

Instructions & Specifications: PWM Dimmer, 12 Volt, 1.5A (18W)

This dimmer is designed to operate LED lighting, such as LED Light Strips and other light sources. It has an integral on/off switch and provides precise dimming of light sources.

To install, use the screw terminals and/or attached input and output wires (shaft is 1/4"). Always place a properly rated fuse between the dimmer and power source. Take care to ensure the dimmer does not contact surrounding metal structure or other wiring.

Specifications

Mode of Operation - Continuously variable, pulse width modulation (PWM).

Supply Voltage - 8 to 20VDC working voltage, up to 30VDC momentary. Dimmer must be fused at power source.

Output Voltage Range - From zero VDC to supply voltage

Output Current Range - Up to 1.5A

Max Continuous Output Current - Full rated current up to 105 F (40C), 75% of rated current up to 115F (46C)

Ambient Temp Range - minus 40F (-40C) to 115F (46C), with restrictions as noted

DC-DC Conversion Efficiency - About 98% at full rated current, higher at lower current

Load Types - Optimized for resistive loads

Reverse Battery Protection - If input leads are reversed, fused link in dimmer blows if main external fuse or circuit breaker is inoperative. Always use an external fuse to protect the dimmer and load.

Forward Transient Protection - Double resistive/capacitive filtering, zener diode clamping.

Voltage Drift - Nil

Size - About 1 3/4" inch square

Weight - 30 to 40 gm, depending on wired connection type

Load Regulation - Generally less than 3% from minimum load to maximum load at all settings

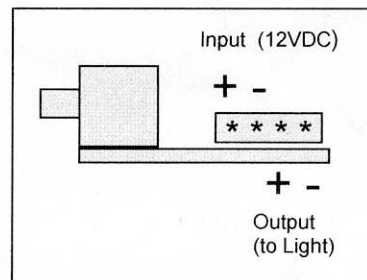
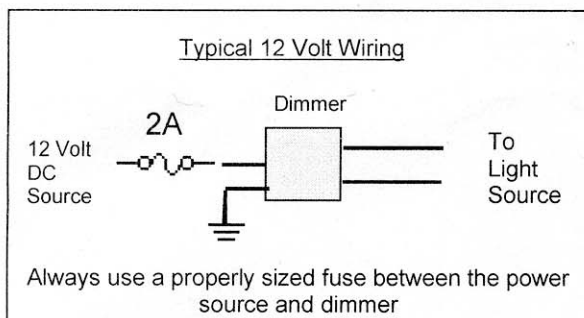
Line Regulation - Directly proportional to supply voltage

Power Dissipation of Drive Circuitry - Less than 0.038W. No load current draw is about 1mA. Nil current used if on/off switch is in Off position.

Heat Sink - Electrically isolated from voltage and acts as a circuit enclosure. Max. temperature rise under load is about 40 F (22C) above ambient.

Accessories - Knob, instructions and color coded input/output wires (labeled)

Wiring Diagrams



Applications: Automotive, Boating, RVs/Specialty Vehicles, Experimental Aircraft (this part is not PMA approved for certified aircraft)

Britta Products LLC, Long Beach, CA - www.pilotlights.net

Part number: 12VDimmer01