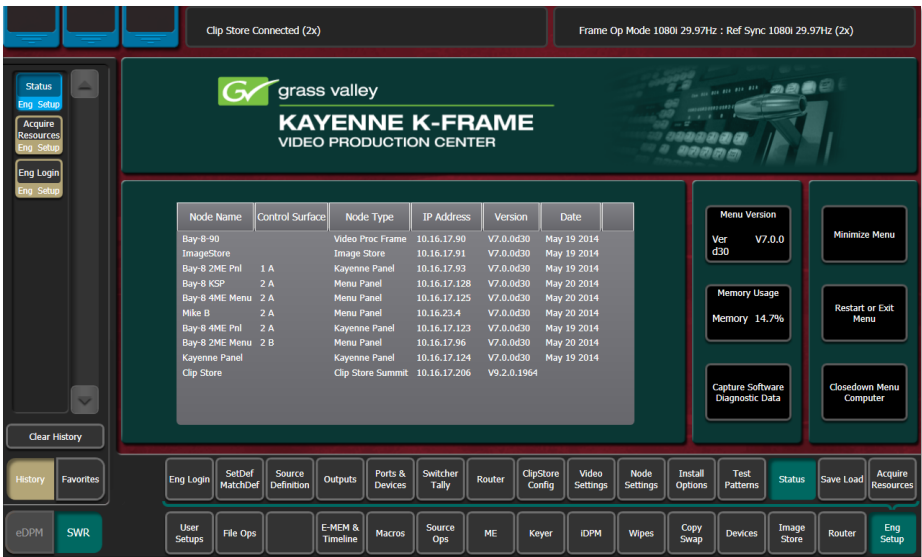


Section 2 – Karrera & Kayenne Basic Configuration



The Kayenne/Karrera Menu is designed for fast access to menus and incorporates a shallow menu structure, many ‘Top menu’ buttons, ‘History’ and ‘Favorite’ Menu selections.

It runs on a standard Windows platform (Windows 7, 8 or 10)

Section 2 – Karrera & Kayenne Basic Configuration

- Menu Overview
- Engineering Setup
 - IP Addressing
 - Node List Creation / Communication
 - Video and License settings
 - Source Definitions and Outputs
- User Setup
 - Button Mapping
- Saving and Loading Engineering Configuration files
 - Local and Remote Storage
- Exercise



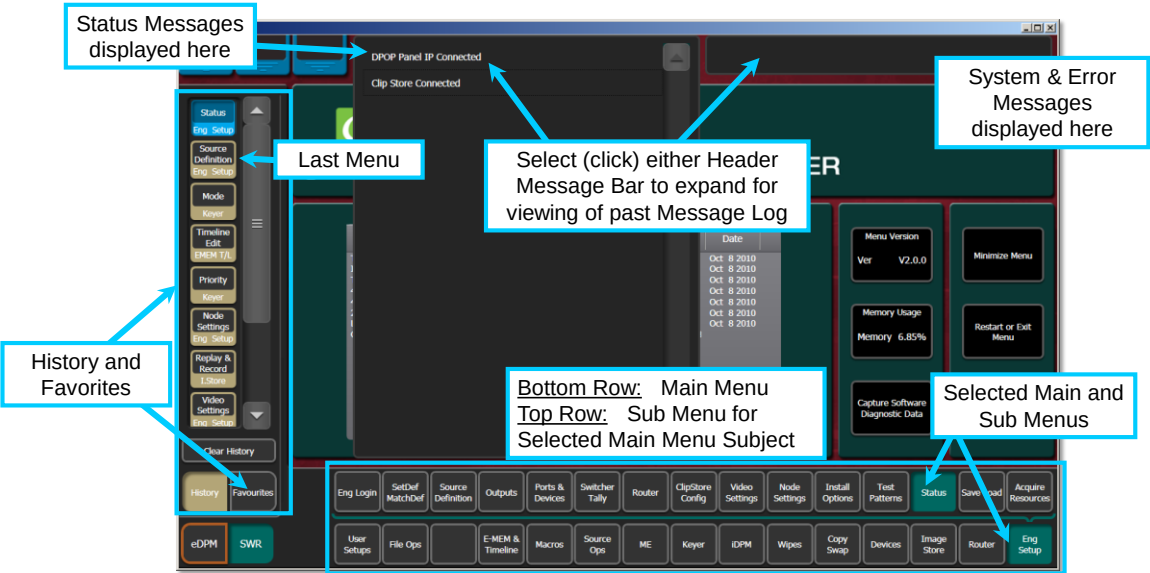
Section 2 – Karrera & Kayenne Objectives

Section Objectives

- Understand how to navigate the Menu system and use History and Favorites
- Understand how to set IP addresses of Ethernet nodes and assign them to a Suite
- Know how to set the Video Format for the system
- Know how to program Video Sources and Output Signals
- Know how to Map Sources to Buttons
- Know how to Save System configuration files to a local or Remote Storage location
- Know how to assign resources to Suites



Menu Navigation (1)



Menu Navigation (2)

The screenshot displays the Grass Valley K-Frame interface with several callouts explaining menu navigation elements:

- Context Sensitive Pulldown:** Points to the top navigation bar containing 'Key 1', 'Key 2', 'Key 3', 'Key 4', 'Pgm Global', 'Sec', and 'Global'.
- Delegated or Active Switcher Section:** Points to the left sidebar menu with options like 'Transform', 'iDPM', 'Mode', 'Keyer', 'Eng Logon', 'Eng Setup', 'Node Settings', 'Crop Setup', 'Status', 'MatchDef Setup', and 'Eng Setup'.
- Delegated Menu Function:** Points to the 'Crop Global' button in the center-left area.
- Enabled Functions:** Points to the 'Global' button in the center-right area.
- Third Level Menu:** Points to the 'Source' and 'Target' buttons at the bottom of the center panel.
- Soft Knobs:** Points to the right sidebar 'Soft Knobs' section, which includes 'Source Locate X', 'Source Locate Y', 'Source Locate Z', and 'Size' controls.
- Switcher/eDPM Selection:** Points to the 'eDPM' and 'SWR' buttons at the bottom left.

The bottom of the interface shows a row of buttons: Transform, Borderline, Film Look, Kurl, Splits & Mirrors, Defocus, Lighting, Output Recursive, User Setups, File Ops, Style Center, E-MEM & Timeline, Macros, Source Ops, ME, Keyer, iDPM, Wipes, Copy Snap, Devices, Image Store, Router, and Eng Setup. The 'iDPM' button is highlighted.

Selected Menu: iDPM / Transform / Source; Pgm/Pst / Key 1 Delegated



Engineering Setup Menu Tree (1)

Eng Login	Ability to access & configure Suites and Control Surfaces										
SetDef MatchDef	Configure I/O Format Conversion and Enables										
Source Definition	<u>Configure all internal and external inputs / create sources</u>										
Outputs	<u>Configure all Outputs including Aux Busses and ClipStore Channels</u>										
Ports & Devices	<table><tr><td>Pbus Ports</td><td>Assign Pbus Ports, Addresses, Speed, Triggers and Names</td></tr><tr><td>GPI Outputs</td><td>Assign GPI Relays, Duration and Names</td></tr><tr><td>External Devices</td><td>Define up to 32* Devices, Addresses, Protocols and Names</td></tr><tr><td>Serial Tally Ports</td><td>Assign Serial Tally Communication Port and Speed</td></tr><tr><td>Editor Ports</td><td>Assign Editor Ports, Speed and Names</td></tr></table>	Pbus Ports	Assign Pbus Ports, Addresses, Speed, Triggers and Names	GPI Outputs	Assign GPI Relays, Duration and Names	External Devices	Define up to 32* Devices, Addresses, Protocols and Names	Serial Tally Ports	Assign Serial Tally Communication Port and Speed	Editor Ports	Assign Editor Ports, Speed and Names
Pbus Ports	Assign Pbus Ports, Addresses, Speed, Triggers and Names										
GPI Outputs	Assign GPI Relays, Duration and Names										
External Devices	Define up to 32* Devices, Addresses, Protocols and Names										
Serial Tally Ports	Assign Serial Tally Communication Port and Speed										
Editor Ports	Assign Editor Ports, Speed and Names										



Note: Underlined items are required for Basic Configuration

2-6

Not all Engineering Setup Menus are required for operation. Several are for external communications and options.

The External Devices Menu may configure up to 32 devices or channels. But only 28 are possible if the ClipStore is enabled and configured. It counts as 4 controllable channels.

Engineering Setup Menu Tree (2)

- Switcher Tally Assign Tally Relays and define multiple Tally Trigger or Calculations
- Router Define Communications to a facility Router, Access Sources and Destinations
- ClipStore Config Configure ClipStore Channels: Numbers, Formats, Timing, Aspect etc
- Video Settings Select Sync Reference and Operating Format, Config Matte Limits, Blanking etc
- Install Options View License Parameters, Install or change licenses
- Test Patterns Select Internal Test Signal Generator Pattern, used as internal source



Note: Underlined items are required for Basic Configuration

2-7

Engineering Setup Menu Tree (3)

Node Settings	Frame Suite Nodes & ID	Define Hardware Names and IP Addresses
	PCU Configuration	*Configure PCU Ports to Panel Stripe Mapping and Surface*
	Control Surfaces	Identifies to Frame, all Devices that may provide Control Comms
	Remote Aux IP Network	Define Remote Aux Panel IP Addresses and Panel Type
	Remote Aux Logical Map	Assign Aux Bus* to be Controlled by a Remote Aux Panel
	Remote Aux Button Map	Assign Sources by Name to Buttons on individual Aux Panels
Status	Lists Applications running, Memory Usage, Access to capture Log information	
Save Load	Allows Save of all Engineering Configuration Data to Storage locations	

* PCU Configuration only used with Kayenne Panels. Menu is missing from Karrera Menu.



