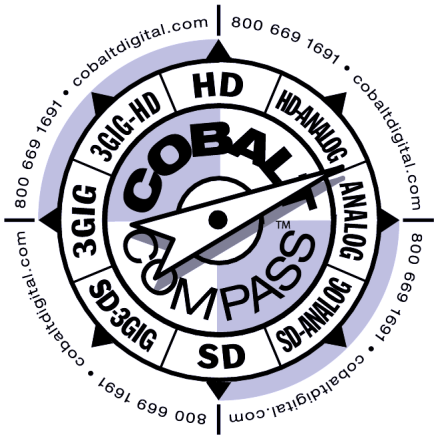

Remote Control User Guide

- **Setting Up DashBoard™ Remote Control**
  For openGear™ Frames and COMPASS™ Cards

- **COMPASS™ Card Software Management**
  Using DashBoard™

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9000RCS-RM (V2.3)

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Remote Control User Guide

This guide provides instructions for setting up and using DashBoard™ to provide the following COMPASS™ card functions:

Setting Up DashBoard™ Remote Control (page 4)

- Provides instructions for setting up and using DashBoard™ remote control for 8310-N / 8321-CN frames and COMPASS™ cards.

COMPASS™ Card Software Management Features Using DashBoard™ (page 24)

- Provides instructions for using features that allow card user settings configurations (Presets) to be saved and recalled, and instructions for updating COMPASS™ card software using DashBoard™.

Managing Frames Using a Log (page 30)

- Provides a blank Frame Log Form and instructions that help ensure an orderly setup and installation process when using DashBoard™.

Note: For remote control setup of Cobalt® Remote Control Panels, refer to the appropriate Remote Control Panel product manual.

Setting Up DashBoard™ Remote Control

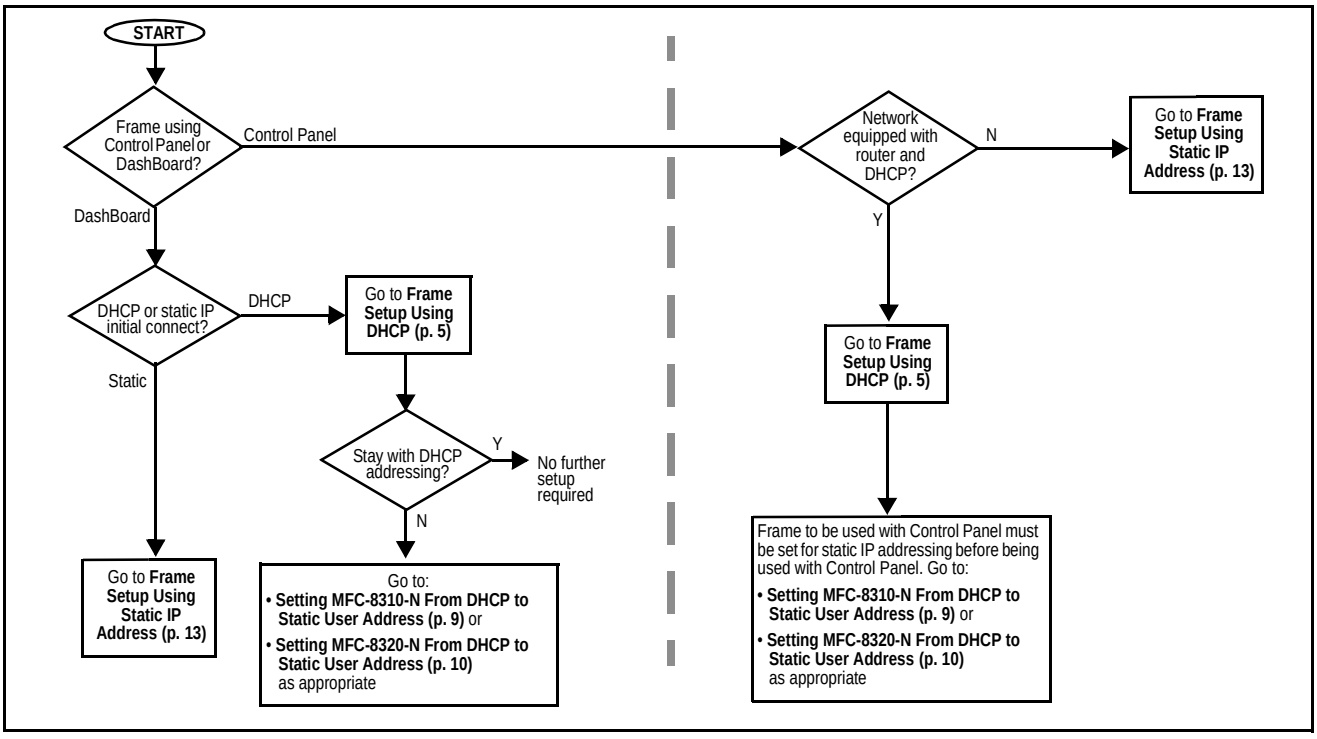
DashBoard™ uses a standard 10/100 Mbps Ethernet LAN for communication between the 8310-N or 8321-CN frame containing the COMPASS™ cards and the computer running DashBoard™.

Before the COMPASS™ cards can be used with DashBoard™, the frame and the computer running DashBoard™ must be set up to communicate ("connect") with each other as described in this section.

Note: To communicate with DashBoard™, the frame must have the optional MFC-8310-N or MFC-8320-N Network Controller Card installed.

Note: 10-slot frame 8310-N uses an MFC-8310-N or MFC-8320-N network card; 20-slot frame 8321-CN uses an MFC-8320-N network card. Setup for either card is very similar. Where setup procedure differences exist between the two cards, these differences are noted.

The flowchart below shows what's required to set up remote control for connecting the card/frame to a Cobalt® Remote Control Panel or DashBoard™, along with corresponding references to procedures in this section.



Frame Setup Using DHCP

DHCP provides the simplest method of connecting frames to the LAN. However, it is typically recommended that frame connections be changed to use static IP addresses after the initial connection is established.

If it is desired to change the address to a static IP address after all frames have been connected in this procedure, follow the instructions in this procedure to change the address to a static IP address after the frame has connected.

▸ Obtain and Install DHCP Server (if not present)

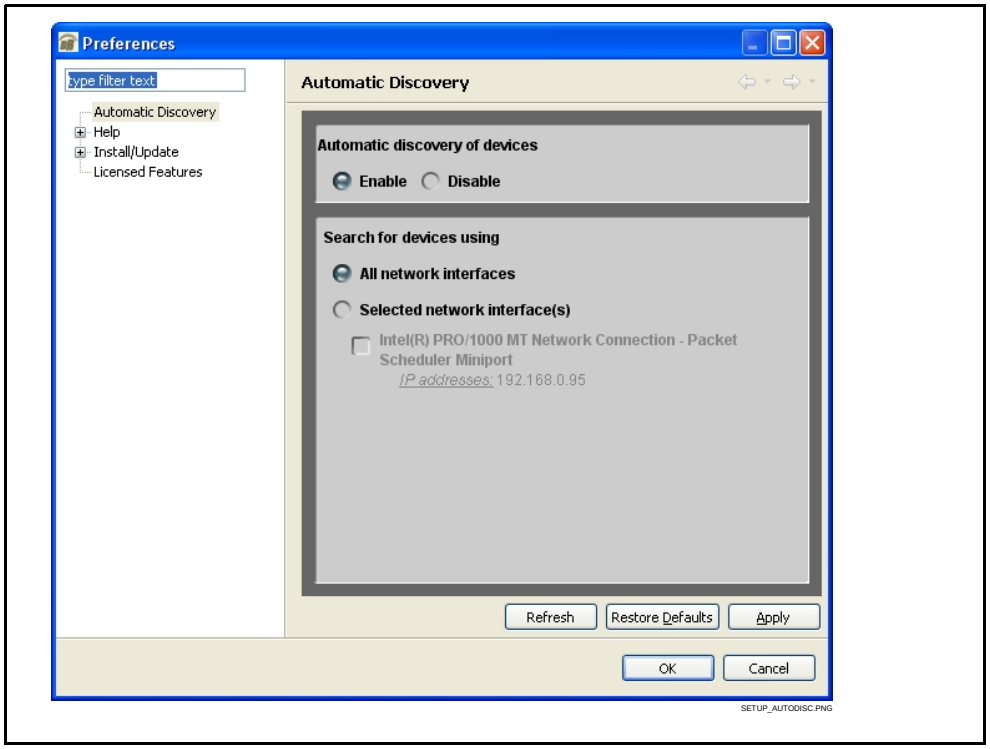
1. If the LAN connecting the frame(s) to DashBoard™ is not already configured with a DHCP server, obtain and install a DHCP server ("TFTP32" or an equivalent is suitable).

▸ Install and Set Up DashBoard™ (if not present)

2. On the computer connected to the frame LAN, go to the Cobalt Digital Inc. website: www.cobaltdigital.com and download DashBoard™. Follow the on-line instructions.

3. When installation is complete, create a desktop shortcut for DashBoard™ (shown here). 

4. Open DashBoard™. Under **Window → Preferences...** make certain Automatic discovery of devices **Enable** button is selected (as shown below).



▸ Set Network Computer for DHCP

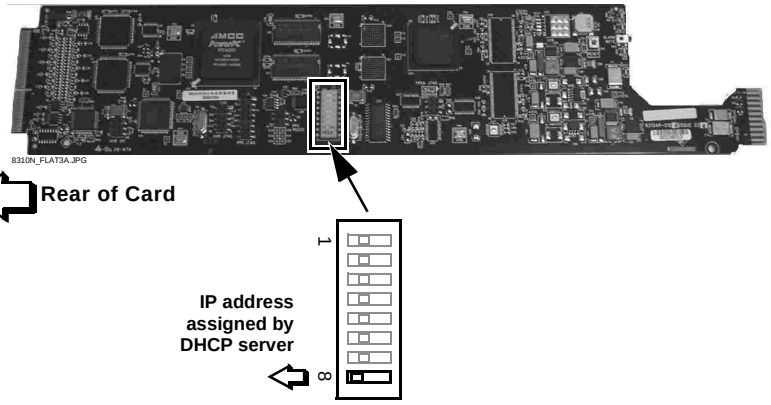
Note:
- If connecting multiple frames using DHCP, allow adequate time to correlate the frame's network card serial number and its DHCP-assigned IP address before proceeding to the next frame. If frames are connected too rapidly without considering this, it may be difficult to correlate frame instances in DashBoard™ and the DHCP-assigned addresses with the physical identity of the frames.
- It is recommended to also identify each frame with its network card serial number and its assigned IP address. This can be easily done using the Frame Log Sheet included in the back of this manual. See Managing Frames Using a Log on page 30 for more information.

