

3-Series® Media Presentation Controller 302



- *Crestron® 3-Series Control System® automated processor and control panel*
- *Mounts flush on a wall or lectern and fits in a 3-gang U.S. electrical box*
- *Ten buttons customizable with replaceable labels, plus rotary volume control with circular volume gauge and additional power and mute buttons*
- *Built-in .AV Framework™ software*
- *Gigabit Ethernet LAN port and Cresnet® network port*
- *Onboard RS-232, IR, relay, and Versiport control ports*
- *iPhone®, iPad®, and Android™ device control app support*
- *XPanel computer and web-based control*
- *Native BACnet™ network and IP support*
- *Installer setup via software, web browser, or cloud*
- *Drag-and-drop, C#, and symbol based programming environments with full Unicode (multilanguage) support*
- *Enterprise-grade security and authentication*
- *IPv6 ready*
- *PoE+ network powered*
- *Upgrade for legacy 2-Series MPC controllers (fits same mounting options as MPC-M10, MPC-M20, MPC-M25, and MPC-M50)*

The 3-Series® Media Presentation Controller 302 (MPC3-302) is a wall-mounted, PoE+ powered 3-Series Control System® automated processor and control panel in one. Its modern appearance and customizable backlit buttons provide an ideal user interface for controlling AV and other functions. The controller offers fully-programmable functionality, supports web and cloud-based configuration and management, and integrates with Crestron Fusion® software as part of a complete managed enterprise solution.

Crestron® MPC3 series controllers are perfect for classrooms, meeting rooms, lecture halls, and training facilities. Use the MPC3-302 to control a video display or AV system, adjust lighting and window shades, or any other custom application. The MPC3-302 is designed for flush-mount installation in a wall using a 3-gang U.S. electrical box (not included). It can also be installed in a podium with no back box or placed on a table using the optional tabletop kit.

NOTE: The MPC3-302 series fits all the same mounting options as previous generation [MPC-M10](#), [MPC-M20](#), [MPC-M25](#), and [MPC-M50](#) series products, providing an easy retrofit upgrade for older systems.

Customizable Backlit Buttons

The MPC3-302 features ten backlit buttons, which can each be labeled using the peel-off labels provided, or custom labeled using laser-engravable labels (sold separately). Elegant backlighting surrounds each button and illuminates the labels. Each button is backlit blue when active and white when inactive to provide clear indication of what media source or lighting scene is currently selected. A volume knob is included, encircled by a blue volume gauge to indicate the audio volume setting. Additional buttons are provided for power and mute control.

All buttons and controls on the MPC3-302 are custom programmable to control any device or function. Autobrightness control of the backlighting ensures optimal visibility under varying lighting conditions.

NOTE: For information about ordering custom button labels, refer to the [MPB3/MPC3-BTN10-B ENGRAVED](#) or [MPB3/MPC3-BTN10-W ENGRAVED](#) web pages.

No Rack Required

The MPC3-302 encapsulates the industry's best control technologies in one compact wall mount device. Gigabit Ethernet provides the essential interface for connecting to the building network and controlling Crestron AV switchers, audio processors, power controllers, and other IP controllable equipment. Cresnet® network connectivity provides support for Crestron lighting dimmers, motorized shades, sensors, thermostats, keypads, and more. Onboard RS-232, IR, relay, and Versiport I/O control ports enable direct integration with all types of third-party equipment.

Expanded connectivity is available using a [C2N-IO](#) control port expansion module, [CEN-GWEXER](#) or [CENI-GWEXER](#) infiNET EX® network wireless gateway, [DIN-CENCN-2](#) or [DIN-CENCN-2-POE](#) Ethernet to Cresnet Bridge, [CEN-CI3-1](#) or [CEN-CI3-3](#) control card interface, or [CEN-IO-COM-102](#), [CEN-IO-DIGIN-104](#), [CEN-IO-IR-104](#), or [CEN-IO-RY-104](#) wired Ethernet module.

