

# MPC-M20

## MPC Media Presentation Controller? M20

Crestron MPC is a family of 2-Series control systems designed for installation in a wall or podium, delivering the industry's best multimedia room control technology in a convenient, space-saving design. Perfect for classrooms, meeting rooms, lecture halls, and training facilities, the MPC-M20 provides a fully-programmable user interface featuring an attractive and intuitive layout of pushbuttons with customizable backlit labeling, volume control, 5-way navigation pad, and wireless remote capability.

Available in white or black, the MPC-M20 is constructed to handle the rigors of everyday use in a corporate or educational environment. An assortment of programmable control ports provides connectivity for audio, video, and lighting equipment. The onboard **e-Control®** Web server provides for complete integration as part of a facility-wide managed control network.

### Control...Simplified

The MPC-M20 is engineered to be easy to integrate and use, yet versatile enough to suit each application perfectly. Its 15 programmable "hard key" buttons can be freely programmed for system power, input source selection, transport control, lighting presets, and any other functions. Custom backlit labeling of the buttons is facilitated using an assortment of pre-printed labels or Crestron Engraver software. The 5-way directional navigation pad enables full control of DVD players, displays, and other devices that utilize an onscreen menu. Adjusting audio volume and other parameters is enabled using the continuous-turn control knob and LED bargraph.

Configuring a complete MPC media presentation control solution is simplified using Crestron **SystemBuilder?** software, allowing limitless programmability from the award-winning platform that's familiar to every Crestron dealer. The MPC Wizard included in SystemBuilder enables setup of a full-featured presentation system complete with lighting control and **RoomView®** remote management without requiring any programming. Uploading and updating a facility full of MPC systems is managed easily over the network, or individually via the front panel USB port.

### Wireless Remote

A range of options is available for adding wireless remote control to the MPC system. Its built-in IR receiver allows use of any Crestron IR wireless touchpanel or handheld remote without requiring a separate receiver or gateway. For greater range and freedom of movement, MPC also supports Crestron's full line of RF wireless and WiFi based products.

### Wired Expansion

Adding a second control panel or just adding a few more buttons is easy using the **MP-B10** and **MP-B20** Media Presentation Button Panels. Of course, with Cresnet® and Ethernet built-in, the MPC-M20 works seamlessly with Crestron's entire line of keypads and touchpanels, lighting dimmers and shade controllers, signal processors and switchers, and much more.

### Built-in Control Ports

Through its onboard control ports, the MPC-M20 interfaces directly with the video display or projector, DVD player or TV receiver,



projection screen, lift, occupancy sensor, and other devices in the room. In addition to Cresnet and high-speed Ethernet, there is a bidirectional RS-232 COM port, an IR/serial port, two relays, and four input ports right on the rear panel.

### Audio and Video Control

The MPC-M20 is ideal for small room systems utilizing a single display device with computers and other sources connected directly to it. But like any 2-Series control system, MPC is fully scalable to suit larger applications with several program sources, microphones, or even multiple displays. Simply add a **C2N-VEQ4** module to enable 4 channels of audio volume and EQ control. Or, use any of Crestron's **QuickMedia®** wall plate and FlipTop interfaces, switchers, and receivers for a total signal routing, processing, and amplification solution.

### Ethernet and e-Control®2

Built-in 10/100 Ethernet facilitates secure high-speed network connectivity, enabling extensive capabilities for remote system maintenance and control, and providing an interface to other Crestron control systems. The onboard Web server provides the foundation for Crestron's exclusive **e-Control 2** Xpanel technology, providing secure IP-based remote control. SSL encryption prevents hackers from breaching the system and accessing its controls.

### RoomView® and SNMP

The MPC-M20 communicates directly with Crestron's exclusive **RoomView** help desk software, the industry's most comprehensive facility-wide solution for remote monitoring and asset management. Built-in SNMP support also enables integration with third-party network management software, allowing full control and monitoring from the IT Help Desk or NOC in a format that's familiar to IT personnel.

### Cresnet® Slave Mode

Selectable Cresnet Slave Mode enables the MPC-M20 to become a Cresnet keypad controller and expansion module as part of a larger Crestron system, providing a deluxe user-interface with local control ports

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built in for interfacing to nearby devices.

## Ambient Light Sensor

The MPC-M20's built-in light sensor has a range of uses, from controlling its own backlight intensity, to providing ambient lighting level data to a central building management system.

