# ECO8000 Series
# Automatic Changeover Unit
# Declassification and Security Instructions

077-0879-00

Tektronix

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# Preface

This document helps users with data security concerns to sanitize or remove memory devices from the Tektronix ECO8000 Series Automatic Changeover Units.

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 the following:

- 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:

- ECO8000 Automatic Changeover Unit
- ECO8020 Automatic Changeover Unit

### Required documents

To perform the procedures in this document, you will need to have access to the ECO8000 Series manuals listed below. These manuals are available on the Tektronix Web site at www.tektronix.com/downloads.

| Document | Tektronix part number |
|---|---|
| ECO8000 Series User Manual | 071-3221-xx (English)<br>077-0873-xx (Japanese)<br>077-0874-xx (Russian) |
| ECO8000 Series Service Manual | 077-0880-xx |

### 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.

# Memory devices

The following sections 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 included in the *Clear and sanitize procedures* section.

## Volatile memory devices

**AM3352 processor**

| | |
|---|---|
| **Type and size** | 32-bit embedded processor |
| **Function** | Main processor. Runs menus, display and remote access. |
| **Type of user information stored** | Data and settings |
| **Backed-up by battery** | No |
| **Method of modification** | Directly and indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Processor board, U9 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |

**MT47H128 RAM**

| | |
|---|---|
| **Type and size** | 128 M x 16 DDR2 RAM |
| **Function** | Memory for the main processor |
| **Type of user information stored** | Data and settings |
| **Backed-up by battery** | No |
| **Method of modification** | Indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Processor board, U8 |
| **User accessible** | Yes |
| **To clear** | Cycle power on the instrument. |
| **Process to sanitize** | Cycle power on the instrument three times. |

**MC9S08 microcontroller**

| | |
|---|---|
| **Type and size** | Microcontroller with 32 K on-board flash |
| **Function** | Run the redundant power system |
| **Type of user information stored** | Settings |
| **Backed-up by battery** | No |
| **Method of modification** | Directly and indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Combiner board, U100 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Set the preferred (active) supply to PS1 (Option DPW only)* on page 15.<br>Perform the procedure *Clear the Event Log* on page 13.<br>Cycle power on the instrument. |
| **Process to sanitize** | Perform the procedure *Set the preferred (active) supply to PS1 (Option DPW only)* on page 15.<br>Perform the procedure *Clear the Event Log* on page 13.<br>Cycle power on the instrument. |

**ISL12020 Real-time clock**

| | |
|---|---|
| **Type and size** | Real-time clock with 128 bytes fo user SRAM |
| **Function** | Stores date and time |
| **Type of user information stored** | Settings |
| **Backed-up by battery** | Yes |
| **Method of modification** | Directly |
| **Data input method** | UI, remote |
| **Location** | Processor, U11 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Reset the date and time settings* on page 16.<br>Cycle power on the instrument. |
| **Process to sanitize** | Perform the procedure *Reset the date and time settings* on page 16.<br>Cycle power on the instrument. |

# Nonvolatile memory devices

**EMP2210F256CN5**

| | |
|---|---|
| **Type and size** | 2210 logic element CPLD |
| **Function** | Run basic ECO operation, left keyboard, and restore settings from EEPROM on power-up. |
| **Type of user information stored** | Data and settings |
| **Method of modification** | Directly and indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Main board, U3 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |

**AT2512B EEPROM**

| | |
|---|---|
| **Type and size** | 16 K x 8 serial EEPROM |
| **Function** | Store ECO state and LTC channel settings |
| **Type of user information stored** | Settings |
| **Method of modification** | Directly and indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Main board, U76 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Replace the part. |

**28F00AP30 flash memory**

| | |
|---|---|
| **Type and size** | 64 M x 16 flash memory |
| **Function** | Stores boot, OS, and application code for the main processor |
| **Type of user information stored** | None |
| **Method of modification** | None |
| **Data input method** | None |
| **Location** | Processor board, U7 |
| **User accessible** | No |

| | |
|---|---|
| **To clear** | N/A |
| **Process to sanitize** | N/A |

**MR25H10 MRAM**

| | |
|---|---|
| **Type and size** | 128 K x 8 MRAM |
| **Function** | Stores settings such as channel names and all menu selections such as IP settings. Also stores Option Key and Event Log. Does not store channel settings that are needed on fast boot. |
| **Type of user information stored** | Data and settings |
| **Method of modification** | Directly and indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Processor board, U1 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Replace the part. |

