Model DMX DECELERATOR
Operations Manual

Product description
The DMX DECELERATOR is a DMX512 isolator and re-timing device. It can receive any signal within the DMX512 specification and it can accept some signals outside of the specification. The DMX DECELERATOR produces a DMX output signal with "relaxed" timing characteristics which are required by some DMX receiving devices.

Environmental
Operating temperature: 0-40º C
Operating humidity: 10-90% non-condensing
Indoor use only

Electrical ratings
Input: 100 - 240 VAC, 50 - 60Hz, 0.5A

Control cable
Standard 5 pin XLR cables should be used to connect DMX512 signals to the connectors on the back panel of the DMX DECELERATOR. A male input is provided and a female output is provided. The input is internally terminated.

Pins 4, and 5 of the 5 pin XLR connectors are not used by the DMX DECELERATOR. They are not connected internally.

Setting the speed switch
The front panel speed switch is used to select the timing characteristics of the output signal regardless of the characteristics of the incoming signal. The SLOW and FAST settings have timing characteristics as shown below.

Switch setting	Break time	MAB time	Inter-byte time	Update rate
SLOW	284 µs	116 µs	52 µs	20 Hz
FAST	202 µs	36 µs	4 µs	40 Hz
Strand *	228 µs	33 µs	4 µs	31 Hz

* Strand timing is set using an internal jumper. See jumper settings below. Strand timing adds an extra 7 millisecond mark-before-break idle time. This mode is only needed when attempting to send DMX to an input on some Strand Ethernet nodes.

LED indicators

The LED indicators on the front of the DMX DECELERATOR have the following functions:

LED label	Function
SIGNAL	On when DMX input is present. It is off when DMX is not present and the HOLD LAST LOOK feature is disabled (default). It flashes when no DMX is present and the HOLD LAST LOOK feature is active.
MIMIC	Tracks the current level of dimmer 1 for troubleshooting purposes
PWR	On when power is on

Jumper settings

Internal jumpers can be removed to change the behavior of the DMX DECELERATOR's output. To access the jumpers, remove the 4 screws which hold the front panel in place. With the screws removed, the front panel can be removed and the top cover panel can be slid out giving access to the jumpers on the circuit board. The jumpers have functions as shown in the table below.

Jumper	Installed function (default)	Removed function
JP1	No output on loss of DMX input	Hold last look on loss of DMX input
JP2	Disable driver on loss of DMX	Leave driver enabled on loss of DMX
JP3	Use front panel selection timing	Set output for Strand timing
JP4	Send last look if JP1 is removed	Send zeros on loss of DMX if JP1 is removed
JP5	Enable output normally	Stop sending DMX if all incoming levels are zero

Warranty

Products manufactured by Doug Fleenor Design carry a five year parts and labor warranty against manufacturing defects. It is the customer's responsibility to return the product to Doug Fleenor Design (at the customer's expense) for service. Doug Fleenor Design will repair the unit and return it to the customer (at Doug Fleenor Design's expense). 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.

1. Note that this warranty is against Manufacturing Defects. It does not include damage due to misuse or abuse. Most non-warranty repairs are made for a fixed $30.00 fee.