PWS2000 Series
Linear DC Power Supplies
Declassification and Security
Instructions
# Table of Contents

Preface ................................................................................................................................. iii  
Clear and Sanitize Procedures ......................................................................................... 1  
  Memory Devices ........................................................................................................... 1  
Troubleshooting .............................................................................................................. 3  
  How to Clear or Sanitize a Nonfunctional Instrument .................................................. 3  
  How to Recover from Sanitizing the Nonvolatile Memory of the Instrument .............. 3
Preface

This document helps customers with data security concerns to clear or sanitize existing memory devices in the PWS2000 Series Linear DC Power Supplies and to declassify instruments that are not functioning.

Products

The following Tektronix products are covered by this document:

- PWS2185
- PWS2323
- PWS2326
- PWS2721

Related Documents

The following table lists the documentation that is available for these products and shows where you can find it: in a printed manual, on the product documentation CD-ROM, or on the Tektronix Web site.

<table>
<thead>
<tr>
<th>Table i: Product documentation</th>
<th>Item</th>
<th>Purpose</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>User Manual</td>
<td>Provides operation and application information. This manual is available in English, Spanish, French, German, Portuguese, Italian, Russian, Korean, Simplified Chinese, and Traditional Chinese.</td>
<td>Product Documentation CD and available at <a href="http://www.tektronix.com/manuals">www.tektronix.com/manuals</a></td>
<td></td>
</tr>
</tbody>
</table>

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 nonvolatile and volatile memory devices. Detailed procedures to sanitize or clear these devices are shown after the tables.

Table 1: Nonvolatile memory devices

<table>
<thead>
<tr>
<th>Type and minimum size</th>
<th>Function</th>
<th>User modifiable</th>
<th>Data input method</th>
<th>Location</th>
<th>To clear</th>
<th>To sanitize</th>
</tr>
</thead>
<tbody>
<tr>
<td>EEPROM, 256k x 8 bit</td>
<td>Current setup, saved setups, and calibration constants</td>
<td>Yes</td>
<td>Firmware operations and user input</td>
<td>Main board</td>
<td>See Clear EEPROM Procedure following this table</td>
<td></td>
</tr>
<tr>
<td>STM32F103C98T6, 64k –128k Flash</td>
<td>No</td>
<td>Firmware update</td>
<td>Main board</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C8051F350, 8k Flash</td>
<td>No</td>
<td>Firmware update</td>
<td>Main board</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Volatile memory devices

<table>
<thead>
<tr>
<th>Type and minimum size</th>
<th>Function</th>
<th>User modifiable</th>
<th>Data input method</th>
<th>Location</th>
<th>To clear</th>
<th>To sanitize</th>
</tr>
</thead>
<tbody>
<tr>
<td>STM32F103C98T6, 20k SRAM</td>
<td>No</td>
<td>Firmware operations</td>
<td>Main board</td>
<td>Cycle power with a minimum of 15 seconds off</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C8051F350, 768b SRAM</td>
<td>No</td>
<td>Firmware operations</td>
<td>Main board</td>
<td>Cycle power with a minimum of 15 seconds off</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clear Flash and EEPROM Procedure

1. Press the front-panel **Enter** button.
2. Press the front-panel **ESC** button.
3. Press the front-panel **2** button.

Clear STM32F103C98T6 and C8051F350 Procedure

1. Press the front-panel power button to turn the instrument off.
2. Wait at least 15 seconds before turning the instrument back on.
Troubleshooting

How to Clear or Sanitize a Nonfunctional Instrument

To sanitize a nonfunctional instrument, remove the Main board and return the instrument to Tektronix for repair or replacement.

How to Recover from Sanitizing the Nonvolatile Memory of the Instrument

After performing the Clear Flash and EEPROM Procedure, the power supply will return to the factory default setting. Therefore, a recovery procedure is not necessary.