



DMF-CI-8
DigitalMedia™ Chassis for
DM® NVX and DMCF Cards

Supplemental Guide
Crestron Electronics, Inc.

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DMF-CI-8: DigitalMedia™ Chassis for DM® NVX and DMCF Cards

Introduction

The Crestron® DMF-CI-8 is a 2-space, rack-mountable chassis designed to accommodate and power Crestron DM® NVX and DMCF series cards. The DM NVX cards consist of the DM-NVX-350C and DM-NVX-351C encoders/decoders. The DMCF cards consist of the DMCF-TX-4K-SFP transmitter and the DMCF-RX-4K-SFP receiver. The DM NVX and DMCF cards can be installed in any of the eight card slots of the chassis in any combination. Stand-alone endpoints are also available for installation at remote locations.

NOTE: The DMF-CI-8 is not a DigitalMedia™ switcher.

The DMF-CI-8 provides a front panel LCD display and associated push button controls. Menus on the front panel display allow status information about the cards and the chassis to be viewed. In addition, the chassis and various functions of the cards can be configured.

This guide provides the following information about the DMF-CI-8:

- Physical description of the front and rear panels
- LCD display operation using the front panel controls
- Card status and configuration
- Chassis status and configuration

For DMF-CI-8 installation information, refer to the DMF-CI-8 DO Guide (Doc. 7860) at www.crestron.com/manuals.

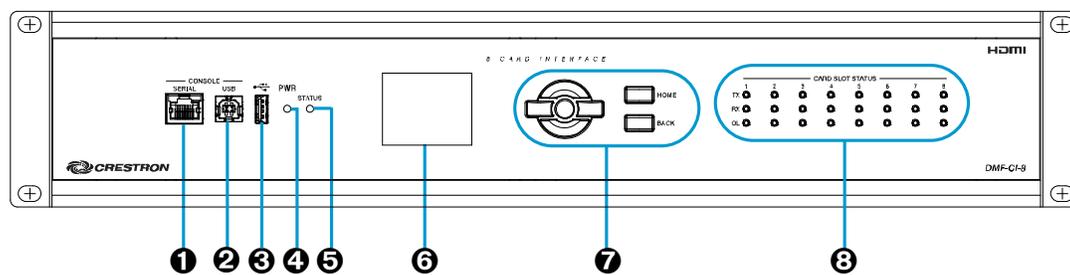
Physical Description

This section provides information about the front and rear panels of the DMF-CI-8.

Front Panel

The following illustration shows the front panel of the DMF-CI-8.

Front Panel



- ❶ **CONSOLE, SERIAL:** 8-pin RJ-45 female; RS-232 computer console port
- ❷ **CONSOLE, USB:** USB Type B female; USB computer console port
- ❸ **USB:** USB Type A female; Supports USB mass storage devices for firmware updates

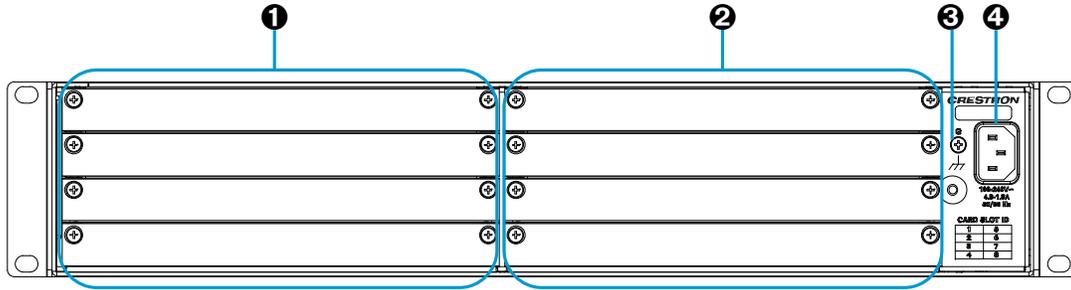
NOTE: As an alternative to using a USB mass storage device and the USB Type A port for firmware updates, the Crestron Toolbox™ software can be used on a computer that connects to the USB Type B (❷) console port.

- ❹ **PWR:** Bicolor LED, amber indicates that operating power is present, green indicates that the DMF-CI-8 has successfully initialized
- ❺ **STATUS:** Bicolor LED, green indicates an error-free operating condition, red indicates that an error condition exists with a card or the chassis
- ❻ **Display:** 2-inch (52 mm) diagonal, 220 x 176 pixels, 16-bit TFT active matrix color LCD
- ❼ **Front Panel Controls:** 5-way navigation pad and push buttons for menu navigation and adjustment of settings (refer to "LCD Display Operation" on page 4 for additional information)
- ❽ **Card Slot Status LEDs:** TX 1–8, green indicates that the corresponding card is in transmitter mode; RX 1–8, green indicates that the corresponding card is in receiver mode; OL 1–8, green indicates that the corresponding card is connected to a control system

Rear Panel

The following illustration shows the rear panel of the DMF-CI-8.

