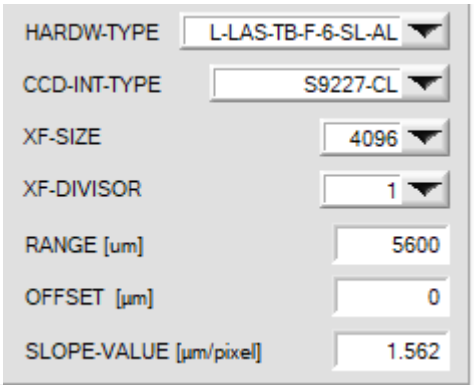
Notification of Change:
L-LAS-TB-Scope V5.4.4 to V5.4.5

This document summarises the changes that were made with the software update from ***L-LAS-TB-Scope V5.4.4 to V5.4.5***.

New in V5.4.5:

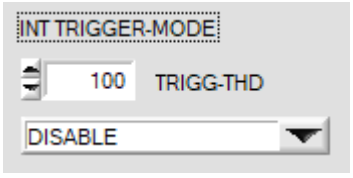
CALIB-TAB:



Adaption to new L-LAS-TB-F-6-AL-SL hardware.
4096 subpixel, working-range = 5.6mm, resolution = 2µm

(F-LAS-MSS housing, fork type)

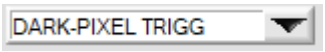
PARA2-TAB:



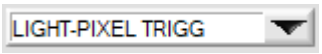
INTERNAL TRIGGER MODE:

In this list function field, the internal trigger mode is activated. Furthermore, a trigger threshold can be specified. The digital output OUT2 / Pin7 of the sensor is used to output the trigger event.

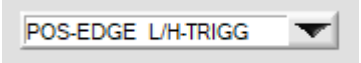
The following trigger modes can be set:



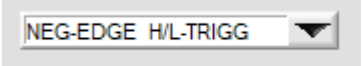
The pixels covered by the shadow of the measurement object are counted. If the number of covered pixels is greater than the set TRIGGER THRESHOLD, a trigger event is detected.



The exposed pixels between transmitter and receiver of the transmitted light sensor are used (gap detection). If the number of exposed pixels exceeds the set TRIGGER THRESHOLD, a trigger event is detected.



Automatic triggering on a positive edge at the position at 6.0mm

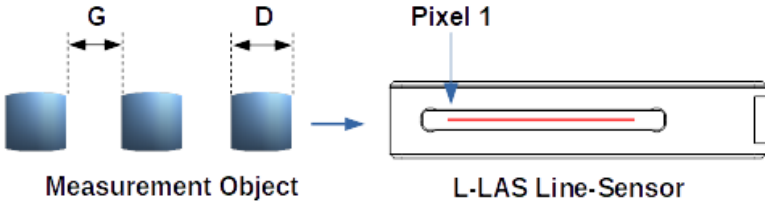


Automatic triggering on a negative edge at the position at 6.0mm

Additional internal trigger modes AUTO TRIGGER-FUNCTION:
POS-EDGE L/H TRIGG
NEG-EDGE H/L TRIGG

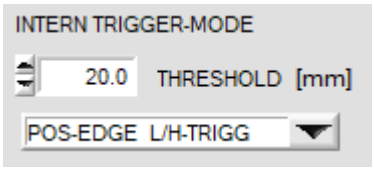
AUTO TRIGGER-FUNCTION:

The auto-trigger function of the line sensor can be used for diameter D detection or for gap measurement G of moving objects. The line sensor must be aligned in such a way that the measurement object enters the line sensor on the side of pixel 1. The trigger threshold and the trigger type can be specified.



Gap **G**

Diameter **D**



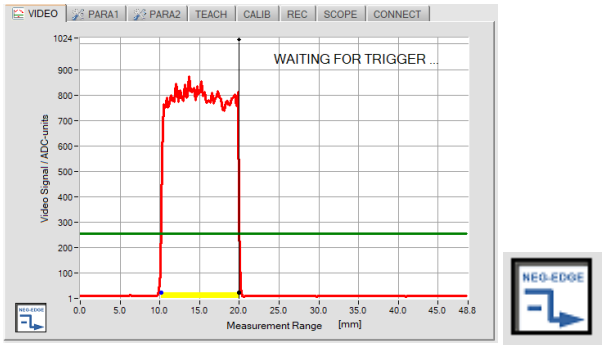
Trigger position = 20.0mm

Trigger mode = POS-EDGE L/H

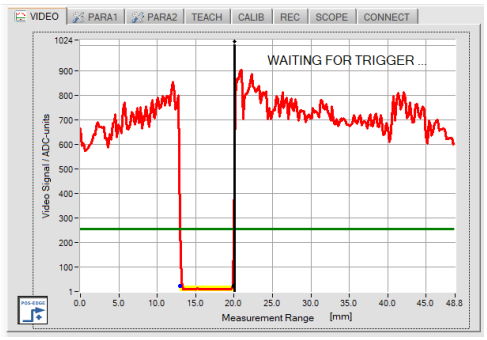
Diameter measurement D

To trigger the trigger event, a LO / HI edge transition is searched for in the video image at the trigger threshold. The trigger threshold can be set in [mm] or in [pixels], based on pixel 1 on the line receiver.
The line sensor must be aligned in such a way that when the measurement object moves into the line sensor, pixel 1 is reached first.

To trigger the trigger event, a HI / LO edge transition is searched for in the video image at the trigger threshold. The trigger threshold can be set in [mm] or in [pixels], based on pixel 1 on the line receive



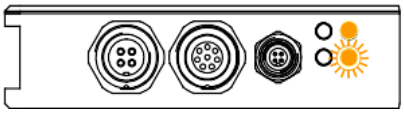
NEG-EDGE H/L-TRIGG at 20.0mm,
Object: Gap measurement **G**



POS-EDGE L/H-TRIGG at 20.0mm,
Object: Diameter measurement **D**

TRIGGER-COUNTER:

The number of trigger events is displayed in this numeric output field. Furthermore, after the trigger has responded, the color of the LED display briefly changes from gray to orange. The trigger counter is limited to a maximum of 65535; if it is exceeded, the counter starts again at 1.



TRIGGER-LED:

The TRIGGER LED on the sensor housing lights up orange to visualize the trigger event.