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A **BELDEN** BRAND

KAYENNE/KARRERA/ GV KORONA

K-FRAME VIDEO PRODUCTION CENTER

Release Notes

VERSION 14.5

071896501-A0

2019-11-06

www.grassvalley.com

Patent Information

This product may be protected by one or more patents.

For further information, please visit: www.grassvalley.com/patents/

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Title	KAYENNE/KARRERA/GV KORONA Release Notes
Part Number	071896501-AO
Revision	2019-11-06, 11:20

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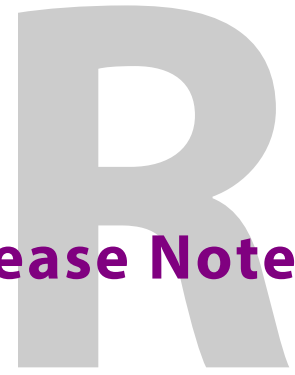
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K-Frame 14.5 Release Notes



About this Manual

This document describes the new features and other information specific to the K-Frame Video Production Center, Version 14.5 switcher software for the Kayenne, Karrera, and GV Korona systems.

For More Information

For information about installing, configuring, and operating K-Frame systems, see the K-Frame Video Production Center Documentation Libraries found on the Grass Valley website at grassvalley.com and on the USB thumb drive provided with your system.

GV K-Frame X/V-series Downgrade Instructions

Contact Customer Support for assistance before downgrading GV K-Frame X or V-series systems from software version 14.4 ([Grass Valley Technical Support](#), on page 33).

New in this Release

- HAD FPGA Update—See the *Kayenne/Karrera/GV Korona Installation & Service Manual, Maintenance* section for instructions
- Important HAD Update Information About the PTP Mezzanine Board—[Golden Image Update Required for Some PTP Mezzanine Boards](#), on page 2
- GV K-Frame X 12G SDI GB (Gearbox) Board Support: 12G (2160p) to Quad Link on the input and Quad Link to 2160p on the output—[About the GV K-Frame X 12G SDI GB \(Gearbox\) Board](#), on page 4
- Timing Menu Enhancements: Horizontal Timing and Timing Analyzer features—[Timing Menu Enhancements](#), on page 17

Golden Image Update Required for Some PTP Mezzanine Boards

For a small number of PTP boards, after performing the HAD update using the Multiboot command as described in the *Kayenne/Karrera/GV Korona Installation & Service Manual, Maintenance* section, the PTP boards will not have been updated. These boards have the Version a.4 Golden Image.

After the Multiboot HAD update, the system will still report version a.4 and an Out of date HAD alert will appear in the switcher menu.

For PTP Boards that did not update, flash only the PTP board Golden Image:

- 1 Perform the HAD update as described in the *Kayenne/Karrera/GV Korona Installation & Service Manual, Maintenance* section.
- 2 Once the update is complete:
 - a view the switcher menu to see if there is an Out of Date HAD alert and/or
 - b in a browser on a network to which the Frame is connected, enter the IP Address of the Frame and view the logs for the PTP Mezzanine board to determine if the version is a.4.

```
Previous Current Next
* 06 Nov 2019 09:50:38 (0) = main.map offset = 0x14e0cea0
I 06 Nov 2019 09:50:34 (0) =====
I 06 Nov 2019 09:50:34 (0) GV K-Frame X
I 06 Nov 2019 09:50:34 (0) Copyright Grass Valley.
I 06 Nov 2019 09:50:34 (0) All Rights Reserved.
I 06 Nov 2019 09:50:34 (0) Version V14.5.0, built Oct 31 2019 15:51:12
I 06 Nov 2019 09:50:34 (0) Current Primary partition version.txt is V5.1.0d47
I 06 Nov 2019 09:50:34 (0) VxWork Kernel creation date: Mar 20 2018, 08:30:24
I 06 Nov 2019 09:50:34 (0) Repeats:1 =====
I 06 Nov 2019 09:50:34 (0) Persistent Log Start.
I 06 Nov 2019 09:50:34 (0) Persistent Log End.
I 06 Nov 2019 09:50:34 (0) =====
* 06 Nov 2019 09:50:38 (0) HAD E540000: PTP Mezz in slot 0, Num.Ver.Rev 9b00.a.4, TimeStamp 04/18/2019 18:10, DMA:N/A
* 06 Nov 2019 09:50:38 (0) HAD F080000: N/A Board in slot 0, Num.Ver.Rev 7000.a.1, TimeStamp 03/07/2019 09:31, DMA:Yes
```

- 3 Enter **consoleMenu** at the prompt: ->consoleMenu

Result:

```
[1] Status           [2] Controller       [3] ME
[4] PTP Mezz        [5] Vid 16x8 IO     [6] Mod 8x4 IO
[7] Image Store     [8] Spare           [9] Debug
[10] Software Options [11] Fan Controller [P] Power Supply
[H] Boot Sw Help   [Z] Test Diagnostics [D] DisableAllUpdates
[M] DisableAllMonitoring [X] Exit to shell
```

4 Enter the number four [4] for PTP Mezz at the prompt: ->4

Result:

```
[1] Peek           [2] Poke           [3] BlockPeek
[4] LongPeek       [5] LongPoke       [6] LongBlockPeek
[7] LoadFPGAs     [8] HAD            [9] PtpMezz
[A] ARM           [11] MAC Addresses [B] Board ID
[T] Temp Monitor  [D] DisableBoardUpdates [x] Exit
```

5 Enter the number eight [8] for HAD, at the prompt: ->8

Result:

```
[1] Peek           [2] Poke           [3] BlockPeek
[4] LongPeek       [5] LongPoke       [6] LongBlockPeek
[7] Program_FLASH [V] Show Version Info [x] Exit
```

6 Enter the number seven [7] for Program_FLASH, at the prompt: ->7

Result:

```
[G] Golden Configuration Image
[M] Multi Boot Configuration Image
[x] Exit (At any time, 'x' will exit)
```

7 Enter the letter g [G] for Golden Configuration Image, at the prompt: ->g

Result:

```
For Version/Revision: <Version>/<Revision> [e.g. a/0 or b/1...]
For Filename: -name <filename> [e.g. -name test_had.000]:
```

8 Enter the version a/6, at the prompt: ->a/6

Result:

```
Read or Write?
[R] Read          [W] Write
```

9 Enter the letter w [W] for Write, at the prompt: ->w

Result:

```
Is this correct? (Y or N)
```

10 Enter the letter y to begin the reprogramming of the HAD, at the prompt: ->y

Note: HAD reprogramming speed will be faster than with earlier versions.

