

# Crestron MP2E Ethernet Control System with A/V Switching



The MP2E is a low-cost 2-Series Ethernet control system and audio/video switcher that provides total control of a room's multi-media resources, including CD players, DVD players, projectors, screens, even lighting. With a unique combination of high-performance Ethernet control and switching at an affordable price, the MP2E is the ideal AV control solution for colleges, corporate campuses, and other multi-room facilities.

**Power**—The heart of the MP2E is the 2-Series processor, built on Motorola's 32-bit, 257 MIPS ColdFire® technology. The MP2E features the same processor as the higher end PRO2 and AV2, with 36MB of onboard memory, allowing the MP2E to run the most sophisticated control applications.

**Professional Video Control**—The 4x2 high-bandwidth video crosspoint distributes video from 4 composite sources to two destinations—great for sending sources to presentation displays like plasma screens or projectors while previewing sources on a Crestron touchpanel. Alternatively, 2 S-Video sources can be switched to one display device. The video inputs include video signal detectors to confirm device power and signal presence.

The Crestron C2N-MMS video matrix switcher can easily be added to extend the video processing capabilities of the MP2E. With 3 additional S-Video inputs switchable to 2 outputs, 4 RGB inputs switchable to 2 outputs, and the C2N-MMS-SC scan converter card, the C2N-MMS is the ideal complement to the MP2E.

**Professional Audio Control**—The 7x1 stereo audio switcher provides balanced and unbalanced switching of room audio sources, with stereo volume and tone control and a 6-band graphic/parametric equalizer, so the sound is always precisely tailored to the listening environment. All the audio features of the MP2E are easily programmable with Crestron Digital Audio Tools™ software. Drag the sliders and adjust the waveforms to set EQ filters and presets. Select real time mode to hear the sound as it is adjusted, and then create a configuration file ready to be uploaded to the MP2E.

**Versatility**—I/O options include 2 COM ports; 4 IR ports; 4 isolated relays; 4 I/O Versiports; 6 BNC video connectors; 8 stereo audio connectors; 1 10/100 Ethernet port; 1 Cresnet port; and 1

IR input designed to work with the CNXRMRD IR detector and any universal RC-5 IR remote, for low-cost control of AV devices.

**e-Control 2™ Technology**—The MP2E features a built-in Web server with SSL, so users can control devices from any computer on the LAN or WAN. Programmers can design custom Web pages using Crestron VisionTools Pro-e®, eliminating the need to purchase third-party Web page design software.

In fact, with Crestron e-Control 2® XPanel technology, Web pages have the same look and feel as TPS touchpanel pages, with the same outstanding runtime performance. e-Control 2 also generates standalone XPanel programs that users can launch from their Windows® desktop or from Windows PocketPC 2002 PDA devices and Windows Tablet PCs.

The MP2E supports all Crestron e-Control Power Applications, including RoomView™ software. With RoomView, organizations can monitor multiple room AV controllers on an integrated Ethernet network, in real time, from any network PC.

- > 2-Series processor built on Motorola's 32-bit 257MIPS ColdFire® technology
- > 4x2 high-bandwidth video switch with video signal detectors
- > 7x1 stereo audio switch
- > 6-band graphic/parametric EQ
- > Built-in volume, treble and bass control
- > 2 bi-directional COM ports
- > 4 IR/serial ports
- > 4 isolated relays
- > 4 Versiports
- > 1 IR input compatible with universal IR remotes
- > 1 Cresnet port
- > Built-in Web server for remote browser/XPanel control
- > DHCP/DNS enabled with SSL (Secure Sockets Layer)
- > PW-2410RU power supply included
- > Easily configured with Crestron SystemBuilder software

# Crestron MP2E Ethernet Control System with A/V Switching

## Processor

**CPU:** 32-bit Motorola ColdFire® 5407 Microprocessor

**Processing Speed:** 257 MIPS (Dhrystone 2.1 benchmark)

## Memory

4MB Flash  
32MB SDRAM  
256KB NVRAM

## Connectors

**COM:** (2) DB9  
2-way RS-232/422/485

**Relays:** (4) 2-pin mini Phoenix  
Normally open, isolated relays  
Rated 1A, 30 Volts AC/DC  
MOV arc suppression across contacts

**I/O Versiports:** (4) 1-pin mini Phoenix  
Digital input/output or analog input  
Digital input: Rated for 0-24 Volts DC; input impedance 20K ohms; logic threshold 1.24 Volts DC  
Analog input: Rated for 0-10 Volts DC, protected to 24 Volts DC maximum; input impedance 20K ohms  
Programmable 5V, 2K ohms pull-up resistor per pin

**IR:** (4) 2-pin mini Phoenix  
IR, TTL Level, 1-way RS-232  
Individual signal plus ground per port  
IR output up to 1.2 MHz  
Individual UART per port, allowing simultaneous firing of all ports

