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A **BELDEN** BRAND

KAYENNE/KARRERA/ GV KORONA

K-FRAME VIDEO PRODUCTION CENTER

Release Notes

VERSION 14.6

071896501-AP

2020-04-21

www.grassvalley.com

Patent Information

This product may be protected by one or more patents.

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Title	KAYENNE/KARRERA/GV KORONA Release Notes
Part Number	071896501-AP
Revision	2020-04-21, 13:33

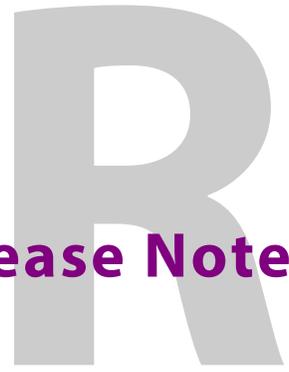
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K-Frame Version 14.6 Release Notes



About this Manual

This document describes the new features and other information specific to the K-Frame Video Production Center, Version 14.6 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 v14.6 or newer ([Grass Valley Technical Support](#), on page 25).

New in this Release

- Single Stream, full frame, UHD-4K on 25GbE SFPs added to GV K-Frame X and V-series—[About Single Stream Full Frame UHD-4K](#), on page 2
- NMOS AMWA IS-04 and IS-05 supported for Discovery & Registration and Connection Management—[About NMOS AMWA IS-04 and IS-05](#), on page 7

V14.6 Upgrade/Downgrade Path (V14.5.3)

The v14.6 upgrade/downgrade process includes v14.5.3 that has mechanisms to manage system level configurations required for v14.6 features. The following are required for upgrading or downgrading with v14.6:

- Switcher software versions earlier than v14.5.3 must upgrade to v14.5.3 before upgrading to v14.6 and
- Switcher software versions newer than v14.5.3 must be downgraded to v14.5.3 before they can be downgraded to earlier v14.x versions.

The v14.5.3 is packaged with the v14.6 software image available at www.grassvalley.com. See [Update the K-Frame Software](#), on page 10. Updates to SD cards (including ARM software) on installed boards (IP I/O, PTP, etc.) are automated.

CAUTION: Do not power down or reset the Frame during the update process, the software installation can take several minutes to complete.

Upgrading to or downgrading from v14.5.3 can take up to six minutes. Upgrading to v14.6 from v14.5.3 (or downgrading from v14.6 to v14.5.3) can take up to 25 minutes depending on board configuration. See the *Kayenne/Karrera/GV Korona K-Frame Installation & Service Manual* for information about verifying the software installation.

Troubleshooting

On rare occasions, when updating software, resetting the Frame, clearing NV, or performing a Frame reboot, the IP I/O boards may not come up properly. Boards can be reset by selecting the **Port Config SFPs** button in the Video I/O, IP I/O Config menu, and selecting the **Reset Board** button.

CAUTION: Selecting the Reset Board button interrupts all inputs and outputs.

About Single Stream Full Frame UHD-4K

Supported in GV K-Frame X and V-series systems, UHD-4K ST 2110-20 (2160p) single stream format can be configured for system IP I/O with 25Gb/s SFPs. Bulk configuration is also supported (see the *Kayenne/Karrera/GV Korona Installation & Service Manual*).

Streams/SFPs

25Gb/s SFPs can be configured in three input/output modes, 2/1, 4/2, and 8/4 input/output streams. The 4/2 and 8/4 modes support single stream 4K ST 2110-20. Four inputs are required to receive a 4K ST 2110-20 signal and four outputs are required to transmit a 4K 2110-20 signal. All three types are supported for the 4K TICO ST 2022-6 format.