5. On the computer where DashBoard™ is installed, make certain TCP/IP Properties DHCP settings are as follows:
   - **Obtain an IP address automatically**
   - **Obtain DNS Server address automatically**

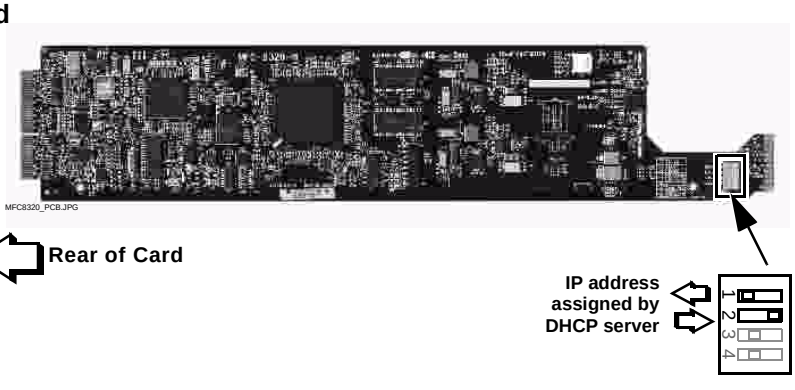
▸ Set Network Controller Card for DHCP

6. On the Network Controller Card, make certain switches are set to the **IP address assigned by DHCP server** position as shown below.

MFC-8310 Card



MFC-8320 Card

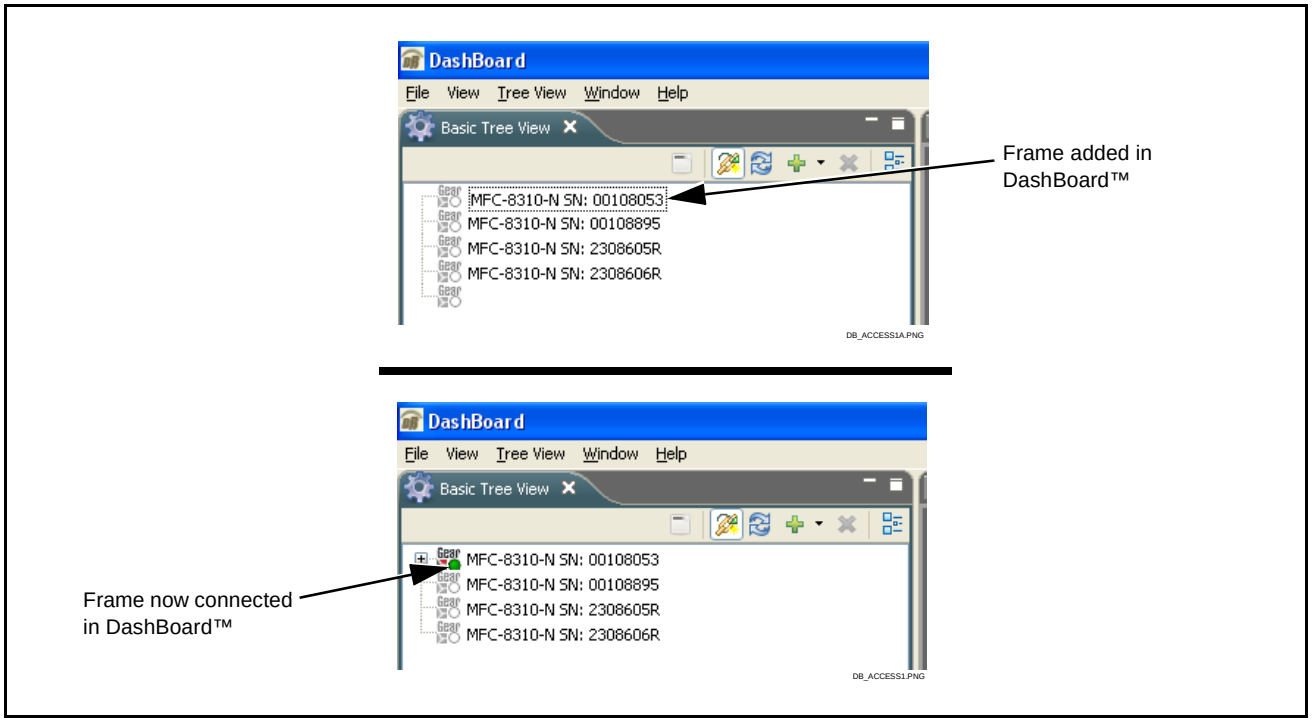


7. Connect the frame to the LAN.

8. Install the network card in the frame and power-up the frame. Wait for the network card to fully boot (red LED turns off).

9. By default, DashBoard™ is set to automatically connect to devices. The frame should now appear in the Basic Tree View pane (added frame “MFC-8310-N SN: 00108053” as shown in the example below).

   (If necessary, right-click on the frame and select **Connect**. The frame is now connected to DashBoard™.)



Note: • DashBoard™ may not be able to connect to the frame if firewalls or network segment controls are used between the computer running DashBoard™ and the frame. (DashBoard™ and the network card use TCP/IP and can be used with routers.)

• If DashBoard™ does not discover the added frame as described above, perform frame setup as described in Frame Setup Using Static IP Address on page 13. Also note that automatic discovery only works for frames within the subnet.

10. If desired, the frame name displayed in the Basic Tree View pane can be changed as shown below.

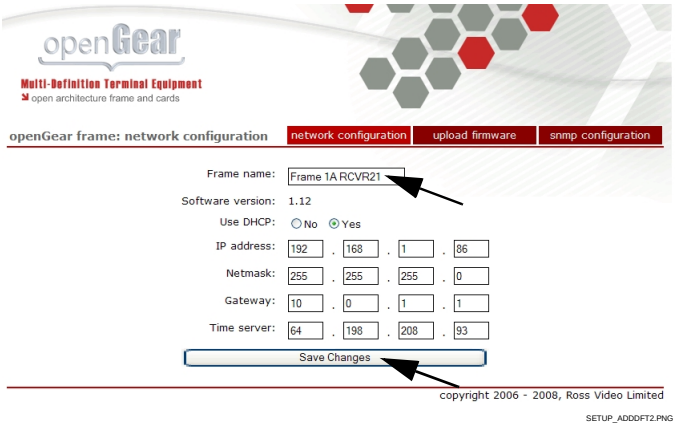
Note: In the next step make certain the frame's network card is given a unique name correlating to the frame physical identity.

As shipped, a Network Controller Card and its controlled frame supplied by Cobalt® are identified in DashBoard™ by the card part number and its serial number (SN) as shown in the examples in this section; therefore, no other action needs to be done unless a custom unique name is desired. Note that frames and/or network cards obtained from other vendors may not be similarly identified and may require a unique name before proceeding.

MFC-8310 Card

Right-click on the **frame** to open the network configuration pane.

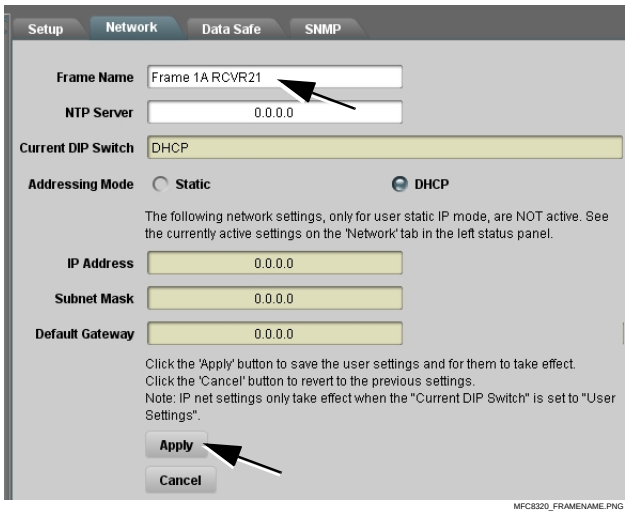
Enter the desired frame name in the **Frame Name:** field and then click **Save Changes**.



MFC-8320 Card

Right-click on the **slot containing the network card (slot 0)** to open the network configuration pane.

Enter the desired frame name in the **Frame Name:** field and then click **Apply**.

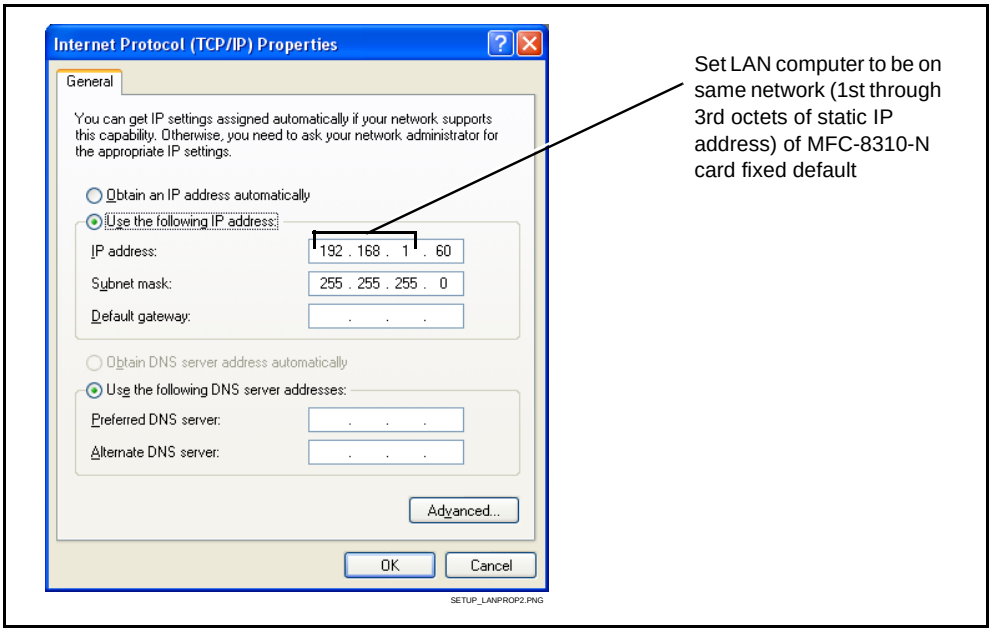


11. Depending on setup desired, proceed as follows:

- To keep setup as **DHCP IP address**, no further setup is required. The frame is now ready to access and control cards. Proceed to the appropriate product manual(s) for card operating instructions.
- To change to **static IP address**, depending on network card model, go to either:
  - **Setting MFC-8310-N From DHCP to Static User Address**
  - **Setting MFC-8320-N From DHCP to Static User Address**