Result:

```
HAD E5400A00: Program page 12400, dest addr 0x307000 (95%)
HAD E5400A00: Program page 12500, dest addr 0x30d400 (96%)
HAD E5400A00: Program page 12600, dest addr 0x313800 (97%)
HAD E5400A00: Program page 12700, dest addr 0x319c00 (97%)
HAD E5400A00: Program page 12800, dest addr 0x320000 (98%)
HAD E5400A00: Program page 12900, dest addr 0x326400 (99%)
HAD E5400A00: Flashed successfully (tries 1)!
```

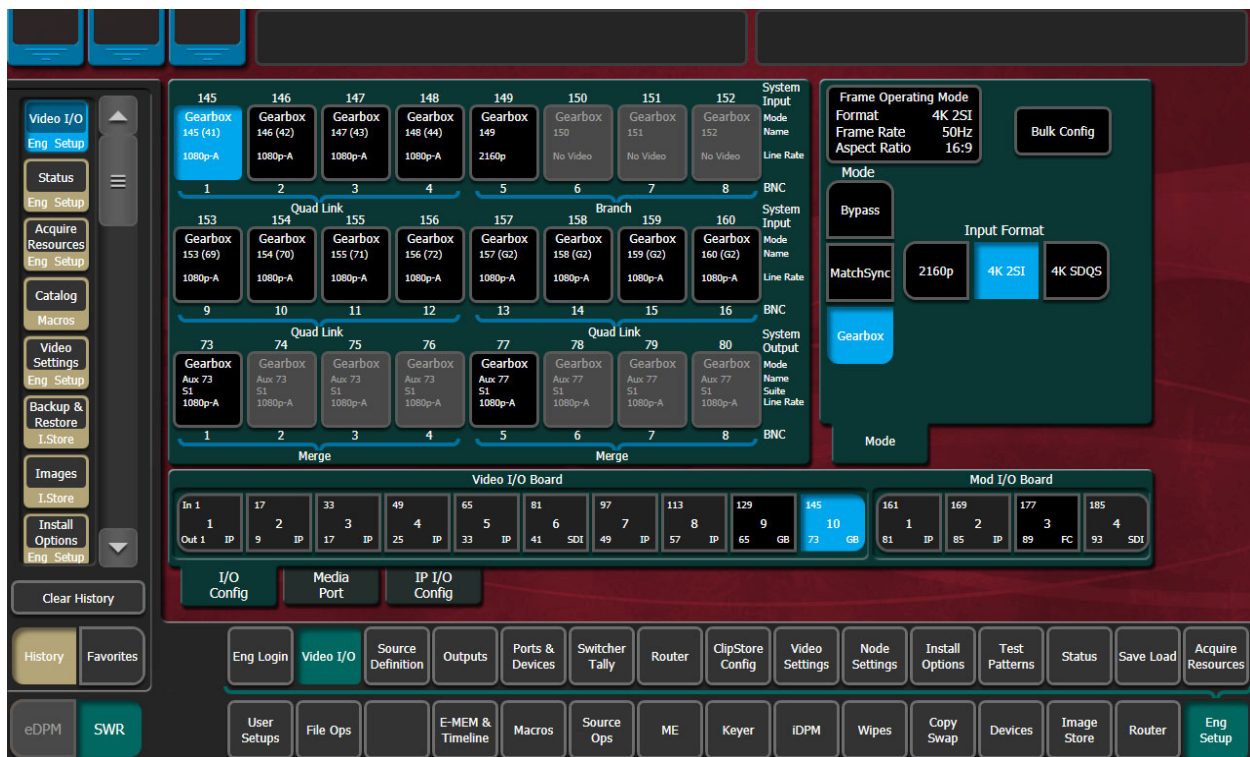
About the GV K-Frame X 12G SDI GB (Gearbox) Board

On the inputs, the 16x8 GB board divides a single 12Gbps (2160p) SDI video stream into a Quad Link signal (four 3Gbps/1080p images) into the Frame. On the outputs, a Quad Link signal is routed as one 12Gbps stream.

The cable with the 12G SDI signal is to be connected to the first of four physical BNCs on the back of the Frame. For example, GB board Input 1, 5, 9, or 13 or Output 1 or 4.

IMPORTANT: In Bypass mode, when a 2160p 12Gbps stream is received, the 1080p sub-image from the first input of a group of four can produce video, however it is *not* a 4K image unless Gearbox mode is selected.

The Eng Setup, Video I/O, I/O Config menu is provided to configure the Gearbox settings.



Input Formatting

In Gearbox mode, input format selections are provided so the switcher can be configured to match a 2160p, 4K 2SI, or 4K SDQS source formats. The 12Gbps SDI (2160P) single stream is received on the first of four GB BNCs and input into the Frame as a Quad Link signal (four 1080p, 3Gbps images).

About Timing

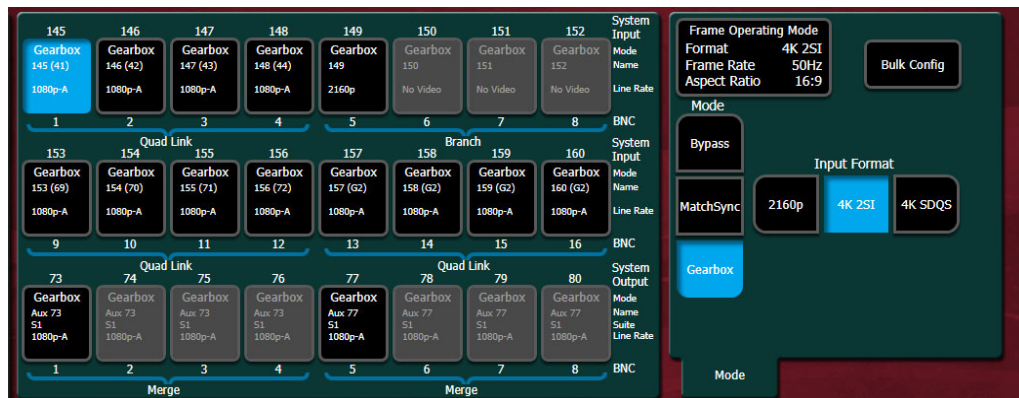
The input video is timed to the internal switcher sync in both MatchSync and GearBox mode. The delay can be up to a frame. In bypass mode, the input signals are auto-timed as long as they are in the normal auto-timing window (see the *Kayenne/Karrera/GV Korona Installation & Service Manual*). The auto-timing window for the MatchSync and Gearbox input is a full Frame Sync. The auto-timing input is measured in a few lines.

To properly time a mixed IP Video and SDI system, adjust the switcher system timing for the IP Video, then use the MatchSync or GearBox inputs to match the timing of the incoming video.

Output Formatting

For the Outputs, format selections are provided so the processed Quad Link video can be routed as a single 12Gbps (2160p) stream on the first of four outputs. Safe Title, cursor, video processing (YUV Correction), etc. are supported on all outputs as with all K-Frame systems.

The configuration settings are indicated by the blue underlining brackets and labels: Branch, Merge, and Quad Link.



MatchSync

MatchSync applies the minimum amount of delay to an incoming SDI video and synchronizes incoming signals with the system timing. MatchSync is supported on the GB (Gearbox) and FC (Format Conversion) boards for the GV K-Frame X.

