

Fluke 177X Firmware V3.2.1 Release Notes

Date: 11th September 2025

Supported Fluke Energy Analyze Plus: V3.13 or higher

New Features:

As part of our ongoing commitment to improving cybersecurity and protecting user data, we have implemented the following enhancements. These updates also support compliance with the Commission Delegated Regulation (EU) 2022/30 supplementing Radio Equipment Directive (RED) 2014/53/EU, and the associated harmonized standards EN 18031-1 and EN 18031-2:

- Enhanced data protection to meet cybersecurity requirements:
 - The PIN is now user-defined and must be configured during first-time use wizard. The default PIN is no longer supported.
 - A user-defined PIN is required to access:
 - Home -> Settings
 - Home -> Info -> Communication
 - Locking the screen
 - It is now mandatory to set a user-defined username and password to access the Fluke 177x via Fluke Energy Analyze Plus software. The credentials must be configured during the first-time use wizard.
- Added security log:
 - Records events related to personal information security

Improvements:

- System security enhancements.
Updated core software components to improve protection against known security vulnerabilities.
- Virtual keyboard input is now also supported via hardware keys.
- Service Data is now encrypted.
Service Data is now securely encrypted and accessible only to Fluke Technical Support. This measure aligns with data privacy regulations, as the data may include potentially personally identifiable information (PII) such as IP addresses and nearby WiFi access points. Please ensure you consent to sharing such data before sending Service Data to Fluke Technical Support.
- After performing a factory reset using the hardware buttons, the Energy Loss Calculator feature was no longer accessible. This issue has now been resolved.

Fluke 177X Firmware V3.1 Release Notes

Date: 25 November 2023

Supported Fluke Energy Analyze Plus: V3.11.1 or higher

New Features:

- Added new measurement mode **Energy Loss Calculator** (ELC)
Note: ELC is designed for use on consuming loads only.
- Encrypted data transfer to Fluke Energy Analyze Plus. To use this feature, first configure a user name and password in the 17xx Setup. User name and password can be reset on the instrument UI in Settings → Communication Settings.
- Warning added that the device shall not be powered from an inverter output.
- Hysteresis of Rapid Voltage Change events is now user configurable according to EN 50160/A2 and IEC 61000-4-30 Ed 3. Values of 0.1% up to the RVC threshold are supported.
- AUX channels: Added icon in the Status Bar when a wireless FC sensor is connected.

Improvements:

- In some special cases invalid session data was stored which caused an error when opening the session in Fluke Energy Analyze Plus. This has been fixed.
- Fixed the issue that in very rare cases the current measurement changed by a factor of 10 during a logging session. This has been fixed.
- The order of sending data to Fluke Energy Analyze Plus has been improved so that in case of many events within short time their waveshape recordings are accessible.
- Transients Trigger Settings: Fixed the issue that the predefined limit values for High/Medium/Low were in rare cases incorrect.
- The START button now stays amber if the Neutral current sensor is not connected for topologies with require a Neutral current sensor.
- AUX Configuration screen: Valid range of gain changed to $\pm 1,000,000$.
- Phasor screen: A digit has been added to the RMS voltage and current values to enable a higher resolution, e.g., to perform a manual calibration.
- Description of PQ Meter in Home screen improved: It logs until stopped and stores data of the last 24 hours.

Known Issues:

- If the device is connected to a Wi-Fi infrastructure with Wi-Fi hotspots which use the same SSID, data communication may be unstable.
- UI in Czech and Russian language show a few untranslated texts
- Downgrading new devices delivered March 2024 or later causes the touch panel to stop working. Upgrade to this firmware version V3.1 or higher to resolve this issue.

Fluke 177X Firmware V2.1 Release Notes

Date: 18 April 2023

New Features:

- Support for BNC Adapters and DC current clamps added.
- DC offset compensation of BNC Adapters and DC current clamps implemented. See *BNC Adapter Instructions*.

It 's recommended that the DC Offset Compensation should be repeated after inverting a current channel or after correcting the connections of the current probes digitally.

Improvements:

- Detection and repair of a misconfiguration of current ADCs (analog to digital convertors). The correct measurement range is used in all applicable cases.

Known Issues:

If the device is connected to a Wi-Fi infrastructure with Wi-Fi hotspots which use the same SSID, data communication may be unstable.

Fluke 177X Firmware V2.0 Release Notes

Date: 03 October 2022

New Features:

- Session trend graph screens for harmonics, interharmonics and suprahharmonics added.
- Session trend graph screens with limits added to the PQHealth screen.
- Energy (kWh, kWh+, kWh-, kVAh, and kvarh) added to the Power screen.
- User configurable option to store 100 harmonics and interharmonics added.
- Instrument screen lock and display brightness control added.
- Added support to use Fluke FC devices for the AUX channels, such as Fluke 3000 FC modules and Fluke 368 FC and 369 FC leakage current clamps.
- Support of LTE-4G module added.
- Added evaluation of current harmonics in the harmonic bar in the PQHealth screen when IEEE519 standard is selected.

