

4-Series Control Processor for Crestron Home™ OS

The Crestron® CP4-R 4-Series control system provides a secure, high-performance, rack-mountable control processor with an embedded Crestron Home™ OS operating system. The CP4-R is designed exclusively to function as the core of a Crestron Home automation system, and features enhanced processing power to handle larger home automation, home theater, multiroom video, and MDU (multidwelling unit) applications.



In the Box

- 1 CP4-R, 4-Series Control System

Additional Items

- 2 Bracket, Rack Ear (2032122)
- 4 Foot, Rubber (2002389)
- 2 Connector, 3-Pin (2003575)
- 1 Connector, 4-Pin (2003576)
- 1 Connector, 5-Pin (2003577)
- 4 Connector, 8-Pin (2003580)
- 1 Connector, 9-Pin (2003581)
- 1 Power Cord, 5 ft 10 in (1.78 m) (2042043)
- 1 Power Pack, 24 VDC, 100–240 VAC (2045873)
- 4 IR Emitter with Terminal Block Connector (4500152)



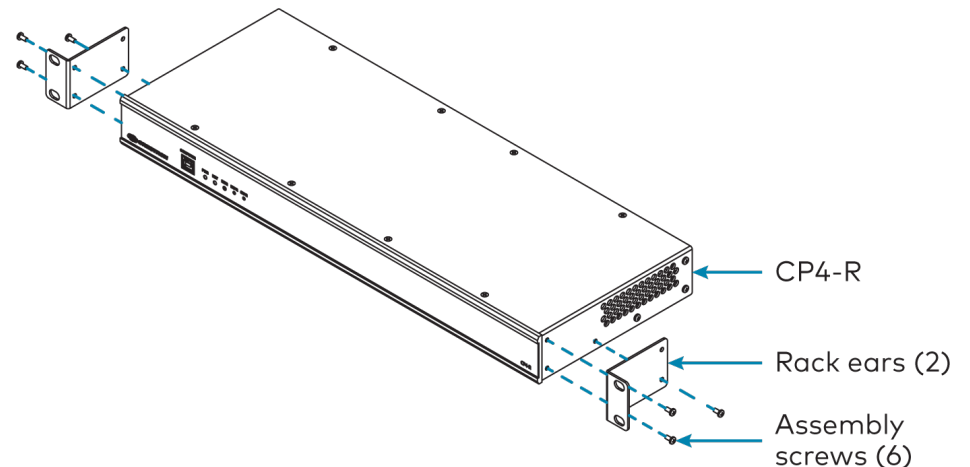
Install the Device

The CP4-R may be mounted into a rack or placed onto a flat surface.

Rack Mounting

The CP4-R occupies 1U of rack space.

1. Use a #1 Phillips screwdriver to remove the six required screws from the CP4-R assembly (shown in the illustration below).
2. Attach the two included rack ears with the removed screws.
3. Mount the CP4-R into the rack with four mounting screws (not included).



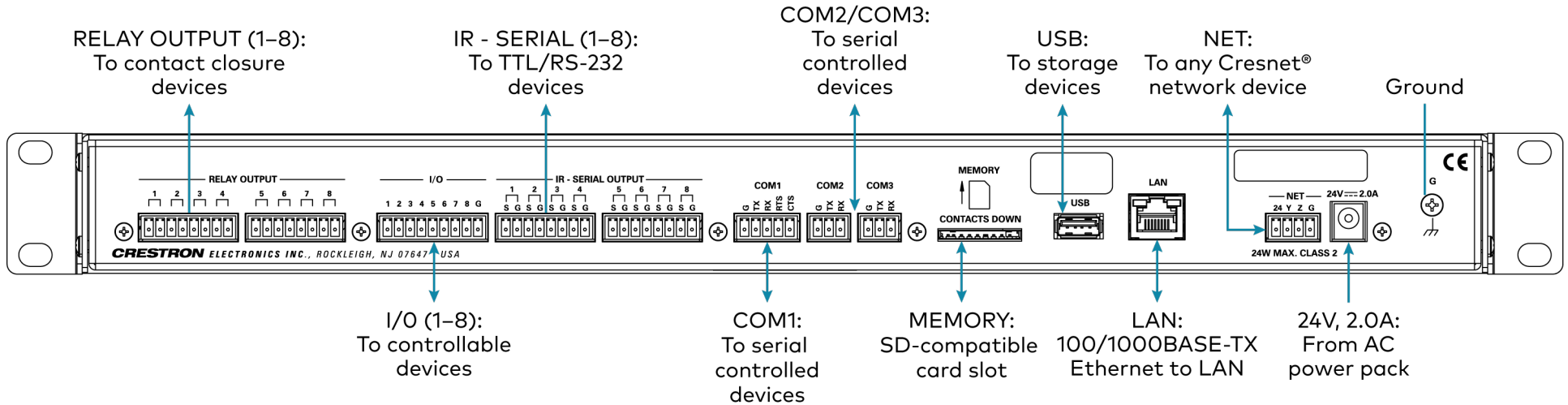
Surface Placement

1. Attach the four adhesive rubber feet near the corners on the underside of the CP4-R.
2. Place the CP4-R onto a flat surface or stack with other equipment.

