

## Short Instructions

# L-LAS-LT-MS-Scope V3.14-TSD Touch-Screen-Display

(PC Software for Microsoft® Windows® Vista, XP, 2000, NT® 4.0, 98)

**P R E L I M I N A R Y  
V E R S I O N**

for Laser Line Sensors of the *L-LAS-LT-...-MS (Master-Slave) Series*



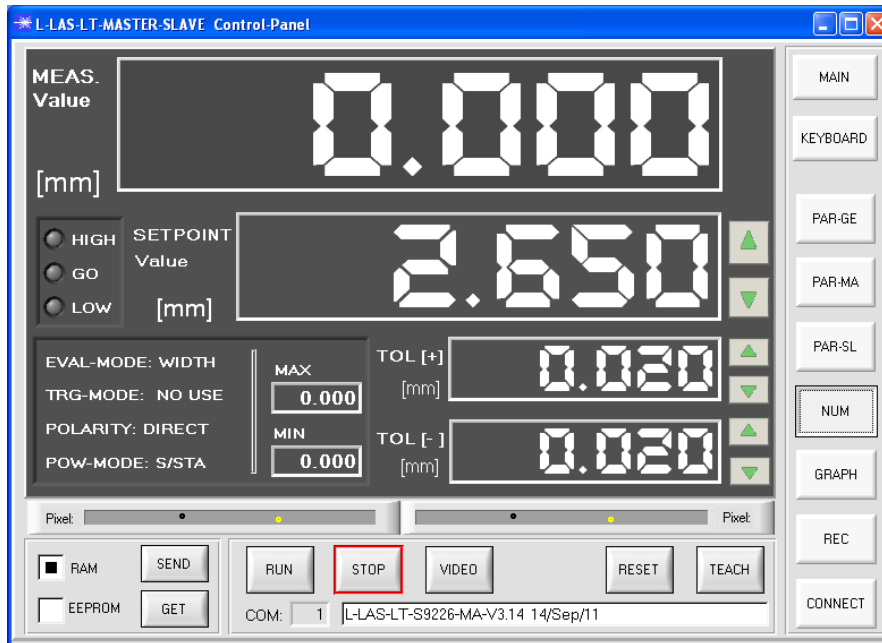
(Fig.: L-LAS-LT-37-MA and L-LAS-LT-37-SL)

L-LAS-LT-...-MA-37 (Master) and L-LAS-LT-...-SL-37 (Slave)  
L-LAS-LT-...-MA-55 (Master) and L-LAS-LT-...-SL-55 (Slave)  
L-LAS-LT-...-MA-80 (Master) and L-LAS-LT-...-SL-80 (Slave)  
L-LAS-LT-...-MA-110 (Master) and L-LAS-LT-...-SL-110 (Slave)  
L-LAS-LT-...-MA-135 (Master) and L-LAS-LT-...-SL-135 (Slave)  
L-LAS-LT-...-MA-160 (Master) and L-LAS-LT-...-SL-160 (Slave)  
L-LAS-LT-...-MA-200 (Master) and L-LAS-LT-...-SL-200 (Slave)  
L-LAS-LT-...-MA-275 (Master) and L-LAS-LT-...-SL-275 (Slave)  
L-LAS-LT-...-MA-450 (Master) and L-LAS-LT-...-SL-450 (Slave)

## Operation of the L-LAS-LT-MS-Scope software V3.14-TSD

The L-LAS-LT-MS-Scope software is used to parameterise the control unit of the L-LAS-LT-...-MA/SL line sensors through the serial interface. The measurement values that are provided by master and slave can be visualised with the PC software. The software therefore also can be used for adjustment purposes and for setting suitable tolerance limits for the inspection of the measuring object.

When the L-LAS-LT-MS-Scope software is started the user interface that was used last will be displayed (top fig.: TSD user interface, bottom fig.: Standard user interface).

