

V-Panel™ Integrated 12" HD Touch Screen

- > Sleek, beautiful, versatile
- > 12" color touch display
- > 800 x 600 SVGA display resolution
- > Integrated digital graphics engine
- > High-definition 24-bit color graphics
- > Smart Graphics™ support
- > Native H.264 streaming video for viewing Web cameras and HD sources
- > Wired composite video input
- > Rava® SIP intercom and phone technology^[1]
- > Crestron® IP intercom
- > Remote annotation
- > Built-in microphone and speakers
- > Customizable audio feedback
- > USB keyboard/mouse port
- > Onscreen keyboard and mouse capability
- > High-Speed Ethernet and Cresnet®
- > VESA-compatible mounting affords endless install options
- > Tabletop tilt model features clean, modern design
- > Wall mount model installs flush in shallow spaces
- > Silent fanless operation
- > Available in white or black



Advanced Touch Screen Control

A Crestron touch screen offers an ideal user-interface for controlling all the technology in your home, boardroom, classroom, courtroom, or command center. Touch screens do away with piles of remote controls, cluttered wall switches, and cryptic computer screens, simplifying and enhancing the way you use technology. For controlling audio, video, lighting, shades, HVAC, security, and other systems, Crestron touch screens are fully-customizable with easy-to-use controls and icons, true feedback and real-time status display, full-motion video windows, and advanced navigation of digital media servers, tuners, and other devices.

Crestron® V-Panels™ deliver the ultimate touch screen experience — blending style and function with advanced high-definition graphics. The TPMC-V12 features a fully integrated design combining the touch screen display and graphics engine in a single, slim housing. Sleek and beautiful, the TPMC-V12 is perfectly at home sitting on a contemporary table or desktop, but is equally suited for all kinds of custom installations thanks to integral VESA mount compatibility.

The TPMC-V12 delivers a powerful and elegant touch screen control solution featuring a brilliant 12" SVGA display, Smart Graphics™, high-performance H.264 video, audio feedback, and Rava® SIP Intercom^[1].

Sleek, Versatile Design

Our V-Panels have been designed with appearance and versatility in mind. At less than 2 inches deep, the TPMC-V12 can be mounted virtually anywhere using a third-party VESA 75 compliant mounting bracket or stand. A tabletop tilt model (TPMC-V12-TILT) is offered, supplied with its

own ultra-stylish, smooth-tilt base to deliver a very sleek-looking, low-profile control solution for desktops, counters, and other level surfaces. A wall mount model (TPMC-V12-WALL) is also offered, affording the same V-Panel style and function in a thoroughly modern, yet unimposing, flush mount design.

Smart Graphics™

Crestron touch screens use Smart Graphics to deliver the ultimate user experience *and* the ultimate value by enabling the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. Using Smart Graphics, programmers can swiftly integrate fluid gesture-driven controls, animated feedback, rich metadata, embedded apps and widgets, and full-motion video for a deeply engaging and ultra-intuitive touch screen experience.

Crestron Smart Graphics offers these enhancements and more:

- Cool-looking graphical buttons, sliders, knobs, and gauges that are intuitive and fun to use
- Kinetic effects to enhance the feeling of realism, with lists and toolbars that scroll with momentum at the flick of a fingertip
- Drag-and-drop objects that snap into place, offering an easy way to switch sources
- Dashboard widgets to personalize the touch screen with clocks, weather, news, and other information
- Customizable themes allowing a completely different look and feel for every user, event, or season
- Fully-developed SmartObjects® that enable sophisticated control over complex devices with minimal programming

TPMC-V12 V-Panel™ Integrated 12" HD Touch Screen

HD Streaming Video

High-definition streaming video capability makes it possible to view security cameras and other video sources over the network right on the touch screen. Native support for H.264 and MJPEG formats allows the TPMC-V12 to display live streaming video from an IP camera, a streaming server (Crestron [CEN-NVS200](#), [DM-TXRX-100-STR](#), or similar^[1]), or a [DigitalMedia](#) switcher.

A wired video input is also provided to allow viewing of a composite video source. Video images can be displayed full frame or in fully-scalable windows anywhere on the touch screen.

Rava® SIP Intercom^[1]

[Rava SIP Intercom Technology](#) enables 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 requiring any special wiring. VoIP phone capability is also possible through integration with an SIP-compatible IP phone system or SIP server.