Supported Gearbox Format and Frame Operating Mode Compatibility

Inputs

Mode	Frame Operating Mode	Input Format
Bypass	All	Same as Frame Operating Mode
Match Sync	All	Same as Frame Operating Mode
Gearbox	1080p Level A	1080p Level A
		2160p ^a
		4K 2SI Quad Link ^b
		4K SDQS Quad Link ^b
	4K 2SI Quad Link	1080p
		2160p
		4K 2SI Quad Link
		4K SDQS Quad Link ^c
	4K SDQS Quad Link	2160p
		4K 2SI Quad Link
		4K SDQS Quad Link

a. Suitable for production video

b. 2160p sub-image, slightly enhanced 1080p signal (not 4K)

c. Translated to 4K 2SI

Outputs

Mode	Frame Operating Mode	Output Format
Bypass	All	Same as Frame Operating Mode
Gearbox	1080p Level A	1080p Level A
		2160p ^a
		4K SDQS Quad Link ^b
	4K 2SI Quad Link	1080p ^c
		2160p

a. Suitable for production quality video

b. Translated to 4K 2SI

c. 2160p sub-image, slightly enhanced 1080p signal (not 4K)

Video I/O Menu Updates

For GV K-Frame X, the I/O Config tab replaces the Mod I/O Conversion tab and includes Gearbox configuration in addition to Format Conversion (for information about Branching, Merging, and Quad Links, see the *K-Frame Kayenne/Karrera/GV Korona Installation & Service Manual*).

The screenshot displays the Video I/O Config menu. The main area shows a grid of gearbox configurations, including System Input (Gearbox 145-152), System Output (Gearbox 153-160), and Aux gearboxes (Aux 73, 75, 76, 77). It also features a 'Frame Operating Mode' section with settings for Format (4K 2SI), Frame Rate (50Hz), and Aspect Ratio (16:9). The bottom section includes tabs for 'I/O Config', 'Media Port', and 'IP I/O Config', and a navigation bar with various system and application tabs.

Note: IP and SDI Boards are non-configurable from the I/O Config menu tab, however, board type, name, board number, input and output, and suite (output only) information is provided in the data pads for reference.

Video I/O Board and Mod I/O Board Configuration Data

Button/Label	Description
--------------	-------------



Board Tile Button enhancements apply to I/O Config and IP/IO Config menu tabs.

Board Selection	Board configuration settings:
	<ul style="list-style-type: none"> • First system input on the board—Top left • First system output on the board—Bottom left • Board slot in Frame—Center • Board type—Bottom right <ul style="list-style-type: none"> • SDI (Serial Digital Interface) • IP (Internet Protocol) • FC (Format Conversion) • GB (Gearbox) • --- No board

I/O Config Menu Button and Labels

Inputs/Outputs Configuration Pane Buttons and Labels (Left)

Button/Label	Description
Inputs	
Input (1-16)	Select the input for configuration from the top two rows of data pads labeled System Input (on the right side of the Configuration pane)
Labels	System Input—Source Definition Engineering ID Mode—Input modes based on Video I/O Board or Mod I/O Board type selections: <ul style="list-style-type: none"> • Gearbox Board: Bypass, MatchSync, Gearbox • Format Conversion Board: Bypass, MatchSync, MatchDef • IP: N/A (IP I/O Config menu) • SDI: N/A
	Name—System Input Name (Eng Setup, Source Definition menu)
	Line Rate— Input video format
	Crop—Crop On/Crop Off (Format Conversion Board)
	BNC—Physical BNC on selected Video/Mod I/O Board
Outputs	
Output (1-8)	Select the output for configuration from the bottom row of data pads labeled System Output (on the right side of the Configuration pane)

Inputs/Outputs Configuration Pane Buttons and Labels (Left)

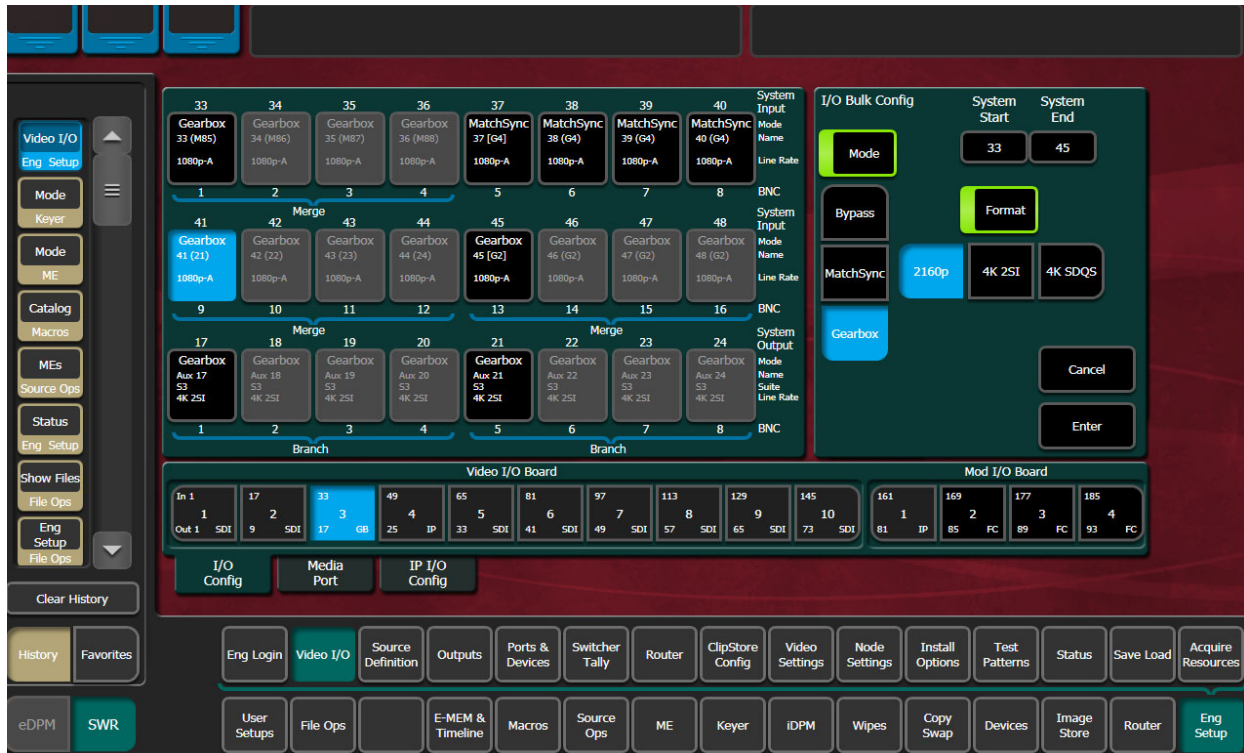
Button/Label	Description
Labels	System Output—Video I/O Physical Output definition from the Eng Setup, Outputs menu
	Mode—Output modes based on Video I/O Board or Mod I/O Board type selections: <ul style="list-style-type: none"> • Gearbox Board: Bypass, Gearbox • Format Conversion Board: Bypass, MatchSync, SetDef • IP: N/A (IP I/O Config menu) • SDI: N/A (No configuration necessary)
	Name—System Output Name (Outputs menu)
	Suite—Current suite assigned to the output
	Line Rate—Line rate of the output, modified by Gearbox or SetDef selection in the Configuration pane (right)
	Crop—Crop On/Crop Off (Format Conversion Board)
	BNC—Physical BNC on selected Video I/O or Mod I/O Board

