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A **BELDEN** BRAND

# **K-FRAME**

VIDEO PRODUCTION CENTER

## **Release Notes**

VERSION 10.6

071896503

2017-03-23

[www.grassvalley.com](http://www.grassvalley.com)

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Title	K-FRAME Release Notes
Part Number	071896503
Revision	2017-03-28, 15:10

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# K-Frame Release Notes, Version 10.6



## About this Manual

This document describes the new features and other information specific to the K-Frame Video Production Center, Version 10.6 switcher menu 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 and on the USB Stick provided with your system.

## New in Release 10.6

- [Windows Operating System Requirements](#), on page 2
- [iDPM Support for Full 4K 2SI Effects](#), on page 2
- [Importing Image Store Audio in 4K Frame Operating Mode](#), on page 2
- [1080P ME Resources Available in 4K Frame Operating Mode](#), on page 2
- [Interpolation Controls for 2D-DPM Added to Film Look Menu](#), on page 3

## Windows Operating System Requirements

Windows 7 or Windows 10 is required for Grass Valley menu software version 10.6 or newer.

**Note:** A Windows 10 upgrade (SWIT-OPT-OS-UPG) configured specifically for Grass Valley systems is available. If your system is under a service agreement, please contact Support, otherwise contact the Sales department. Contact information is available on the Grass Valley website.

## iDPM Support for Full 4K 2SI Effects

Four iDPMs per keyer are used to fly a full 4K effect in 4K 2SI Frame Operating Mode. Up to four, 4K iDPMs are possible with 16 physical iDPM resources licensed and acquired. See the *Version 10.6 K-Frame Installation & Service Manual* for physical resource allocation between suites and iDPM licensing instructions.

When an iDPM is selected in 4K 2SI mode, four sub-images from the keyer source are delegated to four iDPMs. This allows you to create a full 4K iDPM effect when the keyer source image is 3840x2160 (a 1080p image will be replicated to four iDPMs).

**Note:** In earlier software versions supporting 4K 2SI mode, the keyer source image was replicated as four sub-images and delegated to one iDPM only.

## Importing Image Store Audio in 4K Frame Operating Mode

Images, image sequences, and movies with paired audio (stereo) can be imported into Image Store cache, and/or saved to disk. The video with audio must also match the frame rate; 59.97Hz, 50Hz, or 60Hz, otherwise only the video will be imported.

**Note:** : A tolerance of +/-10% of the width and height of an image is allowed. Stills, sequences, or movies outside those tolerances will be center cut.

## 1080P ME Resources Available in 4K Frame Operating Mode

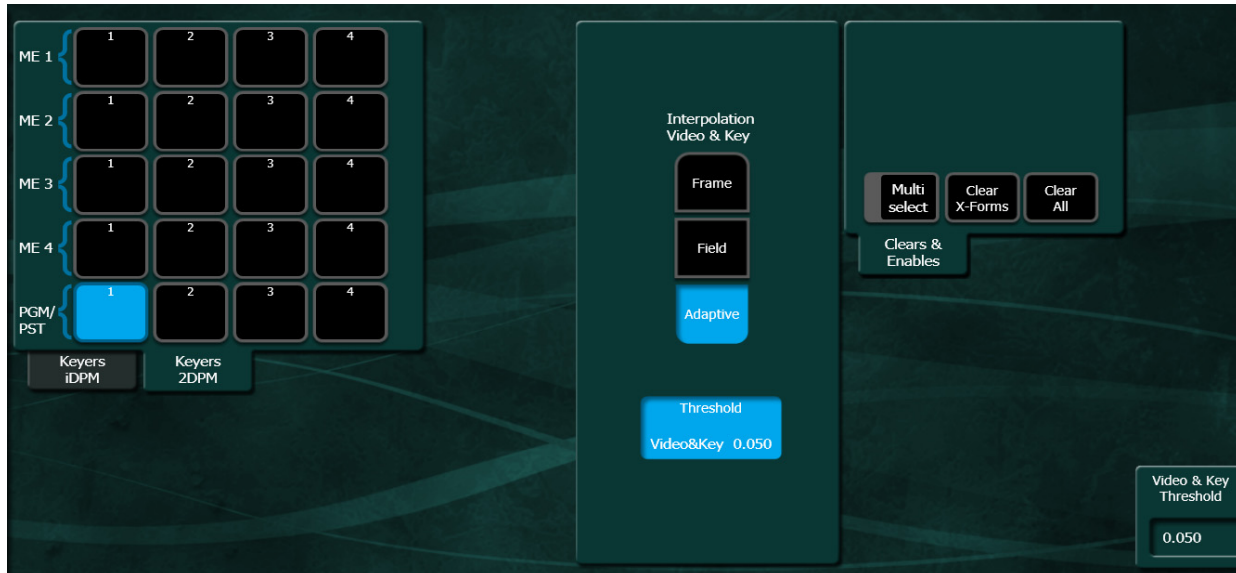
MEs can be released while in 4K mode (Suite 1) and acquired as 1080p. This allows you to create a dual show in both 4K and 1080p or a sub-show, in either suite, from a single K-Frame system. It is recommended that you save separate Engineering Setup and Show files before and after releasing and acquiring ME resources so they can be reloaded as needed.