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3-Series Control Engine

The MPC3-302 features an integrated, enterprise-grade 3-Series control processor. Built-in Modular Programming Architecture (optional ¹) allows the MPC3-302 to run multiple programs simultaneously for increased efficiency and flexibility. Rock solid networking and IP control afford seamless integration with other systems and devices, with add-on control capability using Crestron touch screens, keypads, wireless remotes, and mobile device apps with remote management through [Crestron Fusion](#) and the [Crestron XiO Cloud™](#) service.

No Programming Required!

Built-in .AV Framework™ technology delivers a fully functional AV presentation system with simplified web-based configuration and a choice of control options and add-ons. For complete details on the capabilities supported by .AV Framework, visit www.crestron.com/avframework.

Crestron Fusion Room Monitoring and Scheduling

Crestron Fusion provides an integrated platform for creating smart buildings that save energy and enhance worker productivity. As part of a complete managed network in a corporate enterprise, college campus, convention center, or any other facility, the MPC3-302 works with Crestron Fusion to enable remote scheduling, monitoring, and control of rooms and technology from a central help desk or mobile app. It also enables organizations to reduce energy consumption by tracking real-time usage and automating control of AV, lighting, shades, and HVAC. For more information about Crestron Fusion, visit www.crestron.com/fusion.

Crestron XiO Cloud Provisioning and Management

The MPC3-302 is compatible with the Crestron XiO Cloud™ service, which is an IoT (Internet of Things) based platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. Built on the Microsoft® Azure® software platform and utilizing Microsoft's industry-leading Azure IoT Hub technology, Crestron XiO Cloud enables installers and IT managers to deploy and manage thousands of devices in the time it would ordinarily take to manage just one. Unlike other virtual machine-based cloud solutions, Azure services provide unlimited scalability to suit the ever-growing needs of an enterprise. For more information, visit www.crestron.com/xiocloud.

Enterprise-Grade Security

The MPC3-302 is an enterprise-class control processor that can be deployed across hundreds of spaces and set up easily using a web browser, toolbox software, Crestron Fusion, or Crestron XiO Cloud. It employs standard network security protocols, including 802.1X network access control, Active Directory® service authentication, SSH, TLS, and HTTPS to ensure reliability and compliance with your organization's IT policies.

SNMP Support

Built-in SNMP support enables integration with third-party IT management software, allowing network administrators to manage and control Crestron systems on the network in an IT-friendly format.

Power over Ethernet Plus

Using PoE+ technology, the MPC3-302 gets its operating power directly through the LAN wiring. PoE+ (Power over Ethernet Plus) eliminates the need for a local power supply or any dedicated power wiring. A Crestron PoE+ switch ([CEN-SWPOE-16](#), sold separately) offers a total networking solution with built-in PoE+ to support multiple MPC3 controllers and other PoE or PoE+ powered devices.

Cresnet Network

Cresnet provides a simple four-wire network wiring solution for Crestron keypads, lighting controls, shade motors, thermostats, occupancy sensors, and other devices that don't require the higher speed of Ethernet. The MPC3-302 includes a Cresnet master port capable of supporting approximately 20 Cresnet devices. Systems with more than 20 devices can be handled by adding a Cresnet hub ([DIN-HUB](#) or [CNXHUB](#)) or Ethernet to Cresnet bridge ([DIN-CENCN-2](#) or [DIN-CENCN-2-POE](#)).

NOTE: The MPC3-302 supplies a maximum of 2.5 W to power Cresnet devices. For applications requiring more than 2.5 W, an external Cresnet power supply must be added.

Onboard Control Ports

In addition to Ethernet, the MPC3-302 includes a variety of control ports for interfacing with third-party equipment. Its bidirectional COM port and IR port (one of each) allow for controlling a video display, document camera, and other devices. Two programmable relay ports are provided for controlling a projection screen, lift, or other low-voltage contact-closure actuated equipment. Two Versiport I/O ports enable the integration of various types of sensors or anything else that provides a dry contact closure, low-voltage logic, or provides 0–10 VDC signal.

