

V-Panel™ and DGE

HD Touch Screen Display and Digital Graphics Engine

1 Installing the V-Panel and DGE

NOTE: Throughout this guide, V-Panel™ refers to the V12, V15 and V24R-C HD Touch Screen Displays unless otherwise noted and DGE refers to the DGE-1 or DGE-2 Digital Graphics Engine.

NOTE: For wiring between the DGE and V-Panel, use DM-CBL DigitalMedia™ cable. The maximum allowable cable length between a DGE-1 and a V-Panel is 150 feet (45 meters). The maximum allowable cable length between a DGE-2 and V-Panel is 450 feet (137 meters).

Mounting the V-Panel and DGE

V-Panel Mounting

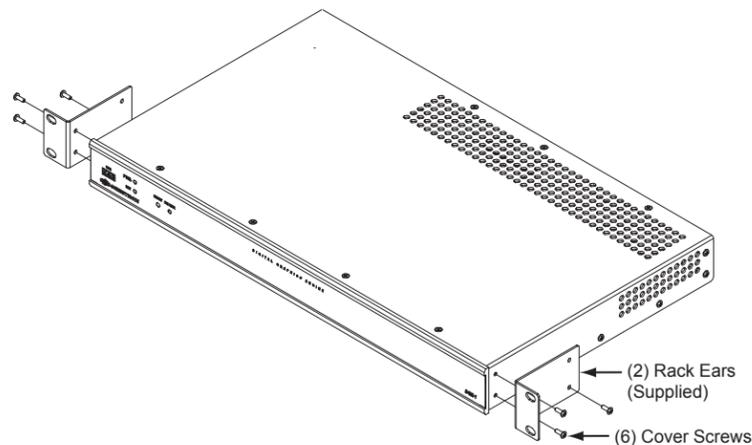
Mounting options for the V-Panel include flush wall mount, tabletop tilt with optional swivel and standard VESA mount. For wall or standard VESA mounting instructions, refer to the installation manual supplied for the mounting option.

DGE Mounting

The DGE can be mounted in a 19-inch rack or used on a tabletop as a freestanding unit.

Rack Mounting

The DGE-1 occupies 1U (1.75 inches) of rack space. The DGE-2 occupies 2U (3.5 inches) of rack space. Two rack ears are supplied to mount the DGE into a rack. To mount the DGE in a rack, refer to the following illustration and perform the steps listed below:



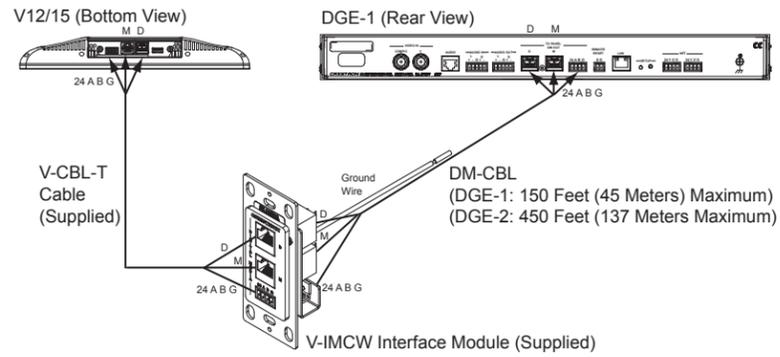
- Using a #1 or #2 Phillips screwdriver, remove the three cover screws closest to the front panel from one side of the device.
- Position one of the rack ears so its mounting holes align with the three holes vacated in step A.
- With the DGE-1, secure the ear to the device using the three cover screws removed in step A. With the DGE-2, secure the ear to the device with three of the six #06-32 x 3/8" screws included with the DGE-2.
- Repeat steps A through C to attach the remaining ear to the opposite side.
- Secure the rack mount ears to the rack using four rack mount screws (two screws each side, not supplied).

Tabletop Mounting

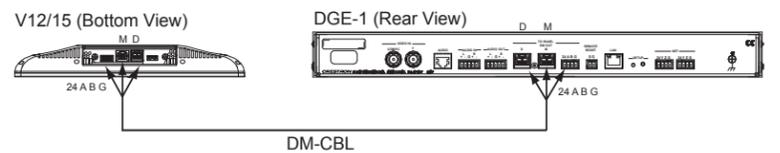
Rubber feet are provided to mount the DGE onto a tabletop. Apply the feet near the corners on the underside of the device.

