

# UPGRADED VERSION WITH MORE POWER!!

| Customer Name |   | Project Name |   | Part Number |  |  |
|---------------|---|--------------|---|-------------|--|--|
|               | • |              | • |             |  |  |



## The Original DMX-CON4V2

US Engineered

New generation 4 channel LED decoder

4 Channel RGBW LED DMX Decoder

Model: DMX-CON4V2

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

Current Output: 10A/Ch.1-4

Total MAX Output: 480W @12V DC and 960W @24V DC

Applies to all kinds of LEDs controlled by voltage.

#### Summary

Thank you for choosing our series of DMX-CON4V2 Decoder. This new edition of the DMX-CON4V2 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 **480W @12V** and **960W @24V**. This LED Decoder provides you with the freedom to control four 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 compiles with DMX 512/1990 Protocol.

# **Product Features**

- Meets DMX512/1990
- 256-levels of brightness, full-color with decoder controls
- 4 output channels, max 10A per Channel
- Can achieve asynchronous color changes effects
- Capable of controlling LED light with 1-4 colors
- Freely set the DMX address 1-512
- Modularizing can be matched with different LED modules
- · Test mode available

# **Tech-parameters**

Decode CH: 1-4

Signal Input: DMX512-A Digital Signal

Signal Output: 0~V+(V+ is power supply) max 10A/channel @

DC 12V-24V output drive

Power Supply: DC 12V-24V

Power Dis. <1W

Power Output: 12V DC - 480W, 24V DC - 960W

Ambient Temp.: -10°C ~ 55°C

Size: 122 x 107 x 33 mm (4.80 x 4.21 x 1.30 in) 337.36 g

Net Weight: (11.9 oz)

Frequency: 5.2 kHz (Flicker-Free Refresh Rate)

\*Note: This model of DMX-CON4V2 is rated IP40 non waterproof, please keep dry at all times.

# **Test Results**

Test at 24 volts

4 Channels - 10A x channel, 40A total, and 960 watts

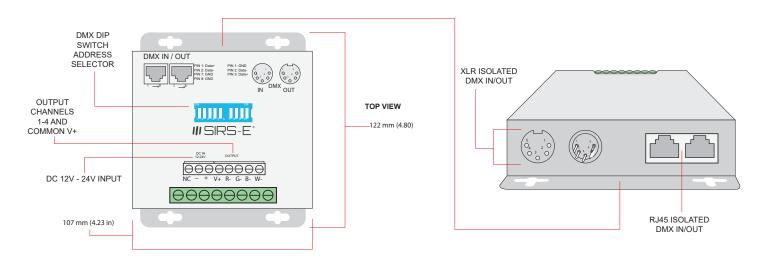
Test at 12 volts

4 Channels - 10A x channel, 40A total, and 480 watts

Note: Internal PCB circuit traces are limited at 10 max per channel 40A total.



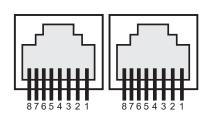
# **Dimension & Physical Layout**



# **Application Tips**

- Place DMX-CON4V2 in a ventilated area, Do not install in air tight locations.
- DMX-CON4V2 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-CON4V2 to minimize voltage drop due to cable resistance.
- If distance between DMX-CON4V2 and LED fixture is greater than 3 meters use at least 14 AWG wire.
- · For use in Dry or Damp locations only.

#### **DMX Pinout**



#### **RJ45 PIN**

PIN 1: Data+ PIN 2: Data-

PIN 7: GND

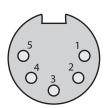
PIN 8: GND

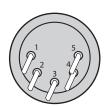
DMX pinout consists of 3 pins in most cases.

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.





#### **XLR 5 PIN**

PIN 1 - Ground

PIN 2 - DMX -

PIN 3 - DMX +

PIN 4 - NC

PIN 5 - NC

XLR Connectors have a different pinout from the Rj45 connectors. Make sure to follow the correct pinout before putting DMX signal

## **DIP Switch Addressing Samples**

The DMX-CON4V2 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**

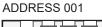
| DIP   | 1 | 2 | 3 | 4 | 5  | 6  | 7  | 8   | 9   |
|-------|---|---|---|---|----|----|----|-----|-----|
| VALUE | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |

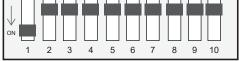
The chart above can be used to determine the value of each DIP switch. Binary code works by adding DIP switch values to achieve the desired address.

## **Test Mode**

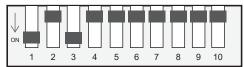
The DMX-CON4V2 has a Test Mode that does not require a DMX signal to test your LED application. To enter Test Mode just turn all the DIP switches to OFF. Once in Test Mode, the LEDs should turn all colors at full intensity.

# **Addressing Samples**

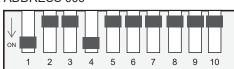




#### ADDRESS 005



#### 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.