This Quick Reference Guide is intended to help you configure the Transient Recorder LTT186 and the SensorCorder LTT182 for stand-alone operation.

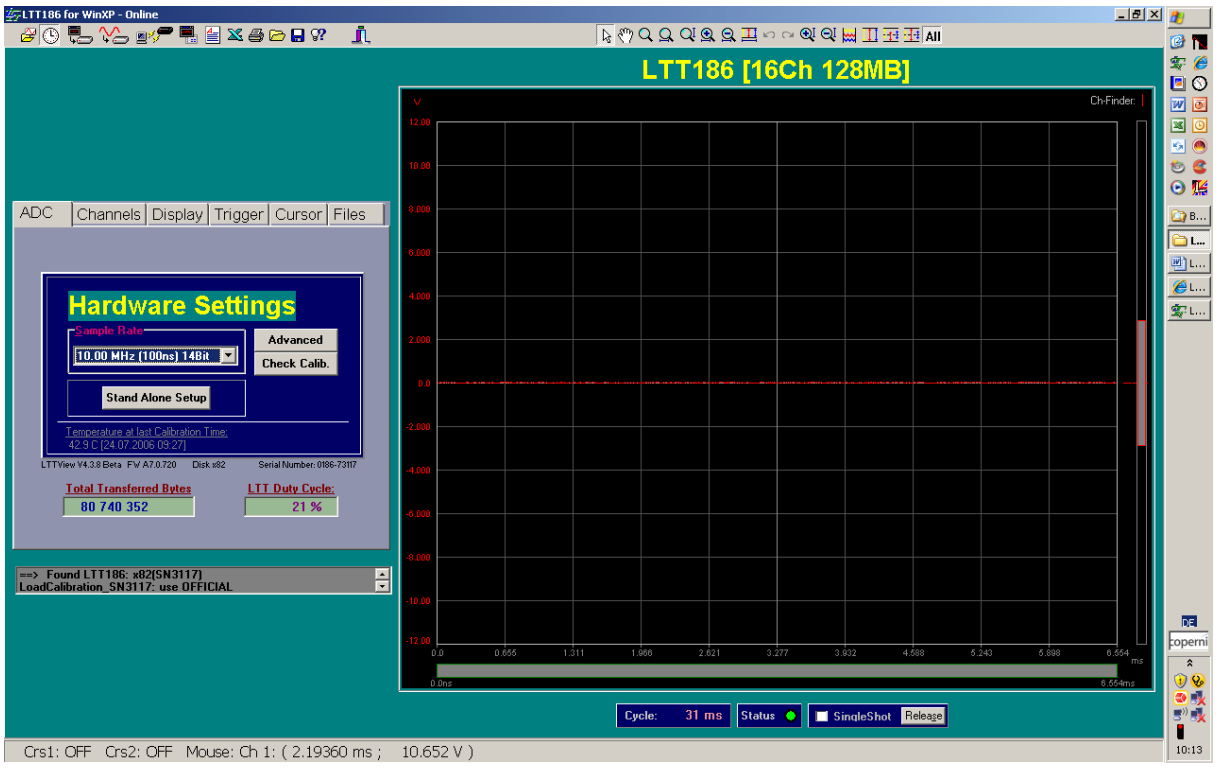
1. Connecting the LTT Recorder to the computer

The connecting procedure depends on whether you use a desktop PC with built-in SCSI card or a notebook with PCMCIA or USB SCSI card.
If using a desktop PC with built-in SCSI card, both PC and LTT device must be turned off. Then connect the PC and the LTT device with the SCSI cable. Turn on the LTT device first before you turn on and boot the PC.
The notebook procedure is even simpler as you don't have to bother about the switch-on order. Make sure that the PCMCIA or USB SCSI card is not yet connected to the notebook. Connect the LTT device with the SCSI cable and turn it on. Then you can insert the PCMCIA card with the SCSI cable attached into the notebook, regardless of whether it is turned on or off (plug and play).

2. Starting the LTT View Software

Now start the LTT View Software installed on your computer. You will find the latest software version on our server at:
http://www.tasler.de/produkte/software/

3. Start Screen



4. Setting the sampling rate

Select a sampling rate that matches your task. Make sure not to exceed the maximum data transfer rate!
The data transfer rate to the internal hard disk must not exceed 19MByte/s.