Rear Panel



- ❶ **CARD SLOTS 1–4:** Each card slot accepts a DM NVX encoder/decoder card or a DMCF transmitter or receiver card

CAUTION: To prevent damage to a card that is connected to cables, disconnect all cables from the card before installing the card into a slot or removing the card from a slot.

NOTE: When installing cards into a partially populated chassis, install the cards into slots 5–8 (refer to ❷ below) before using slots 1–4. Doing so ensures better cooling and lower power consumption. In addition, always cover empty slots using the included filler plates.

- ❷ **CARD SLOTS 5–8:** Each card slot accepts a DM NVX encoder/decoder card or a DMCF transmitter or receiver card
- ❸ **G:** 6-32 screw, chassis ground lug
- ❹ **100-240V~4.3-1.8A 50/60Hz:** IEC 60320 C14 main power inlet; Mates with the included removable power cord

LCD Display Operation

The LCD display provides menus that allow card and DMF-CI-8 chassis status information to be displayed. In addition, menus are provided that allow configuration of the cards and the chassis.

When the DMF-CI-8 is powered on and whenever the LCD display is in an idle state, a general information screen appears on the LCD display.

Sample General Information Screen

Chassis Status: OK
Card: 1
Model: DM-NVX-350C
Name: Podium
IPv4: 192.168.123.123

The general information screen displays the following information:

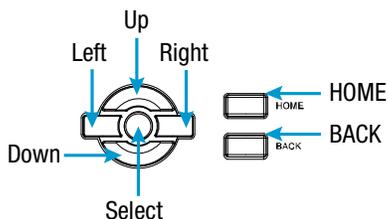
- **Chassis Status:** OK
- **Card:** Slot number of the DMF-CI-8 into which a card is installed

NOTE: The LCD display provides information about each card slot on a scrolling basis.

- **Model:** Model of the card
- **Name:** Name assigned to the card using the DM NVX web interface or SIMPL programming (for example, **Podium**, as shown in the sample general information screen above). If a name is not assigned, the display shows the hostname of the card. If a card is not installed in the slot, the display indicates **Not Installed**.
- **IPv4:** IPv4 (Internet Protocol version 4) address of the card

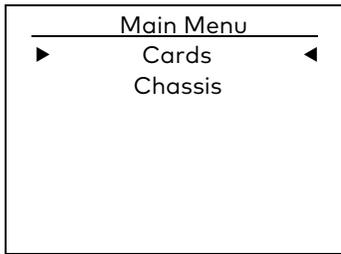
To navigate the LCD display menus and to adjust settings, use the front panel controls. The controls consist of the navigation pad, the **HOME** push button, and the **BACK** push button. The following illustration shows the front panel controls.

Front Panel Controls



To access the Main Menu, press the **HOME** push button. The Main Menu appears.

Main Menu



To navigate the menus and to adjust settings, use the front panel controls:

- To move up or down in a menu or in a list of available selections, press the up push button or the down push button on the navigation pad.
- To move to the left or to the right between an item and a list of available selections, press the left push button or the right push button on the navigation pad.
- To select an item in a menu, press the select (center) button on the navigation pad. An item can be selected when it is enclosed by ▶ and ◀ or by a rectangle.
- To return to the previous level in a menu, press the **BACK** push button.
- To navigate from a parameter name that is highlighted in yellow to the list of available settings, press the select (center) push button or the right push button on the navigation pad. A rectangle denotes a scrolling list of available settings as shown in the example below:



To scroll through the list of available settings (for example, **Enable** or **Disable**), press the up push button or the down push button until the desired setting is displayed. To select the setting, press the select push button.

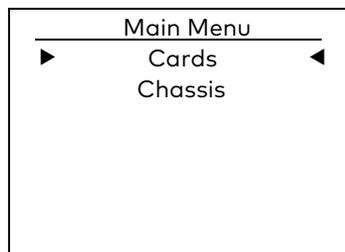
Card Status and Configuration

For DM NVX cards, device mode and input routing settings can be viewed and configured. For DM NVX cards as well as DMCF cards, network settings can be viewed and configured. In addition, diagnostics can be performed on DM NVX and DMCF cards.