Note: [Underlined items are required for Basic Configuration](#)

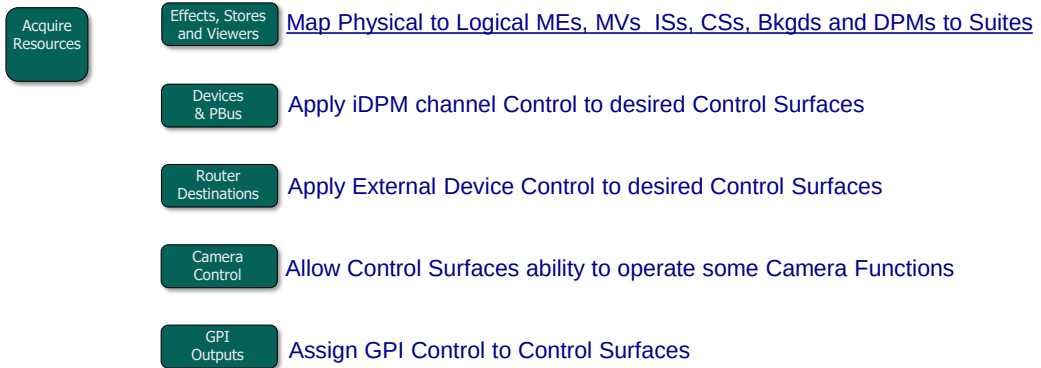
2-8

Two types of Remote Aux Panel are available for Kayenne usage: The single Bus panel that allows control of only one Aux Bus. Or the Multiple Delegation Panel allowing control of up to 16 Aux Busses.

* As the Karrera panels all have an internal processor, the PCU Configuration Menu Tab is not present (or needed) in the Karrera Menu Software.

Engineering Setup Menu Tree (4)

- K-Frame Resources



Note: Underlined items are required for Basic Configuration

2-9

Acquire Resources allows Suites to be set up. This menu controls the assignment of all MEs, backgrounds, DPMs, Image Store and ClipStore Channels etc.

By default, all resources are allocated to Suite 1. In order to acquire resources for Suite 2, the desired resources must first be released from Suite 1 to make them available for use elsewhere.

The Acquire Resources page has a different arrangement for the K-Frame hardware.

User Setups – Panel Prefs Menu Tree

Panel Prefs	Button Mapping	<u>Assign Sources by Name*</u> to Crosspoint Buttons
	Panel Color Scheme	Define Panel Button Colors and scheme
	Source Colors	Define / Customize Individual Crosspoint Button Colors
	Macro-E-MEM Start Number	Assign First or Start Macro Recall Numbering per Stripe
	DPOP Prefs	Define How buttons react to DPOP (Double Punch)
	Shift Prefs	Assign Shift Button Functions per Crosspoint Button Row
	Panel User Interactions	Misc Define Functions: Time Displays, Key Adjust, DPOP Enable
	Aux Delegate Mapping	Assign Aux Buses and Misc Functions to Local Aux Panel Buttons



Note: Underlined items are required for Basic Configuration

2-10

* Names assigned to the Crosspoint button displays or OLEDs (Organic Light Emitting Diodes) will be Engineering (Source) Names until other names are created in the Engineering or Source Patch menus. An Eng ID number will be displayed if an Engineering Name is not created.

Any Source Crosspoint Button may have up to 4 different Sources assigned. Each button may have the normal position source name displayed but when the 2nd, 3rd or 4th shifts are selected, the button display and source will change to a different mapping.

Basic Eng Setup Configuration Steps / Flow

Identify all Devices, set Names and IP Addresses
Check Communication

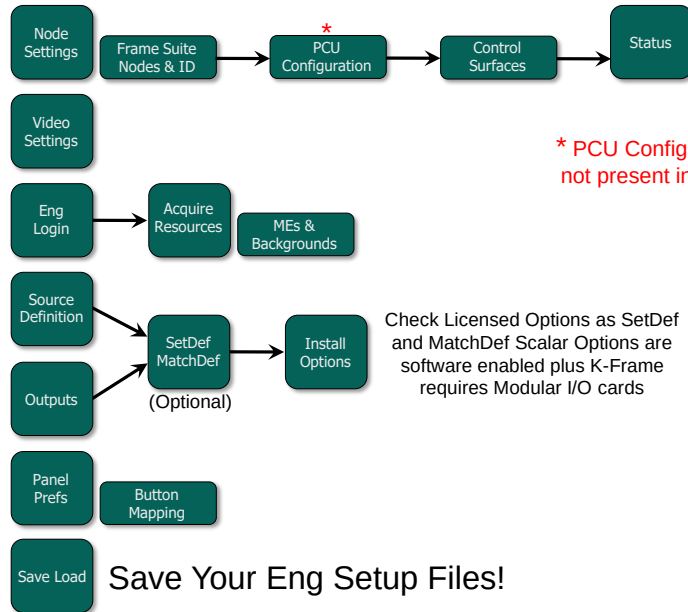
Set Switcher operating
Video Format, choose
Appropriate Reference

Configure Physical to
Logical ME Relationship
Per suite (if needed**))

Configure Engineering
Sources: Names, Input #s,
Signal and Device Type

Configure Outputs: Type,
Connector #, Names, Aux
Busses

Map Engineering Sources
To Crosspoint Buttons,
Verify Eng Display Name



2-11

****** The default physical to logical mapping is as shown earlier. The top board in either frame is mapped as the PGM/PST ME and processes the first 24 inputs and first 12 outputs. The next board will be ME 1. This usually does not need to be changed unless you are configuring suites and have a second panel.

***** As the Karrera panels all have an internal processor, the PCU Configuration Menu Tab is not present (or needed) in the Karrera Menu Software. All other steps on this page are needed for both systems.

Eng Setup – System Type Identification

Eng Setup / Status

Node Name	Control Surface	Node Type	IP Address	Version	Date
Training RM A		Video Proc Frame	192.168.0.170	V4.0.0	Dec 23 2011
ImageStore		Image Stor	192.168.0.171	V4.0.0	Dec 23 2011
KARRERA MENU	1 A	Menu Panel	192.168.0.181	V4.0.0	
Lewis PC	1 A	Menu Panel	192.168.0.55	V4.0.0	
Training Room A PC	1 A	Menu Panel	192.168.0.51	V4.0.0	
Karrera 2 M/E Panel	2 B	RT Panel	192.168.0.177	V4.0.0	
Kayenne 4.5 M/E Panel	1 A	RT Panel	192.168.0.173	V4.0.0	
Kayenne 2.5 M/E Panel	2 A	RT Panel	192.168.0.178	V4.0.0	
Kayenne 2.5 M/E Menu	2 A	Menu Panel	192.168.0.176	V4.0.0	
Kayenne 4.5 M/E Menu	1 A	Menu Panel	192.168.0.175	V4.0.0	

Eng Setup / Install Options

Current Auth Code for Perm
3W1C-K4C0-R444-9CZ8-HKSN-9M6Z

System ID
Karrera
56188

Option Group
Perm

Option

Option	Enab
Number of Full M/Es Allowed	4
Enabled Chroma Keyers	2
Enabled IDPM Channels	2
Enabled SetDef Output Pairs	2
Enabled MatchDef Input Pairs	4

System Type is based on the License from GV and NOT the Panel. The License AND System ID are stored in the EEPROMs on the Video Frame Mother Board.



2-12

The System Type, Karrera or Kayenne, is displayed on the Eng Setup / Status AND Eng Setup / Install Options menu pages.

- This System Type is based upon Options, Packages and Panel Types purchased.
- The Name displayed is driven by the License created and installed by Grass Valley. This license can be changed or upgraded in the field when a new Permanent or Temporary License is acquired from Sales or Customer Service.
- This license information, as well as the System / Customer ID number, is stored on the two EEPROMs (Electrically Erasable Programmable Read Only Memory) located on the Mother Board inside of the Video Processing Frame.

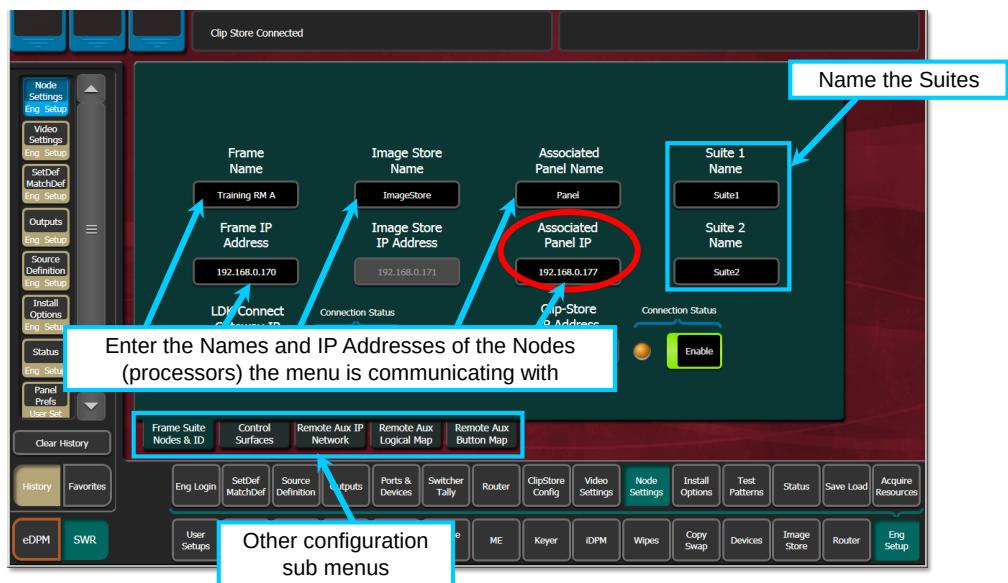
Karrera Systems, Panels and the Karrera Soft Panel must run on Version 4.0 and newer software.

