

DOUG FLEENOR DESIGN

Wall Mounted, Low Power, 12 Channel, ELV DMX512 Dimmer

model: DMX12DIM ELV-JBOX

technical data sheet



The DMX12DIM ELV-JBOX is a twelve output dimmer designed for high efficacy loads, and minimal losses. This dimmer uses “reverse phase” (aka: “trailing edge”) dimming techniques and MOSFET power devices. This type of control is required for proper dimming of many LED fixtures. Each output can drive loads up to 100 Watts. Each channel may be configured for reverse phase dimming (default), forward phase dimming, or non-dim operation.

The dimmer is a wall mounted unit. All connections are made by terminal blocks for easy contractor installation. The NEMA1 electrical enclosure is provided with standard conduit knockouts on four surfaces.

The DMX12DIM ELV-JBOX is ETL Listed to the UL508 standard.

If you would like assistance in your application, please give us a call. We like to talk with our customers.

SPECIFICATIONS: All specifications meet or exceed DMX512 requirements.

Input circuit: Protected EIA-485 receiver (LT1785)

Input protection: Undamaged by up to 60 Volts continuous, 15KV transients

Input signal: 0.2 volts minimum, DMX512, DMX512/1990, or DMX512-A

Input & thru connectors: Pluggable Phoenix terminal blocks

Termination: No internal termination provided. A 120 Ohm termination resistor is provided on the Thru connector if the dimmer is the last device on the line

Power input: 120 VAC 60 Hz 10 Amps at full load, actual current draw is 0.07A plus connected load

Power input connector: 3 position terminal block (Line, Neutral, Ground) suitable for up to #12 AWG wire

Idle power: 7 Watts

Power output: 120 VAC 60 Hz 0.83 Amps (100W) maximum per output

Minimum load: No minimum load requirement

Output protection: 1.5A internal fuse on each output channel

Output connectors: 2 position terminal block (Line, Neutral) on each output suitable for up to #12 AWG wire

Doug Fleenor Design, Inc.

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SPECIFICATIONS: (Continued)

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|-----------------------|---|
| Dimming circuit: | Digitally fired, optically-isolated, MOSFET power devices that allow for forward or reverse phase dimmer control |
| Rise/fall time: | 2 uS (10% to 90% at 90 degree firing angle) at rated load |
| Dimming curve: | Square law, visually appealing on LED lamps (120V), halogen lamps, magnetic low-voltage (MLV) and electronic low-voltage (ELV) |
| Non-dim curve: | Each channel can be configured as a non-dim which turns on at 60%, off at 40% Outputs switch on at zero crossing. Other non-dim trip point options include 50% and 1% (globally settable). |
| DMX footprint: | Twelve consecutive DMX slots beginning with the selected DMX starting address |
| DMX starting address: | Three digit thumbwheel switch, address changes are immediate (no power cycling required) |
| Local control: | An "address switch" setting of 601 turns on output 1, 602 turns on output 2, etc. A setting of 699 turns on all outputs. A setting of 698 turns on all outputs when DMX is present. A setting of 697 turns on all outputs if any DMX level is above zero. |
| Status indicators: | Red POWER indicator Green MIMIC 1 indicator mimics the intensity of output 1 (useful in troubleshooting) Green SIGNAL indicator illuminates when DMX512 is present, flashes when local control is active (address switch settings of 601 thru 612 and 697 thru 699) |
| Cooling: | Convection cooling, no fan required |
| Isolation: | DMX512 input is optically isolated from AC power circuits to 600 Volts |
| Color: | Gray |
| Safety listing: | ETL Listed to UL 508 |
| Size and weight: | 18"H x 4"D x 12"W, 10 pounds |

Limited Manufacturer's Warranty

Products manufactured by Doug Fleenor Design (DFD) carry a five-year parts and labor warranty against manufacturing defects. It is the customer's responsibility to return the product to DFD at the customer's expense. If covered under warranty, DFD will repair the unit and pay for return ground shipping. If a trip is necessary to the customer's site to solve a problem, the expenses of the trip must be paid by the customer.

This warranty covers manufacturing defects. It does not cover damage due to abuse, misuse, negligence, accident, alteration, or repair by other than by Doug Fleenor Design.

Most non-warranty repairs are made for a fixed \$50.00 fee, plus shipping.

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