10ms RMS Recorder – df/dt data now available

The 10ms RMS Recorder now includes a trace of df/dt (rate of frequency change). This data is calculated by WinPQ mobil, so is available with all prior stored PQ data.
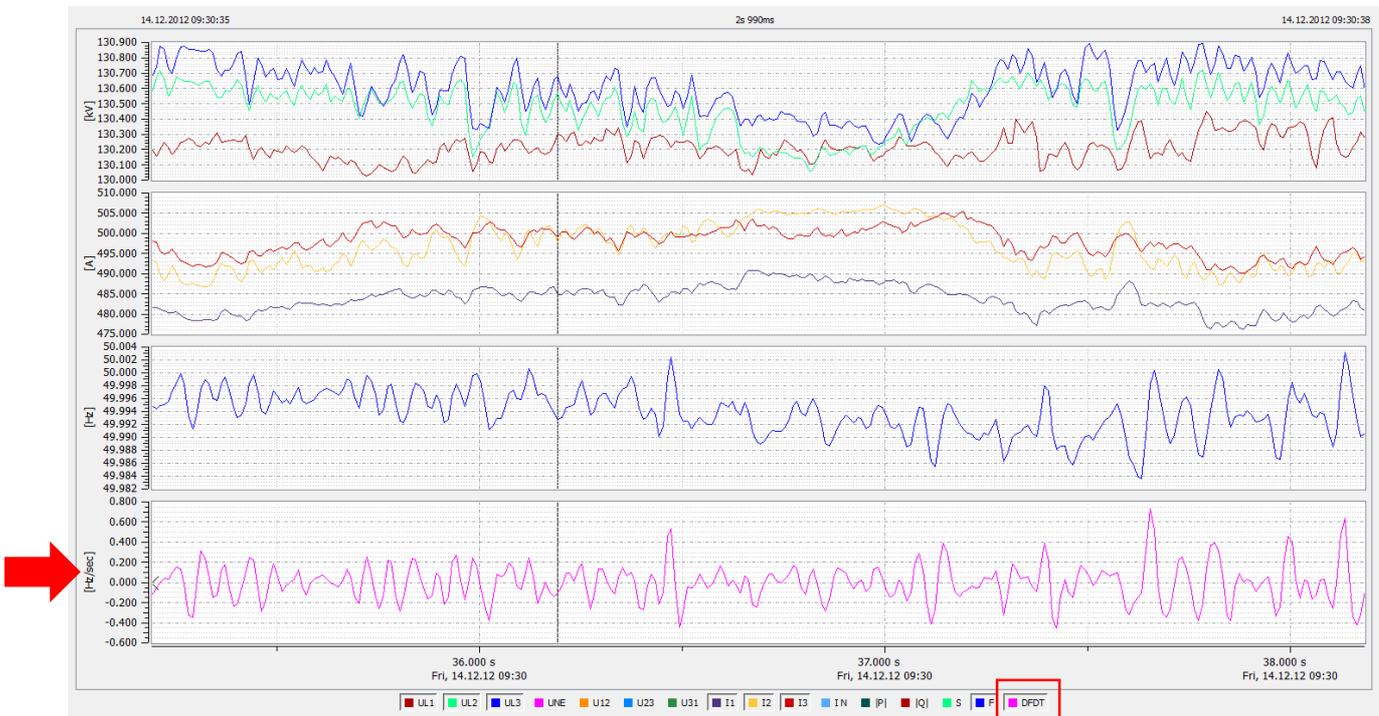

Figure 1. 10 ms RMS Recorder Display with df/dt.

Saving device and WinPQ mobil setups

WinPQ mobil provides a method to "Load" and "Store" PQ-Box 100/150/200 device setups to a file for later use. These 'ini' files are normally located:

      C:\Users\Public\Public Document\WinPQ mobil\Config   (*at least for Windows 7 users*)