Flush Mount Installation

The MPC3-302 is designed to be flush mounted in a wall using a 3-gang U.S. electrical box (not included). It can also be installed in a lectern or podium with no back box. Once installed, the button labels can be changed at any time by simply removing the front cover. A security screw is included to prevent unauthorized removal.

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Tabletop Option

Using the optional tabletop kit ([TTK-MP/MPC/IPAC-B-T](#) or [TTK-MP/MPC/IPAC-W](#)), the MPC3-302 becomes a stylish, freestanding controller that fits perfectly on a table, desk, or countertop. It can even be permanently attached to the surface using the optional swivel mount kit ([SMK-MP/MPC/IPAC](#)). All tabletop options are sold separately.

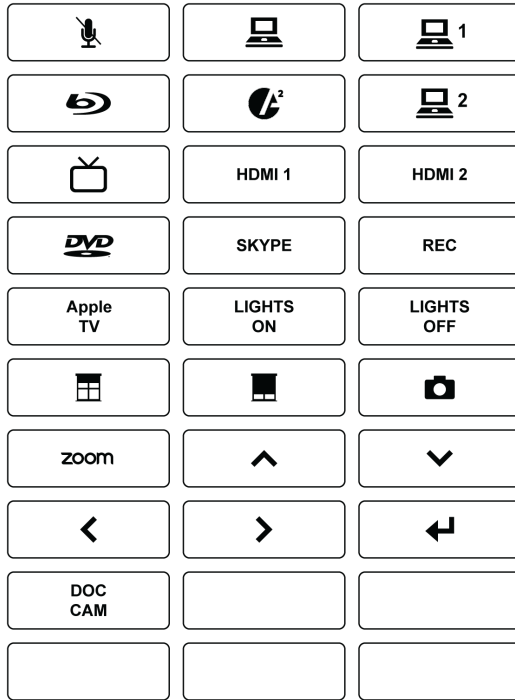


Figure 1: Included Icon Chips

Specifications

Control Engine

Crestron 3-Series® processor; real-time, preemptive multithreaded/multitasking kernel; transaction-safe extended FAT file system; battery-backed nonvolatile real-time clock; supports up to 10 simultaneously running programs (license required¹); preloaded .AV Framework™ base program

Communications

Ethernet 100/1000 Mbps, autoswitching, autonegotiating, autodiscovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP, SSL, TLS, SSH, SFTP (SSH File Transfer Protocol), FIPS 140-2 compliant encryption, IEEE 802.1X, SNMP, BACnet and IP², IPv4 or IPv6, Active Directory® service authentication, SMTP email client, HTTPS web server, HTTPS web browser setup and Crestron XiO Cloud™ client, IEEE 802.3at Type 2 PoE+ compliant

Cresnet® Network Cresnet master mode

RS-232 For 2-way device control and monitoring, supports RS-232 up to 115.2k baud with hardware and software handshaking

IR/Serial Supports 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0–5 V) up to 115.2k baud

Connectors

NET (1) 4-pin 3.5 mm detachable terminal block; Cresnet master port;

LAN PoE (1) 8-pin RJ45 connector, female; 100Base-TX/1000Base-T Ethernet port; PoE+ (Power over Ethernet Plus) PD (Powered Device) port

RELAY 1-2 (1) 4-pin 3.5 mm detachable terminal block; Comprises (2) normally open, isolated relays; Rated 1 A, 30 V AC/DC;

IR (1) 2-pin 3.5 mm detachable terminal block; IR/Serial output port; IR output up to 1.2 MHz; 1-way serial TTL/RS-232 (0–5 V) up to 115.2k baud; (IRP2 emitter sold separately)

COM (1) 5-pin 3.5 mm detachable terminal block; Bidirectional RS-232 port; Up to 115.2k baud; hardware and software handshaking support

