Customer Name	Project Name	Part Number

The Original DMX-CON6

US Engineered
New generation 6 channel LED decoder

6 Channel LED DMX Decoder
Model: **DMX-CON6**
Control: **DMX512-A (Meets USITT DMX512/1990)**
Max Current Output: **6A/Channel**
Total MAX Output: **432W @12V DC, 864W @24V DC**

Applies to all kinds of LEDs controlled by voltage.

Summary

Thank you for choosing our series of DMX-CON6 Decoder. This new revision of the DMX-CON6 DMX decoder has a frequency of 5.2 kHz which allows it to be used for video applications with no camera flickering, and a total power of 864 W. This LED Decoder provides you with the freedom to control 6 channels of LED strip, LED modules, and other types of 12V-24 V 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
- 6 output channels, max 6A per Channel
- Can achieve asynchronous color changes effects
- Capable of controlling LED light with 1-6 colors
- Freely set the DMX address 1-512
- Modularizing can be matched with different LED modules
- Test mode available

Tech-Parameters

Decode CH:	1-6
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 - 432W, 24V DC - 864W
Ambient Temp. :	-10°C ~ 55°C
Size:	170 x 64 x 22 mm (6.69 x 2.52 x 0.87 in)
Net Weight:	269 g (9.49 oz)
Frequency:	5.2 kHz (Flicker-Free Refresh Rate)

*Note: This model of DMX-CON6 is rated IP40 non waterproof, please keep dry at all times.
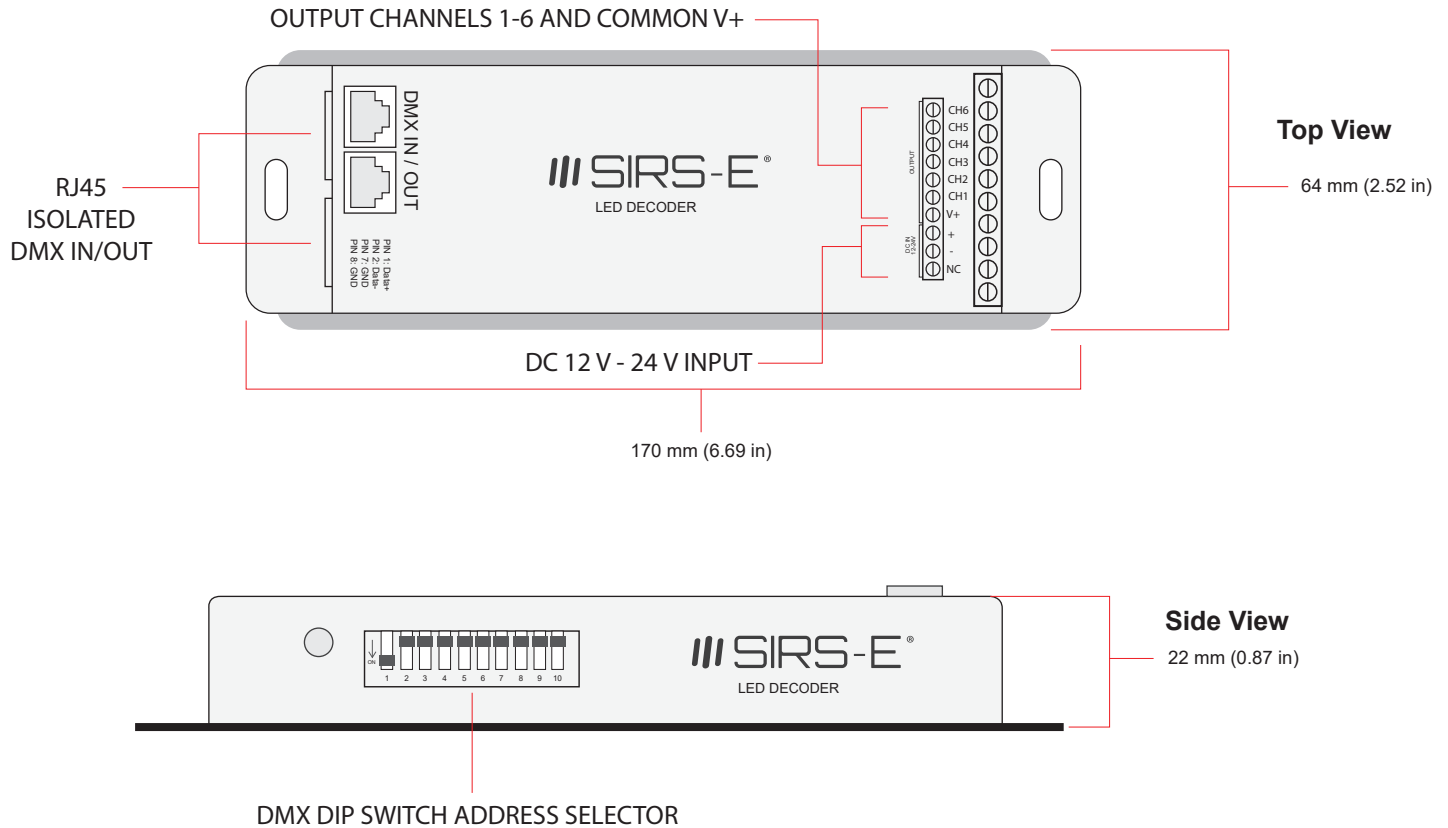
Tested Results

