MPC3-302 Series

3 SERIES

3-Series® Media Presentation Controller 302

- > *Wall mount Crestron® 3-Series Control System® and control panel*
- > *Mounts flush on a wall or lectern*
- > *Fits in a three-gang U.S. electrical box*
- > *Tabletop enclosure available*
- > *Stylish blue and white backlit buttons*
- > *Ten buttons customizable with replaceable labels*
- > *Rotary volume control with circular volume gauge*
- > *Additional power and mute buttons*
- > *Fully-programmable functionality*
- > *Auto-brightness control*
- > *Enterprise-class 3-Series® control engine*
- > *Modular programming architecture (optional)* [1]
- > *.AV Framework™ system configuration—no programming required!*
- > *Built-in real-time clock*
- > *Astronomical time clock for scheduled events*
- > *Gigabit Ethernet LAN port and Cresnet® port*
- > *Onboard RS-232, IR, relay, and Versiport control ports*
- > *infiNET EX® support via external gateway (sold separately)*
- > *iPhone®, iPad®, and Android® control app support*
- > *XPanel computer and web based control with Smart Graphics®*
- > *Crestron Fusion® room monitoring and scheduling support*
- > *XiO Cloud™ provisioning and management support*
- > *SNMP remote IT management support*
- > *Native BACnet™/IP support* [2]
- > *Installer setup via software, web browser, or XiO Cloud*
- > *Drag-and-drop, C#, and symbol based programming environments*
- > *Full Unicode (multi-language) support*
- > *Secure access through full user/group management or Active Directory® integration*
- > *Hardware level security using 802.1X authentication*
- > *TLS, SSL, SSH, and SFTP network security protocols*
- > *FIPS 140-2 compliant encryption*
- > *Built-in web server and SMTP e-mail client*
- > *IPv6 ready*
- > *PoE+ network powered*
- > *Easy upgrade for legacy 2-Series MPC controllers*
- > *Fits same mounting options as MPC-M10, -M20, -M25, and -M50*

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

Crestron® MPC3 series controllers are perfect for classrooms, meeting rooms, lecture halls, and training facilities – wherever a simple yet powerful controller is needed but space is limited. 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 three-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, -M20, -M25, and -M50 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 white when inactive and blue when active 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.

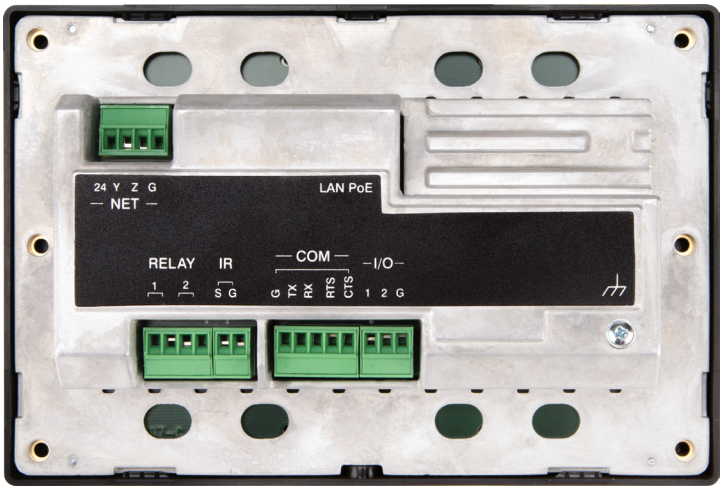
All buttons and controls on the MPC3-302 are custom programmable to control any device or function. Auto-brightness control of the backlighting ensures optimal visibility under varying lighting conditions.

Refer to Figure 1 for a list of supplied labels. For information about ordering custom button labels, please refer to the MPB3/MPC3-BTN10-B ENGRAVED or MPB3/MPC3-BTN10-W ENGRAVED web page.

No Rack Required

The MPC3-302 series encapsulates the industry's best control technologies in one compact wall mount device that can alleviate the need for a bulky equipment rack. Gigabit Ethernet provides the essential interface for connecting to the building network and controlling Crestron AV switchers,

MPC3-302 Series 3-Series® Media Presentation Controller 302



audio processors, power controllers, and other IP controllable equipment. Cresnet® 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® wireless gateway, DIN-CENCN-2 or DIN-CENCN-2-POE Ethernet to Cresnet Bridge, or CEN-CI3-1 or CEN-CI3-3 control card interface.

