TSCW-730

7" Touch Screen Control System

> A complete touch screen control system in one attractive, space-saving design

> Built-in 3-Series® control processor

> 7" capacitive color touch screen with Smart Graphics™ support [7]

> High-performance H.264 streaming video

> Rava™ SIP intercom and phone technology

> Customizable audio feedback

> Built-in microphone and speakers

> Built-in proximity sensor

> 10 optional "hard key" pushbuttons [4]

> Dual-color button backlighting

> Custom engravable button text [2]

> Onboard 10/100 Ethernet and Cresnet® master ports [5]

> PoE+ network powered [5]

> Control port expansion via C2N-IO module [2]

> Versatile wall, surface, and tabletop mounting options [2]

> Modern, contoured appearance

> Available with black or white smooth finish

In one compact wall mount device, the Crestron® TSCW-730 delivers a total control solution for a small conference room, hotel room, condominium, or townhouse. Its built-in 3-Series® control processor and brilliant 7" color touch screen combine to deliver a complete, space-saving solution for controlling lights and shades, audio and video, heating and air conditioning, security and surveillance, and many other functions. Built-in H.264 video and Rava™ SIP intercom capabilities can even eliminate the need for a separate video intercom panel.

Go Anywhere Design

With its clean, contoured appearance, the TSCW-730 makes an elegant statement in any environment. A choice of mounting options allows the TSCW-730 to be installed in places other touch screens can't go. It can be installed on a wall over a standard 2-gang electrical box, placed on a table, or mounted to virtually any flat surface — even glass, granite, or marble.[1]

No Equipment Rack Required!

Ideal for environments with limited space, the TSCW-730 encapsulates the industry's best control technologies in a 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 C2N-IO Control Port Expansion Modules, wireless gateways, and other Crestron interface products.[2]

Smart Graphics™

Its generous 7 inch (178 mm) capacitive color touch screen display provides a fully-customizable user interface that's both intuitive and fun to use. Advanced Smart Graphics technology delivers a stunning user experience with fluid gesture-driven controls, kinetic effects, animated feedback, rich metadata, embedded apps and widgets, and streaming video.

Streaming Video

High-performance streaming video capability makes it possible to view security cameras and other video sources right on the touch screen. Support for H.264 and MJPEG formats allows the TSCW-730 to display live streaming video from an IP camera, a streaming server (Crestron CEN-NVS200 or similar[2]), or a DigitalMedia™ switcher. Video is delivered to the touch screen over Ethernet, eliminating the need for any extra video wiring.

Rava™ SIP Intercom

Rava SIP Intercom Technology enables hands-free VoIP communication with other Rava-enabled touch screens and door stations. Rava works over Ethernet, supporting 2-way intercom, video intercom[3], and paging without any special wiring. VoIP phone capability is also possible through integration with an SIP-compatible IP phone system or SIP server, allowing hands-free telephone functionality complete with speed-dialing, caller ID, custom ringers, and other enhancements. Built-in echo cancellation affords full-duplex performance for clear, seamless voice communication using the TSCW-730's integrated microphone and speakers.

Optional Dual-Color Backlit Buttons

The TSCW-730 ships with a set of 10 optional ìhard keyî pushbuttons, which may be installed and 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 feed-back 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.[4]

The TSCW-730 ships without the optional hard key pushbuttons installed, affording a clean appearance out of the box with just the touch screen for control. Blank ìno-buttonî covers are installed by default over the button areas to either side of the touch screen display. Installation of the buttons is done simply using just a small flat blade screwdriver.

CRESTRON®

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 TSCW-730 senses as you approach it, waking its display automatically without having to touch the screen.

3-Series® Control Engine
The TSCW-730 features a built-in 3-Series control processor, which can eliminate the need for a separate rack-mounted control system for many applications. 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. Its Modular Programming Architecture allows the TSCW-730 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 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 TSCW-730 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. The TSCW-730 supports LLDP advanced power management, requiring only 16 Watts from the PoE power budget when powered by a compatible PoE+ switch such as the Crestron CEN-SWPOE-16[2] (see specifications for more information).

Cresnet®
Equipped with a Cresnet master port, the TSCW-730 supports the full line of Crestron keypads, lighting controls, shades, thermostats, sensors, and other devices that don't require the higher speed of Ethernet.[5]

Control Port Expander
Interfacing with IR, serial, and relay controlled devices is facilitated using the C2N-IO Control Port Expansion Module[2]. The C2N-IO is a compact device that can be mounted virtually anywhere. It connects to the TSCW-730 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 TSCW-730 without requiring an additional power supply[5]. Besides the C2N-IO, the TSCW-730 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.[6]

TSCW-730-W-S — Front, Angle View

Simple, Versatile Mounting
The TSCW-730 installs easily on virtually any mounting surface. As standard, it mounts directly to a 2-gang electrical box or 2-gang UK electrical box, requiring just 1/2-inch mounting depth while protruding less than an inch from the wall surface. For impenetrable surfaces, such as decorative glass, granite, marble, plaster, smooth stone, and masonry, Crestron offers the Multi-Surface Mount Kit (TSW-730-MSMK[2]), 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 Tabletop Kit (TSW-730-TTK[2]) converts the TSCW-730 into a stylish, compact tabletop touch screen control system, perfect for free-standing use or permanently-mounted on a tabletop or counter surface.

