

# V-Panel<sup>™</sup> 15" HD Touch Screen Displays

- > Sleek, beautiful, versatile
- > 15" widescreen touch display
- > 1280 x 768 WXGA display resolution
- > High-definition 24-bit graphics powered by Core 3<sup>™[2]</sup>
- > 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 450 ft (137 m) away<sup>[1,4]</sup>
- > Also works with the DVPHD Digital Video Processor<sup>[7]</sup>
- > Built-in microphone and speakers
- > USB keyboard/mouse port
- > 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 home theater, multimedia presentation, audio, video, lighting, HVAC, 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 the latest Crestron high-definition graphics technology powered by our groundbreaking Core 3 Ul™. 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 is also the world's only touch screen control solution to support HDCP for complete compatibility with today's digital sources!

The V15 features a brilliant 15" widescreen WXGA display capable of producing stunning 24-bit color graphics and high-definition video. Together with a DGE Digital Graphics Engine<sup>[1]</sup>, the V15 delivers an elegant and powerful control solution featuring advanced Core 3 UI touch screen graphics<sup>[2]</sup>, dual-window HD video<sup>[2]</sup>, high-performance H.264 streaming video<sup>[3]</sup>, onboard multimedia and Web browsing, IP intercom, and built-in annotation.

#### Sleek, Versatile Design

Our V-Panels have been designed with appearance and versatility in mind. At less than 2 inches deep, the V15 can be mounted virtually anywhere using a third-party VESA 75 compliant mounting bracket or stand. A tabletop tilt model (V15-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 (V15-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 V15 to the DGE over a wiring distance of up to 450 feet (137 m), affording exceptional flexibility while minimizing wiring cost and complexity. [4]

## Powered by Core 3™ [2]

Crestron touch screens have always offered the ultimate user experience. With Core 3 UI, they also deliver the ultimate value, enabling the creation of dynamically rich user interfaces with incredible efficiency and unparalleled functionality. Using Core 3 UI, 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.



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Some Core 3 UI 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 assign assets to rooms.
- Desktop widgets personalize the touch screen with animated clocks, calendars, weather, news, and other information.
- Customizable themes allow a completely different look and feel for every user, event, or season.
- Fully-developed SmartObjects<sup>™</sup> enable sophisticated control over complex devices with minimal programming.
- Smart resizing scales objects perfectly and instantly for faster GUI development — even across different sized touch screens.

### **Embedded PC Applications**

In combination with a DGE graphics engine, the V15 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<sup>[3]</sup> and MJPEG formats allows the V15 and DGE<sup>[3]</sup> to display live video images from Web cameras and servers such as the Crestron CEN-NVS200 Network Video Streamer<sup>[1]</sup>. 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<sup>®</sup> and Netflix<sup>®[5]</sup>.

## HDMI® and Analog Video[2]

In addition to handling streaming video, the V15 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.<sup>[2]</sup>

## **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.



Wall mount model (V15-WALL)

#### IP Intercom[6]

V-Panels support 2-way voice communication via a choice of IP or Crestron Home (CH) CAT5 wired intercom. Crestron IP intercom eliminates the need for dedicated audio wiring, enabling 2-way speech and room monitoring over Ethernet with other compatible Crestron touch screens. Wired analog intercom is also supported through a dedicated CAT5 audio connection between the DGE and a C2N-IADS30X24<sup>[1]</sup> or other CH CAT5 switcher or processor.<sup>[6]</sup>

## **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 WAV files can also be used to add 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 V15, 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 court-room, classroom, or council chamber.



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## Presentation Output[2]

Through an HDMI or DigitalMedia connection at the DGE, the V15 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. [2]

#### 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<sup>[1]</sup>, multiple V15 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.<sup>[2]</sup>

The V15 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 450 ft (137 m).<sup>[4]</sup>

## **DVPHD Integration**

In addition to the DGE-1 and 2, V-Panel is also compatible with the award-winning DVPHD High-Definition Digital Video Processor<sup>[1]</sup>, 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 V15 via a DM CAT transmitter or DigitalMedia switcher.<sup>[4,7]</sup>

#### **SPECIFICATIONS**

## Touch Screen Display

Display Type: TFT Active matrix color LCD

Size: 15 inch (381 mm) diagonal Aspect Ratio: 15:9 WXGA Resolution: 1280 x 768 pixels Brightness: 470 nits (cd/m²)

Contrast: 700:1

Color Depth: 24-bit, 16.7M colors Illumination: Backlit fluorescent

Viewing Angle: ±85° horizontal, ±85° 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<sup>™</sup>: DM CAT, DMNet<sup>®</sup>, HDCP, EDID, 100 Mbps Ethernet

**USB:** USB host, supports USB HID class devices

#### Video

Input Signal Type: DM CAT (DigitalMedia over dual shielded twisted-pair

copper wire)

Input Resolution: 1280x768@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<sup>[4]</sup>

