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July 28, 2005

Destruction of Data in Non-Volatile Memory in the Keithley Model 580

The Keithley Model 580 contains memory devices to hold firmware code that is executed by an internal microprocessor to operate the product, save calibration constants, and store data for analysis. The following sections describe how the data stored in the memory devices, may be cleared or destroyed.

Description of memory devices and their use:

- 1. 1 of 8k by 8 bit EPROM: Stores firmware for the instrument. This part is in a socket.
- 2. 1 Microprocessor with 112 bytes internal RAM: Temporary storage location for use by the microprocessor while the unit is operating. This part is in a socket.
- 3. 1 of 1k by 4 bit Static RAM: Stores readings (measurement data). This part is soldered in place.
- 4. 1 of 16 bit by 16 bit serial nonvolatile RAM: Stores the calibration constants for the instrument. This part is soldered in place.
- 5. Only for units with the optional Model 1972 GPIB interface:
 - a. 1 of 4k by 8 bit EPROM: Stores firmware for the instrument. This part is in a socket.
 - b. 1 Microprocessor with 112 bytes internal RAM: Temporary storage location for use by the microprocessor while the unit is operating. This part is in a socket.

Procedure for clearing memory content:

- 1. 1 of 8k by 8 bit EPROM: The memory must be removed from unit. Remove cover from window of the integrated circuit. Place in a ultraviolet EPROM eraser for the time specified by the eraser. <u>Note: The Model 580 will be completely inoperable after this procedure.</u>
- 2. 1 Microprocessor with 112 bytes internal RAM: Turn off power for 1 minute.

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- 3. 1 of 1k by 4 bit Static RAM: Turn off power for 1 minute.
- 4. 1 of 16 by 16 bit serial nonvolatile RAM: This part is only programmed by the Model 580 firmware during the calibration process. To destroy the data, the chip must be removed (de-soldered) and physically destroyed. Note: the Model 580 will be completely inoperable after this procedure.
- 5. Only for units with the optional Model 1972 GPIB interface:
 - a. 1 of 4k by 8 bit EPROM: The memory must be removed from unit.

 Remove cover from window of the integrated circuit. Place in a ultraviolet EPROM eraser for the time specified by the eraser. *Note: The Model 1972 GPIB Interface will be completely inoperable after this procedure.*
 - b. 1 Microprocessor with 112 bytes internal RAM: Turn off power for 1 minute.

If you have any further questions or comments, please feel free to contact my office at anytime.

Regards,

William Pelster Director of Quality

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