

**3-1/2 Digit Jumbo LCD Digital Panel Meter**  
**PM-1028A (9V Independent Power Supply)**  
**PM-1028B (5V Common Ground Power Supply)**

**1. Features:**

Jumbo LCD display, 21mm figure height.  
 Single 9V independent power supply (PM-1028A)  
 Or single 5V common ground power supply (PM-1028B)  
 Voltage divider resistors included and max. measured range selectable by soldering the selection joint.  
 Easy plug-in fixing method (84mmx41mm rectangular hole typical)  
 Decimal point selectable by jumping on PCB  
 Automatic Polarity indication  
 Guaranteed zero reading for 0 volt input  
 High input impedance (>100 MΩ)

input accurate 2/3 x max Voltage generated by calibrator (Fluke 5500A, e.g. 100.0V for 200.0V range) and carefully against adjust the semi-fixed resistor 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.

**2. APPLICATIONS**

Voltmeter	Current Meter
Thermometer	Capacitance Meter
PH Meter	Lux Meter
DB Meter	LCR Meter
Watt Meter	Other industrial & Domestic uses.

**3. SPECIFICATIONS**

Max reading: 1999 (3-1/2 Digits) with automatic polarity.  
 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: >100 MΩ  
 Accuracy: ±0.5%(23±5°C, <80% RH)  
 Power Dissipation: 1mA DC typical.  
 Decimal Points: Selectable with wire jumper  
 Supply Voltage: PM-1028A: 7-11V DC independent.  
 PM-1028B: 5V DC common ground  
 Size: 85x41mm

**4. OPERATION**

A) Select the max. measuring range and decimal point jumping as follows:

Max. Voltage to be measured	Proper Voltage Divider Selection	Decimal Point Fixing Method
200mV	Shortcircuit 0.2V joint	Jump P3
20V	Shortcircuit 20V joint	Jump P2
200V	Shortcircuit 200V joint	Jump P3
500V	Shortcircuit 500V joint	-

B) Connect 7-11V DC (independent for PM-1028A) or 5V DC (common ground, for PM-1028B) power supply to panel meter, pay special attention to proper polarity, independent or common ground power Supply.

C) For ranges other than 200mV, make the right selection.

**3-1/2 Digit Jumbo LED Digital Panel Meter**  
**PM-1029A (9V Independent Power Supply)**  
**PM-1029B (5V Common Ground Power Supply)**

**1. Features:**

Jumbo LED display, 20.3mm figure height.  
 Single 9V independent power supply (PM-1029A)  
 Or single 5V common ground power supply (PM-1029B)  
 Voltage divider resistors included and max. measured range selectable by soldering the selection joint.  
 Easy plug-in fixing method (84mmx41mm rectangular hole typical)  
 Decimal point selectable by jumping on PCB  
 Automatic Polarity indication  
 Guaranteed zero reading for 0 volt input  
 High input impedance (>10 MΩ)

input accurate 2/3 x max Voltage generated by calibrator (Fluke 5500A, e.g. 100.0V for 200.0V range) and carefully against adjust the semi-fixed resistor to have same reading in LED.

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

**2. APPLICATIONS**

Voltmeter	Current Meter
Thermometer	Capacitance Meter
PH Meter	Lux Meter
DB Meter	LCR Meter
Watt Meter	Other industrial & Domestic uses.

**3. SPECIFICATIONS**

Max reading: 1999 (3-1/2 Digits) with automatic polarity.  
 Indication Method: LED 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: >10 MΩ  
 Accuracy: ±0.5% (23±5°C, <80% RH)  
 Power Dissipation: 60mA DC typical.  
 Decimal Points: Selectable with wire jumper  
 Supply Voltage: PM-1029A: 7-11V DC independent.  
 PM-1029B: 5V DC common ground  
 Size: 85x41mm

**4. OPERATION**

A) Select the max. measuring range and decimal point jumping as follows:

Max. Voltage to be measured	Proper Voltage Divider Selection	Decimal Point - Fixing Method
200mV	Shortcircuit 0.2V joint	Jump P3
20V	Shortcircuit 20V joint	Jump P2
200V	Shortcircuit 200V joint	Jump P3
500V	Shortcircuit 500V joint	-

B) Connect 7-11V DC (independent for PM-1029A) or 5V DC (common ground, for PM-1029B) power supply to panel meter, pay special attention to proper polarity, independent or common ground power Supply.

C) For ranges other than 200mV, make the right selection.