**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<sup>[4]</sup>

### **Power Requirements**

**DMNet Power Usage:** 42 Watts (1.75 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: 144 BTU/Hr

#### **Enclosure**

Plastic case, VESA 75x75 mm mountable;

V15-TILT model includes tabletop tilt stand with 0° to 35° adjustable

screen tilt, optional swivel mount sold separately;

V15-WALL model includes WMKC-V15 wall mount conversion kit with plastic front bezel, additional mounting accessories sold separately

## **Dimensions**

**V15:** Height: 11.10 in (282 mm);

Width: 15.33 in (390 mm); Depth: 1.85 in (47 mm)

V15-TILT: Height: 11.69 in (297 mm) max at 0° tilt;

Width: 15.33 in (390 mm);

Depth: 8.35 in (212 mm) max at 35° tilt

V15-WALL: Height: 12.44 in (316 mm);

Width: 16.67 in (424 mm); Depth: 2.20 in (56 mm)



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## Weight

V15: 7.5 lb (3.4 kg) V15-TILT: 11.5 lb (5.2 kg) V15-WALL: 11.8 lb (5.4 kg)

## **MODELS & ACCESSORIES**

#### **Available Models**

V15-B: V-Panel<sup>™</sup> 15" VESA Mount HD Touch Screen Display, DM CAT, Blk V15-W: V-Panel<sup>™</sup> 15" VESA Mount HD Touch Screen Display, DM CAT, Wht V15-TILT-B: V-Panel<sup>™</sup> 15" Tilt HD Touch Screen Display, DM CAT, Black V15-TILT-W: V-Panel<sup>™</sup> 15" Tilt HD Touch Screen Display, DM CAT, White V15-WALL-B: V-Panel<sup>™</sup> 15" Wall Mount HD Touch Screen Display, DM CAT, Black

V15-WALL-W: V-Panel<sup>™</sup> 15" Wall Mount HD Touch Screen Display, DM CAT, White

#### **Included Accessories**

**V-IMCW:** V-Panel<sup>™</sup> Interface Module (Qty. 1 included with: V15-B, V15-W, V15-TILT-B, V15-TILT-W)

V-CBL-T3-B: V-Cable Triamese Cable, 3 ft, Black (Qty. 1 included with V15-B)

V-CBL-T3-W: V-Cable Triamese Cable, 3 ft, White (Qty. 1 included with V15-W)

V-CBL-T6-B: V-Cable Triamese Cable, 6 ft, Black (Qty. 1 included with V15-TILT-B)

V-CBL-T6-W: V-Cable Triamese Cable, 6 ft, White (Qty.1 included with V15-TILT-W)

WMKC-V15-B: Wall Mount Conversion Kit for V15, Black (Qty. 1 included with V15-WALL-B)

WMKC-V15-W: Wall Mount Conversion Kit for V15, White (Qty. 1 included with V15-WALL-W)

## **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: V-Cable Triamese Cables SMK-V15: Swivel Mount for V15-TILT

BB-V15: Back Box for V15-WALL and WMKC-V15

PMK-V15: Pre-Construction Mounting Kit for V15-WALL and WMKC-V15

MMK-V15: Mud Ring for BB-V15 and PMK-V15

WMKT-V15: Post-Construction Mounting Kit w/Trim Ring for V15-WALL

and WMKC-V15

WMKM-V15: Post-Construction Mounting Kit w/Mud Ring for V15-WALL and WMKC-V15

WMKC-V15: Wall Mount Conversion Kit for V15

BBI-V15: International Back Box for V15-WALL and WMKC-V15

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™ Repeater

#### Notes

- 1. Item(s) sold separately.
- Support for Core 3 UI 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 standarddefinition analog video displayed in a single window, and does not currently support Core 3 UI graphics or integration with a DigitalMedia system.
- 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. The V15 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 450 ft (137 m) in length. For connection to a DVPHD via a DigitalMedia transmitter or switcher, use DM-CBL DigitalMedia Cable up to 450 ft (137 m) in length. Up to two DM Repeaters (Model DM-DR) may be required. Refer to the DigitalMedia Infrastructure Guide, Doc. #4556 for DM wiring guidelines, and the Crestron DigitalMedia Design Guide, Doc. #4789 for DM system design guidelines. The V15 model includes (1) V-CBL-T3 3 ft V-Cable and V-IMCW wall mount interface module, and the V15-TILT model includes (1) V-CBL-T6 6 ft V-Cable and V-IMCW wall mount interface module. The V15-WALL model includes no cable or interface module. For complete information, please refer to the spec sheet for each individual product, or contact your Crestron representative.
- 5. Accessing Netflix content requires an active Netflix account. See www.netflix.com for details.
- For IP Intercom, the V15 must connect directly to the DGE via DM CAT with no repeaters or switchers in line.
- 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 <a href="https://www.crestron.com/salesreps">www.crestron.com/salesreps</a> or by calling 800-237-2041.

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The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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