

Geo3X HP

BEDIENUNGSANLEITUNG
USER MANUAL
MODE D'EMPLOI



Dear Customer,

Thank you for your confidence in us, having purchased a geo-Fennel instrument.

For the optimum performance of the instrument, please read this manual carefully and keep it in a convenient place for future reference. This manual contains important safety information that should be read and understood before use.

Technical specification and design are subject to change without notification.

geo-FENNEL
Precision by tradition.

Contents

1. Supplied with	A
2. Features	B
3. Keypad layout	C
4. Battery and charger	D
5. Operation	E
6. Safety notes	F

A SUPPLIED WITH

- Cross laser Geo3X HP
- Multi-functional mount
- 3 x AA Alkaline batteries
- Softbag
- User manual

FEATURES

- 2 laser crosses at 90° to each other
- Laser cross to the ceiling
- Compact, rugged design
- Self-levelling function can be locked for manual use

Technical Data

Self-levelling range	$\pm 3^\circ$
Accuracy	$\pm 3 \text{ mm} / 10 \text{ m}$
Working range	
• without receiver	20 m* (radius)
• with receiver (optional)	60 m (radius)
Power supply	3 x AA Alkaline batteries
Operating time (all lines switched on)	12 h
Dust / water protection	IP 54
Laser diode / laser class	635 nm / 2
Temperature range	-10°C to $+45^\circ\text{C}$
Weight (instrument with batteries)	0,4 kg

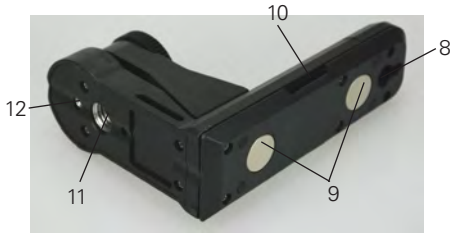
*depending on room illumination

FEATURES

1. Keypad
2. Laser emitting windows
3. Elevating table clamp
4. Battery compartment cover
5. 1/4" adapter
6. ON / OFF knob

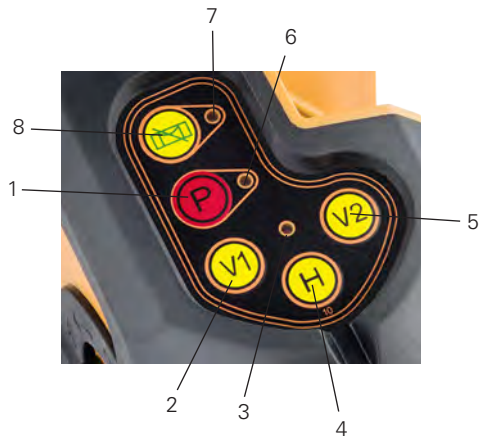


- 7. Elevating table clamp
- 8. Keyhole slot
- 9. Magnets
- 10. Slot for strap attachment
- 11. 5/8" thread for tripod
- 12. 1/4" thread for tripod



C KEYPAD LAYOUT

- 1. Pulse mode on / off
- 2. Vertical line (V1) on / off
- 3. Power ON / OFF LED
- 4. Horizontal line (H) on / off
- 5. Second vertical line (V2) on / off
- 6. Pulse mode LED
- 7. Manual mode (MAN) LED
- 8. Manual mode on / off



BATTERY AND CHARGER

D

INSERT BATTERY

Open the battery compartment cover and insert 3 x AA Alkaline batteries (ensure correct polarity).



OPERATION

E

SET UP OPTIONS

- on any flat surface
- on a tripod either with or without the multi-functional mount
- using the strong magnets on the multi-functional mount
- onto a wall using the keyhole slot (on a screw)
- utilising the strap attachment slot



POWER ON

Turn the ON / OFF knob to position „ON“ and the instrument is ready for use. The laser lines can now be switched on and off independently of each other or altogether.

