

Customer Name

Project Name

Part Number

## The Original DMX-CON3

*US Engineered*

New generation 3 channel LED decoder

### 3 Channel RGB LED DMX Decoder

Model: **DMX-CON3**

Control: **DMX512-A (Meets USITT DMX512/1990)**

Current Output: **6A/Ch.1-3**

Total MAX Output: **216W @12V DC and 432W @24V DC**

Applies to all kinds of LEDs controlled by voltage.

### Summary

Thank you for choosing our series of DMX-CON3 Decoder. This new revision of the DMX-CON3 DMX decoder has a frequency of 5.2kHz which allows it to be used for video applications with no camera flickering, as well as a total power of **216W @12V** and **432W @24V**. This LED Decoder provides you with the freedom to control three channels of LED strip, LED modules, and other types of 12-24V LED lighting. Each channel provides you control from 1-256 levels of intensity. This decoder complies with DMX 512/1990 Protocol.

## Product Features

- Meets DMX512/1990
- 256-levels of brightness, full-color with decoder controls
- 3 output channels, max 6A per Channel
- Can achieve asynchronous color changes effects
- Capable of controlling LED light with 1-3 colors
- Freely set the DMX address 1-512
- Modularizing can be matched with different LED modules
- Test mode available

## Tech-parameters

Decode CH:	1-3
Signal Input:	DMX512-A Digital Signal
Signal Output:	0~V+(V+ is power supply) max 6A/channel @ DC 12V-24V output drive
Power Supply:	DC 12V-24V
Power Dis.	<1W
Power Output:	12V DC - 216W, 24V DC - 432W
Ambient Temp. :	-10°C ~ 55°C
Size:	158 x 47 x 22 mm (6.22 x 1.85 x 0.86 in)
Net Weight:	200 g (7.05 oz)
Frequency:	5.2 kHz (Flicker-Free Refresh Rate)