3-Series® Control Engine

The MPC3-302 series features an integrated, enterprise-grade 3-Series control processor. Crestron 3-Series delivers a distinctively robust, dynamic, and secure control system platform capable of faithfully managing a room full of disparate technologies. Its 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, and remote management through Crestron Fusion and XiO Cloud™.

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, please visit https://www.crestron.com/avframework.

Crestron Fusion® Room Monitoring and Scheduling

Crestron Fusion provides an integrated platform for creating truly smart buildings that save energy, enhance worker productivity, and prolong the life-span of valuable equipment. As part of a complete managed network in a corporate enterprise, college campus, convention center, or any other facility, the MPC3-302 works integrally 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, please visit https://www.crestron.com/fusion.

XiO Cloud™ Provisioning and Management

XiO Cloud is Crestron's unifying cloud-based platform for remotely provisioning, monitoring, and managing Crestron devices across an enterprise or an entire client base. XiO Cloud enables installers and IT managers to deploy and manage thousands of devices in the amount of time it would ordinarily take to manage just one. It provides a zero-touch solution that allows complete configuration of device settings without any hardware in hand, then simply connect each device on site and let XiO Cloud push out the settings, licenses, drivers, and firmware updates – automatically and securely – for a quick and painless, ready-to-use deployment.

Ongoing XiO Cloud services facilitate daily management and monitoring of every device through a single dashboard with comprehensive reporting and logging, live status viewing and alerts, performance metrics and analytics, scheduled actions and updates, and more. As requirements grow and evolve, new features and functionality can be added easily to one or many devices at any time without ever going on site. XiO Cloud is a subscription-based service offering an adaptable SaaS (Software as a Service) solution with graduated levels of functionality and unlimited scalability. For more information about XiO Cloud, please visit https://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 XiO Cloud. It employs standard network security protocols, including 802.1X network access control, Active Directory® 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 right 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®

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 Watts to power Cresnet devices. For applications requiring more than 2.5 Watts, 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 0-10 Volt DC signal.

Flush Mount Installation

The MPC3-302 is designed to be flush-mounted in a wall using a three-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.

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.

SPECIFICATIONS

Control Engine

Crestron 3-Series; real-time, preemptive multi-threaded/multitasking kernel; transaction-safe extended FAT file system; battery-backed non-volatile real-time clock; supports up to 10 simultaneously running programs (license required [1]); preloaded .AV Framework base program

Communications

Ethernet: 10/100/1000 Mbps, auto-switching, auto-negotiating, auto-discovery, 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/IP [2], IPv4 or IPv6, Active Directory authentication, SMTP e-mail client, HTTPS web server, HTTPS web browser setup and XiO Cloud client, IEEE 802.3at Type 2 PoE+ compliant
Cresnet: 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 Volts) 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;
10Base-T/100Base-TX/1000Base-T Ethernet port;
PoE+ PD port

RELAY 1 – 2: (1) 4-pin 3.5 mm detachable terminal block;
Comprises (2) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV arc suppression across contacts

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 Volts) 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

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 Volts DC, input impedance 20k Ohms, logic threshold >3.125V low/0 and <1.875V high/1;
Digital Output: 250 mA sink from maximum 24 Volts DC, catch diodes for use with "real world" loads;
Analog Input: Rated for 0-10 Volts DC, protected to 24 Volts DC maximum, input impedance 21k Ohms with pull-up resistor disabled;
Programmable 5 Volts, 2k Ohms pull-up resistor per pin

Ground: (1) 6-32 screw;
Chassis ground lug

Controls & Indicators

Assignable Buttons: (10) Pushbuttons, each may be labeled using one of 25 pre-designated 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) Pushbutton labeled with "power" icon
Volume: (1) Knob (continuous turn rotary encoder) for volume control
Volume Gauge: (1) Blue LED multi-segment circular graph surrounding the volume knob for volume level indication
Mute: (1) Pushbutton with "mute" icon
HW-R: (1) Pushbutton (behind front panel) for hardware reset (reboots the processor)
SW-R: (1) Pushbutton (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 back-lighting in three levels according to the ambient light level

