

TPMC-3X

Isys i/O® 2.8" Handheld WiFi Touchpanel

Simply stated, the TPMC-3X Handheld WiFi Touchpanel from Crestron delivers the best remote control available for home theater, home automation, and AV presentation, marrying style and ergonomics with the ultimate in performance and customizability. Its sleek form factor is easy to hold, with large tactile pushbuttons, electroluminescent backlighting, and a fully customizable video touchscreen for a wireless control solution that's both intuitive and fun to use.

The Ultimate Handheld Remote

Gone are the limitations of previous generation remotes, and the frustration of using them. The TPMC-3X offers seamless interaction with AV and environmental systems, providing true feedback of all your settings, and displaying metadata information for all your digital media. Whether watching TV, choosing a movie or music title, adjusting room temperature and lighting, or checking the security system, the TPMC-3X affords a user experience like no other handheld remote. You can even communicate with other touchpanels via built-in wireless IP intercom, and monitor live video from cameras and other sources right on the touchscreen.

Wi-Fi Performance—Redefined!

Crestron has redefined Wi-Fi wireless performance with the TPMC-3X, achieving a remarkable 50 feet omnidirectional coverage indoors, providing exceptional freedom of movement without line-of-sight — or even having to be in the same room! And, the TPMC-3X even supports roaming amongst multiple access points for extended coverage^[1]. The choice of 802.11 a, b, and g protocols affords reliable, high-speed 2-way wireless performance in virtually any RF environment. A network of one or more TPMC-3Xs can be set up in mere minutes using a Crestron **CEN-WAP-ABG-1G** or **CEN-WAP-ABG-CM** Wireless Access Point^[2].

Instant-Waking™

To ensure the most transparent user experience possible, the TPMC-3X has been engineered to wake instantly at the press of a button, touch of the touchscreen, or by simply tilting the remote upright. Button presses are sent immediately, just like an IR remote but with none of IR's limitations. So spontaneous actions like muting the audio, pausing the video, or changing the channel can be executed on-the-fly with just a single button press.

Extended Battery Life

Instant-waking also allows the TPMC-3X to be put to sleep within seconds of putting it down, helping to extend its battery life for several days of typical usage on a single charge. Even under continuous use at full brightness, the TPMC-3X lasts an incredible 5 hours! Its fast-charging, field-replaceable Lithium Polymer battery pack delivers optimum power in a very small, lightweight package.

Tactile Pushbuttons with Backlit Text

A complement of tactile pushbuttons makes for a very intuitive user interface, providing easy access to everything needed for watching TV and movies, listening to music, and controlling the entire room. Large, widely-spaced buttons accommodate hands and fingers of all sizes, minimizing the chance of an unintended button press. Electroluminescent backlit button text affords excellent legibility for use in a darkened room.

The pushbuttons are comprised of 17 buttons designated for the most common functions, plus a 5-way navigation pad, 3 context-assignable "hard keys" beneath the touchscreen, a thumb-operated "More" button for advancing through the available touchscreen pages, and a system power button. Every button on the TPMC-3X is fully programmable to allow precisely the control



desired, whether simply adjusting audio volume and flipping through channels, controlling a DVR or DVD player, navigating onscreen setup menus, or operating a pan/tilt camera.

Handheld Touchpanel Control

Custom touchpanel versatility is afforded through a brilliant 2.8" active-matrix touchscreen displaying stunning 16-bit color graphics and video. Dynamic graphics and text capability enable the display of all kinds of useful data and alluring eye candy—from channel preset icons—to room temperature and lighting levels—to photos and video—to digital media playlists complete with metadata and cover art.

Crestron exclusive DNav and Synapse™ technologies enable system programmers to produce amazing graphics faster and easier using advanced

dynamic control menus and 3D effects. Full-motion animations, multimode objects, PNG translucency, transition effects, and streaming video enhance the palette for creating GUIs that are both eye-catching and easy to use.

Wireless Video

Its built-in streaming video player makes it possible to monitor a security camera, or preview a DVD or television channel, right on the touchscreen display. Native support for the motion-JPEG streaming format allows the TPMC-3X to display live video from a variety of Web cameras and servers including the Crestron **CEN-NVS100** Network Video Streamer^[2].

