



DigitalMedia™ Switchers

DM-MD8X8-CPU3

DM-MD16X16-CPU3

DM-MD32X32-CPU3

DM-MD8X8-CPU3-RPS

DM-MD16X16-CPU3-RPS

DM-MD32X32-CPU3-RPS

Product Manual

Crestron Electronics, Inc.

Original Instructions

The U.S. English version of this document is the original instructions.
All other languages are a translation of the original instructions.

The product warranty can be found at www.crestron.com/legal/sales-terms-conditions-warranties.

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

Certain Crestron products contain open source software. For specific information, visit www.crestron.com/legal/open-source-software.

Crestron, the Crestron logo, 3-Series, Crestron Toolbox, Crestron XiO Cloud, DigitalMedia, DigitalMedia 8G, DigitalMedia 8G+, DM, DM 8G, and DM 8G+ are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Adobe and Flash are either trademarks or registered trademarks of Adobe in the United States and/or other countries. HDBaseT and the HDBaseT Alliance logo are either trademarks or registered trademarks of the HDBaseT Alliance in the United States and/or other countries. HDMI and the HDMI logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. DisplayPort is either a trademark or registered trademark of Video Electronics Standards Association 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.



Contents

Introduction.....	1
Physical Description.....	2
Front View	2
Rear View	9
Using the Web Interface.....	11
Access the Web Interface	11
Navigate the Web Interface	13
View or Configure Ethernet Settings	15
View Ethernet Setup Settings.....	16
Configure Ethernet Setup Settings	17
Route Inputs to Outputs.....	23
Set or Edit a Password	27
Edit Input and Output Names.....	29
View or Update Firmware Versions	33
View Versions of System Components.....	34
View Last Firmware Updates.....	36
Update Firmware Manually	37
Update Firmware Automatically	39
Reboot the System	44
Restore Factory Default Settings	46
View the Error Log	48
Using the Front Panel LCD.....	50
Access the Installer Tools Menu	50
Navigate the Installer Tools Menu.....	51
Using the Routing Push Buttons.....	51
Viewing Routing Information	52
View Input Routing Information	52
View Output Routing Information.....	52
Viewing Signal Information	53
View Input Signal Information	53
View Output Signal Information.....	53

Appendix: DMC Series Cards	54
DMC-CPU3 Card.....	54
DMC Input Cards	55
DMC-4KZ-C Input Card	56
DMC-4KZ-C-DSP Input Card	57
DMC-4KZ-HD Input Card.....	58
DMC-4KZ-HD-DSP Input Card	59
DMC-DVI Input Card	60
DMC-S Input Card	61
DMC-S-DSP Input Card	62
DMC-S2 Input Card	63
DMC-S2-DSP Input Card	64
DMC-SDI Input Card	65
DMC-STR Input Card	66
DMC-VGA Input Card	67
DMC-VID4 Input Card.....	68
DMC-VID-BNC Input Card.....	68
DMC-VID-RCA-A Input Card	69
DMC-VID-RCA-D Input Card.....	70
DMC Output Cards	71
DMC-4KZ-HDO Output Card.....	71
DMC-4KZ-CO-HD Output Card	72
DMC-HDO Output Card.....	73
DMC-S2O-HD Output Card	73
DMC-SO-HD Output Card	74
DMC-STRO Output Card	74

Introduction

The Crestron® DM-MD8X8-CPU3, DM-MD16X16-CPU3, DM-MD32X32-CPU3, and related redundant power supply models (DM-MD8X8-CPU3-RPS, DM-MD16X16-CPU3-RPS, and DM-MD32X32-CPU3-RPS) are designed to accommodate DMC Series input and output cards (sold separately):

- The DM-MD8X8-CPU3(-RPS) provides 8 input card slots and 4 dual output card slots.
- The DM-MD16X16-CPU3(-RPS) provides 16 input card slots and 8 dual output card slots.
- The DM-MD32X32-CPU3(-RPS) provides 32 input card slots and 16 dual output card slots.

The switchers also accommodate the included DMC-CPU3 card, which is based on the 3-Series® platform. The RPS switchers also include redundant power supplies to ensure continuous reliable operation for mission-critical applications.

This guide provides information about the following:

- [Physical Description](#)
- [Using the Web Interface](#)
- [Using the Front Panel LCD](#)
- [Using the Routing Push Buttons](#)

In addition, information about DMC Series cards is provided in the [appendix](#) of this manual.

For additional information about the switchers, visit the [DM-MD8X8-CPU3](#), [DM-MD16X16-CPU3](#), [DM-MD32X32-CPU3](#), [DM-MD8X8-CPU3-RPS](#), [DM-MD16X16-CPU3-RPS](#), and [DM-MD32X32-CPU3-RPS](#) product pages on the Crestron website (www.crestron.com).

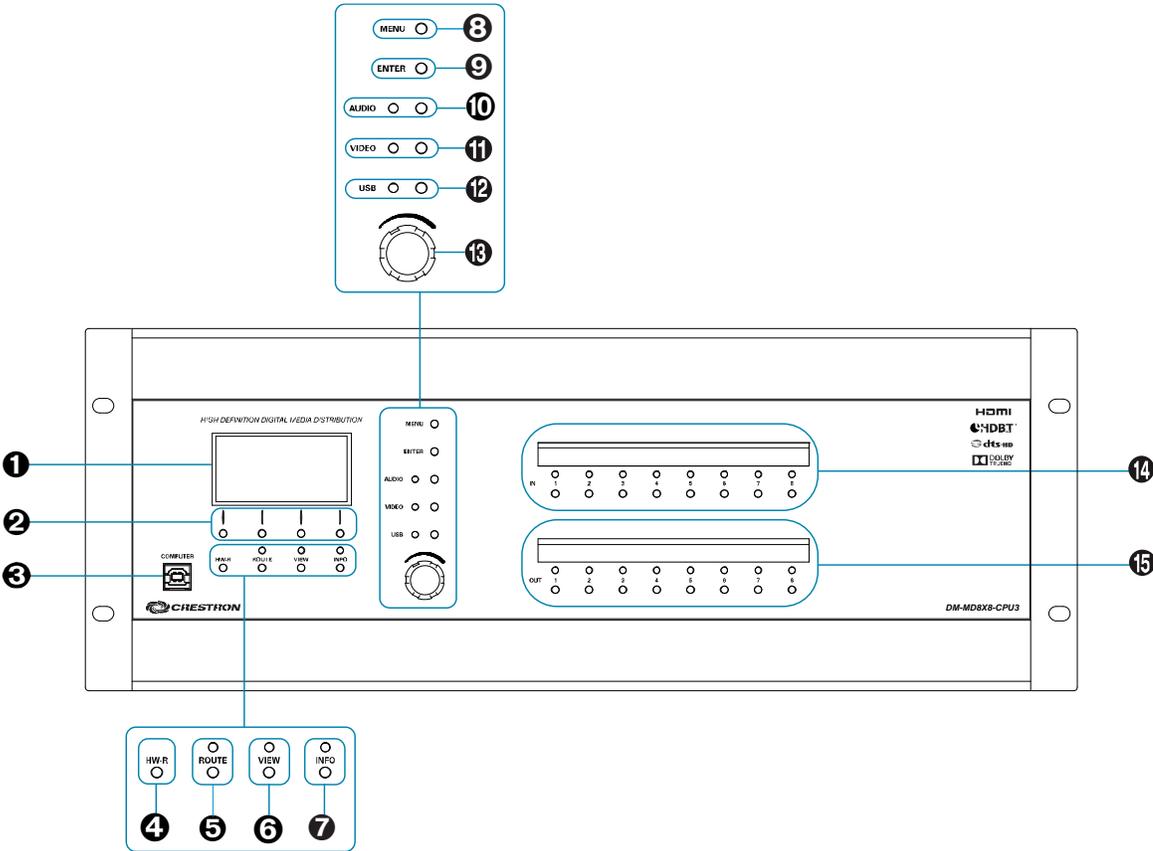
Physical Description

The following sections provide information about the front and rear views of the DM-MD8X8-CPU3, DM-MD16X16-CPU3, and DM-MD32X32-CPU3 and related redundant power supply models (DM-MD8X8-CPU3-RPS, DM-MD16X16-CPU3-RPS, and DM-MD32X32-CPU3-RPS).

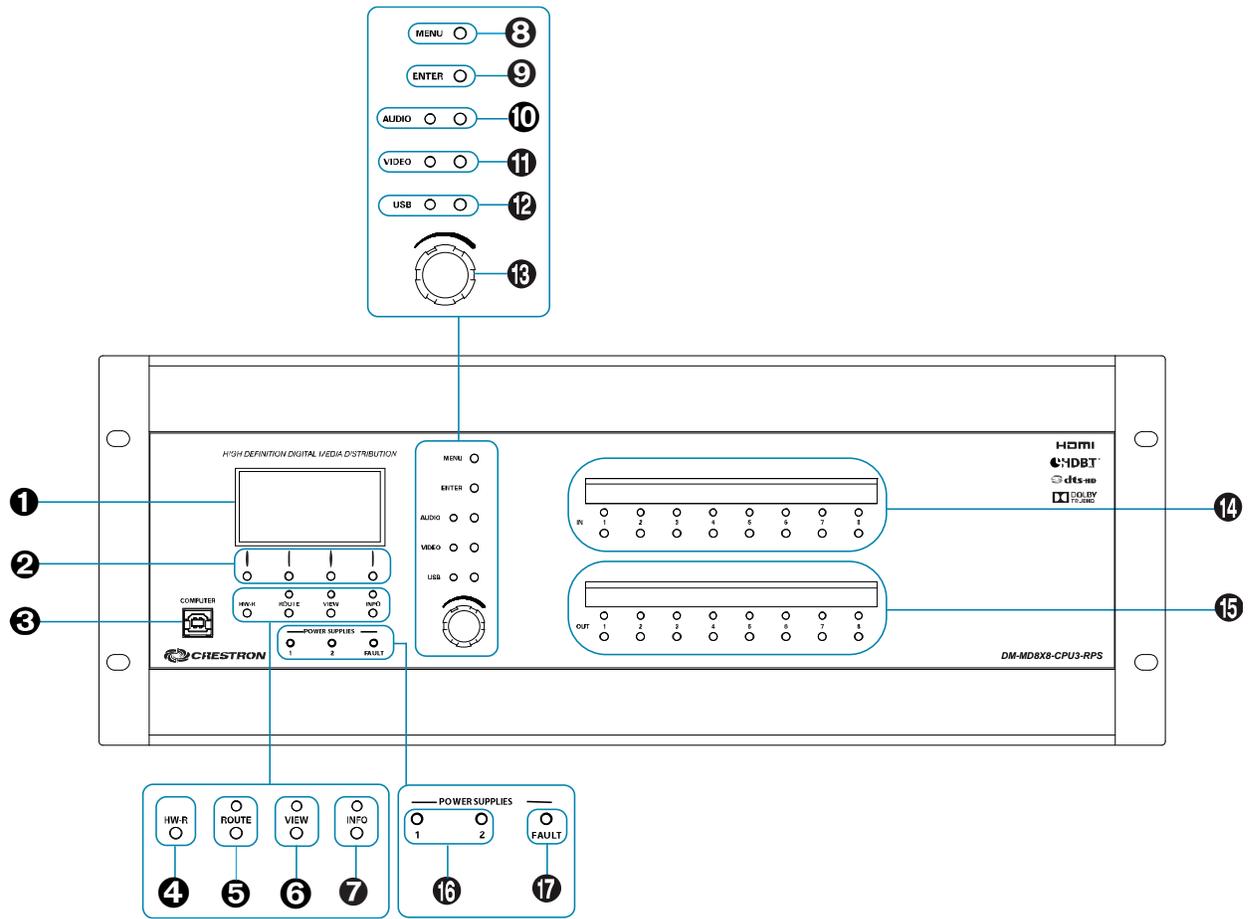
Front View

This section provides information about the connectors, controls, and indicators on the front of the DM-MD8X8-CPU3, DM-MD16X16-CPU3, and DM-MD32X32-CPU3 and related RPS models.

