

# TPS-6X

## Isys™ 5.7" Wireless Touchpanel

The Isys TPS-6X Wireless Touchpanel delivers high-end style and performance in a very versatile, ergonomic design. With its sleek and innovative desktop docking station, the TPS-6X goes effortlessly from wired tabletop use to fully wireless handheld operation.

Compact and portable, the TPS-6X does away with piles of remotes and cryptic control panels, affording true "one-touch" control over a broad range of complex devices and systems. Featuring a bright, beautiful, high-contrast color touchscreen, and a smart array of backlit tactile pushbuttons<sup>[1]</sup>, the TPS-6X offers an ideal user-interface for controlling home theater and multimedia presentation, and a host of other uses.

### Isys™ Color Touchscreen

The TPS-6X provides a wide open canvas for the creation of custom control screens tailored to each unique application. Its brilliant 5.7" active-matrix display and powerful Isys engine combine to produce stunning 16-bit color graphics with extreme versatility and lightning-fast performance. Dynamic graphics and text capability enable the display of all kinds of useful data and alluring eye candy—from audio settings, TV channels, and lighting levels—to changing icons, photos, and logos—to digital media playlists complete with album 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. Additional capabilities like animations, multimode objects, PNG translucency, and full-motion video<sup>[2]</sup> enhance the palette for creating GUIs that are both eye-catching and easy to use.

### Tactile Pushbuttons

In addition to its touchscreen, the TPS-6X features illuminated tactile pushbuttons for quick access to volume adjustment, channel selection, and on-screen menu navigation functions. Eight additional pushbuttons, elegantly trimmed by illuminated button dividers, flank the edges of the touchscreen to support additional programmable functions.

High-quality backlit laser-engraving lends a crisp, legible appearance to button text in both darkened and fully lit rooms<sup>[1]</sup>. The pushbuttons come pre-engraved with labeling suited to a typical home theater or multimedia presentation application. If needed, customized engraving can be attained simply using Crestron Engraver software. A no-button front bezel is also included with the TPS-6X, which may be installed in place of the button bezel for a very clean appearance with no front panel pushbuttons.

Two additional "trigger" style buttons are positioned on top of the TPS-6X for easy control of the display brightness, sleep mode, and other programmable functions.

### High Powered Wireless

The TPS-6X brings a new level of wireless versatility to the Isys family of touchpanels. With both 2-way RF and 1-way IR wireless capabilities built in, the TPS-6X offers a choice of wireless platforms to suit the environment.

Crestron high-power 2.4 GHz RF technology allows long range performance up to 200 feet indoors<sup>[3]</sup> using the CEN-HPRFGW High Powered RF Gateway<sup>[4]</sup>. For even greater coverage, the TPS-6X supports roaming amongst up to 8 CEN-HPRFGW gateways. A range of selectable RF channels and power levels helps to maximize performance for both small and large



facilities—from boardrooms, classrooms, and home theaters to auditoriums and convention centers. High-speed bidirectional communication supports true feedback with dynamic graphics and text, affording the capabilities of a wired Isys touchpanel in a fully wireless portable package.

Built-in IR capability affords a wireless alternative that's immune to extremely noisy RF environments, and suitable for sensitive applications where RF may not be permitted. An operational range of up to 50 feet line-of-sight is possible using a C2N-IRGW-1G or C2N-IRGW-F IR Gateway<sup>[4]</sup>, or CNXRMRD IR Receiver<sup>[4]</sup>.

### TableTop Tilt Docking Station

Placing the touchpanel onto the TPS-6X-DS Docking Station<sup>[5]</sup> converts it to a stylish tilt touchpanel, providing wired communications and video capability while charging the touchpanel's internal battery. Both wired Ethernet and Cresnet® connectivity are available, so when the touchpanel is placed on the docking station, it can switch automatically from RF wireless to fully-wired operation if either Ethernet or Cresnet is connected. Without a wired connection present, the touchpanel will continue to operate wirelessly while it charges.