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Connect the Device

Make all necessary connections to the CP4-R as shown below.



NOTE: Ensure that the included SD card is seated fully in the **MEMORY** slot prior to powering on the CP4-R.

Observe the following when connecting the CP4-R:

- Use Crestron power supplies for Crestron equipment.
- The CP4-R may be powered with the included 24 VDC power supply or via Cresnet® network power with the **NET** port.
- Connect the chassis ground lug to a known earth ground circuit (such as building steel) to ensure that the CP4-R is grounded properly.
- Apply power after all connections have been made.

COM 1 Connections

Port	RS-232	RS-422 ¹	RS-485
G	GND	GND	GND ²
TX	TX (from CP4-R)	TX- (from CP4-R)	TX-/RX-
RX	RX (to CP4-R)	RX+ (to CP4-R)	Not used
RTS	RTS (from CP4-R)	TX+ (from CP4-R)	TX+/RX+
CTS	CTS (to CP4-R)	RX- (to CP4-R)	Not used

1. RS-422 transmit and receive are balanced signals that require two lines plus a ground in each direction. RXD+ and TXD+ should idle high (going low at start of data transmission). RXD- and TXD- should idle low (going high at start of data transmission). If necessary, RXD+/RXD- and TXD+/TXD- may be swapped to maintain correct signal levels.

2. A ground terminal connection is recommended but not required.

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Install IR Emitters (Optional)

The CP4-R ships with four IR emitters, which adhere to the IR sensor window of a display, optical disc player, or any other IR-controlled device. Each IR emitter has a 2-pin terminal block that connects to the **IR - SERIAL** port on the CP4-R, providing a one-way IR control interface to the connected device.

NOTE: The white-traced wire on the IR emitter is positive and connects to one of the **IR - SERIAL** port pins labeled "S."

Position the IR Emitter

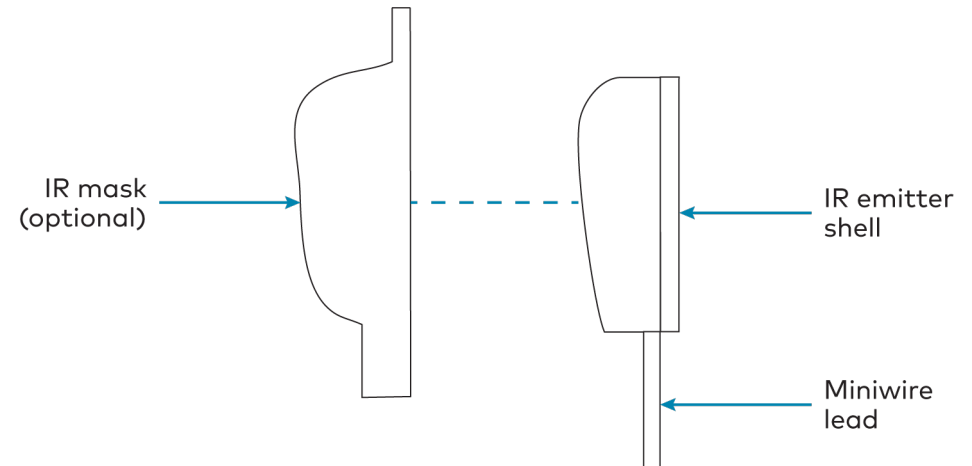
The IR emitter works best for most devices when positioned directly over the device IR sensor. However, operation is more consistent for some devices when the IR emitter is offset one or two inches from the device IR sensor.

To position the IR emitter, send commands from the CP4-R while moving the IR emitter around the front panel of the device. When operation is consistent and reliable, attach the IR emitter using the procedure described in [Attach the IR Emitter](#).

Attach the IR Mask

Attach the IR mask (packaged with the IR emitter) when two or more identical devices are being controlled using IR. The IR mask prevents stray IR output from controlling another device accidentally.

