio y de envío |
| GB Service- and Shipping Address | IT Indirizzo di assistenza e di spedizione |
| NL Service- en verzendadres | PL Serwis i sprzedaż |
| DK Service- og Postadresse | FI Service- og Postadresse |
| FR Livraison et expédition | PT Endereço de serviço e envio |

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