

# Tektronix Instrument Switch Declassification and Security Instructions





**Tektronix Instrument Switch  
Declassification and Security  
Instructions**

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## Preface

This document helps customers with data security concerns to sanitize or remove memory devices from the Tektronix Instrument Switch.

These products have data storage (memory) devices and data output devices. These instructions tell how to clear or sanitize the memory devices and disable the data output devices. The instructions also tell how to declassify an instrument that is not functioning.

## Reference

The procedures in this document are written to meet the requirements specified in:

- NISPOM, DoD 5220.22–M, Chapter 8
- ISFO Process Manual for Certification & Accreditation of Classified Systems under NISPOM

## Products

The following Tektronix products are covered by this document:

- Tektronix Instrument Switch

## Required documents

No external documents are required to perform the procedures in this document.

## Terms used in this document

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.
- **Instrument Declassification.** A term that refers to procedures that must be undertaken before an instrument can be removed from a secure environment. Declassification procedures include memory sanitization and memory removal, and sometimes both.
- **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.
- **Scrub.** This is equivalent to sanitize.
- **User Accessible.** User is able to directly retrieve the memory device contents.
- **User-modifiable.** User can write to the memory device during normal instrument operation, using the instrument interface or remote control.
- **Volatile memory.** Data is lost when the instrument is powered off.



## Device terms

The following terms are used with the memory devices in this document:

- **User data.** Describes the type of information stored in the device. Refers to waveforms or other measurement data representing signals connected to the instrument by users.
- **User settings.** Describes the type of information stored in the device. Refers to instrument settings that can be changed by the user.
- **Both.** Describes the type of information stored in the device. It means that both user data and user settings are stored in the device.
- **None.** Describes the type of information stored in the device. It means that neither user data nor user settings are stored in the device.
- **Directly.** Describes how data is modified. It means that the user can modify the data.
- **Indirectly.** Describes how data is modified. It means that the instrument system resources modify the data and that the user cannot modify the data.



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# Memory devices

## Volatile memory devices

### FPGA

Type and size	FPGA
Function	Processor
Type of user information stored	None
Backed-up by battery	No
Method of modification	Directly
Data input method	Written by processor system
Location	Instrument switch board
User accessible	Yes
To clear	Remove power from the instrument for at least 20 seconds.
Process to sanitize	Remove power from the instrument for at least 20 seconds.

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## Nonvolatile memory devices

### Flash memory

<b>Type and size</b>	Flash memory, 2 MB
<b>Function</b>	Holds instrument operational firmware image
<b>Type of user information stored</b>	None
<b>Method of modification</b>	Indirect
<b>Data input method</b>	Firmware update via PC or BSA utility.
<b>Location</b>	Instrument switch board
<b>User accessible</b>	Yes
<b>To clear</b>	N/A, does not contain user data or user settings. Clearing would disable instrument functionality.
<b>Process to sanitize</b>	N/A, does not contain user data or user settings. Sanitizing would disable instrument functionality.

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### USB FIFO

<b>Type and size</b>	USB FIFO
<b>Function</b>	Holds product/vendor ID
<b>Type of user information stored</b>	None
<b>Method of modification</b>	Indirect
<b>Data input method</b>	Firmware update via PC or BSA utility.
<b>Location</b>	Instrument switch board
<b>User accessible</b>	Yes
<b>To clear</b>	N/A, does not contain user data or user settings. Clearing would disable instrument functionality.
<b>Process to sanitize</b>	N/A, does not contain user data or user settings. Sanitizing would disable instrument functionality.

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## Media and data export devices

### USB device port

<b>Type and size</b>	USB device port
<b>Function</b>	Supports remote control and data transfer to a PC or BSA instrument.
<b>Method of modification</b>	Directly
<b>Data input method</b>	Remote control
<b>Location</b>	USB device port on rear of instrument
<b>User accessible</b>	Yes
<b>Process to disable</b>	The USB device port cannot be disabled.

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## Clear or sanitize a non-functional instrument

No user data is stored on the instrument when the power is off. There are no user procedures to sanitize the instrument.

### Charges

Replacement of any missing hardware will be charged according to the rate at the time of replacement.

