

# DMX0800 DMX 512 DECODER with 8 relay outputs

The LOGIC SYSTEMS DMX0800 decoder card decodes a standard DMX512 signal into 8 channels. The card channels 1-8 are relay contact outputs. The card can be used anywhere within the DMX 512 controller channel group. The starting address is set via dip switches. The relay output switching polarity can also be programmed. The DMX start code for the decoder card is zero. Multiple cards can be used with no overlapping of channels. In the event of a DMX512 signal loss the outputs will default to their open state.

## ADDRESSING

The decoder card uses base-zero addressing. When dip switches 1 through 9 are OFF the first card channel will be DMX controller channel 1.

Example:

To set the starting address to 342 set dip switches as follows.

Set DIPSWITCH SW1 switches to the following:

SW9	SW8	SW7	SW6	SW5	SW4	SW3	SW2	SW1
256	126	64	32	16	8	4	2	1
on	-	on	-	on	-	on	-	on
-	on	-	on	-	on	-	on	-

To get the starting address add up the values of the switches that are on. We have base-zero addressing so add one more. Our starting address is  $256+64+16+4+1+1=342$ . The card will use DMX-512 channels 342 through 349

## RELAY OUTPUTS

Connector P3 and P4 are relay contact output channels 1 through 8. Leave switch 10 in the off position. The relay outputs are rated for 3A 250VAC, 3A 30VDC. All contact are normally open and are isolated.

CONNECTOR P2 PINOUT  
PIN 1 – SHIELD, XLR-PIN 1  
PIN 2 – DATA (-), XLR-PIN 2  
PIN 3 – DATA (+), XLR-PIN 3  
PIN 4 – N/C  
PIN 5 – +24VDC  
PIN 6 – COMMON  
PIN 7 – +24VDC  
PIN 8 – COMMON  
PIN 9 – +24VDC  
PIN10 – COMMON

CONNECTOR P3 PINOUT  
PIN 1 – CHANNEL 1  
PIN 2 – CHANNEL 1  
PIN 3 – CHANNEL 2  
PIN 4 – CHANNEL 2  
PIN 5 – CHANNEL 3  
PIN 6 – CHANNEL 3  
PIN 7 – CHANNEL 4  
PIN 8 – CHANNEL 4

CONNECTOR P4 PINOUT  
PIN 1 – CHANNEL 5  
PIN 2 – CHANNEL 5  
PIN 3 – CHANNEL 6  
PIN 4 – CHANNEL 6  
PIN 5 – CHANNEL 7  
PIN 6 – CHANNEL 7  
PIN 7 – CHANNEL 8  
PIN 8 – CHANNEL 8

## POWER SUPPLY

The decoder card requires a 24VDC power supply. Connect to connector P2. The card requires 120 mADC.

## DMX512 SIGNAL INPUT

Connector P2 accepts a USITT/1986 or USITT/1990 standard DMX512 signal input. Any other signal will give unknown results. Jumper J1 connects the terminating resistor and is used when the card is the last one on the cable run. The LED indicates a valid DMX signal. Connector P1 can be used in place of the on board LED for valid DMX signal indicator. P1-1 is common and P1-2 is for the anode connection. You must remove the onboard LED to use this output. A 1.2k ohm resistor is in series with the output to the connector.