IP Board SFP Speed and Input/Output Calculation Examples

Image Format	SMPTE	Format Speed Gb/s	Board SFP Speed (Gb/s)		Bandwidth used Gb/s
			10GbE	25GbE	
720p 59.94Hz 1080i 29.97Hz 1080sf 29.97Hz	ST 2110-20	1.3	2 inputs/1 output	2 inputs/1 output	2.6/1.3
			4 inputs/2 outputs	4 inputs/2 outputs	5.2/2.6
			N/A	8 inputs/4 outputs	10.4/5.2
720p 59.94Hz 1080i 29.97Hz 1080sf 29.97Hz	ST 2022-6	1.5	2 inputs/1 output	2 inputs/1 output	3.1/1.55
			4 inputs/2 outputs	4 inputs/2 outputs	6.2/3.1
			N/A	8 inputs/4 outputs	12.4/6.2
1080p 59.94Hz	ST 2110-20	2.6	2 input/1 outputs	2 input/1 outputs	5.2/2.6
			N/A	4 inputs/2 outputs	10.4/5.2
			N/A	8 inputs/4 outputs	20.8/10.4
1080p 59.94Hz	ST 2022-6	3.1	2 input/1 outputs	2 input/1 outputs	6.2/3.1
			N/A	4 inputs/2 outputs	12.4/6.2
			N/A	N/A	N/A
4K 59.94Hz Single to Quad Link and Quad to Single Link	ST 2022-6 TICO ^a Compressed	3.1	2 input/1 outputs	2 input/1 outputs	3.1/3.1
			4 inputs/2 outputs	4 inputs/2 outputs	3.1/6.2
			8 inputs/4 outputs	8 inputs/4 outputs	6.2/6.2
4K (2160p) 59.94Hz Single to Quad Link and Quad to Single Link	ST 2110-20 ^b Uncompressed	10.4	N/A	2 input/1 outputs	20.8/10.4
			N/A	N/A	N/A
			N/A	N/A	N/A

a. 4K 2022-6 TICO provides a 1080p monitor output stream.

b. 4K ST 2110-20 provides a 1080p monitor output stream.

Configure Single Stream 4K ST 2110-20 (2160p)

- 1 Select **Eng Setup, Video I/O, IP/IO Config** in the menu.



- 2 Select an IP1 or IP2 (see [About Extended Input Buffer](#), on page 6) board in the Video I/O Board button pane.
- 3 Select the **Inputs** or **Outputs** and **Video** Type buttons.
 - a For the Outputs, a Monitor (only) 1080p stream is available for viewing the output signal without a 4K monitor.

- 4 In the Stream Format column, select the Stream Format data pad of an input/output, the Stream Format pop-up menu will display.



- 5 Select **4K ST 2110-20 (Single to Quad Stream)** and select **Done**.

Result: A blue bracket shows the four grouped input/output streams (at left for Board Inputs, at right for Board Outputs) and the selected stream along with the other three SFP ports are configured as one 2160p stream.

- 6 Select **Apply Settings**.

About Extended Input Buffer

771-0741-01 version 16x8 IP I/O board is required for the Extended Input Buffer. The 771-0741-01 IP I/O boards can be mixed in the Frame with earlier 771-0741-00 boards. Each version of the IP I/O boards are identified in the Video I/O, IP I/O Config menu, Video I/O Board pane as either IP 1 (771-0741-00) or IP 2 (771-0741-01).



K-Frame IP Switcher System Auto-timing (771-0741-01 Board)

K-Frame IP Switcher System 771-0741-01 IP I/O Board Auto-timing Window, by Format (Hz)

Frame Operating Mode	ST 2110-20	ST 2022-6	ST TICO 2022-6
720p/59.94/60	-12 μ s, -24 lines/-12 μ s, 0 lines	-20 μ s, -21 lines/-7 μ s, 0 lines	N/A
720p/50	-10 μ s, -25 lines/-22 μ s, 0 lines	-10 μ s, -18 lines/-11 μ s, 0 lines	N/A
1080i-1080psf/29.97/30	-21 μ s, -16 lines/-5 μ s, 0 lines	-12 μ s, -16 lines/-6 μ s, 0 lines	N/A
1080i-1080psf/25	-32 μ s, -16 lines/-10 μ s, 0 lines	-29 μ s, -13 lines/-12 μ s, 0 lines	N/A
1080psf 23.98/24	N/A	N/A	N/A
1080pA 59.94/60	-9 μ s, -16 line/-4 μ s, 0 lines	-5.7 μ s, -16 lines/-4 μ s, 0 lines	-5 μ s, -18 lines/-3 μ s, -2 lines
1080pA 50	-15 μ s, -16 line/-7 μ s, 0 lines	-13 μ s, -13 lines/-7 μ s, 0 lines	-13 μ s, -15 lines/-7 μ s, -2 lines
2160p 59.94/60	-2.0 μ s, -9 lines/-7.0 μ s 0 lines	N/A	N/A
2160p 50	-3.0 μ s, -9 lines/-9.0 μ s, 0 lines	N/A	N/A