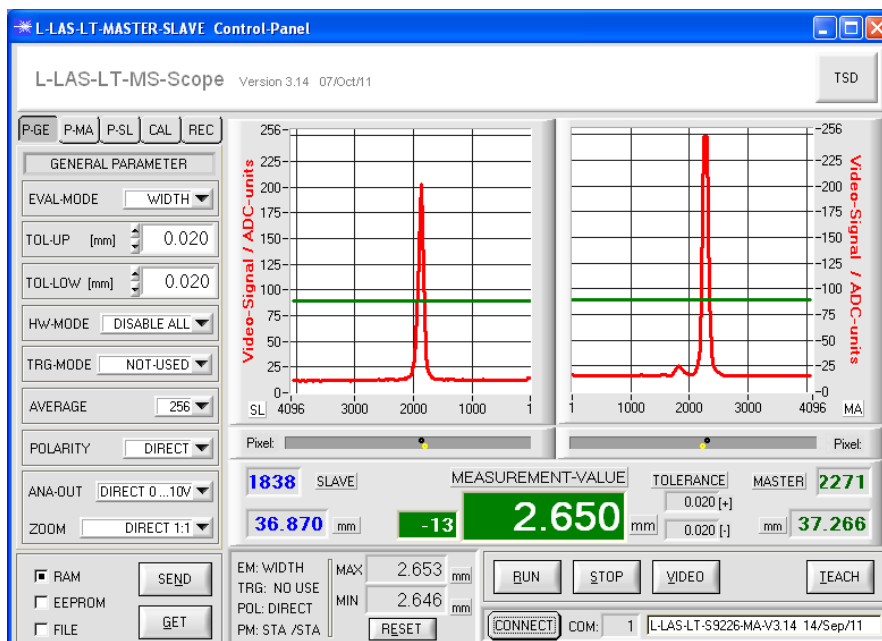


TSD user interface



Tap on the [MAIN] button to switch from the TSD user interface to the MAIN standard user interface.

The TSD (Touch-Screen-Device) user interface has bigger function fields and control buttons to allow easier operation on touch-screens.

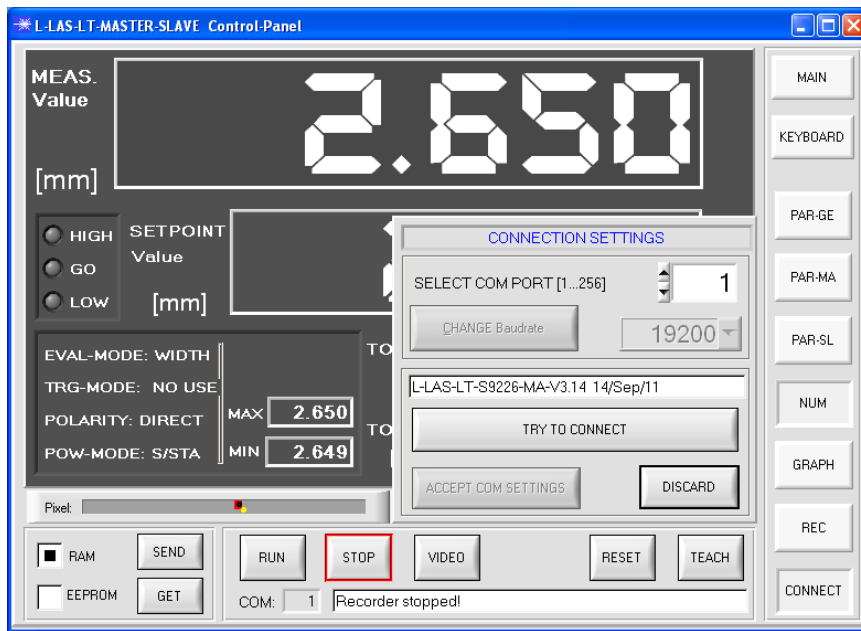


Standard user interface



Click on the [TSD] button to switch from the MAIN standard user interface to the TSD user interface.

