

DMX512 controlled 96 channel open collector driver

model: DMX96OC and DMX96OC-INTPS
technical data sheet



The DMX96OC decodes 96 consecutive DMX512 channels to open collector NPN outputs. The starting address is selected by an easy to read (and set) three digit thumbwheel switch. The switch is mounted on the front panel along with indicators for

power, signal, and an output 1 mimic. The DMX in, DMX through, and four female DB-25 output connectors are located on the back panel. All connectors feature gold plated contacts. The DMX512 input is optically isolated from the outputs and is protected against mis-wiring up to 120 volts. Power connection to the DMX96OC is made via a three position external barrier terminal strip. The end user's 12 - 24 volt DC power supply is connected to the positive and negative terminal position. An additional "output common" terminal block connection is available for high current applications.

Each output of the DMX96OC is capable of sinking 100mA. Higher current may be possible based on duty cycle and other constraints. Contact Doug Fleenor Design for engineering assistance.

SPECIFICATIONS: Input specifications meet or exceed DMX512/1990.

Input baud rate:	DMX512: 250 Kb/s
Input circuit:	EIA-485 receiver with series 100 ohm PTC self-resetting "fuses" clamped to +/- 7 volts by four low capacitance <i>transorb</i> diodes
Input signal:	0.5 volts minimum, 12 volts maximum. Input can withstand up to 120 volts without damage and transients up to 5KV
Output circuit:	8-bit 50V 500mA NPN Darlington driver. Unprotected output
Output signal:	$V_{CE(SAT)}$ 1.1V maximum at 100mA
Max. output current:	100mA continuous, 500mA peak
Max. output voltage:	48VDC
Input/output isolation:	Greater than 500 volts
Throughput delay:	Less than .005 seconds (DMX input change to output change)
DMX512 connectors:	Two gold plated 5 pin Neutrik D-1 Series (male input, female pass through) (All five pins are wired on the pass through)
Output connectors:	Four female DB-25 with gold plated pins. Pin number equals output number, pin 25 is output common (900mA maximum on common)
Output common:	An "output common" terminal block is available for high current applications.
Power input:	(Standard) model: DMX96OC Terminal block for user's external CLASS II power supply 12 - 24 volts DC 200mA or (Optional) model: DMX96OC-INTPS With 6' power cord 90 - 125 volts AC, 50/60 hertz, 10 watts (240 volt optional)
Color:	Top, bottom and sides: Silver hammer tone. Front and back: Black
Size and weight:	1.7"H x 6.5"D x 16.5"W, 6.5 pounds (19" rack adapter available)

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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