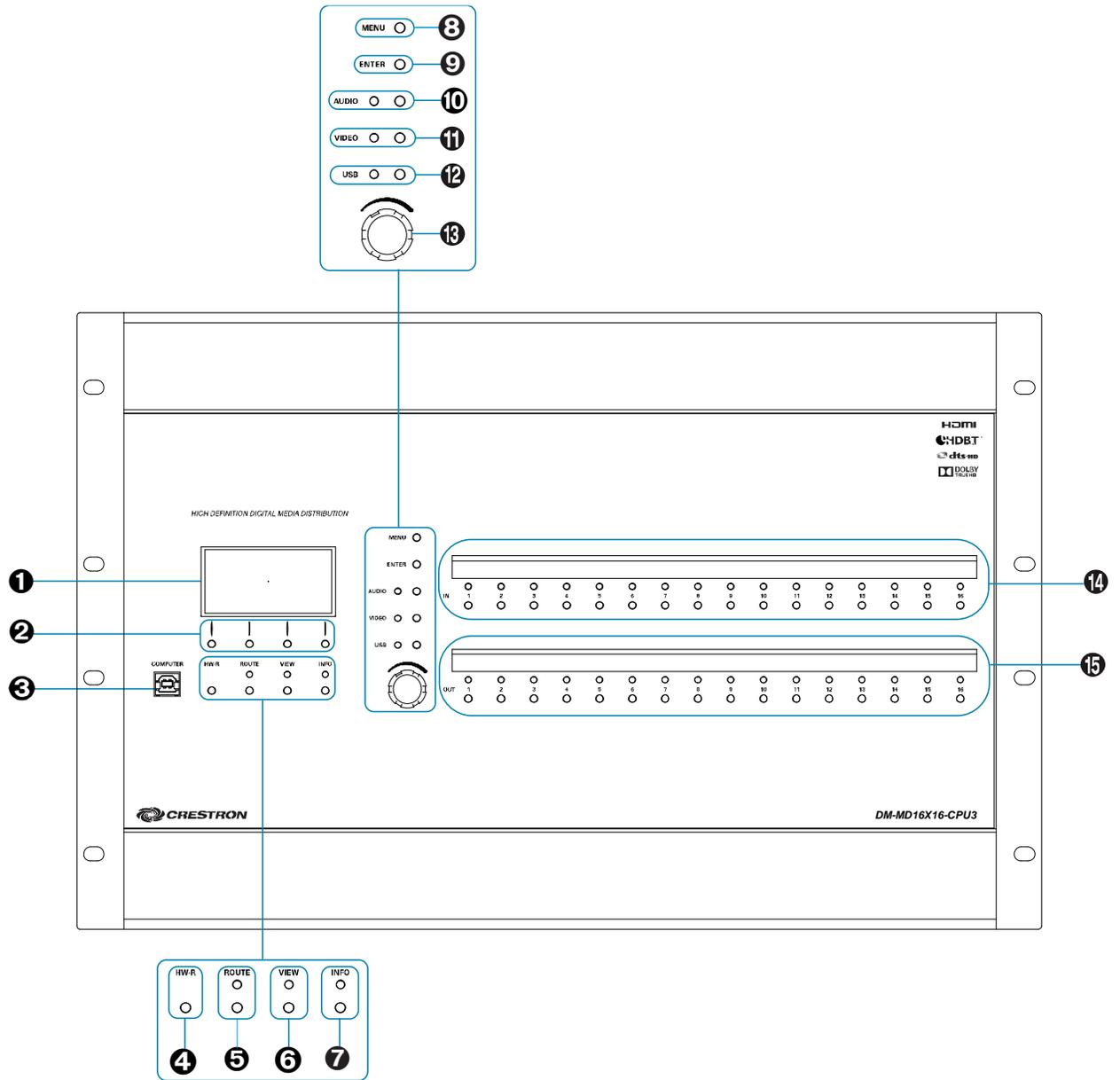
DM-MD8X8-CPU3 Front View



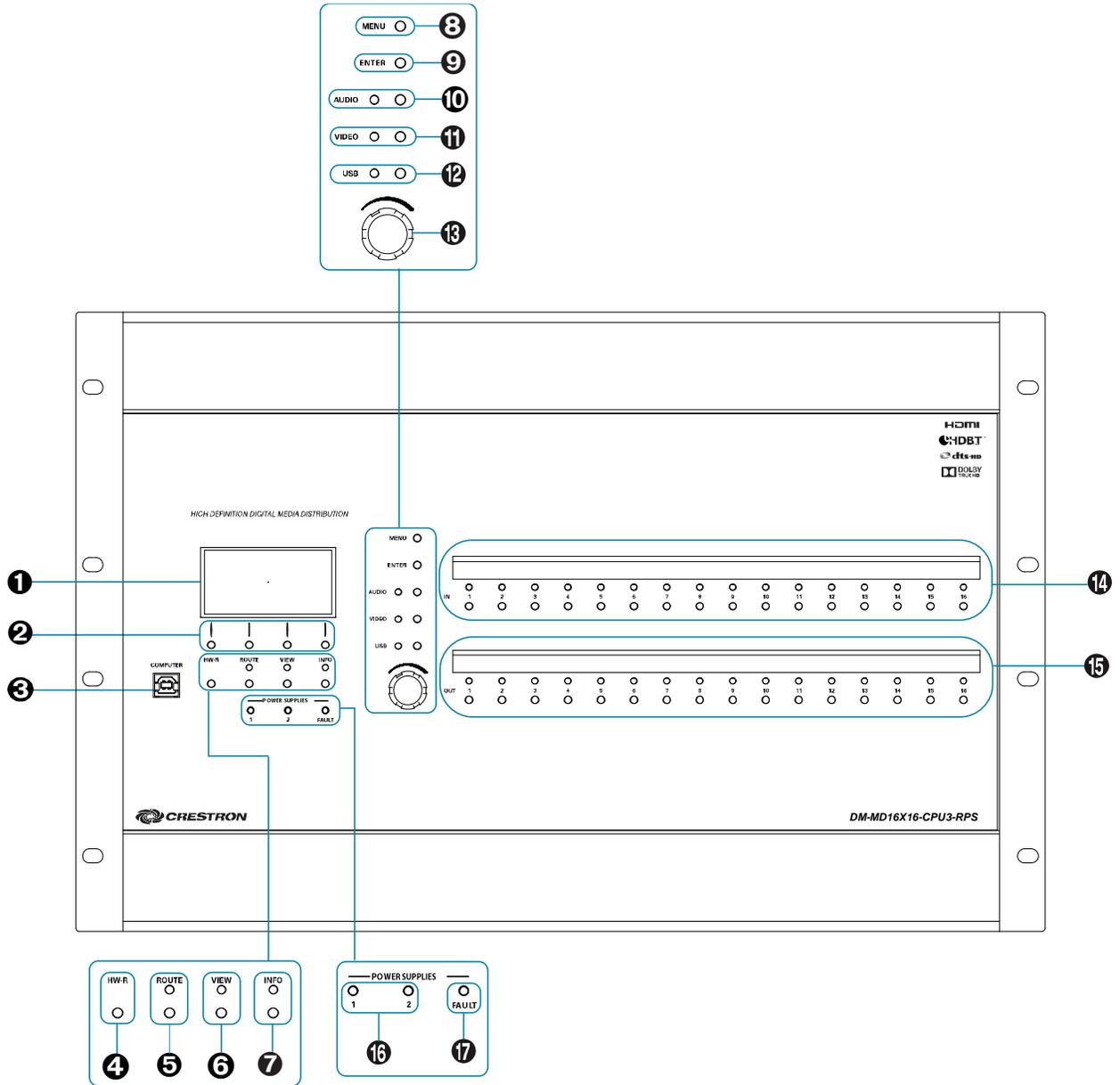
DM-MD8X8-CPU3-RPS Front View



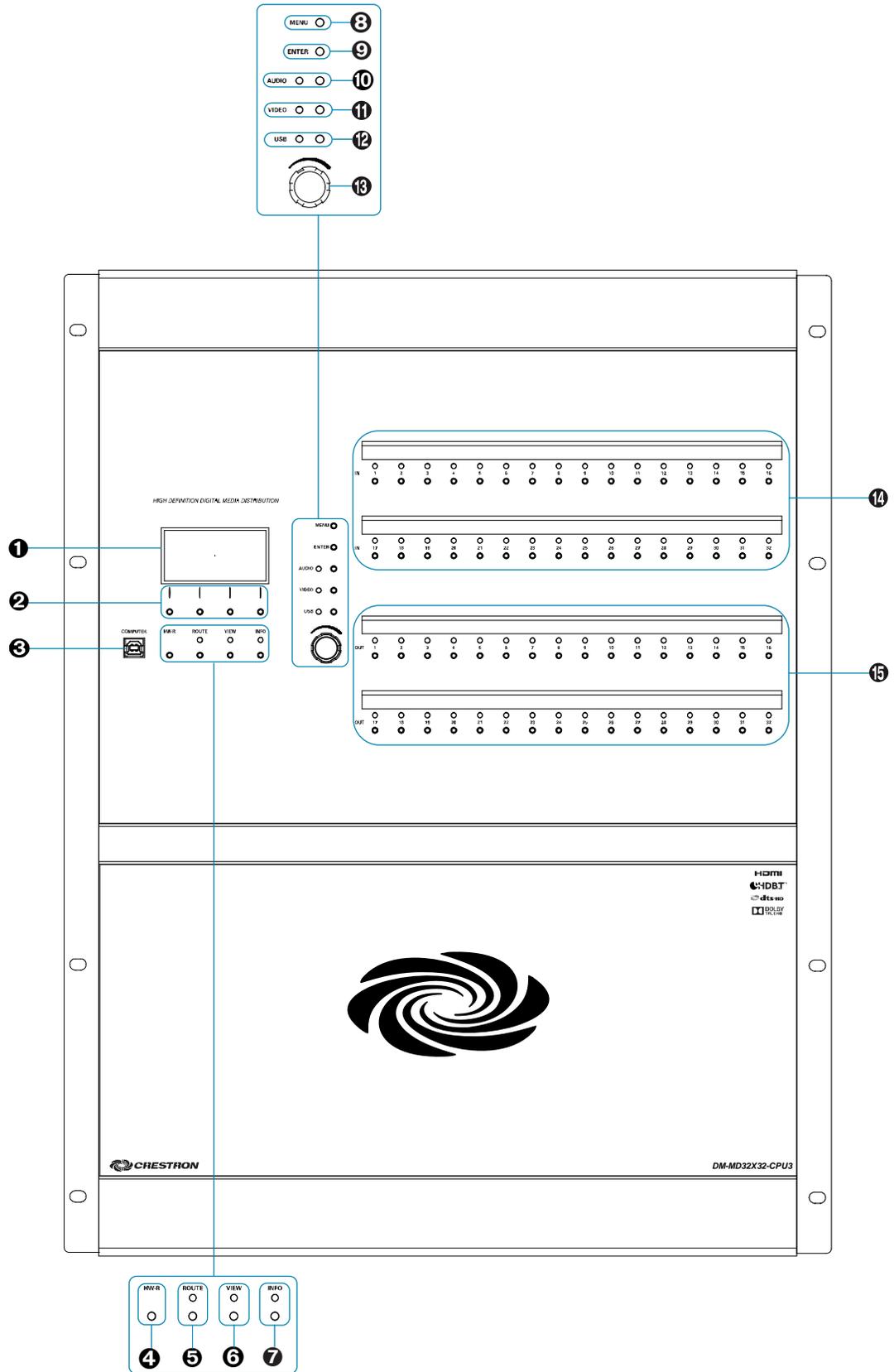
DM-MD16X16-CPU3 Front View



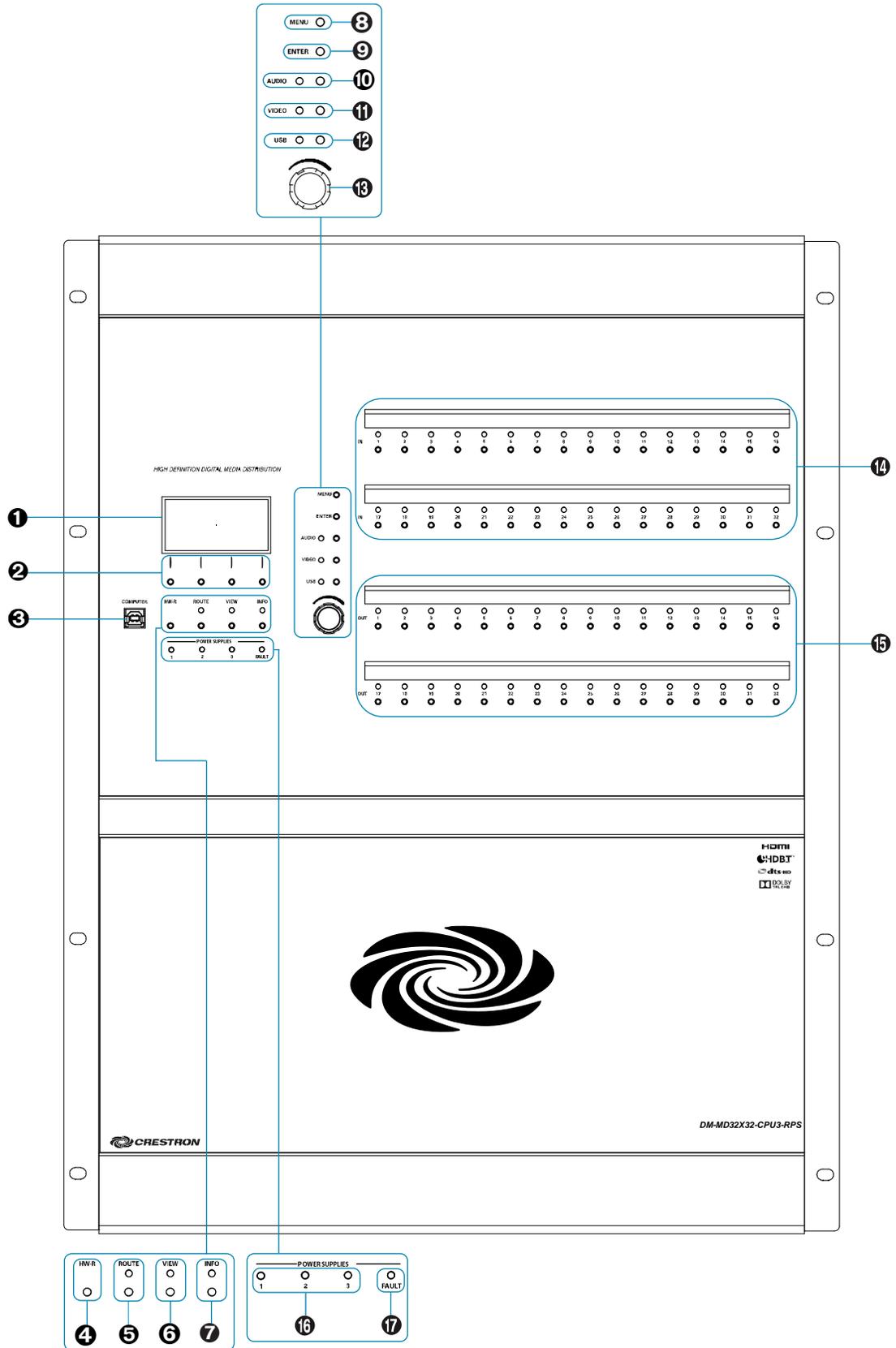
DM-MD16X16-CPU3-RPS Front View



DM-MD32X32-CPU3 Front View



DM-MD32X32-CPU3-RPS Front View



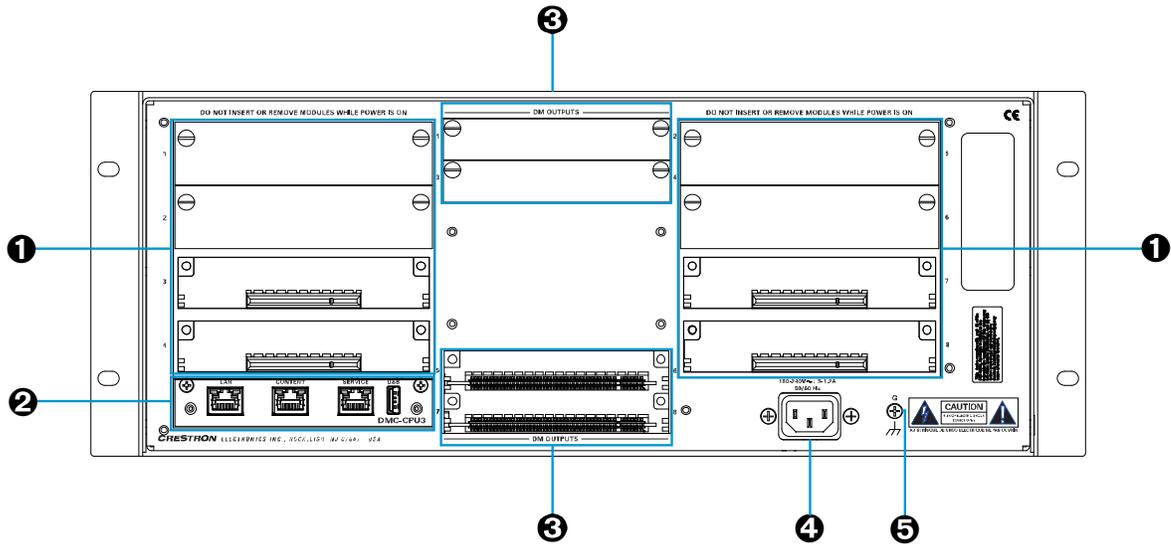
- ❶ **LCD Display:** Green LCD dot matrix, 128 x 64 resolution adjustable LED backlight, displays inputs and outputs by name, video and audio signal information, and Ethernet configuration and setup menus
- ❷ **Soft Buttons:** Push buttons for activation of LCD-driven functions
- ❸ **COMPUTER:** USB Type B female, computer console port (6 foot [~1.8 meter] cable included)
- ❹ **HW-R:** Reset push button for hardware reset, reboots the switcher
- ❺ **ROUTE:** Push button and red LED, selects Route mode to allow routing changes
- ❻ **VIEW:** Push button and red LED, selects View mode for viewing current routes
- ❼ **INFO:** Push button and red LED, selects Info mode for viewing audio, video, and device information
- ❽ **MENU:** Push button, steps menu back one level
- ❾ **ENTER:** Push button, executes highlighted menu or value
- ❿ **AUDIO:** Push button and red LED, selects audio routing view
- ⓫ **VIDEO:** Push button and red LED, selects video routing view
- ⓬ **USB:** Push button and red LED, selects USB routing view
- ⓭ **Selection Knob:** Continuous turn rotary knob, adjusts menu parameters
- ⓮ **IN 1-8, 1-16, or 1-32 (model dependent):** Push buttons and red LEDs, select the corresponding input for routing
- ⓯ **OUT 1-8, 1-16, or 1-32 (model dependent):** Push buttons and red LEDs, select the corresponding output for routing
- ⓰ **POWER SUPPLIES 1-2 or 1-3 (model dependent, RPS only):** Green LEDs, indicate that the corresponding internal power supply is functioning
- ⓱ **POWER SUPPLIES, FAULT (RPS only):** Flashing red LED, indicates a fault with an internal power supply

NOTE: Although the switcher continues to operate if a single power supply fails, it is recommended that the failed power supply be replaced as soon as possible to restore power supply redundancy.

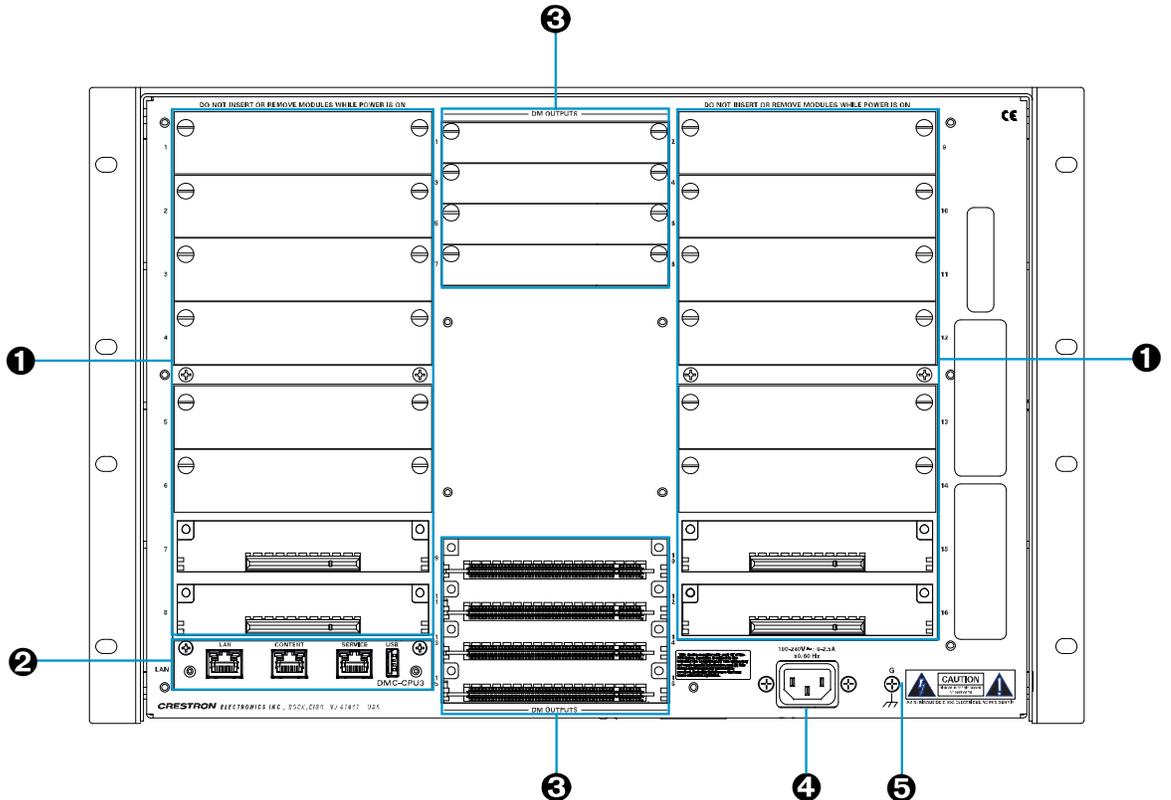
Rear View

This section provides information about the connectors, controls, and indicators on the rear of the DM-MD8X8-CPU3, DM-MD16X16-CPU3, and DM-MD32X32-CPU3 and related redundant power supply models (DM-MD8X8-CPU3-RPS, DM-MD16X16-CPU3-RPS, and DM-MD32X32-CPU3-RPS).

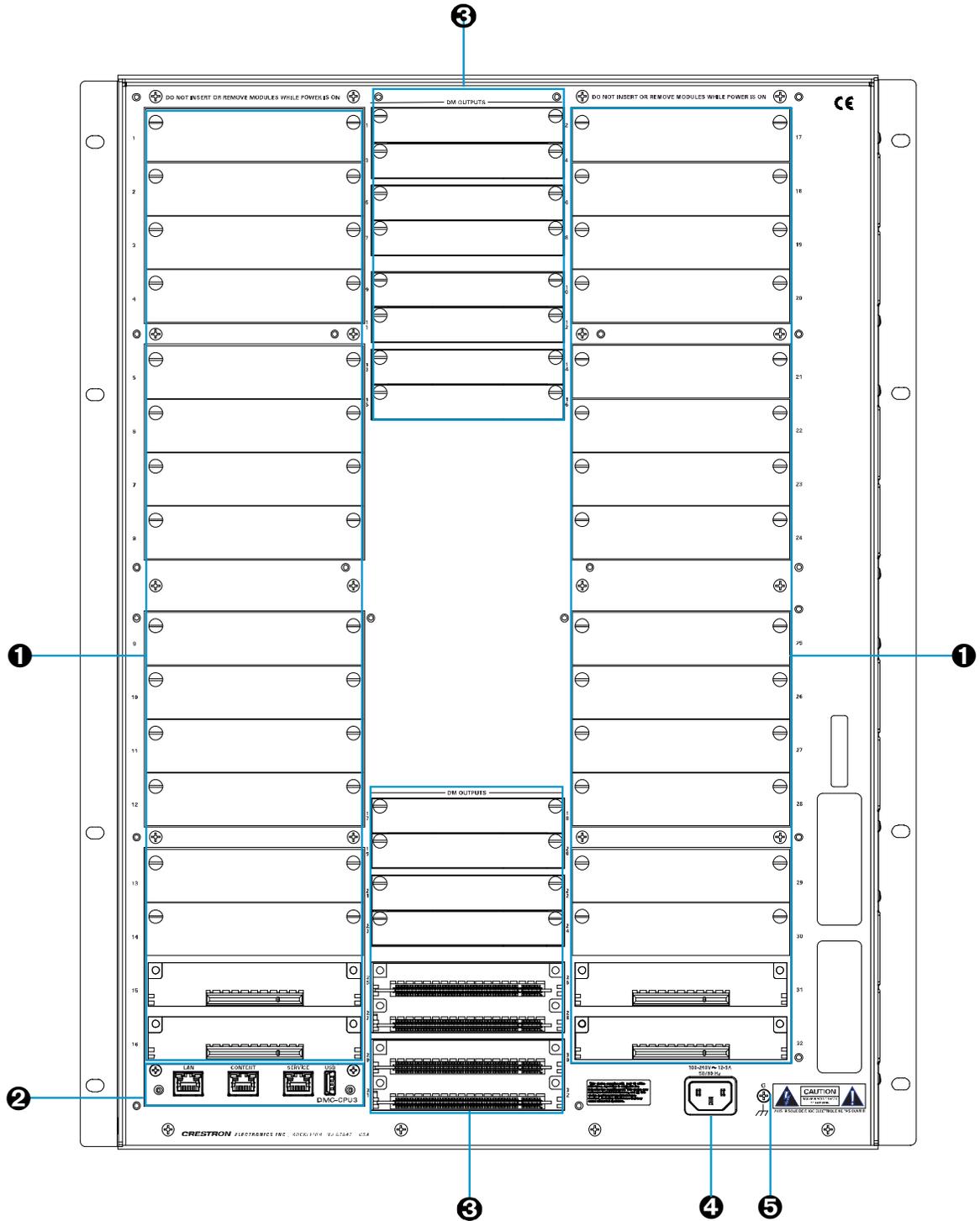
DM-MD8X8-CPU3 and DM-MD8X8-CPU3-RPS Rear View



DM-MD16X16-CPU3 and DM-MD16X16-CPU3-RPS Rear View



DM-MD32X32-CPU3 and DM-MD32X32-CPU3-RPS Rear View



- ❶ **Input Card Slots 1-8, 1-16, or 1-32 (model dependent):** Each slot accepts one DMC Series input card, sold separately (refer to "DMC Input Cards" on page 55 for information about the cards)
- ❷ **CPU3 Slot:** Accepts one DMC-CPU3 card, included (refer to "DMC-CPU3 Card" on page 54 for information about the card)
- ❸ **DM OUTPUTS 1-8, 1-16, or 1-32 (model dependent):** Each slot accepts one DMC Series output card, sold separately (refer to "DMC Output Cards" on page 71 for information about the cards)
- ❹ **100-240V~3-1.2A 50/60 Hz or 100-240V~6-2.5A 50/60 Hz or 100-240V~12.5A 50/60Hz (model dependent):** IEC 60320 C14 mains power inlet; Mates with removable power cord (included)
- ❺ **Ground (⏏):** 6-32 screw, chassis ground lug

Using the Web Interface

This section provides instructions to perform the following tasks using the web interface:

- [Access the Web Interface](#)
- [Navigate the Web Interface](#)
- [View or Configure Ethernet Settings](#)
- [Route Inputs to Outputs](#)
- [Set or Edit a Password](#)
- [Edit Input and Output Names](#)
- [View or Update Firmware Versions](#)
- [Reboot the System](#)
- [Restore Factory Default Settings](#)
- [View the Error Log](#)

NOTE: Unless otherwise indicated in this guide, the web pages of the switchers are the same.

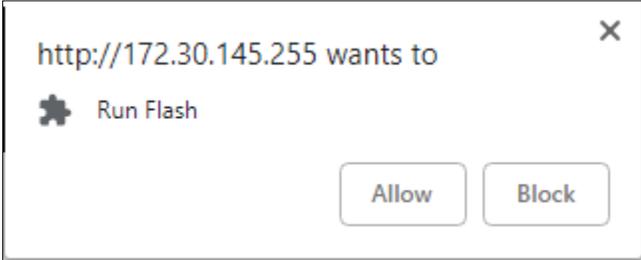
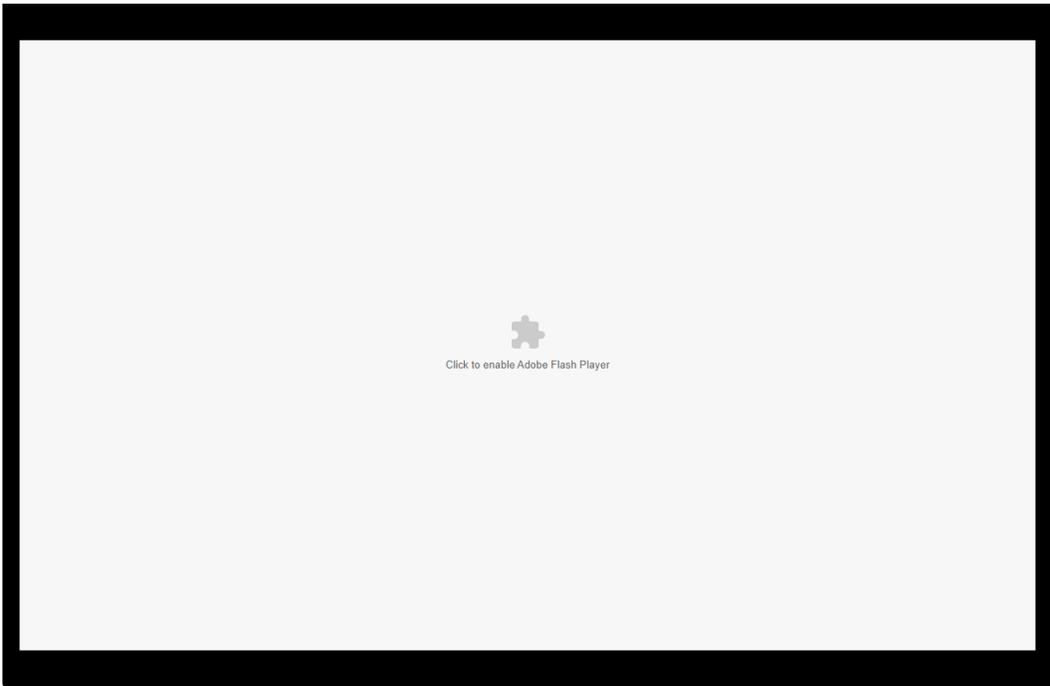
Access the Web Interface

To access the web interface:

1. Using the Device Discovery Tool in the Crestron Toolbox™ software, find the IP address of the switcher.
2. Open a web browser, and then go to the IP address of the switcher.
3. Enable Adobe® Flash® Player.

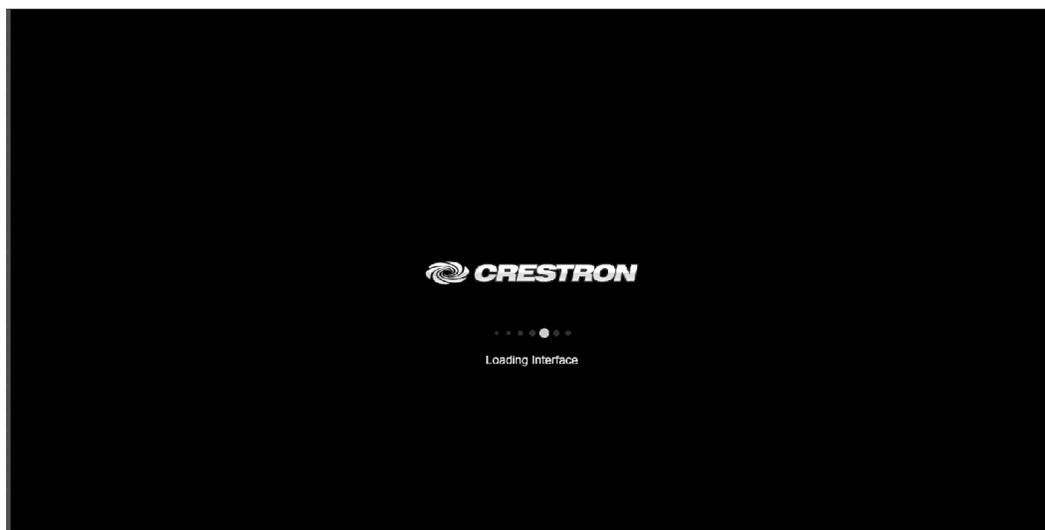
NOTE: The page and related dialog box or prompt that appear vary based on the web browser being used.

