

AV2 Economical Dual Bus Control System



The AV2 is an economical version of the PRO2, providing all of the features and performance of the PRO2 without the front panel LCD display and pushbuttons. The AV2 also ships standard without Y-Bus expansion slots. As an option, three Y-Bus expansion slots may be added via the CAGE2 3-Card Expansion Cage accessory (sold separately).

The AV2 is perfect for medium to large-scale commercial and residential control applications. Six built-in COM ports, eight IR/Serial ports, eight I/O Versiports, and eight isolated relays provide the essential interface for control of numerous devices including video projectors, plasma displays, switchers, VCRs, DVD players, screens, lifts, and much more. Additional control ports and other interfaces like MIDI, DTMF and digital audio processing may be added by installing up to three Y-Bus control cards (requires CAGE2 3-Card Expansion Cage accessory; sold separately).

Native to the AV2, secure Ethernet connectivity and full e-Control[®]2 XPanel support are enabled through the addition of any Crestron Z-Bus Ethernet card. A memory card slot accessible on the rear panel allows for easy expansion of the AV2's internal memory by up to 4 GB using any Type II Compact Flash memory card or IBM Microdrive[®] hard disk drive.

The AV2 features a built-in power supply. Power is available through the AV2's Cresnet port to support external Cresnet devices including touchpanels, keypads and expansion modules.

SPECIFICATIONS

Processor

CPU: 32-bit Motorola ColdFire[®] Microprocessor
Processing Speed: 257 MIPS (Dhrystone 2.1 benchmark)

Memory

Onboard: 4MB Flash, 32MB SDRAM, 256KB NVRAM
Expandable: Compact Flash slot up to 4 GB (accepts standard Type II Compact Flash or IBM Microdrive[®], not included)

Operating System

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

Ethernet Support

With C2ENET-1: 10/100BaseT, static IP or DHCP/DNS, SSL, autonegotiating, full/half duplex TCP/IP, UDP/IP, SMTP, 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 and Expansion Slots

Y-Bus: 40 Mb/s parallel communications
Internal backplane for integrated control ports and Y-Bus expansion slots

COM A - F: (6) DB9 male
(6) Bidirectional RS-232/422/485 ports
Up to 115.2K baud
Hardware and software handshaking support
Ports C-F support C2N-NPA8 Network Poll Accelerator

INFRARED-SERIAL OUTPUT A - H: (8) 2-pin 3.5mm detachable terminal blocks
(8) IR/Serial output ports
IR output up to 1.2 MHz
1-way serial TTL/RS-232 (0-5V) up to 115.2K baud
Individual signal generator per port, allowing simultaneous firing of all ports

I/O Versiports 1 - 8: (1) 9-pin 3.5mm detachable terminal block
(8) Digital input/output or analog input ports (referenced to GND)
Digital input: Rated for 0-24VDC; input impedance 20K ohms; logic threshold 1.24VDC
Digital output: 250mA sync from maximum 24VDC; catch diodes for use with "real world" loads
Analog input: Rated for 0-10VDC, protected to 24VDC maximum; input impedance 20K ohms
Programmable 5V, 2K ohms pull-up resistor per pin

RELAY OUTPUT 1 - 8: (2) 8-pin 3.5mm detachable terminal blocks
(8) Normally open, isolated relays
Rated 1A, 30V AC/DC
MOV arc suppression across contacts

Expansion Slots: (3) Y-Bus expansion slots (Requires CAGE2 accessory, sold separately)
Accept all Y-Bus control cards

Z-Bus: 300 Mb/s parallel communications
Backplane for Z-Bus expansion slots

Expansion Slot: (1) Z-Bus expansion slot
Accepts all Z-Bus control cards

COMPUTER: (2) DB9 female
Front and rear RS-232 computer console port

NET: (1) 4-pin 5mm detachable terminal block
Cresnet port, Master/Slave selectable
Expandable via C2N-NPA8 Network Poll Accelerator

Power: (1) IEC Socket
Mates with removable power cord, included

Reset Buttons

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

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

LED Indicators

PWR, NET, ERR, LNK A/B, ACT A/B: (See product manual or spec sheet for more information)

Power Requirements

Internal Universal Power Supply: 2.4 Amps, 100-240 Volts AC, 50/60 Hz

Available Cresnet Power: 50 Watts (shared with control card expansion slots)

Environmental

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

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

Enclosure

Black metal, 2U 19" rack mountable (rack ears included)

Dimensions

Height: 3.47 in (8.81 cm)

Width: 19.0 in (48.26 cm) with ears; 17.03 in (43.24 cm) without ears

Depth: 9.69 in (24.61 cm)

Weight

7.10 lb (3.22 kg) – with line cord

AVAILABLE ACCESSORIES

- ▶ **CAGE2**
3-Card Expansion Cage for AV2 Control System
- ▶ **Y-Bus Control Cards**
(Refer to "Control Cards" section for more information)
- ▶ **Z-Bus Control Cards**
(Refer to "Control Cards" section for more information)
- ▶ **C2N-HBLOCK**
Cresnet Network Distribution Block
- ▶ **C2N-NPA8**
Cresnet Network Poll Accelerator
- ▶ **C2N-SPWS300**
300 Watt Cresnet Power Supply
- ▶ **CNSP-XX**
Custom Serial Interface Cable
- ▶ **IRP2**
IR Probe