ClipStore (Image Store Clips)

The *ClipStore* is being introduced with Kayenne 2.0. By seamlessly integrating the K2 Summit/Solo technology into Image Store, you can now record and play clips with audio. The Summit provides four Video/Key channels while the Solo provides two.

- The ClipStore is supplied to record and playback with AVC-Intra 100 compression format. Clips imported in DVCPRO HD, DVCPRO 25/50, DV, and MPEG-2 will play natively.
- The ClipStore supports embedded audio only. The AES inputs and outputs are not used.

The ClipStore is completely configured and controlled from the Kayenne menu and control panel. There is no need to use the built-in AppCenter Elite software. In fact, if changes are made to the ClipStore using AppCenter, they will be overwritten by the switcher the next time it sends a configuration to the ClipStore.

This highly integrated solution provides several powerful features, including:

- Fast access to clips and folders,
- Large storage capacity,
- Non-volatile memory—no loss of images due to power failure,
- Clip control from the Kayenne Menu Panel and clip stack control from the Kayenne Control Panel,
- ClipStore device controls (including macros and cues) are E-MEMable, and
- Make sub-clips from clips and build composite clips with audio.

Summit/Solo Software Version

Version 7.2.7.1403 is the current version of the AppCenter Elite software for the ClipStore server, as of the release of this manual. The latest version of the server software is available on the Kayenne Software Download site.

CAUTION Do not use AppCenter Elite software for ClipStore from the Summit/Solo server website as it may not be compatible.

For more information about installing and updating AppCenter Elite software, see the Summit/Solo manuals.

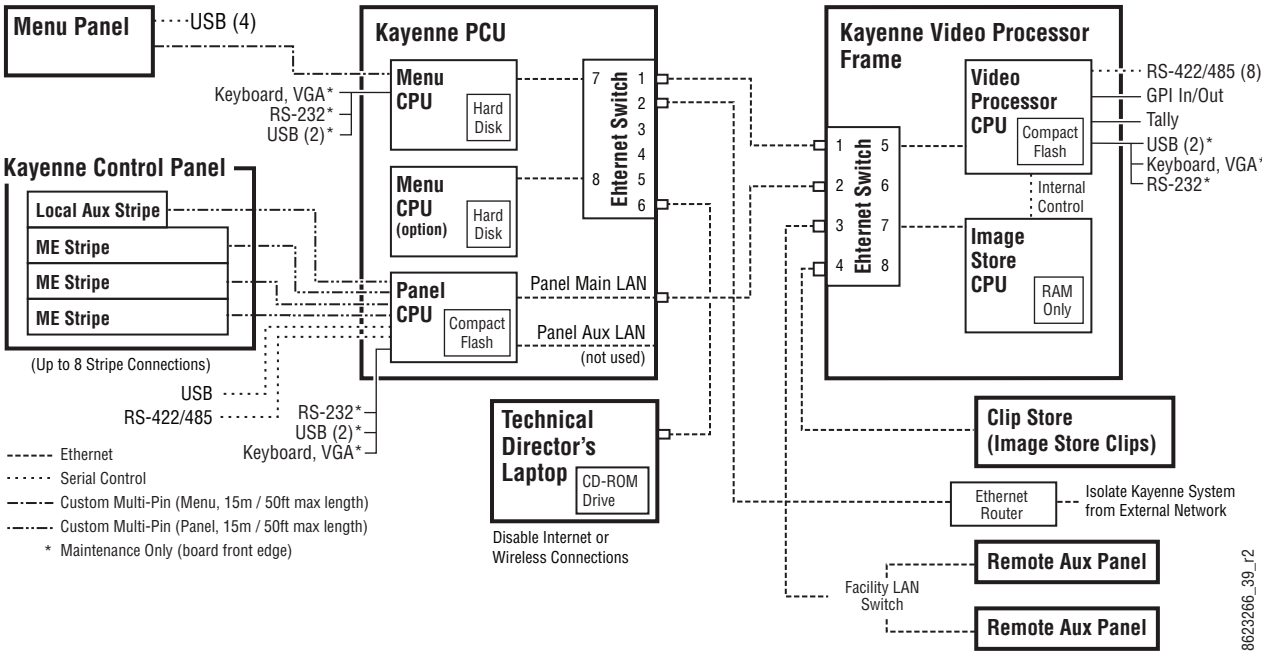
System Cabling

Overview

The Kayenne system uses an Ethernet connection for communications with ClipStore (K2 Summit/Solo, Figure 1). Connect an Ethernet cable from the Kayenne Frame to the bottom left (of the four) 100BT/1000BT Ethernet ports on the Summit/Solo backplane.

Note For a detailed cabling description, see the K2 Summit/Solo manuals included in the packaging.

Figure 1. Kayenne System Communications Overview



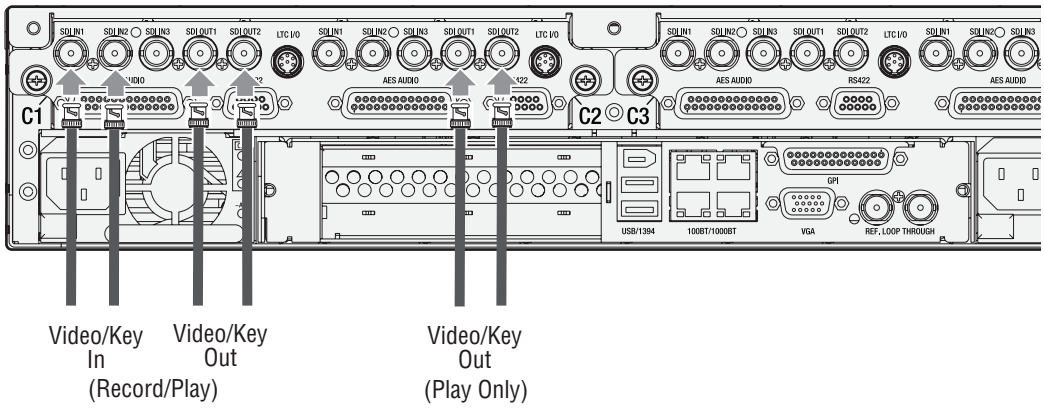
Video Cabling

The ClipStore channels on the server backplane are labeled C1-C4 (Channel 1 through Channel 4 on the Summit) from left to right (Figure 2). The Solo backplane is not labeled, Channel 1 is on the left and Channel 2 is on the right when facing the backplane.

ClipStore requires SDI connections for both video and key— two connections In/Out per channel (C1 in Figure 2) for recording and playback. For

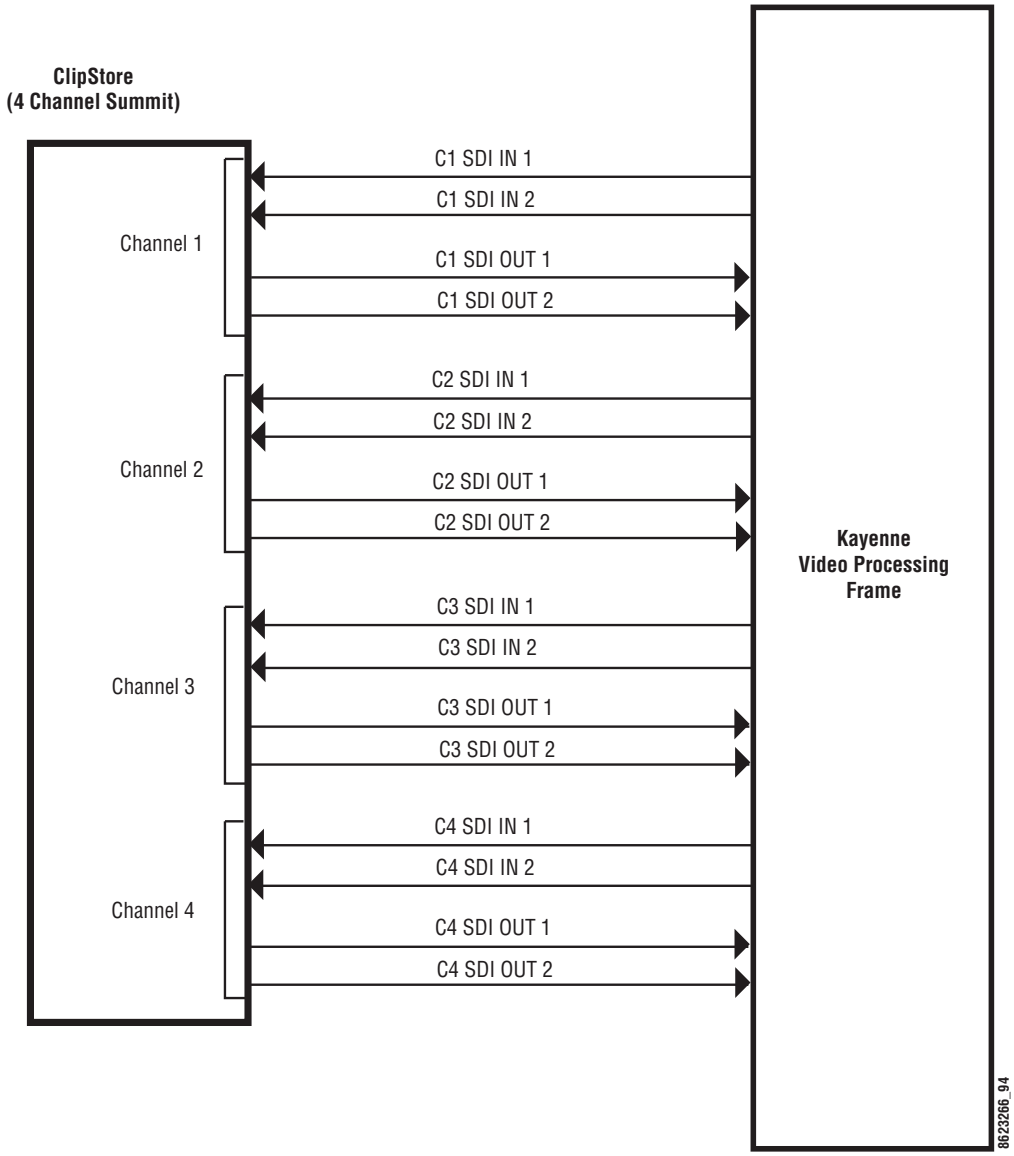
playback only, two SDI connections to Out 1 and Out 2 are all that is required per channel (C2 in Figure 2).

Figure 2. ClipStore Backplane Connections



The ClipStore server (4-channel Summit/2-Channel Solo) can be connected directly to the frame (Figure 3). It is also possible to connect to the ClipStore directly from a router and not use any switcher outputs.

