

4.3" Touch Screen Control System

- > A complete touch screen control system in one low-cost, space-saving design
- > 3-Series™ control processor
- > 4.3" touch screen with Smart Graphics™ support
- > Runs a single control system program
- > Includes full Unicode (multi-language) support
- > Onboard 10/100 Ethernet and Cresnet® master ports
- > Control port expansion via C2N-IO module^[1]
- > Supports additional touch screens, keypads, thermostats, dimmers, sensors and other peripherals^[2]
- > Supports XPanel with Smart Graphics for control from any computer
- > Supports Crestron control apps for iPhone®, iPod touch®, iPad® and Android™^[2]
- > Supports Crestron Fusion™ and SNMP remote management
- > Native BACnet®/IP support for BMS integration^[4]
- > Customizable audio feedback
- > Built-in proximity sensor
- > 10 optional "hard key" pushbuttons
- > Dual-color LED button backlighting and feedback
- > Custom engravable button text
- > PoE network powered
- > Versatile wall, surface, and tabletop mounting options
- > Available with black or white smooth finish

The TPCS-4SM delivers a complete touch screen control system in one incredibly compact wall mount device. Perfect for individual rooms, condominiums, townhouses, MDUs and hotels, the TPCS-4SM combines the functionality of a 3-Series Control System® and a Crestron Touch Screen for a total control solution. With its clean, contoured appearance, the TPCS-4SM makes an elegant statement in any environment, and its full color touch screen affords a customizable user interface that's both intuitive and fun to use.

No Equipment Rack Required!

Designed for installation on a wall or podium, the TPCS-4SM encapsulates the industry's best control technologies in a low-cost, space-saving design that alleviates the need for a separate equipment rack. Wiring at the TPCS-4SM is minimized through one PoE-enabled LAN port and one Cresnet® port, with expanded connectivity provided through the optional C2N-IO Control Port Expansion Module^[1].

3-Series™ Control Engine

Crestron 3-Series delivers a distinctively robust, dynamic, and secure control system platform capable of faithfully managing a room full of disparate technologies — from audio and video equipment to lighting, climate control, shades, drapes, and other amenities. Rock solid networking and IP control afford seamless integration and accessibility beyond the touch screen.^[2]



Smart Graphics™

Featuring a high-resolution 4.3" widescreen touch display, the TPCS-4SM offers a fully-customizable user interface with easy-to-use controls and icons, true feedback and real-time status display. Advanced Smart Graphics enable the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. Using Smart Graphics, programmers can swiftly integrate advanced controls using gestures, animation, and metadata for an engaging and ultra-intuitive touch screen experience.

Crestron Smart Graphics include the following enhancements:

- Cool-looking graphical buttons, sliders, knobs, and gauges are intuitive and fun to use.
- Kinetic effects enhance the feeling of realism with lists and toolbars that scroll with momentum at the flick of a fingertip.
- Drag-and-drop objects snap into place offering an easy way to switch sources.
- Dashboard widgets personalize the touch screen with clocks, weather, news, and other information.
- Customizable themes allow a completely different look and feel for every user, event, or season.
- Fully-developed SmartObjects™ enable sophisticated control over complex devices with minimal programming.

Dual-Color Backlit Buttons

In addition to its touch screen, the TPCS-4SM comes standard with 10 programmable "hard key" pushbuttons for quick access to commonly used functions. Each button features a translucent button cap with a choice of red or green LED backlighting. The backlighting is fully dimmable, either globally or separately for the left side and right side. Alternately, each button LED can be programmed to provide discrete feedback, affording clear indication of the status of each individual button.

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TPCS-4SM-B-S with "No-Button" Covers



TPCS-4SM-W-S with "No-Button" Covers and TTK-4SM TableTop Kit



TPCS-4SM-B-S with WMKU-4SM Universal Wall Mount Kit



TPCS-4SM-W-S with "No-Button" Covers and MSMK-4SM Multi-Surface Mount Kit (Shown w/optional angle bracket)

Customized labeling of the covers surrounding the pushbuttons can be attained using Crestron Engraver software. Or, for a clean appearance, either column of buttons may be removed and covered using the no-button covers provided.

Audio Feedback

Customized audio files can be loaded to add another dimension to the touch screen graphics using personalized sounds, button feedback, and voice prompts.

Proximity Sensor

The TPCS-4SM senses as you approach it, waking its display automatically without having to touch the screen so it's always ready for use.