To view card status or to configure a card:

1. Access the Main Menu by pressing the **HOME** push button.

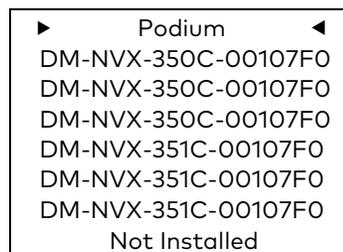
Main Menu



2. Select **Cards**.

For each card slot (1–8), the corresponding name of the card is listed.

Sample List of Cards

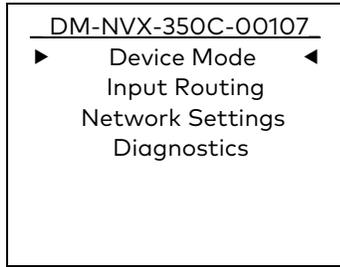


NOTE: The card name that is displayed is assigned using the DM NVX web interface or SIMPL programming. For example, in the sample screen above, **Podium** is the name assigned to the card in slot 1. If a name is not assigned, the display shows the hostname of the card. The default hostname is the model number of the card followed by the MAC address of the card. As shown in the sample screen above, only a portion of the default hostname is visible: **DM-NVX-350C-00107F0** or **DM-NVX-351C-00107F0**. If a card is not installed in the slot, the display indicates **Not Installed**.

3. Select the desired card.

The card status and configuration menu appears on the display for the selected card. The name of the card is displayed at the top of the screen. For example, if the card in slot 2 is selected, the screen appears as shown on the following page. In the sample screen, only a portion of the default hostname is visible: **DM-NVX-350C-00107**.

Card Status and Configuration Menu



NOTE: The Device Mode and Input Routing menu items appear on the menu for the DM-NVX-350C and DM-NVX-351C cards only.

The following sections provide information about viewing card status and configuring various functions of a card.

Configure the Device Mode

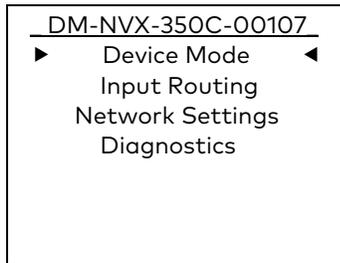
NOTE: Device mode configuration is applicable to the DM-NVX-350C and DM-NVX-351C cards only.

Device mode configuration allows the operating mode of a DM NVX card to be changed from a receiver to a transmitter or from a transmitter to a receiver. By default, a DM NVX card is configured as a receiver.

To configure the device mode:

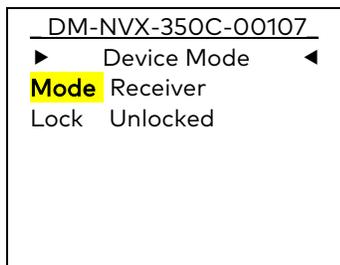
1. On the card status and configuration menu, select **Device Mode**.

Card Status and Configuration Menu



The Device Mode menu appears on the display for the selected card.

Device Mode Menu



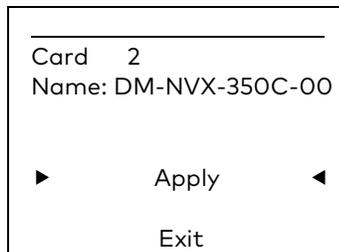
NOTE: If the **Lock** parameter, which is located below the **Mode** parameter, is set to **Unlocked**, continue with step 2. The Unlocked setting allows the **Mode** setting to be changed.

If the **Lock** parameter is set to **Locked**, the **Mode** setting cannot be changed. To unlock the **Mode** parameter, use the DM NVX web interface. The device mode can then be changed using the DM NVX web interface or the DMF-CI-8 front panel.

2. For the **Mode** parameter, select **Receiver** or **Transmitter**. The default setting is **Receiver**.

A screen appears on the display, allowing the device mode to be changed for the selected card.

Change Device Mode Screen



3. Select **Apply** to change the device mode. (Selecting **Exit** prevents the device mode from being changed.)

The card reboots. When the reboot process is complete, the corresponding TX 1–8 or RX 1–8 LED on the front panel lights green to indicate that the card is in transmitter (TX) or receiver (RX) mode.

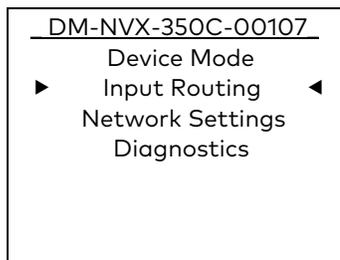
View and Configure Input Routing Settings

NOTE: Input routing status and configuration are applicable to the DM-NVX-350C and DM-NVX-351C cards only.

To view and configure input routing settings:

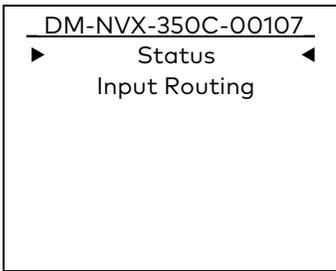
On the card status and configuration menu, select **Input Routing**.

