Section 4 - Karrera & Kayenne Advanced Config

grass valley
A BELDEN BRAND

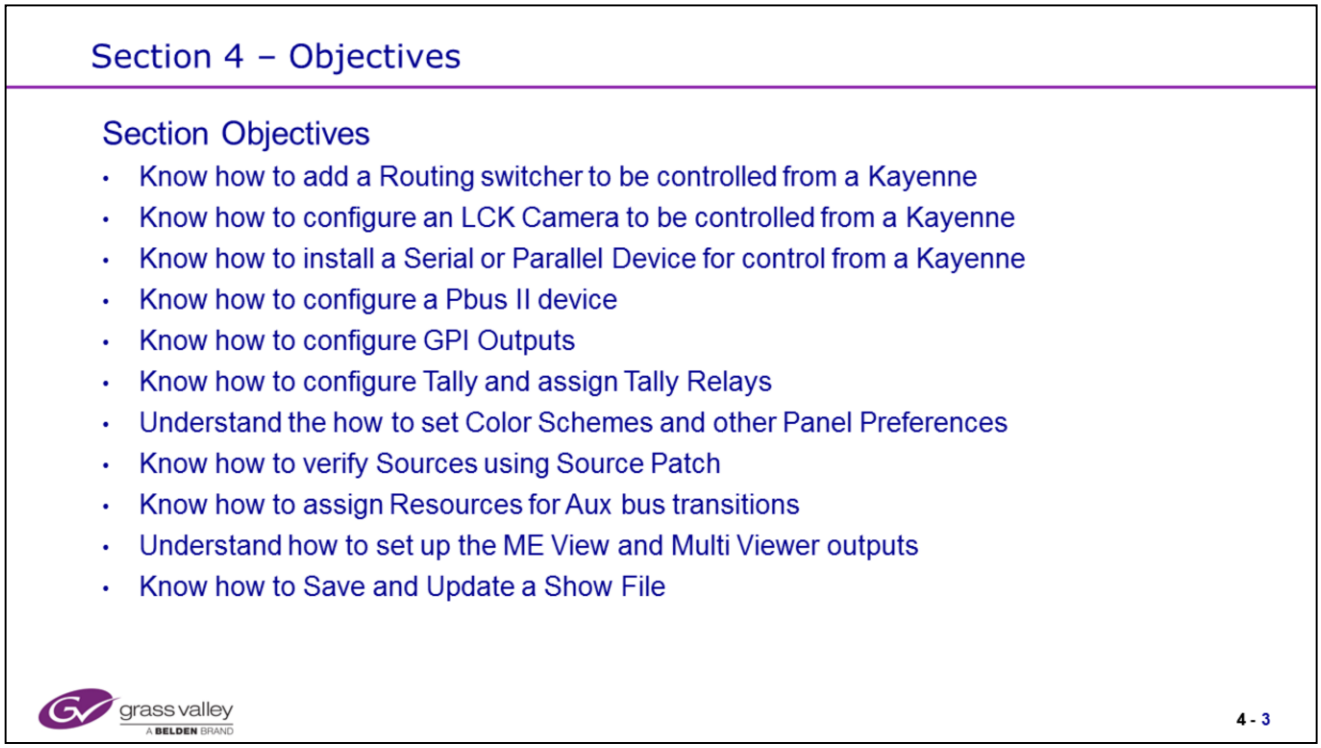
4 - 1

Section 4 - Karrera & Kayenne Advanced Config

- Engineering Setup Menus:
  - Router Configuration
  - Camera Control
  - Ports & Devices
  - Test Patterns
  - Tally
- User Setup
  - Panel Prefs
  - Suite Prefs
- File Ops
- Exercise

grass valley
A BELDEN BRAND

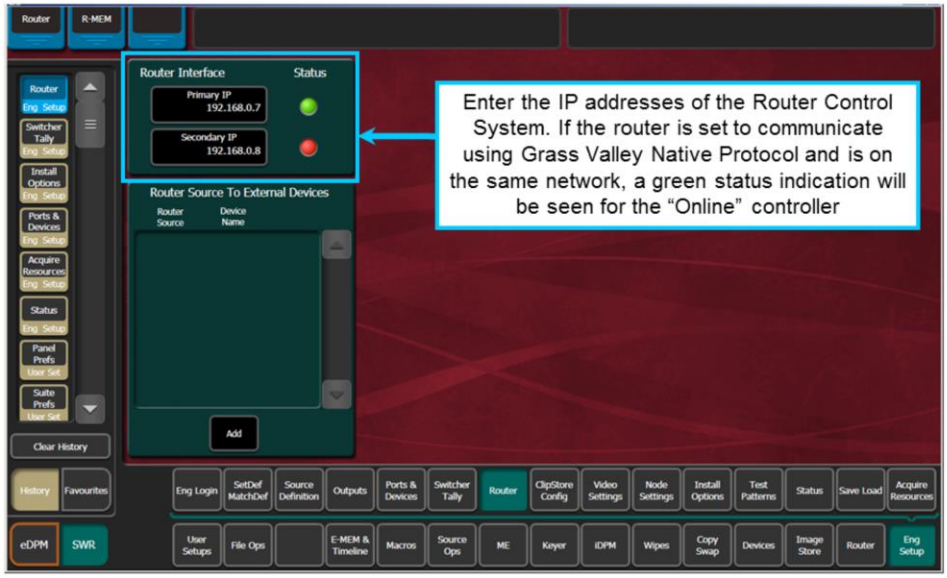
4 - 2



• The Kayenne and Karrera systems use the same software and hardware platforms prior to version 5. Starting with Version 5, the new 3 GB compliant “K-Frame” will be available. The same hardware is used for Karrera and Kayenne Panels and Menus. Older systems will remain at version 4.x.

• This course is intended to cover all products and covers the differences between hardware and software as needed. When specifics are not called out, assume that they are the same for both products.

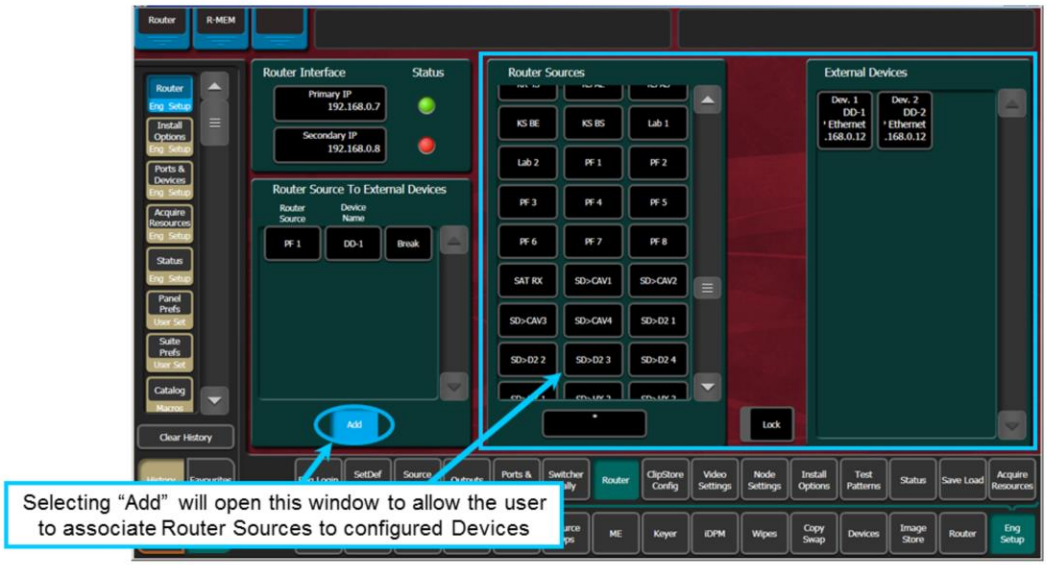
Router Control (1)



grass valley
A BELDEN BRAND

4 - 4

Router Control (2)



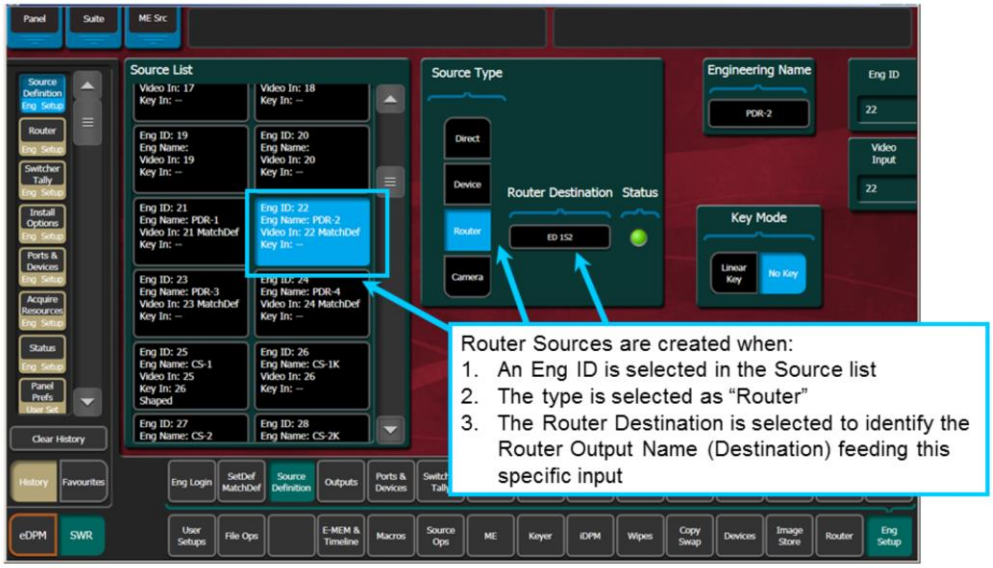
grass valley
A BELDEN BRAND

4 - 5

Routable machines can be linked to each other with the EngSetup / Router menu.

This allows the control panel machine control feature to be automatically routed to the correct machine when that machine is selected as a source on the router.

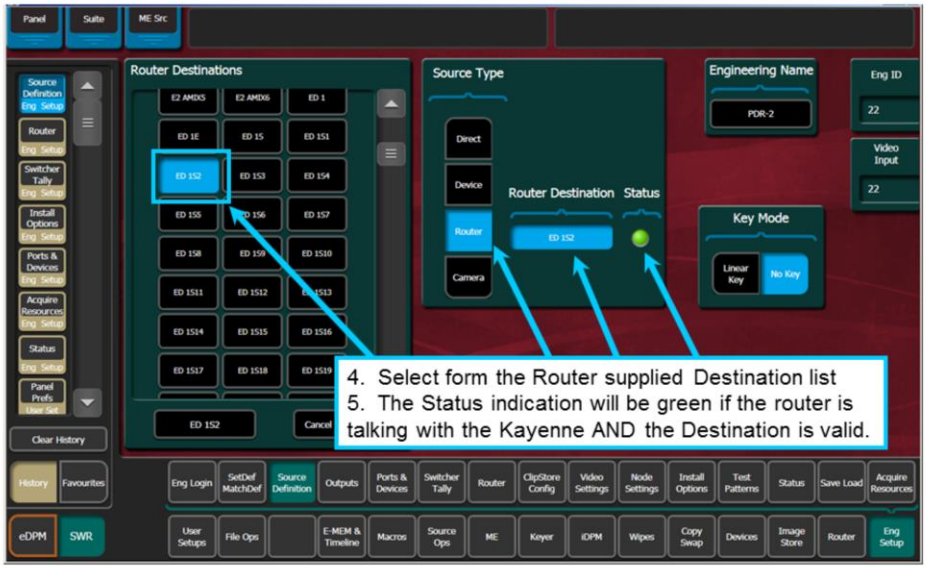
Router Control (3)



grass valley
A BELDEN BRAND

4 - 6

Router Control (4)



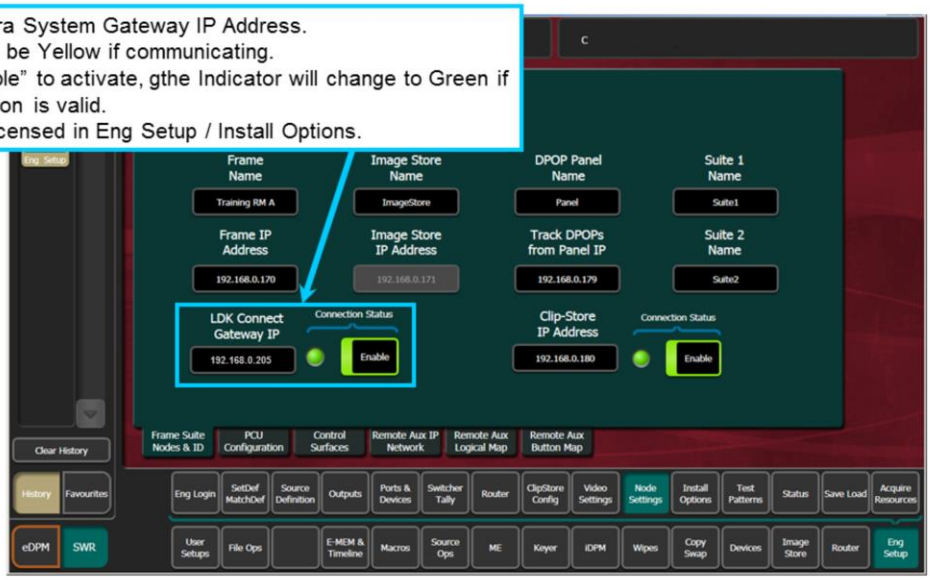
grass valley
A BELDEN BRAND

4 - 7

Camera Control - Version 3.0 (1)

1. Enter Camera System Gateway IP Address.
2. Indicator will be Yellow if communicating.
3. Select "Enable" to activate, gthe Indicator will change to Green if communication is valid.

