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

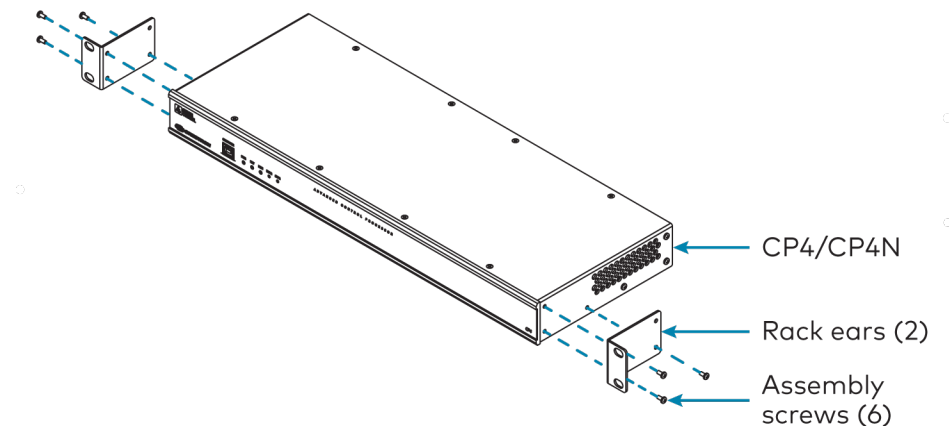|	
2	Bracket, Rack Ear (2032122)
4	Foot, Rubber (2002389)
2	Connector, 3-Pin (2003575)
1	Connector, 4-Pin (2003576)
1	Connector, 5-Pin (2003577)
4	Connector, 8-Pin (2003580)
1	Connector, 9-Pin (2003581)
1	Power Cord, 5 ft, 10 in. (1.78 m) (2042043)
1	Power Pack, 24 VDC, 100–240 VAC (2045873)

Install the Device

The device 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).
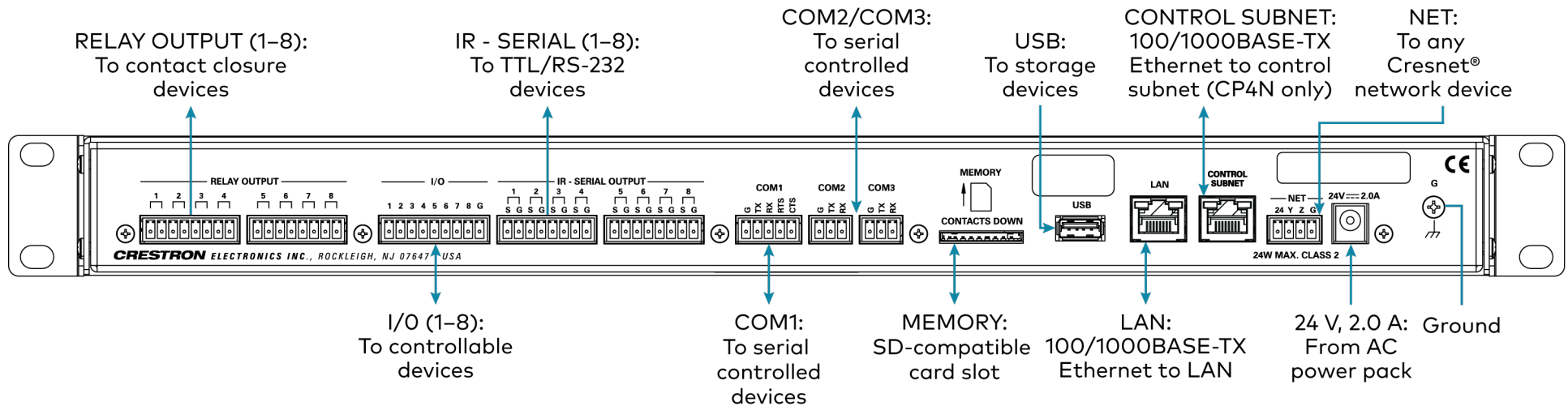

CP4/CP4N
Rack ears (2)
Assembly screws (6)

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.

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Connect the Device

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

RELAY OUTPUT (1–8): To contact closure devices

IR - SERIAL (1–8): To TTL/RS-232 devices

COM2/COM3: To serial controlled devices

USB: To storage devices

CONTROL SUBNET: 100/1000BASE-TX Ethernet to control subnet (CP4N only)

NET: To any Cresnet® network device

I/O (1–8): To controllable devices

COM1: To serial controlled devices

MEMORY: SD-compatible card slot

LAN: 100/1000BASE-TX Ethernet to LAN

24 V, 2.0 A: From AC power pack

Ground

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.

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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 3-Series® Control System Reference Guide (Doc. 7150) at www.crestron.com/manuals.

Configure the Device

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 Crestron 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 device 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 Crestron XiO Cloud

The Crestron XiO Cloud service allows supported Crestron devices across an enterprise to be managed and configured from one central and secure location in the cloud. Supported devices are configured to connect to the service. Use of the service requires a registered Crestron XiO Cloud account.

> **NOTE:** The device may be disconnected from the 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 access the web configuration interface using the Crestron XiO Cloud service:

1. Connect the control system to the network.
2. Record the MAC address and serial number that are labeled on the top of the control system. The MAC address and serial number are required to add the device to the service.
3. Do either of the following
   - For existing accounts, access the Crestron XiO Cloud service at https://portal.crestron.io.
   - For new accounts, register for a Crestron XiO Cloud account at www.crestron.com/xio-cloud-registration.
4. Claim the device to the service as described in the Crestron XiO Cloud User Guide (Doc. 8214) at www.crestron.com/manuals.
5. Select the device from the cloud interface to view its settings.

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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 device 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 device 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/6510420

CP4N

www.crestron.com/model/6510419

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.

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