

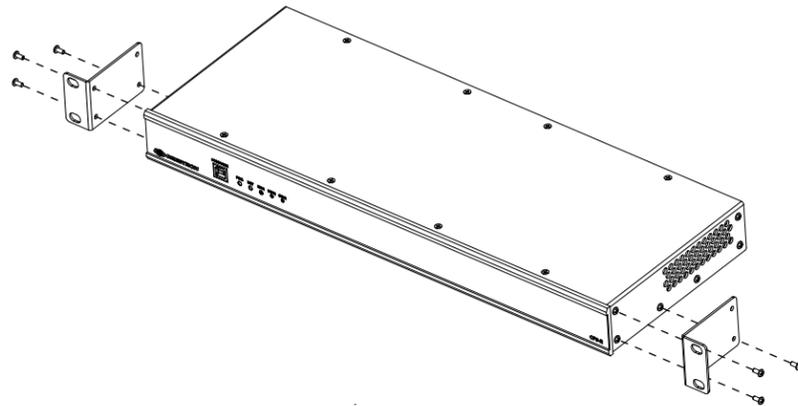
CP3-R 3-Series® Control Processor for Crestron Pynq® Application

DO Install the Device

The Crestron® CP3-R may be mounted into a rack or placed onto a flat surface.

Mount into a Rack

The CP3-R occupies 1U of rack space. Use a #1 Phillips screwdriver to remove the required screws from the CP3-R assembly (shown in the illustration below), and then attach the two included rack ears with the removed screws. Mount the CP3-R into the rack with four mounting screws (not included).

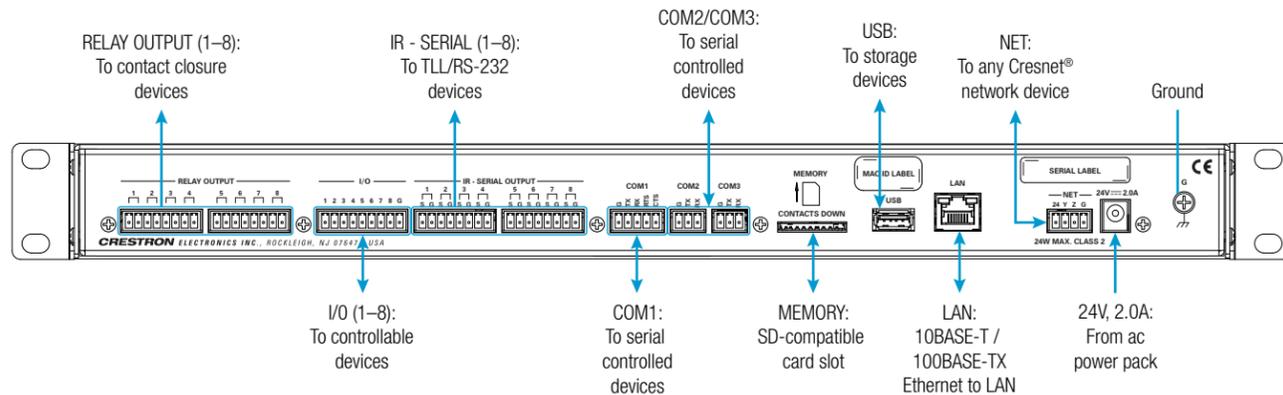


Place onto a Flat Surface

When the CP3-R is placed onto a flat surface or stacked with other equipment, attach the four included feet near the corners on the underside of the CP3-R.

DO Connect the Device

Make all necessary connections to the CP3-R as shown in the illustration below.



NOTE: Ensure that the included SD card is seated fully in the MEMORY slot prior to powering on the CP3-R.

DO Check the Box

QUANTITY	ITEM	PART NUMBER
2	Bracket, Rack Ear, 1U	2032122
1	Cable, USB 2.0, A - B, 6' (1.83 m)	2014966
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
4	Foot, 0.5" x 0.5" x 0.23", Rubber, Black	2002389
4	IR Emitter Probe, with Terminal Block Connector, IRP2	4500152
1	Power Cord, 5' 10" (1.78 m)	2042043
1	Power Pack, 24 Vdc. 2.5 A, 100-240 Vac	2045873

Observe the following when connecting the CP3-R:

- Use Crestron power supplies for Crestron equipment.
- The CP3-R may be powered with the included 24 Vdc power supply or with the NET 4-pin terminal block connector.
- The included cables may not be extended.
- Connect the chassis ground lug to a known earth ground circuit to ensure the CP3-R is properly grounded (for example, building steel).
- 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 CP3-R)	TX- (from CP3-R)	TX-/RX-
RX	RX (to CP3-R)	RX+ (to CP3-R)	Not Used
RTS	RTS (from CP3-R)	TX+ (from CP3-R)	TX+/RX+
CTS	CTS (to CP3-R)	RX- (to CP3-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.

DO Download the Crestron Pynq® App

The Crestron Pynq® app may be downloaded onto an Apple® iPad® device from the iTunes® application App Store® online store.

