

SPECTRO-3 series

Changes from SPECTRO3-Scope V4.1 to SPECTRO3-Scope V4.2

This manual summarises the changes that were made with the software update from **SPECTRO3 V4.1 to V4.2**.

It is possible to update the software from V3.3 to V4.2. In this case, however, an intermediate step is required to save the data.

The respective procedure is exactly described in the "[Firmware update SPECTRO3 V3.x to SPECTRO3 V4.x](#)" file.

A software update from V4.0 or V4.1 to V4.2 can be performed quite easily.

All you need is the FirmwareLoader V1.1 and the firmware files for version 4.2.

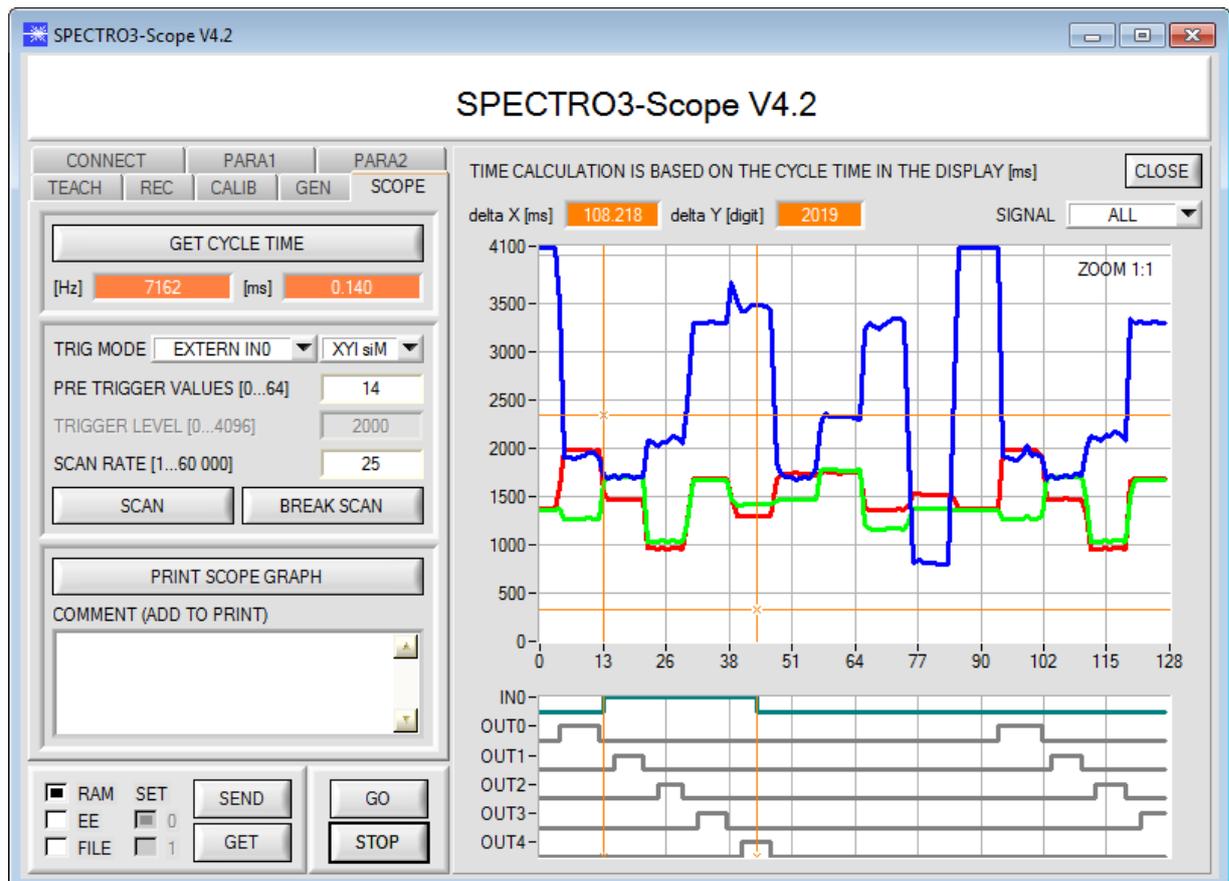
The FirmwareLoader V1.1 can be found on the CD that is provided with the sensor.

The firmware files are available from your sensor supplier.

The respective procedure is exactly described in the "[Manual FirmwareLoader V1_1](#)" file.

Change 1:

The oscilloscope function that is implemented under the SCOPE tab in addition to the states of outputs OUT0 to OUT4 now also displays the state of input IN0.



