

RACK2

Dual Bus Control System with Card Frame

Crestron 2-Series Control Systems are the brain of a complete integrated AV or automation solution. Every audio, video, and environmental element of the home, boardroom, classroom, or command center becomes integrated and accessible through the control system. Crestron 2-Series control systems are unmatched for power, performance and scalability, providing the ideal choice for today's demanding control applications.

The RACK2 is designed for large-scale commercial and residential applications requiring maximum options for customization and scalability. It provides an integrated 12-slot Y-Bus card cage that supports any combination of plug-in Y-Bus control cards for IR, RS-232/422/485, relay, digital I/O, analog I/O, digital audio processing, and MIDI. The integrated 4-slot Z-Bus card cage is designed for Crestron's high-speed single and dual-port Ethernet cards.

2-Series Engine

At the heart of the RACK2 is the powerful 32-bit Freescale ColdFire® processor. Crestron's exclusive enhanced real-time operating system makes the RACK2 the fastest, most reliable control system available.

Dual Bus Architecture

The RACK2's unique dual-bus architecture affords ultra fast communications. The 40Mbps Y-Bus provides a high-speed backplane for IR, serial, and other control ports via the 12 Y-Bus control card slots. At a blazing 300Mbps, the Z-Bus supports Fast Ethernet with future support for other emerging technologies via the 4 Z-Bus slots.

Built-in Cresnet® Hub

The Cresnet bus is a simple, yet flexible 4-wire network that provides rock-solid bidirectional communication and power for many Crestron touchpanels, keypads, lighting controls, and other devices. The RACK2's built-in Cresnet hub serves as a repeater, splitter, and wiring block for large Cresnet networks. Each of its eight ports (or segments) has a dedicated driver/receiver, allowing every port to support up to 3000 feet of Cresnet cabling and approximately 20 Cresnet devices.

Cresnet Slave Mode

Selectable Cresnet Slave Mode enables the RACK2 to be configured as a Cresnet slave device, effectively transforming it into a Cresnet expansion module. Such flexibility can offer a cost-effective solution for system expansion, providing a host of additional control ports in a single card cage.

Ethernet

Crestron pioneered the IP-based control system to harness the vast possibilities of Ethernet and the Internet for remote control, monitoring, programming, and diagnostics, and the RACK2 is designed to deliver the world's most advanced IP control solution. A choice of single or dual port Ethernet cards enables a full-duplex 10/100 Ethernet connection with built-in Web server and email client, and support for both static and dynamic IP addressing.

e-Control®2

Crestron's award-winning e-Control 2 XPanel solutions offer the most flexible range of IP control possibilities available. Using a Windows® computer or CE/PocketPC™ PDA device, e-Control 2 provides an amazing control GUI that looks and behaves just like a Crestron Isys® touchpanel.



RoomView™

Every Ethernet-enabled 2-Series control system works directly with Crestron's exclusive RoomView Help Desk software for the industry's most comprehensive facility-wide asset management solution.

SNMP

Built-in SNMP support enables network management of Crestron control systems using third-party SNMP software. As an alternate or supplement to RoomView, SNMP allows full control and monitoring from the IT Help Desk or NOC in a format that's familiar to IT personnel.

SSL

All Ethernet-enabled 2-Series control systems support SSL (Secure Sockets Layer), the industry standard for protecting sensitive network communications.

NAT

The RACK2's onboard NAT (Network Address Translator) acts as a firewall and router to facilitate the configuration of a private control LAN with a single-point connection to the client's LAN (Dual-port Ethernet card required).

Memory Expansion

A memory card slot accessible on the rear panel allows for easy expansion of the RACK2's internal memory using any Type II Compact Flash memory card up to 2 GB.

Front Panel Control

The RACK2 includes a programmable front control panel with LCD display and card slot status indicators. The RACK2's front panel serves as a ready user interface for system configuration and diagnostics, and can also be custom programmed to enable menu-driven control capability.

Field-Replaceable CPU

To minimize downtime in the event of a fatal processor failure, the RACK2 is designed with a field-replaceable CPU card that is easily accessible from the rear panel.