Mode Configuration Pane Buttons and Labels (Right)

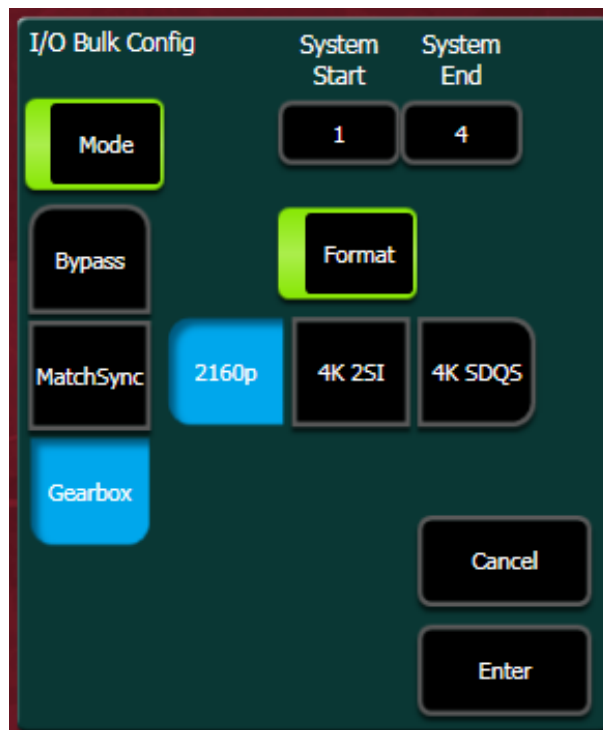
Button/Label	Description
Mode Tab	
Frame Operating Mode Labels	Format—Current Frame setting (Video Settings Menu)
	Frame Rate—Current Frame setting (Video Settings Menu)
	Aspect Ratio—Current Frame setting (Video Settings Menu)
Auto Line-Rate Enable: Format Conversion	Enabled—Automatically detects line rate from incoming stream (does not currently detect 4K modes) and displays the incoming format Disabled—allows pass through stream and manual line rate selection in MatchDef (manually setting the line rate can sometimes be used to correct incoming video from an external device)
Mode: Gearbox	Inputs: <ul style="list-style-type: none"> • Bypass—Allows video to pass through without conversion • MatchSync—Incoming video delayed minimum amount, will synchronize incoming SDI signals to system timing • Gearbox—Select 2160p, 4K 2SI, or 4K SDQS
Mode: Format Conversion	Inputs: <ul style="list-style-type: none"> • Bypass—Allows video to pass through without conversion • MatchSync—Incoming video delayed minimum amount, will synchronize incoming SDI signals to system timing • MatchDef—Incoming stream will be converted to the Frame Operating Mode
Line Rates	4Ksf 2SI, 4K 2S I, 4K SDQS, 2160p, 1080p-A, 1080p-B, 1080p, 1080sf, 1080i, 720p, Std Def 4:3, Std Def 16:9 (Standard Def buttons grayed out when in 4K Frame Operating Modes)
Crop/Matte Tab (Format Conversion only)	
Crop	Displays crop settings and displays Top, Bottom, Left, Right data pad/soft knobs
Top	Crop image from the top down
Bottom	Crop image from the bottom up
Left	Crop image from the left
Right	Crop image from the right
Matte	Displays Matte settings and launches Matte adjustment data pads
Hue	Increase/decrease matte hue percentage
Saturation	Increase/decrease matte saturation
Brightness	Increase/decrease matte brightness
Crop Enable	Enable crops
Clear All	Resets all crop and matte settings

Gearbox Bulk Configuration Menu

Bulk Configuration in the Eng Setup, Video I/O, I/O Config menu allows Gearbox mode configurations to be applied across multiple Gearbox system inputs and outputs for each mode: Bypass, MatchSync, and Gearbox.



I/O Bulk Config Pane

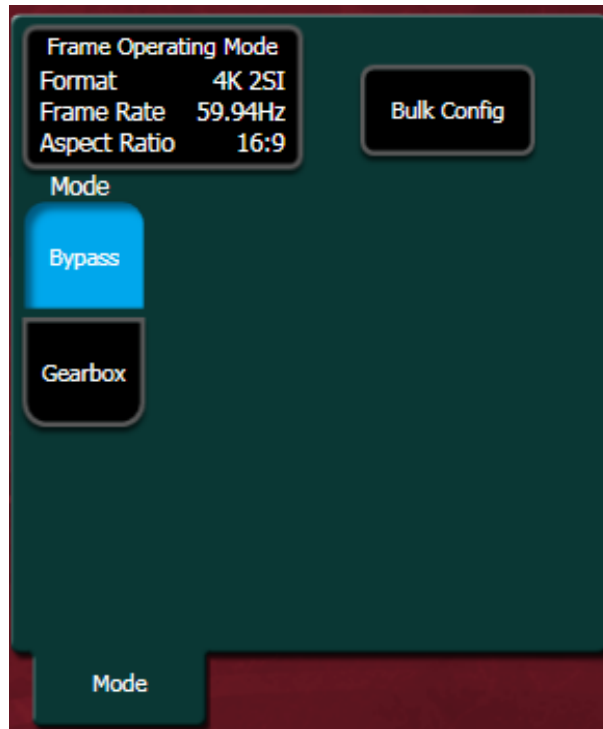


I/O Bulk Config (Mode) Pane Buttons and Labels

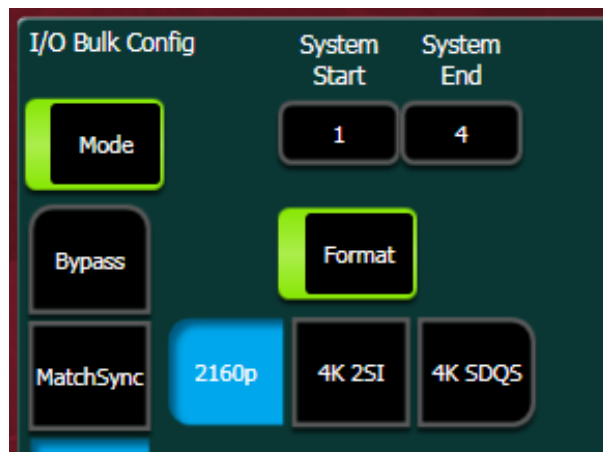
Button/Label	Description
System Start/System End	System Start: First System Input/Output in range System End: Last System Input/Output in range
Mode	Select to enable bulk configuration
Bypass/MatchSync/Gearbox (Modes)	Select mode for bulk configuration
Format	Select to enable format selection
(Inputs format) 2160p/4K 2SI/4K SDQS (Outputs format) 2160p/4K 2SI/1080p	Input/Output video formats
Cancel	Cancel selections
Enter	Apply settings

Apply I/O Bulk Config Settings

- 1 Select the **Bulk Config** button in the Eng Setup, Video I/O, I/O Config, Mode pane.