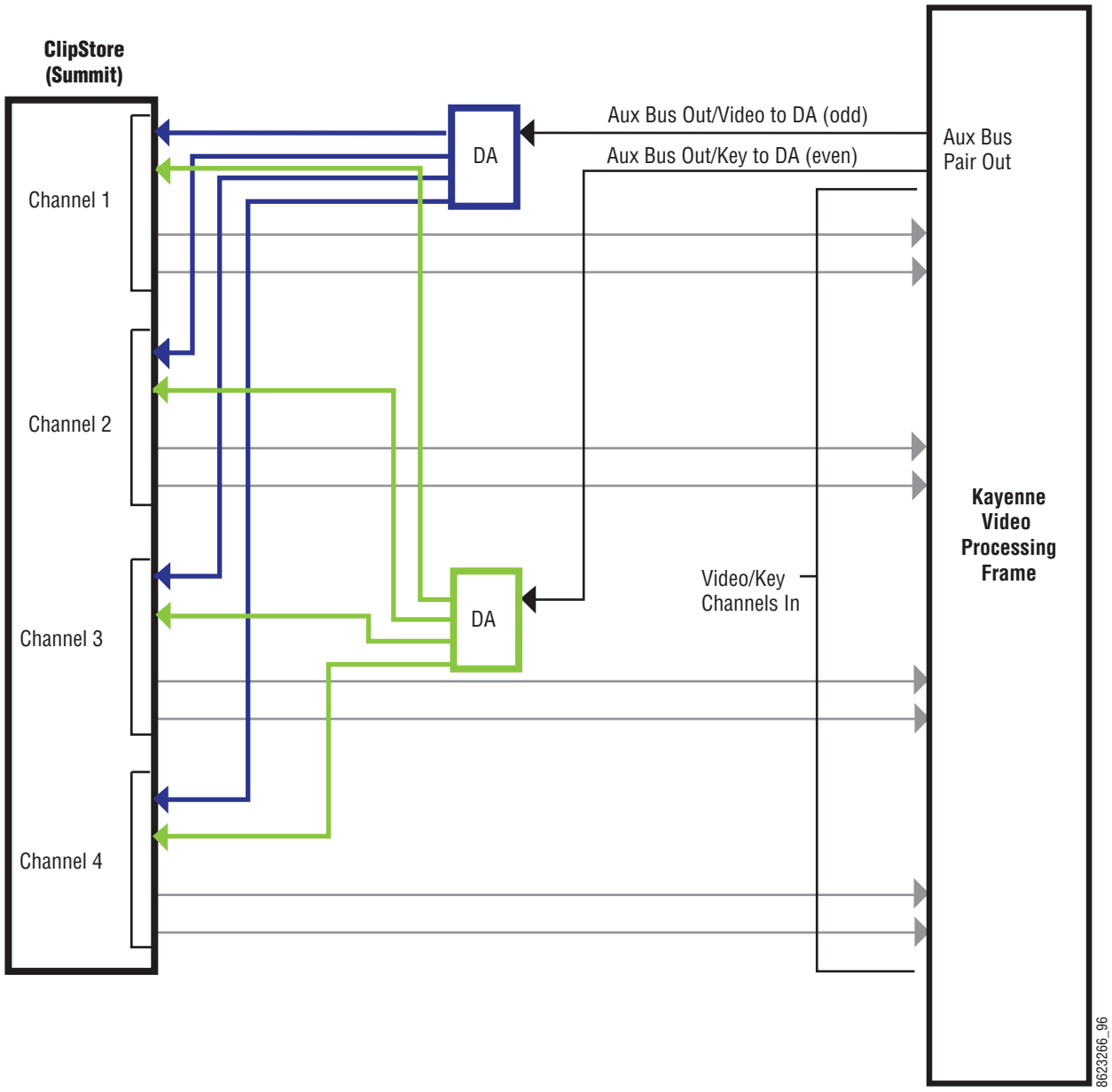
Figure 3. ClipStore Direct Connection



Odd numbered outputs are used for fill and even are used for cut. The first output assigned to a ClipStore channel must be an odd numbered output.

Also, DAs (Distribution Amplifiers) can be used to distribute Kayenne Aux Bus output. The example in Figure 4 shows DAs being used for both the Video and Key Aux Bus outputs from the frame.

Figure 4. ClipStore Connection Using Distribution Amplifiers



Basic Configuration

ClipStore basic configuration includes preparing the Summit/Solo and Kayenne systems through licensing, IP addressing, software installation, cabling, and Kayenne menu configurations.

Summit Preparation

Setting the IP Address

The ClipStore Summit/Solo server is shipped with the following defaults:

- IP Address: 192.168.0.180
- Mask: 255.255.255.0
- Gateway: 192.168.0.1
- WINS: disabled (0.0.0.0)
- DNS: disabled (0.0.0.0)

You can temporarily change the default settings using Netconfig (see the *NetConfig Network Configuration Application Instruction Manual* at www.grassvalley.com).

To set a new IP Address at the ClipStore (Summit/Solo) server, see *Setting the Summit/Solo IP Address* *on page 109*.

The NetConfig Network Configuration Tool is installed as part of the Kayenne software.

Note Make note of the ClipStore IP Address, it will be used later to enable ClipStores as external devices later in the Kayenne configuration process.

Kayenne System Preparation

Install Kayenne Software Version 2.0 or Later

Verify that the Kayenne software is version 2.0 or later. For information about upgrading Kayenne software, see *Kayenne Software Update* *on page 114*.

Install the ClipStore license (Figure 5). The following are the Kayenne ClipStore options (see the *Kayenne Installation and Service Manual* for more about licensing):

- KAYN-CLPS-2CH-PAK (2-Channel Solo Server Platform)
- KAYN-CLPS-4CH-PAK (4-Channel Summit Server Platform)

Figure 5. ClipStore License

Kayenne Configuration

Configuring ClipStore as a Node

ClipStore must be configured as a node in the Eng Setup, Node Settings menu before the Kayenne system can communicate with the Summit/Solo ClipStore server.

1. Verify there is a valid network connection.
2. Go to the Node Settings menu by touching **Eng Setup**, **Node Settings**, **Frame Suite Nodes & ID** (Figure 6).
3. Input a valid IP address for the ClipStore server by touching the **ClipStore IP Address** data pad, typing the address, and touching **Enter** (Figure 6).
4. Touch the **Enable** button (Figure 6).

   The Enable button allows communication between the Kayenne and the ClipStore server and highlights green indicating a proper connection. Red will show no connection and yellow shows that some channels are connected. For both red and yellow indications, ensure that channels are in AMP mode and available for remote control. Other troubleshooting may be required.

Figure 6. ClipStore Node Settings

Configuring Source Definitions

To configure source definitions for ClipStore return outputs, choose a source, a source type, an input, and in the case of a key, an Engineering Name for the source if desired.

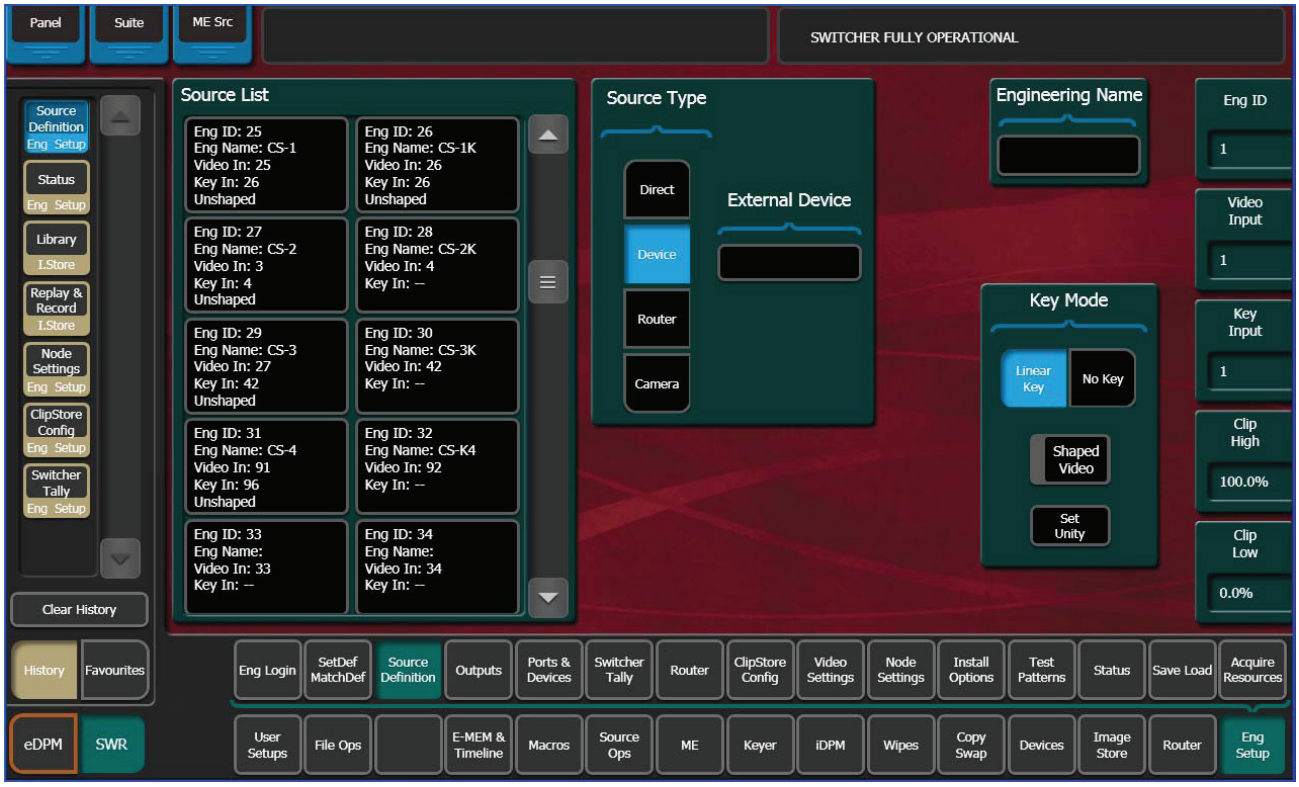
The following example demonstrates the configuration of a Summit with four ClipStore channels. In this example the physical BNC connections from the ClipStore to the Kayenne Frame are Inputs 25-32.

ClipStore can record Video only, Key only, or Video/Key clips. To do this, both a video and a key for the video must be configured for each ClipStore channel.

To configure a source for as a ClipStore Video input:

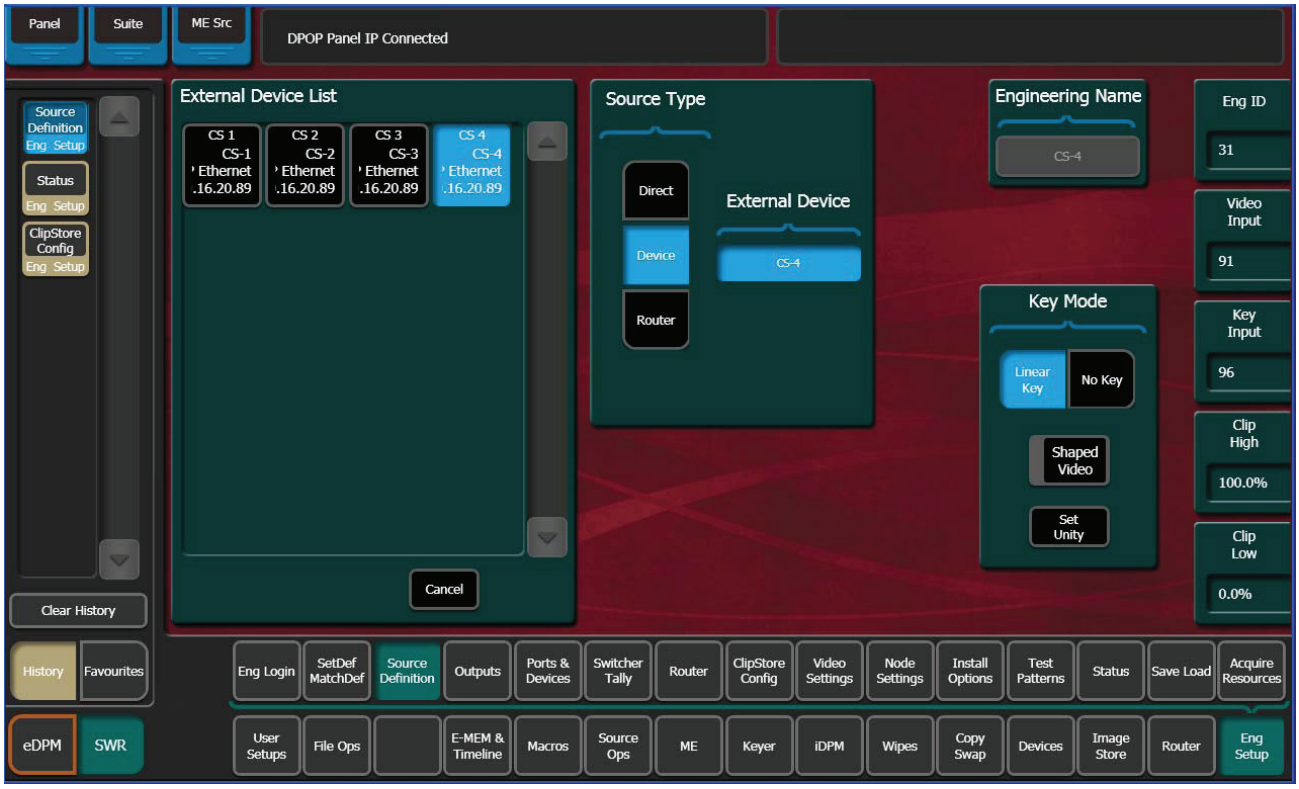
1. Go to the Eng Setup, Source Definition menu (Figure 7).