The docking station features a tiltable docking port, allowing the touchpanel to be tilted at any angle up to 45 degrees for optimal viewing and operation when docked. The angle can be freely adjusted, or locked down at a fixed angle. Strong magnets help guide the touchpanel onto the docking port and hold it in place, and a finger-operated latch can be engaged at any time to secure the touchpanel to the docking station<sup>[6]</sup>. The touchpanel can even be attached to the docking station semi-permanently using a provided locking pin for a sleek, full-time tabletop touchpanel solution<sup>[6]</sup>.

A single cable exits the rear of the docking station base, extending to a wall or surface mounted TPS-6X-IMCW Interface Module<sup>[5]</sup>. The cable can also be repositioned to exit the bottom for a very clean, cordless appearance.

### Full-Motion Video<sup>[2]</sup>

When docked, the TPS-6X can display full-motion video, providing the ability to monitor a security camera, or preview a DVD or television channel, right on the touchscreen display. The video image is fully

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scalable for viewing in any sized window or full screen. The choice of balanced or unbalanced composite inputs allows compatibility with both conventional coaxial and Crestron Home® Balanced AV distribution systems.

> *Lightweight contoured design for wireless handheld use*

> *Also affords full-featured tabletop tilt touchpanel operation*

> *Elegant high gloss black or white, or matte black finishes*

> *Non-slip rubber grips on rear*

> *Illuminated buttons and engravable backlit text<sup>[1]</sup>*

> *5.7" active matrix color touchscreen display*

> *16-bit Isys™ graphics | 640 x 480 resolution*

> *Dynamic graphics & text capability*

> *DNav dynamic menu objects*

> *Synapse Image Rendering Algorithm*

> *Displays full-motion video while docked*

> *High-power, high-speed 2.4 GHz RF wireless technology*

> *Up to 200 feet RF range indoors*

> *Supports roaming for extended RF coverage*

> *1-way IR wireless capability also built in*

> *Includes tabletop tilt docking station, interface module, and NiMH rechargeable battery pack*

> *Wired Ethernet, Cresnet, and Crestron Home CAT5 video connectivity*

> *No-button front bezel option included*

## SPECIFICATIONS

### Touchscreen Display

**Display Type:** TFT Active matrix color LCD

**Size:** 5.7 inch (14.48 cm) diagonal

**Aspect Ratio:** 4:3 VGA

**Resolution:** 640 x 480 pixels

**Brightness:** 350 nits (cd/m<sup>2</sup>)

**Contrast:** 400:1

**Color Depth:** 18-bit, 256k colors

**Illumination:** Backlit fluorescent

**Viewing Angle:** ±80° horizontal, +80°/-70° vertical

**Touchscreen:** Resistive membrane

### Buttons & Switches

**Sleep:** (1) Programmable top-mounted pushbutton (left); normally initiates "Sleep" mode when docked, turns power on/off when undocked; also resets touchpanel if held for 5 seconds

**Brightness:** (1) Programmable top-mounted pushbutton (right), normally sets display brightness level

**Hard Keys:** (8) Optional programmable pushbuttons, engravable backlit text<sup>[1,4]</sup> (default engraving included)

**Up/Down:** (2) Optional programmable "up/down" pushbuttons, backlit, engravable backlit text on bezel (default engraving included)

**Thumbpad:** (5) Optional programmable pushbuttons for 4-way directional navigation and "enter", backlit

**Battery:** (1) Rear panel recessed DIP switch, shuts off battery for long-term storage

### LED Indicators

**Battery:** (1) Green LED, indicates battery condition and charging status when docked

### Connectors

**Docking Connector:** (1) multi-pin connector;

Mates with the docking port on the **TPS-6X-DS** docking station<sup>[5]</sup>

See the **TPS-6X-IMCW** interface module<sup>[5]</sup> specification for other connectors

### Processor

**CPU:** 32-bit Freescale ColdFire® Microprocessor

### Memory

**SDRAM:** 32 MB

**Flash:** 32 MB

**Maximum Project Size:** 28 MB

### Graphic Engine

Isys engine; 16-bit non-palette graphics; 65,536 colors; Synapse image rendering algorithm; multi-mode objects, DNav dynamic menu objects, dynamic graphics, PNG translucency, full-motion (60 fps) animation, color key video windowing

