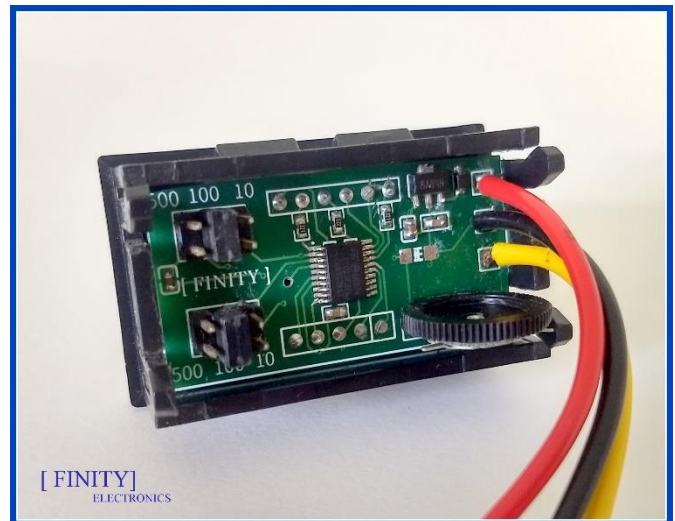
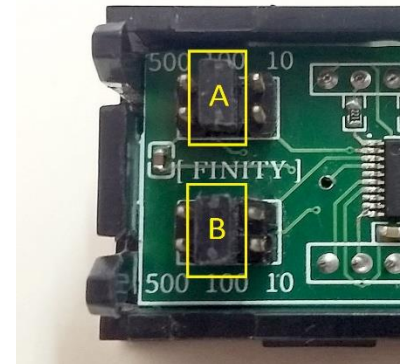


Digital DC Voltmeter User Manual

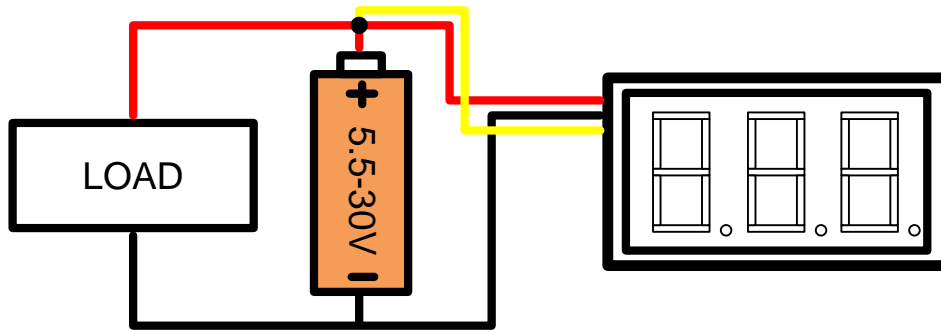


Features:

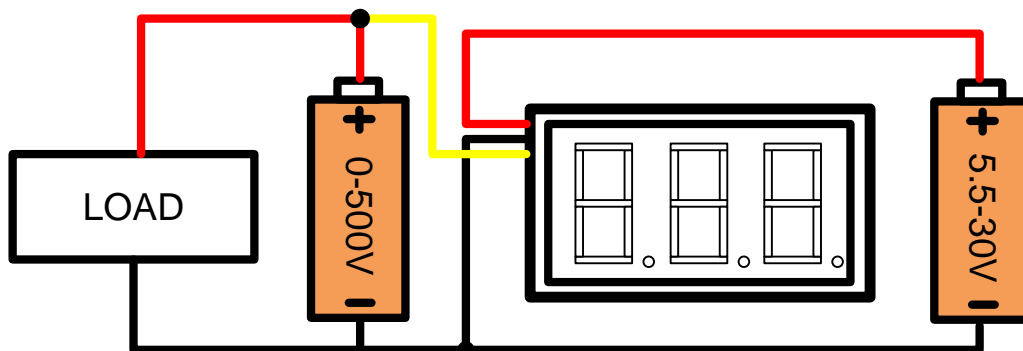
- System:
 - Embedded with a dedicated **microcontroller** for powerful processing.
 - **ADC noise cancellation** results a precise DC voltage measurement.
- Technical specifications:
 - **3-digit** digital seven segment numeric **0.56-inch** display.
 - **2880** samples taken per second for measurement.
 - Display refresh rate: **4** times per second.
 - Potentiometer dial is given for **calibrating** the voltage measurement.
 - Has three inbuilt user selectable voltage measurement ranges:
 - **0.01 to 9.99 V DC**
 - **0.1 to 99.9 V DC**
 - **1 to 500 V DC**
 - Display color: **Red**
 - Power Supply: **5.5V to 30V DC**
 - Terminals Specification:
 - Positive terminal: **Red**
 - Negative terminal: **Black**
 - Measuring terminal: **Yellow**
 - Maximum Input: **10.2V, 105V, 550V DC**, higher voltages to respective ranges may result damage to meter.
 - Has reverse polarity protection. Reverse voltage doesn't burn it.
 - Error: **±1 %** of actual value.
 - Terminal wire length: **10cm or 0.1m**
 - Terminal wire standard: **IS 694**
- Voltage Range Selection Instructions to user:
 - There are two jumpers available named as "**A**" and "**B**" in the figure.
 - These two jumpers can be moved along the three given header places beside their label showing the range.
 - Both the jumpers should be at the same position for respective range. Like in figure both jumpers are set on **middle** header for **100V** range. Likewise, both should be set in **right** for **10V** range and in **left** for **500V** range.
 - Always make sure that both jumpers are set at **same respective range** else it will cause error in the display and could also damage the ADC pin of microcontroller.



- Design Parameters:
 - Compact, crisp and easy to use design.
 - **Push to fit** installation design. No screws required.
 - Outer case dimensions: **48 X 29 X 22 mm** or **1.89 X 1.15 X 0.87 inch.**
 - Installing cut dimensions: **46 X 27 mm** or **1.81 X 1.06 inch.**
 - Weight: approx. **20 grams.**
- Temperature Range:
 - **0°C to +55°C.**
- Notes:
 - Do not let any of the terminals screwed loose. **Loose** connections may result to unnecessary voltage spikes or flickering, which may damage the voltmeter.
 - The calibration dial attached to the voltmeter is on the **measuring** side. Extreme **precaution** should be taken while calibrating the measurements in ON condition as it has chances of getting an electrical shock.
- Connection Diagrams:



For measuring voltage only up to 30V DC



For measuring voltage greater than 30V DC