Card Status and Configuration Menu



The Status and Input Routing menu appears on the display for the selected card.

Status and Input Routing Menu



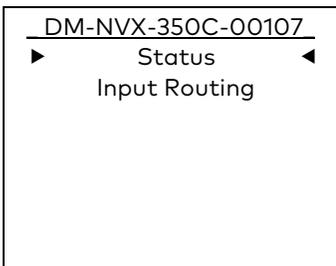
The following sections provide information about viewing and configuring input routing settings.

View Input Routing Settings

To view the input routing settings of a card:

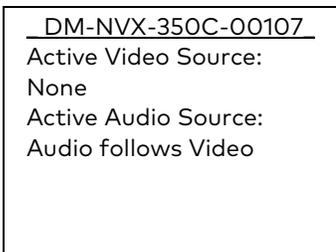
On the Status and Input Routing menu, select **Status**.

Status and Input Routing Menu



The Input Routing Status screen appears on the display for the selected card.

Sample Input Routing Status Screen



The Input Routing Status screen displays the following information:

- **Active Video Source:** Displays the active video source for the transmitter or the receiver as one of the following:
 - None (default setting)
 - Input 1
 - Input 2
 - Stream (receiver only)

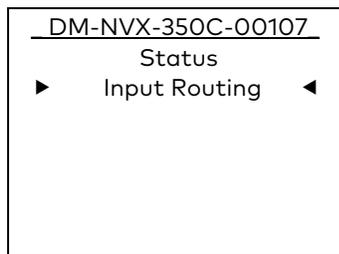
- **Active Audio Source:** Displays the active audio source for the transmitter or the receiver as one of the following:
 - Audio follows Video (default setting)
 - Analog Audio
 - Input 1
 - Input 2
 - Primary stream (receiver only)
 - Secondary stream (receiver only)

Configure Input Routing Settings

To configure input routing settings for the selected card:

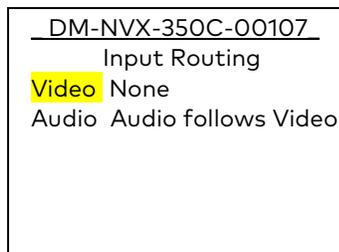
1. On the Status and Input Routing menu, select **Input Routing**.

Status and Input Routing Menu



The Input Routing menu appears on the display for the selected card.

Input Routing Menu



2. Configure input routing settings:
 - **Video:** Select one of the following as the video source:
 - None (default setting)
 - Input 1
 - Input 2
 - Stream (receiver only)

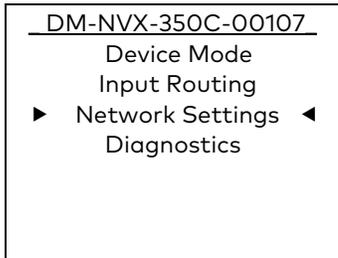
- **Audio:** Select one of the following as the audio source:
 - Audio follows Video (default setting)
 - Analog Audio
 - Input 1
 - Input 2
 - Primary stream (receiver only)
 - Secondary stream (receiver only)

View and Configure Network Settings

To view and configure the network settings of a card:

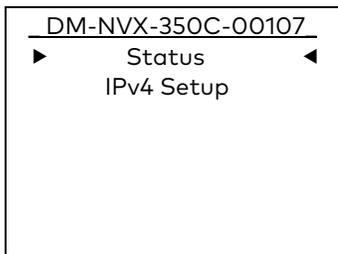
On the card status and configuration menu, select **Network Settings**.

Card Status and Configuration Menu



The Status and IPv4 Setup menu appears on the display for the selected card.

Status and IPv4 Setup Menu



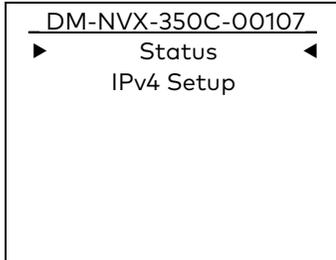
The following sections provide information about viewing and configuring network settings.

View Network Settings

To view the network settings of a card:

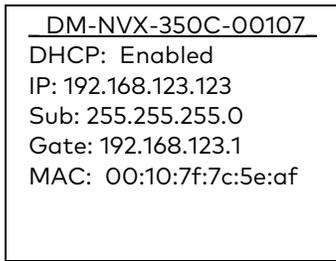
On the Status and IPv4 Setup menu, select **Status**.

Status and IPv4 Setup Menu



The Network Status screen appears on the display for the selected card.