Test at 24 volts
6 Channels - 6A x channel, 36A total, and 864 Watts

Test at 12 volts
6 Channels - 6A x channel, 36A total, and 432 Watts

Note: Internal PCB circuit traces are limited at 6 max per channel 36A total when using 6 channels.

sirs-e.com

V2.1

Dimensions & Physical Layout

OUTPUT CHANNELS 1-6 AND COMMON V+

RJ45 ISOLATED DMX IN/OUT

DMX IN / OUT

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

III SIRS-E ®
LED DECODER

CH6
CH5
CH4
CH3
CH2
CH1
V+
+
-
NC

OUTPUT

DC 12-24V IN

Top View

64 mm (2.52 in)

DC 12 V - 24 V INPUT

170 mm (6.69 in)

III SIRS-E ®
LED DECODER

Side View

22 mm (0.87 in)

DMX DIP SWITCH ADDRESS SELECTOR

Application Tips

- Place DMX-CON6 in a ventilated area, Do not install in air tight locations.
- DMX-CON6 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-CON6 to minimize voltage drop due to cable resistance.
- If distance between DMX-CON6 and LED fixture is greater than 3 meters use at least 14 AWG wire.
- For use in Dry or Damp locations only.

DMX Pinout

8 7 6 5 4 3 2 1   8 7 6 5 4 3 2 1
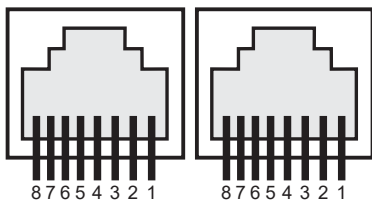
PIN 1: Data+
PIN 2: Data-
PIN 7: GND
PIN 8: GND

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-CON6 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-CON6 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 ON for 10 seconds and then they will cycle through each channel.

When connecting an RGBW LED strip to Channels 1-4, the colors will cycle 1 second each and then turn OFF for 4 seconds between cycles. When connecting two RGB LED strips to Channels 1-6, the colors will cycle 1 second each and then turn OFF for 3 seconds between cycles.
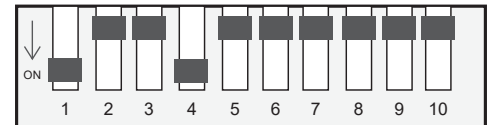
Addressing Samples

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.