



PC4-R

PC Control Processor for Crestron Home® OS

Product Manual

Crestron Electronics, Inc.

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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Overview

The Crestron PC4-R is a PC-based control processor that is embedded with the Crestron Home® operating system. It is designed exclusively to function as the core of a Crestron Home system.

The Crestron PC4-R is secured and ready for operation out of the box and only needs power and an Ethernet connection to function.

This section provides the following information:

- [Features](#)

Features

Key features include:

- PC control system designed exclusively for Crestron Home® OS
- Employs a powerful Dell® micro computer
- Ships with Crestron Home® OS preinstalled
- Provides the same experience, features, and tools as other Crestron Home processors
- Communicates with the Crestron Home Setup App for system configuration and the Crestron Home App for system control
- Crestron Home Setup and Crestron Home apps provide a simple and real-time setup experience
- Enhanced performance to handle large whole home applications as well as single room and MDU applications
- Integrates control and monitoring of audio, video, lighting, shades, thermostats, door locks, sensors, and other devices
- Integrates directly with IP-controllable devices over the network
- Integrates with serial, IR, CEC, and other controllable devices via decentralized control ports on DM®, DM NVX®, and other Crestron® interfaces
- COM, I/O, relay, and IR integration using [CEN-IO control modules](#) as well as [CEN-CI3-3](#) and [CEN-CI3-1-POE](#) card interfaces and [C3 Series Control Cards](#) (all sold separately)
- Integrates directly with Cresnet® controllable devices using an Ethernet-to-Cresnet bridge ([DIN-CENCN-2-POE](#) or [CAEN-BLOCK-CENCN-2-POE](#), sold separately)
- Crestron shade and drapery integration using the [CSA-PWS10S-HUB-ENET](#) Ethernet-to-Cresnet® Bridge for shade and drapery motors (sold separately)
- Supports infiNET EX® network wireless devices via an external [Crestron wireless gateway](#) (sold separately)
- Native BACnet™ network/IP support
- Employs enterprise-grade security to ensure maximum reliability and privacy
- External 100–240V power pack included

Crestron Home® OS

Unlock the full potential of a smart home with the Crestron Home® OS. It provides dealers with the ability to deliver a simple and clean user interface that includes sophisticated page designs and dynamic room controls. It also provides powerful features such as support for multiple homes, favorites, custom access, and room image customizations. For additional information, see crestron.com/crestronhome.

PC Control Processor for Crestron Home® OS

The powerful Dell® micro computer takes the place of a traditional control processor and provides remarkable speed and performance while handling the demands of an advanced automated system. The PC control processor provides enhanced processing power to handle larger Crestron Home systems such as large home automation, home theater, multiroom video, and MDU (multidwelling unit) applications.

Crestron Home Setup and Control Apps

Set up and control the Crestron Home system with the Crestron Home Setup app and Crestron Home app.

- Use the Crestron Home Setup app to configure the Crestron Home system. The Crestron Home Setup app can be used on an Apple® iPad® device or a Mac® or Windows® PC.
- Use the Crestron Home app to control audio, video, lighting, shading, climate, a security system, door locks, cameras, and more throughout your home. The Crestron Home app provides the same look and feel on Crestron Home user-interface devices such as Crestron touch screens, Apple® iOS® devices, and Android™ devices.

Integration and Expansion

Add controls to the system when and where they are needed. This allows for system expansion that utilizes centralized and distributed system controls. The flexibility to combine centralized and distributed controls simplifies system installation and setup.

Centralized control is accomplished using Ethernet-to-Cresnet® bridges and wireless gateways. Cresnet wired devices such as keypads, lighting modules, and thermostats can be controlled using Ethernet-to-Cresnet bridges ([DIN-CENCN-2-POE](#) or [CAEN-BLOCK-CENCN-2-POE](#)) and Cresnet wired shade and drape motors can be controlled using the 10-Shade Power Supply and Ethernet-to-Cresnet Bridge ([CSA-PWS10S-HUB-ENET](#)). Control of SG wireless and infiNET EX® wireless devices is available using Crestron wireless gateways (all sold separately).

