Keysight Technologies
E4981A Capacitance Meter

Configuration Guide



KEYSIGHT TECHNOLOGIES

Unlocking Measurement Insights

Ordering Guide

The following steps will guide you through configuring your Keysight Technologies, Inc. E4981A.

Standard Furnished Item

Description	Additional Information
CD-ROM	Contains operation and programming manuals (in PDF) and sample program file. See documentation option for printed manuals
CD-ROM	Contains Keysight IO Libraries Suite (the latest version).
Power Cable	
Certificate of Calibration	

Note: Test Fixture and printed copy of operation and programming manuals are not furnished.

Step 1. Select Frequency Option (Mandatory)

Description	Option No.	Requires	Additional Information
Frequency, 120 Hz / 1 kHz/ 1 MHz	E4981A-001	None	
Frequency, 120 Hz / 1 kHz	E4981A-002	None	

Step 2. Choose General/Miscellaneous Accessory Option (If not required, go to Step 3)

Description	Option No.	Requires	Not Compatible	Additional Information
Rack mount Kit	E4981A-1CM	None		Recommended to order E4981A-600. The front handle, front and rear bumpers are not required when the rack mount kit is equipped.
Delete Front Handle Kit	E4981A-600	None		Delete front handle, front and rear bumpers. Recommended for manufacturing users who integrate the E4981A in the component handler system.

Note: Handle/Rack Mount Kit is not available.

Step 3. Choose Documentation Option (If not required, go to Step 4)

Description	Option No.	Additional Information
U.S. - English Localization	E4981A-ABA	Printed operation and programming manuals are furnished.
Japan - Japanese Localization	E4981A-ABJ	

Step 4. Choose Calibration Certificate Option

Description	Option No.	Additional Information
ISO 17025 Compliant Calibration	E4981A-1A7	ISO 17025 compliant calibration
ANSI Z540 Compliant Calibration	E4981A-A6J	ANSI Z540 compliant calibration

Hardware Upgrade

Option No.	Description	Upgrade Model No. or Equivalent Part Number	Customer Installable	Requires (Instrument must already include the following)	Not Compatible
E4981A-1CM	Rack Mount Kit	5063-9241	Yes	None	None
E4981A-600	Delete Front Handle Kit	E4980-45001 (Front Handle) 34480-46001 (Front Bumper) 34480-46002 (Rear Bumper)	Yes	None	None

Note: For details of the upgrade information, refer to product homepage on the Keysight home website.

Software Upgrade

Option No.	Description	Upgrade Model No. or Equivalent Part Number	Customer Installable	Requires (Instrument must already include the following)	Not Compatible	Additional Information
E4981A-001	Frequency, 120 Hz/1 kHz/ 1 MHz	E4981AU-001	No	E4981A-002	None	Installable at service center only

Note: For firmware update and upgrade information, refer to product homepage on the Keysight home website.

Available Accessories - General Measurement Accessories

Description	Model Number	Requires (Instrument must already include the following)	Additional Information
SMD Test Fixture	16034E	None	For SMD; (0.1 to 8) L x (0.5 to 10) W x (0.5 to 10) H mm. Operation and Service Manual is furnished.
SMD Test Fixture	16034G	None	For SMD; (0.1 to 5) L x (0.3 to 1.6) W x (0.3 to 1.6) H mm. 100 Ω SMD resistors set is furnished.
	16034G-ABA	None	U.S. - English localization
	16034G-ABJ	None	Japan – Japanese localization
SMD Test Fixture	16034H	None	For Array-type SMD; (0.1 to 5) L x (≤ 15) W x (0.6 to 3) H mm. 100 Ω SMD resistors set and Operation Manual are furnished.
Test Fixture	16047A	None	For axial or radial lead device. Operation and Service Manual is furnished.
	16047A-701	None	Adds shorting plate.
Test Fixture	16047E	None	For axial or radial lead device.
	16047E-ABA	None	U.S. - English localization
	16047E-ABJ	None	Japan – Japanese localization
Test Leads	16048A	None	BNC connector leads; 0.94 m. BNC connector bracket, Operation and Service Manual are furnished.