The TPMC-V12 also supports legacy Crestron IP Intercom, enabling compatibility with older Crestron touch screens that do not support Rava.

Speakers and Microphone

Built-in front-firing speakers provide clear audio for listening to multimedia, as well as for intercom in combination with the integrated microphone. Customized audio files can also be loaded on the TPMC-V12 to add another dimension to the touch screen graphics with personalized sounds, button feedback, and voice prompts.

Keyboard/Mouse Options

On-screen keyboard and mouse capabilities enable complete control of the TPMC-V12's embedded Web browser and other applications, and can also be used to control computers running TouchPoint® Virtual Mouse & Keyboard Software ([VMK-WIN](#)). A USB port is also provided for the connection of a physical keyboard and mouse.

Remote Annotation

Remote annotation capability allows multiple touch screen users to draw with their fingertips over the same video image or whiteboard screen, enabling enhanced interaction between several participants in a courtroom, classroom, or council chamber.

Streamlined, Flexible Connectivity

Each TPMC-V12 model ships with a compact interface module ([TPMC-V-IMCW](#)^[4]), which may be discreetly mounted in a 1-gang wall box, equipment rack, or to any flat surface, providing a single point of connectivity for power, communications, and video signals. Connection between the touch screen and interface module can be made using a V-Cable Siamese Cable ([TPMC-V-CBL-S](#)^[5]), providing a very clean appearance with lengths available up to 15 feet (4.5 meters). For longer distances up to 330 feet (100 meters), especially for in-wall applications, you may use a choice of several Crestron wire solutions or generic CAT5e.^[6]

The TPMC-V-IMCW interface module provides both Cresnet® and high-speed Ethernet ports for control system communications and LAN access. Power can be furnished via Cresnet or an optional power pack



Wall mount model, white (TPMC-V12-WALL-W)

([PW-2420RU](#)^[2]). Wired video connectivity is handled through a single balanced or unbalanced composite input, allowing compatibility with both conventional coaxial and Crestron Home® Balanced AV distribution systems.

The TPMC-V12 can also be installed without using the interface module. Connectors on the touch screen allow for direct connection to Ethernet or Cresnet, with power provided via the Cresnet port. Please note that wired video connectivity is only available through the TPMC-V-IMCW interface module.

SPECIFICATIONS

Touch Screen Display

Display Type: TFT Active matrix color LCD
Size: 12.1 inch (307 mm) diagonal
Aspect Ratio: 4:3 SVGA
Resolution: 800 x 600 pixels
Brightness: 360 nits (cd/m²)
Contrast: 1000:1
Color Depth: 24-bit, 16.7M colors
Illumination: Backlit LED
Viewing Angle: ±89° horizontal, ±89° vertical
Touch Screen: Resistive membrane

Buttons & Indicators

Hard Key: (1) Programmable pushbutton, reboots the touch screen if held for 6 seconds

Power: (1) Green LED, indicates touch screen is in active state

TPMC-V12 V-Panel™ Integrated 12” HD Touch Screen

Memory

SDRAM: 1 GB

Flash: 2 GB

Memory Card: Supports SD and SDHC cards up to 32 GB (not included)

Maximum Project Size: 120 MB

Graphics Engine

Supports Smart Graphics™ or “traditional” GUI projects

Embedded Applications

Microsoft® Internet Explorer® 7 w/Adobe® Flash® plug-in and Java® Runtime plug-in, Windows Media® Player, Remote Desktop, VNC Viewer, Adobe Acrobat® Reader, WordPad, MS Word Viewer 2007, Excel® Viewer 2007, PowerPoint® Viewer 2007

Languages

Arabic, Chinese Simplified, Chinese Traditional, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hungarian, Icelandic, Indonesian, Italian, Japanese, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Turkish

Communications

Ethernet: 10/100 Mbps, auto-switching, auto-negotiating, auto-discovery, full/half duplex, DHCP, for control and console

Cresnet: Cresnet slave mode for control and console

USB: USB 2.0 host, supports USB HID class devices and USB flash drives

Video

Analog Input Signal Types: Composite

Analog Formats: NTSC or PAL

Analog Input Resolutions: 480i, 576i

Color Depth: 24-bit, 16.7M colors

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

Audio

Features: Built-in microphone and amplified speakers, Rava® SIP Intercom^[1], Crestron IP Intercom

