Instrument Security Procedures

Models:
Fluke 434-II, 435-II, 437-II, and 438-II (43x-II)

Product Name:
3-Phase Energy and Power Quality Analyzer

Instrument Description:
These Analyzers help you locate, predict, prevent and troubleshoot problems in power distribution systems.

Memory Description:
Fluke 43x-II products have the following memory devices:
1. RAM 8M x 16, U901, type: e.g., MT47H64M16HR-25IT:H, contains: temp storage of measuring data
2. Video RAM 256k x 16, D1001, type: e.g., CY62146EV30LL, contains: storage of data to be displayed on LCD-screen.
3. Flash-ROM 16M x 2, U1100, U1101, type: e.g., MW29W160EB, contains: the embedded software, calibration data, data for the settings (Config, Freq, Vnom, Limits) and Current Clamp data that differ from Factory Default.
4. FIFO (First In First Out) RAM 2kB, U801, type: e.g., SN74V235-7PAG, contains: data to be exchanged between DSP and Microcontroller.
5. SRAM 16 Mb x 2, D1100, D1103, type: e.g., CY62167DV30LL, contains: temporary data storage for microcontroller.
6. SD Memory Card. Contains: all datasets, screens, and logging data.

Memory Cleaning Instructions:
Ad 1. Memory contents erased at power-off. No user access.
Ad 2. Memory contents erased at power-off. No user access.
Ad 3. Flash memory: contents stay available at power off and disconnection of the Li-ion accumulator (can be loaded/exchanged with dedicated PC software that is exclusively available in manufacturing and Fluke service).

Note
The calibration data is generated when the 43x-II is sent through its calibration process and are fundamental to the meter operation.
To erase 43x-II settings that differ from Factory Default, do the following key operations:

1. Go to SETUP.
2. F1 – USER PREF.
3. F1 – FACTORY DEFAULTS.
4. F5 – YES (confirm menu).

Ad 4. Memory contents erased at power-off. No user access.
Ad 5. Memory contents erased at power-off. No user access.
Ad 6. There are two methods to remove measurement data from the 43x-II:

1. Remove the SD Card from the battery-compartment at the rear of the 43x-II:
   a. Open the compartment with a small screwdriver.
   b. Push the SD Card in the direction of the arrow and take it out of the 43x-II. All measurement data is removed from the 43x-II.
   c. Avoid touching the contacts of the Card with hands.
   d. When reinstalling the Card, take careful notice of the indicator in the battery compartment.

2. Reformat the SD memory card installed in the 43x-II with a confirm menu:
   a. Go to SETUP.
   b. F1 – USER PREF.
   c. F4 – FORMAT SD CARD.
   d. F5 – YES.