Connecting the V-Panel and DGE

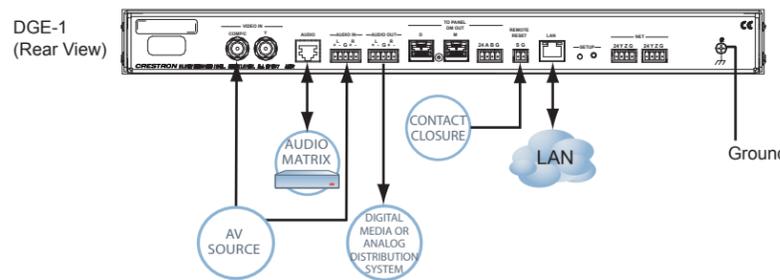
V-Panel to DGE Connection Using the V-IMCW Interface Module (V12/15 and DGE-1 Shown) (Supplied with V-Panel VESA Mount and Tilt Models)



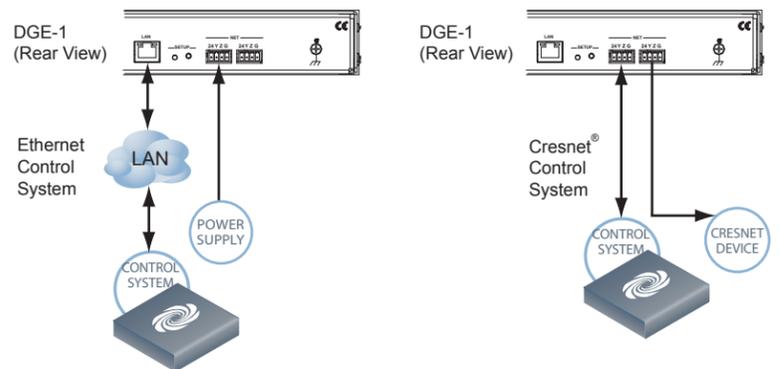
Direct Connection Between V-Panel and DGE (V12/15 and DGE-1 Shown) (V-IMCW Interface Module Not Used)



DGE Video Input, Audio Input/Output, Contact Closure, LAN, and Ground Connections (DGE-1 Shown)



DGE Control and Power Connections (DGE-1 Shown)



NOTE: The DGE-2 is powered via its built-in IEC socket and comes with a detachable power cord.

V-Panel Connections

On the V12 and V15, HDMI® (D port), data management (M port), and power and control (DMNet® 24 A B G port) connections are made to the bottom of the V-Panel. The V24-C has a single DM IN port and requires a DM-TX-201-C transmitter or DM switcher (both sold separately) for connection to a DGE-2. A USB HID port is also provided on the bottom of the V-Panels.

- DM Input and 24 A B G Connections (V12 and V15):** Connect the DM CAT input, comprised of two 8-pin RJ-45 connectors (D and M, right to left) to the DM CAT output (D and M, left to right) of the DGE. Using the supplied terminal block connector, connect the 4-pin DMNet port to the DMNet port of the DGE. If the V-IMCW Interface Module is used, use the supplied V-Cable Triamese cable (V-CBL-T) to connect the V-Panel to the front of the module. Use DM-CBL to connect the rear of the module to the rear of the DGE.
- DM IN and 24VDC Connections (V24R-C):** Connect the DM input, comprised of a single 8-pin RJ-45 connector to the DM output of a DM-TX-201-C transmitter or DM switcher. Using the supplied terminal block connector, connect the 2-pin 24VDC port to the power pack included with the DGE-2. If the IMCW-V24-C Interface Module is used, use the supplied V-Cable Triamese cable (V-CBL-SC3) to connect the V-Panel to the front of the module. Use DM-CBL to connect the rear of the module to the DM-TX-201-C or DM switcher.
- USB HID Connection:** Connect the USB port to a keyboard, mouse, or other USB-HID compliant device.

DGE Connections

Video, audio, D and M, DMNet, contact closure, LAN, control, and power connections are made to the rear of the device. A USB HID port is also provided on the front of the device.

