

PDMT28 DIGITAL MULTIMETER

USER’S INSTRUCTION

Thanks for buying our product. Please go through the instruction manual before using the meter and carefully follow these safety rules.

FRONT PANEL DESCRIPTION

1. FUNCTION AND RANGE SWITCH

This switch is used to select the function and desired range as well as to turn on the instrument. To extend the life of this battery, the switch should be in the “OFF” position when the instrument is not in use.

2. DISPLAY

3 ½ digit, 7 segment, 0.5” high LCD.

3. “Common” JACK

Plug in connector for black (negative) test lead.

4. “VΩmA” JACK

Plug in connector for red (Positive) test lead for all voltage and resistance and current (except 10A) measurements.

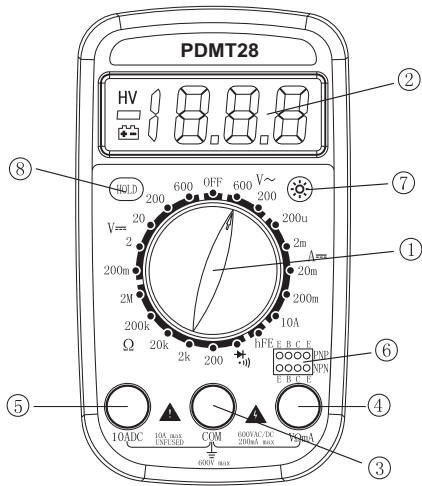
5. “10A” JACK

Plug in connector to red (positive) test lead for 10A measurement.

6. Transistor test

7. With backlight function

8. Hold key



GENERAL FEATURES

Item \ Function	DCV	ACV	DCA	Ω	→	•)	hFE	HOLD	☼
PDMT28	√	√	√	√	√	√	√	√	√

1. Display:3 ½ LCD display provided MAX.

indication: 1999.Indication of polarity: automatic polar display.

2. Automatic over range indication with the “1” displayed.

3. Operating temperature: 32~104°F.

Humidity <75% RH

Storage temperature: 5~122°F

4. Power supply: 9V battery

5. Low battery indication: appears on the display

6. Data hold

7. Size: 4.13 in * 2.36 in * 0.01 in.

8. Weight: 140g / 0.3lbs (including holster and battery)

Specifications

Accuracies are guaranteed for 1 year, 73.4 ± 41°F, less than 75% RH

1. DC Voltage

RANGE	RESOLUTION	ACCURACY
200mV	100uV	± (0.5%+2)
2V	1mV	± (0.5%+2)
20V	10mV	± (0.5%+2)
200V	100mV	± (0.5%+2)
600V	1V	± (0.8%+2)

Input resistance: ≥ 1MΩ

Max input voltage : DC 600V or the AC 600V

RMS

2. DC CURRENT

RANGE	RESOLUTION	ACCURACY
20uA	10nA	± (1%+2)
200uA	100nA	± (1%+2)
2mA	1uA	± (1%+2)
20mA	10uA	± (1%+2)
200mA	100uA	± (1.2%+2)
10A	10mA	± (2%+2)

Overload protection: 0.2A/250V fuse, (10A range not fused)

3. AC VOLTAGE

RANGE	RESOLUTION	ACCURACY
200V	100mV	±(1.2%+10)
600V	1V	±(1.2%+10)

Frequency range: 45 to 400Hz

Max input voltage: AC 600V RMS

Indication: Average (rms of sine wave).

4. RESISTANCE

RANGE	RESOLUTION	ACCURACY
200Ω	0.1Ω	± (1%+5)
2KΩ	1Ω	± (1%+5)
20KΩ	10Ω	± (1%+5)

200KΩ	100Ω	± (1%+5)
2MΩ	1KΩ	± (1%+5)

Open voltage: less than 2.8V

Overload protection: 10 seconds max 250V rms

5. TRANSISTOR hFE DATA TEST

RANGE	DISPLAY	TEST CONDITION
NPN OR PNP	0~1000	Basic Current is Approx. 10µA.Vce is Approx. 3V

6. Diode & continuous buzzer. The voltage is 2.4V, current is 1.5mA, Display of diode resembling forward conduction voltage. Inside buzzer shall alarm if test resistance below 70Ω.

METHOD OF MEASUREMENT

1. DCV, ACV MEASUREMENT

- 1) Set the Function– Range switch at the required position.
- 2) Connect black test lead to “COM” terminal and red test lead to the “VΩ mA” input terminal.
- 3) Connect test leads to measuring point and read value

2. DCA MEASUREMENT

- 1) Connect the black test lead to “COM” terminal and the red test lead to “VΩ mA” terminal for a maximum of 200mA.

For a maximum of 10A, move the red test lead to “10A” terminal.

- 2) Set the Function – Range switch at the required position.
- 3) Connect test leads to measuring points and read the value.

3. RESISTANCE MEASUREMENT

- 1) Connect black test lead to “COM” terminal and red test lead to “VΩmA” input terminal.
- 2) Set the Function – Range switch to the Ω range.
- 3) Connect the test leads across the resistance under test
- 4) Before checking in-circuit resistance, be sure the circuit being test is not powered and all capacitors have been discharged fully.

4. TRANSISTOR hFE TEST

- 1) Set the Function – Range switch to the “hFE” position.
- 2) Insert Correct Transistor into E.B.C. connector.

5. DIODE MEASUREMENT

- 1) Connect black test lead to “COM” terminal and red test lead to “VΩmA” input terminal.
- 2) Set the Function – Range switch at the “→|” position.
- 3) The forward voltage drop in mV will be displayed. If the diode is reversed, number “1” will be shown.
- 4) Connect the test leads. Inside buzzer shall alarm if test resistance below 70Ω.

BATTERY AND FUSE REPLACEMENT

Fuse rarely needs replacement. A blown fuse is almost always a result of operator error.

If “ ” appears in display, it indicates that the battery should be replaced.

To replace battery & Fuse (500mA/250V) remove the 2 screws in the bottom of the case. Simply remove the old, and replace with a new one. Be careful to observe polarity.



- Always make sure to check the function switch is set to the appropriate range before starting measurement.
- Do not expose the instrument to direct sunlight, high temperature and humidity or dewfall.
- When the instrument will not be in use for a long period, place it in storage after removing the batteries.
- Use a cloth dipped in water or neutral detergent for cleaning the instrument. Do not use abrasives or solvents.
- Never make measurements on a circuit in which electrical potential to ground over 500V AC/DC exists.

- Do not attempt to make measurement in the presence of flammable gasses. Otherwise, the use of the instrument may cause sparking, which can lead to an explosion.
- Be sure to keep your fingers behind the Finger barrier part of test lead.
- Never attempt to use the instrument if the surface or your hand is wet.
- Do not open the instrument case when making measurement.
- Never attempt to make any measurement if any abnormal conditions are noted, such as broken case, cracked test leads and exposed metal parts.
- Do not turn the function selector switch with test leads connected to the instrument.
- Do not install substitute parts or make any modification to the instrument.
- Do not try to replace the batteries if the surface of the instrument is wet.
- Make sure to disconnect test leads from the device when opening the case for battery replacement.

The manual contents are subject to change without notice.

The Company does not take any responsibility for accidents that result out of error during operation of our unit.