

Agilent U1731B/U1732B **Dual Display Handheld LCR** Meter

Ouick Start Guide





The following items are included with your LCR meter:

- Alligator clip leads ***
- Printed Quick Start Guide
- 9 V Alkaline battery
- Certificate of Calibration

If anything is missing or damaged, please contact the nearest Agilent Sales Office.

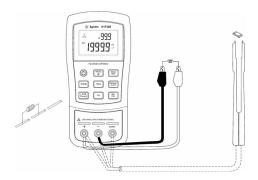
For more detailed information, please refer to the Agilent U1731B/U1732B Dual Display Handheld LCR Meter User's and Service Guide on Agilent Web site (www.agilent.com/find/handheld-tools).



WARNING To avoid damage to the device, do not exceed the input limit. Do not apply voltage to input terminals. Discharge the capacitor before testing.

Inductance/Capacitance/Resistance Measurement

Inductance measurement



Capacitance measurement

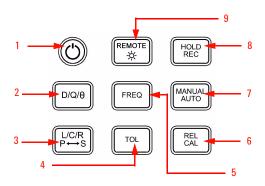
Resistance measurement



Procedure:

- Press the L/C/R key to select inductance (L), capacitance (C), or resistance (R) measurement.
- 2 Connect the red test clip or SMD tweezers to the + terminal and the black test clip to the terminal.
- 3 Connect both the test clips to the component leads as required or use the SMD tweezers to measure SMD components.
- 4 Press the FREQ key to select the testing frequency.
- **5** Press the $\mathbf{D}/\mathbf{Q}/\theta$ key to select \mathbf{Q} or \mathbf{D} factor for secondary display as required.
- 6 Ensure that your hands are not touching the clips before taking the readings on the display.
- 7 The LCR measurements setup are shown as above.

Keypad Operations



| No. | Keys | Functions |
|-----|----------------|--|
| 1 | Power | To turn ON/OFF the instrument |
| 2 | D/Q/θ | To select dissipation factor, quality factor, and phase angle display (only applicable for U1732B) |
| 3 | L/C/R P↔S | To select inductance, capacitance, and resistance measurement To toggle parallel and series mode |
| 4 | TOL | Tolerance mode |
| 5 | FREQ | To select test frequency |
| 6 | REL CAL | Relative mode Calibration mode |
| 7 | Manual AUTO | Manual range Auto range |
| 8 | HOLD REC | Data hold Static recording mode |
| 9 | REMOTE | To toggle ON/OFF the remote function Backlight display (only applicable for U1732B) |

CAUTION

Degradation of some product specifications can occur in the presence of ambient electromagnetic (EM) fields and noise that affects the product's power line or I/O cables. The product self-recovers and operates to all specifications when:

- · the source of the ambient EM field and noise is removed,
- the product is protected from the ambient EM field, or
- the product cabling is shielded from the ambient EM noise.

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.

Safety Information

The Agilent U1731B and U1732B are safety-certified in compliance with the following safety and EMC requirements:

- IEC 61010-1:2001/EN 61010-1:2001 (2nd Edition)
- CISPR 11:2003+A1:2004
 IEC 61000-4-2:1995+A1:1998 +A2:2000
- IEC 61000-4-3:2006
- IEC 61000-4-4:2004 • IEC 61000-4-5:2005
- IEC 61000-4-6:2003+A1:2004+A2:2006
- · IEC 61000-4-11:2004
- Canada: ICES/NMB-001:2004
- Australia/New Zealand: AS/NZS CISPR11:2004

Safety Symbols

| = | Earth (ground) terminal |
|-------------|---|
| | Equipment protected throughout by double insulation or reinforced insulation |
| A | Caution, risk of electric shock |
| \triangle | Caution, risk of danger (refer to the instrument manual for specific Warning or Caution information) |

For further safety information details, refer to the Agilent U1731B/U1732B Dual Display LCR Meter User's and Service Guide.

Printed in Malaysia



First Edition, December 1, 2009 © Agilent Technologies, Inc., 2009