A Karrera panel can run in a Kayenne system but not vice versa.

The Menu Application is 98% generic between both the Karrera and Kayenne System types.

- The Menu will display the correct choices for the Associated Panel type (Kayenne or Karrera) when the specific Panel IP Address is entered into the "Associated Panel IP" field of the Eng Setup / Nodes Settings / Frame Suite Nodes & ID Menu.

Eng Setup - Node Settings – Naming & Addressing (1)



2-13

Eng Setup menu showing Node settings for each Suite and the Suite names.

The “Associated Panel IP” entry must have the correct address entered of the Panel that this menu is working with. This allows the menu PC to listen and respond to the panel.

- This association will allow the menu application to display the correct menu options based upon if it is working with a Kayenne or Karrera. This is regardless of what is displayed on the Status and Install Options pages.
- This entry also allows for Panel D-Pops (Double Panel Button Push Operations) to function correctly and delegate the correct menu.
- This entry will allow the ability to attach a Macro to a specific panel button.

Karrera & Kayenne Default IP Addresses

- Video Frame Addresses:
 - Video Processor CPU 192.168.0.170
 - Image Store CPU 192.168.0.171
- Control Panel (PCU) Addresses:
 - Panel Surface 1A 192.168.0.173
 - Touch Screen Menu 1 192.168.0.175
 - Touch Screen Menu 2 192.168.0.176
 - Panel Surface 1B 192.168.0.177
 - Panel Surface 2A 192.168.0.178
 - Panel Surface 2B 192.168.0.179
- Optional Hardware Addresses:
 - Clip Store Server 192.168.0.180
- **Reserved Internal Addresses, Do Not Use anywhere on Kayenne LAN:**
 - Video Processor CPU (Frame) 192.168.0.172
 - Panel Aux LAN Port (PCU) 192.168.0.174



2-14

These are the default IP addresses for the Kayenne system components as shipped from the factory.

The ClipStore is an option to the Kayenne/Karrera System comprised of a Grass Valley K2 Summit (4 channel) or a Grass Valley K2 Solo (2 Channel) stand alone server. When the Server is ordered as the ClipStore option, it will ship with a different software image including App Center Elite and a default IP address of 192.168.0.180. This address is different than the normal K2 IP address as shipped from the factory.

Starting with software version 2.0, the Image Store address will always be the Video Processor CPU address plus 1. You will no longer be able to set this address in the Kayenne menu. The display will show the address but be “greyed out” not allowing a change to be made. This address can be changed or entered in the Video Frame Web Browser tool. (See next page plus Panel & Frame chapters for Web Browser addressing examples.)

The Karrera Panel also has a default shipping IP address of 192.168.0.173. This way it is plug and play with existing stock Kayenne systems.

Eng Setup - Node Settings – Naming & Addressing (2)

Starting with Version 2 Software, the Image Store IP address can no longer be set here. The default address will be the Frame IP +1. This can also be set using the Web Browser.

1. Enter Clip Store IP Address
2. Select "Enable" to activate
3. Indicator will be green if communicating correctly



2-15

Eng Setup menu showing Node settings for each suite and Suite names.

Frame Proc and Image Store IP addresses are set using a web browser below. These may be set to any legal address upon the same network.

Entering the "Frame IP Address" into the above window tells the menu processor how to communicate with the frame.



Kayenne Web Access

Frame Network Addresses

[Software Versions](#)

[Frame Status](#)

[Frame Message Log](#)

[Frame Network Addresses](#)

[Frame Date and Time](#)

[Frame Description](#)

Facility LAN

IP Address : 192.168.0.170
Subnet Mask : 255.255.255.0
Gateway IP : 192.168.0.1

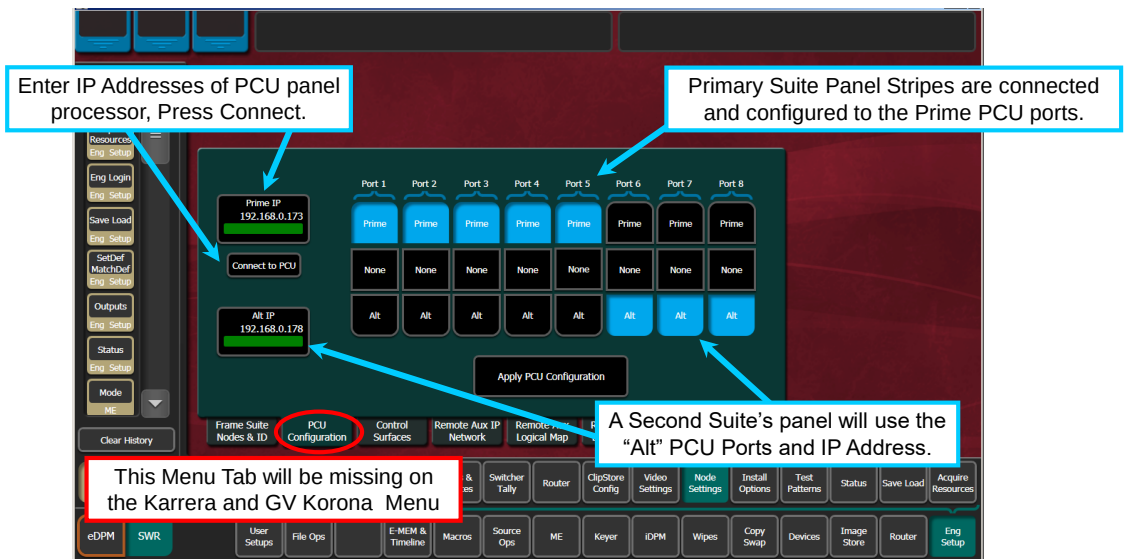
Image Store LAN

IP Address : 192.168.0.171
Subnet Mask : 255.255.255.0
Gateway IP : 192.168.0.1

The displayed Image Store IP address (shown in grey) will be read automatically from the frame. This, again tells the menu how to communicate with the Image Store Processor.

Clip Store Enable & Address is new in Version 2.0. Camera Enable was added in version 3.0 (See Panel chapter 5 for New screen).

Eng Setup - PCU Configuration – Kayenne Panel Only



2-16

Eng Setup Menu above showing PCU configuration for a standard 4 ME panel in one suite and an additional 2 ME panel as a second control surface in one suite or as a second suite.

See Chapter 5 (Panels) for correct port connection and mapping procedures.

The top ME Stripe will always connect to the lowest port number. In this case, Stripe #1 (top ME Stripe) is connected to port #1, The next stripe below is connected to port #2 and so on.

The Aux Panel Stripe will always be the last port used for a panel. It is connected to Port #5.

The image to the right shows a PCU with 5 stripes connected: 4 ME Stripes and 1 Aux Stripe. For this image, the Configuration screen above would display "None" for Ports 6, 7 and 8. The "Alt IP" window would display "0.0.0.0".



The "Alt IP" address is entered ONLY when using a second control surface. In other words, a second panel connected to the same PCU as the primary panel.

The PCU and Frame Processor use this "Spoofed" IP address to communicate with the second panel as if it had its own Panel processor and NIC. But as the one PCU processor controls both panels, this allows the commands and tally to be differentiated. *** Do NOT try to change the IP address on the second panel. It must always read the same as the Primary IP*.**

Eng Setup - Node Settings - Control Surfaces

Node Name	IP Address	Suite/Surface
4 M/E Panel	192.168.0.173	Suite1 Surface A
4 M/E Menu	192.168.0.175	Suite1 Surface A
Training Room A PC	192.168.0.51	Suite2 Surface A
2 M/E panel	192.168.0.178	Suite2 Surface A
2 M/E Menu	192.168.0.176	Suite2 Surface A
Mike PC	192.168.0.88	Suite1 Surface A
Lew's PC	192.168.0.55	Suite1 Surface A
Ed's XPS	192.168.0.99	Suite1 Surface A
Android Tablet	192.168.0.201	Suite1 Surface A
	0.0.0.0	Suite1 Surface A

All Networked Devices (Control Surfaces with the exception of Remote Aux Panels) that will control the Switcher Frame must be listed or registered with the Frame Processor and be assigned to a suite.

Changes will not take effect until the changed device(s) are restarted.

Node Settings
Eng Setup

Acquire Resources
Eng Setup

Eng Login
Eng Setup

Save Load
Eng Setup

SetDef MatchDef
Eng Setup

Outputs
Eng Setup

Status
Eng Setup

Mode
ME

Clear History

History

Favourites

eDPM

SWR

Frame Suite Nodes & ID

PCU Configuration

Control Surfaces

Remote Aux IP Network

Remote Aux Logical Map

Remote Aux Button Map

Eng Login

SetDef MatchDef

Source Definition

Outputs

Ports & Devices

Switcher Tally

Router

ClipStore Config

Video Settings

Node Settings

Install Options

Test Patterns

Status

Save Load

Acquire Resources

User Setups

File Ops

E-MEM & Timeline

Macros

Source Ops

ME

Keyer

IDPM

Wipes

Copy Swap

Devices

Image Store

Router

Eng Setup

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2-17

Eng Setup menu showing Node settings for each control surface.

These are the devices that are allowed communication with the Frame Processor. Only devices that originate control or commands are entered here.