### RF Wireless

**RF Transceiver:** 2-way RF, 2.4 GHz ISM Channels 11-26 (2400 to 2483.5 MHz), IEEE 802.15.4 compliant

**Transmitting Power:** 75 mW (Ch.11), 100 mW (Ch.12-23), 15 mW (Ch.24), 3.5 mW (Ch.25), 1 mW (Ch.26) @ High Setting; 1 mW (Ch.11-25), 0.5 mW (Ch.26) @ Low Setting

**Range:** 100 to 200 feet maximum indoor, 1000 feet outdoor, subject to site-specific conditions

**Gateway:** Requires a **CEN-HPRFGW** RF Gateway<sup>[4]</sup>

**Roaming:** Supports roaming amongst up to 8 RF gateways

### IR Wireless<sup>[7]</sup>

**IR Transmitter:** 38 kHz, RC5 format

**Range:** 50 feet typical

**Gateway:** Requires a **C2N-IRGW-1G** or **C2N-IRGW-F** IR Gateway<sup>[4]</sup>, or

**CNXRMIRD** IR Receiver<sup>[4]</sup>

### Wired Communications<sup>[2]</sup>

**Ethernet:** 10BaseT/100BaseTX, auto-switching, auto-negotiating, auto-discovery, full/half duplex, TCP/IP, UDP/IP, CIP, DHCP

**Cresnet:** Supports Cresnet slave mode

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## Video<sup>[2]</sup>

**Signal Types:** Composite

**Formats:** NTSC 480i or PAL 576i

**Color Depth:** 18-bit; 262,144 colors

**Windowing:** Single-window, deinterlaced and scalable up to full-screen

## Audio

Internal transducer for keyclick sound

## Battery

**Internal Battery:** NiMH, 4.8 Volt, 2000 mAh, model **TPS-6X-BTP**<sup>[5]</sup>

**Usage per Charge:** ~2 hours continuous, 2 days under normal use with factory settings

**Charging Time:** ~2.5 hours (~2.5 to 3 hours when in use)

## Power Requirements

**Power Pack:** 0.75 Amps @ 24 Volts DC;

100-240 Volts AC, 50/60 Hz power pack, model **PW-2407WU** included

**Cresnet Power Usage:** 18 Watts (0.75 Amps @ 24 Volts DC), includes **TPS-6X-IMCW** module<sup>[5]</sup>

Note: May be powered by power pack or Cresnet network power, not both. All power connections are made via the TPS-6X-IMCW interface module<sup>[5]</sup>

## Environmental

**Temperature:** 32° to 112°F (0° to 45°C);

50° to 104°F (10° to 40°C) while charging

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

**Heat Dissipation:** 61 BTU/hour

## Enclosure

**Construction:** Injection-molded plastic, non-slip grips/feet, integral docking station port

**Front Bezels:** Button and no-button bezels included; button bezel includes white translucent illuminated Up/Down and Thumbpad buttons and 8 hardkey buttons with illuminated dividers and default backlit text engraving, optional custom backlit text engraving sold separately<sup>[1]</sup>

## Dimensions

**Height:** 5.10 in (130 mm)

**Width:** 8.08 in (206 mm)

**Depth:** 1.57 in (40 mm)

Note: Combined height of the TPS-6X touchpanel docked on the TPS-6X-DS docking station is 6.21 in (158 mm) maximum.