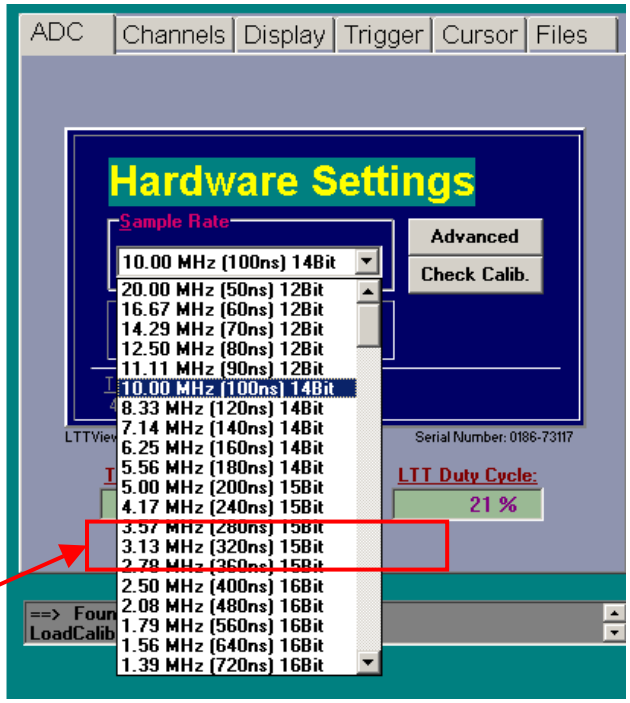
Calculation:

Maximum sampling rate =

19MB/s: (No. of channels * 2Byte)

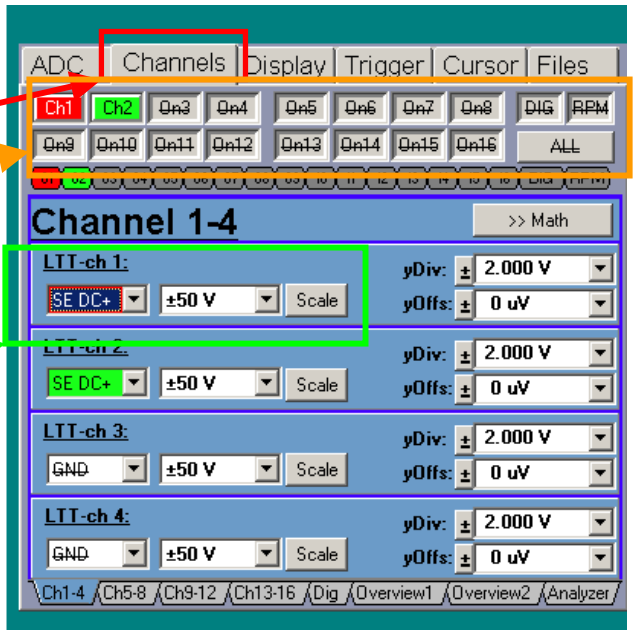
Example:

Recording on 3 channels
19MB/s: (3ch * 2Byte) =
19MB/s: (6Byte) = 3.16 MHz
Maximum sampling rate = 3.16 MHz
respectively 3.13 MHz



