

# Kayak

DIGITAL PRODUCTION SWITCHER

## Release Notes



**SOFTWARE VERSION 6.9.0**

**071844606**  
**FEBRUARY 2007**

# CERTIFICATE

Certificate Number: 510040.001

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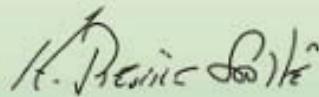
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The design, manufacture and support of video hardware and software products and related systems.

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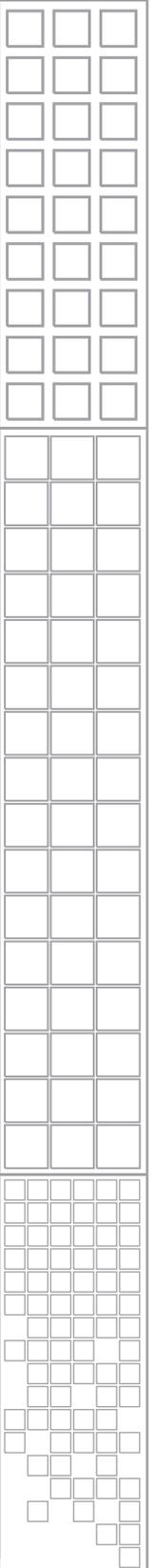
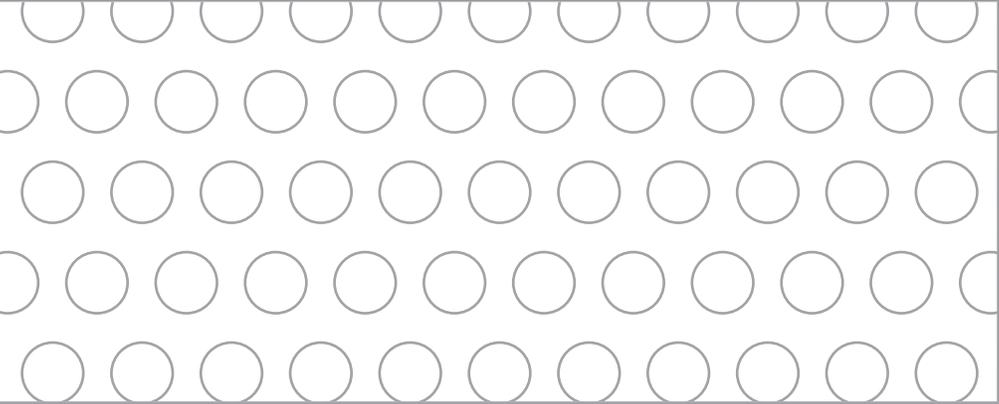
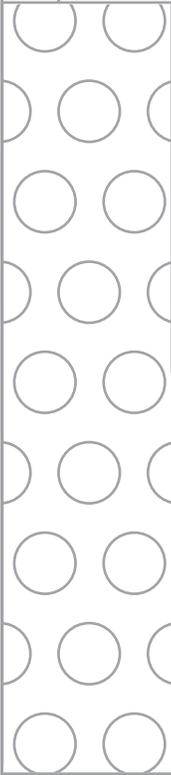
DIGITAL PRODUCTION SWITCHER

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**FAQ Database** — Solutions to problems and troubleshooting efforts can be found by searching our Frequently Asked Questions (FAQ) database.

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# *Kayak Release Notes*

## **Introduction**

This document includes notes for software installation, licenses, new features and changes, and other information specific to Kayak Release Version 6.9.0 software.

## **Kayak New Features**

### **Kayak HD New Features**

- New RAM Recorder features
  - Play and Trim
  - Image Transfer enhancements
  - Mode Pane: Video and Vid/key Modes
- Special Effects Kurl Extensions
  - Ripple
  - Sphere
- Support of the new I/O Expander boards
- Support of Temporary Licenses
- Key/Fill Freeze

### **Kayak DD New Features**

- Key/Fill Freeze enhancements
- Matrix Wipes (Kayak DD-1 and DD-2)

## Changes in this release

- Genlock changed to “Timing” in Menu panel.

## Compatibility

The software for Kayak frames and Kayak Control Panels (1 M/E through 3 M/E) is compatible if installed from the same release CD.

Scaling of Key Gain, ClipHi, and ClipLo has changed starting with software Version 6.8.3. Recalling E-MEM effects created with previous software versions will show different key adjustments.

**CAUTION** Do not install software versions lower than 6.8.6 in control panels and main-frame units with WDT serial number **200** and higher (new RoHS conform switcher). See type label on the rear of the units

## Options and Configuration Licenses

The following operation features are options or configurations available only if the corresponding license is activated.

Table 1.

Available Licenses	Kayak HD/SD	Kayak DD
Switcher Type	X	X
Number of Inputs	X	X
Number of Aux Busses	X	X
Chroma Key	X	X
Number of flexible Chroma Keys	X	X
RGB Color Correction	X	X
DPM Channels (includes Kurl in Kayak DD)	X	X
DPM Kurl Effects	X	
DPM Spektra	X	
Number of RAM Recorder Channels	X	X
NetCentral	X	X
Half M/E/DSK	X	
MatchDef	X	
HD Operation	X	
KlipCache	X	

**Note** Included in the basic configuration are licenses required for **Switcher Type**, **Number of Inputs**, and **Number of Aux Busses**. These are required for basic operation.

# RAM Recorder

## RAM Recorder Upgrade

If you are upgrading to RAM Recorder and replacing the existing frame controller board with a new 6910000xx or 7710060xx Controller Board, refer to *Version 6.8.8 or later Kayak Installation and Service Manual* for installation.

## RAM Recorder Enhancements

The RAM Recorder is a solid state video server with 6 input/output channels. This means that all stills and clips are stored within a common data pool and may be accessed by all 6 output channels.

For the whole switcher the total amount of storage is approximately:

- HD = over 23 seconds, over 57 seconds with KlipCache memory expansion option
- SD = approximately 2 min. 15 sec., 5 min. 30 seconds with KlipCache

This storage can be segmented for a maximum of 2400 Stills/Clips.

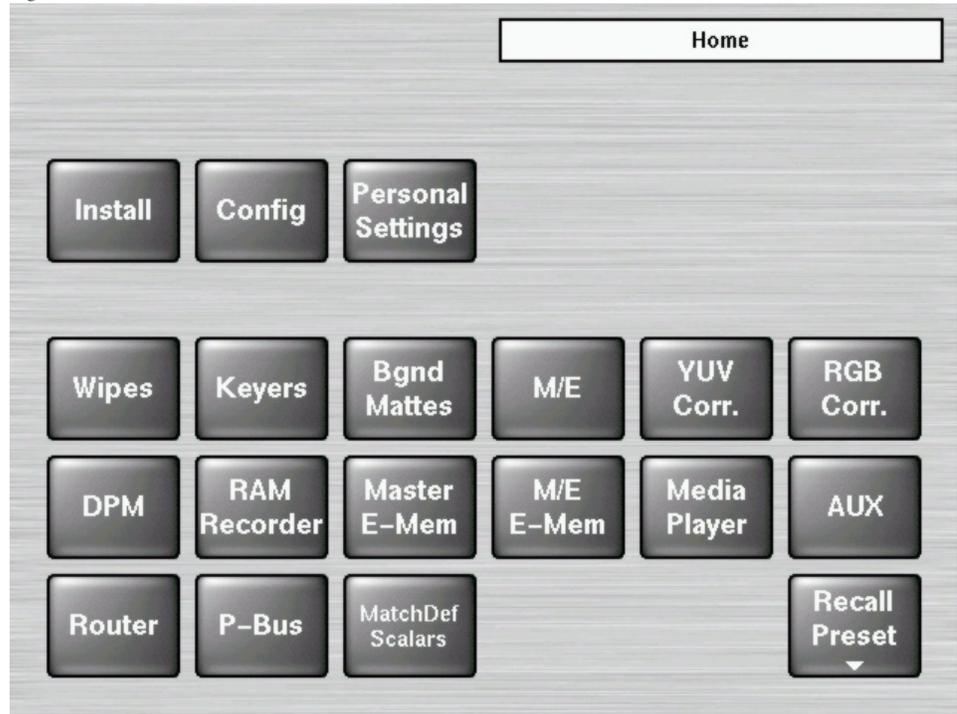
The maximum storage time depends upon the selected TV standard and the equipped memory board (4GB or 8GB).

The RAM Recorder supports the video standards: 525, 625, 720, 1080i (or all standards the switcher supports).

**Note** To use the RAM Recorder, a new 6910000xx or 7710060xx Controller Board in the Mainframe is required. To upgrade a 6716630xx Controller Board to run the RAM Recorder, an option including the newer CPU board is available.

Access the RAM Recorder menu via the Home Menu.

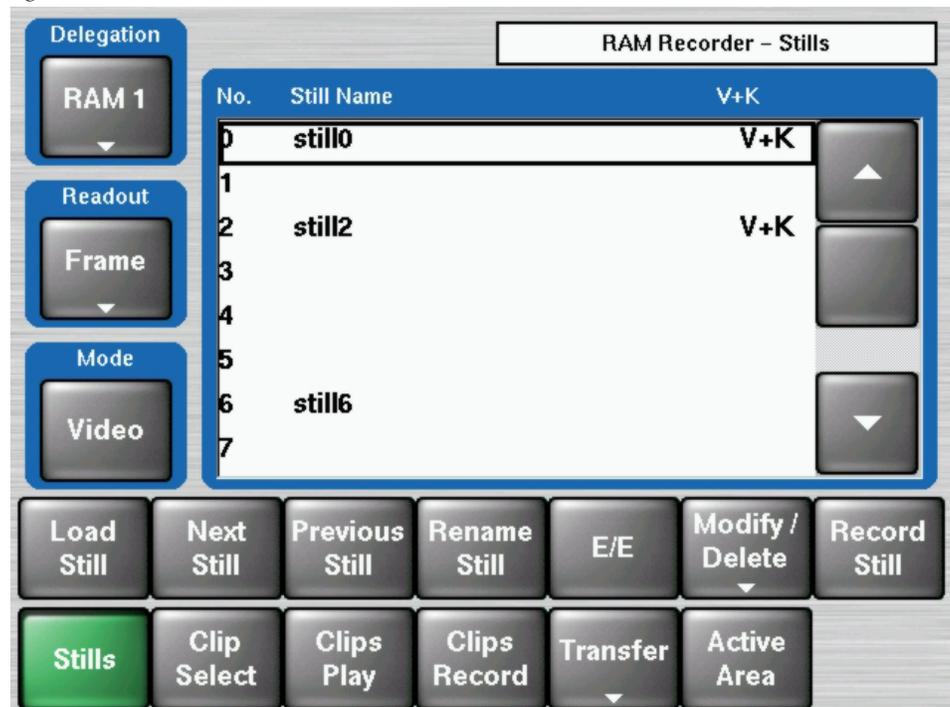
Figure 1. Home Menu



## Still Menu

The Stills menu allows the user to store or load stills using the delegated channels.

Figure 2. RAM Recorder Stills Menu



### Delegation Pane

Select the desired channel 1 to 6 with the **Delegation** button. The menu shows the values of the selected channel.

### Readout Pane

**Field1/2** — Field 1 or field 2 is replicated to make frame and Previous Still / Next Still advances to the next field, which results in single stepping in field resolution.

**Field1** — Field 1 is replicated to make frame and Previous Still/Next Still advances to field 1 of the next still.

**Field 2** — Field 2 is replicated to make frame and Previous Still/Next Still advances to field 1 of the next still.

**Frame** — Fields 1 & 2 are displayed in the normal order to show frame and Previous Still/Next Still advances to field 1/2 of the next still.

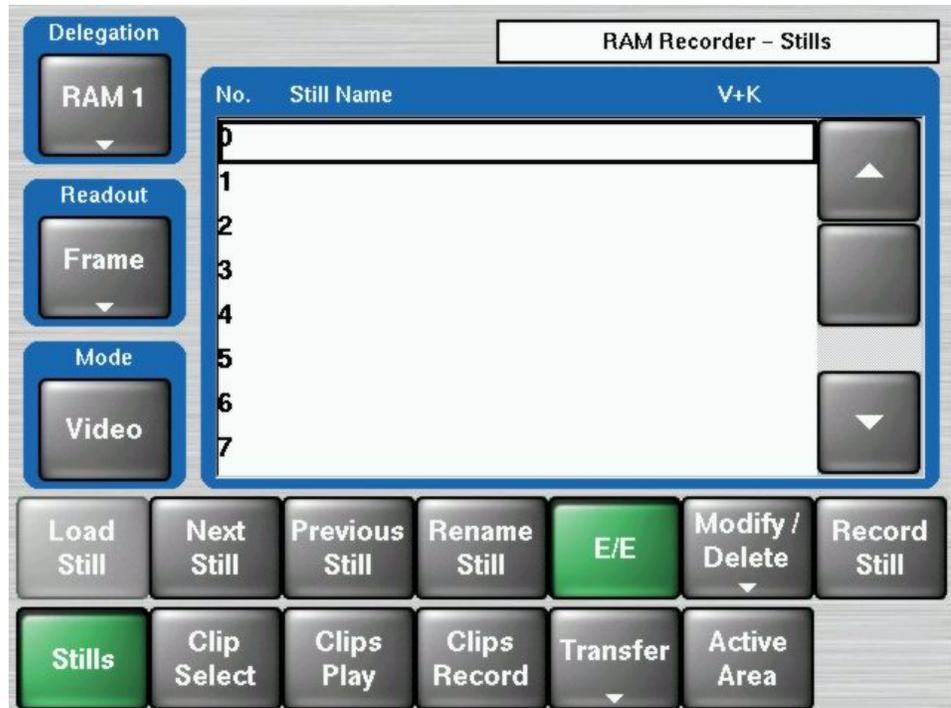
## Mode Pane

Mode Pane is a new feature of the RAM Recorder.

### Video Mode

When in Video mode, a video signal will be stored. RAM 1 uses RAM 2 as its associated key channel for record and recall, while RAM 3/5 uses RAM 4/6.

Figure 3. RAM Recorder Mode Pane: Video

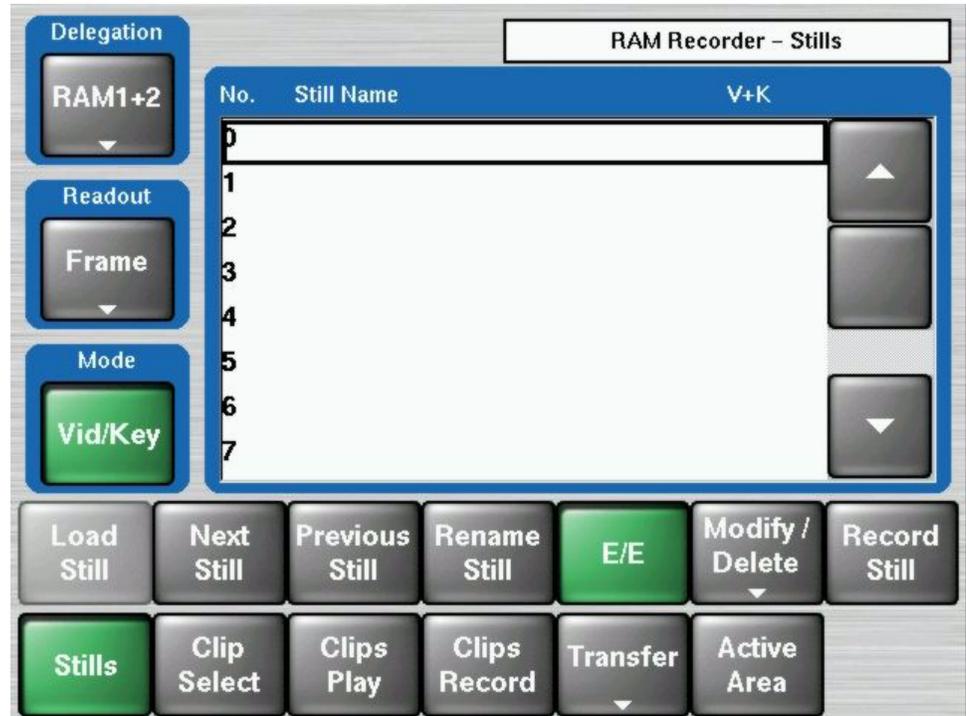


### Vid/Key Mode

When in Vid/Key mode, each video signal will be stored with an associated key signal. At recall, the key signal will only be recalled if the Vid/Key Mode button is active.

RAM 1 uses RAM 2 as its associated key channel for record and recall, while RAM 3/5 uses RAM 4/6.

Figure 4. RAM Recorder Mode Pane: Vid/Key



## Still: Video Mode

**Load Still** — Load still into delegated channel.

**Next Still** — Load the next available still into the delegated channel.

**Rename Still** — Rename the selected still.

**Previous Still** — Load the previous available still into the delegated channel.

**E/E (E to E)** — When selected, displays the input signal of the delegated channel, otherwise the loaded stills are displayed.

### **Modify/Delete — Calls a sub-dialog:**

- **Delete Still** — Deletes the selected still from the list. If the still contains a video and a key, both parts are deleted (a key part cannot exist without its video part).
- **Delete all Stills** — Deletes all stored stills. If the still contains a video and a key, both parts are deleted (a key part cannot exist without its video part).
- **Move to...** — Stills can be repositioned or “moved” within the list. If the target position is already taken an enquiry appears.
- **Move to Clips** — Stills can be moved from the still list to the clip list. If the target position is already taken an enquiry appears. If the name of the still already exists in the clip list the still has to be renamed.
- **Split Vid/Key** — Splits a Vid/Key-Signal into a Vid-Signal and a Key-Signal.
- **Join Vid/Key** — Combines a single Vid-Signal and a single Key-Signal into one Vid/Key-Signal
- **Save meta data** — Saves the stills meta data.
- **Record Still** — Grabs the still from the input of the delegated channel.

### **Still: Video/Key Mode**

In this mode RAM 1+2 (RAM 3+4, RAM 5+6) work together as a video/key pair. RAM 1, RAM 3 and RAM 5 are always the video path and RAM 2, RAM 4 and RAM 6 are the key path.

**Load Still** — Load the video part of the still into RAM 1 (RAM 3, RAM 5) and the key part into RAM 2 (RAM 4, RAM 6). If a still without key was selected, RAM 2 (RAM 4, RAM 6) will still show the previously loaded still.

**Next Still** — Load the Next available video into RAM 1 (RAM 3, RAM 5) and the associated key part into RAM 2 (RAM 4, RAM 6). If this still does not have a key part, RAM 2 (RAM 4, RAM 6) will still show the previously loaded still.

**Rename Still** — Rename the selected still.

**Previous Still** — Load the previous available video into RAM 1 (RAM 3, RAM 5) and the associated key part into RAM 2 (RAM 4, RAM 6). If this still does not have a key part, RAM 2 (RAM 4, RAM 6) will still show the previously loaded still.

**E/E (E to E)** — When selected, displays the input signals of both channels, RAM 1 and RAM 2 (RAM 3/4 or RAM 5/6) otherwise the loaded Stills are displayed.

**Modify/Delete** — Modify/Delete the selected still. If the still contains a video and a key, both parts are deleted

**Record Still** — Grabs the video part from the input of RAM 1 (RAM 3, RAM 5) and the key part from the input of RAM 2 (RAM 4, RAM 6).

## Clip Select Menu

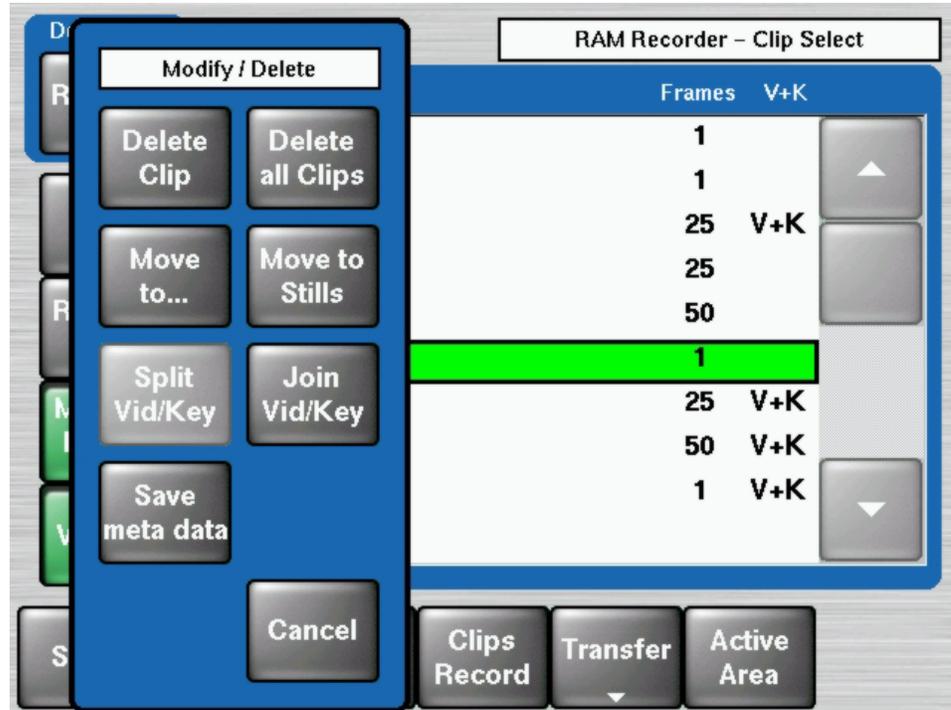
Figure 5. RAM Recorder Clip Select Menu



**Load Clip** — Selects the clip to the output of the delegated channel.

**Rename Clip** — Renames the default clip name and makes automatic name changes for associated key signals. The software will prevent changes in key signal names only and the rename button will go grey when a key signal is highlighted.

Figure 6. RAM Recorder Clip Select - Modify/Delete Menu



**Modify/Delete** — Calls a sub-dialog:

- **Delete Clip** — Deletes the selected clip from the list. If the still contains a video and a key, both parts are deleted, because a key part cannot exist without its video part.
- **Delete all Clips** — Deletes all stored clips. If the clip contains a video and a key, both parts are deleted, because a key part cannot exist without its video part.
- **Move to...** — Clips can be repositioned or “moved” within the list. If the target position is already taken an enquiry appears.
- **Move to Stills** — Clips can be moved from the clip list to the still list. The clip cannot be longer than one frame. If the target position is already taken an enquiry appears. If the name of the clip already exists in the stills list the clip has to be renamed.
- **Split Vid/Key** — Splits a Vid/Key-Signal into a Vid-Signal and a Key-Signal.
- **Join Vid/Key** — Combines a single Vid-Signal and a single Key-Signal into one Vid/Key-Signal
- **Save meta data** — Saves the clips meta data.

