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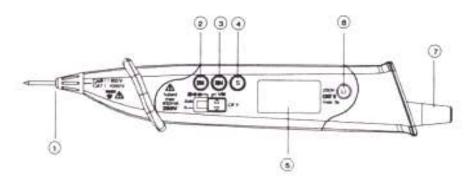
# Manual PCE-PDM1





The pen-type digital multimeter capable of measuring DC and AC voltage, resistance, diode and continuity. Its controls are: Volts (V), Ohms (Ω), Diode Test and Continuity Beeper (•)), Current (mA),On- Off, AC/ DC and Hold.

- V/mA/Ω input.
- 2. RANGE HOLD selector.
- 3. DATA HOLD button.
- Select button for ACV/ DCV or ACA/ DCA or Diode /Continuity/ Ω.
- LCD Display.
- COM input.
- Low imp.400K Ω Button



Note: When connecting or disconnecting test leads to or from a circuit, always first turn off power to the circuit under test and discharge all capacitors.

#### DC / AC Voltage Measurement

Set the Function switch to "V". Select AC or DC by pressing the mode selector button (AC or DC is displayed). Connect the instrument to the circuit and read the measured voltage in the display.

#### Resistance Measurement

Set the Function switch to "  $\Omega$  ". Connect the instrument across the resistance and read the value in the display.



When measuring high resistance values, take care not to touch the test leads.

**Continuity Measurement** 

Set the Function switch to  $\Omega$   $\bullet$ )). Press the mode selector button once, so that appears in the LCD. Connect the instrument across the device or wire to be tested. Beeper will sound when continuity is established. The beeper also sounds when changing functions, modes, or for Probe Hold.

#### Diode Measurement

Set the Function switch to 

∴ Press the mode\_selector button twice, so that appears (→) in the LCD. Connect the instrument across the device to be tested. The forward Voltage drop of a good diode is about 0.6V. An open or reverse biased diode will read "OL".

#### Low imp.400k Ω Measurement (Li)

In the DCV/ACV function mode, pressing the function switch "Low imp.400K  $\Omega$ " can change the input resistance from 10M  $\Omega$  to about 400K  $\Omega$ . It may check the tangency state of the crunode .

## Data Hold (DH)

Push the HOLD button to "freeze" the measurement reading and then remove the test leads while the reading remains displayed. HOLD is useful when it is necessary to pay very close attention to your work. Pushing the HOLD button again releases the display.

## Range Hold (RH)

The Resistance, AC or DC voltage or current ranges can be selected manually or automatically. The Range Hold button



is used to select the range hold mode as follows.

- Press to change from automatic to manual ranging. "RH" is displayed in the manual range mode
- Press to change range in the manual range mode. Observe the decimal point position to determine the range set.
- Press and HOLD for 2 seconds to change back to automatic ranging.

#### Automatic Shutdown

This function causes the meter to enter power saving mode after approximately 10 minutes. Disable automatic shutdown by holding the SELECT button down while turning the meter on.

In Case of Difficulties in the case of improper operation of the meter, first review the operating instructions for possible errors in operation. Inspect and check test leads for continuity. Check the condition of the batteries. The battery "symbol appears when the voltage falls below the level where accuracy is guaranteed. Replace batteries immediately.

#### **Battery Replacement**

Warning: In order to avoid electrical shock, remove the test lead before opening the case.

To replace the batteries (2 – LR44) unscrew the battery hatch screw and remove the old batteries. Install the new batteries observing the diagram in the battery area.



DCV			
Range	Resolution	Input	Tolerance
400.0 mV	0,1 mV	$10\ \text{M}\Omega$	+/- (0,8% +2digit)
4.000 V	1 mV	$10\ \text{M}\Omega$	+/- (1.0% +2digit)
40.00 V	10 mV	$10\ \text{M}\Omega$	+/-(1.0% +2digit)
400.0 V	100 mV	10 MΩ	+/-(1.0% +2digit)
600 V	1V	10 ΜΩ	+/-(1.2% +2digit)



Measuring Functions:					
ACV (40Hz-400Hz)					
Range	Resolution	Input	Tolerance		
4.00 V	1 mV	10 ΜΩ	+/-(1.2+3digit)		
40.00 V	10 mV	10 ΜΩ	+/-(1.2+3digit)		
400.0 V	100 mV	10 ΜΩ	+/-(1.2% +3digit)		
600 V	1V	10 ΜΩ	+/-(1,5% +5digit)		
Overload Protection: 1000V					
DCA	177				
Range	Resolution	Input	Tolerance		
40,00 mA	0,01 mA		+/-1.5% +2digit		
400,0 mA	0,1 mA		+/-1.5% +2digit		
Overload Protection: 400mA Fuse					
ACA :					
Range	Resolution	Input	Tolerance		
40,00 mA	0,01 mA		+/-1,8% +3digit		
400,0 mA	0,1 mA		+/-2.0% +3digit		
Overload Protection: 400mA Fuse					



In this direction will find a vision of the measurement technique: <a href="http://www.industrial-needs.com/measuring-instruments.htm">http://www.industrial-needs.com/measuring-instruments.htm</a>

**NOTE:** "This instrument doesn't have ATEX protection, so it should not be used in potentially explosive atmospheres (powder, flammable gases)."