

## LED REPEATER

## INSTALLATION GUIDE

### GENERAL

This LED repeater is to repeat PWM (pulse width modulation) signal for multi color LED strips connection. It must be installed in accordance with Article 450 of the National Electric code (N.E.C.) when used Indoors. The repeater must be installed in a well-ventilated area free from explosive gases and vapors. Proper operation requires the free flow of air.

### PRECAUTIONS BEFORE INSTALLING

Check the label and ensure the repeater has the proper input DC voltage and LED strip load for the job. Check the wire color to ensure they match the wiring diagram on this instruction sheet.

### MOUNTING

Select a suitable location capable of supporting the weight of the LED repeater.

### QUICK SPECS

Input Voltage	12V / 20A & 24V / 20A
Maximum Load	12V = Max 240W (20A) & 24V = Max 400W (20A)
Operating Temp	-4° ~ 122°F (-20° ~ 50°C)
Environment	Dry and Damp Location / Indoor

DO NOT INSTALL IN AN ENVIRONMENT THAT IS OUTSIDE OF THE PRODUCTS LISTED AMBIENT TEMPERATURE.

### INPUT VOLTAGE NOTE!

The input voltage: 12VDC to 24VDC

For 12VDC input, max. current: 20A, max. load power: 240W. For 24VDC input, max. current: 20A, max. load power: 400W.

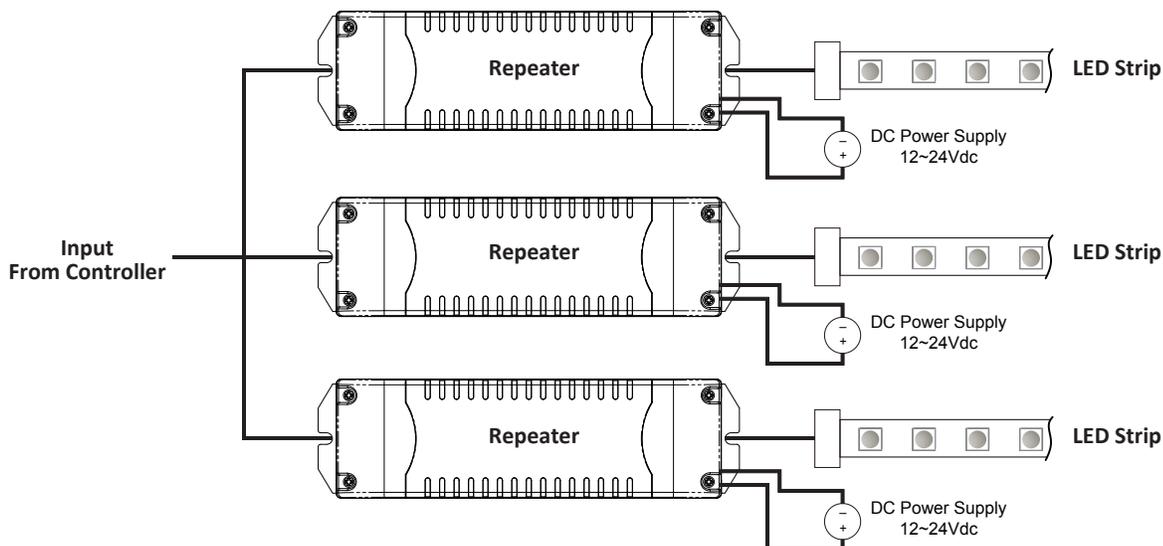
ENSURE to power the repeater with the correct voltage, wattage and polarity!

### INSTALLATION

1. Unscrew and remove the input and output cover for the LED repeater.
2. Prepare stripped wires with requirement below:
  - Stripping length: 1/4"
  - Wire gauge range: #12 ~ #18 AWG
  - Wire must be rated for 90°C or above.
3. Feed each wire into each terminal at input and output and screw tightly.
4. Connect each wire with reference to wiring diagram (up to 4 channels).
5. Verify all connections; switch ON power supply to check for proper operation.
6. Install cover at both input and output sides.

