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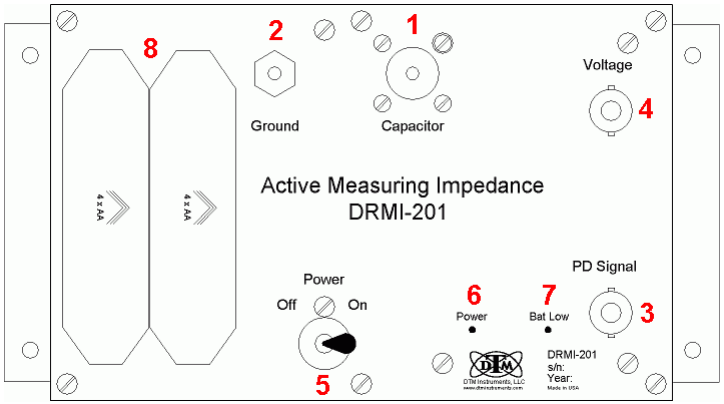
Active Measuring Impedance DRMI-201



1 - Signal Input (SO-259), connect to Coupling Capacitor or Bushing Tap
2 - Ground Connector, must be grounded
3 - BNC connector for Signal Output and remote power
4 - BNC connector for Voltage Divider Output
5 - Power Switch to turn on the amplifier
6 - Power Indicator light
7 - Change Battery Indicator, blinking
8 - Batteries, 8x AA/LR-6

Preparation for Use

- Open the battery holders (8) by pressing the flaps and lift the battery holders out of the slots. Place the eight AA batteries into the holder according to the indicated polarity.
- Test the battery power by shortly switching on the device (5).
- Connect the "Capacitor" input (1) with the coupling capacitor, using a "UHF" (PL-259) or a banana plug.
- Connect the "Ground" post (2) with the test field ground directly at the test object or at the coupling capacitor.
- Using a 50Ω coaxial cable (e.g. RG-58/U) with BNC connectors, connect the "PD Signal" output to the PD detector Signal input.
- Using a 2nd coaxial cable with BNC connectors, connect the "Voltage" output to the PD detector voltage input if used.
- Switch on the power (5) at the DRMI-200. Check that the "Power" indicator (6) lights up and the "Battery Low" indicator (7) does not blink.
- After use, switch off the "Power" switch (5)

Battery Power Supply

The DRMI-201 measuring impedance contains a built-in amplifier. If no external power is used, the amplifier has to be powered by eight AA batteries. While rechargeable batteries can be used, for maximum run time the use of non-rechargeable Alkaline batteries is recommended.
The supply current is approximately 8mA. With Alkaline batteries with 1000mAh capacity, the run time is approximately 120 hours.

External Power Supply

The amplifier can be powered by an external 12V supply feed to the “PD Signal” jack. In this case a d.c. supply and blocking filter has to be used in front of the PD detector input.

Low-Voltage Branch

On default, the DRMI-201 contains a 3.3µF capacitor. Together with the high voltage capacitor, it creates an AC voltage divider. The output of the voltage divider is available at the voltage jack (4).
At the time of ordering, the value of the divider capacitor can be specified for a specific divider ratio with the high voltage capacitor.
The limits of 100V r.m.s. output voltage ($150V_{PK}$) and 1A r.m.s. current through the DRMI-201 must not be exceeded.

Technical Data

Dimensions:	21.5 x 12 x 10 cm (8.5 x 4.7 x 4 inch)
Weight:	2 kg (4.4 lbs)
Temperature Range:	0 - 45°C (32-113°F) Operation
	-20 - 60°C (-4 - 140°F) Storage

Amplifier

Power Draw:	12 V / 8 mA
Input Impedance:	5 kΩ
Output Impedance:	50 Ω
Frequency Range:	30 kHz - 5 MHz
nom. Amplification:	10 (20dB)

AC Divider

internal Capacitor:	3.3 µF nominal
maximum AC Voltage:	100Volt (150V Peak)
maximum AC Current:	1.0 Ampere
AC Frequency Range:	0 - 500 Hz