Sample Adobe Flash Player Enable Page and Dialog Box



When Adobe Flash Player is allowed to run, a Crestron splash screen appears, indicating that the web interface is loading.

Crestron Splash Screen



When the web interface is accessed for the first time, the Ethernet Setup page opens.

NOTE: After the initial Ethernet Setup settings have been accepted or the settings have been changed and applied for the first time, the Main page opens when the web interface is accessed.

For information about the Ethernet Setup page, refer to "View or Configure Ethernet Settings" on page 15. For information about the Main page, refer to "Route Inputs to Outputs" on page 23. For information about navigating the web interface, refer to the following section.

Navigate the Web Interface

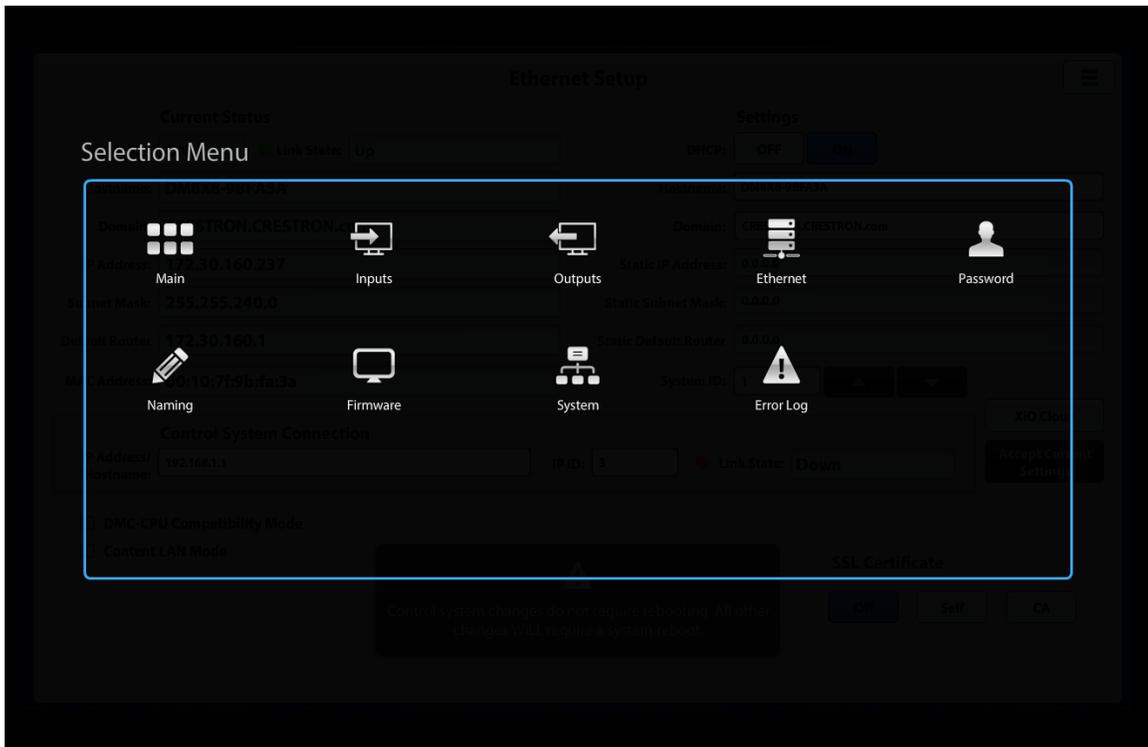
To navigate the web interface, click the menu icon (☰) in the upper-right corner of a web page. The menu icon is shown below on the Ethernet Setup page.

Menu Icon (Ethernet Setup Page Shown)



The Selection Menu page opens.

Selection Menu Page



The Selection Menu page provides access to the following web pages:

- Main (routing) page (refer to "Route Inputs to Outputs" on page 23)
- Inputs page

NOTE: As indicated on the Inputs page, configuration of input cards must be performed using DMTool in the Crestron Toolbox software.

- Outputs page

NOTE: As indicated on the Outputs page, configuration of output cards must be performed using DMTool in the Crestron Toolbox software.

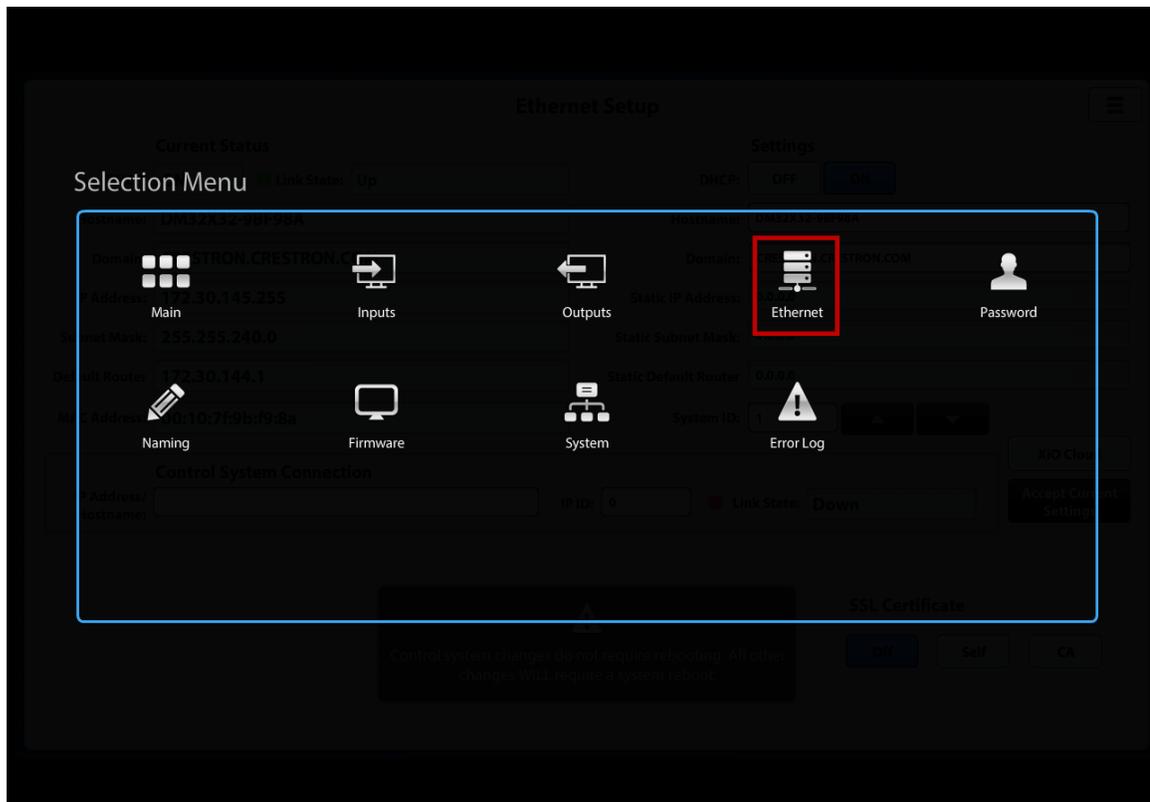
- Ethernet Setup page (refer to "View or Configure Ethernet Settings" on page 15)
- Password page (refer to "Set or Edit a Password" on page 27)
- Naming page (refer to "Edit Input and Output Names" on page 29)
- Firmware page (refer to "View or Update Firmware Versions" on page 33)
- System (refer to "Reboot the System" on page 46 and to "Restore Factory Default Settings" on page 46)
- Error Log (refer to "View the Error Log" on page 48)

View or Configure Ethernet Settings

View or configure Ethernet settings and control system information on the Ethernet Setup page. The page also enables connection of the switcher to the Crestron XiO Cloud™ service, backward compatibility between a CPU3 and CPU card, content LAN mode, and SSL (Secure Sockets Layer).

The Ethernet Setup page opens automatically after accessing the web interface for the first time. If the Ethernet Setup page is not currently displayed, click the **Ethernet** icon on the Selection Menu page.

Selection Menu Page – Ethernet Icon



The Ethernet Setup page opens.

Sample Ethernet Setup Page

The screenshot displays the 'Ethernet Setup' configuration page. It is divided into several sections:

- Current Status:** Shows DHCP as 'ON', Link State as 'Up' (green circle), Hostname as 'DM8X8-9BFA3A', Domain as 'CRESTRON.CRESTRON.com', IP Address as '172.30.160.237', Subnet Mask as '255.255.240.0', Default Router as '172.30.160.1', and MAC Address as '00:10:7f:9b:fa:3a'.
- Settings:** Shows DHCP as 'OFF' (with 'ON' button), Hostname as 'DM8X8-9BFA3A', Domain as 'CRESTRON.CRESTRON.com', Static IP Address as '0.0.0.0', Static Subnet Mask as '0.0.0.0', Static Default Router as '0.0.0.0', and System ID as '1'.
- Control System Connection:** Shows IP Address/Hostname as '192.168.1.1', IP ID as '3', and Link State as 'Down' (red circle).
- Options:** Includes checkboxes for 'DMC-CPU Compatibility Mode' and 'Content LAN Mode', and an 'SSL Certificate' section with 'Off', 'Self', and 'CA' buttons.
- Buttons:** Includes 'XIO Cloud', 'Accept Current Settings', and a warning box stating: 'Control system changes do not require rebooting. All other changes WILL require a system reboot.'

View Ethernet Setup Settings

The **Current Status** section of the Ethernet Setup page displays the following settings:

- **DHCP:** Indicates whether DHCP (Dynamic Host Configuration Protocol) is **ON** or **OFF**.
- **Link State:** Indicates whether an Ethernet link is established between the switcher and the network:
 - A green circle and the word **Up** indicate that the switcher is connected to the network.
 - A red circle and the word **Down** indicate that the switcher is not connected to the network.
- **Hostname:** Indicates the hostname of the switcher:
 - For the DM-MD8X8-CPU3, the default hostname is **DM8X8-xxxxxx** (xxxxxx represents the last six characters of the MAC address).
 - For the DM-MD16X16-CPU3, the default hostname is **DM16X16-xxxxxx** (xxxxxx represents the last six characters of the MAC address).
 - For the DM-MD32X32-CPU3, the default hostname is **DM32X32-xxxxxx** (xxxxxx represents the last six characters of the MAC address).
- **Domain:** Indicates the domain name of the switcher
- **IP Address:** Indicates the IP address of the switcher

- **Subnet Mask:** Indicates the subnet mask that is set on the network
- **Default Router:** Indicates the IP address of the default router
- **MAC Address:** Indicates the MAC address of the switcher

Default settings consist of the following:

- **DHCP** is set to **ON**.
- The **System ID** of the switcher is set to **1**.
- Connection to the Crestron XiO Cloud service is set to **Enable**.
- **DMC-CPU Compatibility Mode** and **Content LAN Mode** are disabled.
- **SSL Certificate** is set to **Off**.

Configure Ethernet Setup Settings

If no changes are necessary on the Ethernet Setup page when the web interface is accessed for the first time, click the **Accept Current Settings** button.

To change the current settings on the Ethernet Setup page, refer to the following sections as desired.

NOTE: All changes except control system changes require a system reboot.

Configure Ethernet Settings

Configure Ethernet settings in the **Settings** section of the Ethernet Setup page:

1. Disable or enable DHCP by clicking **OFF** or **ON**, respectively. The default setting is **ON**.
2. Enter the hostname of the switcher.
3. Enter the domain name of the switcher.
4. (Applicable only when DHCP is set to **OFF**) Enter the following:
 - a. Unique static IP address of the switcher
 - b. Static subnet mask of the network
 - c. Unique static IP address of the default router
5. Using the up button () or down button (), select a unique system ID for the switcher. The system ID determines the internal IP address used by each device in the DigitalMedia™ system. Values range from **1** to **64**. The default setting is **1**.

NOTE: When multiple switchers are cascaded, each switcher must have a unique system ID. It is recommended that a value ranging from **2** to **64** be used. A system ID other than the default setting of **1** prevents potential conflicts when bringing additional switchers online.

6. Click the **Apply Settings & Reboot** button to save the settings and reboot the system.

Configure Control System Connection Settings

Configure control system connection settings in the **Control System Connection** section of the Ethernet Setup page:

1. Enter the unique IP address or hostname of the control system.
2. Enter a unique IP ID for the switcher. The value must match the IP ID in SIMPL Windows and the value in the control system IP table for the switcher.
3. Click the **Apply Settings** button to save the settings.

NOTE: Control system connection changes do not require a system reboot.

Link State indicates whether an Ethernet link is established between the switcher and the control system:

- A green circle and the word **Up** indicate that the switcher is connected to the control system.
- A red circle and the word **Down** indicate that the switcher is not connected to the control system.

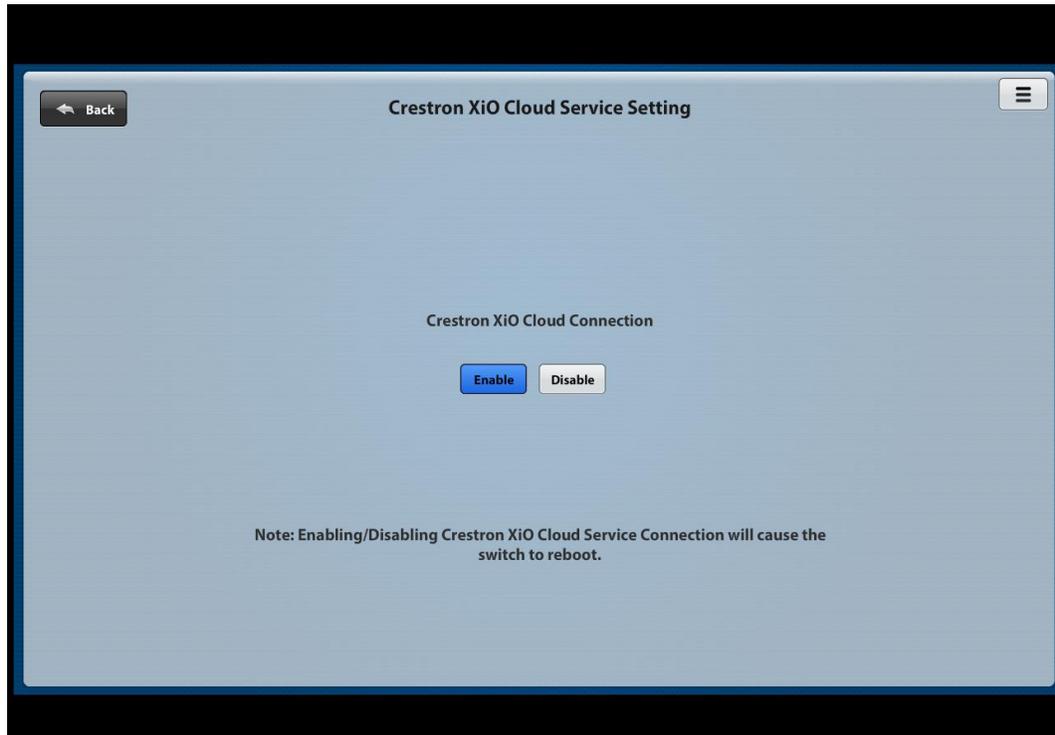
Configure Crestron XiO Cloud Service Connection

By default, connection of the switcher to the Crestron XiO Cloud service is enabled.

To enable or disable the service:

1. On the Ethernet Setup page, click the **XiO Cloud** button. The Crestron XiO Cloud Service Setting page opens.

Crestron XiO Cloud Service Setting Page



2. Do either of the following:
 - To enable the connection, click the **Enable** button if it is not already selected.
 - To disable the connection, click the **Disable** button.

A dialog box appears asking for confirmation to reboot the switcher.

Reboot Dialog Box



- In order for the new setting to take effect, click **YES** to reboot the switcher.
A message appears indicating that the system is rebooting.

Configure DMC-CPU Compatibility Mode

DMC-CPU compatibility mode provides backward compatibility between the DMC-CPU3 card and the DMC-CPU card without the need for additional programming. DMC-CPU compatibility mode must be enabled when either of the following occurs:

- A DMC-CPU3 card replaces a DMC-CPU card in an existing installation.
- A CPU3 switcher (DM-MD8X8-CPU3[-RPS], DM-MD16X16-CPU3[-RPS], or DM-MD32X32-CPU3[-RPS]) replaces a non-CPU3 switcher (DM-MD8X8[-RPS], DM-MD16X16[-RPS], or DM-MD32X32[-RPS]) in an existing installation.

NOTE: In order for DM CAT (legacy) and DM Fiber (legacy) input and output cards to operate with a CPU3 switcher, DMC-CPU compatibility mode must be enabled. The SIMPL Windows program of a CPU3 switcher cannot be used to manage the cards.

To configure DMC-CPU compatibility mode:

- Do either of the following:
 - Enable DMC-CPU compatibility mode by selecting the **DMC-CPU Compatibility Mode** checkbox.
 - Disable DMC-CPU compatibility mode by deselecting the **DMC-CPU Compatibility Mode** checkbox (default setting).
- Click the **Apply Settings & Reboot** button to save the setting and reboot the system.

A dialog box appears asking for confirmation to reboot the switcher.

Reboot Dialog Box



- In order for the new setting to take effect, click **YES** to reboot the switcher.
A message appears indicating that the system is rebooting. When the process is complete, the Main page opens.

Configure Content LAN Mode

Content LAN mode controls whether the CONTENT port of the DMC-CPU3 card in the switcher will be used to provide a dedicated LAN connection for streaming content to and from DMC streaming input and output cards (DMC-STR and DMC-STRO, respectively). When Content LAN mode is enabled, the CONTENT port of the DMC-CPU3 is used for streaming rather than the LAN port of the switcher or the CONTENT LAN port of the streaming cards.

To configure content LAN mode:

1. Do either of the following:
 - Enable CONTENT LAN mode by selecting the **CONTENT LAN Mode** checkbox.
 - Disable CONTENT LAN mode by deselecting the **CONTENT LAN Mode** checkbox (default setting).
2. Click the **Apply Settings & Reboot** button to save the setting and reboot the system.

A dialog box appears asking for confirmation to reboot the switcher.

Reboot Dialog Box



3. In order for the new setting to take effect, click **YES** to reboot the switcher. A message appears indicating that the system is rebooting. When the process is complete, the Main page opens.

Enable SSL

An SSL (Secure Sockets Layer) certificate provides secure, encrypted communications (HTTPS) between a website and a web browser.

SSL is enabled by default (set to **Off**).

To enable SSL:

1. Select one of the following buttons:
 - **Self:** Generates a self-signed certificate, which provides data encryption
 - **CA:** Allows use of a certificate that is signed by a trusted Certificate Authority, which provides data encryption and authentication
2. Click the **Apply Settings & Reboot** button to save the settings and reboot the system.

A dialog box appears asking for confirmation to reboot the switcher.

Reboot Dialog Box



3. In order for the new setting to take effect, click **YES** to reboot the switcher. A message appears indicating that the system is rebooting. When the process is complete, the Main page opens.

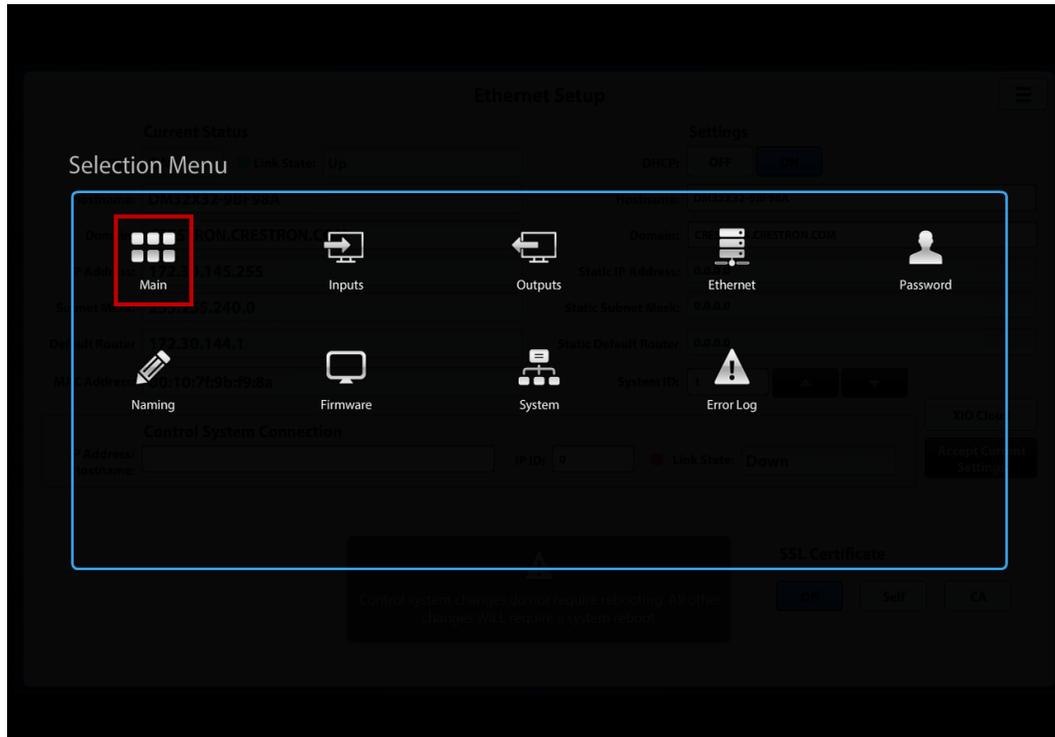
Route Inputs to Outputs

An input can be routed to one or more outputs. In addition, audio and USB breakaway routes can be configured.

