

# **Quick Start**

# **DIN-2LEDPWM8**

### 2 Channel RGBW LED Dimmer, DIN Rail Mount

The Crestron® DIN-2LEDPWM8 is a two channel RGBW dimmer that uses a PWM (pulse width modulation) frequency for flicker-free performance. A Cresnet® control port is provided for integration with a Crestron control system.

- For control of 12-24 VDC LEDs and LED strips
- Two individually controlled output channels
- Each output channel provides control of one RGBW LED or four independent LEDs
- 100 W maximum input at 24 VDC
- 60 W maximum input at 12 VDC
- Cresnet® control port for integration with a Crestron control system and daisy-chain wiring
- Override input for test or in case of emergency

# >> Check the Box

Item	Qty
DIN-2LEDPWM8	1

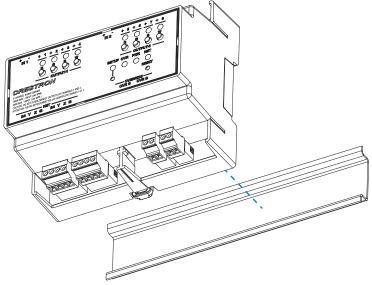
## Mounting to a DIN Rail

NOTE: Observe the following points when installing the DIN-2LEDPWM8.

- Use the DIN-2LEDPWM8 in an electrical panel with DIN rail mounting provisions.
- Mount the DIN-2LEDPWM8 in a well-ventilated area.
- Do not block the venting holes.

Mount the DIN-2LEDPWM8 to the DIN rail (not included):

- 1. Hang the DIN-2LEDPWM8 on the top of the DIN rail.
- 2. Align the bottom with the DIN rail and snap it into place



Remove the DIN-2LEDPWM8 from the DIN rail:

- 1. Turn off power to the DIN-2LEDPWM8.
- 2. Remove all connections from the DIN-2LEDPWM8.
- 3. Use a small, flat-head screwdriver to pull the DIN rail release tab down
- 4. Tilt the bottom of the DIN-2LEDPWM8 away from the bottom of the DIN rail and then remove the DIN-2LEDPWM8.

## Wire the DIN-2LEDPWM8

### Make LED or LED Strip Connections

The OUTPUT-1 and OUTPUT-2 terminals accept 18-14 AWG wires. The maximum wire length is 100 ft (30 m).

### **LED or LED Strip Power Connections**

The LED or LED strip receives power from the R+, G+, B+, and/or W+ terminal(s). Make power connections as required for the LED or LED strip. Some LED or LED strips require a power connection from only one terminal (R +, G +, B +, or W +), other LED or LED strips require a 

NOTE: Connections to OUTPUT-1 and OUTPUT-2 must remain separate. For example, do not connect an LED or LED strip to the G + power terminal on OUTPUT-1 and to the G 2 control terminal on OUTPUT-2.

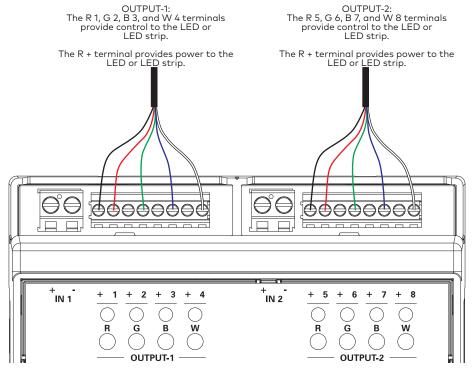
- R +: Provides power to the red LED channel.
- G +: Provides power to the green LED channel.
- B +: Provides power to the blue LED channel.
- W +: Provides power to the white LED channel.

### **LED or LED Strip Control Connections**

The LED or LED strip connected to OUTPUT-1 receives control from the R 1, G 2, B 3, and W 4, and the LED or LED strip connected to OUTPUT-2 receives control from the R 5, G 6, B 7, and W 8 terminals. Make control connections as required for the LED or LED strip.