To reacquire the ME as 4K, the 4K Frame Operating Mode must be selected either by loading the saved Show file or in the Eng Setup, Video Settings menu. See the *Version 10.6, K-Frame Installation & Service Manual* for information about Frame Operating Modes and allocating resources across suites.

**Note:** ME-4 is 1080p only, and allocated to Suite 1 by default.

## Interpolation Controls for 2D-DPM Added to Film Look Menu

Controls for setting the interpolation for 2D-DPM Video/Key have been added to the iDPM, Film Look menu. You can select Frame, Field, or Adaptive mode for Video and Key. Video and Key are set as one threshold for 2D-DPMs.



## 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.

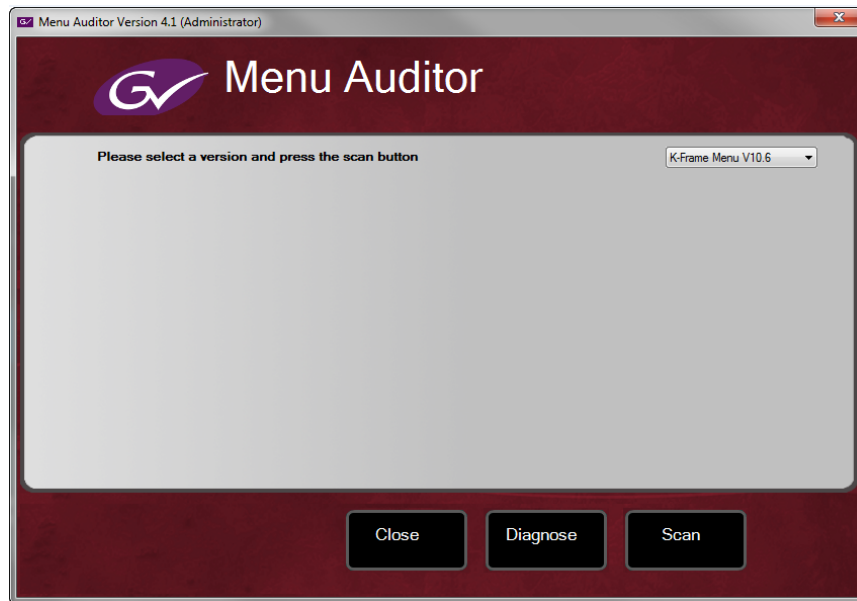
## Run the Menu Auditor for Third Party Updates

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.