> [2-Series engine](#) | [Dual-bus architecture](#)

RACK2 Dual Bus Control System with Card Frame

- > Compact Flash memory card slot
- > Cresnet port - master/slave selectable
- > Integrated Cresnet hub/repeater
- > 10/100 Ethernet capable | SSL encryption
- > e-Control 2 and RoomView enabled
- > SNMP support | Built-in firewall, NAT and router
- > 12 Y-Bus control card expansion slots
- > 4 Z-Bus control card expansion slots
- > 4-space EIA rack-mountable
- > Front control panel with LCD display

SPECIFICATIONS

Processor

CPU: 32-bit Freescale ColdFire® Microprocessor

Memory

SDRAM: 64 MB

NVRAM: 256 KB

Flash: 4 MB

Compact Flash: expandable up to 2 GB (not included)

Operating System

Real-time, preemptive multi-threaded/multitasking kernel; FAT32 file system with long names; supports SIMPL™ Windows® and SIMPL+®

Ethernet

With C2ENET-1: 10/100BaseT, auto-negotiating, full/half duplex, static IP or DHCP/DNS, SSL, TCP/IP, UDP/IP, CIP, SMTP, SNMP, built-in Web server and e-mail client; supports Crestron e-Control®2 XPanel and RoomView™ applications

With C2ENET-2: All above features plus: built-in firewall, router, and network address translator (NAT)

Connectors & Expansion Slots

Y-Bus Expansion Slots: (12) Y-Bus expansion slots;
40 Mb/s parallel communications internal backplane;
Accept all Y-Bus control cards

Z-Bus Expansion Slots: (4) Z-Bus expansion slots;
300 Mb/s parallel communications internal backplane;
Accepts all Z-Bus control cards

COMPUTER: (2) DB9 female;

Front and rear panel RS-232 computer console ports

NET: (1) 4-pin 5mm detachable terminal block;

Cresnet port, Master/Slave selectable;

Expandable via C2N-NPA8 Network Poll Accelerator

NET A - H: (8) 4-pin 3.5mm detachable terminal blocks;

Cresnet hub/repeater ports

PWR: (2) 3-pin 3.5mm detachable terminal blocks;

Cresnet internal/external power connectors/selectors

G: (1) 6-32 screw, chassis ground lug

Reset Buttons

HW-R: Hardware reset (reboots the control system)

SW-R: Software reset (restarts the SIMPL program)

Menu Buttons

FUNCTIONS: (6) Up to 6 dynamically assigned functions based upon current menu

MENU: (1) Returns the LCD display to the MAIN menu

UP, DOWN: (2) Scroll up or down through any list displayed in the LCD display

BKLT: (1) Toggles through 4 levels of backlight intensity for the LCD display
Refer to the Operations Guide for additional menu functions

Display

(2) lines, (40) characters per line;

Reverse mode (yellow and black) backlit LCD;

Displays system information, configuration menus, and custom programmable user functions

LED Indicators

PWR: (1 green) Indicates DC power supplied to unit

NET: (1 yellow) Indicates Cresnet bus activity

MSG: (1 red) Indicates control system has generated an error message

LNK A: (1 red) Indicates a valid connection on LAN port A

ACT A: (1 red) Indicates activity on LAN port A

LNK B: (1 red) Indicates a valid connection on LAN port B

ACT B: (1 red) Indicates activity on LAN port B

SLOT 1 - 16: (16 red) Illuminates to indicate presence of a card in the

respective expansion slot; extinguishes momentarily to indicate activity

Hub Ports A - H (rear) : (8 red) Indicate Cresnet activity coming from any device on a given network segment

Hub PWR (rear) : (2 green) Indicate presence of Cresnet power at ports A-D and E-H

Power Requirements

Cresnet Power Usage: 12 Watts (0.5 Amps @ 24 Volts DC) with no control cards installed;

External Cresnet power supply required (sold separately)

Environmental

Temperature: 41° to 113°F (5° to 45°C)

Humidity: 10% to 90% RH (non-condensing)

Enclosure

Chassis: Steel, black matte powder coat finish

Faceplate: Extruded aluminum, black matte powder coat finish with polycarbonate label overlay

Mounting: Freestanding or 4U 19-inch rack-mountable (adhesive feet and rack ears included)

Dimensions

Height: 6.97 (17.71 cm)

Width: 17.03 in (43.26 cm);

19.0 in (48.26 cm) with ears

Depth: 9.17 in (23.27 cm)

Weight

9.5 lb (4.3 kg)