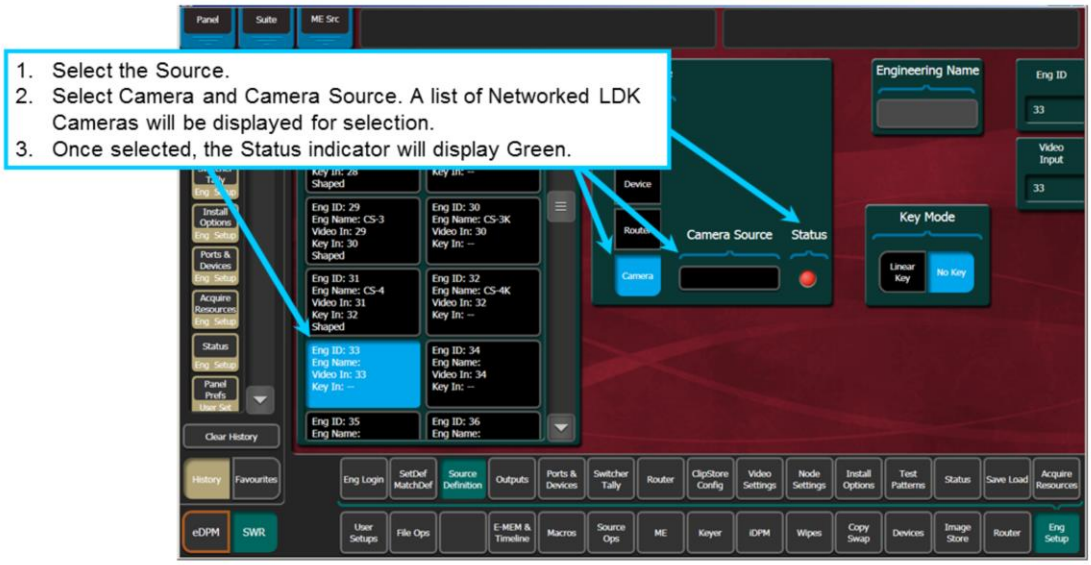
Note: Must be licensed in Eng Setup / Install Options.



grass valley
A BELDEN BRAND

4 - 8

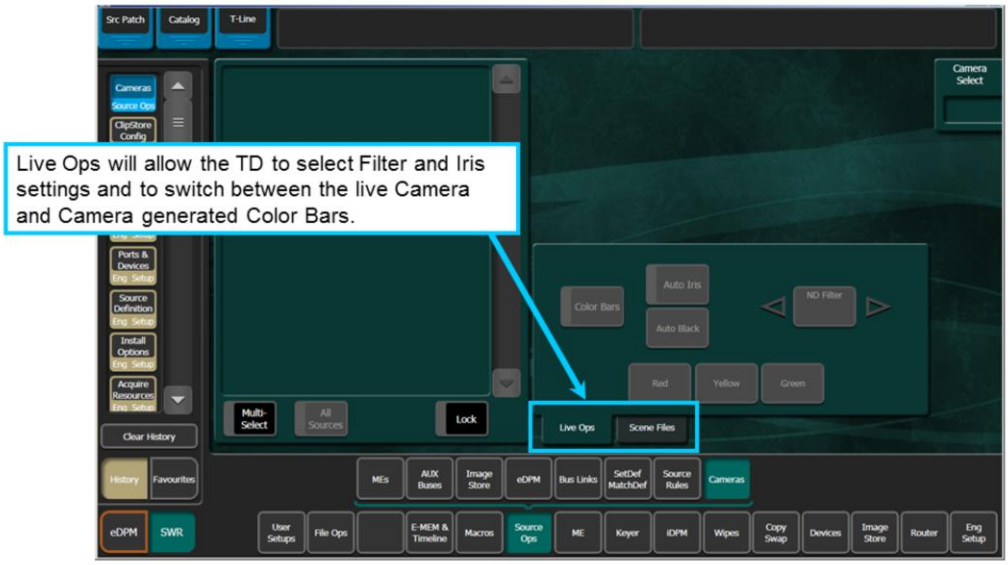
Camera Control (2)



grass valley
A BELDEN BRAND

4 - 9

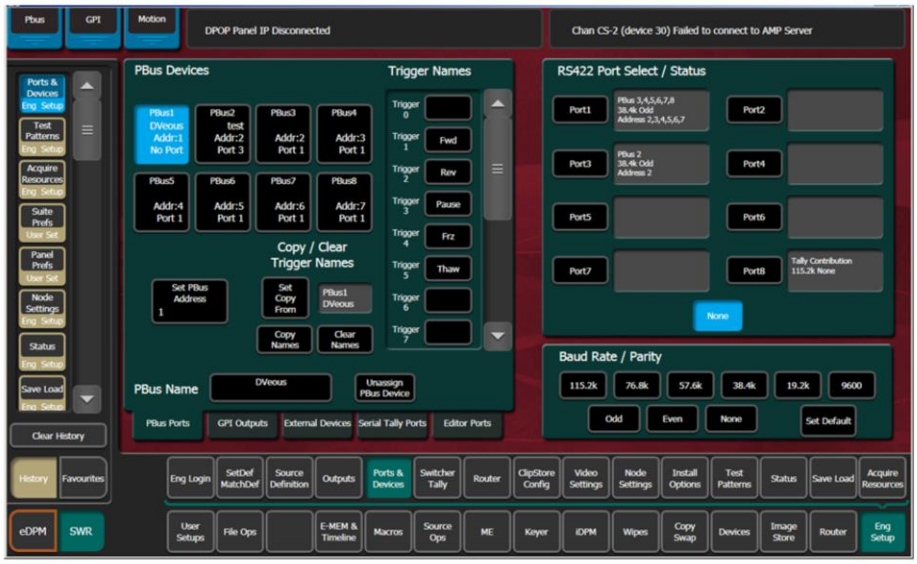
Camera Control (3)



grass valley
A BELDEN BRAND

4 - 10

Ports & Devices V5.1



grass valley
A BELDEN BRAND

4 - 11

- This menu allows the Pbus devices to be configured and mapped to one of the 8 external Serial control ports.
- The trigger names are for reference and are determined by the device being controlled.
- The example shows a Grass Valley Dveous external Digital Effects unit being configured.

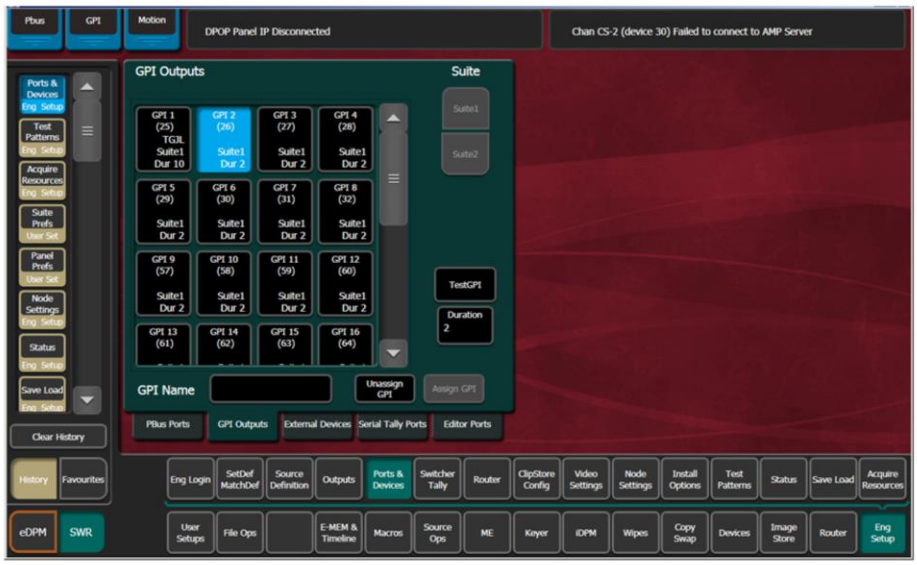
Eng Setup – Ports and Devices – PBus v6.0

4-12

Software version 6.0 increases the number of controllable PBus Devices to 24.

With the K-frame the Serial Tally is replaced by Ethernet Tally (Option)

Eng Setup - Ports & Devices - GPI



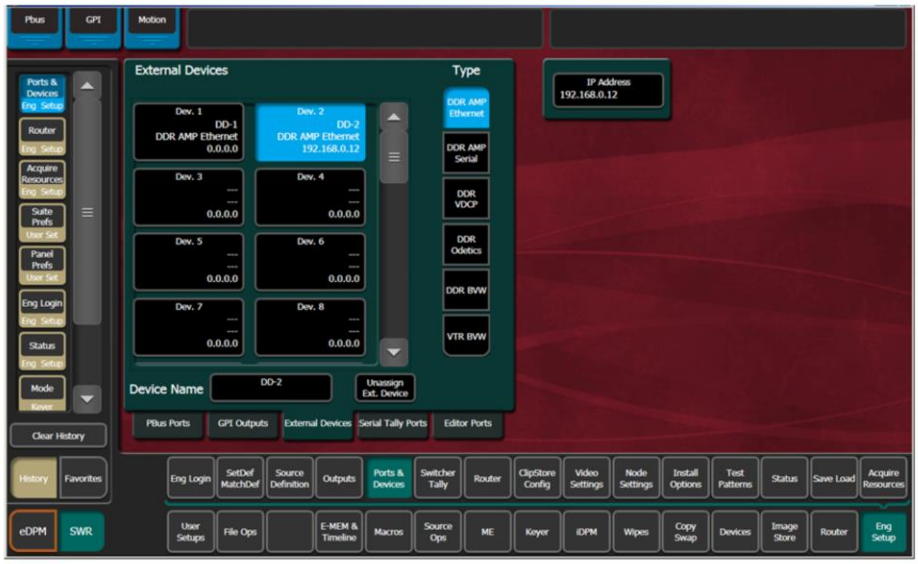
grass valley
A BELDEN BRAND

4 - 13

This menu allows the GPI Output triggers to be named and their duration set.

They can also be assigned to either Suite. There are 40 GPI relays in a K-frame but limited to 32 max in any one Suite

Eng Setup - Ports & Devices – External Devices



grass valley
A BELDEN BRAND

4 - 14

32 Devices are configurable and controllable by Karrera and Kayenne.

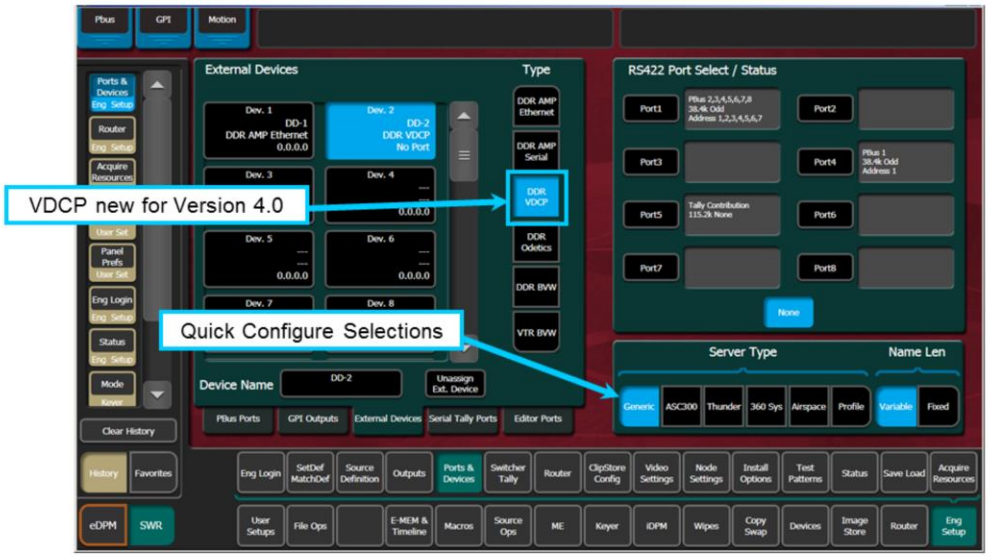
When a licensed ClipStore is used, it will occupy the last 2 (Solo) or 4 (Summit) devices in the list of 32. Version 4 software assumes this and automatically reserves these last 4 making only 28 other configurable devices available.

Devices may be controlled by the Optional Kayenne DCM (Device Control Module).

Devices may be controlled from the Menu and System Bars of both Kayenne and Karrera.

When naming devices in this screen, the device may have any logical name. The name needs to be appended with a dash (no spaces) and then a channel number. i.e . as above: DD-1 & DD-2. This is essential for the machine to be contrlolled.

Eng Setup - Ports & Devices v5.1



grass valley
A BELDEN BRAND

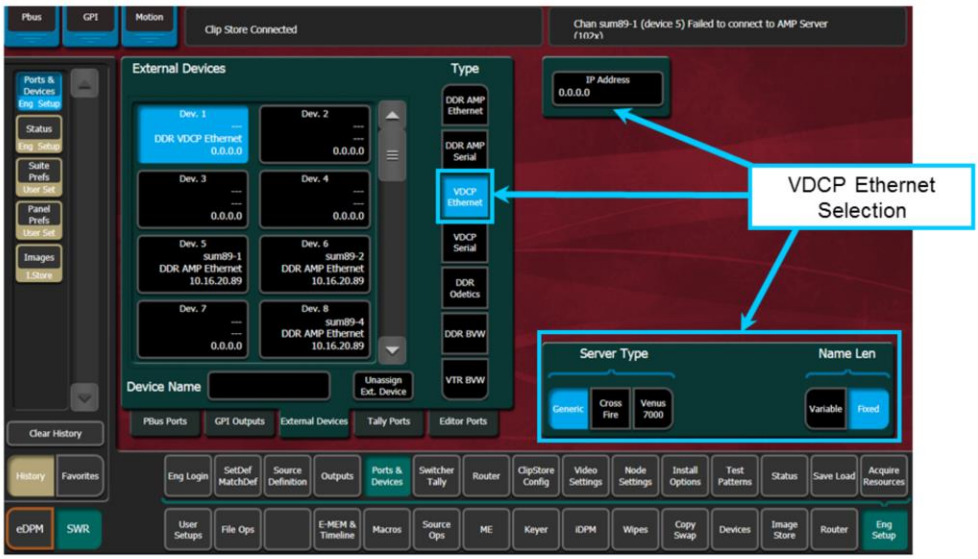
4 - 15

VDCP Protocol is a Serial Protocol that uses a serial cable for control of a device such as a Grass Valley K2 or Summit video Server.

