3-1/2D LCD
Digital Panel Meter
PM438/PM438T

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 MΩ)

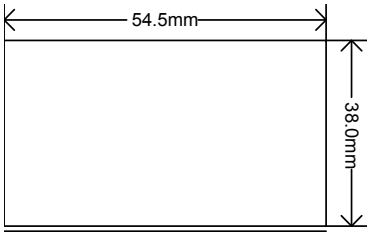
2. APPLICATIONS

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 MΩ
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 × 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:

Max. voltage to be	Proper voltage	Decimal Point
200mV	RB=0Ω RA=10MΩ	Shortcircuit P3
2V	RB=10MΩ RA=1MΩ	Shortcircuit P1
20V	RB=10MΩ RA=100KΩ	Shortcircuit P2
200V	RB=10MΩ RA=10KΩ	Shortcircuit P3
1000V	RB=10MΩ RA=1KΩ	-

Note: RA & RB are 1/2W 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 × 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