Change 2:

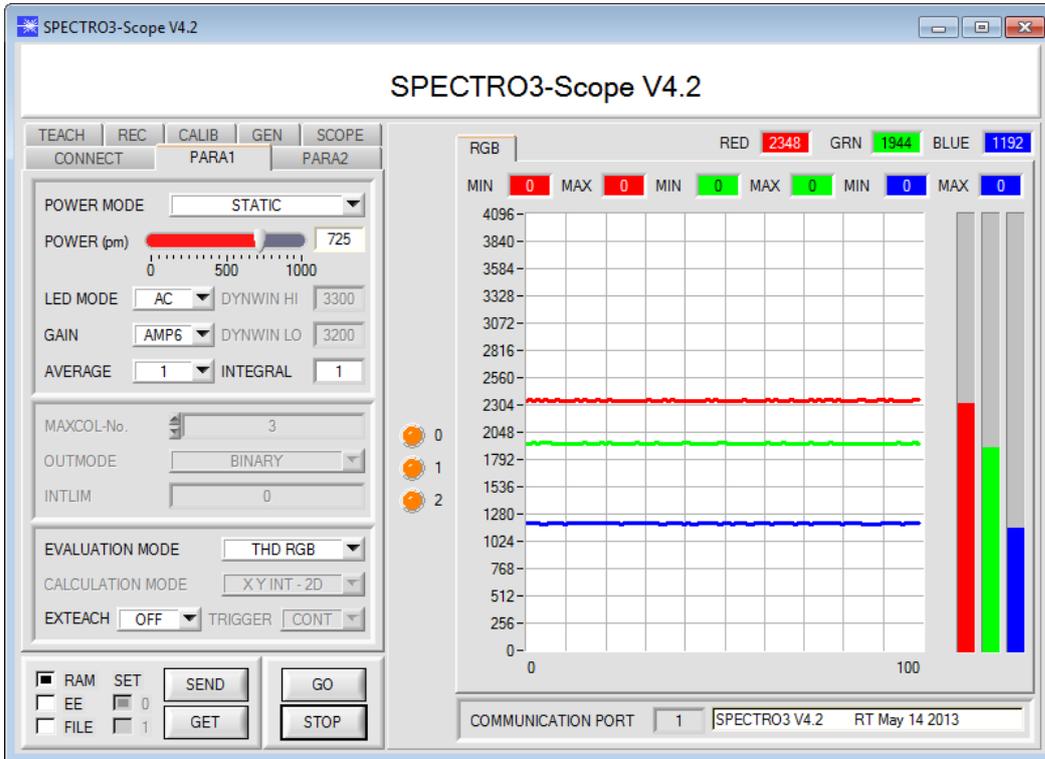
A new **EVALUATION MODE = THD RGB** was introduced.

In this evaluation mode a specific switching threshold can be set for red, green, and blue.

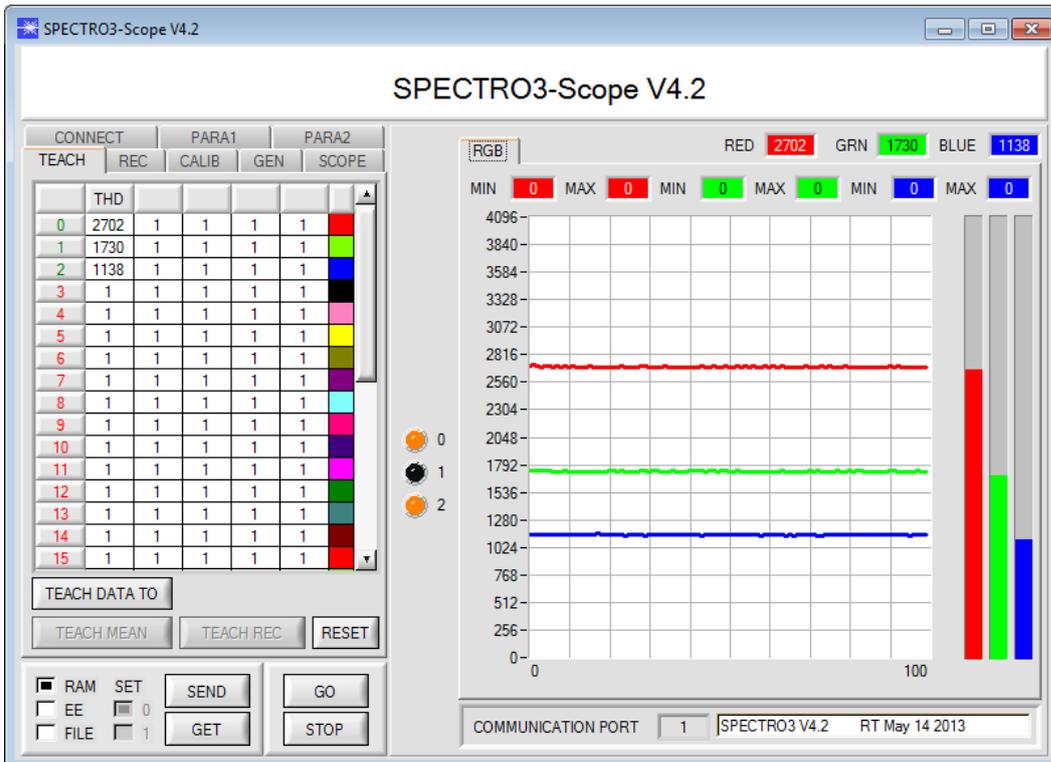
If the respective channel is higher than this threshold, the associated output is HI, otherwise it is LO.

