Model DMX8DIM Installation and Operations Manual

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Product description

The DMX8DIM is an 8 channel, 250 Watt dimmer. It is fed by a single 120VAC 20A branch circuit. Each output is protected by a self-resetting poly-fuse. Each of the dimmers can be separately controlled using a typical DMX512-based lighting controller. The DMX8DIM is housed in a standard NEMA1 electrical enclosure. Knockouts are provided on the top and bottom of the enclosure for easy installation. Cables may enter the sides of the enclosure by using standard chassis punches.

Safety warnings

- The DMX8DIM should only be installed by qualified personnel in accordance with local electrical codes.
- There are no user serviceable parts in the DMX8DIM. Servicing should be referred to qualified service personnel.
- Do not operate the DMX8DIM without the cover installed.
- Turn off all power to the DMX8DIM before installing. Do not attempt to wire or install any part of the DMX8DIM with the power on.

Environmental

Operating temperature: 0-40º C
Operating humidity: 10-90% non-condensing
Indoor use only

Electrical ratings

Input: 120VAC, 60Hz, 20A
Output: 8 outputs, 120VAC, 250W each. Self-resetting protection on each output.

Certification

The DMX8DIM is ETL Listed under safety Standard UL 508.

Mounting

The DMX8DIM can be mounted on any stable surface in compliance with local electrical codes. To mount the DMX8DIM:

- Remove the cover by loosening the front panel screws
- Select the desired mounting location
- Locate the mounting holes using the DMX8DIM as a guide
- Secure the DMX8DIM to the surface using appropriate fasteners
- After all wiring is complete and switches have been configured (see below), install the cover and secure it in place.

General installation notes

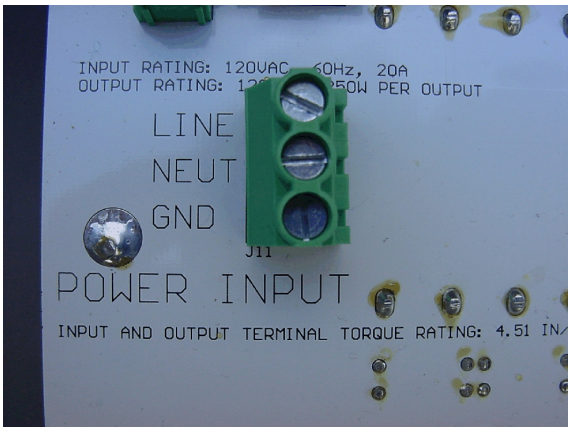
- If enclosure knock-outs are used or if holes are punched in the enclosure for wire entries, the holes must have appropriate bushings or conduit fittings installed to protect the wires from cuts and abrasion.

- Safety grounding must be maintained through this product. Metallic conduit may be used for grounding if it is appropriately bonded to the enclosure. The ground terminal on the line input and all output terminals may be used for grounding conductors. All such terminals are internally bonded to the enclosure.

Power input (line) wiring

Supply the DMX8DIM with a protected branch circuit of no more than 20A. The power input terminals on the DMX8DIM are rated for #12AWG copper wire (maximum). The torque rating for the terminals is 4.51 IN/LB.

Input power wiring must enter the enclosure and route directly to the input power terminals without crossing over the circuit board or any control wiring.

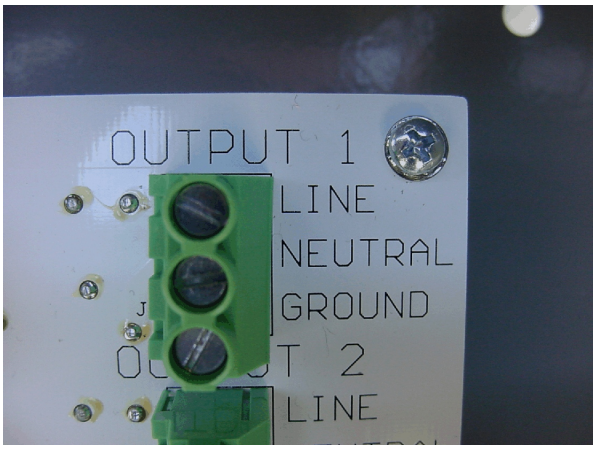


Line input terminal

Power output (load) wiring

Each output can supply a 250W (maximum) 120VAC load. The output terminals are rated for #12AWG copper wire (maximum). The torque rating for the terminals is 4.51 IN/LB.

