

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
- > Onboard PC applications for Web browsing, playing digital media, and viewing digital documents
- > VNC viewer for remotely accessing and controlling external computers
- > 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, onboard multimedia and Web browsing, 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, metadata, embedded apps, and full-motion video for a deeply engaging and ultra-intuitive touch screen experience.

Crestron Smart Graphics include the following enhancements:

- Cool-looking graphical buttons, sliders, knobs, and gauges are intuitive and fun to use.
- Kinetic effects enhance the feeling of realism with lists and toolbars that scroll with momentum at the flick of a fingertip.
- Drag-and-drop objects snap into place offering an easy way to switch sources.

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

- Dashboard widgets personalize the touch screen with clocks, weather, news, and other information.
- Customizable themes allow a completely different look and feel for every user, event, or season.
- Fully-developed SmartObjects™ enable sophisticated control over complex devices with minimal programming.

Embedded PC Applications

The TPMC-V12 provides everything you need to enjoy online music and videos, browse the Internet, and even review digital documents without a separate computer. With Microsoft® Internet Explorer® embedded, you have full access to the entire World Wide Web including sites that use Flash® or Java®. Windows Media® Player ensures broad compatibility for playing most types of digital media. Adobe® Acrobat® Reader and Microsoft PowerPoint®, Word, and Excel® document viewers complete the online experience, allowing you to download and view documents and presentations.

In addition, VNC Viewer support delivers enhanced cross-platform interaction with computers over the network or Internet, allowing remote access and control of desktop applications to unleash a host of possibilities for system integration and multimedia presentation.

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](#)^[1] or similar), a [DigitalMedia](#) switcher, or a [Capture HD](#)® system. And, through its embedded Web browser and media player, it supports a wide variety of other streaming and downloadable video formats, enabling access to all kinds of content from media servers and Web sites like YouTube® and Netflix®^[3].

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 between any two Rava-enabled Crestron touch screens. Rava works over Ethernet, supporting 2-way intercom, video intercom^[4], 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.



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

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](#)^[5]), 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](#)^[6]), 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.^[7]

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 ([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.

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

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

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/File Formats: H.264 (MPEG-4 part 10 AVC), MJPEG, plus other formats as supported by Windows Media Player

Audio

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

Streaming/File Formats: As supported by Windows Media Player

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^[5] via TPMC-V-CBL-S, CRESCAT, CRESCAT-D-HP, CRESCAT-QM, DM-CBL, or generic CAT5e/6 cable^[6,7];

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^[5] via TPMC-V-CBL-S, CRESCAT, CRESCAT-D-HP, CRESCAT-QM, DM-CBL, CRESNET, or CRESNET-HP cable^[6,7];

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^[5]

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

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

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)

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®

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

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. Accessing Netflix content requires an active Netflix account. See www.netflix.com for details.
4. H.264 compatible IP camera required.
5. Item(s) included, see individual product specifications for additional information.
6. 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.
7. 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.

Crestron, the Crestron logo, Capture HD, Cresnet, Crestron Home, DigitalMedia, Rava, Smart Graphics, SmartObjects, TouchPoint, V-Panel, and V-Panels are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Acrobat, Adobe, and Flash are either trademarks or registered trademarks of Adobe Systems Incorporated in the United States and/or other countries. YouTube is either a trademark or registered trademark of Google Inc. in the United States and/or other countries. Excel, Internet Explorer, Microsoft, PowerPoint, Windows, and Windows Media are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Netflix is either a trademark or registered trademark of Netflix, Inc. in the United States and/or other countries. Java is either a trademark or registered trademark of Oracle America, Inc. in the United States and/or other countries. SD and SDHC are either trademarks or registered trademarks of SD-3C, LLC in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice. ©2014 Crestron Electronics, Inc.

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