Definition

For GV K-Frame X and V-series systems with the 771-0741-01 IP I/O boards installed, the IP Timing Window has been extended to just under one frame to accommodate the three types of senders defined in the SMPTE ST 2110-21 standard (see the SMPTE ST 2110-21 standard for detailed information). These types define limits for the amount of packet delay variation (i.e. burstiness) that a sender is allowed to exhibit in its output stream:

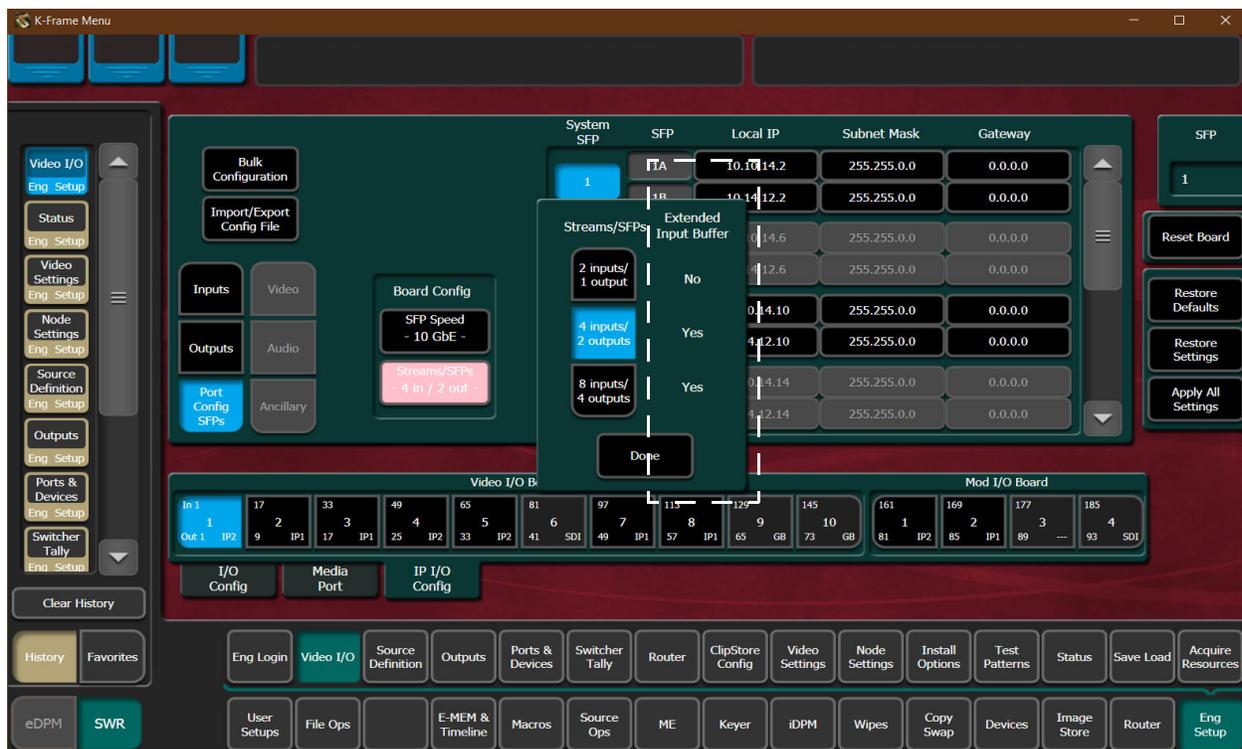
- NL (Narrow Linear)—Corresponds to a stream where all the packets for a video signal are evenly spaced across the duration of each video frame,
- N (Narrow)—Similar to NL in that it corresponds to a stream where all the packets for a video signal are evenly spaced across the duration of each video frame except the sender does not send packets during the time that would correspond to the VBI (Vertical Blanking Interval) or VANC (Vertical Ancillary data space) of the corresponding traditional SDI video signal, and
- W (Wide)—Senders are allowed to have significantly greater burstiness to accommodate software based senders, such as graphics generators.