**AT24C01C EEPROM**

| | |
|---|---|
| **Type and size** | 128 x 8 serial EEPROM |
| **Function** | Store power supply module build on date, power supply part number and usage hours, data logging for the supply module |
| **Type of user information stored** | Data |
| **Method of modification** | Indirectly |
| **Data input method** | Usage |
| **Location** | Power module board, U1 |
| **User accessible** | Yes |
| **To clear** | Replace the part or the power supply module. |
| **Process to sanitize** | Replace the part or the power supply module. |

**AT15128B EEPROM**

| | |
|---|---|
| **Type and size** | 16 K x 8 serial EEPROM |
| **Function** | Channel parameters such as Enable Trigger, threshold, which must restore quickly on boot up |
| **Type of user information stored** | Settings |
| **Method of modification** | Directly |
| **Data input method** | UI, remote |
| **Location** | Ref 3 board, U14 |
| **User accessible** | Yes |

| | |
|---|---|
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Replace the part. |

**AT15128B EEPROM**

| | |
|---|---|
| **Type and size** | 16 K x 8 serial EEPROM |
| **Function** | Channel parameters such as Enable Trigger, threshold, which must restore quickly on boot up |
| **Type of user information stored** | Settings |
| **Method of modification** | Directly |
| **Data input method** | UI, remote |
| **Location** | Ref 5 board, U14 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Replace the part. |

**AT15128B EEPROM**

| | |
|---|---|
| **Type and size** | 16 K x 8 serial EEPROM |
| **Function** | Channel parameters such as Enable Trigger, threshold, which must restore quickly on boot up |
| **Type of user information stored** | Settings |
| **Method of modification** | Directly |
| **Data input method** | UI, remote |
| **Location** | Ref 3 board, U8 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Replace the part. |

**AT15128B EEPROM**

| | |
|---|---|
| **Type and size** | 16 K x 8 serial EEPROM |
| **Function** | Channel parameters such as Enable Trigger, threshold, which must restore quickly on boot up |
| **Type of user information stored** | Settings |
| **Method of modification** | Directly |
| **Data input method** | UI, remote |
| **Location** | Ref 5 board, U8 |
| **User accessible** | Yes |

| | |
|---|---|
| **To clear** | Perform the procedure *Activate the hardware initialization* on page 7.<br>Perform the procedure *Return instrument settings to the factory default settings* on page 7.<br>Cycle power on the instrument. |
| **Process to sanitize** | Replace the part. |

**MC9S08 microcontroller**

| | |
|---|---|
| **Type and size** | Microcontroller with 32 K on-board flash |
| **Function** | Run the redundant power system |
| **Type of user information stored** | Settings |
| **Method of modification** | Directly and indirectly |
| **Data input method** | UI, remote, input signals |
| **Location** | Controller board, U100 |
| **User accessible** | Yes |
| **To clear** | Perform the procedure *Set the preferred (active) supply to PS1 (Option DPW only)* on page 15.<br>Cycle power on the instrument. |
| **Process to sanitize** | Perform the procedure *Set the preferred (active) supply to PS1 (Option DPW only)* on page 15.<br>Cycle power on the instrument. |

# Procedures

The following procedures assume that the instrument is powered on.

## Activate the hardware initialization

1. Press and hold the **PANEL ENABLE** button for about four seconds to enable the front-panel control buttons. The instrument beeps to indicate the change in the enable/disable status.
2. Press the **MANUAL MODE** button to set the instrument to Manual mode.
3. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
4. Press the up (▲) arrow button to select **INITIALIZE HW**.
5. Press the **ENTER** button to start the process, and press **ENTER** again at the confirmation prompt to perform the hardware initialization of the hardware.

## Return instrument settings to the factory default settings

First perform the *Activate the hardware initialization* procedure, and then perform each of the following procedures to return all of the instrument settings to the factory default settings:

- *Reset channel labels* on page 7
- *Reset SNMP event-reporting parameters* on page 9
- *Reset email event-reporting parameters* on page 10
- *Reset GPI event-reporting parameters* on page 12
- *Reset beeper event-reporting parameters* on page 13
- *Clear the Event Log* on page 13
- *Reset network and Web interface parameters* on page 14
- *Set the preferred (active) supply to PS1 (Option DPW only)* on page 15
- *Reset the date and time settings* on page 16

### Reset channel labels

When you perform the procedure *Activate the hardware initialization*, all of the channel parameters are returned to their factory default settings except for the channel labels. Perform the following procedure to return the channel labels to the factory default values:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select the CHANNEL menu.
3. Press the left (◄) or right (►) arrow button to select **CH 1**.