Improvements:

- Improved labeling of parameters for clarity, e.g. THD40 in PQHealth, indicating that the THD uses harmonics up to the 40th according to the EN50160 standard.
- In addition to the gain/offset configuration, an alternative configuration of min/max range values has been added to the AUX channels.
- Fixed an issue where the bar height in the PQHealth screen did not always match the "Meisterkurve" for the mains signaling limit.
- Improved phase shift compensation of current clamps.

Known Issues:

If the device is connected to a WiFi infrastructure with WiFi hotspots which use the same SSID, data communication may be unstable.

Fluke 177X Firmware V1.2 Release Notes

Date: 20 April 2022

New Features:

- Added QR code screen to navigate to the product registration.

Improvements:

- In FW version 1.1.1 a Flicker lamp model voltage different to the nominal voltage caused an initialization error. This has been fixed.
- Improved visualization of min/max values in the Current THD graph.
- Fixed bug that the THC/TIC bar was not always visible.
- The user interface was sometimes slow during firmware updates and when closing a logging session. This has been fixed.
- Enabled fundamental power measurements on the Fluke 1773.

Known Issues:

It is strongly advised against downgrading devices shipped with firmware V1.2 to older versions, as this may result in hardware initialization errors or non-functioning Ethernet.

If the device is connected to a WiFi infrastructure with WiFi hotspots which use the same SSID, data communication may be unstable.

Fluke 177X Firmware V1.1.1 Release Notes

Date: 25 February 2022

New Features:

None

Improvements:

- Added translations for new features introduced with firmware V1.1.
- Fixed an issue that could cause wrong readings on neutral-ground voltage channel.
- Improved switching between time synchronization sources.
- Topology 2-element delta:
 - Fixed calculation of third current. This caused an additional error in unbalance.
 - If no sensor for the 3rd current was connected, then some parameters were not calculated. Fixed.
- Improved UI in session overview screen
- Fixed issue that the list of available templates was not refreshed after attaching a new USB flash drive.

Known Issues:

- If the device is connected to a WiFi infrastructure with WiFi hotspots which use the same SSID, data communication may be unstable.

Fluke 177X Firmware V1.1 Release Notes

Date: 11 February 2022

New Features:

- Tables with minimum, maximum and average values of PQ Meter and PQ Logger sessions added.
- Time plots for PQ Meter and PQ Logger sessions added.
- PQ Health Screen: added navigation to new session screens via Details button.
- Added session templates:

The settings of a PQ Meter or PQ Logger session can be saved to a USB flash drive for later use on a new session.

How to use templates:

From Home menu navigate to *Memory – Logging Sessions*. Use soft key *Template – Save to USB*. The template may be applied on a different instrument, but it needs to be the same model, e.g., a Fluke 1775.

The settings of a session that is already completed can be applied to a new session by selecting *Template - Use as Template*.

- Automatic switch from local UI to Remote Display.
A connection by a VNC client switches automatically to Remote Display. Pressing a button or tabbing on the screen switches back to the local UI.
To enable or disable the Remote Display navigate to *Settings – Communication Settings – Remote Display*.
- Added P_{ST} and P_{LT} to Flicker live table and graph screens
- Added transient peak values to event screens.
- Added Dutch and Swedish language support
- Added Japanese radio certification

Improvements:

- Added DC offset calibration feature to improve temperature influence of the voltage DC offset. For details refer to the Fluke 177x Calibration Manual.
- Accuracy improvement of iFlex and clamps on supra-harmonics (2-30kHz). For details refer to the Fluke 177x Product Specification document.
- Temperature drift improvement on Aux channels
- Improved touch panel sensitivity to avoid unintended actions by e.g., surrounding wires.
- Improved translation quality

- Improved navigation between session screens
- Improved stability of firmware update via WiFi
- Improved stability of data download via WiFi
- Various fixes of minor bugs

Known Issues:

- None

Fluke 177X Firmware V1.0.3 Release Notes

Date: 19 November 2021

New Features:

- Initial release for Fluke 1773.

Improvements:

- Improved battery fuel gauge firmware to prolong battery lifetime.
To update from previous firmware versions, disconnect the Analyzer from power and disconnect the battery for 1 minute. When the device is switched on again, the new firmware is programmed.
- Improved initialization of transient voltage ADCs
- Fixed issue that the session download via USB-C cable did not work.

Known Issues:

- None

Fluke 177X Firmware V1.0.2 Release Notes

Date: 18 October 2021

New Features:

- None

Improvements:

- Improved support for IEC 61000-4-30 Class A compliance testing

Known Issues:

- None

Fluke 177X Firmware V1.0.1 Release Notes

Date: 30 July 2021

New Features:

- None

Improvements:

- UI improvements
- Improved robustness to external electromagnetic interference
- Fixed occasionally occurring issue when programming battery fuel gauge and improved recovery of a disabled ("dead") battery
- Improved storage of remaining data when stopping a logging session
- Resetting to factory defaults now deletes the sessions on both media, the built-in flash memory as well as the SD card.
- WiFi passphrase screen: show clear-text passphrase instead of dots.
- Not all features of the voltage transient measurements were available on Fluke 1775. This has been fixed.

Fluke 177x Firmware V1.0 Release Notes

Date: 29 June 2021

New Features:

- Initial release for Fluke 1775 and Fluke 1777.