To route an input to one or more outputs:

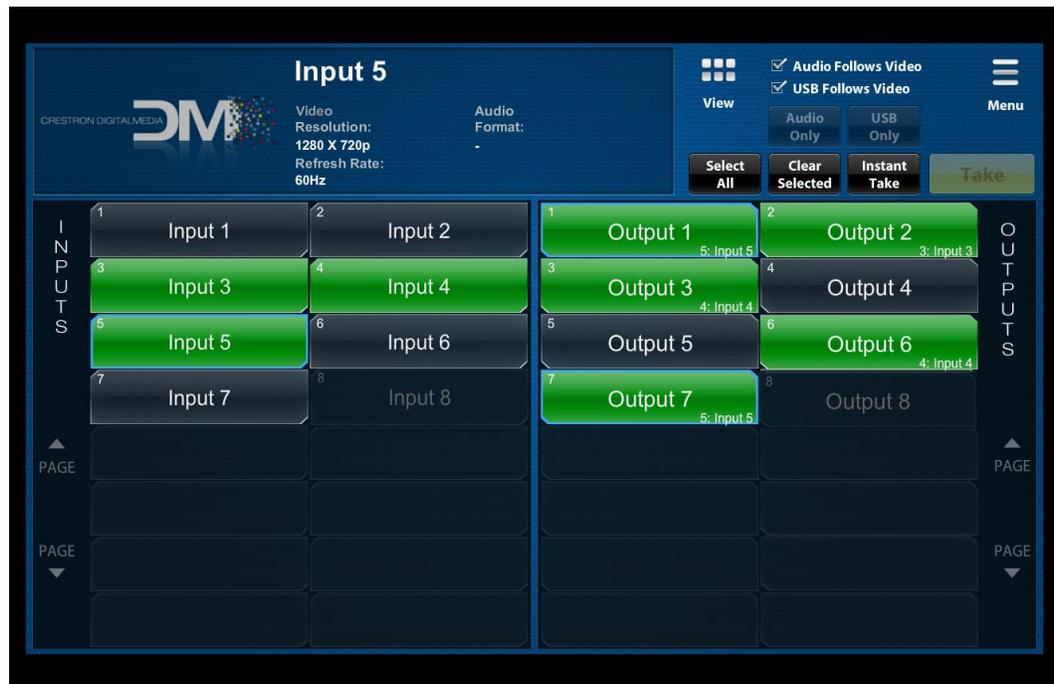
1. On the Selection Menu page, click the **Main** icon.

Selection Menu Page – Main Icon



The Main (routing) page opens.

Main Page – Default View (DM-MD8X8-CPU3 Page Shown)

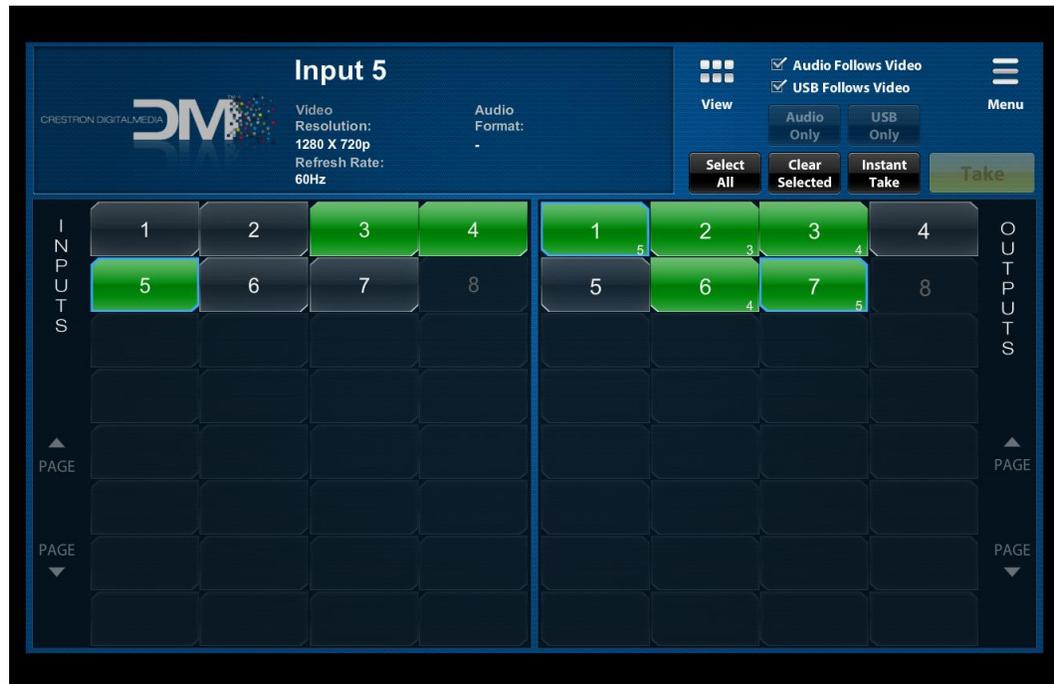


By default, the Main page can display up to 16 inputs and outputs at a time as applicable to a switcher. Input and output numbers, which correspond to the inputs and outputs on the rear of the switcher, are displayed. Input and output names are also displayed. In addition, inputs and outputs that are installed in the chassis but are not connected to source and display devices, respectively, are shaded white. Inputs and outputs that are connected to source and display devices, respectively, are shaded green. Inputs and outputs that are not installed in the chassis are solid blue. (Information about the blue border around an input or output is provided later in this procedure.)

In the sample screen above, Inputs 1, 2, 6, and 7 and outputs 4 and 5 are shaded white indicating that they are installed in the chassis. Inputs 3, 4, and 5 and outputs 1, 2, 3, 6, and 7 are shaded green indicating that they are connected to source and display devices, respectively. Input 8 and Output 8 are solid blue indicating that they are not installed in the chassis.

2. If desired, change the view from the default view to the alternate view by clicking the **View** icon (⊞) in the upper-right section of the page.

Main Page – Alternate View (DM-MD8X8-CPU3 Page Shown)



In the alternate view, up to 32 inputs and outputs can be displayed at one time as applicable to a switcher. Only the input and output numbers are displayed. The input and output names are not displayed. In addition, inputs and outputs that are installed in the chassis but are not connected to source and display devices, respectively, are shaded white. Inputs and outputs that are connected to source and display devices, respectively, are shaded green. Inputs and outputs that are not installed in the chassis are solid blue. (Information about the blue border around an input or output is provided later in this procedure.)

In the sample screen above, Inputs 1, 2, 6, and 7 and outputs 4 and 5 are shaded white indicating that they are installed in the chassis. Inputs 3, 4, and 5 and outputs 1, 2, 3, 6, and 7 are shaded green indicating that they are connected to source and display devices, respectively. Input 8 and Output 8 are solid blue indicating that they are not installed in the chassis.

The **View** icon () functions as a toggle. To return to the default view, click the **View** icon again.

3. If desired, configure audio or USB breakaway for the routes to be set. (By default, **Audio Follows Video** and **USB Follows Video** are enabled.)

NOTE: Either audio breakaway or USB breakaway can be set at one time.

Do either of the following:

- Enable audio breakaway by deselecting the **Audio Follows Video** checkbox, and then select the **Audio Only** button. The button is highlighted in blue.
- Enable USB breakaway by deselecting the **USB Follows Video** checkbox, and then select the **USB Only** button. The button is highlighted in blue.

4. On the Inputs section of the page, select the desired input to be routed and observe the following:
 - A blue border highlights the selected input.
 - The input name, video resolution, refresh rate, and audio format are indicated at the top of the screen.
 - If any outputs are currently routed for the input, a blue border highlights those outputs on the Outputs section of the page and the outputs are shaded green. In addition, the number of the selected input appears in the lower-right corner of the outputs.
5. On the Outputs section of the page, do either of the following:
 - If an input is to be routed to all outputs simultaneously:
 - a. Select the **Select All** button. A flashing blue border highlights all outputs, and the **Take** button flashes.
 - b. Select the **Take** button. The input is routed to the selected outputs simultaneously. A blue border highlights the outputs, and the outputs are shaded green. In addition, the number of the selected input appears in the lower-right corner of the outputs.
 - If an input is to be routed to certain outputs only, select the **Instant Take** button and then select the desired outputs. If required, use the up (▲) or down (▼) button to scroll through the page. The input is routed to an output as soon as the output is selected. A blue border highlights the selected outputs, and the outputs are shaded green. In addition, the number of the selected input appears in the lower-right corner of the outputs.

To clear routes for an input, do either of the following:

- If all of the current routes are to be cleared:
 1. Select the **Clear Selected** button. A flashing red border highlights the selected outputs, and the **Take** button flashes.
 2. Select the **Take** button. The route is cleared for the selected outputs.
- If a route is to be cleared for certain outputs only, select the **Instant Take** button and then select the desired outputs. If required, use the up (▲) or down (▼) button to scroll through the page. A route is cleared as soon as an output is selected.

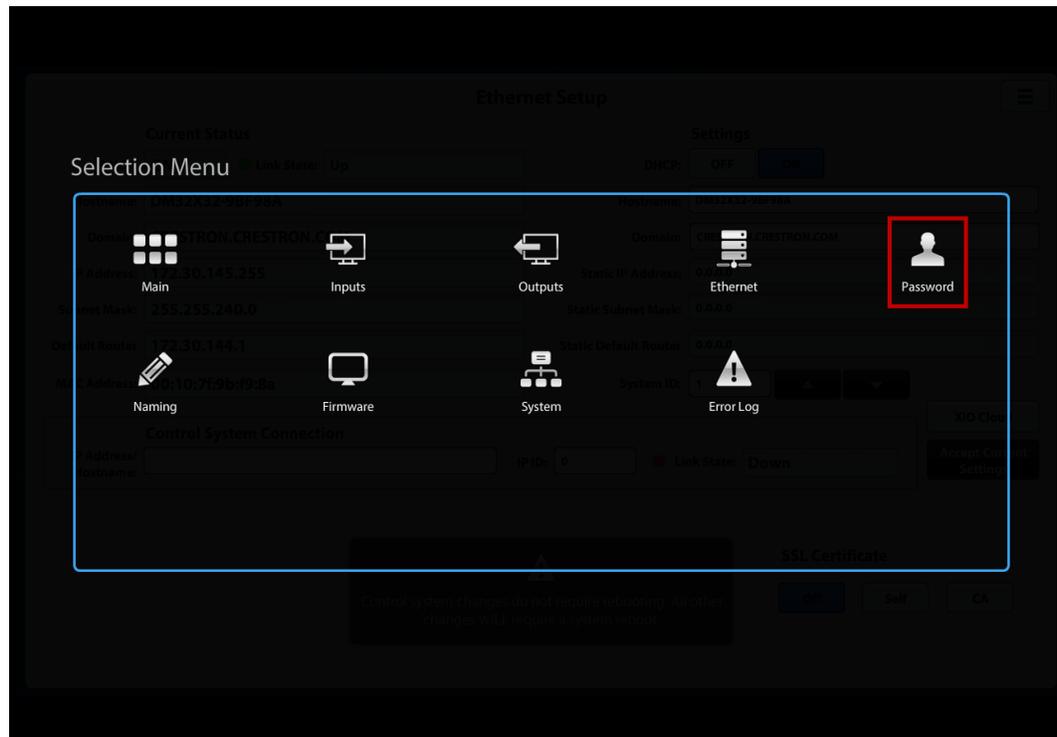
Set or Edit a Password

By default, a password is not required to access the web interface. Set or edit a password to control access to the web interface.

To set or edit a password:

1. On the Selection Menu page, click the **Password** icon.

Selection Menu Page – Password Icon



The Password Setup page opens.

Password Setup Page

2. Do either of the following:
 - If a password is to be used to access all pages except the Main page, click the **Setup Only** button. A lock appears next to the menu icon () on the Main page indicating that access to all other pages requires the use of a password.
 - If the password is to be used to access all pages of the web interface including the Main page, click the **All Controls** button.

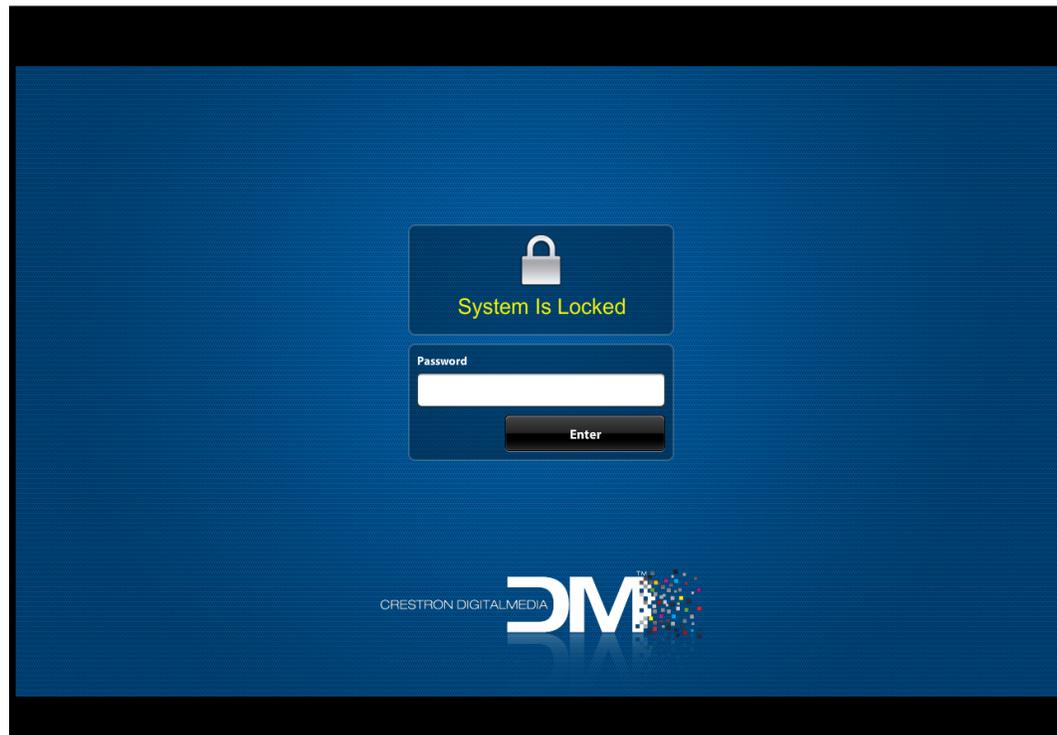
NOTE: Selecting **Disabled** (default setting) does not clear a current password from memory. Selecting **Disabled** only eliminates the need for the password to be entered.

3. Do the following:
 - a. In the **Current Password** text box, enter the current password if one exists; otherwise, omit this step and proceed to step 3b.

NOTE: Although a password may be currently disabled, it is the current password and must be entered in the **Current Password** text box.

 - b. In the **New Password** text box, enter a new password.
 - c. In the **Re-Enter New Password** text box, reenter the password.
4. Click the **Enter** button to save the password. A message appears indicating that the new password is accepted.
5. Click the **Lock Now** button to require the use of the password. The **System Is Locked** dialog box appears.

System Is Locked Dialog Box



6. In the **Password** text box, enter the password and then click **Enter**. The Selection Menu page opens.

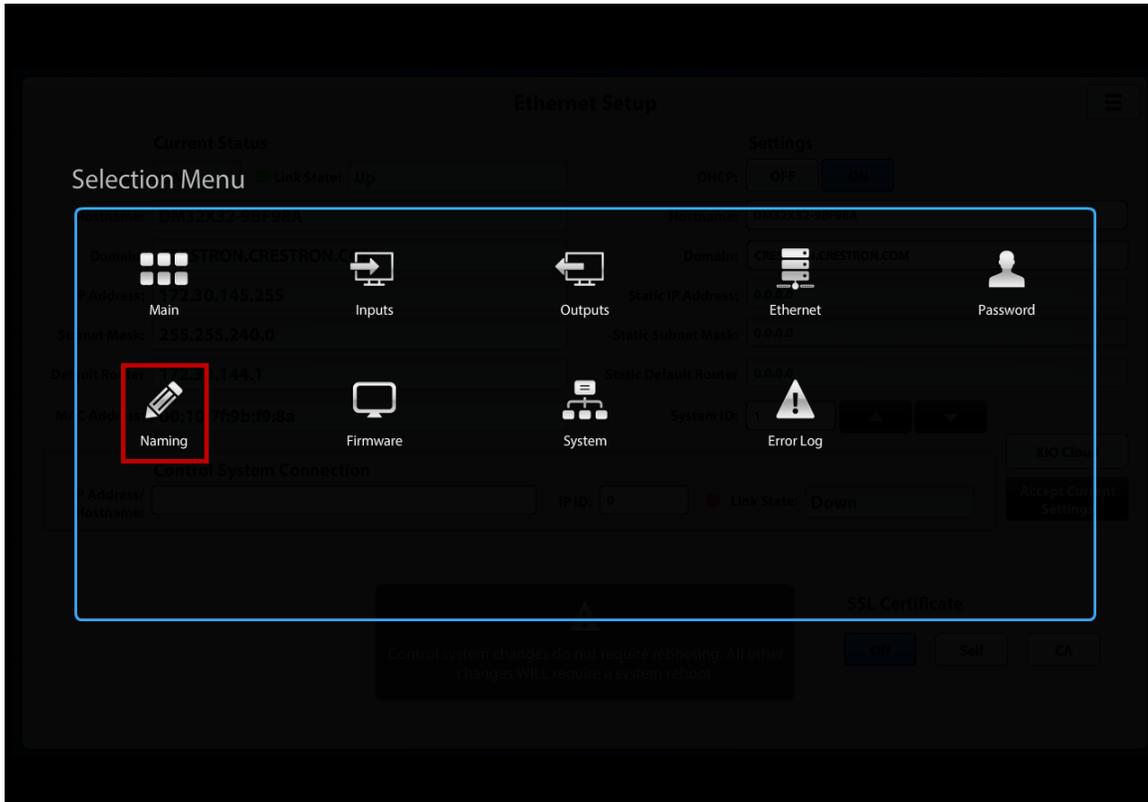
Edit Input and Output Names

Default names are assigned to the inputs and outputs based on input and output numbers. The numbering of inputs and outputs corresponds to the input and output locations on the rear of the switcher. If desired, input and output names can be edited by using the Naming page of the web interface.

To access the Naming page:

On the Selection Menu page, click the **Naming** icon.

Selection Menu Page – Naming Icon



The Naming page opens, allowing input names to be edited.

Naming Page – Edit Input Names (DM-MD8X8-CPU3 Page Shown)

Edit Input Names	
Input 1	Input 2
Input 3	Input 4
Input 5	Input 6
Input 7	Input 8

Current Number

Current Name:

New Name:

Enter

To edit input names:

1. If the Naming – Edit Input Names page is not shown, click the **Inputs** button (default selection).
2. For each input name to be edited:
 - a. Click the input name.

On the right side of the page, the **Current Number** text box (read only) displays the number of the input, and the **Current Name** text box (read only) displays the current name of the input.

- b. In the **New Name** text box, enter the desired new name.
- c. Click the **Enter** button.

To edit output names:

1. On the Naming page, click the **Outputs** button. The Naming – Edit Output Names page opens.

Naming Page – Edit Output Names (DM-MD8X8-CPU3 Page Shown)

The screenshot shows a web interface for editing output names. At the top, there's a 'Naming' header with a menu icon. Below it, there are two tabs: 'Inputs' and 'Outputs', with 'Outputs' being the active tab. The main content area is titled 'Edit Output Names' and features a table with eight rows, each representing an output from 'Output 1' to 'Output 8'. To the right of this table, there are three text input fields: 'Current Number', 'Current Name', and 'New Name'. Below the 'New Name' field is a dark 'Enter' button.

2. For each desired output name to be edited:

- a. Click the output name.

On the right side of the page, the **Current Number** text box (read only) displays the number of the output, and the **Current Name** text box (read only) displays the current name of the output.

- b. In the **New Name** text box, enter the desired new name.
- c. Click the **Enter** button.

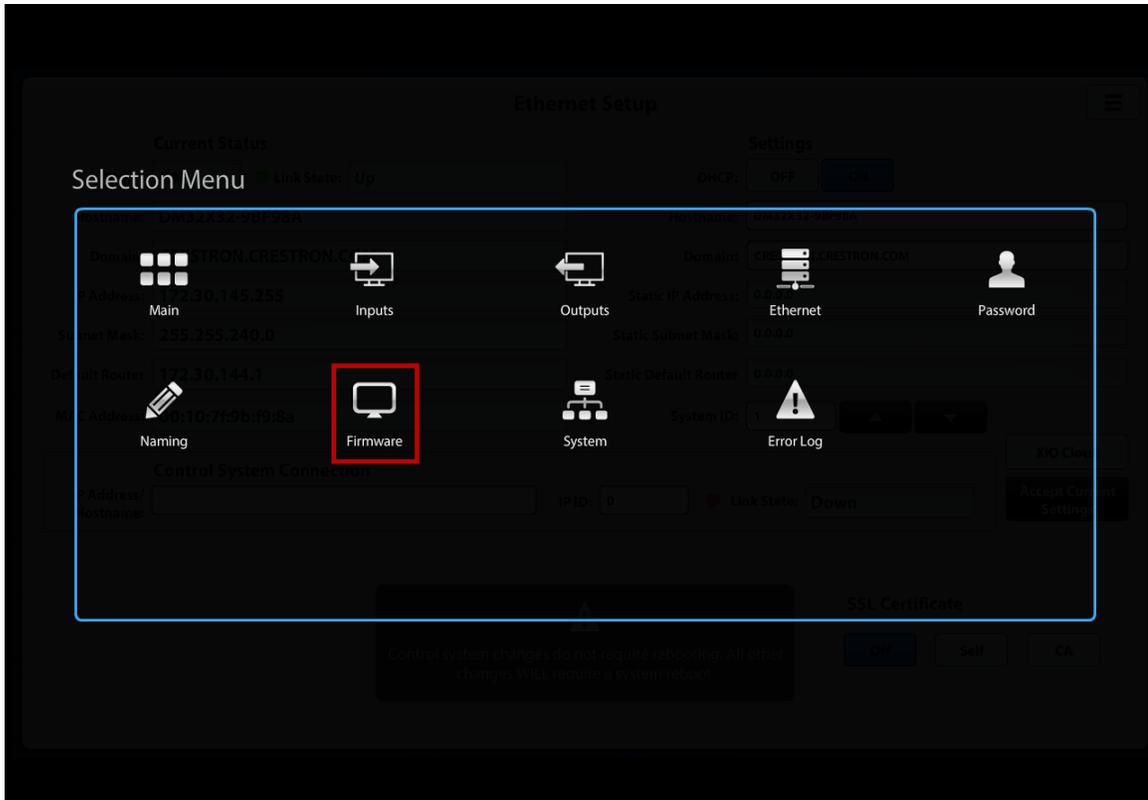
View or Update Firmware Versions

View or update firmware versions of the DigitalMedia system components (for example, DMC cards) on the Firmware Setup page.