4. Check that the second line of the display reads **User Label 1**.
5. If the channel label is not **User Label 1**, then perform the following steps to reset the channel label:
   a. Press the **ENTER** button to enter the submenu for BNC channel 1.
   b. Press the up (▲) or down (▼) arrow button to select **CH 1 LABEL**, and then press the **ENTER** button to enter the label edit mode.
   c. Press the left (◄) or right (►) arrow button to select a label digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the label until the label reads **User Label 1**, with the number matching the channel number.
   d. After you edit the channel label, press the **ENTER** button to implement the change.
   e. Press the **BACK** button to exit the selected channel menu.
6. For each installed BNC channel, press the right (►) arrow button to select the next channel and repeat steps 4 and 5. For each channel, the channel number and user label number should match.
7. If option LTC is installed, press the left (◄) or right (►) arrow button to select **LTC 1**.
8. Check that the second line of the display reads **Ltc 1**.
9. If the channel label is not **Ltc 1**, then perform the following steps to reset the channel label:
   a. Press the **ENTER** button to enter the submenu for LTC channel 1.
   b. Press the up (▲) or down (▼) arrow button to select **LTC 1 LABEL**, and then press the **ENTER** button to enter the label edit mode.
   c. Press the left (◄) or right (►) arrow button to select a label digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the label until the label reads **Ltc 1**, with the number matching the channel number.
   d. After you edit the channel label, press the **ENTER** button to implement the change.
   e. Press the **BACK** button to exit the selected channel menu.
10. Repeat steps 8 and 9 for each of the other three LTC channels. For each channel, the channel number and user label number should match.

### Reset SNMP event-reporting parameters

Perform the following steps to reset each of the SNMP event-reporting parameters back to the factory default settings:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
3. Press the up (▲) or down (▼) arrow button to select **SNMP CONFIG**, and then press the **ENTER** button to access the SNMP CONFIG submenu.
4. Press the up (▲) or down (▼) arrow button to select **TRAP EVENTS**, and then press the **ENTER** button to access the TRAP EVENTS submenu. The PRIMARY FAULT event should be displayed.
5. Check that the second line of the display reads **Trap Disabled**.
6. If the display reads Trap Enabled, press the left (◄) or right (►) arrow button to select **TRAP DISABLED** and then press the **ENTER** button to disable the trap.
7. Press the down (▼) arrow button to select the next event type.
8. For each event, repeats steps 5 and 6, changing the event setting to **Trap Disabled**.
9. Press the **BACK** button to exit the TRAP EVENTS submenu.
10. Press the down (▼) arrow button to select **PUBLIC COMMUNITY**.
11. Check that the second line of the display reads **public**.
12. If the public community string value is not **public**, then perform the following steps to reset the string value:
    a. Press the **ENTER** button to enter the string edit mode.
    b. Press the left (◄) or right (►) arrow button to select a string digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the string until the string reads **public**.
    c. After you edit the string value, press the **ENTER** button to implement the change and exit the string edit mode.
13. Press the down (▼) arrow button to select **PRIVATE COMMUNITY**.
14. Check that the second line of the display reads **private**.
15. If the public community string value is not **private**, then perform the following steps to reset the string value:
    a. Press the **ENTER** button to enter the string edit mode.
    b. Press the left (◄) or right (►) arrow button to select a string digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the string until the string reads **private**.
    c. After you edit the string value, press the **ENTER** button to implement the change and exit the string edit mode.

16. Press the down (▼) arrow button to select **TRAP ADDRESS 1**.
17. Check that the second line of the display reads **000.000.000.000**.
18. If the trap address is not **000.000.000.000**, then perform the following steps to reset the trap address:
    a. Press the **ENTER** button to enter the address edit mode.
    b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the address until the address reads **000.000.000.000**.
    c. After you edit the trap address, press the **ENTER** button to implement the change and exit the address edit mode.
19. Press the down (▼) arrow button to select the next trap address.
20. For trap addresses 2 – 4, repeat steps 17 and 18.
21. Press the **BACK** button to exit the SNMP CONFIG submenu.
22. Press the **BACK** button to exit the SYSTEM CONFIG submenu.

