

**GPS7 GPS Synchronization and Timecode Module
Declassification and Security
Instructions**

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Preface

This document describes how to clear or sanitize the data storage (memory) devices in the products listed below. The instructions also describe how to declassify an instrument that is not functioning. These procedures can be useful for customers with data security concerns.

Products This document applies to the GPS7 GPS Synchronization and Timecode Module used with the TG700 TV Signal Generator mainframe.

Related Documents *TG700 TV Signal Generator Platform Service Manual*, Tektronix part number 077-0230-XX, is available on the Tektronix Web site at www.tektronix.com/manuals

Terms The following terms may be used in this document:

- **Clear.** This removes data on media/memory before reusing it in a secured area. All reusable memory is cleared to deny access to previously stored information by standard means of access.
- **Erase.** This is equivalent to clear.
- **Media storage/data export device.** Any of several devices that can be used to store or export data from the instrument, such as a USB port.
- **Nonvolatile memory.** Data is retained when the instrument is powered off.
- **Power off.** Some instruments have a “Standby” mode, in which power is still supplied to the instrument. For the purpose of clearing data, putting the instrument in Standby mode does not qualify as powering off. For these products, you will need to either press a rear-panel OFF switch or remove the power source from the instrument.
- **Remove.** This is a physical means to clear the data by removing the memory device from the instrument. Instructions are available in the product Service Manual.
- **Sanitize.** This eradicates the data from media/memory so that the data cannot be recovered by other means or technology. This is typically used when the device will be moved (temporarily or permanently) from a secured area to a non-secured area.
- **User-modifiable.** The user can write to the memory device during normal instrument operation, using the instrument interface or remote control.

Clear and Sanitize Procedures

Memory Devices

The following table lists the nonvolatile memory devices in the module. Detailed procedures to clear or sanitize these devices are shown following the table.

Table 1: Nonvolatile Memory Devices

Type and minimum size	Function	May contain user data ¹	Data input method	Location	To clear	To sanitize
Flash memory 4 M X 8	Configuration of FPGA	No	Written by processor system from TG700 Main board	U0331	None	N/A No customer information can be stored in this flash memory
Flash memory 4 M X 8	Calibration for the module Stores leap second information	Yes. The values are a function of how the user calibrates the module and when it was last receiving the GPS signal	Stored during calibration Stores leap second information obtained by satellite	U0332	Manually calibrate the module back to the factory default values Allow the module to receive satellite information for 30 minutes to update the leap second field	Remove and destroy the memory device or destroy the entire board
Flash memory 4 M X 8	unused	No	None	U0741	None	None
GPS receiver assembly	Calculates timing and position information	Yes if operated in fixed mode	Location is stored when operated in fixed mode	Mounts above the main module board and connects to J12 with a ribbon cable, and to the antenna connector on the rear panel	Save a position from a position other than the one that was last saved. This will erase the previous position and save the new one	Remove and destroy the module or destroy the entire board

¹ During normal instrument operation.

Restore Factory Defaults Procedure

Restore the module settings to the factory default as follows:

1. Press the **MODULE** button until **TG700 Preset** appears.
2. Press the **ENTER** button. You will see the words **RECALL** appear.
3. Press the right or left arrow button until **Power On Default** appears.
4. Press the **ENTER** button.
5. Press the **CANCEL** button or the **MODULE** button to exit the Recall preset menu.

Troubleshooting

How to Clear or Sanitize a Non-Functional Instrument

To sanitize a non-functional instrument, remove the Main board and return the instrument to Tektronix for installation of a new Main board.

How to Recover from Clearing or Removing Memory from the Instrument

The module reloads the system software on start up. Perform the following procedure to recover the module:

1. Power up the module.
2. Calibrate the module as instructed in the *TG700 TV Signal Generator Platform Service Manual* (Tektronix part number 077-0230-XX).
3. Reconfigure the module for your specific application. Configure information can be found in the *TG700 TV Signal Generator Platform User Manual* (Tektronix part number 071-1970-XX, English; 071-1971-XX, Japanese).
4. Connect a GPS signal to the module and let it run for 30 minutes. This allows the leap second and position information to be reacquainted.