


Quick Guide - LTL-XL Retroreflectometer

Getting Started

Height Adjustment


Before using LTL-XL notice that the operating panel can be adjusted in height for ergonomic considerations. The height is adjusted by pressing the red knob on the front of the instrument and at the same time lifting the handle on the operating panel. Release the knob and continue lifting until the handle locks.

Measuring


Turn on the LTL-XL by pressing and holding the ON/OFF button  until the display turns on. The display will then change to the measure mode. An exception is when the instrument is set to ask for user identification, see User select.

Calibrate the instrument if necessary, see Calibration.









Place the instrument on the road marking.

Press the big green OK-button  to take a measurement. A measurement will be finished in 1-3 sec.


When the measurement is complete, the RL and/or Qd value will be displayed. Data is automatically transferred to the data log. If there is a problem with the measurement a warning or an error icon will pop up (see Warnings and Errors) and an audible alarm will sound (if enabled, see Sound).

To printout the last measurement data, press the PRINT button .

Buttons

HELP		Presents a help text for the actual function. Another press on the button will open up a general help menu.	ON/OFF		Is used to turn the instrument ON or OFF. Press the button to turn on the instrument. Press 0 to 4 sec. to change to sleep mode. Press >4 sec. to turn off the instrument.
MENU		Selects the top level of the menu tree. Use UP and DOWN to scroll through the menu items. Press OK to select.	SMART		This button is user programmable to one of several functions, e.g. to clear the last measurement or select measurement type.
HOME		Will bring you back to measure display.	CALIBRATE		Starts the calibration wizard.
BACK		Is used to go backward one step in the menu.	PRINT		This button will print out the last measurement or selected parts of the log to the internal printer (optional).

User select


If a user icon  is shown in the top line of the display then from the measure display press ▲ and ◀ or ▶ buttons to mark the user icon. Press the OK button to enter the user select menu.

Series id select

From the measure display press ▲ to mark the road icon . Press the OK button to enter the series id select menu. To deactivate the series id press MENU and select SETTINGS/SERIED ID. Now select ACTIVATE and use OK to change to OFF.


Calibration procedure

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

Press the CALIBRATION button . Select RL and/or Qd calibration. Mount the calibration unit underneath the instrument. Make sure that the pins on the interface plate fit into the holes in the calibration unit. Press the OK button to start calibration. Check the value displayed and, if necessary, adjust the calibration value shown in the display so it matches the value stamped on the calibration unit. Press the OK button to finish the calibration or repeat if erroneous.

The calibration procedure is now done. Remove the calibration unit and store it properly. Press OK to return to the measurement display.


Miscellaneous



The measure display can at all times be activated by pressing .

Reset Log: Press the MENU button  and select LOG/CLEAR DATA/ALL.

Date and Time: Press the MENU button and select SETTINGS/DATE & TIME/SET TIME/DATE. Select wanted value and use ▲ and ▼ to set the time and date. Accept the setting by pressing the green OK button. Alternatively SYNC TO GPS can be selected to auto set the time. Remember also to set correct time zone.

Power Save: Press the MENU button and select SETTINGS/POWER. Select AUTO SLEEP or AUTO OFF and use ▲ or ▼ to edit the auto turn off/ sleep time. Accept the setting by pressing the green OK button.

Sound: Press the MENU button  and select SETTINGS/SOUND. SELECT KEY CLICK or SOUNDS to set the individual sound levels for key click and miscellaneous system sounds. Use ▲ or ▼ buttons to set the levels. Accept the setting by pressing the OK button.

Warnings and Errors: An error icon  or warning icon  will be displayed in the top line of the display if a problem is detected when a measurement is taken. Press ▲ to get a description of the most severe error or warning. Now press the OK button to display a total list of errors or warnings.

