

Core Electronics User Guide

Mini Digital Display DC Voltmeter 0-100V Blue

SKU: 018-05-VM-100V-BL-MINI

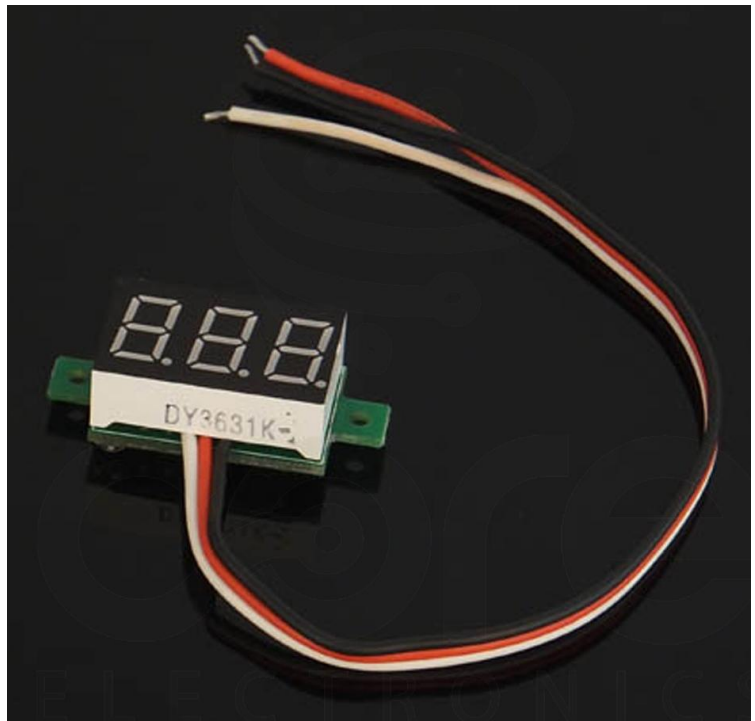


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1. Introduction

This is a 100V DC Voltmeter that operates over a wide voltage range of input voltage (from 3 to 100V). For up to 30V, only two wires are needed to interface this device with the target circuit and the same DC voltage is used for powering the meter from the target circuit. 100V+ requires a separate power supply as detailed below.

The PCB assembly has two mounting holes which facilitates users to mount the meter on a panel or another surface.

Applications include project power supply monitoring up to 30V while construction of DIY power supply project using along with Digital Display DC Ammeter (a separate device), monitor battery voltage of a car, motorcycle, truck or bus which have 12v /24v batteries. In addition, monitor UPS, Home Inverter Batteries of 12V/24V or Solar Panel voltage.



Technical Specification:

- Measuring Range: 0-100V DC
- Error: 1%
- Display: Three digit 0.36" Blue LED Segment Display
- Refresh Rate: 500mS
- Power Supply: 3.0-30V
- Operating Temperature: -10°C to 65°C
- Dimensions: 23x15x10mm (without mounting tabs)
- Panel mounting Hole Size: 24x15mm
- Lead Length: 15cm

Wiring Details:

- Red: Power Supply V+
- Black: Power Supply V-(GND), Measure –
- White: Measure +

