

4-Series™ Control System

The Crestron® [CP4](#) and [CP4N](#) are secure, high-performance control processors with a powerful 4-Series™ control engine. The CP4 and CP4N are designed to integrate and automate technology within any modern networked home, commercial building, or government facility. An isolated control subnet port provides a Gigabit Ethernet LAN dedicated to Crestron devices (CP4N Only).

NOTE: The CP4 and CP4N are functionally similar. For simplicity within this guide, the term "control system" is used to refer to both the CP4 and CP4N unless otherwise noted.



In the Box

- 1 CP4 or CP4N, 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)



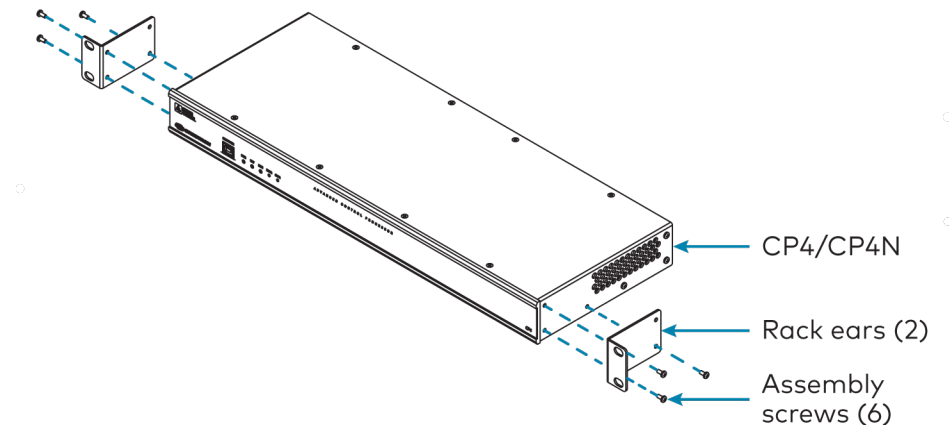
Install the Control System

The control system may be mounted into a rack or placed onto a flat surface.

Rack Mounting

The control system occupies 1U of rack space.

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



Surface Placement

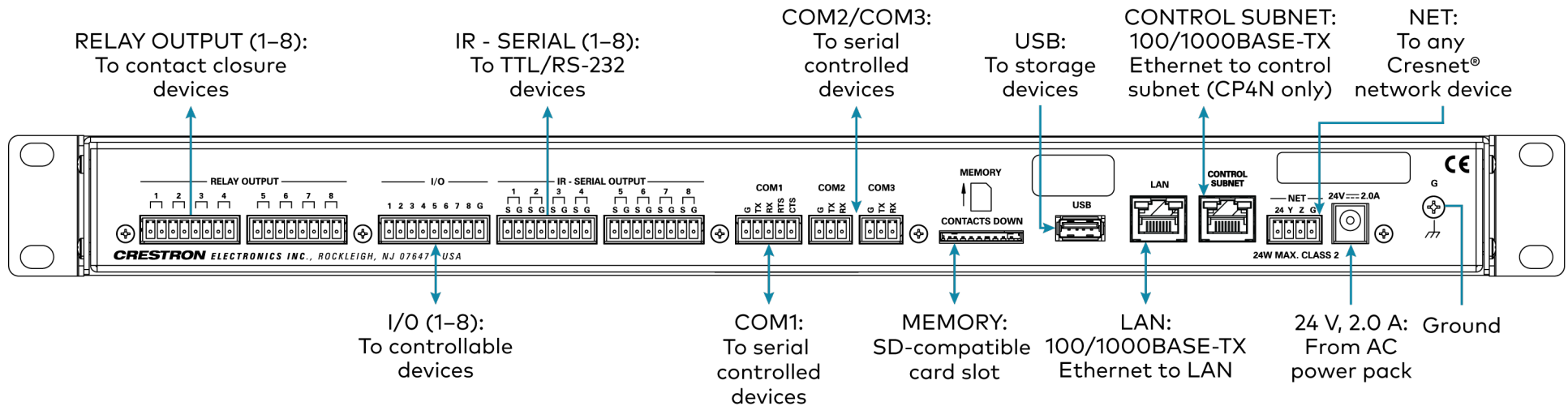
1. Attach the four adhesive rubber feet near the corners on the underside of the control system.
2. Place onto a flat surface or stack with other equipment.

4-Series™ Control System



Connect the Control System

Make all necessary connections to the control system as shown below.



Observe the following when connecting the control system:

- Use Crestron power supplies for Crestron equipment.
- The control system 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 control system 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/CP4N)	TX- (from CP4/CP4N)	TX-/RX-
RX	RX (to CP4/CP4N)	RX+ (to CP4/CP4N)	Not used
RTS	RTS (from CP4/CP4N)	TX+ (from CP4/CP4N)	TX+/RX+
CTS	CTS (to CP4/CP4N)	RX- (to CP4/CP4N)	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.