Available Accessories - General Measurement Accessories (continued)

Description	Model Number	Requires (Instrument must already include the following)	Additional Information
Test Leads	16048D	None	BNC connector leads; 1.89 m. BNC connector bracket, Operation and Service Manual are furnished.
Tweezers Test Fixture	16334A	None	For SMD; ≤ 10 mm L. Tweezers type; cable length 1 m. Shorting block, Operation and Service Manual are furnished.
Kelvin Clip Leads	16089A	None	2 large clips. Choose mandatory option 800 or C20.Operation and Service Manual is furnished.
	16089A-800	None	Cable length: 1 m (standard)
	16089A-C20	None	Cable length: 2 m
Kelvin Clip Leads	16089B	None	2 medium clips. Choose mandatory option 800 or C20. Operation and Service Manual is furnished.
	16089B-800	None	Cable length: 1 m (standard)
	16089B-C20	None	Cable length: 2 m
Kelvin IC Clip Leads	16089C	None	2 IC clips; cable length 1 m. Operation and Service Manual is furnished.
Dielectric Test Fixture	16451B	None	Test fixture for measuring permittivity of dry solid sheet material; Cable length 1 m. 38 mm and 5 mm diameter electrodes for measuring bare material and two types of electrodes for measuring material with pre-formed electrodes are furnished.
	16451B-ABA	None	U.S. - English localization
	16451B-ABJ	None	Japan - Japanese localization

Note: For more detailed information, refer to Accessories Selection Guide for Impedance Measurements.

Available Accessories - External DC Bias Accessories

Description	Model Number	Requires (Instrument must already include the following)	Additional Information
External Voltage Bias Fixture	16065A	None	±200 V dc max., for axial or radial lead device. Shorting plate, Operation and Service Manual are furnished.
External Bias Adapter	16065C	None	External DC bias adapter; ±40 V dc max, 100 Hz to 1 MHz. Compatible with all the test fixtures, test leads and clip leads except for the 16060A. Operation and Service Manual is furnished.

Note: For more detailed information, refer to Accessories Selection Guide for Impedance Measurements Available A

Available Accessories – for Calibration and Maintenance

Description	Model Number	Requires (Instrument must already include the following)	Additional Information
Open Termination	42090A	None	4-terminal pair Open termination. Needed for performing calibration.
Short Termination	42091A	None	4-terminal pair Short termination. Needed for performing calibration.
4-Terminal Pair Standard Capacitor Set	16380A	None	1 pF, 10 pF, 100 pF and 1000 pF standard capacitor set with carrying case. Calibration report and Operation Note are furnished.
4-Terminal Pair Standard Capacitor Set	16380C	None	0.01 µF, 0.1 µF and 1 µF standard capacitor set with carrying case. Calibration report and Operation Note are furnished.
	16380C-001	None	Adds 10 µF standard capacitor.
4-Terminal Pair Standard Resistor Set	42030A	None	9 standard resistors from 1 mΩ to 100 kΩ in decade steps; carrying case, calibration report, Operation and Service Manual are furnished.

Note: For more detailed information, refer to Accessories Selection Guide for Impedance Measurements

Literature Resource

Title	Publication Number
E4981A Data Sheet	5989-8963EN
E4981A Brochure	5989-8964EN
LCR Meters, Impedance Analyzers and Test Fixtures Selection Guide	5952-1430E
Accessories Selection Guide For Impedance Measurements	5965-4792E
Impedance Measurement Handbook	5950-3000

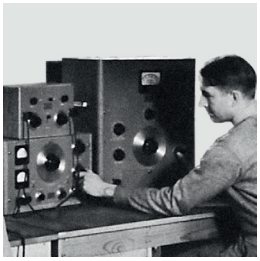
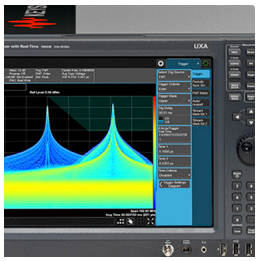
1. Note: More literature is available on the Keysight home website.

Web Resource

Have Access to the following website to acquire the latest news, product and support information, application literature and more.
www.keysight.com/find/e4981a

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Published in USA, December 1, 2017
5989-8868EN
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