## Selecting the serial RS232 interface



### CONNECT button



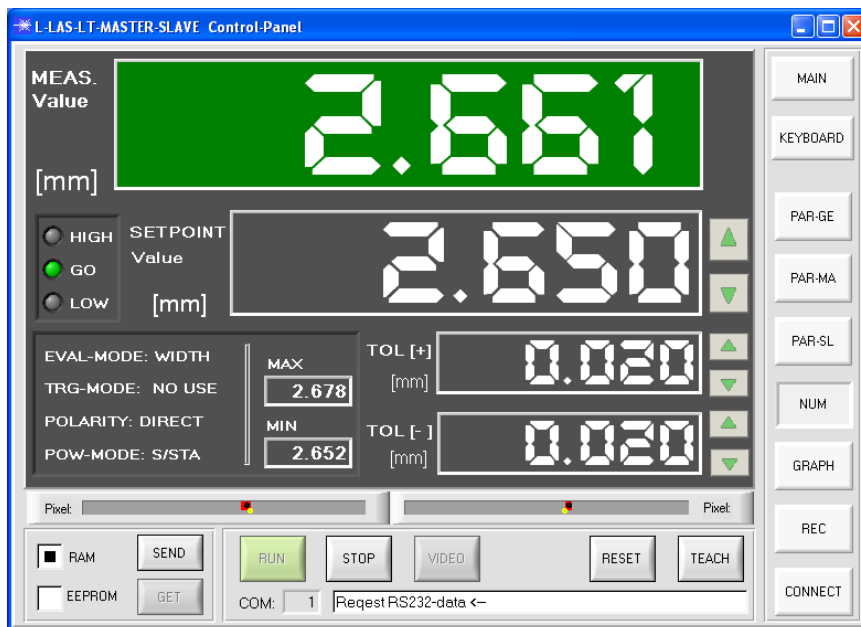
Tap on the [CONNECT] button to open a window where you can enter the COM PORT number.

When you have entered the correct COM PORT number, tap on the [TRY TO CONNECT] button to establish the connection to the master sensor. When this connection has been successfully established, a firmware status message will be displayed.

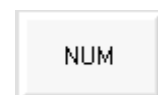


The serial RS232 interface cable must be connected to the master unit!

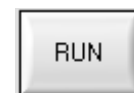
## Displaying numeric measurement values in the NUM display field:



### NUM button

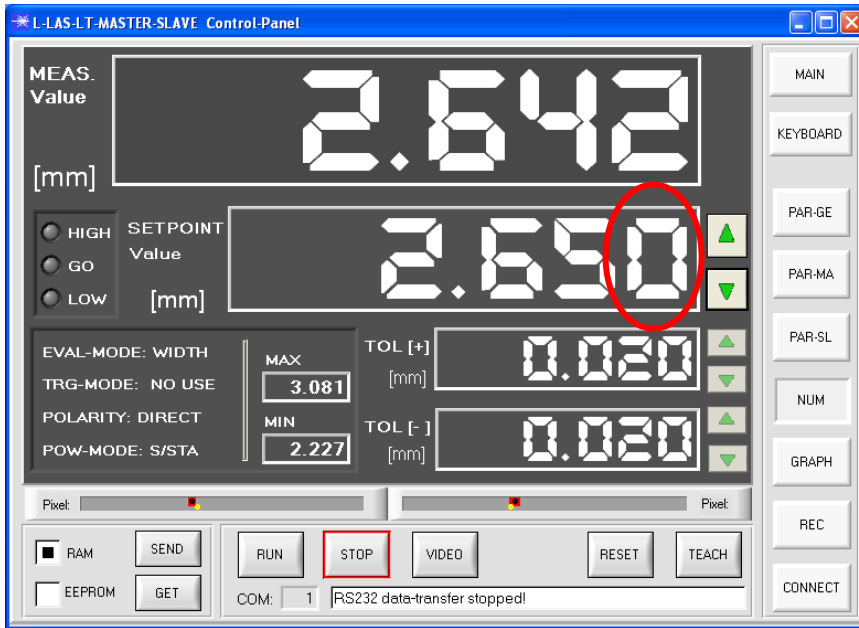


Tap on the [NUM] button to open a window that displays the most important numeric measurement values and setpoint values.



Tap on the [RUN] button to start the continuous transfer of measurement data between master and PC through the serial RS232 interface.

## Entering/changing setpoint and tolerance values in the NUM display field:



The SETPOINT value and the upper and lower TOLERANCE limits can be changed in the NUM display field.

For this purpose the arrow buttons at the right side of the respective display field must first be enabled by tapping on the respective numeric display field.



