

Fluke 1736/1738 Firmware V2.1 Release Notes

Date: 20 Jan 2017

New Features:

- Initial release for Fluke 1732 and Fluke 1734.
- *Lock Screen* button added which allows locking the hardware buttons and touch targets during active logging sessions. The default lock/unlock PIN is *1234* and can be changed in *Instrument Settings*.
- Support of partial averaging intervals added. The start and stop time of a logging session is no longer synchronized to the averaging interval but starts and stops immediately.
Use the scheduled start and stop feature in *Logger Setup* if the logging needs to start or stop at a full minute or hour. The change does not apply to the power quality interval used for the PQ graphs, harmonics and PQ standard assessment according to EN50160 and IEEE519.
- User configurable instrument name.
- Timezone database updated to reflect recent important changes.

Improvements:

- The display format of power readings using the current clamp i40s-EL has been changed to show 1W (1VA, 1var) instead of 0.001kW (0.001kVA, 0.001kvar). The minimum resolution has been increased to 0.1W (0.1VA, 0.1var).
- Improvements on FC 3000 module support:
 - Added support of unit change while connected to the Logger. Note: Changing the unit while a logging session is active is not supported.
 - Improved update of the list with sensors in range
 - Improved assignment of the sensor ID.
 - Connection stability issues resolved.
- Data download via USB cable connection to a PC running Windows 10 caused problems with large data files. This has been fixed by changing to a virtual network interface with IP V6 communication over USB cable.
- Nominal voltage is now a mandatory setting in energy studies. *None* is no longer supported.
- Error message during firmware on missing folder on USB flash drive improved.
- Improved user experience and execution time on WiFi mode selection.
- Sometimes a screen was no longer accessible after the virtual keyboard or a message screen was shown. This has been fixed.

Known Issues:

- Remote control using VNC:
 - UltraVNC can cause unexpected results. This is seen on UltraVNC V1.2.1.2. Use TightVNC or RealVNC instead.
 - The backspace key on the virtual keyboard and keyboard of the client sometimes does not work. Select the text and press the delete button on the client instead.
 - The number and backspace keys on the client do not work for the numerical keyboard. Use the virtual keys instead.

- It may take up to a minute for Windows to provide required functionality for Energy Analyze to communicate with an instrument after establishing a WiFi connection with the device or attaching the USB cable.
- Windows Device Manager may show an unknown CDC device after connecting 173x instruments to the USB port. This device is not used.

Notes for users updating from firmware version earlier than V2.0:

The firmware update function in release V1.1 expects a different file structure on the USB stick. In order to activate the firmware update follow these steps before inserting the USB flash drive into the Logger:

- Rename the firmware *173x_firmware_2.1.bin* to *1736_firmware_2.1.bin*.
- Create a directory titled *Fluke1736* (no blanks) on the USB flash drive and copy the renamed firmware file to that directory location.

Fluke 1736/1738 Firmware V2.0 Release Notes

Date: 27 Jan 2016

New Features:

- Initial release for Fluke 1738.
- Phasor added in *Meter - Verify Connection*.
- Voltage Unbalance is now available in Phasor screen.
- Support for licenses added: 1736/Upgrade, IEEE519 and WiFi-Infrastructure.
Note: Reset to factory defaults from *Tools* menu retains installed licenses. Press <Meter> – <Logger> – <Memory/Settings> at startup to remove licenses.
- Event detail screen added. Details of an event are now shown when an event is selected with <Save/Enter>.
- Limit lines added in *Logger - PQ Graphs*.
- Add support to use up to two Fluke Connect® modules FC 3000 series for the auxiliary input channels (Fluke 1738 for US, CAN and EU market only).
- Views added in *Meter – Scope* to show voltage and current of a phase simultaneously.
- Features of Fluke 1738 and 1736/Upgrade license added:
 - Limit assessment for voltage harmonics according to EN50160 in *Meter – Harmonics*.
 - Limit assessment for voltage harmonics according to EN50160 in *Logger – Harmonics*.
 - Wave shape and RMS profile recordings on events added.
 - *PQ Health* screen added.
- Features of IEEE 519 license added:
 - Selection of IEEE 519 and configuration of I_{sc} and I_L in *Meter – Change Configuration* added.
 - Limit assessment for voltage and current harmonics in *Meter – Harmonics*.
 - Limit assessment for voltage and current harmonics in *Logger – Harmonics*.
 - TDD (total demand distortion) added. It is shown in *Harmonics – Current Limit* in *Meter* (live values) and *Logger* (logged values).
 - Voltage harmonics bars based on IEEE 519 limits in *PQ Health* screen added (on 1738 or 1736 with 1736/Upgrade license).
- Features of WiFi-Infrastructure added:
 - Option to connect to an access point in *Instrument Settings – Tools – WiFi configuration* added. Supported authentication: WPA2-PSK (pre-shared key).
Go to item “Name (SSID):” and press <Save/Enter> when status shows “scanning” to select an access point from the list.

Improvements:

- Precision of values shown in Fluke Connect® app aligned to precision shown on the Logger.
- Noise on Aux-1 input reduced.
- Ability to review Aux configuration during a logging session added.
- Service data includes now additional log files

- Radio icon in status bar replaced by Fluke Connect® icon.
- Navigation in event overview list significantly improved.
- Selection of the harmonic to plot with <F2>/<F3> improved.

Bugfix:

- Bug fixed that an event sometimes started earlier or ended later than the logging session.
- When using VNC for remote control the cursor keys sometimes did not open the side menu. This bug has been fixed.

Known issues:

- Measurement Configuration – Aux:
 - A Fluke Connect® module remains in the list of available modules even when it has been turned off or it is out of range.
 - Occasionally the model number of a Fluke Connect® module is not shown. The module can be selected though and the Aux channel eventually shows the correct configuration:
IDn - <FC module>
- On a Fluke Connect® module which supports measurement of different parameters, e.g. T3000FC can be configured to measure either °C or °F, select the measurement parameter on the module first before establishing a connection.
- The maximum number of events per logging session is limited to 5000.
- The number of event records depends on the size of the logging session and is in the range of 100 to 1000 for each, wave shape and RMS profile.
- Remote control using VNC:
 - The backspace key on the virtual keyboard and keyboard of the client sometimes does not work. Select the text and press the delete button on the client instead.
 - The number and backspace keys on the client do not work for the numerical keyboard. Use the virtual keys instead.

Fluke 1736 Firmware V1.1 Release Notes

Date: 18 Sep 2015

Improvement

- The detection of the tapped position on the touch screen has been improved.

Bugfixes

- Occasionally some instruments showed a serial number “0000000” in *Memory/Settings – Instrument Settings - Info*. This has been fixed.
- In delta topologies (Delta, 2 Element Delta, High Leg Delta, Wye IT, and Delta Balanced) the virtual phase-to-neutral voltage was recorded for *PQ Data – Voltage* in V1.0. The phase-to-phase voltage is now recorded instead.
- The Wye icon in *Meter* side menus has been removed in single phase and split phase topologies.
- The readings in upper right corner of *Meter – Harmonics* and *Logger – Harmonics* are now grouped to show the same unit for all phases.
- The y-axis scaling in *Meter-Harmonics* has been improved to scale to the highest bar. Note that scaling is applied on THD or the highest harmonic, excluding the fundamental (h01).
- The items in the list box in *Meter – Change Configuration – Events* are now localized.
- The position of the x-axis tick marks in *Meter – Scope* matches now with the input signal frequency.

Fluke 1736 Firmware V1.0 Release Notes

Date: 31 Aug 2015

Initial Release