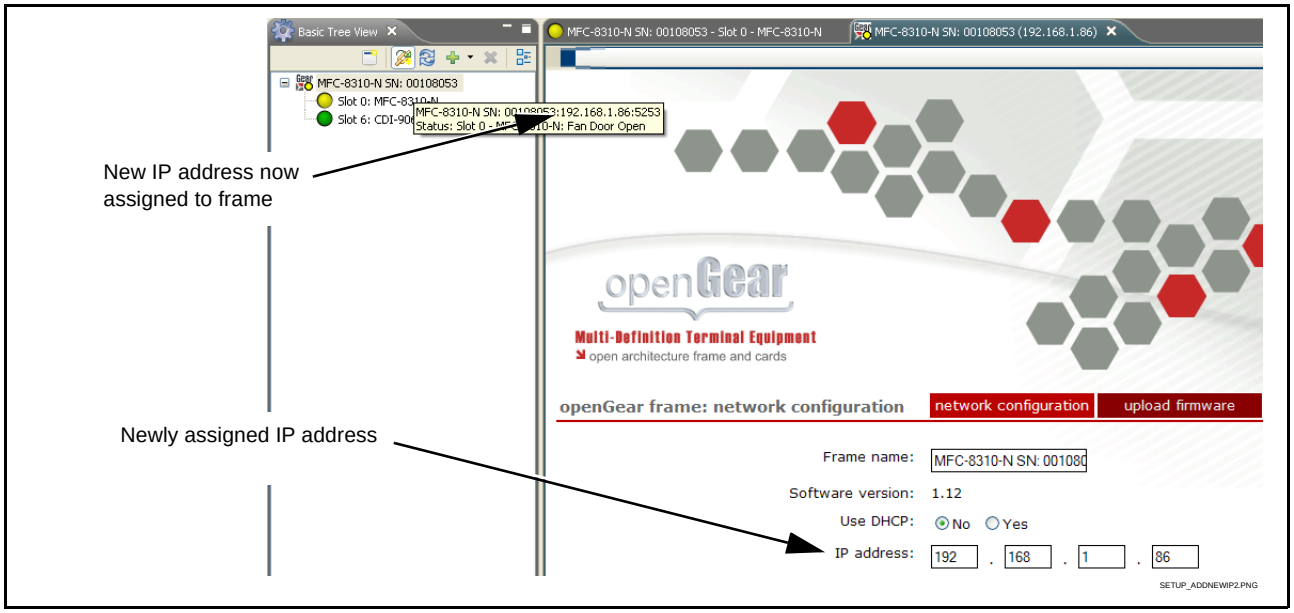
Setting MFC-8310-N From DHCP to Static User Address

1. Right-click on the frame and open the Network Configuration page. Set **Use DHCP:** to **No**.
2. In the **IP address:** field, enter a desired static IP address other than the card fixed default making certain the selected address is in the **same subnet** as the MFC-8310-N card and LAN computer.
3. Click on **Save Changes**. This sets DashBoard™ to use the new static address for this frame.
4. As shown on the next page, set the frame LAN computer to a static IP address to be on the same network as the MFC-8310-N default static IP address (i.e., **192.168.1.x**).



Note:
- When using a frame static IP address, it is recommended to isolate the LAN segment containing the frame, the hosting computer, and intermediate hubs or switches from other parts of the network. This prevents a potential conflict between the frame and any other node that might also have this address.
- Time required for card to come back online depends upon amount of frames connected to DashBoard™.

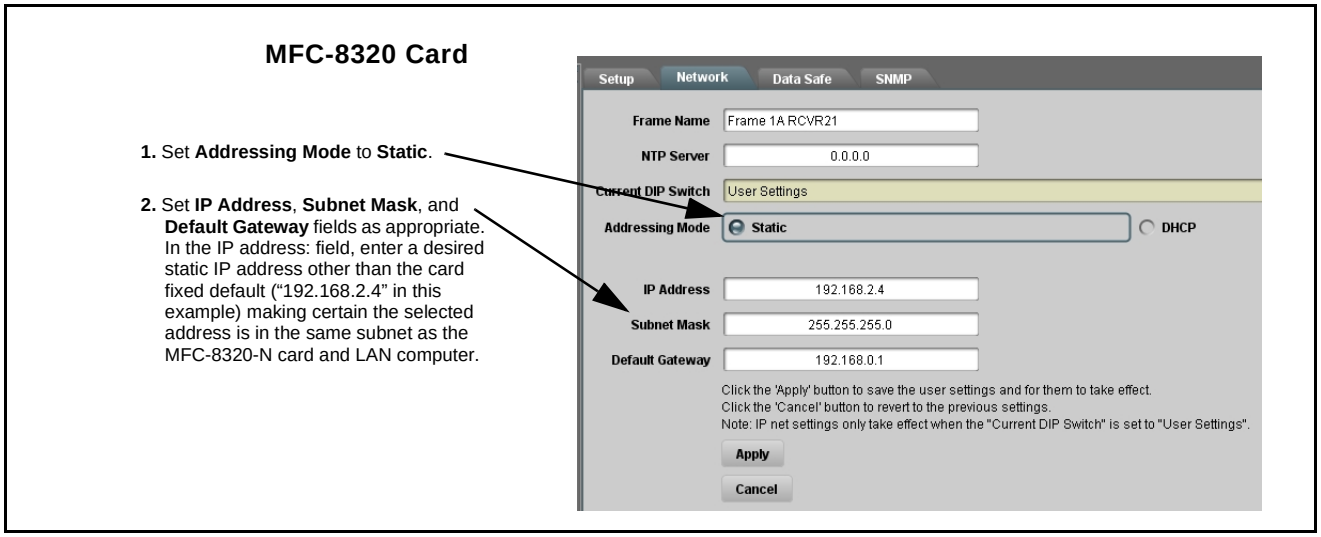
5. The frame now shows connection to DashBoard™ with the assigned static IP address (“192.168.1.86” as shown in the example on the next page).



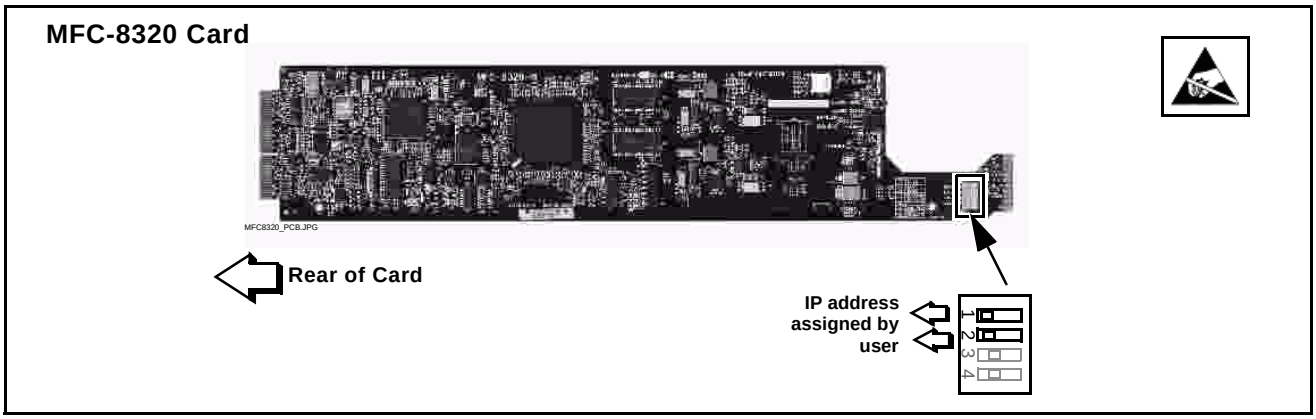
6. The frame is now ready to access and control cards. Proceed to the appropriate product manual(s) for card operating instructions.

Setting MFC-8320-N From DHCP to Static User Address

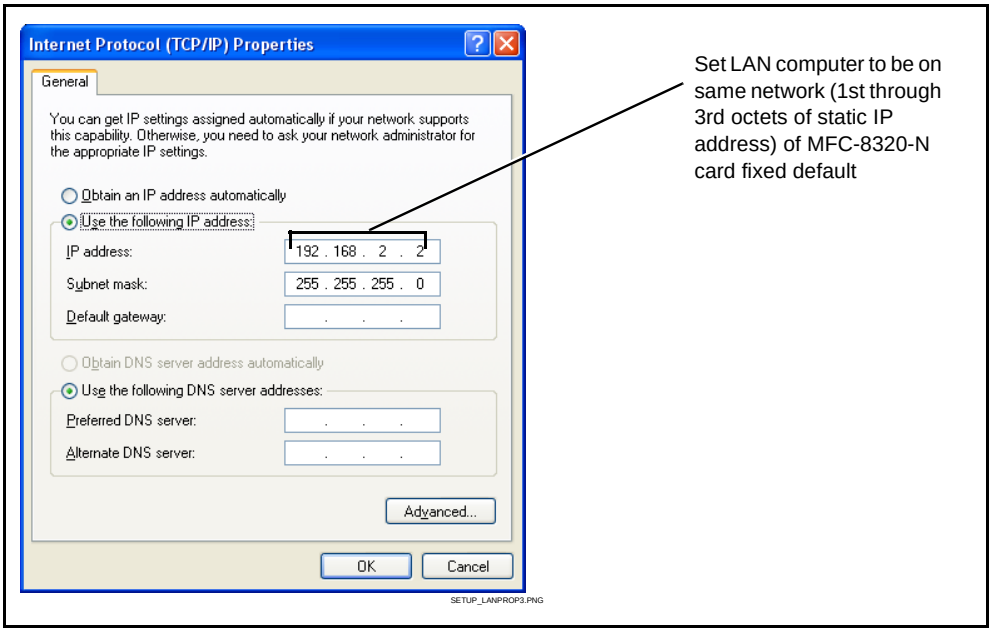
1. On MFC-8320-N **Network** configuration pane, perform the settings shown below.



2. On MFC-8320-N **Network** configuration pane, click **Apply**. The card will momentarily go offline; **wait for the card to come back online before proceeding**.
3. Remove the card from its slot and set DIP switches as shown below.