Figure 7. ClipStore Source Definition



2. From the Source List, touch a source (Figure 7).
3. Use the default video input (Video In:) or change it using the **Video Input** data pad.
4. Touch the Linear Key button to select it.
5. Use the **Key Input** data pad (or soft knob) to select the source number of the Key source you will use for the ClipStore channel.
6. Configure the Source Type:
   a. Touch the **Device** mode button in the Source Type pane (Figure 8).
   b. Touch the **External Device** data pad, the External Device List is displayed (Figure 8).

Figure 8. ClipStore External Device List



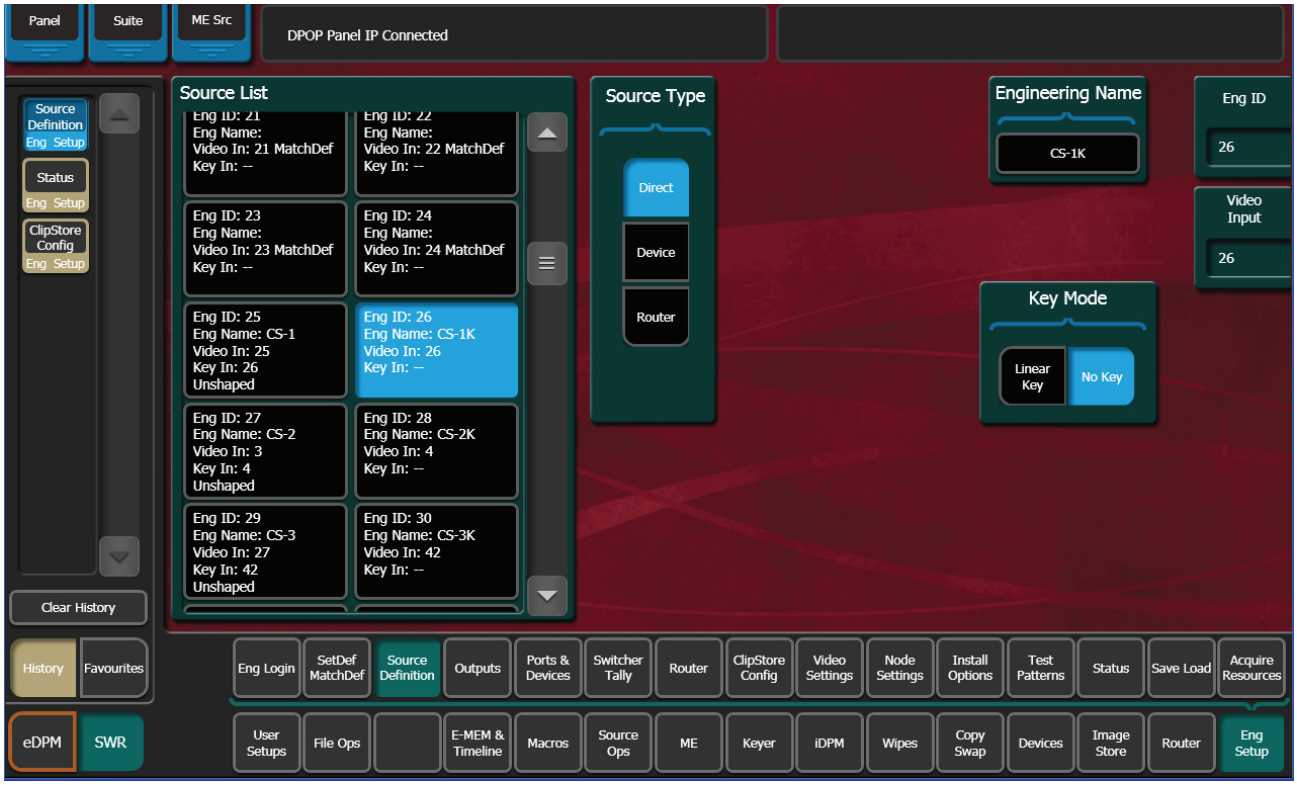
c. Touch a CS channel to select it (Figure 8).

The External Device List closes and the Engineering Name is filled in with the ClipStore External Device name automatically.

To configure a source as a ClipStore Key input (Key input to the ClipStore Video input created earlier):

1. From the Source List, touch a source (Figure 9).
2. Touch the **No Key** button in the Key Mode pane to select it (if not selected).
3. Use the default video input (Video In:) or change it using the **Video Input** data pad.
4. Touch the **Direct** mode button in the Source Type pane to select it.
5. Give the ClipStore key input an Engineering Name if desired (CS-1K, Figure 9), by touching the **Engineering Name** data pad and entering the name in the pop-up keyboard.

Figure 9. ClipStore Key Input Source



You now have device control over this ClipStore resource, and it can be mapped. Repeat the preceding steps for each ClipStore channel.

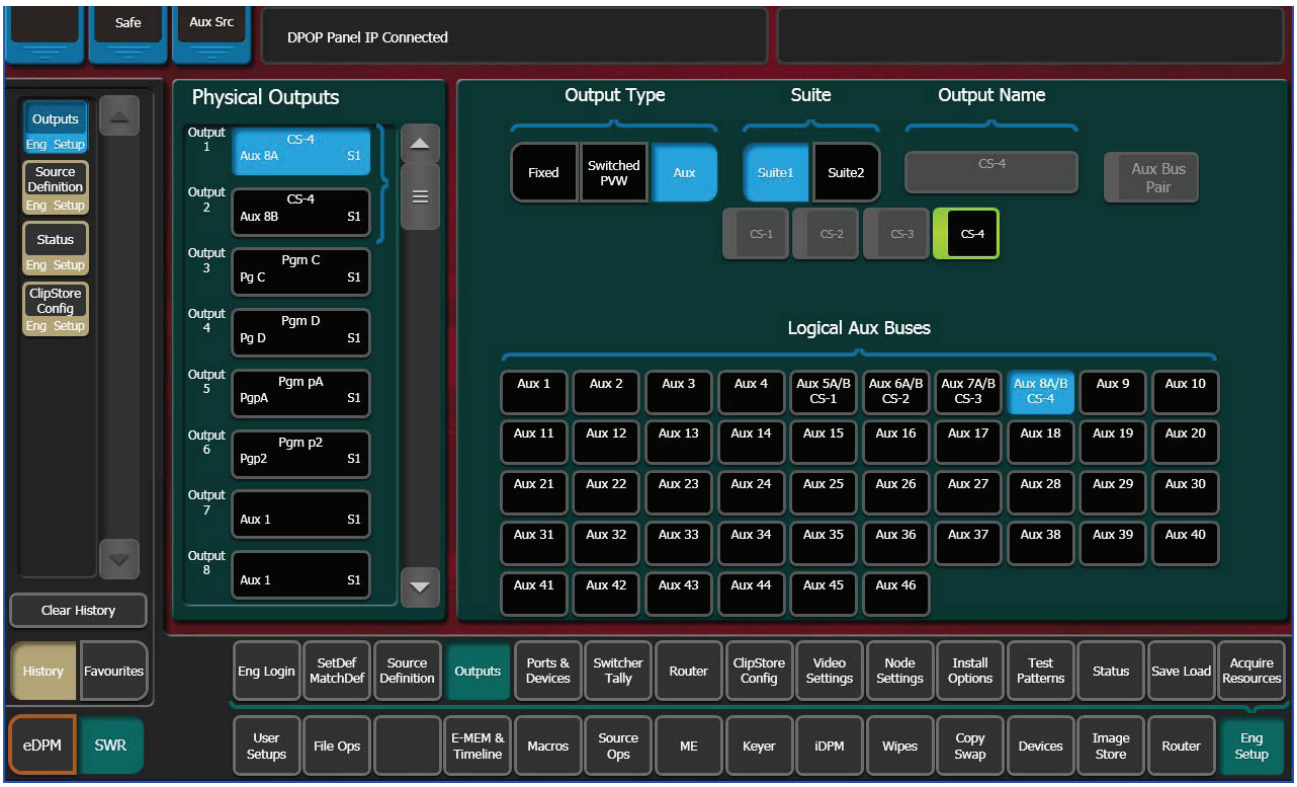
Configuring Outputs

Set the switcher outputs that are feeding into ClipStore. By selecting an Aux bus then touching one of the CS-1 through CS-4 enable buttons, those Aux bus outputs will be paired. In other words, if you select the output, then

Aux 5, Aux 5a and Aux 5b will be paired as a ClipStore Video/Key pair when the ClipStore button is enabled.

1. Go to the Outputs menu (Figure 10) by touching **Eng Setup**, **Outputs**.

Figure 10. ClipStore Output Configuration



2. Select the odd numbered output (first Aux bus output assigned for a video/key pair must be odd/fill) that you wish to use as the input to ClipStore (Figure 10). Then select Aux as the Output Type and the desired logical Aux bus.
3. Touch one of the ClipStore buttons (Figure 10).
4. Repeat the preceding steps for each channel of ClipStore.

Note You only need to configure all channels as video/key if you wish to record on all channels.

The Engineering Names for each ClipStore channel will appear in the Kayenne Local Aux Module and/or can be button mapped as desired.