To access the Firmware Setup page:

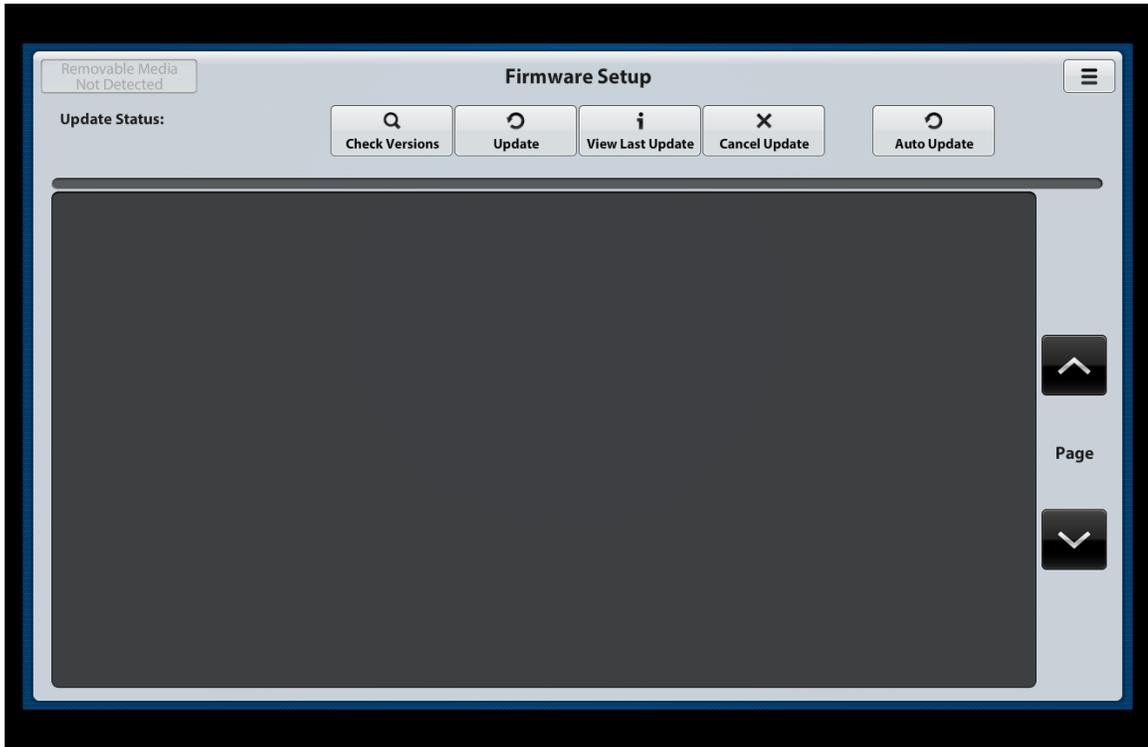
On the Selection Menu page, click the **Firmware** icon.

Selection Menu Page – Firmware Icon



The Firmware Setup page opens.

Firmware Setup Page



View Versions of System Components

To view the firmware versions of the DigitalMedia system components:

On the Firmware Setup page, click the **Check Versions** button.

A list of DigitalMedia system components and corresponding information appears, including the current firmware version of each component (CUR VER) and the firmware version of the Package Update File (PUF VER) that is loaded. The WILL UPDATE? column indicates which components will be updated (**YES** or **NO**) if the **Update** button is pressed.

Sample Firmware Setup Page – Check Versions

The screenshot shows the 'Firmware Setup' interface. At the top left, it says 'Removable Media Not Detected'. The 'Update Status' is 'Idle'. There are five buttons: 'Check Versions', 'Update', 'View Last Update', 'Cancel Update', and 'Auto Update'. The main content area displays a terminal-style log of the update process, including a table of components.

```

Command running. Please wait...
Parsing REPORTDM.
Checking current versions...
Planning updates...
Scan complete.
PUSHUPDATE plan follows:
Report Timestamp: 2:17:07 PM 12/5/2019
|---|---|---|---|---|---|
|SLOT|HOST IP|ITEM|CUR VER|PUF VER|WILL UPDATE?|
|---|---|---|---|---|---|
10|169.254.0.1|DM-MD8X8-CPU3-RPS Bootloader|3.4.0|3.4.0|NO|
10|169.254.0.1|DM-MD8X8-CPU3-RPS Updater|2.0.5|2.0.5|NO|
10|169.254.0.1|DM-MD8X8-CPU3-RPS Golden|1.601.3948.26754|1.601.3948.26754|NO|
168|169.254.0.98|DMC-CPU3-FPANEL App|2.2.26|2.2.26|NO|
168|169.254.0.98|DMC-CPU3-FPANEL VTP|1.0.115|1.0.115|NO|
11|169.254.0.2|DMC-4KZ-C-DSP App|1.3991.64|1.3991.64|NO|
12|169.254.0.3|DMC-4K-HD-DSP App|1.2911.108|1.2911.108|NO|
12|169.254.0.3|DMC-4K-HD-DSP DSP|5.5.0|5.5.0|NO|
13|169.254.0.4|DMC-4KZ-HD-DSP App|1.3991.63|1.3991.63|NO|
13|169.254.0.4|DMC-4KZ-HD-DSP DSP|5.5.0|5.5.0|NO|
  
```

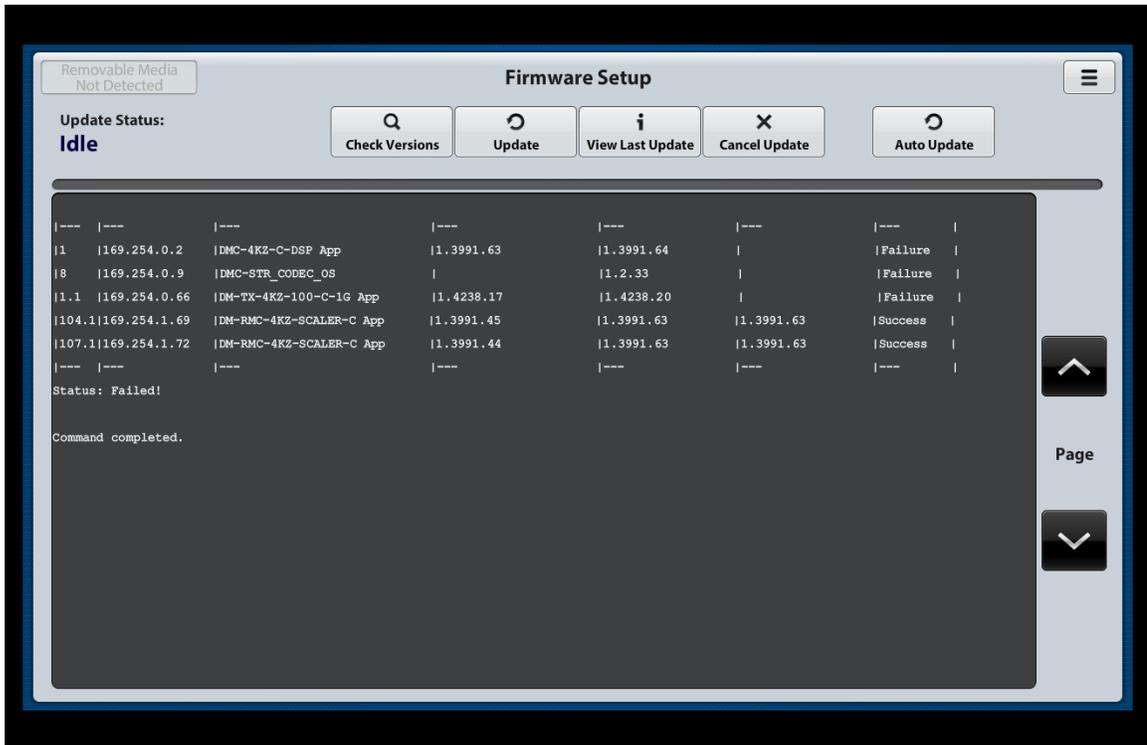
To view the entire contents of the page, use the up (⬆) and down (⬇) buttons on the right side of the page.

View Last Firmware Updates

To view the last firmware updates:

On the Firmware Setup page, click the **View Last Update** button.

Sample Firmware Setup Page – View Last Update



A list of DigitalMedia system components that were last updated appears and indicates the status of the updates (**Success** or **Failure**).

To view the entire contents of the page, use the up (⬆️) and down (⬇️) buttons on the right side of the page.

Update Firmware Manually

Update firmware manually by using an FTP client or a USB flash drive. The following sections provide instructions for each firmware update method.

Update Firmware Using an FTP Client

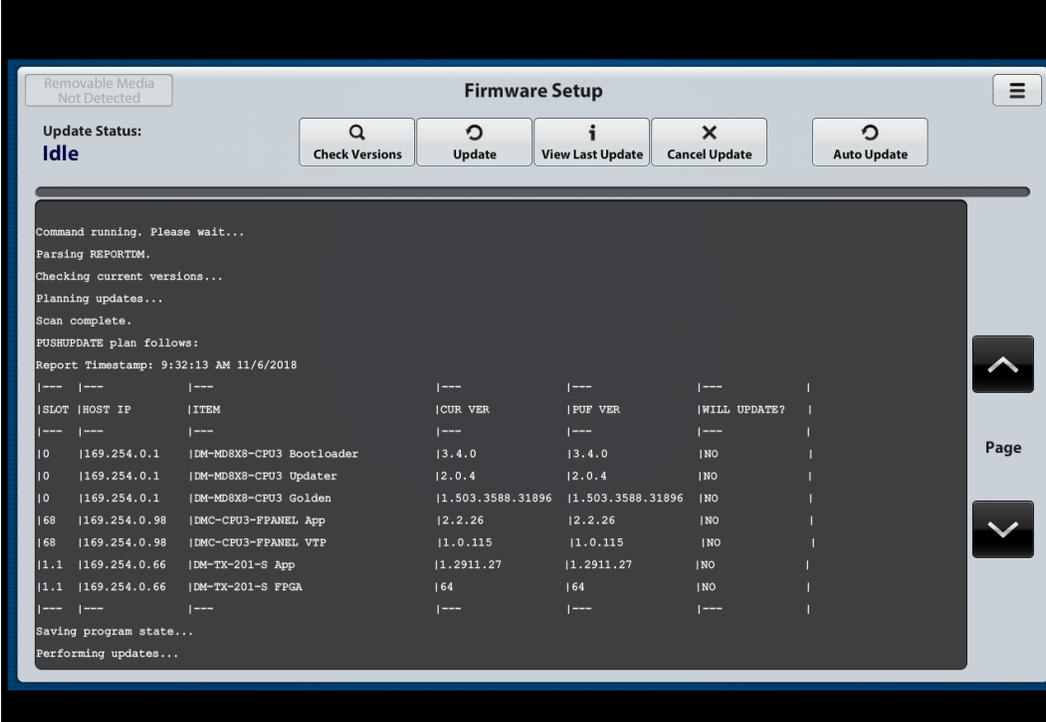
To update firmware using an FTP client:

1. If a USB flash drive is inserted into the USB port on the DMC-CPU3 card, remove the flash drive.
2. Download the latest firmware file from the Crestron website to a computer. The firmware file is named **digitalmedia_x.xx.xx.puf** (x.xx.xx represents the version number), for example, **digitalmedia_3.02.10.puf**.
3. Using the FTP client, connect to the DM® switcher by entering the IP address of the switcher.
4. Locate the FIRMWARE folder.
5. Upload the firmware file to the FIRMWARE folder.
6. On the Firmware Setup page of the web interface, click the **Update** button. The firmware update process begins.

NOTE: The update process can be canceled by clicking the **Cancel Update** button.

A list of DigitalMedia system components and corresponding information appears.

Sample Firmware Setup Page – Update Using FTP Client



The screenshot displays the 'Firmware Setup' web interface. At the top, it shows 'Removable Media Not Detected' and the title 'Firmware Setup'. Below the title are several control buttons: 'Check Versions', 'Update', 'View Last Update', 'Cancel Update', and 'Auto Update'. The main content area shows a terminal window with the following text:

```
Command running. Please wait...
Parsing REPORTM.
Checking current versions...
Planning updates...
Scan complete.
PUSHUPDATE plan follows:
Report Timestamp: 9:32:13 AM 11/6/2018
```

SLOT	HOST IP	ITEM	CUR VER	PUP VER	WILL UPDATE?
0	169.254.0.1	DM-MD8X8-CPU3 Bootloader	3.4.0	3.4.0	NO
0	169.254.0.1	DM-MD8X8-CPU3 Updater	2.0.4	2.0.4	NO
0	169.254.0.1	DM-MD8X8-CPU3 Golden	1.503.3588.31896	1.503.3588.31896	NO
68	169.254.0.98	DMC-CPU3-PPANEL App	2.2.26	2.2.26	NO
68	169.254.0.98	DMC-CPU3-PPANEL VTP	1.0.115	1.0.115	NO
1.1	169.254.0.66	DM-TX-201-S App	1.2911.27	1.2911.27	NO
1.1	169.254.0.66	DM-TX-201-S FPGA	64	64	NO

The terminal window continues with 'Saving program state...' and 'Performing updates...'. On the right side of the terminal window, there are 'Page' navigation arrows.

To view the entire contents of the page, use the up (▲) and down (▼) buttons on the right side of the page.

Update Firmware Using a USB Flash Drive

To update firmware using a USB flash drive:

1. Insert a USB flash drive into the USB port of a computer.
2. Download the latest firmware file from the Crestron website to the root directory on the flash drive—do not download the file to a subfolder on the flash drive. The firmware file is named **digitalmedia_x.xx.xx.puf** (x.xx.xx represents the version number), for example, **digitalmedia_3.02.10.puf**.
3. Remove the USB flash drive from the computer, and then insert the flash drive into the USB port of the DMC-CPU3 card.
4. On the Firmware Setup page of the web interface, click the **Update** button. The firmware update process begins.

NOTES:

- The message “Removable Media Detected” appears in red in the upper-left corner of the page. The message indicates that a USB flash drive is inserted into the USB port of the DMC-CPU3 card.
- The update process can be canceled by clicking the **Cancel Update** button.

A list of DigitalMedia system components and corresponding information appears.

Sample Firmware Setup Page – Update Using a USB Flash Drive

The screenshot shows the 'Firmware Setup' page with a 'Removable Media Detected' notification in the top left. The 'Update Status' is 'Idle'. There are buttons for 'Check Versions', 'Update', 'View Last Update', 'Cancel Update', and 'Auto Update'. A table lists system components with columns for Slot, Host IP, Item, Current Version, PUF Version, and Will Update?.

SLOT	HOST IP	ITEM	CUR VER	PUF VER	WILL UPDATE?
10	169.254.4.1	DM-MD8X8-CPU3 Bootloader	3.4.0	3.4.0	NO
10	169.254.4.1	DM-MD8X8-CPU3 Updater	2.0.4	2.0.4	NO
10	169.254.4.1	DM-MD8X8-CPU3 Golden	1.503.3588.31896	1.503.3588.31896	NO
68	169.254.4.98	DMC-CPU3-FPANEL App	2.2.26	2.2.26	NO
68	169.254.4.98	DMC-CPU3-FPANEL VTP	1.0.115	1.0.115	NO
11	169.254.4.2	DMC-S-DSP App	1.2911.57	1.2911.57	NO
11	169.254.4.2	DMC-S-DSP DSP	3.4.5	3.4.5	NO
11	169.254.4.2	DMC-S-DSP FPGA	3	3	NO
12	169.254.4.3	DMC-S-DSP App	1.2911.57	1.2911.57	NO
12	169.254.4.3	DMC-S-DSP DSP	3.4.5	3.4.5	NO
12	169.254.4.3	DMC-S-DSP FPGA	3	3	NO
107	169.254.4.40	DMC-STRO App	1.2911.43	1.2911.43	NO
107	169.254.4.40	DMC-STRO SCALER	3	3	NO
107	169.254.4.40	DMC-STRO CODEC	1.1.0	1.1.0	NO
1.1	169.254.4.66	DM-TX-201-S App	1.2911.27	1.2911.27	NO
1.1	169.254.4.66	DM-TX-201-S FPGA	64	64	NO

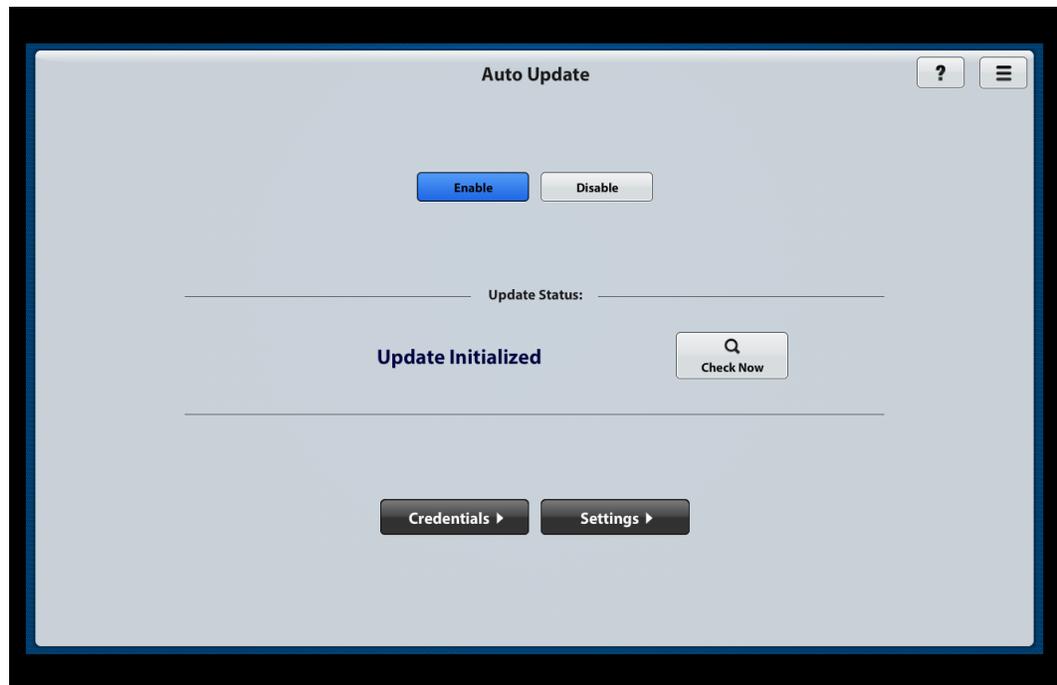
To view the entire contents of the page, use the up (▲) and down (▼) buttons on the right side of the page.

Update Firmware Automatically

Automatic firmware update can be enabled or disabled. To update firmware automatically:

1. On the Firmware Setup page, click the **Auto Update** button. The Auto Update page opens.

Auto Update Page



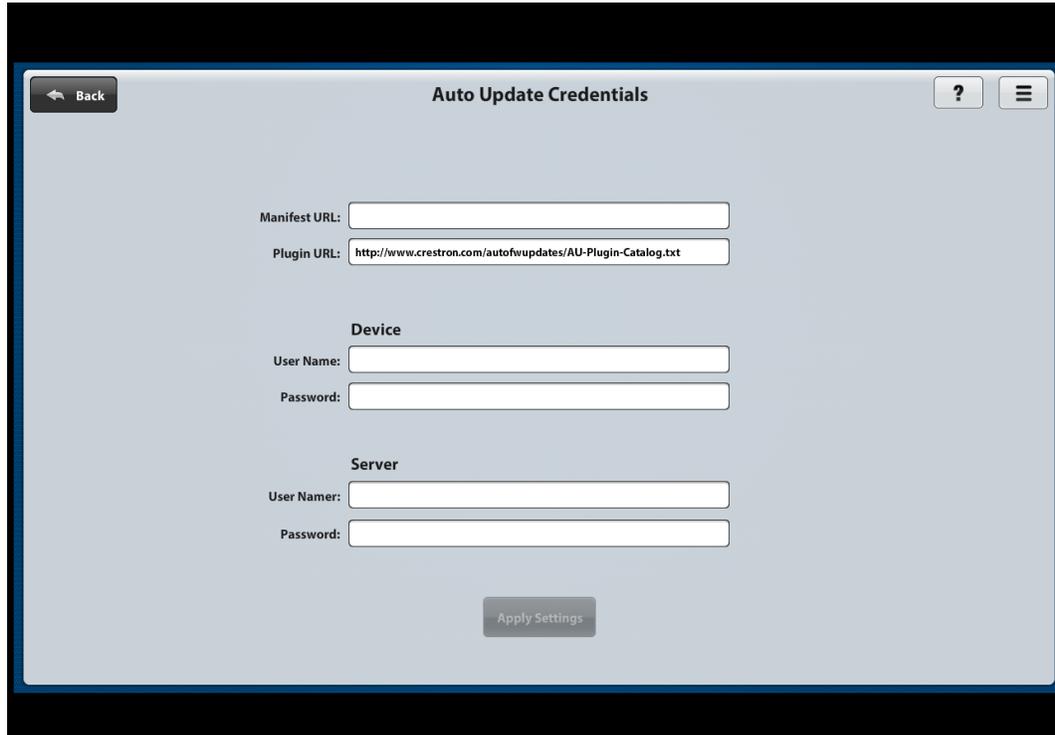
2. Click the **Enable** button if it is not already selected. (By default, the **Enable** button is selected.)
3. Continue with the following sections to set Auto Update credentials and Auto Update settings.

Set Auto Update Credentials

To set Auto Update credentials:

1. On the Auto Update page, click the **Credentials** button at the bottom of the page. The Auto Update Credentials page opens.

Auto Update Credentials Page



The screenshot shows a web interface titled "Auto Update Credentials". At the top left is a "Back" button. The main content area contains the following fields:

- Manifest URL:** An empty text input field.
- Plugin URL:** A text input field containing the URL `http://www.crestron.com/autofwupdates/AU-Plugin-Catalog.txt`.
- Device:** A section header followed by:
 - User Name:** An empty text input field.
 - Password:** An empty text input field.
- Server:** A section header followed by:
 - User Name:** An empty text input field.
 - Password:** An empty text input field.

At the bottom center of the form is a button labeled "Apply Settings".