The clips meta data contains the following parameters:

Table 2.

Meta Data
Clip name
Clip ID
Clip standard
Clip length
Play positioner
Mark-In
Mark-Out
Loops
Bounce
Playmode
Start Record X/Y
End Record X/Y
Start Play X/Y
End Play X/Y
Play Offset X/Y

## Clip Play Menu

The Clips Play menu provides the control for playing a clip

Figure 7. Clip Play Menu



## Tape Motion Commands (TMC)

**Begin** — Moves clip to the beginning

**End** — Moves clip to the end

**< (Play Reverse)** — Plays the clip in reverse

**> (Play Forward)** — Plays the clip forward

**Step + / Step -** — Advances one field or frame, depending on Readout mode

**Still** — Goes to stop, displaying the current image

**E/E (E to E)** — Goes to stop, showing the input signal of the delegated channel. The signal is one frame delayed depending on Readout Play.

**Var** — Play the clip in variable speed, depending on **Variable** setting:  
1 = normal speed, 2 = double speed, 0.5 = half speed

## Modify

**Modify** allows you to modify the values displayed in the main display area. After pressing the button a dialog appears to modify the play parameters.

Figure 8. Clips Play Modify Dialog



**Go to timecode** — Go to a timecode specified by the numeric popup panel

**Mark In** — Set a Mark In point via numeric popup panel

**Mark Out** — Set a Mark Out point via numeric popup panel

**After Play** — Not supported yet

**Mode** — Calls a sub-dialog:

- **VTR** — Standard behavior like a tape machine
- **Clip** — Mark In and Mark Out limit the accessible timecode range. When you press play the clip is always played from Mark In to Mark Out.
- **Simple Loop** — Mark In and Mark Out limit the accessible timecode range. When you press play the clip starts at the current position, plays to Mark Out and executes then total range from Mark In to Mark Out n times, where "n" is the numbers of loops (0 = forever).
- **Extended Loop**— The looped section is from Mark In to Mark Out as is the case for Simple Loop mode, but in this mode play may start before Mark In and Offset determines the post Mark Out play duration.

**Readout Play** — Calls a sub-dialog:

- **Field1/2** — This mode is useful when a still or clip is made from a graphic source that has generated motion which is not in the expected field dominance. By stepping to Field 2 by pressing Previous Still / Next Still, before playing a clip, the display order of fields is reversed to F2/F1.
- **Field 1** — Only field 1 is played out resulting in "Film look" (only 25/30 motion updates per second)
- **Field 2** — Only field 2 is played out resulting in "Film look" (only 25/30 motion updates per second)
- **Frame** — Standard play out mode

**Readout Still** — Calls a sub-dialog:

- **Field1/2** — Field 1 or field 2 is displayed and Previous Still / Next Still advances to the next fields, which results in single stepping in field resolution.
- **Field 1** — Field 1 is replicated to make frame and Previous Still / Next Still advances to field 1 of the next still
- **Field 2** — Field 2 is replicated to make frame and Previous Still / Next Still advances to field 1 of the next still
- **Frame** — Field 1 or Field 2 is replicated to make frame and Previous Still / Next Still advances to field 1/2 of the next still

**Loops** — Used in Loop mode to specify the number of loops to be executed (0 = forever).

**Bounce** — When On, the clip bounces (forward/reverse) between Mark In and Mark Out.

**Breakout Mode** — Calls a sub-dialog to allow selection of a break mode for loop or bounce:

- **Any** — The clip will be stopped at the next mark.
- **Mark In** — The clip will be stopped at the next Mark In.
- **Mark Out** — The clip will be stopped at the next Mark Out.

## Clip Record Menu

The Clips Record menu allows the user to create or re-record clips.

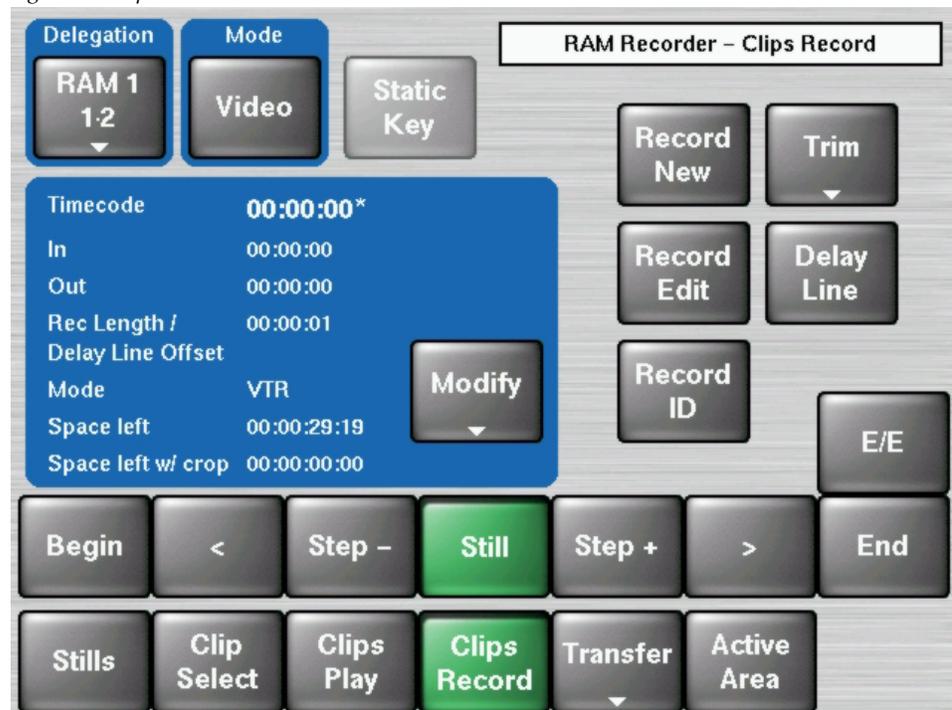
To create a new clip, press the **Record New** button. Recording starts immediately and the clip name is set to a default name. To stop recording press Still or E/E.

The parameters of the recorded clips are shown in the display pane.

**Space left** shows the free storage space for full frame clips in hours:min:sec:frames.

**Space left with crop** shows the maximum duration of the current cropped clip based on the free storage space in hours:min:sec:frames of the selected channel.

Figure 9. Clip Record Menu



### Record New

The button starts recording. Clip position and clip name will be created automatically.

**Record Edit**

The button starts recording in an existing clip at the current position. The system allows recording over the end of the current clip which results in appending to the current clip.

**Static Key**

Only the first frame will be used to record the clip.

**Trim**

This function is used to select the exact range of unwanted frames out of a recorded clip, e.g. to create an endless loop without any disturbance. When pressed the total clip is trimmed to the "In" and "Out" values.

**Trim inner** — Using the "Inner" function the frames between the Mark In and Mark Out value will be deleted.

**Trim outer** — Using the "Outer" function the frames before the Mark In value and the frames after the Mark Out values will be deleted.

**Delay Line**

When switched on, the delegated channel behaves like a delay line, the desired delay can be specified via **Modify/Record Length**.

**Note** When you change the Record Length value while you are in Delay Line mode, the new value is not accepted unless you leave and re-enter this mode.

**Record ID**

The button starts recording. Clip position can be selected. If this position is already taken a warning dialog appears:

**You tried to record a clip to an existing clip! Would you like to overwrite the clip?**

## Vid/Key Mode

### Vid/Key Mode button

This button is always active and describes one of two modes, Video or Vid/Key. Each video signal will have an associated key signal stored. At recall, the key signal will only be recalled if the Vid/Key Mode is active. RAM 1 uses RAM 2 as its associated key channel for record and recall, while RAM 3 uses RAM 4. For more information please see the *Config/Misc. menu*.

## Clips Video Mode

- **Load Clip** - Load clip into delegated channel.
- **Record Clip** - Grab the clip from the input of the delegated channel.
- **Rename Clip** - Rename the selected clip.
- **Delete Clip** - Delete the selected clip. If the clip contains a video and a key, both parts are deleted, because a key part cannot exist without its video part.
- **Previous Clip** - Load the previous available clip into the delegated channel.
- **Next Clip** - Load the next available clip into the delegated channel.
- **E/E (E to E)** - When selected, displays the input signal of the delegated channel, otherwise the loaded clip is displayed.

## Clips Video/Key Mode

In this mode Ram1+2 (Ram3+4) work together as a video/key pair. Ram1 and Ram3 are always the video path and Ram2 and Ram4 are the Key path.

- **Load Clip** - Load the video part of the clip into Ram1 (Ram3) and the key part into Ram2 (Ram4). Without a key, the previous keys in channel 2, 4 and 6 are removed and the channel jumps to E/E.
- **Record Clip** - Grab the video part from the input of Ram1 (Ram3) and the key part from the input of Ram2 (Ram4)
- **Rename Clip** - Rename the selected clip.
- **Delete Clip** - Delete the selected clip. If the clip contains a video and a key, both parts are deleted
- **Previous Clip** - Load the previous available video into Ram1 (Ram3) and the associated key part into Ram 2 (Ram4). If this clip does not have a key part, Ram2 (Ram4) will show the previously loaded clip (in yellow)
- **Next Clip** - Load the Next available video into Ram1 (Ram3) and the associated key part into Ram 2 (Ram4). Without key the previous keys in channel 2, 4 and 6 are removed and the channel is jumping to E/E.
- **E/E (E to E)** - When selected, displays the input signals of both channels; Ram1 and Ram2 (Ram3 and Ram4), otherwise the loaded clips are displayed.

## Tape Motion Commands (TMC)

**Begin** — Moves clip to the beginning (VTR mode)

**End** — Moves clip to the end (VTR mode)

**</>** — Play Forward / Play Rewind

**Step- / Step +** — Advances one field or frame, depending on Readout mode

**Still** — Stops replay and displays the current image as a frame or field depending on Readout mode.

**E/E (E to E)** — Goes to stop, showing the input signal of the delegated channel

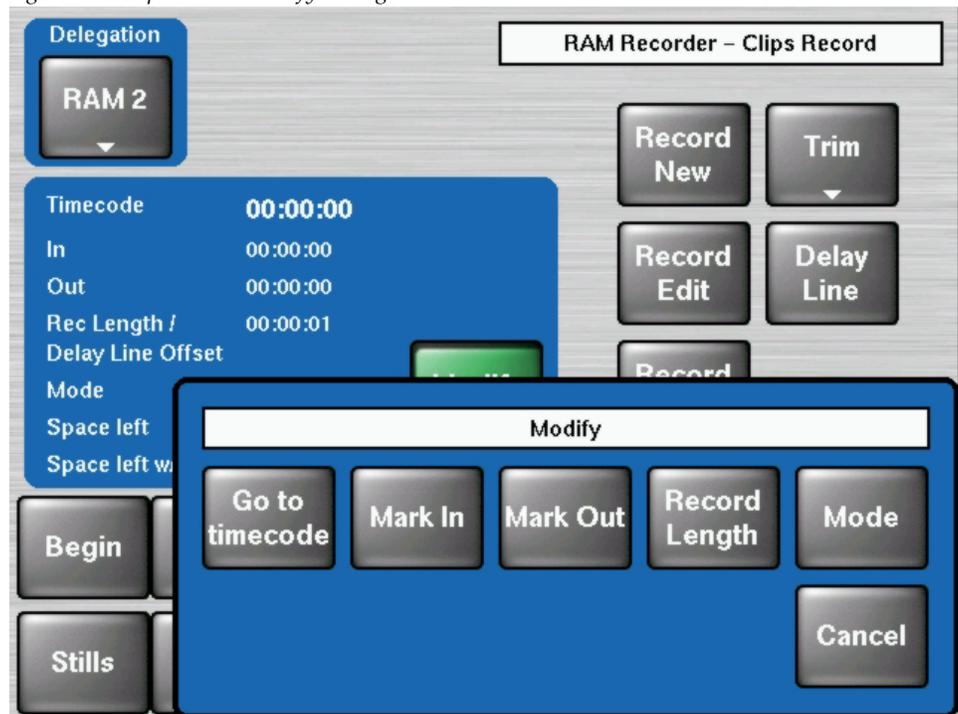
**Begin** — Set a Mark

**Var** — Play the clip in variable speed, depending on **Variable** setting:  
1 = normal speed, 2 = double speed, 0.5 = half speed

## Modify

**Modify**—Modifies the values displayed in the main display area. After pressing the button a dialog appears to modify the play parameters.

Figure 10. Clips Record Modify Dialog



**Go to timecode** — Go to a timecode specified by the numeric popup panel

**Mark In** — Set a Mark In point via numeric popup panel

**Mark Out** — Set a Mark Out point via numeric popup panel

**Record Lengths** — Set the record length and the delay line offset in min:sec:frames via numeric popup panel

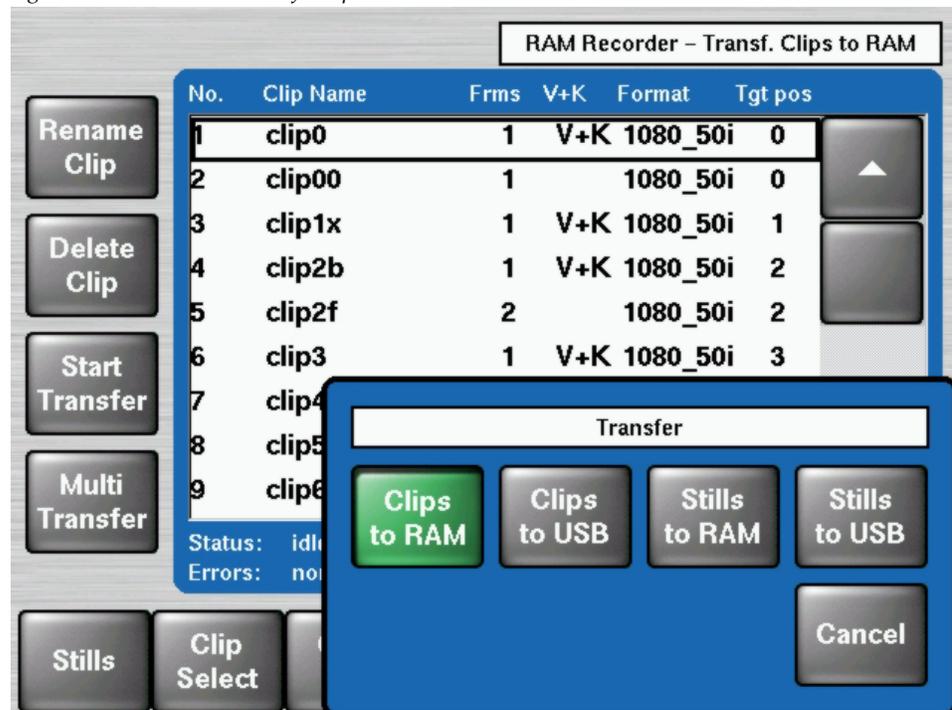
**Mode** — Calls a sub-dialog:

- **VTR** — Standard behavior like a tape machine
- **Clip** — Mark In and Mark Out limit the accessible timecode range. When you press play the clip is always played from Mark In to Mark Out.
- **Simple Loop** — Mark In and Mark Out limit the accessible timecode range. When you press play the clip starts at the current position, plays to Mark Out and then executes the total range from Mark In to Mark Out n times, where "n" is the number of loops (0 = forever).
- **Extended Loop**— The looped section is from Mark In to Mark Out as in the case for Simple Loop but in this mode, play may start before Mark In and Offset determines the post Mark Out play duration.

## Kayak HD Transfer Menu

The RAM-Recorder Transfer Menu provides possibilities to transfer clips and stills from the RAM Recorder to a USB flash memory and vice versa.

Figure 11. RAM Rec. - Transf. Clips to RAM



Select the desired Transfer Mode with the buttons:

- **Clips to RAM**
- **Clips to USB**
- **Stills to RAM**
- **Stills to USB**

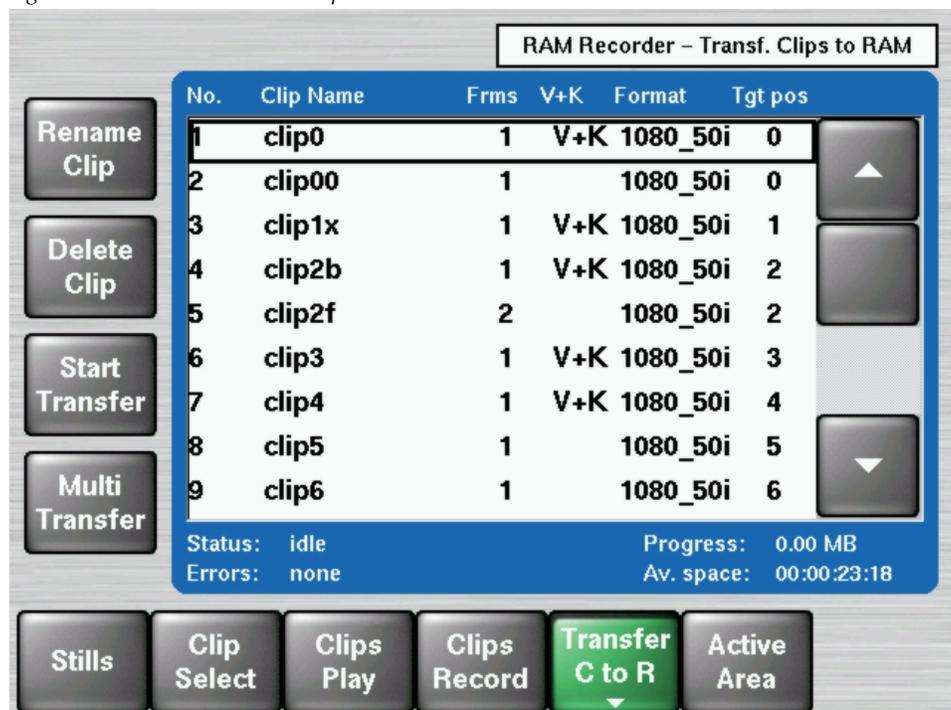
The clip and still storage is organized in 2400 addressable positions each.

## Transfer Clips to RAM

- Insert your USB flash memory
- Select the transfer mode „Clips to RAM“
- The content of the USB flash memory will be shown in the list box with the following details: Clip name, number of frames (Frms), Video/Key Identifier (V/K), TV format (Format) and target position of the clip (Tgt pos).

**Note** Both clip name and target position can be changed during transfer.

Figure 12. RAM Rec. - Select Clips



Single clips can be renamed, deleted and transferred with the buttons on the left.

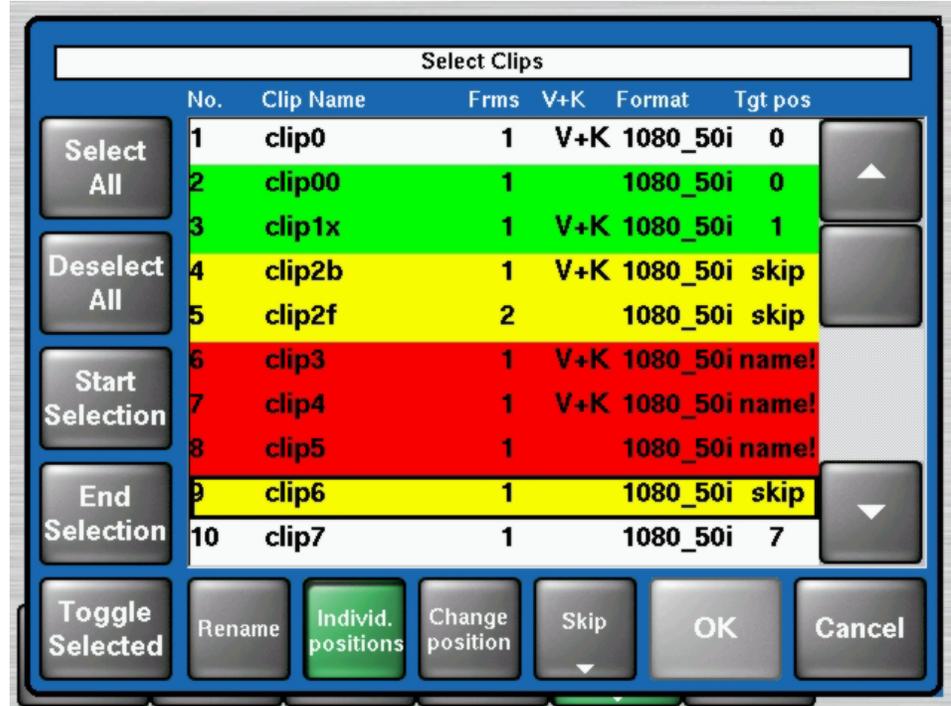
A transfer of multiple clips can be made by pressing the **Multi Transfer** button.

**Note** Depending on the clip size the transfer can take up to one hour.

## Multi Transfer

Using the selection buttons on the left, all clips or groups of clips can be selected.

Figure 13. RAM Rec. - Selected Clips



Selected clips will be marked with a colored background in order to identify transfer conflicts.

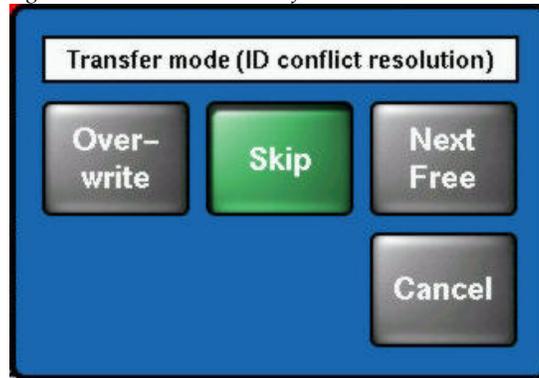
- **Green:** No conflict. Press OK to start the transfer.
- **Red:** May be caused by a name conflict - to solve this problem rename the clip. If the overwrite mode is active and there are multiple clips with the same target position, the background will also turn red.
- **Yellow:** Clip position in RAM storage is used and "Skip" is selected. Change target position number or change the transfer mode.

**Individual positions:** The **Target Position** value is taken from the data on the flash memory. If this option is not active the Target Position value begins with 0 for the first clip and increases by one for any further clips.

**Change Position:** This button is only available if **Individual positions** is active - it redefines the Target Position value of a chosen clip.

**Set Start Position:** This button is only available if **Individual positions** is not active - it defines a starting point (other than 0) for the Target Position enumeration.