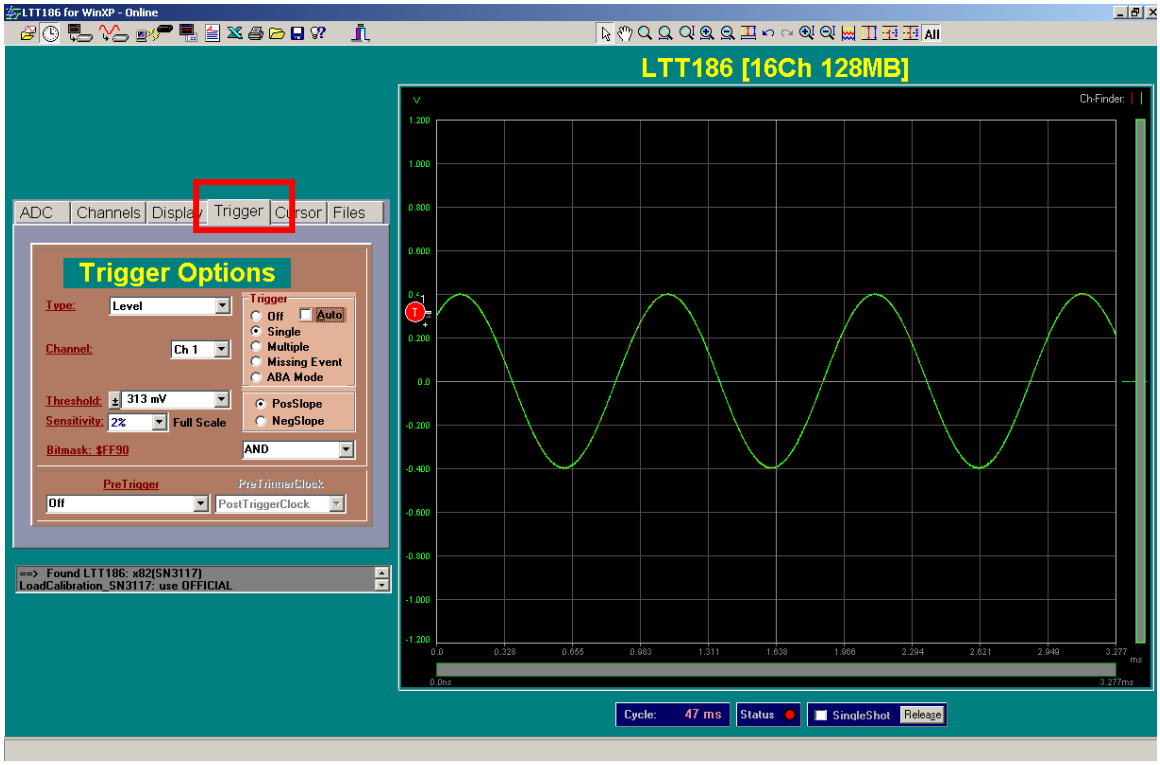
5. Setting the channel count

Please switch to the Channels tab.
The channels are activated/deactivated via mouse click on the Channel buttons.
Then select the settings for each channel: (Available selections depend on the LTT device type!)
Measuring range, connections (DC, AC, ICP,…) and scaling of the physical units.

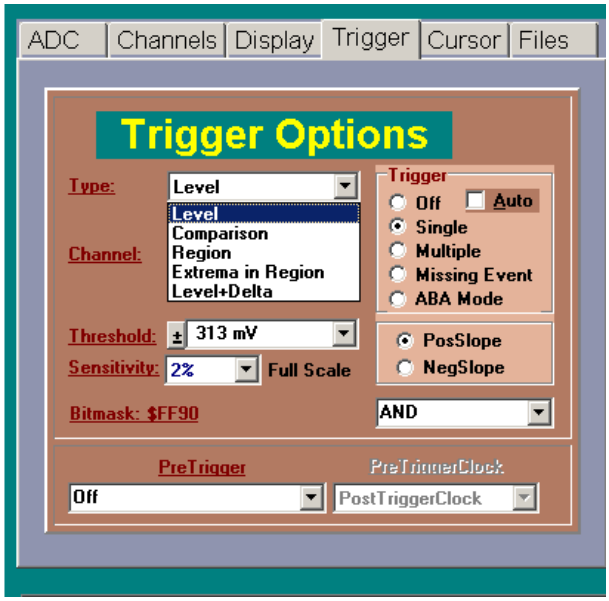


6. *Trigger setting*

Please switch to the Trigger tab. Here you set the trigger condition. In this example the trigger channel will be channel 1. Level above 313mV.

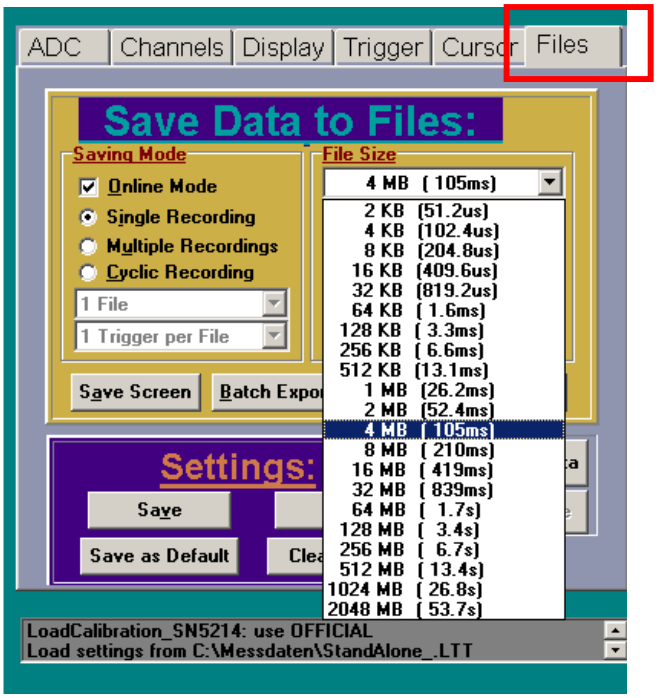


There are different ways to set trigger conditions.
In stand-alone mode the measurement will start as soon as the trigger condition is met!



