Thank you for purchasing our product! As our customers are our top priority and we strive for 100% satisfaction, we would appreciate your feedback on the product. Please contact us if you have any questions regarding the product. Our professional support team is always ready to answer your enquiries and provide assistance.
GENERAL SPECIFICATIONS

PPDMM is a stable, safe, reliable compact digital handheld 6000 count auto-ranging multimeter. This meter can measure AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle, temperature, diodes and continuity. This meter is ideal for many situations, whether you're a professional or causal user.

- **Operating Altitude:** 2000m
- **Relative Humidity:** 75% max operating
- **Operating Temperature:** 0°C~40°C/32°F~104°F (<80% RH)
- **Storage Temperature:** -10°C~60°C/14°F~140°F (<70% RH)
- **Accuracy Temperature:** -18°C~28°C/64°F~82°F (<80% RH)
- **Temperature Coefficient:** 0.1x(specified accuracy)/°C (<18°C or >28°C)
- **Sampling Frequency:** approx. 3 times/sec.
- **Fuse Protection:** μA/mA input: F600mA/600V 10A input: F10A/600V
- **DC/AC Voltage:** 600V
- **DC/AC Current:** 10A
- **Resistance:** 60MΩ
- **Capacitance:** 60mF
- **Frequency:** 10kHz
- **Duty cycle:** 0.1%~99%
- **Diodes:** 2.7V
- **Continuity:** <50Ω
- **Temperature:** -20°C~1000°C/-4°F~1832°F
- **LCD Display:** 3 ¾ digit display (6000 counts)
- **Product Supply:** 3×1.5V AAA batteries
- **Product Size:** 160mm×74mm×49mm / 6.3"×2.9"×1.9"
- **Product Weight:** 482g / 1.06lb
- **Safety Rating:** CAT IV 600V; pollution degree: II
- **Safety Standards:** IEC61010-1
- **Pollution Degree:** 2
- **Accuracy:** ±(of reading + # of least significant digits)

WARNINGS

To avoid electric shock and injury or damage to the meter, observe the following safety methods:

- Check the meter before use to make sure there was no damage during transit.
- Check that the insulation on the test leads is not damaged and/or wires are not exposed.
- If any faults or abnormalities are observed, the meter should not be used and should be checked out prior to use.
- Never exceed the protection limit values indicated in specifications for each range of measurement.
- Always be careful when working voltages above 60V DC or 30V AC rms, keep fingers behind the probe barrier while measuring.
- Make sure the rotary switch is in the correct position before measurement.
- Never use the meter in an environment with explosive gas, vapor or dust.
- Always keep fingers behind probe barriers when making measurements.
- When connecting test leads to a circuit, connect the black test lead first, then the red lead. Disconnect in the opposite order.
- Turn off power and discharge all capacitors first before measuring resistance, continuity or diodes.
- Failure to follow safety guidelines could compromise the safety features of this meter.
- Do not use the meter without the battery cover in place.
- Replace the batteries as soon as the low battery symbol “ ” to avoid false reading that could lead to electric shock and injury.
- Remove test leads from all circuits before opening the battery cover.
1. **LCD Display**
   - Press "-" to hold the current reading on the display. Press the button again to release the hold. Hold "-" to turn on the backlight. Hold the button again to manually turn off the backlight.

2. **Hold/Backlight Button**
   - In all modes (except continuity, diode, capacitance), press "Max/Min" and the display will show the maximum value recorded since the button was pressed. Press the button again and the display will show the minimum value recorded. Pressing the button a third time will show the difference between the max and min value. Hold "Max/Min" to return the display to normal readings.

3. **Max/Min Button**
   - Function Switch Button
     - Press “FUNC” to switch between functions or between AC/DC current.

4. **Frequency/Duty Cycle Button (Hz/%)**
   - In AC voltage/current modes, press "Hz%" and the display will show the frequency measurement. Press the button again to switch to duty cycle. Press the button a third time to return to normal display.

5. **Range Button**
   - In voltage, current and resistance modes, the default range is auto. To enter manual range, press "RAN". Each press of the button increases the range, and returns to the lowest range when pressed in the highest range. Hold "RAN" to return to auto range. (Only auto range is available in capacitance mode)

6. **Relative Measurement Button**
   - In all modes (except resistance, continuity, diode), press “REL” and the display will show the relative value, i.e. the difference between the stored value when the button was pressed and the currently measured value. (REL = stored value – currently measured value) Press the button again to return the display to normal. (In REL mode, auto range is disabled)

7. **Rotary Switch**
   - Input Jack (all measurements; current below 600mA)
   - A Jack (current measurements between 600mA-10A only)
   - Common Jack (all measurements)
5. DISPLAY FUNCTION INSTRUCTIONS