Wireless IP Intercom

Built-in wireless IP intercom capability facilitates direct panel to panel intercom and monitoring right over the LAN without requiring any additional AV wiring or special wireless equipment. The TPMC-3X features an integrated microphone and speaker for clear voice communication.

Audio Feedback

Customized WAV files can be loaded on the TPMC-3X to add dimension to its touchscreen graphics using personalized sounds, button feedback, and voice prompts.

TableTop Docking Station

The TPMC-3X makes an elegant statement in any room, especially when placed on its stylish docking station (**TPMC-3X-DS**^[3]). When docked, the

TPMC-3X Isys i/O® 2.8" Handheld WiFi Touchpanel

controller while charging. The docking hook incorporates a magnetic catch, ensuring secure attachment while docked and an effortless transition between docked and handheld use. The sleek, low-profile base is weighted for excellent stability on any flat surface. An optional wall mount docking station (TPMC-3X-DSW^[2]) is also available.

- > *Sleek and ergonomic handheld design*
- > *Elegant gloss black finish*
- > *Instant-Waking™ behavior with tilt sensor*
- > *Works like an IR remote — with all the benefits of 2-way RF!*
- > *High-performance 802.11a/b/g Wi-Fi wireless communications*
- > *50 feet omnidirectional RF range indoors*
- > *Roaming between multiple Wi-Fi access points*
- > *Wireless video from network cameras and servers*
- > *Built-in speaker and microphone*
- > *Crestron® wireless IP Intercom capability*
- > *WAV file customizable audio feedback*
- > *Widely-spaced tactile pushbuttons*
- > *White EL backlit button text*
- > *2.8" active matrix color touchscreen display*
- > *High display brightness and contrast*
- > *Wide 150 degrees viewing angle*
- > *16-bit Isys i/O® graphics*
- > *240 x 320 resolution*
- > *Dynamic graphics & text capability*
- > *DNav Dynamic Menu Objects*
- > *Synapse™ Image Rendering Algorithm*
- > *Programmable via SystemBuilder™ and Adagio® Composer software*
- > *Long-lasting LiPo rechargeable battery pack*
- > *Stylish tabletop docking station included*
- > *Wall mount docking station also available^[2]*

SPECIFICATIONS

Touchscreen Display

Display Type: Transflective TFT active matrix color LCD
Size: 2.8 inch (72 mm) diagonal
Aspect Ratio: 3:4 QVGA (portrait orientation)
Resolution: 240 x 320 pixels
Brightness: 350 nits (cd/m²) typical
Contrast: 500:1 typical
Color Depth: 16-bit, 64k colors
Viewing Angle: ±75° horizontal, +75/-55° vertical
Illumination: LED Backlit
Touchscreen: Resistive membrane

Buttons & Indicators

Power (top): (1) programmable pushbutton, performs hardware reset if held for >10 seconds
Hard Keys: (3) programmable pushbuttons below touchscreen
Functions: (15) programmable pushbuttons with white EL backlit labeling for GUIDE, HOME, LIST, MUTE, INFO, LAST, MENU, KEYPAD, EXIT, and icons for Rewind, Play, Forward, Stop, Pause, Record
Volume: (1) programmable rocker button with white EL backlit Volume 'Raise' and 'Lower' icons
Navigation Pad: (5) programmable pushbuttons comprising a 5-way thumbpad (4-way navigation plus "enter")
Up/Down: (1) programmable rocker button with white EL backlit 'Up' and 'Down' arrows
More (right side): (1) programmable thumb-operated side button
Charge: (1) Green LED, indicates charging status when docked

Memory

SDRAM: 128 MB
Flash: 256 MB
Maximum Project Size: 24 MB

Operating System

Microsoft® Windows® CE 6.0

Graphic Engine

Isys i/O engine, 16-bit non-palette graphics; 65,536 colors; Synapse image rendering algorithm; multi-mode objects; DNav dynamic menu objects; dynamic graphics and text; PNG translucency; full-motion (60 fps) animation; transition effects