- VIDEO IN Connection(s):** For video input connection(s), use 75-ohm coaxial cable with BNC connectors to connect to the video source.
 - For composite video input, connect the **COMP/C** connector only.
 - For S-video (**Y/C**) input, connect both the **COMP/Y** and **C** connectors.
 - In addition, on the DGE-2 only:
 - For component video input, connect the **Y**, **P_r/Y** and **P_r/C/COMP** connectors.
 - The DGE-2 also includes **RGB** and **HDMI** video inputs.
- AUDIO Connection:** Using CresCAT® cable, connect the bidirectional Crestron Home® CAT5 balanced stereo audio port to any other Crestron Home CAT5 balanced audio port. The maximum cable length is 1000 feet (305 meters).
- AUDIO IN Connection:** Using the supplied terminal block mating connector, connect the 5-pin balanced/unbalanced stereo line level input to the audio input device.
- AUDIO OUT Connection:** Using the supplied terminal block mating connector, connect the 5-pin balanced/unbalanced stereo line level output to the audio output device.
- TO PANEL, DM OUT and 24 A B G Connections (V12/15 only):** Refer to the description of the V-Panel **DM INPUT** and **24 A B G** (DMNet) connections above.
- VIDEO OUT, HDMI (DGE-2 only):** For HDMI video and audio connection to a compatible display device.
- REMOTE RESET Connection:** Using the supplied terminal block mating connector, connect the 2-pin contact closure input for remote reset of the DGE.
- LAN Connection:** Using an RJ-45 cable, connect the 8-pin **LAN** port to the Ethernet network. In an Ethernet control network, connect the control system to the network.
- NET Connection(s):** Using the supplied terminal block mating connector, connect one of the 4-pin **NET** ports to the control system in a Cresnet® control network or to a power supply in an Ethernet control network.
 - When connecting to a power supply, connect only the power pair of wires.
 - If required, connect the second **NET** port to a Cresnet device.
- Ground Connection:** Connect the chassis ground lug to earth ground (building steel).
- USB HID Connection (Front):** Connect the USB port to a keyboard, mouse, or other USB-HID compliant device. The DGE-2 has two additional USB ports on the rear.

2 Uploading the SIMPL Windows Program

NOTE: The DGE—not the V-Panel—is programmed in SIMPL Windows.

To upload the SIMPL Windows program to the control system:

- A. Locate the sample SIMPL Windows program for the DGE at www.crestron.com/exampleprograms, and then download the program to the computer.
- B. Modify the program as required:
 - To add the DGE as an Ethernet device, do the following:

From the *Touchpanels | Touchpanels (Ethernet)* folder of the *Device Library*, drag the DGE touchpanel into slot 8 of *System Views* (refer to the illustration at the top of the next column).
 - To add the DGE as a Cresnet device, do the following:

From the *Touchpanels | Touchpanels (Cresnet)* folder of the *Device Library*, drag the DGE touchpanel into slot 9 of *System Views* (refer to the illustration at the bottom of the next column).
 - (Optional) Double-click the DGE in the system tree to open the “Device Settings” window, then change the Ethernet IP ID or Cresnet ID of the DGE.

For additional programming information, refer to the SIMPL Windows online help.

- C. Using Crestron Toolbox™, do the following:
 1. From the **Tools** menu, select **System Info**.
 2. In the Address Book drop-down list, select the desired control system.



3. Click the **Quick function access** button (⚡), then select **SIMPL Program**.



4. Browse for the program, select the program, then click **Open**.
5. Click **Send**.

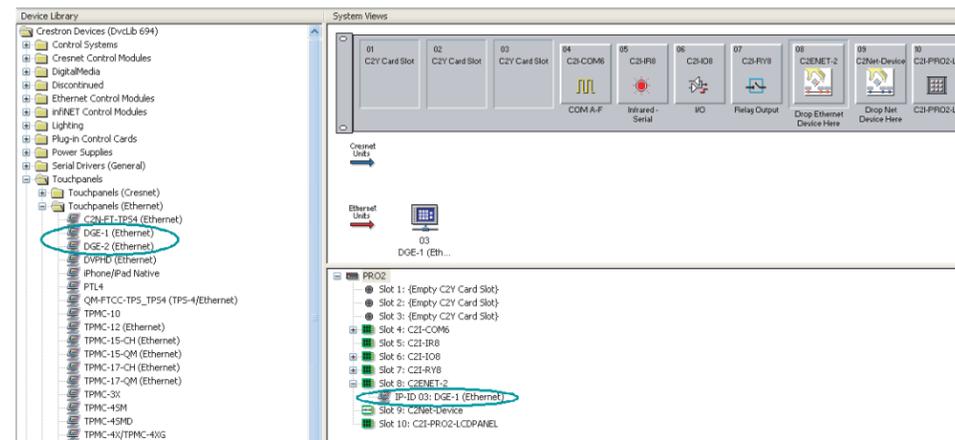
The “Confirmation” window opens, asking to overwrite the default IP table of the control system with the default IP table of the SIMPL Windows program.

