

# The 4 Channel High Speed High Power DMX Decoder



# Basic Overview

Featuring:

- 12v DC input and drive voltage
- High speed (5 KHz) PWM drive
- Neutrik XLR-5 connectors for DMX input and through
- Human-readable switches for DMX address and test modes
- Built-in DMX termination switch
- 4 channel operation, rated at 15A DC per channel or 40A total
- Mounting ears for wall or panel attachment
- Dimensions: 5.9" left to right, not counting mounting ears, 3.6" front to back, 1.7" tall
- Designed and fabricated in Utah, USA.

This DC dimmer system was designed for TV studios, theaters, and any place where smooth, stable DC dimming is required. The high drive frequency ensures that no dimming artifacts will be visible to the naked eye or on camera.

# Panel Settings



The three blue rotary switches perform the following functions based on the selected digits:

Value	Function
000	Fade up / fade down on sequential channels. Useful for testing connections before DMX data is applied. Loops continuously.
001 - 512	4 Channel DMX receive mode. This is normal operation. 4 DMX channels are required. If address is set to 056, channels 56-59 are processed
600 - 699	Primary / secondary color mix. Change the tens digit to cycle between major color steps. Change the ones digit for 10% intensity steps within that major color.
800 - 899	RGB Color wheel. Channel 4 is inactive. 99 steps fade through the RGB spectrum.
900 - 999	All four channels in parallel, in 1% increments. 900 is off. 950 equals 50%, 999 = 99%.

# More Panel Settings



- The 'Power' LED lights when 12v DC is applied to the system.
- The 'DMX' LED lights when a valid DMX data stream is detected. Depending on the DMX packet refresh rate, this LED may appear to flicker. This is normal and expected.
- The 'Drive' LED lights when any of the four channels have a value greater than 0.
- The 'Terminate' switch, when set to the right-hand setting, terminates the DMX line. Only set this switch if the decoder is the last device in the DMX chain, as erratic system operation may result.

# Power and Drive Connections

The large 2-pole connector functions as both DC power input for the decoder, and the supply voltage for any attached loads. Do not exceed 12.0v DC as an input voltage. The 'GND' terminal is electrically connected to the aluminum chassis as well.



On the 6-pole output connector, the first two terminals, marked '+12v', are connected in parallel with the DC Input +12v terminal. This was added to reduce congestion when connecting large loads. The remaining four terminals are the drive outputs. Electrically, these are switched to ground and will turn on any attached resistive load.