RSA3303A & RSA3308A
Real-Time Spectrum Analyzers
Declassification and Security Instructions

www.tektronix.com
071-2222-00

Tektronix

Contacting Tektronix

Tektronix, Inc.
14200 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.tektronix.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 RSA3303A and RSA3308A Real-Time Spectrum Analyzers.

These products have 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.

Products

The following Tektronix products are covered by this document:

RSA3303A

RSA3308A

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.
- **Scrub.** This is equivalent to sanitize.
- **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.

Clear and Sanitize Procedures

Memory Devices

The following tables list the volatile and nonvolatile memory devices in the standard instrument and listed options. Detailed procedures to clear or sanitize these devices, if any, are shown following each table.

Table 1: Volatile Memory Devices

Type and min. size	Function	User Modifiable	Input method	Location	Process to sanitize
SDRAM Standard: 64MB, Option 02: 256MB	Holds active acquisition data	No	Firmware operations	A40 board	Remove power from the instrument for at least 20 seconds.

Table 2: Nonvolatile Memory Devices

Type and min. size	Function	User Modifiable	Input method	Location	Process to clear	Process to sanitize
40 GB Fixed Hard Drive	Holds instrument operating system and application software. Holds all user-storable data such as waveforms, measurement results, and instrument settings. (Operating system restore image and calibration data are stored on the D drive.)	Yes	Firmware operations, user input	Internal	Perform a recovery procedure to reinstall the operating system and application software. After performing the recovery procedure erase the free space on the hard drive with commercial erasure software.	Remove the hard drive. Store the removed hard drive in a secure area or destroy it. (See page 2, *Fixed Hard Drive Removal*.) When it is removed, no user data remains in the instrument.

Clearing Hard Disk Drives

If your organization's security protocols allow the use of software to purge or sanitize hard drives, you can use commercial software to erase free space on the hard drive before sending the instrument out for upgrades or repair. Follow the instructions that come with the software to ensure that the erasure of sensitive data from the hard drive complies with your organization's security protocols.

Sequence for clearing secure data from a hard drive:

1. Perform a System Recovery.
2. Upgrade the instrument application software if necessary.
3. Erase the free space on the hard drive using commercial software.

Fixed Hard Drive Removal

For a detailed removal and replacement procedure for the fixed hard drive, see the *RSA3303A & RSA3308A 3GHz & 8 GHz Real-Time Spectrum Analyzers Service Manual*, Tektronix part number 071-1412-XX. Refer to the Removal and Installation Procedures section of the manual.

WARNING. *Only qualified service personnel should perform the hard drive removal procedure. Read the Service Safety Summary and the General Safety Summary in the RSA3303A & RSA3308A 3GHz & 8 GHz Real-Time Spectrum Analyzers Service Manual (Tektronix part number 071-1412-XX) before proceeding.*

WARNING. *Before working on the spectrum analyzer, disconnect the power cord from the line voltage source. Failure to do so could cause serious injury or death.*

CAUTION. *To avoid damaging the hard drive, perform the procedure in a static-safe environment with proper electro-static discharge controls in place.*

Media and Data Export Devices

Table 3: Media and Data Export Devices

Type and min. size	Function	User Modifiable	Input method	Location	Process to disable
720 KB/1.44 MB floppy disk drive	Holds all user-storable data such as waveforms, measurement results, and instrument settings.	Yes	Firmware operations, user input	Side panel	Format any disks (do not use “Quick Format”) and remove them from the drive. Store the disks or destroy them.
USB device ports	Holds user-storable data such as waveforms, measurement results, and instrument settings.	Yes	User Writeable	Side panel	
LAN Ethernet Connection	Supports remote control and data transfer.	N/A	Remote control via TekVISA	Side panel	Disconnect from Network cable.
GPIB connector	Data transfer.	N/A	Remote control	Rear panel	N/A

Troubleshooting

How to Clear or Sanitize a Non-Functional Instrument

If your instrument is not functioning, perform the following actions and return the instrument for Tektronix for repair. Describe the initial problem with the product. Tektronix will install replacement parts and then repair and return the instrument.

Hard Disk Drives Remove the internal hard disk using the procedures in the *RSA3303A & RSA3308A 3 GHz & 8 GHz Real-Time Spectrum Analyzers Service Manual* (Tektronix part number 071-1412-XX).

Floppy Disk Drive Remove any disk in the drive. Store the disk or destroy it.

External Memory Devices Remove any USB flash drives or external hard drives from the instrument.