

# Crestron Isys<sup>®</sup> TPS-4000L

## 10.4" Lectern/Wall Mount Touchpanel

The Isys TPS-4000L presents a state-of-the-art flush mount touchpanel solution complete with integrated video and audio. A vibrant 640 x 480 10.4" touchscreen display delivers astounding graphical performance to support a host of control applications. The addition of 5 programmable hardbuttons provides quick pushbutton access to commonly used functions.

Crestron touchpanels offer an ideal user-interface for multimedia presentation, videoconferencing, lighting, climate control, and much more, providing a wide-open canvas for the creation of custom control screens perfectly tailored to the needs of the end-user. Touchpanels do away with piles of remote controls, cryptic front panels, and cluttered wall switches, affording true "one-touch" control over a broad range of complex devices and systems.

**Isys<sup>®</sup>**—Isys power and beauty are infused throughout Crestron's entire touchpanel lineup. Under the hood, the Isys engine produces astonishing full-color graphics with lightning-fast performance and incredible versatility. A 32-bit Motorola ColdFire<sup>®</sup> Microprocessor combines with an ingenious and ultra efficient operating system to support high-resolution graphics and images, dynamic text, full-motion video, animations, multimode objects (buttons, frames, gauges, and sliders), popup/dropdown subpages, and more.

**Synapse<sup>™</sup>**—Crestron's exclusive Synapse Image Rendering Algorithm enables system programmers to produce amazing graphics - faster and easier. Advanced antialiasing delivers crisper, sharper objects and text. Enhanced 3D effects add new depth and style. And because Synapse is native to the touchpanel, memory requirements and upload time are substantially reduced.

**Video with Advanced Gamma Correction**—Video capability is standard in the TPS-4000L, accepting any NTSC/PAL composite or S-Video source, scalable for display in any sized window or full screen. Advanced gamma correction and built-in time base correction ensure accurate color reproduction and a jitter-free image.

**Built-in Audio**—Audio features include built-in amplified speakers, volume control, line-level stereo input, and a microphone with automatic gain control and line-level output. The speakers may be used to amplify signals from TV and video sources, or to support programmable intercom functionality in combination with the microphone. Customized WAV files may be loaded on the touchpanel to provide audible feedback, button clicks, voice prompts, and more.

**Versatile Flush-Mount Design**—The TPS-4000L is designed for easy flush-mount installation in a wall, lectern or similar flat surface. A variety of mounting accessories is offered including optional back box and 19" rack mount kit. A light sensor is built in to automatically adjust the display brightness for optimal visibility under varying light conditions.

> *10.4" Active Matrix Touchscreen Display | 640 x 480 Resolution*

> *Isys Graphics Engine | Synapse Image Rendering Algorithm*

> *High-Performance Video with Gamma Correction*

> *Built-in Amplified Speakers and Microphone*

> *5 Engravable Hardbuttons | Built-in Light Sensor*

> *Stylish Flush Mount Design | Optional Rack Mount*

> *Cresnet Communications*



### AVAILABLE MODELS

**TPS-4000LA** Isys 10.4" Lectern/Wall Mount Touchpanel, Almond

**TPS-4000LB** Isys 10.4" Lectern/Wall Mount Touchpanel, Black

**TPS-4000LW** Isys 10.4" Lectern/Wall Mount Touchpanel, White

### SPECIFICATIONS

#### Touchscreen Display

**Display Type:** Active matrix color LCD  
**Size:** 10.4 inch (26.4 cm) diagonal  
**Resolution:** 640 x 480 pixels  
**Illumination:** Edgelit fluorescent  
**Viewing Angle:** ±70° horizontal, +45°/-55° vertical  
**Touchscreen:** Resistive membrane

#### Processor

**CPU:** 32-bit Motorola ColdFire<sup>®</sup> Microprocessor  
**Processing Speed:** 63 MIPS (Dhrystone 2.1 benchmark)

#### Memory

8MB flash, 8MB DRAM

#### Graphic Engine

Isys engine, 16 Bit non-palette graphics with color key video window capability, 65,536 colors (262,144 colors for video), Synapse image rendering algorithm

#### Video

Auto-detecting composite/S-Video, NTSC/PAL, 262,144 colors, time base correction, gamma correction

#### Audio

**Features:** Built-in microphone with defeatable AGC, built-in amplified speakers, internal volume control and audio mixer, WAV file capability  
**WAV File:** 8-bit PCM, mono, 8 kHz sampling rate  
**Amplification:** 5 Watts X2 channels for built-in speakers (mono)

#### Connectors

**RS-232:** (1) 6-pin RJ11 female  
Serial connection to PC for loading screen files  
Touchscreen output to PC or Telestrator  
Bidirectional RS-232 up to 115.2k baud  
Hardware and software handshaking support

