Instrument Security Procedures

Model:

Fluke Hydra 2620A

Product Name:

Data Acquisition Unit

Instrument Description:

The 2620A is a Data Acquisition Unit that measures DC and AC RMS voltage, temperature, resistance, and frequency. It is easy to set up and configure from the front panel. It includes bi-directional communication via RS-232C, which enables data logging to and control from a host computer. A remote IEEE-488 interface is also available.

Memory Description:

The 2620A has the following memory devices:

- An 8K x 8 bit SRAM in the Non-Volatile RAM/Real-time clock module on the A1 Main PCA. The SRAM contains the instrument configuration settings, plus minimum, maximum, and last Review readings for each channel; also, a portion is used as working memory by the microprocessor.

    1. The configuration settings are cleared when the Hydra instrument configuration is changed or cleared by remote commands or by a user from the front panel, as described in the procedure below.

    2. Review readings data are cleared automatically when the instrument's configuration is cleared or changed as described above.

    3. The working memory portion is cleared by the power up self-test when the Hydra unit is turned on.

- A 64 x 16 bit EEPROM chip on the Main PCA. This memory contains calibration constants. Data remains in this non-volatile memory until the unit is re-adjusted at a Calibration Lab. The EEPROM contains no user alterable data.

- A 64K X 8 bit EPROM chip on the Main PCA. This memory contains the Hydra unit's firmware operating code. The EPROM is factory-programmed Read-Only Memory and cannot be cleared.

- Microcontrollers on the A2 Display PCA and A3 A/D Converter PCA have internal RAM, plus masked ROM, EPROM, or Flash ROM, depending on the revisions. None of this memory is user accessible. Internal RAM is cleared when the unit is turned off. The masked ROM, EPROM, or Flash ROM (as appropriate to the revisions) contain firmware code for the microcontrollers, and cannot be cleared.

- The 2620A Data Acquisition Unit may have a -05 IEEE-488 Interface option. If so, the unit contains the optional A5 IEEE PCA, which has a GPIB Controller chip: this is a third-party pre-programmed microcontroller that has no user alterable memory.

Memory Cleaning Instructions:

To clear the Hydra 2620A configuration memory, first turn off the power switch. Then, hold in the CANCL button on the front panel while turning the power to the Hydra unit back on. The Hydra unit will self-test and then display "**OFF CH 0**". Note that this resets the instrument configuration, which also clears the Review memory, i.e. the stored MIN, MAX, and LAST values. (This information is from the 2620A Users Manual pages 3-4 and 3-23.)