Sample Network Status Screen



The Network Status screen displays the following information:

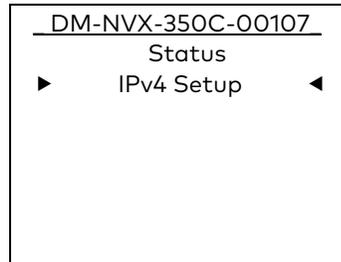
- **DHCP: Enabled** or **Disabled**. By default, DHCP is enabled.
- **IP:** IPv4 address of the card
- **Sub:** Subnet mask address
- **Gate:** Gateway address
- **MAC:** MAC address of the card

Configure IPv4 Settings

To configure IPv4 settings for the selected card:

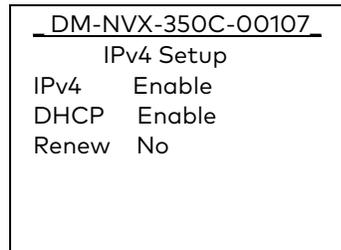
1. On the Status and IPv4 Setup menu, select **IPv4 Setup**.

Status and IPv4 Setup Menu



The IPv4 Setup screen appears on the display for the selected card when DHCP is enabled (default setting).

IPv4 Setup Screen (DHCP Enabled)



2. Configure IPv4 settings as follows:

- **IPv4: Enable**

NOTE: The default setting is **Enable**. At the time of publication of this document, **Enable** is the only available selection and cannot be changed.

- **DHCP:** Select **Enable** or **Disable**. The default setting is **Enable**. If **Disable** is selected, refer to "Disable DHCP" on the following page.

If any change is made to DHCP settings, the changes must be applied. Refer to "Apply IPv4 DHCP Settings" on page 15.

- **Renew:** Select **No** if forcing renewal of a DHCP lease is not desired. Select **Yes** to force renewal of the DHCP lease. The default setting is **No**. If **Yes** is selected, refer to "Renew a DHCP Lease" on page 15.

Disable DHCP

If DHCP is disabled on the IPv4 Setup screen, additional parameters are added to the screen to allow a static IP address and associated settings to be assigned to the card.

IPv4 Setup Screen (DHCP Disabled)

DM-NVX-350C-00107				
IPv4 Setup				
IPv4	Enable			
DHCP	Disable			
IP Addr	0	0	0	0
Subnet	0	0	0	0
Gateway	0	0	0	0
DNS1	0	0	0	0
DNS2	0	0	0	0

With DHCP disabled, configure the following settings:

NOTE: To navigate from a parameter name (for example, **IP Addr**) to the list of available octet settings for an address in dotted decimal notation, press the select push button or the right push button on the navigation pad. A rectangle denotes a scrolling list of available settings:

IP Addr 0 0 0

To scroll through the list of available octet settings (for example, **0, 1, 2, 3**, and so on), press the up push button or the down push button until the desired setting is displayed.

To move to the next octet in the address, press the right push button. To move to the previous octet in the address, press the left push button. After navigating to the last octet in the address and scrolling to the desired octet, press the select push button to navigate to the next parameter name (for example, **Subnet**).

- **IP Addr:** Navigate to the desired static IPv4 address.
- **Subnet:** Navigate to the subnet mask address.
- **Gateway:** Navigate to the gateway address.
- **DNS1:** Navigate to the primary DNS server address.
- **DNS2:** Navigate to the secondary DNS server address.

If any change is made to DHCP settings, the changes must be applied. Refer to "Apply IPv4 DHCP Settings" on the following page.

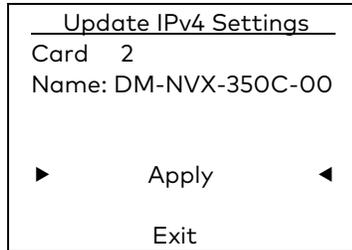
Apply IPv4 DHCP Settings

After changing DHCP settings, do the following:

1. Access the Update IPv4 Settings screen by pressing the **HOME** or the **BACK** push button.

NOTE: If neither the **HOME** nor the **BACK** push button is pressed, the IPv4 Setup screen automatically times out and the Update IPv4 Settings screen appears.

Update IPv4 Settings Screen



```
Update IPv4 Settings
Card 2
Name: DM-NVX-350C-00

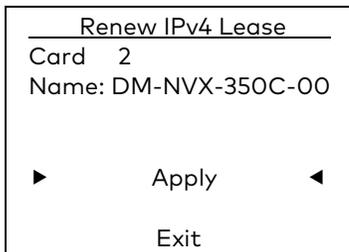
▶ Apply ◀
Exit
```

2. Select **Apply** to update the IPv4 settings. (Selecting **Exit** prevents the IPv4 settings from being updated.)

Renew a DHCP Lease

When **Renew** is set to **Yes** on the IPv4 Setup screen, the Renew IPv4 Lease screen appears for the selected card.