- 2 Select the System Start data pad and enter the number of the first System Input/Output in the range for bulk configuration in the System Start numeric keypad.



- 3 Select the System End data pad and enter the number of the last System Input/Output in the range for bulk configuration in the System End numeric keypad.

Note: Gearbox Mode and Format can be configured in bulk together or independently. The Mode or Format buttons must be enabled for the configuration to be applied.

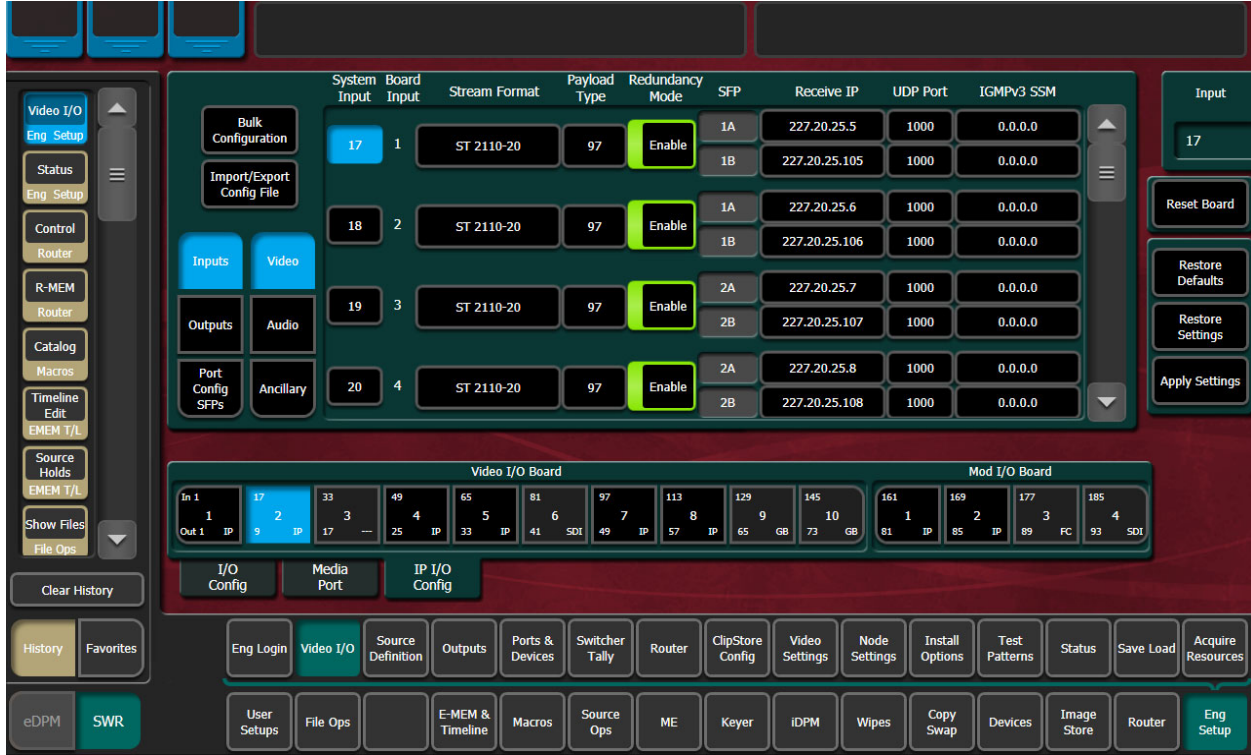
- 4 To bulk configure the Mode setting, enable the **Mode** button and select:
 - Bypass, MatchSync, or Gearbox for inputs or
 - Bypass or Gearbox for outputs, and



- 5 Select **Enter**.
- 6 To bulk configure the format in Gearbox mode, enable the **Format** button and select:
 - **2160p, 4K 2SI, 4K SDQS** for Inputs or
 - **2160p, 4K 2SI, 1080p** for Outputs, and
- 7 Select **Enter**.

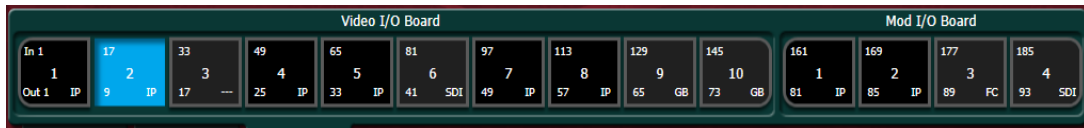
IP I/O Config Menu

The IP I/O Config menu was updated to include the additional configuration settings on the Video I/O and Mod I/O Board data pads.



Video I/O Board and Mod I/O Board Configuration Data

Button/Label	Description
--------------	-------------

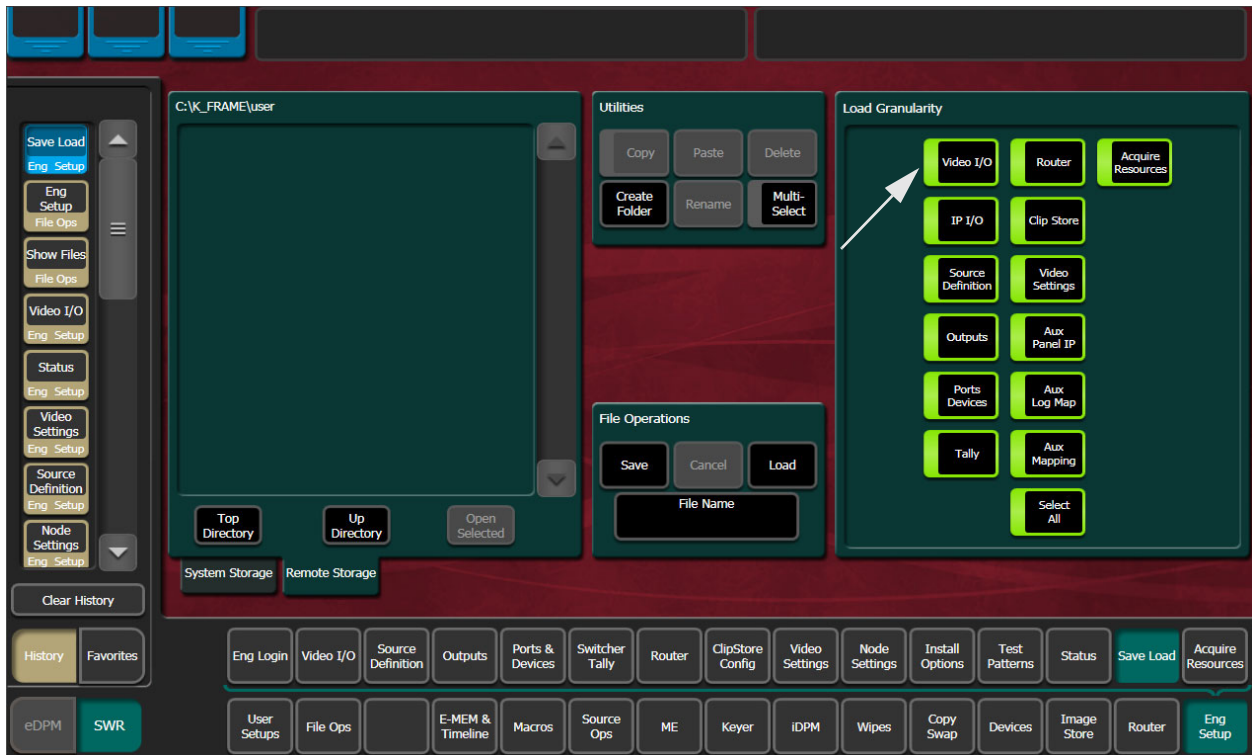


Board Tile Button enhancements apply to I/O Config and IP/IO Config menu tabs.