Robust Ethernet

High-speed Ethernet connectivity enables integration with IP-controllable devices and allows the TPCS-4SM to be part of a larger managed control network. Whether residing on a home network or a sensitive corporate LAN, the TPCS-4SM provides secure, reliable interconnectivity with computers, mobile devices, video displays, media servers, security systems, and other equipment — whether on premises or across the globe.^[2]

Remote Access

Years ago, Crestron pioneered the world's first IP-based control system, unleashing vast new possibilities for controlling, monitoring, and managing integrated systems over a LAN, WAN, and the Internet. Today's Crestron control systems offer more ways than ever to control your world the way you want.

With its built-in Web server, the TPCS-4SM lets you control anything in your home or workplace from anywhere in the world using a computer or mobile device.^[2] Remote access is simplified using the myCrestron Dynamic DNS service to establish a friendly URL for your home system. And should you ever need technical support, your Crestron system installer can even perform diagnostics and implement updates to the system remotely without coming on site.

Crestron Fusion™

As part of a complete managed network in a hotel, office building, university, or apartment complex, the TPCS-4SM works integrally with Crestron Fusion RV® and Fusion EM™ software to enable remote management, monitoring, and scheduling of rooms, equipment, and energy consumption from a central help desk.

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SNMP Support

Built-in support for SNMP (Simple Network Management Protocol) offers a centralized control and management solution suited to IT personnel using third-party software.

Power over Ethernet

Using PoE technology, the TPCS-4SM gets its operating power right through the LAN wiring. PoE (Power over Ethernet) eliminates the need for a local power supply or any dedicated power wiring. A PoE Injector ([PWE-4803RU^{\[1\]}](#)) simply connects in line with the LAN cable at a convenient location. Crestron PoE switches ([CEN-SW-POE-5](#), [CEN-SWPOE-16](#), or [CEN-SWPOE-24^{\[1\]}](#)) may also be used to provide a total networking solution with built-in PoE.

Simple, Versatile Mounting

The TPCS-4SM installs easily on virtually any mounting surface. As standard, it mounts directly to a single-gang electrical box (horizontally oriented) or European electrical box, requiring just 1/2-inch mounting depth while protruding less than 3/4-inch from the wall surface. It can also be adapted for mounting to a vertically-oriented 1-gang or 2-gang electrical box, or a 2-gang UK electrical box, using the optional [WMKU-4SM](#) Universal Wall Mount Kit^[1], which can also be used without an electrical box for a low-profile surface-mount solution^[3].

For impenetrable surfaces, such as decorative glass, granite, marble, plaster, smooth stone and masonry, Crestron offers the [MSMK-4SM](#) Multi-Surface Mount Kit^[1], which provides a very versatile mounting solution complete with a low-profile rear shell enclosure, adhesive mounting plate, optional angle bracket, and wire raceway. And finally, the [TTK-4SM](#) Table Top Kit^[1] converts the TPCS-4SM into a stylish, compact tabletop touch screen, perfect for free-standing use or permanently-mounted on a tabletop or counter surface.

Control Port Expander^[1]

Interfacing with IR, serial, and relay controlled devices is facilitated using the [C2N-IO](#) Control Port Expansion Module^[1]. The C2N-IO is a compact device that can be mounted virtually anywhere. It connects to the TPCS-4SM via the Cresnet port, and provides one bidirectional RS-232 port, one IR/serial port, and two relay ports for integration with third-party devices. Besides the C2N-IO, the TPCS-4SM is compatible with the complete line of Crestron control modules, 3-Series control card interfaces, sensors, lighting controllers, thermostats, keypads, and wireless gateways to accommodate virtually any control function or system integration need.^[2]

BACnet®/IP

Native support for the [BACnet/IP](#) communication protocol provides a direct interface to third-party building management systems over Ethernet, simplifying integration with HVAC, security, fire & life safety, voice & data, lighting, shades, and other systems. Using BACnet/IP, each system runs independently with the ability to communicate together on one platform for a truly smart building.^[4]

SPECIFICATIONS

Control Engine

3-Series™; real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system ^[2]

Graphics Engine

Supports Smart Graphics™

Memory

SDRAM: 256 MB

Flash: 2 GB

Maximum Touch Screen Project Size: 60 MB

Communications

Ethernet: 10/100 Mbps; auto-switching; auto-negotiating; auto-discovery; full/half duplex; industry-standard TCP/IP stack; UDP/IP; CIP; DHCP; SSL; IEEE 802.1X; SNMP; BACnet®/IP^[4]; IPv4 or IPv6; Active Directory authentication; IIS v.6.0 Web Server; SMTP e-mail client; installer setup via Crestron Toolbox™ or MSIE^[5]; supports all XPanel, Crestron Mobile®, Crestron Fusion™ and RoomView® applications, IEEE 802.3af and 802.3at Type 1 compliant