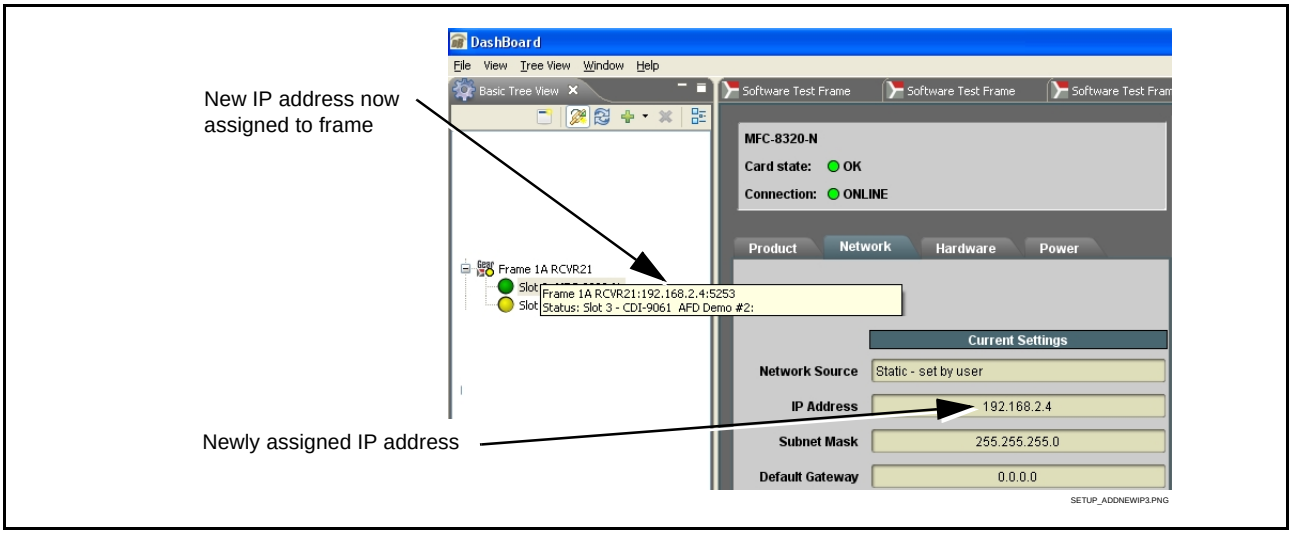


4. As shown on the next page, set the frame LAN computer to a static IP address to be on the same network as the MFC-8310-N default static IP address (i.e., **192.168.2.x**).



Note:
- When using a frame static IP address, it is recommended to isolate the LAN segment containing the frame, the hosting computer, and intermediate hubs or switches from other parts of the network. This prevents a potential conflict between the frame and any other node that might also have this address.
- Time required for card to come back online depends upon amount of frames connected to DashBoard™.

5. Re-insert the card. When the card again comes online, the frame now shows connection to DashBoard™ with the assigned static IP address (“192.168.2.4” as shown in the example on the next page).



6. The frame is now ready to access and control cards. Proceed to the appropriate product manual(s) for card operating instructions.

Frame Setup Using Static IP Address

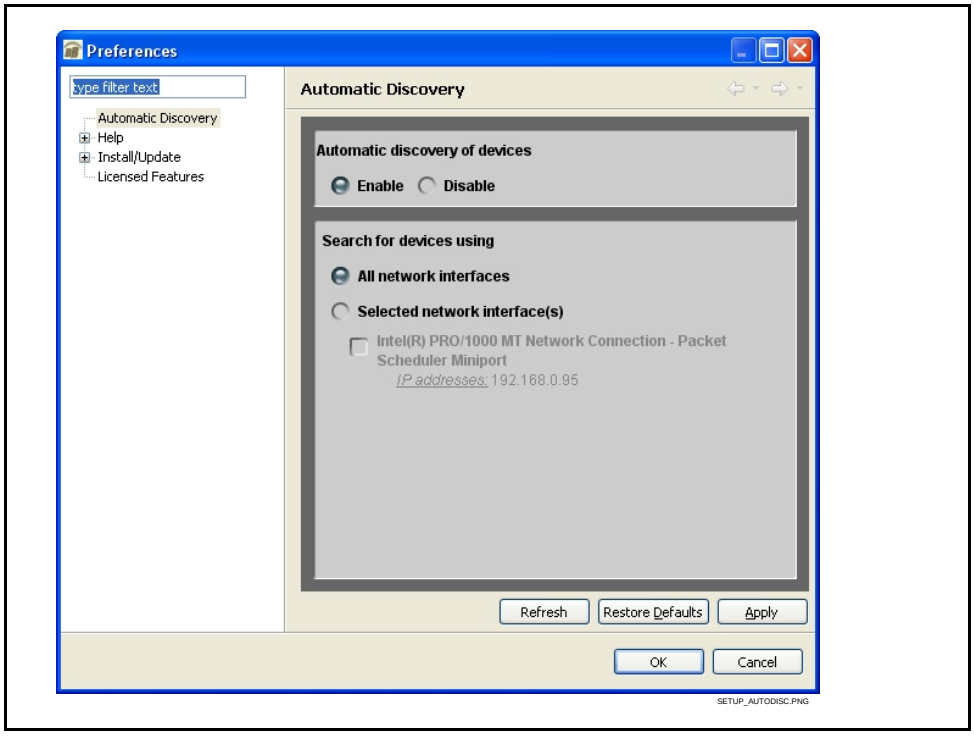
This procedure provides instructions for using the manual mode for adding a frame to DashBoard™. In this mode, the frame is set to use a static IP address, and DashBoard™ is set to look for and connect to a specific frame address. This mode is useful where network problems or resource availability prevent DHCP usage.

Note: If static IP addresses are to be used, carefully follow this procedure. If the procedure is not followed as specified, DashBoard™ may lose all communication with the frame, thereby requiring the procedure to be repeated in its entirety.

▸ Install and Set Up DashBoard™ (if not present)

1. If not already performed, install DashBoard™ on the computer connected to the frame LAN as described in steps 2 and 3 in **Frame Setup Using DHCP** on page 5.

2. Open DashBoard™. Under **Window** → **Preferences...** make certain Automatic discovery of devices **Enable** button is selected (as shown below).

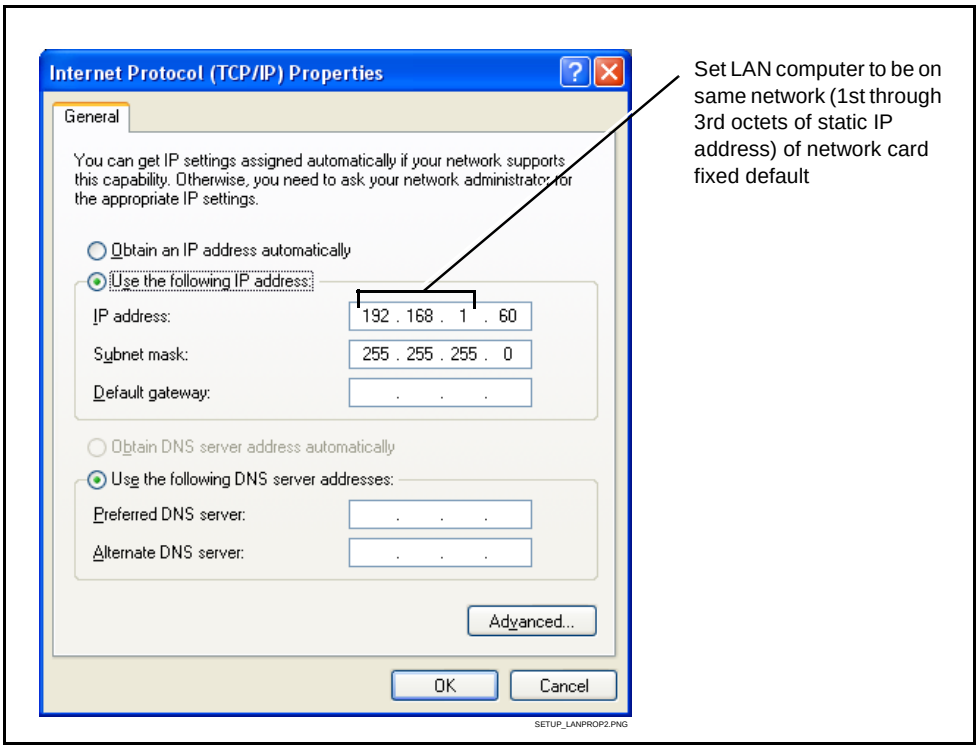


Note: It is recommended to identify each frame with its MFC-8310-N / MFC-8320-N network card serial number and its assigned IP address. This can be easily done using the Frame Log Sheet included in the back of this manual. Refer to Managing Frames Using a Log on page 30 for more information.

Set Network Computer for Static IP Addressing

3. As shown below, set the frame LAN computer to a static IP address that is on the same network as the network card default static IP address:

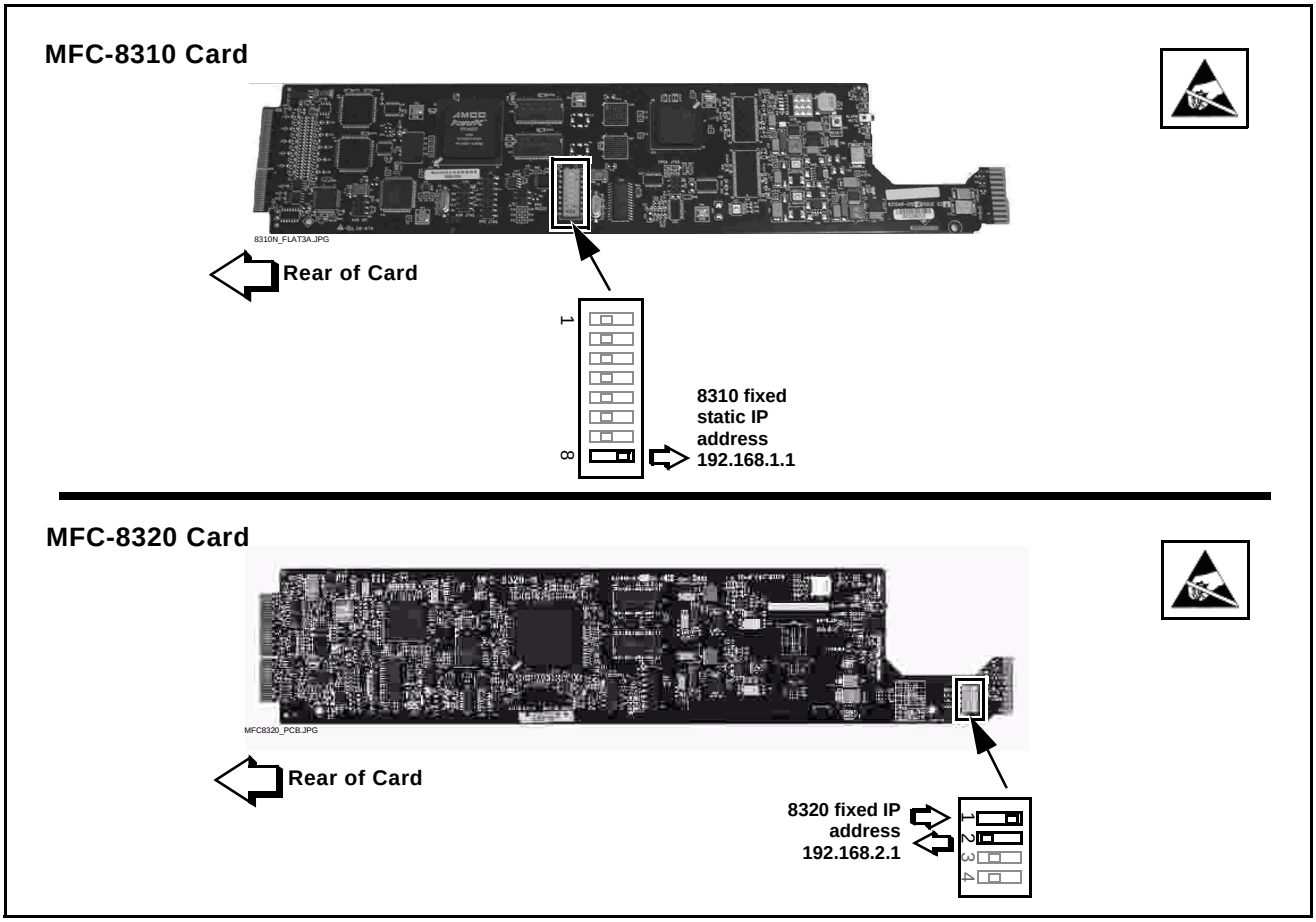
Card Model	Factory Default Network
MFN-8310-N	192.168.1.x
MFN-8320-N	192.168.2.x



Note: When using a frame static IP address, if not already done it is recommended to isolate the LAN segment containing the frame, the hosting computer, and intermediate hubs or switches from other parts of the network. This prevents a potential conflict between the frame and any other node that might also have this address.