Board Selection	Board configuration settings:
	<ul style="list-style-type: none"> • First system input on the board—Top left • First system output on the board—Bottom left • Board slot in Frame—Center • Board type—Bottom right <ul style="list-style-type: none"> • SDI (Serial Digital Interface) • IP (Internet Protocol) • FC (Format Conversion) • GB (Gearbox) • --- No board

Saving/Loading I/O Config Parameters

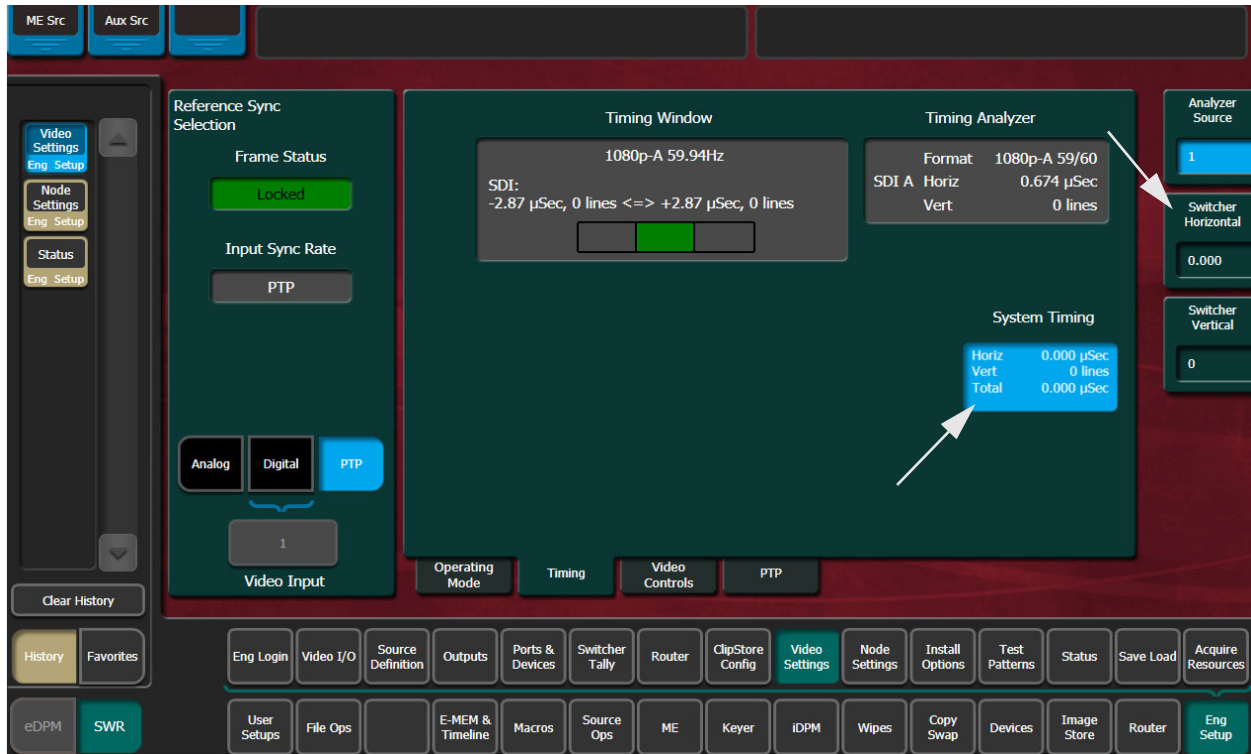
I/O Config parameter settings are saved/loaded when the Video I/O button is enabled in the Load Granularity pane of the Eng Setup, Save Load (and File Ops, Eng Setup) menu.



Timing Menu Enhancements

The following enhancements have been added to the Timing menu:

- When adjusting the Horizontal timing with the Switcher Horizontal knob or data pad and the end of a line is reached, the Switcher Vertical parameter will be incremented or decremented accordingly and the Switcher Horizontal parameter resets to zero.
- The *Total* line has been added under the Vert (Vertical) line in the System Timing pane to reflect the total amount of delay in μ secs.



About the K-Frame Software Update

K-Frame systems are shipped with the current software version installed on the Frame and Control Surface. 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.

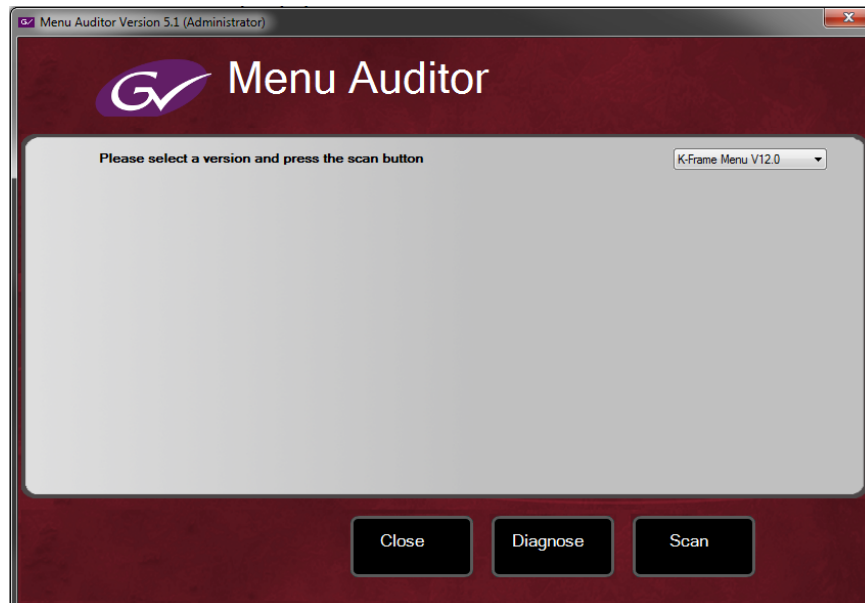
Run the Menu Auditor for Third Party Updates

The Menu Auditor Program is included on the USB Stick provided with your system and available from the grassvalley.com support menu. The Menu Auditor is run to verify that the required Third Party Updates are installed, including Microsoft .NET. The Menu Auditor will indicate which updates need to be installed to ensure an up-to-date system.