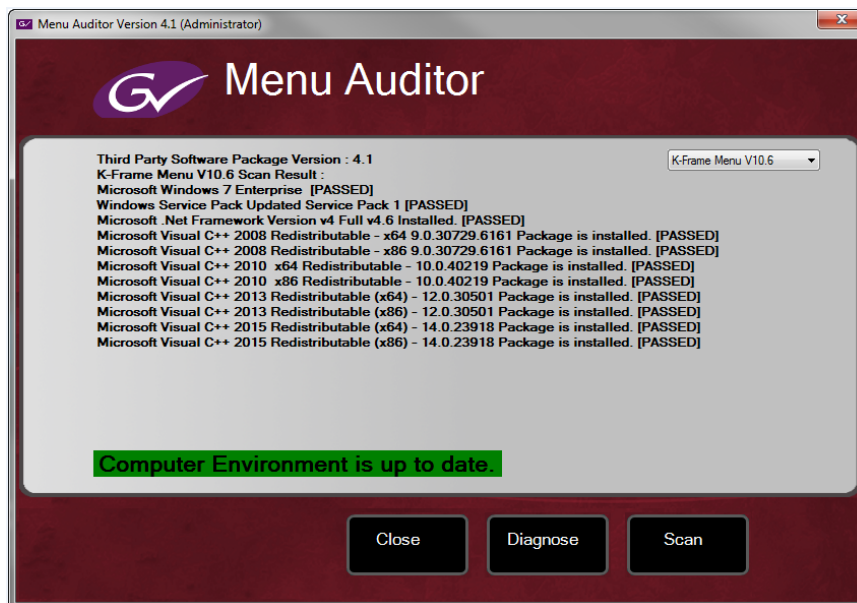
**CAUTION:** Out of date third-party software can cause the menu to become unstable or stop working.

**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.

## Sample Files

Sample files or other elements and instructions for use are available with an installer from the Grass Valley website starting with version 8.0. New K-Frame systems are shipped with the Samples directory installed. When upgrading, install the samples after the initial software upgrade; visit [www.grassvalley.com](http://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.

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 10.6 Software; 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 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 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 and double-click on the **K-FrameSetup.exe** and click **OK**,
  - or -
  - b Download the K-FrameSetup.exe file from the Grass Valley download site, double-click on the file, then click **OK**.

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**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.

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- 4 Click **Next** in the K-Frame Deployment Tool window.
- 5 Accept the license agreement and click **Next**.
- 6 Click **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 Click **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 clicking the K-Frame Installer desktop icon.

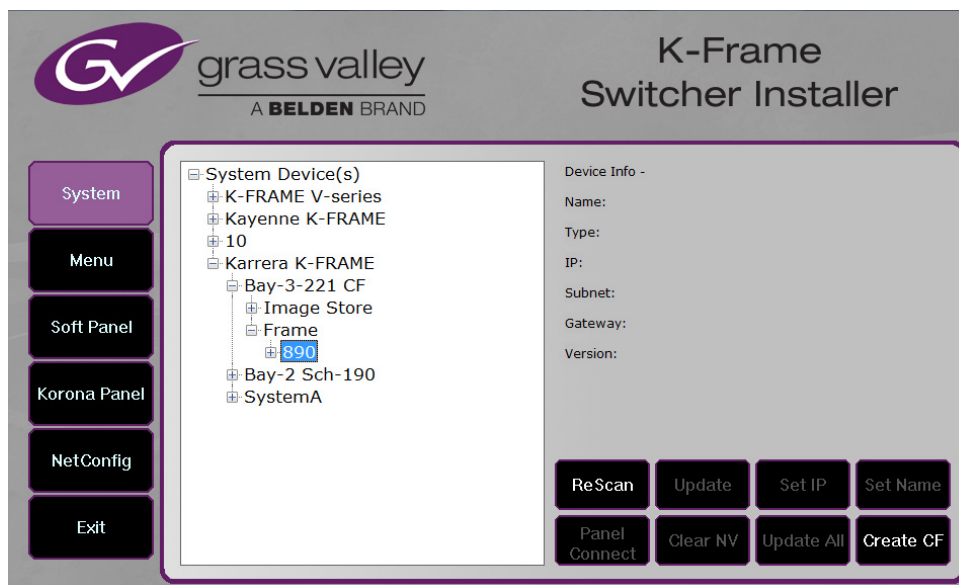
## K-Frame Installer Program Description

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 Kayenne, Karrera, or GV Korona device in the hierarchy to display information for that device or install software.



