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A **BELDEN** BRAND

KAYENNE/KARRERA

VIDEO PRODUCTION CENTER

Release Notes
Software Version 9.1

CERTIFICATE

Certificate Number: 510040.001

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Grass Valley, A Belden Brand and its Grass Valley Affiliates

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Grass Valley and Hillsboro: Design, outsource manufacture and support.

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This Certificate is valid until: June 14, 2018

This Certificate is valid as of: June 14, 2015

Certified for the first time: June 14, 2000

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Grass Valley Web Site

The Grass Valley Web (www.grassvalley.com) site offers the following:

Online User Documentation — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes are available.

FAQ Database — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

Software Downloads — Download software updates, drivers, and patches.

Grass Valley Technical Support

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1 514 333 1772.

To obtain a local phone number for the support center nearest you, please consult the Contact Us section of Grass Valley's Web site (www.grassvalley.com).

An online form for e-mail contact is also available from the Web site.

Recycling

Visit www.grassvalley.com for recycling information.

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KAYENNE and KARRERA K-Frame Release Notes

Introduction

This document describes new features, installation, and other information specific to Kayenne/Karrera K-Frame Video Production Center Release 9.1 software. See [page 20](#) for system update instructions.

New in Release 9.1

- Macro Attachable Panel Preference Default Change (see *“Disabled” is the Default for the Macro Attachable Control Panel Preference* on [page 8](#))
- ImageStore Enhancements including Record Loop and Record Delay Line modes, importing movies with audio, and support for SD audio (see *Image Store Enhancements* on [page 8](#))
- Modular I/O IP Address and Port Configuration (see *About Modular 10GigE IP I/O Address and Port Configuration* on [page 14](#))
- Macro Builder Enhancements for ClipStore & Image Store (see *Macro Builder Enhanced with ClipStore/Image Store Control* on [page 18](#))

“Disabled” is the Default for the Macro Attachable Control Panel Preference

The ability to attach macros from the Kayenne/Karrera Control Panel (in addition to the menu) is provided by the Macro Attachable panel preference. Starting with version 9.1 of the GV switcher software, the default state for Macro Attachable is ‘disabled’ (enabled in earlier versions).

The Macro Attachable panel preference is controlled using the **Macro Attachable** button in the User Setups, Panel Prefs, Panel User Interactions menu.

Note Macro Attachable is a Panel Preference and does not affect or limit macro functionality including macro attachment from the GV switcher Macros menu.

Macro Attachments and Importing Show Files

Shows created using versions earlier than 9.1 with Macro Attachable enabled will have the Macro Attachable panel preference *disabled* (the 9.1 or newer default) when imported. The show can be updated to the previous state by enabling the **Macro Attachable** button and saving the show. See the *K-Frame Kayenne/Karrera User Manual* for more information about Macro Attachments.

Image Store Enhancements

About Image Store Record Modes

Normal Record Mode

Record a movie continuously until it is stopped or the Image Store cache is full.

Timed Record Mode

Record a movie of a set duration.

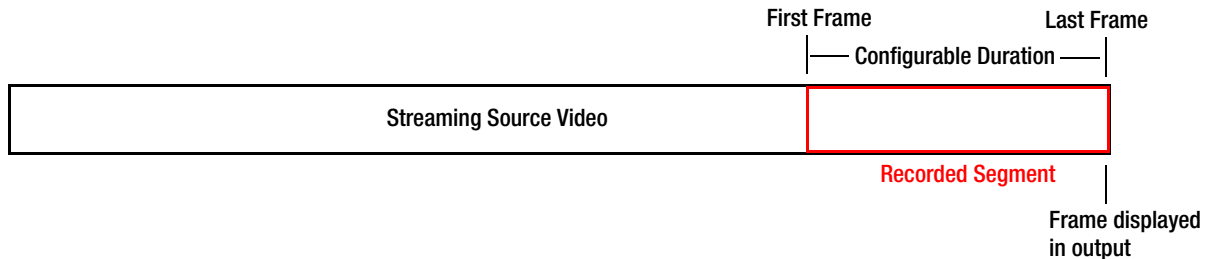
Loop Record Mode

Record a video segment of a set duration (MM:SS.FF) from the last seconds of a continuously streaming video. In Loop record mode, the *last* frame of the buffer is displayed in output.

When recording in Loop mode, Image Store buffers video from the currently recording frame, back to the first frame of the defined duration; previously recorded frames are discarded as new ones are recorded.

When recording is stopped, the buffered video is available as an Image Store movie.

Figure 1. Image Store Loop Record Mode Definition



Delay Line Record Mode

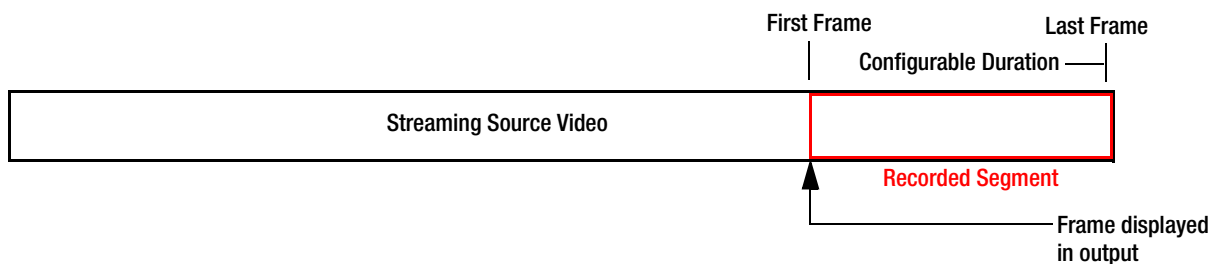
Record a video segment of a set duration (MM:SS.FF) from the last seconds of a continuously streaming video with a delay. In Delay Line record mode, the *first* frame of the continuously recording video in buffer is displayed in output, therefore the recorded frames up to the end of the recording are delayed.

Note When recording is first started in Delay Line record mode, after one second the first frame will freeze until the remaining frames of the defined duration have been recorded into the buffer.

When recording in Delay Line mode, Image Store buffers video of a set duration. The buffered video is captured from the currently recording frame back to the first frame of the defined duration; previously recorded frames are discarded as new ones are recorded.

When recording is stopped, the buffered video is available as an Image Store movie.

Figure 2. Image Store Delay Line Record Mode Definition



Audio Offset with Delay Line Record Mode

In Delay Line record mode, audio can be offset for up to one second plus/minus to correct for any audio/video syncing issues that may occur in the delayed recording.

Note A recorded negative audio offset will result in audio muting for the duration of the offset at the end of the video, upon playback.

Synchronizing Video and Audio with Delay Line Mode

Often, the amount of processing done on audio and video can cause one to be delayed relative to the other. Most often, the video is delayed more than the audio. The Delay Line Record mode functionality allows you to synchronize the audio and video so that they match in time.

Using Delay Line Mode for Censorship

There are times when you will want to cut away from an objectionable video feed before it makes it to air. Using Delay Line Record mode, you can cut the show using the delayed output of the Image Store and view the Image Store input as a way to "look ahead".

About Image Store Audio

Image Store Audio Requirements

The K-FRM-LIC-RAMREC license option is required for all K-Frame systems including the S-series to support Image Store audio. Standard and Compact K-Frame systems also require the K-FRM-IMG Image Store board.