NOTES:

- An iTunes account is required to download the Crestron Pynq app. Refer to <https://support.apple.com/kb/HT2731> for help with setting up an iTunes account.
- For a comprehensive list of iOS® hardware and software versions that are compatible with the Crestron Pynq app, refer to OLH article 5655 at https://support.crestron.com/app/answers/detail/a_id/5655.

To download the Crestron Pynq app:

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

DO Configure the System

Once the Crestron Pynq app is downloaded and installed, system setup takes place entirely through the app.

Tap the Crestron Pynq app icon on the iPad device home screen. The Crestron Pynq app connects to the CP3-R automatically, and a splash screen is displayed.

NOTE: Ensure that the iPad device and the CP3-R are placed on the same subnet prior to configuration.

For more information on setting up and configuring the Crestron Pynq system, refer to the Crestron Pynq Application for CP3-R Product Manual (Doc. 8356) at www.crestron.com/manuals.



DO Install the IR Emitters (Optional)

The CP3-R ships with four IR (infrared) emitters, which are designed to adhere to the IR sensor window of a display, an optical disc player, or any other IR-controlled device. Each IR emitter is equipped with a 2-pin terminal block that connects to the IR - SERIAL port on the CP3-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

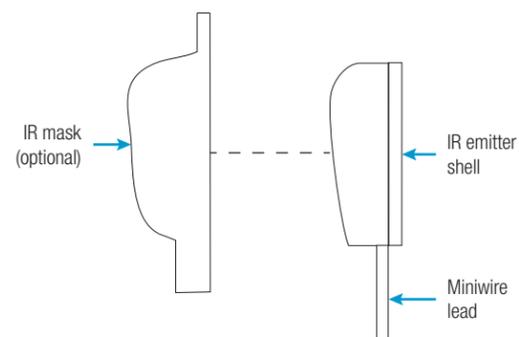
With many devices, the IR emitter works best when positioned directly over the IR sensor of the controlled device. However, operation is more consistent for some devices when the IR emitter is placed an inch or two offset from the IR sensor.

Since it may be difficult to locate the IR sensor on the controlled device, send commands from the CP3-R while moving the IR emitter around the front panel of the controlled device. When operation is consistent and reliable, attach the IR emitter using the procedure described in “Attach the IR Emitter” below.

Attach the IR Mask (Optional)

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.

To attach the IR mask, place it over the IR emitter shell as shown in the illustration below. Do not remove the clear adhesive strips from the IR emitter shell or the IR mask.



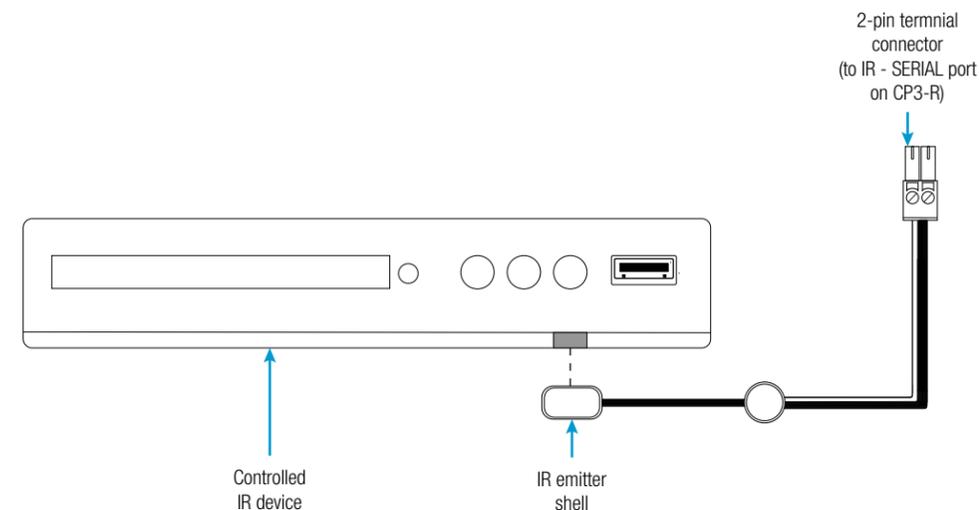
Attach the IR Emitter

To attach the IR emitter to the controlled device:

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. Since IR signals can be captured with a camera, test to see that the IR emitter is working properly by triggering an IR command from the CP3-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.



DO Learn More

Visit the website for additional information and the latest firmware updates. To learn more about this product, use a QR reader application on your mobile device to scan to the QR image, or click the QR image to load the web page.

Crestron Electronics

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



This product is Listed to applicable UL® Standards and requirements tested by Underwriters Laboratories Inc.
Ce produit est homologué selon les normes et les exigences UL applicables par Underwriters Laboratories Inc.

Federal Communications Commission (FCC) Compliance Statement

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

Rack Mounting Safety Precaution

- **Elevated Operating Ambient Temperature:** If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.
- **Reduced Airflow:** Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.
- **Mechanical Loading:** Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- **Circuit Overloading:** Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- **Reliable Earthing:** Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

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