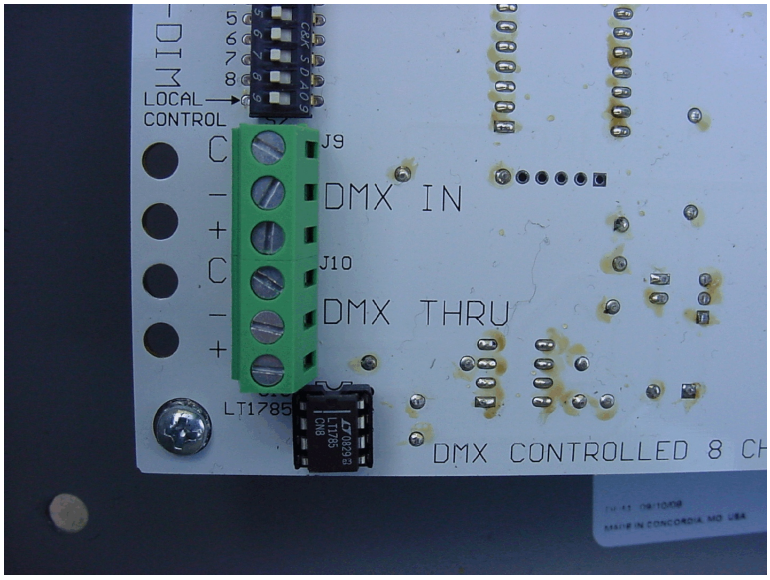
Load wiring must enter the enclosure and route directly to the input power terminals without crossing over the circuit board or any control wiring.



Load terminal (1 of 8 shown)

Control cable wiring

Control cabling must enter the enclosure and route directly to the control input terminals. The installer must secure low voltage control cabling such that it can not come in contact with high voltage line or load wiring.



Control cable terminal block

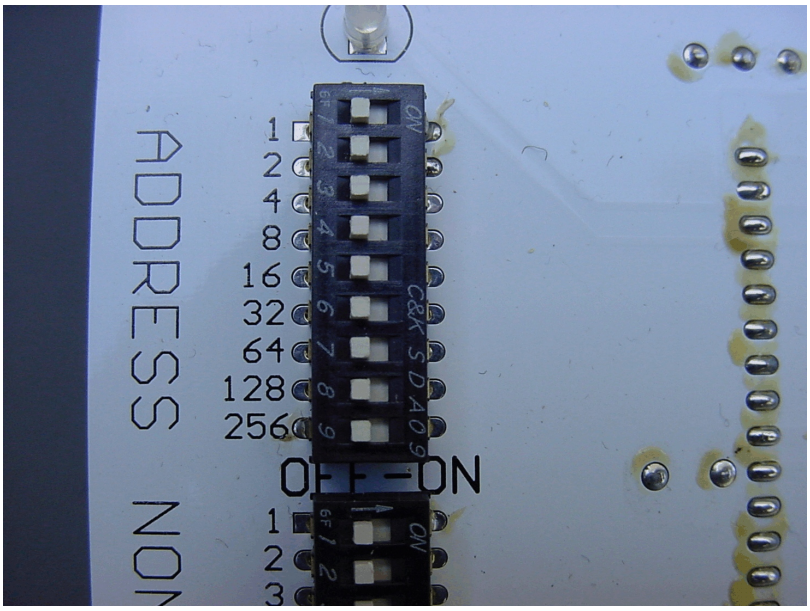
The DMX512 control signal is connected to the DMX IN terminal block. A cable appropriate for use with DMX512 must be used. Examples include Belden 9829, Belden 9729, or their equals by other manufacturers.