Audio Feedback Formats: MP3 using Smart Graphics, WAV using “traditional” graphics

Connectors

USB HID: (1) USB Type A female; USB 2.0 host port for USB HID-compliant mouse/keyboard or USB flash drive

VIDEO/LAN: (1) Shielded 10P8C modular jack (RJ45 or RJ50 compatible); 10Base-T/100Base-TX Ethernet and balanced video port;

Normally connects to TPMC-V-IMCW interface module^[4] via TPMC-V-CBL-S, CRESCAT, CRESCAT-D-HP, CRESCAT-QM, DM-CBL, or generic CAT5e/6 cable^[5,6];

See the TPMC-V-IMCW interface module specification for other connectors;

May also be connected directly to an Ethernet LAN (negates TPMC-V-IMCW and video connectivity)

24 Y Z G: (1) 4-pin 3.5mm detachable terminal block;

Cresnet slave port and power input;

Normally connects to TPMC-V-IMCW interface module^[4] via TPMC-V-CBL-S, CRESCAT, CRESCAT-D-HP, CRESCAT-QM, DM-CBL, CRESNET, or CRESNET-HP cable^[5,6];

See the TPMC-V-IMCW interface module specification for other connectors;

May also be connected directly to a Cresnet network or power supply

MEMORY EXPANSION: (1) SD memory card slot;

Accepts one SD or SDHC card up to 32 GB for memory expansion

Power Requirements

Cresnet Power Usage: 40 Watts (1.67 Amps @ 24 Volts DC) with or without TPMC-V-IMCW module^[4]

Power Pack: 2 Amps @ 24 Volts DC; 100-240 Volts AC, 50/60 Hz power pack, model PW-2420RU sold separately

Note: May be powered by power pack or Cresnet network power, not both.

Environmental

Temperature: 41° to 113°F (5° to 45°C)

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

Heat Dissipation: 137 BTU/Hr

Enclosure

Plastic case, VESA 75x75 mm mountable;

TPMC-V12-TILT model includes tabletop tilt stand with 0° to 35° adjustable screen tilt, optional swivel mount sold separately;

TPMC-V12-WALL model includes WMKC-V12 wall mount conversion kit with plastic front bezel, additional mounting accessories sold separately

Dimensions

TPMC-V12: Height: 10.22 in (260 mm);

Width: 11.72 in (298 mm);

Depth: 1.66 in (42 mm)

TPMC-V12-TILT: Height: 10.81 in (275 mm) max at 0° tilt;

Width: 11.72 in (298 mm);

Depth: 8.11 in (206 mm)

TPMC-V12-WALL: Height: 11.54 in (293 mm);

Width: 13.04 in (332 mm);

Depth: 2.03 in (52 mm)

Weight

TPMC-V12: 5.3 lb (2.4 kg)

TPMC-V12-TILT: 9.1 lb (4.2 kg)

TPMC-V12-WALL: 8.6 lb (3.9 kg)

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MODELS & ACCESSORIES

Available Models

- TPMC-V12-B:** V-Panel™ Integrated 12" VESA Mount HD Touch Screen, Black
- TPMC-V12-W:** V-Panel™ Integrated 12" VESA Mount HD Touch Screen, White
- TPMC-V12-TILT-B:** V-Panel™ Integrated 12" Tilt HD Touch Screen, Black
- TPMC-V12-TILT-W:** V-Panel™ Integrated 12" Tilt HD Touch Screen, White
- TPMC-V12-WALL-B:** V-Panel™ Integrated 12" Wall Mount HD Touch Screen, Black
- TPMC-V12-WALL-W:** V-Panel™ Integrated 12" Wall Mount HD Touch Screen, White