Figure 14. RAM Rec. - Transfer Mode



- **Overwrite:** Overwrites the clip with the same position number in the RAM storage.
- **Skip:** The transfer of the current clip will be skipped.
- **Next Free:** The current clip will be saved on the next free position.

### Transfer Clips to USB

This menu is intended to save single clips or backup all clips to a USB flash memory. The operating procedure is the same as the transfer operation described above.

### Transfer Stills to RAM

This menu is intended to save single stills or backup all stills to the switchers RAM storage. The operating procedure is the same as the transfer operation described above.

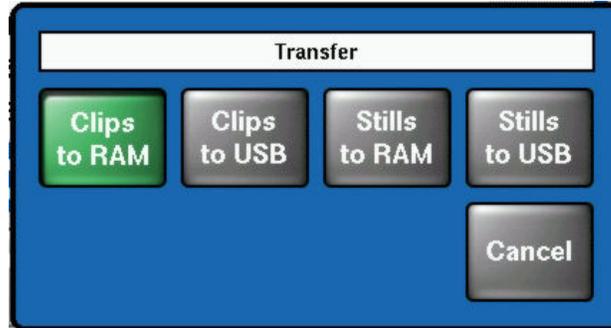
### Transfer Stills to USB

This menu is intended to save single stills or backup all stills to a USB flash memory. The operating procedure is the same as the transfer operation described above.

## Kayak DD Transfer Menu

The RAM-Recorder Transfer Menu provides possibilities to transfer clips and stills from the RAM Recorder to a USB flash memory and vice versa.

Figure 15. RAM Rec. - Transf. Clips to RAM



As described in the *Kayak HD Transfer Menu* on page 20, the storage of single and multiple clips is possible.

Figure 16. RAM Rec. - Transf. Clips to RAM



Single clips can be renamed, deleted and transferred with the buttons on the left.

A transfer of multiple clips can be made by pressing the **Multiple Transfer** button.

**Note** Depending on the clip size, the transfer can take up to one hour.

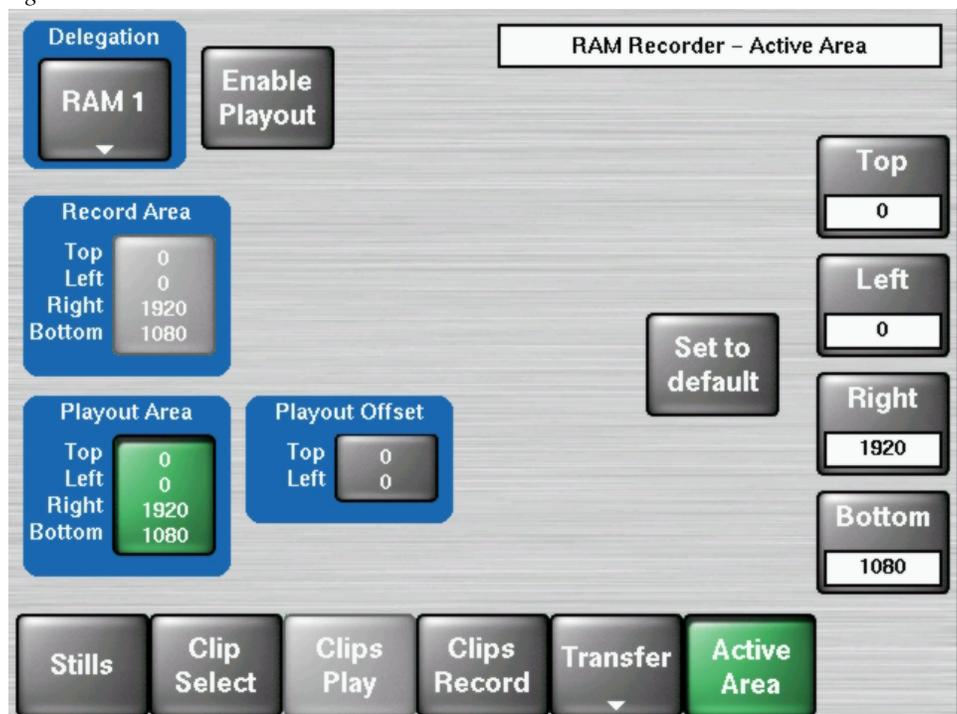
Files can be renamed to prevent transfer conflicts.

## Active Area Menu

With the Active Area function the storage space of special clips (e.g. logos) can be reduced to the active picture size.

The idea of the Playout Area/Playout Offset is that you could crop and reposition the recorded clip. The Area settings should be recovered by recalling a clip/still.

Figure 17. RAM Recorder Active Area Menu



**Enable Playout** — Position and crop a stored clip on the screen

**Record Area** — Crop

**Playout Area** — Crop the area to record

**Playout Offset** — Move the cropped clip

**Set to default** — Recall the default parameter. If Record Area is active, pressing the button sets the parameter to full frame. If Playout Area is active, pressing the button sets the Playout Area to the Record Area values and reset the Playout Offset values to zero.

## RAM Recorder Live Mode Menu

Selecting the Live Mode button (left of the display) reduces the number of parameter adjustments to the most essential ones, allowing faster control with less selection steps.

By pressing the button during RAM Recorder operation, a keypad with direct access to the stored stills and clips appears.

Figure 18. Live Mode Stills Recall



### Stills Recall / Clips Recall

- Select the delegated RAM channel via **Delegation** button
- Select the associated bank 0 to 23 via **Bank** button
- Select the group of stills, e.g. **0-19**
- Select **Video** or **Video/Key** mode.  
 In Video Mode only the video part of the still is loaded in the selected channel.  
 In Video/Key Mode the RAM pairs work together as a video/key pair. The video part of a still is loaded in RAM 1 (RAM 3/5) and the key part of a still is loaded in RAM 2 (RAM 4/6). If a still does not contain a key part, only the video part will be loaded into Ram1 and Ram2 keeps its previous image.

**Note** Stills containing video and key are displayed in yellow characters, video only in white.

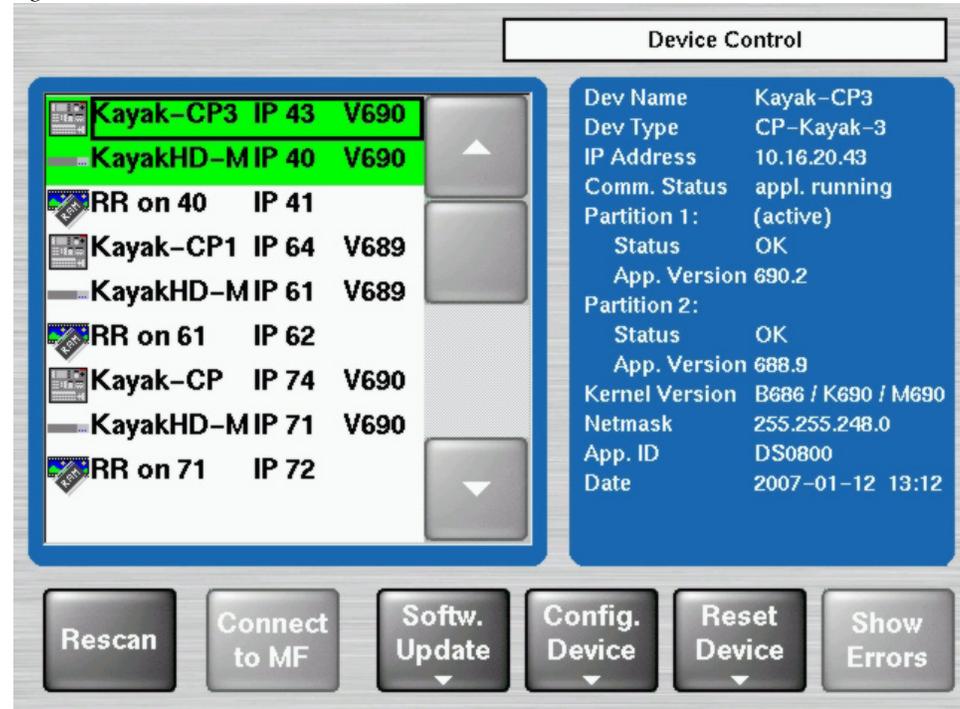
## Setting of the RAM Recorder IP Address

The IP address of the RAM Recorder will be set automatically by the system during installation.

**IP Address = Mainframe IP address + 1**

The IP address can be set manually by using the Device Control menu.

Figure 19. Device Control Menu



1. Select the RAM Recorder (RR) to be changed
2. Hold down the **Menu Lock** button and select "Config-Device"
3. Select "Set IP Addr"

A dialog box will appear with a reference to the *Kayak Installation and Service Manual* for more information.

4. Select 'OK' and change the IP address

# SpecialFX - Kurl Extensions

## Ripple

Ripple is one of the two new Kurl Modes.

Ripple is an effect in which the source video mapped to a plane is effectively distorted into and out of the target screen by a train of concentric waves. This is a parallel projection to the target screen with no perspective.

Touch the **Kurl Mode** button and then select **Ripple**, as shown in [Figure 20](#).

Figure 20. Kurl Mode

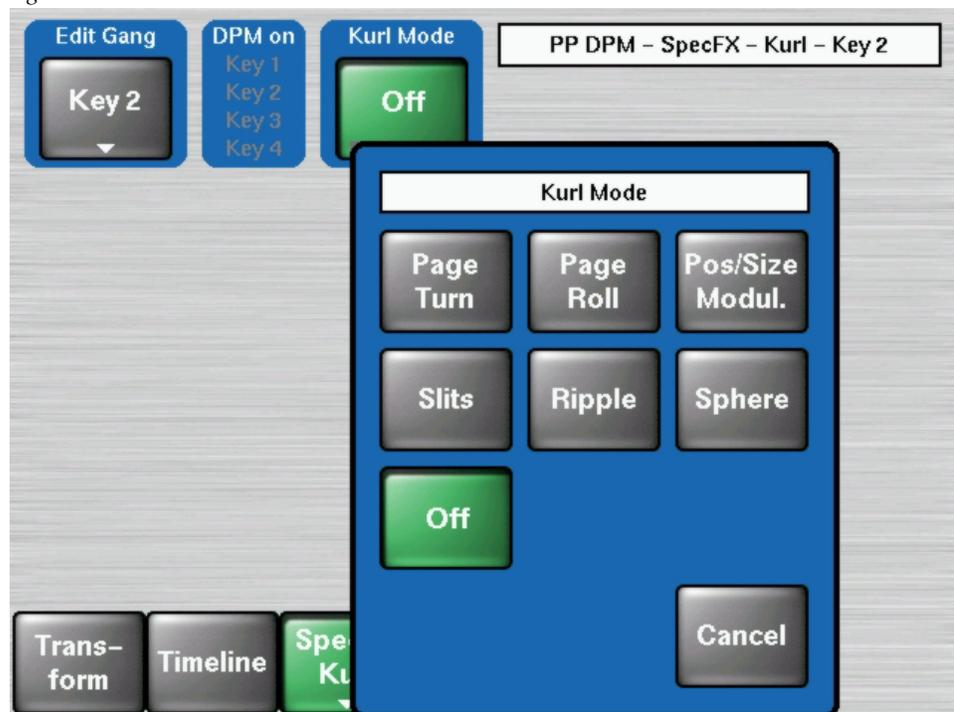
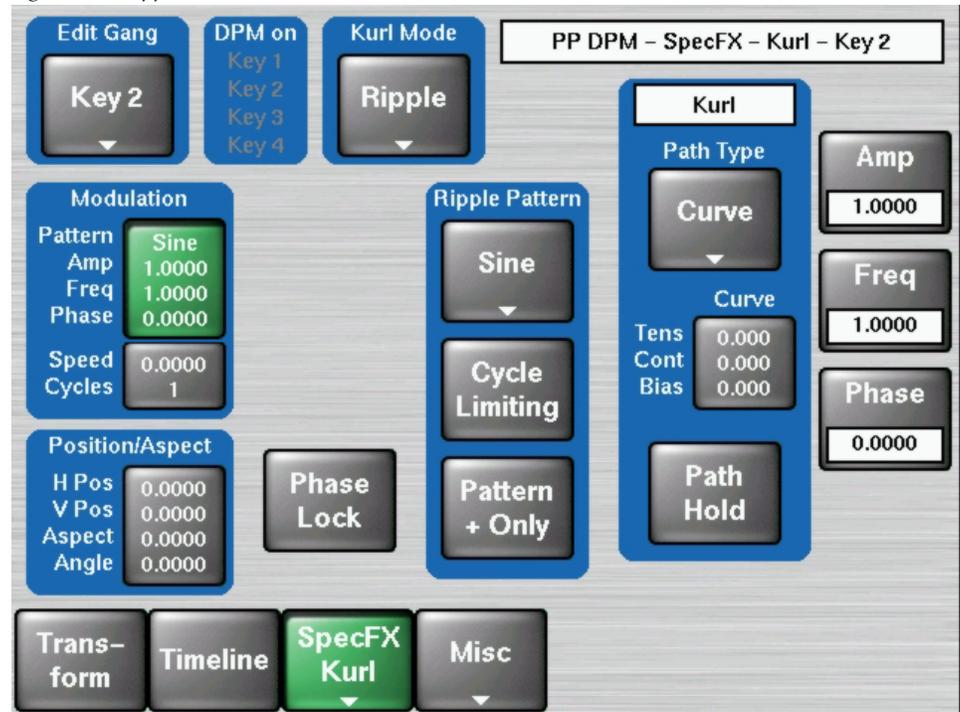


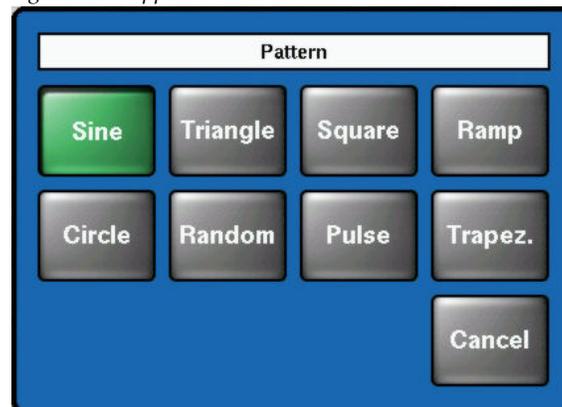
Figure 21. Ripple Mode



## Ripple Pattern Pane

To choose a Pattern click on the top button of the **Ripple Pattern Pane**.

Figure 22. Ripple Pattern Pane

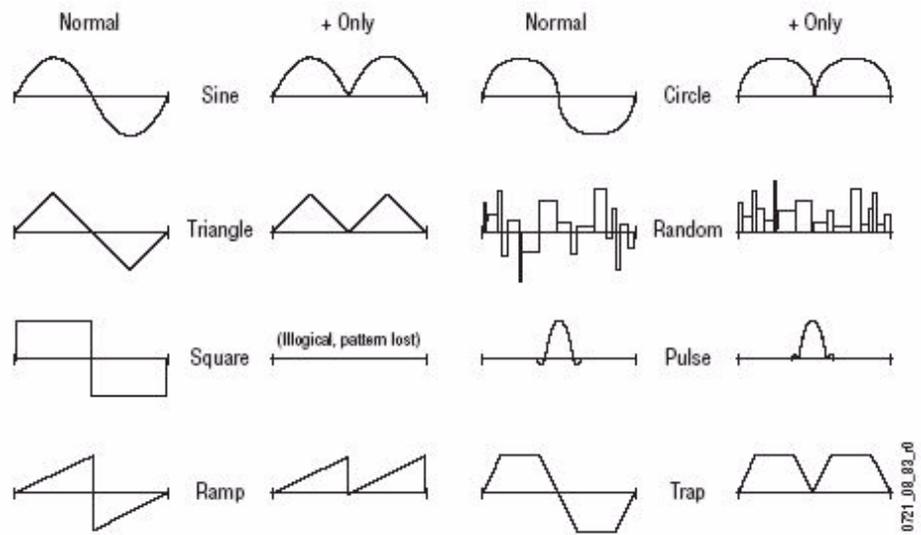


The type of wave pattern to be applied to the selected axis and modulation type is selected in the Pattern pane.

**Cycle Limiting** — activates the Cycles soft knob. This control can be used to limit the number of wave pattern cycles.

**Pattern + Only** — selects only the positive portion of the wave cycle. Representative wave shapes are shown in [Figure 23](#).

Figure 23. Ripple Pattern



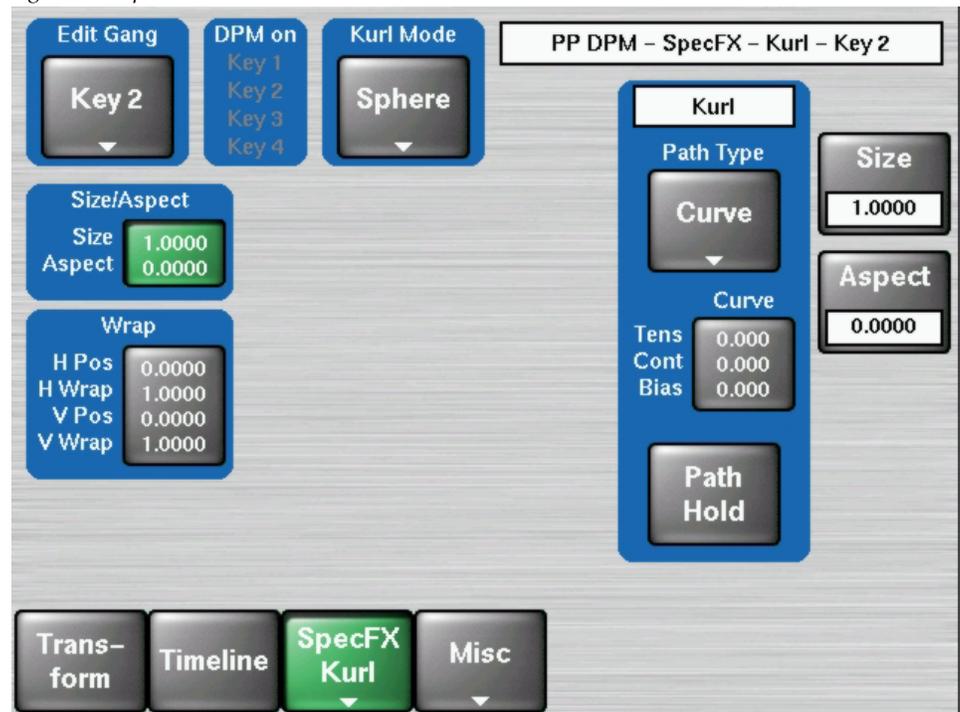
## Sphere

Sphere is the other new Kurl Mode.

Sphere is an effect in which the source video is mapped to the surface of a sphere. Controls are provided which change the aspect and size of the sphere, the point in source video to be mapped to the center of the front surface of the sphere, and the horizontal and vertical scaling of the source video to be mapped.

Touch the **Kurl Mode** button and select **Sphere**, as shown in [Figure 20](#).

Figure 24. Sphere Mode



When **Size/Aspect** is selected the following soft knob controls are available:

**Size** — defines the radius of the sphere before it is modified by Aspect.

**Aspect** — scales the horizontal and vertical dimensions of the sphere.

When **Wrap** is selected the following soft knob controls are available:

**Horizontal Position** — controls where the image is mapped onto the sphere by moving the image horizontally on the sphere's surface.

**Horizontal Wrap** — controls how much of the image is mapped onto the sphere by compressing or stretching the image horizontally.

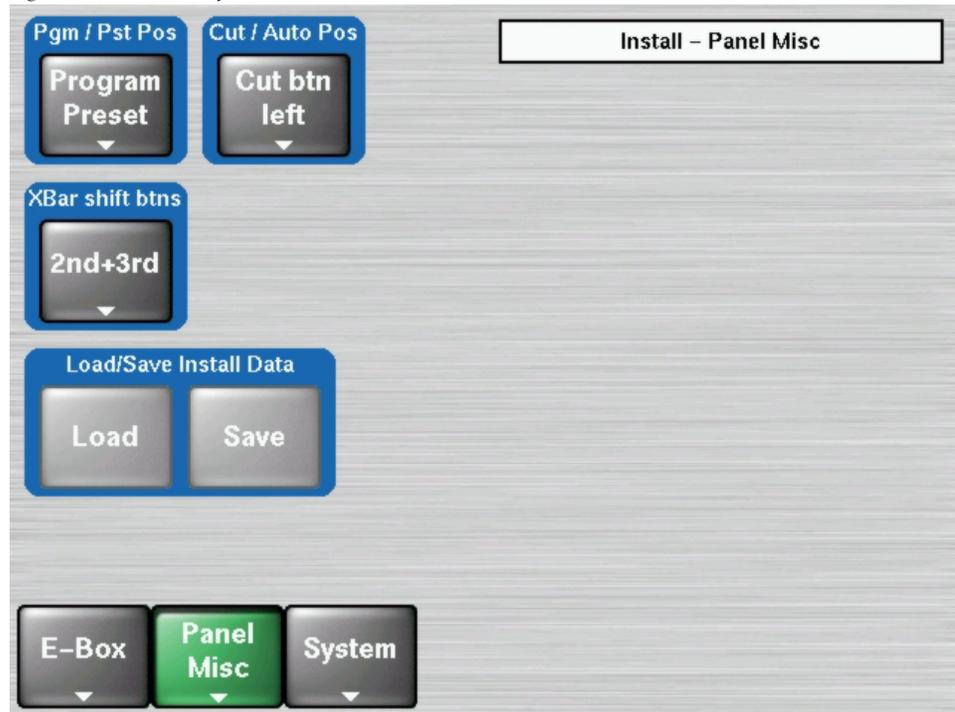
**Vertical Position** — controls where the image is mapped onto the sphere by moving the image vertically on the sphere's surface.

**Vertical Wrap** — controls how much of the image is mapped onto the sphere by compressing or stretching the image vertically.

## Additional Improvements

### XBAR Shift

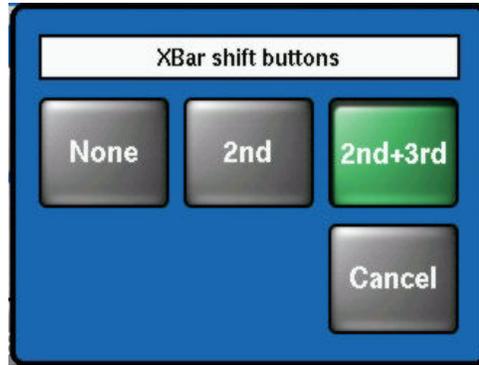
Figure 25. XBAR Shift Buttons



The **XBAR shift btns** option is used to enable or disable the **2nd** and/or **3rd** buttons which change the keyboard layout.

