

# SI-COLO4 Series

## Changes from SI-COLO4-Scope V6.3 to SI-COLO4-Scope V6.4

The text below provides a short summary of the changes made with the software-update from SI-COLO4-Scope V6.3 to V6.4.

### Change 1:

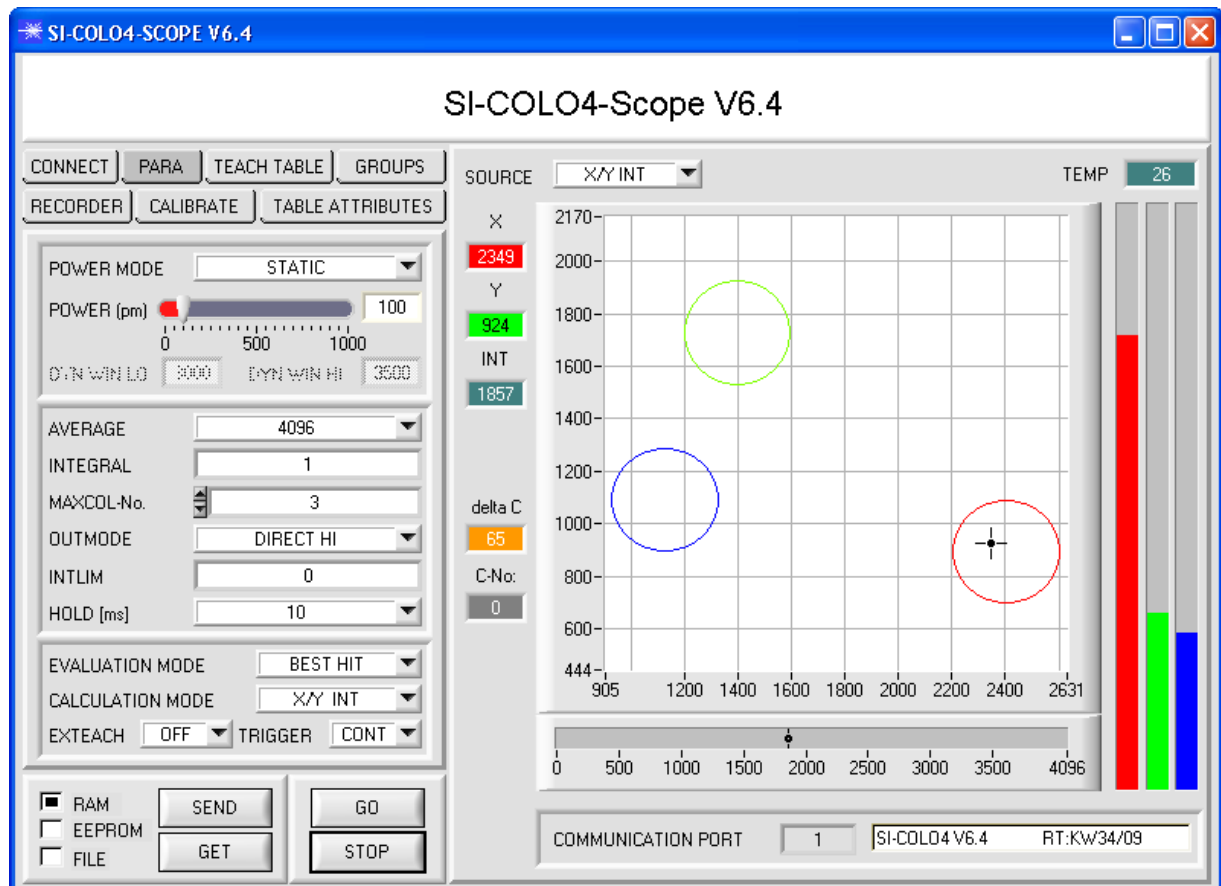
A new **delta Color** display has been added. This display shows the deviation from a color hit, **delta C** corresponds with  $\Delta E$  that is calculated in a color measurement.

In **FIRST HIT** evaluation mode **delta C** represents the distance from a color hit. When no color has been hit, **delta C** is calculated in relation to the last valid color in the color table (depending on **MAXCOL-No.**).

In **BEST HIT** and **MIN DIST** evaluation mode **delta C** also represents the distance from a color hit. If, however, no color has been recognised, **delta C** assumes the value of -1.