Importing Movies with Audio to Image Store

K-Frame systems with Image Store, including S-series, can import .AVI and .MOV files with audio. The Image Store imports up to four channels of audio per stream (even if the .AVI or MOV file contains more than four channels of audio). The Import Facility will find and select the first two stereo pairs of audio, starting with the first audio stream. The Import Facility then searches in order, audio streams 2, 3, and 4 in the import file, and will only select the first four audio channels it locates for import. Empty audio channels are silent if the import file does not contain at least four audio channels.

Note Image Store will not import corrupted Audio channels but will instead replace them with silence.

See the *Kayenne/Karrera User Manuals* for information about Image Store libraries and file import operations.

Import Formatting for Image Store Audio

Grass Valley uses Version 8.10.2015 of the open source FF MPEG utility with the 7.13.2013 library to convert imported movies and audio to the EIF/EAF format used by Image Store. Information is widely available on the Internet for the .AVI and .MOV file formats supported for import and conversion.

Image Store Supports Audio for SD

Image Store now supports audio for Standard Definition formats of 525 and 625 at both 4x3 and 16:9 aspect ratios.

Image Store Audio Levels in Loop Mode

When playing a movie with audio in loop mode, the Image Store will play the audio from the first frame of video immediately after the audio from the last frame of the movie. If the audio waveform at the end of the movie does not match the audio waveform at the beginning of the movie, there will be a discontinuity in the waveform at the loop point that can cause disturbances in the audio output. This can be avoided by careful matching of the audio waveform at the beginning and end of the movie; one method of doing this is to ramp from silence to the desired level at the beginning of the movie and fade from the desired level to silence at the end of the movie.

Create a Movie from Continuously Streaming Video with Loop Mode

Create a movie of a set duration from the last seconds of a continuously streaming video. In Image Store Loop record mode, the *last* frame of the buffer is displayed in the output.

1. In the Image Store, Images, Movie Record menu, select an Image Store channel (1/2 through 9/10).
2. Select a source for the video stream on the Image Store channel (see the *Kayenne/Karrera User Manual* for more information).
3. Set the record mode by selecting the **Record** (mode) data pad and choosing **Loop** in the pop-up Record Mode Button pane.
4. Select the **Record Mode Duration** data pad, enter a duration (MM:SS:FF) in the pop-up keypad, and select **Enter**.
5. Optionally, select the **Record Elements** data pad and select from Video, Key, and Audio as part of the recording, then select **Done**.

6. Select the **Timecode** data pad and enter a duration in the pop-up keypad for the movie length you wish to record, and select **Enter**.
7. Select **Show E-E** (changes to Record) then **Record**.
8. Select the **Record** button again to stop recording.
9. To save the recorded movie, select **Keep** then **Enter** in the pop-up keypad (optionally you can change the image number using the keypad).

Result: An Image Store movie is created and the thumbnail is displayed in the scrolling images list.

Create a Movie including a Delay with Delay Line Mode

Create a movie of a set duration from the last seconds of a continuously streaming video with a delay. In Delay Line record mode, the *first* frame of the video in buffer is displayed in output, therefore the frames up to the end of the recording are delayed.

1. In the Image Store, Images, Movie Record menu, select an Image Store channel (1/2 through 9/10).
2. Select a source for the video stream on the Image Store channel.
3. Set the record mode by selecting the **Record** (mode) data pad and choosing **Delay Line** in the pop-up Record Mode Button pane.
4. Select the **Record Mode Duration** data pad, enter a duration (MM:SS:FF) in the pop-up keypad, and select **Enter**.
5. Optionally, select the **Record Elements** data pad and select from Video, Key, and Audio as part of the recording, then select **Done**.
6. Select the **Timecode** data pad and enter a duration in the pop-up keypad for the movie length you wish to record, and select **Enter**.
7. Select **Show E-E** (changes to Record) then **Record**.
8. Select the **Record** button again to stop recording.
9. Select **Keep** then **Enter** in the pop-up keypad (optionally you can change the image number using the keypad).

Result: An Image Store movie is created and the thumbnail is displayed in the scrolling images list.

Upgrading Image Store to 64GB of Memory

Standard and Compact K-Frame systems with Image Store boards can be upgraded to 64GB of memory, with the 64GB license option. Systems with

8GB DIMMs installed on the Image Store board will require the 64GB upgrade kit that includes four 16GB DIMMs.

Image Store 64GB Memory upgrade prerequisites:

- K-FRM-IMG Image Store Board
- K-Frame switcher software 9.1 or newer

Included with the Image Store 64GB Memory Upgrade Kit:

- K-FRM-LIC-IMG-64GB license
- 4 each 16GB DIMMs

Note S-series Compact Frames do not support the Image Store 64GB memory upgrade.

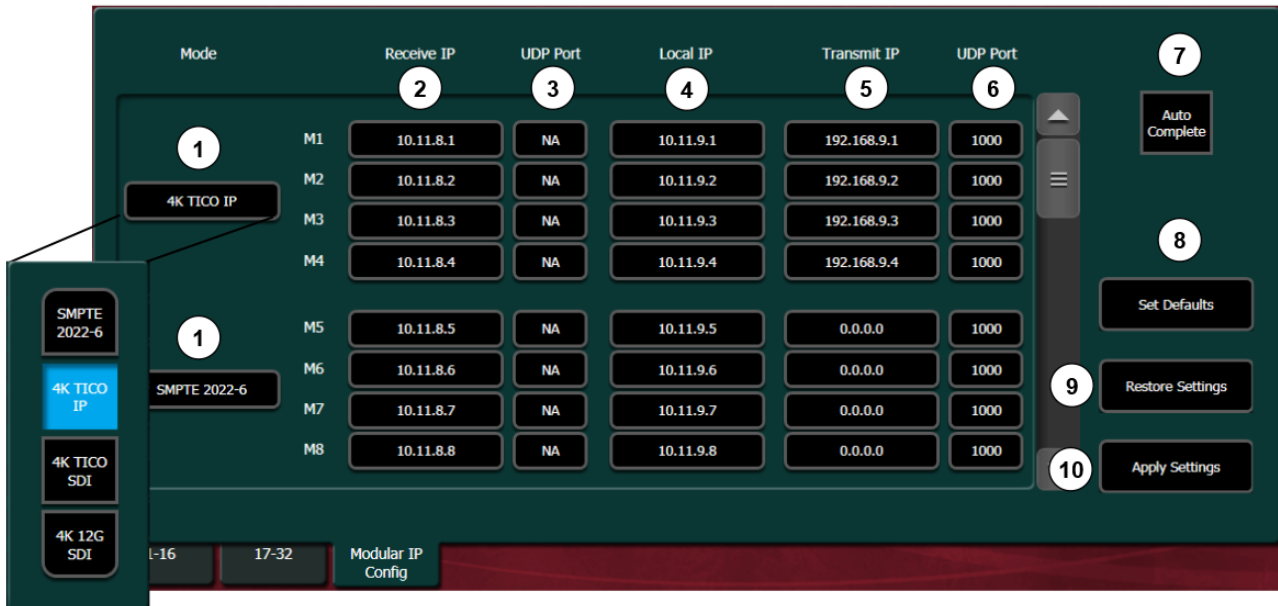
Visit www.grassvalley.com or call your sales support representative for more information.

About Modular 10GigE IP I/O Address and Port Configuration

You can configure 10GigE IP I/O channels to transmit and/or receive video signals over IP. Selecting a data pad displays a pop-up pane or key pad to make selections or enter parameters.

No settings are committed to the switcher system until the **Apply Settings** button is selected.