- **2nd**: Only the 2nd-button will affect the keyboard layout.
- **2nd+3rd**: Both keys will affect the keyboard layout.
- **None**: Neither of the two keys will affect the keyboard layout.

Figure 26. XBAR Shift Buttons



## I/O Expansion Board Support

Kayak software Version 6.9.0 supports the I/O Expansion board (771-0061-50), which can be installed in an empty M/E board slot. The boards presence is detected and licensed automatically on power cycle.

The I/O Expansion provides:

- 24 SDI Inputs
- 12 SDI Outputs
- 8 GPI Inputs
- 32 GPI / Tally Outputs

In the compact 4RU frame, the I/O Expansion board can be installed in the bottom M/E slot. In the large 8RU frame it can be installed in place of M/E 1, M/E 2, or M/E 3. However the M/Es need to be in consecutive positions with the I/O Expansion board in the next position.

**Note** The I/O Expansion Board cannot be used in the 8RU Option slot as that slot does not have I/O connections.

Table 3. 8RU Frame Slot Configuration

<b>FAN MODULE</b>	<b>M/E 0-PROGRAM/PRESET</b>			<b>AIR FILTER</b>
	<b>M/E 1</b>			
	<b>CONTROLLER</b>			
	<b>M/E 2</b>			
	<b>M/E 3</b>			
	<b>OPTION</b>			
	<b>POWER SUPPLY 1</b>	<b>POWER SUPPLY 2</b>	<b>POWER SUPPLY 3</b>	

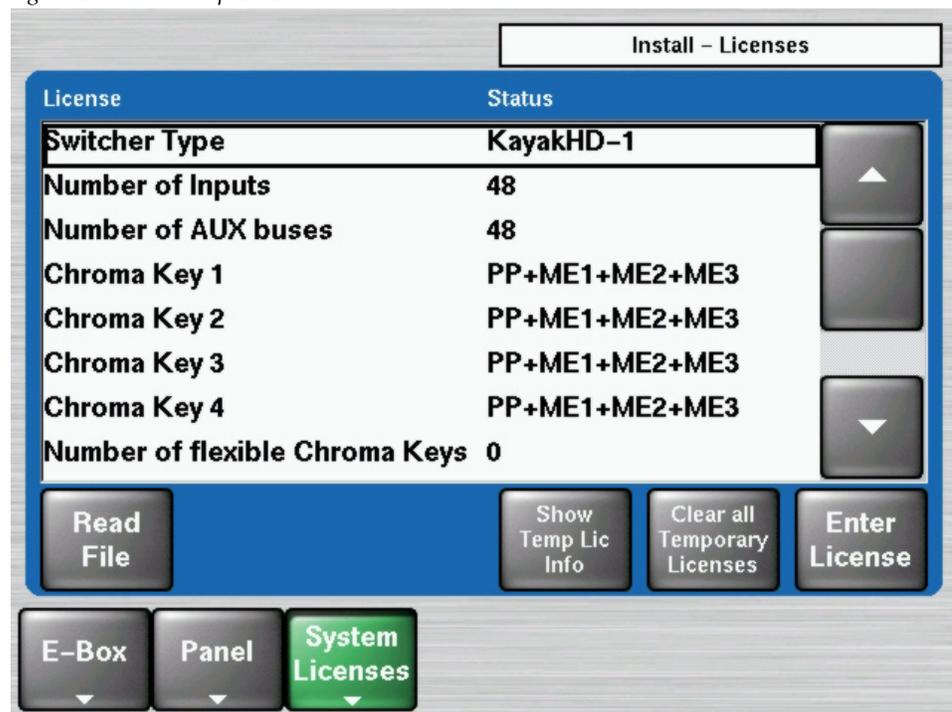
Additionally, 4 more MatchDef (Scalar) inputs can be licensed per I/O Expansion used. MatchDef options must be purchased separately.

## Licenses - Temporary License Details (HD Only)

**Note** The Kayak HD licensing is based on the correct real-time clock and date settings in the switchers' mainframe. The Real Time Clock (RTC) must be set to the current local time before temporary licence installation.

Attempts to manipulate temporary licenses by setting the time or date to the past or future is prohibited and may result in the disabling of all the temporary licenses. Before a temporary license becomes disabled, the operator is notified by appropriate dialogs. Authorized licenses can be re-enabled by GV customer service personnel.

Figure 27. Show Temp Lic Details

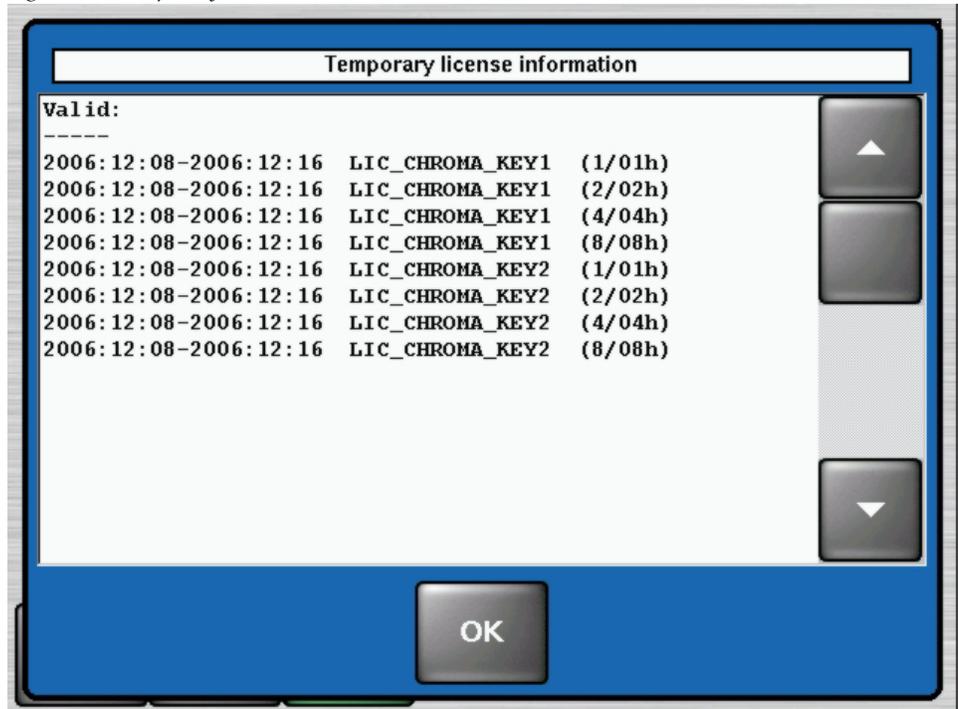


There are two new buttons:

- **Show Temp Lic Details**—shows the period in which a purchased temporary license is valid.
- **Clear all Temporary Licenses**—clears all temporary licenses, whether they are valid or expired (static licenses are not affected). To activate, you must first press the **Menu Lock** button and then the **Clear all Temporary Licenses** button.

**Note** A warning dialog will appear asking if you are sure you want to clear all temporary licences.

Figure 28. Temporary Details

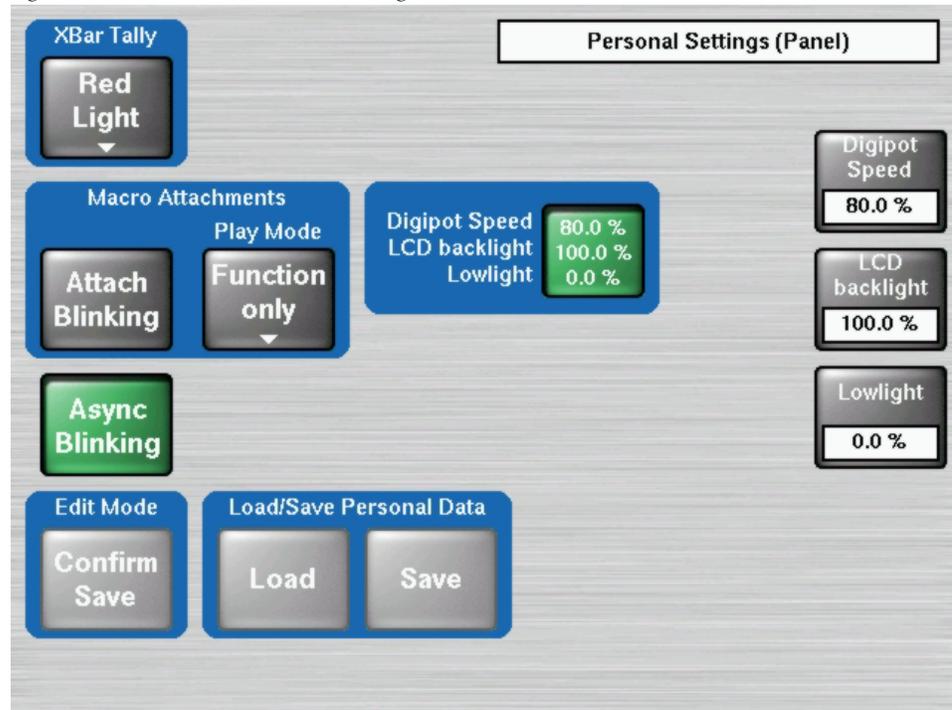


All temporary licenses are shown at once.

# Personal Settings (Panel)

## 1 M/E Panel

Figure 29. 1 M/E Panel-Personal Settings



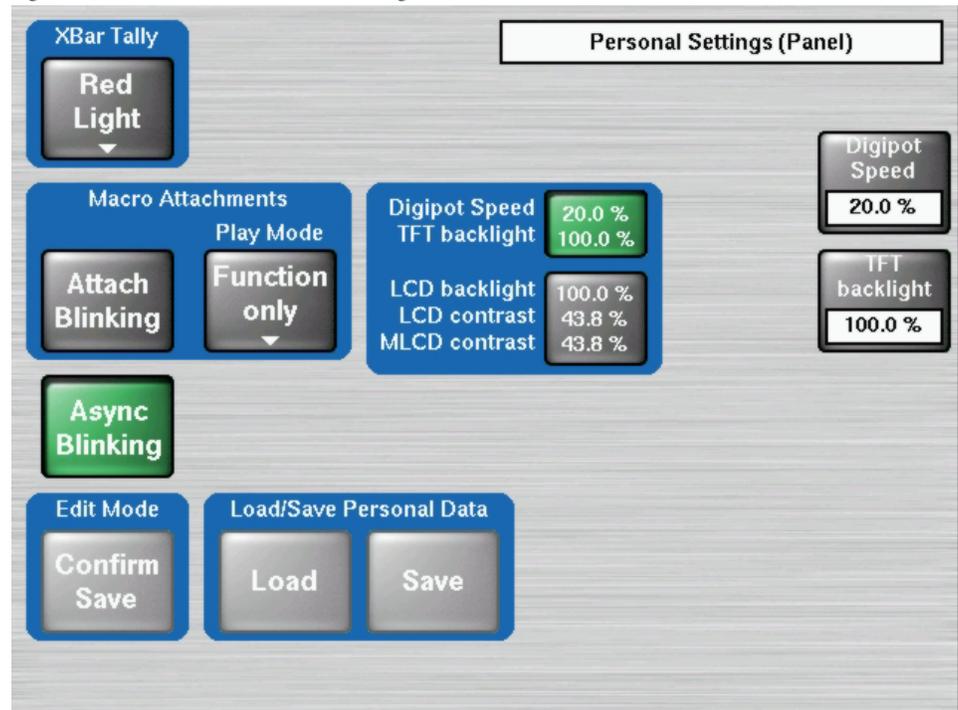
**Digipot Speed:** Sets the sensitivity of the digipots.

**LCD backlight:** Sets the backlight of the LCD display.

**Lowlight:** Sets the lumination of the keys on the panel.

### 3 M/E Panel

Figure 30. 3 M/E Panel-Personal Settings



**Digipot Speed:** Sets the sensitivity of the digipots.

**TFT backlight:** Sets the backlight of the TFT display.

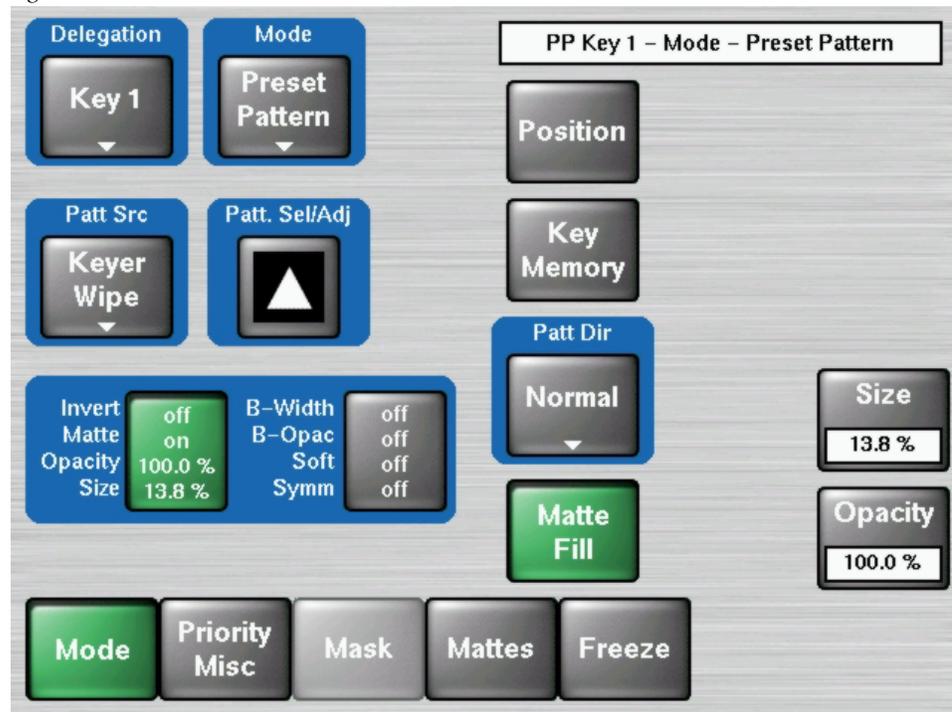
**LCD backlight:** Sets the backlight of the LCD display.

**LCD contrast:** Sets the contrast of the LCD display.

**MLCD contrast:** Sets the contrast of the LCD displays right over the Keys on the panel.

## Key/Fill Freeze

Figure 31. New Freeze Button

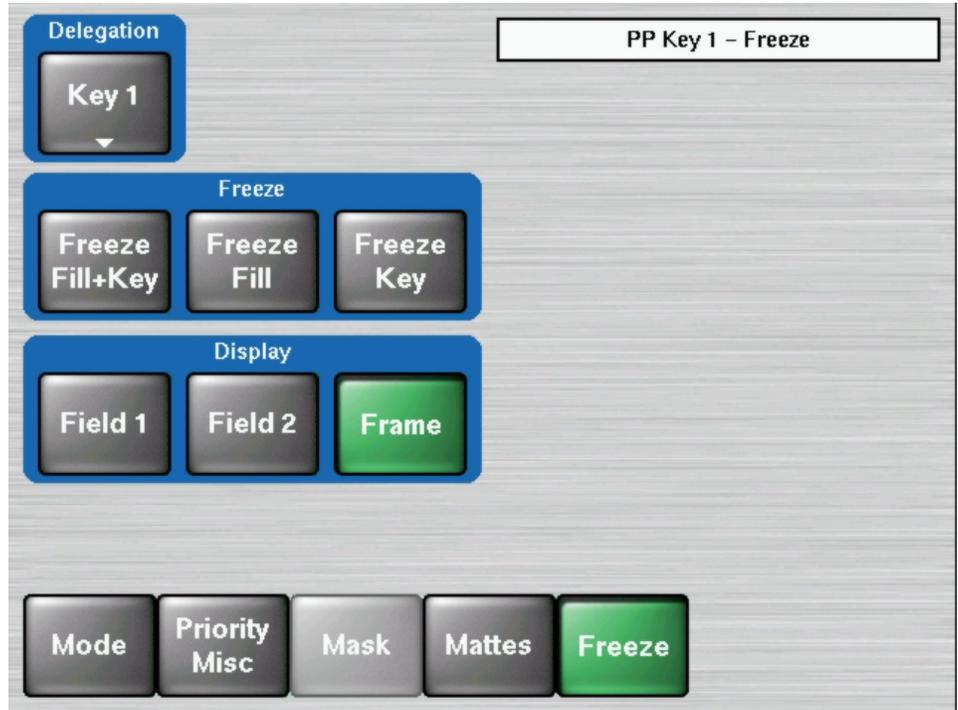


The **Freeze button** in the bottom row of the key menu is a new feature.

The **Freeze** pane contains a **Freeze Fill** and a **Freeze Key** button which are similar to the keys on the panel and **Freeze Fill+Key** which is similar to pressing both. Pressing the **Freeze Fill+Key** guarantees that the signals are frozen in same field.

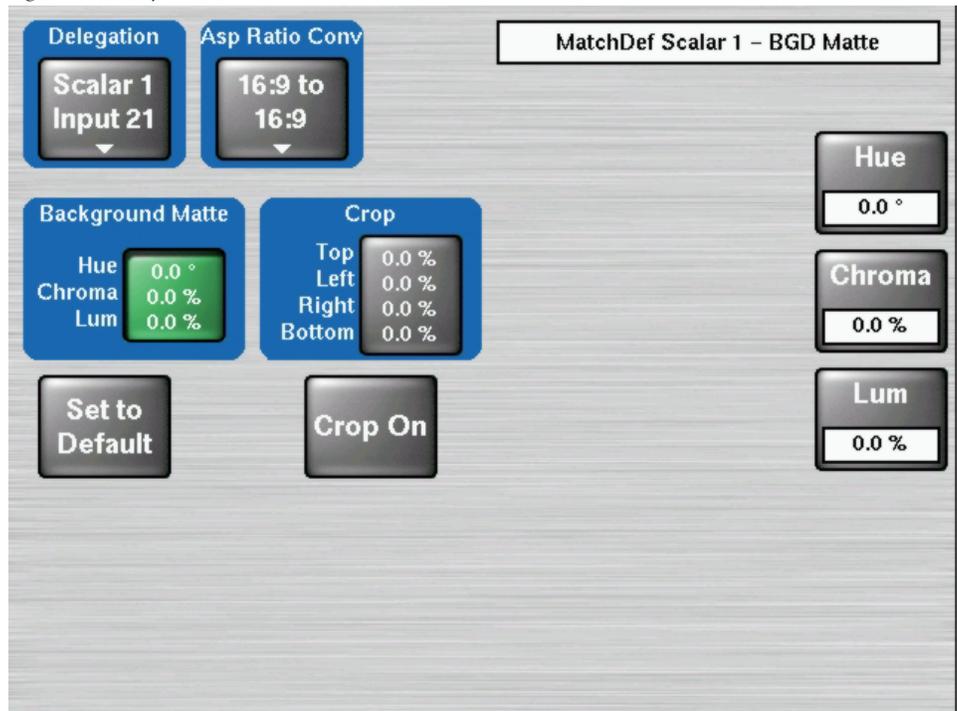
The Display pane offers the choice of which area should be either Field 1 or Field 2, or both.

Figure 32. Freeze and Display Pane



## Crop

Figure 33. Crop

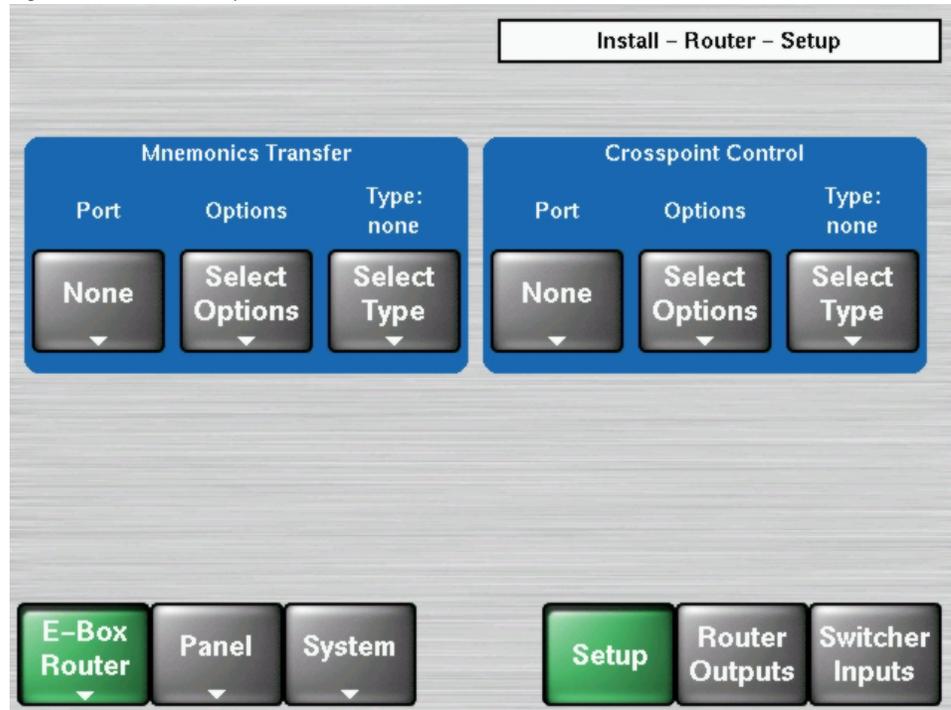


The **Crop** button crops the edges to remove\mask any unwanted artifacts that appear around the edges.

**Crop On** toggles crop on and off.

## Router Setup - Protocol Options

Figure 34. Router Setup



The **Select Options** button in the **Mnemonics Transfer** pane of the **Router Setup** allows you to select additional protocol options.

## Matrix Wipes

Kayak now supports matrix wipes for DD-1 and DD-2 systems. Earlier KayakDDs will work without any change or modification once the Kayak v6.9.0 software is installed. However new board types exist in the field that are equipped with Cypress Matrix RAM, and they will only work if the Hardware Index is set to the correct value.

KayakDDs in the field with Cypress Matrix RAM will need to be verified to have the correct HW Index value, and if not, reprogrammed.

From VxWorks shell, a special function can be executed to swap the HW Index. The shell command can be sent from a Telnet connection to the frame from a PC on the Kayak LAN. Telnet is a standard application in the Windows OS.

**CAUTION** Do not send commands you are not familiar with as you could delete important files.

To verify that the Matrix Wipes work correctly, complete the following steps:

1. Install the new Version 6.9.0 Kayak software.
2. Check if Matrix Wipes are working properly for all M/Es.

If Matrix Wipes do not work properly within an M/E, continue to [Step 3](#) and reprogram the hardware index for each M/E by using the VxWorks shell command at the Mainframe.