When naming devices in this screen, the device may have any logical name. The name should be appended with a dash (no spaces) and then a channel number. To indicate the channel being controlled . i.e. example above: DD-1 & DD-2.

When in VDCP mode, “Fixed” will allow for 8 Character maximum name length. Variable will allow for up to 32 characters.

Eng Setup - Ports & Devices v6.0



grass valley
A BELDEN BRAND

4 - 16

In version 6.0 VDCP (Louth) Protocol Ethernet was added to the choices available.
A choice of Generic or two popular Server control variations are provided.
Fixed or variable Name length is also available.

Eng Setup - Ports & Devices - Editor

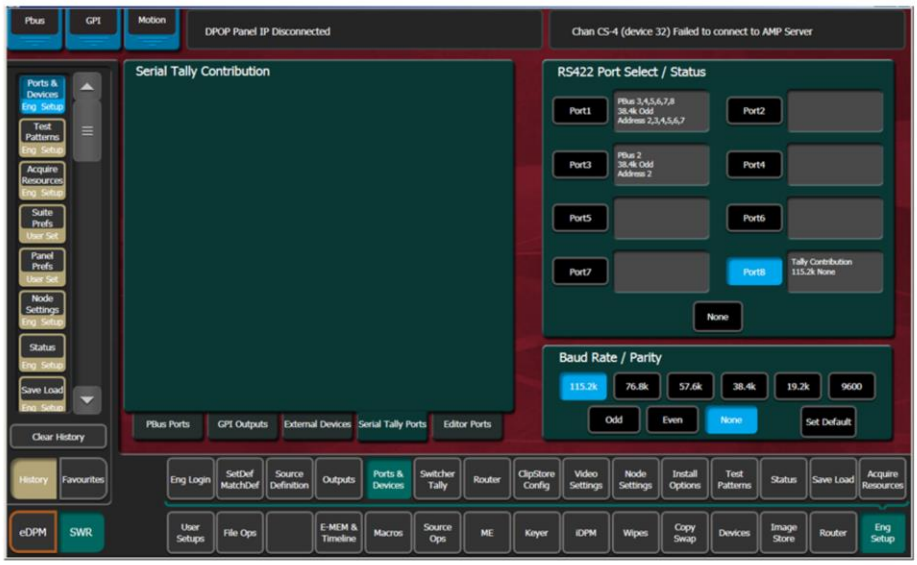
grass valley
A BELDEN BRAND

4 - 17

This menu allows one of the 8 external Serial control ports to be configured as an Editor control port for each Suite.

This uses the standard GV Editor protocol. (Refer to GV web site for details)

Ports & Devices – Serial Tally 1.5G frame



grass valley
A BELDEN BRAND

4 - 18

Serial Tally is replaced with Ethernet Tally in the 3G K-Frame.

Ports & Devices – Ethernet Tally - K-Frame 3G

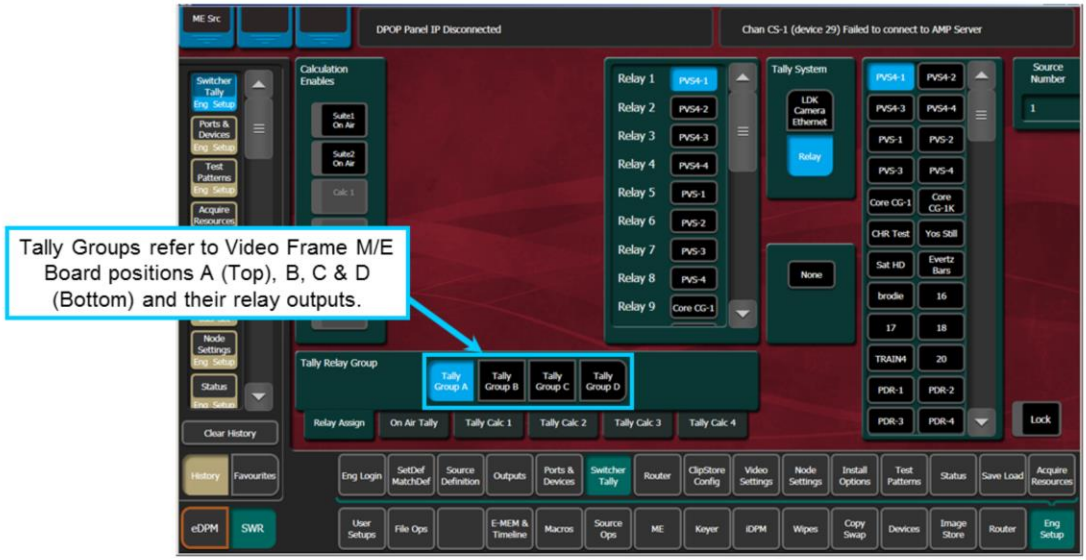
grass valley
A BELDEN BRAND

4 - 19

In addition to Relay Tally the K-Frame offers Ethernet Tally as an option.

Ethernet tally provides the ability to interface directly with external Tally information systems.

Tally Relay Assignment



4 - 20

Tally Relays are connected to the frame through multipin connectors.

Each connector supports 24 tally relays. There are 4 groups of 24, for 96 relays, on the 1.5G frame and 5 groups of 24, for 120 relays, on the 3G frame.

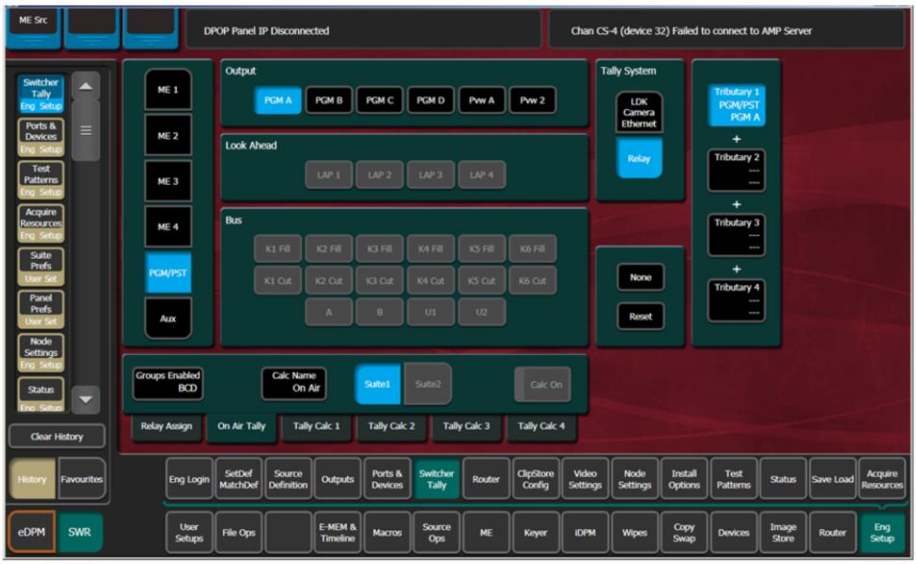
Tally groups can be assigned to different Suites.

Each Group can be controlled from the On Air Tally or 1 of 4 Tally Calculators as programmed.

Default Tally is a one to one mapping but any relay can be changed to tally any source.

The 3G K-Frame allows tally to be assigned to any source or any internal signal.

Tally On Air Assignment



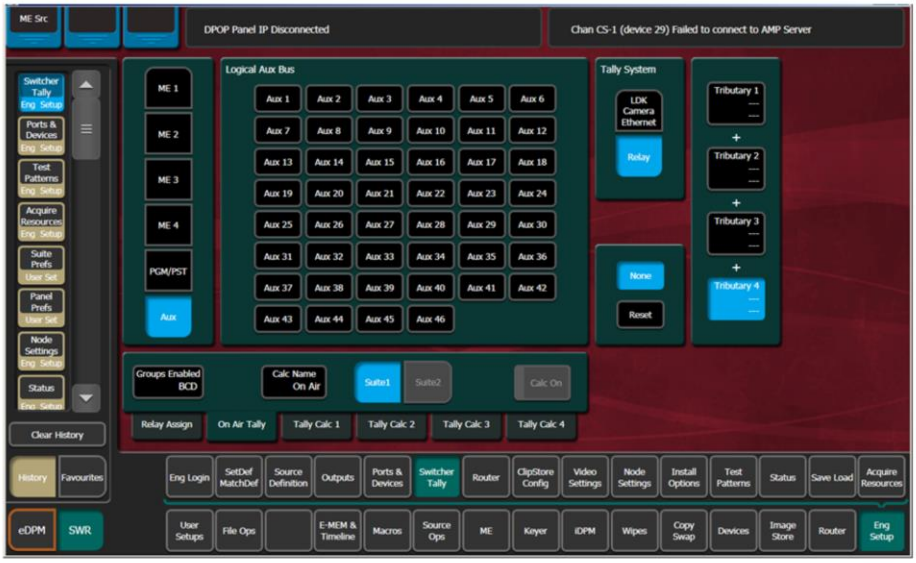
1.5G Frame Shown

4 - 21

The default On Air tally is Suite 1. Any or All of the main PGM outputs can be tallied using the 4 Tributary windows.

Tally Calculators can be configured to Tally key busses or Preview outputs.

Tally Aux Bus assignement

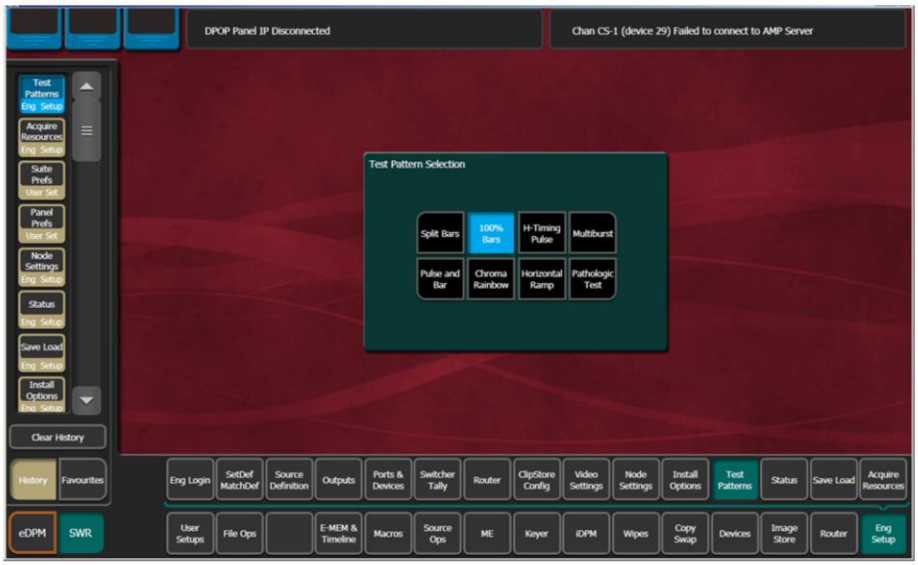


grass valley
A BELDEN BRAND

4 - 22

Aux busses can also be tallied as needed either to separate relays or in combination with an ME or Program outputs.

Test Patterns



1.5G Frame Shown

4 - 23

K Frame has 2 sets of Test Signals with some additional test patterns

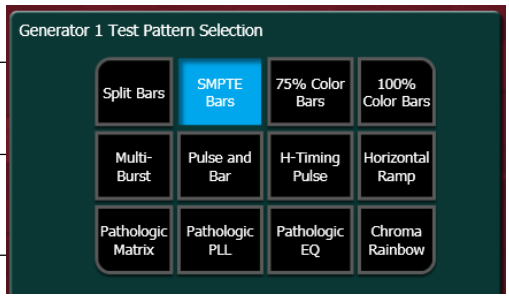
Any one of 8 internally generated Test Signals be selected as a source. This signal may be mapped anywhere like any other source, internal or external.

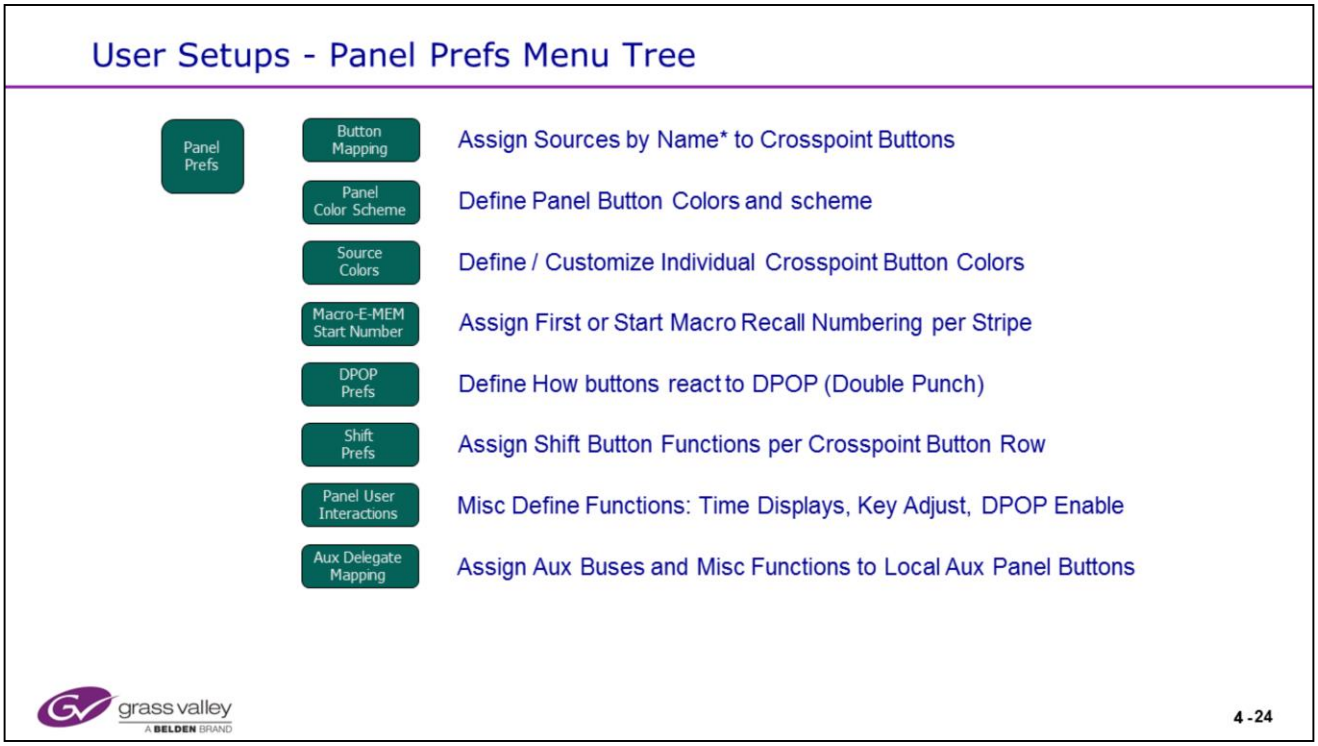
The Pathologic Test Signal (Matrix) is a 2 section signal that represents one of the hardest scrambled serial data streams for equipment to deal with.

