DOUG FLEENOR DESIGNE

Six Channel DMX512 Controlled Relay Pack

model: DMX6REL15A-JBOX, DMX6REL30A-JBOX





Doug Fleenor Design, Inc. 396 Corbett Canyon Road Arroyo Grande, CA 93420 (805) 481-9599 Voice and FAX **Product Description:** The Six Channel DMX512 Controlled Relay Pack receives DMX512 and uses the levels to open or close dry contact relays. A relay is closed when its level exceeds 60%. The relay is opened when the level falls below 40%. The unit is wired such that when the relay is closed, the line voltage on the AC input is switched onto the AC output (only the *hot* side is switched). The DMX6REL15A-JBOX, designed to switch line voltage loads up to 15 amps, uses 30 amp relays. The DMX6REL30A-JBOX is the same as the DMX6REL15A-JBOX, but uses two 120 VAC inputs, one for relays 1 through 3, one for relays 4 through 6. Custom options with different trip points, inverted action, momentary action, and DMX loss behavior can be configured in the field. Contact DFD for details.

Safety Warnings:

- The DMX6REL15A-JBOX and DMX6REL30A-JBOX should only be installed by qualified personnel in accordance with local electrical codes.
- There are no user serviceable parts in the DMX6REL15A-JBOX or DMX6REL30A-JBOX.
 Servicing should be referred to qualified service personnel.
- Do not operate the DMX6REL15A-JBOX or DMX6REL30A-JBOX without the cover installed.
- Turn off all power to the DMX6REL15A-JBOX or DMX6REL30A-JBOX before installing. Do not attempt to wire or install any part of the DMX6REL15A-JBOX or DMX6REL30A-JBOX with the power on.

Mounting: The DMX6REL15A-JBOX and DMX6REL30A-JBOX can be mounted on any stable surface in compliance with local electrical codes. No clearance is needed for ventilation. Any convenient box orientation is acceptable. To mount the DMX6REL15A-JBOX or DMX6REL30A-JBOX:

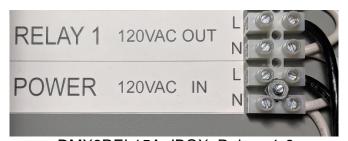
- Remove the cover by loosening the front panel screws.
- Select the desired mounting location.
- Locate the mounting holes using the DMX6REL15A-JBOX or DMX6REL30A-JBOX as a guide.
- Secure the DMX6REL15A-JBOX or DMX6REL30A-JBOX to the surface using appropriate fasteners.
- After all wiring is complete and switches have been configured, 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.

Power Input (Line) Wiring: Supply the DMX6REL15A-JBOX with a 15 amp 120 VAC branch circuit or two 15 amp 120 VAC branch circuits for the DMX6REL30A-JBOX. The power input terminals on the DMX6REL15A-JBOX or DMX6REL30A-JBOX are rated for #12-22 AWG copper wire. The torque rating for the terminals is 5 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.



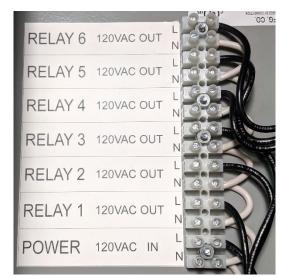
DMX6REL15A-JBOX: Relays 1-6 DMX6REL30A-JBOX: Relays 1-3



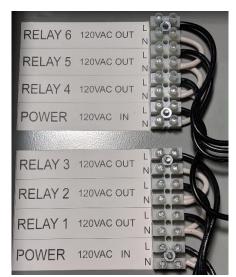
DMX6REL30A-JBOX: Relays 4-6

Power Output (Load) Wiring: Each output can supply up to 15 amps of a 120 VAC load. The output terminals are rated for #12-22 AWG copper wire. The torque rating for the terminals is 5 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.



DMX6REL15A-JBOX



DMX6REL30A-JBOX

DMX Input: The DMX signal is applied to the DMX INPUT terminal with three positions for data common, data minus, and data plus. A cable appropriate for use with DMX512 must be used. Examples include Belden 9829, Belden 9729, or their equal by other manufacturers. 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 cannot come in contact with high voltage line or load wiring.



The shield of the cable is connected to the DMX INPUT "C" terminal. The first twisted pair of wire is to be connected to the DMX INPUT "-" 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 cannot come in contact with any other parts of the DMX6REL15A-JBOX or DMX6REL30A-JBOX. The torque rating for the terminals is 12 IN/LB (maximum).

DMX Termination: No internal termination is provided. The last device on a DMX run should be terminated with a 120 ohm terminator.

Starting Address: The starting address (the address that will control the first relay) is set using the three switches on the DMX address switch module. Set the number to the desired starting address. The second relay will be controlled by the address setting plus one, the third relay by the address setting plus two, etc.



Test Mode: Setting the address switch to 601 will close the first relay to allow testing the output without a DMX512 signal. Setting the address switch to 602 will close the second relay, etc. When in test mode the signal indicator will flash. 697 closes all relays if any DMX slot is above zero, 698 closes all relays when DMX is present, and 699 closes all relays.

Power Indicator: The red power indicator will illuminate whenever power is applied.

Mimic Indicator: The green relay one indicator will illuminate when the first relay is closed, supplying power to the first output.

Signal Indicator: The green signal indicator will illuminate when a valid DMX signal is received. The indicator will flash when the unit is in test mode (Address switch set to 6XX).

Specifications:

Certification: ETL Listed to the UL 508 standard

Power input: 120 VAC, 50/60 Hz, 2 Watts

(plus the connected load)

Output rating: DMX6REL15A: up to 15 amps per channel, 15 amps total connected load

> DMX6REL30A: up to 15 amps per channel, 15 amps total connected load on relays 1-3, and up to 15 amps per channel, 15 amps total connected load on

relays 4-6

Environmental: 0-40° C (32-104° F), 10-90% humidity, non-condensing. Indoor use only

Size and weight: 18"H × 4"D × 12"W, 10 pounds

Color: Gray

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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