When acquiring CS channels in another suite, before reassigning CS channels:

1. In the Outputs menu, deselect the CS channels to be acquired (Figure 10).

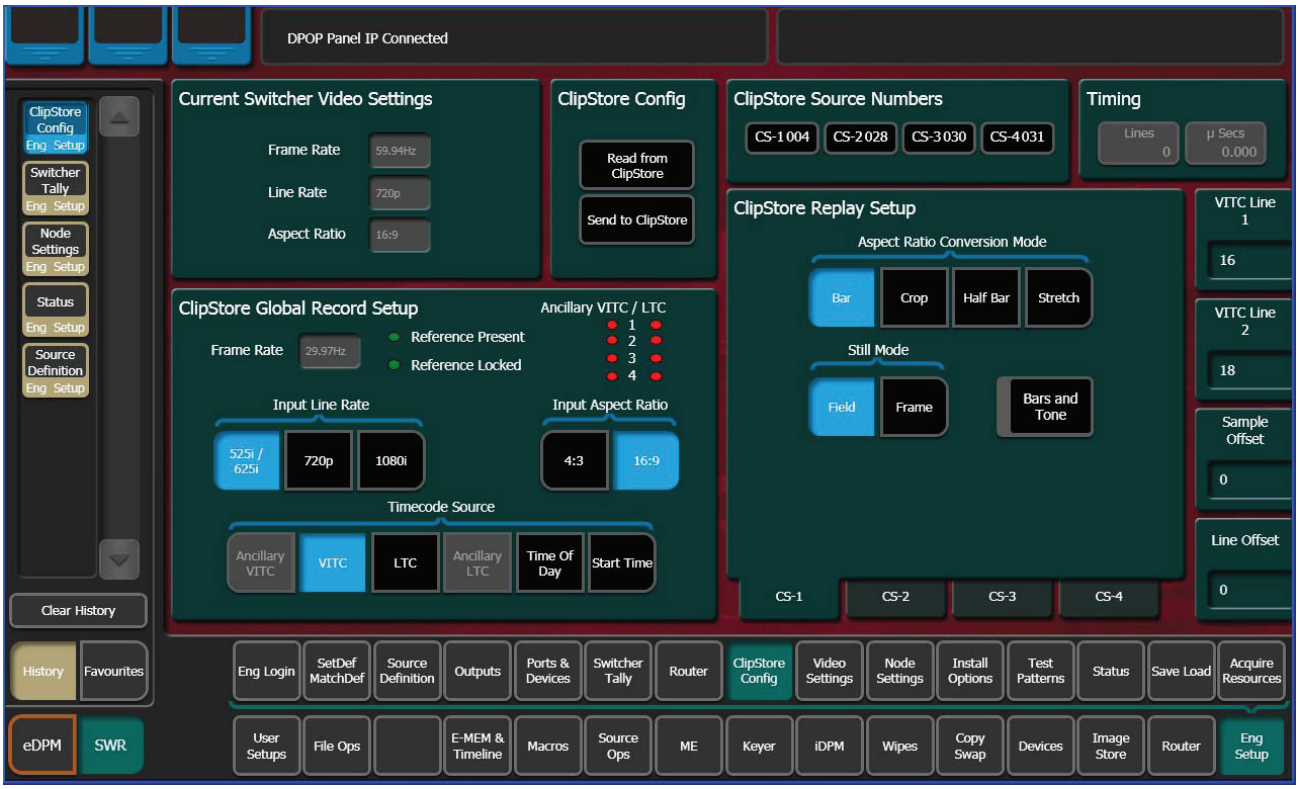
2. Touch the **Suite 1** or **Suite 2** button (Figure 10) to change suite delegation.
3. Re-acquire the CS outputs by touching the CS buttons (CS-1, CS-2, etc.).

It is recommended at this point that you save a new Eng Setup file that includes these changes.

ClipStore Config Menu

The ClipStore Config menu is used to configure the ClipStore input/output parameters and read those input/output parameters from, or send them to, the ClipStore server (Figure 11).

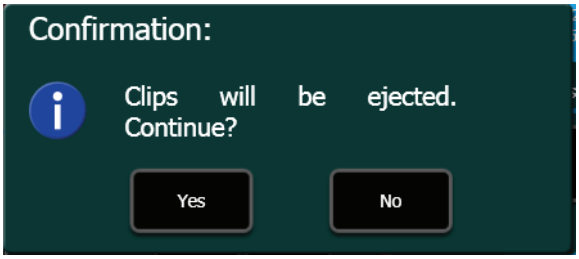
Figure 11. ClipStore Configuration Menu



Read from ClipStore button—Updates the Eng Setup, ClipStore Config menu with the current parameter settings for the configured ClipStore server channels (Figure 11).

Send to ClipStore button—Sends all parameter and system settings required by ClipStore to record, edit, and control clips to the server. Any changes to the Record Setup or Replay Setup parameter settings will also be sent to the ClipStore server (Figure 11). A dialog is displayed when this button is pressed (Figure 12), stating that all clips will be ejected as part of this operation; keep this in mind if considering this operation during a broadcast.

Figure 12. Send to ClipStore Confirmation Dialog



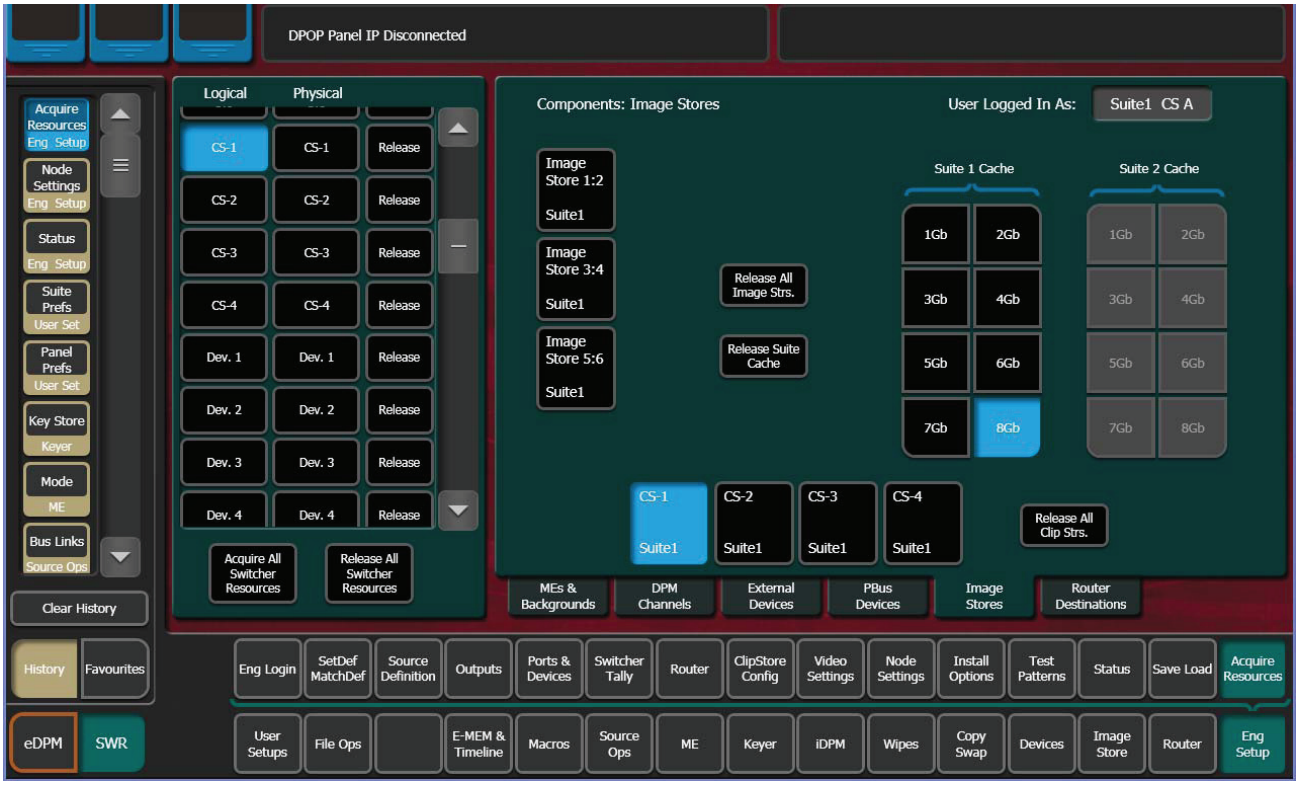
The ClipStore Source Numbers Pane (read-only), provides channel and source information, for example CS-1025 means ClipStore Channel1 (CS-1), Eng Source ID 25 (025).

Bars and Tone button—Turning this button on (highlighted green) then touching the **Send to ClipStore** button, loads color bars (and updates the configuration) and sends a tone to the selected ClipStore channel for testing.

Assigning ClipStore Channel Resources to a Suite

ClipStore resources can be acquired in suites. ClipStore suite assignment buttons have been added to the Eng Setup, Acquire Resources, Image Stores menu (Figure 13). For information about acquiring suite resources, see the *Kayenne Installation and Service manual*.

Figure 13. ClipStore Acquire Resources



ClipStore as an External Device

Note ClipStores 1-4 as devices can only be enabled in the Eng Setup, Devices, Node Settings menu in the Frame Suite Nodes & ID menu tab.

ClipStores 1-4 will appear as the first four external devices in the Device Enables scrolling list (Figure 14), in the Devices, Enables menu (and other Devices menus). External Device 1 will now be in the 5th position in the Device Enables list (Figure 14). Enable/Disable buttons in the Devices menu do not function for ClipStore.

Note For a two-channel K2 Solo, only ClipStores 1 and 2 are reserved and External Device 1 will be in the 3rd position.

ClipStore can be used in a gang like any other external device. For more information about ganging devices, see the *Kayenne User Manual*.

Figure 14. ClipStore in Device Menu

Kayenne Control Panel Operation

As with other external devices, device control is possible through the MFM (Multi-Function Module), the optional DCM (Device Control Module), and the System Bar. Engineering names (CS-1, CS-2, etc.) appear

in the control panel displays and all motion controls provided from the server are available.

ClipStore motion controls can be learned as part of an E-MEM.

ClipStore Menu Operations

Clip Replay

The ClipStore output channels appear in the same columnar style as in the Stills menu (Figure 15). Also like the Stills menu, the selected output channel will be outlined in blue or red if on-air.

Note ClipStore channel represents a permanent Video/Key pair.

Clip replay is performed in the Image Store, Replay & Record, Clips (and Clip Record and Edit) menu (Figure 15).

Figure 15. Clips Menu

Folder Selection

Touch the **Current Folder** data pad located just above the scrolling clip list (Figure 15) to change the current folder. The Folders/Clips menu is displayed (Figure 16).

Touch the folder you wish to be the current folder and either select a clip on the right or press the **Cancel** button (bottom right of menu, Figure 16) to close and return to the Clips menu (if the **Cancel** button is touched, the folder will still be changed but it will not result in a clip load).

Figure 16. Folders/Clips Menu Selection

Menu Clip Selection

Clips can be selected in three ways in the menu:

- Touching a clip in the scrolling clip list (Figure 15),
- Touching the **Scroll Image List** data pad (Figure 15), and entering the Image ID for the clip (ascending numeric value in the current folder).
- Touching the Current Folders data pad and then touching a clip in the Current Clip scrolling list (Figure 16).

With the **Auto Load** button selected (highlighted green), the clip will be loaded into the selected ClipStore channel.

Clip Loading

As with Stills, to load a clip (Figure 15):

1. Turn on Auto Load by touching the **Auto Load** button.

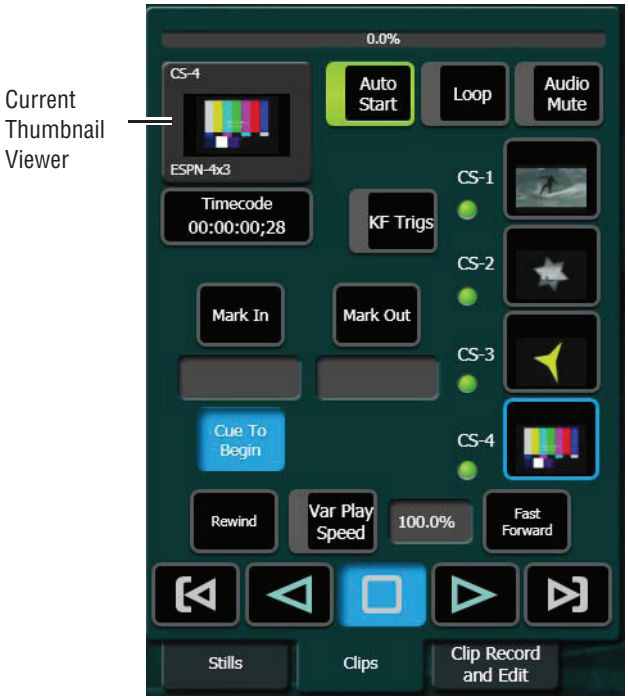
Note Auto Load must be on to load a clip.