The error state (255) **HOLD** time is used as output pulse lengthening.

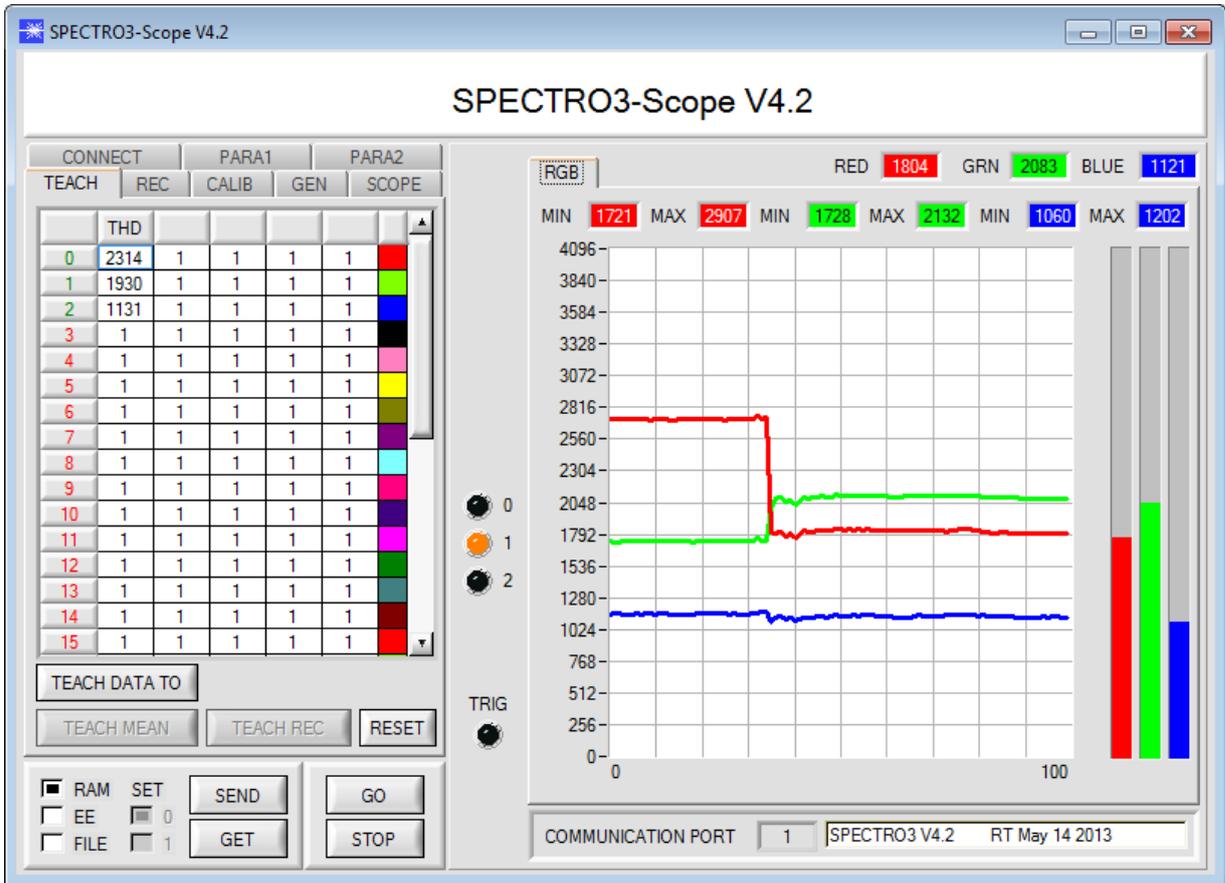
If one of the three outputs changes its state, the **HOLD** time is started.



In the teach table the switching threshold for red is set in row 0 under the **THD** column. Green is set in row 1, and blue in row 2. If you click on **TEACH DATA TO**, the current red, green, and blue values are automatically written to the table.



If a teach mode is selected under **EXTEACH**, the switching thresholds for red, green, and blue can be learned through IN0.
 While IN0=HI, a maximum and a minimum is determined for every channel.
 The respective switching threshold is calculated from $(Max+Min)/2$ and thus lies exactly in the middle of the determined Max-Min values.
 If you click on GET, the determined thresholds are displayed in the teach table.



ATTENTION!

Input fields, function buttons, or display elements that are not needed or cannot be changed are either masked out or grayed out.