CAUTION: Out of date third-party software can cause the menu to become unstable or stop working.

To check for third party updates on a Menu Panel or Menu on PC:

- 1 Run the Menu Auditor Program.



- 2 Select **Scan**. The Auditor will check each relevant installation and indicate the state of the computer environment.



- 3 Select the **Install** buttons of any files that are not of the correct version.
- 4 Select the **Diagnose** button to run the scan and put the windows machine data into a file for diagnostic purposes.

Materials Required

You will need the following materials for this update:

- K-FrameSetup.exe, which can be downloaded from the Grass Valley Customer Support website along with the latest ClipStore/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 K-Frame Software

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

Back up Current Configuration and Effects Files:

- 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 K-Frame Kayenne/Karrera/GV Korona User Manual for file operations instructions.

Note: A thumb drive that includes the current Grass Valley switcher software version is a convenient location to back up these files.

- 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 the 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:
 - a Insert the K-Frame Software USB stick into an available port on the Menu Panel or PC. Locate the removable disk in My Computer, open **K-FrameSetup.exe**, and select **OK**,
- or -
- b Download the K-FrameSetup.exe file from the Grass Valley download site, open the file, and select **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 Select **Next** in the K-Frame Deployment Tool window.
- 5 Accept the license agreement and select **Next**.
- 6 Select **Next** to accept the default deployment location. Alternatively, you can Browse to a different location to deploy the files. The "Ready to Install the Application" screen appears next.
- 7 Select **Next** to deploy the files.

Result: When the deployment completes, the K-Frame Installer Program will launch automatically. After the switcher files have been deployed, the K-Frame Installer Program can be launched at any time by opening the **K-Frame Installer** from the desktop icon.

K-Frame Installer Program Description

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



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 Frame or Control Panel device in the hierarchy to display information for that device or install software.



Selecting **System Device(s)**, at the top of the hierarchy window displays the types of switcher devices residing on the network. Selecting a switcher device displays the system names present on the network of that switcher. Each system name is taken from the Video Processor Frame name. Selecting 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 selecting its labeled button:

Rescan - Rescans 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.

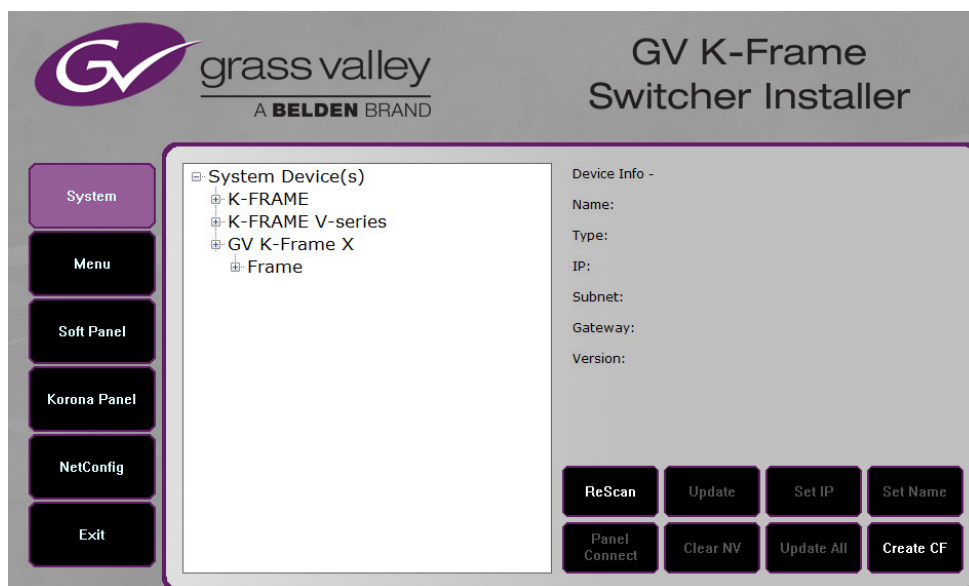
Create CF - Allows the creation of a Control Panel Compact Flash Card onto another CF Card.

CAUTION: : The Create CF process wipes and formats the CF card.

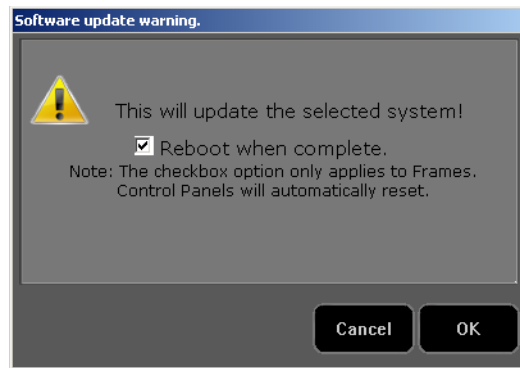
Update the K-Frame System Software

For Kayenne and Karrera, the K-Frame system's Video Processor Frame, Control Panels, and optional Image Stores can be updated in one operation. The GV Korona Control Panel is updated separately from the Frame and Image Store ([Update the GV Korona Control Panel Software](#), on page 23).

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



- 2 In the System menu, each K-Frame Switcher system consists of a Video Processor Frame, associated Control Panels; and PCU(s) for Kayenne, 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 Select **Update All**. The Software update warning dialog is displayed.



If the Reboot when complete box is checked, the Video Processor Frame, optional Image Store, and all associated Control Panels will reboot after the **OK** button in the Software update warning dialog is selected. If the box is not checked, you will need to manually reboot the Video Processor Frame and optional Image Store hardware after the software files have finished installing. Control Panels are always rebooted after a software update.

- 4 Select **OK**.
- 5 Select **Finish** when complete.

Update the GV Korona Control Panel Software

The GV Korona Control Panel software is updated separately from the Video Processor Frame.

- 1 With the K-Frame Switcher Installer Program launched, select **Korona Panel**.



- 2 Accept the License Agreement, select **Next**, and follow the prompts.

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.

Install the Menu Panel Application Update

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

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



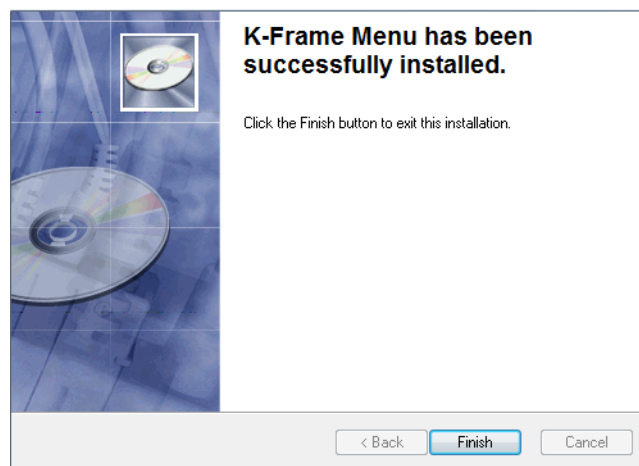
- 2 Select the **Menu** button. The K-Frame Menu Installation tool will launch.



