
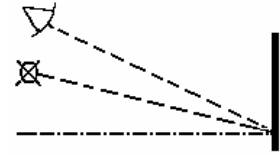



## Quick guide - RetroSign®

### Getting started

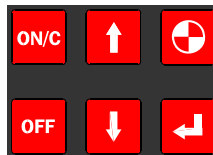
Turn the RetroSign on by pressing . The display will first show some information about the instrument and then display the latest measurement in memory. If the latest operation was a calibration the display will show a picture of the measurement geometry.









If the  icon is shown, the instrument is calibrated and ready for use, if not, the instrument must first be calibrated, **see manual for details**.

Start a measurement by pressing the trigger knob. A beep indicates the start of the active measuring cycle. The display shows an hourglass for the duration of the measurement, approx. 2 seconds. A beep signals end of the measurement.

If errors are detected during the measurement or calibration sequence, an error icon and error number is shown, **see manual for details**.















### 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>• Redisplays the last measurement result.</li> </ul>
	<i>Off</i>	<ul style="list-style-type: none"> <li>• Turn off. Terminates all activity and powers off.</li> </ul>
	<i>scroll up</i>	<ul style="list-style-type: none"> <li>• Open menu "Remove Measurement from Log"</li> <li>• Scroll through menus, increment values.</li> </ul>
	<i>scroll down</i>	<ul style="list-style-type: none"> <li>• Open menu "Edit Measurement ID"</li> <li>• Scroll through menus, decrement values.</li> </ul>
	<i>Calibration</i>	<ul style="list-style-type: none"> <li>• Open Instrument calibration menu.</li> </ul>
	<i>Enter</i>	<ul style="list-style-type: none"> <li>• Activate selected function or accept changed settings.</li> </ul>
<b>Trig</b>		<ul style="list-style-type: none"> <li>• Start R' measurement.</li> <li>• Start fast calibration.</li> </ul>

### Icons:


The instrument status and operational mode are signalled by the use of icons. Icons are shown in the top of the display.

	Instrument is calibrated and ready.		Calib. Monitor Active for normal aperture.
	Menu selected.		Calib. Monitor Active for reduced aperture.
	Calibration selected.		Battery is low.
	Reference calibration in progress.		Log is enabled.
	Zero calibration in progress.		Log is full.
	Instrument is receiving data on port.		Display backlight is turned on.
<b>GPS</b>	Instrument is receiving GPS data		



## Calibration

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


### Fast calibration.

Fast 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 value.






### Full calibration.


Full calibration is initiated by pressing  and then   
Follow the procedure displayed.

#### Zero.

Mount the *zero cap* (dark surface pointing in) on the instrument. Press  when ready. When the hourglass disappears the instrument is ready for the next step in the calibration procedure.

#### Reference.

Mount the *reference cap* (reflective surface pointing in). Edit the reference value using   until the value is the same as marked on the reference unit. Press  when ready. Wait until the hourglass disappears and then press  to accept calibration or cancel with .

After a successful calibration the icon  is shown.

## Menu


Enter the menu by repeatedly pressing  or  until the desired function displays.  
Selected functions. see **manual for more details**.

**Power save:** *Off timer: nn sec.* use  or  to edit.

To disable the auto power off function set *Off time to less than 60 sec.*  to accept.

**Reset log:** *Free Log = xx.x %.*  to reset.

**Remove log:** *Remove Top Data in Log?*  to remove data.

**Enable log:** *Log closed.*  to enable logging.

## 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.

## Communication

Use a PC with a simple communication software such as HyperTerminal to control the RetroSign.





Serial communication setup (RS232 interface): 9600 baud, No parity, 8 bit, 1 stop, Xon/Xoff handshake.

### On line help.

? 

RetroSign will return a brief help page.

### Selected commands.

LO 	(Log Open)	Enables log for input.
LD 	(Log Dump)	Number, date, time, R', mode.
RM 	(R' Measurement)	Start R' measurement.
SD 	(Status Dump)	Returns instrument settings and status.

- \* RetroSign is an optical precision instrument, handle with care.
- \* Store in a clean and dry environment.
- \* Do not recharge unnecessary as this will reduce battery life.
- \* Check or change reference cap frequently.