

Troubleshooting with TX-DMM™ True RMS MultiMeters

Number 4

How can I measure electrical contact resistance with my DMM?

I need to measure electrical contact resistance on a circuit breaker. It can be inconvenient to carry a micro-ohmmeter with me at all times. It would be nice to measure low values of ohms with my "every-day" DMM for making quick checks on electrical connections.

The problem: I need to make low-value ohms measurements on electrical circuit connections

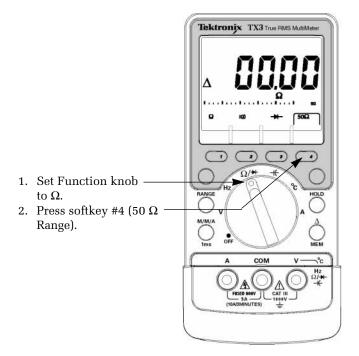
- I often can't take my low ohmmeter with me
- I need a quick check on contact resistance

The solution: Use the TX-DMM Series 50 Ω range with automatic lead calibration

• Measure small resistance values with 0.01 Ω resolution

Troubleshooting Tip

Use a TX-DMM in 50 Ω range as a quick check of electrical contact resistance.





- 3. Short the leads together for approximately three seconds to allow the meter time to calibrate out the lead resistance; the display should read $00.00~\Omega$ when finished. For best results, do not significantly change the position of the leads after shorting them together; this may cause the lead resistance to change.
- 4. Measure electrical contact resistance with 0.01 Ω resolution.

For further information, contact Tektronix:

World Wide Web: http://www.tek.com; ASEAN Countries (65) 356-3900; Australia & New Zealand 61 (2) 888-7066; Austria, Eastern Europe, & Middle East +43 2236 8092 0; Belgium +32 (2) 715.89.70; Brazil and South America 55 (11) 3741-8360; Canada 1 (800) 661-5625; Denmark +45 (44) 850 700; Finland +358 (9) 4783 400; France & North Africa +33 1 69 86 81 81; Germany + 49 (221) 94 77 400; Hong Kong (852) 2585-6688, India (91) 80-2275577; Italy +39 (2) 25086 501; Japan (Sony/Tektronix Corporation) 81 (3) 3448-3111; Mexico, Central America, & Caribbean 52 (5) 666-6333; The Netherlands +31 23 56 95555; Norway +47 22 07 07 00; People's Republic of China 86 (10) 6235 1230; Republic of Korea 82 (2) 528-5299; South Africa (27 11)651-5222; Spain & Portugal +34 (1) 372 6000; Sweden +46 (8) 629 6503; Switzerland +41 (41) 729 36 40; Taiwan 886 (2) 722-9622; United Kingdom & Eire +44(0)1628 403400; USA 1 (800) 426-2200.





Copyright @ 1998, Tektronix, Inc. All rights reserved. Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supersedes that in all previously published material. Specification and price change privileges reserved. TEKTRONIX, TEK, and TX-DMM are registered trademarks of Tektronix, Inc. All other trade names referenced are the service marks, trademarks, or registered trademarks of their respective companies.

From other areas, contact: Tektronix, Inc. Export Sales, P.O. Box 500, M/S 50-255, Beaverton, Oregon 97077-0001, USA 1 (503) 627-6877.