Renew IPv4 Lease Screen



```
Renew IPv4 Lease
Card 2
Name: DM-NVX-350C-00

▶ Apply ◀
Exit
```

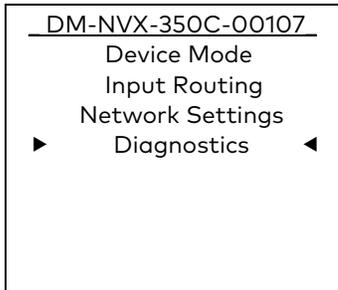
Select **Apply** to renew the IPv4 lease. (Selecting **Exit** prevents the lease from being renewed.)

Perform Diagnostics

To perform diagnostics on a card:

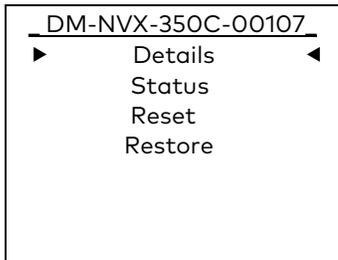
On the card status and configuration menu, select **Diagnostics**.

Card Status and Configuration Menu



The Diagnostics menu appears on the display for the selected card.

Diagnostics Menu



The following sections provide information about viewing and configuring card diagnostics.

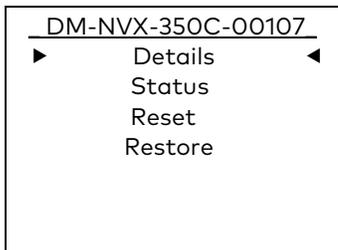
View Card Details

Card details consist of the serial number and firmware version of the selected card.

To view card details:

On the Diagnostics menu, select **Details**.

Diagnostics Menu



The Card Details screen appears on the display for the selected card. A sample screen is shown on the following page.

Sample Card Details Screen

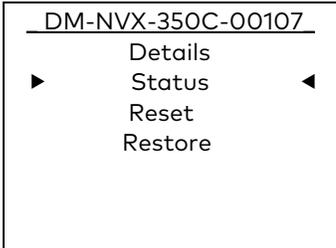


View Card Status

Card status consists of items such as the operating temperature of the card. To view card status:

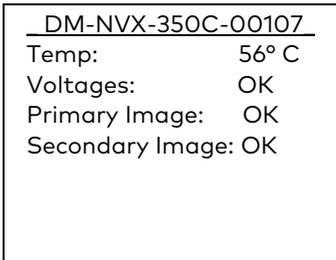
On the Diagnostics menu, select **Status**.

Diagnostics Menu



The Card Status screen appears on the display for the selected card.

Sample Card Status Screen



The Card Status screen displays the following information:

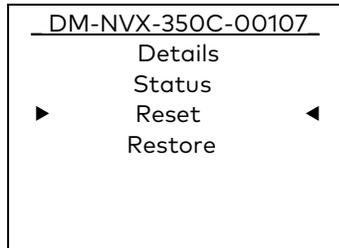
- **Temp:** Operating temperature of the card
- **Voltages:** Status of the voltage condition: **OK** or **Fail**
- **Primary Image:** Status of the primary firmware image: **OK** or **Fail**
- **Secondary Image:** Status of the secondary firmware image: **OK** or **Fail**

Reset a Card

Resetting a card causes the card to reboot. To reset a card:

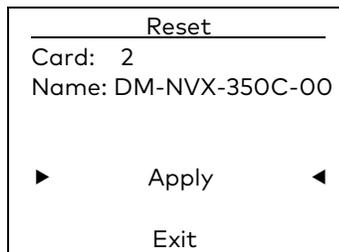
1. On the Diagnostics menu, select **Reset**.

Diagnostics Menu



The **Reset** screen appears on the display for the selected card.

Reset Screen



2. Select **Apply** to reset the card. (Selecting **Exit** prevents the card from being reset and returns the display to the Diagnostics menu.)

NOTE: While the card is being reset, the corresponding green Card Slot Status LED on the front panel of the DMF-CI-8 turns off. The LED turns on again when the card is reset.

Restore a Card to the Factory Default Settings

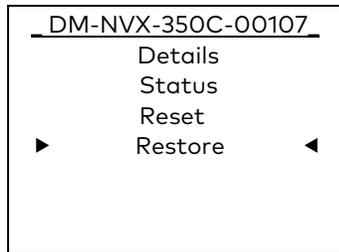
The factory default settings of a card can be restored on a card-by-card basis.

