

GeoMax Zoom10



GE  **MAX**

Quick Guide
Version 1.0

1 Important Information about your Instrument



Read and follow the User Manual on the accompanying data storage device before using the product.

If you have no such manual, or if it is in the wrong language, ask your agency for an appropriate copy.



Keep for future reference!

Intended use

- Measuring horizontal and vertical angles.
 - Measuring distances.
 - Recording measurements.
 - Visualising the aiming direction and vertical axis.
 - Data communication with external appliances.
 - Computing with software.
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Environment

Suitable for use in an atmosphere appropriate for permanent human habitation: not suitable for use in aggressive or explosive environments.

Laser products

The Zoom10 instrument contains the following laser products:

Laser product	Laser class
EDM (Electronic Distance Measurement) module	
• measurements with reflectors	Class 1
• measurements without reflectors	Class 3R
Laser plummet	Class 2
Red laser pointer	Class 3R

- The classification for the EDM and Laser plummet is in accordance with IEC 60825-1 (2014-05).

 **CAUTION****Class 3R laser products**

From a safety perspective, class 3R laser products should be treated as potentially hazardous.

Precautions:

- ▶ Prevent direct eye exposure to the beam.
 - ▶ Do not direct the beam at other people.
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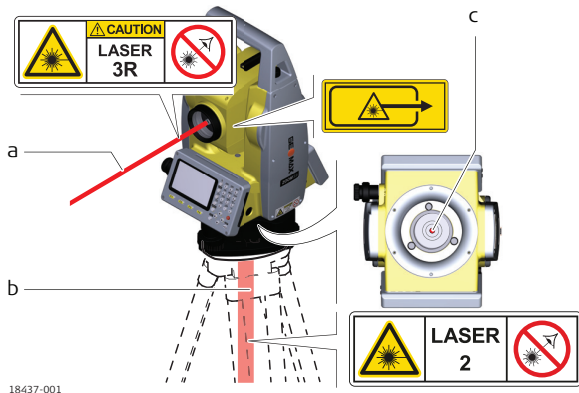
 **CAUTION****Class 2 laser product**

From a safety perspective, class 2 laser products are not inherently safe for the eyes.

Precautions:

- ▶ Avoid staring into the beam or viewing it through optical instruments.
 - ▶ Avoid pointing the beam at other people or at animals.
-

Locations of laser exit apertures




- a Laser beam (EDM, Laser pointer)
- b Laser beam (Laser plummet)
- c Laser exit aperture (Laser plummet)

Hazards of use

- The person responsible for the product must make all users fully aware of the existing dangers during dynamic applications.
- Do not aim at areas that are essentially reflective, such as a mirror, or which could emit unwanted reflections.
- Do not look through or beside the optical sight at prisms or reflecting objects when the laser is switched on, in laser pointer or distance measurement mode. Aiming at prisms is only permitted when looking through the telescope.
- Do not point the product directly at the sun.
- Keep a safe distance to the moving parts.
- Keep at a safe distance from electrical installations. If it is essential to work in this environment, first contact the safety authorities responsible for the electrical installations and follow their instructions.



- Do not use the product in a thunderstorm.
- Always ensure that the working site is adequately secured.
- When setting up the product, make sure that the accessories are correctly adapted, fitted, secured, and locked in position. Avoid subjecting the product to mechanical stress.
- Adhere to the regulations governing safety, accident prevention and road traffic.

- For Batteries:
 - Before shipping the product or disposing it, discharge the batteries by the product until they are flat.
 - When transporting or shipping batteries, the person in charge of the product must ensure that the applicable national and international rules and regulations are observed.
 - Before transportation or shipping, contact your local passenger or freight transport company.
 - Protect the batteries from mechanical influences and high ambient temperatures. Do not drop or immerse batteries into fluids.
 - Make sure that the battery terminals do not come into contact with metallic objects.
 - Periodically carry out test measurements and perform the field adjustments indicated in the User Manual, particularly after the product has been subjected to abnormal use as well as before and after important measurements.
 - The product must not be disposed with household waste.

