

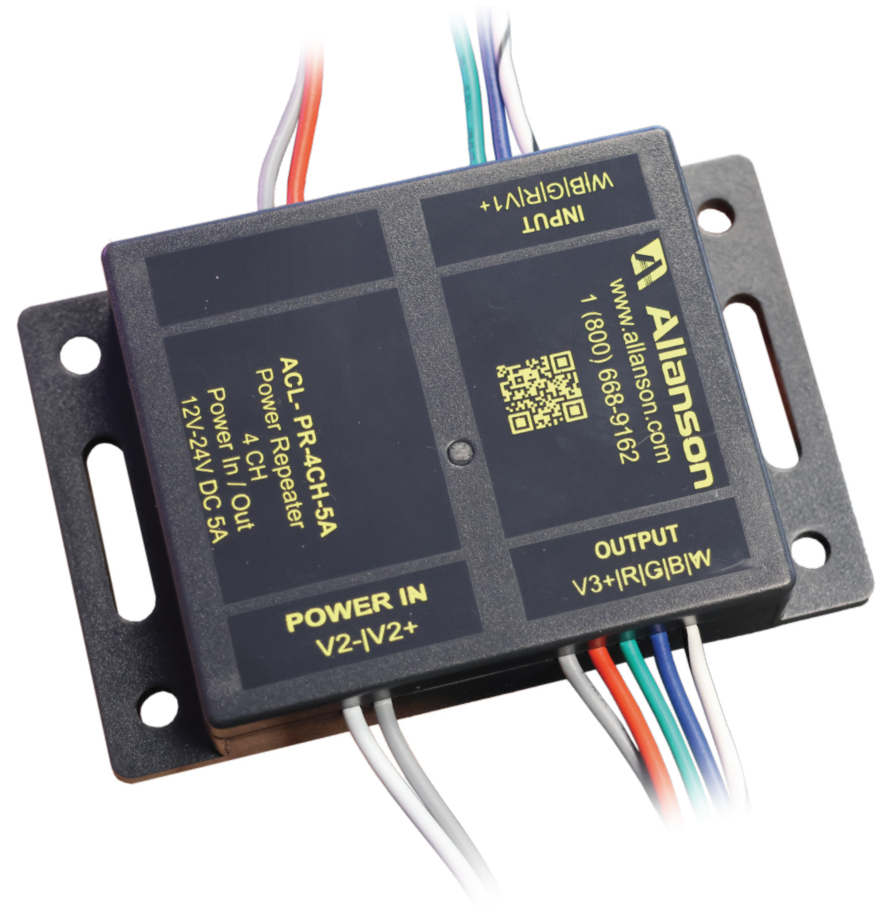


# 4 Channel Power Repeater

ACL-PR-4CH-5A

## 4 Channel Power Repeater

### Installation Guide



# 4 Channel Power Repeater

## ACL-PR-4CH-5A

Thank you for your purchase of our 4 Channel Power Repeater ACL-PR-4CH-5A. Prior to installing the system, we kindly request that you carefully review all the provided instructions. For any specific programming requirements tailored to your needs, please reach out to our LED department at led@allanson.com

### Specifications:

- Operating Voltage: 12V / 24V DC
- Maximum Power: 100W (4 channels combined) with 24V DC class 2 Power supply or 60W (4 channels combined) with 12V DC Class 2 Power Supply
- Signal In : PWM RGBW Channels input
- Signal out: PWM RGBW Channels output
- Dimensions (LxWxH): 3.8" x 2.48" x 0.78"
- Minimum 18 guage wires are recommended for long run wires connecting RGB modules

The PWM RGBW Power Repeater is designed to amplify PWM signals, providing consistent and synchronized control of multiple RGBW LED strips or fixtures. It supports a load capacity of up to 5A per channel (with a total of 5A across all 4 channels combined), ensuring that even high-power LED setups maintain uniform brightness and color consistency across large or complex installations. This repeater is essential for extending the reach of LED controllers, preventing signal loss or degradation, and ensuring reliable operation in extensive LED networks. Its compact and durable design makes it a versatile solution for commercial lighting applications.

#### A. RGBW Output:

W (White).....White/Black Wire  
 B (Blue).....Blue Wire  
 G (Green).....Green Wire  
 R (Red).....Red Wire  
 V3+ (12V / 24V DC).....Gray Wire