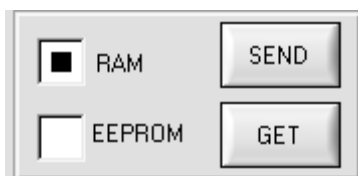
When the arrow buttons have been enabled, tap on the decimal place that should be changed.  
Example: **1/1000 mm decimal place**



Changing the **1/100 mm decimal place**



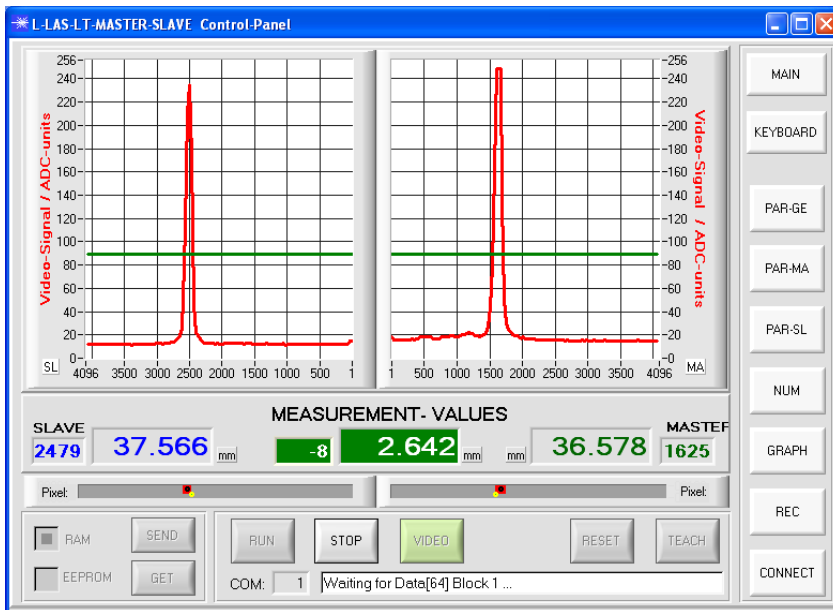
The selected decimal place can then be changed by tapping on the [UP] or [DOWN] arrow buttons at the right side of the respective numeric display field.



Tap on the [SEND] button to send the current values for SETPOINT, TOL [+] and TOL[-] to the sensor through the serial interface.

[#] RAM: The values are saved in the volatile RAM memory  
[#] EEPROM: The values are saved in the non-volatile EEPROM memory

## Displaying video data of master and slave:



### VIDEO button

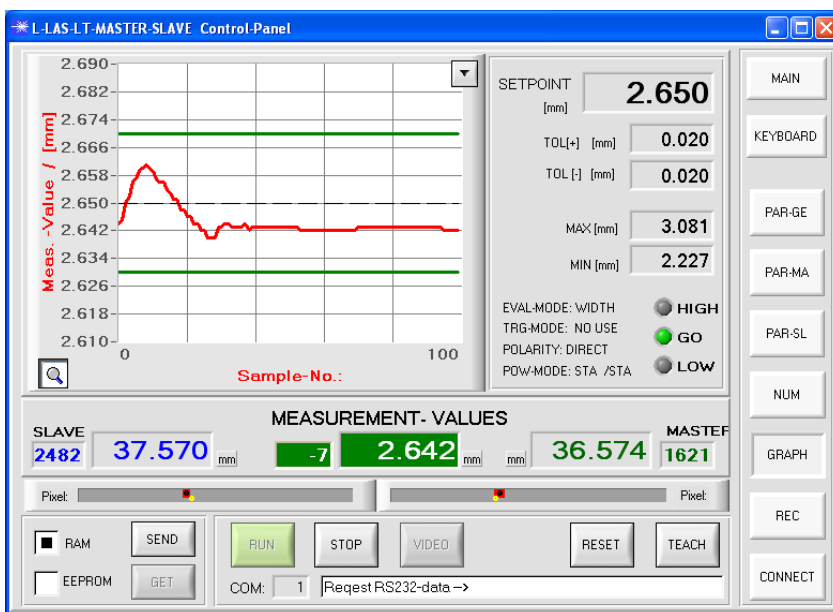


Tap on the [VIDEO] button to open a window that displays the video data of the CCD line of master and slave.

The video image can be used to check the adjustment of master and slave. The video peak values provide information about the correct setting of the transmitter power. The video image is refreshed every second.

The SLAVE video data are shown in the left display window, the MASTER video data in the right display window.