One half of the field is a series of 20 data zeros followed by a single data one followed by 20 zeros during the active picture area. This ends up looking a lot like a square wave signal that is approximately 1/20 of the serial transport frequency. For SD, this would look like 13.5 MHz to the reclocking circuit that is running at 270 MB/s.

The other half of the field stresses input equalizers. This signal looks like 19 zeros followed by 2 ones and repeating. After a run of cable, this signal looks a lot like D.C.

K frame provides 2 independent Test Pattern generators with more selections.

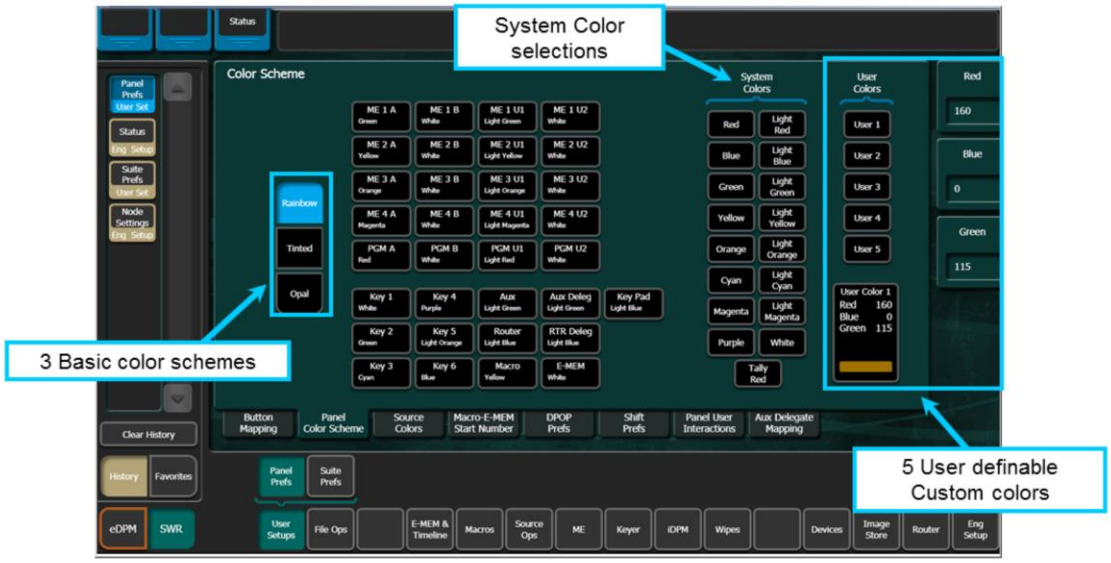




Names assigned to the Crosspoint button displays or OLEDs (Organic Light Emitting Diodes) will be Engineering (Source) Names, until other names are created in the Source Patch menu. An Eng ID number will be displayed if an Engineering Name is not created.

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.

Panel Prefs - Panel Color Scheme



1.5G Frame Shown

4 - 25

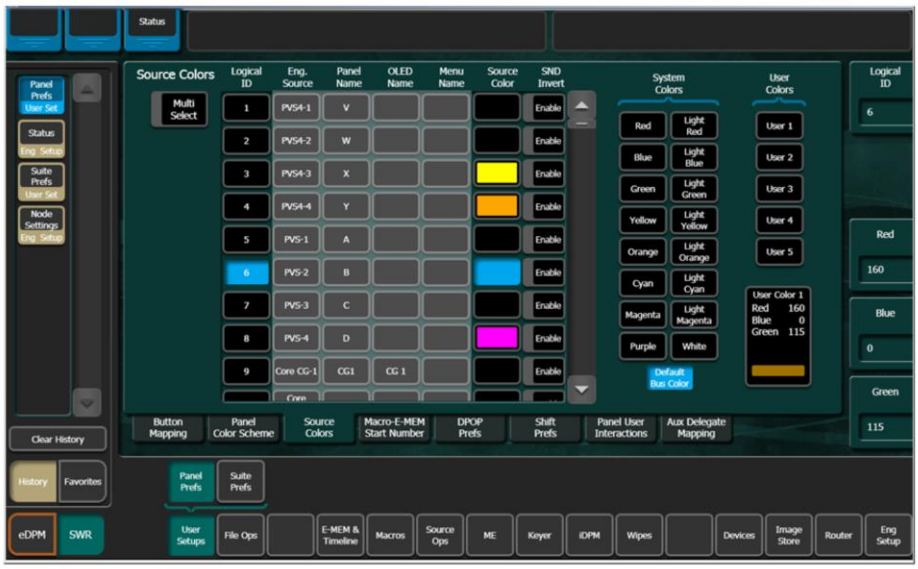
3 main color schemes are available: Opal (White Buttons), Tinted (Keys color coded) or Rainbow.

All busses can be changed to suit individual requirements regardless of the basic scheme selected.

The K Frame includes additional selectors for the C and D busses.

K Frame selector

Panel Prefs - Source Colors



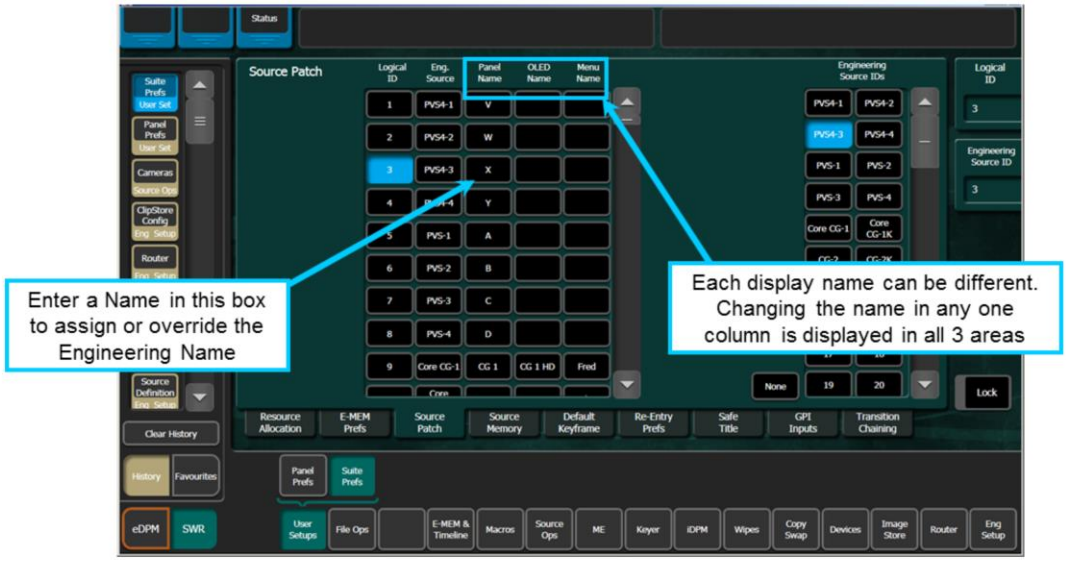
1.5G Frame Shown

4 - 26

Individual Source color assignments override the default bus colors..

5 User colors are available for customization.

Suite Prefs - Source Patch

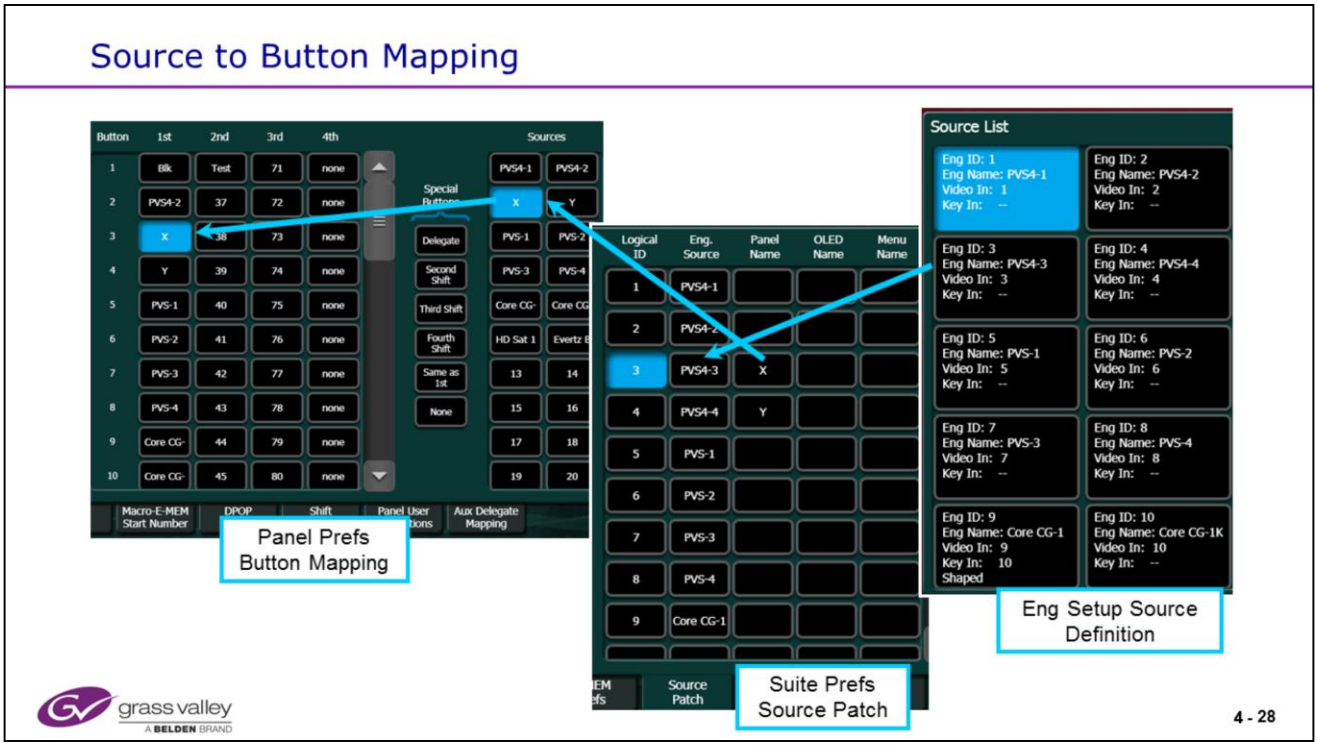


1.5G Frame Shown

4 - 27

Source Patch provides 2 functions:

1. A method for overriding Engineering names in the panel and Menu.
2. The ability to patch engineering sources into the logical ID positions.



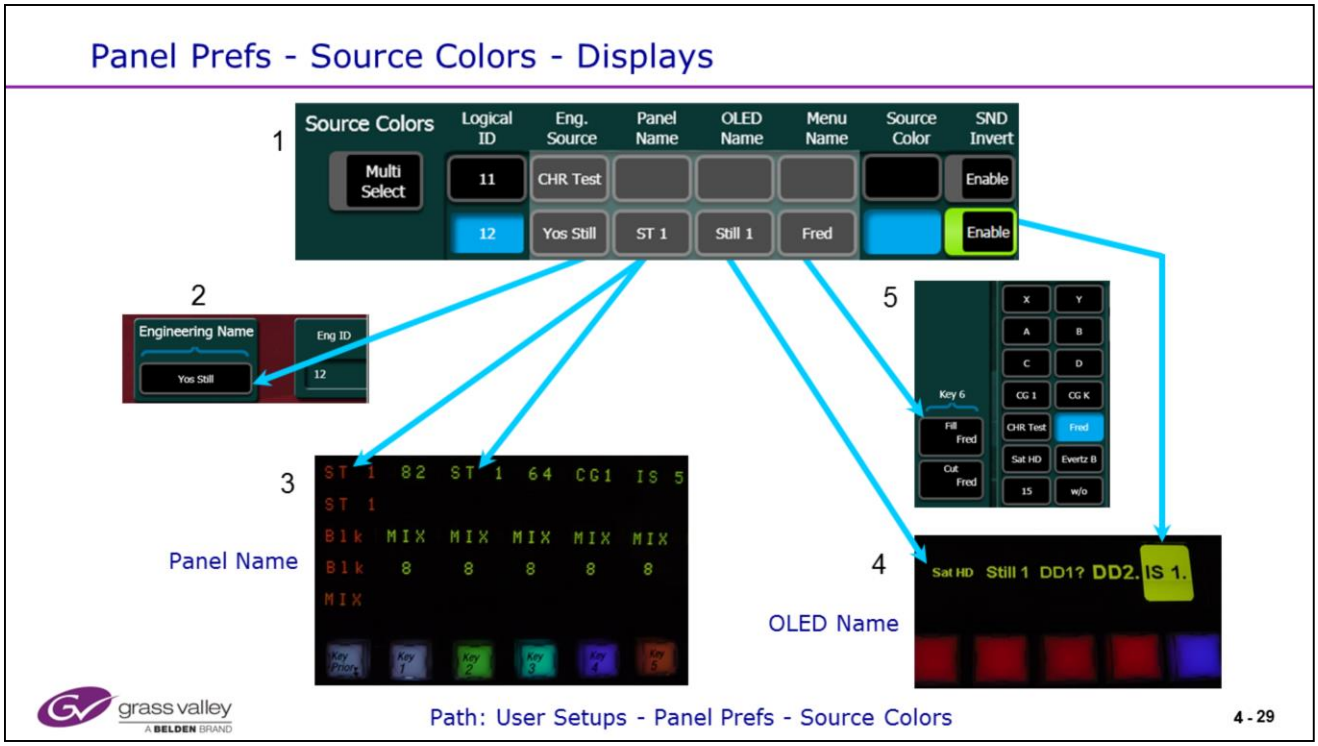
Mapping Sources to Buttons involves 3 steps