 - Only GeoMax authorised service workshops are entitled to repair these products.
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2 **Conformity to National Regulations**

Conformity to national regulations

- FCC Part 15, 22 and 24 (applicable in US)
 - Hereby, GeoMax AG declares that the radio equipment type Zoom10 is in compliance with Directive 2014/53/EU and other applicable European Directives.
The full text of the EU declaration of conformity is available at the following Internet address: <http://www.geomax-positioning.com/Downloads.htm>.
- CE** Class 1 equipment according to European Directive 2014/53/EU (RED) can be placed on the market and be put into service without restrictions in any EEA member state.
- The conformity for countries with other national regulations not covered by the FCC part 15, 22 and 24 or European Directive 2014/53/EU has to be approved prior to use and operation.
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 **WARNING**

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

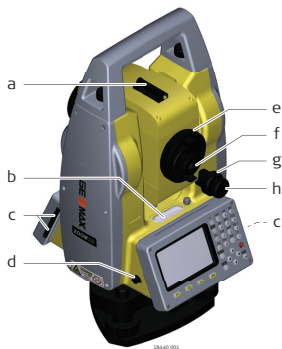
1. This device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

**Radio Frequency
(RF) Exposure
Compliance
Statement**

The radiated RF output power of the instrument is below the Health Canada's Safety Code 6 exclusion limit for portable devices (radiated element separation distance between the radiating element and user and/or bystander is below 20 cm).

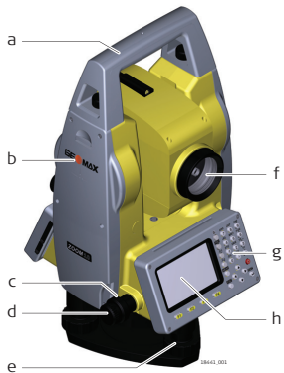
3 Instrument Components

Instrument components part 1 of 2



- a Optical sight
- b Levelling bubble
- c Ports for SD card and mini USB
- d RS232C port
- e Focusing telescope image
- f Eyepiece; focusing graticule
- g Clamping screw
- h Vertical drive

Instrument components part 2 of 2



- a Detachable carrying handle with mounting screw
- b Battery cover
- c Clamping screw
- d Horizontal drive
- e Footscrew
- f Objective with integrated Electronic Distance Measurement (EDM). Exit for laser beam.
- g Keyboard
- h Display

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Technical Data

Environmental specifications

Temperature

Operating temperature [°C]	Storage temperature [°C]
-20 to +50	-40 to +70

Protection against water, dust and sand

IP54 (IEC 60529)

Humidity

Max 95 % non condensing.

The effects of condensation are to be effectively counteracted by periodically drying out the instrument.

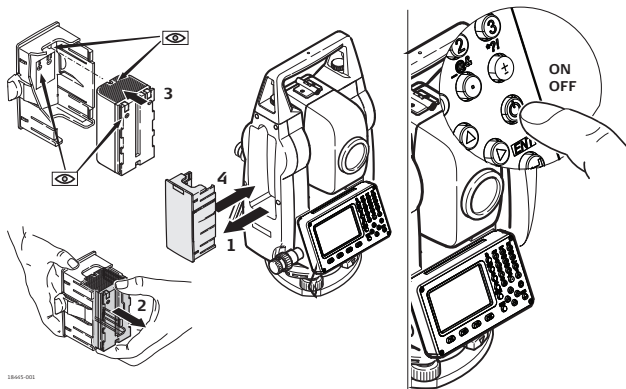
5 Care and Transport

Care and transport

- Carry the product in its original container or carry the tripod with the attached product upright, to protect it against shock and vibration.
 - Periodically carry out test measurements and perform the field adjustments indicated in the User Manual, particularly after the product has been dropped, stored for long periods or transported.
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6 Operation

Getting started





The battery must be charged before using it for the first time.



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