Set Network Controller Card for Initial Fixed IP Address

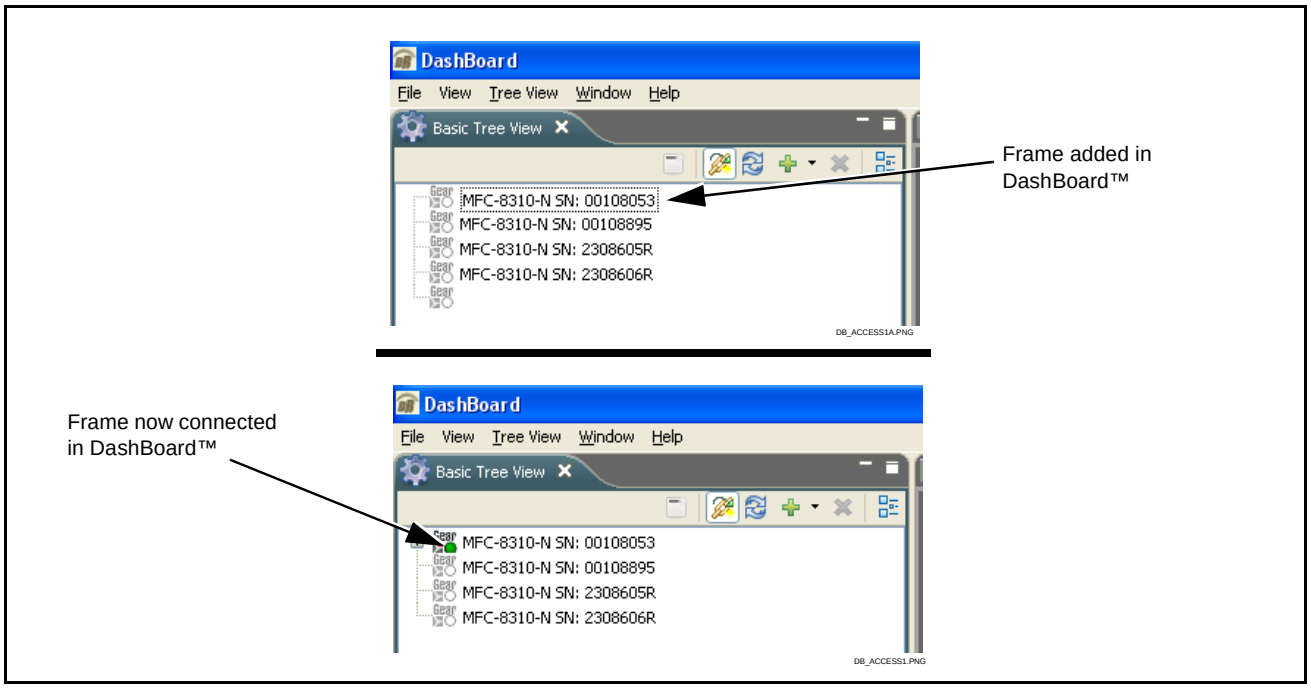
4. Set network card switch(es) to the **fixed static IP address** position as shown below. This establishes the initial connection between the card and the network computer.



5. Connect the frame to the LAN and power-up the frame.

6. Install the network card in the frame. Wait for the network card to fully reboot (red LED turns off).

7. The added frame should now appear in the Basic Tree View pane. If necessary, right-click on the frame and select **Connect**. The frame is now connected to DashBoard™.

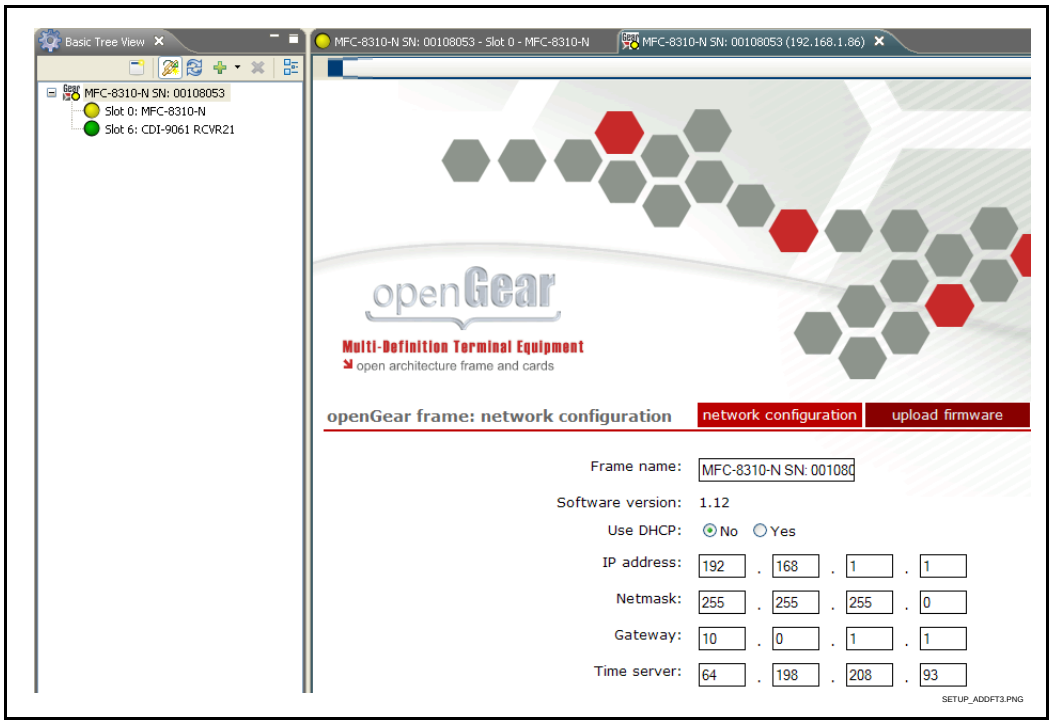


▸ Set Network Controller Card to Desired Unique Static IP Address

8. Set the network card to the desired unique static IP address as described in:
   - **Setting MFC-8310-N to Static User Address** (page 17), or
   - **Setting MFC-8320-N to Static User Address** (page 19)

Setting MFC-8310-N to Static User Address

1. Right-click on the frame and select **Open**. The Network Configuration page appears (shown below).



2. In the Network Configuration page, do the following:
   - Make certain **Use DHCP:** is set to **No**.
   - In the **IP address:** field, enter a desired static IP address other than the card fixed default ("192.168.1.86" in the example here) making certain the selected address is in the **same subnet** as the MFC-8310-N card and LAN computer.
   - Click on **Save Changes**. This sets DashBoard™ to use the new static address for this frame.

   At this point, the frame instance is installed in DashBoard™, with DashBoard™ now looking for the frame whenever DashBoard™ is again opened.

Note: Do not leave the IP address as the factory default 192.168.1.1. If other frame are to be installed later, the IP address being left at default will conflict with subsequent frames installed as described here.

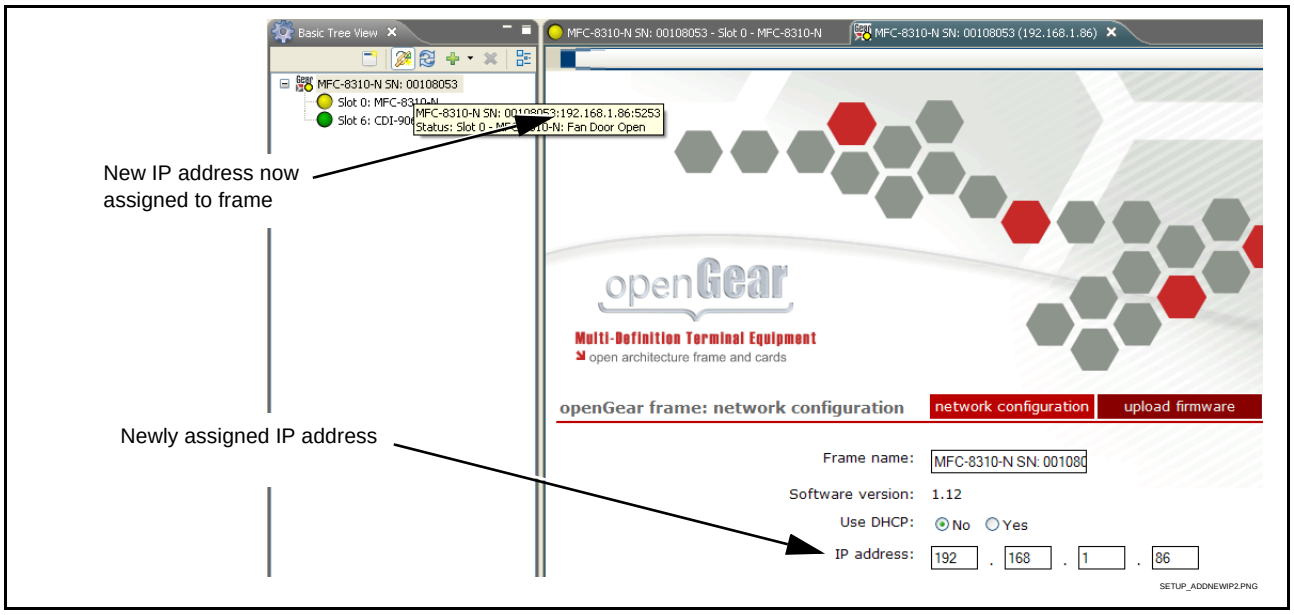
3. Remove the MFC-8310-N card and set switch SW-1 (position 8) to the opposite position in which it is now set. (**Normal** position).

