



# Quick Guide – RetroSign GRX

## Getting started

The GRX is operated by a touch screen, where you can use these movements: tap, swipe, and pinch. Alternatively, use the GRX trigger button.

**Turn on the instrument:** Press the red power button underneath the GRX housing. The instrument turns on in less than a minute and in 1-2 seconds from stand-by mode.

**Stand-by:** To activate stand-by press the red power button shortly.

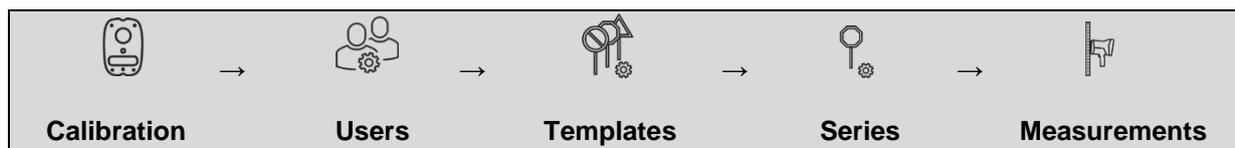
**Switching off:** Press the red power button for a couple of seconds until 'Power off' is written on the touch screen. Then tap the screen to turn off the instrument completely.



## Day-to-day operation

To start preparing a measurement press  at the top left corner of the GRX touch screen (or swipe the screen from left to right) to access the main menu

Follow the steps below in your daily workflow routine and follow the instructions on the GRX screen:



-  **Calibrate:** Calibrate the instrument daily before conducting any measurements. Use the calibration target  (at the back of the angle adaptor) for verification and calibration of the retroreflectometer. Calibration values can either be typed in by hand or scanned from the barcode. Follow the instruction on the display.
-  **Users:** Create or select a user who performs the measurement.
-  **Template:** Create or select a template which specifies the data fields to be captured during an inspection (retroreflection of background and legend colors). Choose between *single* or *multiple* (2-10) shots per element, taking a photo of the object and data fields picked from predefined fields or typed new. If *single shot* is chosen it will still be possible to enter data fields but not to activate "Take picture" or automatically note if it is a background or legend measurement. *Single shot* is made for fast measurements.
-  **Series:** Create or select an existing series based on a template. Your inspections are automatically stored. Series is where data is stored and organized and the individual measurements can be confirmed.
-  **Measure:** Conduct the measurements on-site. Press the trigger button to initiate an inspection. For *multiple shots* the first step will be to confirm the series information (or modify if required). If "Take picture" has been chosen this will be the next step followed by the retroreflection measurements. During measurement follow the instruction on the display. For single shots you will go directly to measure without the option of modifying entered data.



For “User”, “Template” and “Series” the following actions are available:

- a) **Filter or find**, search for a previous entry
- b) **Edit** , edit an entry
- c) **Add** , add a new entry
- d) **Delete** , delete an entry
- e) **Select** by tapping an entry

All entries and measurements are automatically stored.

Please refer to the GRX user manual for further details and additional information.



**Log:** Examine the data log to view your inspections. To export or delete data series, swipe the screen from right to left on the relevant series and these icons appear:

-  **Export data:** export the logged data to a USB stick for further data processing, analysis and reporting on a computer.
-  **Delete data.** Note, all measurements within the data series will be deleted.

## Important guidelines

Position the GRX instrument in close contact with the elements to be inspected to get the best data quality. Use the red ‘measurement field center indicators’ on the side and bottom of the GRX to check you are positioning the GRX correctly.

Keep the GRX lenses free of smear and dust.

If errors are detected during a measurement or calibration sequence, a message will be displayed on the screen. Please refer to the GRX user manual for further details.

DELTA recommends re-calibrating or changing the calibration target bi-annually. If damaged or dirty beyond cleaning the calibration target has to be changed immediate to ensure correct measurement results.



## Safety precautions

In case of any severe error condition remove the battery immediately.