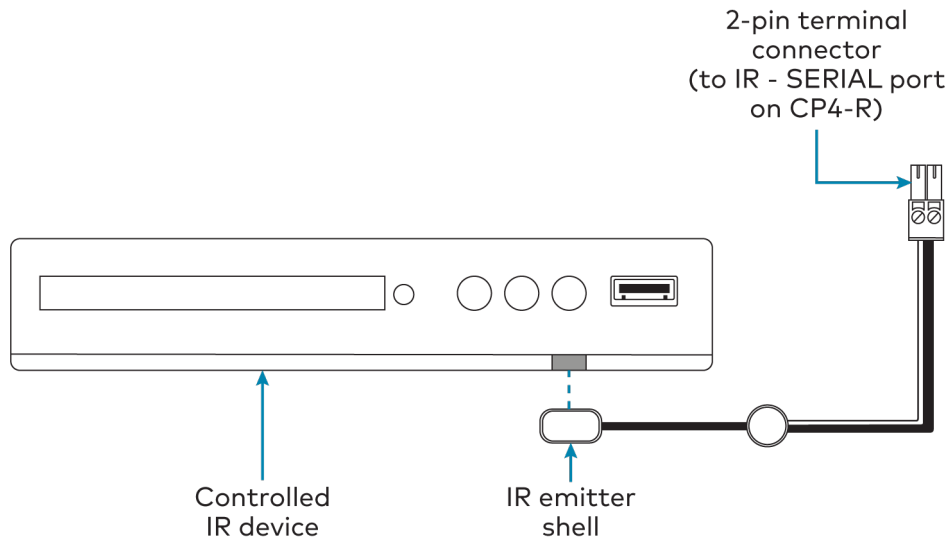
Place the IR mask over the IR emitter shell as shown in the following illustration. Do not remove the clear adhesive strips from the IR emitter shell or the IR mask.



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Attach the IR Emitter

1. Peel off the clear adhesive strip on the back of the IR emitter shell and the IR mask (if attached).
2. Affix the IR emitter by pressing it firmly to the desired location on the front panel of the controlled device.



If the IR emitter must be removed and repositioned for any reason, it may be necessary to replace the adhesive on the IR emitter with a new piece of two-sided tape.

NOTE: The IR emitter is a pure infrared emitter that does not emit any visible light. To test that the IR emitter is working properly, trigger an IR command from the CP4-R. Then, use a digital camera device (such as a smart phone) to record a video of the IR emitter while it is being triggered. If the IR signal is visible in the video during playback, the IR emitter is working properly.



Pair with Apple HomeKit

The CP4-R can be paired with Apple® HomeKit® technology to enable communication between the Crestron Home system and Apple HomeKit devices and accessories.

For pairing instructions and to locate the unique QR code required for pairing, refer to the CP4-R Compliance document (Doc. 8547) that shipped with your CP4-R.





Install the Setup App

The Crestron Home Setup app is used to configure the Crestron Home system. The Crestron Home Setup app is available from the App Store® online store and may be downloaded onto an Apple® iOS® device such as an iPad® device. An Apple ID is required to download the Crestron Home Setup app.

For a comprehensive list of iOS® hardware and software versions that are compatible with Crestron Home, refer to [online help article 5655](#).

To install the Crestron Home Setup app:

1. Tap the **App Store** icon  on the iPad device home screen.
2. Tap the search field, and enter the search term "Crestron Home Setup."
3. Tap **Search**.
4. Tap the **Crestron Home Setup** app icon .
5. Follow the prompts to download and install the app to the device.


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Set Up Crestron Home

Set up the Crestron Home system after all of the Crestron Home devices and the CP4-R have been installed and connected to the local network. Once the Crestron Home Setup app is downloaded and installed, system setup takes place entirely through the app.

NOTE: Ensure that the iPad device, personal computer, and the CP4-R are placed on the same subnet prior to setup.

To access the setup screens, tap the Crestron Home Setup app icon  on the iPad device home screen. The Crestron Home Setup app connects to the CP4-R and a splash screen is displayed.

For detailed instructions on how to set up the Crestron Home system, refer to the Crestron Home OS 3 Product Manual (Doc. 8525) at www.crestron.com/manuals.



Device Security

The CP4-R is secured by factory default. The default username is "admin" and the default password is the serial number of the CP4-R (case-sensitive). These credentials are required to connect to the CP4-R using Crestron Toolbox™ software, XPanel, or the Crestron Home app.

The default credentials can be changed using the Crestron Home Setup app. For more information, refer to the Crestron Home OS 3 Product Manual (Doc. 8525).



Visit the Product Page

Scan the QR code to visit the product page.

CP4-R



<https://www.crestron.com/model/6510747>

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Original Instructions

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

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