

# SPECTRO1-SC-Scope: Changes due to software update from SPECTRO1-SC-Scope V1.0 to V2.0

This manual summarises the changes that were made with the software update from SPECTRO1-SC V1.0 to V2.0.

**!!!A software update from V1.x to V2.x and vice versa is not possible.**

A software update (downgrade) from V2.x to V2.0 can be performed quite easily.

All you need is the FirmwareLoader V1.1 and the firmware files for version 2.0.

The FirmwareLoader V1.1 can be found on the software CD/DVD 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

## Change 1:

The **ANALOG OUTMODE** parameter has been added.



### ANALOG OUTMODE

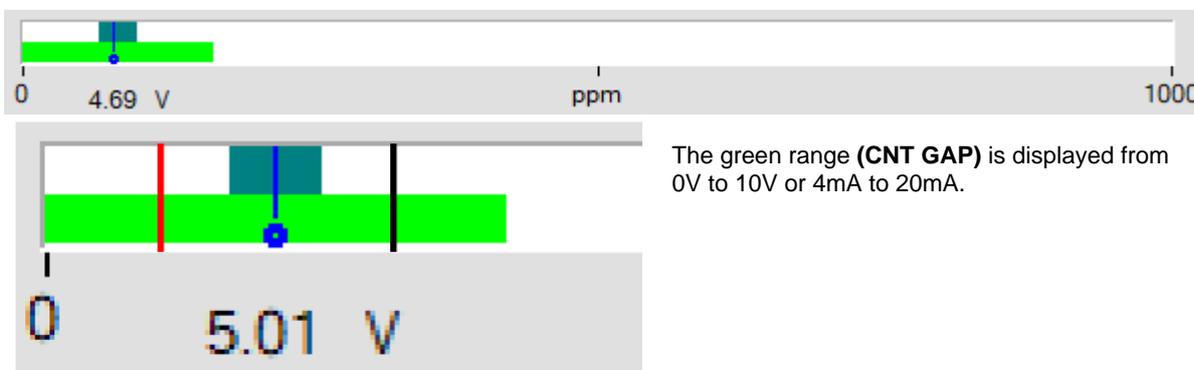
In this function field you can set how the analog signal is to be output.

**OFF:** No analog signal is output.

**U (Voltage):** The analog signal is output as a voltage from 0 to 10V.

**I (Current):** The analog signal is output as a current from 4 to 20mA.

### Calculation of the analog signal:



If the cursor (**punch stroke CNT STROKE**) is on the position of the blue line, 5V or 12mA is output.

If the cursor is positioned on the red line (only symbolically drawn here), 2.5V is output.

If the cursor is positioned on the black line (only symbolically drawn here), 7.5V is output.

If the punch stroke (**CNT STROKE**) is on the far left of the green area, 0V is output.

If it comes from the far right of the green area (**CNT GAP**), 10V is output.

From the far right in the green area (**CNT GAP**) to 500ppm in the white area (**CNT PERIODE**) 10V is output.

From 500ppm to 1000ppm in the white field (**CNT PERIODE**) 0V is output.

If no punching stroke occurs, 0V is output.

If no cutout occurs, 10V is output.

After 60 seconds without action (**no notch and no punch stroke**), 10V is also output.

**ATTENTION!** When 0V or 10V is output, the digital outputs should also be interrogated for safety, because 0V or 10V can be position signals or can also mean the absence of the punching stroke or the recess or a standstill of the machine.