4. Re-install the card and wait for the card to boot (red LED turns off).

5. On DashBoard™, select the newly added frame. If necessary, click the **Re-query** button to again display the added frame. The added frame now appears with its new address (as shown below).

   Because DashBoard™ now "sees" the frame, its address can be changed as desired at this point. If desired, a new address can be applied in the frame Network Configuration page by entering the new address and then clicking on **Save Changes** to apply a different address.

Note: Whenever using a static address for the frame, the address must be compatible with the network of the computer running DashBoard™.

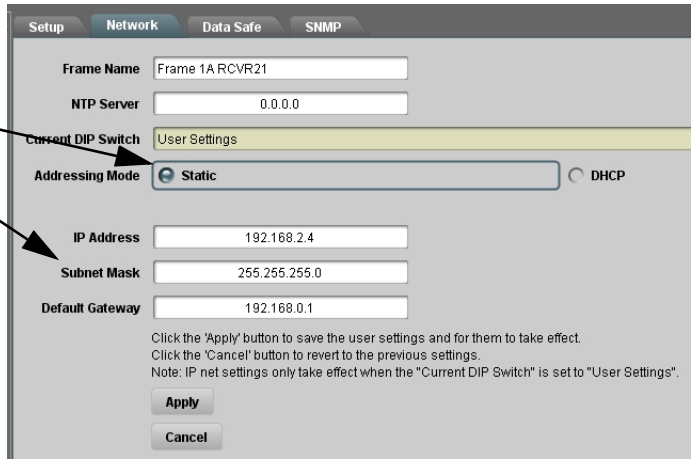


Setting MFC-8320-N to Static User Address

1. On MFC-8320-N **Network** configuration pane, perform the settings shown below.

MFC-8320 Card

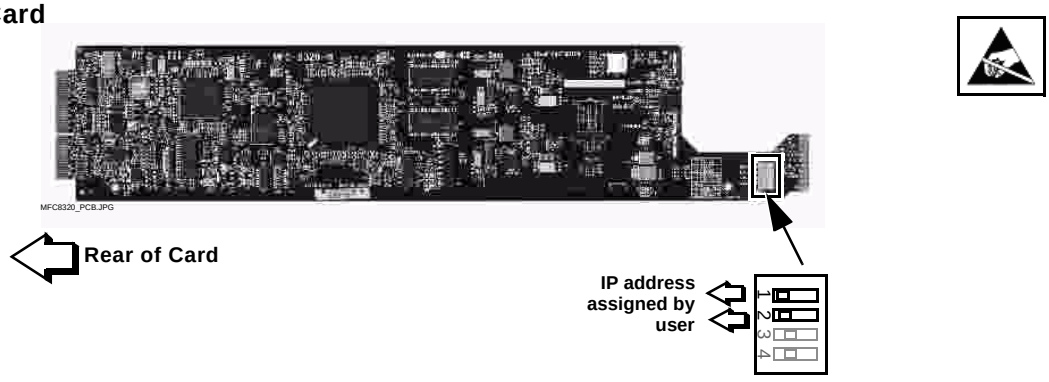
1. Set **Addressing Mode** to **Static**.
2. Set **IP Address**, **Subnet Mask**, and **Default Gateway** fields as appropriate. In the IP address: field, enter a desired static IP address other than the card fixed default ("192.168.2.4" in this example) making certain the selected address is in the same subnet as the MFC-8320-N card and LAN computer.



Note: Do not leave the IP address as the factory default 192.168.2.1. If other frame are to be installed later, the IP address being left at default will conflict with subsequent frames installed as described here.

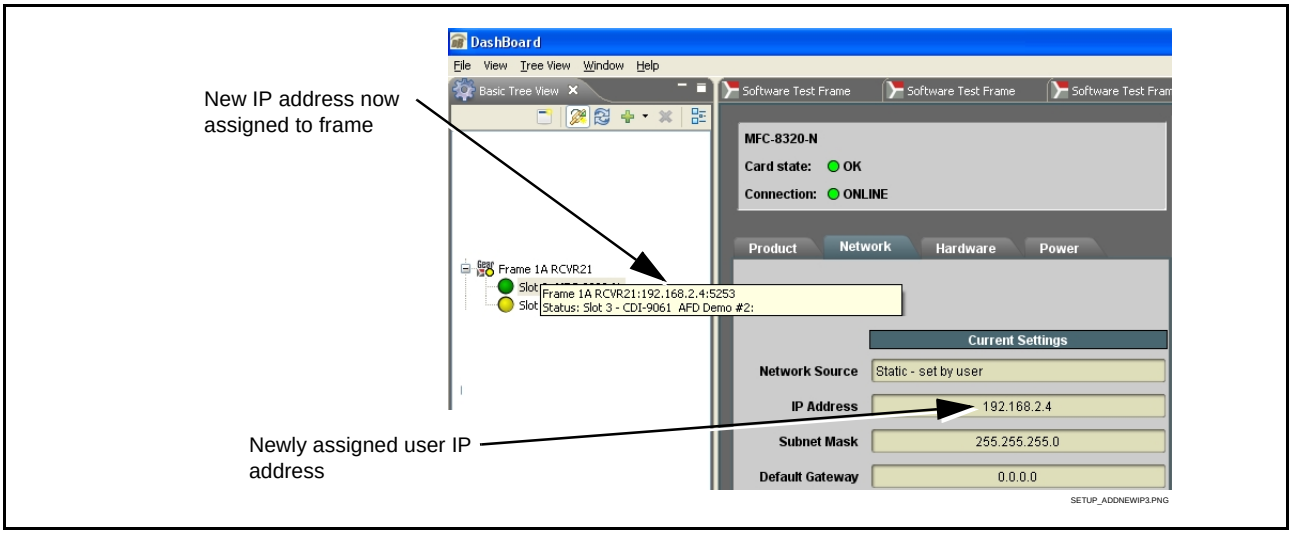
2. On MFC-8320-N **Network** configuration pane, click **Apply**. The card will momentarily go offline; **wait for the card to come back online before proceeding**.
3. Remove the card from its slot and set DIP switches as shown below.

MFC-8320 Card



Note: Time required for card to come back online depends upon amount of frames connected to DashBoard™.

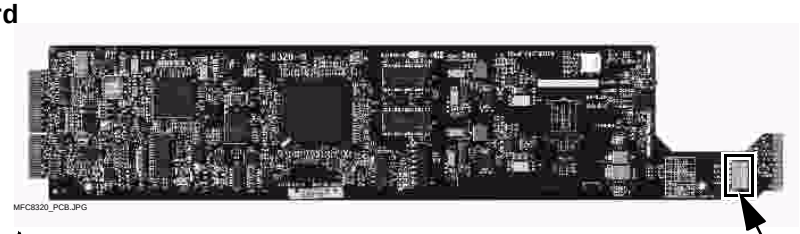
4. Re-insert the card. When the card again comes online, the frame now shows connection to DashBoard™ with the assigned static IP address ("192.168.2.4" as shown in the example below).



5. The frame is now ready to access and control cards. Proceed to the appropriate product manual(s) for card operating instructions.

MFC-8320-N switches SW-1 and SW-2 provide various network settings for the card. For reference, these are described below. Note that for normal installations, manipulation of these switch as shown in the procedures above is all that is required.

MFC-8320 Card



Rear of Card

Static IP address assigned by user

IP address assigned by DHCP

IP address set to fixed factory: 192.168.2.1

Local/private address set to fixed factory: 10.1.2.1

Note: In all cases using static addressing, typical subnet setting is 255:255:255:0

Troubleshooting Network/Remote Control Errors

The table below provides network/remote control troubleshooting information. If the COMPASS™ card or its remote connection(s) exhibits any of the symptoms listed in the table, follow the troubleshooting instructions provided.

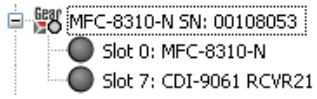
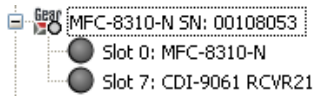
Note: All remote control items described here use industry standard 10/100 Mbps Ethernet for communication between the Network Card/frame and remote control systems such as DashBoard™.

Standard LAN troubleshooting techniques and practices are applicable to this usage. The RJ-45 receptacle that provides the frame connection to the LAN is equipped with an activity status indicator that can be used to determine activity status.

Troubleshooting Network/Remote Control Errors by Symptom

Symptom	Error	Corrective Action
DashBoard™ does not discover newly connected frame.	DashBoard™ may not be set to automatically discover added devices	• Make certain DashBoard™ is set to automatically discover devices as specified in Frame Setup Using DHCP on page 5.
General difficulty getting frame to connect.	—	• The surest method of establishing a connection is to use static addressing using the network card's fixed IP address to establish initial connection. When connection is established using fixed IP address, the connection can then be changed to a unique IP address in accordance with Setting MFC-8310-N to Static User Address (p. 17) or Setting MFC-8320-N to Static User Address (p. 19), as applicable.
	• Computer-to-frame Ethernet cable is not crossover-type cable	• Some computer NIC cards require a crossover-type cable to properly connect to the Tx and Rx pins used on the openGear frame Ethernet connector. It is generally recommended to use a crossover-type cable in these cases, as the auto-MDIX feature of the frame will adapt to either Rx/Tx orientation when a crossover-type cable is used.

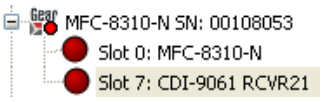
Troubleshooting Network/Remote Control Errors by Symptom — continued

Symptom	Error	Corrective Action
Newly added frame in DashBoard™ that uses static IP address will not activate (icon stays grayed-out)	• Network Card and LAN computer on different networks	• Make certain LAN hosting computer and Network Controller Card are on same network. During setup, computer must use 192.168.1.x network (MFC-8310-N card) or 192.168.2.x network (MFC-8320-N card) to accommodate the Network Card fixed static IP address.
	• Address conflict with other nodes or another Network Card	• Make certain that the LAN segment containing the frame, the hosting computer, and intermediate hubs or switches is isolated from other parts of the network. • Make certain the Network Card is not left with its address mode switch set to the fixed static IP address mode.
DashBoard™ shows grayed-out icon in Card Access/Navigation Tree pane for Network Controller Card). Error randomly occurred with no intervening action. 	Network Controller Card not electrically/physically connected to frame, or communications error	• Make certain the Network Card is properly and fully seated in its frame card slot. Eject the card and reseat the card. • Make certain the frame power supply shows proper operating status. • Make certain the Ethernet cable is properly connected and showing activity on the LAN switch. Use `ping` or `netstat` to check the connection.
DashBoard™ shows grayed-out icon in Card Access/Navigation Tree pane for Network Controller Card). Error occurred immediately after applying DashBoard™ Network Configuration page changes, or when host computer/network had network setting changes applied. 	DashBoard™ has lost its connection to the frame. If a frame is set in Dashboard™ as using DHCP, **do not** change the setting to static IP address ("Use DHCP: No") without following the **entire** procedure for static address usage (DashBoard™ will not forward from DHCP-assigned addresses to a static address)	• Try removing and re-inserting the network card, and then repeating by closing and opening DashBoard™ again. • Re-establish connection by re-connecting the frame to Dashboard™ using factory fixed static IP address (192.168.1.1 for MFC-8310-N or 192.168.2.1 for MFC-8320-N) as described in Frame Setup Using Static IP Address on page 13. Then, reconfigure the frame for DHCP in accordance with the instructions provided in the procedure.