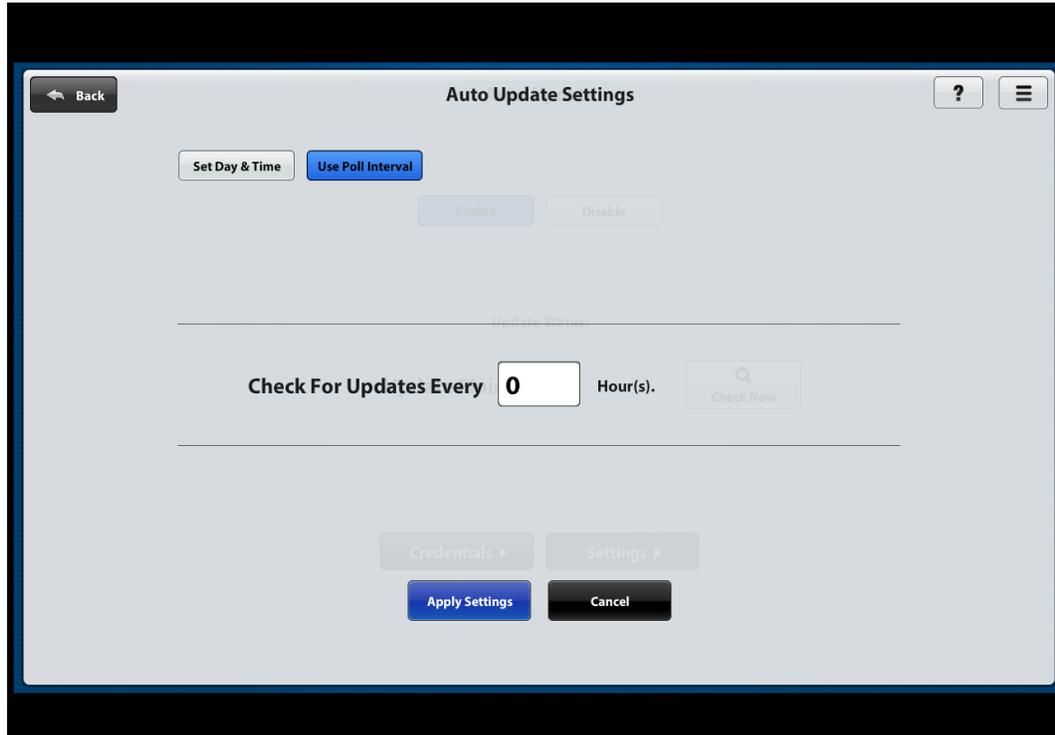
2. On the Auto Update Credentials page:
 - a. Enter the following information:
 - **Manifest URL:** Specifies the URL of the manifest file
 - **Plugin URL:** Specifies the URL of the plug-in file. It is recommended that the default plug-in URL not be changed.
 - **Device User Name and Password:** Enter the user name and password of the switcher if authentication was enabled in the Crestron Toolbox software.
 - **Server User Name and Password:** Enter the user name and password of the server that stores the PUF and manifest files for the switcher.
 - b. Click the **Apply Settings** button.
 - c. Click the **Back** button in the upper-left corner of the page to return to the Auto Update page, and then continue with "Configure Auto Update Settings" on the following page.

Configure Auto Update Settings

To configure Auto Update settings:

1. On the Auto Update page, click the **Settings** button at the bottom of the page. The Auto Update Settings page opens. By default, **Use Poll Interval** is selected.

Auto Update Settings – Use Poll Interval Page



2. Do either of the following:
 - Use an automatic polling interval to update the firmware. Refer to “Use Automatic Polling Interval” below for instructions.
 - Set a specific day and time for the firmware to be updated. Refer to “Set Day and Time” on page 42 for instructions.

Use Automatic Polling Interval

To set an automatic polling interval to update the firmware:

1. On the Auto Update Settings page, select the **Use Poll Interval** button if it is not already selected.
2. Set the automatic polling interval by entering the desired value in the **Check for Updates Every Hour(s)** text box.
3. Click the **Apply Settings** button.
4. Click the **Back** button in the upper-left corner of the page to return to the Auto Update page.

5. Check the status of the update. Refer to "Check Update Status" on page 43 for instructions.

Set Day and Time

To set a specific day and time to update the firmware:

1. On the Auto Update Settings page, select the **Set Day & Time** button.

The Auto Update Settings - Set Day & Time page opens.

Auto Update Settings – Set Day & Time Page

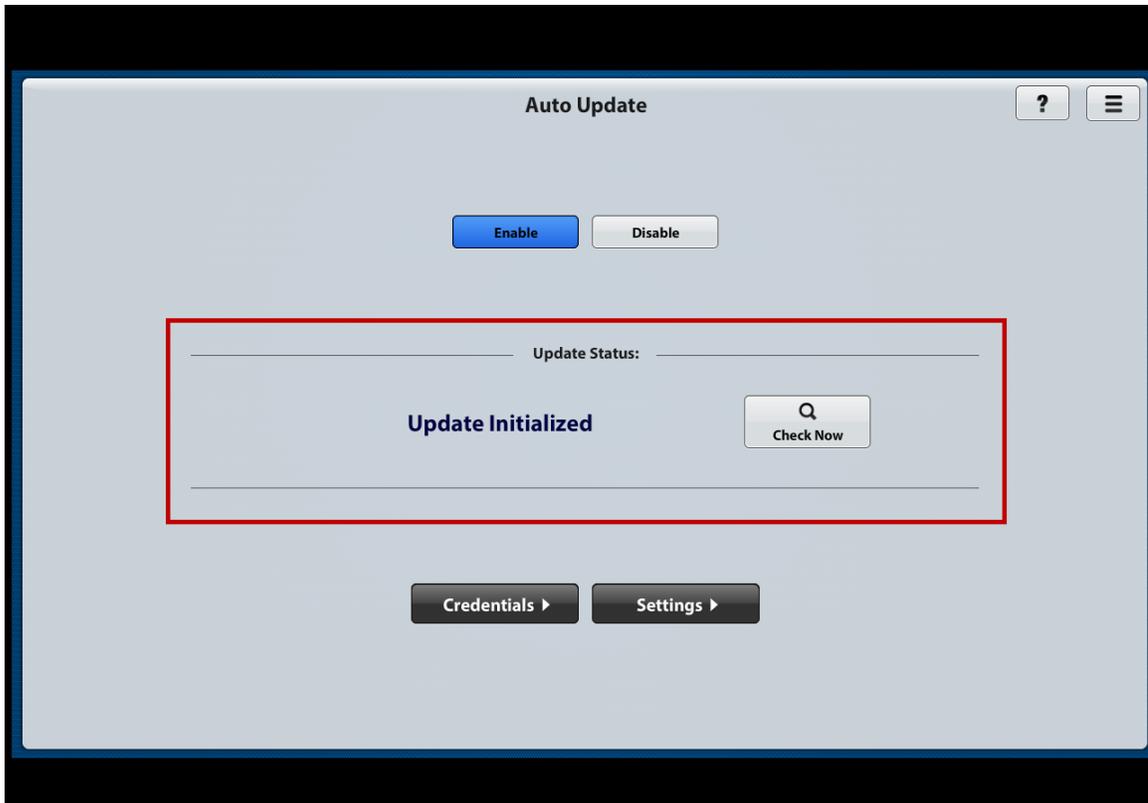
The screenshot shows the 'Auto Update Settings' interface. At the top left is a 'Back' button. The main title is 'Auto Update Settings'. Below the title are two buttons: 'Set Day & Time' (highlighted in blue) and 'Use Poll Interval'. Underneath are 'Enable' and 'Disable' buttons. A row of radio buttons for days of the week (SUN, MON, TUE, WED, THU, FRI, SAT) and an 'Every Day' button are visible. Below this is a section for 'Update Status' with a 'Use 24 Hour Format' label and two text boxes for 'Update' (00) and ': 00'. A 'Check Now' button is also present. At the bottom are 'Credentials' and 'Settings' buttons with right-pointing arrows, and 'Apply Settings' (blue) and 'Cancel' (black) buttons.

2. Set the desired day (**SUN, MON, TUE, WED, THU, FRI, or SAT**) by clicking the appropriate radio button, or click **Every Day**.
3. Set the time using 24-hour format in the hour and minute text boxes.
4. Click the **Apply Settings** button.
5. Click the **Back** button in the upper-left corner of the page to return to the Auto Update page.
6. Check the status of the update. Refer to "Check Update Status" on the following page for instructions.

Check Update Status

To check the status of the automatic update process, click the **Check Now** button on the Auto Update page.

Auto Update Page – Update Status



The Update Status section indicates the status as any of the following:

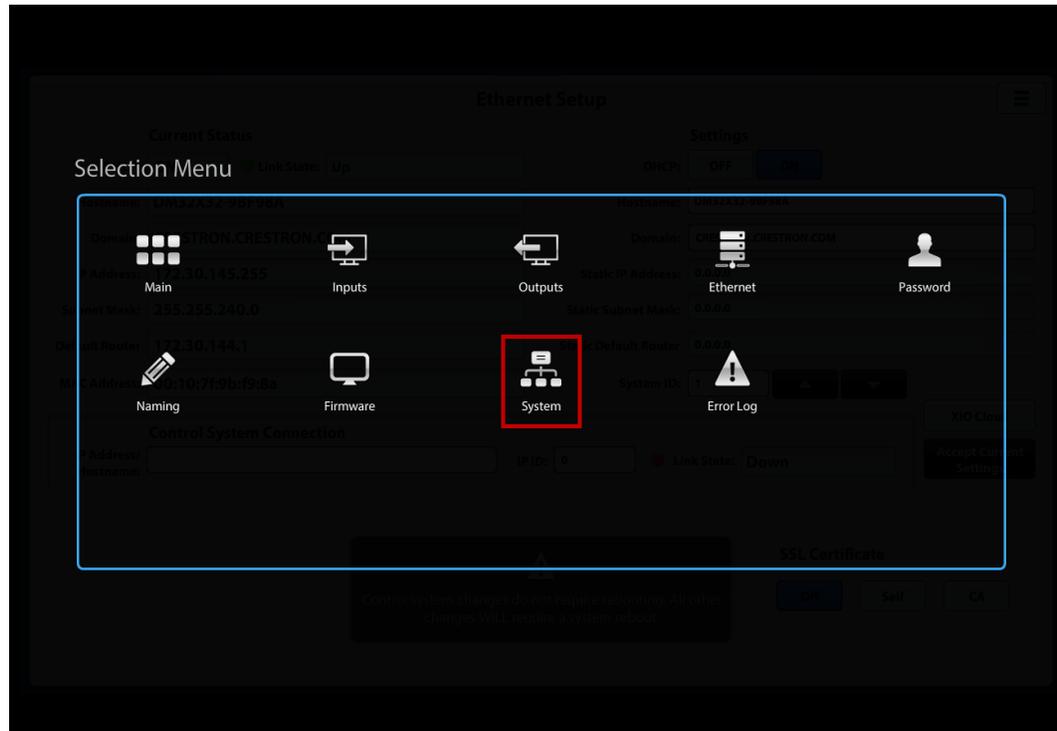
- Update Initialized
- Update Started
- Update Downloading Plugins
- Update Running
- Update Finished

Reboot the System

To reboot the system:

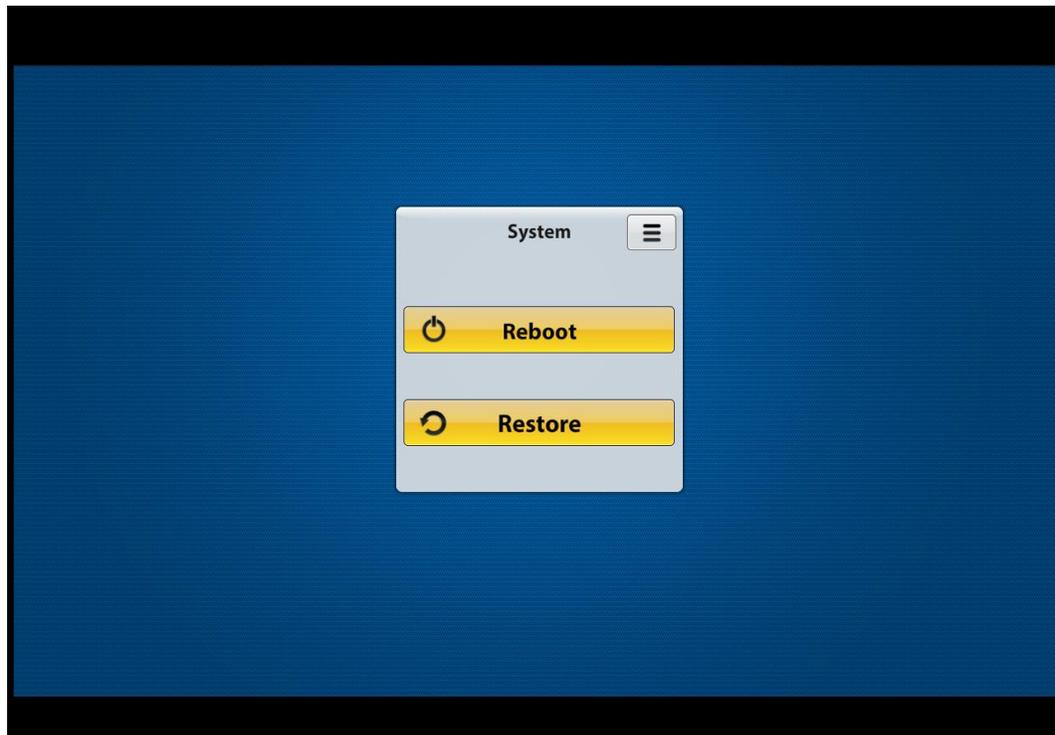
1. On the Selection Menu page, click the **System** icon.

Selection Menu Page – System Icon



The System page opens.

System Page



2. Click the **Reboot** button. A dialog box appears asking for confirmation that the system be rebooted.

Reboot Confirmation Dialog Box



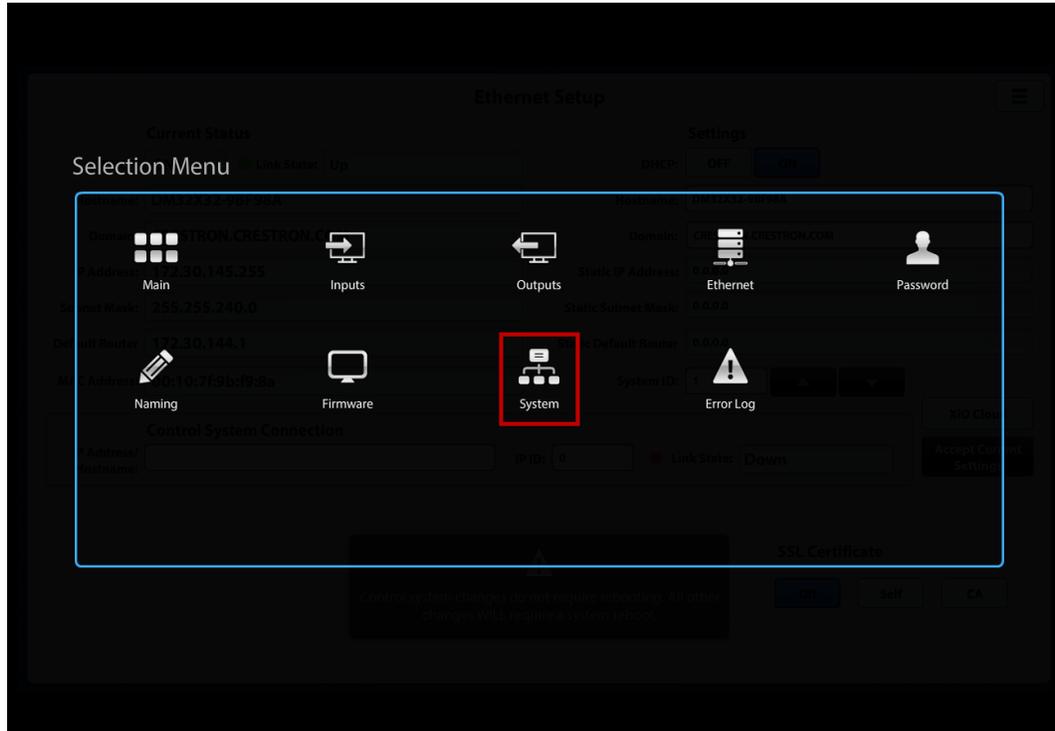
3. Click **YES**. A message appears indicating that the system is rebooting.

Restore Factory Default Settings

To restore factory default settings:

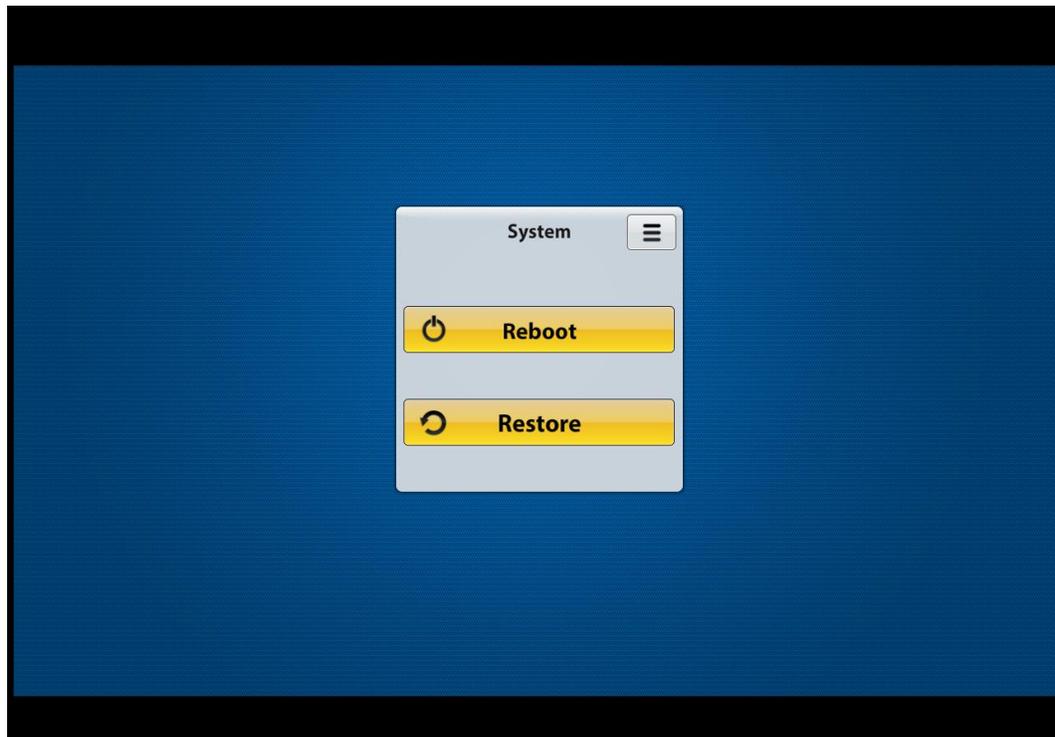
1. On the Selection Menu page, click the **System** icon.

Selection Menu Page – System Icon



The System page opens.

System Page



2. Click the **Restore** button. A dialog box appears asking for confirmation that the factory default settings be restored.

Restore Confirmation Dialog Box



3. Click **YES**. A message appears indicating that the system is rebooting.

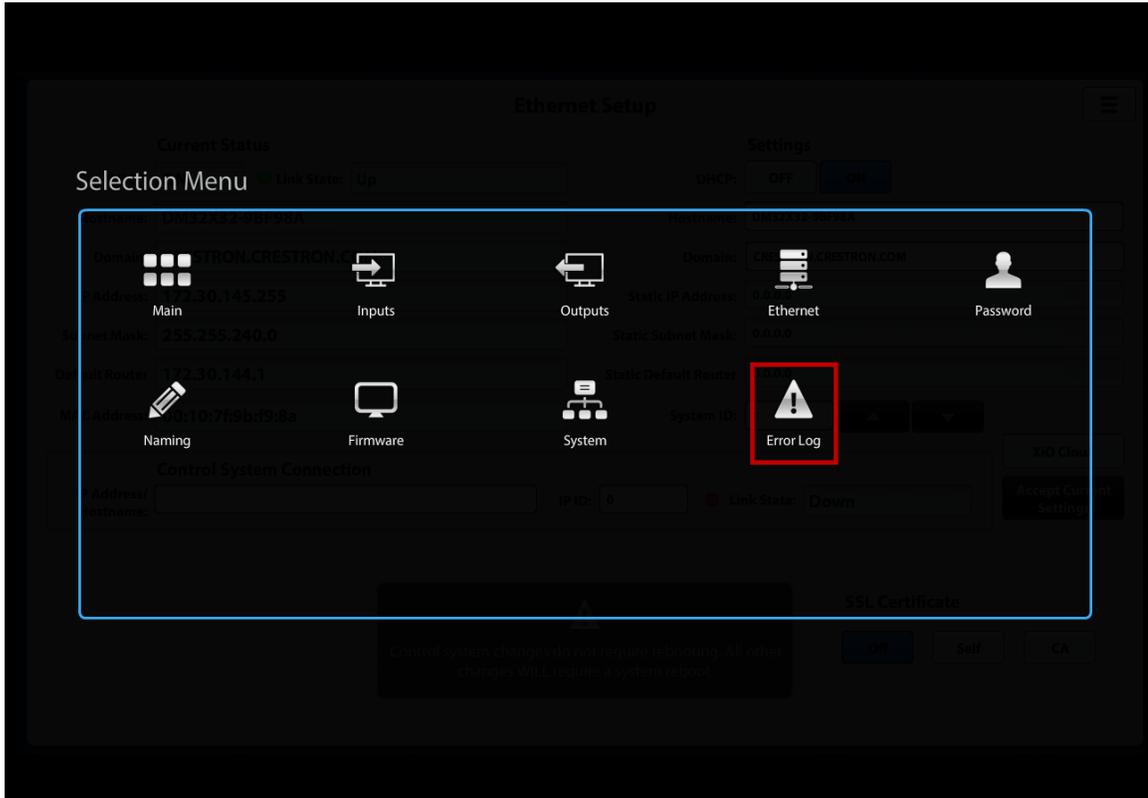
View the Error Log

For troubleshooting purposes, view the error log.