This table may be accessed and modified by any computer running the menu application.

These devices are stored on the Frame Processor in the Compact Flash Card as part of our NV RAM.

When Clearing NV RAM, this table will be deleted. Ensure you have this information backed up.

A PC running the Menu Application may connect to the frame processor without being in this table. Enter the PC name and IP address and reset the Menu Application in order to operate the system from this PC.

Eng Setup - Status

KAYENNE
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Status Information & Windows Controls

Node Name	Control Surface	Node Type	IP Address	Version	Date
Training RM A		Video Proc Frame	192.168.0.170	V3.0.0	Jan 19 2011
ImageStore		Image Store	192.168.0.171	V3.0.0	Jan 19 2011
4 M/E Panel	1 A	RT Panel	192.168.0.172	V7.2.1403	Jan 19 2011
Lew's PC	1 A	Menu Panel	192.168.0.55	V3.0.0	Jan 19 2011
Training Room A PC	2 A	Menu Panel	192.168.0.51	V3.0.0	Jan 19 2011
4 M/E Menu	1 A	Menu Panel	192.168.0.175	V3.0.0	Jan 19 2011
2 M/E panel		RT Panel	192.168.0.174	V7.2.1403	Jan 19 2011
Clip Store	2 A	Clip Store Summit	192.168.0.18	V7.2.7.1403	Jan 19 2011

List of Nodes currently connected to the frame

Versions and Build Dates in RED indicate different from Frame Software Version

Menu Version: Ver V3.0.0, Minimize Menu
Memory Usage: Memory 3.81%, Restart or Exit Menu
Capture Software Diagnostic Data, Close Down Menu Computer

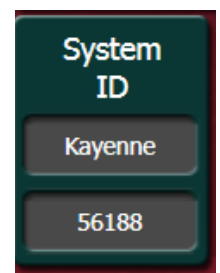
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2-18

Eng Setup Status menu showing which devices are communicating with the frame. All items shown are based upon the frame processor polling all devices for their status. Any device shown in red indicates a different software version than that of the frame processor.

Starting with Version 4.0 software, Karrera Panels are compatible with the Kayenne Frame. The menu is the same for both Kayenne and Karrera with only a couple of small differences.

The menu status page (shown above) will Display “Kayenne” if the system (frame) is licensed as a Kayenne. See the “Eng Setup / Install Options” menu to see this display at right. If it shows “Karrera” (instead of Kayenne), the system is licensed as a Karrera and the menu Status page (regardless of what panel it is tied to) will Display Karrera. One way to determine if the menu is acting and displaying correctly is to check the “Eng Setup / Node Settings” menu. Look at the second tab: If the “PCU Configuration” tab is present, the menu panel is associated to and most likely talking with a



Kayenne Panel processor. If the second tab is “Control Surfaces”, the menu is talking to a Karrera Panel processor. To verify that the menu application is talking to the correct panel, view and verify that the correct panel IP Address is displayed in the “Associated Panel IP” window of the “Eng Setup / Node Settings / Frame Suite Nodes & ID” menu. Having this address correct allows the menu to verify which type of panel it is communicating with as well as allowing D-Pops and Macro Attach to function.

Eng Setup - Video Settings - K-Frame v5.1

The screenshot shows the 'Eng Setup - Video Settings' window. Callouts provide the following information:

- Sync Reference window**: Will indicate if the frame is locked or not. (Points to the 'Locked' status in the 'Reference Sync Selection' section.)
- Status bar**: Shows change of state. (Points to the top status bar showing 'Frame Op Mode 1080i 29.97Hz : Ref Sync 1080i 29.97Hz'.)
- Timing Analyzer**: Use the Timing Analyzer to check the timing of each Source. (Points to the 'Timing Analyzer' section showing 'Source 3' and timing details.)
- Select the operating mode of the switcher**: (Points to the 'Frame Operating Mode' grid where '1080i 29.97Hz' is selected.)
- Select a source if locking to an input signal**: (Points to the 'Video Input' section where '3' is selected.)

The interface includes a sidebar with menu items like 'Video Settings', 'Test Patterns', 'Library', 'ClipStore', 'Images', 'Backup & Restore', 'Suite Prefs', 'Install Options', and 'Eng Setup'. The bottom of the window features a toolbar with buttons for 'eDPM', 'SWR', 'Log In', 'SetDef', 'Source Definition', 'Outputs', 'Ports & Devices', 'Switcher Tally', 'Router', 'ClipStore Config', 'Video Settings', 'Node Settings', 'Install Options', 'Test Patterns', 'Status', 'Save Load', 'Acquire Resources', 'User Setups', 'File Ops', 'E-MEM & Timeline', 'Macros', 'Source Ops', 'ME', 'Kayer', 'iDPM', 'Wipes', 'Copy Swap', 'Devices', 'Image Store', 'Router', and 'Eng Setup'.

Only 1 Analog or internal source reference is required.

The frame operating modes now include the 1080p A and 1080p B standards.

Switching frame operating modes will cause the switcher to reset. Any Effects are retained.

Eng Setup menu showing Video Settings for Switcher format and the Timing Analyzer. Switching between HD and SD requires the frame to be rebooted.

- Analog reference can be Analog Color Black or Tri-Level Sync.
- Digital allows for one input connector to be selected as the reference source.

System Timing is a global adjustment compared to the switcher reference.

The switcher timing may be moved in reference to the sync input.

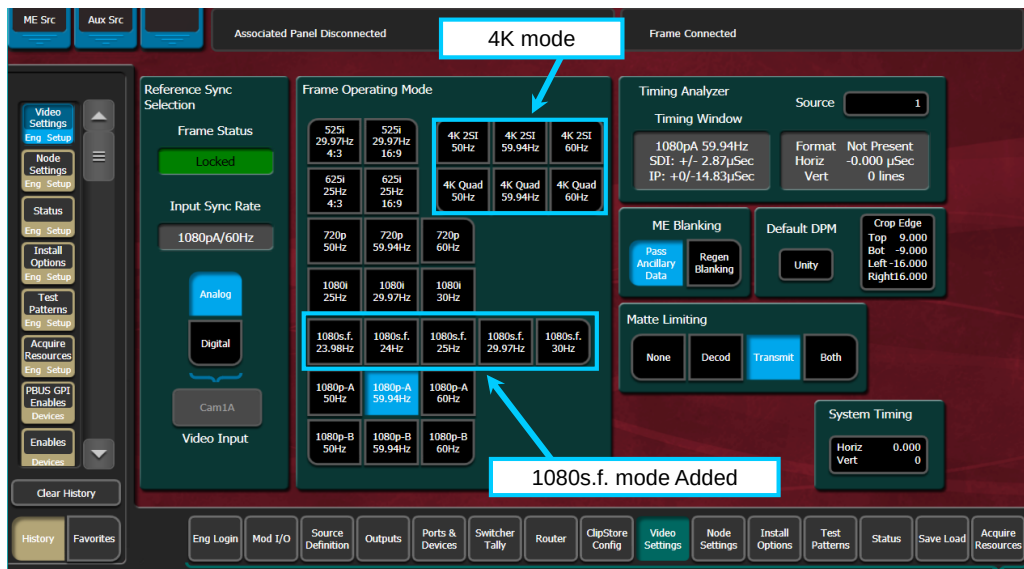
Matte Limiting refers to the limiting applied to the internal Matte generators

- "None" will allow any color matte levels to be created, legal levels or not.
- "Decode" keeps all matte colors to legal RGB (decoded) values.
- "Transmit" refers to limiting the matte generators Luma and Chroma levels to that of an Analog legal level signal
- "Both" is combines Decode and transmit limitations to Decode and keeps all mattes legal for RGB and Analog levels.

ME Output blanking passes (Pass) or strips (Regen) all vertical and horizontal Ancillary Data. This included any EDH packets and Embedded Audio.

Default iDPM allows for the setting of global crop edges.

Eng Setup - Video Settings 4K and - 1080 sf modes



2-20

Eng Setup/ Video Settings menu for K-Frame.

Only 1 Analog or internal source reference is required.

The frame operating modes now include the 1080p A and 1080p B standards.

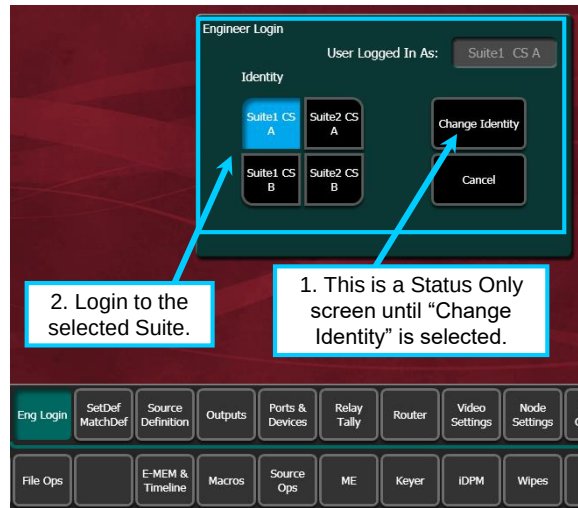
Switching frame operating modes will cause the switcher to reset.

Any Effects are retained.

A slightly different arrangement of the timing analyzer has been implemented.

Eng Setup - Eng Login

- No password is required to log in to a suite
- There are 2 suites
- Suites can be named under: Eng Setup / Node Settings
- There are also 2 Control Surfaces (CS) A and B to allow for 2 possible configurations per suite for different panel layouts
- The default Suite for a Menu is set under: EngSetup / Node Settings / Control Surfaces



2-21

Eng Setup, Eng Login screen.