Note: All front panel buttons and volume knob are custom programmable

Light Sensor

Photosensor detects the ambient light level to enable auto-brightness control

Power

Power over Ethernet: IEEE 802.3at Type 2 compliant PoE+ PD (Powered Device);
- Requests 15 Watts from an 802.3at Type 2 PSE with LLDP advanced power management;
- Requests 30 Watts (PoE+ Class 4) from an 802.3at Type 2 PSE without LLDP

Available Cresnet Power: 2.5 Watts (104 mA @ 24 Volts DC)

Power Consumption: 8.5 Watts typical

Environmental

Temperature: 41° to 95° F (5° to 35° C)
Humidity: 10% to 90% RH (non-condensing)
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, ≥2-1/2 inch (64 mm) deep recommended (not included)
Lectern Mount: Mounts in a 2-11/16 x 5-13/32 inch (69 x 138 mm) cutout using bracket provided

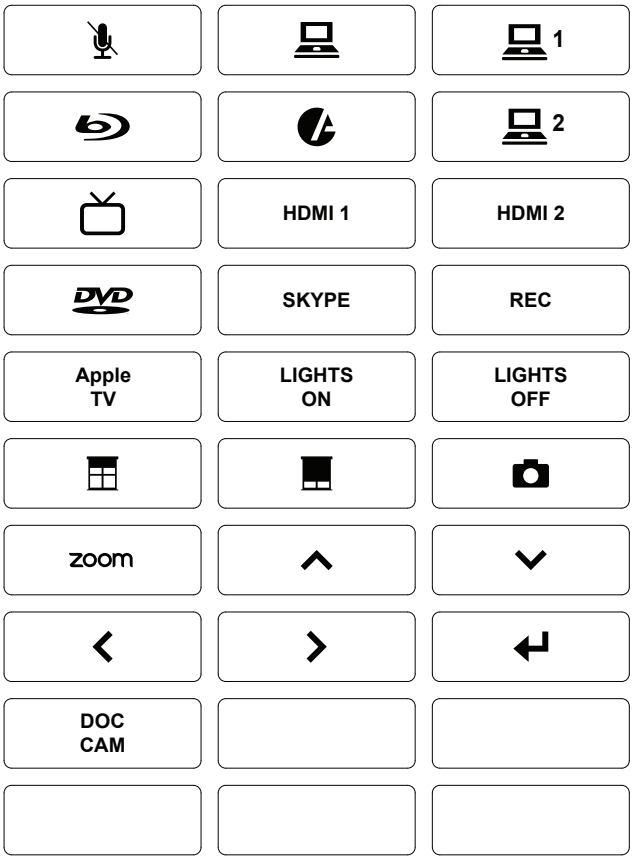


Figure 1: Included Button Labels

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

23.2 oz (657 g)

Compliance

CE, IC, FCC Part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

MPC3-302-B: 3-Series® Media Presentation Controller 302, Black
MPC3-302-W: 3-Series® Media Presentation Controller 302, White

MPC3-302 Series 3-Series® Media Presentation Controller 302

Available Accessories

MPB3/MPC3-BTN10-B ENGRAVED: Backlit Engravable Button Labels for MPC3-302-B, Black, Set of 10, Includes Custom Engraving
MPB3/MPC3-BTN10-W ENGRAVED: Backlit Engravable Button Labels for MPC3-302-W, White, Set of 10, Includes Custom Engraving
MPB3/MPC3-BTN10-B BLANK: Backlit Engravable Button Labels for MPC3-302-B, Black, Set of 10, Engraving Not Included
MPB3/MPC3-BTN10-W BLANK: Backlit Engravable Button Labels for MPC3-302-W, White, Set of 10, Engraving Not Included
SW-RMC3-10PROG: 10 Program MPA Support License
TTK-MP/MPC/IPAC-B-T: Tabletop Kit, Black
TTK-MP/MPC/IPAC-W: Tabletop Kit, White
SMK-MP/MPC/IPAC: Swivel Mount Kit for TTK-MP/MPC/IPAC
IRP2: IR Emitter
CNSP-XX: Custom Serial Interface Cable
CEN-SWPOE-16: 16-Port Managed PoE Switch
SW-XIOC-S Series: XiO Cloud™ Standard Provisioning and Management Service
SW-XIOC-P Series: XiO Cloud™ Premium Provisioning and Management Service
SW-FUSION-C-3: Crestron Fusion® Cloud, 250 rooms, 3-year
SW-FUSION-P-L: Crestron Fusion® On-premises, unlimited rooms, lifetime
CRESTRON-APP: Crestron® App for iPhone® & iPod touch®
CRESTRON-APP-ANDROID: Crestron® App for Android®
CRESTRON-APP-PAD: Crestron® App for iPad®
XPANEL: XPanel – Crestron Control® for Computers
SW-3SERIES-BACNET-50+: BACnet™/IP Support for 3-Series®
C2N-IO: Control Port Expansion Module
C2N-HBLOCK: Cresnet® Network Distribution Block
DIN-CENCN-2: Ethernet to Cresnet® Bridge
DIN-CENCN-2-POE: Ethernet to Cresnet® Bridge w/PoE

