

REED Model R5006 Digital Multimeter

Features

- Auto Range, Diode Forward, Data Hold, and Relative Mode
- 0.1%~99.9% Duty Cycle
- Input Impedance for DCV around 10M Ω
- 4000 Display Count
- Auto Power Off, Continuity Buzzer, & Low Battery Indicator

Specifications

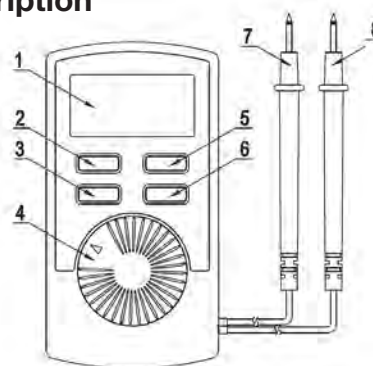
LCD Size: 43 x 22mm Power Supply: 3V Battery
 Weight: 76g Dimensions: 110 x 58.2 x 10.8mm
 Includes: Test Leads, Battery, and Carrying Case

Electrical Specifications

Function	Range	Resolution	Accuracy
DC Voltage	400mV	0.1mV	$\pm(0.8\% \text{ rdg} + 3 \text{ dgts})$
	4V	1mV	$\pm(0.8\% \text{ rdg} + 1 \text{ dgt})$
	40V	10mV	
	400V	100mV	
	600V	1V	$\pm(1\% \text{ rdg} + 3 \text{ dgts})$
AC Voltage	4V	1mV	$\pm(1.2\% \text{ rdg} + 3 \text{ dgts})$
	40V	10mV	
	400V	100mV	
	600V	1V	$\pm(1.5\% \text{ rdg} + 5 \text{ dgts})$
DC Current	400 μ A	0.1 μ A	$\pm(1.0\% \text{ rdg} + 3 \text{ dgts})$
	4000 μ A	1 μ A	
	40mA	10 μ A	$\pm(1.2\% \text{ rdg} + 5 \text{ dgts})$
	400mA	100 μ A	
AC Current	400 μ A	0.1 μ A	$\pm(1.5\% \text{ rdg} + 5 \text{ dgts})$
	4000 μ A	1 μ A	
	40mA	10 μ A	$\pm(2\% \text{ rdg} + 5 \text{ dgts})$
	400mA	100 μ A	
Resistance	400 Ω	0.1 Ω	$\pm(1.2\% \text{ rdg} + 2 \text{ dgts})$
	4K Ω	1 Ω	
	40K Ω	10 Ω	
	400K Ω	100 Ω	$\pm(1\% \text{ rdg} + 2 \text{ dgts})$
	4M Ω	1K Ω	
	40M Ω	10K Ω	
Capacitance	4.000nF	0.001nF	$\pm(4\% \text{ rdg} + 3 \text{ dgts})$
	40.00nF	0.01nF	
	400.0nF	0.1nF	
	4.000 μ F	0.001 μ F	
	40.00 μ F	0.01 μ F	
	100 μ F	0.1 μ F	$\pm(5\% \text{ rdg} + 10 \text{ dgts})$
Frequency	99.9Hz	0.1Hz	$\pm(0.5\% \text{ rdg} + 3 \text{ dgts})$
	0.999kHz	0.001kHz	
	9.99kHz	0.01kHz	
	99.9kHz	0.1kHz	
Duty Cycle	0.1%~99.9%	0.10%	
Diode		1mV	0.5V~0.8V
Continuity		0.1 Ω	About $\leq 60\Omega$

Instrument Description

1. LCD Display
2. SELECT Button
3. REL Button
4. Function Switch
5. Hz/% Button
6. HOLD Button
7. Positive Input
8. Negative Input



Display Description

- Low Battery
- Earth Ground
- Diode
- AC
- DC
- Warning
- Continuity
- Double Insulation
- Capacitance

Safety

- Do not use if test leads are damaged
- Keep your fingers behind the finger guards
- Use caution with voltages above 60DC/42AC RMS
- Do not switch functions during measurements

Measuring AC/DC Voltages

- Set the Function Switch to the V Position. AUTO and DC icons will appear on the LCD. Press the SELECT Button to switch to AC measurements and the LCD will show the AC icon.
- Connect the test leads to the power under test; Black to Cathode, Red to Anode. Read the results on the LCD.
- Reverse the test leads & the LCD will show negative readings.

Measuring Resistance

- Set the Function Switch to the Ω position.
- Connect the test leads to the resistor under test; Black to Cathode, Red to Anode. Read the results on the LCD.
- Measurements $\geq 1M\Omega$ will take several seconds to stabilize.

Measuring Frequency and Duty Cycle

- Set Function Switch to Hz/%, V, μ A, or mA position. Press the Hz/% button for Frequency measurements.
- Connect the test leads to the frequency signal under test; Black to Cathode, Red to Anode. Read the results on the LCD.
- Press the Hz/% button for % results.
- This meter is set with reference to Sine wave.

Testing Diodes and Continuity

- Set the Function Switch to the Ω position. Press the SELECT button once for Diode measurement and twice for Continuity testing.
- Turn the circuit power off and discharge the capacitor before measuring online diode to avoid meter damage.
- Connect the test leads to the frequency signal under test; Black to Cathode, Red to Anode. The LCD will display the approximate value for diode forward voltage drop.
- If resistance between two terminals of circuits under test is $\leq 60\Omega$ the meter will beep and display the resistance value.
- This function can also measure PN voltage drop of diodes or semiconductors. The reading of forward voltage drop should be between 0.5~0.8V for a normal silicon semiconductor.
- If measured diode is an open circuit or if the polarity is reversed "OL" will appear on the LCD.

Measuring Capacitance

- Set the Function Switch to the Ω position. Press the SELECT button three times to select Capacitance measuring. Press the REL button to enter Relative measurement mode.
- Completely discharge all capacitors before taking a measurement.
- Connect the test leads to the capacitance under test; Black to Cathode, Red to Anode. Read the results on the LCD.
- Measurements $\geq 10\mu$ F will take several seconds to stabilize.
- To avoid damage or injury do not apply voltages above 60DC or 30 AC RMS.

Measuring AC/DC Current

- Set the Function Switch to the μ A or mA Position. Press the SELECT button to the DC or AC range. Start from a higher range if you are not sure about the current flow under test.
- Cut off the current before connecting the meter to the loop.
- Connect the test leads in series to the measured loop. Read the results on the LCD. RMS value is displayed when measuring AC current (Sine wave).
- Do not connect test leads in parallel to any circuit.

Display Hold

Press and hold the HOLD button to freeze the display. Release the HOLD button to resume measuring.

Auto Power Off

After 30 minutes of inactivity the meter will go into Sleep Mode. When the meter is in Sleep Mode press the SELECT button to inactivate Auto Power Off. Press any other button when in Sleep Mode to turn the meter back on.

Battery Replacement

- Set the Function Switch to the OFF position.
- Unscrew the back housing and remove it.
- Replace the old batteries with new batteries.