3. In Windows, select the Start Menu and choose Run.
4. Type **telnet 192.168.0.70** (default Frame IP address) into the **Run** dialog box

Once connected to the frame, **VxWorks login:** will appear with a blinking cursor.

5. After the colon, type **target**, the password prompt should appear
6. After the password prompt, type **password**
7. Use the VxWorks shell command to change the HW Index value.

Sample commands for changing the HW Index for each M/E:

```
sysMxRamToCypressSet 0, 1—Changes the HW Index of the PGM/PST M/E
```

```
sysMxRamToCypressSet1, 1—Changes the HW Index of M/E 1
```

If a command is successful, **Value=0=0x0** is displayed.

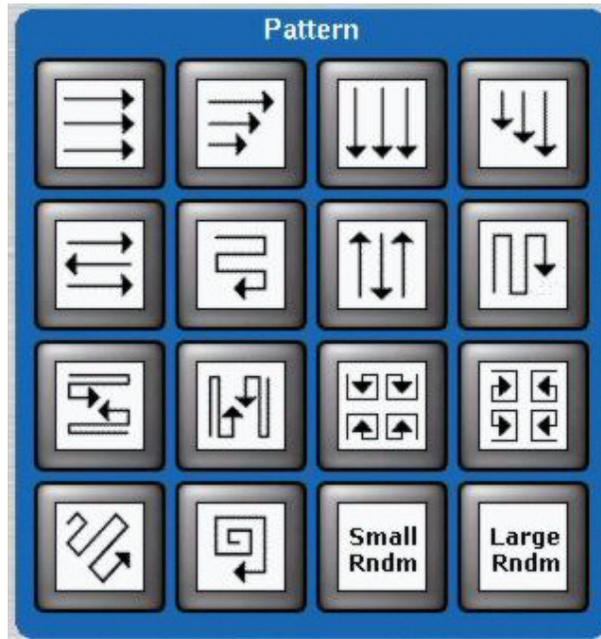
8. Perform a frame reset and verify that the Matrix Wipes are working properly (for each M/E).

### Examples of resetting the values

**Note** You will only need the following commands to reset the values if the MatrixRam was programmed incorrectly, or if you do not have the Cypress Matrix Ram and there are other causes for the Matrix Wipes working incorrectly.

- `sysMxRamToCypressSet 0, 0`—Resets HW Index value for PP Mixer
- `sysMxRamToCypressSet 1, 0`—Resets HW Index value for M/E 1

Figure 35. Matrix Pattern Wipes



## Genlock Renamed “Timing”

Genlock has been renamed “**Timing**” however the functionality is the same. The menus on the menu panel are now consistent with the side panel menus for Kayak systems.

The **Timing** menu reports the status of the Kayak system sync generator. It is used to switch between HD/DD and SD operating modes and to adjust the internal system timing. For more information, see the *Kayak Installation and Service Manual*.

[Figure 36](#), [Figure 37](#), and [Figure 38](#) show the new menu titles and button descriptions in the menus.

Figure 36. E-box-Setup

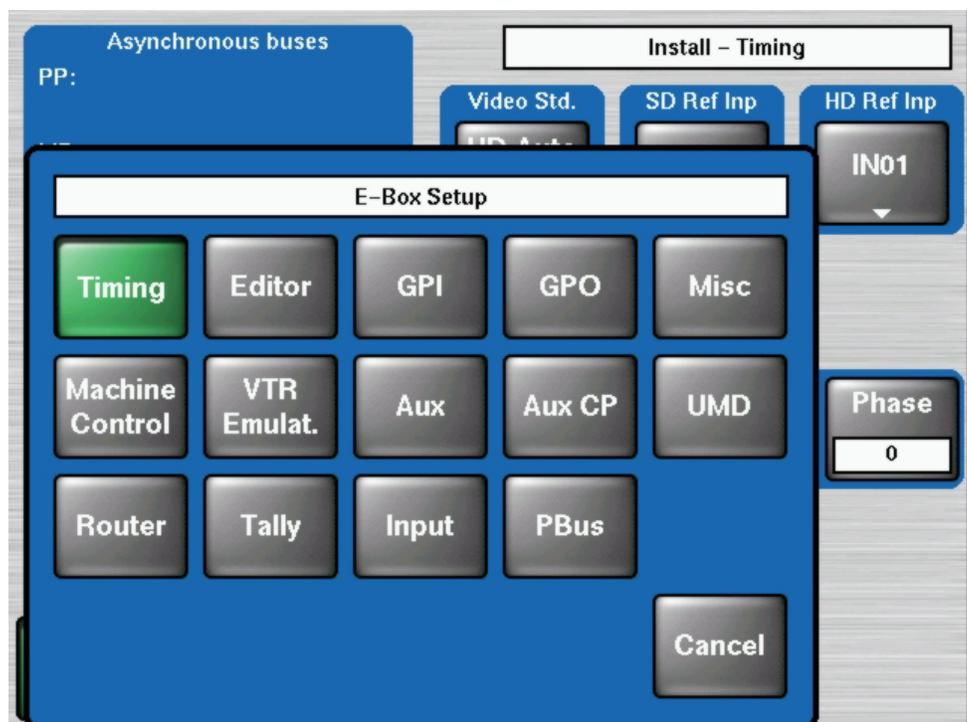


Figure 37. E-box Timing-Install

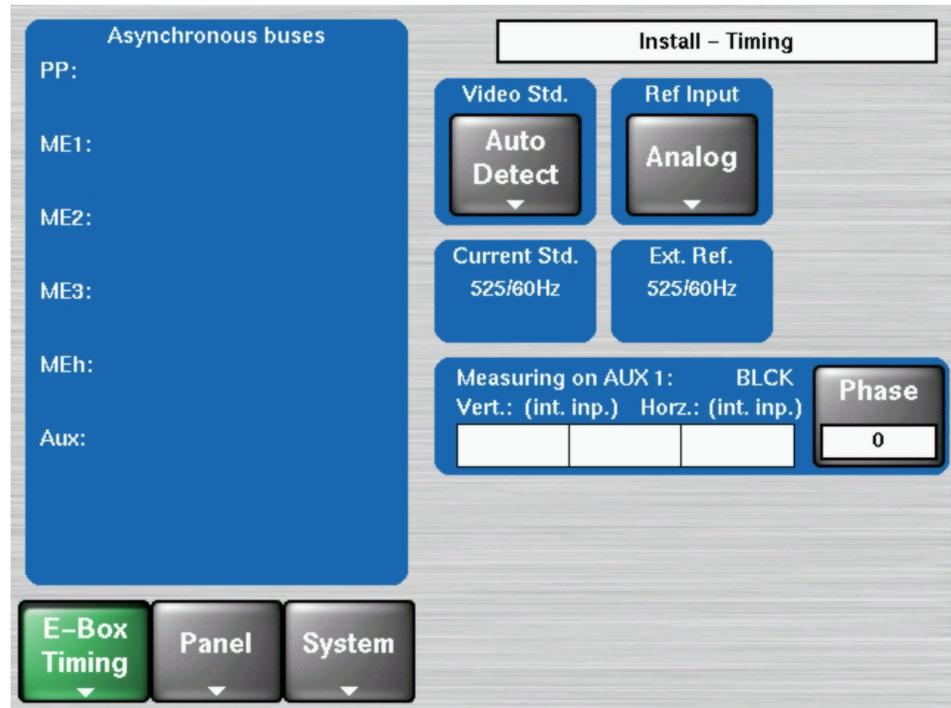
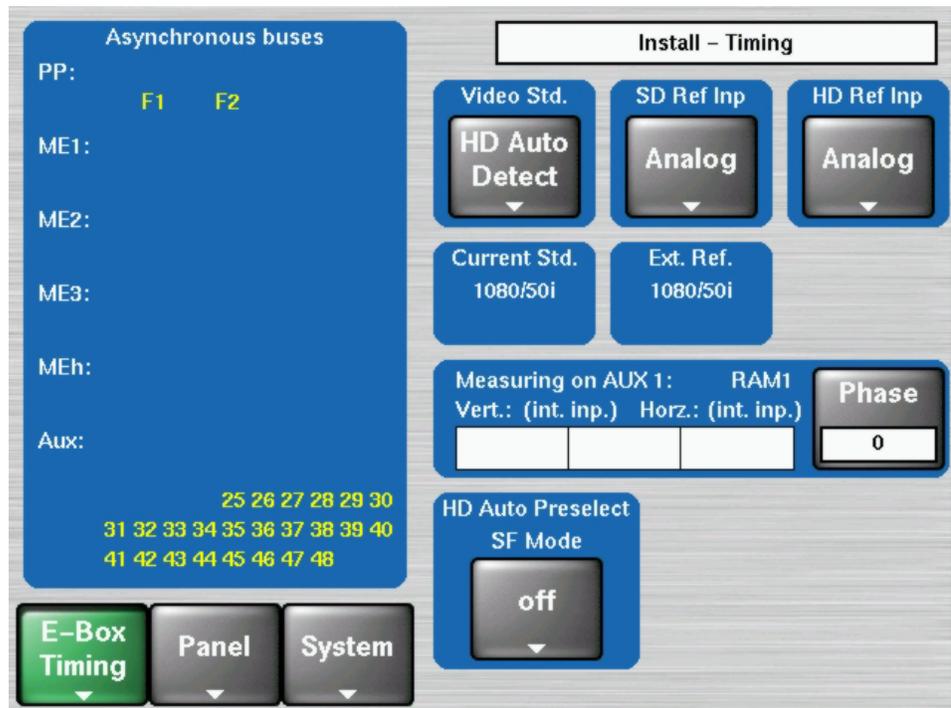


Figure 38. E-box Timing-Install Aux



# Kayak Software CD

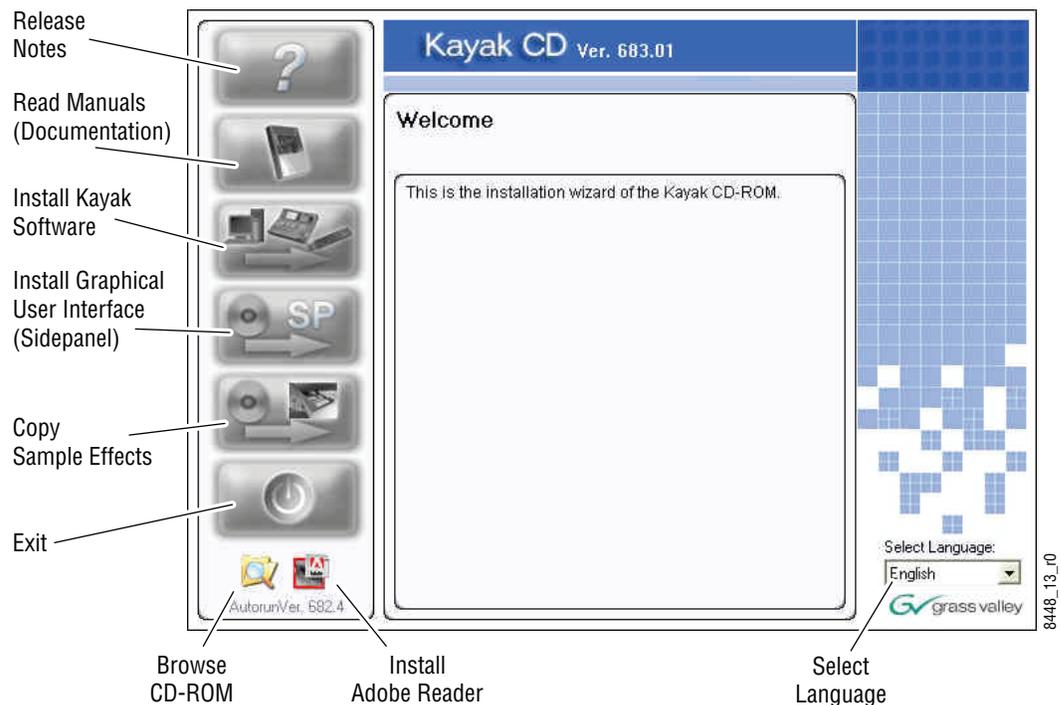
Kayak menu panel software can be installed from the Kayak Software CD over a network connected to the Kayak switcher or to a USB flash drive that can then be used to install software on the control panel.

The Kayak Software CD also lets you read the PDF version of the *Release Notes* and other manuals, copy DPM sample effects into applications, and modify some installation settings. The program is multilingual and self explanatory.

## Autorun Launch

To use the Kayak Software CD, insert the Kayak Software CD into your computer's CD-ROM drive. The **CD Installer Welcome** screen will be displayed (Figure 39).

Figure 39. CD Installer Welcome Screen



You can perform several functions by clicking on the buttons on the left-hand side of the **CD Installer Welcome** screen:

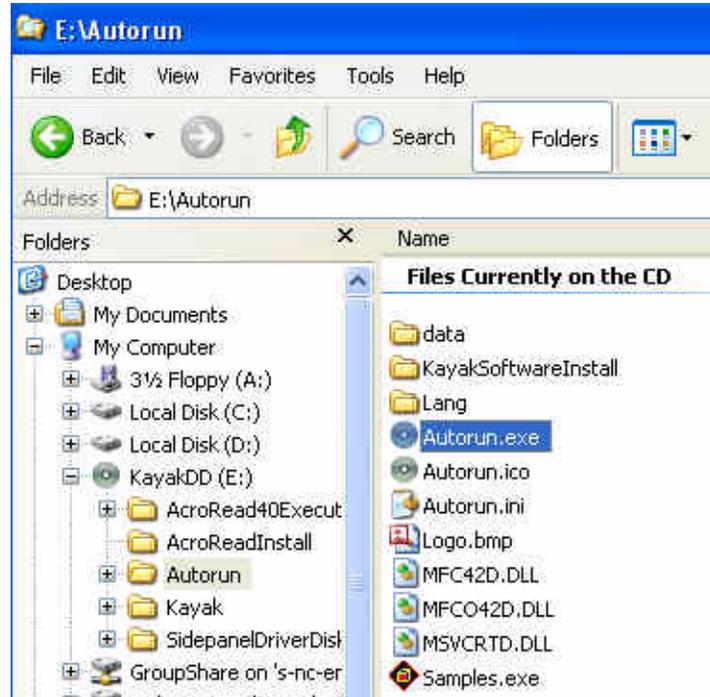
- Read the *Release Notes* and *Release Notes Addendum* for the latest information on this software release. (See *Kayak Release Notes* on page 48.)
- Read documentation including the User and Installation manuals for both Kayak DD and Kayak HD switchers. (See *Kayak Manuals* on page 49.)

- Install Kayak software to a USB flash drive or to devices connected to the network. (See *Install Kayak Software* on page 52.)
- Install the graphical user interface (Kayak PC Sidepanel software) to a PC computer. (See *Install Graphical User Interface (PC Sidepanel Software)* on page 61.)
- Copy sample effects to a USB flash drive for use on the RAM Recorder or into previously-stored applications. (See *Copy Sample Effects* on page 63.)
- Quit the CD Installer program by clicking the **Exit** button.
- Browse the contents of the CD-ROM. (See *Browse the Contents of the Installer CD-ROM* on page 47.)
- Install Adobe Reader to read Kayak documentation. (See *Install Adobe Reader* on page 47.)
- Select a language (English or Deutsch/German).

## Manual Launch

If the autorun feature is disabled on your PC, you can launch the software manually by navigating to the directory /autorun on the CD-ROM and double-clicking on the file autorun.exe (Figure 40).

Figure 40. Kayak Software CD-ROM Directory

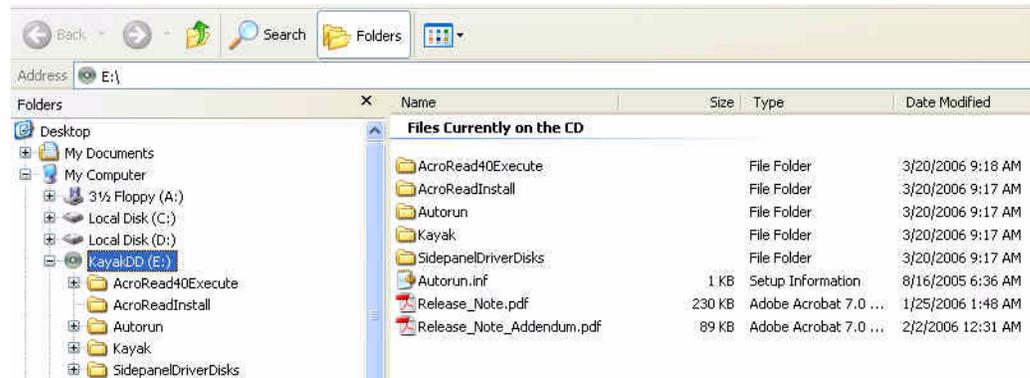


## Browse the Contents of the Installer CD-ROM

To look at the files stored on the Installer CD-ROM, click on the **Browse CD** button (magnifying glass) at the bottom left of the **CD Installer Welcome** screen (Figure 39 on page 45).

A window displays showing all the files and directories contained within the Installer CD-ROM (Figure 41).

Figure 41. Browse the CD-ROM Contents



## Kayak Documentation

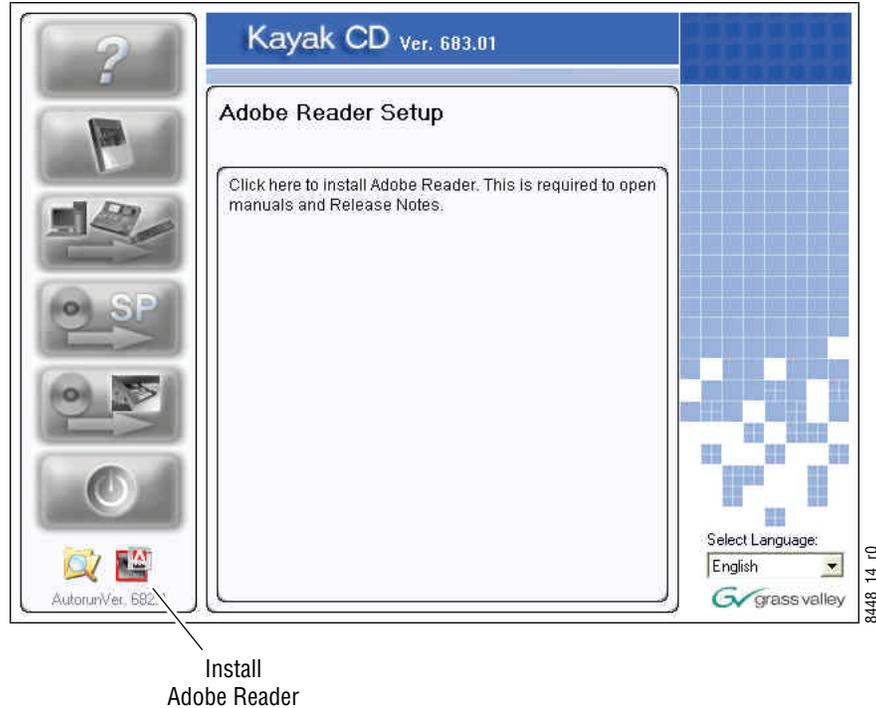
**Note** If you cannot read the Kayak documentation, available in Adobe PDF (Portable Document Format), you may need to install Adobe Reader software.

### Install Adobe Reader

To install Adobe Reader software so you can read the Kayak documentation manuals on this CD-ROM in PDF format:

Click on the **Adobe Reader** icon at the bottom of the **CD Installer Welcome** screen (Figure 42) and then follow the instructions in the installation wizard.

Figure 42. Install Adobe Reader



## Kayak Release Notes

To read the latest *Release Notes* and *Release Notes Addendum* using Adobe Acrobat Reader:

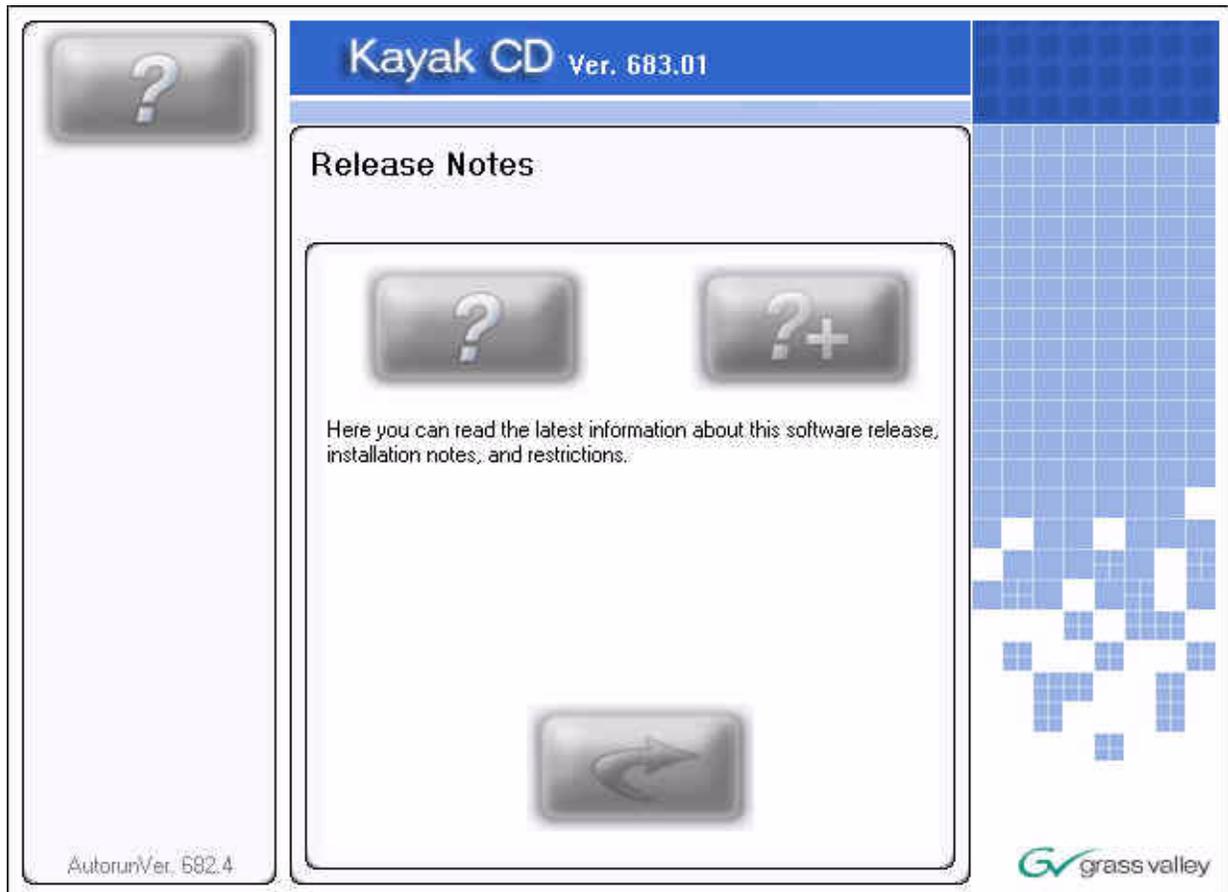
1. From the **CD Installer Welcome** screen click on the **Release Notes** button (red question mark) in the upper left-hand corner (Figure 43)

Figure 43. Release Notes Button on the CD Installer Welcome Screen



2. The **Release Notes Welcome** screen displays (Figure 44).

Figure 44. Release Notes Welcome Screen



3. Click on the **Release Notes** button (question mark) on the left to open the *Release Notes* or click on the **Release Notes Addendum** button (question mark with the plus (+) sign) on the right to open the *Release Notes Addendum*.

