

# GEO1X-GREEN / SET USER MANUAL



Dear customer,

Thank you for your confidence in us having purchased a **geo-FENNEL** instrument. This manual will help you to operate the instrument appropriately.

Please read the manual carefully - particularly the safety instructions. A proper use only guarantees a longtime and reliable operation.

geo-FENNEL Precision by tradition.

### SUPPLIED WITH Geo1X-GREEN

(Ref. no. 541250)

- · Cross line laser Geo1X-GREEN
- 4 x AA Alkaline batteries
- · Wall/tripod mount
- Padded bag
- · User manual

# SUPPLIED WITH Geo1X-GREEN SET

(Ref. no. 541260)

- · As above
- Elevating tripod

# **OPTIONAL:**

- · Li-lon rechargeable battery and charger
- · Receivers FR 75-MM, FR 55, FR 55-M

### **CHARACTERISITCS**

- 1 vertical and 1 horizontal line combine to a laser cross
- Self-levelling function can be locked for manual use
- Visual/acoustic alarm when out of selflevelling range
- · Wall/tripod mount:
  - magnetic
  - screw hole for wall attachment
  - 1/4" + 5/8" tripod connection
- Optional use with receiver (FR 75-MM, FR 55, FR 55-M)

# **Technical data**

Self levelling range	± 3°
Accuracy	± 3 mm / 10 m
Laser diode	green
Laser class	2
Working range without receiver	30 m* (radius)
Working range with receiver	70 m (radius)
Power supply	4 x AA Alkaline
Working time	5 h
Dust/water protection	IP 54

<sup>\*</sup>depending on the room illumination

# **FEATURES**



1/4" tripod connection







### **POWER SUPPLY**

The Geo1X-GREEN comes with Alkaline batteries. Open the battery cover and insert 4 x AA Alkline batteries (take care of correct polarity!). Close the battery cover. As soon as the ON/OFF LED starts flashing the batteris must be exchanged.

#### Insert the batteries





#### **SET UPTHE LASER**



Set up the instrument as upright as possible to allow the self-levelling system to function within the range.

#### **OPTIONAL**

the laser can be operated with Li-Ion rechargeable battery. As soon as the ON/ OFF LED starts flashing the batteris must be charged (ref. no. 541251)

# Insert the rechargeable battery



# Charge the battery



During the charging process the LED of the rechargeable battery case lights; as soon as the battery is fully charged the LED extinguishes.

The operating time of the rechargeable battery is 10 h approx.

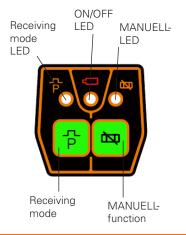
# **OPERATION**





Power on the laser = **ON**Power off the laser = **OFF** 

# KEYPAD



Power on the laser (bring the lever in **ON**-position):

-> the laser cross is now projected.

Press the **H/V** button once to switch off the laser cross (the unit remains powered on).



# MANUAL FUNCTION

The MANUAL function is only available in the OFF mode (as otherwise compensator alarm would start). Press the button RECEIVING MODE / MANUAL to start the MANUAL function. The ON/OFF LED lights, the MANUAL LED blinks. Now the laser can be used in slope position; the compensator alarm is off. The laser cross will be projected automatically.

Press the button RECEIVING MODE / MANUAL again to quit the MANUAL function.

# RECEIVING MODE

To prolong the working range or at unfavourable light conditions the Geo1X -GREEN can be used with an optional receiver (not included in this kit).

Power on the laser and press the button RECEIVING MODE / MANUAL at laser (the LED for the function lights). The laser cross can now be detected by the receiver (the visibility of the laser cross is weaker in this mode).

Press this button again to quit this mode.

#### 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.

# 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 3. 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 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.

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: 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**

- 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.
- 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.
- 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.
- 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.
- 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.
- The manufacturer, or its representatives, assumes no responsibility for damage caused by wrong movement or action due to connecting with other products.

#### LASER CLASSIFICATION

The instrument is a laser class 2 laser product according to DIN IEC 60825-1:2014. It is allowed to use the unit without further safety precautions.

The eye protection is normally secured by the aversion responses and the blink reflex.

The laser instrument is marked with class 2 warning labels.



#### 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