DOUG FLEENOR DESIGN
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DMX512 to AMX192 Converter

model: DMX1AMX, DMX2AMX
technical data sheet

The DMX to AMX converter is available in two standard configurations. The single output model handles up to 192 dimmers while the dual output converter extends the unit's capability to 384 dimmers. Custom converters with any number of DMX inputs and AMX outputs are also available. These custom units are *seamless*; they handle the problems of two DMX inputs covering one AMX output and CD-80 6K/12K modules without gaps in the DMX numbering.

The DMX to AMX converter allows the installation of control consoles that lack AMX outputs into a system of AMX dimmers. Typical uses include upgrading the console of an AMX lighting system or adding AMX outputs to a DMX only console (you may purchase just the circuit board). If you would like assistance in your application, please give us a call. We like to talk with our customers.

SPECIFICATIONS: Input specifications meet or exceed DMX512 requirements.
Output specifications meet or exceed AMX192 requirements.

Input signal:	250 Kilobaud (CMX's 153.6 Kilobaud is optional) 0.2 volts minimum, 12 volts maximum
Input circuit:	EIA-485 receiver with 22 K-Ohm pull up on +Data, 22 K-Ohm pull down on -Data
Input connector:	Gold plated 5 pin male (Neutrik D-1 series)
Input pass through:	Gold plated 5 pin female (Neutrik D-1 series) All five pins are passed through
Output signal:	
Data clock:	8 uS (micro seconds)
Reset clock:	50 uS followed by 15 uS delay
Frame rate:	60 uS period. Analog data precedes rising edge of clock by 10 uS
Analog level:	0 to 5.3 volts
Output circuit:	
Clock:	EIA-485 driver
Analog data:	NPN active pull up, 200 ohm passive pull down, 24 ohm series resistor
Output connector(s):	Gold plated 4 pin male (Neutrik D-1 series)

Output Pinout:

Pin	Function
1	COMMON
2	CLOCK+
3	ANALOG DATA
4	CLOCK-

Power input:	100 - 120 volts, 50/60 hertz, 12 watts (208 - 240 volt optional)
Color:	Black front, back, top, and sides. Clear iridite aluminum bottom.
Size and weight:	9" deep, 1.6" high, 5.6" wide, 2.5 pounds (19" rack adapter available)

DMX512 to AMX192 Converter - Selected Features

The following information is provided to assist you in determining if the DMX512 to AMX192 Converter would be of benefit in your installation. If you have any questions, please feel free to call, write, or FAX us.

FEATURE	BENEFIT
No user adjustments.	Easy "fool proof" installation.
DMX and AMX pinouts are printed on the converter.	Assists in proper control wiring.
Single piece vinyl clad steel top/sides.	Rugged and attractive for years of service.
Extruded aluminum chassis.	Holds circuit board and cover firmly in place.
Gold plated Neutrik connectors.	Assures reliable connections.
All integrated circuits are socketed.	Eases field service.
Power and input signal indicators.	Simplifies system trouble shooting.
Dimmer 1 output level mimic.	Verifies data is being received correctly.
Average delay of 0.005 seconds.	No visible delay. Bumps are fast. Fades are smooth.
5 year warranty.	Peace of mind.

The DMX512 to AMX192 converter is based on a 20 MHz high performance microprocessor (Zilog Super8). The program is written in assembly language for maximum speed. The converter accepts any DMX signal: DMX512, DMX512/1990, 4 or 8 uS mark-after-break. The converter outputs AMX192 at 100 updates per second. On dual output models (384 dimmers), the two ports run in *parallel.* That is dimmer 1 and dimmer 193 are output at the same time using two separate digital to analog converters. This doubles the speed over designs using one digital to analog converter. The two outputs have separate drivers so a short on one output will not affect the other.

The circuit board is available without the enclosure for mounting inside a console. The tested board comes with wiring information but installation should be done by a technician trained in lighting console repairs. The power supply is included on the board and may be jumpered for 100-120 or 208-240 volt operation.

Meeting custom requirements is our specialty. If your needs are not met by a standard product, contact us for a quotation on your specific challenge.

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