

# Crestron PAC2 Automation Control System

CRESTRON  
HOME



Crestron has been building reliable lighting control systems for more than 20 years. A recent addition to Crestron's lighting control product line-up is the PAC2 control processor. The PAC2 is the heart of the Crestron lighting and automation control system, linking touchpanels, keypads, wireless remotes and the Internet to lighting and climate control modules located in the Crestron home automation enclosure. In addition to controlling the lighting system throughout the home, the PAC2 enables the homeowner to seamlessly integrate other systems such as HVAC and security.

The PAC2, which is part of Crestron's family of 2-Series control systems, utilizes the 257 MIPS, 32-bit Motorola ColdFire® processor. Its on-board 36MB memory is enhanced with a 4GB expansion slot that supports off-the-shelf Type II compact flash memory and the IBM Microdrive hard disk drive, for on-board storage of program and touch-panel files, room and equipment profiles, upgrades, databases and schedules.

Crestron's unique Dual Bus system, with its high-speed I/O bus architecture, provides blazing fast throughput, system wide. The two 40 Mb/s Y-bus expansion slots offer the option of installing any of the current CNX-series control cards. The 300 Mb/s Z-bus expansion slot is designed for super high-speed control card applications such as 10/100 Ethernet, USB, USBII, Fire wire, disk drive array and more.

The PAC2 offers built-in 8 programmable analog and digital inputs as well as digital outputs and 8 normally open relays, isolated with MOV suppression. On the front of the PAC2 are 8 groups of Cresnet connections. When powered by an additional external power supply, they expand the number of Cresnet devices that can be connected to the PAC2. The LEDs indicate communication on the Cresnet link.

The PAC2 provides an external connection for a back-up processor and emergency override closure signal. Should the PAC2 become inoperable, a signal is generated to switch power and communication of the Cresnet system to a back-up processor. When the override connection receives a contact closure, the lights are then turned on to a programmed preset emergency level. They remain at this level until that electrical closure is removed.

The PAC2 can be programmed through either the new Crestron lighting and climate control software or SIMPL Windows™ programming software. The PAC2 control system is part of the complete line of Crestron Home™ fully integrated control and automation solutions. In addition to the PAC2, Crestron Home features professional in-wall, tabletop and wireless touchpanels, keypads, audio amplifiers, tuners and switchers, plus easy-to-use software templates for system design and programming. With Crestron Home, technology is practical and easy to use.

# Crestron PAC2 Automation Control System w/Ethernet

## Processor:

- **CPU:** 32-bit Motorola 5407 ColdFire® Processor
- **Processing Speed:** 257 MIPS (Dhrystone 2.1 benchmark)

## Memory:

- **On-board Memory:** 36MB
- **Expandable Memory: Compact Flash slot** (up to 4GB) accessible on rear panel accepts standard Type II Compact Flash or IBM Microdrive®

## Dual Bus Architecture:

### Y-Bus:

- **40 Mb/s parallel communications**
- **Built-in 2-slot card cage** supports Crestron's existing CNX expansion cards and new C2 Series expansion cards

### Z-Bus:

- **300 Mb/s parallel communications**
- **1 expansion card slot.** Optional cards include:
  - **C2ENET-1:** Single Port 10/100 BaseT Ethernet
  - **C2ENET-2:** Dual Port WAN-LAN-10/100 BaseT Ethernet

## On-Board Relay Connections

- **I/O Versiports:** 8 programmable analog and digital inputs as well as digital outputs
- **Relay ports:** 8 normally open relays, isolated with MOV suppression

## Override Connections

- (1) Override connection for manual-overide of modules

## Computer console:

1 RS-232 port (accessible from bottom of panel), 9-pin DB9 for programming with a PC

## Cresnet ports:

- (1) 4-pin Cresnet connection
- (32) mini Cresnet connections
- (2) Crestron lighting connections

## Operating System:

- Real-time, preemptive, multitasking kernel
- Multi-threaded
- FAT32 file system with long names
- Fully compatible with existing SIMPL™ Windows® and SIMPL+™ programs
- Enhanced SIMPL+ instruction set

## Reset Buttons

**HW-R:** Performs physical reset of system

**SW-R:** Restarts SIMPL program when held down for 5 seconds

\* Holding down both buttons performs a system restart without loading the program

## LED Indicators

PWR, NET, ERR, LNK A, ACT A, LNK B, ACT B

## Power Requirements:

100-240VAC, 2.4A, 50/60Hz, internal universal power supply

## Dimensions

7.375" / 18.43cm (H) x 14.25" / 35.625cm (W) x 3.25" / 8.125cm (D)

## Weight

8.0lb/3.6kg

## Optional Accessories:

**CNXIO-16:** Analog/digital I/O expansion card

**CNXAO-8:** Analog output expansion card

**CNXCOM-2:** RS-232/422.485 expansion card

**CNXMIDI:** MIDI interface expansion card

**CNXRY-8:** Output expansion card

**CNXRY-16:** Output expansion card

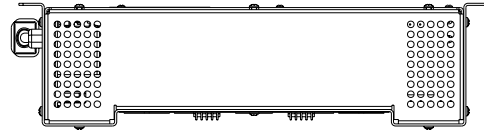
**CNXVTC-3:** Volume control expansion card

**CNXTA:** CNX Telephone and voice/WAV player interface card

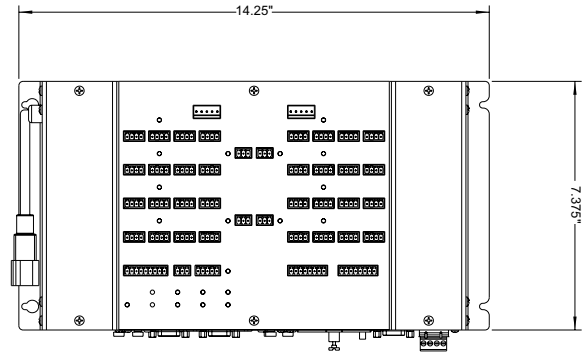
**C2IR-8:** IR/Serial output card for 2-Series control systems

**C2COM-3:** RS-232/422/485 interface for 2-Series control systems

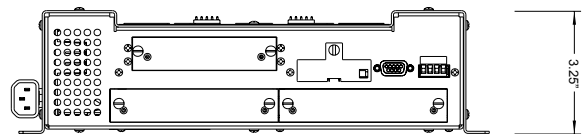
Top View



Front View



Bottom View W/out Ports



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