Troubleshooting Network/Remote Control Errors by Symptom — continued

Symptom	Error	Corrective Action

DashBoard™ shows red icon in Card Access/Navigation Tree pane for COMPASS™ card (Network Controller Card OK).
 
	See “Corrective Action” to the right	• **If other cards in the same frame show connection**, the card showing red icon may not be communicating with Dashboard™. Check the following:
		  • Make certain the card is installed in the intended frame and slot location.
		  • Make certain the card is properly and fully seated in the frame card slot. Eject the card and reseat the card.
		• **If all other cards in the same frame do not show connection**, the remote control system may not be connecting to the LAN. Check the following:
		  • Make certain the Ethernet cable is properly connected and showing activity on the LAN switch. Use `ping-` to check the connection.

DashBoard™ shows red icon in Card Access/Navigation Tree pane for Network Controller Card).
 
	Network Controller Card LAN settings may be incorrect in DashBoard™ Network Configuration screen	• **If cards in another frame display properly**, the remote control system may not be connecting to the frame containing the cards. Check the following:
		  • Make certain the IP settings for the frame specified in the DashBoard™ Network Configuration screen agree with the settings for the frame.
		• **If cards in another frame also do not display properly**, the remote control system may not be connecting to the LAN. Check the following:
		  • Make certain the Ethernet cable is properly connected and showing activity on the LAN switch. Use `ping-` to check the connection.

COMPASS™ Card Software Management Features Using DashBoard™

Using DashBoard™, COMPASS™ card user configuration settings and card operating software updates can be conveniently and flexibly managed.

- **Using the COMPASS™ Card Presets Function** – Most COMPASS™ card have a Presets function tab that allows up to 16 COMPASS™ card user settings configurations (Presets) to be saved (Preset Save) and then recalled (Preset Load) as desired. All current settings (including list selections and scalar (numeric) control settings) are saved when a Preset Save is invoked.

  Go to **Using the COMPASS™ Card Presets Function** on page 25 for using the Presets function.

- **COMPASS™ Card Update Using DashBoard™** – Using the DashBoard™ Upload function, newer software versions (when available) of a COMPASS™ card can be received by e-mail and uploaded to the same-model COMPASS™ card.

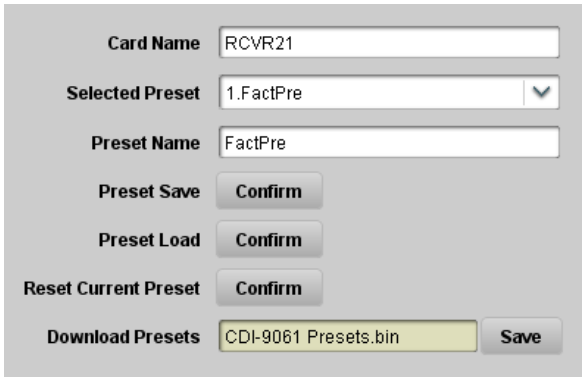
  Software version is identified by the Software Build Number that is displayed in the Card Info pane. Contact Cobalt Digital Inc. Technical Support for information on receiving card update software.

  Go to **COMPASS™ Card Update Using DashBoard™** on page 29 for performing a card Update.

Using the COMPASS™ Card Presets Function

The table below shows and describes the items accessed when the DashBoard™ **Presets** tab is selected for a COMPASS™ card.

Presets can be saved to a file (**Preset Download**) for future use. The presets saved in the file can then in turn be uploaded (**Upload**) to the same card, or uploaded to other same-model cards within frames connected on the same LAN.

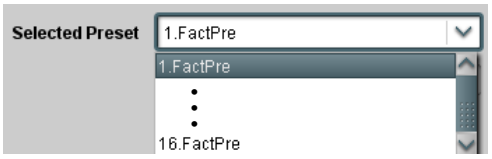


The **Preset Name** field and **Preset Save** button allow custom user setting configurations to be labeled and saved to a Preset for future use.

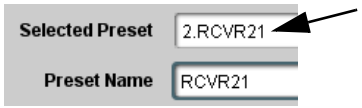
The **Preset Load** button and the **Selected Preset** drop-down list allow saved presets to be selected and loaded as desired. When a preset is loaded, it immediately becomes active with all user settings now automatically set as directed by the preset.

Saved presets can be uploaded to a computer for use with other same-model COMPASS™ cards.

Each of the items to the left are described in detail on the following pages.

• **Card Name** 	Text entry field provides for optional entry of card name, function, etc. (as shown in this example). **Note:** Card name can be 31 ASCII characters maximum.
• **Selected Preset** 	**Selected Preset 1** thru **Selected Preset 16** range in drop-down list selects one of 16 stored presets as ready for **Save** (being written to) or for **Load** (being applied to the card). **Note:** The preset names shown to the left are the default (unnamed) preset names. All 16 presets in this case are loaded identically with the factory default settings.

(Continued on next page)

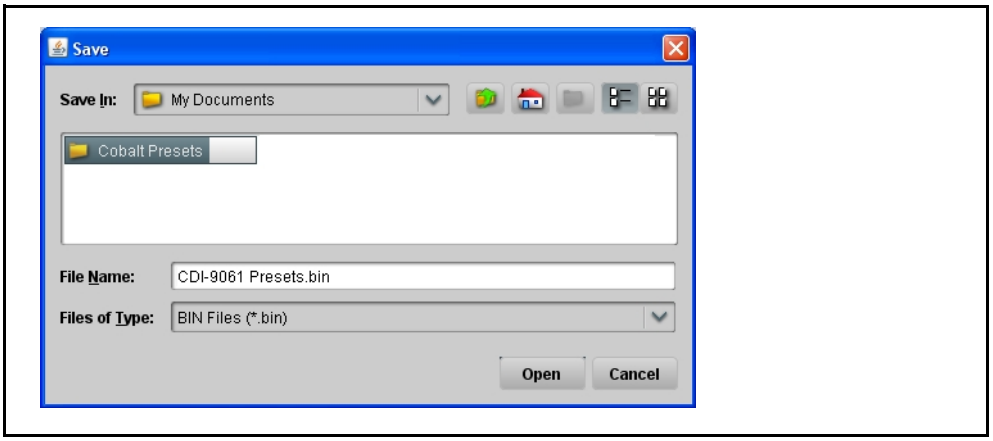
• **Preset Name** 	With one of 16 presets selected, provides for entry of custom name for the preset (as shown in example below).  Entering text in Preset Name field (in this example, “RCVR21”) applies custom name to selected Preset (in this example, Preset 2) **Note:** • Preset name can be seven ASCII characters maximum. • The Preset ID number does not need to be entered; it is added automatically.
• **Preset Save, Load, and Reset**   	• **Preset Save** stores all current card control settings to the currently selected preset. (For example, if Preset 1 is selected in the Selected Preset drop-down list, clicking and confirming Preset Save will then save all current card control settings to Preset 1) • **Preset Load** loads (applies) all card control settings defined by whatever preset (**Preset 1** thru **Preset 16**) is currently selected in the **Selected Preset** drop-down list. (For example, if Preset 3 is selected in the Selected Preset drop-down list, clicking and confirming Preset Load will then apply all card control settings defined in Preset 3) • **Reset Current Preset** resets all parameters (including preset custom name entered) of the currently selected Preset (as displayed in the **Selected Preset** field) to factory default settings. (Refer to the Product Manual for you COMPASS™ card for a list of the card’s factory default settings.) All of the above buttons have a **Confirm?** pop-up that appears, requesting confirmation. **Note:** Applying a change to a preset using the buttons described above **rewrites** the previous preset contents with the invoked contents. Make certain change is desired before confirming preset change.

Downloading Presets

Downloading the Presets allows all 16 presets to be saved to a computer on the network hosting the frame for use with other same-model COMPASS™ cards as described below. When a Presets download is performed, the Presets file is then rewritten with the new card state information defined in the Presets download (except card name).

Download the presets from a COMPASS™ card to a Presets file as follows:

1. Open DashBoard™ for the desired COMPASS™ card and select the **Presets** tab.
2. Adjacent to the **Download Presets** field, click **Save**.
3. In DashBoard™, the screen shown below now appears. Navigate to the location where you want to save the Presets file (in this example, “My Documents/Cobalt Presets”). Click **Save** and confirm. The 16 current presets for the card are now saved on your computer.

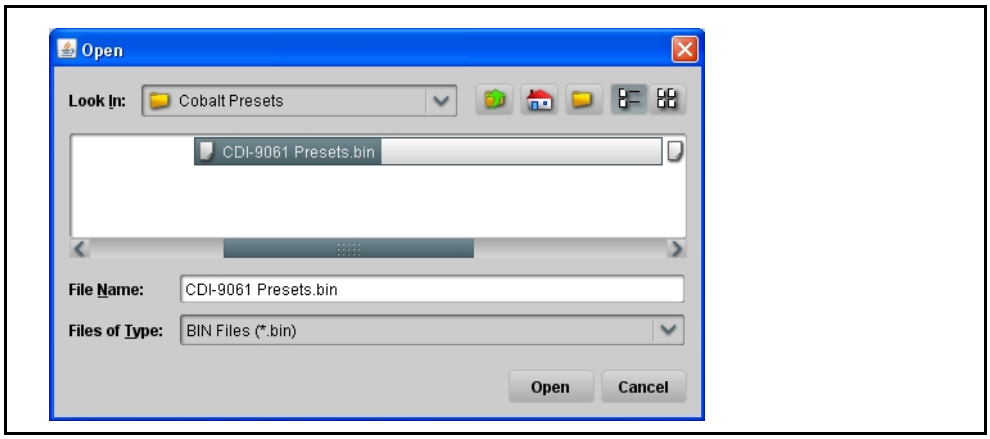


4. The Confirm? pop-up appears, requesting confirmation.
   - Click **Yes** to confirm the download.
   - Click **No** to reject confirm and select another target filename and/or location.
   - Click **Cancel** to exit from the download procedure.

