

FL 40-PowerCross SP

BEDIENUNGSANLEITUNG
USER MANUAL
MODE D'EMPLOI



Dear customer,

Thank you for your confidence having purchased a *geo-FENNEL* instrument of „*Selection Pro*“ series. This high-quality product was produced and tested with due prudence.

Among others „*Selection Pro*“ is defined by even clearer visible lines which you are originally used to from our standard range of instruments.

This manual will help you to operate the instrument appropriately. Please read carefully - particularly the safety instructions. A proper use guarantees a longtime and reliable operation.

geo-FENNEL

Precision by tradition.

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Technical Specifications

self-levelling range	$\pm 3^\circ$
levelling accuracy	$\pm 3 \text{ mm} / 10 \text{ m}$
working range without receiver	30 m* (radius)
Power supply (all lines illuminated)	3x AA Alkaline batteries
Operating time	40 hours
Dust / water protection	IP 54
Laser diode	635 nm
Laser class	2
Temperature range	-10° C to +45° C

SUPPLIED WITH**A**

- FL 40-PowerCross SP
- 3x AA Alkaline batteries
- bag
- user manual

*depends on room illumination

B OPERATIONAL ELEMENTS

1. Keypad
2. Laser emitting windows
3. 1/4" thread for tripod
4. Battery case
5. Hanging hole
6. Belt slot
7. Interlock for height adjustment of elevator table
8. 5/8" thread for tripod
9. 1/4" adapter
10. Magnets



KEYPAD**C**

1. ON/OFF LED
2. ON/OFF horizontal and vertical laser line

**POWER SUPPLY****D**

Put in 3 x AA Alkaline batteries into the battery case (4) (take care to polarity) and close battery compartment.

SET UP / MULTI-FUNCTIONAL MOUNT**E**

Fix the instrument on the multi-functional mount by using the 1/4" adapter.

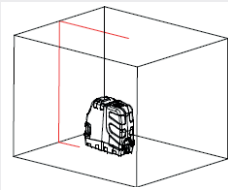
To move the instrument up or down on the mount declamp the knob (7).
For locking the desired position of the instrument tighten the knob again.

Use of the laser on a tripod.
Use of the laser with the magnets.
Use of the laser with strap attachment.

F OPERATION

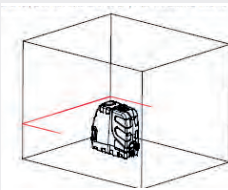


The ON/OFF LED is off - the instrument is off



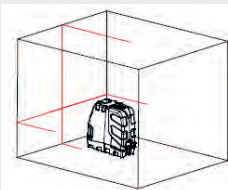
Press button H-V once:

- the ON/OFF LED is illuminated continuously
- the vertical laser line only is switched on
- the self-levelling mode is activated; if the instrument is tilted, (out of compensator range) the vertical laser line is blinking



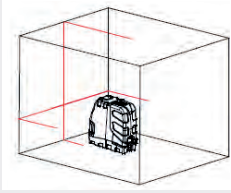
Press button H-V again:

- the ON/OFF LED is illuminated continuously
- the horizontal laser line only is switched on
- the self-levelling mode is activated; if the instrument is tilted, (out of compensator range) the horizontal laser line is blinking



Press button H-V a third time:

- the ON/OFF LED is illuminated continuously
- the vertical and the horizontal laser line are switched on = laser cross
- the self-levelling mode is activated; if the instrument is tilted, (out of compensator range) both laser lines blinking



Press button H-V once again:

- the ON/OFF LED is blinking
- the vertical and the horizontal laser line are switched on = laser cross
- the self-levelling mode is de-activated (TILT mode); if the instrument is tilted. (out of compensator range) the laser lines are not blinking
- now the instrument can be used in slope mode



Press button H-V again:

- the ON/OFF LED is off
- the instrument is now off

SAFETY NOTES

G

ACCURACY CHECK

Set up instrument in the middle of two walls which are about 5 m apart. Mark visible laser cross on one wall. Turn unit to opposite wall and mark laser cross.

Repeat measurements with distance of about 0,6 m to one wall and about 4,4 m to second wall. Deviation between two measurements taken from the centre and two measurements taken at 0,6 m and 4,4 m must not exceed 3 mm.

Testing accuracy of horizontal line (end to end)

Set up instrument about 5 m from a wall. Mark laser cross on wall. Turn instrument until the laser cross has moved about 2,5 m to the left side and check if horizontal line is within ± 2 mm of laser cross marked on wall. Repeat measurement by turning instrument to the right side

Testing accuracy of vertical line (end to end)

Set up instrument about 5 m from a wall. Fix a plumb line of 2,5 m length to the wall, using a plumb bob. Bring laser line into coincidence with the plumb line. Deviation between laser line and plummet cord from top to bottom must not exceed $\pm 1,5$ mm.

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 61010-1:2001 + corr. 1+2, IEC 60825-1:2008:05.

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.

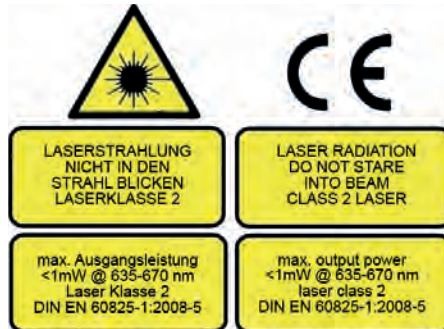
SAFETY INSTRUCTIONS

- 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.

ZUBEHÖR / ACCESSORIES / ACCESSOIRES



FS 10

ARTIKEL-NR. / REFENCE NO. / RÉFÉRENCE 302000

Kurbelstativ / elevating tripod / trépied à colonne

drehbarer Stativkopf / rotating head / Tête de trépied rotative

53 - 163 cm; 2,3 kg

Dosenlibelle, Tragetasche / Circular bubble, with carrying bag / Nivelle sphérique intégrée, Sacchoche de transport



FS 30-L

ARTIKEL-NR. / REFENCE NO. / RÉFÉRENCE 156

Kurbelstativ / elevating tripod / trépied à colonne

drehbarer Stativkopf / rotating head / Tête de trépied rotative

90 - 285 cm; 2,3 kg

ZUBEHÖR / ACCESSORIES / ACCESSOIRES



WH 2

ARTIKEL-NR. / REFERENCE NO. / RÉFÉRENCE 290610

Wand- & Deckenhalter / wall and ceiling mount / support mural et de plafond

robust / solid / particulièrement solide

Große Plattform / large platform size / grande plateforme: 150 x 95 mm

Einteilung / graduation / graduation: cm/inch

für alle geo-FENNEL Laser / for all geo-FENNEL laser / pour tous les lasers geo-FENNEL



KS 3

ARTIKEL-NR. / REFERENCE NO. / RÉFÉRENCE 520100

Klemmsäule / floor-to-ceiling-pillar / canne support laser

Robuste Ausführung / solid construction / modèle robuste

wird zwischen Boden und Decke festgeklemmt / to be fixed between floor and ceiling / bloquée entre sol et le plafond

Adapter / adapter / filetage: 5/8" & 1/4"

Max. Länge / maximal length / longueur max.: 3,40 m

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



Precision by tradition.

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