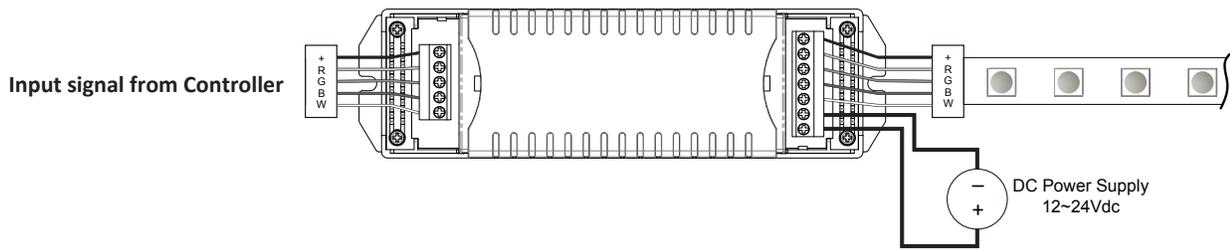
Remark: Ensure exactly same input and output for each terminal. Refer to unit label for each channel position.

### MULTI REPEATERS AND LED STRIPS CONNECTION

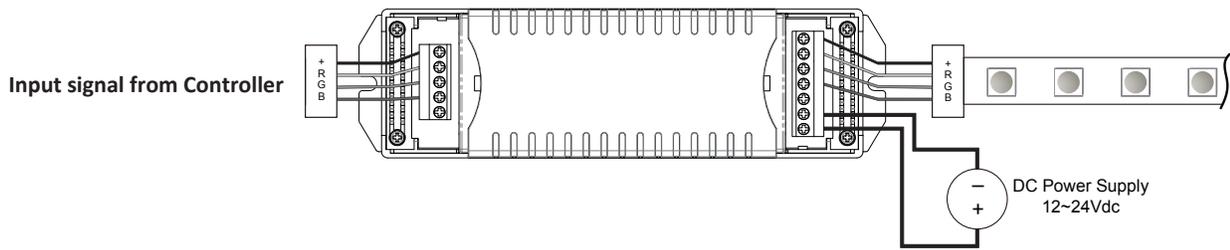


# WIRING DIAGRAMS

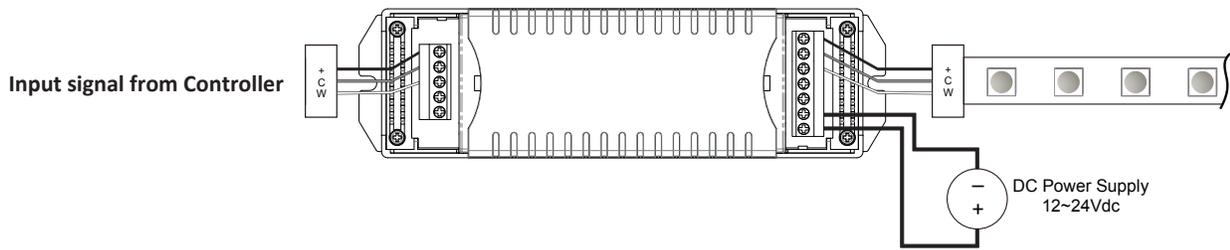
RGBW connection (4 channels)



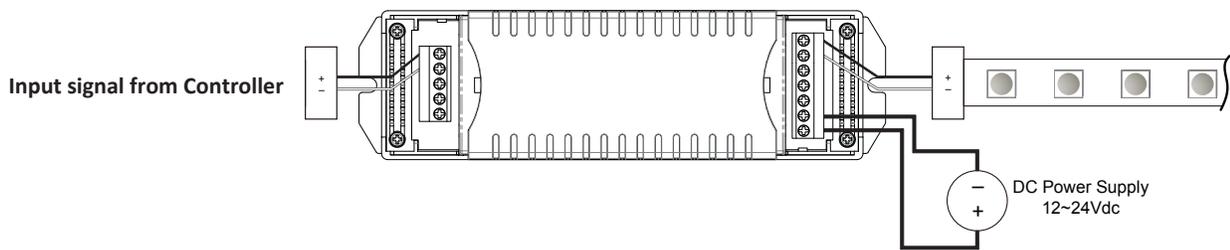
RGB connection (3 channels)



Dual color connection (CCT, 2 channels)



Single color connection (1 channel)



See LED strip specifications for maximum series run limits.

# TROUBLESHOOTING

Fixture does not illuminate:

- Ensure all connections are properly secured.
- Check +/- polarity on input, output and DC power supply.
- Ensure DC power supply input is 12Vdc~24Vdc, also match the LED strip input voltage.

Fixture is not bright enough:

- Ensure sufficient power for DC power supply, recommended to use with 80% of maximum load.
- Total loads exceed maximum load power.

Fixture color is not correct:

- Ensure all connections are matched exactly between input and output.



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