

3-1/2 Inch Digital Panel Meter

PM-128/PM-188

1. FEATURES

200mV full scale input sensitivity
 Single 9V DC operation
 Decimal point selectable
 13mm figure height
 Automatic Polarity indication
 Guaranteed zero reading for 0 volt input
 High input impedance (>100MΩ)
 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
Over-range Indication:	"1" shown in the display
Reading rate time:	2-3 readings per second
Input Impedance:	> 100 MΩ
Accuracy:	± 0.5% (23° ± 5°C, <80%RH)
Power Dissipation:	1 mA DC
Decimal Points:	Selectable with wire jumper
Supply Voltage:	7-11V DC
Size:	68mm x 44mm

Please Note: The supply voltage and voltage to be measured MUST have separated grounds.

4. OPERATION

A) 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	Factory default jumper in RB, RA=not installed, RB=wire jumper	Shortcircuit P1 on and P2,P3 off ±XXX.X
2V	Disconnect wire jumper in RB, RA=1MΩ, RB=9.0MΩ	Shortcircuit P3 on and P1,P2 off ±X.XXX
20V	Disconnect wire jumper in RB, RA=100kΩ, RB=9.9MΩ	Shortcircuit P2 on and P1,P3 off ±XX.XX
200V	Disconnect wire jumper in RB, RA=10kΩ, RB=9.99MΩ	Shortcircuit P1 on and P2,P3 off ±XXX.X
500V	Disconnect wire jumper in RB, RA=1kΩ, RB=9.999MΩ	Shortcircuit P1 on and P2,P3 off ±XXX.X

Cut jumper below P3 to disable automatic polarity sign function. RA and RB are 1/2W 0.5% Metal Film resistors.

B) Connection 7-11 V DC power supply to panel meter, pay attention to proper polarity.

C) For range other than 200 mV, input accurate 1/2 x Maximum 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.

D) Connect the input voltage to be measured to VIN and GND. The input voltage should be DC only.