4-Series™ Control System



Connect the Control Subnet (CP4N Only)

The CP4N has a dedicated Control Subnet that is used for communication between the control system and Crestron Ethernet devices without interference from other traffic on the network.

CAUTION: Do not connect the **CONTROL SUBNET** port to the LAN. The **CONTROL SUBNET** port must only be connected to Crestron Ethernet devices.

For more information on using the Control Subnet, refer to the [4-Series™ Control System Reference Guide](#).



Configure the Control System

The control system may be configured using the provided web configuration interface. The interface can be accessed using the control system IP address or the XiO Cloud® service.

Configuration via IP Address

To access the web configuration interface using the control system IP address:

NOTE: The control system ships with DHCP enabled. A DHCP server is required to access the web configuration interface via the control system IP address.

1. Connect the control system to the network.
2. Use the Device Discovery tool in Crestron Toolbox™ software to discover the control system and its IP address on the network.
3. Enter the control system IP address into a web browser.

Configuration via XiO Cloud

The [XiO Cloud® service](#) allows supported devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported Crestron® devices are configured to connect to the service out of the box.

Use of the service requires a registered XiO Cloud account. To register for an XiO Cloud account, refer to www.crestron.com/Support/Tools/Licensing-Registration/XiO-Cloud-Registration-Room-Licenses.

NOTE: The device may be disconnected from the XiO Cloud service by navigating to the **Cloud Services** tab in Crestron Toolbox™ software (**Functions > Device Info > Cloud Services**). For details, refer to the Crestron Toolbox help file.

To connect the device to the XiO Cloud service:

1. Record the MAC address and serial number that are labeled on the shipping box or the device. The MAC address and serial number are required to add the device to the XiO Cloud service.

NOTE: If the device has multiple MAC addresses, use the MAC address that is providing the primary connection back to the network. For most devices, the Ethernet MAC address should be used. However, if your device is connecting to the network over a different protocol (such as Wi-Fi® communications), use the MAC address for that protocol instead.

2. Log in to your XiO Cloud account at portal.crestron.io.
3. Claim the device to the XiO Cloud service as described in the [XiO Cloud User Guide](#).

Select the device from the cloud interface to view its status and settings. The device may now also be managed and assigned to a group or room. For more information, refer to the [XiO Cloud User Guide](#).

4-Series™ Control System

NOTE: For XiO Cloud accounts with room-based licenses, the device must be added to a licensed room before its status and settings can be viewed.



Create an Admin Account

The first time the web configuration interface is accessed, a dialog box is displayed asking the user to create an admin account. A similar message is displayed when connecting to the control system in Crestron Toolbox software if an admin account has not already been created.

To create an admin account:

1. Enter a username and password for the admin account in the appropriate text fields.

CAUTION: Do not lose the username and password for the admin account, as the control system must be reset to factory settings to regain access.

2. Click **OK**. A dialog box is displayed stating that enabling authentication will restart the web session.
3. Click **Yes** to confirm and restart. The username and password created in step 1 must be entered to regain access to the web configuration interface.

NOTE: The username and password must also be entered when connecting from Crestron Toolbox or XPanel.



Set the Time Zone

The time zone must be set on the control system to ensure that the correct time settings are pushed to controlled devices.

To set the time zone:

1. Access the web configuration interface using either the device IP address or the Crestron XiO Cloud service.
2. Navigate to **Settings > System Setup**.
3. Select the time zone where the control system is used from the **Time Zone** drop-down menu.
4. Click **Save Changes** on the top right of the screen.



Pair with Apple HomeKit

The control system can be paired with Apple® HomeKit® technology to enable communication between the control system and Apple HomeKit devices and accessories.

For pairing instructions and to locate the unique QR code required for pairing, refer to the CP4/CP4N Product Information document (Doc. 8536) that shipped with the control system.

4-Series™ Control System



Visit the Product Page

Scan the QR code to visit the product page.

CP4



www.crestron.com/model/6511816

CP4N



www.crestron.com/model/6511817

Additional Information

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: M201903003

Crestron product development software is licensed to Crestron dealers and Crestron Service Providers (CSPs) under a limited nonexclusive, nontransferable Software Development Tools License Agreement. Crestron product operating system software is licensed to Crestron dealers, CSPs, and end-users under a separate End-User License Agreement. Both of these Agreements can be found on the Crestron website at www.crestron.com/legal/software_license_agreement.

The product warranty can be found at www.crestron.com/warranty.

The specific patents that cover Crestron products are listed at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/opensource.

Crestron, the Crestron logo, 3-Series, 4-Series, Cresnet, Crestron Toolbox, and XiO Cloud are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Apple and HomeKit are either trademarks or registered trademarks of Apple, Inc. in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography.

©2021 Crestron Electronics, Inc.

Doc. 8507B

08/30/21