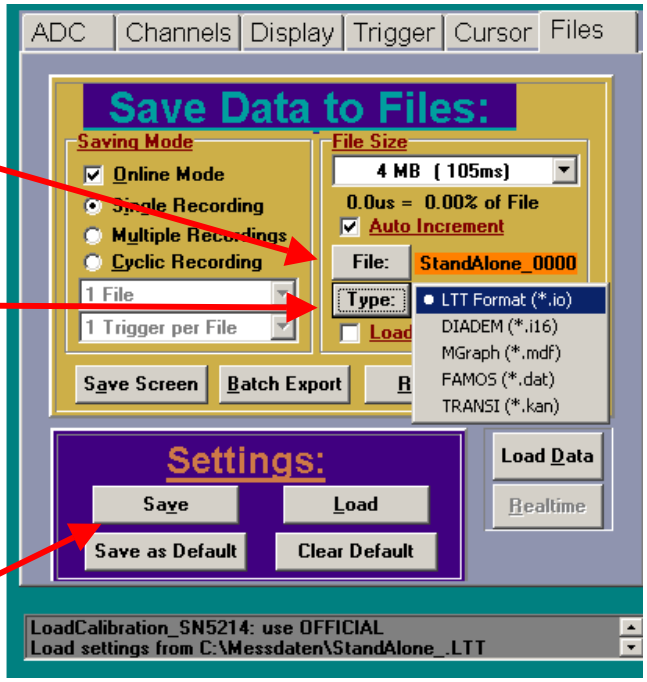
7. Setting the size of measurement files

Now switch to the Files tab.
Here you specify the required file size for your measurement. The recording time is calculated automatically from the number of channels and the sampling rate.



Press the File button to specify the name and location of the measurement file. In stand-alone mode only our setup file is saved there.

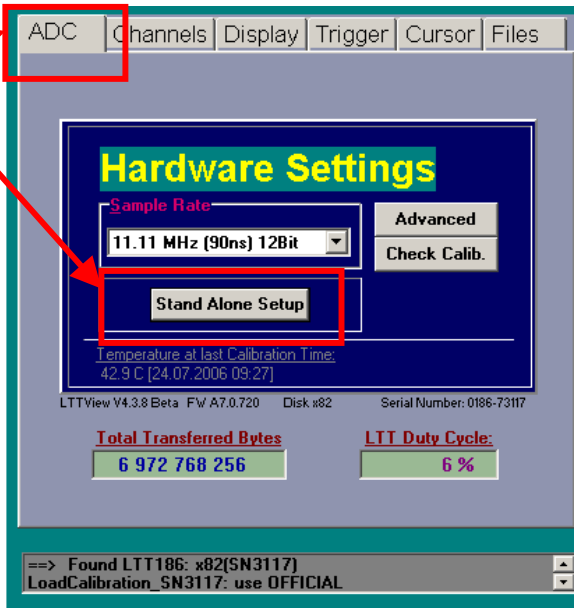
Press the Type button to specify the format of the measurement file. In stand-alone mode only LTT format and MGraph are supported.
Finally, set the Saving Mode to Single Recording. (Multiple or Cyclic-Recording are not supported in stand-alone mode!)
Also specify the number of trigger events to be saved in one file.
Finally, press Save to save the settings.