IMPORTANT: Each sender type has specific characteristics and should be configured by qualified service personnel only.

Menu

IP I/O boards with Extended Input Buffer enabled are labeled as IP2 in the Video I/O Board menu pane, bottom right of the button.

Extended Input Buffer Status is displayed in the IP I/O Config menu by selecting the Streams/SFPs button in the Board Config pane of the Port Config SFPs menu tab. For the menu to return a *Yes*, indicating the Extended Input Buffer is enabled, the correct IP I/O board must be present and selected. Extended input Buffer is available for the 4 in/2 out and 8 in/4 out SFP configurations with either 10Gb/s or 25Gb/s SFP board configurations.



About NMOS AMWA IS-04 and IS-05

The GV K-Frame X and V-series IP I/O systems support NMOS (Networked Media Open Specifications) AMWA (Advanced Media Workflow Association) IS-04 Discovery and Registration using in-band mDNS (Multicast DNS) and IS-05 Connection Management.

IS-04

IS-04 allows control and monitoring applications to find the resources on a network, including *Nodes*, *Devices*, *Senders*, *Receivers*, and *Flows*.

For GV K-Frame X and V-series, the IP I/O board is discoverable and registered as a *Node* by its UUID number. The node registers each of its sub-resources:

- *Receivers*—SFP Inputs,
- *Senders*—SFP Outputs, and

- *Flows*—IP streams,

and begins to post regular heartbeats between the node and the registry. Upon connection to a network, nodes discover the registry as advertised with mDNS.

IS-05

For GV K-Frame X and V-series, NMOS IS-05 is an API presented by Devices that can control the switcher's SFP IGMP addresses.

Menu

The switcher system default is *enabled*. The feature can be enabled/disabled by selecting the **IS-04 & IS-05 Enable** button in the Node Settings, NMOS Configuration menu tab.



About the K-Frame Software Update

Refer to [V14.6 Upgrade/Downgrade Path \(V14.5.3\)](#), on page 2 before performing software updates.

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.

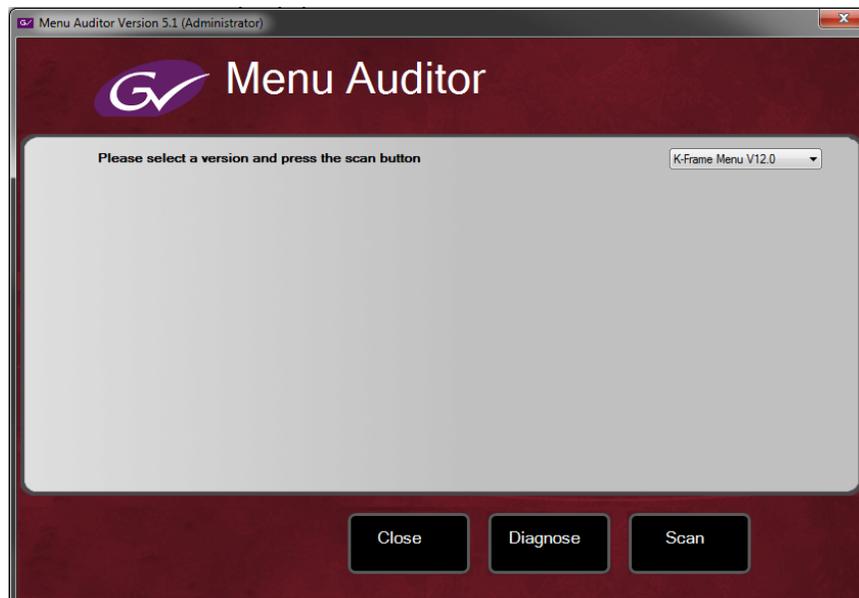
Run the Menu Auditor for Third Party Updates

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.