- R 1 and R 5: Red wire to control the red LED channel.
- G 2 and G 6: Green wire to control the green LED channel.
- B 3 and B 7: Blue wire to control the blue LED channel.
- W 4 and W 8: White wire to control the white LED channel

### Wire Two RGBW LEDs or LED Strips



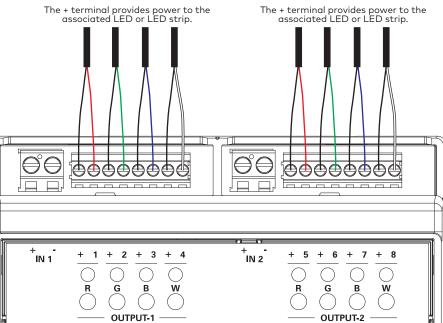
NOTE: Do not mix wires between OUTPUT-1 and OUTPUT-2. Connections to OUTPUT-1 and OUTPUT-2 must remain separate. For example, do not connect an LED or LED strip to the G + power terminal on OUTPUT-1 and to the G 6 control terminal on OUTPUT-2.

### Wire Eight Independent LEDs or LED Strips

OUTPUT-1: The R 1, G 2, B 3, and W 4 terminals provide control to the LED or LED strip.

OUTPUT-2: The R 5, G 6, B 7, and W 8 terminals provide control to the LED or I FD strip

The + terminal provides power to the associated LED or LED strip.



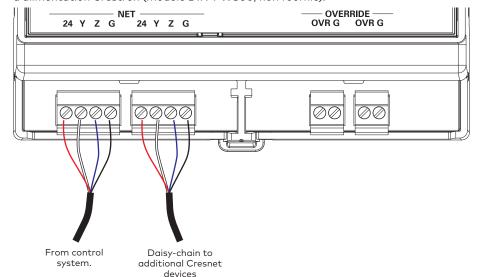
NOTE: Do not mix wires between OUTPUT-1 and OUTPUT-2. Connections to OUTPUT-1 and OUTPUT-2 must remain separate. For example, do not connect an LED or LED strip to the G + power terminal on OUTPUT-1 and to the G 6 control terminal on OUTPUT-2.

### Make Cresnet Connections

The NET (24, Y, Z, G) port provides a connection to the control system and a pass-through connection to additional Cresnet devices. Make connections as necessary

CAUTION: The NET power port must be connected to a Crestron (Model DIN-PWS60, not supplied) power supply only.

AVERTISSEMENT: Le port d'alimentation NET doit être connecté uniquement à une source d'alimentation Crestron (modèle DIN-PWS60, non fournie).





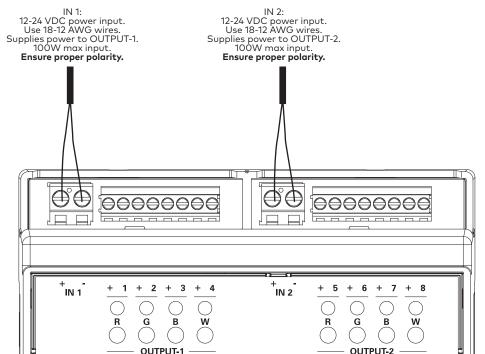
### **Make Power Connections**

#### **CAUTIONS/AVERTISSEMENT:**

- Observe the proper polarity when making connections to IN 1 and IN 2.
- Do not turn the power on until the DIN-2LEDPWM8 is fully connected.
- Use a certified Class 2 power supply (12–24 VDC) when making connections to the + and - terminals for the IN 1 and IN 2 connection. The power supply provides power to the LED channels.
- Respectez la polarité lorsque vous connectez IN 1 et IN 2.
- N'allumez pas l'appareil DIN-2LEDPWM8 tant qu'il n'est pas entièrement raccordé.
- Utilisez une source d'alimentation certifiée de Classe 2 (12-24 VDC) lors des connexions aux bornes + et - pour le raccordement de IN 1 et IN 2. La source d'alimentation fournit du courant aux canaux LED.

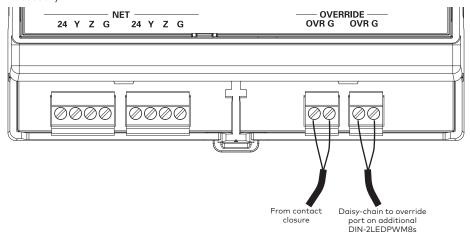
Connect power supplies to IN 1 and IN 2. The IN 1 and IN 2 terminals accept 18–12 AWG wires. Power supplied to IN 1 provides power to OUTPUT-1 (100 W maximum) and power supplied to IN 2 provides power to OUTPUT-2 (100 W maximum).