Embedded Applications

Crestron MJPEG Viewer, Crestron IP Intercom, Keypad^[4]

RF Wireless

RF Transceiver: IEEE 802.11a/b/g Wi-Fi, 5.8 or 2.4 GHz 2-way RF, static IP or dynamic IP via DHCP, 64 and 128-bit WEP encryption, WPA & WPA2-PSK with TKIP & AES
Range: 50 feet (15 m), subject to environmental conditions
Gateway: Requires a **CEN-WAP-ABG-1G**, **CEN-WAP-ABG-CM**, or similar 802.11a/b/g wireless access point and Ethernet-enabled Crestron 2-Series control system
Roaming: Supports roaming amongst multiple access points^[1]

Video

Streaming Format: MJPEG via Crestron MJPEG Viewer, with support for Crestron **CEN-NVS100** Network Video Streamer

TPMC-3X Isys i/O® 2.8" Handheld WiFi Touchpanel

Audio

Hardware Features: Built-in speaker and microphone

Audio Feedback (WAV): 8 & 16 bit PCM, mono & stereo, 8 - 44.1 kHz sampling rates

Tilt Sensor

Wakes touchpanel within 0.5 second when unit's physical orientation is moved from horizontal to vertical

Connectors

USB (bottom): (1) Mini Type AB female behind battery cover;
USB 1.1 computer console port, for installer use only

Battery

Battery Type: Lithium Polymer, 3.7 Volt, 1000 mAh, model **TPMC-3X-BTP** included

Usage per Charge : 5 hours continuous at full brightness

Charging Time : 2 hours

Cycle Life: >300 cycles (80% capacity)

Power Requirements

Power Pack: 1.5 Amps @ 12 Volts DC;

0.6 Amp @ 100-240 Volts AC, 50/60 Hz power pack, model **PW-1215WU** included

Note: Power connection made via the **TPMC-3X-DS** docking station/charger^[3]

Environmental

Temperature: 32° to 104°F (0° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

Heat Dissipation: 5 BTU/Hr

Enclosure

Construction: Injection-molded plastic, integral docking station port

Dimensions

Height: 1.04 in (27 mm);

6.34 in (161 mm) docked

Width: 2.55 in (65 mm);

4.58 in (117 mm) docked

Depth: 7.94 in (202 mm);

6.30 in (160 mm) docked

Weight

6.5 oz (182 g) including battery

Available Models

TPMC-3X: Isys i/O® 2.8" Handheld WiFi Touchpanel

Included Accessories

TPMC-3X-BTP Battery Pack for TPMC-3X

[Included Quantity: 1] **TPMC-3X-DS** Desktop Docking Station/Charger for TPMC-3X

[Included Quantity: 1]

Available Accessories

TPMC-3X-DSW: Wall Mount Docking Station/Charger, Black

TPMC-3X-DSW-W-S: Wall Mount Docking Station/Charger, White

CEN-WAP-ABG-1G: Wall Mount 802.11a/b/g Wireless Access Point

CEN-WAP-ABG-CM: Ceiling Mount 802.11a/b/g Wireless Access Point

CEN-WAP-ABG-POE-PWE: Wall Mount 802.11a/b/g Wireless Access Point w/PoE Injector

CEN-WAP-ABG-POE-PWE-CM: Ceiling Mount 802.11a/b/g Wireless Access Point w/PoE Injector

CEN-WAP-POE-PAK: Wall Mount 802.11a/b/g Wireless Access Point w/5-Port PoE Switch

CEN-NVS100: Network Video Streamer

CEN-NVS100-PWE: Network Video Streamer w/PoE Injector

Notes:

1. Refer to the TPMC-3X Operations Guide, Doc. 6789 for complete information on configuring a system for roaming.

2. Item sold separately.

3. Item included. See separate product specifications for additional details.

4. Contact Crestron for a current list of embedded applications. To ensure reliable performance, new applications are available only from Crestron through firmware updates.

TPMC-3X Isys i/O® 2.8" Handheld WiFi Touchpanel

