

3-1/2D LCD Digital Panel Meter PM228

1. FEATURES

200mV full scale input sensitivity

Can be used as A version (9V Independent power supply application) or as B version (5V common ground power supply application)

Decimal point selectable

13mm figure height

Automatic zero reading for 0 volt input

High input impedance(>100M Ω)

Easy Bezel fixing Method

2. APPLICATIONS

Voltmeter Current Meter

Thermometer Capacitance Meter

PH Meter Lux Meter

dB Meter LCR Meter

Watt Meter Other industrial & domestic uses.

3. SPECIFICATIONS

Maximum Input: 199.9mV DC

Maximum Display: 1999 counts(3-1/2 Digits)with Automatic polarity indication

Indication Method: LCD Display

Measuring Method: Dual-Slope Integration A-D Converter system

Overrange Indication: "1" shown in the display

Reading rate time: 2-3 readings per second.

Input Impedance: >100M Ω

Accuracy: $\pm 0.5\%$ (23 $^{\circ}$ $\pm 5^{\circ}\text{C}$, <80%RH)

Power Dissipation: 1mA DC

Decimal Points: Selectable with wire jumper

Short circuit Points: Refer to point 4

Supply Voltage: 9V (independent, in A version), or 5V (common ground, in B version)

Size: 68mmx44mm

4. SELECTION FOR A/B VERSIONS:

- For A version (9V independent power application), shortcircuit J2, leave the J1, J3 open
- For B version (5V independent power application), shortcircuit J1 & J3, leave J2 open

5. OPERATION:

Make the A/B version selection (as point 4 above) **first**.

- If needed, add proper voltage dividers(not included)

And decimal point wire jumper

Max. Voltage to be measured	Proper Voltage Divider	Decimal Point Fixing Method
200mV	-	Shortcircuit P1 on And P2,P3 off
20V	Disconnect wire Jumper in RB RA=100K Ω RB=9.9M Ω	Shortcircuit P2 on And P1,P3 off
200V	Disconnect wire Jumper in RB RA=10K Ω RB=9.99M Ω	Shortcircuit P1 on And P2,P3 off
500V	Disconnect wire Jumper in RB RA=1K Ω RB=9.999M Ω	

RA and RB are 1/2W 0.5% Metal Film Resistors.

- Connect 9V independent DC power supply (in A version), Or 5V common ground power supply (in B version) to panel meter, pay attention to the proper polarity.
- For range other than 200mV, input accurate 1/2 x Max. Voltage generated by calibrator (e.g.100.0V for 200.0V range) and carefully adjust the semi-fixed resistor R4 to have same reading in LCD.
- Connect the input voltage to be measured to Vin and GD. The input voltage should be DC only.