

## Low Power, 24 Channel, DMX512 Dimmer

model: DMX24DIM, DMX24DIM-2U  
technical data sheet



The DMX24DIM and the DMX24DIM-2U are twenty-four output dimmers designed for high efficacy loads, low idle power, and minimal losses. Typical loads include Christmas light strings (LED and incandescent), and low power lamps such as LED, neon, compact fluorescent, electronic and magnetic low voltage, halogen and incandescent. Typical applications include Christmas tree lighting, cue lights, signs, marquees, and practicals.

The DMX24DIM is a single-space rack mount unit, while the DMX24DIM-2U is a two-space rack mount unit, each with removable rack ears. Airflow is front to side. Half inch holes are provided for half couplers or C clamps. The enclosures feature a carry handle and a 3/8 inch safety cable slot.

The units are 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, 12 volts maximum, DMX512, DMX512/1990, or DMX512-A.

Input connector: Gold plated 5 pin male XLR (Neutrik D-1 series) 3 pin XLR optional.

Input pass through: Gold plated 5 pin female XLR (Neutrik D-1 series). All five pins are passed through.

Termination: None. Unused pass through connectors must be externally terminated.

Power input: 120 VAC 60 Hz 20 Amps at full load. Actual current draw is 0.05A plus connected load.

Power input connector: NEMA 5-15P (15A U-ground) on 18 inch 12 gauge pigtail. Connector must be replaced with a 20A connector for connected loads greater than 1800 Watts.

Idle power: Less than 1 Watt.

Power output: 120 VAC 60 Hz 0.83 Amps maximum per output.

Minimum load: No minimum load requirement.

**SPECIFICATIONS:** (Continued)

- Output protection: None. Overloading of outputs can result in output failure.
- Output connectors: DMX24DIM: NEMA 1-15R (15A polarized ungrounded parallel blade).  
DMX24DIM-2U: NEMA 5-15 (grounded parallel blade)
- Dimming circuit: Digitally fired, phase controlled 16 Amp snubberless triac (Alternistor) with high dv/dt driver. Triacs are screwdriver replaceable. One spare triac provided. A leakage control circuit on each output prevents ghosting of small loads.
- Rise 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: Optional factory programmed non-dims turn on at 60%, off at 40% (or other user specified points). Outputs switch at zero crossing.
- DMX footprint: Twenty-four consecutive DMX slots beginning with the selected DMX starting address.
- DMX starting address: Three digit front panel thumbwheel switch. Address changes are immediate (no power cycling required).
- Local control: "Address switch" setting of 601 turns on output 1, 602 turns on output 2, etc.
- Chase mode: Factory programmed chase sequences are available. Please call.
- 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 624).
- Cooling: Processor controlled low speed fan exchanges internal air from front to side.
- Isolation: DMX512 input is optically isolated from AC power circuits to 600 Volts.
- Color: Silver hammer tone with black front and rear panels.
- Safety listing: ETL Listed to UL 508
- Size and weight: DMX24DIM: 1.7"H x 10.5"D x 19"W (17" behind rack ears), 7 pounds  
DMX24DIM-2U: 3.4"H x 10.5"D x 19"W (17" behind rack ears), 7 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.

**Doug Fleenor Design, Inc.**

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