Included Accessories

- TPMC-V-IMCW:** Interface Module (Qty. 1 included with TPMC-V12-B, TPMC-V12-W, TPMC-V12-TILT-B, TPMC-V12-TILT-W, TPMC-V12-WALL-B, & TPMC-V12-WALL-W)
- TPMC-V-CBL-S3-B:** V-Cable Siamese Cable, 3 ft, Black (Qty. 1 included with TPMC-V12-B)
- TPMC-V-CBL-S3-W:** V-Cable Siamese Cable, 3 ft, White (Qty. 1 included with TPMC-V12-W)
- TPMC-V-CBL-S6-B:** V-Cable Siamese Cable, 6 ft, Black (Qty. 1 included with TPMC-V12-TILT-B)
- TPMC-V-CBL-S6-W:** V-Cable Siamese Cable, 6 ft, White (Qty. 1 included with TPMC-V12-TILT-W)
- WMKC-V12-B:** Wall Mount Conversion Kit for TPMC-V12, Black (Qty. 1 included with TPMC-V12-WALL-B)
- WMKC-V12-W:** Wall Mount Conversion Kit for TPMC-V12, White (Qty. 1 included with TPMC-V12-WALL-W)

Available Accessories

- TPMC-V-CBL-S Series:** V-Cable Siamese Cables
- PW-2420RU:** Power Pack, Desktop, 24VDC, 2A (50 Watts), Regulated, US/International
- SMK-V15:** Swivel Mount for TPMC-V12-TILT
- BB-V12:** Back Box for TPMC-V12-WALL and WMKC-V12
- PMK-V12:** Pre-Construction Mounting Kit for TPMC-V12-WALL and WMKC-V12
- MMK-V12:** Mud Ring for BB-V12 and PMK-V12
- WMKT-V12:** Post-Construction Mounting Kit w/Trim Ring for TPMC-V12-WALL and WMKC-V12
- WMKM-V12:** Post-Construction Mounting Kit w/Mud Ring for TPMC-V12-WALL and WMKC-V12
- WMKC-V12:** Wall Mount Conversion Kit for TPMC-V12
- BBI-V12:** International Back Box for TPMC-V12-WALL and WMKC-V12
- CRESNET-HP-NP:** Cresnet® "High-Power" Control Cable, non-plenum
- CRESNET-NP:** Cresnet® Control Cable, non-plenum
- CRESNET-P:** Cresnet® Control Cable, plenum
- CRESCAT-NP:** Crestron Home® CAT5 AV Cable, Single CAT5e & Cresnet, non-plenum
- CRESCAT-D-HP-NP:** Crestron Home® CAT5 AV Cable, 2x CAT5e & Cresnet "High-Power", non-plenum
- CRESCAT-QM-NP:** QuickMedia® Cable, Low-skew CAT5e & Cresnet,

non-plenum

- CRESCAT-QM-P:** QuickMedia® Cable, Low-skew CAT5e & Cresnet, plenum
- DM-CBL-NP:** DigitalMedia™ Cable, non-plenum
- DM-CBL-P:** DigitalMedia™ Cable, plenum-rated
- DM-CONN-20:** DigitalMedia™ Cable Connectors, 20-Pack
- CEN-NVS200:** Network Video Streamer
- SW-VMK-WIN:** TouchPoint® Virtual Mouse & Keyboard Software for Windows®

Notes:

1. Supports Rava SIP Intercom, as well as legacy IP Intercom. Supports push-to-talk mode only. Hands-free mode is not supported.
2. Item(s) sold separately.
3. H.264 compatible IP camera required.
4. Item(s) included, see individual product specifications for additional information.
5. The TPMC-V12 model includes (1) [TPMC-V-CBL-S3](#) 3 ft Siamese Cable. The TPMC-V12-TILT model includes (1) [TPMC-V-CBL-S6](#) 6 ft Siamese Cable. The TPMC-V12-WALL model does not include any cable.
6. For wiring between the touch screen and interface module, use a [TPMC-V-CBL-S](#) Siamese Cable, [CRESCAT](#), [CRESCAT-D-HP](#), [CRESCAT-QM](#), [DM-CBL](#), or quality CAT5e/CAT6. CAT5e/6 requires an additional [CRESNET](#) or [CRESNET-HP](#) for Cresnet and power, or else a single-pair wire for power only. The maximum length for CRESCAT-D-HP, CAT5e/6 + CRESNET-HP, or CAT5e/6 + 14 AWG power wire is 330 ft (100 m) minus the length of any Ethernet cable connected to the LAN jack on the rear of the interface module. The maximum length for CRESCAT, CRESCAT-QM, DM-CBL, CAT5e/6 + CRESNET, or CAT5e/6 + 18 AWG power wire is 166 ft (50 m) minus the length of any additional Ethernet cable beyond 164 ft (50 m).

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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