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I/O	(1) 3-pin 3.5 mm detachable terminal block; Comprises (2) Versiport digital input/output or analog input ports (referenced to GND); Digital Input: Rated for 0–24 VDC, input impedance 20k Ω , logic threshold >3.125 V low/0 and <1.875 V high/1; Digital Output: 250 mA sink from maximum 24 VDC, catch diodes for use with real world loads; Analog Input: Rated for 0–10 VDC, protected to 24 VDC maximum, input impedance 21k Ω with pull-up resistor disabled; Programmable 5 V, 2k Ω pull-up resistor per pin
Ground	(1) 6-32 screw; Chassis ground lug

Controls and Indicators

Assignable Buttons	(10) Push buttons, each may be labeled using one of 25 predesignated labels or five blank labels (included), custom laser-etched labels are available using optional MPB3/MPC3-BTN10-B ENGRAVED or MPB3/MPC3-BTN10-W ENGRAVED engravable labels (sold separately)
Power	(1) Push button labeled with power icon
Volume	(1) Knob (continuous turn rotary encoder) for volume control
Volume Gauge	(1) Blue LED multisegment circular graph surrounding the volume knob for volume level indication
Mute	(1) Push button with mute icon
HW-R	(1) Push button (behind front panel) for hardware reset (reboots the processor)
SW-R	(1) Push button (behind front panel) for software reset (restarts the software program)
LAN PoE	(2) LEDs (on rear panel LAN port), green LED indicates Ethernet link status, amber LED indicates Ethernet activity
Illumination	Each front panel button is individually backlit white when inactive and blue when active; auto-brightness control adjusts all backlighting in three levels according to the ambient light level

NOTE: All front panel buttons and the volume knob are custom programmable.

Power

Power over Ethernet	IEEE 802.3at Type 2 compliant PoE+ PD (Powered Device); Requests 15 W from an 802.3at Type 2 PSE with LLDP advanced power management; Requests 30 W (PoE+ Class 4) from an 802.3at Type 2 PSE without LLDP
Available Cresnet Power	2.5 W (104 mA @ 24 VDC)
Power Consumption	8.5 W typical

Environmental

Temperature	41 to 95 °F (5 to 35 °C)
Humidity	10% to 90% RH (noncondensing)
Heat Dissipation	23 BTU/hr

Construction

Housing	Plastic with metal mounting plate, black or white, removable front panel with security screw
Flush Wall Mount	Mounts in a 3-gang U.S. plaster ring or electrical box, \geq 2-1/2 in. (64 mm) deep recommended (not included)
Lectern Mount	Mounts in a 2-11/16 x 5-13/32 in. (69 x 138 mm) cutout using bracket provided
Tabletop Mount	Sits on, or mounts to, a tabletop using optional tabletop kit (TTK-MP/MPC/IPAC series, sold separately)

Dimensions

Height	4.50 in. (115 mm)
Width	6.70 in. (171 mm)
Depth	2.41 in. (62 mm)

Weight

1.45 lb (657 g)

Compliance

UL® Listed, CE, IC, FCC Part 15 Class B digital device

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Models

MPC3-302-B

MPC3-302-W

Available Accessories

For supported accessories, visit the appropriate MPC3-302 product page at www.crestron.com.

Notes:

1. To enable Modular Programming Architecture (MPA) on the MPC3-302 requires the purchase of one [SW-RMC3-10PROG](#) license. The license enables support for running up to 10 simultaneous programs on a single MPC3-302 device. The license is not required if running only one program. To obtain a license for your MPC3-302 device, complete the "[Request for SW-RMC3-10PROG License](#)" form. If you have any questions, send an email to license@crestron.com.
2. A BACnet and IP license is required. A free license is available to support up to 50 BACnet objects on a single 3-Series control system. A full license must be purchased to enable support for more than 50 objects. The MPC3-302 supports a maximum of 500 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity. To obtain the license, visit www.crestron.com/bacnetlicense. For additional information, refer to the [SW-3SERIES-BACNET-50+](#) product page.

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

This product is covered under the Crestron standard limited warranty. Refer to www.crestron.com/warranty for full details.

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