### Reset email event-reporting parameters

Perform the following steps to reset each of the email event-reporting parameters back to the factory default settings:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
3. Press the up (▲) or down (▼) arrow button to select **EMAIL REPORTING**, and then press the **ENTER** button to access the EMAIL REPORTING submenu. The EMAIL SERVER ADDR selection should be displayed.
4. Check that the second line of the display reads **000.000.000.000**.
5. If the email server address is not **000.000.000.000**, then perform the following steps to reset the server address:
    a. Press the **ENTER** button to enter the address edit mode.
    b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the string until the string reads **000.000.000.000**.
    c. After you edit the string value, press the **ENTER** button to implement the change and exit the address edit mode.
6. Press the down (▼) arrow button to select **EMAIL LOGIN NAME**.
7. Check that the second line of the display reads **user1**.

8. If the email login name is not **user1**, then perform the following steps to reset the login name:
   a. Press the **ENTER** button to enter the name edit mode.
   b. Press the left (◄) or right (►) arrow button to select a name digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the name until the name reads **user1**.
   c. After you edit the login name, press the **ENTER** button to implement the change and exit the name edit mode.
9. Press the down (▼) arrow button to select **EMAIL PASSWORD**.
10. Perform the following steps to reset the email password:
    a. Press the **ENTER** button to enter the password edit mode.
    b. Press the left (◄) or right (►) arrow button to select a password digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the password until the password is **welcome**. The value of each password character will appear briefly as you change the character before returning to the * (asterisk) character.
    c. After you edit the password, press the **ENTER** button to implement the change and exit the password edit mode.
11. Press the down (▼) arrow button to select **EMAIL ADDRESS FROM**.
12. Check that the second line of the display reads **eco1@company.com**.
13. If the email address is not **eco1@company.com**, then perform the following steps to reset the email address:
    a. Press the **ENTER** button to enter the address edit mode.
    b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the string until the string reads **eco1@company.com**.
    c. After you edit the email address, press the **ENTER** button to implement the change and exit the address edit mode.
14. Press the down (▼) arrow button to select **EMAIL ADDRESS TO**.
15. Check that the second line of the display reads **user1@company.com**.
16. If the email address is not **user1@company.com**, then perform the following steps to reset the email address:
    a. Press the **ENTER** button to enter the address edit mode.
    b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value

of the selected digit. Repeat for each digit of the string until the string reads **user1@company.com**.

c. After you edit the email address, press the **ENTER** button to implement the change and exit the address edit mode.

17. Press the down (▼) arrow button to select **EMAIL EVENTS**, and then press the **ENTER** button to access the EMAIL EVENTS submenu. The PRIMARY FAULT event should be displayed.
18. Check that the second line of the display reads **Email Disabled**.
19. If the display reads Email Enabled, press the left (◄) or right (►) arrow button to select **Email DISABLED** and then press the **ENTER** button to disable the email event.
20. Press the down (▼) arrow button to select the next event type.
21. For each event, repeats steps 19 and 20, changing event setting to **Email Disabled**.
22. Press the **BACK** button to exit the EMAIL EVENTS submenu.
23. Press the **BACK** button to exit the EMAIL REPORTING submenu.
24. Press the **BACK** button to exit the SYSTEM CONFIG submenu.

### Reset GPI event-reporting parameters

Perform the following steps to reset each of the GPI event-reporting parameters back to the factory default settings:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
3. Press the up (▲) or down (▼) arrow button to select **GPI EVENTS**, and then press the **ENTER** button to access the GPI EVENTS submenu. The PRIMARY FAULT event should be displayed.
4. Check that the second line of the display reads **GPI Disabled**.
5. If the display reads GPI Enabled, press the left (◄) or right (►) arrow button to select **GPI DISABLED** and then press the **ENTER** button to disable the GPI event.
6. Press the down (▼) arrow button to select the next event type.
7. For each event, repeats steps 5 and 6, changing event setting to **GPI Disabled**.
8. Press the **BACK** button to exit the GPI EVENTS submenu.
9. Press the **BACK** button to exit the SYSTEM CONFIG menu.

### Reset beeper event-reporting parameters

Perform the following steps to reset each of the beeper event-reporting parameters back to the factory default settings:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
3. Press the up (▲) or down (▼) arrow button to select **BEEPER EVENTS**, and then press the **ENTER** button to access the BEEPER EVENTS submenu. The PRIMARY FAULT event should be displayed.
4. Check that the second line of the display reads **BEEPER Disabled**.
5. If the display reads BEEPER Enabled, press the left (◄) or right (►) arrow button to select **BEEPER DISABLED** and then press the **ENTER** button to disable the beeper event.
6. Press the down (▼) arrow button to select the next event type.
7. For each event, repeats steps 5 and 6, changing event setting to **BEEPER Disabled**.
8. Press the **BACK** button to exit the BEEPER EVENTS submenu.
9. Press the **BACK** button to exit the SYSTEM CONFIG menu.

