



**Agilent E5864A  
Removable Hard Drive  
for 16850-Series Logic  
Analyzers**

**Installation Guide**



**Agilent Technologies**

# Notices

© Agilent Technologies, Inc. 2013

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Agilent Technologies, Inc. as governed by United States and international copyright laws.

## Manual Part Number

E5864-97001

## Edition

First edition, August 2013

Printed in Malaysia

Agilent Technologies, Inc.  
1900 Garden of the Gods Road  
Colorado Springs, CO 80907 USA

## Warranty

**The material contained in this document is provided “as is,” and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.**

## Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

## Restricted Rights Legend

If software is for use in the performance of a U.S. Government prime contract or subcontract, Software is delivered and licensed as “Commercial computer software” as defined in DFAR 252.227-7014 (June 1995), or as a “commercial item” as defined in FAR 2.101(a) or as “Restricted computer software” as defined in FAR 52.227-19 (June 1987) or any equivalent agency regulation or contract clause. Use, duplication or disclosure of Software is subject to Agilent Technologies’ standard commercial license terms, and non-DOD Departments and Agencies of the U.S. Government will receive no greater than Restricted Rights as

defined in FAR 52.227-19(c)(1-2) (June 1987). U.S. Government users will receive no greater than Limited Rights as defined in FAR 52.227-14 (June 1987) or DFAR 252.227-7015 (b)(2) (November 1995), as applicable in any technical data.

## Safety Notices

### CAUTION

A **CAUTION** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a **CAUTION** notice until the indicated conditions are fully understood and met.

### WARNING

A **WARNING** notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a **WARNING** notice until the indicated conditions are fully understood and met.

# Contents

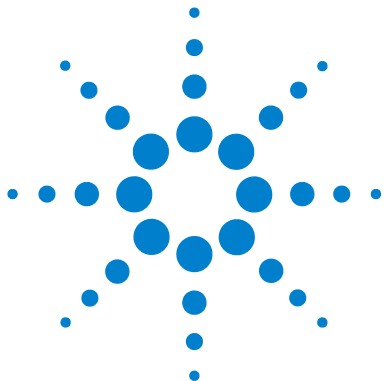
## 1 Handling the Removable Hard Drive

- Protecting Against Electrostatic Discharge (ESD) 5
- Protecting Against Contamination of the Edge Connector 5
- Protecting Against Physical Shock 6

## 2 Installing the Hard Drive

- Step 1. Back up data for transfer to new hard drive 7
- Step 2. Power OFF the 16850 logic analyzer 8
  - Using the Windows Shutdown 8
  - Using a Short Press of the Power Button 9
  - Using a Long Press of the Power Button 9
  - Unplugging the Power Cord or Power Loss 9
- Step 3. Remove the current hard drive 11
- Step 4. Install the new hard drive 12
- Step 5. Power on the 16850 logic analyzer 14
- Step 6. Perform the first-time set up steps 14
- Step 7. Perform the first-time set up procedures 14
- Step 8. Restore data 14
- Step 9. Install any additional application software 14





# 1 Handling the Removable Hard Drive

For the integrity of the data on your hard disk drive, Agilent recommends that you take the following precautions while handling and storing the hard disk drives:

- Store unused hard disk drives in the shipping container.
- Protect the hard disk drive from electrostatic discharge (ESD).
- Protect the hard disk drive's edge connectors from physical contamination.
- Protect the hard disk drive from physical shock.

## Protecting Against Electrostatic Discharge (ESD)

### CAUTION

Electrostatic discharge can damage electronic components. Use grounded wrist straps and mats when handling electronic components.

---

## Protecting Against Contamination of the Edge Connector

### CAUTION

The hard drive edge connector is sensitive to ESD and mechanical or material contamination. Take precautions to protect the edge connector from contamination during handling and storage.

---

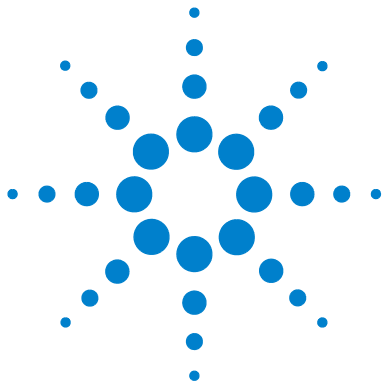


## Protecting Against Physical Shock

**CAUTION**

While operating, do not expose the hard disk drive to more than 5 to 500 Hz at 0.3 g rms.

---



## 2 Installing the Hard Drive

- Step 1. Back up data for transfer to new hard drive 7
- Step 2. Power OFF the 16850 logic analyzer 8
- Step 3. Remove the current hard drive 11
- Step 4. Install the new hard drive 12
- Step 5. Power on the 16850 logic analyzer 14
- Step 6. Perform the first-time set up steps 14
- Step 7. Perform the first-time set up procedures 14
- Step 8. Restore data 14
- Step 9. Install any additional application software 14

### CAUTION

Electrostatic discharge can damage electronic components. Use grounded wrist straps and mats when handling electronic components.