1. Define the Source information in the Eng Setup, Source Definition menu

2. Decide on any name override to be used in the panel in User Setup, Suite Prefs, Source Patch menu.

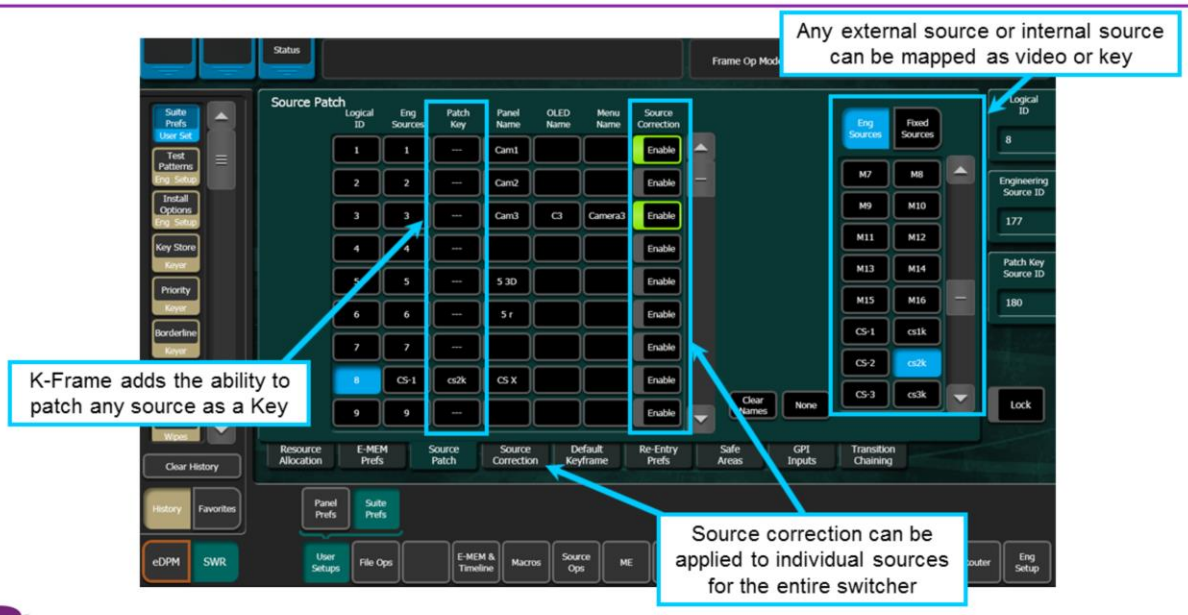
3. Map the Source to a button in the User Setup, Panel Prefs, Button Mapping menu.

4. E-Mems remember the Logical Identification number and Not the Engineering ID. This is what allows for doing the soft-patch of sources to allow “your” E-Mem to match the new switcher’s sources.



1. User Setups / Panel Prefs / Source Colors (User Setups / Suite Prefs / Source Patch).
2. Eng Setup / Source Definition.
3. Transition Module Status Display (Panel Display), 4 characters maximum.
4. Source Select Module Display (OLED Display).
5. Source Ops / MEs (or any of the Source Ops menus).

Suite Prefs - Source Patch - K-Frame

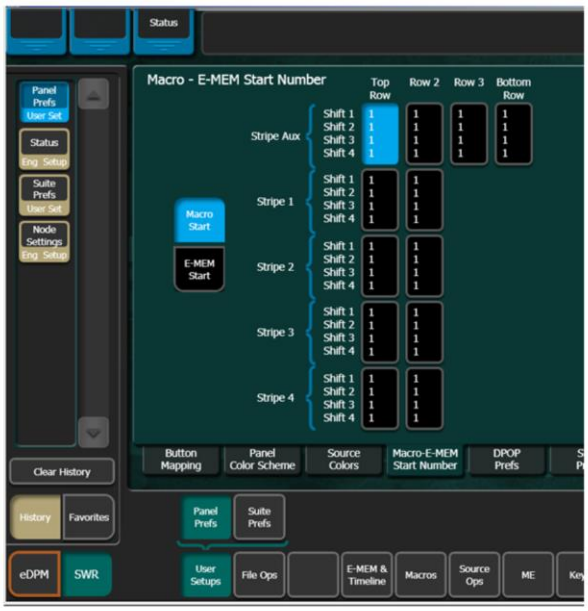


In K Frame Source Patch has 2 additional functions:

1. The ability to patch a Key signal into any source
2. The ability to turn on Source Color Correction for any source

Kayenne Panel Prefs - Macro / E-MEM Start Numbers

- This Menu sets the start number for the busses on each stripe
- Each Shifted row can have a different start number
- E-MEM and Macro selections have different settings

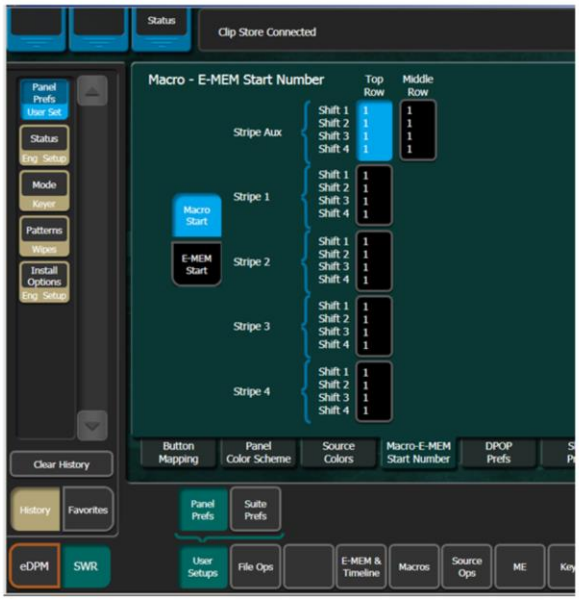


4 - 31

When used for Macros or E-MEMs the operator can set the start number of each bus row to be different.

Karrera Panel Prefs - Macro / E-MEM Start Numbers

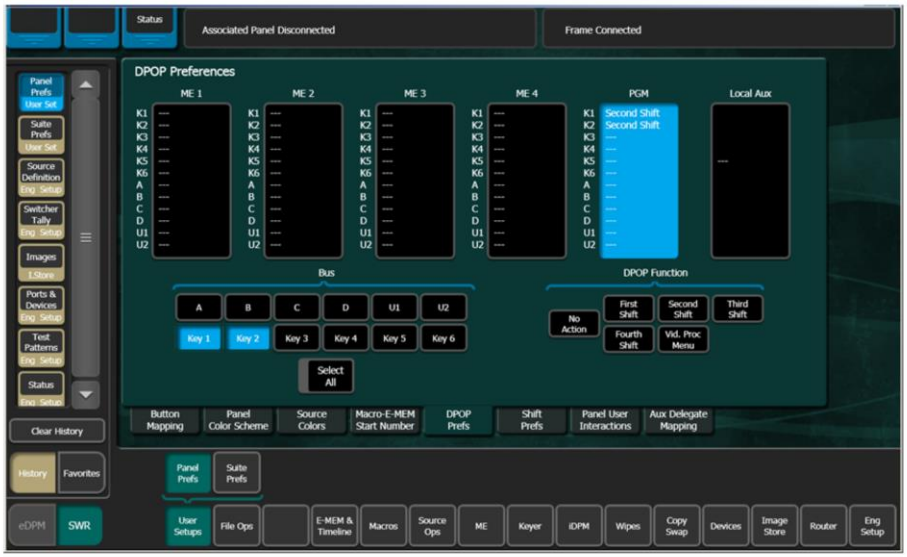
- This Menu sets the start number for the busses on each stripe
- Each Shifted row can have a different start number
- E-MEM and Macro selections have different settings



grass valley
A BELDEN BRAND

4 - 32

Panel Prefs - DPOP Prefs



grass valley
A BELDEN BRAND

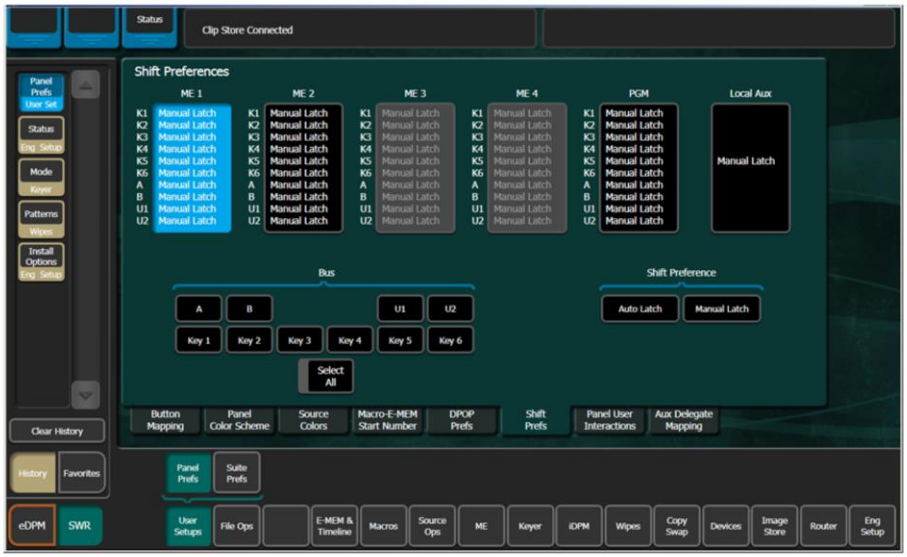
4 - 33

DPOP Prefs enables the DPOP (Double Press) function of each of the bus' rows to be set.

Functions can be different for each bus.

This shows the K-Frame (3G) selections. The 1.5G frame does not have the C and D busses.

Panel Prefs - Shift Prefs



1.5G Frame Shown

4 - 34

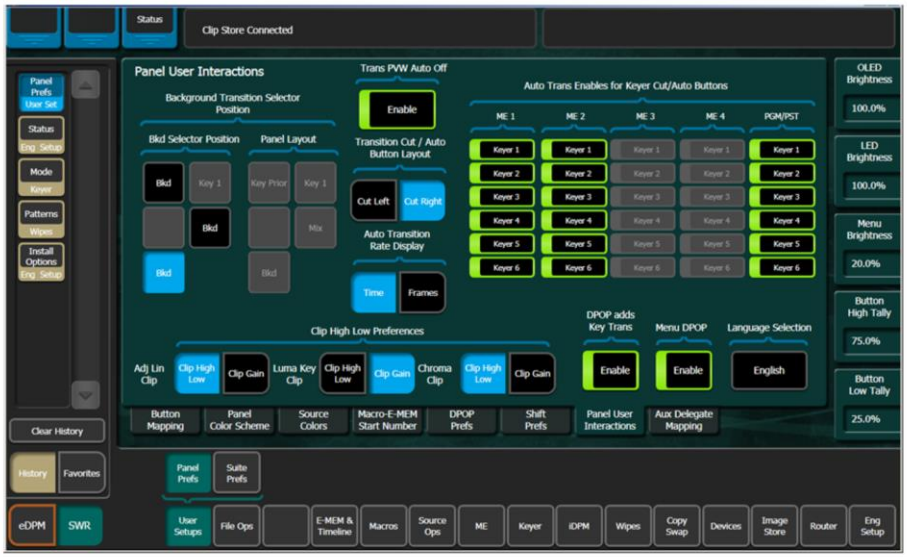
Manual latch leaves the bus in the selected shift row after a selection is made.

Double press to set the shifted row to 2nd Shift, 3rd Shift or 4th Shift (both buttons lit).

Auto Latch stays in the shifted row of the current source.

This shows the 1.5G frame. The K- Frame has the C and D busses.

Panel Prefs - Panel User Interactions



Karrera Menu Shown

4 - 35

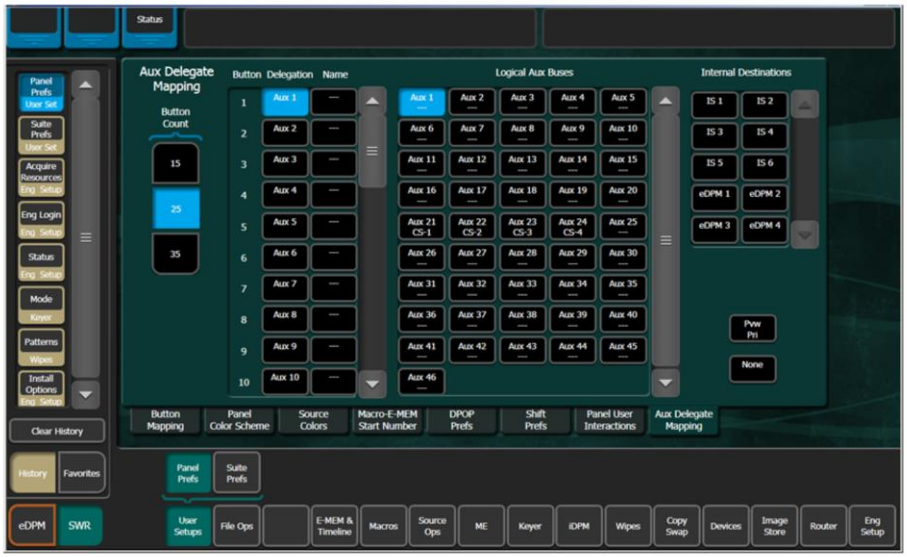
Panel User interactions allows for customized panel control and display features.

There are 3 choices for the position of the Background Button. These allow operators to customize the button to be similar to a 3/4000 or Kalypso switcher.