Click the **Return** button (arrow) to return to the main installer screen.

## Kayak Manuals

To read the latest documentation manuals for Kayak switchers:

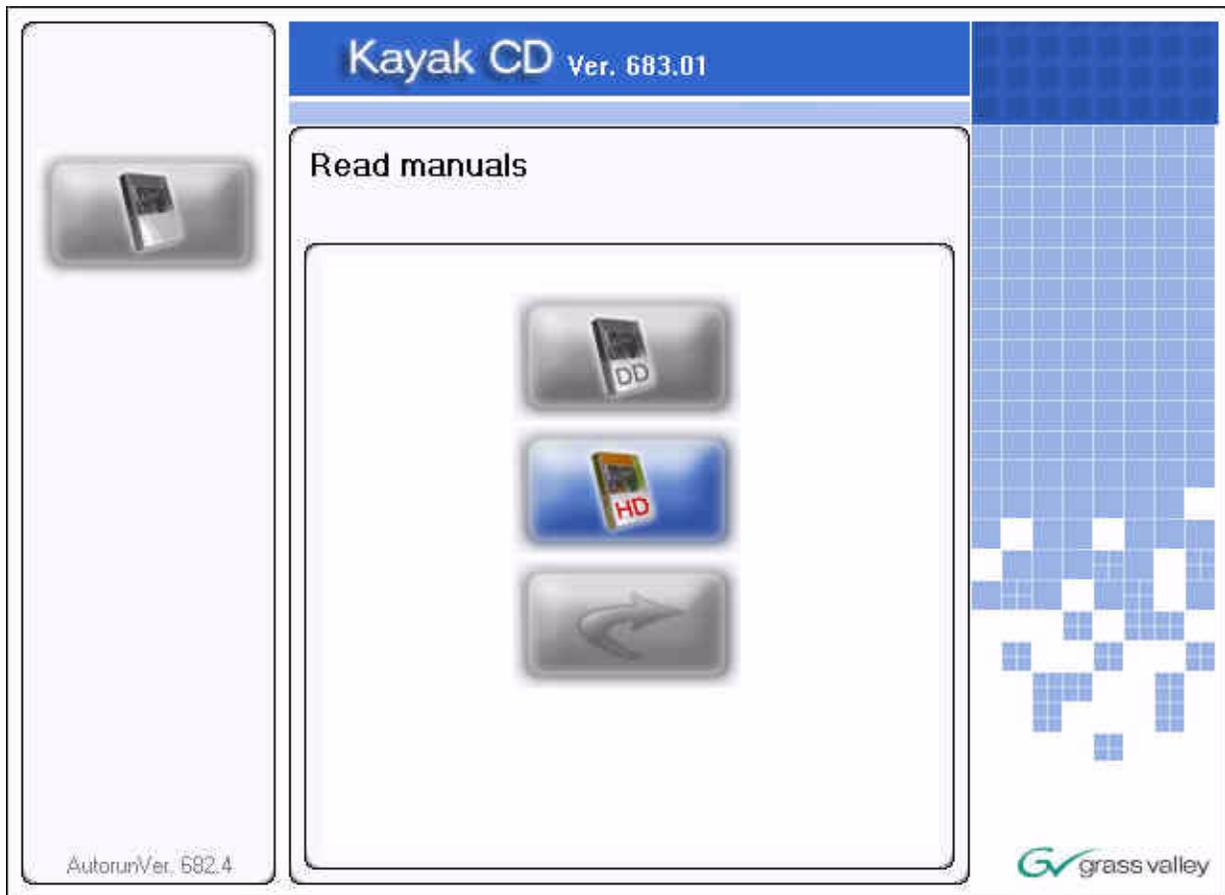
1. From the **CD Installer Welcome** screen click on the **Read Manuals** button (Book icon in Figure 45) in the upper left.

Figure 45. Read Manuals Button on the CD Installer Welcome Screen



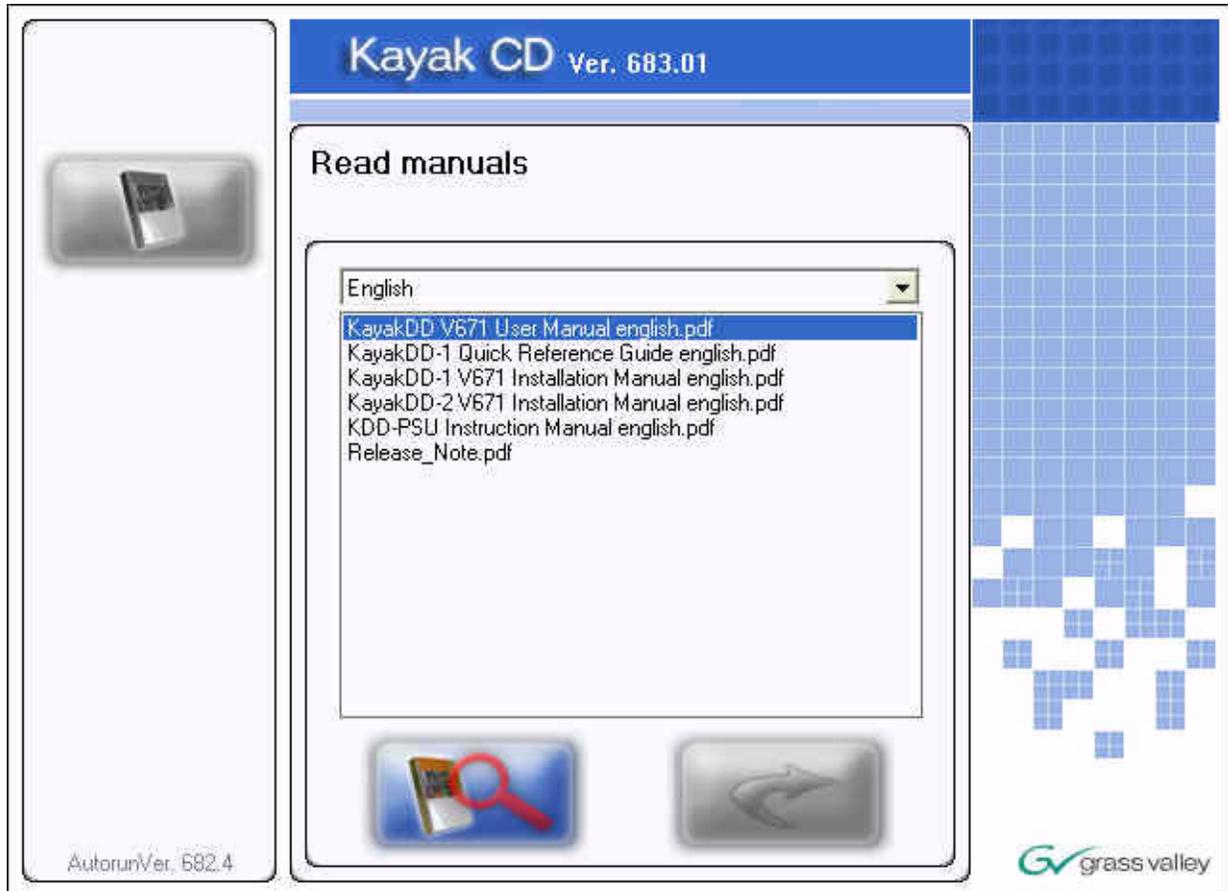
2. The **Kayak Read Manuals Selection** screen displays (Figure 46).

Figure 46. Kayak Read Manuals Selection Screen



3. Click on the **DD Documentation** button to see all Kayak DD manuals or click on the **HD Documentation** button to see all the Kayak HD manuals. A screen listing the appropriate manuals is displayed (Figure 47).

Figure 47. Kayak DD Documentation Screenshot Example



4. If manuals are available in multiple languages, you can select the desired language using the drop down menu at the top of the list.
5. With the list of available manuals displayed, double-click the manual you want to view, or select the manual and then click on the **Read** button (magnifying glass) at the bottom left of the screen. The manual will open in Adobe Reader.

Click on the **Return** button (arrow) to return to the main installer screen.

## Software Installation

Software updates for Kayak are given to our customers on the Kayak Release CD-ROM or can be downloaded from the Thomson Grass Valley web site. Menu panel software updates can be installed into any Kayak device connected to the switcher network or alternatively by transferring the software to a USB flash drive that can be plugged into the switcher control panel.

During this installation procedure the system checks the software update for completeness and to make sure that there have been no changes to the software. If a modification is detected, the installation process stops at 99% and displays a related error message. In this case the previous installation remains active.

A second CPLD update process is appended on system demand (see [Updating the CPLD Firmware on page 73](#)).

### Install Kayak Software

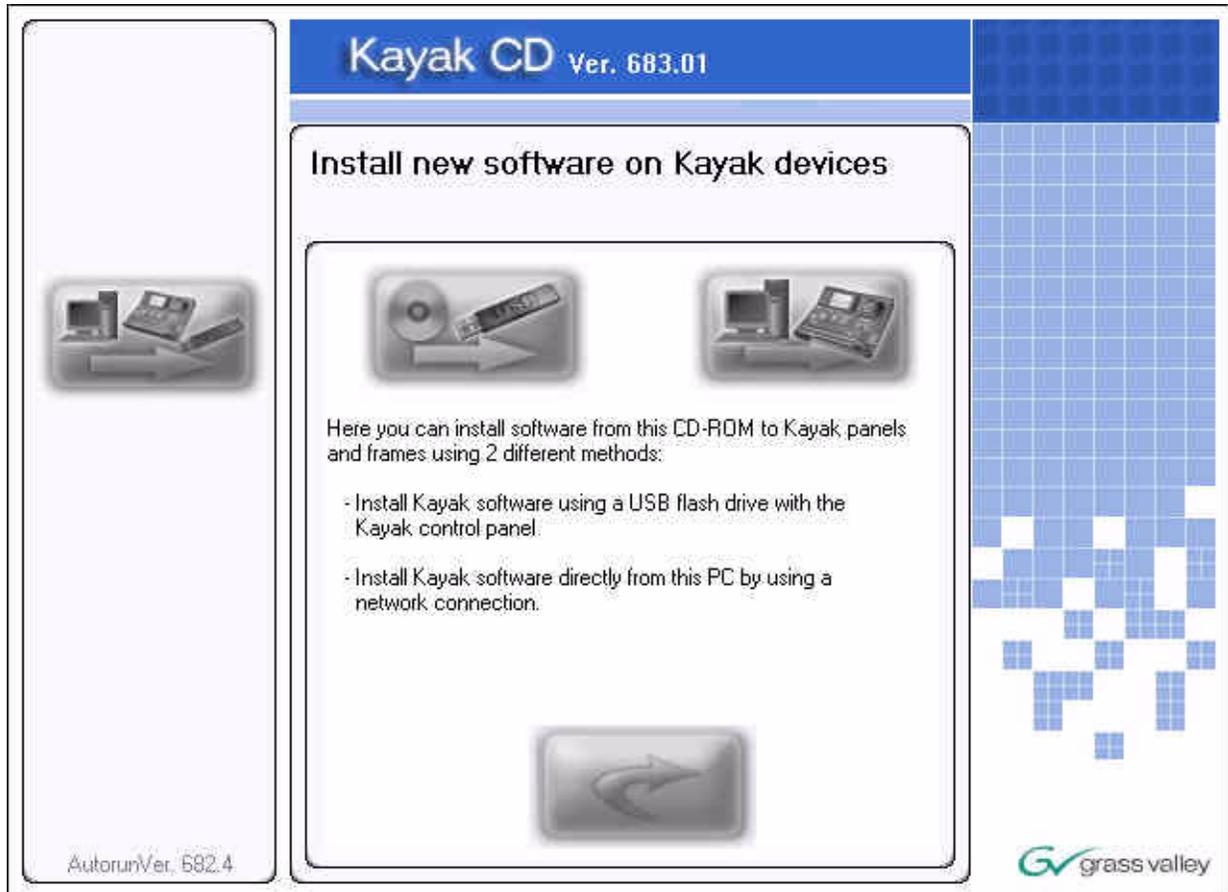
1. From the **CD Installer Welcome** screen click on the **Install Kayak Software** button (third from the top on the left as shown in [Figure 48](#)):

Figure 48. Install Kayak Software Button on the CD Installer Welcome Screen



2. The **Install new software on Kayak devices** selection screen displays (Figure 49).

Figure 49. Install Kayak Software Selection Screen



- Note** Before you click on the **Kayak software** button (top left) to load software onto a flash drive for installation to a local switcher panel you must first connect a supported USB flash drive to your computer. Not all USB flash drives are supported for Kayak installation. A complete list of supported drives and installation instructions can be found in the section *Recommended USB Flash Drives* on page 54.

## USB Flash Drive Installation

Select this option if you want to load menu panel software from the CD-ROM to a USB flash drive for installation onto the control panel.

1. Plug a supported USB flash drive into your computer.

### Recommended USB Flash Drives

A 128MB USB flash drive is supplied with your switcher. The following types of USB flash drives are approved for use with the Kayak HD switcher:

Table 4.

Recommended USB Drives	Note
Apacer USB Flash Drive (HandySteno) 256MB (USB1.1)	These first three Apacer USB flash drives require a cable adapter for the Kayak HD USB 4 slot. Normally part of delivery
Apacer USB Flash Drive (HandySteno) 256MB (USB2.0)	
Apacer USB Flash Drive 128MB (USB1.1)	
Apacer Handy Steno HT202 USB 2.0 Flash Drive 128MB	
Buffalo Firestix 1GB (USB2.0)	V6.8.5 or higher required
Corsair Flash Voyager 1GB (USB2.0)	V6.8.5 or higher required
LG XTIC Mirror 1GB (USB2.0)	V6.8.5 or higher required
Memorex Thumb Drive USB 256 MB	
Memorex TravelDrive - Smart U3, 1GB (USB2.0)	V6.8.5 or higher required
PQI Corp. Intelligent Stick 1GB, CoolDrive 512MB, CoolDrive 1GB	
SanDisk Cruzer Mini 256MB	
SanDisk Cruzer Mini 128MB	
SanDisk Cruzer Micro 2GB (USB2.0)	V6.8.5 or higher required
Sony Micro Vault USM 1GB (USB2.0)	V6.8.5 or higher required
Transcend JetFlash Type TS256MJFLASHA (USB2.0)	
TrekStore CS 1GB (USB2.0)	V6.8.5 or higher required
Twinmos Mobile DiskIII 128MB	USB Setup does not detect this device as a removable device.
Verbatim Stor'n'go 1GB (USB2.0)	V6.8.5 or higher required

2. From the Kayak Software Selection screen ([Figure 49 on page 53](#)) click on the **Kayak software** button (USB flash drive icon on the left).
3. Follow the instructions in the USB Flash Device Setup Program wizard to transfer the software from the CD to the flash drive.
4. When the software has finished loading onto the USB flash drive remove it from your computer and take it to the Kayak HD control panel.

**Note** USB ports 1 and 3 are not supported on Kayak HD control panel.

5. Plug the USB flash drive into either USB port 2 or 4 on the Kayak HD control panel. If the USB flash drive doesn't fit (mechanically) into the USB 4 slot use the extension cable that comes with your switcher as an adapter.

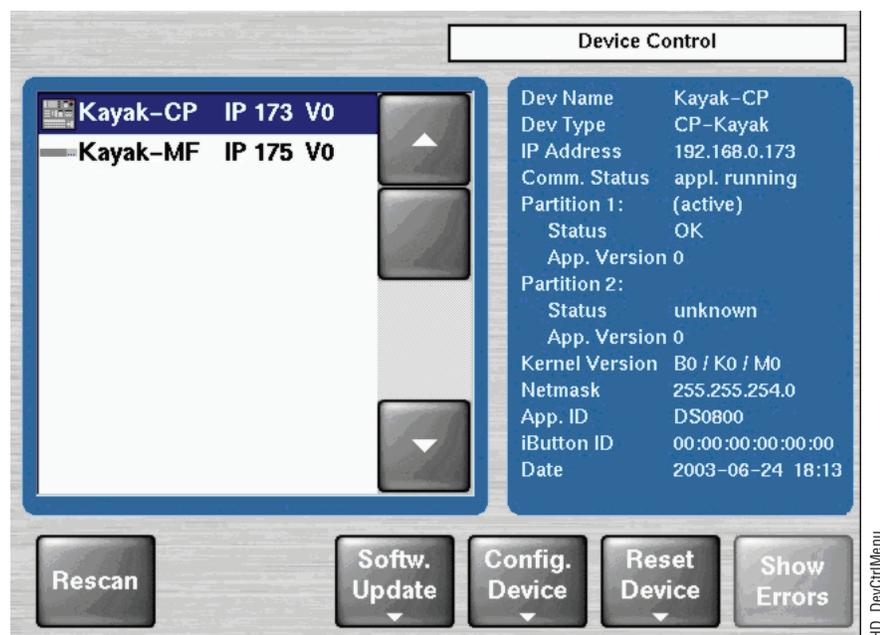
**Note** If the control panel software recognizes a valid Kayak release version on the USB flash drive the **Device Control** menu launches automatically. If the **Device Control** menu does not display when you plug in the USB flash drive, reload the software onto the flash drive using the process described in *USB Flash Drive Installation on page 54*

6. The **Device Control** menu displays all connected network devices with the last three digits of the device's IP address and the version of software installed.

**Kayak-MF** = Frame

**Kayak-CP** = Control Panel

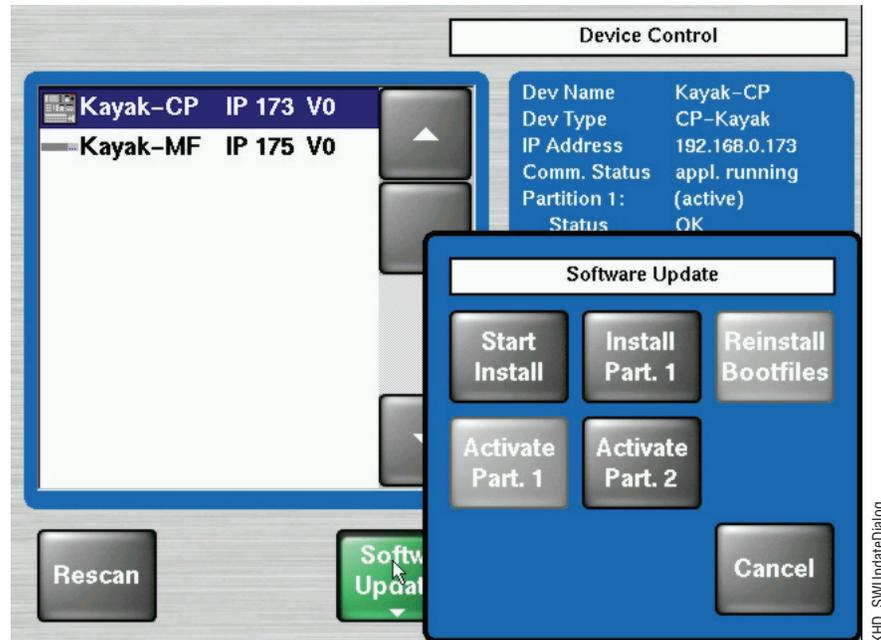
Figure 50. Device Control Menu



7. Select the device for software installation from the scrolling list in the **Device Control** menu.

- Click the **Softw. Update** button (Figure 50 on page 55). The **Software Update** dialog box displays.

Figure 51. Device Control Menu with Software Update Dialog Box



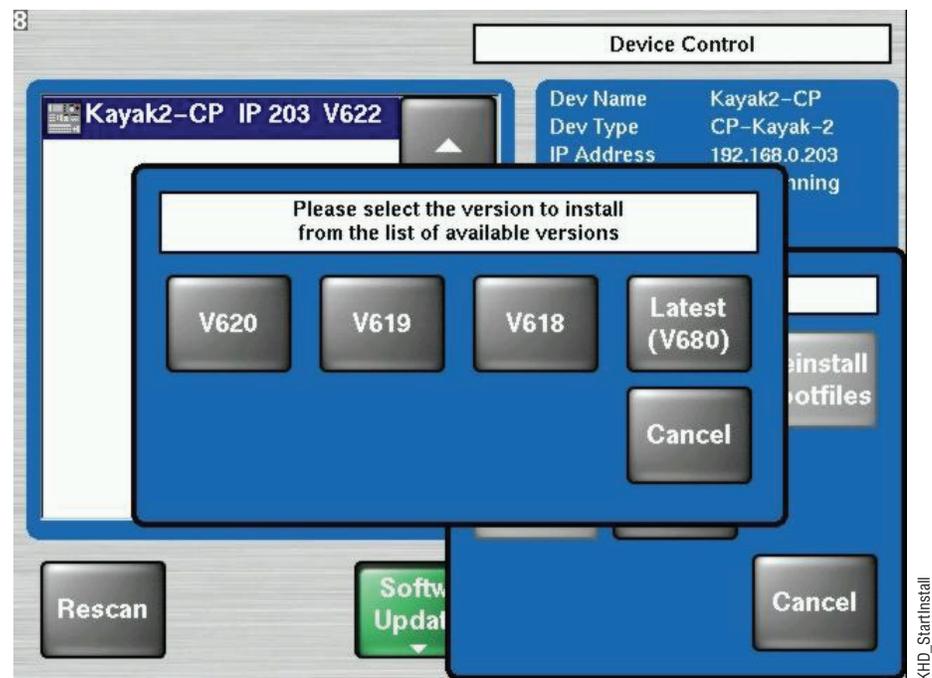
- Click either the **Start Install** or the **Install Part.x** button (Figure 51). The correct software will be installed in the respective device (MF or CP) automatically.