## Weight

1.59 lb (720 g)

## Available Models

**TPS-6X:** Isys™ 5.7" Wireless Touchpanel, Gloss Black

**TPS-6X-B-T:** Isys™ 5.7" Wireless Touchpanel, Matte Black

**TPS-6X-W-S:** Isys™ 5.7" Wireless Touchpanel, Gloss White

**TPS-6XNL:** Isys™ 5.7" Wireless Touchpanel w/No-Lock DS, Gloss Black

**TPS-6XNL-B-T:** Isys™ 5.7" Wireless Touchpanel w/No-Lock DS, Matte Black

**TPS-6XNL-W-S:** Isys™ 5.7" Wireless Touchpanel w/No-Lock DS, Gloss White

## Included Accessories

**TPS-6X-BTP** Replacement battery pack for TPS-6X

[Included Quantity for TPS-6X, TPS-6X-B-T, TPS-6X-W-S, TPS-6XNL, TPS-6XNL-B-T, TPS-6XNL-W-S: 1]

**TPS-6X-DS** Desktop Docking Station for TPS-6X, Gloss Black

[Included Quantity for TPS-6X: 1]

**TPS-6X-DS-B-T** Desktop Docking Station for TPS-6X-B-T, Matte Black

[Included Quantity for TPS-6X-B-T: 1]

**TPS-6X-DS-W-S** Desktop Docking Station for TPS-6X-W-S, Gloss White

[Included Quantity for TPS-6X-W-S: 1]

**TPS-6XNL-DS** Desktop Docking Station for TPS-6X, No-Lock, Gloss Black

[Included Quantity for TPS-6XNL: 1]

**TPS-6XNL-DS-B-T** Desktop Docking Station for TPS-6X-B-T, No-Lock, Matte Black

[Included Quantity for TPS-6XNL-B-T: 1]

**TPS-6XNL-DS-W-S** Desktop Docking Station for TPS-6X-W-S, No-Lock, Gloss White

[Included Quantity for TPS-6XNL-W-S: 1]

**TPS-6X-IMCW** Interface Module for TPS-6 and TPS-6X-DS

[Included Quantity for TPS-6X, TPS-6X-B-T, TPS-6X-W-S, TPS-6XNL, TPS-6XNL-B-T, TPS-6XNL-W-S: 1]

**PW-2407WU** Wall Mount Power Pack 24VDC, 0.75A, Universal

[Included Quantity for TPS-6X, TPS-6X-B-T, TPS-6X-W-S, TPS-6XNL, TPS-6XNL-B-T, TPS-6XNL-W-S: 1]

**TPS-6X-FP\_ENGRAVED** Backlit Engravable Button Bezel Kit w/Custom Engraving, Gloss Black

[Included Quantity for TPS-6X, TPS-6XNL: 1]

**TPS-6X-FP-NB** No-Button Bezel Kit for TPS-6 & TPS-6X, Gloss Black

[Included Quantity for TPS-6X, TPS-6XNL: 1]

**TPS-6X-FPB-T\_ENGRAVED** Backlit Engravable Button Bezel Kit w/Custom Engraving, Matte Black

[Included Quantity for TPS-6X-B-T, TPS-6XNL-B-T: 1]

**TPS-6X-FPB-T-NB** No-Button Bezel Kit for TPS-6-B-T & TPS-6X-B-T, Matte Black

[Included Quantity for TPS-6X-B-T, TPS-6XNL-B-T: 1]

**TPS-6X-FPW-S\_ENGRAVED** Engravable Button Bezel Kit w/Custom Engraving, Gloss White

[Included Quantity for TPS-6X-W-S, TPS-6XNL-W-S: 1]

**TPS-6X-FPW-S-NB** No-Button Bezel Kit for TPS-6-W-S & TPS-6X-W-S, Gloss White

[Included Quantity for TPS-6X-W-S, TPS-6XNL-W-S: 1]

