

Errata

Agilent References in this manual

NOTICE: This document contains references to Agilent Technologies. Agilent's former Test and Measurement business has become Keysight Technologies. For more information, go to:

www.keysight.com

About this manual

We've added this manual to the Keysight website in an effort to help you support your product. This manual provides the best information we could find. It may be incomplete or contain dated information.

Support for your product

You can find information about technical and professional services, product support, and equipment repair and service on the web:

www.keysight.com

Select your country from the drop-down menu at the top. Under *Electronic Test and Measurement*, click on *Services*. The web page that appears next has contact information specific to your country.

For more detailed product information, go to: www.keysight.com/find/ *<product model>*
i.e., for the M9514A, use: www.keysight.com/find/M9514A

Hypertext links to documents on agilent.com are no longer active. Use this substitution to access PDF files:

Broken links have the form: http://cp.literature.agilent.com/litweb/pdf/<literature_part_number>

Substitute links with this form: http://literature.cdn.keysight.com/litweb/pdf/<literature_part_number>

Where *<literature_part_number>* has the form: M9300-90001.pdf

For service notes, use: www.keysight.com/find/servicenotes



Agilent Technologies

Agilent Technologies, Inc.
395 Page Mill Rd.
Palo Alto, California 94306

+1 877 424 4536 telephone
+1 650 752 5000 alternate
+1 650 facsimile
www.agilent.com

Memory Information and Procedure

Product: 34980A Multifunction Switch/Measure Mainframe and Modules, L44xxA Series LXI Switch and Control Instruments

Date: January 28, 2013

Mainframe 34980A, Mainframe L4421A/33A/37A/45A/50A/51A/52A, Mainframe L4490A/91A:

Memory Type: EEPROM	Memory Size: 2KB
Memory Function: I/O hardware addresses, boot parameters, LAN GPIB configuration settings	
User Modifiable (Y/N): Yes	Volatile (Y/N): No
Memory Erase Processes: SYST:SEC:IMM clears all instrument memory (except instrument operation firmware (not user modifiable), I/O hardware addresses (not user modifiable), boot parameters (not user modifiable), and calibration parameters (refer to the "Calibration Security" section in the 34980A Service Guide manual for how to clear these)) and then cycles power to the instrument.	

Memory Type: Flash	Memory Size: 8MB
Memory Function: Instrument states, channel labels, sequences, instrument operation firmware (not user modifiable)	
User Modifiable (Y/N): Yes	Volatile (Y/N): No
Memory Erase Processes: SYST:SEC:IMM	

Memory Type: SDRAM	Memory Size: 32MB
Memory Function: Measurement data buffer	
User Modifiable (Y/N): Yes	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

Memory Type: SRAM	Memory Size: 4KB
Memory Function: Boot-up information	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
1) Memory Erase Processes: Cycle Power	

DMM:

Memory Type: EEPROM	Memory Size: 4KB
Memory Function: Serial EEPROM containing DMM calibration constants and miscellaneous nonvolatile DMM settings.	
User Modifiable (Y/N): Yes, mostly via calibration process	Volatile (Y/N): No
Memory Erase Processes: Can only be done by Agilent service. Renders DMM uncalibrated.	

Memory Type: SRAM	Memory Size: 32KB
Memory Function: DMM operational data	
User Modifiable (Y/N): Yes	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

Memory Type: Flash	Memory Size: 256KB
Memory Function: DMM operation firmware	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: Firmware upgrade	

34921A, 34922A, 34923A, 34924A, 34925A, 34931A, 34932A, 34933A, 34937A, 34938A, 34939A, 34941A, 34942A, 34959A, L4421A, L4433A, L4437A, L4490A/L4491A Option 004

Memory Type: EEPROM	Memory Size: 8KB
Memory Function: Relay counts, Initialization or configuration	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: Flash	Memory Size: 16KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 512B or 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

34934A

Memory Type: EEPROM	Memory Size: 16KB
Memory Function: Relay counts, Initialization or configuration	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: Flash	Memory Size: 64KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

34945A, 34946A, 34947A, L4445A, L4490A/91A

Memory Type: EEPROM	Memory Size: 8KB
Memory Function: Relay counts, Initialization or configuration	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: Flash	Memory Size: 64KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

34945EXT:

Memory Type: EEPROM	Memory Size: 8KB
Memory Function: All channel/bank/tether configuration information	
User Modifiable (Y/N): Yes	Volatile (Y/N): No
Memory Erase Processes: SYSTem:RMOdule:RESet <slot> resets to factory defaults	

Memory Type: Flash	Memory Size: 64KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

34950A and L4450A:

Memory Type: EEPROM	Memory Size: 8KB
Memory Function: Initialization or configuration	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: Flash	Memory Size: 16KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

Memory Type: Flash for FPGA	Memory Size: 1MB
Memory Function: Flash for fpga	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 256KB
Memory Function: waveform download/upload	
User Modifiable (Y/N): Yes	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

34951A and L4451A:

Memory Type: EEPROM	Memory Size: 8KB
Memory Function: Cal constants, cal string	
User Modifiable (Y/N): Yes	Volatile (Y/N): No
Memory Erase Processes: Recalibrate to overwrite old data	

Memory Type: Flash	Memory Size: 16KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 512B or 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

Memory Type: Flash for FPGA	Memory Size: 128KB
Memory Function: Flash for fpga	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: DRAM	Memory Size: 2MB
Memory Function: Waveforms downloaded	
User Modifiable (Y/N): Yes	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

34952A and L4452A:

Memory Type: EEPROM	Memory Size: 8KB
----------------------------	-------------------------

Memory Function: Cal constants, cal string	
User Modifiable (Y/N): Yes	Volatile (Y/N): No
Memory Erase Processes: Recalibrate to overwrite old data	

Memory Type: Flash	Memory Size: 16KB
Memory Function: Flash Isp/iap for microprocessor program	
User Modifiable (Y/N): No	Volatile (Y/N): No
Memory Erase Processes: (none)	

Memory Type: SRAM	Memory Size: 512B or 1KB
Memory Function: Internal processor RAM not user accessible	
User Modifiable (Y/N): No	Volatile (Y/N): Yes
Memory Erase Processes: Cycle Power	

Select one of the following:

- ☒ **Sanitization process is documented above**
- ☐ Sanitization process could be available with engineering resources
- ☐ Sanitization process is not possible (i.e. sanitize the product by destruction)