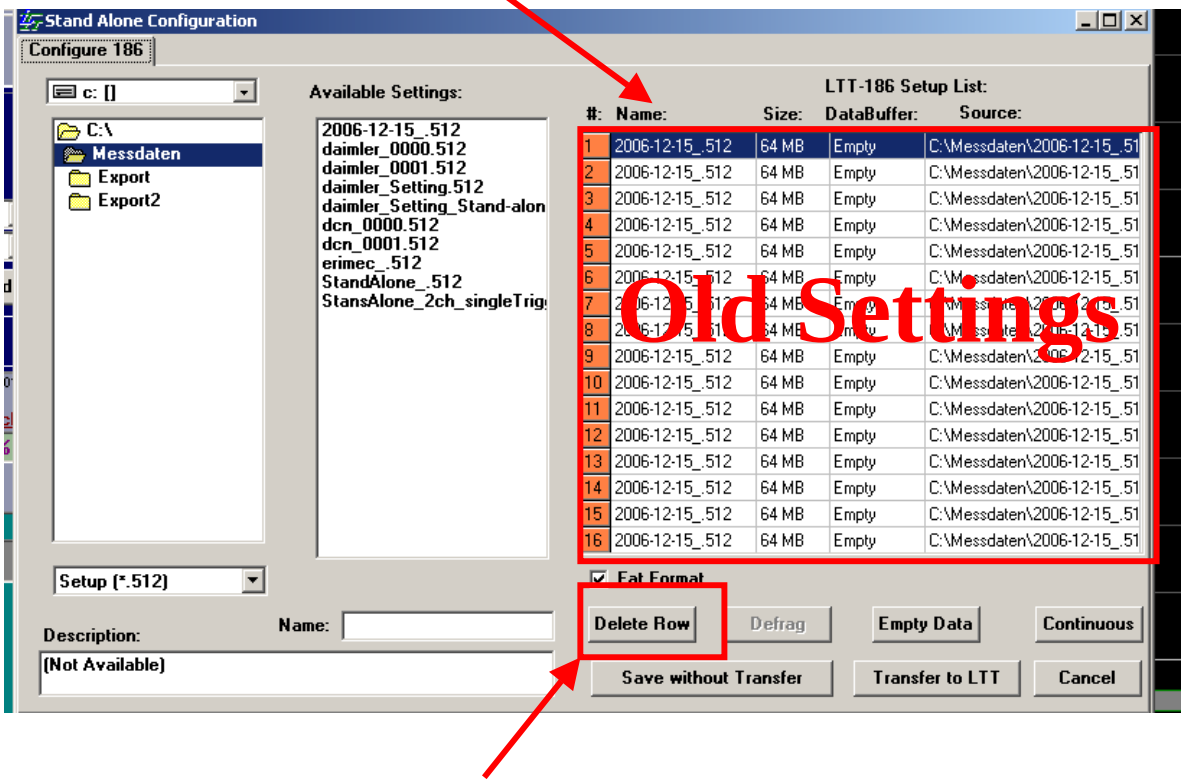


8. Saving the Setup to the LTT device

Now, please return to the ADC tab and press the button Stand Alone Setup.

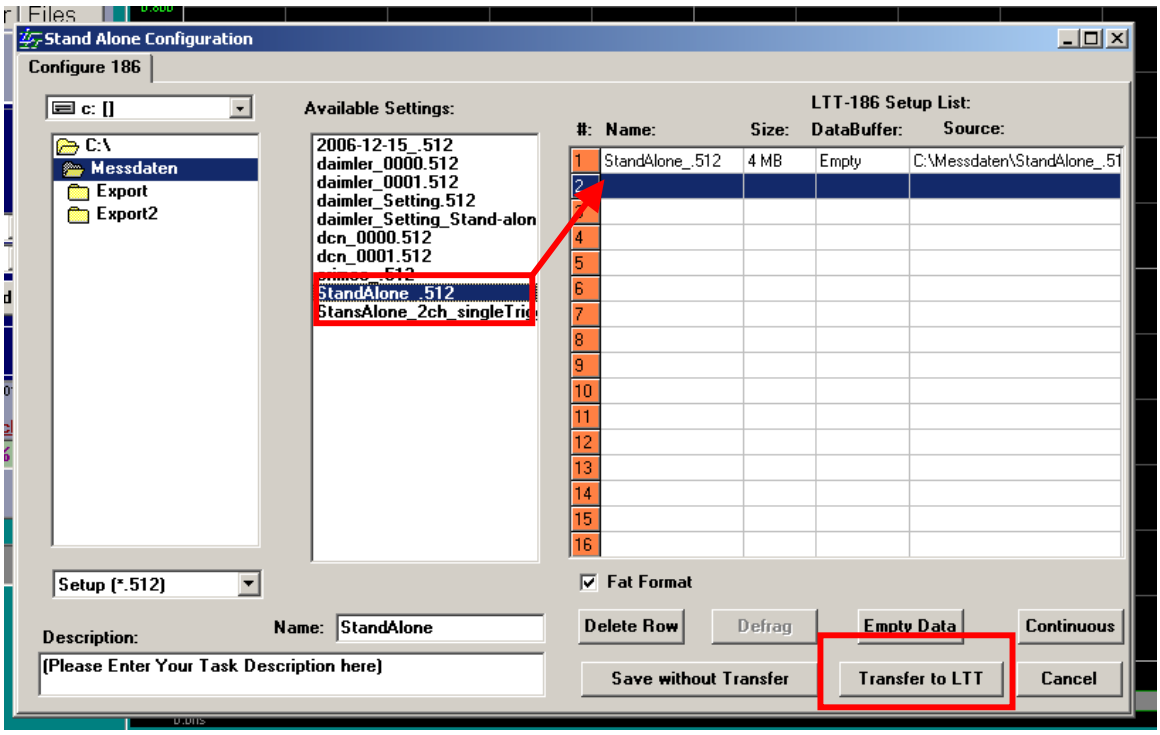
A window opens where you can load the setup saved in the previous step.
First of all you see that there are old settings saved on the device.