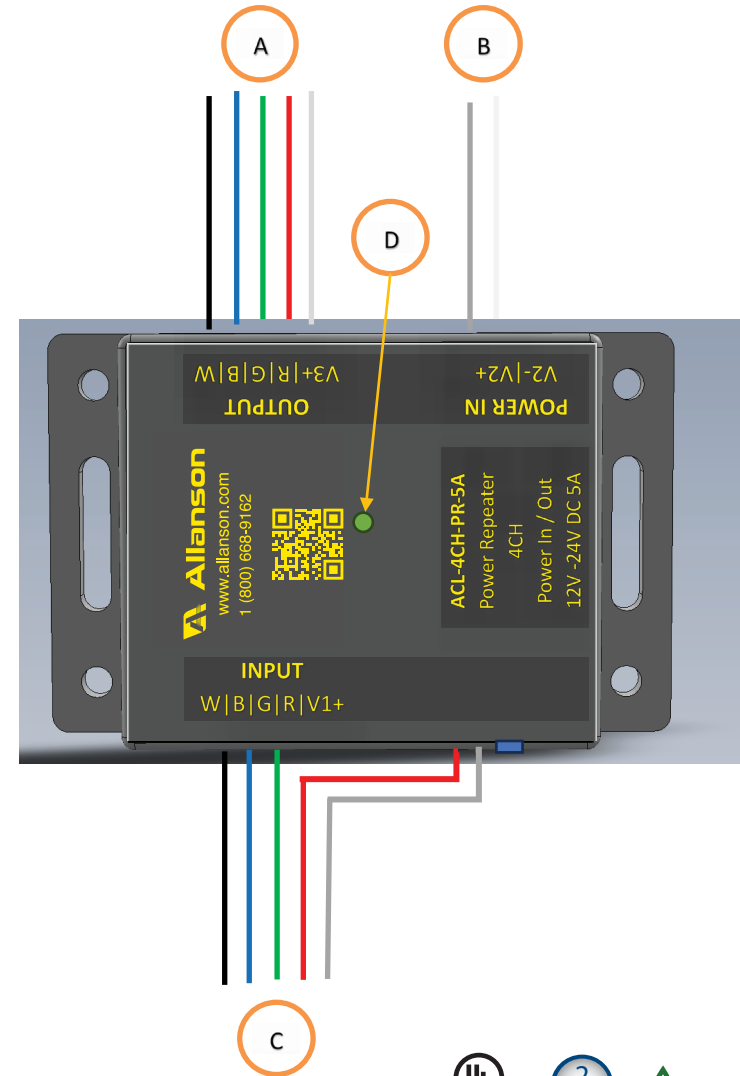
#### B. Power Input 12V-24V DC

V2+.....Gray Wire  
 V2-.....White Wire

#### C. RGBW Input:

W (White).....White/Black Wire  
 B (Blue).....Blue Wire  
 G (Green).....Green Wire  
 R (Red).....Red Wire  
 V1+ (12V / 24V DC).....Gray Wire

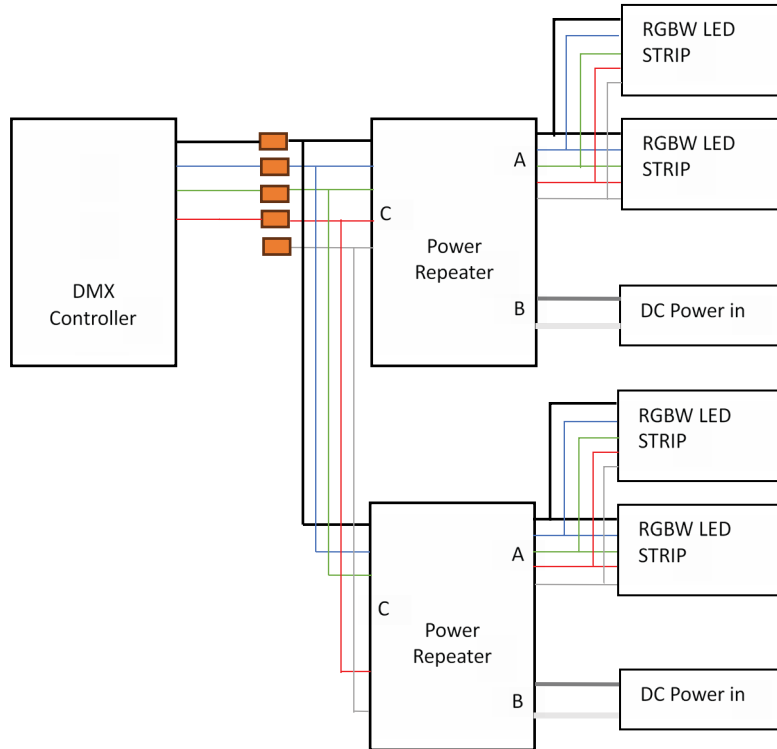
#### D. Power V2 Indicator



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## Connection Diagram



## Note

- Allanson Power supply CV12 or CV24 series should be used to match the 12VDC / 24VDC LED module/fixture rated operating voltage.
- Minimum 18 Gauge wires are recommended for long run wires connecting RGBW modules.

## Attention

- The product shall be installed and serviced by a qualified person.
- This unit is a water splash proof product. Please avoid the direct sun and rain and that will prolong the working life of the controller. Please ensure good ventilation.
- Please check if the output voltage of the LED power supply used complies with the working voltage of the product.
- Please ensure that proper wire gauge is used from the controller to the LED power supply and RGBW products to carry the current.
- Ensure all wire connections and polarities are correct before applying power to avoid any damage to the LED and RGB products.
- If a fault occurs, please return the product to your supplier. Do not attempt to fix this product by yourself.
- This manual only applies to this model. Allanson reserves the right to make changes without prior notice.