Cresnet®: Cresnet master mode

Audio

Audio Feedback Format: MP3

Touch Screen Display

Display Type: TFT Active matrix color LCD

Size: 4.3 inch (109 mm) diagonal

Aspect Ratio: 16:9 WVGA

Resolution: 800 x 480 pixels

Brightness: 270 nits (cd/m²)

Contrast: 300:1

Color Depth: 16-bit, 64k colors

Illumination: Backlit LED

Viewing Angle: ±80° horizontal, ±80° vertical

Touch Screen: Resistive membrane

Buttons

Hard Keys: (10) Optional programmable pushbuttons, translucent backlit

Feedback/Backlight: (1) red and (1) green LED per hard key, programmable for feedback and backlighting

Reset: (1) Recessed pushbutton behind pinhole for hardware reset

Proximity Sensor

Type: Active infrared beam and receiver

Range: 3-4 feet

Wakes the touch screen and backlight

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Connectors

LAN PoE: (1) 8-wire RJ45 with 2 LED indicators;
10Base-T/100Base-TX Ethernet port;
Power over Ethernet compliant;
Green and yellow LEDs indicate Ethernet port status

NET: (4) captive screw terminals, Cresnet master port;
Connects to C2N-IO Control Port Expansion Module and other Cresnet devices^[1,2]

Power Requirements

Power over Ethernet: IEEE 802.3af (802.3at Type 1) Class 3 PoE Powered Device

Available Cresnet Power: 4 Watts (167 mA @ 24 Volts DC)

Environmental

Temperature: 32° to 104°F (0° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 14 BTU/Hr

Enclosure

Construction: Plastic, black or white, smooth finish
Front Bezel: Plastic, hard buttons installed with pre-labeled button covers, custom engraving sold separately, "no-button" covers also included
Mounting: Requires a horizontally-oriented 1-Gang electrical box or plaster ring, or a 1-Gang European (DIN 49073) electrical box; choice of standard or security screws provided; optional universal wall, multi-surface, and table top mounting kits sold separately

Dimensions

Height: 3.47 in (89 mm)
Width: 6.20 in (158 mm)
Depth: 1.21 in (31 mm)

Weight

8.8 oz (249 g)

MODELS & ACCESSORIES

Available Models

TPCS-4SM-B-S: 4.3" Touch Screen Control System, Black Smooth
TPCS-4SM-W-S: 4.3" Touch Screen Control System, White Smooth

Available Accessories

4SM-BTNO: Engravable Button Covers, Set of 2
WMKU-4SM: Universal Wall Mount Kit
MSMK-4SM: Multi-Surface Mount Kit
TTK-4SM: TableTop Kit
SMK-4SM/730: Swivel Mount Kit for TTK-4SM
C2N-IO: Control Port Expansion Module
C2N-HBLOCK: Multi-type Cresnet Distribution Block

PWE-4803RU: PoE Injector

CEN-SW-POE-5: 5-Port PoE Switch

CEN-SWPOE-16: 16-Port Managed PoE Switch

CEN-SWPOE-24: 24-Port Managed PoE Switch

SW-VMK-WIN: TouchPoint® Virtual Mouse & Keyboard Software for Windows®

CRESTRON-MOBILE-PRO: Crestron Mobile Pro® Control App for iPhone®, iPod touch®, and Android™; refer to the iTunes® App Store and Google Play™ for pricing and download

SW-FUSION-RV: Fusion RV® Remote Asset Management Software

SW-FUSION-EM: Fusion EM™ Energy Management Software

SW-ROOMVW-ENT: RoomView® Express - Remote Help Desk and Resource Management Software, Full License

SW-3SERIES-BACNET-50+: BACnet®/IP Support for 3-Series™ - Full license for more than 50 objects

CSP-LIR-USB: IR Learner

Notes:

1. Item(s) sold separately.
2. The TPCS-4SM supports a maximum of 10 Ethernet devices, 10 Cresnet® devices, one infiNET EX® wireless gateway, and one Crestron Mobile® device.
3. WMKU-4SM mounting option requires a minimum surface cut-out or wall box opening of 1.7" high x 2.0" wide.
4. License required. The TPCS-4SM supports a maximum of 250 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.
5. Web-based installer setup requires the Microsoft® Internet Explorer® Web browser running on a Windows® PC.

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 www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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