Figure 3. Modular IP Config Menu Tab Features



- 1 **Mode:** Mode button selections apply to all four channels on a Modular I/O IP board (for example M1 through M4).
- 2 **Receive IP:** Receive transmission from external devices sending to this IP Address; select dot (.), Enter to insert "Use Local IP" Address.
- 3 **Receive UDP Port:** Setting the UDP port will filter incoming signals by UDP Port. Select dot (.), Enter to insert the default, N/A which disables filtering on the UDP Port numbers.
- 4 **Local IP:** IP address for the local device. Set to receive a signal; 0.0.0.0 disables the transmission.
- 5 **Transmit IP:** Target IP address. Set to send a signal.
- 6 **Transmit UDP Port:** Sets transport UDP Port number. Select dot (.), Enter to insert the default, 1000.
- 7 **Auto Complete:** Auto-enters IP addresses sequentially, from the selection downward in the selected column.
- 8 **Set Defaults:** Sets the IP Addresses and UDP Port Numbers to the default settings.
- 9 **Restore Settings:** Restores settings before changes (will not restore after Apply Settings has been selected).
- 10 **Apply Settings:** Commit all changes to the switcher.

10GigE Modular I/O Modes

4K modes require the switcher system to operate in 1080pA mode.

Table 1. Modular IP I/O Modes

Mode Name	Description
SMPTE 2022-6	The default, four signals split between two I/O
4K TICO IP ^a	4K, two-sample interleave quad link signals compressed and sent over Ethernet, then uncompressed to two-sample interleave, quad link signals at the receiver
4K TICO SDI	4K, two-sample interleave quad link signals compressed and sent over 3G SDI, then uncompressed to two-sample interleave, quad link signals at the receiver
4K 12G SDI	4K, two-sample interleave quad link signals sent uncompressed over 12G SDI, then converted to two-sample interleave, quad link signals at the receiver

^a Only the first input of the SFP Card is used to receive 4K TICO signal. On the output, the 4K TICO is on the first and third outputs; the second and fourth outputs carry an uncompressed monitor signal.

Transmit IP Addresses and UDP Ports

To transmit over IP, you must set the Transmit IP address. You can use the default UDP port setting of 1000 or change it to fit your workflow. Setting the UDP Port number allows you to send two video streams with different UDP port numbers to the same IP address.

Multicast signals can be transmitted from and to the switcher by setting the first octet of the address to between 234 and 239 (see [Configure a 10GigE IP I/O Multicast Video Signal](#)). Ethernet switches enable an IGMP Query Server in order to pass Multicast signals.

Local IP Addresses

The Local IP Address is used for two purposes:

- To transmit the Local IP Address from the switcher system so other devices can identify where data is being transmitted from, and
- As the Receive IP Address so devices can send data to the switcher system.

Receive IP Addresses and UDP Ports

For the Receive IP address channels, you can either use the default presets or change them to fit your preferences, including the Local IP. The default port setting for Receive IP is N/A. The N/A setting means signals from an IP address with any port setting is available to the configured device.

Setting the UDP Port number allows you to filter signals, for example signals from two or more channels using the same IP address.

Configure 10GigE Modular I/O Mode

Modular I/O Mode selection in the Modular IP Config menu tab, is applied to each of the four input/output ports for that I/O board (for example M1 through M4). Selection mode buttons for SMPTE 2022-6, 4K TICO, and SDI are provided (see *About Modular 10GigE IP I/O Address and Port Configuration*).

Note 4K modes require the switcher system to operate in 1080pA mode.

1. In the Eng Setup, Mod I/O, Modular IP Config tab, select the Mode data pad of the four I/O channels you wish to configure.
2. Select a mode from the Mode button pop-up pane.
3. Select the **Apply Settings** button.

Configure 10GigE IP I/O Transmit IP Addresses and UDP Ports

To transmit a video signal from a Switcher IP I/O Module channel, the Transmit IP address must be set; the factory default is 0.0.0.0. The default port assignment is 1000.

1. In the Eng Setup, Mod I/O, Modular IP Config switcher menu tab, select the Transmit IP Address data pad for the IP I/O channel (for example M1), enter the IP address in the pop-up keypad, and select **Enter**.
2. To set the Transmit IP UDP Port (see *About Modular 10GigE IP I/O Address and Port Configuration*), select the data pad for the channel, enter a port number, and select **Enter**.
3. Select the **Apply Settings** button.

Configure 10GigE IP I/O Receive IP Addresses and UDP Ports

To receive signals over IP, you must set the Local IP address so the signal is available to your device. For the Receive IP address channels, you can either use the factory presets or change them to fit your preferences, including the Local IP. The default port setting for Receive IP is N/A (see *Receive IP Addresses and UDP Ports*)

1. In the Eng Setup, Mod I/O, Modular IP Config switcher menu tab, select the Local IP data pad for the I/O IP channel you wish to configure, enter the IP address for your device, and select **Enter**.

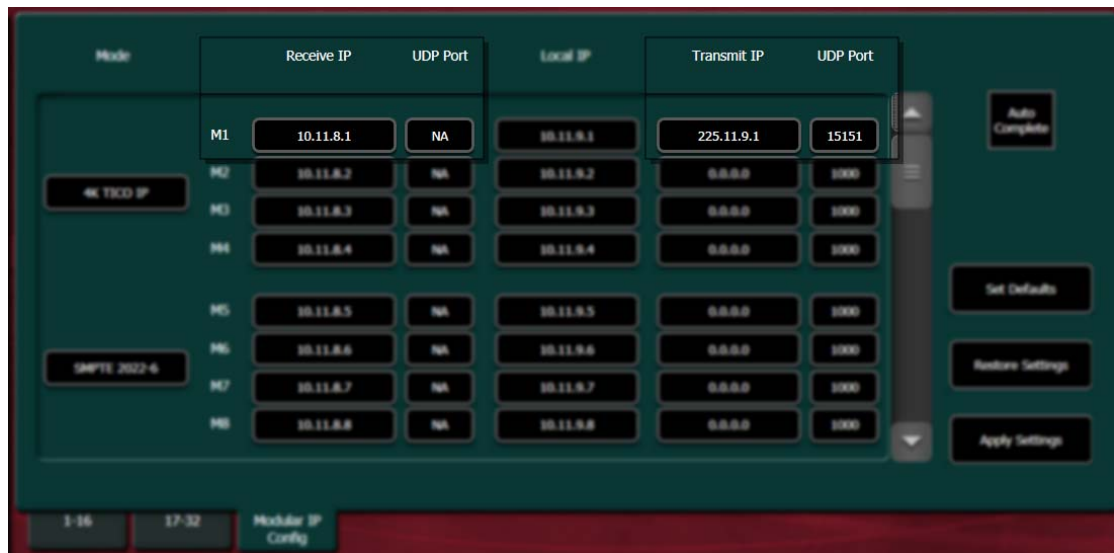
2. Select the Receive IP Address data pad for the Modular I/O IP channel (for example M1), enter the IP address in the pop-up keypad or select dot (.) to select the Local IP address, and select **Enter**.
3. To set the Receive IP UDP Port (see *About Modular 10GigE IP I/O Address and Port Configuration*), select the UDP Port data pad for the channel, enter a port number, and select **Enter**.
4. Select the **Apply Settings** button.

Configure a 10GigE IP I/O Multicast Video Signal

IP addresses for Multicast must use 224 through 239 as the first octet in the address. A Multicast signal can then be sent to an Ethernet switch or received to your local device.

Note Ethernet switches must have the IGMP Query Server enabled to receive a Multicast signal.