### Clear the Event Log

Perform the following steps to clear the Event Log:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **STATUS**, and then press the **ENTER** button to access the STATUS menu.
3. Press the up (▲) or down (▼) arrow button to select **CLEAR EVENT LOG**.
4. Press the **ENTER** button to start the process, and press **ENTER** again at the confirmation prompt to clear the Event Log.
5. Press the **BACK** button to exit the STATUS menu.

### Reset network and Web interface parameters

Perform the following steps to reset each of the network parameters back to the factory default settings:

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
3. Press the up (▲) or down (▼) arrow button to select **NETWORK CONFIG**, and then press the **ENTER** button to access the NETWORK CONFIG submenu. The DHCP parameter should be displayed.
4. Check that the second line of the display reads **Disable**.
5. If the display reads Enable, press the left (◄) or right (►) arrow button to select **DISABLE** and then press the **ENTER** button to disable DHCP service.
6. Press the down (▼) arrow button to select **IP ADDRESS**.
7. Check that the second line of the display reads **192.168.1.1**.
8. If the IP address is not 192.168.1.1, then perform the following steps to reset the address:
   a. Press the **ENTER** button to enter the address edit mode.
   b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the address until the address reads **192.168.1.1**.
   c. After you edit the IP address, press the **ENTER** button to implement the change and exit the address edit mode.
9. Press the down (▼) arrow button to select **SUBNET MASK**.
10. Check that the second line of the display reads **255.255.255.0**.
11. If the subnet mask address is not 255.255.255.0, then perform the following steps to reset the address:
    a. Press the **ENTER** button to enter the address edit mode.
    b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit of the address until the address reads **255.255.255.0**.
    c. After you edit the subnet mask address, press the **ENTER** button to implement the change and exit the address edit mode.
12. Press the down (▼) arrow button to select **GATEWAY ADDRESS**.
13. Check that the second line of the display reads **192.168.1.1**.
14. If the gateway address is not 192.168.1.1, then perform the following steps to reset the address:
    a. Press the **ENTER** button to enter the address edit mode.
    b. Press the left (◄) or right (►) arrow button to select an address digit, and then press the up (▲) or down (▼) arrow button to change the value

of the selected digit. Repeat for each digit of the address until the address reads **192.168.1.1**.

**c.** After you edit the gateway address, press the **ENTER** button to implement the change and exit the address edit mode.

**15.** Press the **BACK** button to exit the NETWORK CONFIG submenu.

**16.** Press the down (▼) arrow button to select **WEB USER INTERFACE**.

**17.** Check that the second line of the display reads **Disable**.

**18.** If the second line of the display does not read Disable, press the left (◄) or right (►) arrow button to select **Disable**.

**19.** Press the **ENTER** button to disable the instrument from being accessed using the Web interface.

**20.** Press the **BACK** button to exit the SYSTEM CONFIG submenu.

### Set the preferred (active) supply to PS1 (Option DPW only)

If your instrument has two Power Supply modules installed (Option DPW only), perform the following steps to reset the preferred supply to Power Supply 1:

**1.** Press the **BACK** button as necessary to return to the top-level Main menu.

**2.** Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.

**3.** Press the up (▲) or down (▼) arrow button to select **PREFERRED SUPPLY**.

**4.** Press the left (◄) or right (►) arrow button to display **PS1**, and press the **ENTER** button.

**5.** Press the **BACK** button to exit the SYSTEM CONFIG menu.

### Reset the date and time settings

Perform the following steps to reset the date and time settings to a safe value:

***CAUTION.*** *Perform the steps in the order listed below. You need to reset the DST settings and Time Zone settings first and then reset the local time and date settings. If you do not perform these steps in the correct order, then the local time will be changed by later actions.*

