

# COAST-Scope

## Changes due to software update from V1.1 to V2.0

This manual summarises the changes that were made with the software update from **COAST V1.1 to V2.0**.

### **!!!A software update from V1.x to V2.0 and vice versa is not possible.**

This is due to the addition of an additional transmitter and receiver channel.

This hardware has not been installed in the COAST sensors before version 2.0 and cannot be actuated and evaluated.

The additional transmitter and receiver unit can e.g. cover the infrared range. The various UV ranges such as UVC etc. are also conceivable.

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

All you need is the FirmwareLoader V1.1 and the firmware files for V2.0.

The FirmwareLoader V1.1 can be found on the software 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 hardware has been extended by the addition of an additional transmitter and receiver channel, which supplies the signal CHC. CHC is displayed at the corresponding points in the PC software and is a further evaluation criteria in the TEACH TABLE.

The receiver unit for CHC was installed next to the transmitter from CHL.

The transmitter is placed in the centre next to the receiver with the line chip.

The transmitter unit is operated together with the transmitter source for CHL. You can enter an integral value INTEGRAL CHC for CHC.

The screenshot shows the COAST Scope V2.0 software interface. The left panel contains control settings for power source, channel power, power mode, LED mode, hysteresis, power levels, gain, evaluation mode, and communication port. The right panel displays a grid of colored bars and numerical values for different channels. The 'CHC' channel is highlighted with orange circles. The 'INTEGRAL CHC' field is also highlighted with an orange circle.

	0	1	2	3	4	5
sL	0	0	0	0	0	0
iL	0	0	0	0	0	0
ML	0	0	0	0	0	0
VLEN L	0	0	0	0	0	0
DMM L	0	0	0	0	0	0
AREA L	0	0	0	0	0	0
EXPT L	0	0	0	0	0	0
DP L	0	0	0	0	0	0
sR	0	0	0	0	0	0
iR	0	0	0	0	0	0
MR	0	0	0	0	0	0
VLEN R	0	0	0	0	0	0
DMM R	0	0	0	0	0	0
AREA R	0	0	0	0	0	0
EXPT R	0	0	0	0	0	0
DP R	0	0	0	0	0	0
CHC	0	0	0	0	0	0

## Change 2:

HYSTERESIS DP

50

The HYSTERESIS DP parameter was introduced.

Operating the sensor in POWER MODE = DOUBLE will define a changeover point when setting the parameters. To this end, a darker surface will be used in addition to the lightest surface (but not the darkest).

The darker surface defines the changeover point between DOUBLE PARAMETER SET 1 and 2.

This means that it is possible that the sensor on this surface works once with parameter set 1 and with parameter set 2 at a different time. Both states must be taught in to ensure that this surface is recognized reliably. Working via VECTOR GROUPS = ON, the two entries can be integrated as a single group in the tab PARA2, so that you receive only a single starting state for both learning vectors. The lines can be evaluated individually, but you need to know that you will receive two starting states for the same surface on the darker surface.

If the sensor is in front of the surface with the changeover point, the signal will jump up and down to avoid this. A hysteresis (HYSTERESIS DP) can be set.