Clicking **System Device(s)**, at the top of the hierarchy window displays the types of switchers (Kayenne, Karrera, and GV Korona) 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.

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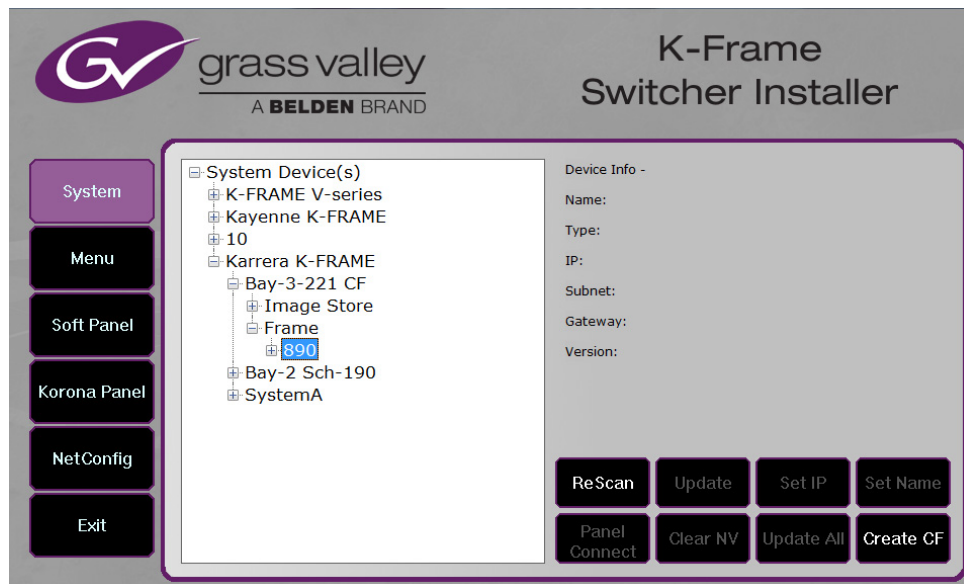
CAUTION: The Create CF process wipes and formats the CF card.

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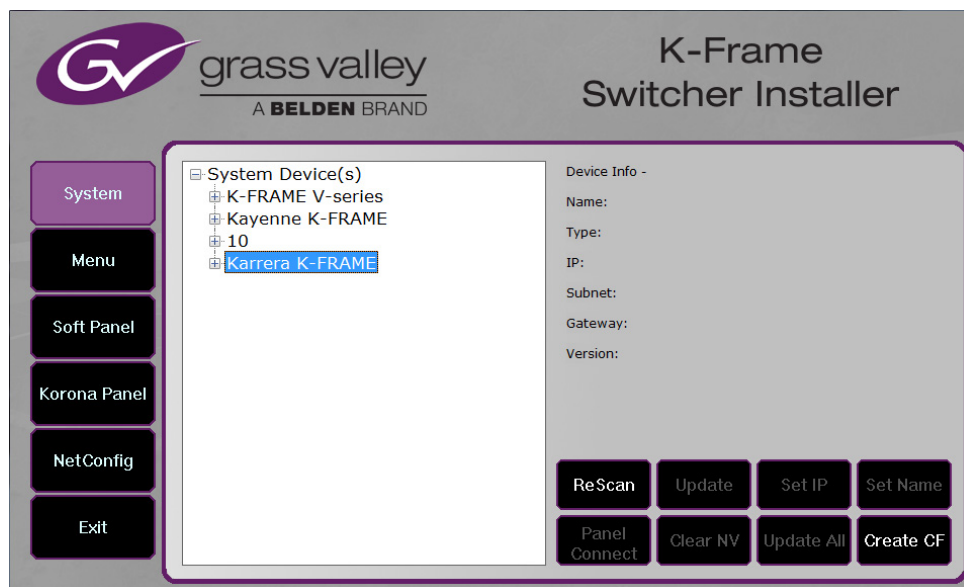
## Update the K-Frame System Software

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, see [Update the GV Korona Control Panel Software](#), on page 10.