Two partitions are available on the USB flash drive for the application software.

- Clicking **Start Install** installs the software in the non-active partition by default (recommended).
- Clicking **Install Part.x** installs the software in the partition containing the current active software.

After clicking the **Start Install** (or the **Install Part.x**) button a dialog box displays the software versions available for installation.

Figure 52. Start Installation Procedure



## Installation Procedure

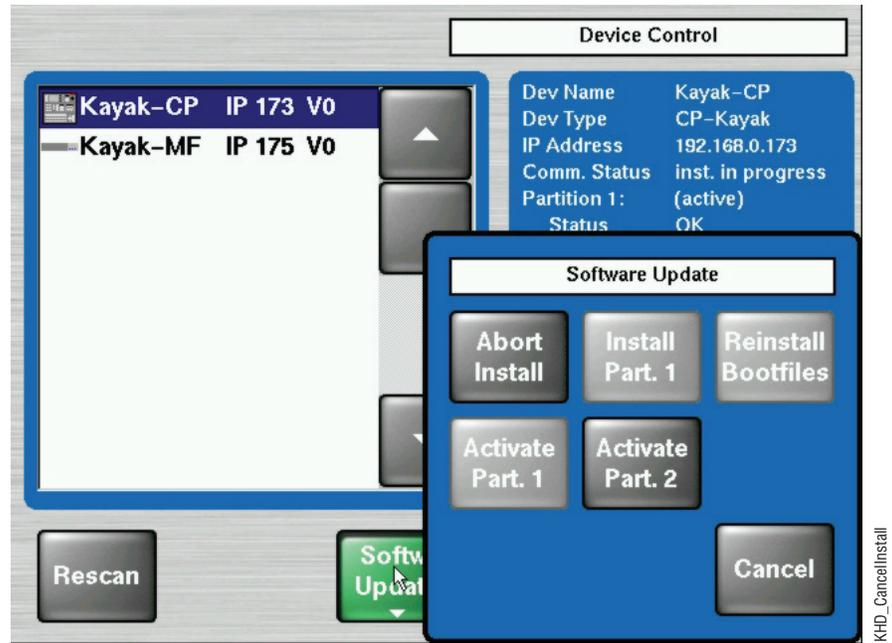
**CAUTION** Do not remove the USB flash drive during installation.

**CAUTION** Do not abort installation while installing on the Active partition! If you stop the installation process on the Active partition the switcher will not function.

- Click to select the software version to install from the dialog box display (Figure 52). Installation begins immediately with progress displayed as a percentage.

If you need to cancel the Installation click the **Abort Install** button in the **Software Update** menu. If you cancel the installation, the system displays the status `inst. failed` as shown in Figure 54 on page 58. The partition used for the cancelled installation is no longer available for use and cannot be activated.

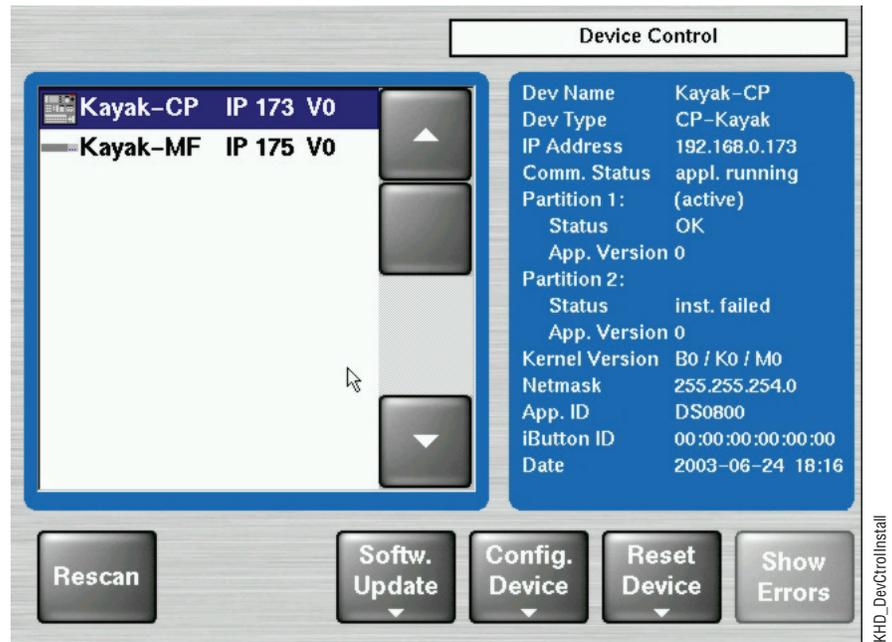
Figure 53. Abort Install Button



**CAUTION** Use only the **Abort Install** button to cancel installation. Do not interrupt the installation using any other method.

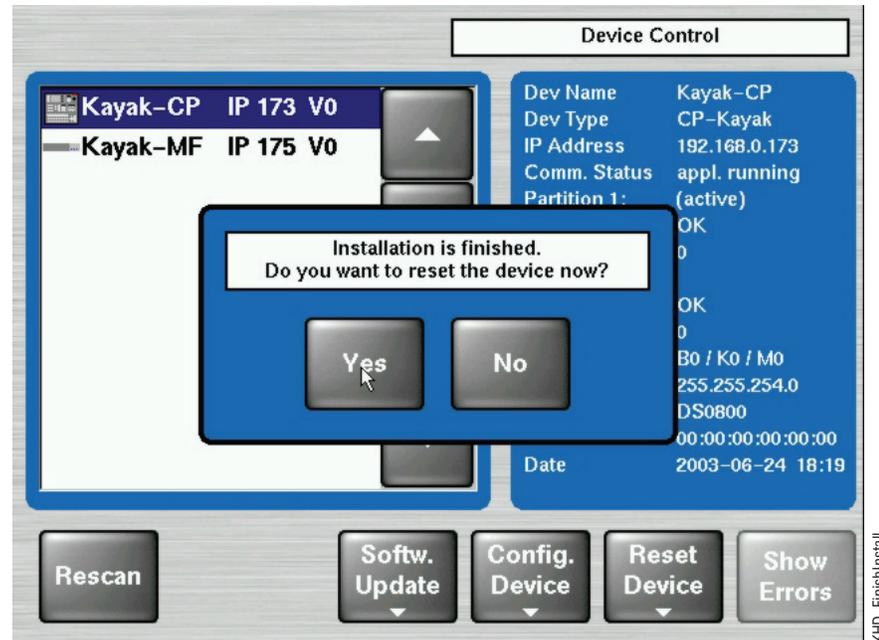
**CAUTION** Do not cancel the installation by turning off power to any device.

Figure 54. Device Control Installation Failure Status on Partition 2



11. After finishing the installation procedure, a dialog box displays the question, Do you want to reset the device now?

Figure 55. Finish Installation



**Note** Verify that the active partition shows the new software version you just installed (e.g., 6.8.5) before restarting the device.

12. If the active partition shows that the new software was successfully installed click **Yes**. The installed software is available only after you restart the system.

**Note** Always restart each device after upgrading its software.

## Installation over the Network

1. From the **Install new software on Kayak devices** screen click on the **Kayak Network Devices** button on the right to install Kayak software to any device visible from the same subnet connected to the PC computer running the CD Installer.

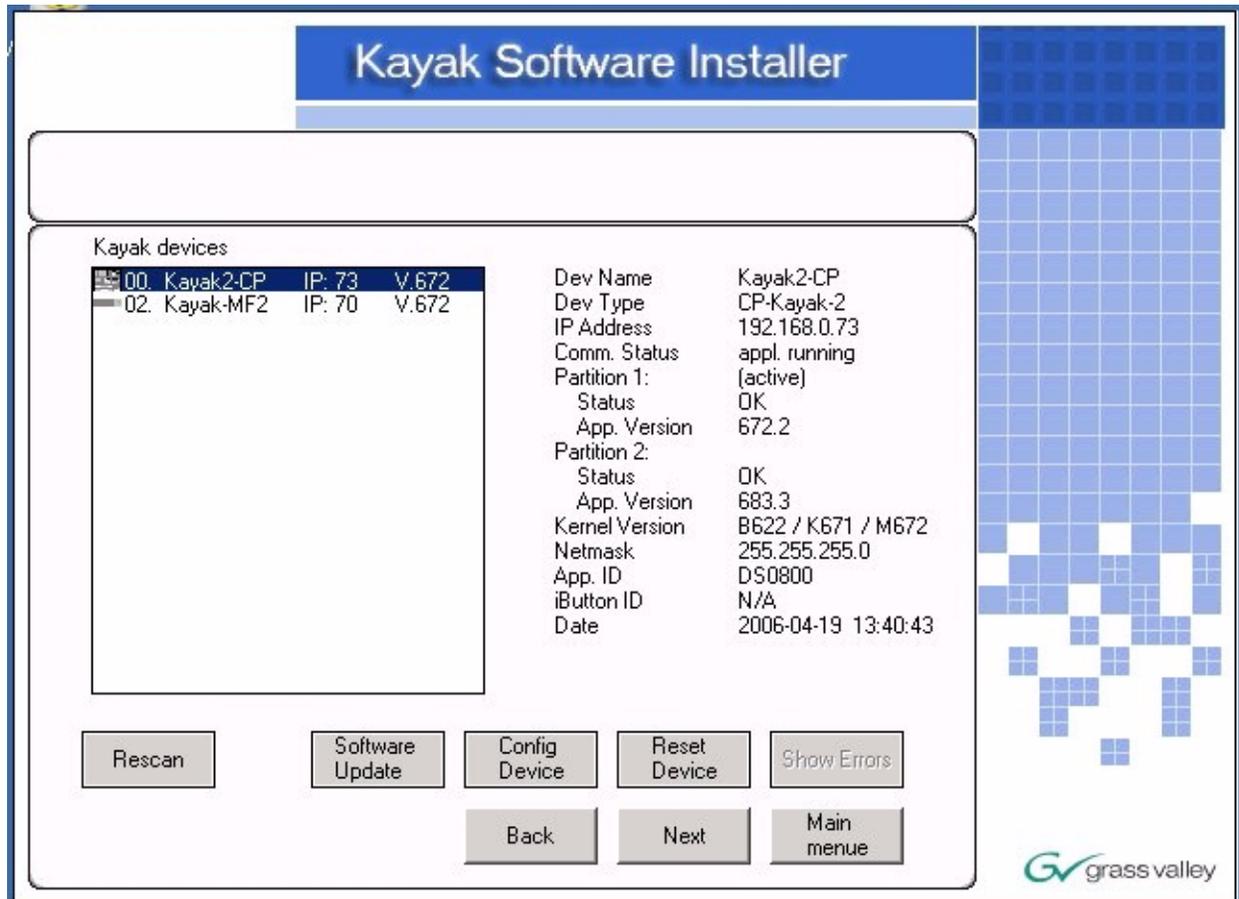
The **Kayak Software Installer** displays.

2. Click the **Next** button to continue.

You can also click the **Back** button to return to the **Install new software on Kayak devices** screen.

- Clicking the **Next** button displays the **Kayak Device Selection** screen (Figure 56). Every Kayak device connected to your computer's network is displayed here in the Kayak devices window. Click on a name in the list to select a device for installation.

Figure 56. Kayak Network Device Selection



4. Once you have selected a device click one of the active buttons below the device list (see [Figure 56 on page 60](#)) to choose the action you want to perform:
  - The **Rescan** button will go back to the network to check for any new devices that may have been added.
  - **Software Update** installs Kayak software to the device you selected.
  - **Config Device** lets you configure the selected device over the network.
  - **Reset Device** resets the selected device to its default settings.
  - **Show Errors** displays a list of any errors discovered by the Kayak software.
  - The **Next** button to exit the Kayak Software Installer.
  - The **Back** button returns you to the previous screen.
  - The **Main Menu** button returns to the main **CD Installer Welcome** screen.

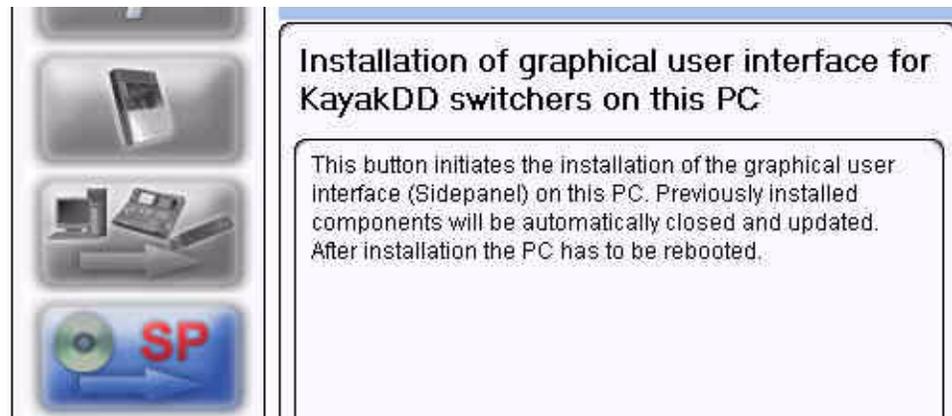
## Install Graphical User Interface (PC Sidepanel Software)

The PC Sidepanel software can be used to configure and control Kayak switchers from a PC computer.

### To Install the Sidepanel Software Onto a PC:

1. From the **CD Installer Welcome** screen click on the **Install Sidepanel Software** button on the left (with the disc and the SP logo as shown in [Figure 57](#)).

Figure 57. Install Sidepanel Software Button on the CD Installer Welcome Screen



2. A software wizard launches. Follow the instructions on the screen to install the Kayak Sidepanel software.
3. During the installation process you need to choose the type of installation you wish to perform:

**CAUTION** Be careful when selecting the type of software installation to use. This setting cannot be changed later.

- Demo:** Demo version, no connection to a panel or a frame.
- GUI PC:** Connection only to a frame, not to a panel.
- MultiPanel:** Connection to frame and panel.
- SinglePanel:** Connection to a specified panel during the installation.

4. When you are done the wizard asks if you wish to reset the computer. You can do this now, or at a later time.

The Sp\_dd35.exe Sidepanel application is installed at:

C:\Programme\DD35\bin.

## Connecting to the Kayak System

For non-Demo installs you need to establish the computer connection to the Kayak HD system after the computer has rebooted:

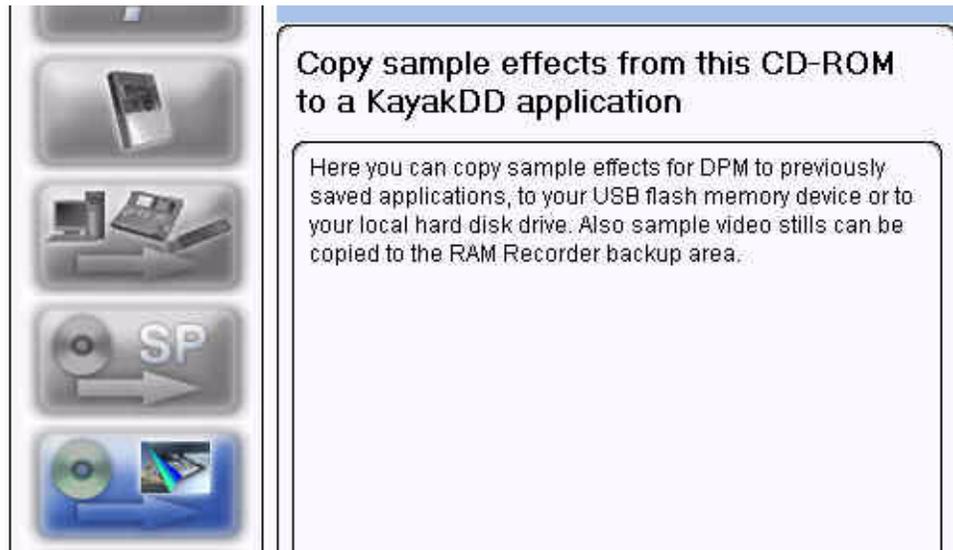
1. Launch the Sidepanel software application.
2. Right-click the **Menu** button and select the **Startup** option.
3. Click to select the box for E-Box at the top of the screen. A blue line displays in the bottom of the box to indicate that it has been selected.
4. Click to select the box for **Panel** (if available) at the top of the screen. (The **Panel** box is active only if you selected to install the Sidepanel software in **MultiPanel** mode.)
5. Click to select the name and IP address for the frame from the scrolling list at the bottom of the screen.
6. If needed, click to select the name and IP address for the panel.
7. Click the **Connect** button to connect the frame to the panel and to the computer Sidepanel software for this session.
8. Click **Attach** to make the connection from the frame to the panel and to the computer Sidepanel software persistent so that it will remain after the computer reboots.

## Copy Sample Effects

**Note** Sample effects are only available on the CD-ROM for the Kayak DD switcher type. Sample effects in HD will be available with the next software release.

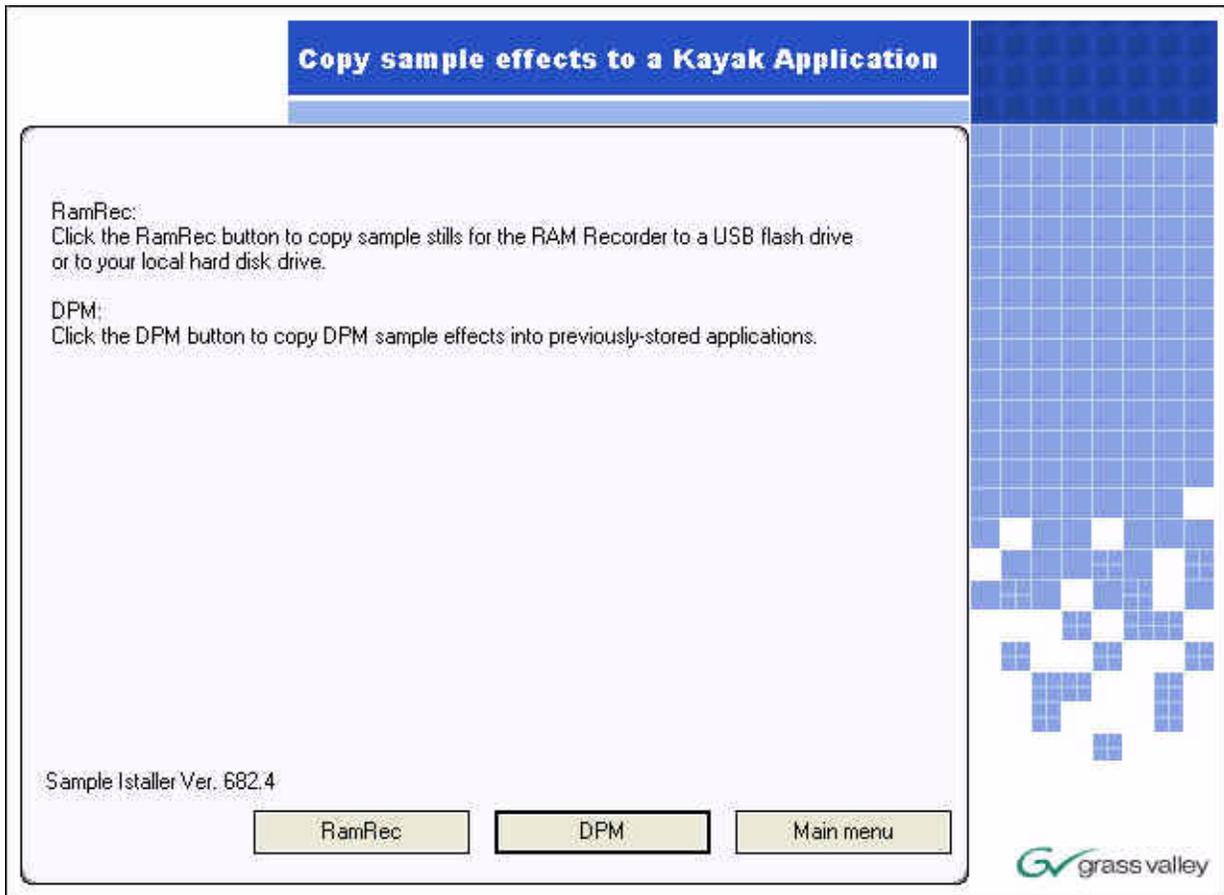
1. From the **CD Installer Welcome** screen click on the **Copy Sample Effects** button (with the disc and the page turn icon as shown in [Figure 58](#)) in the upper left-hand corner to copy sample effects to a USB flash drive for use on the RAM Recorder or to copy DPM sample effects into previously-stored applications.

Figure 58. Copy Sample Effects Software Button on the CD Installer Welcome Screen



The **Copy Sample Effects to a Kayak Application** screen displays (Figure 59).

Figure 59. Copy Sample Effects to a Kayak Application Screen

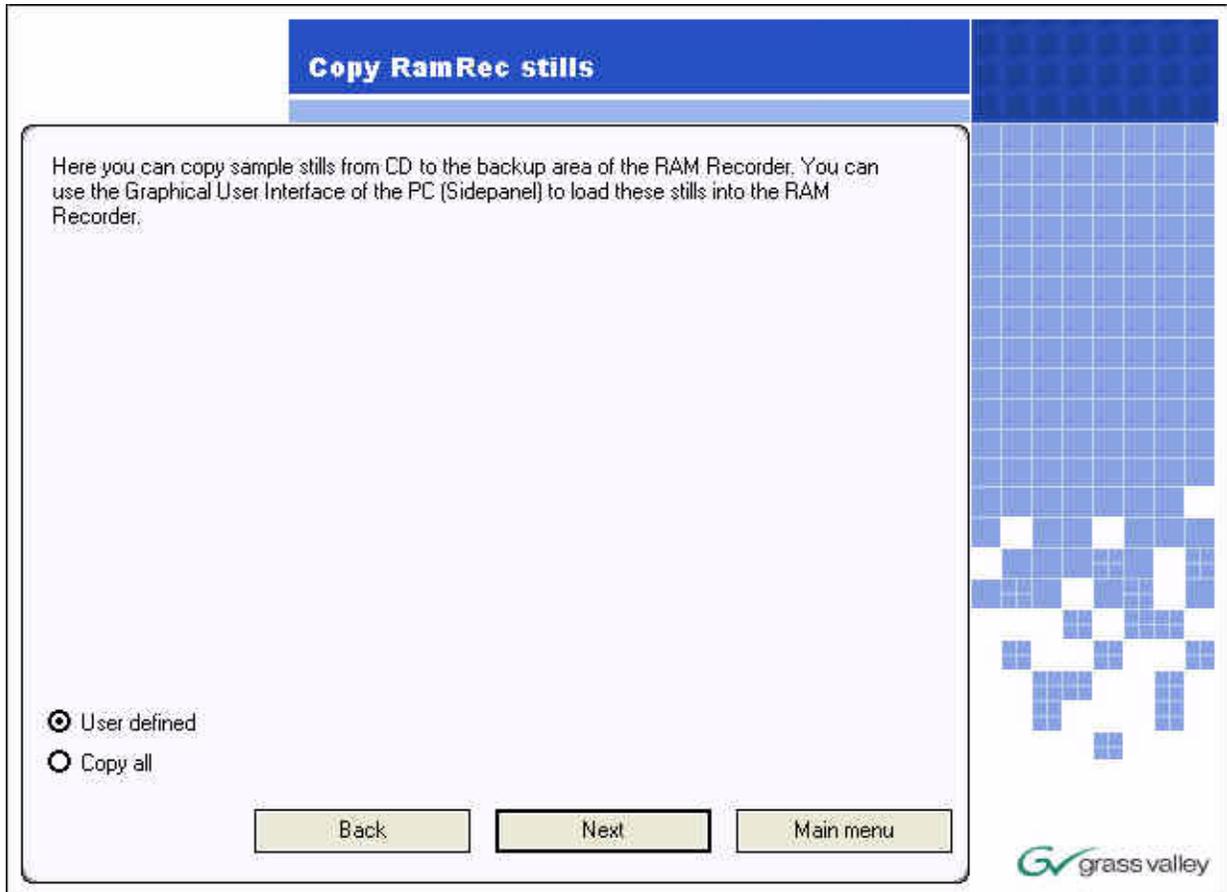


2. From this screen you can:

- Click on the **RamRec** button to copy sample still images from the CD-ROM to a USB flash drive (or your computer hard disk) to use for the Kayak RAM Recorder.
- Click on the **DPM** button at the bottom of the screen to copy DPM sample effects into applications that have been previously stored on your Kayak system.
- Click on the **Main menu** button to return to the **CD Installer Welcome** screen.