This shows the Karrera Panel version. The main difference is in the selection of Mix or Cut for the dedicated Keyer buttons on the panel.

On the Kayenne these are replaced with machine control selections for the MFM Dev ice Control ‘Multi’ mode

Panel Prefs - Aux Delegate Mapping



grass valley
A BELDEN BRAND

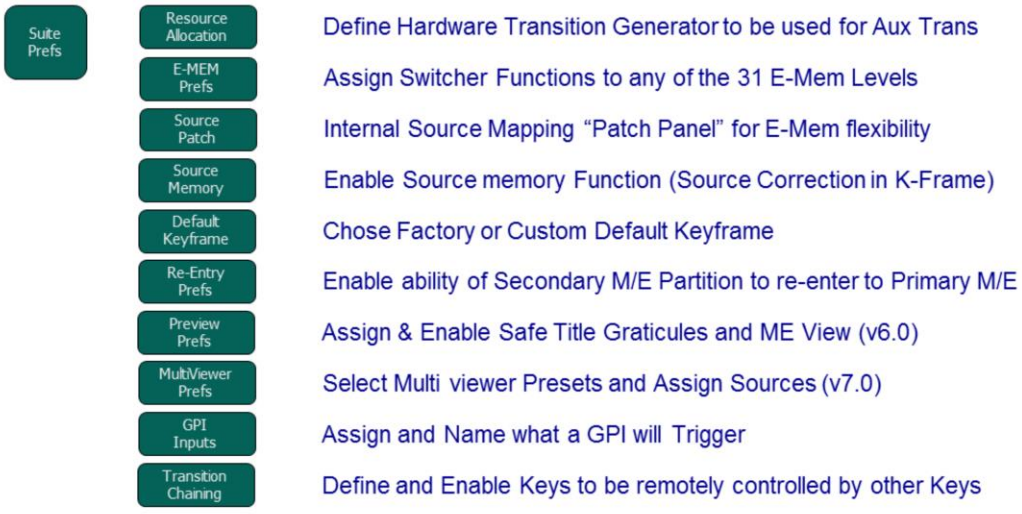
1.5G Frame Shown

4 - 36

Aux Delegate mapping enables the Aux bus selections to be either Aux Busses, Image Store inputs, eDPM inputs or Preview Primary selection.

The K-Frame has 96 Aux busses and only 2 IS channels and 2 eDPM chanels that can be mapped.

User Setups - Suite Prefs Menu Tree



The ME View feature was added as an option in v6.0

The MultiViewer Option was added in v7.0

Suite Prefs - Resource Allocation

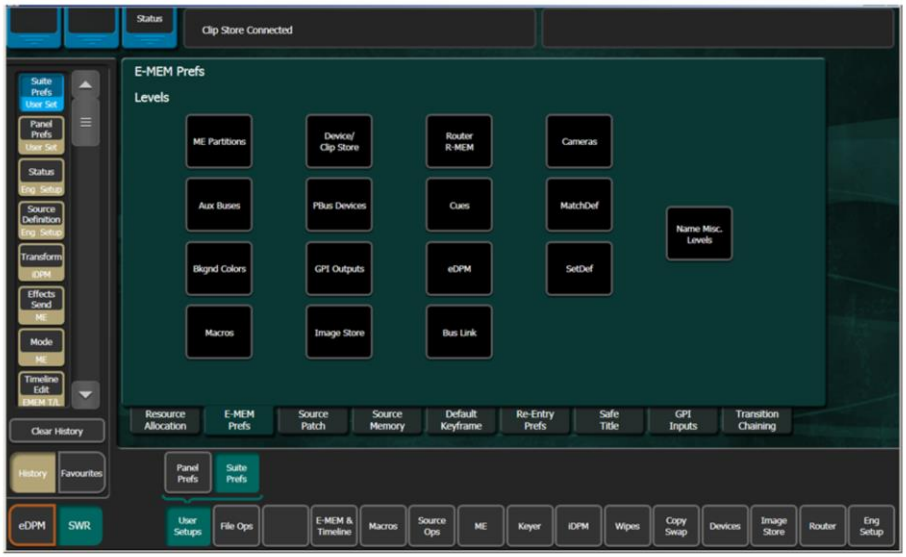
grass valley
A BELDEN BRAND

4 - 38

Resource allocation shows the status of the acquired M/E resources.

Allocation of a resource to Aux transition changes the M/E mode to Split and overrides the ME mode selection menu.

Suite Prefs - E-MEM Prefs



grass valley
A BELDEN BRAND

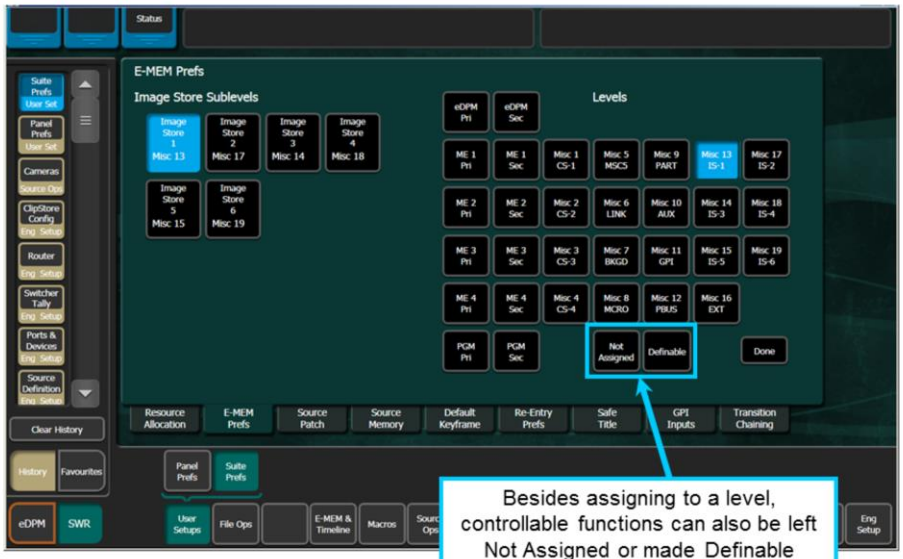
4 - 39

E-MEM Prefs allows the different switcher areas to be assigned to te E-MEM levels.

Each level can be named.

The K-Frame does not provide E-MEM control of the Set Def and Match Def options.

Suite Prefs - E-MEM Prefs – Image Store Example



1.5G Frame Shown

4 - 40

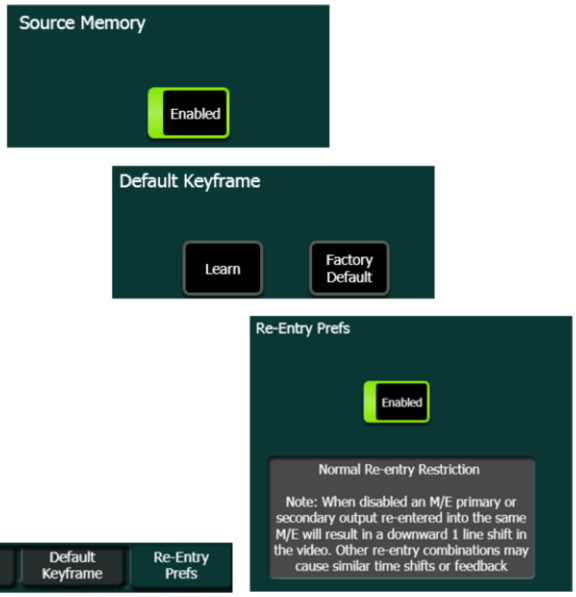
E-MEM control can be assigned to any Level button, left ‘Not Assigned’ to an E-MEM level or made Definable.

Definable allows the control to be defined in the E-MEM Timeline menu.

The K-Frame has 10 channels of Image Store that can be assigned to E-MEM level buttons.

Suite Prefs - Source Memory, Default KF and Re-Entry

- Source Memory can be set on or off for this Suite (1.5 G frame)
- The Default Keyframe can be either the Factory Default or any setup that is Learned.
  - The Default keyframe is recalled from the Master E-MEM module or menu when the Clear Working Buffer (CWB) button is pressed.
  - The CWB operation is determined by the Master E-MEM levels enabled.
- Re-Entry of one M E into another M E is normally restricted to prevent circular re-entries (i.e. M E1 into M E2 into M E1) but can be disabled for certain operations



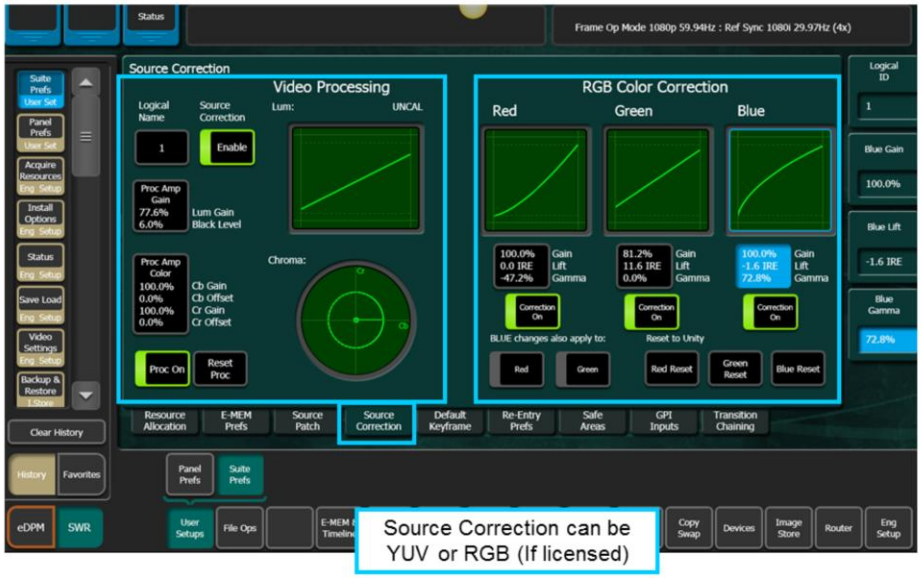
grass valley
A BELDEN BRAND

4 - 41

The Source Memory tab is replaced by the Source Correction tab in a K-Frame (3G) system.

Source Memory is implemented differently in K-Frame systems.

Suite Prefs - Source Correction - K-Frame

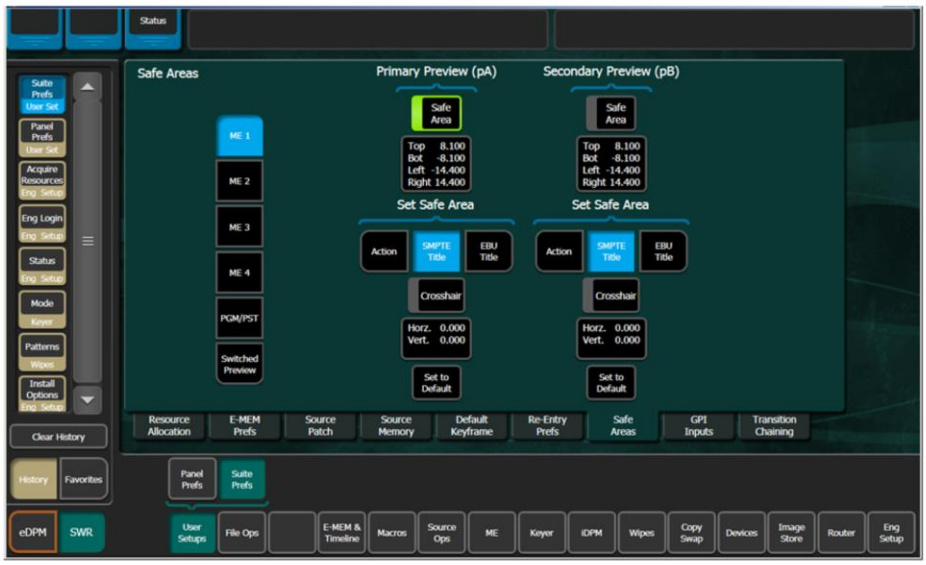


grass valley
A BELDEN BRAND

4 - 42

Source Correction allows Video processing or RGB Color Correction (option) to be applied to the selected source for the entire switcher.

Suite Prefs – Safe Title – v 5.0



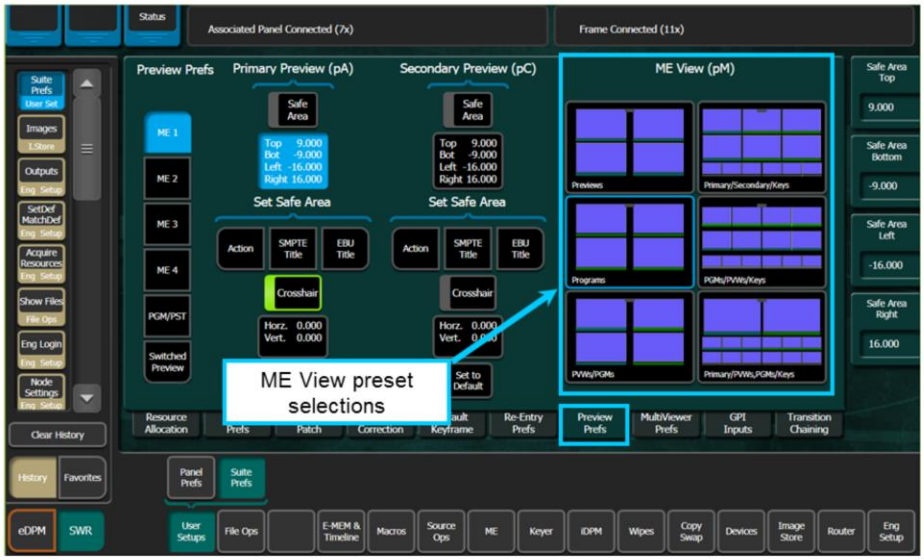
grass valley
A BELDEN BRAND

4 - 43

Safe Title can be displayed on Preview Outputs for any M E, Primary or Secondary Partitions.

Safe Title may be set to default or normal parameters or set to specific user values.