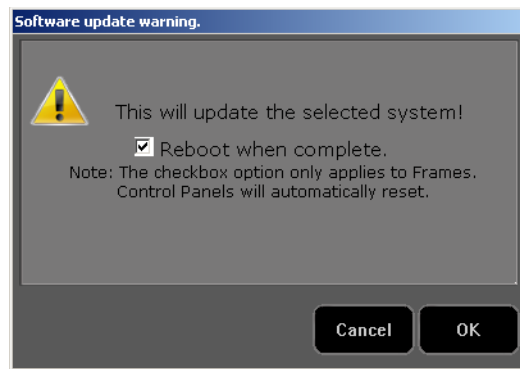
- 1 With the K-Frame Switcher Installer Program launched, click on the **System** button.



- 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 Click **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 and the **Finish** button in the Reboot dialog are 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 Click **OK**.
- 5 Click **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

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 21 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 12.

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

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



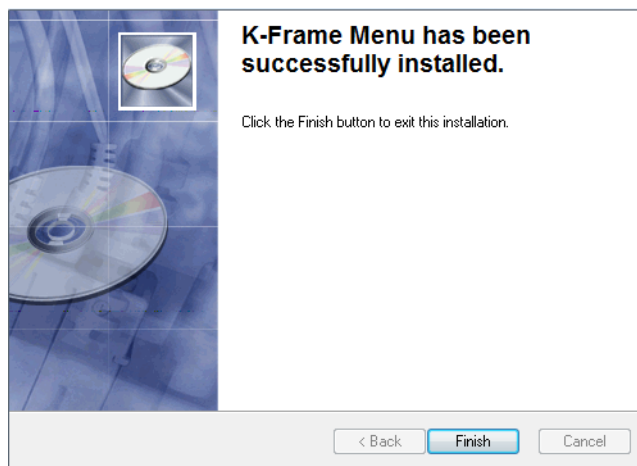
- 2 Click the **Menu** button. The K-Frame Menu Installation tool will launch.



- 3 Click **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 click **Next**.
- 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.



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

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

## Soft Panel Installation

Clicking on 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 (see [Install the Menu Panel Application Update](#), on page 11. 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 (see [Run the Menu Auditor for Third Party Updates](#), on page 3)
- Microsoft Visual Studio 2010 redistributable is installed—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.

## 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 *K-Frame Installation & Service Manual*.

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**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).

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## 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.

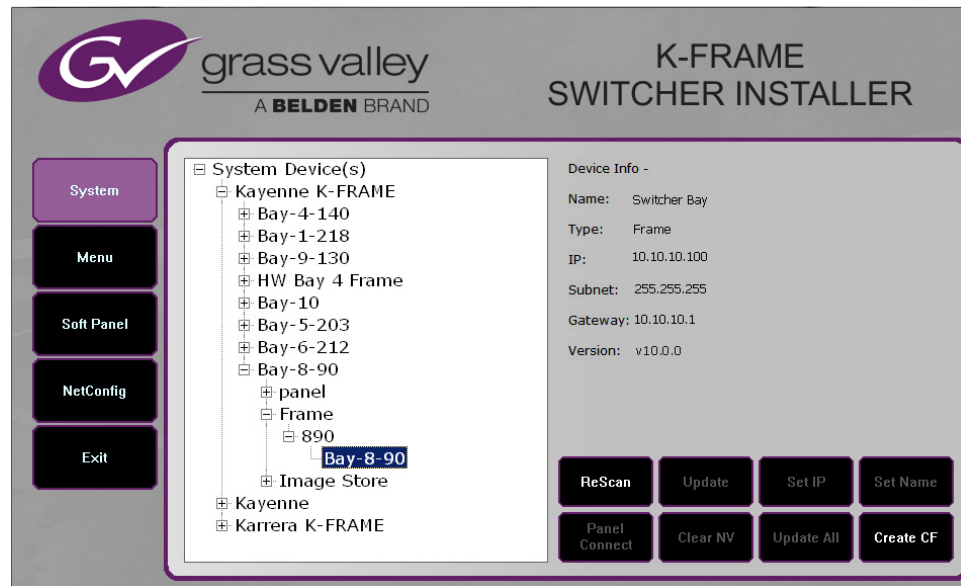
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**Note:** A new Menu Panel or PC that has not been used with the switcher system will need to be configured as a Control Surface Node before it can operate with a switcher system. See the *K-Frame Installation & Service Manual* for specific instructions.

