

ECOLINE EL 639



**BEDIENUNGSANLEITUNG
USER MANUAL
MODE D'EMPLOI**

EXACTLY WHAT YOU NEED.

geo
F E N N E L

ECOLINE

1 FEATURES

- 4 vertical laser lines at 90° to each other
- 1 horizontal laser line
- Plumb down beam
- Laser lines switchable separately
- Plumbing function
- Self-levelling function can be locked for manual use
- Audible and visual alarm when out of self-levelling range
- Integrated floor tripod
- 360° rotatable circle
- 5/8" connection at the bottom
- Use with receiver (optional)

TECHNICAL SPECIFICATIONS

Self-levelling range	± 3,5°
Accuracy	± 3 mm / 10 m
Working range w/o receiver	20 m* (radius)
Working range with receiver	60 m (radius)
Power supply	4 x AA Alkaline
Operating time (all lines switched on)	6h
Dust / water protection	IP 54
Laser diode / laser class	635 nm / 2
Temperature range	-10°C to +45°C
Weight (instrument with battery)	1,0 kg

*depending on room illumination

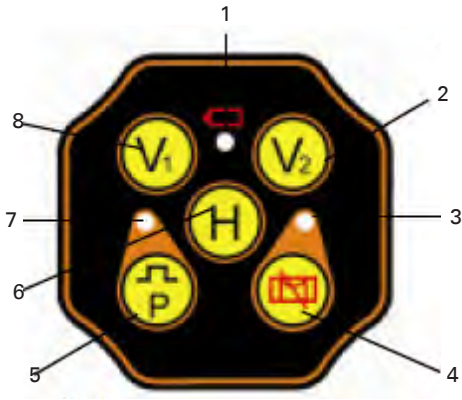
SUPPLIED WITH

EL 639, laser glasses, 4 x AA Alkaline battery, hard case, user manual

OPERATIONAL ELEMENTS



1. Keypad
2. Laser emitting windows
3. 360° rotatable circle
4. Circular bubble
5. Adjustable support leg
6. Fine adjustment screw
7. ON/OFF knob / transport lock
8. Battery compartment
9. 5/8" thread for tripod

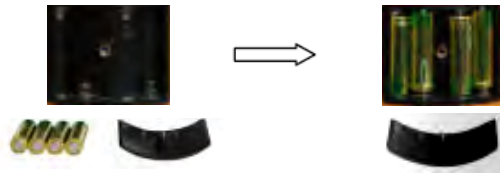


KEYPAD

1. ON/OFF LED
2. ON/OFF vertical laser V2
3. MANUAL LED
4. ON/OFF MANUAL function
5. ON/OFF receiver mode
6. ON/OFF horizontal laser line H
7. LED receiver mode
8. ON/OFF vertical laser V1

POWER SUPPLY

Put in 4 x AA Alkaline batteries into the battery case (take care to polarity) and close battery compartment.
When the ON/OFF LED flashes the batteries must be replaced.



SET UP THE INSTRUMENT

1. On a tripod: Connect the laser to the 5/8" retaining bolt of a builder's tripod.
2. On the floor: Set up the laser on the floor tripod.

Set up the instrument as upright as possible by means of the circular vial (4) to allow the self-levelling system to function within the range.

Fine adjustment with adjustable tripod legs.

POWER ON THE INSTRUMENT

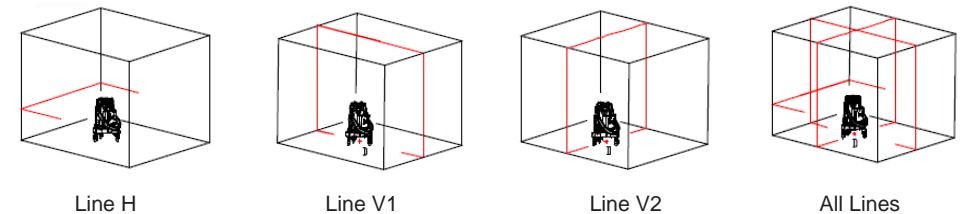
3

Set ON/OFF knob in position „ON“. Instrument is now ready for use (POWER LED is illuminated). An audible and optical (blinking lines) alarm indicates if the instrument was set up outside of compensator range of $\pm 3,5^\circ$. Set up instrument on a more even surface.