- 3 Select **Next**.
- 4 In either the Karrera, Kayenne, or GV Korona Control Panel area, choose either the Menu Platform (the Touch Screen Menu Panel) or User PC, and select **Next**.
- 5 Enter a name and organization in the User Information screen, leave the Anyone who uses this computer setting selected, and select **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 foolproof security method and should not be relied on for mission critical applications.

- 6 Select **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, select **Next**.
- 8 When done, the Menu Successfully Installed screen appears, select **Finish**.
If you installed onto Menu hardware you will be prompted to reboot the computer.



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

Selecting the K-Frame Menu icon launches the new version of the Menu Panel application.

Soft Panel Installation

Selecting the Soft Panel button launches an individual installer for the KSP option. The Soft Panel installer is intended for a customer provided PC and the process is identical to the Menu on PC ([Install the Menu Panel Application Update](#), on page 24). Install the menu and follow the prompts. 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 4.5 Windows 7/Windows 10 ([Run the Menu Auditor for Third Party Updates](#), on page 18)
- Microsoft Visual Studio 2010 redistributable is installed—([Run the Menu Auditor for Third Party Updates](#), on page 18)

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.

FPGA and Board ARM Software Upgrades

CAUTION: It is recommended that HAD FPGA Board ARM Software upgrades are performed by qualified personnel only, for example an EIC (Engineer In Charge).

About Host Address Decoder FPGA Upgrades

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 (Host Address Decoder) FPGA (Field Programmable Gate Array). Software updates can include firmware upgrades for endpoint HADs. Upgrading the HADs is recommended.

Any out of date HADs will be reported by the menu, however the HAD version match can be checked with the checkHADs command in the Console menu (*Kayenne/Karrera/GV Korona Installation & Service Manual, Maintenance*).

About the IP I/O Board ARM Software

For GV K-Frame X and V-series Frames, each 16x8 and 8x4 Video IP I/O (8x4 only for V-series) and PTP Mezzanine board (GV K-Frame X only) require a board ARM software upgrade as part of the software installation. In most cases, the Board ARM software upgrades are automatic but there are exceptions, see the *Kayenne/Karrera/GV Korona Installation & Service Manual, Maintenance section*.

Clear NV RAM for Control Panel and Frame

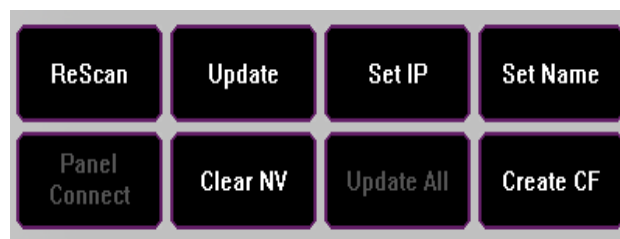
Use the following procedure on the Menu Panel or Menu on PC running the Menu Panel application that operates with the updated Video Processor Frame.

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 *K-Frame Installation & Service Manual* for specific instructions.

- 1 From the K-Frame Installer menu, select the **System** button.



- 2 Select the device to be cleared.
- 3 Select the **Clear NV** button. Repeat for Control Panel and Frame.



Sample Files and DPM Effects

Sample files or other elements and instructions for use are provided with an installer from the Grass Valley website. The K-Frame Sample Installer, available on the Software USB thumb drive that came with your system and from the Grass Valley website, can be used to place the K-Frame samples in the C:\K_Frame\user\Samples directory on the GV Switcher system.

IMPORTANT: When upgrading, install the samples after the initial software upgrade.

During installation, you can choose to install all (the default) sample effects or select specific effects, reducing installation times.

Sample DPM Effects

Starting with switcher software version 11.0, sample DPM effects are provided with the K-Frame Sample Installer. It is important to read the accompanying instructions on how to load and run the sample DPM effects.

Note: The C:/Images folder must be a shared folder on the network to use sample Image Store stills with sample DPM Effects.

About K-Frame V-series and S-series Samples and Effects

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

Install NetConfig and Newton Configurator (Optional)

Select the **NetConfig** button to launch the K-Frame NetConfig installer (similar to the Menu Panel installer). Both NetConfig and the Newton Configurator plug-in will be installed. Follow the menu prompts 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 lists the switcher system devices. Ensure all the components are running the same software version. Mismatched versions will be reported with red text.

Node Name	Control Surface	Node Type	IP Address	Version	Date
Kayenne Frame		Video Proc Frame	192.168.0.170	V14.5.0	Oct 6 2019
ImageStore		Image Store	192.168.0.171	V14.5.0	Oct 6 2019
Kayenne	1A	Kayenne Panel	192.168.0.173	V14.5.0	Oct 6 2019
KYN 4ME Menu	1A	Menu Panel	192.168.0.175	V14.5.0	Oct 6 2019
Karrera	2A	Karrera Panel	192.168.0.177	V14.0.0	May 1 2019
KRR 2ME Menu	2A	Menu Panel	192.168.0.176	V14.5.0	Oct 6 2019
Clip Store		Clip Store	192.168.0.180	V14.5.0	Oct 6 2019

System Memory Usage: 16%

System Disk Usage: 15.32%

ImageStore Disk Usage: 86.92%

Confirm System Operation

- 1 Verify that all the installed MEs are operational. Select different crosspoints on the Control Panel and fly a key with an iDPM.
- 2 Ensure 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.
 - If older effects use iDPMs, it may require that you load, update, and save the show (see the *K-Frame User Manual* for more information).
- 4 Reload the Macros and check that they operate correctly.
- 5 Load some Image Store images and confirm they display correctly.

Back up 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 as described.

- 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.

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.

Default destinations:

- C:\Program Files (x86)\Grass Valley\GV Switcher\ K_Frame_Switcher_VX.X for 32-bit
- C:\Program Files\Grass Valley\GV Switcher\ K_Frame_Switcher_VX.X for 64-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 remove the newer, currently installed Menu Panel version, either using that newer version's K-Frame Deploy Tool or Windows Add or remove programs.

Calibrate the Lever Arm and Joystick

See the Maintenance section of the *Kayenne/Karrera/GV Korona Installation & Service Manual*.

K-Frame System Suggested IP Addresses

K-Frame systems are shipped with default IP addresses, and it is suggested that you reserve several IP Address in sequence to configure Control Panel suites and additional devices. 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 so your system may not be using these defaults.

K-Frame System Default IP Addresses

Device	IP Address
Video Processor Frame	192.168.0.170
Image Store	192.168.0.171
Control Panel Suite 1A	192.168.0.173
Touch Screen Menu Panel 1	192.168.0.175
ClipStore	192.168.0.180
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.

K-Frame System Default IP Addresses

Device	IP Address
Video Processor Frame Gigabit Ethernet	192.168.0.172
PCU Panel (Kayenne) 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 *Kayenne/Karrera/GV Korona Installation & Service Manual* for network configuration information.



Grass Valley Technical Support

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1 530 478 4148.

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

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

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