The shield of the cable is connected to the DMX IN “C” terminal. The first twisted pair of wire is to be connected to the DMX IN “ -“ and “+” terminals. If a second twisted pair is present in the control cable, it should NOT be connected. The spare pair should either be trimmed back or secured such that it can not come in contact with any other parts of the DMX8DIM

The DMX THRU terminal block has been provided if the DMX512 signal is to be run to other devices. If the DMX THRU terminals block is to be used, remove and discard the 120 ohm resistor. Land the cable on the DMX THRU terminals in the same fashion as described for the incoming DMX512 cable. The cable connected to the DMX THRU terminal block must only enter the enclosure in the areas shown below. The installer must secure low voltage control cabling such that it can not come in contact with high voltage line or load wiring.

Setting the address switches

The ADDRESS switches are used to select the DMX512 starting address for the DMX8DIM. Each switch represents a value as marked on the circuit board. The address switches should be turned on in a combination whose totals equals the desired DMX512 starting address. For example, if the desired starting address is 25, the switches representing the values 16, 8, and 1 should be turned on. The rest of the address switches should be off. The photo below shows this setting.



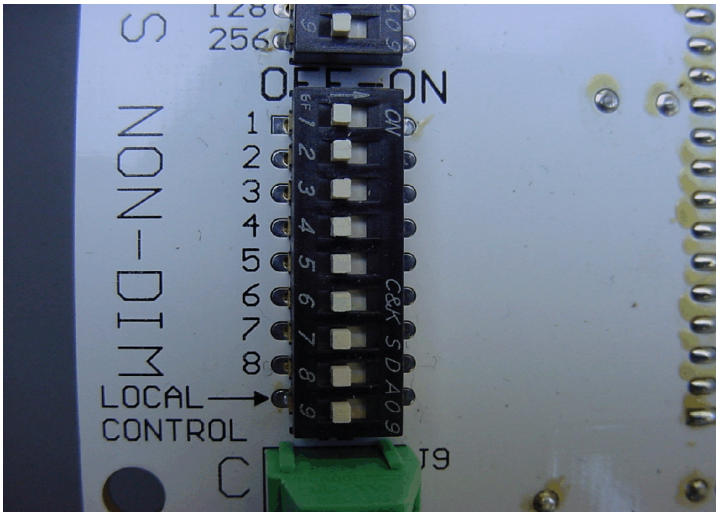
The starting address can be set to any value from 1 to 511. The starting address represents the address to be used for output 1 of the DMX8DIM. The second output will respond to the next DMX512 slot, etc.

Setting all of the address switches to off is the same as having switch 1 on (address 1).

Setting the non-dim mode switches

The NON-DIM switches are used to select the behavior of each output. When the NON-DIM switch for the associated output is off, the dimmer will have full range dimming control from zero to full intensity.

When a NON-DIM switch is on, the associated output can only be either on or off. There will be no dimming action. The output will turn on full when the associated DMX512 input channel is raised above 1%. It will turn off when the DMX512 channel is brought below 0.5%.



Local control

Local control mode is used to turn on selected outputs without the use of a DMX512 signal source. To enable local control, turn on the local control switch as shown below.

While in local control, the NON-DIM switches are used to turn individual outputs on or off. NON-DIM switch 1 turns output 1 on or off, NON-DIM switch 2 controls output 2, etc.

LED indicator

The bi-color LED indicates the current state of the DMX8DIM as follows:

LED State	System Status
Flashing red	Power on, no input signal
Solid red	Local control mode enabled
Flashing green	DMX input present
Solid green	DMX input present, output 1 above 0

Warranty

Products manufactured by Doug Fleenor Design carry a five year parts and labor warranty against manufacturing defects. It is the customer's responsibility to return the product to Doug Fleenor Design (at the customer's expense). Doug Fleenor Design will repair the unit and return it to the customer (at Doug Fleenor Design's expense). 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.

1. Note that this warranty is against Manufacturing Defects. It does not include damage due to misuse or abuse. Most non-warranty repairs are made for a fixed $30.00 fee.