SIRIUS PCB Ltd
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3-1/2D LCD Digital Panel Meter PM438/PM4381

1. FEATURES

200mV full scale input sensitivity
Single 9V DC operation
Decimal point selectable
13mm LCD figure height
Automatic polarity indication
Guaranteed zero reading for 0 volts input
High input impedance (<=10 M)

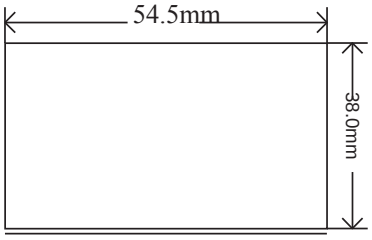
2. APPLICATIONS

Voltmeter	Current Meter
Thermometer	Capacitance Meter
PH Meter	Lux Meter
dB Meter	LCR Meter
Watt Meter	Other Industrial & DIY Uses

3. SPECIFICATIONS

Maximum Input: 199.9mV DC
Maximum Display: 1999 counts (3-½ Digit) 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 sec.
Input Impedance: <=10 M ***Accuracy:*** ±0.5% (23±5°C, <80% RH)
Power Dissipation: 1mA DC
Decimal Point: Selectable with short-circuit
Supply Voltage: 8-12V DC
Size: 68mm x 44mm

4. PANEL HOLE FOR FIXING PM-428/PM-438



5. OPERATION:

a. If needed, added proper voltage dividers (RA & RB are not included) and decimal point wire jumper:

Range	Proper voltage	Decimal Point
DC 200mV	RA=0Ω, RB=10MΩ	P3
DC 2V	RA=10MΩ, RB=1MΩ	P1
DC 20V	RA=10MΩ, RB=100kΩ	P2
DC 200V	RA=10MΩ, RB=10kΩ	P3
DC 500V	RA=10MΩ, RB=1kΩ	-
DC 2mA	RA=0Ω, RB=100Ω	P1
DC 20mA	RA=0Ω, RB=10Ω	P2
DC 200mA	RA=0Ω, RB=1Ω	P3
DC 2A	RA=0Ω, RB=0.1Ω	P1

Note: RA & RB are 1/4W 0.5% Metal Film Resistors.

b. Connect an 8-12V DC power supply to panel meter.

c. For ranges other than 200mV, input accurate 1/2 h Max. Voltage generated by calibrator (e.g. 100.0V for 200.0V range) and carefully adjust semi fixed resistor 201 to have the same reading in LCD.

d. Connect the input voltage to be measured to IN+ and COM. The input voltage should be DC only.

e. Connect the power to VCC+9V and VSS