SPECIFICATIONS

Touch Screen Display

Display Type: TFT Active matrix color LCD
Size: 7 inch (178 mm) diagonal
Aspect Ratio: 15:9 WVGA
Resolution: 800 x 480 pixels
Brightness: 300 nits (cd/m²)
Contrast: 350:1
Color Depth: 18-bit, 262k colors
Illumination: Edgelit LED
Viewing Angle: ±70° horizontal, ±65° vertical
Touch Screen: Projected Capacitive

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

LPDDR2 RAM: 1 GB
Flash: 4 GB
Maximum Project Size: 512 MB

Graphics Engine

Supports Smart Graphics™ [7]

Control Engine

3-Series®; real-time, preemptive multi-threaded/multitasking kernel; Transaction-Safe Extended FAT file system; supports up to 10 simultaneously running programs

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[6]; IPv4 or IPv6; Active Directory authentication; IIS v.6.0 Web Server; SMTP e-mail client; installer setup via Crestron Toolbox™ or MSIE[8], IEEE 802.3at Type 2 compliant
Cresnet®: Cresnet master mode

Video

Streaming Formats: H.264 (MPEG-4 part 10 AVC), MJPEG

Audio

Features: Built-in microphone and speakers, Rava™ SIP Intercom
Audio Feedback Formats: MP3

Connectors

LAN PoE: (1) 8-wire RJ45 with 2 LED indicators;
10Base-T/100Base-TX Ethernet port, Power over Ethernet compliant[5];
Green and yellow LEDs indicate Ethernet port status

NET: (4) Captive screw terminals;
Cresnet master port, connects to C2N-IO Control Port Expansion Modules and other Cresnet devices[2,5]

Power Requirements

Power over Ethernet: IEEE 802.3at Type 2 PoE+ Powered Device;
- 16 Watts if using an 802.3at Type 2 PSE with LLDP advanced power management;
- Class 4 (25.5W) if using an 802.3at Type 2 PSE without LLDP;
- Class 3 (12.95W) if using an 802.3af (or 802.3at Type 1) PSE (no Cresnet power available via NET port)[5]

Available Cresnet Power: 4 Watts (166 mA @ 24 Volts DC)[5]

Environmental

Temperature: 32° to 112°F (0° to 45°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 35 BTU/hr

Enclosure

Construction: Plastic, black or white, smooth finish
Front Bezel: Plastic, "no-button" covers installed, includes optional hard buttons with pre-labeled button covers (uninstalled)[4], custom engraving sold separately
Mounting: Surface mount over a 2-gang electrical box or plaster ring, 2-gang UK (BS 4662) electrical box, or rectangular cutout; choice of standard or security screws provided; optional multi-surface and tabletop mounting kits sold separately

Dimensions

Height: 4.75 in (121 mm)
Width: 8.76 in (223 mm)
Depth: 1.25 in (32 mm)

Weight

18.3 oz (518 g)

MODELS & ACCESSORIES

Available Models

TSCW-730-B-S: 7" Touch Screen Control System, Black Smooth
TSCW-730-W-S: 7" Touch Screen Control System, White Smooth

Available Accessories

TSW-730-BTNO: Engravable Button Covers, Set of 2
TSW-730-MSMK: Multi-Surface Mount Kit
TSW-730-TTK: Tabletop Kit
SMK-4SM/730: Swivel Mount Kit for TSW-730-TTK
C2N-IO: Control Port Expansion Module
C2N-HBLOCK: Multi-type Cresnet Distribution Block
CEN-SWPOE-16: 16-Port Managed PoE Switch
CEN-NVS200: Network Video Streamer
SW-VMK-WIN: TouchPoint® Virtual Mouse & Keyboard Software for Windows®

CRESTRON-APP: Crestron® App for Apple® iOS® & Android™

CRESTRON-APP-SSTV: Crestron® App for Samsung Smart TV®

XPANEL: Crestron Control® for Computers

SW-MYCRESTRON: myCrestron Dynamic DNS Service for Crestron Systems

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

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

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

SW-3SERIES-BACNET: BACnet™/IP Support for 3-Series®

CSP-LIR-USB: IR Learner

Notes:

1. Tabletop and multi-surface mounting kits sold separately.
2. Item(s) sold separately.
3. H.264 compatible IP camera required.
4. The button covers that ship with the TSCW-730 are pre-labeled with icons identical to the TSW-730 Room Scheduling Touch Screen. A set of custom engravable button covers, model TSW-730-BTNO, is available separately.
5. To supply Cresnet power via the NET port, the TSCW-730 must be powered using an IEEE 802.3at Type 2 PoE+ PSE (Power Sourcing Equipment). If the TSCW-730 is powered by an 802.3af or 802.3at Type 1 PoE PSE, no load should be connected to the "24" terminal of the NET port, and an external Cresnet power supply must be used to power any attached devices that require Cresnet power.
6. License required. The TSCW-730 supports a maximum of 250 BACnet objects when dedicated for BACnet use only. Actual capabilities are contingent upon the overall program size and complexity.
7. Supports Smart Graphics only. Not compatible with îtraditionalî UI projects.
8. 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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