Control depends on which Suite the menu is logged in to, not which Suite the menu is assigned to.

Logging into a different Suite will allow this Menu to modify the parameters of the other Suite. This is a temporary operation and the Menu will return to the default Suite when a Menu App or the frame is restarted.

Eng Setup - Acquire Resources - K-Frame v7.0+

MultiViewer Options added in v 7.0

State of the switchers Physical ME Resources

Channels can be:
Acquired
No Suite
NL – Not Licensed
NP – Not Present

Number of MultiViewers available (v 7.0)

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2-22

ME A, B, C, D Can be used as MEs, eDPM's or as a MV depending on licensing

ME-CT can be used as an ME or MV but not as an eDPM.

MX-MV only exists in the Large Frame and can only be used for MV (On Controller card). It will appear 'greyed out' in the Compact Frame.

ME hardware can be used as MV without an ME License.

The eDPM requires and ME license as well as an eDPM license.

Example shows a 5 ME switcher with an eDPM and 4 MultiViewers in Suite 2

iDPM licenses depend on presence of physical hardware.

Eng Setup - Acquire Resources - K-Frame S-series v8.0

Dedicated MultiViewer Options in v 8.0 with S-series Frame

State of the switchers Physical ME Resources

Channels can be:
Acquired
No Suite
NL – Not Licensed
NP – Not Present

iDPM channels can be allocated to the ME pool or the eDPM

3 MEs are available
A1, A2 and A3
B1, B2 and B3
For assignment as an ME or eDPM

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2-23

In the S-series, MEs A and B can be used as MEs or eDPM's depending on licensing. ME hardware cannot be used as MultiViewers in the S-Series frame.

The eDPM requires and ME license as well as an eDPM license.

Example shows a 6 ME switcher with one ME as an eDPM and the 2 MultiViewers enabled

Eng Setup - Acquire Resources - K-Frame V-series v11.0

Dedicated MultiViewer Options in v 11.0 with V-series Frame

State of the switchers Physical ME Resources

Channels can be:
Acquired
No Suite
NL – Not Licensed
NP – Not Present

iDPM channels can be allocated to the ME pool or the eDPM

Hardware Resources are labeled VPE (Video Processor Engine)

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2-24

In the S-series, MEs A and B can be used as MEs or eDPM's depending on licensing. ME hardware cannot be used as MultiViewers in the S-Series frame.

The eDPM requires and ME license as well as an eDPM license.

Example shows a 6 ME switcher with one ME as an eDPM and the 2 MultiViewers enabled

Eng Setup - Acquire Resources - K-Frame v 11.0+ (2)

Logical Resources

Physical Resources

User Logged In As: Suite2 CS A

Image Store and ClipStore Channels can be assigned to either Suite

State of the switchers Physical IS Resources (8 channels in V-series)

Image Store Memory can be assigned in 1GB increments between Suites

Image Store Memory

Units: 10 Available: 1

Effects, Stores & Viewers

PBus Devices

External Devices

Router Destinations

Camera Control

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Eng Login

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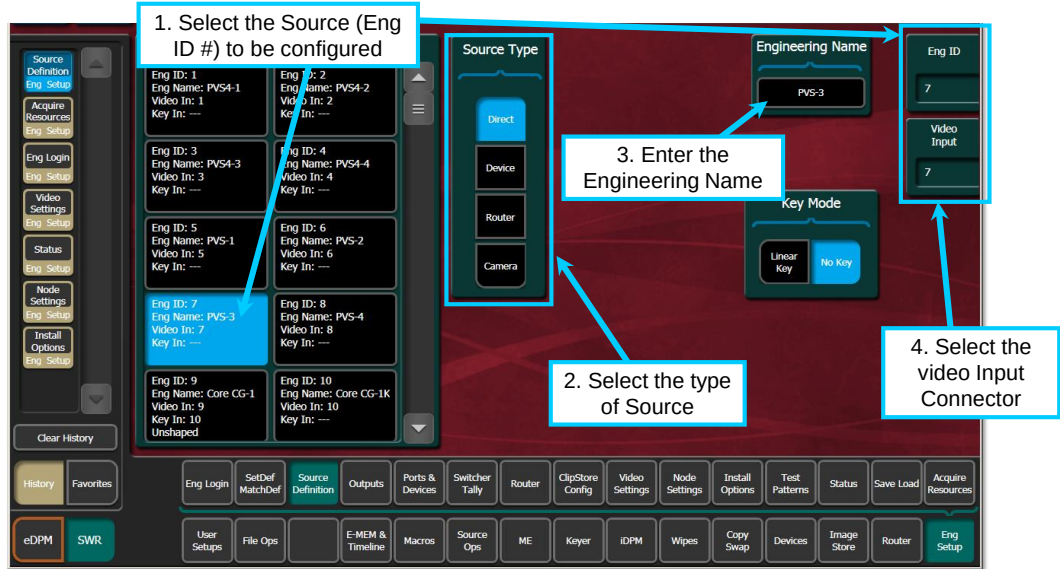
2-25

The Physical Image Store channels (A-J) can be assigned to any logical IS channel 1-10.

Memory allocation allows the memory to be partitioned between the 2 Suites in 1GV increments

The V-series Image Store has 8 V/K channels

Eng Setup - Source Definition (1)



2-26

Eng Setup menu showing Source Definitions for a Keyed Source.

The Source Definition list goes to 300 Source IDs.

The K-frame has a larger the number of sources available, 192 (160 + 32 Modular) instead of 90 for the standard Kayenne frame.

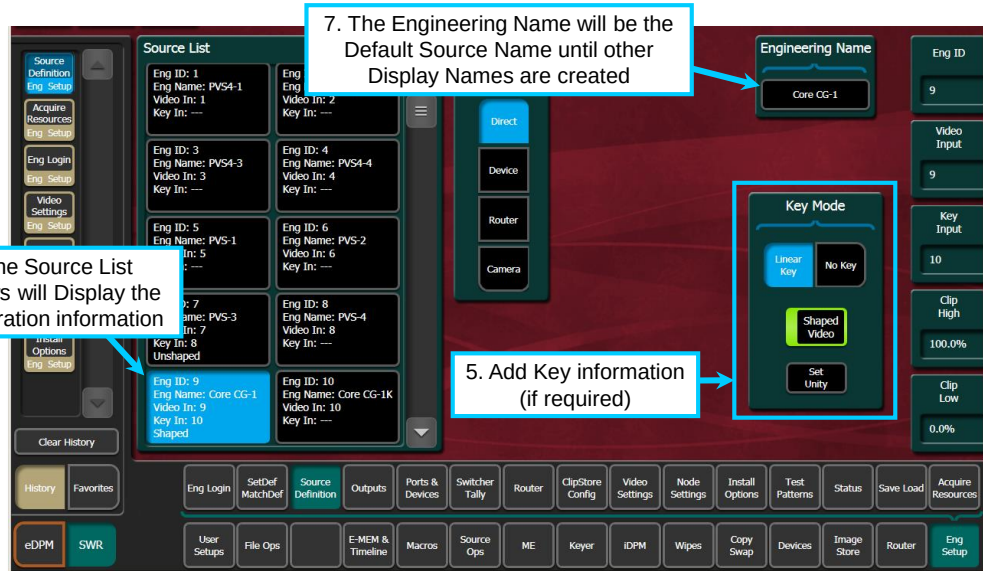
The S-series frame can have up to 64 inputs

The V-series frame has up to 32 inputs.

Modular Inputs are numbered 193 up regardless of the size of frame or how many SDI modules are installed.

The Media Inputs on the V-series are numbered 501-504.

Eng Setup - Source Definition (2)



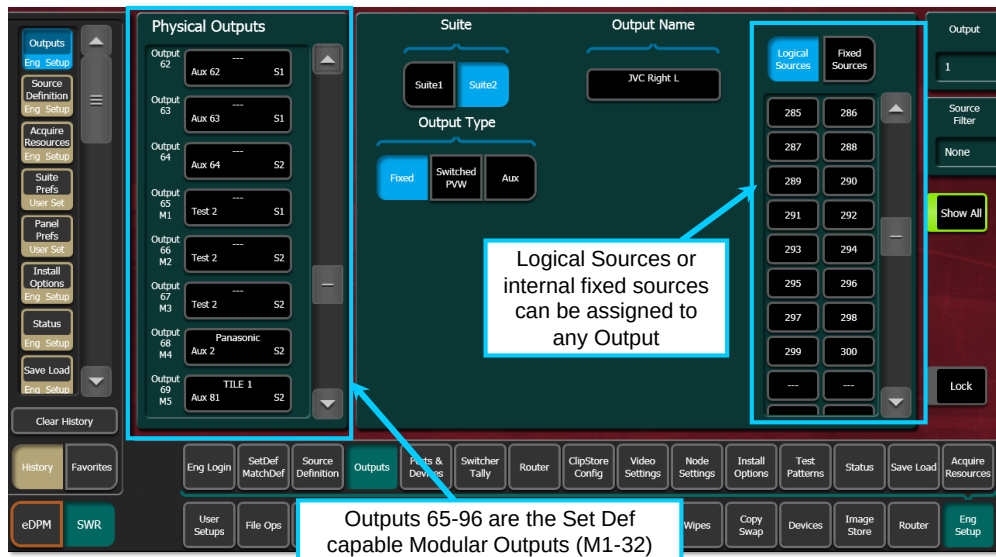
2-27

Eng Setup menu showing Source Definitions for a Keyed Source.

For each Keyed Source select the Shape mode to match the output of the device being configured. For an explanation of shaping see the appendix.

The Keyed source's key settings can be adjusted with the Clip Low and Clip High controls, if the levels are different from the standard defaults so that it will key correctly when in 'Fixed Linear' key mode.

