






# Quick guide - RetroSign GR3®

## Getting started








Turn the RetroSign on by pressing . The display will show some information about the instrument. Repeat  to show the results of the last measurement.

The instrument is calibrated and ready if the  icon is displayed, if not, the instrument must first be calibrated, press  and follow the instructions to do this.

Start a measurement by pressing the trigger knob . The display shows "WAIT" while measuring then the measured values is shown.














If errors are detected during a measurement or calibration sequence, a message will be displayed and one or more error icons appear.

## Keyboard functions:

	<i>On/Clear</i>	<ul style="list-style-type: none"> <li>• Push shortly to activate the instrument.</li> <li>• When switched on it clears all selected operations.</li> <li>• Displays the last measurement result.</li> <li>• Clears the mean calculation when displaying this</li> </ul>
	<i>Off</i>	<ul style="list-style-type: none"> <li>• Terminates all activity, saves changed values and powers off.</li> </ul>
	<i>Scroll up</i>	<ul style="list-style-type: none"> <li>• Open the menu, scroll through menus</li> <li>• Increment/scroll edit values.</li> </ul>
	<i>Scroll down</i>	<ul style="list-style-type: none"> <li>• Open the menu, scroll through menus</li> <li>• Decrement/scroll edit values.</li> </ul>
	<i>Calibration</i>	<ul style="list-style-type: none"> <li>• Open Instrument calibration menu, select/change settings.</li> </ul>
	<i>Enter</i>	<ul style="list-style-type: none"> <li>• Activate selected function or accept changed settings.</li> <li>• Switch between the different result and status display screens</li> </ul>
	<i>Trig</i>	<ul style="list-style-type: none"> <li>• Start R' measurement.</li> <li>• Start quick calibration.</li> </ul>

## Icons:

The instrument status and operational mode are signalled by the use of icons.

	Instrument is calibrated and ready.		Calib. Monitor Active for normal aperture.
	Menu selected.		Calib. Monitor Disabled for reduced aperture.
	Calibration selected.		Battery fully charged.
	Reference calibration in progress.		Battery getting low.
	Zero calibration in progress.		Battery empty, recharge.
<b>RFID</b>	RFID function enabled.		Display backlight is enabled.
<b>GPS</b>	GPS On. Position FIX OK	<b>GPS</b>	GPS On. No FIX
	Calculating mean values		Bluetooth Disconnected/Connected (option)

## Calibration:

RetroSign features two levels of calibration: *quick* and *full*.


### Quick calibration.

Quick calibration is initiated by first pressing  and then trigger. Mount the *reference cap* (reflective surface pointing in) before triggering. The instrument will be calibrated to the last used values.







### Full calibration.


Full calibration is initiated by pressing  and then . Follow the on-screen instructions.

### Zero Measurement.



Mount the *zero cap* (dark surface pointing in). Press  when ready. **WAIT** is displayed during the measurement. The measured zero values and a short status for each geometry are shown, then the display shows that the instrument is ready for the next step in the calibration procedure.

### Reference Measurement.

Mount the *reference cap* (reflective surface pointing in). Edit the reference values one by one by using the   and  keys until the values are the same as printed on the calibration unit. Press  when ready. **WAIT** is displayed once more during the calibration process; the display shows the calibration results and then asks the operator for acceptance, press  to accept or  to discard the calibration, the previous values will then be used.


After a successful calibration the icon  is shown.

## Menu

Enter the menu by repeatedly pressing  or  until the desired function displays and then follow the on-screen instructions.

Seq ID:	Name a measurement series	Seq ID count:	Running number for the Seq ID. can be edited
Clear ID:	Delete the Seq ID string	Sound control:	Enable/Disable system sounds
Clear Log:	Reset user log <sup>1</sup>	Remove last Measurement:	Delete last measurement form log
Mean calculation.	Enable/Disable Mean calculations <sup>2</sup>	Calib. monitor: <sup>3</sup>	Enable/Disable the calibration monitor
Remote Box display	Select result for display on remote-box	LCD backlight:	Enable/Disable LCD backlight
GPS state	Enable/Disable the GPS unit	DGPS mode:	Select GPS position correction system
RFID state	Enable/Disable the Radio Frequency ID reader option	Off Time:	Set time for auto turn off

<sup>1</sup>) All log entries are marked as having been read, the log status will only show entries since this operation.

<sup>2</sup>) Calculates the mean value of all measurements since the last ON/C action, press  once from the main screen to display the calculated mean values.

<sup>3</sup>) Depends on the instrument type

## RFID

Connect the RFID unit to the front connector and enable the unit in the menu, when doing a measurement the instruments requests to read a RFID tag on the first trigger and then needs a second trigger to actually do the measurement, this also applies when using the remote trigger.

## Battery

To remove the battery release the retaining spring and pull the battery out of the handle.

Temperatures in excess of 45°C (113°F) can damage the battery.

Do not short circuit and do not dispose together with household waste.

## USB PC connection

**Important!** Install the Instrument driver on the PC **before** connecting the instrument for the first time, simply insert the CD-ROM and let it install. Connect the instrument with a PC-USB port, turn it on and run the installed program.

- \* RetroSign GR3 is an optical precision instrument, handle with care.
- \* Store it the carrying case in a clean and dry environment.
- \* Do not recharge the battery unnecessary as this will reduce battery life.
- \* Carefully check and clean the reference cap with a clean, soft and dry cloth before each calibration.