NOTE: To restore all cards on a global basis to the factory default settings, refer to "Restore Factory Default Settings" on page 24.

To restore a card to the factory default settings:

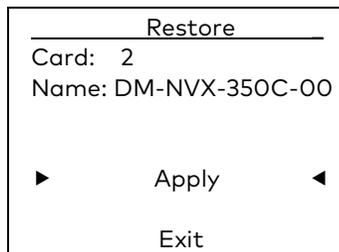
1. On the Diagnostics menu, select **Restore**.

Diagnostics Menu



The **Restore** screen appears on the display for the selected card.

Restore Screen



2. Select **Apply** to restore the factory default settings. (Selecting **Exit** prevents the factory default settings from being restored and returns the display to the Diagnostics menu.)

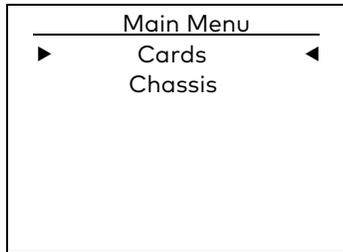
Chassis Status and Configuration

Chassis details and status can be viewed. Chassis configuration allows the front panel navigation pad and push button controls to be disabled. In addition, the factory default settings of only the chassis or of both the chassis and all of the cards can be restored.

To view chassis information or to configure the chassis:

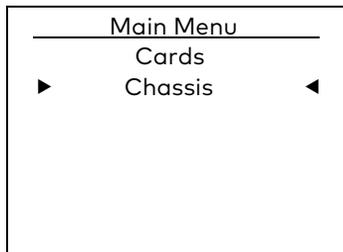
1. Access the Main Menu by pressing the **HOME** push button.

Main Menu



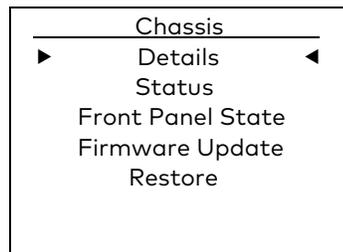
2. Select **Chassis**.

Main Menu



The **Chassis** menu appears on the display.

Chassis Menu



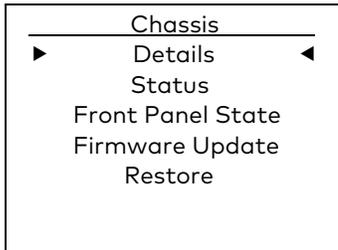
The following sections provide information about viewing chassis details and status as well as information about configuring various chassis functions.

View Chassis Details

Chassis details consist of the serial number and firmware version of the chassis. To view chassis details:

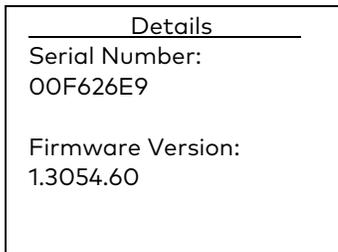
On the **Chassis** menu, select **Details**.

Chassis Menu



The **Details** screen appears on the display showing the serial number and firmware version of the chassis.

Sample Chassis Details Screen

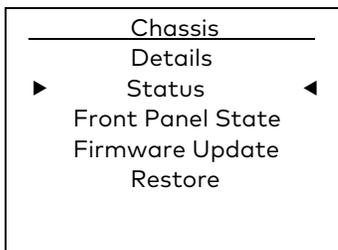


View Chassis Status

Chassis status consists of the operating temperature and the RPM of each fan in the chassis. To view the chassis status:

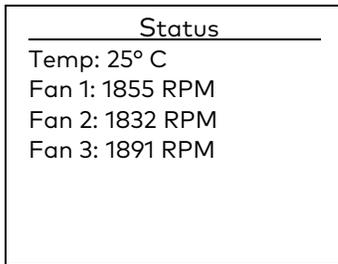
On the **Chassis** menu, select **Status**.

Chassis Menu



The **Status** screen appears on the display showing the operating temperature of the chassis and the RPM of each fan in the chassis. A sample screen is shown on the following page.

Sample Chassis Status Screen



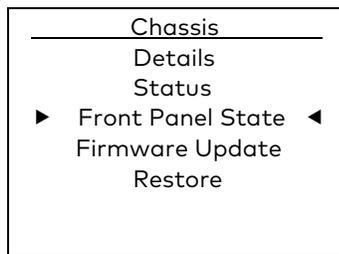
Configure the Front Panel

The navigation pad and the **HOME** and **BACK** push button controls on the front panel can be disabled.