1. DC: Direct Current
2. AC: Alternating Current
3. →: Negative DC Value
4. ∅: Auto Power Off
5. ▽: Data Hold
6. AUTO: Auto Range Active
7. MAX: Maximum Display
8. MIN: Minimum Display
9. REL: Relative Display
10. →: Diode Test
11. ◀: Continuity Test
12. △: Low Battery
13. %: Duty Cycle Mode
14. ℃: Temperature in Celsius
15. ℉: Temperature in Fahrenheit
16. kΩ: Resistance
17. Hz: Frequency
18. ▲: Main Display

6. ROTARY SWITCH FUNCTION INSTRUCTIONS

1. DC Voltage: <600V
2. AC Voltage: <600V
3. DC Current (large): <10A
3.2 AC Current (large): <10A

4.1 DC Current (Middle): <600mA

4.2 AC Current (Middle): <600mA

5.1 DC Current (Small): <6000μA

5.2 AC Current (Small): <6000μA

6.1 Resistance: <60MΩ

6.2 Continuity: <50Ω

6.3 Diode Test: <1V

7. Capacitance: <60mF

8. Temperature: -20°C to 1000°C/ -4°F to 1832°F
# Electrical Specifications

## DC Voltage Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600mV</td>
<td>0.1mV</td>
<td>±(0.5% of reading +2 digits)</td>
</tr>
<tr>
<td>6V</td>
<td>0.001V</td>
<td></td>
</tr>
<tr>
<td>60V</td>
<td>0.01V</td>
<td></td>
</tr>
<tr>
<td>600V</td>
<td>0.1V</td>
<td></td>
</tr>
</tbody>
</table>

- Input impedance: 10MΩ
- Max. input voltage: 600V rms

## AC Voltage Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600mV</td>
<td>0.1mV</td>
<td>±(1.0% of reading +5 digits)</td>
</tr>
<tr>
<td>6V</td>
<td>0.001V</td>
<td></td>
</tr>
<tr>
<td>60V</td>
<td>0.01V</td>
<td></td>
</tr>
<tr>
<td>600V</td>
<td>0.1V</td>
<td></td>
</tr>
</tbody>
</table>

- Input impedance: 10MΩ
- Max. input voltage: 600V rms
- Frequency response: 40~400Hz, calibrated to rms of sine wave (average response)

## DC Voltage Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600μA</td>
<td>0.1μA</td>
<td>±(1.0% of reading +5 digits)</td>
</tr>
<tr>
<td>6000μA</td>
<td>1μA</td>
<td></td>
</tr>
<tr>
<td>60mA</td>
<td>0.01μA</td>
<td></td>
</tr>
<tr>
<td>600mA</td>
<td>0.1μA</td>
<td></td>
</tr>
<tr>
<td>10A</td>
<td>10mA</td>
<td>±(2.0% of reading +10 digits)</td>
</tr>
</tbody>
</table>

- Overload protection:
  - μA/mA input: Fuse(F600mA/600V)  10A input: Fuse (F10A/600V)
- Max. input current:
  - μA/mA input: 600mA rms  10A input: 10A rms

## AC Voltage Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600μA</td>
<td>0.1μA</td>
<td>±(1.2% of reading +5 digits)</td>
</tr>
<tr>
<td>6000μA</td>
<td>1μA</td>
<td></td>
</tr>
<tr>
<td>60mA</td>
<td>0.01μA</td>
<td></td>
</tr>
<tr>
<td>600mA</td>
<td>0.1μA</td>
<td></td>
</tr>
<tr>
<td>10A</td>
<td>10mA</td>
<td>±(2.5% of reading +10 digits)</td>
</tr>
</tbody>
</table>

- Overload protection:
  - μA/mA input: Fuse(F600mA/600V)  10A input: Fuse (F10A/600V)
- Frequency response: 40~400Hz, calibrated to rms of sine wave (average response)
- Max. input current:
  - μA/mA input: 600mA rms  10A input: 10A rms

## Resistance Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>600Ω</td>
<td>0.1Ω</td>
<td>±(0.8% of reading +5 digits)</td>
</tr>
<tr>
<td>6kΩ</td>
<td>0.001kΩ</td>
<td></td>
</tr>
<tr>
<td>60kΩ</td>
<td>0.01kΩ</td>
<td></td>
</tr>
<tr>
<td>600kΩ</td>
<td>0.1kΩ</td>
<td></td>
</tr>
<tr>
<td>6MΩ</td>
<td>0.001MΩ</td>
<td></td>
</tr>
<tr>
<td>60MΩ</td>
<td>0.01MΩ</td>
<td>±(2.0% of reading +5 digits)</td>
</tr>
</tbody>
</table>

- Max. input voltage: 600V rms

## Continuity Test

<table>
<thead>
<tr>
<th>Overload Protection</th>
<th>Open Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>600V RMS</td>
<td>Appx. 3.0V</td>
</tr>
</tbody>
</table>

