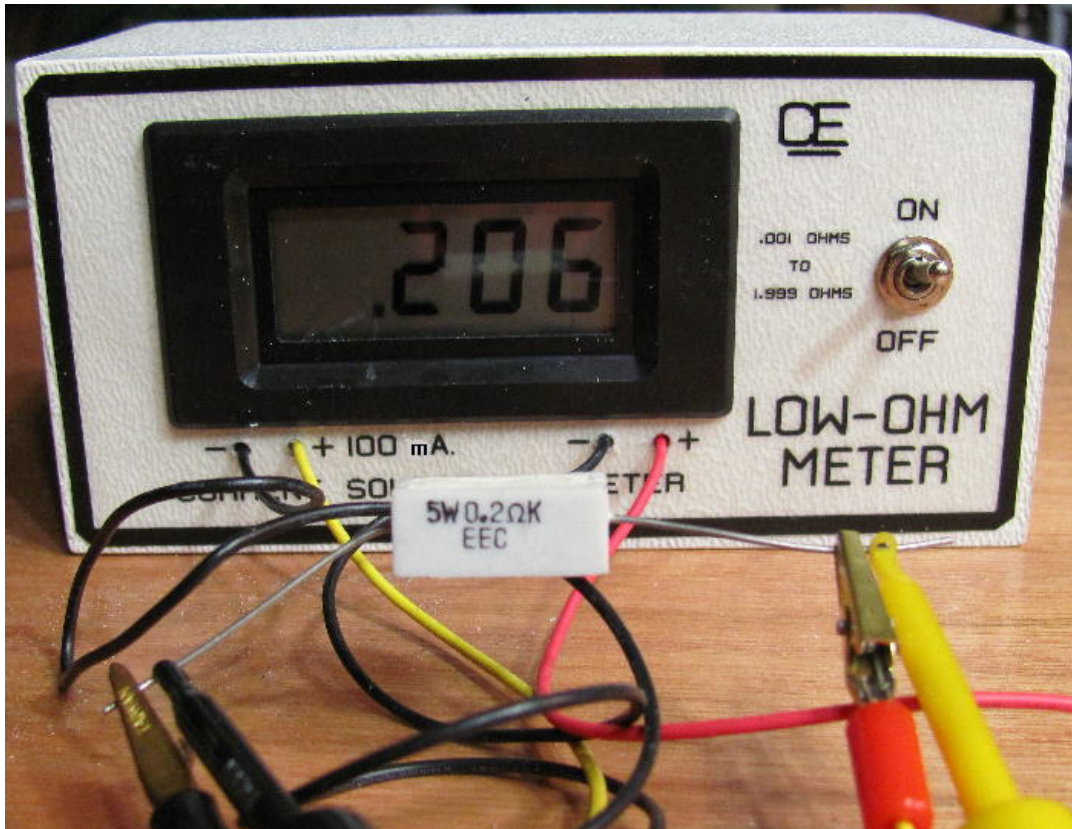


Low Ohm Meter - Measures 0.001 up to 1.999 Ohm



Low Ohm Meter - Measures 0.001 up to 1.999 Ohm

[Ads by Google](#)

[Circuit](#)

[Electronic Design](#)

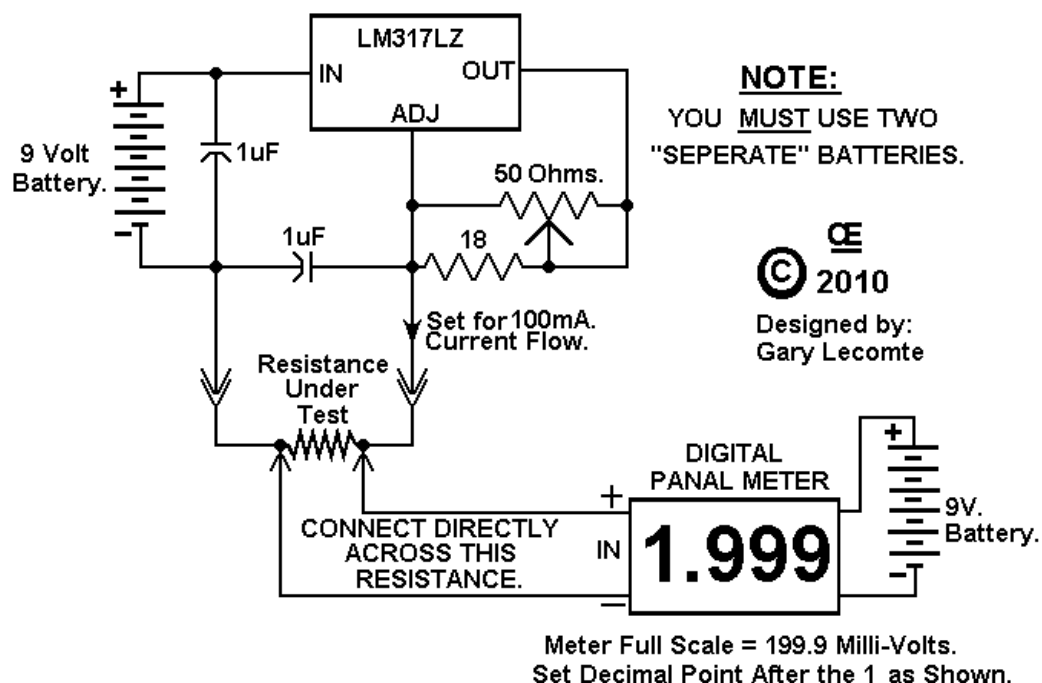
[Electronic Kit](#)

