

**AFG1000 Series  
Declassification and Security  
Instructions**

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# Table of Contents

Preface .....	iii
---------------	-----

## Memory devices

Volatile memory devices .....	1
Nonvolatile memory devices .....	1

## Built-in security features

Secure .....	3
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## Clear and sanitize procedures

Clear Flash procedure .....	5
-----------------------------	---

## Clear or sanitize a non-functional instrument

USB Flash drive .....	7
Charges .....	7



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## Preface

This document helps customers with data security concerns to sanitize or remove memory devices from the Tektronix AFG1000 Series Arbitrary Function Generators.

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:

- AFG1022
- AFG1062

## 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.
- **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

The following sections lists the volatile and nonvolatile memory devices in the instrument.

## Volatile memory devices

### DDR2\_RAM

<b>Type and size</b>	16 x 32 M
<b>Function</b>	Microprocessor system memory
<b>User modifiable</b>	No
<b>Data input method</b>	Written by processor system
<b>Location</b>	U82, U32
<b>User accessible</b>	No
<b>Process to sanitize</b>	Turn off instrument power

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## Nonvolatile memory devices

<b>Device name</b>	Flash
<b>Type and size</b>	8 x 128 M
<b>Type of user information stored</b>	User data, user settings, user waveforms
<b>User modifiable</b>	Yes
<b>Data input method</b>	Firmware operations
<b>Location</b>	U32
<b>Process to sanitize</b>	Refer to the <a href="#">Clear Flash procedure</a> on page 5

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## Built-in security features

The AFG3000 Series Arbitrary Function Generators have the following security functions:

- Secure

### Secure

To erase confidential data from your AFG1000 Series Arbitrary Function Generator, use the Secure function. [Clear Flash procedure](#) on page 5 It does the following:

- Erases all user waveforms stored in all user memories.
- Secure does not erase or change factory calibration constants.



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# Clear and sanitize procedures

## Clear Flash procedure

Use this Secure function to erase confidential data from your instrument. This procedure does not erase or change factory calibration constants.

1. Power on the instrument.
2. Select **Arab** > **others** > **File\_browse**.
3. Select **Enter**.
4. Select **Secure**.

The user waveforms will be erased.



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## Clear or sanitize a non-functional instrument

If your instrument is not functioning, perform the following actions. Refer to your organization's policies regarding storage or disposal of any removed items.

### USB Flash drive

This is the start of your concept.

Remove any attached USB flash drives from the instrument before returning the instrument for repair.

### Charges

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