## Displaying measurement data in the GRAPH display window:



### GRAPH button



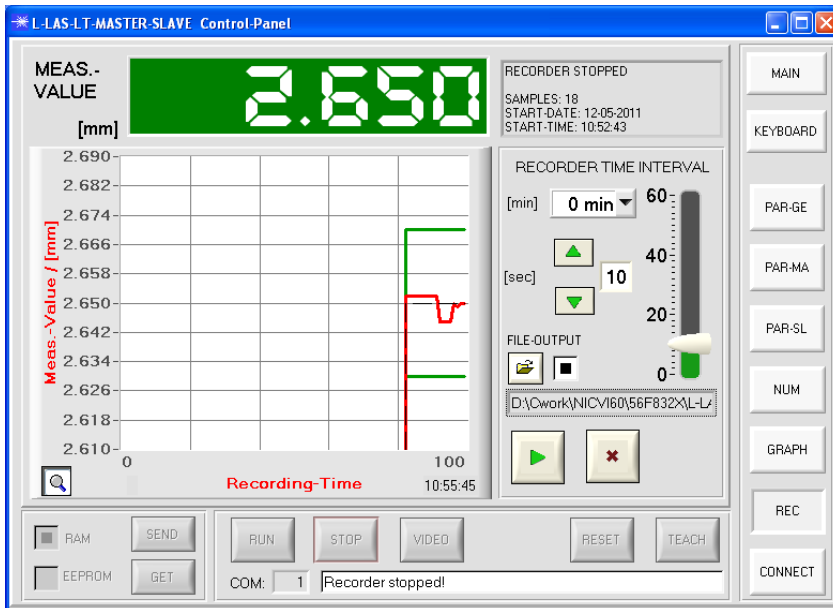
Tap on the [GRAPH] button to open a window that displays the measurement data in numeric and graphic form.



Tap on the [RUN] button to start the continuous transfer of measurement data between master and PC through the serial RS232 interface.

In the graphic display window the current measurement value is shown as a red curve. The values are displayed in "scroll mode", which means that the most recent measurement values run through the window from right to left.

## Displaying/saving measurement data in the RECORDER display window:



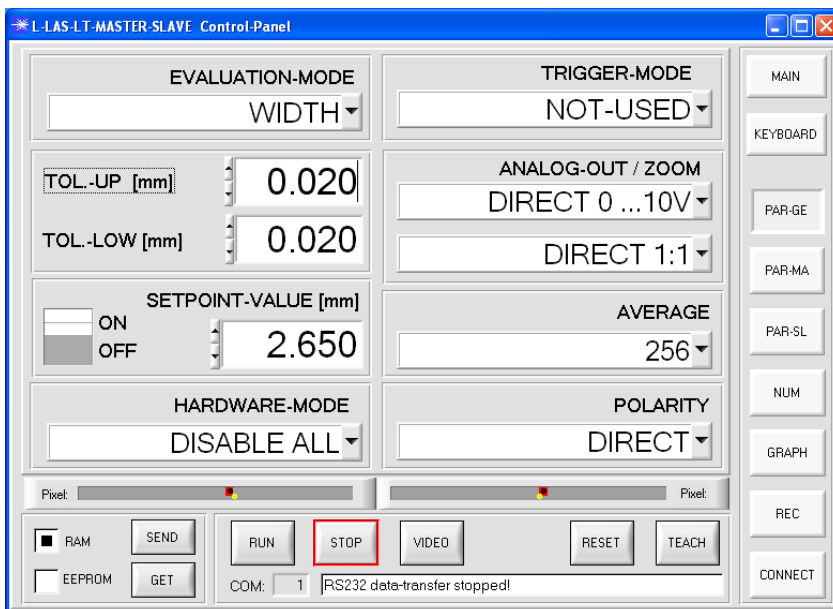
### REC button



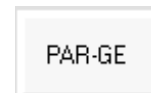
Tap on the [REC] button to open a window where you can set a recorder function for displaying/saving measurement data.

As in the graphic display window the current measurement value is shown as a red curve. The values are displayed in "scroll mode", which means that the most recent measurement values run through the window from right to left.