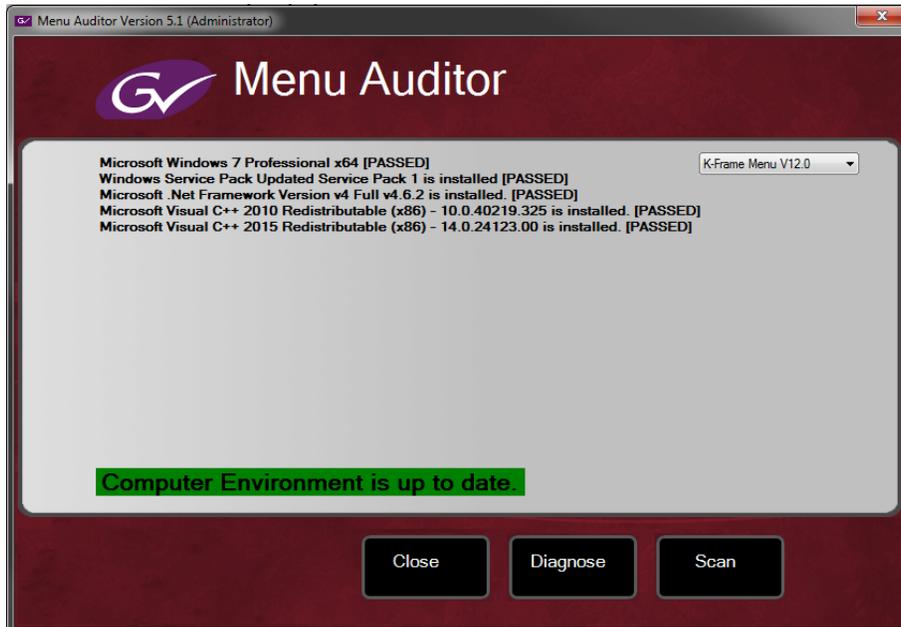
CAUTION: Out of date third-party software can cause the menu to become unstable or stop working.

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 Corona 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**.

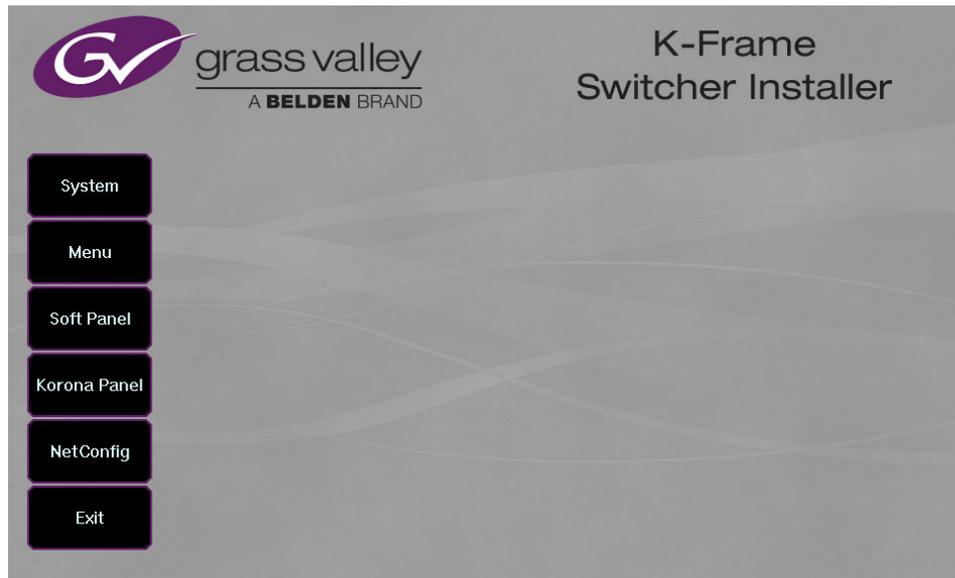
Note: If the same K-Frame Deployment Tool version files are detected, a Repair/Remove screen is displayed, allowing re-installation or removal of the Deployment files

- 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.

