

How to use the Flash Program and update the instrument's internal software

These "**Instrument Software Update Instructions**" show you how to use the Flash Program and how to update (flash) the instrument software into the 350 M/XL Control Unit and Analyzer Box.



Note:

Please make sure all necessary files were downloaded to your computer before you continue with this procedure. If you are not sure, please review the "**Download Instructions**" and double check if everything was done correctly!

System requirements

- Pentium 133 and higher
- 16 MB Ram
- High Color Graphic Card
- Mouse
- Windows™ 95/98/NT/2000/ME
- Serial port

Prior to updating

In order to update the instrument with the latest software, you need to prepare the respective instrument for the data transfer.
Please only update one instrument at a time.





Sequence - Note:

- I) Prepare the Control Unit
- III) Flash the Control Unit
- II) Prepare testo 350 M/XL Analyzer Box
- III) Flash the testo 350 M/XL Analyzer Box

I. testo Control Unit – Preparation before flashing

- (1) Disconnect all (rechargeable) batteries from the Control Unit (white connector)
- (2) Connect the RS232 serial cable (0409.0178) to the computer
The other end will be connected to the Control Unit. For the Control-Unit use the port that is labeled "**RS232**".
- (3) Plug the AC cord into the wall outlet and into the Analyzer Box
- (4) Connect the Control Unit to the Analyzer Box via connection cable (0040.004x)
- (5) Remove Control Unit from the dock and set aside
- (6) Disconnect the the connection cable from the Control Unit and the Analyzer Box


- (7) On the Control Unit Key pad press the blue & white up arrow (). Keep that button pressed and then re-insert the connection cable into the Control Unit. Make sure you are pressing the button while you connect the connection cable.

 **Note:**
Please wait until **“FLASH ACTIVE – NO CONNECTION – BAUDRATE: 115200 - VERSION X.XX”** appears on the display

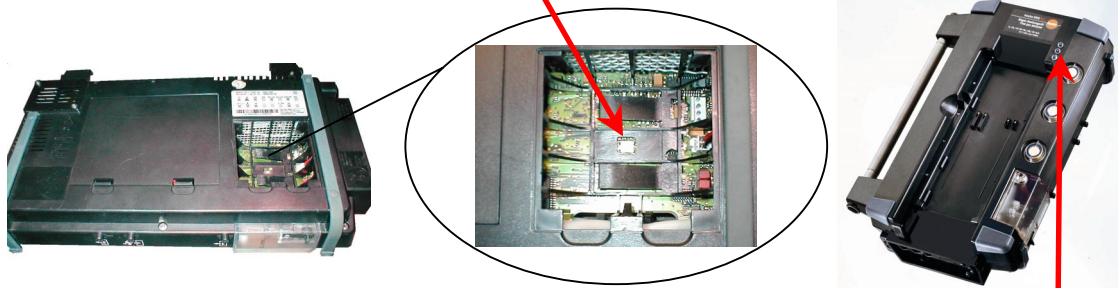
**Now the Control Unit is prepared for updating.
Go to step III “Execute Software Flash Program “ and follow the steps.**

II. testo 350 M/XL Analyzer Box – Preparation before flashing


- (1) First, connect the RS232 serial cable (0409.0178) to the computer. The other end will be connected to the Analyzer Box. For the Analyzer Box use the trigger input port "□□□□" located on the bottom of the Box.

 **Note:**
Please ensure that Control Unit is not connected to analyzer box (directly or via connection cable).

- (2) Remove all (rechargeable) batteries from Analyzer Box.
- (3) Press the white flashing mode button in the battery compartment



- (4) While pressing that button plug in the AC power cord.
- (5) Hold the white button down for 10 seconds until the **middle LED light** on the top of the Analyzer Box **flashes green**.

 **Now the Analyzer Box is prepared for updating.
Go to step III “Execute Software Flash Program “ and follow the steps.**

III. Execute Software Flash Program

With the Testo program “**Flash Update**” you can update the following instruments with the latest instrument software:

- testo Control Unit
- testo 350 M/XL Analyzer Box

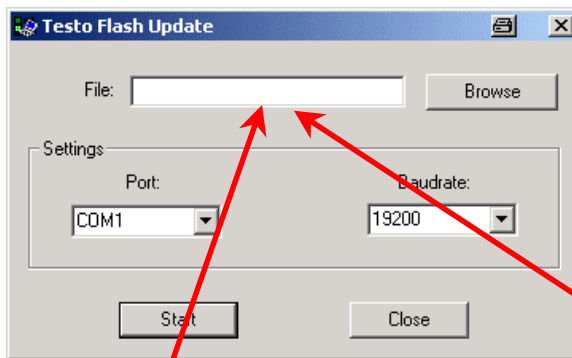


Note:

After starting the data transfer do not interrupt data communication. If the transfer is interrupted you have to start the procedure from the beginning.