**NOTE:** One power supply can provide power to IN 1 and IN 2. Total combined power output for OUTPUT 1 and OUTPUT 2 will be 100W.



### Make OVERRIDE Connections (Optional)

The OVERRIDE (OVR G) port provides a connection to a contact closure and a pass-through connection to additional devices. The OVERRIDE ports are wired in parallel. Make connections as necessary.



# Operation

### Identify the Device

Press the **SETUP** button to acknowledge a TSID (Touch-Settable ID) message from Crestron Toolbox  $^{\mathsf{T}}$  software.

### Control the R, G, B, and W Channels

The **R**, **G**, **B**, and **W** buttons on the front of the DIN-2LEDPWM8 provide local control of the red (**R**), green (**G**), blue (**B**), and white (**W**) channels.

### Toggle the Channels

To toggle the red, green, blue, or white channel on and off, press the  $\bf R$  (red channel),  $\bf G$  (green channel),  $\bf B$  (blue channel) or  $\bf W$  (white channel) button. The corresponding R, G, B, or W LED lights to indicate that the channel is on.

**NOTE:** A command from the control system (turn on, turn off, raise or lower the LED) will override any local settings.

### Dim the Channels

To dim the red, green, blue, or white channel of the LED or LED strip, press and hold the  $\bf R$  (red channel),  $\bf G$  (green channel),  $\bf B$  (blue channel) or  $\bf W$  (white channel) button. If the LED or LED strip is off, the brightness raises until it reaches 100%. If the LED or LED strip is at 100% brightness, the brightness lowers until it turns off. The corresponding R, G, B, or W LED lights to indicate that the channel is on.

### NOTES:

- If the button is released before the LED or LED strip brightness reaches 100% or off (0%), a subsequent press and hold continues to raise or lower the LED or LED strip brightness.
- A command from the control system to change the LED or LED strip light level will override any local settings.

### Override Mode

Override mode is entered when a contact closure is engaged. When Override mode is enabled, the R, G, B, and W channels are turned on to 100% brightness (default) and their corresponding LEDs light. Remote control of the channels is disabled. Channels can be controlled using the buttons on the front of the device. When Override mode is exited, the R, G, B, and W channels return to their previous light level.

**NOTE:** The control system program can be configured to turn the channels to levels other than 100% brightness when the DIN-2LEDPWM8 is in Override mode.

### Restart the Device

Press the **RESET** button to restart the DIN-2LEDWPM8. After the DIN-2LEDPWM8 boots, it recalls its last known light levels until new levels are provided by the control system.

# >>> LED Indicators

The LEDs indicate the following:

- NET: Yellow Lights to indicate activity on the Cresnet bus
- POWER: Green On indicates that power is supplied to the unit.
- SETUP: Red Flashing indicates that the device is in TSID mode.
- R, G, B, W: Red On indicates that the channel is on.
- OVR: Red On indicates that Override mode is enabled. The R, G, B, and W LEDs also light.

# >> Additional Information

Scan or click the QR code for detailed product information.



DIN-2LEDPWM8

## Compliance and Legal

**Original Instructions:** The U.S. English version of this document is the original instructions. All other languages are a translation of the original instructions.

### Regulatory Model: M201903002

As of the date of manufacture, the product has been tested and found to comply with specifications for CE marking.



### Federal Communications Commission (FCC) Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following

conditions: (1) This device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

**CAUTION:** Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### Industry Canada (IC) Compliance Statement

CAN ICES-3 (B)/NMB-3(B)

The product warranty can be found at <a href="https://www.crestron.com/warranty">www.crestron.com/warranty</a>.

The specific patents that cover Crestron products are listed at  $\underline{www.crestron.com/legal/patents}.$ 

 $Certain\ Crestron\ products\ contain\ open\ source\ software.\ For\ specific\ information,\ please\ visit\ \underline{www.crestron.com/opensource}.$ 

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