- Max. input voltage: 600V rms

## Diode Test

<table>
<thead>
<tr>
<th>Overload Protection</th>
<th>Test Current</th>
<th>Open Circuit Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>600V RMS</td>
<td>Appx. 1mA</td>
<td>Appx. 3.0V DC</td>
</tr>
</tbody>
</table>

- Max. input voltage: 600V rms
### Capacitance Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1nF</td>
<td>0.001nF</td>
<td>±(4.0% of reading + 10 digits)</td>
</tr>
<tr>
<td>10nF</td>
<td>0.01nF</td>
<td></td>
</tr>
<tr>
<td>100nF</td>
<td>0.1nF</td>
<td>±(3.0% of reading + 10 digits)</td>
</tr>
<tr>
<td>1μF</td>
<td>1nF</td>
<td></td>
</tr>
<tr>
<td>10μF</td>
<td>10nF</td>
<td></td>
</tr>
<tr>
<td>100μF</td>
<td>100nF</td>
<td></td>
</tr>
<tr>
<td>1mF</td>
<td>1μF</td>
<td></td>
</tr>
<tr>
<td>10mF</td>
<td>10μF</td>
<td>±(4.0% of reading + 10 digits)</td>
</tr>
<tr>
<td>60mF</td>
<td>10μF</td>
<td></td>
</tr>
</tbody>
</table>

- Max. input voltage: 600V rms

### Frequency (cont.) (AC voltage)

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>99.99Hz</td>
<td>0.01Hz</td>
<td>±(1.5% of reading + 5 digits)</td>
</tr>
<tr>
<td>999.9Hz</td>
<td>0.1Hz</td>
<td></td>
</tr>
<tr>
<td>9.999kHz</td>
<td>0.001kHz</td>
<td></td>
</tr>
<tr>
<td>&gt;10kHz</td>
<td>0.01kHz</td>
<td>Reference only</td>
</tr>
</tbody>
</table>

- Signal input range: ≥0.2V AC rms
  (voltage input will increase as frequency increases)
- Input impedance: 10MΩ
- Max. input voltage: 600V rms

### Duty Cycle

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1%—99.9%</td>
<td>0.1%</td>
<td>±3.0%</td>
</tr>
</tbody>
</table>

- In current mode:
  Signal input range: μA: ≥60μA rms  mA: ≥6mA rms  A: ≥0.6A rms
  (current input will increase as frequency increases)
  Max. input current: 10A rms
- In voltage mode:
  Signal input range: ≥0.6V AC rms
  (voltage input will increase as frequency increases)
  Input impedance: 10MΩ
  Max. input voltage: 600V rms

### Temperature Measurement

<table>
<thead>
<tr>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20°C~1000°C</td>
<td>1°C</td>
<td>±(2.0% of reading + 3 digits)</td>
</tr>
<tr>
<td>-4°F~1832°F</td>
<td>1°F</td>
<td></td>
</tr>
</tbody>
</table>

- Overload protection: Fuse (F600mA/600V)
8. **MAINTENANCE**

This section provides basic maintenance principles, including replacing batteries and fuses.

Do not attempt to repair or perform any maintenance on the meter not included in the section below unless you are qualified personnel.

9. **CLEANING**

⚠️ **WARNINGS**

To prevent injury or damage to the meter, do not allow moisture inside the casing. Before opening the battery cover/case, disconnect test leads from all circuits.

Clean the meter regularly with a damp cloth and a small amount of detergent; do not use abrasives or solvents. Dirty/wet input jacks can affect readings.

To clean input jacks:
1. Turn off the meter and remove test leads.
2. Brush off any dirt or contaminants from the input jacks.
3. Use a cotton swab with a cleaner/lubricant (i.e. WD40) to clean the input jack.
4. Use a new swab on each jack to prevent cross contamination.

10. **REPLACING THE BATTERIES**

⚠️ **WARNINGS**

To avoid false reading that could lead to injury or damage to the meter, replace the batteries as soon as the “!” symbol appears. Turn off the meter and remove the test leads before opening the battery cover to avoid injury or damage to the meter.

To replace the batteries:
1. Turn off power to the meter.
2. Remove test leads from input jacks.
3. Loosen the screw on the battery cover and remove cover from meter.
4. Replace used batteries with new batteries.
5. Replace battery cover and secure to meter.

11. **REPLACING THE FUSES**

⚠️ **WARNINGS**

To prevent injury or damage to the meter, turn off power to the meter and disconnect test leads from input before opening case.

To replace the fuses:
1. Turn off power to the meter.
2. Remove test leads from input jacks.
3. Remove the 6 screws on the back case and remove back case from meter.
4. Replace blown fuse(s) with a new fuse.
5. Replace back cover and secure to meter.

12. **DISPOSAL / RECYCLE**

⚠️ **Caution:** This symbol indicates that equipment and its accessories shall be subject to a separate collection and correct disposal.