2. Touch a ClipStore channel.
3. Touch a clip in the scrolling clip list.

The clip loads to the selected channel.

The Current Thumbnail Viewer (Figure 17) displays the currently loaded clip in the selected channel.

Figure 17. Current Thumbnail Viewer



Note When a ClipStore channel is selected and a clip is loaded, that clip will be highlighted in *blue* in the scrolling clip list (Figure 15) and the list will automatically scroll to display the selected clip.

Clip Search

You can search for clips using the **Search Clip** button (Figure 15). Touching the button displays the Search Clip keyboard. Type letters and/or numbers (minimum 1 character) and touch **Enter** to execute the search. The found clips will be listed in the scrolling clip list.

If Auto Load is on, the first clip in the resulting list will be loaded into the selected channel. If Auto Load is off, or the search finds no clips, then no clips will be loaded.

Playback

The Playback pane in the Image Store, Replay & Record, Clips menu provides playback and playback parameter controls for clips (Figure 18).

You can play a clip by loading it into a ClipStore channel and touching the Play button, or by turning on the **Auto Start** button and taking the channel on-air (Figure 18). For example, if you take the CS-1 channel on-air, either as a background or keyer, the clip loaded into the CS-1 channel will play automatically when the **Auto Start** button is on.

You can loop a clip by touching the **Loop** button (highlights green) or mute the audio of each channel individually with the **Audio Mute** button (Figure 18).

Other controls include (Figure 18):

- **Timecode** data pad—Touch the **Timecode** data pad to enter a timecode.
- **Mark In**/**Mark Out** buttons and data pads—Touch the **Mark In**/**Mark Out** buttons to set the mark-in/mark-out to the current clip position, touch the data pads to enter a Mark In or Mark Out point on a numeric keypad.
- **Cue to In** button data pad—Touch the **Cue to In** data pad and enter the value.
- **Var Play Speed** button and data pad—**Var Play Speed** button on, enables variable speed play. Touch the data pad to enter the playback speed value.

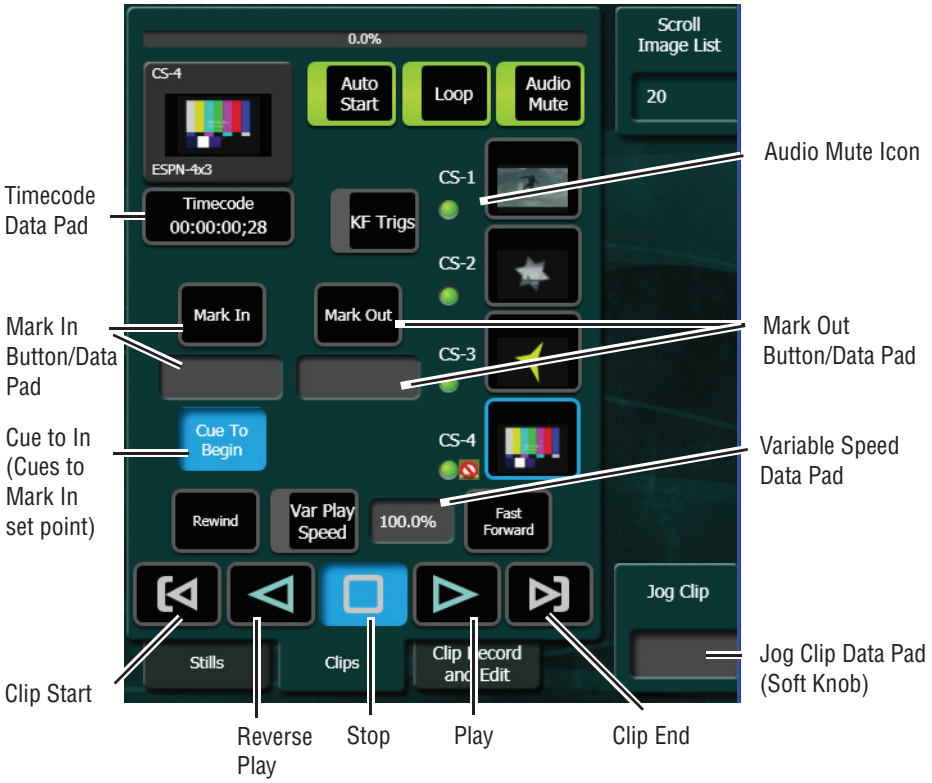
Device control buttons:

- **Rewind**
- **Fast Forward**
- **Start of Clip**
- **Reverse Play**
- **Stop**
- **Play**
- **End of Clip**

(The **KF Trigs** button is described in *Replay with E-MEMs*.)

Note All the functions listed above can be controlled by macros.

Figure 18. Playback Controls



Replay with E-MEMs

ClipStore replay can be controlled with E-MEMs. Keyframe triggers that are E-MEMable are:

- Load (Clip),
- Loop Enable/Disable,
- Cue (to in), and
- All Motion Controls including Variable Speed Play (**Var Play Speed** button).

Note The Master E-MEM has CS-1, CS-2, CS-3, and CS-4 assigned by default to MISC 1-4.

To create an E-MEM trigger, touch the **KF Trigs** button in the Image Store, Clips menu (Figure 19). The motion control buttons become jeweled toggle buttons, and **Loop Enable**, **Loop Disable** and **Cue** buttons are displayed (Figure 19). When a **Loop Enable**, **Loop Disable**, **Cue**, or motion control button is

touched, that operation will be learned by E-MEM. For more information about E-MEMs, see the *Kayenne User Manual*.

Figure 19. Clip Replay with E-MEM Control

Recording Clips

Clips are recorded with embedded audio in the Image Store, Replay & Record, Clip Record and Edit menus (Figure 20). The **Record** and **Edit** mode buttons (Figure 20) are positioned at the top right of the menu. To record, the **Record** mode button must be selected (highlighted light blue, Figure 20).

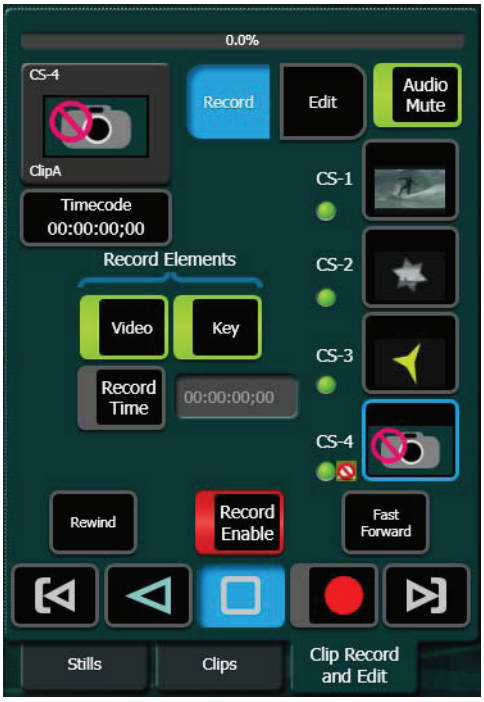
Figure 20. Record Mode

When the **Record Enable** button is touched, ClipStore ejects the clip from the selected channel, places the ClipStore channels in E/E mode, and displays a pop-up keyboard. Type in the name of the new clip. Once the name is typed, **Enter** is pressed, and the keyboard closes, the **Record Enable** button is highlighted red and the menu has changed to display recording controls and parameters in readiness for recording (Figure 21). The **Play** device control button is replaced by a **Record** button.

Clips can be overwritten by entering an existing clip name into the pop-up keyboard or by touching the **Cancel** button in the pop-up keyboard and touching a clip (or folder then clip) in the Folders/Clips menu (Figure 16). Once either operation is completed, you are returned to the Record mode menu and the **Record** button is present and highlighted in red.

Note Thumbnails do not display in the Current Thumbnail Viewer in Record Enable mode except when overwriting an existing clip.

Figure 21. Record Button Enabled



The **Video** and **Key** Record Elements buttons allow you to route the Aux Bus selections:

- Video Only—Video + Full Raster White,
- Key Only—Key + Key, and
- Video/Key—Video + Key.
- Set a Record Time using the Record Time button.

Note If an Aux Bus is not configured for the ClipStore output, the **Video** and **Key** buttons will always be on.

These elements are also very useful for editing when you want to *build* or *join* clips (see *Editing Clips* *on page 35*). To set a record time, touch the **Record Time** button and a pop-up keypad will appear to enter the desired value. Touch **Enter** when finished.

To record a clip:

1. Touch to select the ClipStore channel for recording.
2. Touch the **Record** mode button.
3. Define the Record Elements you wish to apply to the clip to be recorded.
4. Touch the **Record Enable** button.

5. Enter a new clip name or an existing clip name if you wish to overwrite that clip.
6. Touch **Enter**.
7. Touch the **Record** device control button.
8. Touch the **Stop** device control button when the desired length of the clip is reached.

Editing Clips

Clips can be edited in the Image Store, Clip Record and Edit menu. There are three types of clip editing provided:

- Cut Edit,
- Build Edit, and
- Join Edit.

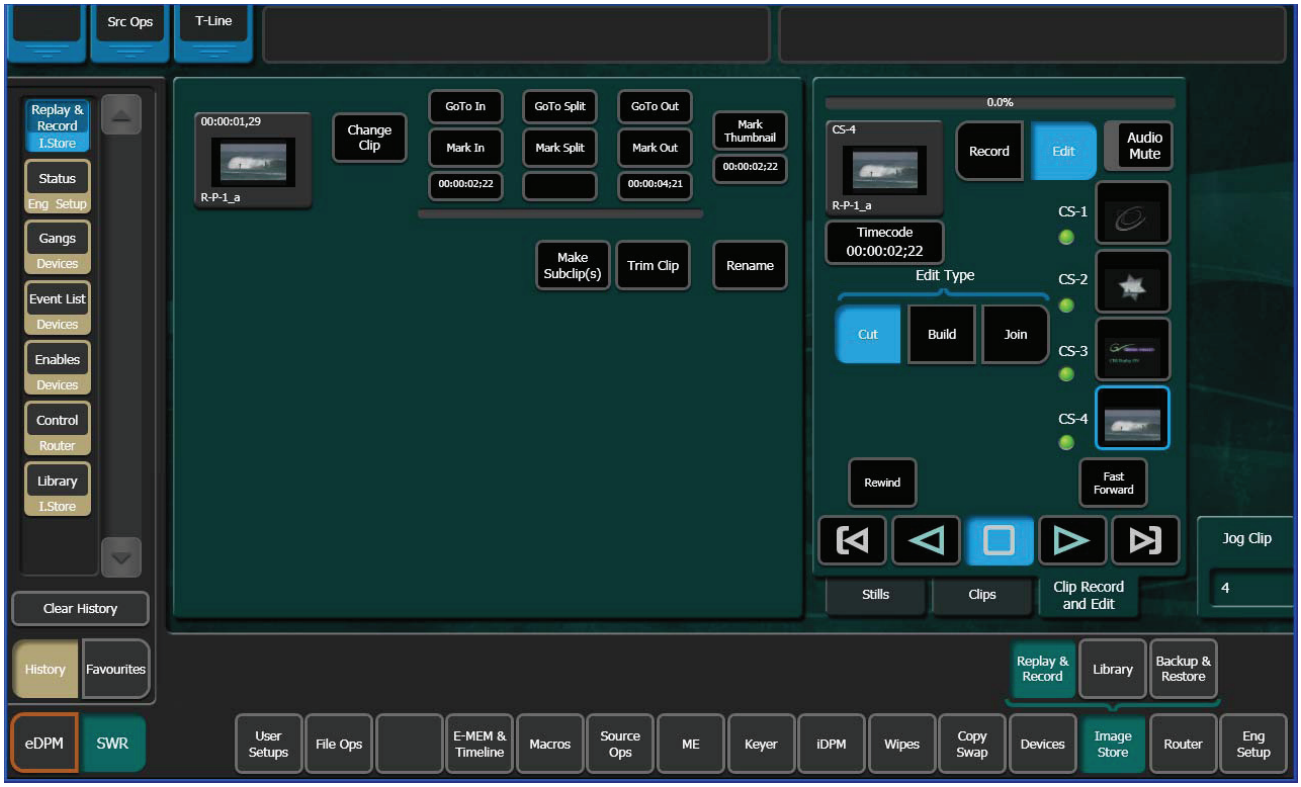
Cut Edit

Cut Editing allows you to edit a clip in the following ways:

- Rename Clips (use the **Rename** button).
- Mark a thumbnail, see *Cut Edit* *on page 35*),
- Trim and remove from the head of the clip to the Mark In point (*Trim and Remove* *on page 37*),
- Trim and remove from Mark Out point to the end of the clip (*Trim and Remove* *on page 37*),
- Make sub-clips (including splitting one clip into two) from the current clip (*Make Sub-clips from the Current Clip* *on page 38*), and
- Cut Edit while recording a clip (*Cut Editing while Recording* *on page 39*).

For Cut Edit, touch **Image Store**, **Replay & Record**, **Clip Record and Edit** and touch the **Cut** button in the Edit Type mode group (Figure 25).

Figure 22. Cut Edit Mode



Mark a thumbnail

The Cut Edit menu displays the currently loaded clip in the thumbnail view. If you wish to change the clip, touch the **Change Clip** button before editing (Figure 23).

Figure 23. Mark Thumbnail Point

1. Touch the **Change Clip** button to select a clip to edit (unless previously loaded, Figure 23).
2. Either jog, shuttle, or play to the desired frame and touch the **Mark Thumbnail** button or,
3. Touch the **Mark Thumbnail** data pad and enter the mark point in the pop-up Mark Thumbnail Point keypad (Figure 23), and touch **Enter**.
4. Touch the **Mark Thumbnail** button (Figure 23).

The new thumbnail replaces the old in all views.

Trim and Remove

Material can be removed from the head of a clip to a mark-in point and from a mark-out point to the end of a clip. Both operations can be performed on a single clip.

Trim Clip operations include:

- Setting only the mark-in point, and touching the **Trim Clip** button—the clip will be trimmed from the beginning of the clip to the mark-in point.
- Setting only the mark-out point, and touching the **Trim Clip** button—the clip will be trimmed from the mark-out point to the end of the clip.
- Setting both a mark-in and mark-out point, and touching the **Trim Clip** button—the clip will be trimmed on both ends (beginning of clip to mark-in and mark-out to end of clip).

To enter the mark-in/mark out points, either jog, shuttle, or play to the desired frame and touch the **Mark In/Out** button or touch the **Mark In/Out** data pad and enter the mark-in/out point in the pop-up keypad, and touch **Enter**.

Note Trim Clip to mark-in, trims up to the mark point in the clip so the marked frame is the first frame of the new sub-clip.

CAUTION Trim Clip from the mark-out point, trims (removes) the marked frame and trims to the end of the clip so the frame at the mark point will *not* be part of the new sub-clip.

Make Sub-clips from the Current Clip

A sub-clip can be created from the current clip with mark-in and mark-out values (or without and the clip length will be the same as the original) or split into two sub-clips.

1. To enter the mark-in/mark out points, either jog, shuttle, or play to the desired frame and touch the **Mark In/Out** button or touch the **Mark In/Out** data pad and enter the mark-in/out point in the pop-up keypad, and touch **Enter**.
2. Touch the **Make Subclip(s)** button.
3. Enter a clip name or accept the provided name (appends _a) and touch **Enter**.

   A new sub-clip with the trimmed length is created.

When making a split clip, the first clip is created from the current clip head to the split mark point, the second from the split point to the clip end.

To split one clip into two sub-clips:

1. Either jog, shuttle, or play to the point in the clip where you want to split the clip and touch the **Mark Split** button (Figure 24), or
2. Touch the **Mark Split** data pad (below **Mark Split** button) and enter the value for the split point in the Mark Split Point pop-up keypad, and touch **Enter** (Figure 24).

Figure 24. Mark Split (One Clip Split into Two)

3. Touch the **Make Subclip(s)** button.

   The Name First sub-clip pop-up keyboard is displayed.

4. Enter a name or accept the default name for the *first* sub-clip in the Name First sub-clip pop-up keyboard (for the default, _a is appended to the clip name).

5. Touch **Enter**.

6. Enter a name or accept the default name for the *second* sub-clip in the Name Second sub-clip pop-up keyboard (for the default, _b is appended to the clip name).

7. Touch **Enter**.

The two new sub-clips are created.

Cut Editing while Recording

A key advantage to using a ClipStore server is you can record and replay simultaneously. This allows you to create sub-clips from the currently recording clip.

The following rules apply to performing a Cut Edit operation during recording:

- Making sub-clips is the only available operation.
- Only the Cut Edit type will be available.
- Changing the clip will not be possible from the menu during this operation.

Once recording has begun, you can touch the **Edit** mode button, set mark-in/mark-out points, and create a sub-clip (see *Make Sub-clips from the Current Clip* *on page 38*).

A currently recording clip can also be loaded into another channel of Clip-Store. From the other channel, sub-clips can be made from any part of the recording without interrupting the record.

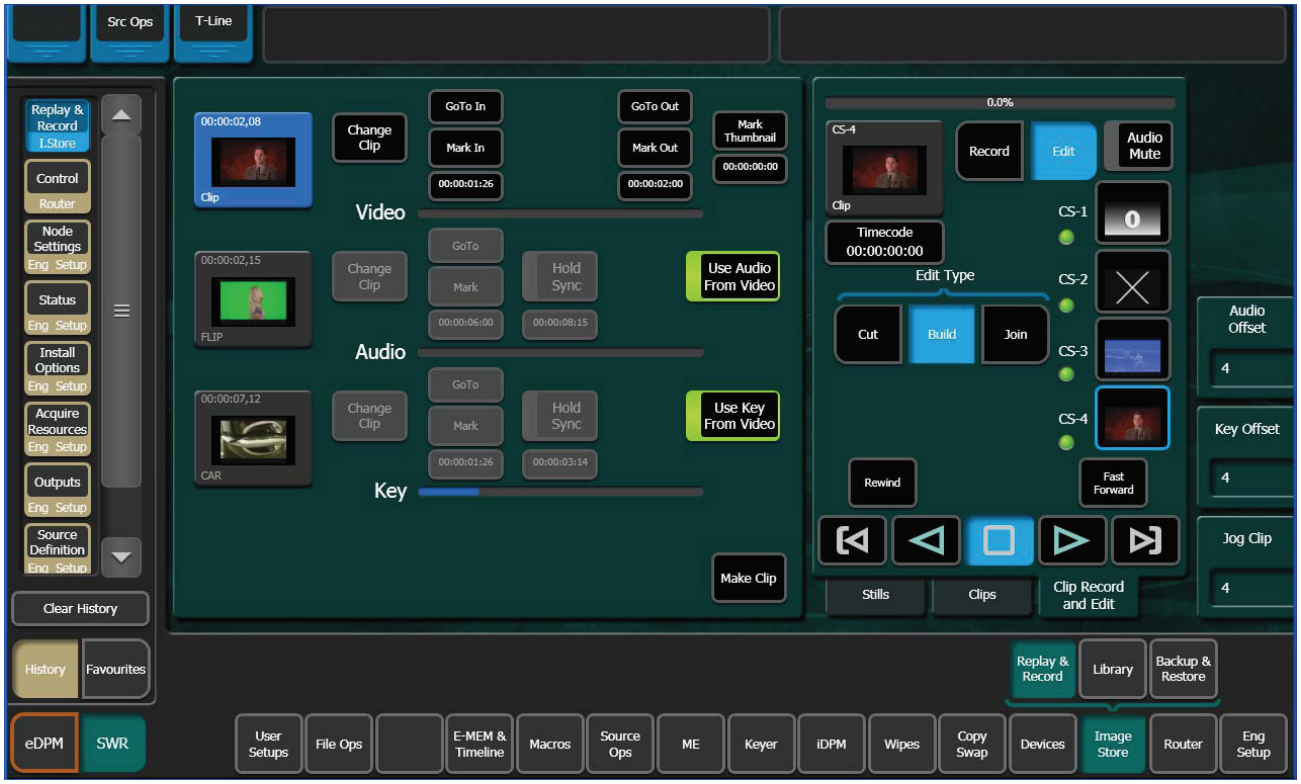
Build Editing

Build Editing (Figure 25) allows you to take elements from one long clip or from multiple clips and make a sub-clip, including:

- Video and Audio (audio from a clip or .WAV file),
- Video (with embedded audio) and Key, or
- Video, Audio (audio from a clip or .WAV file), and Key.

CAUTION Audio files must be 48kHz/.WAV file format, other file types will not be recognized by ClipStore.

Figure 25. Build Edit Mode



The clip created with the Make Clip operation will be a sub-clip that has its head to tail length defined by the mark-in and mark-out points of the Video track. (if there are no marks, the sub-clip created will be the same length as the original). Both Audio and Key tracks of the new clip will only exist inside the Video track's marks.

Video is the controlling track in the scratch clip, i.e. the Audio, Key, and motion control is slave to the Video track when selected.

Audio Offset, **Key Offset**, and **Jog** soft knobs are provided for editing (1/4 turn equals 1 frame).

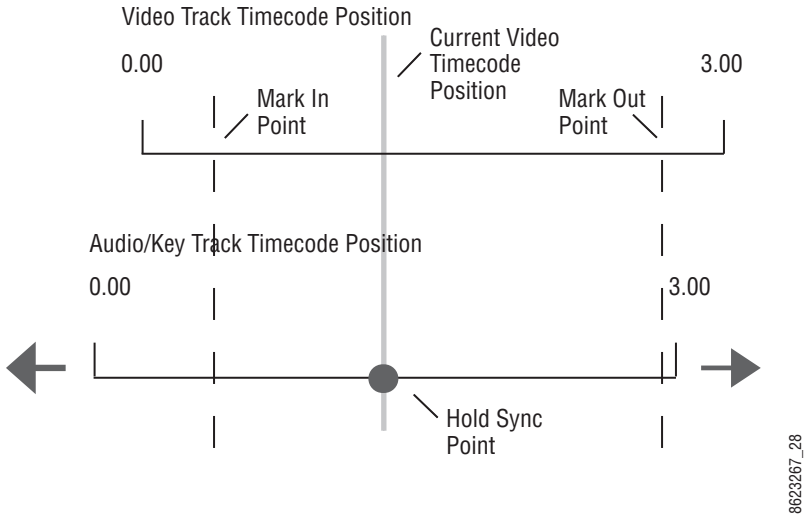
Hold Sync—Hold Sync sets the position of the Audio/Key track in relation to the Video track's current timecode position (Figure 26). The Audio/Key track's timecode can be offset in relation to the video track timecode by changing the Hold Sync Mark Point (using the **Hold Sync** data pad pop-up keypad or the **Audio/Key Offset** soft knobs). In this way, the Audio/Key tracks can be synchronized with the Video track. Different Hold Sync Points can be set for the Audio and Key tracks in relation to the Video.