Eng Setup - Outputs



2-28

Outputs 65-96 (M1-M32) are the Set Def capable Modular Outputs. The numbers are the same for both small and large frame sizes. They can be named and assigned to either Suite.

Refer to the Set Def menu to determine the status of the Set Def outputs.

Outputs can also now be assigned a direct Input Source as a feed if required.

Eng Setup menu showing Fixed (Internal) output signal assignments.

Outputs may be assigned to either Suite 1 or Suite 2.

Each suite may have a “Switched Preview or Program Out” without affecting the other suite.

The “Output Name” is used for reference and serial tally output only.

On the V-series Set Def/Match Def modules, all inputs and outputs have Set Def/ Match Def capability.

Eng Setup - Source Definition - V-series

Source List

Eng ID: 27
Eng Name: 27
Video In: 27
Key In: ---

Eng ID: 28
Eng Name: 28
Video In: 28
Key In: ---

Eng ID: 29
Eng Name: 29
Video In: 29
Key In: ---

Eng ID: 30
Eng Name: 30
Video In: 30
Key In: ---

Eng ID: 31
Eng Name: 31
Video In: 31
Key In: ---

Eng ID: 32
Eng Name: 32
Video In: 32
Key In: ---

Eng ID: 33
Eng Name: Media 1
Video In: 501
Key In: ---

Eng ID: 34
Eng Name: 34
Video In: 502
Key In: ---

Eng ID: 35
Eng Name: 35
Video In: 503
Key In: ---

Eng ID: 36
Eng Name: 36
Video In: 504
Key In: ---

Source Type

Direct

Device

Router

Camera

Engineering Name

Media 1

Engineering Name

Key Mode

Linear Key

No Key

Eng ID

33

Video Input

501

The media input ports are numbered 501-504

Eng Login

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E-MEM & Timeline

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Copy Swap

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2-29

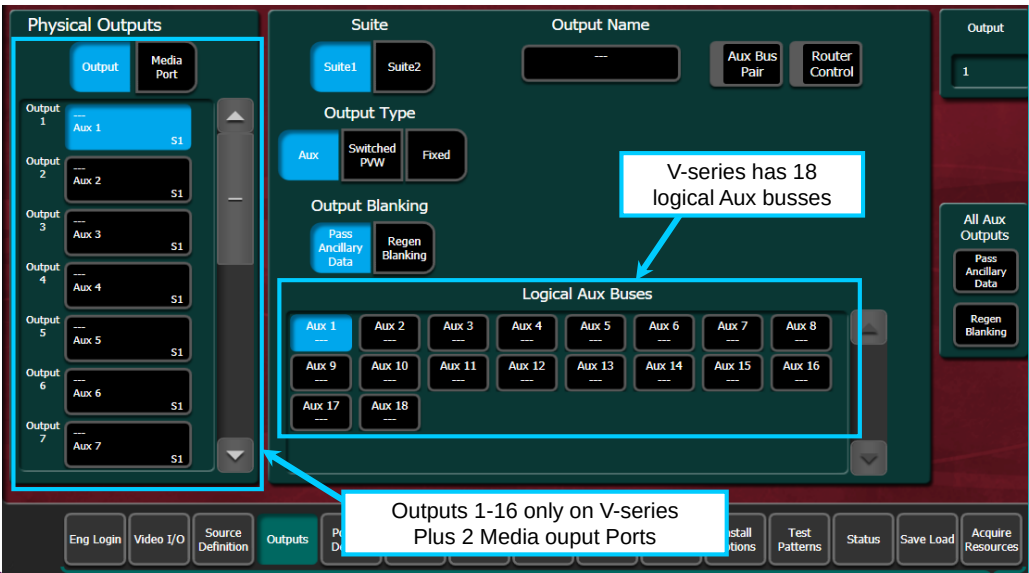
V-series has 32 BNC inputs and 4 Media port inputs

The Media ports are essentially HDMI but are not fully compliant with the HDMI standard.

Media ports use video input numbers 501 through 504.

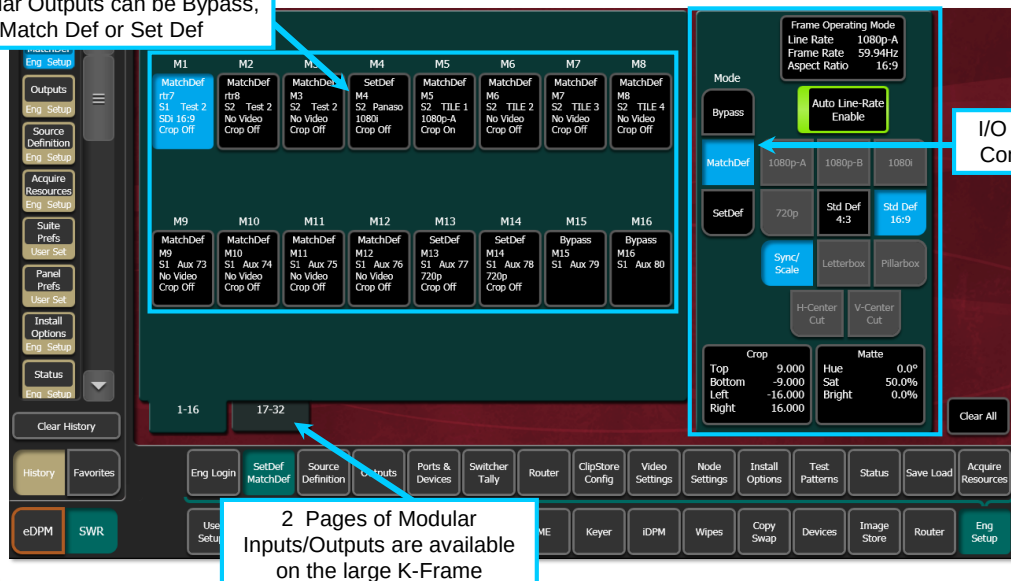
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Eng Setup - Outputs – V-series



Eng Setup – Modular I/O - SetDef - Match Def

Modular Outputs can be Bypass,
Match Def or Set Def



I/O Mode and Configuration

2 Pages of Modular
Inputs/Outputs are available
on the large K-Frame



2-31

Modular I/O modules have 3 modes. Bypass, Match Def and Set Def.

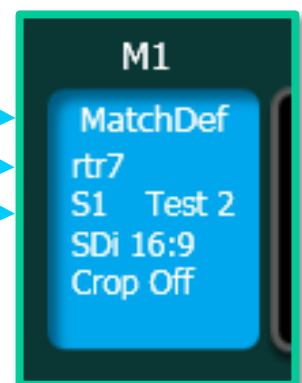
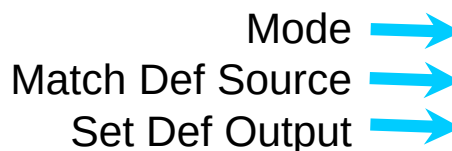
In Bypass mode both the associated Input and Outputs will be in Bypass. (ie In 161/Out 65)

In Match Def mode the Input conversion will be active and the Output will be in Bypass

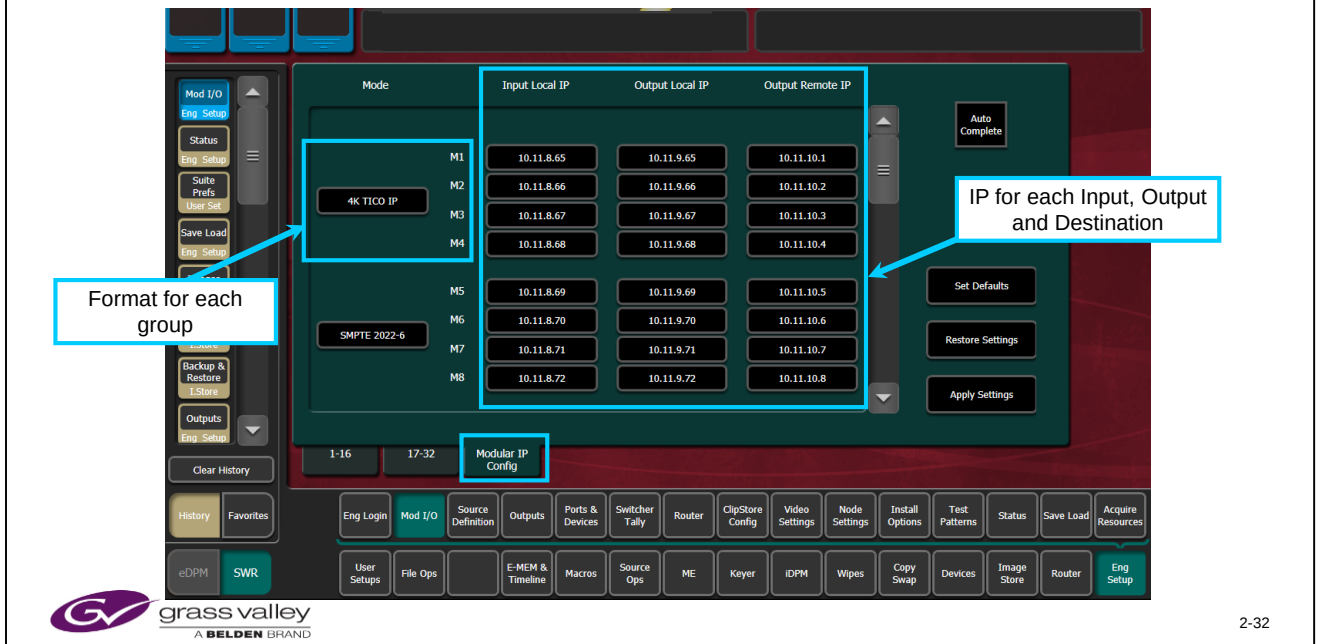
In Set Def mode the Output conversion will be active and the Input will be in Bypass

Input and Output formats now include 1080p-A and 1080p-B, This is active regardless of the presence of a 1080p license.