1. Press the **BACK** button as necessary to return to the top-level Main menu.
2. Press the up (▲) or down (▼) arrow button to select **SYSTEM CONFIG**, and then press the **ENTER** button to access the SYSTEM CONFIG menu.
3. Press the up (▲) or down (▼) arrow button to select **INTERNAL CLOCK**, and press the **ENTER** button to access the INTERNAL CLOCK submenu.
4. Reset the DST offset, and the DST start and end time/date parameters:
   a. Press the up (▲) or down (▼) arrow button to select **DST SCHEDULE**, and press the **ENTER** button to access the DST SCHEDULE submenu.
   b. Press the left (◄) or right (►) arrow button to select **Disable**, and press the **ENTER** button.
   c. Press the up (▲) or down (▼) arrow button to select **DST OFFSET**, and press the **ENTER** button to enter the offset edit mode.
   d. Press the left (◄) or right (►) arrow button to select a time digit and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit until the offset reads **01:00**.
   e. After you edit the DST offset, press the **ENTER** button to implement the change.
   f. Press the up (▲) or down (▼) arrow button to select **DST START DATE**, and press the **ENTER** button to enter the date edit mode.
   g. Press the left (◄) or right (►) arrow button to select a date parameter and then press the up (▲) or down (▼) arrow button to change the value of the selected parameter to a desired value. The factory default setting is the **Second Sunday in March**. After you edit the DST start date, press the **ENTER** button to implement the change.
   h. Press the up (▲) or down (▼) arrow button to select **DST START TIME**, and press the **ENTER** button to enter the time edit mode.
   i. Press the left (◄) or right (►) arrow button to select a time digit and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit until the start time reads **02:00:00**. After you edit the DST start time, press the **ENTER** button to implement the change.
   j. Press the up (▲) or down (▼) arrow button to select **DST END DATE**, and press the **ENTER** button to enter the date edit mode.
   k. Press the left (◄) or right (►) arrow button to select a date parameter and then press the up (▲) or down (▼) arrow button to change the value of the selected parameter to a desired value. The factory default setting is

the **First Friday in November**. After you edit the DST end date, press the **ENTER** button to implement the change.

**l.** Press the up (▲) or down (▼) arrow button to select **DST END TIME**, and press the **ENTER** button to enter the time edit mode.

**m.** Press the left (◄) or right (►) arrow button to select a time digit and then press the up (▲) or down (▼) arrow button to change the value of the selected digit. Repeat for each digit until the start time reads **02:00:00**. After you edit the DST end time, press the **ENTER** button to implement the change.

**n.** Press the **BACK** button to exit the DST SCHEDULE submenu.

**5.** Reset the time zone offset and the local time and date parameters:

**a.** Press the up (▲) or down (▼) arrow button to select **SET LOCAL TIME**, and press the **ENTER** button to enter the SET LOCAL TIME submenu.

**b.** Press the up (▲) or down (▼) arrow button to select **TIME ZONE OFFSET**, and press the **ENTER** button to enter the offset edit mode.

**c.** Press the left (◄) or right (►) arrow button to select a time digit and then press the up (▲) or down (▼) arrow button to change the value of the selected digit to 0. Repeat for each digit. After you edit the time zone offset, press the **ENTER** button to implement the change.

**d.** Press the up (▲) or down (▼) arrow button to select **SET LOCAL TIME**, and press the **ENTER** button to enter the time edit mode.

**e.** Press the left (◄) or right (►) arrow button to select a time digit and then press the up (▲) or down (▼) arrow button to change the value of the selected digit to 0. Repeat for each digit. After you edit the local time, press the **ENTER** button to implement the change.

**f.** Press the up (▲) or down (▼) arrow button to select **SET LOCAL DATE**, and press the **ENTER** button to enter the date edit mode.

**g.** Press the left (◄) or right (►) arrow button to select a date digit and then press the up (▲) or down (▼) arrow button to change the value of the selected digit a desired number. Repeat for each digit. After you edit the local date, press the **ENTER** button to implement the change.

**h.** Press the **BACK** button to exit the SET LOCAL TIME submenu.

**6.** Press the **BACK** button to exit the INTERNAL CLOCK submenu.

**7.** Press the **BACK** button to exit the SYSTEM CONFIG submenu.

# Troubleshooting

## Clear or sanitize a nonfunctional instrument

If your instrument is not functioning, perform the following actions and return the instrument for Tektronix for repair.

- If possible, use the troubleshooting section in the service manual to isolate the problem to one circuit board. Remove any storage devices from that circuit board and return it to Tektronix for replacement.
- Describe the initial problem with the product. Tektronix will install replacement parts and then repair and return the instrument.

## Parts replacement charges

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

## Recover from clearing or removing memory

Use the user interface and set all parameters to the desired values.