Note If a key track from another clip is used, and starts past the mark-in point of the video track, full raster white will be used for the key until the key timecode begins when the composite clip is played. If an audio element from another clip is used, and starts past the mark-in point of the video track, there will be no audio until the start of the audio timecode when the composite clip is played.

Once the **Hold Sync** button is touched for either the Audio or Key, the Hold Sync point will be set and their positions in relation to the current video track timecode position become part of the scratch clip, and subsequently the new sub-clip when the **Make Clip** button is touched.

Note You can still change any of the current timecode values, including the video timecode by changing the mark-in/mark-out points and the Audio/Key timecode using the **Hold Sync** data pad or **Audio/Key Offset** soft knobs, before the **Make Clip** button is touched. Each change updates the scratch clip.

Figure 26. Hold Sync Point



The following provides examples and procedures of how to combine elements of Video, Audio, and Key. These composited elements become part of the new sub-clip.

These procedures can also be used to make a composite clip of elements on one long clip, for example if both Video and Key track are recorded on one

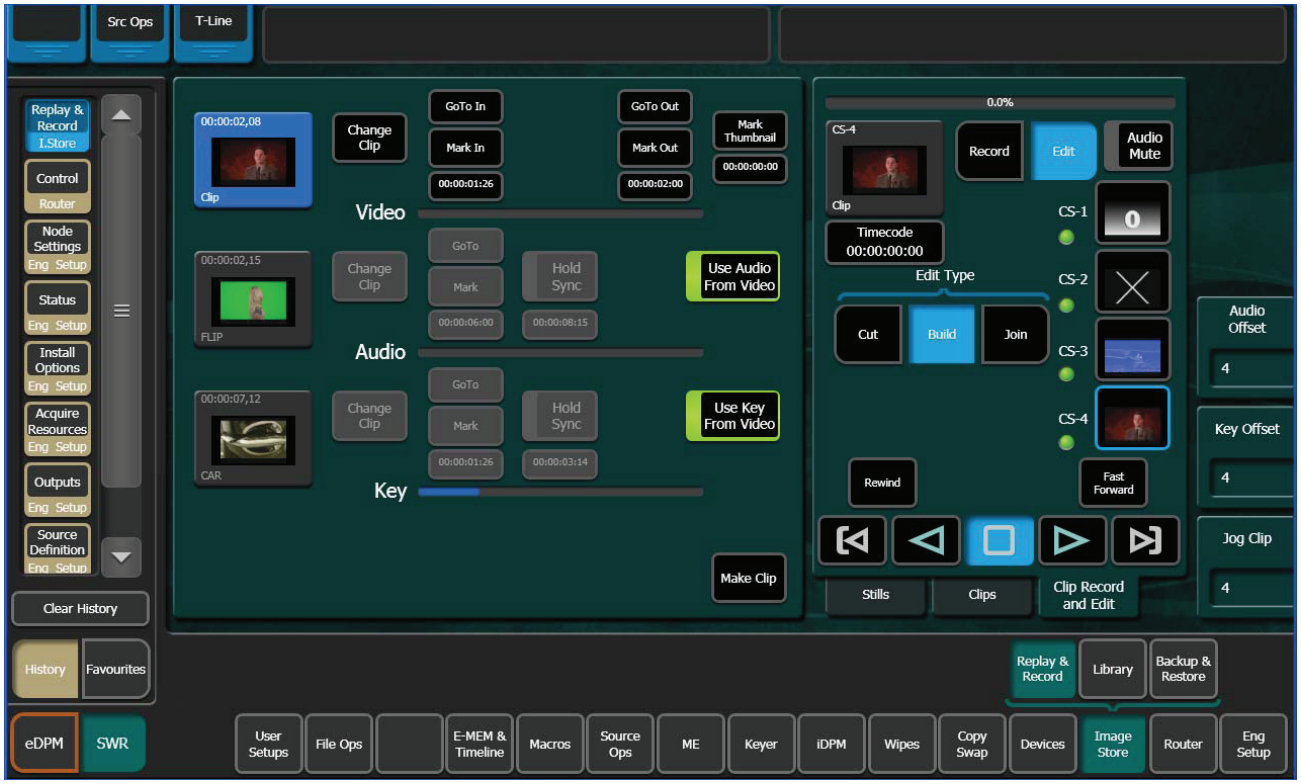
clip, the clip can be loaded as the Video track and then as the Key track, synchronized, and then a sub-clip made of the composite elements.

As with other ClipStore editing operations, if you enter the name of an existing clip, that clip will be overwritten when creating a sub-clip using the Make Clip operation.

Editing a Video Clip with Build Edit—The following example is of how to mark-in, mark-out, mark a thumbnail, and make a sub-clip. The **Use Audio From Video** and **Use Key From Video** buttons are enabled (highlighted green) which means only the video track will be edited and a new clip made with those changes:

Touch **Image Store**, **Replay & Record**, **Clip Record and Edit** and touch the **Build** button in the Edit Type mode button group (Figure 27).

Figure 27. Build Edit Mode—Video Only Edit



1. Unless the desired clip is loaded, touch the **Video Thumbnail Viewer** (Figure 27).
2. Touch the **Change Clip** button for the Video and touch the desired clip (Figure 27).

3. Determine where you want a mark-in point for the Video track by either playing/jogging to the mark while viewing the clip on a monitor and touching the **Mark In** button (Figure 27) or if you know the timecode, touch the **Mark In** data pad and enter the timecode into the pop-up keypad, and touch **Enter**.

4. Determine the mark-out point for the Video track and enter it as described for Mark In.

Mark a Thumbnail

1. Jog, shuttle, or play to where you want to mark thumbnail and touch the **Mark Thumbnail** data pad, or

2. Touch the **Mark Thumbnail** data pad and enter the mark-thumbnail point in the pop-up keypad, and touch **Enter**.

With the Video Thumbnail Viewer selected, you can test the composite elements using the motion control buttons.

Make the Sub-clip

1. Touch the **Make Clip** button.

2. Enter the name of the new clip and touch **Enter**.

The new clip is created and appears in the clip lists in the ClipStore menus.

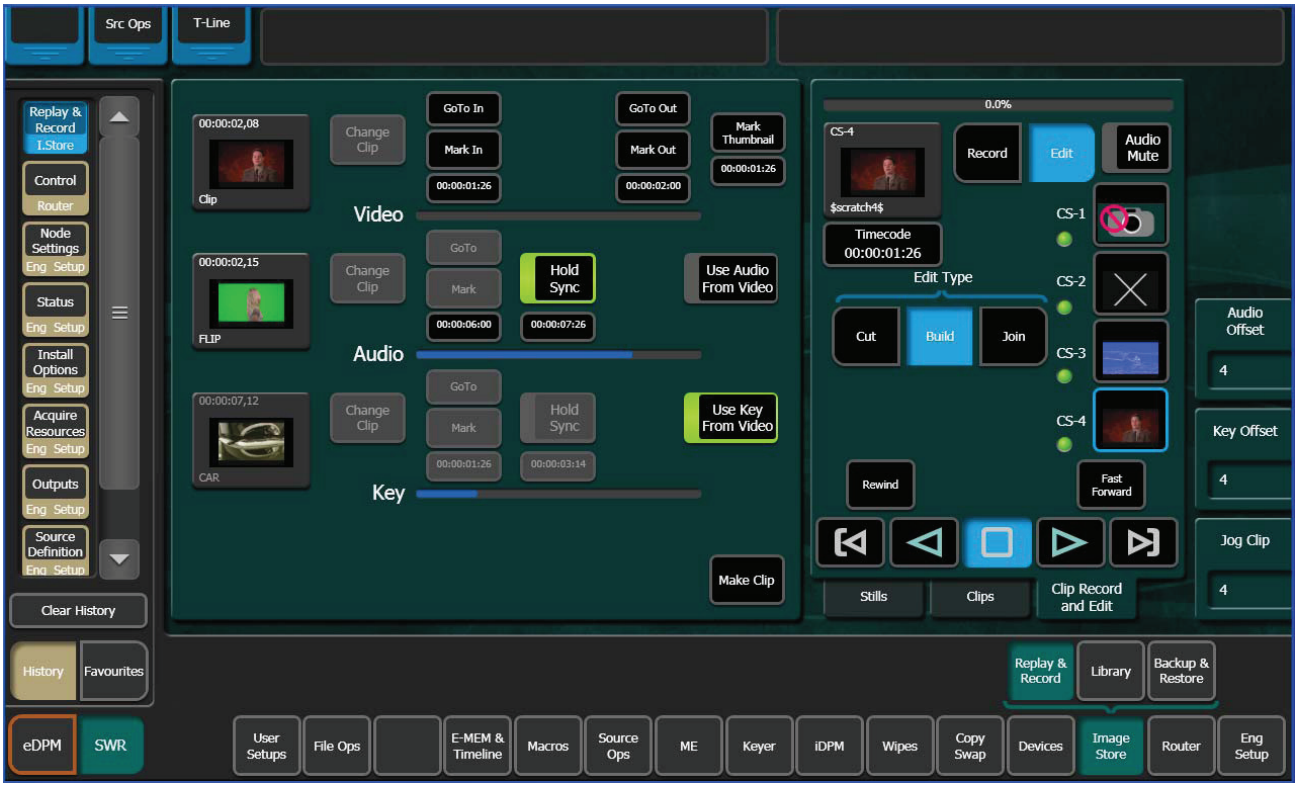
Note If Multiple sub-clips are desired from a built clip, use Build Edit to make the whole clip and then use the Cut Edit to make multiple sub-clips.

Adding a New Audio Element with Build Edit—If you require audio before or after video, a video track (for example of black) is needed so a mark can be made (this can be added with Join Edit, see *Join Edit* *on page 47*).

In this case, you want to use the Video and Key of the loaded Video track but add/replace the Audio track and make a sub-clip. The **Use Key From Video** button is enabled (highlighted green):

1. Unless the desired clip is loaded, touch the **Video Thumbnail Viewer** (Figure 28).

Figure 28. Build Edit Mode—Audio Track Edit



2. Touch the **Change Clip** button for the Video and touch the desired clip (Figure 28).
3. Determine where you want a mark-in point for the Video track by either playing/jogging to the mark while viewing the clip on a monitor and touching the **Mark In** button (Figure 28) or if you know the timecode, touch the **Mark In** data pad and enter the timecode into the pop-up keypad, and touch **Enter**.
4. Determine the mark-out point for the Video track and enter it as described for Mark In.
5. Turn off the **Use Audio From Video** button (Audio section) by touching it (Figure 28).
6. Touch the **Audio Thumbnail Viewer**.
7. Touch the **Change Clip** button and touch the desired clip/.WAV file with the desired Audio track.
8. Synchronize the Audio track in relation to the current video track timecode position, if needed, using the **Hold Sync** data pad or the **Audio Offset** soft knob (see page 42 for more about Hold Sync).

With the **Video Thumbnail Viewer** selected, you can test the composite elements using the motion control buttons.