If you don't want to use the old settings and no longer need the data you can delete them. Press Delete Row to delete the old settings. Up to 16 different settings can be saved.

After having deleted all old settings, click the mouse button on the name of the setting file to move the file to the list. In this way you can store up to 16 different measurement settings and execute them later. (***Hint:*** If you just save one setting in row 1 and then press the Continuous button, this setting will be applied to all 16 rows. This allows continuous recording without interruption. In this example you will save 16 * 4MByte as one continuous measurement.)



Press Transfer to LTT to transfer this setting to the device.
The transfer progress is displayed in %.

To operate the LTT device without computer, it must be disconnected from the computer. Exit the LTT View software.

- If using a desktop computer with built-in SCSI card, switch off the computer and then the LTT device.
- With a notebook it is even simpler. Press “Safely Remove Hardware” to remove the PCMCIA SCSI card from the notebook.

Please disconnect the SCSI cable from the LTT device.

9. Activating stand-alone mode on the LTT device

To activate the stand-alone mode, perform the following steps:

- Turn on the LTT device.
- Press and hold the RESET button on the rear side of the device.
- Additionally, press and hold the START button on the front.
- Now release the RESET button while keeping the START button pressed.
- When the START button begins to flash, release it as well.

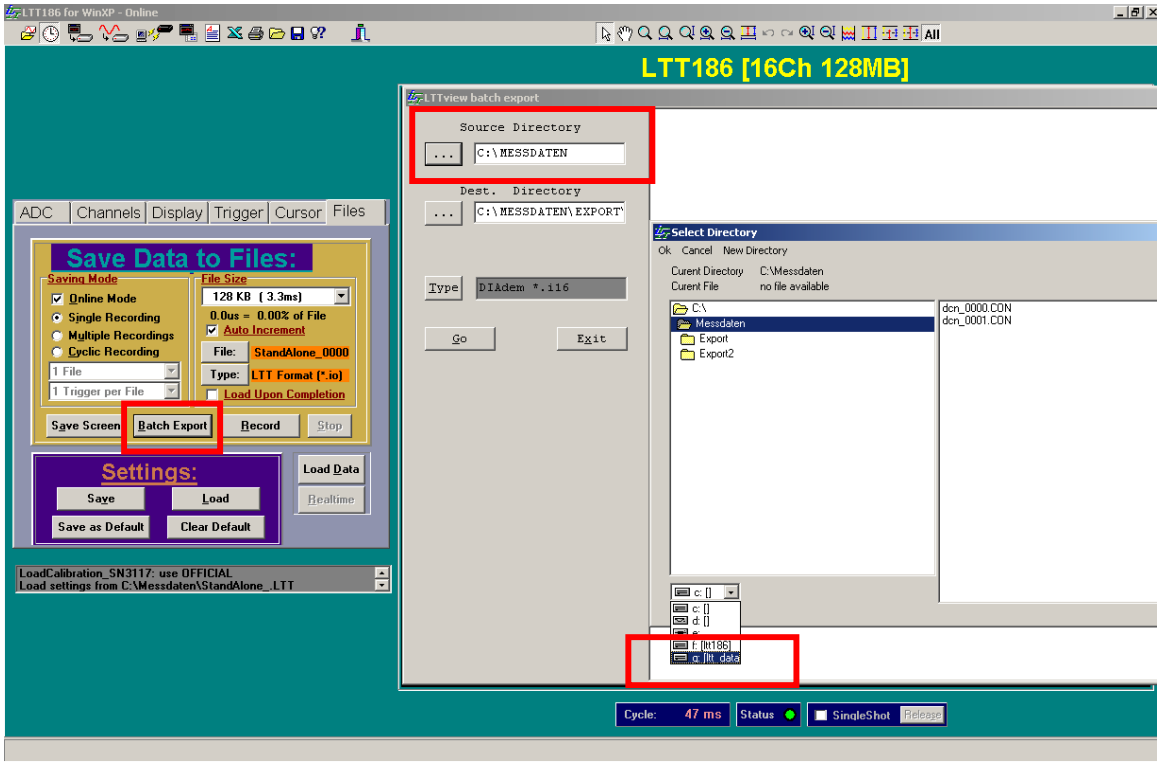
Press the flashing START button again to start the measurement. The START button stops flashing and the LTT device is waiting for the trigger event – also indicated by the orange Trigger LED.