**NET:** (1) 4-pin 3.5mm detachable terminal block  
Connects to Cresnet control network

**MIC OUT:** (1) 3-pin 3.5mm detachable terminal block  
Balanced/unbalanced stereo line-level output  
Output Impedance: 600 ohms balanced, 300 ohms unbalanced  
Maximum Output Level: 2 Vrms balanced, 1 Vrms unbalanced

# Crestron Isys® TPS-4000L 10.4" Lectern/Wall Mount Touchpanel

**AUDIO INPUT:** (1) 6-pin 3.5mm detachable terminal block  
Balanced/unbalanced stereo line-level input  
Input Impedance: 20k ohms balanced, 10k ohms unbalanced  
Maximum Input Level: 4 Vrms balanced, 2 Vrms unbalanced

**NTSC/PAL INPUT (Balanced):** (1) 6-pin 3.5mm detachable terminal block  
(1) Composite or (1) S-Video input (balanced)  
100 ohms balanced  
Connects to any Crestron CAT5 balanced video source

**NTSC/PAL INPUT (Coaxial):** (2) 2-pin 3.5mm detachable terminal blocks  
(1) Composite or (1) S-Video input (unbalanced)  
75 ohms terminated

## Buttons

(5) Replaceable engravable buttons with red feedback LEDs, programmable

## Light Sensor

Programmable photosensor for automatic backlight dimming

## Power Requirements

**Cresnet Power Usage:** 22 Watts (0.92 Amp @ 24 Volts DC)

## Environmental

**Temperature:** 50° to 113°F (10° to 45°C)  
**Humidity:** 10% to 90% RH (non-condensing)

## Enclosure

**Construction:** Black metal, flush mountable, 6U 19" rack mountable (all mounting kits sold separately)

**Faceplate:** Injection-molded plastic; white, black, or almond

## Dimensions

(With faceplate)

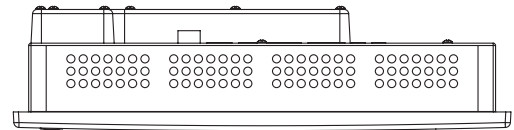
**Height:** 8.56 in (21.74 cm)

**Width:** 11.97 in (30.40 cm)

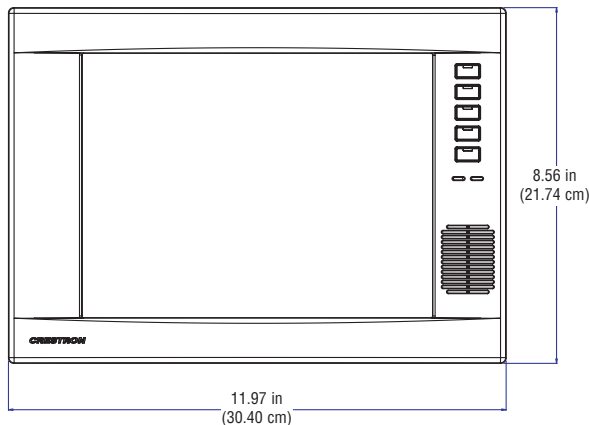
**Depth:** 2.99 in (7.60 cm)

## Weight

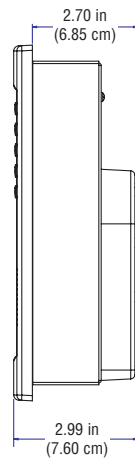
4.6 lbs (2.1 kg) - with faceplate



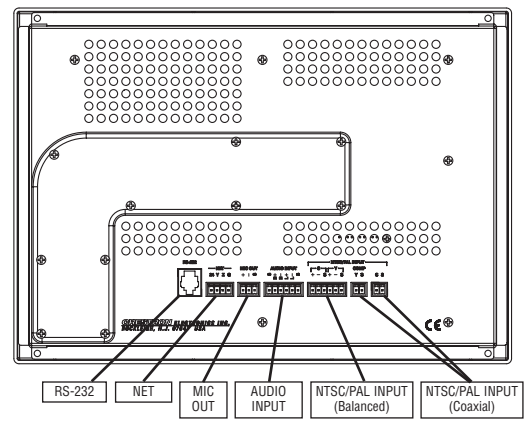
Bottom View



Front View



Right Side View



Rear View

## AVAILABLE ACCESSORIES

### DB12-BTN

Engravable Button Cap

### TPS-FPAR4000L

Architectural Faceplates

### BB-4000L

Wall Mount Back Box

### RMK-4000L

Rack Mount Kit

### WMKT-4000L

Lectern Mount and Post-construction  
Wall Mount Kit w/Trim Ring

### PMK-4000L

Pre-construction Wall Mount Kit

### WMKM-4000L

Post-construction Wall Mount Kit  
w/Mud Ring

### TMK-4000L

Trim Ring Only

### MMK-4000L

Mud Ring Only

### ST-PK

Programming Cable Kit