TPCS-4SM

4.3” Touch Screen Control System

- A complete touch screen control system in one low-cost, space-saving design
- Built-in 3-Series® control processor
- 4.3” color touch screen with Smart Graphics™ support
- Customizable audio feedback
- Built-in proximity sensor
- 10 optional “hard key” pushbuttons
- Dual-color button backlighting
- Custom engravable button text
- Onboard 10/100 Ethernet and Cresnet® master ports
- PoE network powered
- Control port expansion via C2N-IO module
- Versatile wall, surface, and tabletop mounting options
- Available with black or white smooth finish

In one compact wall mount device, the Crestron® TPCS-4SM delivers a total control solution for a small conference room, hotel room, condominium, or townhouse. Its built-in 3-Series® control processor and 4.3” color touch screen combine to deliver a complete, space-saving solution for controlling lights and shades, audio and video, heating and air conditioning, and many other functions.

Go Anywhere Design
With its clean, contoured appearance, the TPCS-4SM makes an elegant statement in any environment. A choice of mounting options allows the TPCS-4SM to be installed in places other touch screens can’t go. It can be installed on a wall over an electrical box, placed on a table, or mounted to virtually any flat surface — even glass, granite, or marble.

No Equipment Rack Required!
Ideal for environments with limited space, the TPCS-4SM encapsulates the industry’s best control technologies in a low-cost, space-efficient design that can alleviate the need for a separate equipment rack. Onboard Ethernet and Cresnet® ports provide the essential connectivity for integrating a roomful of equipment and connecting to the building network. Expanded connectivity is available using a C2N-IO Control Port Expansion Module, a wireless gateway, or other Crestron interface products.

Smart Graphics™
Its high-resolution 4.3 inch (109 mm) color touch screen display provides a fully-customizable user interface that’s both intuitive and fun to use. Advanced Smart Graphics technology delivers a dynamic user experience with gesture-driven controls, kinetic effects, animated feedback, rich metadata, and embedded apps and widgets.

Optional Dual-Color Backlit Buttons
The TPCS-4SM ships with a set of 10 optional “hard key” pushbuttons, which may used to access commonly used functions such as turning lights on, adjusting audio volume, or opening the front door for a guest. Dual-color backlighting allows the buttons to illuminate either green or red, providing indication of a waiting message from the front desk, incoming call, security system alert, or any other important notification. The button backlighting can also be used to enable individual button feedback or simply provide a beacon in a darkened room. The backlighting is fully dimmable to allow for just the right brightness. Customized labeling of the buttons can be attained using Crestron Engraver software.

The TPCS-4SM ships with the optional hard key pushbuttons installed. Blank “no-button” covers are included, which may be installed over the button areas to either side of the touch screen display, affording a clean appearance with just the touch screen for control. Installation of the button covers is done simply using a small flat blade screwdriver.

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.

3-Series® Control Engine
The TPCS-4SM features a scaled-back 3-Series control processor, which can potentially eliminate the need for a separate rack-mounted control system for many applications. Crestron 3-Series delivers a 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 with other systems and devices, with add-on control capability using additional Crestron touch screens, keypads, wireless remotes, and mobile devices, as well as remote management through Crestron Fusion® Enterprise Management 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) simply connects in line with the LAN cable at a convenient location. Crestron PoE switches (CEN-SW-POE-5 or CEN-SWPOE-16) may also be used to provide a total networking solution with built-in PoE.

**Cresnet®**

Equipped with a Cresnet master port, the TPCS-4SM supports the full line of Crestron keypads, lighting controls, shades, thermostats, sensors, and other devices that don’t require the higher speed of Ethernet.

**Control Port Expander**

Interfacing with IR, serial, and relay controlled devices is facilitated using the C2N-IO Control Port Expansion Module. 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. A single C2N-IO can be connected directly to the TPCS-4SM without requiring an additional power supply. 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.

**BACnet™/IP**

Native support for the BACnet/IP communication protocol provides a direct interface to third-party building management systems over Ethernet.

**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 (13 mm) mounting depth while protruding less than 3/4-inch (19 mm) 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, which can also be used without an electrical box for a low-profile surface-mount solution.

For impenetrable surfaces, such as decorative glass, granite, marble, plaster, smooth stone, and masonry, Crestron offers the MSMK-4SM Multi-Surface Mount Kit, which provides a very versatile mounting solution complete with a low-profile rear shell enclosure, adhesive mounting plate, optional angle bracket, and wire raceway.

**Tabletop Option**

Using the optional Tabletop Kit (TTK-4SM), the TPCS-4SM becomes a stylish, freestanding touch screen that fits perfectly on a table, desk, or countertop. It can be permanently attached to the surface in a fixed position, or it be attached using the optional Swivel Mount Kit (SMK-4SM/730) to allow for up to 330 degrees of rotation.
**SPECIFICATIONS**

### 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**

### Memory
- **SDRAM:** 256 MB
- **Flash:** 2 GB
- **Maximum Touch Screen Project Size:** 60 MB

### Graphics Engine
- **Supports Smart Graphics™**

### Control Engine
- **Crestron® 3-Series®, real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system [4]**

### 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[5], IPv4 or IPv6, Active Directory authentication, IIS v.6.0 Web Server, SMTP e-mail client, IEEE 802.3af and 802.3at Type 1 compliant
- **Cresnet®:** Cresnet master mode

### Audio
- **Audio Feedback Format:** MP3

### 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[2,4]**

### Power Requirements
- **Power over Ethernet:** IEEE 802.3at Type 1 (802.3af compatible) Class 3 (12.95W) PoE Powered Device
- **Available Cresnet Power:** 4 Watts (166 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-I0: 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
SW-VMK-WIN: TouchPoint® Virtual Mouse & Keyboard Software for Windows®
Crestron® App: Control App for Apple® iOS® & Android™
XPanel: Crestron Control® for Computers
myCrestron: Dynamic DNS Service for Crestron Systems
Fusion EM®: Energy Management Software
Fusion RV®: Remote Asset Management Software
RoomView® Express: Remote Help Desk and Resource Management Software
3-Series® BACnet™/IP Support: 3-Series Native BACnet/IP Interface
License
CSP-LIR-USB: IR Learner

Notes:
1. Some mounting options require additional hardware that is sold separately. Please review this complete spec sheet for full details.
2. Item(s) sold separately.
3. The button covers that ship with the TPCS-4SM are pre-labeled with icons identical to the TPMC-4SM Room Scheduling Touch Screen. A set of custom engravable button covers, model 4SM-BTNO, is available separately.
4. The TPCS-4SM runs a single control system program and supports a maximum of 10 Ethernet devices, 10 Cresnet devices, one infiNET EX® wireless gateway, and one mobile device app.
5. 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.
6. The WMKU-4SM mounting option requires a minimum surface cut-out or wall box opening of 1.7” high x 2.0” wide.

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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Shown with buttons and pre-labeled button covers

Shown with “no-button” covers