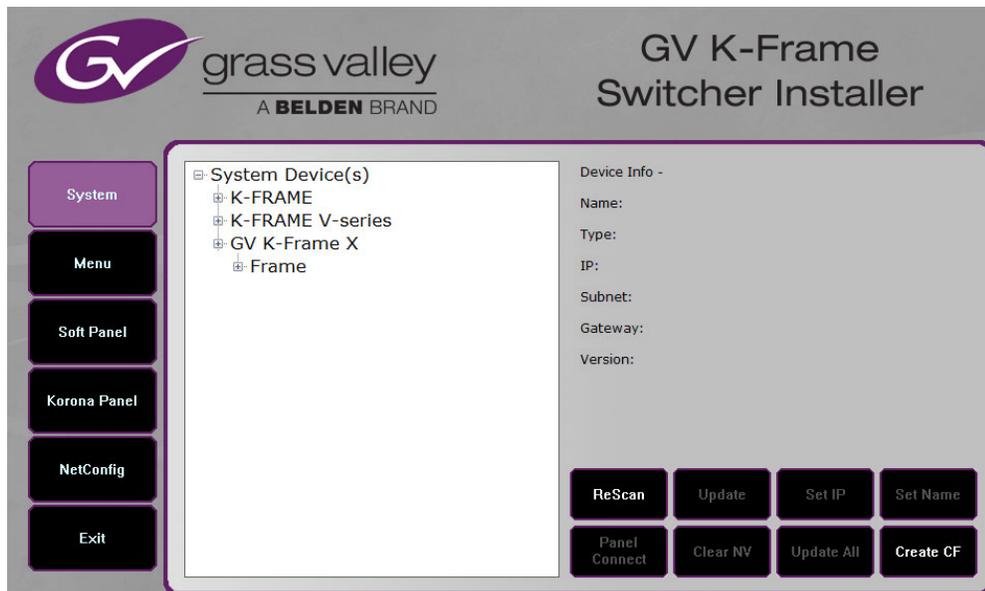
K-Frame Installer Program Description

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.

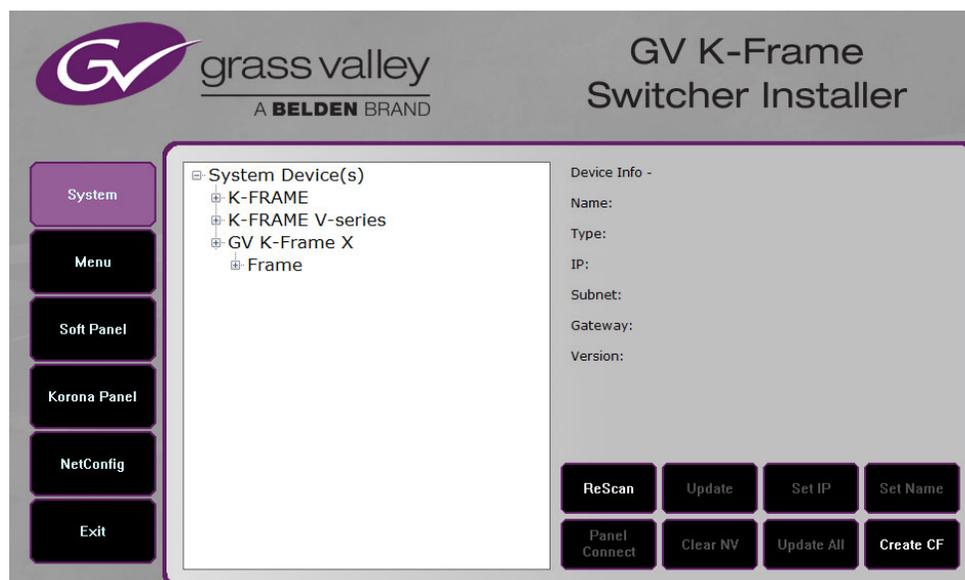
Create CF - Allows the creation of a Control Panel Compact Flash Card onto another CF Card.