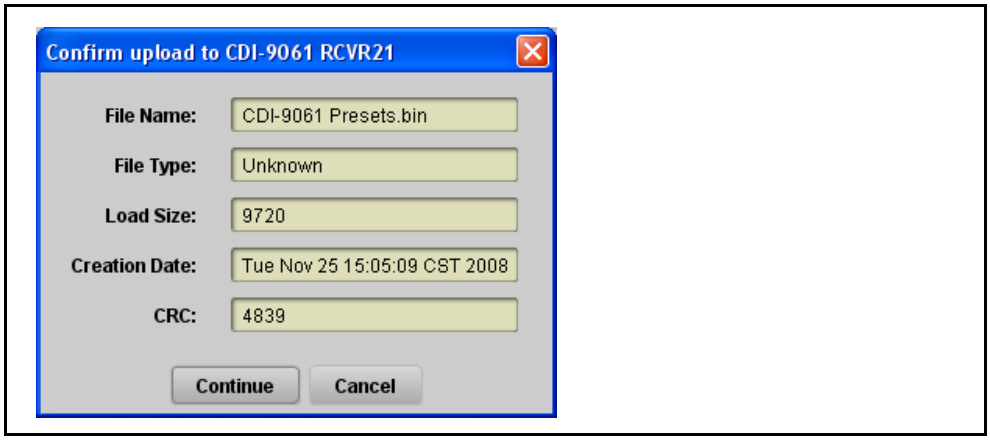
Presets Upload

Uploading the Presets allows all 16 presets stored in a Presets file to be uploaded to same-model COMPASS™ cards as described below. Upload stored presets to a COMPASS™ card as follows:

1. Open DashBoard™ for the desired COMPASS™ card and select the **Presets** tab.
2. Click **Upload**. The screen shown below appears. Navigate to where you saved the Presets file (in this example “Cobalt Presets”). Select the desired file (in this example, “CDI-9061 Presets.bin”) and click **Open**.



3. The screen shown below appears on DashBoard™. Click on **Continue** to proceed with the upload. When the upload is complete, the COMPASS™ card reboots. Your saved presets are now in the card and can be re-applied as desired.

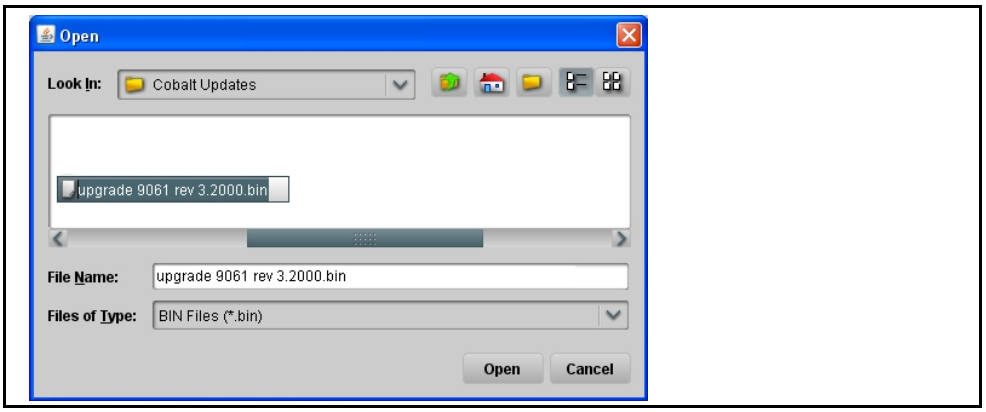


COMPASS™ Card Update Using DashBoard™

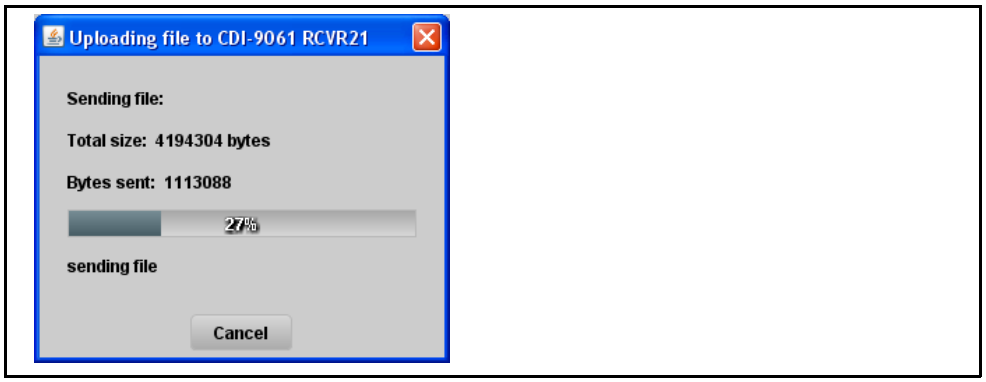
Using DashBoard™, newer firmware versions for a COMPASS™ card can be uploaded from your computer to a COMPASS™ card. Upload card software as described below.

Note:
- Make certain the COMPASS™ card is not carrying an on-air signal while performing this procedure. The card will automatically go off-line while the software uploads to the card.
- COMPASS™ cards retain the previous firmware in card memory, thereby providing firmware redundancy that allows reverting to the previous firmware should any problems arise when new firmware is uploaded to the card.

1. After receiving a Cobalt® card update file (typically sent via e-mail), save the file to a desired location on your computer/network that is accessible by DashBoard™ (in this example “Cobalt Updates”).
2. Open DashBoard™ and select the card to receive an updated software version.
3. Click on the **Upload** button at the bottom of the DashBoard™ screen.
4. The screen shown below now appears. Navigate to where you saved the file (in this example, “Cobalt Updates”) and select the desired upgrade file (in this example, “upgrade 9061 rev 3.2000 .bin”).



5. Click on the **Open** button and confirm the upload. Wait while the file is sent to the card (as shown below). When the upload is complete, the Upload function closes and the card automatically reboots.



Managing Frames Using a Log Form

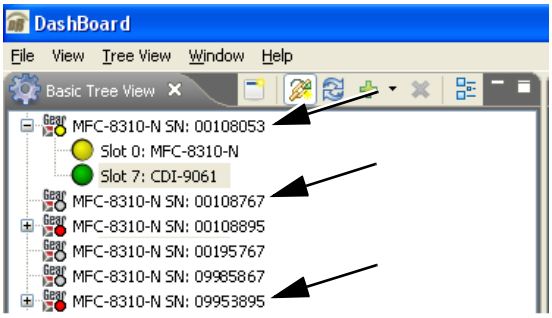
Consideration should be given to a means of correlating the frame physical identification/location with its remote control identity in DashBoard™.

Especially when using DHCP to connect frames, a large number of frames may suddenly connect and appear in the DashBoard™ Basic Navigation Tree without any means of correlating each frame instance in DashBoard™ with the actual frame hardware.

To help prevent this, it is recommended that an orderly installation process be used that correlates the frame's physical identity (rack location, function, etc.) with its instance as displayed in DashBoard™. A blank **Frame Log Form** is provided on the inside back cover of this guide that can be used for documenting the installation.

Using a Log for Managing Frames

The example below shows how to use the Frame Log Form. Photocopy or print copies of the Frame Log Form to document the frame correlation to its name in DashBoard™. The form is equipped with on-line form fields that allow the form to be filled out as a PDF soft copy. Save the form page using the Adobe® Acrobat® save options.



SETUP_MULTFRAME_EX.PNG

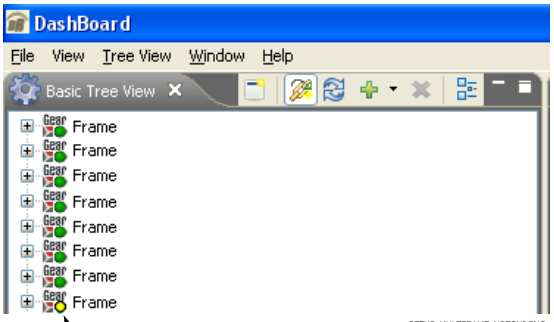
In the example here, each frame's DashBoard™ instance is correlated to its physical identity using the form.

Each rack is identified on the form with a number, with its frames identified with a suffix letter. Additional information such as network ID can also be included.

Using this method of correlating a frame's physical identity with its DashBoard™ name, the frame can be easily located in both DashBoard™ and the physical plant should it need any further attention.

Rack ID	Frame ID	Remote Control System	
		Network ID	Remarks:
1	1A MFN SN 00108053	❑ DHCP ☒ Static IP ADDR: 192 . 168 . 1 . 15 Netmask: 255 . 255 . 255 . 0 Gateway: 10 . 0 . 1 . 1	Post-production backend room 125
1	1B MFN SN 00108767	❑ DHCP ☒ Static IP ADDR: 192 . 168 . 1 . 16 Netmask: 255 . 255 . 255 . 0 Gateway: 10 . 0 . 1 . 1	Post-production backend room 125
1	1C MFN SN 09953895	❑ DHCP ☒ Static IP ADDR: 192 . 168 . 1 . 17	Post-production backend room 125

Log_Example_B.pdf



SETUP_MULTFRAME_NOTOK2.PNG

Without an orderly and documented means of connecting frames to the network, many frames may connect with no correlation to the frame's physical identity (especially if DHCP is used without adequate consideration of keeping track of connections). In this example, although the frames are connected to DashBoard™, the frame becomes "lost" from its physical identity.

Also note that in cases where an MFC-8310-N Network Controller Card does not have a unique name, the only unique identification of the card/frame will be its IP address (which typically may have no correlation to its physical identity).

Note: If a frame becomes "lost" after installation, its instance in DashBoard™ can be identified by opening the frame's fan door, thereby causing an alert (yellow icon) for the corresponding frame in DashBoard™. The frame for which the door was opened can then be correlated to its instance in DashBoard™ by taking note of the instance displaying a "Fan Door Open" alert.

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Frame Log Form

Use this form to document the frame correlation to its name in DashBoard™. Fill in the blanks for other information that can also be recorded as desired.

Sheet __ of __

Date: _____

Site: _____

Personnel: _____

Rack ID	Frame ID	Remote Control System	
		Network ID	Remarks:
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.___.__ Gateway: ___.___.__.___	
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.___.__ Gateway: ___.___.__.___	
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.___.__ Gateway: ___.___.__.___	
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.___.__ Gateway: ___.___.__.___	
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.__.___ Gateway: ___.___.__.___	
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.__.___ Gateway: ___.___.__.___	
		❑ DHCP ❑ Static IP ADDR: ___.___.__.___ Netmask: ___.___.__.___ Gateway: ___.___.__.___	

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