

V-Panel™ 12" HD Touch Screen Displays

- > Sleek, beautiful, versatile
- > 12" touch screen display
- > 800 x 600 SVGA display resolution
- > High-definition 24-bit color graphics
- > HDCP-ready touch screen controller
- > VESA-compatible mounting affords endless install options
- > Tabletop tilt model features clean, modern design
- > Wall mount model installs flush in shallow spaces
- > Contemporary appearance blends in anywhere
- > DigitalMedia™ technology minimizes the amount of visible wiring
- > Digital Graphics Engine (DGE) installs up to 300 ft (91 m) away^[1,5]
- > Also works with the DVPHD Digital Video Processor^[8]
- > Built-in microphone and speakers
- > USB keyboard/mouse port
- > Silent fanless operation
- > Available in white or black

Crestron® V-Panels™ deliver the ultimate touch screen experience — blending style and function with advanced high-definition graphics. Sleek and beautiful, our V-Panel displays are perfectly at home sitting on a contemporary table or desktop, but are equally suited for all kinds of custom installations thanks to integral VESA mount compatibility. Complete connectivity is provided through a simple one-wire interface that allows for long wire runs while affording an extremely clean appearance. V-Panel also supports HDCP to ensure complete compatibility with today's digital sources!

The V12 features a brilliant 12" SVGA display capable of producing stunning 24-bit color graphics and video. Together with a DGE Digital Graphics Engine^[1], the V12 delivers an elegant and powerful control solution featuring Smart Graphics™^[2], dual-window HD video^[2], high-performance H.264 streaming video^[3], onboard multimedia and Web browsing, audio feedback, Rava™ SIP Intercom^[4], and built-in annotation.

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.

Sleek, Versatile Design

Our V-Panels have been designed with appearance and versatility in mind. At less than 2 inches deep, the V12 can be mounted virtually anywhere using a third-party VESA 75 compliant mounting bracket or stand. A tabletop tilt model (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 (V12-WALL) is also offered, affording the same V-Panel style and function in a thoroughly modern, yet unimposing, flush mount design.

Digital Graphics Engine

For every V-Panel application, a DGE Digital Graphics Engine is required.^[1] The DGE can be installed at the central equipment location, dramatically reducing all the wiring from head end AV sources, switchers, and the control network. A choice of DGEs is offered, allowing V-Panel to fit a range of applications and budgets. A single DigitalMedia™ cable connects the V12 to the DGE over a wiring distance of up to 300 feet (91 m), affording exceptional flexibility while minimizing wiring cost and complexity.^[5]

Smart Graphics™^[2]

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.

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- Drag-and-drop objects snap into place offering an easy way to switch sources.
- 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

In combination with a DGE graphics engine, the 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^[3]

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^[3] and MJPEG formats allows the V12 and DGE^[3] 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 the embedded Web browser and media player, they support 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[®]^[6].

HDMI[®] and Analog Video^[2]

In addition to handling streaming video, the V12 can simultaneously display up to two fully-scalable, full-motion video windows, each supporting SD or HD video and high-resolution computer signals from external sources. All connections are made at the DGE using conventional BNC, HDMI, and VGA type cables.

HDCP Support

Industry-leading support for HDCP (High-bandwidth Digital Content Protection) ensures seamless compatibility with content-protected DVD, Blu-ray Disc[®], digital HDTV, and multimedia computer sources.

Rava™ SIP Intercom^[4]

[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^[7], 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.



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

The V12 also supports legacy Crestron IP Intercom and Crestron Home[®] (CH) CAT5 wired intercom. Crestron IP Intercom enables compatibility with older Crestron touch screens that do not support Rava. CH CAT5 wired intercom provides compatibility with the [C2N-IADS30X24](#)^[1] and other CH CAT5 based switchers and processors.

Speakers and Microphone

Built-in front-firing speakers provide clear audio for listening to multimedia and monitoring external AV sources, as well as for intercom in combination with the integrated microphone. Customized audio files can also be used 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 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 on the V12, allowing for the connection of a physical keyboard and mouse.

Real-Time Annotation

Whether conducting a high-level boardroom meeting, training seminar, or watching sports in your home theater, annotation helps put the fine point on any presentation. Built-in annotation provides the ability to illustrate your thoughts on-the-fly, letting you draw and write over high-definition video and computer images, and sketch out ideas on a whiteboard screen, without leaving the podium or your favorite chair while other viewers watch on the big screen.

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.

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Presentation Output ^[2]

Through an HDMI or DigitalMedia connection at the DGE, the V12 screen image can be sent to additional display devices, allowing videos, PowerPoint presentations, annotation, and other on-screen media to be shared with a live audience.

DigitalMedia™ ^[2]

DigitalMedia (DM®) connectivity opens up new ways to configure a touch screen control system. For instance, using a DM switcher such as the DM-MD8X8^[1], multiple V12 touch screens can be connected to a single DGE, providing a simple, cost-effective way for multiple participants to view and control the same graphical interface. DigitalMedia also provides a versatile means for distributing touch screen content to additional display devices and sound systems to serve a larger audience.