Start your “**Windows Explorer**”, locate the folder with “**Download**” and start “**Flash Update**” by double-clicking on it.

The following window appears:



Updating the Control Unit:

If you have saved the downloads as recommended in the “**Download Instructions**” please write into the field “**File**”:

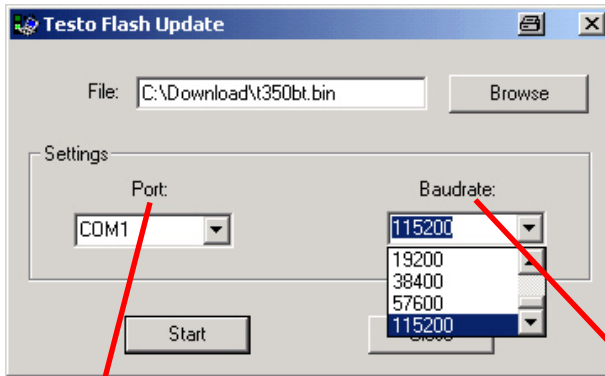
c:\download\t350bt.bin

Updating the testo 350 M/XL Analyzer Box:

If you have saved the downloads as recommended in the “**Download Instructions**” please write into the field “**File**”:

c:\download\t350mb.bin

Now check the right settings as described below:



Settings port:

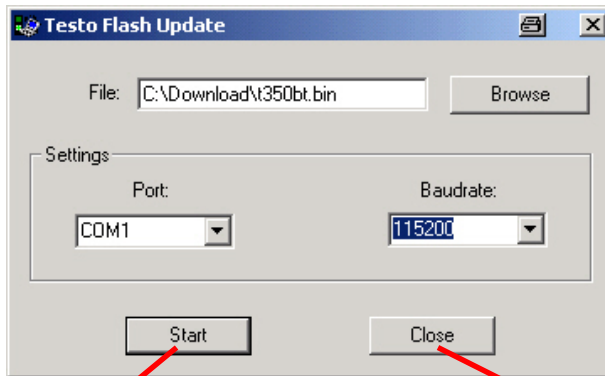
In case the default serial port is not available the following error message appears: **“Open COM port failed”**. In that case please try another port.

Settings baud rate:

Please choose the respective baud rate as follows:

<i>Instrument</i>	<i>Baud rate</i>
Control Unit	115200
Analyzer Box	57600

After checking the settings you can click on the **“Start”** button to start the update process.



Start:

By clicking on the **“Start”** button, you can start the update process.

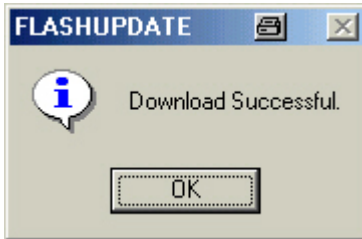
Close:

By clicking on the **“Close”** button you can interrupt data transfer and close the program.

**Note:**

If you update the testo Control Unit the display shows **“FLASH ACTIVE – SERVER DETECTED – FLASHING BOOT – BAUDRATE: 115200 – VERSION X.XX”**.

After successfully updating your instrument the following screen appears:



Please click the **“OK”** button and

- **testo Control Unit:**

Disconnect the serial cable to the computer and the connection cable to the Analyzer box from the Control Unit and replace the battery pack

- **testo 350 M/XL Analyzer Box:**

Disconnect the serial cable to the computer from the Analyzer Box and replace the battery pack.

**Note:**

To update the testo 350 M/XL Analyzer Box go to page 3 and follow the same procedure as the testo Control Unit. Be sure to choose the right baud rate!

**Messages**

“Dialog creation failed”	=	connection to instrument interrupted
“Download successful”	=	instrument was updated successfully
“File not found”	=	file was not found
“Open COM port failed”	=	serial port is not available
“Transfer canceled by user”	=	data transfer was interrupted
“Transfer canceled by receiver”	=	data transfer was interrupted by device
“Unknown error code”	=	an unknown error has occurred



 **Customer Service**

If you have any questions on how to perform any of these procedures please contact us at:

Testo, Inc.

35 Ironia Road

Flanders, NJ 07836

Phone: 800-227-0729

Hours: 8AM to 6PM EST