Distributed control of devices using COM, I/O, IR, and relays is available using [CEN-IO control modules](#) as well as [CEN-CI3-3](#) and [CEN-CI3-1-POE](#) card interfaces and [C3 Series Control Cards](#) (all sold separately). Additionally, DM®, DM NVX®, and other Crestron® interfaces allow integration of serial, IR, CEC, and more using their control ports.

Works with Crestron Home® OS

The Crestron Home system supports a wide variety of Crestron and third-party devices and controls them all from one user interface.

- Crestron Home® OS is designed to work with a wide variety of devices to provide control of audio, video, lighting, shading, climate, security systems, door locks, cameras, I/O devices, and third-party devices.

- The Crestron Home system utilizes Crestron Drivers to expand the functionality of the system. Crestron Drivers are available for AV receivers, AV switchers, Blu-ray® disc players, cable boxes, displays, pool controllers, projectors, video servers, and more. To view the complete list of drivers, visit drivers.crestron.io.
- Crestron works with our partners to offer the best smart home solution for you and your clients. Some of these partners include 2N video intercom door stations, Amazon® Alexa® voice control, Apple® iOS® devices and Siri® voice commands, Cool Automation, Android devices™ and Google Assistant™ voice control, Josh.ai voice control, Sonos® speakers and amplifiers, Yale® door locks, and more.

myCrestron Services

The myCrestron services provide enhanced monitoring, remote access, and system configuration.

- The myCrestron Residential Monitoring Service (RMS) enables you to centrally monitor and manage Crestron Home systems with ease, identify issues, and resolve them faster. Crestron Home systems are displayed on an online dashboard to provide a comprehensive status update at a single glance. System-level information is available as well as device-level event logs that the Crestron Home system automatically sends to the cloud. Crestron True Blue Support and your technicians can access log files to eliminate many troubleshooting truck rolls.
- The myCrestron.com Dynamic DNS (DDNS) service furnishes a URL for the system that enables a remote connection for configuration using the Crestron Home Setup app. This also enables monitoring of a Crestron Home system.
- Use the Crestron Home Configurator to create and manage system configurations using the myCrestron RMS. Unlike the Crestron Home Setup app, the configuration can be created before arriving on-site and can be used to generate a variety of detailed configuration reports. After the system is installed, use a Deploy code to transfer the configuration onto the Crestron Home processor.

BACnet Network/IP Support

Native support for the BACnet™ communication protocol provides a direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, and other systems. Up to 2,000 BACnet objects are supported out of the box with no licensing required.

Versatile Installation

Install it on a flat, level surface or VESA® mounted using third-party VESA mounting solutions.

Specifications

Product specifications for the PC4-R are provided below.

Computer

Computer	Dell® OptiPlex® 7080 Micro Desktop computer
Processor	Intel Core® i5-10500T CPU @ 2.30GHz
RAM	8 GB DDR4 2666MT/s
Storage	256 GB SSD
Network	Intel® I219-LM 100/1000 Mbps Ethernet
Operating System	Crestron Home® OS

NOTE: The micro computer provides control processor functionality for a Crestron Home system. Typical PC functions are not supported.

Communications

Ethernet	100/1000 Mbps
BACnet™ network/IP	Supports up to 2000 BACnet objects

Connectors

USB-C (Front)	(1) USB Type-C® 3.2 (Gen 2) connector, female; Connects to a USB flash drive for password reset or factory restore
SSUSB 3.2 Gen 2 (Front)	(1) USB Type-A 3.2 (Gen 2) connector, with PowerShare, female; Connects to a USB flash drive for password reset or factory restore
LAN	(1) 8-pin RJ-45 connector, female; 100BASE-TX/1000BASE-T Ethernet port
SSUSB 3.2 Gen 1	(2) USB Type-A 3.2 (Gen 1) connectors, female; Provides one port with Smart Power; Connects to a USB flash drive for password reset or factory restore
SSUSB 3.2 Gen 2	(2) USB Type-A 3.2 (Gen 2) connectors, female; Connects to a USB flash drive for password reset or factory restore
Kensington Lock	(1) Slot for optional Kensington® lock
19.5VDC	(1) DC power connector; 19.5VDC power input; For included power adapter

NOTE: The Audio, Line-Out, Antenna, HDMI® video, and DisplayPort® video connectors are disabled and not used.