Inputs are numbered 161-192. Outputs are numbered 65-96.



Modular I/O - IP Configuration



Auto Complete can be used to fill in the Modular group IP numbers for each IP section.

Modular I/O IP Formats

Modular I/O Configuration

M1 M2 M3 M4 M5 M6 M7 M8

M9 M10 M11 M12 M13 M14 M15 M16

Mode

SMPTE 2022-6

4K TICO IP

4K TICO SDI

4K 12G SDI

Select the type of input signal for each Modular Group

All 4 inputs must be in the same mode

1-16 17-32 Modular IP Config

Eng Login Mod I/O Source Definition Outputs Ports & Devices Switcher Tally Router ClipStore Config Video Settings Node Settings Install Options Test Patterns Status Save Load Acquire Resources

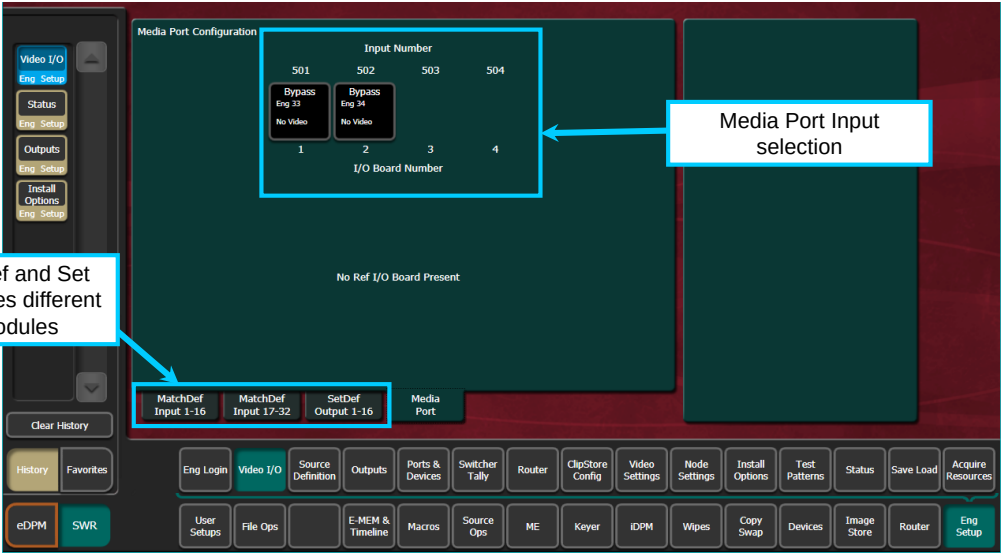
eDPM SWR User Setups File Ops E-MEM & Timeline Macros Source Ops ME Keyer IDPM Wipes Copy Swap Devices Image Store Router Eng Setup

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2-33

‘4K TICO’ is a compressed format for sending 4 - 1080p streams into the switcher as IP or SDI or 12G compressed into 1 input.

Modular I/O – V-series



Eng Setup - K-Frame - Install Options, v 7.0+

Install Options
Eng Setup

Acquire Resources
Eng Setup

Test Patterns
Eng Setup

Suite Prefs
User Set

Panel Prefs
User Set

User Setups
File Ops

Show Files
File Ops

Images
I Store

Clear History

History

Favorites

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System ID

Kayenne

12345678

Option Group

Perm

Temp 1

Temp 2

Temp 3

Temp 4

Option

Full MEs
Controller ME
ClipStore Channels
Image Store Cache Size (GB)
Chroma Keyers
DPM Channels
RGB Color Correction
eDPM
FlexiKey™
DoubleTake™
Ethernet Tally
Soft Panel
SNMP
SetDef MatchDef Scalers
HD 1080p
2D DPMs
Image Store Movies
ME View
Multiviewer

Option	Enabled	Total Licensed	Perm
Full MEs	8	8	8
Controller ME	1	1	1
ClipStore Channels	4	4	4
Image Store Cache Size (GB)	32	32	32
Chroma Keyers	54	54	54
DPM Channels	16	16	16
RGB Color Correction	Yes	Yes	Yes
eDPM	2	2	2
FlexiKey™	Yes	Yes	Yes
DoubleTake™	Yes	Yes	Yes
Ethernet Tally	Yes	Yes	Yes
Soft Panel	Yes	Yes	Yes
SNMP	Yes	Yes	Yes
SetDef MatchDef Scalers	32	32	32
HD 1080p	Yes	Yes	Yes
2D DPMs	Yes	Yes	Yes
Image Store Movies	Yes	Yes	Yes
ME View	Yes	Yes	Yes
Multiviewer	4	4	4

Eng Login

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IDPM

Wipes

Copy Swap

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Image Store

Router

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2-35

- Additional K-Frame Options include:
- 2D-DPMs All (54 max) or None
 - eDPM (1 per Suite)
 - 1080p HD capability
 - Image Store Clip capability (Now called Movies) (v 6.0)
 - Extra memory for the Image Store (64GB max – 32GB for V-series)
 - Ethernet Tally
 - The ME View Option (added in v 6.0) – Not in V-Series chassis
 - The Multiviewer Option (added in v7.0)

Panel Prefs - Button Mapping

The screenshot displays the 'Button Mapping' configuration window. On the left, a 'Banks' list includes 'Local Aux', 'ME 1', 'ME 2', 'ME 3', 'ME 4', and 'PGM/PST'. A 'Button Count' selector is set to 35. The main area shows a grid of buttons mapped to sources, with columns for '1st', '2nd', '3rd', and '4th' shifts. A 'Special Buttons' list on the right includes 'Delegate', 'Second Shift', 'Third Shift', 'Fourth Shift', and 'None'. The bottom navigation bar includes options like 'Button Mapping', 'Panel Color Scheme', 'Source Colors', 'Macro-E-MEM Start Number', 'DPOP Prefs', 'Shift Prefs', 'Panel User Interactions', and 'Aux Delegate Mapping'.

Each Bank can be mapped differently

4 Different Button Mappings are remembered, 1 for each Panel Type

Special buttons allow for Delegation and Shift modes to be used

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2-36

The Source List shows the sources based on their ID numbers (or names if Eng names have been assigned).

The Logical sources are the external inputs all internal signals are listed under the Fixed Sources list.

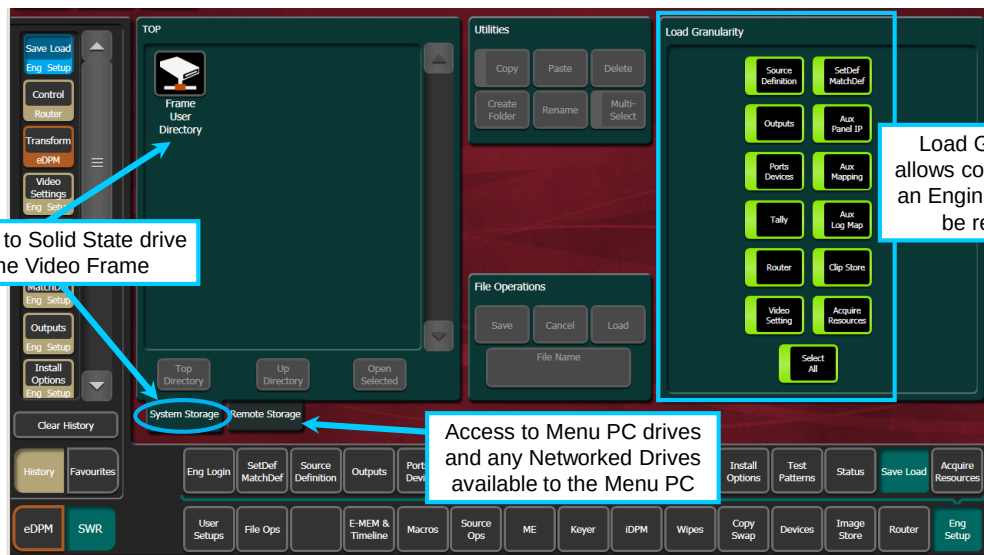
The Source Filter can be set to filter the names of the sources to show for example only Cam or VTR named sources.

Before making changes verify that the correct panel button count (15, 20, 25 or 35) is selected.

The special Buttons (Shifts, Delegate and None) along with source buttons can be mapped multiple times on the same bus or shifted row if desired.

Set the Button Count to 15 for use with the Karrera Soft Panel, the 20 button mapping is used for GV Korona.

Engineering File Management



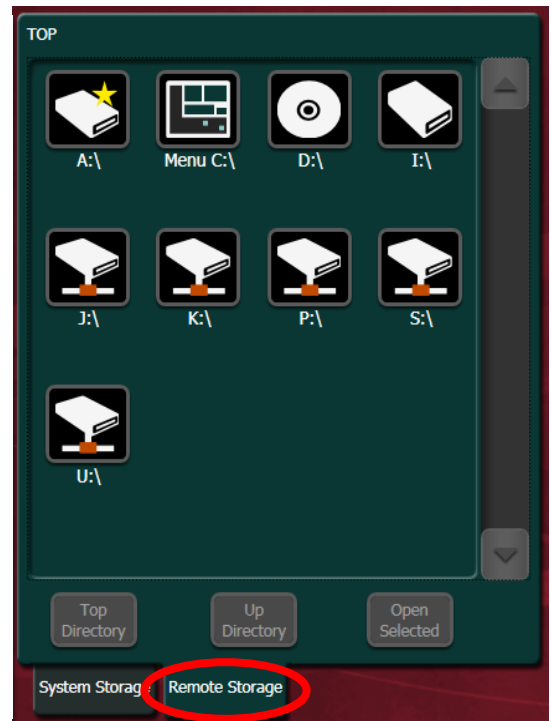
2-37

Engineering setup or Configuration files may be stored (saved) to the frame Compact Flash card or to a drive of your choice.