To switch off instrument bring ON/OFF knob into position „OFF“. Instrument is now switched off and the compensator is blocked to avoid damages during transport.

NOTE: During transport ON/OFF knob (compensator clamp) no. 6 must be set to „OFF“. Disregard may lead to damage of compensator.

The laser lines can be switched on and off independently of each other or together:



MANUAL-FUNCTION

MANUAL-function is only available in OFF-mode (as otherwise compensator alarm would start). Press MANUAL key (4) (MANUAL LED is blinking) and choose desired laser lines. Now EL 639 can be used in slope position. Press MANUAL key again to switch off the instrument.

4 USE WITH RECEIVER

To prolong the working range or at unfavourable light conditions EL 639 can be used with receiver.

Press button „P“ (the receiver mode LED is illuminated) to change to receiver mode. The receiver can now detect the signal of EL 639 (the visibility of the laser lines is weaker in this mode).

The working range can be extended up to 60 meters by use of the receiver. More detailed information you will find in user manual of the receiver.



5 SAFETY NOTES

SPECIFIC REASONS FOR ERRONEOUS MEASURING RESULTS

Measurements through glass or plastic windows; dirty laser emitting windows; after instrument has been dropped or hit. Please check accuracy. Large fluctuation of temperature: If instrument will be used in cold areas after it has been stored in warm areas (or the other way round) please wait some minutes before carrying out measurements.

CARE AND CLEANING

Handle measuring instruments with care. Clean with soft cloth only after any use. If necessary damp cloth with some water. If instrument is wet clean and dry it carefully. Pack it up only if it is perfectly dry. Transport in original container / case only.

ELECTROMAGNETIC ACCEPTABILITY (EMC)

It cannot be completely excluded that this instrument will disturb other instruments (e.g. navigation systems); will be disturbed by other instruments (e.g. intensive electromagnetic radiation nearby industrial facilities or radio transmitters).

CE-CONFORMITY

Instrument has CE-mark according to EN 61326:1997, EN 55022, EN 61000-4-2/-3.

WARRANTY

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 manufacturers option), without charge for either parts or 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. Without 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

1. 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.
2. The manufacturer, or its representatives, assumes no responsibility of results of a faulty or intentional usage or misuse including any direct, indirect, consequential damage, and loss of profits.
3. The manufacturer, or its representatives, assumes no responsibility for consequential damage, and loss of profits by any disaster (earthquake, storm, flood etc.), fire, accident, or an act of a third party and/or a usage in other than usual conditions.
4. 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.
5. The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits caused by usage other than explained in the users' manual.
6. The manufacturer, or its representatives, assumes no responsibility for damage caused by wrong movement or action due to connecting with other products.

SAFETY INSTRUCTIONS

- Follow up instructions given in user manual.
- Do not stare into beam. Laser beam can lead to eye injury. A direct look into the beam (even from greater distance) can cause damage to your eyes.
- Do not aim laser beam at persons or animals.
- The laser plane should be set up above eye level of persons.
- Use instrument for measuring jobs only.
- Do not open instrument housing. Repairs should be carried out by authorized workshops only. Please contact your local dealer.
- Do not remove warning labels or safety instructions.
- Keep instrument away from children.
- Do not use instrument in explosive environment.
- The user manual must always be kept with the instrument.

LASER CLASSIFICATION

The instrument is a laser class 2 laser product according to DIN IEC 60825-1:2008-05.

It is allowed to use unit without further safety precautions. Eye protection is normally secured by aversion responses and the blink reflex.

The laser instrument is marked with class 2 warning labels.



Please note:

If you return instruments for repair / for adjustment to us please disconnect batteries or rechargeable batteries from the instrument - this is for safety reasons!

Thank you.

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**Technische Änderungen vorbehalten.
All instruments subject to technical changes.
Sous réserve de modifications techniques.**



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