To view the error log:

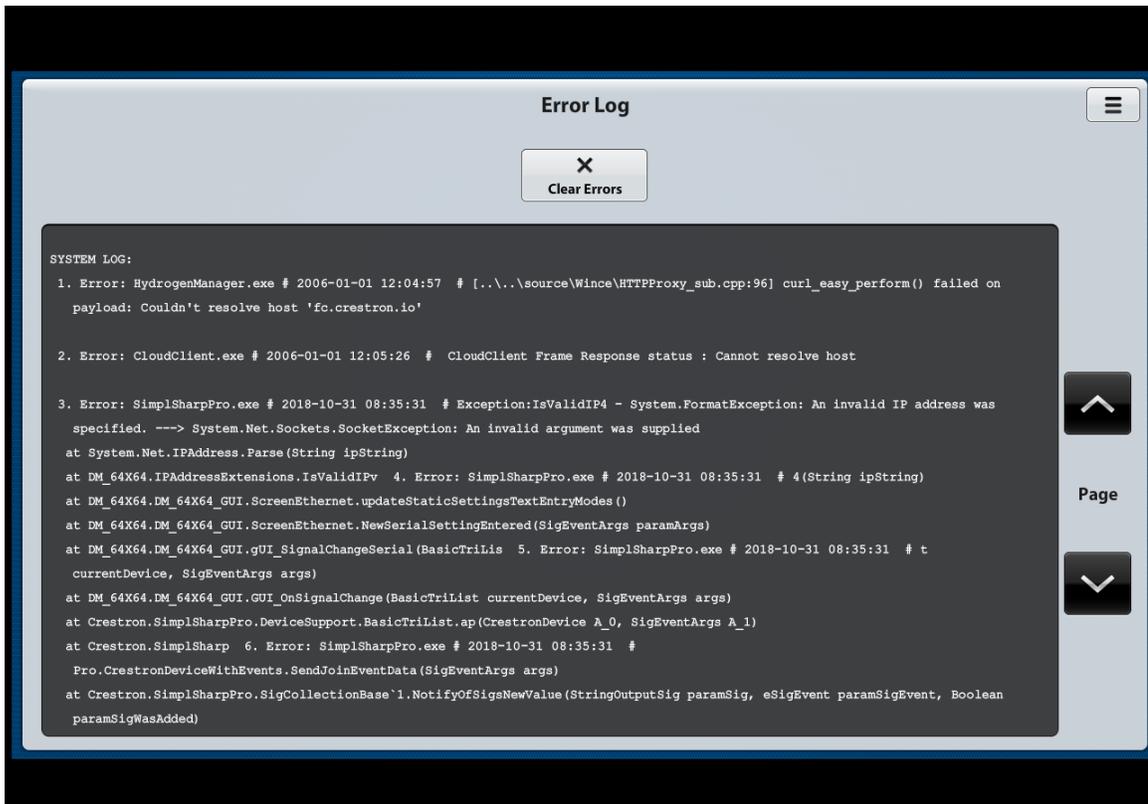
On the Selection Menu page, click the **Error Log** icon.

Selection Menu Page – Error Log



The error log appears.

Sample Error Log



The screenshot shows a window titled "Error Log" with a "Clear Errors" button at the top. The log content is as follows:

```
SYSTEM LOG:
1. Error: HydrogenManager.exe # 2006-01-01 12:04:57 # [..\..\source\Wince\HTTPProxy_sub.cpp:96] curl_easy_perform() failed on
  payload: Couldn't resolve host 'fc.crestron.io'

2. Error: CloudClient.exe # 2006-01-01 12:05:26 # CloudClient Frame Response status : Cannot resolve host

3. Error: SimplSharpPro.exe # 2018-10-31 08:35:31 # Exception:IsValidIP4 - System.FormatException: An invalid IP address was
  specified. --> System.Net.Sockets.SocketException: An invalid argument was supplied
  at System.Net.IPAddress.Parse(String ipString)
  at DM_64X64.IPAddressExtensions.IsValidIPv 4. Error: SimplSharpPro.exe # 2018-10-31 08:35:31 # 4(String ipString)
  at DM_64X64.DM_64X64_GUI.ScreenEthernet.updateStaticSettingsTextEntryModes ()
  at DM_64X64.DM_64X64_GUI.ScreenEthernet.NewSerialSettingEntered(SigEventArgs paramArgs)
  at DM_64X64.DM_64X64_GUI.SignalChangeSerial(BasicTriLis 5. Error: SimplSharpPro.exe # 2018-10-31 08:35:31 # t
  currentDevice, SigEventArgs args)
  at DM_64X64.DM_64X64_GUI.GUI_OnSignalChange(BasicTriList currentDevice, SigEventArgs args)
  at Crestron.SimplSharpPro.DeviceSupport.BasicTriList.ap(CrestronDevice A_0, SigEventArgs A_1)
  at Crestron.SimplSharp 6. Error: SimplSharpPro.exe # 2018-10-31 08:35:31 #
  Pro.CrestronDeviceWithEvents.SendJoinEventData(SigEventArgs args)
  at Crestron.SimplSharpPro.SigCollectionBase`1.NotifyOfSigsNewValue(StringOutputSig paramSig, eSigEvent paramSigEvent, Boolean
  paramSigWasAdded)
```

If necessary, use the up (⬆) and down (⬇) buttons to view the entire contents of the error log.

To clear the error log, click the **Clear Errors** button at the top of the page.

Using the Front Panel LCD

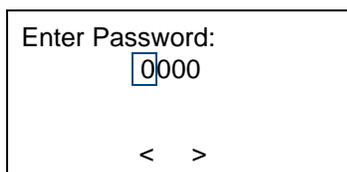
The front panel LCD provides the Installer Tools menu, which consists of the following menu items:

- Inputs
- Outputs
- Network Setup
- Control Setup

Access the Installer Tools Menu

To access the Installer Tools menu:

1. Press the **MENU** button. The Enter Password prompt appears on the LCD.



2. Using the selection knob, enter each digit in the password. If the password contains digits greater than 0 and less than 9, **IN 1-8** buttons can also be used to enter the digits.

When using the selection knob, press the > soft button to move the cursor to the right after entering a digit. To move the cursor to the left (if necessary), press the < soft button.

The default password is **1234**.

3. Press the **ENTER** button. The password is saved, and the Installer Tools menu appears on the LCD.

NOTE: The password can be changed by following the **Control Setup > Password** menu path.

Navigate the Installer Tools Menu

To navigate the Installer Tools menu:

- To navigate upward or downward in a menu, use the selection knob.
- To move the cursor to the right when entering data, press the **>** soft button.
- To move the cursor to the left when entering data, press the **<** soft button.
- To select an item in a menu or to apply a new setting, press the **ENTER** button.
- To go back to the previous level in a menu, press the **MENU** button.
- To select an item in a series of items displayed horizontally on the LCD, press the soft button under the desired item.
- To enter digits or uppercase and lowercase letters, turn the selection knob clockwise or counterclockwise as applicable until the desired character is displayed.

To exit the Installer Tools menu, press the **MENU** button until the Exit Confirmation screen appears. Press the **YES** soft button to exit the menu.

Using the Routing Push Buttons

This section provides information about the push buttons that can be used to route an input to one or more outputs. The audio, video, and USB portions of a signal can be routed simultaneously or separately.

NOTES:

- If the front panel is locked, pressing the routing push buttons has no effect and the corresponding LEDs do not light. (The front panel can be locked or unlocked by following the **Control Setup > Front Panel Lock** menu path.)
 - As discussed in the "Route Inputs to Outputs" section on page 23, the Main page of the web interface can also be used to route an input to one or more outputs.
-

To route an input to one or more outputs:

1. Press the **ROUTE** push button. The ROUTE LED lights. By default, the AUDIO, VIDEO, and USB LEDs also light, indicating the signal types that are to be routed.
2. If desired, deselect the signal types that are not to be routed by pressing the **AUDIO**, **VIDEO**, and **USB** push buttons as appropriate. (Pressing the **AUDIO**, **VIDEO**, and **USB** push buttons successively functions as a toggle to select or deselect the signal types.)

NOTE: When audio is routed separately, the signal is 2-channel audio.

3. Press the appropriate **IN** button that corresponds to the input to be routed. The LED of the selected input lights. In addition, the LEDs of the outputs to which the input is currently routed also light.

4. If desired, deselect the outputs to which the input is currently routed by pressing the corresponding **OUT** buttons. The LEDs of the corresponding outputs go off.
5. Press the appropriate **OUT** buttons that correspond to the desired outputs. The LEDs of the selected outputs light.
6. Press the **ENTER** button to route the input. The LCD shows the input number and the outputs to which the input is routed.

To disconnect an input from an output:

1. Press the **ROUTE** push button. The ROUTE LED lights.
2. Press the desired **OUT** button.
3. Press the **ENTER** button. The output is disconnected from the input.

Viewing Routing Information

Routing information for inputs and outputs can be viewed on the LCD.

View Input Routing Information

To view routing information for inputs:

1. Press the **VIEW** push button. The VIEW LED lights.
2. Press the desired **IN** button to view the outputs to which the input is routed.
3. Press the **AUDIO**, **VIDEO**, and **USB** push buttons as desired to view the routing of audio, video, or USB portions of an input signal.

View Output Routing Information

To view routing information for outputs:

1. Press the **VIEW** push button. The VIEW LED lights.
2. Press the desired **OUT** button to view the input that is routed to the output. The LEDs of all outputs that are receiving the same input signal also light.
3. Press the **AUDIO**, **VIDEO**, and **USB** push buttons as desired to view the input that is providing the audio, video, or USB portion of the output signal.

Viewing Signal Information

Information about input and output signals can be viewed on the LCD. Depending on the input selected, information such as the name of the input, the detected resolution, the detected video type, the detected frame rate, the detected aspect ratio, the HDCP state, and the deep color setting can be viewed.

View Input Signal Information

To view information about an input signal:

1. Press the **INFO** push button. The INFO LED lights.
2. Press the desired **IN** button to view information about the input signal. The IN LED lights.
3. Turn the selection knob to view the available information.

View Output Signal Information

To view information about an output signal:

1. Press the **INFO** push button. The INFO LED lights.
2. Press the desired **OUT** button to view information about the output signal. The OUT LED lights.
3. Turn the selection knob to view the available information.

Appendix: DMC Series Cards

DMC Series cards for the DM-MD8X8-CPU3, DM-MD16X16-CPU3, and DM-MD32X32-CPU3 and related redundant power supply models consist of the following:

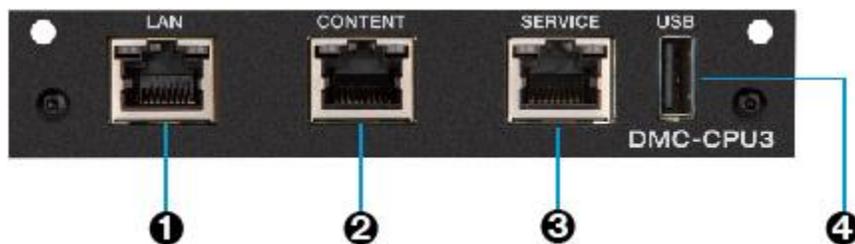
- [DMC-CPU3 card](#) (see below)
- [Input cards](#) (refer to page 55)
- [Output cards](#) (refer to page 71)

DMC-CPU3 Card

The DMC-CPU3 card is based on the 3-Series® platform and is included with the switcher. The card can be purchased separately to provide a backup replacement or to upgrade from the previous model (DMC-CPU) in a non-CPU3 switcher (DM-MD8X8, DM-MD16X16, DM-MD32X32, and related redundant power supply models).

The following illustration shows the DMC-CPU3 card.

DMC-CPU3 Card



- ❶ **LAN:** 8-pin RJ-45 connector, female;
100BASE-TX/1000BASE-T Ethernet port

Green LED indicates 100BASE-TX link is established;
Amber LED indicates 1000BASE-T link is established;
Flashing amber LED indicates Ethernet activity
- ❷ **CONTENT:** 8-pin RJ-45 connector, female;
100BASE-TX/1000BASE-T Ethernet port;
Provides a dedicated LAN connection for streaming only;
Used for streaming instead of the LAN port of the DMC-CPU3 card or the CONTENT LAN port of a DMC input or output streaming card

Green LED indicates 100BASE-TX link is established;
Amber LED indicates 1000BASE-T link is established;
Flashing amber LED indicates Ethernet activity

- ③ **SERVICE:** 8-pin RJ-45 connector, female;
100BASE-TX/1000BASE-T Ethernet port;
For factory use only

Green LED indicates 100BASE-TX link is established;
Amber LED indicates 1000BASE-T link is established;
Flashing amber LED indicates Ethernet activity

- ④ **USB:** USB Type A connector, female;
USB 2.0 host port for connection of a USB flash drive;
For saving/loading EDID settings and for firmware update

For additional information, visit the [DMC-CPU3](#) product page on the Crestron website.

DMC Input Cards

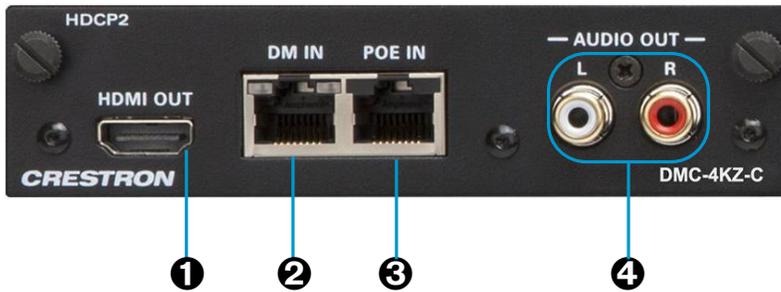
DMC input cards include the following:

- [DMC-4KZ-C](#) (refer to page 56)
- [DMC-4KZ-C-DSP](#) (refer to page 57)
- [DMC-4KZ-HD](#) (refer to page 58)
- [DMC-4KZ-HD-DSP](#) (refer to page 59)
- [DMC-DVI](#) (refer to page 60)
- [DMC-S](#) (refer to page 61)
- [DMC-S-DSP](#) (refer to page 62)
- [DMC-S2](#) (refer to page 63)
- [DMC-S2-DSP](#) (refer to page 64)
- [DMC-SDI](#) (refer to page 65)
- [DMC-STR](#) (refer to page 66)
- [DMC-VGA](#) (refer to page 67)
- [DMC-VID4](#) (refer to page 68)
- [DMC-VID-BNC](#) (refer to page 68)
- [DMC-VID-RCA-A](#) (refer to page 69)
- [DMC-VID-RCA-D](#) (refer to page 70)

DMC-4KZ-C Input Card

The DMC-4KZ-C is a DigitalMedia 8G+® input card that supports 4K60 4:4:4 and HDR (High Dynamic Range) video signals. The card provides a DM 8G+® input that is also compatible with the HDBaseT® standard. An HDMI® output and unbalanced analog audio output are also provided. A POE IN port enables PoDM (Power over DigitalMedia) power sourcing through the DM 8G+ input.

DMC-4KZ-C Input Card



- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DM IN:** 8-pin RJ-45 connector, female, shielded;
DM 8G+ input, HDBaseT standard compliant;
PoDM PSE port (HDBaseT PoE compatible);
Connects to the DM 8G+ output of a DM transmitter or other DM device or to an HDBaseT device

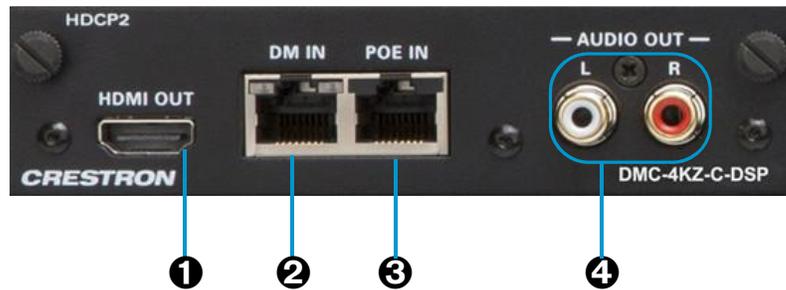
Green LED indicates DM link status;
Amber LED indicates video and HDCP signal presence
- ❸ **POE IN:** 8-pin RJ-45 connector, female;
PoE/PoDM input;
Connects to IEEE 802.3af or 802.3at compliant PoDM or PoE PSE (Power Sourcing Equipment) to enable PoDM or HDBaseT PoE power sourcing via the DM IN port;
Compatible with PoE+, PoDM+, and PoDM++
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-4KZ-C](#) product page on the Crestron website.

DMC-4KZ-C-DSP Input Card

The DM-4KZ-C-DSP is a DigitalMedia 8G+ input card that supports 4K60 4:4:4 and HDR video signals. The card provides a DM 8G+ input that is also compatible with the HDBaseT standard. An HDMI output and unbalanced analog audio output are also provided. A POE IN port enables PoDM power sourcing through the DM 8G+ input. Built-in DSP (digital signal processing) enables multichannel surround sound signals to be decoded and downmixed to stereo.

DMC-4KZ-C-DSP Input Card



- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DM IN:** 8-pin RJ-45 connector, female, shielded;
DM 8G+ input, HDBaseT standard compliant;
PoDM PSE port (HDBaseT PoE compatible);
Connects to the DM 8G+ output of a DM transmitter or other DM device or to an HDBaseT device

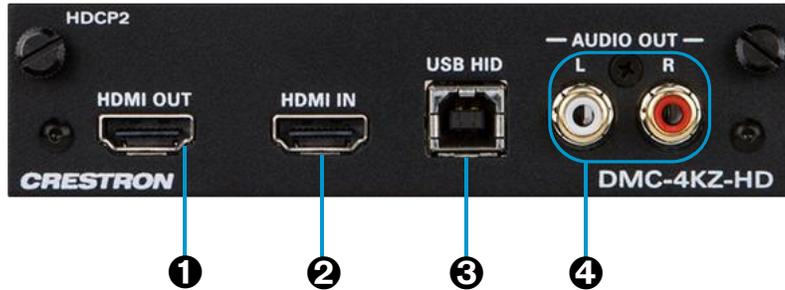
Green LED indicates DM link status;
Amber LED indicates video and HDCP signal presence
- ❸ **POE IN:** 8-pin RJ-45 connector, female;
PoE/PoDM input;
Connects to IEEE 802.3af or 802.3at compliant PoDM or PoE PSE (Power Sourcing Equipment) to enable PoDM or HDBaseT PoE power sourcing via the DM IN port;
Compatible with PoE+, PoDM+, and PoDM++
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-4KZ-C-DSP](#) product page on the Crestron website.

DMC-4KZ-HD Input Card

The DMC-4KZ-HD is an HDMI input card that supports 4K60 4:4:4 and HDR video signals. An HDMI output, unbalanced analog audio output, and USB HID port are also provided.

DMC-4KZ-HD Input Card



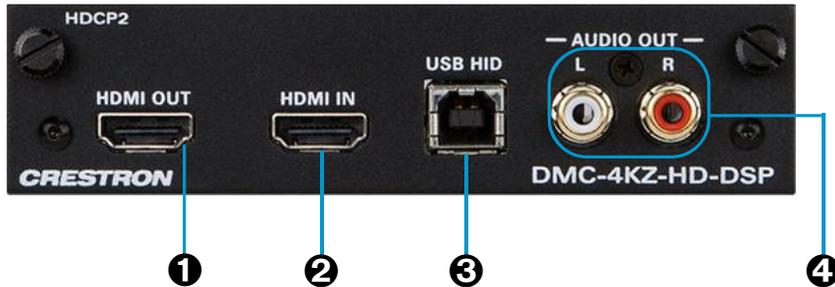
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **HDMI IN:** HDMI Type A connector, female;
HDMI digital video/audio input (DVI and Dual-Mode DisplayPort™ interface compatible)
- ❸ **USB HID:** USB Type B connector, female;
USB device port for connection to the USB host interface of a computer or other USB HID compliant host
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-4KZ-HD](#) product page on the Crestron website.

DMC-4KZ-HD-DSP Input Card

The DMC-4KZ-HD-DSP is an HDMI input card that supports 4K60 4:4:4 and HDR video signals. An HDMI output, unbalanced analog audio output, and USB HID port are also provided. Built-in DSP enables multichannel surround sound signals to be decoded and downmixed to stereo.

DMC-4KZ-HD-DSP Input Card



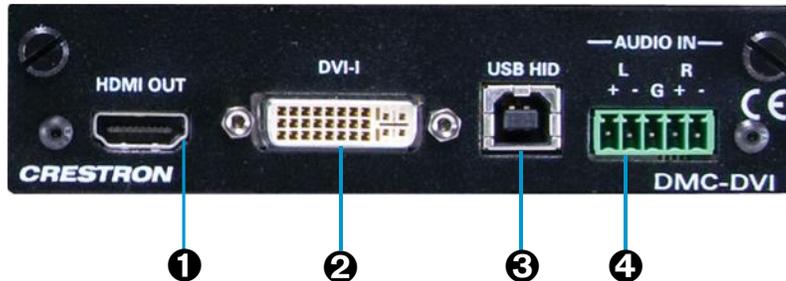
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **HDMI IN:** HDMI Type A connector, female;
HDMI digital video/audio input (DVI and Dual-Mode DisplayPort interface compatible)
- ❸ **USB HID:** USB Type B connector, female;
USB device port for connection to the USB host interface of a computer or other USB HID compliant host
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-4KZ-HD-DSP](#) product page on the Crestron website.

DMC-DVI Input Card

The DMC-DVI is a DVI/VGA input card. An HDMI output, balanced/unbalanced analog audio input, and USB HID port are also provided.

DMC-DVI Input Card



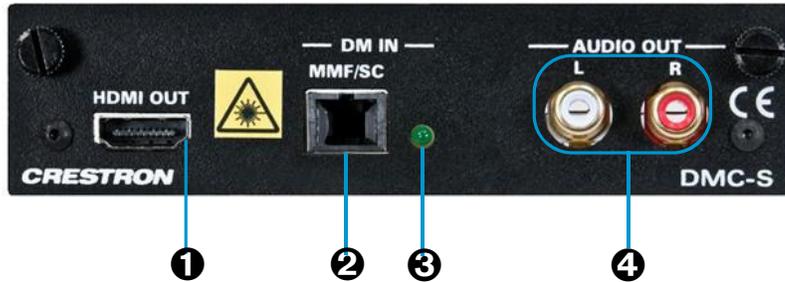
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DVI-I:** DVI-I female (or HD15 female via included adapter);
DVI (single-link), VGA/RGB, component, S-Video, or composite video input
- ❸ **USB HID:** USB Type B connector, female;
USB device port for connection to the USB host interface of a computer or other
USB HID compliant host
- ❹ **AUDIO IN L, R:** 5-pin 3.5 mm detachable terminal block;
Balanced/unbalanced stereo line level audio input

For additional information, visit the [DMC-DVI](#) product page on the Crestron website.

