

3-1/2D LCD Digital Panel Meter PM213A

1. FEATURES

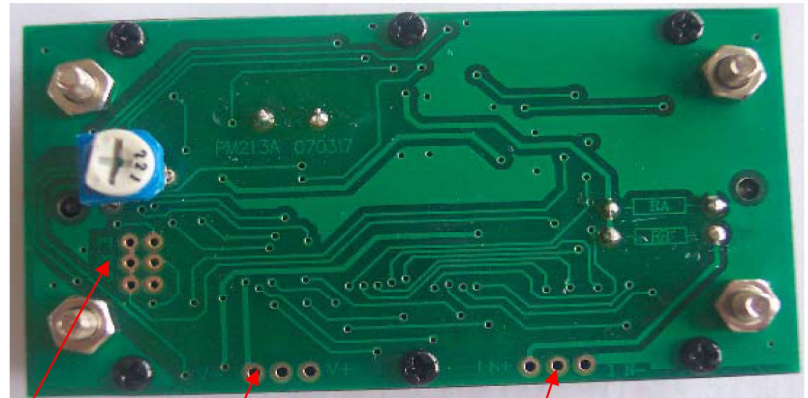
- 200mV full scale input sensitivity
- Single 9V DC operation
- Decimal point selectable
- 13mm LCD figure height
- Automatic polarity indication
- Guaranteed zero reading for 0 volts input
- High input impedance ($\leq 10\text{ M}\Omega$)

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 (3-1/2 Digit) 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 sec.
- Input Impedance:** $\leq 10\text{ M}\Omega$
- Accuracy:** $\pm 0.5\%$ ($23\pm 5^\circ\text{C}$, $< 80\%$ RH)
- Power Dissipation:** 1mA DC
- Decimal Point:** Selectable with shortcircuit
- Supply Voltage:** 8-12V DC
- Size:** 71x39*19mm



Decimal Point

Power supply

Signal input

OPERATION:

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

Max. voltage to be measured	Proper voltage divider	Decimal Point
200mV	RB=0 Ω RA=10M Ω	Shortcircuit P3
2V	RB=9M Ω RA=1M Ω	Shortcircuit P1
20V	RB=9.9M Ω RA=100K Ω	Shortcircuit P2
200V	RB=9.99M Ω RA=10K Ω	Shortcircuit P3
500V	RB=9.999M Ω RA=1K Ω	-

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 $1/2 \times$ Max. Voltage generated by calibrator (e.g. 100.0V for 200.0V range) and carefully adjust semifixed resistor 220 Ω to have the same reading in LCD.

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