Figure 4. Modular IP Multicast IP Address Configuration

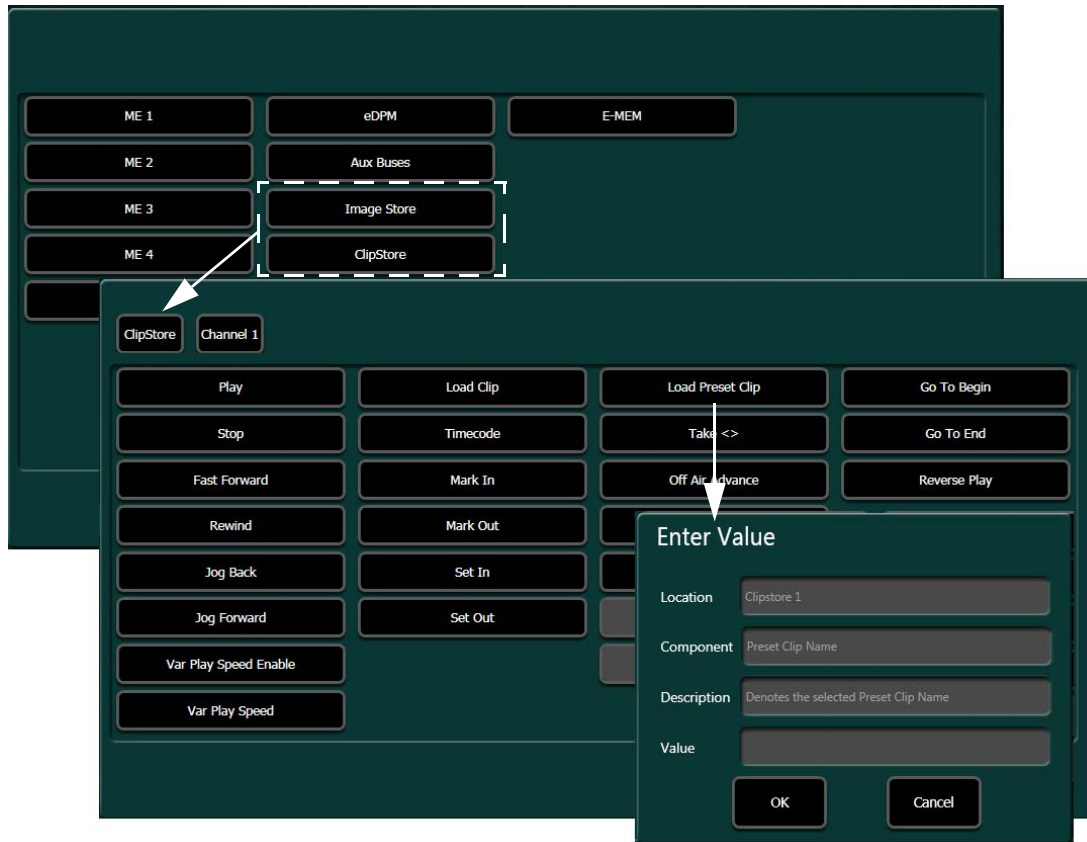


1. In the Eng Setup, Mod I/O, Modular IP Config switcher menu tab, select the Receive IP or Transmit IP data pad (see *About Modular 10GigE IP I/O Address and Port Configuration*) for the IP I/O channel you wish to configure, enter the Multicast IP address, and select **Enter**.
2. To set an IP UDP Port (see *About Modular 10GigE IP I/O Address and Port Configuration*), select the UDP Port data pad for the channel, enter a port number, and select **Enter**.
3. Select the **Apply Settings** button.

Macro Builder Enhanced with ClipStore/Image Store Control

Build or edit macros to include ClipStore and Image Store events using the ClipStore and Image Store Macro Builder menus. On-screen instructions are provided for events requiring parameter settings. See the *Kayenne/Karrera User Manual* for Macro Builder operations information.

Figure 5. Macro Builder ClipStore/Image Store Menu Example



About the Kayenne/Karrera K-Frame Software Update

Kayenne/Karrera K-Frame systems are shipped with the current software version installed. Updates to K-Frame system software are available for download from the Grass Valley website. Software installation tools are provided with each update package.

The K-Frame Deployment Tool extracts and copies Grass Valley switcher system files to a Menu Panel or PC. These files include the K-Frame Installer Program.

The K-Frame Installer Program is used to install the extracted software to Grass Valley Video Processor Frame(s) and Control Panel(s) over the network. The K-Frame Installer Program also launches other installation tools (wizards). One wizard installs the Menu application directly on the Menu Panel or PC running the installer program. If multiple Menu Panels (or PCs running the Menu application) exist, each must be updated individually. Installation wizards can also be launched for the KSP and NetConfig features.

Third-party Updates

Certain Third-party libraries are needed on the PC that runs the Menu software and Switcher Installer software. These “Third-party Updates” are available in a directory on the Grass Valley Switcher Software Download Site. They are also included on the Switcher Software USB Memory Stick shipped with each Grass Valley switcher system. The Third Party Updates also include a Menu Auditor program. The Menu Auditor Program is run to verify that the required Third Party Updates are installed on a PC or Menu PC. The Menu Auditor will indicate which updates need to be installed to create an up-to-date system. Not having the updates installed could cause the menu to be unstable or not run at all.

To check for the third party updates on a PC or the menu system, run the Menu Auditor Program and press Scan. The Auditor will check each relevant install and indicate the state of the computer environment. The Diagnose button runs the scan and puts windows machine data into a file for diagnostic purposes.

The user can bring the environment up to date by installing identified Third Party Updates which can be downloaded from the Grass Valley Web site.

Sample Files

Sample show files or other elements and instructions for use are available with an installer from the Grass Valley website starting with version 8.0. When upgrading, install the samples after the initial software upgrade;

visit www.grassvalley.com. The installer can be used to place the K-Frame samples in the C:\K_Frame\user\Samples directory on the GV Switcher system. New K-Frame systems are shipped with the sample directory installed.

Note For Compact S-series Frames, samples that are built using more than four keyers will need some customization before incorporating those elements into a production.

Materials Required

You will need the following materials for this update:

- Version 9.1 Software; **K-FrameSetup.exe**, which can be downloaded from the Grass Valley Customer Support website along with the latest Clip-Store/Summit software, Release Notes, and Release Notes Addendum, and copied to a USB stick,
- Backup media for configuration and effects files,
- USB mouse and keyboard, and
- a Menu Panel, or user PC, properly configured on the switcher system network.

Update the Kayenne/Karrera K-Frame Software

Backup Current Configuration and Effects Files

This software update procedure assumes your Grass Valley switcher system is fully operational with all network communications properly configured. Refer to the *Karrera K-Frame* or *Kayenne K-Frame Installation and Service Manual* for configuration instructions.

1. Save your system configuration files (Eng Setup, User Setups), and your operational registers (EMEM, Macros, etc.) and other settings. You can create a Show file that contains all this information. See the *Karrera* or *Kayenne K-Frame User Manual* for file operations instructions.

Note A convenient location to save these backup files is on the USB stick of the software version that created the files (the older software being updated). Create a new folder on that older software USB stick for the file and name the Show file with the current date.

2. Store the backup media in a safe place. You may want to use these files if you decide to back down to that earlier software version.