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- 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.

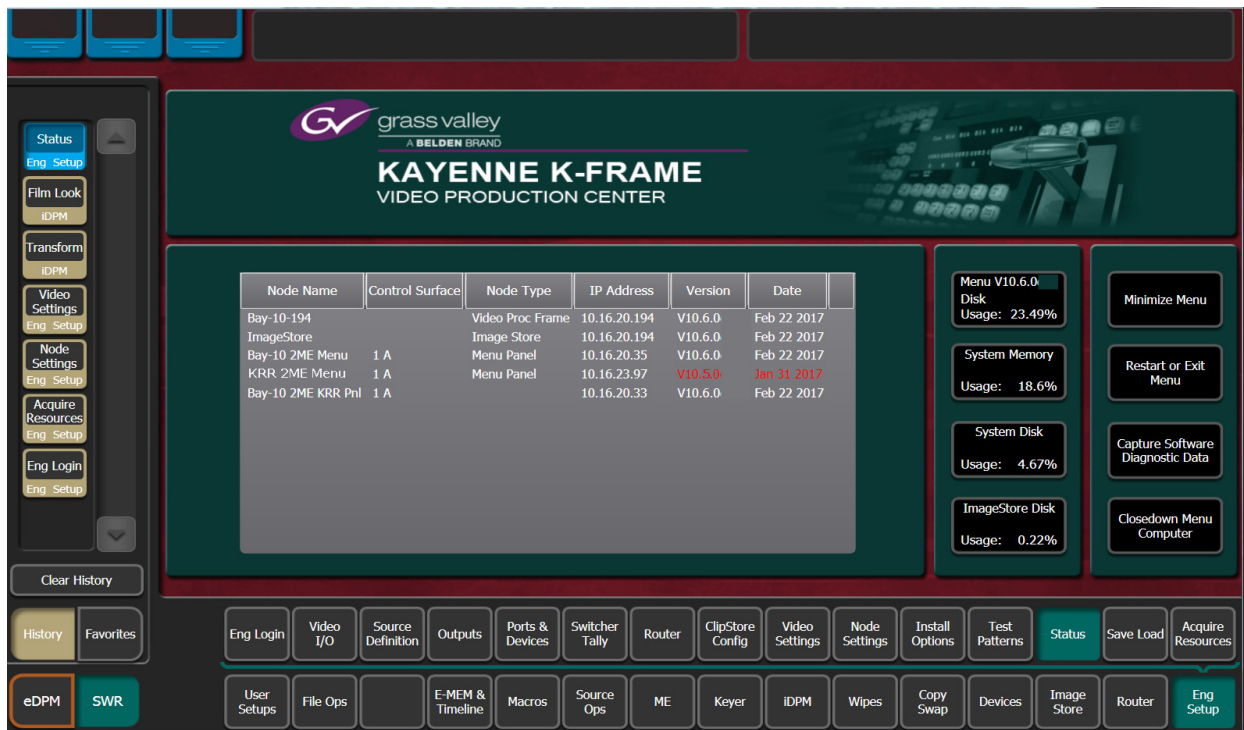
## Install NetConfig and Newton Configurator (Optional)

Click on 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 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 lists the switcher system devices. Ensure all the components are running the same software version. Mismatched versions will be reported with red text.



## 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.

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 uninstall 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 Lever Arm and Joystick

See the Maintenance section of the *K-Frame Installation & Service Manual*.

## 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.

### K-Frame System Default IP Addresses

Device	IP Address
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 <b>Note:</b> 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

### K-Frame System Default IP Addresses

Device	IP Address
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 (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 *K-Frame 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](http://www.grassvalley.com)).

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

## **Corporate Head Office**

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