User Setup – ME View v6.0



grass valley
A BELDEN BRAND

4 - 44

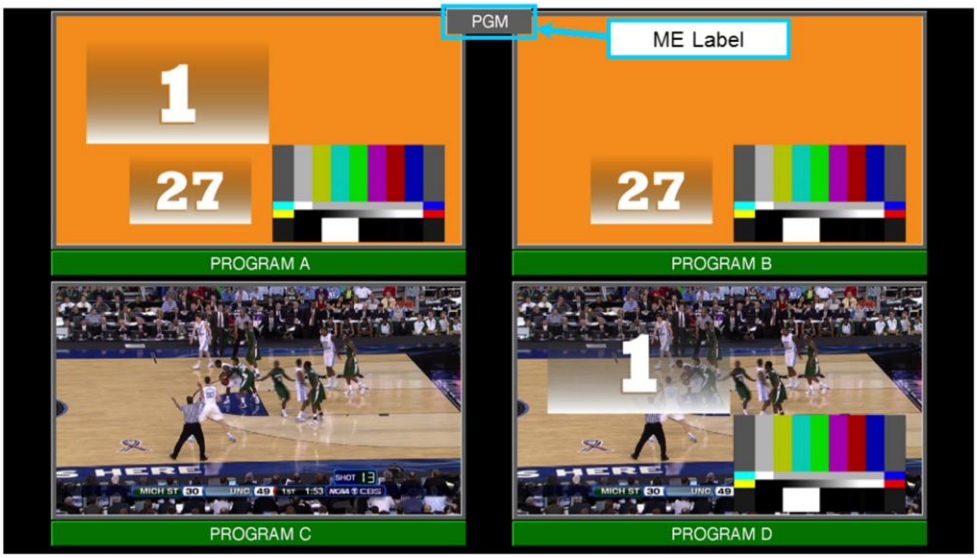
In Software version v6.0 the ME Viewer option was added. In v7.0 the name was changed to ME View to help reduce confusion with the Multi Viewer.

This adds control of the pM output from all of the MEs.

This selectable output is available as a signal to be selected to any Switcher output.,

6 User selectable Preset choices of layout are provided

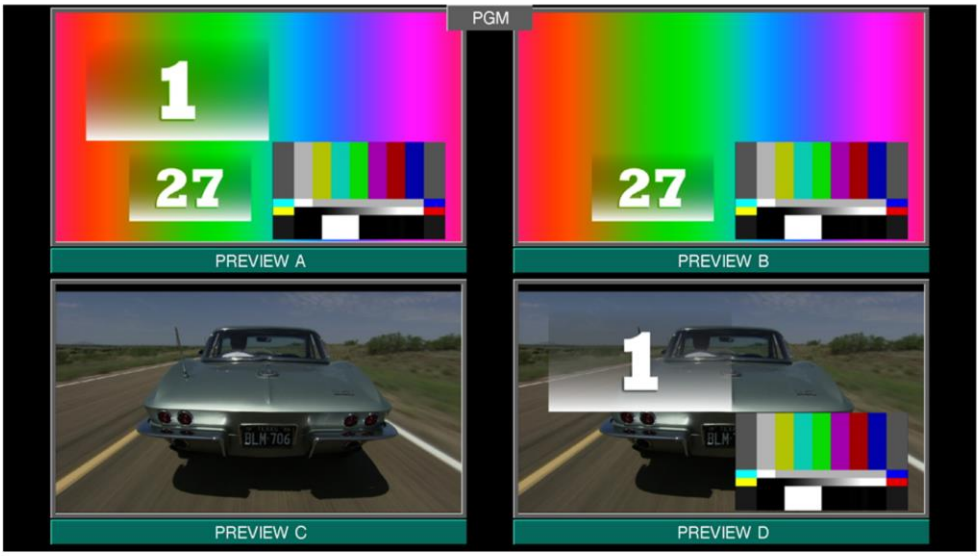
ME Viewer Output (1) ME Programs



grass valley
A BELDEN BRAND

4 - 45

ME Viewer Output (2) ME Previews



grass valley
A BELDEN BRAND

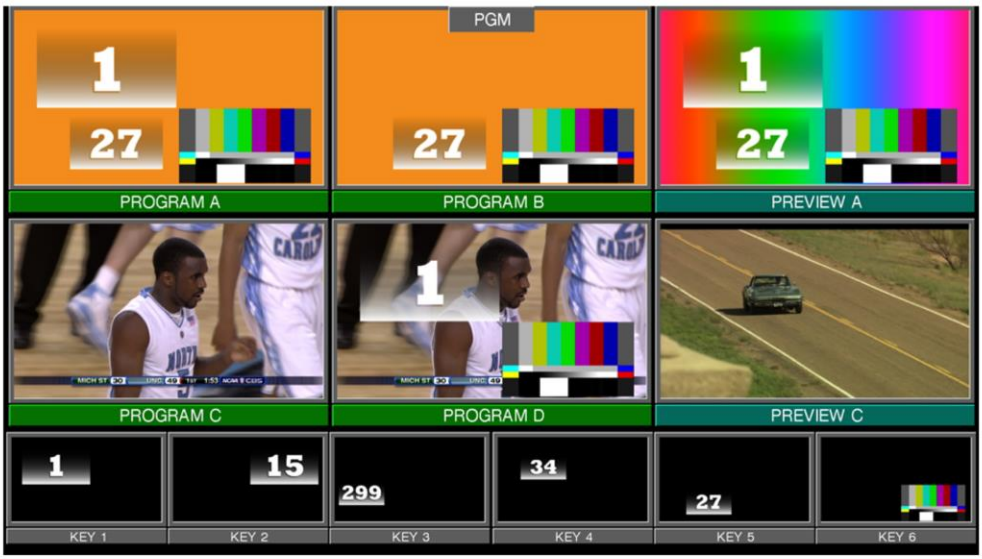
4 - 46

ME Viewer Output (3) ME Pri/Sec - Pgm/Pvw

grass valley
A BELDEN BRAND

4 - 47

ME Viewer Output (4) ME Pgms, Pvws and Keys



grass valley
A BELDEN BRAND

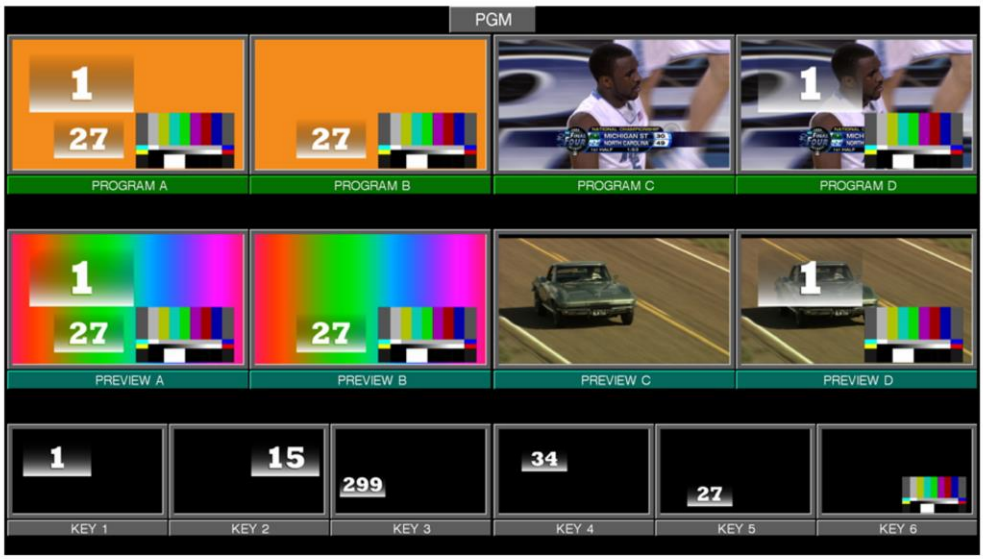
4 - 48

ME Viewer Output (5) ME Pgms, Pvws and Keys

grass valley
A BELDEN BRAND

4 - 49

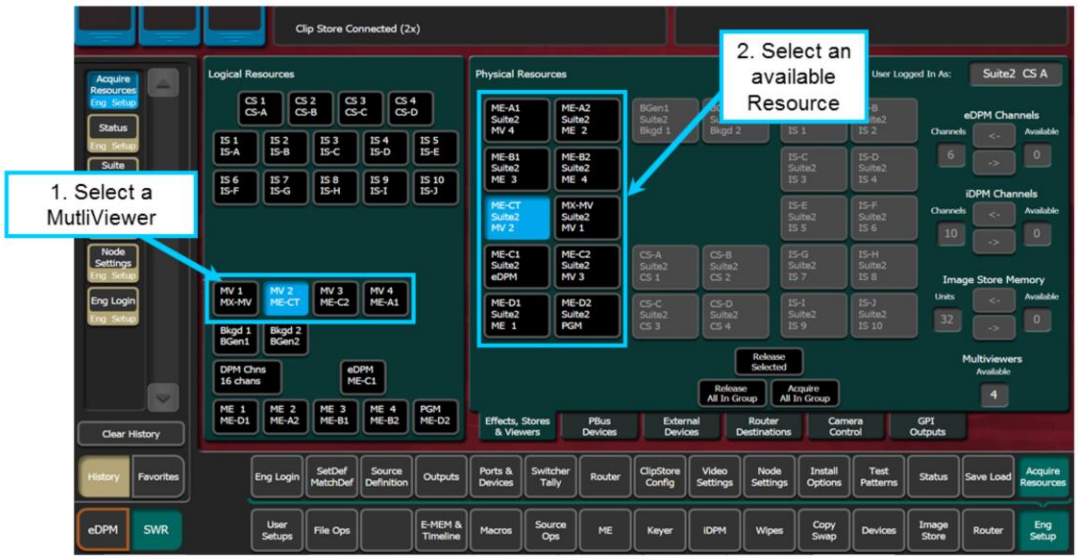
ME Viewer Output (6) ME Pgms, Pvws and Keys



grass valley
A BELDEN BRAND

4 - 50

User Setup – MultiViewer v7.0



grass valley
A BELDEN BRAND

4 - 51

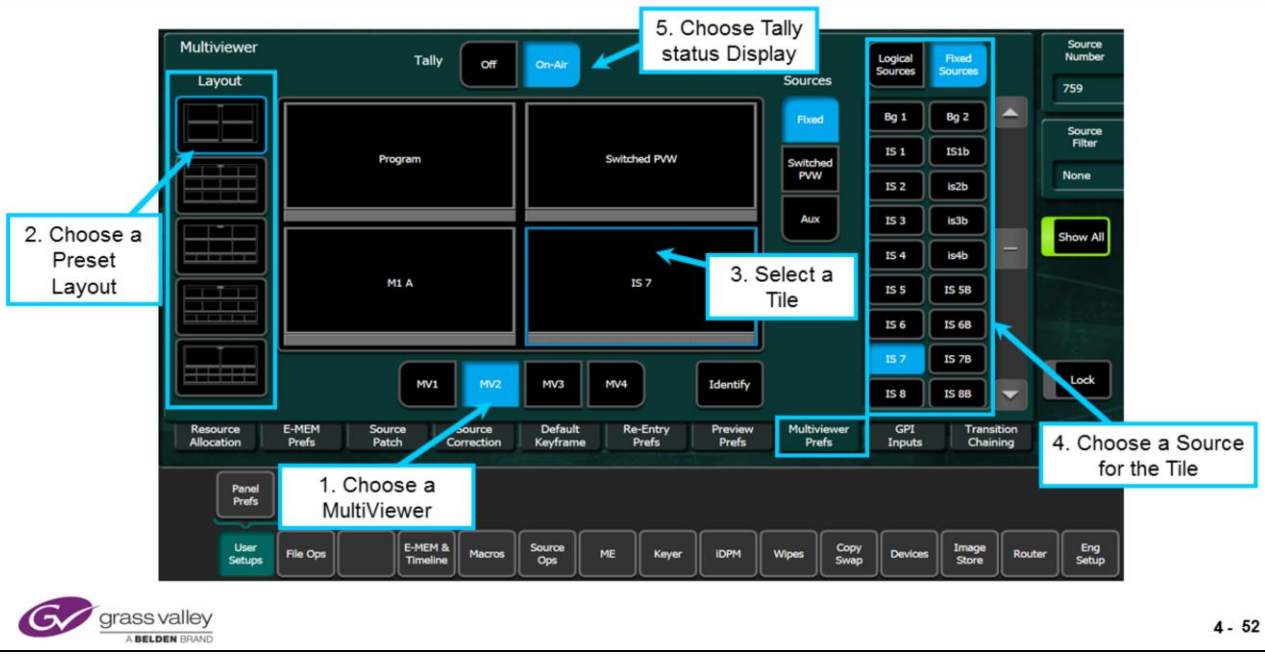
The MultiViewer has to be assigned an ME resource and be licensed before it can be used. Only available on K-Frame.

The MultiViewer hardware MX-MV is located on the Large K-Frame only and can only be used as a MultiViewer.

Any ME can be used as a MultiViewer as long as there are licenses and hardware available.

Hint if you need 2 MultiViewers in the large frame use the Controller ME as the second one as it does not have iDPM capability.

User Setup – MultiViewer v7.0



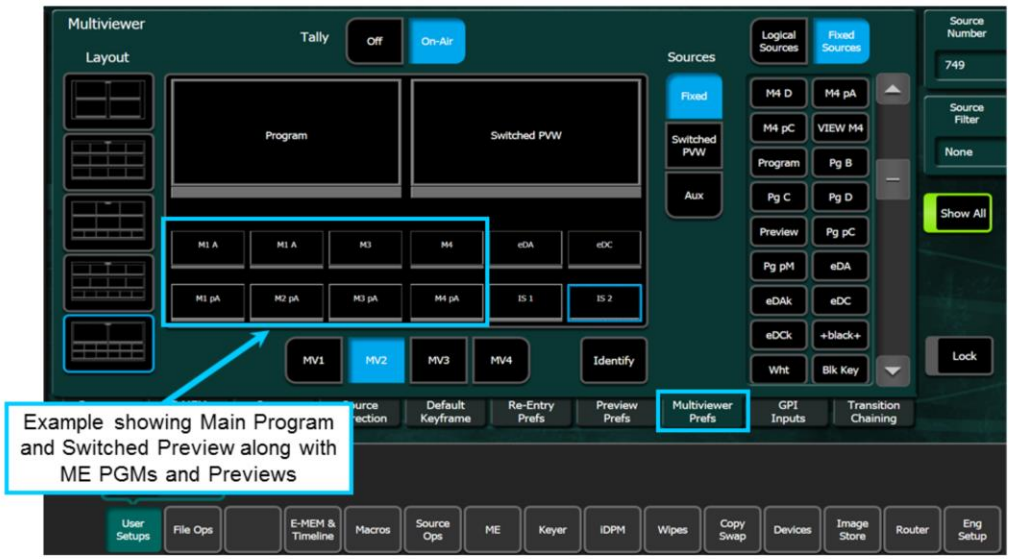
In Software v7.0 the Multi Viewer Option was added.