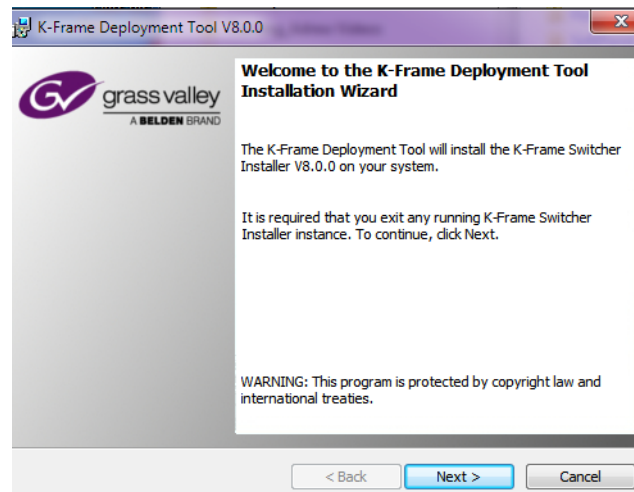
Deploy Switcher Update Package Files and Installer

1. Exit the Menu application and any other applications that may be running on the Menu Panel or PC.
2. Disable any virus protection, Windows firewall, and any other firewall protections that may have been installed on the Menu Panel or PC. Firewalls must be inactive to allow switcher system software installation over the network.
3. Run the K-Frame Setup application. Either:
 - Insert the K-Frame Software USB stick into an available port on the Menu Panel or PC. Locate the removable disk in My Computer and double-click on the **K-FrameSetup.exe** and click **OK**.
 - or -
 - Download the **K-FrameSetup.exe** file from the Grass Valley download site, double-click on the file, then click **OK**.

Note If the same K-Frame Deployment Tool version files are detected, a Repair/Remove screen is displayed, allowing re-installation or removal of the Deployment files.

4. The K-Frame Deployment Tool will then launch, click **Next**.

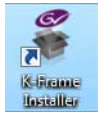
Figure 6. K-Frame Deployment Tool Welcome Screen



5. Accept the license agreement and click **Next**.
6. Click **Next** to accept the default deploy location. Alternatively, you can Browse to a different location to deploy the files. The Ready to Install the Application Screen appears next.
7. Click **Next** to deploy the files.

8. When the deployment completes the K-Frame Installer Program will launch automatically.

Figure 7. Installer Icon

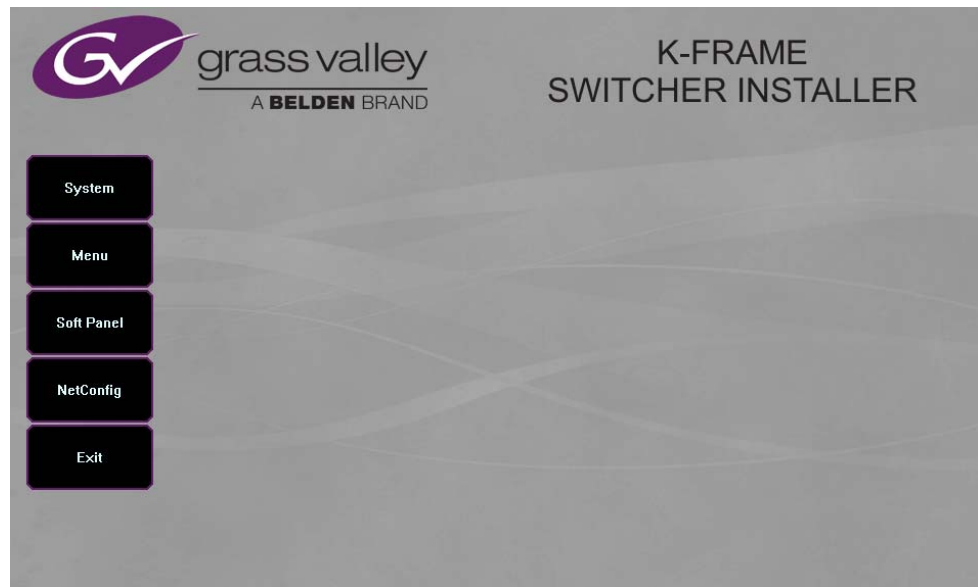


After the switcher files have been deployed, the K-Frame Installer Program can be launched at any time by clicking on its desktop icon.

K-Frame Installer Program Description

The K-Frame Installer Program initial screen has buttons on the left used to select various installers.

Figure 8. K-Frame Installer Program Initial Screen

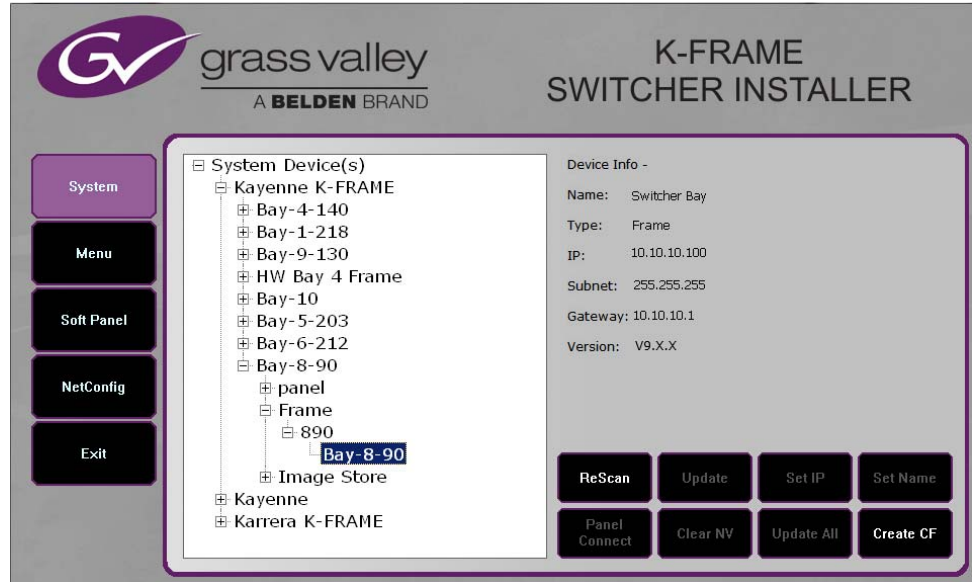


The **Exit** button at the bottom left closes the K-Frame Installer Program.

When **System** is selected, a screen appears with an expandable central hierarchy window, information on the upper right, and function buttons on the lower right.

Navigate to the Kayenne or Karrera device in the hierarchy to display information for that device or install software. The same methods of installation work for both products.

Figure 9. K-Frame Installer Program Expanded Hierarchy Window



System Devices is at the top of the hierarchy window. Clicking on that item displays the types of switchers (**Kayenne** and/or **Karrera**) residing on the network. Clicking on a switcher type displays the system names present on the network of that switcher type. Each system name is taken from the Video Processor Frame name. Clicking on a system name reveals **Frame**, **Panel**, and optional **Image Store** items for that system, which when opened allows selection of the individual devices making up that system. When a specific device is selected, information for it is displayed on the right. This hierarchy allows easy identification of each switcher system's components when multiple switchers reside on the same network.

The K-Frame Installer program has the following other features, accessed by clicking on its labeled button:

Rescan - Re-scans the network for devices. This refreshes the screen to show the currently connected components and any modified system names.

Update - Updates the software on the selected device using the software deployed with this K-Frame Installer version.

Set Name - Opens a window allowing you to change the name of the selected device.

Set IP - (Control Panel selected in hierarchy window) - Opens a window allowing you to enter the IP address the Control Panel will use to communicate with the Video Processor Frame.

Clear NV - (Frame or Control Panel selected) Clears NV Memory.

Update All - (System selected) Updates software to all devices for the selected system, excluding Menus.

Create CF - Allows the creation of a Control Panel Compact Flash Card onto another CF Card.

