



# Leica TS11 Quick Guide



Version 2.0 **English** 



#### 1

## Important Information about your Instrument







#### Intended Use

Read and follow the User Manual on the accompanying DVD before using the product.

#### Keep for future reference!

- Measuring horizontal and vertical angles.
- Measuring distances.
- Recording measurements.
- Visualising the aiming direction and vertical axis.
- Capturing and recording images.
- Data communication with external appliances.
- Measuring raw data and computing coordinates using carrier phase and code signal from GNSS satellites.
- Carrying out measurement tasks using various GNSS measuring techniques.
- Recording GNSS and point related data.
- Computing with software.

#### Laser products

The TS11 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	
EGL (Electronic Guide Light)	Exempt Group	
Laser plummet	Class 2	

- The classification for the EDM and Laser plummet is in accordance with IEC 60825-1 (2007-03).
- The classification for the EGL is in accordance with IEC 62471 (2006-07).



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

#### Precautions:

- 1) Prevent direct eye exposure to the beam.
- 2) Do not direct the beam at other people.



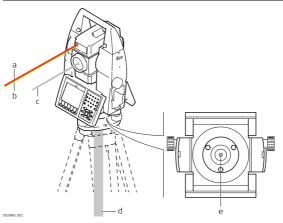
#### CAUTION

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

Precautions:

- 1) Avoid staring into the beam.
- 2) Avoid pointing the beam at other people.

## Locations of laser apertures



- LED beam red (EGL)
- b) LED beam yellow (EGL)
- c) Laser beam (EDM)
- d) Laser beam (Laser plummet)
  - ) Exit for laser beam (Laser plummet)



Conformity to national regulations The product must not be disposed with household waste.

- FCC Part 15 (applicable in US)
- Hereby, Leica Geosystems AG, declares that the product TS11 is in compliance
  with the essential requirements and other relevant provisions of Directive
  1999/5/EC and other applicable European Directives. The declaration of
  conformity may be consulted at http://www.leica-geosystems.com/ce.



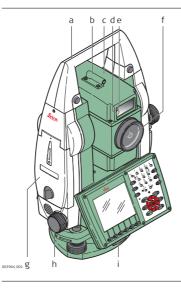
Class 1 equipment according European Directive 1999/5/EC (R&TTE) can be placed on the market and be put into service without restrictions in any EU Member state.

 The conformity for countries with other national regulations not covered by the FCC part 15 or European directive 1999/5/EC has to be approved prior to use and operation.

#### 2

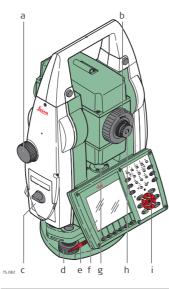
## **Instrument Components**

Instrument components part 1 of 2



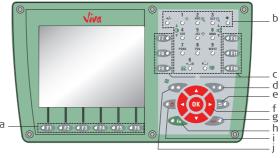
- a) Carry handle
- b) Optical sight
- Telescope, integrating EDM, EGL, wide-angle camera
- d) EGL flashing diode yellow and red
- e) Wide-angle camera, lens
- f) Coaxial optics for angle and distance measurement, and exit port of visible laser beam for distance measurements
- g) Communication side cover
- h) Horizontal drive
- i) Tribrach securing screw

## Instrument components part 2 of 2



- a) Vertical drive
- b) Focusing ring
- c) Battery compartment
- d) Tribrach footscrew
- e) Stylus for touch screen
- f) Touch screen
- g) Circular level
- h) Interchangeable eyepiece
- i) Keyboard

#### Keyboard



TS\_143

- a) Function keys F1-F6
  Correspond to six softkeys that appear on the bottom of the screen when the screen is activated
- b) Alphanumeric keys To type letters and numbers.
- c) Function keys F7-F12
   User definable keys to execute chosen commands or access chosen screens.
- d) Favourites
  Goes to a favourites menu.
- e) Esc
   Leaves the current screen without storing any changes.

#### f) Arrow keys

OΚ

Move the focus on the screen.

Selects the highlighted line and leads to the next logical menu / dialog, starts the edit mode for editable fields or opens a selectable list.

#### g) Enter

Selects the highlighted line and leads to the next logical menu / dialog, starts the edit mode for editable fields or opens a selectable list.

h) Fn

Switches between the first and second level of function keys.

i) ON/OFF

If the instrument is already off: Turns on the instrument when held for 2 s. If the instrument is already on: Turns to Power Options menu when held for 2 s.

i) Home

Switches to the SmartWorx Viva Main Menu. Switches to the Windows CE Start Menu when pressing Fn at the same time.

TS11, Technical Data

### 3 Technical Data

#### Environmental specifications

#### Temperature

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

#### Protection against water, dust and sand

IP55 (IEC 60529)

#### Humidity

Max 95 % non condensing.

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

### 4

## **Care and Transport**

#### Care and transport

- Carry the product in its original container or carry the tripod with its legs splayed across your shoulder, to protect the product 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.

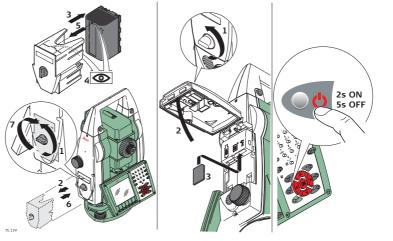
5

## **Operation**



the instrument

Turning on and off



TS11, Operation 11

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

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## ${\bf Total\ Quality\ Management:\ Our\ commitment\ to\ total\ customer\ satisfaction.}$



Leica Geosystems AG, Heerbrugg, Switzerland, has been certified as being equipped with a quality system which meets the International Standards of Quality Management and Quality Systems (ISO standard 9001) and Environmental Management Systems (ISO standard 14001).

Ask your local Leica Geosystems dealer for more information about our TQM program.

Leica Geosystems AG

Heinrich-Wild-Strasse CH-9435 Heerbrugg Switzerland Phone +41 71 727 31 31

- when it has to be right

