# SPECTRO3-MSM-DIG-Scope: Changes due to software update from V1.0 to V1.1 

This manual summarises the changes that were made with the software update from SPECTRO3-MSM-DIG V1.0 to V1.1.

A software update from V1.0 to V1.1 can be performed quite easily.
All you need is the FirmwareLoader V1.1 and the firmware files for version 1.1.
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:

For a clearer representation the panel size was changed to $1024 \times 768$.
Furthermore, scaling errors that may have occurred at some PCs were fixed.

## Change 2:



The LANGUAGE selection field is now available and can be used to set the language in which the individual controls on the user interface are represented.
The language also applies to the help function that can be called up with the right mouse button.

For now German and English are available as languages.

## Change 3:

## CALCULATION MODE:

This function field is used to specify whether the color space coordinates (e.g. L* $\mathbf{a}^{*} \mathbf{b}^{*}$ ) should be viewed as a cylinder (2D) or as a sphere (3D) in space.


When viewed as a cylinder, the color coordinates ( $\mathbf{a}^{*} \mathbf{b}^{*}$ ) have their own tolerance ( $\mathbf{a}^{*} \mathbf{b}^{*}$ Tol), and the brightness value (L*) has its own tolerance ( $\mathbf{L}^{*}$ Tol). The color distance delta $\mathbf{E}$ is calculated from the color coordinates ( $\mathbf{a}^{*} \mathbf{b}^{*}$ ).
A color is recognised if the current color space coordinates lie in the color cylinder

In 3D mode there only is one tolerance for the color space coordinates. The color distance here is calculated from the color space coordinates (L* $\mathbf{a}^{*}$ $b^{\star}$ ).
A color is recognised if the current color space coordinates lie in the color sphere.