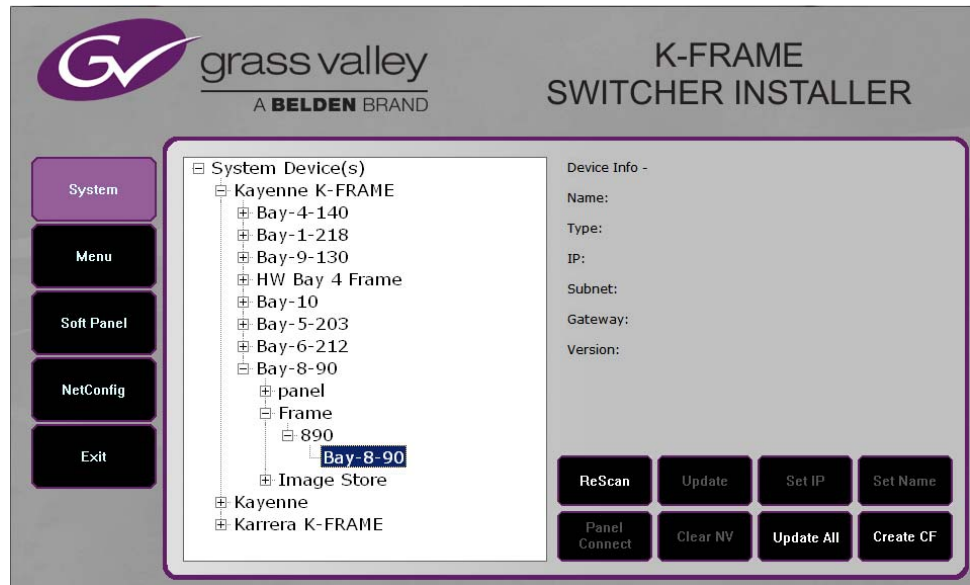
CAUTION This formats the CF card.

Update the System

A system's Video Processor Frame, Control Panels, and optional Image Stores can be updated with one operation.

1. With the K-Frame Switcher Installer Program launched, click on the **System** button.

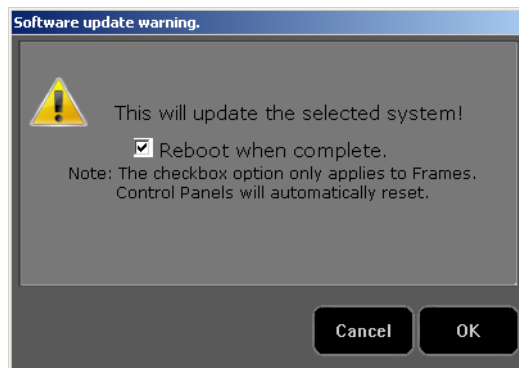
Figure 10. K-Frame Installer, System Button Selected



2. Each K-Frame Switcher system consists of a Video Processor Frame, associated PCU(s) (Control Panels), and optional Image Store. Use the mouse to navigate to the desired system (not an individual system device). When a system has been selected the **Update All** button becomes active.

3. Click **Update All**. The following reboot message appears.

Figure 11. K-Frame Installer, Reboot Screen



4. If the **Reboot when complete** box is checked, the Video Processor Frame, optional Image Store, and all associated Control Panels will automatically reboot after the software update. If the box is not checked, you will need to manually reboot the Video Processor Frame and optional Image Store after the software files have finished being transferred to them. Control Panels are always rebooted after a software update.
5. Click **OK**.
6. Click **Finish** when complete.

About Updating Spare Kayenne Control Panel Modules

The Kayenne K-Frame Control Panel FPGAs will automatically be updated with software installation. However spare Kayenne Control Panel Modules must be connected to the Control Panel after initial software installation and the Control Panel software re-installed so all modules are loaded with the current FPGAs and ready for use when needed.

CAUTION Do not interrupt power to GV switcher systems during software installation; the FPGAs will revert to an older version. If power is lost during software installation, install the software once the power has been restored.

Update/Install the Menu Panel Application

The first-time installation of the Menu application onto a user PC may require installing Windows .NET Framework software. See *Install .NET for First Time Menu on PC Installation* on [page 29](#) for more information.

The K-Frame Deployment Tool must be run on each Menu Panel or PC onto which you will be installing the Menu Panel application. See *Deploy Switcher Update Package Files and Installer* on [page 21](#).

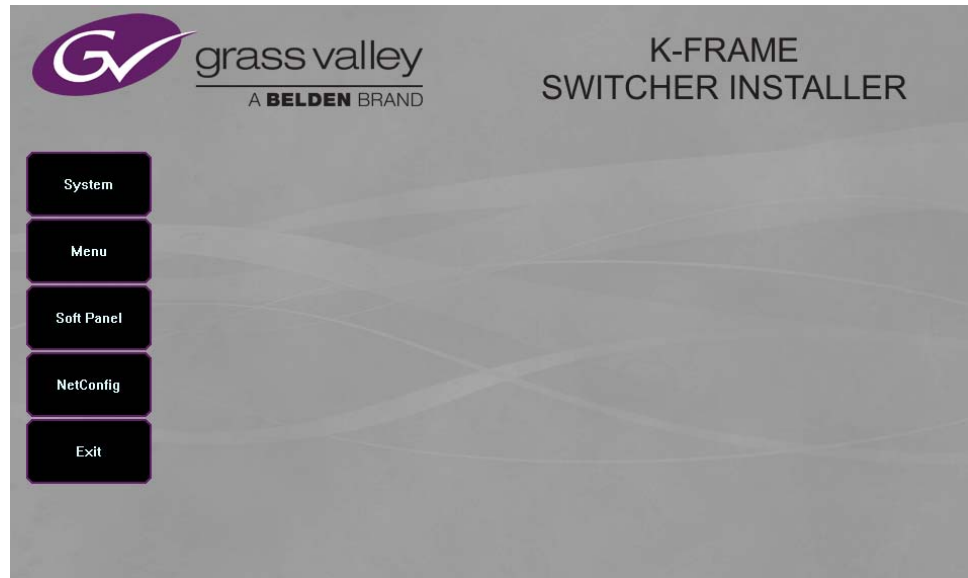
CAUTION For Menu on PC, you must be logged on as administrator or the installation will fail.

Figure 12. Installer Icon



1. Click on the K-Frame Switcher Installer desktop icon, if necessary, to launch the K-Frame Switcher Installer Program.

Figure 13. K-Frame Installer Program Initial Screen



2. Click the **Menu** button. The K-Frame Menu Installation tool will launch.

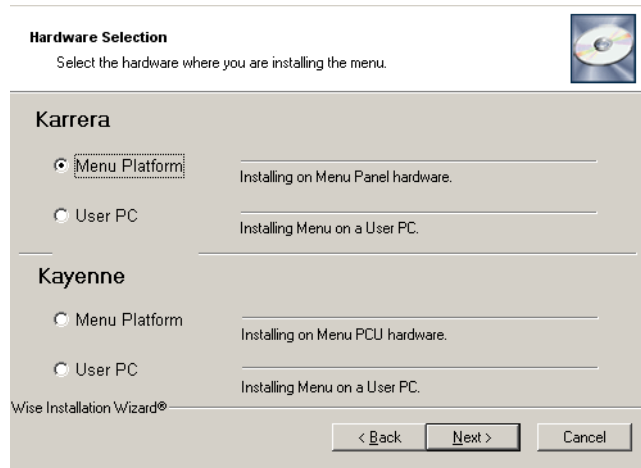
Figure 14. K-Frame Menu Installer



3. Click **Next**.

4. In either the Karrera or Kayenne Control Panel area, choose either **Menu Platform** (the Touch Screen Menu Panel) or **User PC**, and click **Next**.