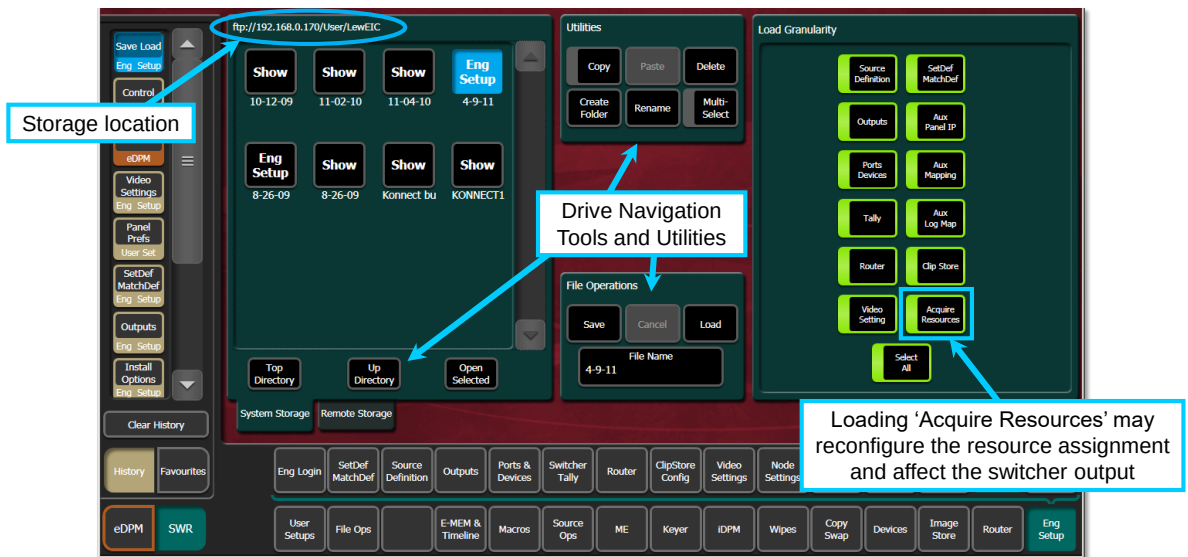
By selecting “System Storage” as seen above, you are choosing the Video Frame CF card as a file location.

By selecting “Remote Storage” you are choosing a networked drive as a file location. This may be the Kayenne/Karrera Menu Windows Processor in the PCU or any drive on a remote PC.

It is a idea good to save files to remote locations in addition to the system drive. When you exchange or update a Frame Processor module the saved Eng Setup files can then be loaded into the new module..



Engineering File Management



2-38

“Show” Files are a folder that may contain several different user or “TD” saved files. These can be anything from Button Mapping to E-Mems, R-Mems, Macros etc.

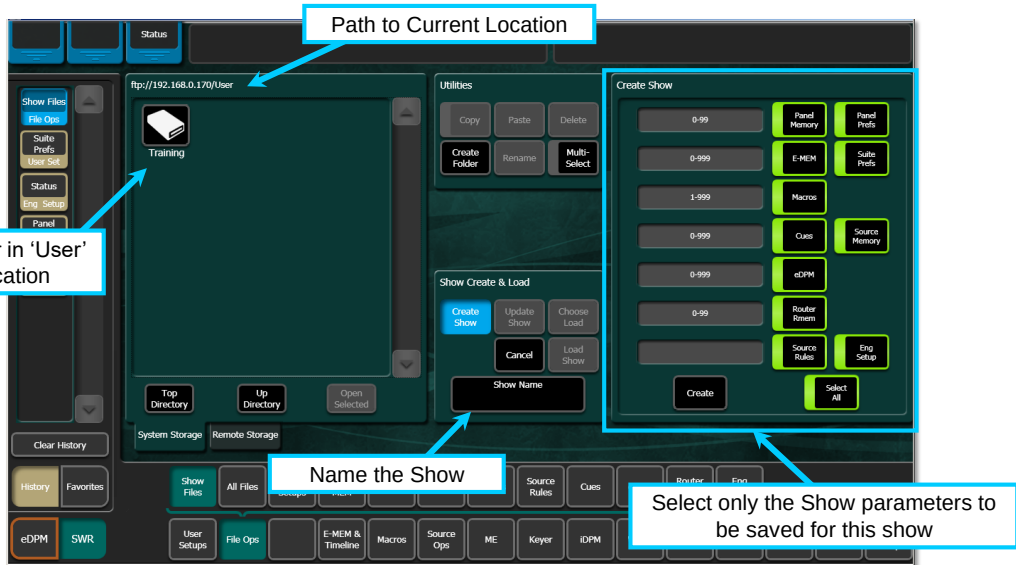
Show files are saved in a similar “Save / Load” type menu under “File Ops”.

Engineering setup Files may be saved in File Ops as part of a Show or under Engineering Setup / Save Load as seen above.

It is recommended to save Engineering files daily as you are creating configurations or adding new hardware to the switcher’s operation.

Saving the engineering files with this menu is much faster than in File Ops as a Show File.

File Ops - Show Files



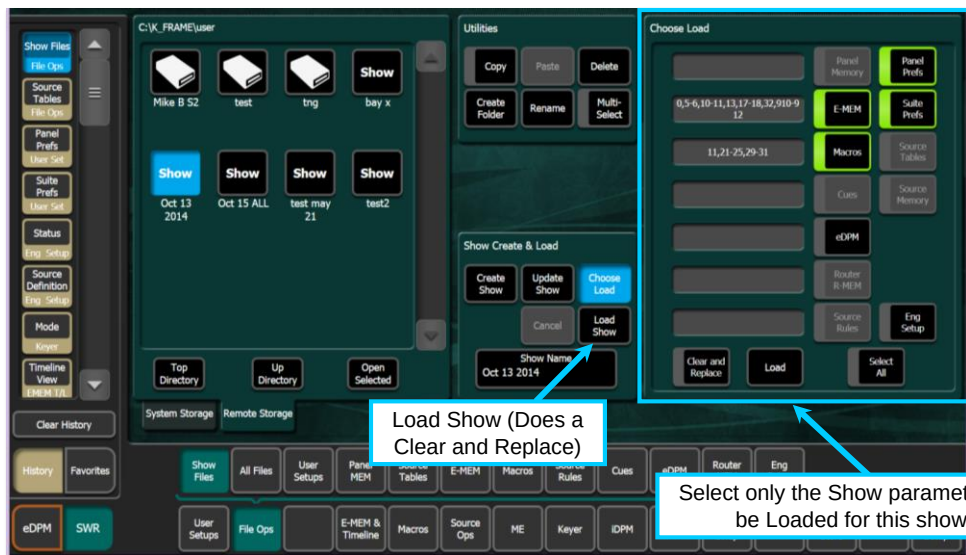
2-39

File Ops provides the ability to store settings either locally (Frame) or Remotely (Menu or other networked device).

The All Files view shows everything in the selected location. All other views are filtered to show files of the selected type.

'Show Files' allow a single file to be created that consists of user selectable combinations of specific switcher settings.

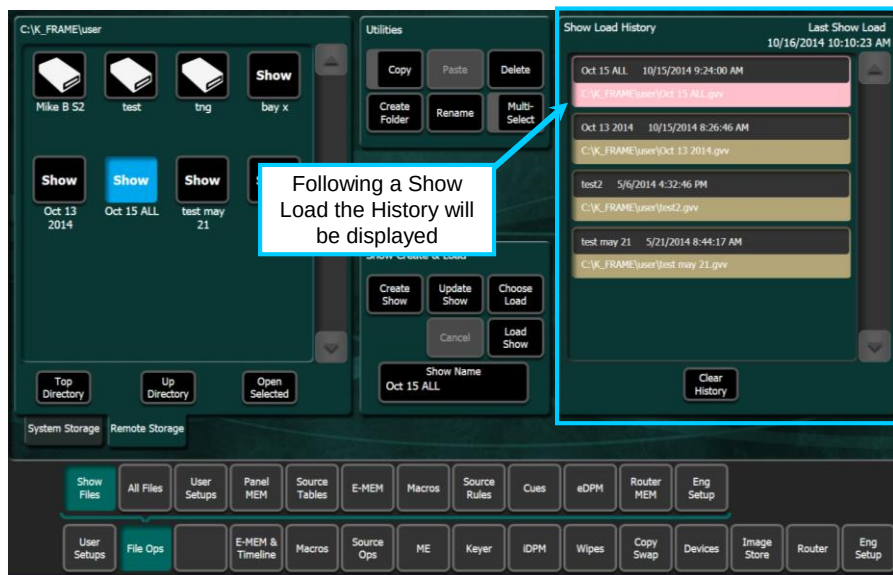
File Ops - Show File Load



Choose Load allows a subset of what was Saved to be loaded.

Clear and Replace is selectable when using Choose Load. This also shows which shows will be loaded.

File Ops - Show Load History



2-41

The Show History displays the most recent files that were loaded into the switcher and their date and time of loading.

The top entry will be the most recent Show Load. Partial loads are shown in Brown, Full loads are in red.