

FIRMWARE UPDATE

Z5

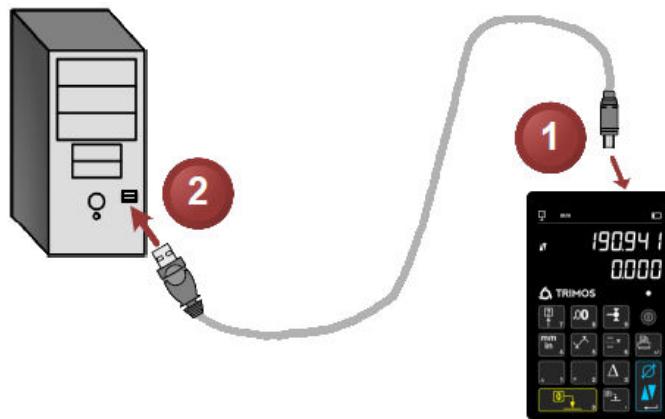
Firmware Update

1 Requirements

- PC with Window 7, Windows 8 or Windows 10
- Microsoft .NET Framework 4.5 (available on www.microsoft.com)
- Cable USB A-Mini B: 926-6001
- STM32 programmer (STM32Programmer.exe)
- STM32 driver (VCP_XXX_Setup.exe)
- Firmware files (VLINE_Module_vXXX.hex, VLINE_Mainboard_vXXX.hex, VLINE_Sensor_vXXX.hex)

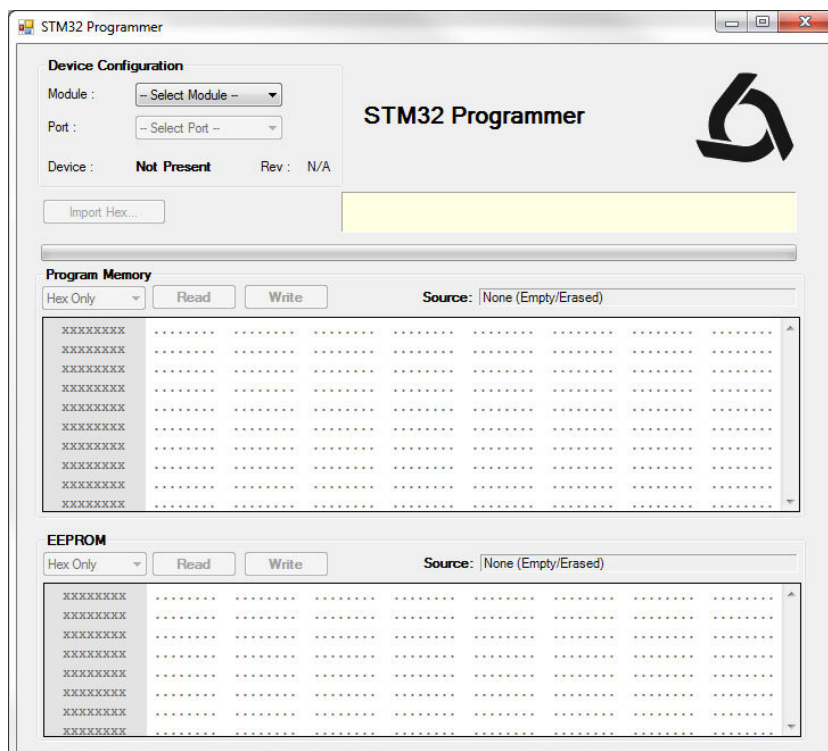
2 Connection

Install the Microsoft .NET Framework 4.5 and STM32 driver if necessary.
Connect the display module of the instrument to your computer with the mini USB cable.



3 Programming Software

Open the STM32 Programmer Utility software.



Firmware Update

4 Programming the firmware

The firmware files are:

- **VLINE_Module_vXXX.hex** for the display unit
- **VLINE_Mainboard_vXXX.hex** for the motorization and air supply for the force measurement sensor
- **VLINE_Sensor_vXXX.hex**

You need to update in the following order:

1. Module
2. Mainboard
3. Sensor

For each upgrade, follow this procedure. At the end of each upgrade, close the STM32 Programmer (No 7). Do not disconnect the USB cable during the complete procedure. Do not care about what happens on the display of the instrument. When all steps are over, the instrument will ask for the reference.

The screenshot shows the STM32 Programmer interface with the following steps highlighted:

1. Device Configuration: Module (TV500-1 - Module), Port (COM59).
2. Import Hex... button.
3. File explorer showing VLINE_Module_v320.hex.
4. Program Memory Write button.
5. EEPROM Write button.
6. Programming Successful message.
7. Close button.



The step No. 5 will reset all the settings of the instrument. If you wish to only upgrade the application but keep the actual settings, skip this step (recommended). If you decide to overwrite the settings, you will have to follow the procedure below and recalibrate the instrument.

5 New setting of the instrument

After software upgrade of the instrument, you will have to follow the steps below:



Go through each step extremely carefully.
A wrong setting can cause dysfunction of the instrument!

Press the **Validation key** to start the setting of the instrument.



Enter the serial number of the instrument.



Enter the instrument type with the following keys.



Enter the instrument measuring range with the following keys.



Move the measuring carriage upwards and downwards manually (like probing movement) until numbers appear on the 2nd line of the display. Adjust the balance until "PROBE OK" is displayed on the first line. The 2nd line should display between -20 and +20 in the neutral position. Press the **Validation key** to confirm.



Pass the reference.



Press the **Validation key** to confirm. The instrument will now start as usual.