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

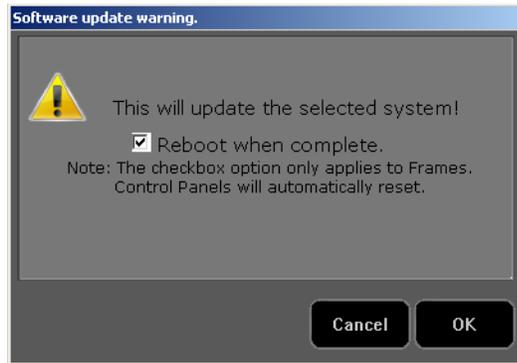
Update the K-Frame System Software

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 14).

- 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

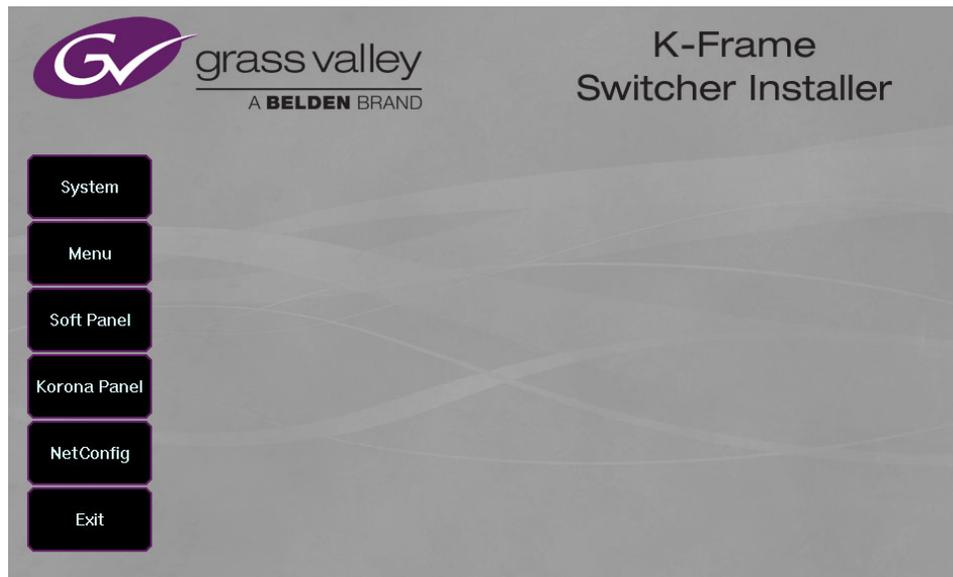
The Kayenne K-Frame Control Panel FPGAs will automatically be updated with software installation. However, spare Kayenne Control Panel Modules must be connected to the Control Panel after initial software installation and the Control Panel software re-installed so all modules are loaded with the current 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 15). 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 9)
- Microsoft Visual Studio 2010 redistributable is installed—([Run the Menu Auditor for Third Party Updates](#), on page 9)

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	V14.6.0	Apr 23 2020
ImageStore		Image Store	192.168.0.171	V14.6.0	Apr 23 2020
Kayenne	1A	Kayenne Panel	192.168.0.173	V14.6.0	Apr 23 2020
KYN 4ME Menu	1A	Menu Panel	192.168.0.175	V14.6.0	Apr 23 2020
Karrera	2A	Karrera Panel	192.168.0.177	V14.0.0	May 1 2019
KRR 2ME Menu	2A	Menu Panel	192.168.0.176	V14.6.0	Apr 23 2020
Clip Store		Clip Store	192.168.0.180	V14.6.0	Apr 23 2020

Menu V12.0.0
Disk Usage: 24.33%

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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