A visible (blinking lines) and audible alarm indicates if the instrument is set up outside of the self-levelling range. If so, re-position the instrument on a more level surface.

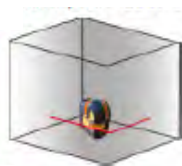
To power off turn the ON / OFF knob to „OFF“:

The instrument is now switched off and the compensator is locked to avoid damages during transportation.

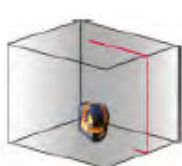
NB: During transportation ensure the ON / OFF knob is set to „OFF“:

To disregard this instruction may lead to damage of the self-levelling mechanism.

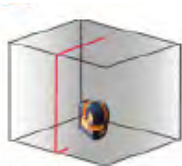
The laser lines can be switched on and off independently of each other or altogether:



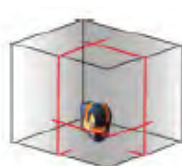
Line H



Line V1



Line V2



All Lines

USE WITH A RECEIVER

To extend the working range or for use in unfavourable light conditions the Geo3X HP can be used with a receiver. The receiver is optional (not included in the kit)

Press button „P“ (pulse mode LED (6) will illuminate) to change from normal to receiver mode. The receiver can now detect the Geo3X HP laser lines (the visibility of the laser lines are weaker in this mode).

The working range can be extended up to 60 meters by using a receiver. You will find more detailed information in the receiver user manual.

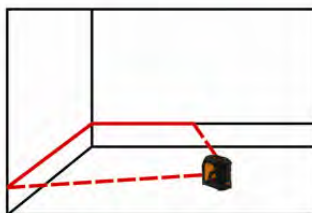
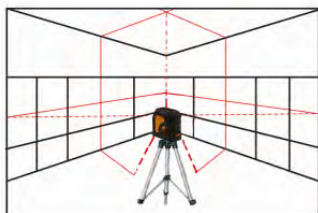
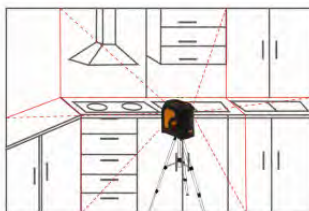
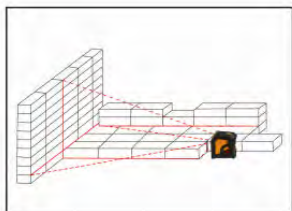


FR 55-M

MANUAL FUNCTION

The MANUAL function is only available with the power ON / OFF knob set to „OFF“ (otherwise the visible and audible alarm would be activated). Press the MANUAL button (8) and choose the desired laser lines. The Geo3X HP can be used in slope mode.

APPLICATION DIAGRAMS



F SAFETY NOTES

INTENDED USE OF INSTRUMENT

The instrument emits a visible laser beam in order to carry out the following measuring tasks (depending on instrument): Setting up heights, horizontal and vertical planes, right angles and plumbing points.

CARE AND CLEANING

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

SPECIFIC REASONS FOR ERRONEOUS MEASURING RESULTS

Measurements through glass or plastic windows; dirty laser emitting windows; after the instrument has been dropped or hit. Please check the accuracy.

Large fluctuation of temperature: If the 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.

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

This instrument has the CE mark according to EN 61010-1:2010.

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 the user 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 user 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 the instructions given in the user manual.
- Do not stare into the beam. The 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 the laser beam at persons or animals.
- The laser plane should be set up above the eye level of persons.
- Use the instrument for measuring jobs only.
- Do not open the 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 the instrument away from children.
- Do not use the 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 the unit without further safety precautions. The eye protection is normally secured by aversion responses and the blink reflex.

The laser instrument is marked with class 2 warning labels.



geo-FENNEL GmbH

Kupferstraße 6

D-34225 Baunatal

Tel. +49 561 / 49 21 45

Fax +49 561 / 49 72 34

info@geo-fennel.de

www.geo-fennel.de

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



Precision by tradition.

geo
F E N N E L