### Step 1. Back up data for transfer to new hard drive

- 1 Close the *Agilent Logic and Protocol Analyzer* application software.
- 2 Back up any data and server license files you want to retain using LAN, USB flash drive, writable CDs, etc.

Agilent recommends floating licenses for logic analyzers with removable disks (such as the 16850-series logic analyzers).



If the license server is on the logic analyzer, back up the server license files which are located in the “LicenseFiles” folder under the license server’s installation directory. For example, the default location is: C:\Program Files\Agilent Technologies\LicenseServer\LicenseFiles\

License files have the extension “.lic”.

You can also use node-locked licenses. However, because the logic analyzer host ID changes with the hard disk drive, you must have separate licenses on each disk. Node-locked license files are located in the “License” folder under the *Agilent Logic and Protocol Analyzer* application’s installation directory. For example, the default location is: C:\Program Files\Agilent Technologies\Logic Analyzer\License\

## Step 2. Power OFF the 16850 logic analyzer

### WARNING

**Hazardous voltages exist on the power supply. To avoid electrical shock, disconnect the power from the instrument before performing the following procedures. After disconnecting the power, wait at least six minutes for the capacitors on the power supply board to discharge before servicing the instrument.**

---

### CAUTION

Damage can occur to electronic components if you remove or replace assemblies when the instrument is on or when the power cable is connected. Never attempt to remove or install any assembly with the instrument on or with the power cable connected.

---

- 1 Power off the system using one of the methods explained below.
- 2 Remove the power cord.

## Using the Windows Shutdown

On the logic analysis system desktop, click **Start > Shut Down** or if you are running remote desktop, click **Start > Settings > Windows Security > Shut Down**. This software power off does the following:

- Closes all programs that are running.
- Writes all data to the disk.



- Turns off the power supply.
- If the system is unplugged while it is off and then plugged back in, the system will not power on until the power button is pressed.

### Using a Short Press of the Power Button

Pressing the power button on a frame for a short time (less than 2 seconds):

- Closes all programs that are running.
- Writes all data to the disk.
- Turns off the power supply.

If the power button is depressed for a short time (less than 2 seconds or so) while another instrument has an open Remote Desktop connection to this instrument, a message on the logic analysis system screen (not on the remote desktop) will pop up asking if you really want to power down. Clicking the 'yes' button results in the above events. Clicking 'no' will prevent the shutdown and not answering the dialog box (neither clicking "Yes" or "No") will have no effect. Further short presses on the power button will have no effect.

### Using a Long Press of the Power Button

Pressing the power button for more than 4 seconds will power the system down abruptly. Use this method only when other methods have not responded:

- Programs that are running will not be shut down. Any data that has not been written to the disk will be lost.
- Turns off the power supply.
- If the system is unplugged while it is off and then plugged back in, the system will not power on until the power button is pressed.
- If the system does not boot, the hard disk drive will need to be re-imaged.

### Unplugging the Power Cord or Power Loss

Unplugging power while the instrument is turned on or a power loss is similar to the long press of the power button with one exception:

## Installing the Hard Drive

- When the system is plugged back in, it will power up and boot into Windows.

### Step 3. Remove the current hard drive

The 16850 logic analyzer has a removable hard disk drive. It can be removed and replaced without disassembling the instrument.

- 1 Loosen both the thumb screws that hold the hard disk drive in place.



Thumb Screws

Removable Hard  
Disk Drive

- 2 Pull the drive tray out to remove the disk drive.

## Installing the Hard Drive



Removable Hard Disk Drive pulled out

### Step 4. Install the new hard drive

- 1 Slide the new removable hard drive into the drive bay.

## Installing the Hard Drive



- 2 Gently press the tray all the way in to seat the disk drive connectors.
- 3 Tighten both the thumb screws that hold the hard disk drive in place.



### **Step 5. Power on the 16850 logic analyzer**

Turn on the logic analyzer.

### **Step 6. Perform the first-time set up steps**

If you are using the E5864A replacement hard disk as an additional bootable drive, the replacement disk is pre-configured with the operating system, frame drivers, and logic and protocol analysis application software (just like the original 16850 disk as shipped from the factory). The next step is to perform the first-time set up procedures described in the *16850-Series Logic Analyzers Installation Guide* shipped with the 16850 logic analyzer.

### **Step 7. Perform the first-time set up procedures**

The next step is to perform the first-time set up procedures described in the *16850-Series Logic Analyzer Installation Guide* shipped with the 16850 logic analyzer.

### **Step 8. Restore data**

Restore the data and server license files you backed up in [“Step 1. Back up data for transfer to new hard drive”](#) on page 7.

### **Step 9. Install any additional application software**

Install any additional application software.



[www.agilent.com](http://www.agilent.com)

© Agilent Technologies, Inc. 2013

Printed in Malaysia  
First edition, August 2013

