# **Tektronix**<sup>®</sup>

RSA500A and RSA600A Series Real-Time Spectrum Analyzers Declassification and Security

Instructions

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#### **Contacting Tektronix**

Tektronix, Inc. 14150 SW Karl Braun Drive P.O. Box 500 Beaverton, OR 97077 USA

For product information, sales, service, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit www.tek.com to find contacts in your area.

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# Preface

	This document helps customers with data security concerns to sanitize or remove memory devices from the Tektronix RSA500A Series, and RSA600A Series Real-Time Spectrum Analyzers.				
	This product has data storage (memory) devices and data output devices (USB ports). 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				
	<ul> <li>ISFO Process Manual for Certification &amp; Accreditation of Classified Systems under NISPOM</li> </ul>				
Products	This document covers the following Tektronix products:				
	RSA503A				
	RSA507A				
	RSA513A				
	RSA518A				
	RSA603A				
	RSA607A				
Required documents	No external documents are required to perform the procedures in this document.				
Terms that may be used in	The following terms may be used in this document:				
this document	<ul> <li>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.</li> </ul>				
	<b>Erase.</b> 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. The user can write to the memory device during normal instrument operation, using the instrument interface or remote control.
- User-modifiable. The 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** 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.

### **Memory devices**

### Volatile memory devices

Type and min. size	Function	Type of user info stored	Backed up by battery	Method of modification	Data Input method	Location	User accessible	To clear	To sanitize
CYUSB3014	USB3 interface	Spectrum data in FIFOs	No	Run the instrument	Firmware operations	U3001	No	Disconnect power for at least 5 seconds.	Disconnect power for at least 5 seconds.

# Non-volatile memory devices

Type and min. size	Function	Type of user info stored	Method of modification	Data Input method	Location	User accessible	To clear	To sanitize
16 MB Flash	Holds USB and FPGA images, calibration constants, and board ID	None	USB 3.0	Firmware operations	U3003	No	Not applicable. Does not contain user data or settings. Clearing would disable instrument functionality.	Not applicable. Does not contain user data or settings. Clearing would disable instrument functionality.
16 MB Flash (RSA500P instruments only)	Holds FPGA image and calibration constants	None	USB 3.0	Firmware operations	U1201	No	Not applicable. Does not contain user data or settings. Clearing would disable instrument functionality.	Not applicable. Does not contain user data or settings. Clearing would disable instrument functionality.

#### Data export devices

There are no media or export devices that require declassification or security procedures with this product.

### **Clear or sanitize a non-functional instrument**

If your instrument is not functioning, return the instrument to Tektronix for repair. No user data is stored on the instrument when the power is removed. Clearing or sanitizing the instrument is not applicable.

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