## DOUG FLEENOR DESIGN

## DMX512 to 0-10 Volt Analog Converter

model: DMX24ANL technical data sheet



The DMX to Analog Converter decodes consecutive DMX512 channels to 0 to 10 volt output. Two versions are available: 24 and 96 output. The starting address is selected by an easy to read (and set) three digit push-wheel switch. The switch is mounted on the front panel along with power, signal, and output 1 mimic indicators. The DMX in and through connectors and the female DB-25 output connector(s) are located on the back panel.

All connectors feature gold plated contacts. The output pinouts are easy to remember with the pin number equals the channel number [pin 25 being common]. The DMX512 input is optically isolated from the outputs and is protected against miswiring up to 120 volts. The (defeatable) hold feature holds the last look indefinitely upon loss of DMX. A test feature allows you to bring any output to full by setting the front panel switch to 601-624 (601-696). The converter may also be ordered to receive Colortran's CMX protocol.

## SPECIFICATION

Input baud rate:
Input circuit:
Input signal:

Output circuit:
Output signal:

DMX512: $250 \mathrm{~Kb} / \mathrm{s}$, CMX: $152.6 \mathrm{~Kb} / \mathrm{s}$
EIA-485 receiver with series 100 ohm PTC self resetting "fuses" clamped to +/- 7 volts by four low capacitance transorb diodes
0.5 volts minimum, 12 volts maximum

Input can withstand up to 120 volts without damage, transients up to 5KV
LM324 quad op amp with 1N4004 series diode
0 to 10.1 volts positive DC into 2000 ohm load
Outputs can withstand up to positive 400 volts without damage Outputs cannot withstand high negative voltages
Max. output current: 15 mA per output, 120 mA total all outputs ( 360 mA total on 96 out version)
Input/output isolation: Greater than 500 volts

Throughput delay: Less than .005 seconds (DMX input change to analog 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)
Analog connector: Female DB-25 with gold plated pins
Pin number equals output number, pin 25 is output common
Power input:
90-125 volts, 50/60 hertz, 10 watts (180-250 volts optional)
Color:
24 output: Black front, back, top, and sides. Clear iridite aluminum bottom

96 output: Silver anodized aluminum
Size and Weight: $\quad 24$ output: $9.0^{\prime \prime}$ deep, $1.6^{\prime \prime}$ high, $5.6^{\prime \prime}$ wide, 2.5 pounds (19" adapter available)

96 output: $8.0^{\prime \prime}$ deep, $1.7^{\prime \prime}$ high, $16.7^{\prime \prime}$ wide, 4.5 pounds (19" adapter available)

## DMX512 to 0-10 Volt Analog Converter -- Selected Features

The following information is provided to assist you in determining if the DMX512 to 0-10 Volt Analog Converter will be of benefit in your installation. If you have any questions, please feel free to call, write, or FAX us.

| FEATURE | BENEFIT |
| :--- | :--- |
| Input is electrically isolated from output. | Console (and other DMX512 equipment) is <br> protected from failed dimmers (or other <br> equipment) on the analog side of the converter. <br> Ground loops are broken. Troubleshooting is <br> simplified. |
| Input is protected by transorb diodes | The converter can withstand very high transient <br> voltages without damage. |
| Input has self resetting "fuses". | Input can withstand up to 120 volts without <br> damage. |
| Outputs are current limited. | Outputs can withstand short circuits without <br> damage. |
| Outputs are diode protected. | Output can withstand high positive voltages <br> without damage. <br> Outputs can be "piled-on" with other diode <br> protected analog controllers |
| Output circuits are socketed. | High negative voltages on outputs may damage <br> the output circuit. Output circuits (LM324) are <br> readily available at electronic stores (i.e. Radio <br> Shack) and can be replaced without soldering. |


| DMX starting address is a decimal switch. | No need to learn binary dip switch settings. |
| :--- | :--- |
| Address switch is on the front panel. | Starting address is easily visible and easily <br> selected. |
| Input and output pinouts are printed on the <br> converter. | Assists in proper control wiring. |
| Gold plated Neutrik 5 pin connectors. | Assures reliable connections. |
| All integrated circuits are socketed. | Eases field service. |
| Uses 2500 Volt optical coupler. | Easily isolates line voltage failures. <br> Usually withstands electrical storm damage. |
| 15 mA drive current. | Reliably drives long control cables. |
| Power, input, and output indicators. | Simplifies system troubleshooting. Reports <br> blown fuses. |
| Mr. Fleenor is active in ESTA, PLASA, and <br> USITT. | Products are designed to latest specifications. |
| In the lighting industry since 1979. | We'll be here if you need us. |

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5 year warranty. Peace of mind.