This requires an ME to be assigned to be used as the MultiViewer and a License to enable it.

A layout is first chosen from the preset selections available and then the sources to be displayed are selected from the logical or fixed list for the individual screen sections.

The Display Tally indications can also be disabled if needed.

User Setup – MultiViewer v7.0

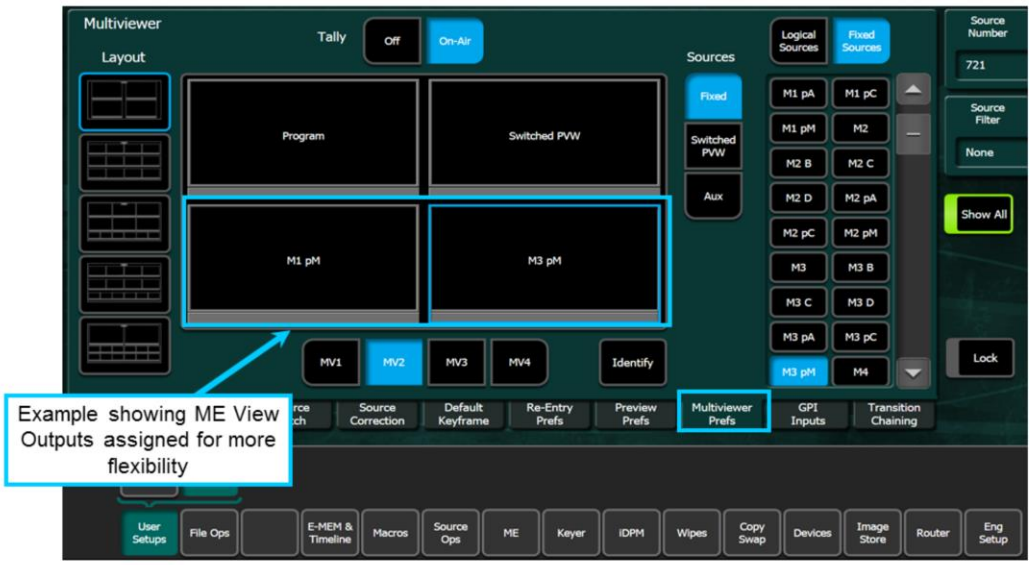


grass valley
A BELDEN BRAND

4 - 53

A typical example showing ME PGM and Preview outputs assigned to the tiles to give the TD access to the most often needed images.

User Setup – MultiViewer v7.0

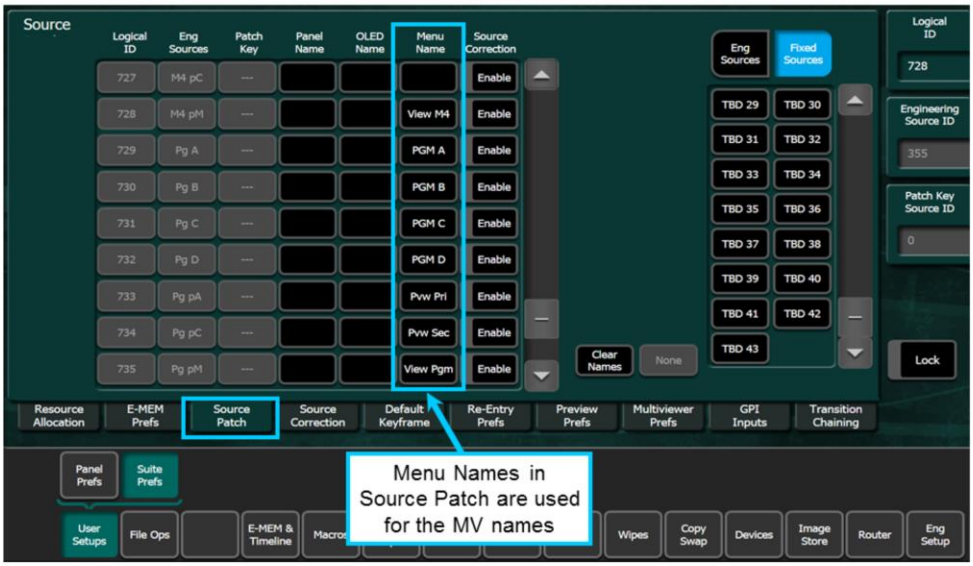


grass valley
A BELDEN BRAND

4 - 54

The ME View outputs can also be mapped to any tile increasing the flexibility of the signals available for the MultiViewer tiles.

User Setup – MultiViewer v7.0



grass valley
A BELDEN BRAND

4 - 55

The Menu names in the Source Patch menu are used for the MultiViewer Displays. This allows the user to rename the default names in the displays.

Suite Prefs - GPI Inputs

grass valley
A BELDEN BRAND

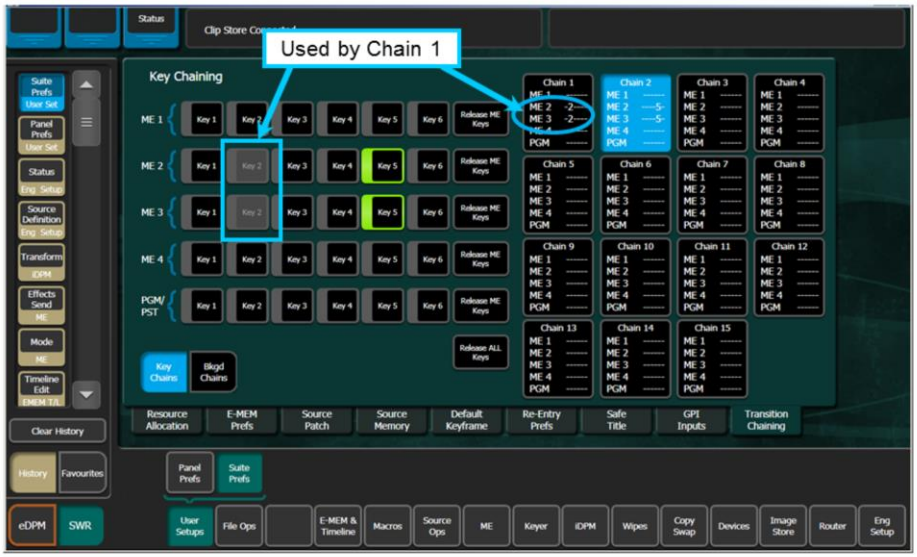
4 - 56

GPI inputs can be set to control Macros, Recall E-MEMs, Select Sources, Trigger Transitions or Run the current effect.

Each Action type will change the right half of the menu for correct selection. The above display shows a GPI trigger that will Take the Source “X” to the B Bus of M/E 1.

The normal Action state is “GPI IN Disabled”.

Suite Prefs – Transition Chaining – Key Chains



grass valley
A BELDEN BRAND

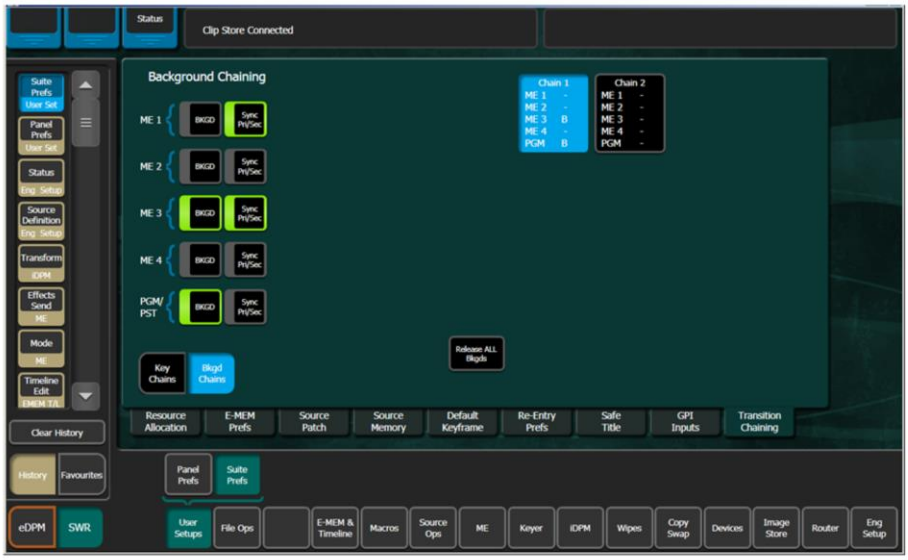
4 - 57

Select the Chain Number you wish to create. There are 15 chains available.

Select Keys to be linked within that chain.

"Release All Keys" is a very important function to remember when working with your show files!

Suite Prefs - Transition Chaining - Background Chains



grass valley
A BELDEN BRAND

4 - 58

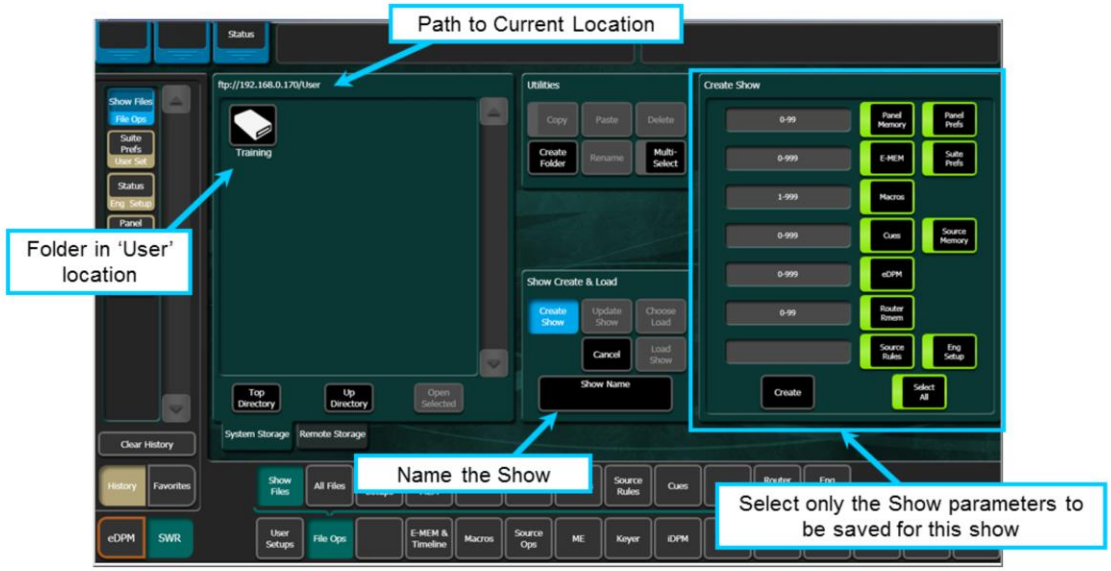
Select the Chain Number you wish to create. There are 2 chains available.

Select an M/E background to link to another.

Primary and Secondary Partition Backgrounds may also be synchronized. This may be done with or without a link to another M/E.

"Release All Bkgds" is a very important function to remember when working with your show files! This will NOT remove the Partition Synchronization.

File Ops - Show Files



grass valley
A BELDEN BRAND

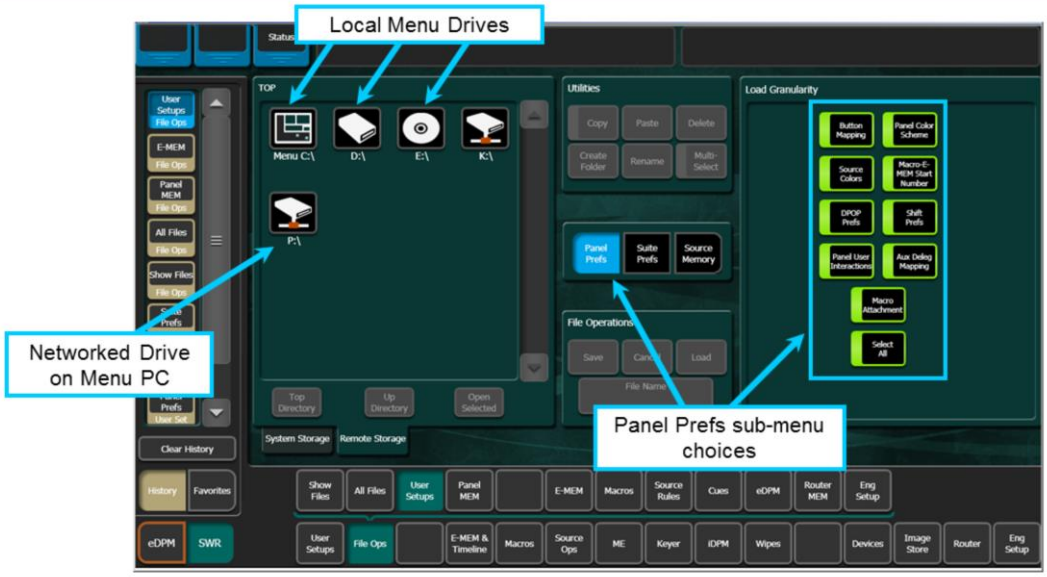
4 - 59

File Ops provides the ability to store settings either locally (Kayenne 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 - User Setups



grass valley
A BELDEN BRAND

4 - 60

User Setups allows for storing individual group settings within the User Setups. The Panel, Suite and Source Memory groups are divided based on the individual sub menus in each group.