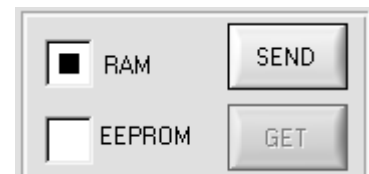
## Entering general parameters for master and slave:



### PAR-GE button

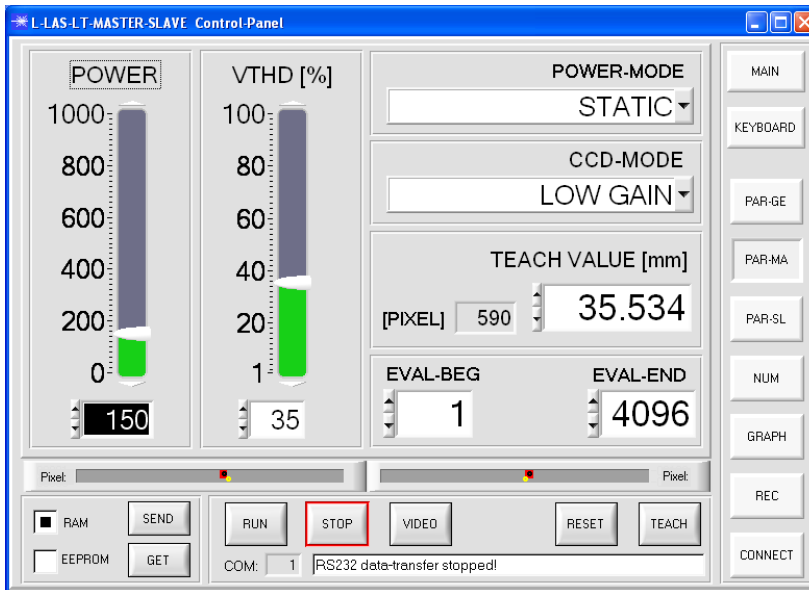


Tap on the [PAR-GE] button to open a window where you can enter general parameters.



Tap on the [SEND] button to send the parameters to the sensor through the serial interface.

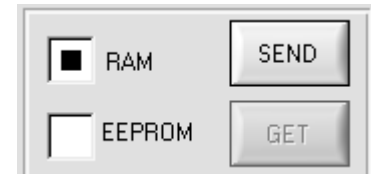
## Entering MASTER parameters:



### PAR-MA button

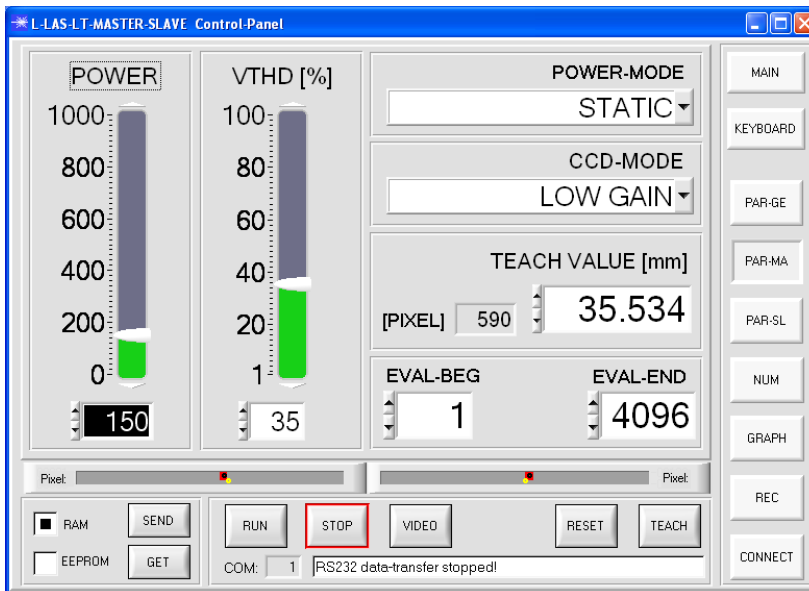


Tap on the [PAR-MA] button to open a window where you can enter parameters for the MASTER.

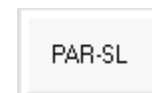


Tap on the [SEND] button to send the parameters to the sensor through the serial interface.

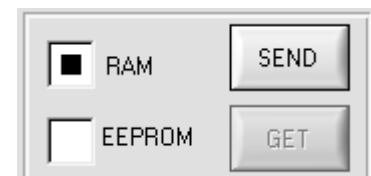
## Entering SLAVE parameters:



### PAR-SL button



Tap on the [PAR-SL] button to open a window where you can enter parameters for the SLAVE.



Tap on the [SEND] button to send the parameters to the sensor through the serial interface.