6. Click **Yes**.
7. In the “SIMPL Program” window, click **Close**.

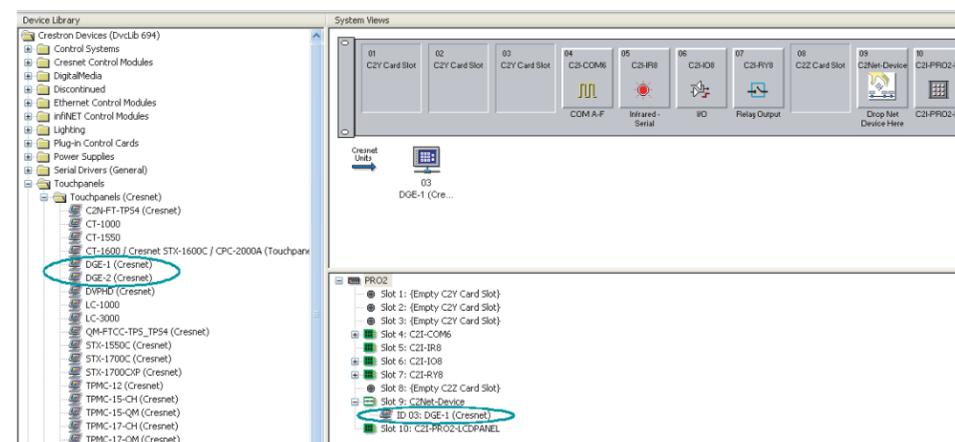
NOTE: Do not close Crestron Toolbox. It must be used in section 3.

NOTE: The following illustrations depict use of a DGE-1. The process is the same when selecting the DGE-2.

Device Library and Sample System Views, DGE-1 (Ethernet) in Slot 8



Device Library and Sample System Views, DGE-1 (Cresnet) in Slot 9



3 Uploading the VT Pro-e Project

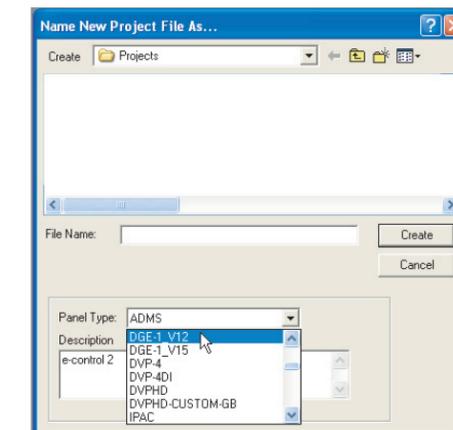
NOTE: The VT Pro-e® project is uploaded to the DGE—not to the V-Panel.

To upload the VT Pro-e project to the DGE:

- A. Locate the sample VT Pro-e project for the DGE and V-Panel at www.crestron.com/exampleprograms, then download the program to the computer.
- B. (Optional) Do either of the following:
 - Modify the sample project, then compile the project.
 - Create a new project, then compile the project.

NOTE: When creating a new project, be sure to select the correct panel type. The V-Panel that is to be connected to the DGE must be selected; for example, with a DGE-1, to select the V12, select **DGE-1_V12** as shown in the illustration below.

Creating a New Project (Selection of DGE-1_V12 Shown)



NOTE: The default resolutions for the different V-Panels are as follows:

- V12 800 x 600
- V15 1280 x 768
- V24-C 1920 x 1200

If desired with the DGE-2, use the “Project Properties” dialog box to change to a different resolution after creating the

- C. Using Crestron Toolbox, do the following:
 1. From the **Tools** menu, select **System Info**.
 2. In the Address Book drop-down list, select the desired DGE.



3. Click the **Quick function access** button (⚡), then select **Project**.



4. Browse for the project, select the project, then click **Open**.
5. Click **Send All File Types** to send the entire compiled project.
6. Click **Send** to transfer the files. A progress bar displays the status of the transfer as the project is uploading.

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

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