Figure 15. K-Frame Menu Installer, Hardware Selection



5. Enter a name and organization in the User Information screen, leave the **Anyone who uses this computer** setting selected, and click **Next**.

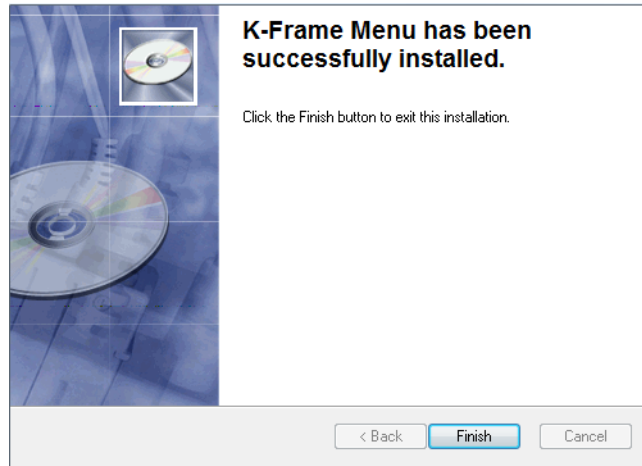
Note Selecting **Only for me** limits some settings to the currently logged in user. This may be appropriate if the Menu application is installed onto a PC shared by several users. However, this is not a fool-proof security method and should not be relied on for mission-critical applications.

6. Click **Next** to accept the default installation location. Alternatively, you can Browse to a different location to install the application.
7. In the Ready to Install the Application menu, click **Next**.

8. When done, the Menu Successfully Installed screen appears, Click **Finish**.

If you installed onto Menu hardware you will be prompted to reboot the computer.

Figure 16. K-Frame Menu Installer Success



9. Click **Exit** and answer **Yes** to the prompt to exit the K-Frame Installer.

Figure 17. Switcher Menu Icon



Clicking on the K-Frame Menu icon now launches the new version of the Menu Panel application.

About Updating the Host Address Decoder (HAD) FPGA

Each CPU or Image Store board installed in a Grass Valley K-Frame Video Processing Frame has a PCI Express endpoint for communication with the host processor. These PCI endpoints are governed by the HAD FPGA. Software updates can include firmware updates for these endpoint HADs.

For HAD FPGA update instructions, see the maintenance information in the Installation & Service Manual for your switcher model.

CAUTION It is recommended that HAD (Host Address Decoder) FPGA (Field Programmable Gate Array) updates are performed by qualified personnel only, i.e. an EIC (Engineer In Charge).

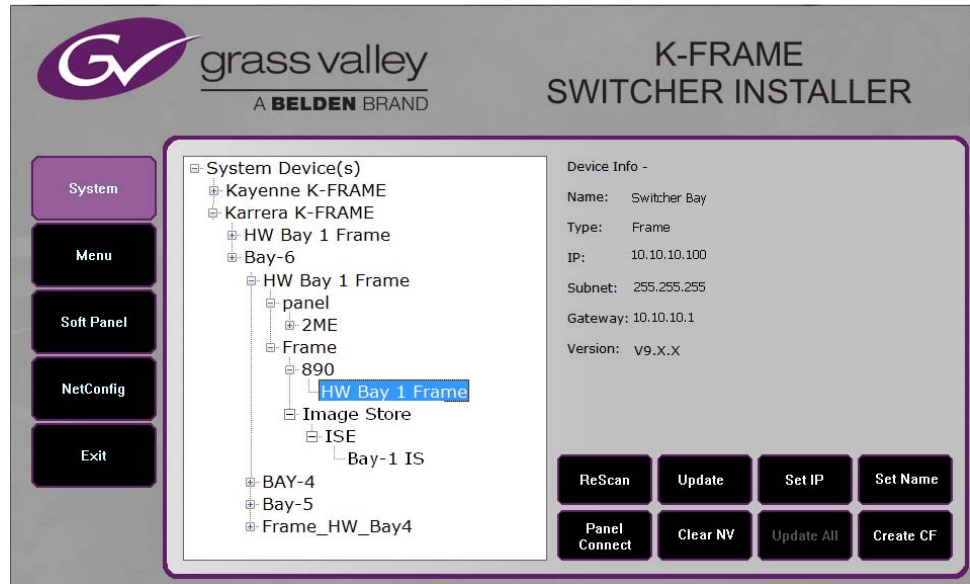
Clear NV RAM for Control Panel and Frame

Use the following procedure on the Menu Panel or Menu on PC running the Menu Panel application that operates with the updated Video Processor Frame.

Note A new Menu Panel or PC that has not been used with the switcher system will need to be configured as a Control Surface Node before it can operate with a switcher system. See the *Karrera* or *Kayenne Installation and Service Manual* for specific instructions.

From the K-Frame Installer menu, touch the **System** button and touch the device to be cleared. Touch the **Clear NV** button. Repeat for Control Panel and Frame.

Figure 18. K-Frame Installer Program Clear NV



Install .NET for First Time Menu on PC Installation

The Windows .NET Framework software is required for Menu on PC application operation, you can go to the PC's Add or Remove Programs to see what, if any .NET versions have already been installed. The Menu application requires at least .NET version 4.0 for XP or 4.5 for Windows 7 to operate and other third party software listed in the Third-party updates folder on the download site.

The .NET framework software is included on the K-Frame Software USB stick, and is also available on the Grass Valley website.

1. Insert the K-Frame Software USB stick into the PC's USB port.
2. Open the Third-party Updates folder, and in the **DotNet** folder run:
 - For Windows XP: dotNetFx40_Full_x86_x64.exe, or
 - For Windows 7: dotNetFx45_Full_x86_x64.exe file.

Files will be extracted to your PC and then the .NET Framework Setup application will run. Accept the license agreement and click **Install**.

3. When done, the message **Download complete. You can now disconnect from the Internet** will be displayed. Exit the .NET installer application and relaunch the K-Frame Installer Program.
4. You will now be able to install the Menu application onto the PC (see *Update/Install the Menu Panel Application* [on page 25](#)).
5. Add the PC's Name and IP Address with the Menu on PC software to the node list in the Eng Setup, Control Surfaces menu. For more information, see the *Kayenne or Karrera Installation & Service Manual*.

Soft Panel Installation

Clicking on the **Soft Panel** button launches an individual installer for the KSP option. This installer is similar to the Menu Panel installer, and is intended for customer provided PC (not a Menu Panel). Follow the directions displayed to install KSP onto that PC. See the *KSP Switcher Soft Panel Graphical User Interface Instruction Manual* for more information.

Soft Panel requirements:

- The installed menu software matches the K-Frame system
- 1920 x1080 display resolution
- Microsoft .NET Framework 4.0 for XP/4.5 Windows 7 (see [Install .NET for First Time Menu on PC Installation](#)).
- Microsoft Visual Studio 2010. The file is named vcredist_x86.exe and is included in the Third-party Updates\VisualStudio2010 folder.

Add the PC's Name and IP Address with the KSP software to the node list in the Eng Setup, Control Surfaces menu.

The KSP option is activated with a purchased license key.

Install NetConfig and Newton Configurator (Optional)

Clicking on the **NetConfig** button launches an individual installer similar to the Menu Panel installer. Both NetConfig and the Newton Configurator plug-in will be installed. Follow the directions displayed to install these applications onto that Menu Panel or PC.

Note The K-Frame Installer Application and the separate NetConfig application cannot run simultaneously on the same Menu Panel or PC.

Check Software Versions

Launch the Menu application. The Status Menu will list the switcher system devices. Ensure all the components are running the same software version. Mismatched versions will be reported with red text.