Available Models

RACK2: Dual Bus Control System with Solutions Card Frame

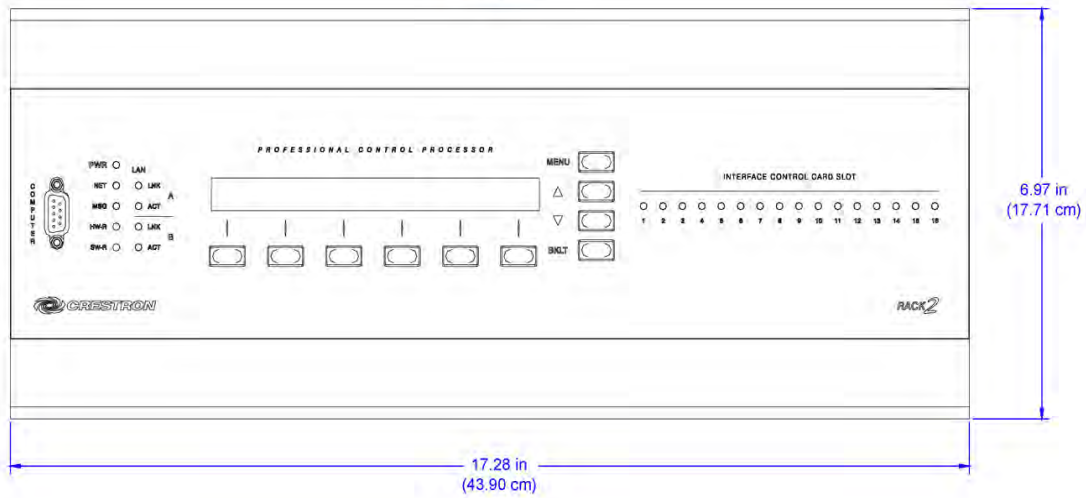
Available Accessories

RACK2 Dual Bus Control System with Card Frame

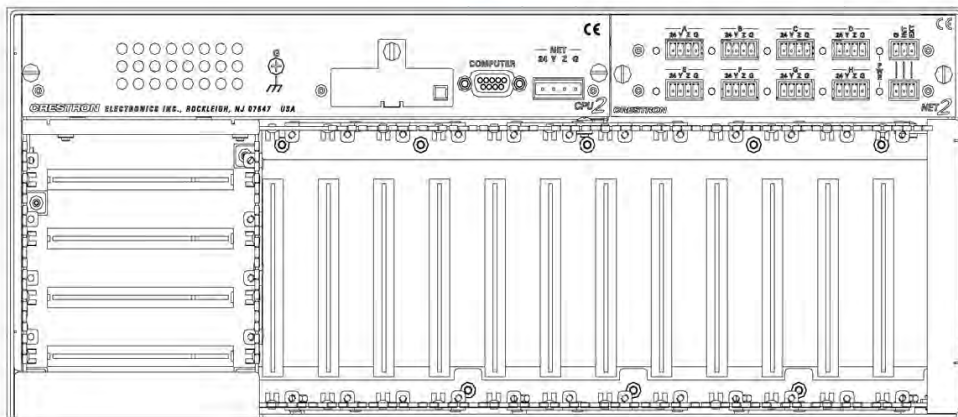
C2COM-2: 2 Port RS-232/422/485 Card for Y-Bus Expansion Slot
C2COM-3: 3 Port RS-232/422/485 Card for Y-Bus Expansion Slot
C2ENET-1: Single Port Ethernet Card for Z-Bus Expansion Slot
C2ENET-2: Dual Port Ethernet Card for Z-Bus Expansion Slot
C2IR-8: 8 Port Infrared/Serial Output Card for Y-Bus Expansion Slot
C2N-HBLOCK: Multi-type Cresnet Distribution Block
C2N-NPA8: Cresnet Network Poll Accelerator
C2N-SPWS300: Cresnet Power Supply, 300 Watts
C2N-VEQ4: 4-Channel Volume/EQ Control Module
CNPWS-75: Cresnet Power Supply, 75 Watts
CNPWSI-75: Cresnet Power Supply, 75 Watts - International Version, 230V
CNXAO-8: 8 Analog Output Card for Y-Bus Expansion Slot
CNXIO-16: 16 Port Versiport Card for Y-Bus Expansion Slot
CNXMIDI: MIDI Interface Card for Y-Bus Expansion Slot
CNXRY-16: 16 Relay Card for Y-Bus Expansion Slot
CNXRY-8: 8 Relay Card for Y-Bus Expansion Slot

RACK2 Dual Bus Control System with Card Frame

Front



Back



Top