CEN-GWEXER: infiNET EX® & ER Wireless Gateway
CENI-GWEXER: infiNET EX® & ER Wireless Gateway – International Version
CEN-CI3-1: 3-Series® Card Interface – 1 Slot
CEN-CI3-3: 3-Series® Card Interface – 3 Slot
CSP-LIR-USB: IR Learner

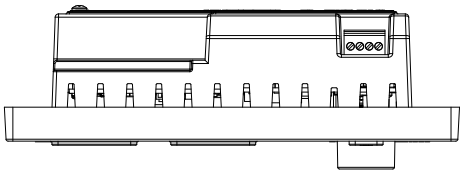
Notes:

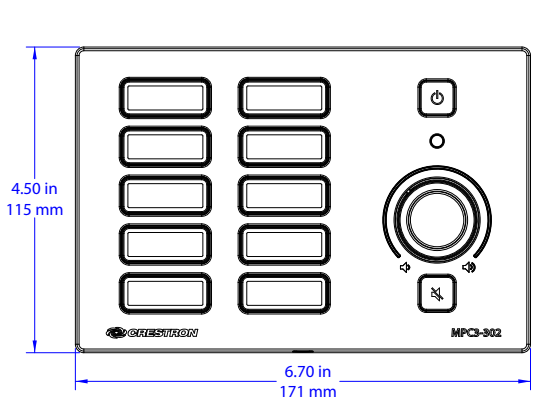
1. To enable Modular Programming Architecture (MPA) on the MPC3-302 requires the purchase of one SW-RMC3-10PROG license. The license enables support for running up to 10 simultaneous programs on a single MPC3-302. The license is not required if running only one program. To obtain a license for your MPC3-302, please complete the "Request for SW-RMC3-10PROG License" form. If you have any questions, please send an email to license@crestron.com.
2. BACnet/IP license 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 MPC3-201-B 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 https://www.crestron.com/bacnetlicense. For additional information, refer to the SW-3SERIES-BACNET-50+.

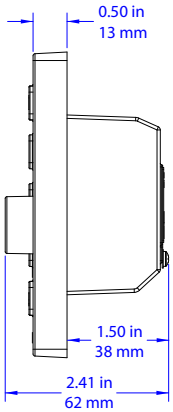
This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

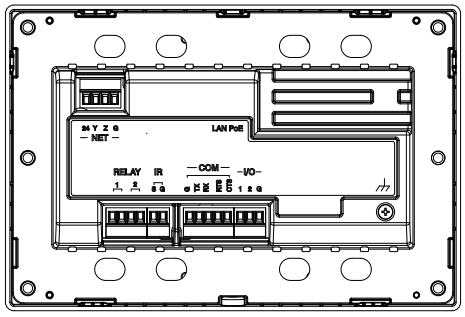
The specific patents that cover this and other Crestron products are listed online at https://www.crestron.com/legal/patents.

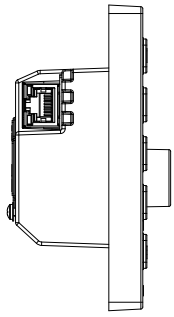
Certain Crestron products contain open source software. For specific information, please visit https://www.crestron.com/opensource.











Crestron Electronics, Inc. 15 Volvo Drive | Rockleigh, NJ 07647
Tel: 800.237.2041 / 201.767.3400 | Fax: 201.767.1903
www.crestron.com

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