- > Wall mount 2-Series control system
- > 15 programmable buttons with LED feedback
- > Customizable backlit button labels
- > 5-way navigation pad
- > Volume control knob and LED bargraph
- > Built-in IR receiver and light sensor
- > RS-232, IR, 4 input, & 2 relay control ports
- > Cresnet and 10/100 Ethernet
- > e-Control Web server
- > RoomView and SNMP support
- > SSL (Secure Sockets Layer) network protection
- > Setup via SystemBuilder software
- > Rugged construction
- > 3-gang wall-mountable
- > Includes external Cresnet power supply

## SPECIFICATIONS

### Processor

: CPU: 32-bit Freescale ColdFire® Microprocessor:

### Memory

**SDRAM:** 32 MB  
**NVRAM:** 256 KB  
: Flash: 8 MB:

### Operating System

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

### Ethernet

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

### Connectors

: **NET:** (2) sets of (4) captive screw terminals;  
Cresnet port and 24 Volt DC power input with parallel pass-thru;  
Master/Slave selectable:  
: **LAN:** (1) 8-wire RJ45 with 2 LED indicators;  
10/100BaseT Ethernet port;  
Green LED indicates link status;  
Yellow LED indicates Ethernet activity:  
: **COM:** (5) captive screw terminals;  
Bidirectional RS-232 port;  
Up to 115.2k baud; hardware and software handshaking support:  
**RELAYS 1 - 2:** (3) captive screw terminals comprising (2) normally open, isolated relays (with shared common);  
Rated 1 Amp, 30 Volts AC/DC;  
MOV arc suppression across contacts  
**IR:** (2) captive screw terminals;  
IR/Serial output port;  
IR output up to 1.2 MHz;  
1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

**INPUTS 1 - 4:** (5) captive screw terminals comprising (4) digital or analog input ports (referenced to GND);  
Digital Input: Rated for 0-24 Volts DC, input impedance 20k ohms, logic threshold 1.25 Volts DC;  
Analog Input: Rated for 0-10 Volts DC, protected to 24 Volts DC maximum, input impedance 20k ohms;  
Programmable 5 Volts, 2k ohms pull-up resistor per pin  
**Computer:** (1) USB Type B female (behind front cover);  
USB 1.1 computer console port  
**Ground:** (1) flying lead, chassis ground wire

### Controls and Indicators

**Hard Keys:** (15) Programmable pushbuttons with backlit labeling  
**Feedback Indicators:** (15) Programmable red LEDs (1 per hard key)  
**Navigation Pad:** (5) Programmable pushbuttons for 4-way directional navigation and "enter"  
**VOLUME:** (1) Programmable continuous turn rotary encoder  
**Bargraph:** (1) Programmable red 5-segment LED bargraph  
**HW-R:** (1) Recessed miniature pushbutton for hardware reset (reboots the processor)  
**SW-R:** (1) Recessed miniature pushbutton (behind front cover) for software reset (restarts the SIMPL program)

### Light Sensor

Photosensor, programmable for auto-dimming of front panel labeling and other functions

### IR Receiver

: **Reception Frequency:** 36 to 38 kHz IR:  
: **Formats:** Crestron format, RC5:  
**Range:** Up to 50 ft line of sight (typical), dependent upon angle, obstructions, IR interference, and IR remote signal strength

### Power Requirements

**Cresnet Power Usage:** 9 Watts (0.375 Amps @ 24 Volts DC);  
**PW-2407RU** power supply included  
**Available Cresnet Power:** 9 Watts using **PW-2407RU** (included)

### Environmental

: **Temperature:** 32° to 104°F (0° to 40°C):  
: **Humidity:** 10% to 90% RH (non-condensing) :  
**Heat Dissipation:** 17 BTU/hr

### Enclosure

**Faceplate:** High-impact plastic, black or white, with polycarbonate label overlay  
**Chassis:** Injection-molded plastic with steel mounting plate  
**Mounting:** Requires 3-gang plaster ring or electrical box (& 2.5 inch deep recommended)

### Dimensions

**Height:** 4.50 in (11.43 cm)  
**Width:** 6.70 in (17.02 cm)  
**Depth:** 2.23 in (5.67 cm)

### Weight

1.33 lb (0.61 kg)

### Available Models

**MPC-M20-B-T [6502284]:** Media Presentation Controller™ M20 - 15 buttons, nav pad, & volume control; 1 RS-232, 1 IR, 4 input, 2 relay; black, textured; includes PW-2407RU