The V12 features a DM CAT type input, supporting the direct connection to a Digital Graphics Engine model DGE-1 or DGE-2. It can also connect to any DM switcher or transmitter equipped with a DM CAT output. A single DigitalMedia cable carries all video, audio, Ethernet, USB, control, and power signals up to 300 ft (91 m).^[5]

DVPHD Integration^[8]

In addition to the DGE-1 and 2, V-Panel is also compatible with the award-winning DVPHD High-Definition Digital Video Processor^[1], enabling the display of up to 8 simultaneous video windows along with HD touch screen graphics and annotation. The DVPHD supports high-definition video and computer signals from a wide variety of digital and analog sources. Its DVI output connects to the V12 via a DM CAT transmitter or DigitalMedia switcher.^[5]

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 DGE if held for 5 seconds
DM Link: (1) Green LED, indicates connection to DGE or other DM device

Communications

DigitalMedia™: DM CAT, DMNet®, HDCP, EDID, 100 Mbps Ethernet
USB: USB host, supports USB HID class devices

Video

Input Signal Type: DM CAT
Input Resolution: 800x600@60Hz

Refer to DGE-1, DGE-2, or DVPHD specifications for additional information.

Audio

Input Signal Type: DM CAT
Hardware Features: Built-in microphone and amplified speakers
Amplification: 3 Watts x 2 channels

Refer to DGE-1 or DGE-2 specification for additional information.

Connectors

USB HID: (1) USB Type A female;
USB host port for connection of a mouse/keyboard or other USB HID-compliant device

DM INPUT: (1) DM CAT input composed of (2) 8-pin RJ45 female, shielded;
Connects to DM CAT output of a DGE-1, DGE-2, DM transmitter, or DM switcher via DM-CBL cable^[5]

24 A B G: (1) 4-pin 3.5mm detachable terminal block, DMNet port;
Connects to DMNet port of a DGE-1, DGE-2, DM transmitter, or DM switcher via DM-CBL cable^[5]

Power Requirements

DMNet Power Usage: 35 Watts (1.46 Amps @ 24 Volts DC);
Normally powered from DGE via DMNet connection

Environmental

Temperature: 41° to 113°F (5° to 45°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 120 BTU/Hr

Enclosure

Plastic case, VESA 75x75 mm mountable
V12-TILT model includes tabletop tilt stand with 0° to 35° adjustable screen tilt, optional swivel mount sold separately
V12-WALL model includes WMKC-V12 wall mount conversion kit with plastic front bezel, additional mounting accessories sold separately

Dimensions

V12: Height: 10.22 in (260 mm);
Width: 11.72 in (298 mm);
Depth: 1.66 in (42 mm)
V12-TILT: Height: 10.81 in (275 mm) max at 0° tilt;
Width: 11.72 in (298 mm);
Depth: 8.11 in (206 mm) max at 35° tilt
V12-WALL: Height: 11.54 in (293 mm);
Width: 13.04 in (332 mm);
Depth: 2.01 in (52 mm)

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Weight

V12: 5.0 lb (2.3 kg)
V12-TILT: 9.0 lb (4.1 kg)
V12-WALL: 8.3 lb (3.8 kg)

MODELS & ACCESSORIES

Available Models

V12-B: V-Panel™ 12" VESA Mount HD Touch Screen Display, DM CAT, Black
V12-W: V-Panel™ 12" VESA Mount HD Touch Screen Display, DM CAT, White
V12-TILT-B: V-Panel™ 12" Tilt HD Touch Screen Display, DM CAT, Black
V12-TILT-W: V-Panel™ 12" Tilt HD Touch Screen Display, DM CAT, White
V12-WALL-B: V-Panel™ 12" Wall Mount HD Touch Screen Display, DM CAT, Black
V12-WALL-W: V-Panel™ 12" Wall Mount HD Touch Screen Display, DM CAT, White
V12-B-DGE-1_PAK: V-Panel™ 12" VESA Mount Touch Screen Package w/DGE-1, Black
V12-W-DGE-1_PAK: V-Panel™ 12" VESA Mount Touch Screen Package w/DGE-1, White
V12-TILT-B-DGE-1_PAK: V-Panel™ 12" Tilt Touch Screen Package w/DGE-1, Black
V12-TILT-W-DGE-1_PAK: V-Panel™ 12" Tilt Touch Screen Package w/DGE-1, White
V12-WALL-B-DGE-1_PAK: V-Panel™ 12" Wall Mount Touch Screen Package w/DGE-1, Black
V12-WALL-W-DGE-1_PAK: V-Panel™ 12" Wall Mount Touch Screen Package w/DGE-1, White