Figure 19. Mismatched Software Versions—K-Frame

The screenshot displays the 'KAYENNE K-FRAME VIDEO PRODUCTION CENTER' interface. A central table lists system components and their software versions. The 'KRR 2ME Menu' entry is highlighted in red, indicating a version mismatch.

Node Name	Control Surface	Node Type	IP Address	Version	Date
Kayenne Frame		Video Proc Frame	192.168.0.170	V9.0.0	Jul 30 2015
ImageStore		Image Store	192.168.0.171	V9.0.0	Jul 30 2015
Kayenne	1A	Kayenne Panel	192.168.0.173	V9.0.0	Jul 30 2015
KYN 4ME Menu	1A	Menu Panel	192.168.0.175	V9.0.0	Jul 30 2015
Karrera	2A	Karrera Panel	192.168.0.177	V9.0.0	Jul 30 2015
KRR 2ME Menu	2A	Menu Panel	192.168.0.176	V7.0.1	Apr 13 2014
Clip Store		Clip Store	192.168.0.180	V9.0.0	Jul 30 2015

Additional interface elements include a 'Menu Version' box showing 'Ver V7.0.0 d24', 'Memory Usage' at 15.5%, and buttons for 'Minimize Menu', 'Restart or Exit Menu', and 'Capture Software Diagnostic Data'.

Confirm System Operation

1. Check that all the installed MEs are operational. Select different crosspoints on the Control Panel and fly a key with an iDPM.
2. Check that any software enabled options operate correctly. Existing authorization codes should work with the new software.
3. Check that EMEMs run properly. Older effects should work with the new software. If there are differences, however, you will need to edit or rebuild the effect with the new software version.
4. Reload the Macros and check that they operate correctly.
5. Load some Image Store images and confirm they display correctly.

Backup New Configuration and Effects Files

1. When you are satisfied with system operation, save the new configuration files and effects as a Show file to a folder you've created on that version's K-Frame Software USB stick.
2. Label the media with the version and date and store it in a safe place.
3. Reactivate any virus protection on the Menu panel that may have been disabled at the start of this procedure.

This completes the standard switcher system software update procedure.

Update Other Grass Valley Switcher Systems Software

More than one switcher system (multiple Video Processor Frames) may reside on your network. Each system can operate simultaneously with different software versions, as long as all the components in each system run the same software version.

Additional switcher systems are updated using the same procedure described before.

1. Select the other switcher system on the K-Frame Installer Program System hierarchy screen, and choose **Update All**.
2. Insert the K-Frame Software USB stick into each Menu Panel or PC associated with that switcher system and choose the **Menu** software update button.

Individual Switcher System Component Update

Individual components can be selected for update (just the Video Processor Frame, optional Image Store, or just one Control Panel). However, all components of a switcher system must run the same software version. If updating components individually, make sure they all are at the same version before resuming K-Frame system operation.

CAUTION Allow the Video Processor Frame and optional Image Store to completely finish rebooting before attempting to install Control Panel software. The Control Panel update process requires the Frame to be operational.

K-Frame Software Removal With Windows OS

K-Frame Deployment Tool versions and Menu Panel programs can be removed using standard Windows techniques (Setup/Add or Remove Programs/Uninstall or Change Programs, etc.).

Deployment Archive Files

When new software versions are installed with the K-Frame Deployment tool, older version deployment files are not automatically removed. Each K-Frame deployment creates its own software version folder. If the default installation location, or the same alternative destination, is always chosen, all the version folders will be listed together.

Default destinations:

- C:\Program Files (x86)\ Grass Valley \ GV Switcher \ K_Frame_Switcher_VX.X for 64-bit
- C:\Program Files\ Grass Valley \ GV Switcher \ K_Frame_Switcher_VX.X for 32-bit systems.

Running the K_FrameInstaller.exe file in any version's folder will permit installation of that version's files.

CAUTION Before installing an older version of the Menu Panel application, you must first un-install the newer, currently installed Menu Panel version, either using that newer version's K-Frame Deploy Tool or Windows Add/Remove Programs.

Note All the components of a switcher system must run the same software version. If you want to return to an earlier version of software, you should back-down the software on the Video Processor Frame, all Control Panels, and all Menu Panel applications used with that switcher system.

Calibrate the Kayenne Lever Arm and Joystick

It is recommended that the Kayenne Control Panel Lever Arm (for each Transition Module) and Joystick be calibrated after a software update.

1. Press and hold down the two left (**Exchange ME/Ptn Limit**) and two right (**EMEM Run/Trans Rate**) buttons located just above the Lever Arm.
2. Follow the instructions on the Transition Module status display to calibrate the Lever Arm.
3. From the Home menu in the Multi-Function Module, press **Panel, Cali** and follow the instructions on the status display to calibrate the joystick.

Calibrate the Karrera Lever Arm and Joystick

It is recommended that the Karrera Control Panel Lever Arm (for each Transition area) and Joystick be calibrated after a software update.

1. On any Karrera panel EMEM area, press **Menu, Page**.
2. Select **Calib**, choose the ME Lever Arm or Joystick to calibrate, and follow the instructions displayed.

Lever 1 is the topmost Lever Arm on the panel.

K-Frame System Default IP Addresses

K-Frame systems are shipped with default IP addresses. These default addresses can be used if the K-Frame system is operating on a dedicated network with no other devices present. Note that these addresses can be changed during installation, and so your system may not be using these defaults.

Table 2. Kayenne/Karrera K-Frame System Default IP Addresses

Device	IP Address
Video Processor Frame CPU	192.168.0.170
Image Store CPU	192.168.0.171
Control Panel Surface 1A	192.168.0.173
Touch Screen Menu Panel 1	192.168.0.175
Touch Screen Menu Panel 2	192.168.0.176
Control Panel Surface 1B	192.168.0.177
Control Panel Surface 2A	192.168.0.178
Control Panel Surface 2B	192.168.0.179
ClipStore Server	192.168.0.180
32-Crosspoint Remote Aux Panels V1.6.5 and higher software: (hard reset with the front panel buttons)	IP Address: 192.168.1.2 Frame IP: 192.168.1.1 Gateway IP: 192.168.1.1 Subnet Mask 255.255.255.0 Note 32-Crosspoint Remote Aux Panel default settings must be changed to operate with a Karrera system whose other components are configured with their default IP addresses.
All Subnet Masks)	255.255.255.0
All Gateways (except V1.6.5 software Remote Aux panel)	192.168.0.1
Reserved For Future Use	CAUTION Do not connect any devices configured with the following IP addresses to a Karrera network.
Video Processor Frame Gigabit Ethernet	192.168.0.172
PCU Panel Reserved LAN Port	192.168.0.174

Note Customer orders with multiple Control Panels will be pre-configured to the listed IP addresses. However, if one of these additional Control Panels is reset to factory defaults, it will be given the standard 1A default 192.168.0.173 address.

IP Addresses and Single Control Surface Systems

A new Grass Valley system will operate on an isolated network with the default IP addresses configured at the factory (except for 32 Crosspoint Remote Aux panels). However, if you wish to integrate the system into an existing network, wish to use gateway communications, or wish to add more control surface components, then the IP addresses may need to be changed.

IP Addresses and Multiple Control Surfaces and Suites

If you plan to use multiple control surfaces (for example, more than one Control Panel or more than one Menu Panel) with the same Video Processor frame, you must make sure the IP addresses of the additional items are unique before connecting them to the network. Using default IP addresses will cause network conflicts and unpredictable system operation.

See the *Installation and Service Manual* for your switcher model for specific information about network configuration.

