# ALLOYLED®

## DMX Decoder AL-60-03-0007



The DMX Decoder translates the digital signals from DMX color controllers, such as the Nicolaudie series, into the analog signal used by Radialux™ RGB and RGB-W 24V LED tape lights. This powerful decoder supports large installations with a clean, consistent signal and is also easy to address with the digital interface.

• Input Voltage: 12-36V DC

• Max. Wattage: 8A per channel

• Output Voltage: 192W (24V)

Constant Voltage

• Dimensions: 6.4 x 2.4 x 1.3 in.

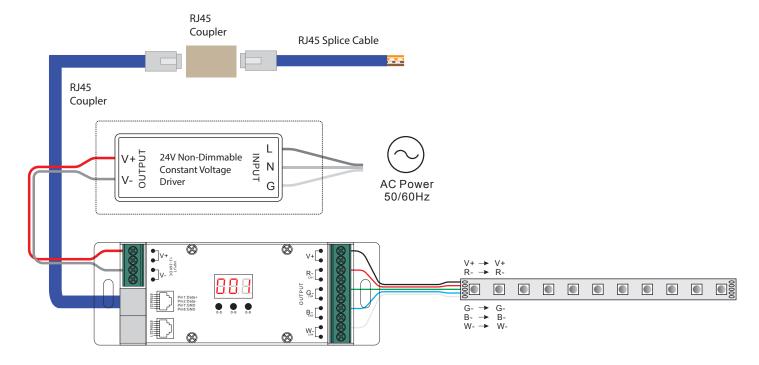
• Power Source: 24V Non-Dimmable Driver

• Max. daisy-chain: 10 decoders\*

Maximum total amount of tape that can be connected to the DMX Decoder (note: observe max. run lengths for individual sections as stated on Radialux tape specification sheets):

Radialux 2.2 RGB: 262 ft. Radialux 4.4 RGB: 131 ft. Radialux 4.4 RGB-W: 87 ft.

### Wiring Diagram

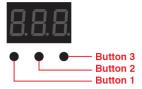


<sup>\*</sup>If more than 10 decoders are needed, wire decoders in parallel with data cables.

## Operation

#### Setting DMX Decoder Address

**Button 1** sets the "hundreds place", **Button 2** sets the "tens place", and **Button 3** sets the "ones place." The address values cannot exceed 512.



Press and hold Button 1 until the digital display flashes. Then use the buttons to assign the decoders to the desired setting:

- To synchronize the decoders to one zone, set all decoders to the same address: 001.
- To set up independent zones, address the decoders as follows:

zone 1 =  $\frac{001}{2000}$ zone 5 =  $\frac{017}{2000}$ zone 2 =  $\frac{005}{2000}$ zone 6 =  $\frac{021}{2000}$ zone 3 =  $\frac{009}{2000}$ zone 7 =  $\frac{025}{2000}$ zone 4 =  $\frac{013}{2000}$ zone 8 =  $\frac{029}{2000}$ 

#### Choose the PWM Frequency

Press Button 1 and Button 3 at the same time for 2 seconds, and the channel digital display will flash and display "P\_c".

"P" means PWM frequency, press Button 1 to show "1", which means 1500Hz, "2" means 200Hz.

"c" means dimming options, press **Button 3** to show "1", which means logarithmic dimming, while "2" means linear dimming. The factory preset default is PWM frequency 200Hz with linear dimming, with the display reading "2" 2".



## Safety & Warnings

- This product should be installed and serviced by a qualified technician.
- Do not expose this unit to water. When installed outdoors, ensure it is mounted in a waterproof enclosure.
- Always mount this unit in an area with proper ventilation to avoid overheating.
- Never connect any cables while power is on.
- Before switching power on, ensure connections are correct to avoid short circuits.

## **Troubleshooting**

- Check that the output voltage of any LED power supplies used comply with the working voltage of the product.
- Ensure that all cable connections are secure.