3. When you click on the **RamRec** button the **Copy RamRec Stills** screen displays.

Figure 60. Copy Sample Effects to a Kayak Application Screen



You can click the **Back** button to return to the previous screen or click the **Main menu** button to return to the **CD Installer Welcome** screen.

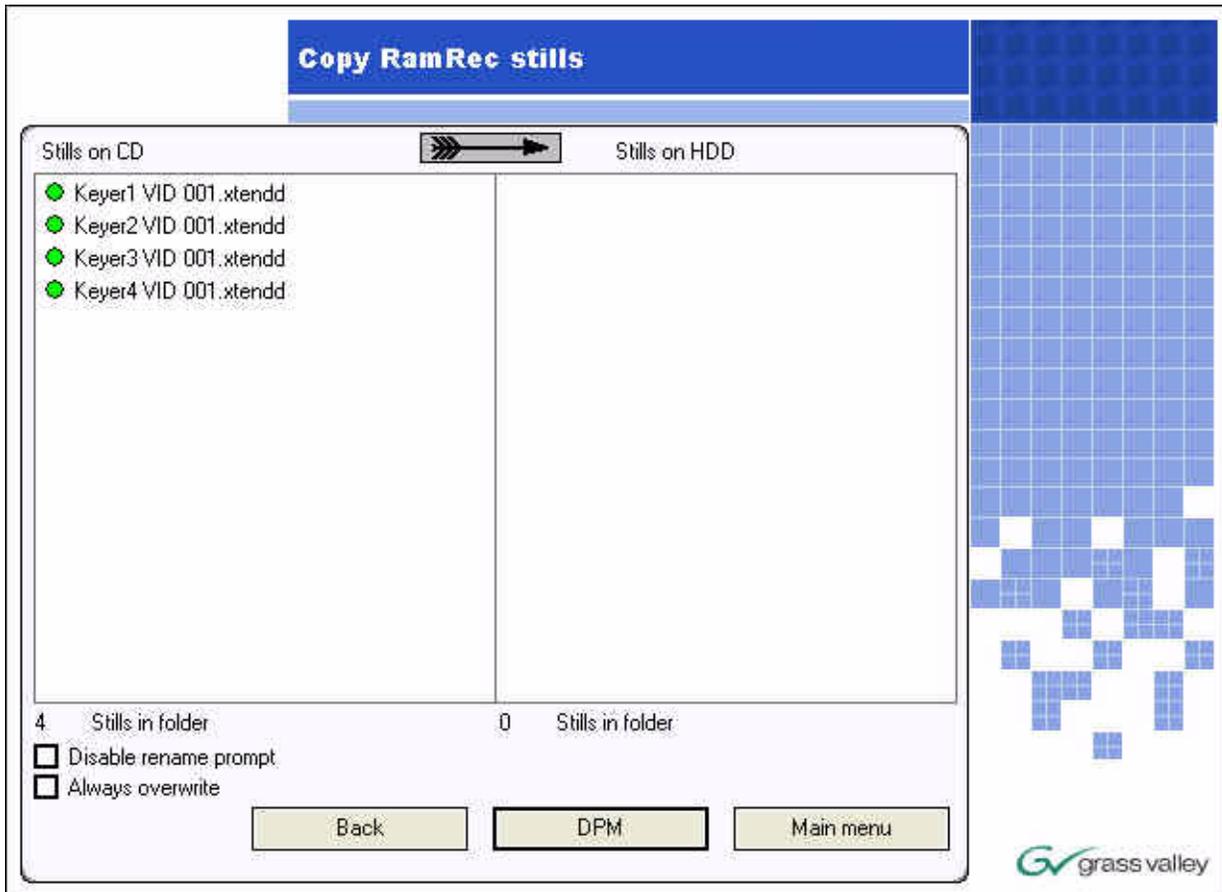
4. Click on the **User defined** radio button at the bottom left to copy only those still images that were created by the user, or select the **Copy all** radio button to copy all still images, and then click the **Next** button to begin the copy process.

If you selected the **Copy all** radio button, clicking the **Next** button copies all files to your local hard disk drive in the directory:

`C:\Programme\DD35\ramrecStills`

5. If you selected the **User defined** radio button clicking the **Next** button displays a menu showing the stills stored on the CD-ROM and a list of stills stored on your computer's local hard disk drive as shown in [Figure 61](#).

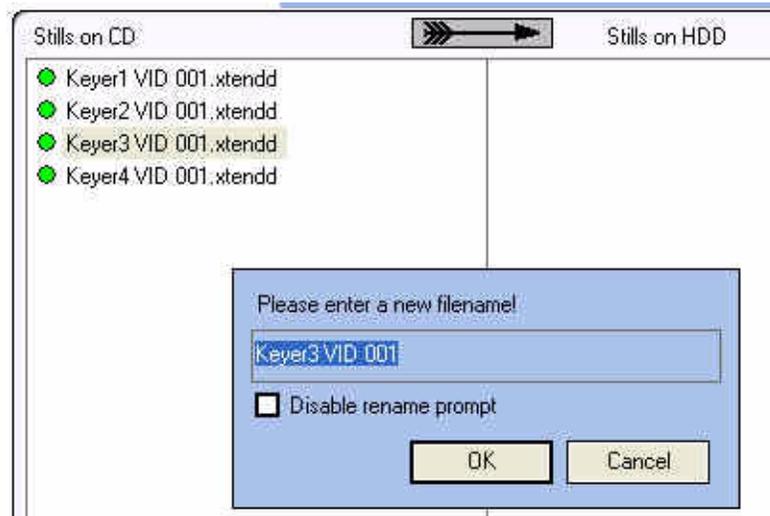
Figure 61. Copy User Defined Stills



- Select the **Disable rename prompt** checkbox if you want to accept the still names from the CD-ROM, or leave it unchecked if you want to rename the files.
  - Select the **Always overwrite** checkbox to let the copy program overwrite any existing files you have with the same name.
6. Select the names of the files you want to copy by clicking on them. You can select multiple files by holding down the **Control (Ctrl)** key while you click. To transfer the files to your hard disk drive click on the **Arrow** button at the top of the window.

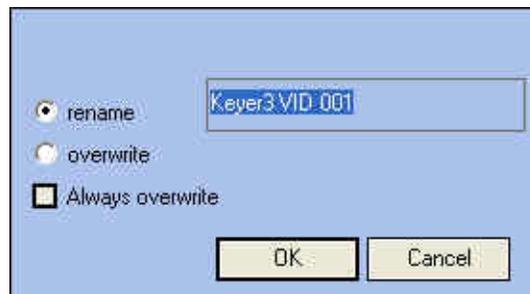
- Clicking on the **Arrow** button displays a dialog box asking you to enter a new filename (Figure 62). You can accept the existing default filename or type in a new one and then click **OK**. If you select the checkbox to **Disable rename prompt** in the dialog box you will not be asked to change the filename during the next file transfer.

Figure 62. Rename File Dialog Box



If you try to copy a still image file that already exists on your hard disk drive a dialog box displays asking if you want to **Rename** or **Overwrite** the file (Figure 63).

Figure 63. Rename or Overwrite Dialog Box



You also have the option to select the checkbox to **Always overwrite** files in the future.

- Select the radio button to **rename** the file or to **overwrite** it and then click **OK**.

9. From the **Copy Sample Effects to a Kayak Application** screen (Figure 59 on page 64) click on the **DPM** button to display the **Copy DPM effects** screen (Figure 64).

Figure 64. Copy DPM Effects

The screenshot shows the 'Copy DPM effects' screen. It features a blue header with the title 'Copy DPM effects'. Below the header is a white form area with several sections. The first section is 'Storage device' with radio buttons for 'HD-Drive' and 'USB-Drive', and a 'Please select!' prompt. The second section is 'Saved applications:' with a large empty box and a 'Please select an application!' prompt. The third section is 'Target M/E' with radio buttons for 'PP' and 'M/E - 1', and a 'Please select!' prompt. The fourth section is 'DPM License per M/E' with radio buttons for '1 - CH' and '4 - CH', and a 'Please select!' prompt. At the bottom left are radio buttons for 'User defined' (selected) and 'Copy all'. At the bottom center are three buttons: 'Back', 'Next', and 'Main menu'. At the bottom right is the 'grass valley' logo.

10. From this screen click on a radio button on the left-hand side to select a location where you want to copy the DPM effects from the CD-ROM:
- Storage device (HD-drive or USB Drive)
  - Saved applications
  - Target M/E (PP or one of the available M/Es)
  - DPM License per M/E (1-CH or 4-CH, may vary with your system)

Click on the **User defined** radio button at the bottom left to copy only those DPM effects that were created by the user, or select the **Copy all** radio button to copy all still images, then click the **Next** button to begin the copy process.

## Version Compatibility

When the software version V672.2 is reactivated or reinstalled after V683.x (or higher) has already been running, it's possible that the Kayak CP won't come up. To make the Panel work with the older version, complete the following steps:

1. Perform a power cycle and boot the panel without loading the application (press **home** and **User 4** buttons simultaneously while they are blinking)
2. Press the **ClearStateMem** button within the Reset menu (press **Menu Lock** and **Reset Device** simultaneously to get access to this button)
3. Reboot the panel

## Licenses

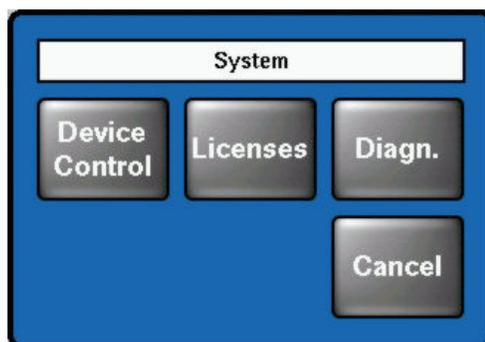
### Basics

Kayak HD has a software option licensing system. You can see the number and type of possible licenses for your system by going to the **Licenses** menu under **Home | Install | System | Licenses**. This menu is also used to add licenses to a system. The licenses are stored in 2 EEPROMs (Electrically Erasable Programmable Read Only Memory chips) located in the backplane of the frame. Licenses cannot be moved between different Kayak HD frames. (See the *Kayak HD Installation and Service Manual* for more details.)

### Licenses Menu

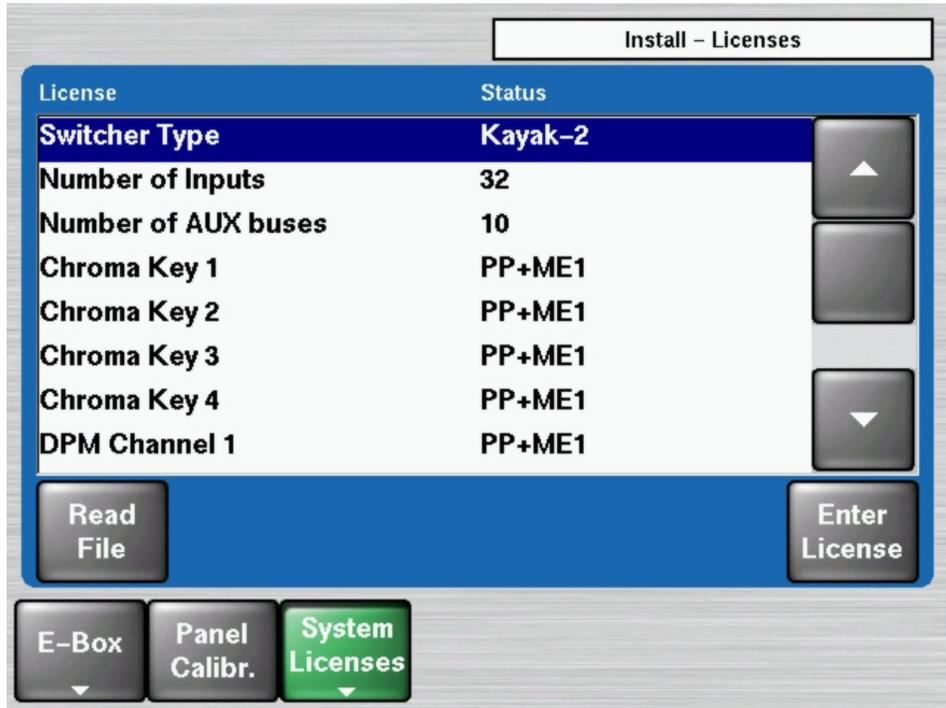
The Licenses menu is available from the control panel by pressing **Home – Install – System**.

Figure 65. System Setup Dialog Box



Press the **Licenses** button to display the **Install - Licenses** menu.

Figure 66. Install Licenses Menu



## How to Install Licenses

A license is a line of text expressed in a format similar to this chroma key license key:

```
key="LIC_CHROMA_KEY1", "1", "0000:00:00", "9999:12:31", "3
4567", "8-xyz", "2005:12:06",
"3489c00db5b1c548e9daf7fbe0ed67eb21"
```

The license key contains the:

<b>License name</b>	LIC_CHROMA_KEY1
<b>License value:</b>	1
<b>Start date:</b>	0000:00:00
<b>End date:</b>	9999:12:31
<b>Serial no:</b>	34567
<b>wksID:</b>	5-xyz
<b>License creation date:</b>	2005:12:06
<b>LicenseKey:</b>	3489c00db5b1c548e9daf7fbe0ed67eb21

After installing the software version you can add licenses to the system. There are two ways to do this:

### With a USB Flash Drive (recommended):

1. Copy the file `sp_license.txt` (which contains all your licenses) to the `root` directory of your USB flash drive.
2. Connect the Kayak control panel (CP) to the frame.
3. Insert the USB flash drive into the control panel USB port 2 or 4 (just as you would for software installation) and enter the **Home | Install | System | Licenses** menu
4. Push the button **ReadFile** and follow the instructions. After installation you must reset the frame.

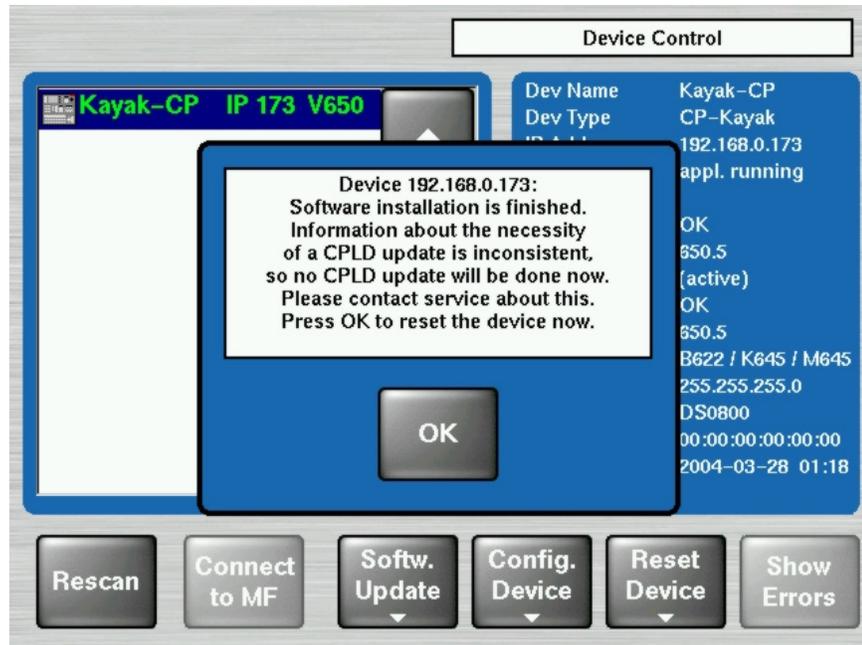
## Manual Entry with Internal GUI Keyboard

1. Connect the Kayak control panel to the frame.
2. Go to the CP menu **Home | Install | System | Licenses**.
3. Select the option **LIC\_CHROMA\_KEY1** with the menu cursor
4. Press the **Enter License** button. This starts a keyboard dialog. A window displays reading `Enter value for Chroma Key 1`.
  - a. Enter the value `1` and press **OK**. The next window displays reading `Enter start date for Chroma Key 1`.
  - b. Enter the value `0000:00:00` (without quotation marks) and press **OK**. (Normally this value is already entered for you.) The next window displays reading `Enter end date for Chroma Key 1`.
  - c. Enter the value `9999:12:31` and press **OK**. (Normally this is the default value.) The next window displays reading `Enter iButton ID for Chroma Key 1`.
  - d. Enter the value `34567` and press **OK**. (Normally this is the default value.) The next window displays reading `Enter wks ID for Chroma Key 1`.
  - e. Enter the value `8-xyz` and press **OK**. The next window displays reading `Enter license creation date`.
  - f. Enter the value `2005:12:06` and press **OK**. The next window displays reading `Enter license key for Chroma Key 1`.
  - g. Enter the value `3489c00db5b1c548e9daf7fbe0ed67eb21` and press **OK**.
5. If all values are correct the license will be installed successfully.
6. Enter all the remaining licenses in the same way and reboot the frame afterwards.

## Updating the CPLD Firmware

At the end of each installation process the system checks to determine if a CPLD (Complex Programmable Logic Device) update is necessary. This is done by comparing the versions of the installed CPLD firmware files in flash memory with the current CPLD version tags stored within an EEPROM of each hardware board. If the version of at least one file is newer an update of the CPLD is necessary and the user is notified.

Figure 67. CPLD Update



To skip the CPLD update press **No**, to confirm the update press the **Yes** button (recommended). After the user has confirmed the update, the device will be restarted. During this sequence the CPLD will be updated. The progress of the update procedure is displayed in percent within the Device Control menu. The currently installed file (file name) is shown as well.

**CAUTION** Do not change to a menu other than the Device Control menu after initiating a CPLD update on a Kayak frame. If you change menus you cannot monitor the update process.

**CAUTION** Do not switch off the device while the CPLD update is running, as evidenced by a red progress indicator. If you turn off the device it will be permanently damaged.

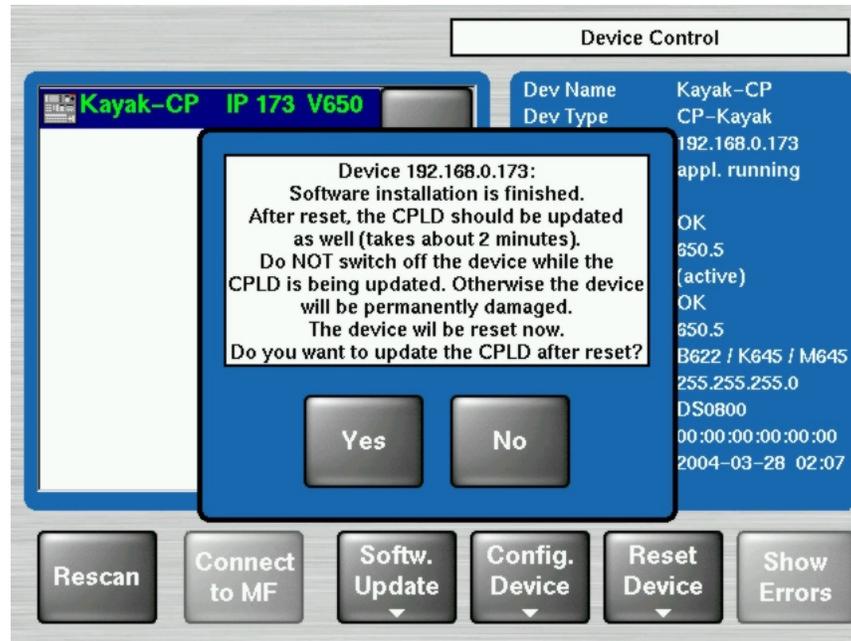
After the CPLD update is finished the system must be restarted. This brings the device to normal operation mode. If the installation process is terminated from the system, refer to [CPLD Update Troubleshooting](#).

## CPLD Update Troubleshooting

### Inconsistent EEPROM Data

When the software installation process checks whether a CPLD update is necessary or not, it initiates a plausibility check of the EEPROM data of each hardware board. If the EEPROM data is inconsistent or has a problem the user is notified and the update will not be initiated.

Figure 68. Error Message During CPLD Update



The CPLD update can be performed manually at any time.

**CAUTION** An update tries to correct inconsistent EEPROM data. A manual CPLD update should only be performed by qualified service engineers or experienced users.

### Wrong Position of CPLD Program Switch

A switch (ETX. BSCAN) on each hardware board controls external or internal programming of the CPLD. If this switch is set to **On** the CPLD cannot be updated by the software installation process. In this case the user is informed by an error message (CPLD update failed: validating chain failed, check test switch (EXT. BSCAN)) and the update process will be terminated. If this happens contact your Grass Valley service representative. (See *Contacting Grass Valley* on the rear of the title page). To bring the system back to normal operation mode, perform a reset.