## Available Accessories

**TPS-6X-FP\_ENGRAVED:** Backlit Engravable Button Bezel Kit w/Custom Engraving, Gloss Black

**TPS-6X-FP\_BLANK:** Backlit Engravable Button Bezel Kit (blank), Gloss Black

**TPS-6X-FPB-T\_ENGRAVED:** Backlit Engravable Button Bezel Kit w/Custom Engraving, Matte Black

**TPS-6X-FPB-T\_BLANK:** Backlit Engravable Button Bezel Kit (blank), Matte Black

**TPS-6X-FPW-S\_ENGRAVED:** Engravable Button Bezel Kit w/Custom Engraving, Gloss White

**TPS-6X-FPW-S\_BLANK:** Engravable Button Bezel Kit (blank), Gloss White

**CEN-HPRFGW:** High Powered RF Gateway

**CENI-HPRFGW:** High Powered RF Gateway - International Version, 230V

**C2N-IRGW-1G:** Wall Mount IR Gateway

**C2N-IRGW-F:** Flush Mount IR Gateway

**CNXRMIRD:** IR Receiver

**TPS-6X-DS-C:** Desktop Docking Station, Charging Only, Gloss Black

**TPS-6X-DS-C-B-T:** Desktop Docking Station, Charging Only, Matte Black

**TPS-6X-DS-C-W-S:** Desktop Docking Station, Charging Only, Gloss White

**TPS-6XNL-DS-C:** Desktop Docking Station, Charging Only, No-Lock, Gloss Black

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**TPS-6XNL-DS-C-B-T:** Desktop Docking Station, Charging Only, No-Lock, Matte Black

**TPS-6XNL-DS-C-W-S:** Desktop Docking Station, Charging Only, No-Lock, Gloss White

**SMK-6X:** Swivel Mount Kit

**TPS-6X-DSW:** Wall Mount Docking Station, Gloss Black

**TPS-6X-DSW-B-T:** Wall Mount Docking Station, Matte Black

**TPS-6X-DSW-W-S:** Wall Mount Docking Station, Gloss White

**CRESNET-NP-TL-B250:** Cresnet® Control Cable, non-plenum, teal, 250 ft box

**CRESNET-NP-TL-B500:** Cresnet® Control Cable, non-plenum, teal, 500 ft box

**CRESNET-NP-TL-SP500:** Cresnet® Control Cable, non-plenum, teal, 500 ft spool

**CRESNET-NP-TL-SP1000:** Cresnet® Control Cable, non-plenum, teal, 1000 ft spool

**CRESNET-NP-BK-B500:** Cresnet® Control Cable, non-plenum, black, 500 ft box

**CRESNET-NP-OR-B500:** Cresnet® Control Cable, non-plenum, orange, 500 ft box

**CRESNET-NP-YL-B500:** Cresnet® Control Cable, non-plenum, yellow, 500 ft box

**CRESNET-P-TL-SP500:** Cresnet® Control Cable, plenum, teal, 500 ft spool

**CRESNET-P-TL-SP1000:** Cresnet® Control Cable, plenum, teal, 1000 ft spool

**CRESNET-P-BK-SP500:** Cresnet® Control Cable, plenum, black, 500 ft spool

**CRESNET-P-OR-SP500:** Cresnet® Control Cable, plenum, orange, 500 ft spool

**CRESNET-P-YL-SP500:** Cresnet® Control Cable, plenum, yellow, 500 ft spool

**CRESNET-HP-NP-TL-SP500:** Cresnet® "High-Power" Control Cable, non-plenum, teal, 500 ft spool

**CRESNET-HP-NP-TL-SP1000:** Cresnet® "High-Power" Control Cable, non-plenum, teal, 1000 ft spool

**CRESCAT-NP-SP500:** Crestron Home® CAT5 AV Cable, Single CAT5e & Cresnet, non-plenum, 500 ft spool

**CRESCAT-D-NP-SP500:** Crestron Home® CAT5 AV Cable, 2x CAT5e & Cresnet, non-plenum, 500 ft spool

**CRESCAT-D-HP-NP-TL-SP500:** Crestron Home® CAT5 AV Cable, 2x CAT5e & Cresnet "High-Power", non-plenum, teal, 500 ft spool

#### Notes:

1. Text engraving is not backlit on the white models.
2. Requires a wired connection via the docking station and interface module.
3. 100 to 200 feet indoor range, subject to site-specific conditions.
4. Item sold separately.
5. Item included, see individual product specifications for additional information.
6. Models with "No-Lock" docking stations omit the finger-operated latch and locking pin features.
7. When IR wireless is enabled, the RF transceiver is disabled, and wired communication is restricted to console functions only (i.e., programming and configuration).



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