When the trigger condition is met the device starts recording. The measurement will stop when the preset file size is reached.
If there are several settings stored, the START button will start flashing again and you can start the next measurement by pressing the START button.

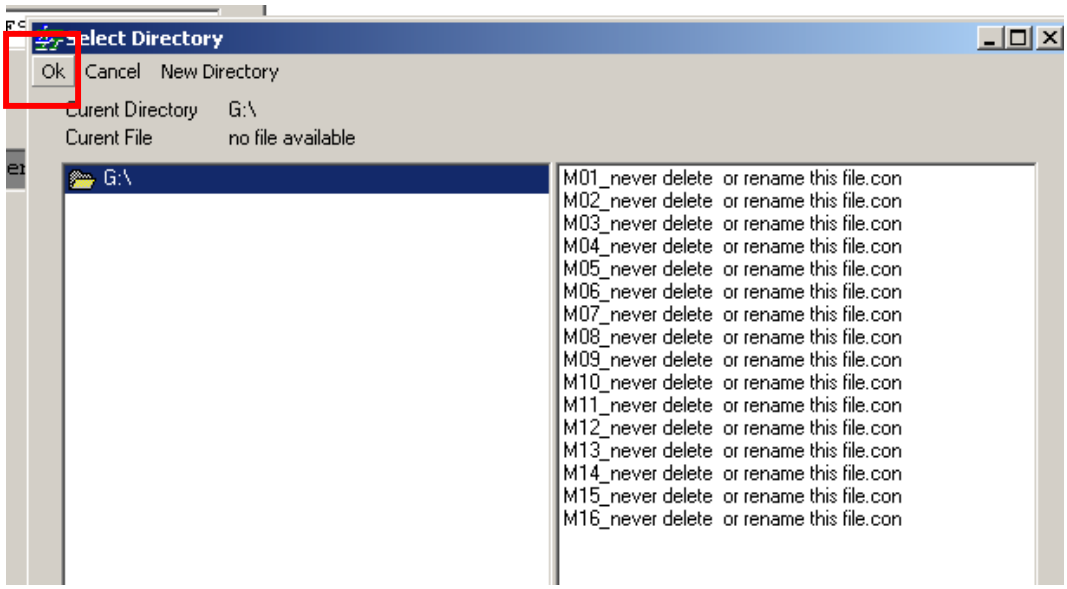
Depending on the settings, the subsequent measurements can be performed automatically without pressing the START key again! (*See page 7: Hint!*)

10. Reading out the measured data

Upon completion of all measurements, please connect the LTT device to the computer as described above. Start the LTT View software and go to the Files menu item.



Select Batch Export. A window will open where you select Source Directory which opens a new window. Select the hard disk of the LTT device, named “ltt data”, as source directory.



Confirm your selection with Ok.

Now specify the destination directory and the file format (Type) of the measured data. Available file formats are our LTT format together with DIAdem, FAMOS, MGraph, MATLAB, ASCII and DASYLab.
Now you are ready to evaluate your measured data with your preferred analysis software.

Of course, you can always reload and review the data with LTT View.