**IR receiver:** (1) 3-pin mini Phoenix  
For connection to the CNXRMIIRD and any universal RC-5 IR remote

**Video inputs:** (4) BNC  
4 composite or 2 S-video sources  
Discrete video signal detectors

**Video outputs:** (2) BNC  
2 composite or 1 S-video

**Audio inputs:** (5) 3-pin mini Phoenix  
Unbalanced audio

**Audio inputs:** (2) 5-pin mini Phoenix  
Balanced audio

**Audio output:** (1) 5-pin mini Phoenix  
Balanced and unbalanced audio

**Computer:** (1) DB9  
RS-232 connection to a PC

**Cresnet:** (1) 4-pin Phoenix

**Ethernet (1):** RJ-45  
10/100Base-T full duplex

**Power:** 24 Volts DC power jack (PW2410RU power supply included)

## 7x1 Audio Switcher

**Volume control:** -80db to +20dB balanced input and output

**Bass/treble controls:** +/-15dB

**Equalization:** Selectable 5-band graphic plus 1-band parametric; 3-band graphic plus 3-band parametric; or full 6-band parametric

**Input compensation:** +/-10dB per input channel

**Input impedance:** 10K ohms balanced, 5K ohms unbalanced

## Video Switcher

**4x2:** 4 composite inputs switchable to two outputs

-OR-

**2x1:** 2 S-video inputs switchable to one output

Video signal detectors at each input

**Input impedance:** 75 ohms, terminated

**Minimum bandwidth:** 100MHz

## Reset Buttons

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

**SW-R:** Software reset (reloads the logic program)

## LED Indicators

**PWR:** Green power LED

**NET:** Yellow network activity LED

**ERR:** Red error LED

## Power Requirements

18 Watts (0.75 Amps @ 24 Volts DC)  
PW-2410RU power supply included  
Available Cresnet power: 6 Watts

## Dimensions

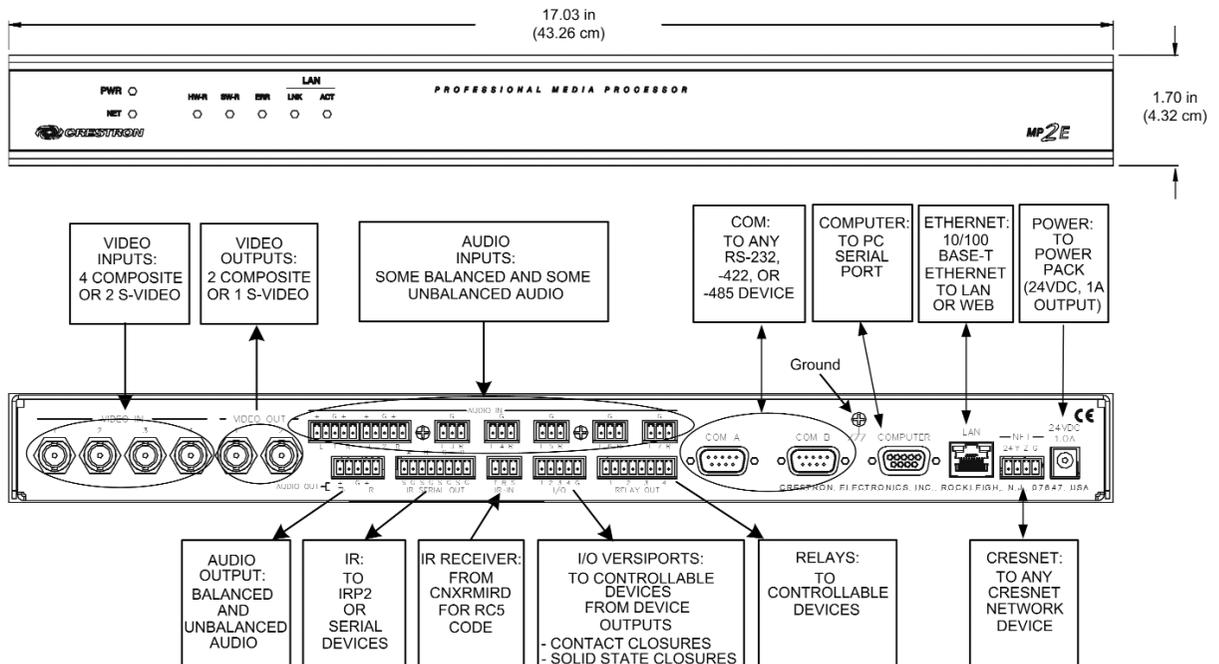
**Height:** 1.7 in (4.32 cm)

**Width:** 19.0 in (48.26 cm)

**Depth:** 8.5 in (21.59 cm)

## Weight

3.54 lb (1.59 kg)



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