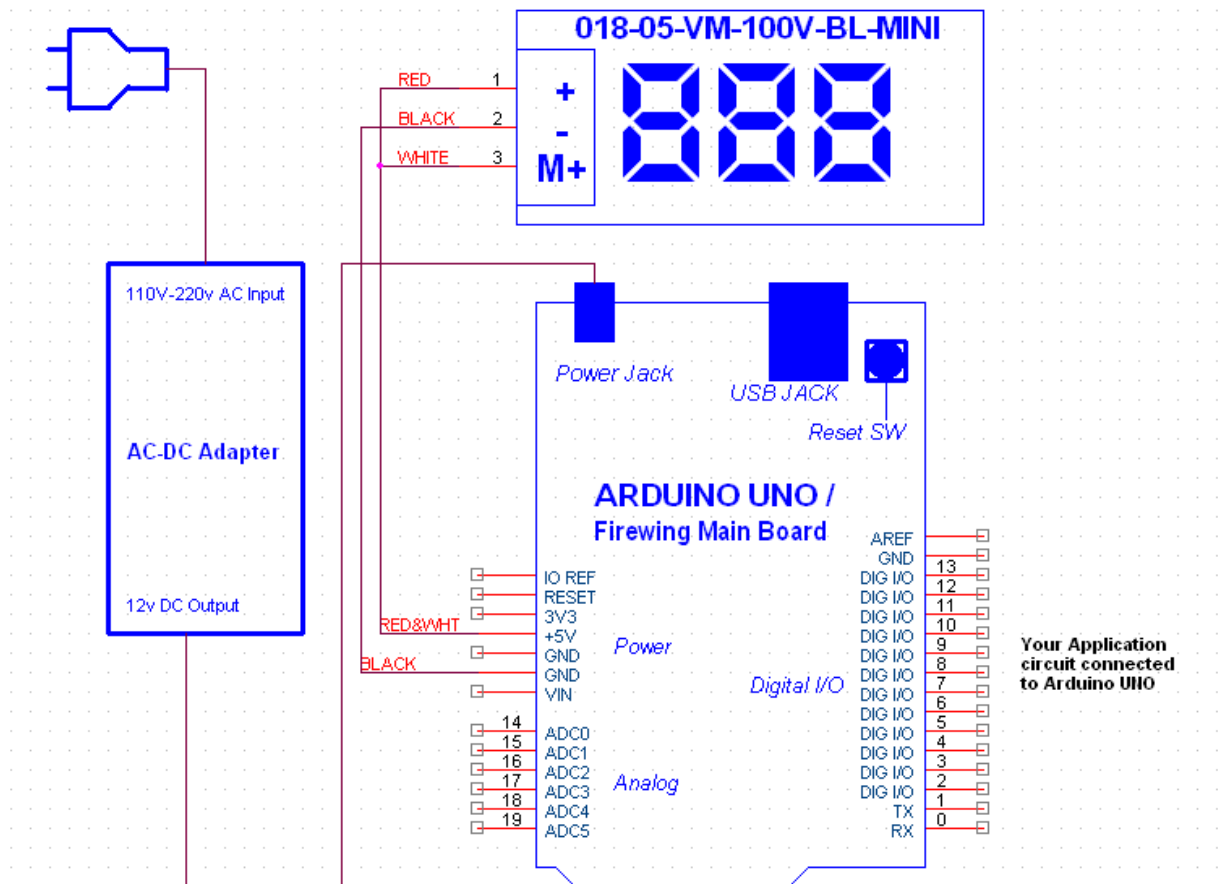


2. Application Circuit

Option 1: Measurement of voltage less than 30V.

Below is a circuit for monitoring the supply using the digital voltmeter for a Arduino UNO project. The supply voltage and measure voltage for the module are connected in this example; which can be handy for detecting brownouts and the like. The measurement voltage is connected to the RED wire. The ground is connected to the BLACK wire.

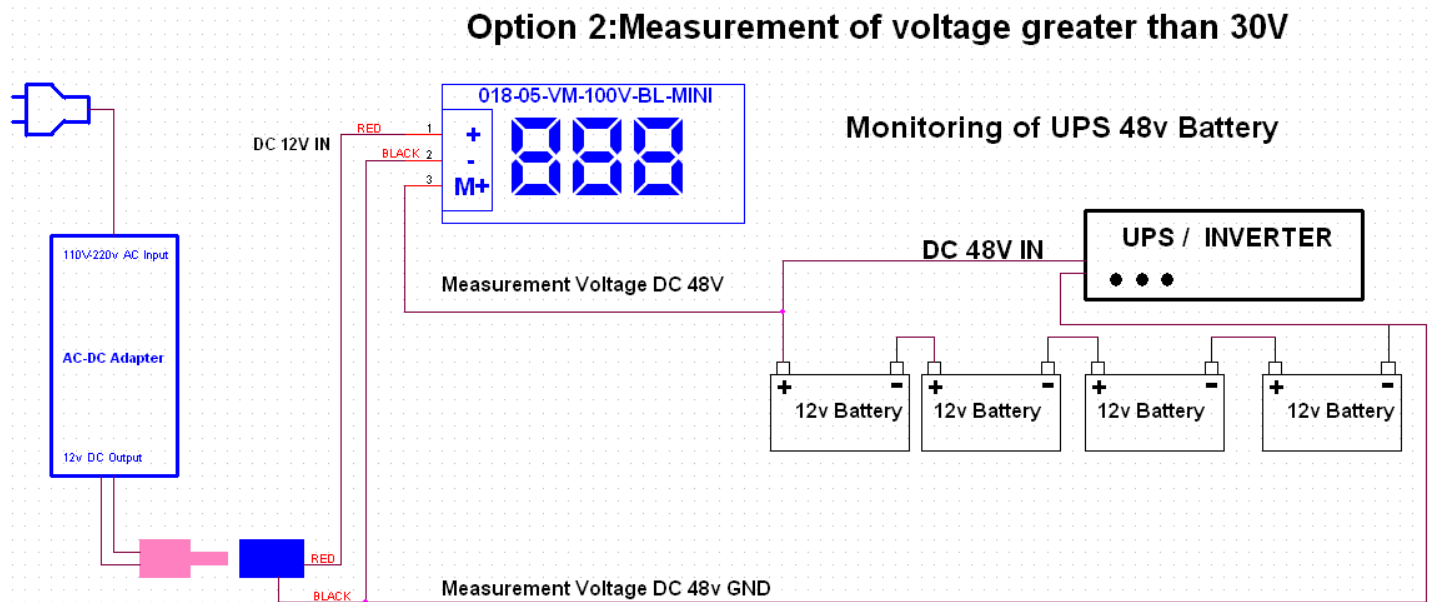
Option 1: Measurement of voltage less than 30V



Option 2: Measurement of voltage greater than 30V.

The DC supply voltage for the voltmeter RED and BLACK wire should not exceed 30V. Measurement voltage is via the WHITE wire which can be up to +100v. Measurement voltage ground should be connected to BLACK wire which is common for both DC circuits.

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Caution: Since measurement voltage is higher (more than 40V) risk of electrical shock is there. Disconnect all power before handling the non insulated wire connections.

3. Reader Feedback

Have a suggestion or discovered an error? Let us know and we will fix it! Please contact us via manuals@core-electronics.com.au and mention the product SKU and your feedback in the message.

4. Disclaimer

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