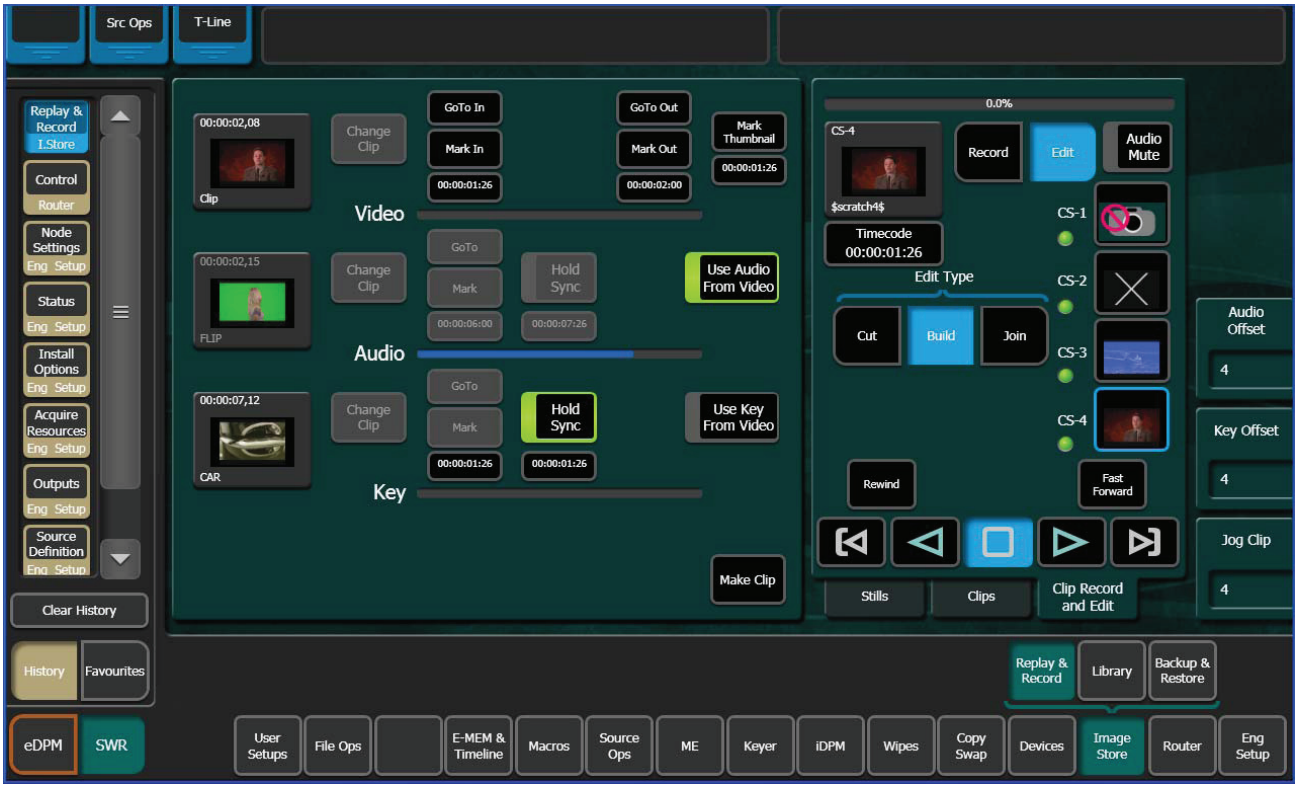
Make the Sub-clip

1. Touch the **Make Clip** button.
2. Enter the name of the new clip and touch **Enter**.

Add/Replace a Key Element with Build Edit—In this case, you want to use the video and audio of the loaded video element but add/replace the key track and make a sub-clip. The **Use Audio From Video** button is enabled (highlighted green):

1. Unless the desired clip is loaded, touch the **Video** thumbnail viewer (Figure 29).

Figure 29. Build Edit Mode—Key Track Edit



2. Touch the **Change Clip** button for the Video and touch the desired clip (Figure 29).
3. Determine where you want a mark-in point for the Video track by either playing/jogging to the mark while viewing the clip on a monitor and touching the **Mark In** button (Figure 29) or if you know the timecode, touch the **Mark In** data pad and enter the timecode into the pop-up keypad, and touch **Enter**.

4. Determine the mark-out point for the Video track and enter it as described for Mark In.
5. Synchronize the Key track in relation to the current video track timecode position, if needed, using the **Hold Sync** data pad or the **Key Offset** soft knob (see page 42 for more about Hold Sync).

With the Video Thumbnail Viewer selected, you can test the composite elements using the motion control buttons.

Make the sub-clip

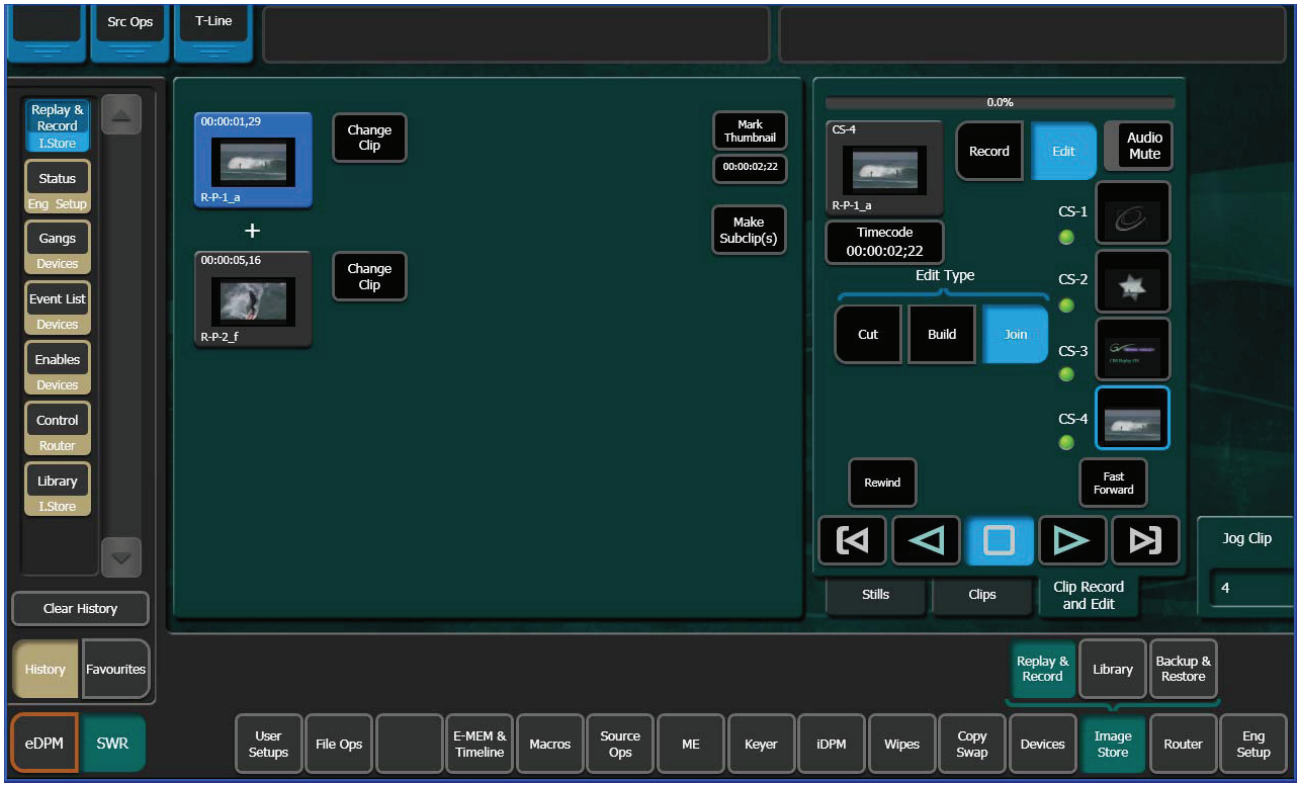
1. Touch the **Make Clip** button.
2. Enter the name of the new clip and touch **Enter**.

Join Edit

Join Edit allows you to append one clip to another, and mark a thumbnail if desired.

To go to the Join Edit mode menu, touch **Image Store**, **Replay & Record**, **Clip Record & Edit** and touch the **Join** button in the Edit Type mode group (Figure 30).

Figure 30. Join Edit Mode



1. Touch the **Change Clip** button for the first clip (top thumbnail) and touch the desired clip.
2. Touch the **Change Clip** button for the second clip (bottom thumbnail) to be appended to the tail end of the first, and touch the desired clip.
3. Mark a thumbnail if desired (optional).
   a. Determine where you want to mark thumbnail and touch the **Mark Thumbnail** data pad, or
   b. Enter the mark-thumbnail point in the pop-up keypad and touch **Enter**.
4. Touch the **Make Subclip(s)** button.

The new clip is created and appears in the clip lists in the ClipStore menus.

File Operations

ClipStore file transfers are performed in the ClipStore Library menu. Touch **Image Store**, **Library**. Files can be imported or exported using the **Copy**/**Paste** (or **Cut**/**Paste** in the case of ClipStore to ClipStore folder transfers) buttons in the To and From ClipStore and Disk/Folder menu tabs (Figure 31).

Note File renaming is not supported in the ClipStore Library menus.

File transfers can be performed from/to the following locations from the Kayenne Menu Panel:

- ClipStore Server,
- Image folder on the Kayenne Menu Panel,
- USB Storage Devices (seen as Removable Disks) and
- External USB Disk Drives (seen as Hard Disk Drives).

USB storage devices can be inserted into the USB ports on both the ClipStore server and on the Kayenne Menu Panel. Memory Sticks will be seen as Removable Disks and will be displayed in the From Disk/Folders and To Disk/Folders menu tabs. External USB Disk Drives will also be seen in the From and To Disk/Folders menu tabs however first a shared folder is needed on the device (see *Creating a Shared Folder for External USB Disk Drives* *on page 50*).

Figure 31. ClipStore Library Menu—File Transfer

Both files and folders containing files can be copied from disk to the ClipStore server. However, folders can only be copied to the top directory of the ClipStore server, “nested” folders are not permitted.

Files can be exported in multiple formats, by touching the mode buttons in the **Export Format** modes pane (Figure 31). This operation is only supported when the files selected for export are in the From ClipStore pane. *Files in Video/Key format can only be exported in GXF format.*

Note If a folder is selected for export, all files within the folder will be exported with the same format.

Creating a Shared Folder for External USB Disk Drives

To exchange files with an external USB disk drive, you will need to create a shared folder in the device, in Windows:

1. Insert the USB connector for the external USB drive in the Menu Panel.
2. Minimize the Kayenne menu.
3. Open **My Computer** from the Desktop.
4. Open the disk drive from the Hard Disk Drives list.
5. Create a new folder using the File menu, name the folder (for example "Kayenne Clips").
6. Right-Click on the folder, and choose **Sharing and Security** from the pull-down menu.
7. In the **Sharing** tab, select the **Share this folder** radio button.
8. Press the **Permissions** button.
9. Allow full control for Everyone.
10. Click **Apply**.

    The folder is now shared. The new folder will be available in the Image Store, Library, From/To Disk Folders menu tabs.

Changes to the Stills Menu

The Image Store Stills menu has been changed with Kayenne 2.0. Changes include (Figure 32):

- Capture Still menu tab removed, replaced with menu when **Capture Still** button is pressed.
- **Reserve Space** button removed.
- **Change Description** button added (displays pop-up keyboard to change image description).

Figure 32. Image Store Still Menu Changes