## IIISIRS-E*



# The Original LED-CON2-R2 

US Engineered
New generation 3 channel LED driver

## 3 Channel RGB LED DMX Controller, UL Listed, Class 2

Model: LED-CON2-R2
Control: DMX512-A (Meets USITT DMX512/1990)
Total MAX Output: 100W
Applies to all kinds of LEDs controlled by voltage.

## Summary

Thank you for choosing our series of LED-CON2-R2 Driver. This new revisision of the LED-CON2 DMX driver has a frequency of 5.2 kHz which allows it to be used for video applications with no camera flickering, as well as a total max power of 100W. This LED Driver provides you with the freedom to control 3 channels of LED strip, LED modules, and other types of 12-24 V LED lighting. Each channel provides you control from 1-256 levels of intensity. This driver complies with DMX 512/1990 Protocol.

## Product Features

- Meets DMX512/1990
- 256-levels of brightness, full-color with driver controls
- 3 output channels, 100W Max.
- 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
- Class 2 circuit, isolated DMX input, UL Listed (UL2108, E479339)


## Tech-parameters

Decode CH: 1-3
Signal Input: DMX512-A Digital Signal
Signal Output: $\quad 0 \sim \mathrm{~V}+(\mathrm{V}+$ is power supply) 100 W Max
Power Supply: DC 12V-24V
Power Dis. : <1W
Power Output: 12-24 V DC, <100W Total
Ambient Temp. : $\quad-10^{\circ} \mathrm{C} \sim 55^{\circ} \mathrm{C}$
Size: $\quad 158 \times 47.50 \times 22.35 \mathrm{~mm}(6.22 \times 1.87 \times 0.88 \mathrm{in})$
Net Weight: $\quad 206.95 \mathrm{~g}$ (7.3 oz)
Frequency: $\quad 5.2$ kHz (Flicker-Free Refresh Rate)
*Note: This model of LED-CON2-R2 is rated IP40 non waterproof, please keep dry at all times.

## Dimensions



## Application Tips

- Place LED-CON2-R2 in a ventilated area, Do not install in air tight locations.
- LED-CON2-R2 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 LED-CON2-R2 to minimize voltage drop due to cable resistance.
- If distance between LED-CON2-R2 and LED fixture is greater than 3 meters use at least 14 AWG wire.
- For use in Dry or Damp locations only.
- Class 2 dimming methods only.
- Class 2 input only.


## Physical Layout



Top View

Side View

## Legend

1. RJ45 ISOLATED DMX IN/OUT
2. DMX DIP SWITCH ADDRESS SELECTOR
3. DC 12 V INPUT
4. OUTPUT CHANNELS 1-3 AND COMMON V+

## DMX Pinout



Pin1: Data+
Pin2: Data-
Pin7: GND
Pin8: 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 LED-CON2-R2 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 LED-CON2-R2 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.

## Addressing Samples



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 DMX2DIP iphone app to aid you in the calculating process.
https://itunes.apple.com/us/app/dmx2dip/id514122166?mt=8

## *Note

*We recommend you hire a lincensed electrician for any electrical connection, and or installation. *We reserve the right to make changes without any prior notice.

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