



Quick Guide – LTL3000 Retroreflectometer

Getting started

Insert battery: Before using the LTL3000 instrument make sure that the battery is charged and inserted in the battery slot on the side of the instrument.

Turn on: Press the green button on the handle of the LTL3000 instrument. After 10-15 seconds, the system has booted, and the instrument is ready for use.

Stand-by: The LTL3000 automatically switches to **stand-by mode** if the instrument has not been used for a specific amount of time. From stand-by mode the instrument is instantly ready when pressing the green button on the handle.

Switch off: press the X-button on the handle of the LTL3000 and then press ‘Shutdown’ in the menu on the touch screen, and the instrument will switch off. Note: If not properly switched off, the instrument will continue to consume battery in standby mode.

Calibration procedure

Before a calibration is carried out make sure that the calibration unit is clean and undamaged.

Reference RL calibration (recommended daily)

To calibrate the LTL3000 use the RL calibration target delivered with the instrument.

Calibrate the RL value by following these steps:

- Select ‘Calibrate’ from the main menu.
- Type in the RL-calibration value printed on the calibration target sticker.
- Place the calibration target under the LTL3000 (in the front) and press ‘Calibrate RL’ on the screen. Note: the pins on the calibration target fit into the slots underneath the LTL3000 instrument.
- Wait for success confirmation and remove the calibration unit

Reference Qd calibration (when needed):

The instrument is factory calibrated for the Qd value and thus Qd should only be recalibrated when needed.

The calibration can be verified by performing a Qd measurement on the Qd calibration marking delivered with the instrument. If the reading is within a few percent recalibration is not required. Qd calibration requires the Qd calibration marking. The instrument will warn about this fact before calibration. **Note:** Be aware that it is **NOT** possible to recover the factory calibration if the Qd value is recalibrated.

To calibrate the Qd value follow these steps:


- Select ‘Calibrate’ from the main menu.
- Type in the Qd calibration value printed on the calibration target sticker.
- Place the LTL3000 all the way back on the Qd calibration target facing in the direction indicated.
- Press ‘Calibrate Qd’ on the screen.
- Wait for success confirmation.

Perform a measurement

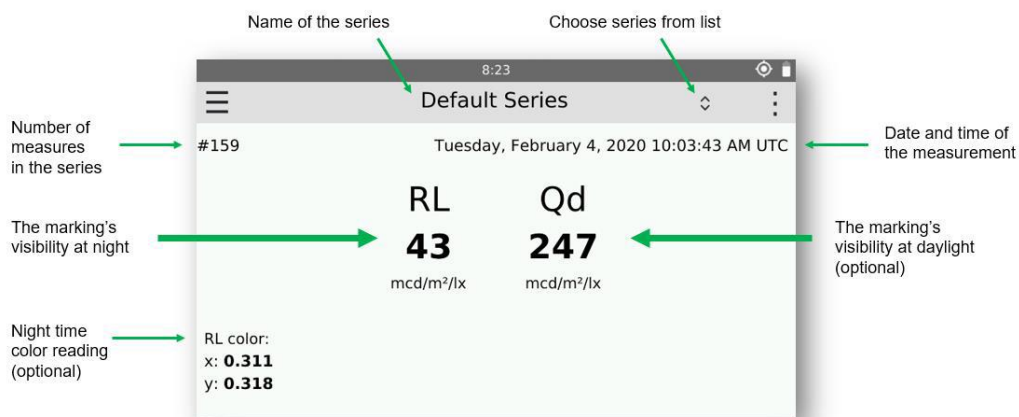
Select ‘Measure’ from the main menu, and the instrument is now ready to perform a measurement.

Place the LTL3000 instrument on top of the specific road markings you want to measure and press the green button on the instrument handle. NOTE. Make sure that the instrument is positioned correctly on the road marking. The two wear plates in front of the instrument and the end of the instrument should be on the mark when measuring.

Wait a second until the reading is shown on the display. The measurement data is automatically saved by the LTL3000 instrument. You can now continue to conduct another measurement.

If you want to switch to another measurement series, choose the relevant series from the drop-down menu  or select it in the Series menu and continue with your measurements.


View all your measurements in the Log.



Main Menu








The various instrument actions can be accessed via the main menu on the display screen.

You can activate the main menu in 3 ways:

- press  at the top left corner of the display screen to access the main menu,
- or swipe the screen from the left side,
- or press **X** on the instrument handle.

If you want to close the menu again, just touch the display or press X on the instrument handle. The main menu consists of these elements:

The main menu consists of these elements:

Icon	Function	Explanation
	Measure	Perform an inspection
	Series	Select, add, edit, or delete series of measurements
	Users	Select, add, edit, or delete a user
	Log	Export measurement series to USB stick or delete data
	Calibrate	Calibrate the LTL3000
	Settings	Adjust settings (location, time and date)
	Shutdown	Power off the instrument

Note: all information you enter or alter under the individual menu items is automatically stored in the instrument.

Icons

The icons in the status bar at the top of the display screen give you information about the instrument status and operational mode:

