

2-Channel Dimmer, 2 x 1.5A (18W) Instructions & Specifications

This dimmer is designed to operate LED lighting, such as LED Light Strips and other light sources. It has two independent circuits with integral on/off switches for control of 2 light sources using Pulse-Wave Modulation (PWM) to provide precise dimming.

To install, use the screw terminals to attach 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.

When using with "PilotLights" Dual-Color LED Light Strips the light source has 3 input wires – one for each of the two positive (+) colors and a common negative (-) ground. Connect the ground (-) wire to either of the Output negative (-) terminals

Specifications

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

Supply Voltage – 6 to 25 VDC working voltage, up to 30 VDC momentary. When input voltage is larger than 16 VDC, the output is automatically turned off. To restore operation, input voltage must be less than 16 VDC.

Output Voltage Range – From zero VDC to supply voltage

Output Current Range – Up to 1.5 A per channel

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 – MCU will detect over voltage and over-current within less than 0.1 seconds

Voltage Drift – Nil

Size – About 2" x 1.75" inch square

Weight – About 50 grams

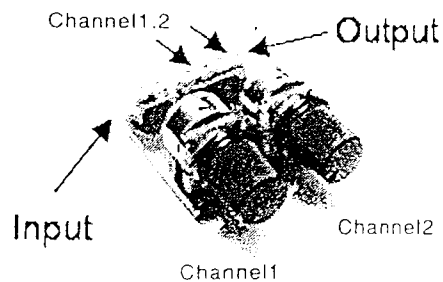
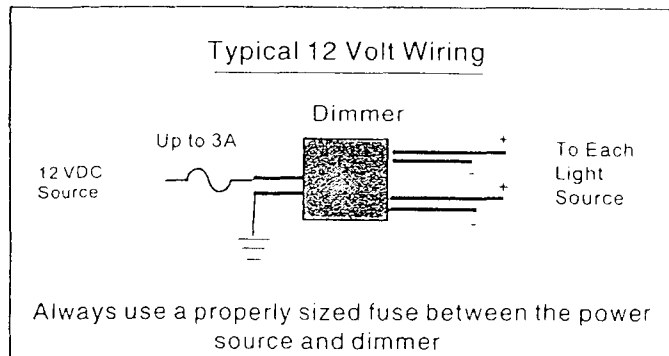
Load Regulation – Generally less than 3% from minimum load to maximum load at all settings

Line Regulation – Directly proportional to supply voltage

Power Dissipation of Drive Circuitry – Less than 0.1W not including the power dissipation of the load. The dimmer is controlled by a MCU providing voltage regulation. When the dimmer is turned off, the power dissipation is still less than 0.1W.

Accessories ? Knobs, hardware and instruction sheet

Wiring Diagrams



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