Included Accessories

DGE-1: Digital Graphics Engine w/DigitalMedia™ CAT Connectivity (Qty. 1 included with V12-B-DGE-1_PAK, V12-W-DGE-1_PAK, V12-TILT-B-DGE-1_PAK, V12-TILT-W-DGE-1_PAK, V12-WALL-B-DGE-1_PAK, & V12-WALL-W-DGE-1_PAK)
V-IMCW: V-Panel™ Interface Module (Qty. 1 included with V12-B, V12-W, V12-TILT-B, V12-TILT-W, V12-B-DGE-1_PAK, V12-W-DGE-1_PAK, V12-TILT-B-DGE-1_PAK, & V12-TILT-W-DGE-1_PAK)
V-CBL-T3-B: V-Cable Triamese Cable, 3 ft, Black (Qty. 1 included with V12-B & V12-B-DGE-1_PAK)
V-CBL-T3-W: V-Cable Triamese Cable, 3 ft, White (Qty. 1 included with V12-W & V12-W-DGE-1_PAK)
V-CBL-T6-B: V-Cable Triamese Cable, 6 ft, Black (Qty. 1 included with V12-TILT-B & V12-TILT-B-DGE-1_PAK)
V-CBL-T6-W: V-Cable Triamese Cable, 6 ft, White (Qty. 1 included with V12-TILT-W & V12-TILT-W-DGE-1_PAK)
WMKC-V12-B: Wall Mount Conversion Kit for V12 and TPMC-V12, Black (Qty. 1 included with V12-WALL-B & V12-WALL-B-DGE-1_PAK)
WMKC-V12-W: Wall Mount Conversion Kit for V12 and TPMC-V12, White (Qty. 1 included with V12-WALL-W & V12-WALL-W-DGE-1_PAK)

Available Accessories

DGE-1: Digital Graphics Engine w/DigitalMedia™ CAT Connectivity
DGE-2: Digital Graphics Engine w/HDMI® and DigitalMedia™ CAT Connectivity
V-IMCW: V-Panel™ Interface Module
V-CBL-T Series: V-Cable Triamese Cables
SMK-V15: Swivel Mount for V12-TILT
BB-V12: Back Box for V12-WALL & WMKC-V12
PMK-V12: Pre-Construction Mounting Kit for V12-WALL & WMKC-V12
MMK-V12: Mud Ring for BB-V12 and PMK-V12
WMKT-V12: Post-Construction Mounting Kit w/Trim Ring for V12-WALL & WMKC-V12
WMKM-V12: Post-Construction Mounting Kit w/Mud Ring for V12-WALL & WMKC-V12
WMKC-V12: Wall Mount Conversion Kit for V12
BBI-V12: International Back Box for V12-WALL & WMKC-V12
DM-CBL-NP: DigitalMedia™ Cable, non-plenum
DM-CBL-P: DigitalMedia™ Cable, plenum-rated
DM-CBL-D-NP: DigitalMedia™ D Cable, non-plenum
DM-CBL-D-P: DigitalMedia™ D Cable, plenum
DM-CONN-20: DigitalMedia™ Cable Connectors, 20-Pack
DM-DR: DigitalMedia™ CAT Repeater

Notes:

1. Item(s) sold separately.
2. Support for Smart Graphics requires a DGE-2. Support for multiple video windows, high-definition video, RGB/VGA, HDMI, presentation output, and DigitalMedia system integration requires a DGE-2 or DVPHD. Additional equipment may be required. The DGE-1 supports only standard-definition analog video displayed in a single window, and does not currently support Smart Graphics or integration with a DigitalMedia system.
3. Support for H.264 streaming video requires a DGE-2. MJPEG and Windows Media Player formats are supported using a DGE-1 or DGE-2.
4. Supports Rava SIP Intercom via the DGE-2 only. Supports legacy IP Intercom as well as wired analog intercom via the DGE-1 or DGE-2. Supports push-to-talk mode only. Hands-free mode is not supported. For Rava or IP Intercom, the V12 must connect directly to the DGE via DM CAT with no repeaters or switchers in line.
5. The V12 features a DM CAT type input. For direct connection to a DGE-1, use DM-CBL DigitalMedia Cable up to 150 ft (45 m) in length. For connection to a DGE-2, direct or via a DigitalMedia switcher, use DM-CBL DigitalMedia Cable up to 300 ft (91 m) in length. For connection to a DVPHD via a DigitalMedia transmitter or switcher, use DM-CBL DigitalMedia Cable up to 300 ft (91 m) in length. A single DM CAT Repeater (Model DM-DR) is required for lengths over 150 ft (45 m). Deduct 20 ft (6 m) for each V-IMCW interface module. Refer to the [Crestron DigitalMedia Design Guide, Doc. #4546](#) for DM system design guidelines. The V12 model includes (1) V-CBL-T3 3 ft V-Cable and (1) V-IMCW interface module, and the V12-TILT model includes (1) V-CBL-T6 6 ft V-Cable and (1) V-IMCW interface module. The V12-WALL model includes no cable or interface module. Please refer to the spec sheet for each individual product, or contact your Crestron representative, for complete information.
6. Accessing Netflix content requires an active Netflix account. See www.netflix.com for details.
7. H.264 compatible IP camera required.
8. An Ethernet-enabled control system and DM CAT interface are required for use with a DVPHD. Be advised, DVPHD does not support audio, intercom, streaming media, Web browsing or other embedded PC functionality.

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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