There are a number of factory supplied files, based on different norms. Additionally there is a "Basic Setting" button which loads to the screen a default setting. There are two default files:
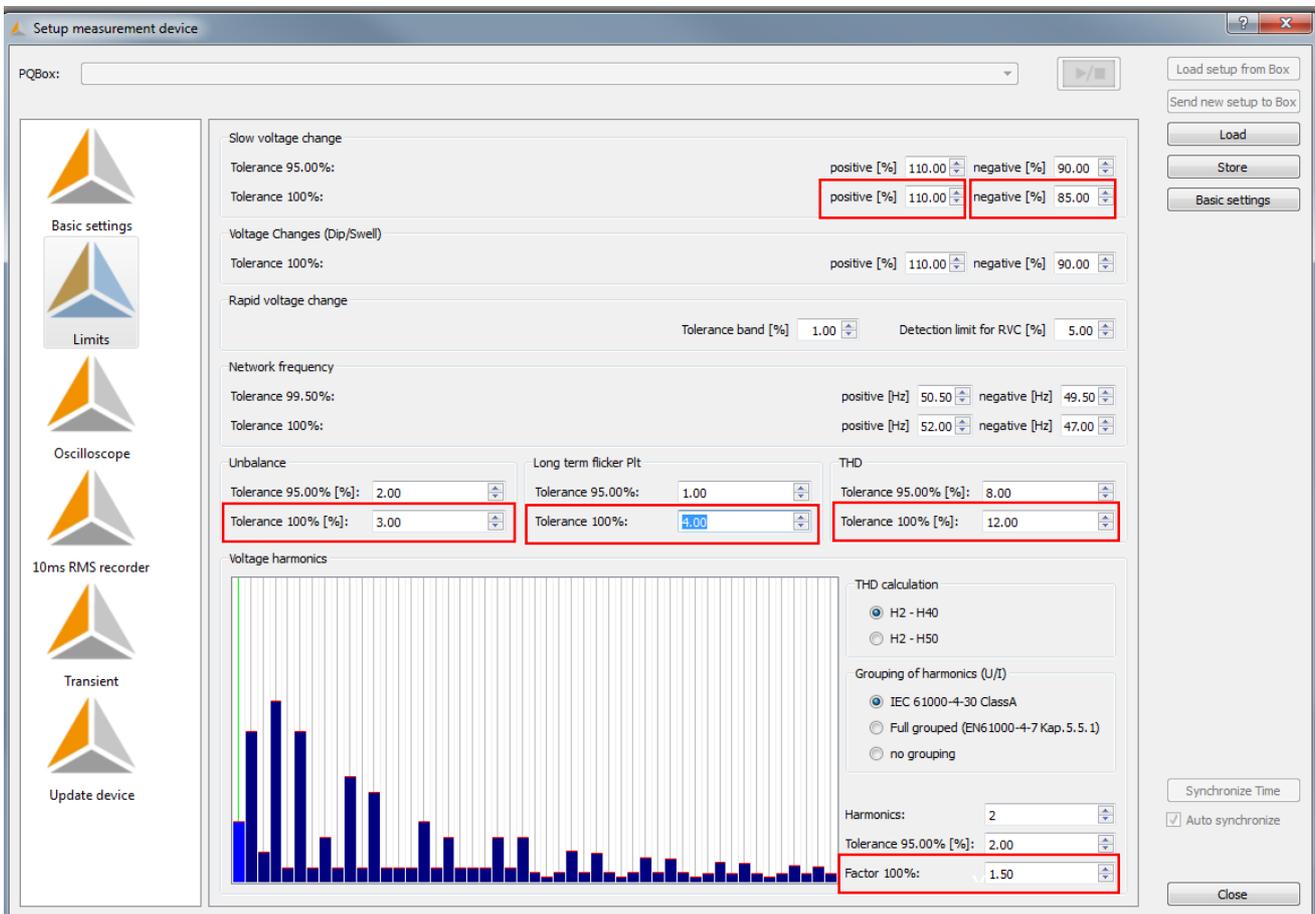
- 'PQBox200_Param_default.ini' – is used if a PQ-Box 150 or 200 is connected
- 'PQBox100_Param_default.ini' – is used if a PQ-Box 100 is connected

Both these files can be overwritten, if you wish to change any of the default values (but we recommend taking a backup copy first).

If no PQ-Box is connected, then:
- The file 'PQBox200_Param_default.ini' provides those setting that are first displayed when the setting screen is displayed.
- The file 'PQBox100_Param_default.ini' provides those setting that are recalled when the "Basic Settings" button is pressed.

A close analysis of the behaviour of the device setting values will find that some of the limit values, while displayed as part of the "setting file" are not actually stored/recalled as part of a specific device setting file. Figure 2 shows those 100% Statistical Limit values which are actually controlled by the general WinPQ mobil software setup – not the device setting file.

Figure 2. Values that are not actually part of the PQ-Box <u>device</u> setting file.

Following is a narrative of how these specific 100% values are updated etc:
- On start-up, the 100% limit settings are recalled from saved software setup file (The 'PC_Param_default.ini' file which is use to remember common program settings – which is different to the device setting file)
- If you modify any of these 100% values, the modified values will be used for any EN 50160 analysis done in that session. However, the modified values will only be updated in the 'PC_Param_default.ini' file only **if** you save a PQ-Box device setting file.

- That is, if you change for example the 'Slow voltage change Positive 100% Tolerance' setting from 110% default to say 120%, but **do not** save a PQ-Box device setting file…
  - If you close and open the Limit setup screen, 110% will be reloaded (120% will remain if just changing between limits/Basic Setting display/Oscilloscope etc)
  - If you exit the program and reopen WinPQ mobil, 110% will be shown
- If you change for example the 'Slow voltage change Positive 100% Tolerance' setting from 110% default to say 120%, and **then save** a PQ-Box device setting file…
  - If you close and open the Limit setup screen, 120% will be reloaded
  - If you exit the program and reopen WinPQ mobil, 120% will be shown

- If you load a new PQ-Box device setting file (or click Basic Settings), then the 100% limits are replaced with the values that have been stored in the 'PC_Param_default.ini' file.

So, while the 100% limits are not stored in the PQ-Box setting file, loading a PQ-Box 100 setting file (or clicking "Basic Settings") also causes the 100% limits currently being displayed to be replaced with the 'PC_Param_default.ini' values. This can give the appearance that the 100% values are being updated from the PQ-Box 100 setting file – this is not the case.

This may raise the question, where are these 100% values used. The answer is in the EN/IEC normalised graphical report – where the bar graph will show a cross hatch on the '5%' blue portion of the graph if the highest recorded value exceeds these 100% limits.

Note: The 'PC_Param_default.ini' file located….. 'C:\Users\Public\Public Document\WinPQ mobil\Settings' stores the common setup information. There is no user load/save features for this file, it is automatically open/closed/updated by WinPQ mobil. This file is used for settings applicable to the WinPQ mobil software setup, rather than the PQ-Box settings. This file stores the setting values of the "Setup Common", the "Setup Harmonic Views", the "Setup Export" view, the last used printer information and the "100% Statistical limits" described above. This file is first created when the software is closed down for the first time, so to reset to default, simply delete the file.