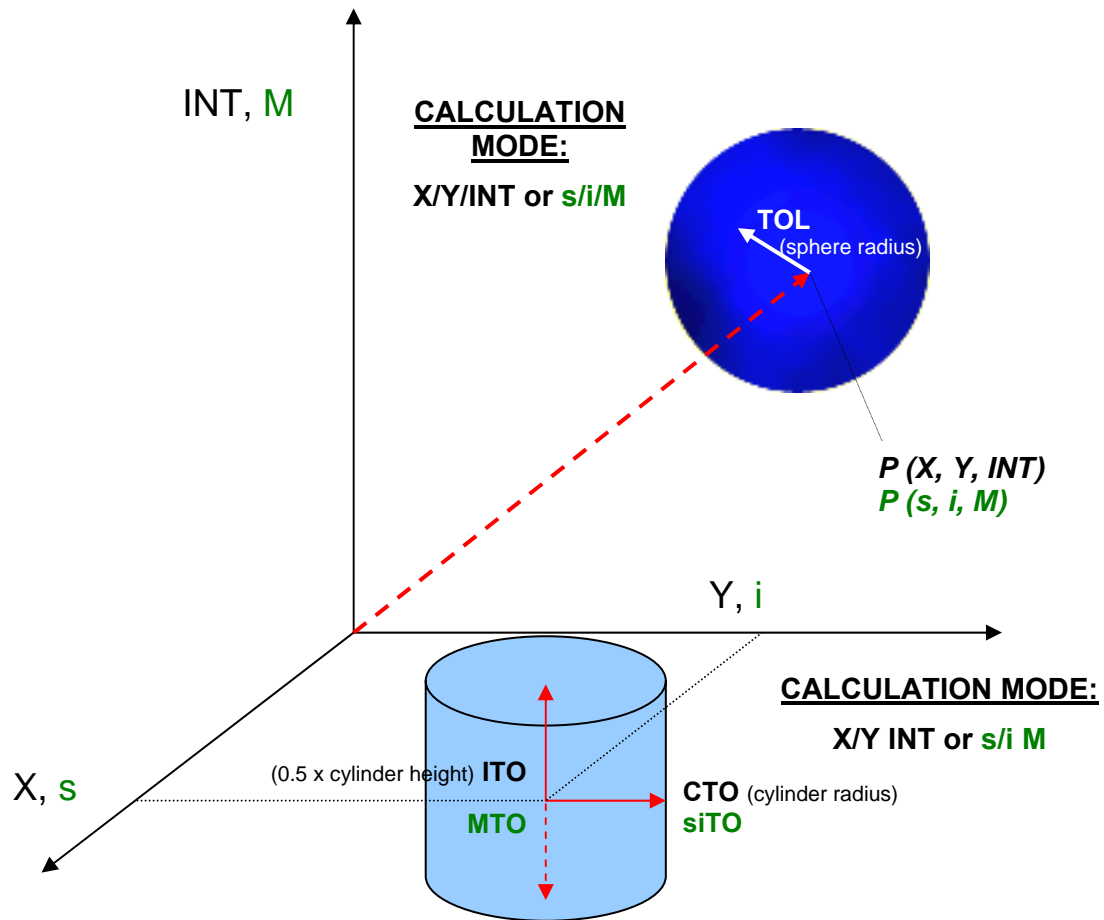
In **COL5** evaluation mode **delta C** is not calculated.

When the current intensity (**INT** or **M**) falls below the **INTLIM** parameter, **delta C=-1** will be displayed.



In **CALCULATION MODE X/Y INT** and **s/i M delta C** represents the distance from the cylinder axis.

In **CALCULATION MODE X/Y/INT** and **s/i/M delta C** represents the distance from the centre of the circle.



### Change 2:

RECORD MODE:	AUTO LIMITED		
RECORD-TIME INTERVAL [sec]	1		
RECORD VALUES (MAX 50 000)	1000		
TOTAL RECORD TIME (days hours min sec)			
0	0	16	40
RECORDED		REMAINING	
0		1000	
START RECORD		STOP RECORD	
ID			
SELECT RECORD FILE		SHOW GRAPH	
C:\Programme\Spectro3V32\RecordFile.dat			

The recorder automatically pre-initialises the record file in the system directory with the extension "**RecordFile.dat**".

Of course it is always possible to select another file with **SELECT RECORD FILE**.

### Change 3:

COMMUNICATION PROTOCOL: RS232  
SELECT COM PORT [1...256]: 1  
SELECT BAUDRATE: 19200  
TRY TO CONNECT  
FIRMWARE STRING  
ACCEPT SETTINGS (disabled) CHANGE BAUDRATE (disabled)

It is now possible to set the baudrate for data transfer through the RS232 interface.

This is necessary if a high-speed connection is needed for data transfer through the serial interface.

COMMUNICATION PROTOCOL: RS232  
SELECT COM PORT [1...256]: 1  
SELECT BAUDRATE: 19200  
TRY TO CONNECT  
FIRMWARE STRING  
ACCEPT SETTINGS (disabled) CHANGE BAUDRATE (disabled)

If the baudrate should be changed, a connection must first be established by clicking on **TRY TO CONNECT**.

The **CHANGE BAUDRATE** button will then be active.

COMMUNICATION PROTOCOL: RS232  
SELECT COM PORT [1...256]: 1  
SELECT BAUDRATE: 115200  
TRY TO CONNECT  
FIRMWARE STRING  
ACCEPT SETTINGS (disabled) CHANGE BAUDRATE (disabled)

Now a new baudrate can be selected under **SELECT BAUDRATE**.

A click on **CHANGE BAUDRATE** sends the new baudrate information to the sensor.

COMMUNICATION PROTOCOL: RS232  
SELECT COM PORT [1...256]: 1  
SELECT BAUDRATE: 115200  
TRY TO CONNECT  
FIRMWARE STRING  
ACCEPT SETTINGS (disabled) CHANGE BAUDRATE (disabled)



When the new baudrate information has been successfully sent, the sensor operates with the new baudrate. A window will pop up, prompting you to select **EEPROM** and then to press **SEND**. After a hardware reset the new baudrate only will be used when **EEPROM** and **SEND** have been pressed.

A click on **ACCEPT SETTINGS** saves the current interface settings, which will then be automatically set when the software is restarted.

## Change 4:

The new **INTEGRAL** parameter has been added.

This function field is used for setting the number of scan values (measurement values) over which the raw signal measured at the receiver is summed up. The integral function allows a reliable detection even of extremely weak signals. A higher **INTEGRAL** default value increases the noise of the raw signals of the receiver unit, and at the same time reduces the maximally achievable switching frequency of the sensor.

To ensure the proper operation of this integral function, offset calibration or zero-point calibration must be performed after a software update from an older version (please refer to the manual).