**\*Note: This model of DMX-CON3 is rated IP40 non waterproof, please keep dry at all times.**

## Test Results

Test at 24 volts

3 Channels - 6A x channel, 18A total, and 432 Watts

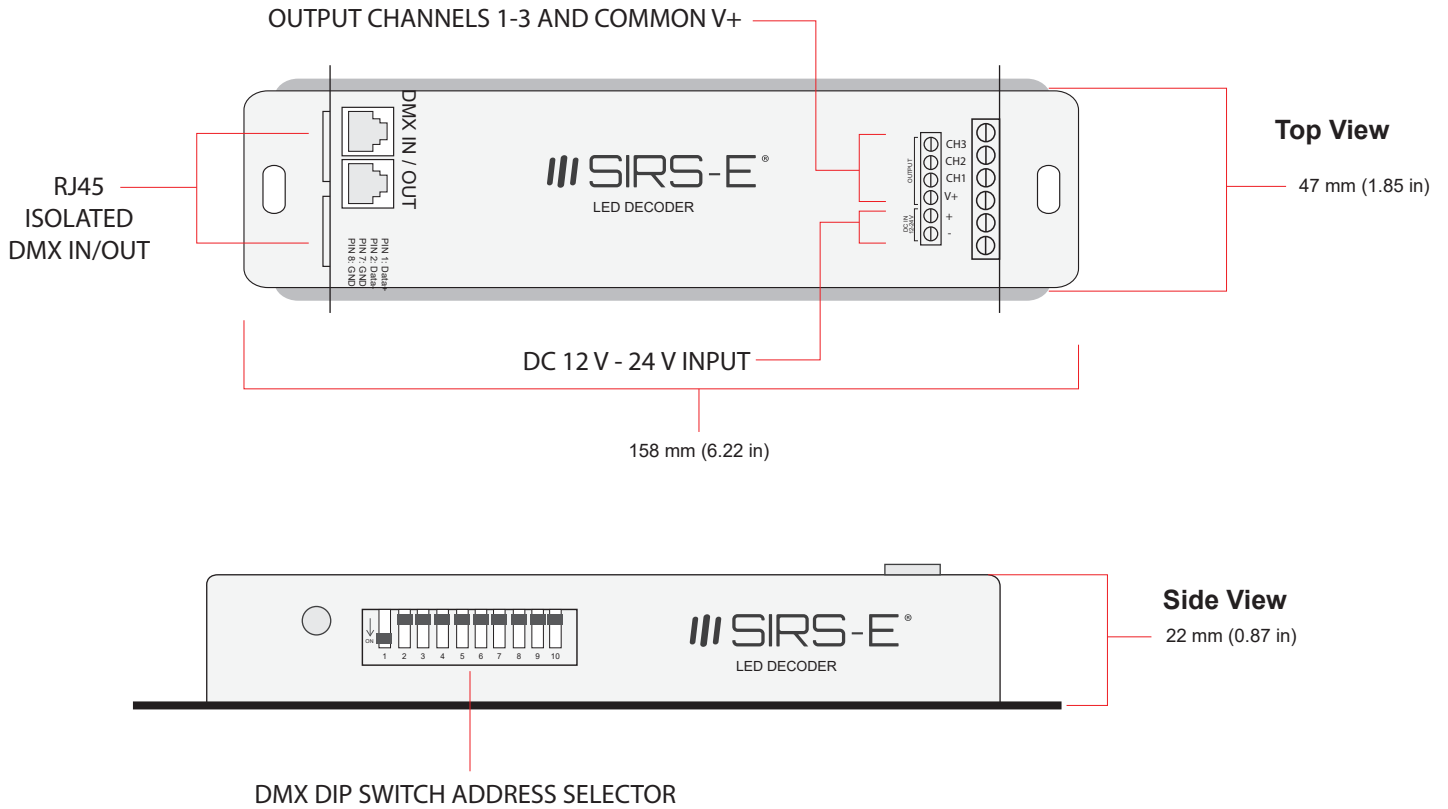
Test at 12 volts

3 Channels - 6A x channel, 18A total, and 216 Watts

Note: Internal PCB circuit traces are limited at 6A max per channel 18A total.



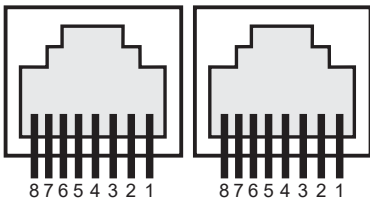
## Dimensions & Physical Layout



## Application Tips

- Place DMX-CON3 in a ventilated area, Do not install in air tight locations.
- DMX-CON3 can be installed on top of a metal plate to aid in the heat sinking process.
- Never exceed the limits in the specifications.
- Do not install where moisture is present.
- Always have LED fixtures as close as possible to the DMX-CON3 to minimize voltage drop due to cable resistance.
- If distance between DMX-CON3 and LED fixture is greater than 3 meters use at least 14 AWG wire.
- For use in Dry or Damp locations only.

## DMX Pinout



PIN 1: Data+  
PIN 2: Data-  
PIN 7: GND  
PIN 8: GND

DMX pinout consists of 3 pins in most cases.  
Pin 2 from the DMX XLR is correspondant to pin 1 in the RJ-45 connector as Data +.  
Pin 3 from the DMX XLR is correspondant to pin 2 in the RJ-45 connector as Data -.  
Pin 1 from the DMX XLR is correspondant to pin 7 and 8 in the RJ-45 Connector as Ground.

## DIP Switch Addressing Samples

The DMX-CON3 is equipped with a DIP switch system that allows you to address your unit to the desired address using a binary code method. Binary code can be tricky at first to figure out, but once it's been mastered, it becomes a really efficient way to address your units.

## DIP Switch Value Chart

DIP	1	2	3	4	5	6	7	8	9
VALUE	1	2	4	8	16	32	64	128	256

The chart above can be used to determine the value of each DIP switch. Binary code works by adding DIP switch values to achieve the desired address.

## Test Mode

The DMX-CON3 has a Test Mode that does not require a DMX signal to test your LED application. To enter Test Mode just turn all the DIP switches to OFF. Once in Test Mode, the LEDs should turn all colors at full intensity.

## Addressing Samples

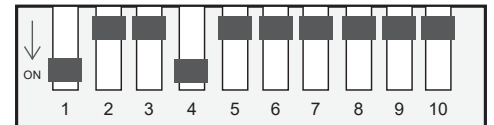
ADDRESS 001



ADDRESS 005



ADDRESS 009



The samples above are intended to help you understand the way binary code works, If you are still having issues addressing your units, you can use this DIP switch calculator found online under this link:

<http://www.sabretechnology.co.uk/calc.asp?dmx>

You can also download the DMX DIP iPhone app to aid you in the calculating process. Available in the Apple App Store.

### **\*Note**

*\*We recommend you hire a licensed electrician for any electrical connection, and or installation.*

*\*We reserve the right to make changes without any prior notice.*