

SPECTRO1-Scope: Changes due to software update from SPECTRO1-Scope V2.3 to V2.4

This manual summarises the changes that were made with the software update from **SPECTRO1 V2.3 to V2.4**.

A software update from V2.x to V2.4 can be performed quite easily.

All you need is the FirmwareLoader V1.1 and the firmware files for version 2.4.

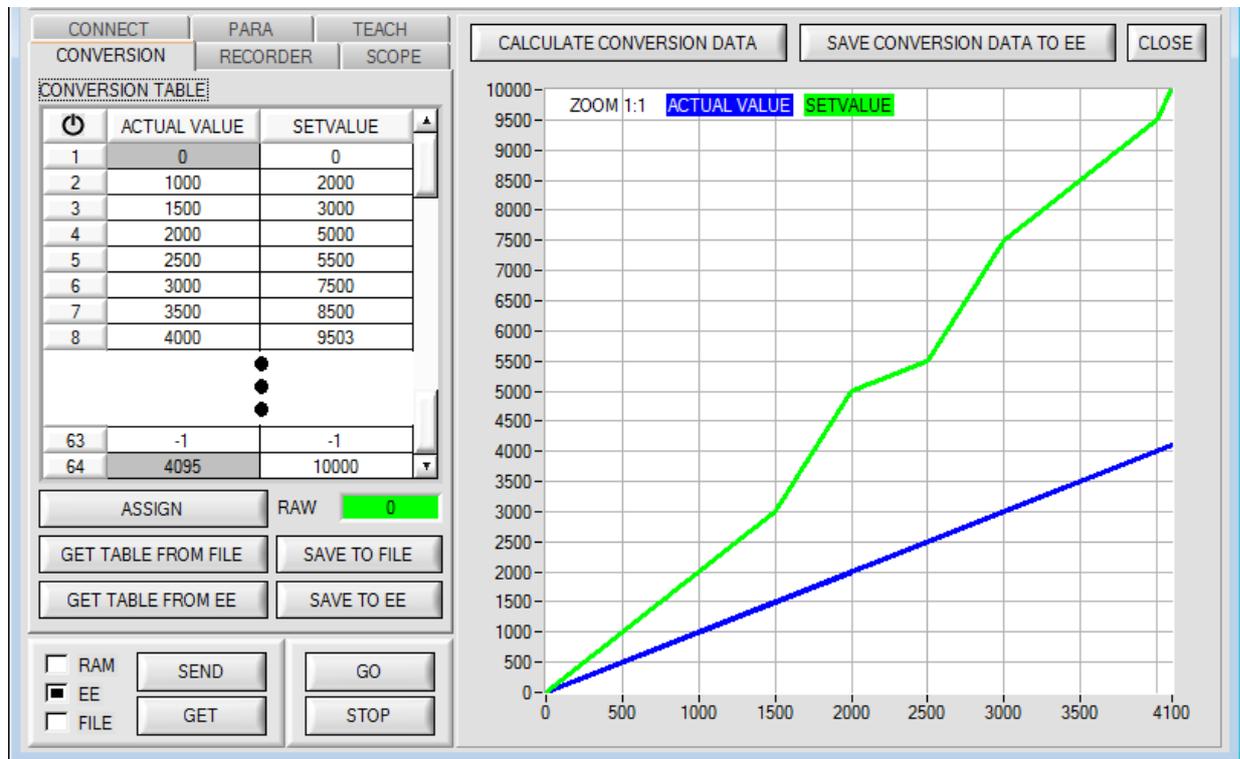
The FirmwareLoader V1.1 can be found on the CD that is provided with the sensor or can be downloaded from our homepage.

The firmware files are available from your sensor supplier.

The respective procedure is exactly described in the "[Manual FirmwareLoader V1_1](#)" file (see software CD/DVD: Folder Support Software → Version Update → FirmwareLoader V1.1).

Change 1:

In the **CONVERSION** tab a certain conversion value can be assigned to the **RAW** signal.
If **ANALOG RANGE = CONV TABLE** is set the corresponding conversion value is output instead of **RAW**.



When the **GO** button is pressed the current **RAW** value is shown in the **RAW** display.
Use the mouse to select a cell in the **ACTUAL VALUE** column and press **ASSIGN**. This value is then written to the cell in the table. Then enter the value that should be output in analog form in the **SETVALUE** column.
A total of 64 conversion values can be entered this way.
The first and the last row must be filled in (see **CONVERSION TABLE** row 1 and 64).
Rows that are not used must be disabled with -1 (see **CONVERSION TABLE** row 63).
The **ACTUAL VALUE** column has a value range of 0 to 4095.
The **SETVALUE** column has a value range of 0 to 10000.
10000 was chosen because the analog voltage output has a range of 0 to 10 V (10000mV).
If, for example, for a **RAW** value of 2500 you want to have an analog output voltage of 5.5V, the value 5500 must be entered in the corresponding cell in the **SETVALUE** column (see **CONVERSION TABLE** row 5).

Click on **CALCULATE CONVERSION DATA** to display a graph of the conversion table. The blue line represents the actual value, the green line shows the setvalue.
The graph can be zoomed by holding down the control key and drawing a window with the left mouse button. Click on **ZOOM 1:1** to display the graph in normal size again.

With **SAVE CONVERSION DATA TO EE** the conversion data can be sent to the EEPROM of the sensor.

GET TABLE FROM FILE and **SAVE TO FILE** can be used to load the conversion table from a file or to save it in a file.

With **GET TABLE FROM EE** and **SAVE TO EE** the conversion table can be loaded from the sensor's EEPROM or saved to the sensor's EEPROM.

A click on the  symbol resets the table.