DMC-S Input Card

The DMC-S is a DigitalMedia 8G™ fiber input card that transports high-definition video, audio, Ethernet, and control signals over a single strand of multimode fiber. An HDMI output and unbalanced analog audio output are also provided.

DMC-S Input Card



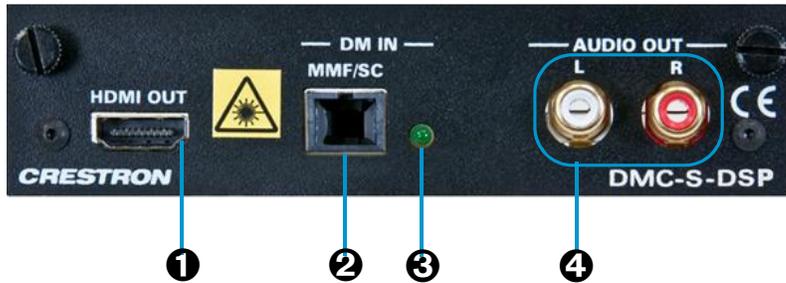
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DM IN MMF/SC:** SC female optical fiber connector;
DM 8G® multimode fiber input;
Connects to the DM 8G multimode fiber output of a DM transmitter or other DM device
- ❸ **DM IN MMF/SC LED:** Green LED, indicates DM link status
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-S](#) product page on the Crestron website.

DMC-S-DSP Input Card

The DMC-S-DSP is a DigitalMedia 8G™ fiber input card that transports high-definition video, audio, Ethernet, and control signals over a single strand of multimode fiber. An HDMI output and unbalanced analog audio output are also provided. Built-in DSP enables multichannel surround sound signals to be decoded and downmixed to stereo.

DMC-S-DSP Input Card



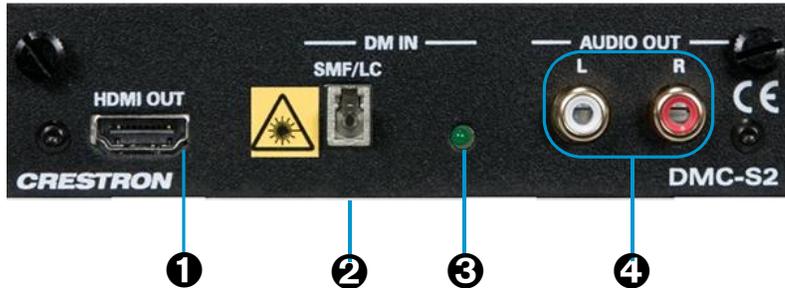
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DM IN MMF/SC:** SC female optical fiber connector;
DM 8G multimode fiber input;
Connects to the DM 8G multimode fiber output of a DM transmitter or other DM device
- ❸ **DM IN MMF/SC LED:** Green LED, indicates DM link status
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-S-DSP](#) product page on the Crestron website.

DMC-S2 Input Card

The DMC-S2 is a DigitalMedia 8G fiber input card that transports high-definition video, audio, Ethernet, and control signals over a single strand of single-mode fiber. An HDMI output and unbalanced analog audio output are also provided.

DMC-S2 Input Card



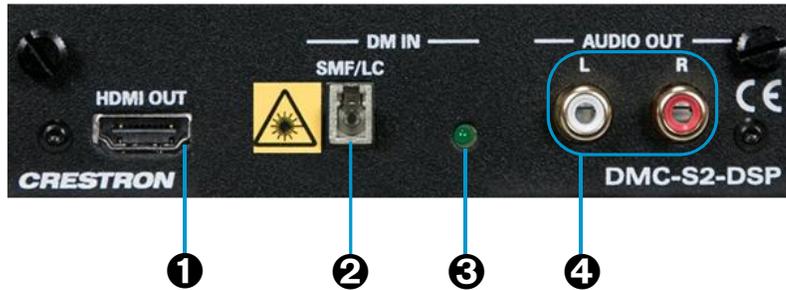
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DM IN SMF/LC:** LC female optical fiber connector;
DM 8G single-mode fiber input;
Connects to the DM 8G single-mode fiber output of a DM transmitter or other DM device
- ❸ **DM IN SMF/LC LED:** Green LED, indicates DM link status
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-S2](#) product page on the Crestron website.

DMC-S2-DSP Input Card

The DMC-S2-DSP is a DigitalMedia 8G fiber input card that transports high-definition video, audio, Ethernet, and control signals over a single strand of single-mode fiber. An HDMI output and unbalanced analog audio output are also provided. Built-in DSP enables multichannel surround sound signals to be decoded and downmixed to stereo.

DMC-S2-DSP Input Card



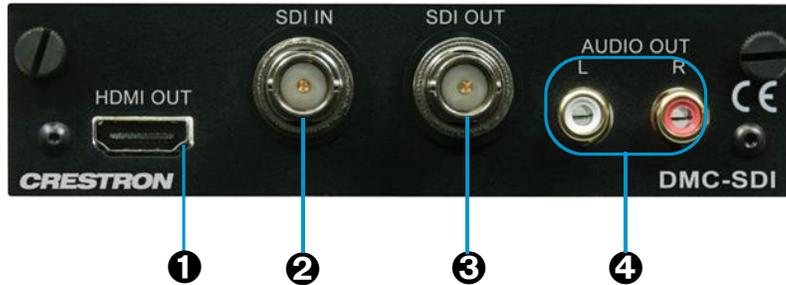
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **DM IN SMF/LC:** LC female optical fiber connector;
DM 8G single-mode fiber input;
Connects to the DM 8G single-mode fiber output of a DM transmitter or other DM device
- ❸ **DM IN SMF/LC LED:** Green LED, indicates DM link status
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-S2-DSP](#) product page on the Crestron website.

DMC-SDI Input Card

The DMC-SDI is an input card that supports SD-SDI, HD-HDI, and 3G-SDI formats, handling high-definition video signals up to 1080p60 and 2 channels of 24-bit digital audio through a single coaxial cable. An SDI loop-through output, HDMI output, and unbalanced analog audio output are also provided.

DMC-SDI Input Card



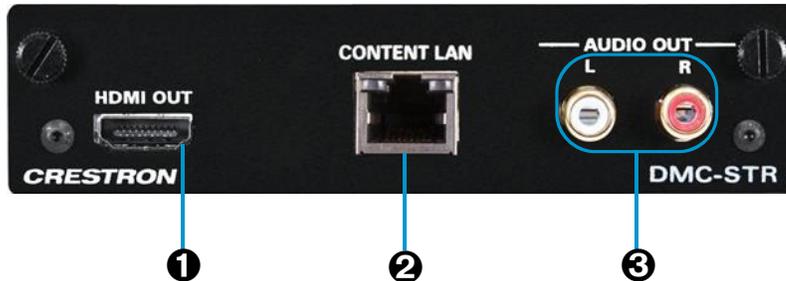
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **SDI IN:** BNC female;
SDI video input
- ❸ **SDI OUT:** BNC female;
SDI video/audio loop-through output
- ❹ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-SDI](#) product page on the Crestron website.

DMC-STR Input Card

The DMC-STR is an H.264 streaming input card. An HDMI output and unbalanced analog audio output are also provided.

DMC-STR Input Card



- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **CONTENT LAN:** 8-pin RJ-45 female;
10BASE-T/100BASE-TX Ethernet port;
Provides a dedicated LAN connection for streaming only, used instead of the main LAN port or CONTENT port of the host switcher or the LAN port of the DMCI DigitalMedia Card Interface

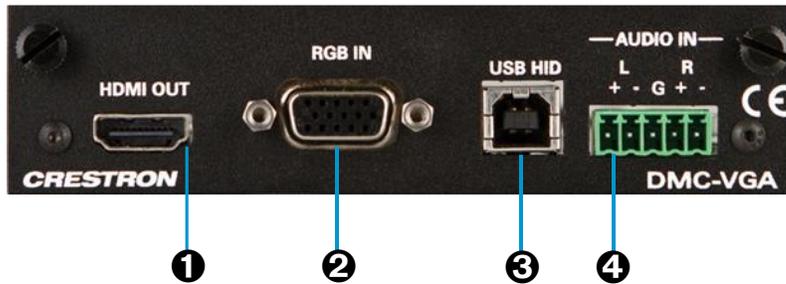
Green LED indicates Ethernet link status;
Amber LED indicates Ethernet activity
- ❸ **AUDIO OUT L, R:** RCA connectors, female;
Unbalanced stereo line level audio output

For additional information, visit the [DMC-STR](#) product page on the Crestron website.

DMC-VGA Input Card

The DMC-VGA is an input card that enables connection of an analog VGA, RGB, component, S-Video, or composite video source. An HDMI output and balanced/unbalanced analog audio input, and USB HID port are also provided.

DMC-VGA Input Card



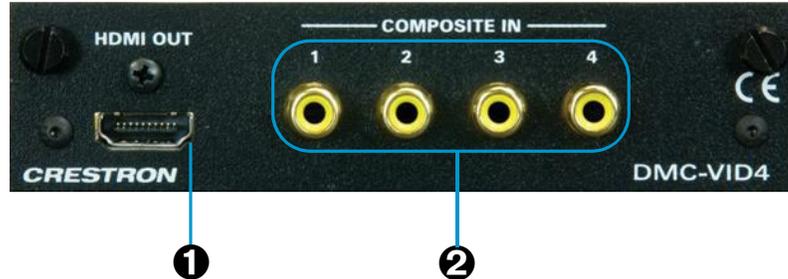
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **RGB IN:** HD15 connector, female;
VGA/RGB, component, S-Video, or composite video input
- ❸ **USB HID:** USB Type B connector, female;
USB device port for connection to the USB host interface of a computer or other
USB HID compliant host
- ❹ **AUDIO IN L, R:** 5-pin 3.5 mm detachable terminal block;
Balanced/unbalanced stereo line level audio input

For additional information, visit the [DMC-VGA](#) product page on the Crestron website.

DMC-VID4 Input Card

The DMC-VID4 is an input card that provides four composite video inputs with built-in sequential switching and quad processing. An HDMI output is also provided.

DMC-VID4 Input Card



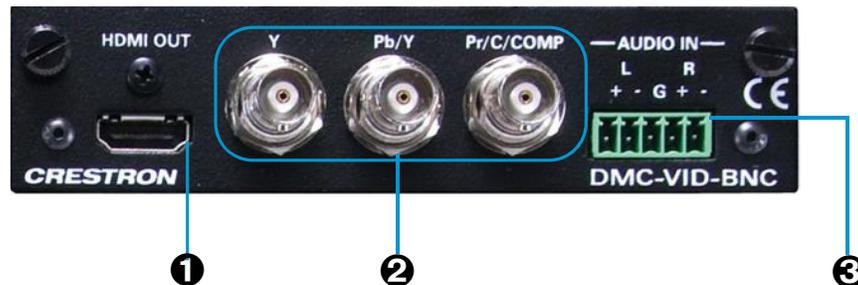
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **COMPOSITE IN 1-4:** RCA female;
Composite video inputs

For additional information, visit the [DMC-VID4](#) product page on the Crestron website.

DMC-VID-BNC Input Card

The DMC-VID-BNC is an input card that provides a multi-format BNC analog video input for the connection of component, S-Video, and composite video sources. An HDMI output and balanced/unbalanced analog audio input are also included.

DMC-VID-BNC Input Card



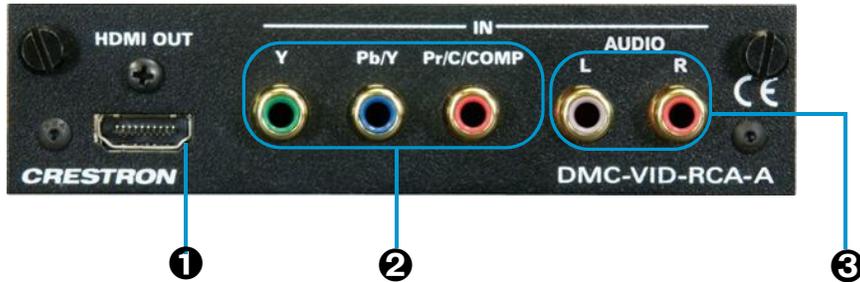
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **Y, Pb/Y, Pr/C/COMP:** 3 BNC female connectors comprising 1 auto-sensing multi-format analog video input;
Signal Types: Component (YPbPr), S-Video (Y/C), or composite
- ❸ **AUDIO IN L, R:** 5-pin 3.5 mm detachable terminal block;
Balanced/unbalanced stereo line level audio input

For additional information, refer to the [DMC-VID-BNC](#) product page on the Crestron website.

DMC-VID-RCA-A Input Card

The DMC-VID-RCA-A is an input card that provides a multi-format RCA analog video input for the connection of component, S-Video, and composite video sources. An HDMI output and unbalanced analog audio input are also provided.

DMC-VID-RCA-A Input Card



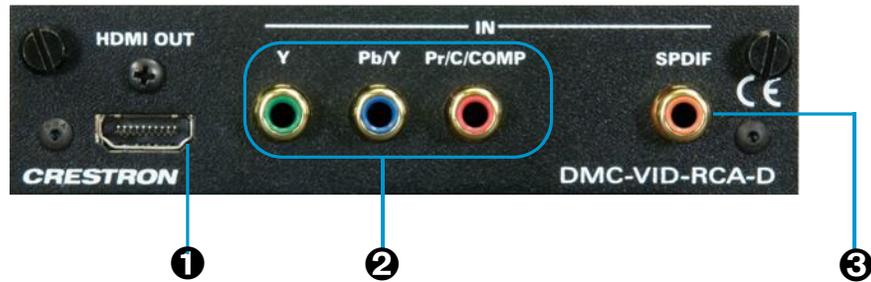
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **IN - Y, Pb/Y, Pr/C/COMP:** 3 RCA female connectors comprising 1 auto-sensing multi-format analog video input;
Signal Types: Component (YPbPr), S-Video (Y/C), or composite
- ❸ **IN - AUDIO IN L, R:** 2 RCA female connectors;
Unbalanced stereo line level audio input

For additional information, refer to the [DMC-VID-RCA-A](#) product page on the Crestron website.

DMC-VID-RCA-D Input Card

The DMC-VID-RCA-D is an input card that provides a multi-format RCA analog video input for the connection of component, S-Video, and composite video sources. An HDMI output and S/PDIF digital audio input are also provided.

DMC-VID-RCA-D Input Card



- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ❷ **IN - Y, Pb/Y, Pr/C/COMP:** 3 RCA female connectors comprising 1 auto-sensing multi-format analog video input;
Signal Types: Component (YPbPr), S-Video (Y/C), or composite
- ❸ **IN - SPDIF:** RCA female;
S/PDIF coaxial digital audio input

For additional information, refer to the [DMC-VID-RCA-D](#) product page on the Crestron website.

DMC Output Cards

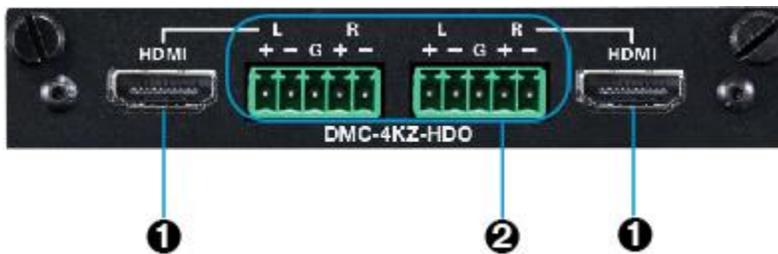
DMC output cards include the following:

- [DMC-4KZ-HDO](#) (see below)
- [DMC-4KZ-CO-HD](#) (refer to page 72)
- [DMC-HDO](#) (refer to page 73)
- [DMC-S2O-HD](#) (refer to page 73)
- [DMC-SO-HD](#) (refer to page 74)
- [DMC-STRO](#) (refer to page 74)

DMC-4KZ-HDO Output Card

The DMC-4KZ-HDO is a 2-channel HDMI output card that supports 4K60 4:4:4 and HDR video signals and provides built-in scaling. Two balanced/unbalanced analog audio outputs are also provided.

DMC-4KZ-HDO Output Card



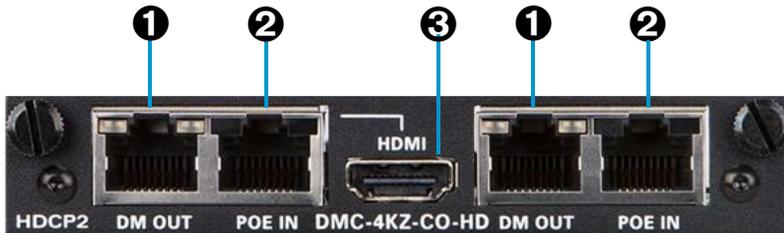
- ❶ **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio outputs (DVI compatible)
- ❷ **L, R:** 5-pin 3.5 mm detachable terminal blocks;
Balanced/unbalanced stereo line level audio outputs

For additional information, refer to the [DMC-4KZ-HDO](#) product page on the Crestron website.

DMC-4KZ-CO-HD Output Card

The DMC-4KZ-CO-HD is a 2-channel DigitalMedia 8G+ card that supports 4K60 4:4:4 and HDR video signals. The card provides two independent DM 8G+ outputs that are also compatible with the HDBaseT standard. An HDMI output is also provided. A POE IN port for each DM OUT port enables PoDM power sourcing.

DMC-4KZ-CO-HD Output Card



- ❶ **DM OUT:** 8-pin RJ-45 connector, female, shielded;
DM 8G+ output, HDBaseT standard compliant;
PoDM PSE (Power Sourcing Equipment) port (HDBaseT PoE compatible);
Connects to the DM 8G+ input of a DM receiver or other DM device or to an HDBaseT device

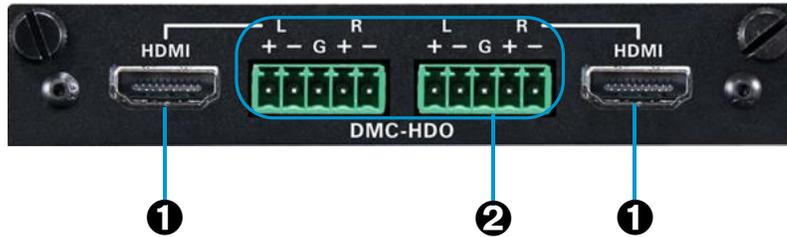
Green LED indicates DM link status;
Amber LED indicates video and HDCP signal presence
- ❷ **POE IN:** 8-pin RJ-45 connector, female;
PoE/PoDM input;
Connects to IEEE 802.3af or 802.3at compliant PoDM or PoE PSE to enable PoDM or HDBaseT PoE power sourcing via the corresponding DM OUT port. Compatible with PoE+, PoDM+, and PoDM++
- ❸ **HDMI:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible);
Outputs same signal as the first DM OUT port

For additional information, refer to the [DMC-4KZ-CO-HD](#) product page on the Crestron website.

DMC-HDO Output Card

The DMC-HDO is a 2-channel HDMI output card. Two balanced/unbalanced analog audio outputs are also provided.

DMC-HDO Card



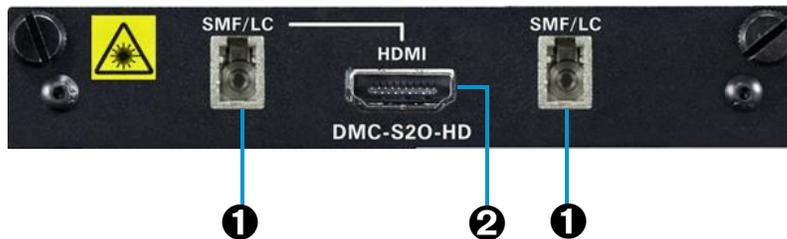
- ② **HDMI OUT:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible)
- ② **L, R:** 5-pin 3.5 mm detachable terminal blocks;
Balanced/unbalanced stereo line level audio outputs

For additional information, refer to the [DMC-HDO](#) product page on the Crestron website.

DMC-S2O-HD Output Card

The DMC-S2O-HD is a 2-channel DigitalMedia 8G single-mode fiber output card. An HDMI output is also provided.

DMC-S2O-HD Output Card



- ① **SMF/LC:** LC female optical fiber connector;
DM 8G single-mode fiber output;
Connects to the DM 8G single-mode fiber input of a DM receiver or other DM device

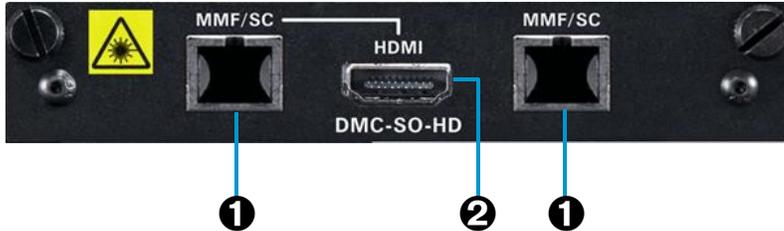
Green LED indicates DM link status for each corresponding DM 8G single-mode fiber output.
- ② **HDMI:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible);
Outputs same signal as the first SMF/LC output

For additional information, refer to the [DMC-S2O-HD](#) product page on the Crestron website.

DMC-SO-HD Output Card

The DMC-SO-HD is a 2-channel DigitalMedia 8G multimode fiber output card. An HDMI output is also provided.

DMC-SO-HD Output Card



- ❶ **MMF/SC:** SC female optical fiber connector;
DM 8G multimode fiber output;
Connects to the DM 8G multimode fiber input of a DM receiver or other DM device

Green LED indicates DM link status for each corresponding DM 8G multimode fiber output.
- ❷ **HDMI:** HDMI Type A connector, female;
HDMI digital video/audio output (DVI compatible);
Outputs same signal as the first MMF/SC output

For additional information, refer to the [DMC-SO-HD](#) product page on the Crestron website.

DMC-STRO Output Card

The DMC-STRO is an H.264 streaming output card.

DMC-STRO Card



- ❶ **CONTENT LAN:** 8-pin RJ-45 female;
100BASE-TX/1000BASE-T Ethernet port;
Provides a dedicated LAN connection for streaming only, used instead of streaming via the main LAN port or CONTENT port of the switcher

For additional information, refer to the [DMC-STRO](#) product page on the Crestron website.

This page is intentionally left blank.