To disable the front panel controls:

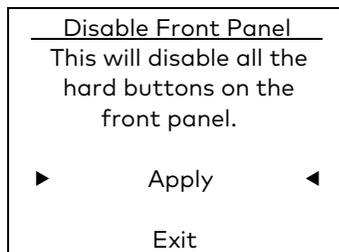
1. On the **Chassis** menu, select **Front Panel State**.

Chassis Menu



The **Disable Front Panel** screen appears on the display.

Disable Front Panel Screen



2. Select **Apply** to disable the front panel controls. The display returns to the general information screen. (Selecting **Exit** prevents the front panel buttons from being disabled and returns the display to the Chassis menu.)

To enable the front panel controls, do either of the following:

- Press the select push button on the navigation pad, the **HOME** push button, and the **BACK** push button simultaneously.
- Use **Text Console** in the Crestron Toolbox software and enter the following command:

lcd 1 off

where **1** is the lowercase letter *L* and **off** disables the lock on the front panel controls. (Entering **lcd 1 on** enables the lock on the front panel controls and therefore disables the controls.)

Update Firmware

The latest firmware file can be downloaded from the Crestron website after logging in as an authorized user. The firmware file is a .upg file, which is included in a .zip file. The .zip file also includes an .html file, which links to the product release notes on the Crestron website.

To upgrade firmware:

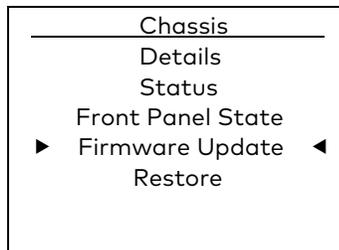
1. Extract the *.upg file from the *.zip file (the * represents the respective filename).
2. Copy the *.upg file to the root directory of a USB flash drive.

NOTE: The USB flash drive must use FAT32.

NOTE: Ensure that the latest firmware file (*.upg) is the only firmware file in the root directory.

3. On the **Chassis** menu, select **Firmware Update**.

Chassis Menu



The Chassis Firmware screen appears on the display.

Chassis Firmware Screen



4. Insert a USB flash drive into the USB Type A port, which is located on the front panel of the DMF-CI-8.
5. Select **Apply**. The Crestron logo appears on the display while the firmware is being updated. When the firmware update process is complete, the display returns to the general information screen.
6. Remove the USB flash drive from the USB Type A port.

Restore Factory Default Settings

Factory default settings can be restored using either of the following options:

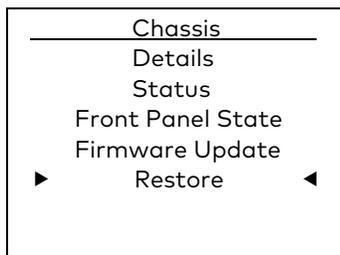
- Chassis only
- Chassis and all cards installed in the chassis

NOTE: To restore the factory default settings of cards on an individual basis, refer to "Restore a Card to the Factory Default Settings" on page 19.

To restore the factory default settings of the chassis only or of the chassis and all installed cards:

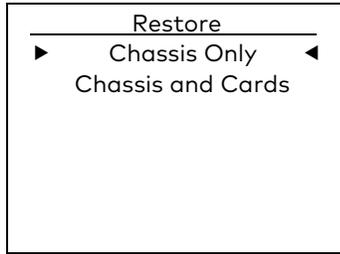
1. On the **Chassis** menu, select **Restore**.

Chassis Menu



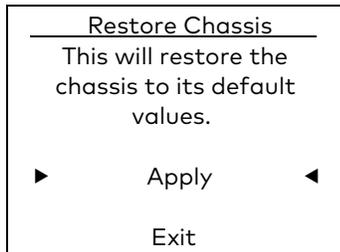
The **Restore** menu appears on the display.

Restore Menu



2. Do either of the following:
 - To restore the factory default settings of the chassis only, select **Chassis Only**. The **Restore Chassis** screen appears on the display. Continue with step 3.
 - To restore the factory default settings of the chassis as well as all installed cards, select **Chassis and Cards**. The **Restore All Devices** screen appears on the display. To proceed, skip step 3 and continue with step 4.
3. (For restoral of chassis default settings only) On the **Restore Chassis** screen, select **Apply**.

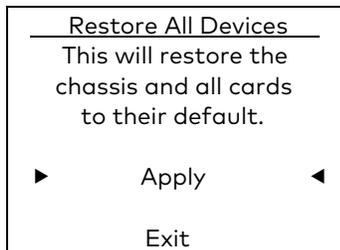
Restore Chassis Screen



The factory default settings of the chassis are restored. The display returns to the general information screen.

4. (For restoral of chassis and card default settings) On the **Restore All Devices** screen, select **Apply**.

Restore All Devices Screen



The factory default settings of the chassis and all installed cards are restored. The display returns to the general information screen.