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**MPC-M20-W [6502438]:** Media Presentation Controller™ M20 - 15 buttons, nav pad, & volume control; 1 RS-232, 1 IR, 4 input, 2 relay; white; includes PW-2407RU

## Included Accessories

**PW-2407RU [6502499]:** 18 Watt Cresnet® Power Supply, Desktop, 24VDC, 0.7A (18 Watts), Regulated, US/International [Included Quantity: 1]

## Available Accessories

**MP/MPC/IPAC\_FRONT\_LABEL\_ENGRAVED-B-T [6502473]:** Custom Engravable Backlit Labels, Black

**MP/MPC/IPAC\_FRONT\_LABEL\_ENGRAVED-W [6502472]:** Custom Engravable Backlit Labels, White

**TTK-MP/MPC/IPAC-B-T [6502759]:** Table Top Kit, Black

**TTK-MP/MPC/IPAC-W [6503151]:** Table Top Kit, White

**SMK-MP/MPC/IPAC [6502904]:** Swivel Mount Kit

**CNSP-XX [6001139]:** Custom Serial Interface Cable. Contact Crestron for exact models and configurations. Prices may vary.

**IRP2 [6500126]:** IR Emitter Probe

**MP-B10-B-T [6502281]:** Media Presentation Button Panel B10, Black

**MP-B10-W [6502435]:** Media Presentation Button Panel B10, White

**MP-B20-B-T [6502282]:** Media Presentation Button Panel B20, Black

**MP-B20-W [6502436]:** Media Presentation Button Panel B20, White

**MP-WP100-B [6503174]:** Media Presentation Wall Plate - RCA Composite Video w/RCA Stereo Audio, Black

**MP-WP100-W [6503358]:** Media Presentation Wall Plate - RCA Composite Video w/RCA Stereo Audio, White

**MP-WP110-B [6503175]:** Media Presentation Wall Plate - Mini-DIN S-Video w/RCA Stereo Audio, Black

**MP-WP110-W [6503379]:** Media Presentation Wall Plate - Mini-DIN S-Video w/RCA Stereo Audio, White

**MP-WP120-B [6503176]:** Media Presentation Wall Plate - RCA Component Video w/RCA Stereo Audio, Black

**MP-WP120-W [6503380]:** Media Presentation Wall Plate - RCA Component Video w/RCA Stereo Audio, White

**MP-WP125-B [6503177]:** Media Presentation Wall Plate - RCA Component & Composite Video w/2x RCA Stereo Audio, Black

**MP-WP125-W [6503381]:** Media Presentation Wall Plate - RCA Component & Composite Video w/2x RCA Stereo Audio, White

**MP-WP130-B [6503178]:** Media Presentation Wall Plate - DB15HD Computer VGA w/Mini-TRS Stereo Audio, Bulkhead, Black

**MP-WP130-W [6503382]:** Media Presentation Wall Plate - DB15HD Computer VGA w/Mini-TRS Stereo Audio, Bulkhead, White

**MP-WP131-B [6503179]:** Media Presentation Wall Plate - DB15HD Computer VGA w/Mini-TRS Stereo Audio, Breakout, Black

**MP-WP131-W [6503383]:** Media Presentation Wall Plate - DB15HD Computer VGA w/Mini-TRS Stereo Audio, Breakout, White

**MP-WP140-B [6503180]:** Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, Black

**MP-WP140-W [6503384]:** Media Presentation Wall Plate - DVI-I w/Mini-TRS Stereo Audio, White

**MP-WP150-B [6503181]:** Media Presentation Wall Plate - HDMI® w/Mini-TRS Stereo Audio, Black

**MP-WP150-W [6503385]:** Media Presentation Wall Plate - HDMI® w/Mini-TRS Stereo Audio, White

**MP-WP152-B [6503183]:** Media Presentation Wall Plate - HDMI®, Black

**MP-WP152-W [6503386]:** Media Presentation Wall Plate - HDMI®, White

**MP-WP160-B [6503184]:** Media Presentation Wall Plate - DisplayPort w/Mini-TRS Stereo Audio, Black

**MP-WP160-W [6503387]:** Media Presentation Wall Plate - DisplayPort w/Mini-TRS Stereo Audio, White

**MP-WP162-B [6503185]:** Media Presentation Wall Plate - DisplayPort, Black

**MP-WP162-W [6503388]:** Media Presentation Wall Plate - DisplayPort, White

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