[Electronic PDF](#)

A very simple circuit to measure low resistance values from 0.001 up to 1.999 Ohm. With a "Direct Resistance Readout in Ohms". You must use two separate batteries. One for the DMM and one to supply power to the LM317LZ. I recommend the LM317LZ, which is the 100 mA, T0-92 version of the normal LM317. But you can also use the LM317, in the T0-220 package, if you want. The trimpot must be set precisely to deliver 100.0 mA out to get truly accurate resistance measurements. So you need a very accurate Milli-Amp Meter to adjust this Correctly. (And like Any Test Equipment, This Calibration should be Re-Checked once a year or so.)

DIRECT READOUT, LOW-OHM METER

Measures Down to: 0.001 Ohms.



** My Calibration Meter is a 4 1/2 Digit DMM, "So 100.00 mA setting Capability".

The Meter Leads MUST Connected DIRECTLY Across the Resistor or Wire to be Tested. DO NOT CONNECT IT to the Clip On Leads, that connect to the Resistance under test, As this will give FAULTY Readings, as a Result of Contact Resistance.

You Could use a DMM instead of this Panal Meter, But you will Probably Lose One Decimal point of Sensitivity.

The Front Decal was created in a small Cad Program and Reverse Printed on "Transparency Film".

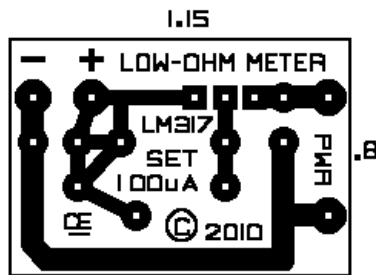
Than Sprayed with "3M's Spray Mount Adhesive", let dry and than applied to the front.

Because it is Reverse Printed, the writing Can't rub off.

The Display will read out Directly in Ohms, Between 0.001 up to 1.999 Ohms.

AS A OUALITY TEST: I connected my 100 mA current across a Single Conductor of 22 AWG Bare Copper wire that was about 16 inches long, "but exactly 12 inches long between my Meter Test Leads". And it measured 0.016 Ohms. Looking at my Copper wire Chart, it tells me: 22 AWG has 16.46 Ohms per 1000 feet. So that is 0.01646 Ohms per Foot. So I AM HAPPY with this result!

I could also create a Milli/Micro-Ohm Resistance Meter, But the real Problem would be the Accurate Calibration of the current source.



Related Links

- [Accurate LC Meter](#)
- [60MHz Frequency Meter / Counter](#)
- [PIC Volt Ampere Meter](#)
- [PIC Dual Temperature Meter](#)
- [BA1404 HI-FI Stereo FM Transmitter](#)
- [BH1417 Stereo PLL FM Transmitter](#)
- [500mW FM / VHF Transmitter Amplifier / Booster](#)
- [50mW BH1417 Stereo PLL FM Transmitter](#)
- [Phone FM Transmitter](#)
- [TV Transmitter with Audio](#)
- [5 Watt FM Amplifier](#)
- [TDA7000 FM Receiver / TV Tuner / Aircraft Receiver](#)
- [NJM2035 HI-FI Stereo Encoder / Multiplexer](#)

Downloads

[Ads by Google](#)

[Circuit](#)

[Electronic Design](#)

[Electronic Kit](#)

[Electronic PDF](#)

Low Ohm Meter - Measures 0.001 up to 1.999 Ohm - Link



Build your own LC Meter and start making your own coils and inductors. This LC Meter allows to measure incredibly small inductances making it perfect tool for making all types of RF coils. LC Meter can measure inductances starting from 10nH - 1000nH, 1uH - 1000uH, 1mH - 100mH and capacitances from 0.1pF up to 900nF. The circuit includes an auto ranging and "Zero Out" function to make sure the readings are as accurate as possible ... [more]