Controls and Indicators

POWER	(1) Push button with LED backlight; For power on/off and reset
LAN	(2) LEDs on LAN port; Indicate Ethernet link status and activity

Power

Power Adapter (Included)	Input: 100–240VAC, 50/60 Hz; Output: 130 W @ 19.5V
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Environmental

Temperature	32 to 104°F (0 to 40°C)
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Enclosure

Enclosure	Metal, plastic
Mounting	Freestanding, optional VESA® mount and Kensington® lock capabilities

Dimensions

Height	1.40 in. (36 mm)
Width	7.20 in. (183 mm)
Depth	7.00 in. (178 mm)

Weight

2.87 lb (1.30 kg)

Compliance

To search for product certificates, refer to support.crestron.com/app/certificates.

Installation

This section provides the following information:

- [In the Box](#)
- [Mount the PC4-R](#)
- [Connect the PC4-R](#)

In the Box

The following items are provided:

Qty.	Description
1	PC4-R, PC Control Processor for Crestron Home® OS
Additional Items	
1	Power Pack, 19.5VDC, 100–240VAC

Mount the PC4-R

The PC4-R must be installed in a well-ventilated area. The PC4-R can either be placed on a flat, level surface or VESA® mounted using third-party VESA mounting solutions.

NOTE: The air intake is located on the front of the device, and air is exhausted out of the rear. Ensure the device is installed in a location that permits sufficient airflow through the device.

Note the following enclosure and ventilation requirements when installing the PC4-R:

- If installing within an enclosure with doors, the doors must be of a type that allows at least 30% airflow through the enclosure (front and back).
- Leave a 4 in. (10 cm) minimum clearance on all vented sides of the PC4-R to permit the airflow required for proper ventilation.
- Do not install the PC4-R in an enclosure that does not provide sufficient airflow, that is dusty, or that reaches a temperature exceeding 95°F (35°C).
- Do not block the PC4-R air vents with any objects, as this can restrict airflow and computer performance, possibly causing the PC4-R to overheat.
- If the PC4-R is installed in a corner, on a desk, or under a desk, leave a 2 in. (5 cm) clearance from the back of the PC4-R to the wall to permit the airflow required for proper ventilation.

Connect the PC4-R

Make all necessary connections to the PC4-R as described below:

NOTES:

- Any connector on the PC4-R that is not listed below is not used.
- USB ports are used for factory reset and password reset. For details, refer to the [Crestron Home® OS Product Manual](#).
- **19.5VDC:** Connect to included power supply (100–240VAC, 50/60 Hz input).
- **LAN:** Connect to LAN via Ethernet cable.

Configuration

The PC4-R is configured using the Crestron Home Setup app. Refer to the [Crestron Home® OS Product Manual](#) for details.

Resources

The following resources are provided for PC4-R.

NOTE: You may need to provide your Crestron.com web account credentials when prompted to access some of the following resources.

Crestron Support and Training

- [Crestron True Blue Support](#)
- [Crestron Resource Library](#)
- [Crestron Online Help \(OLH\)](#)
- [Crestron Training Institute \(CTI\) Portal](#)

Programmer and Developer Resources

- help.crestron.com: Provides help files for Crestron programming tools such as SIMPL, SIMPL#, and Crestron Toolbox™ software
- developer.crestron.com: Provides developer documentation for Crestron APIs, SDKs, and other development tools

Product Certificates

To search for product certificates, refer to support.crestron.com/app/certificates.

Related Documentation

- [Crestron Home OS® Product Manual](#)

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