

Kayak

DIGITAL PRODUCTION SWITCHER

Release Notes

SOFTWARE VERSION 6.9.3

071844609
APRIL 2008



Affiliate with the N.V. KEMA in The Netherlands

CERTIFICATE

Certificate Number: 510040.001

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Including its implementation, meets the requirements of the standard:

ISO 9001:2000

Scope:

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

This Certificate is valid until: June 14, 2009
This Certificate is valid as of: August 30, 2006
Certified for the first time: June 14, 2000

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Kayak

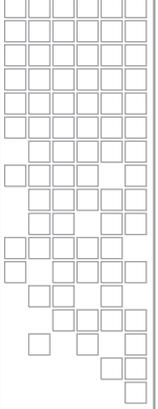
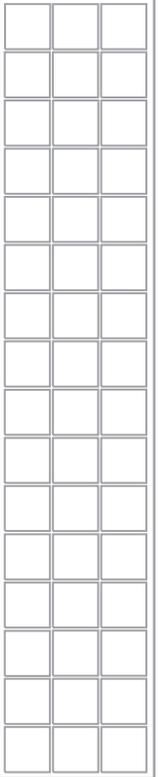
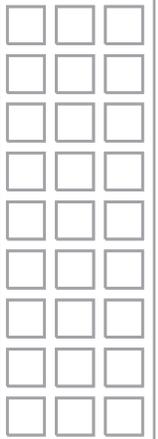
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Grass Valley Web Site

The www.thomsongrassvalley.com web site offers the following:

Online User Documentation — Current versions of product catalogs, brochures, data sheets, ordering guides, planning guides, manuals, and release notes in .pdf format can be downloaded.

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

Software Downloads — Download software updates, drivers, and patches.



END-OF-LIFE PRODUCT RECYCLING NOTICE

Grass Valley's innovation and excellence in product design also extends to the programs we've established to manage the recycling of our products. Grass Valley has developed a comprehensive end-of-life product take back program for recycle or disposal of end-of-life products. Our program meets the requirements of the European Union's WEEE Directive, the United States Environmental Protection Agency, and U.S. state and local agencies.

Grass Valley's end-of-life product take back program assures proper disposal by use of Best Available Technology. This program accepts any Grass Valley branded equipment. Upon request, a Certificate of Recycling or a Certificate of Destruction, depending on the ultimate disposition of the product, can be sent to the requester.

Grass Valley will be responsible for all costs associated with recycling and disposal, including freight. However, you are responsible for the removal of the equipment from your facility and packing the equipment to make it ready for pickup.

For further information on the Grass Valley product take back system please contact Grass Valley at + 800 80 80 20 20 or +33 1 48 25 20 20 from most other countries. In the U.S. and Canada please call 800-547-8949 or 530-478-4148, and ask to be connected to the EH&S Department. Additional information concerning the program can be found at: www.thomsongrassvalley.com/environment



Contents

Section — Kayak Release Notes	7
Introduction	7
New Features in Software Release Version 6.9.3	7
Kayak HD New Features	7
Compatibility	7
Options and Configuration Licenses	8
Flexi Key	9
Preview Assignment	10
Cleanfeed Configuration	10
Default PVW	10
Flexi Key Selection Using Sidepanel Menu	11
RAM Recorder Audio Functions	12
Memory Size vs Storage Time	12
Clips Record	12
Clips Select	13
Clips Play	15
Audio RAM Recorder Using Sidepanel Menu	17
RAM Recorder Transfer Menu (Using Kayak Menu)	18
Single Transfer Mode	19
Multi Transfer Mode	19
Transfer from the RAM Recorder to the USB Flash Memory	20
Transfer from the USB Flash Memory to the RAM Recorder	20
Color Information for Multi Transfer	20
RAM Recorder Transfer Menu (Using Sidepanel Menu)	21
Single Transfer Mode	21
Multi Transfer Mode	21
Transfer from the RAM Recorder to the PC	22
Transfer from the PC to the RAM Recorder	22
Color Information for Multi Transfer	22
Protocol Extensions	23
AMP Protocol	23
ACOS Protocol	24
Mainframe Harddisk Support	25
USB Software Update Improved	26
Kayak Software CD	27
Browse the Contents of the Installer CD-ROM	29
Kayak Documentation	29
Install Adobe Reader	29
Kayak Release Notes	30
Kayak Manuals	31
Software Installation	34
Install Kayak Software	34
USB Flash Drive Installation	36
Installation over the Network	41
Install Graphical User Interface (PC Sidepanel Software)	43

Contents

- To Install the Sidepanel Software Onto a PC: 43
- Connecting to the Kayak System 44
- Copy Sample Effects. 45
- Licenses 51
- Basics 51
- Licenses Menu. 51
- How to Install Licenses 53
- With a USB Flash Drive (recommended): 53
- Manual Entry with Internal GUI Keyboard 54
- Updating the CPLD Firmware 55
- CPLD Update Troubleshooting 56
- Inconsistent EEPROM Data. 56
- Wrong Position of CPLD Program Switch 56

Kayak Release Notes

Introduction

This document includes notes for software installation, licenses, new features and changes, and other information specific to Kayak Release Version 6.9.3 software.

New Features in Software Release Version 6.9.3

Kayak HD New Features

- FlexiKey™ programmable clean feed, using 6 Outputs (4 PGM, 2 PVW per ME) [page 11](#)
- Basic audio features in RAM Recorder [page 14](#)
- DPM Transform Interpolation [page 25](#)
- Extended AMP protocol [page 28](#)
- Extended ACOS protocol [page 29](#)
- Support of the RAM Recorder hard disk [page 30](#)
- Enhanced USB software update [page 31](#)
- Enhanced Source Shift Button Mode (Sidepanel) [page 32](#)

Compatibility

The software for all connected devices: Kayak DD Mainframe, Kayak HD Mainframes, Kayak Control Panels (1 M/E through 3 M/E), Sidepanel and XtenDD/DD-35 Control Panels 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 mainframe units with WDT serial number **200** and higher (new RoHS compliant switcher). See type label on the rear of the units

Kayak DD Only

RoHS and non-RoHS Motherboard Compact Flash not Interchangeable

Compact Flash cards for new RoHS compliant Kayak DD Mainframe motherboards (512MB) are not interchangeable with non-RoHS Motherboard Compact Flash cards (128MB).

CAUTION Do not swap Compact Flash cards between RoHS (512MB) and non-RoHS (128MB) Kayak DD Mainframe motherboards.

Additional Information

After Installing New Software

A new section has been added that provides instructions for verifying a new software installation and to add troubleshooting tips. See *After Installing New Software* [on page 65](#).

X-Bar AuxBus Delegation and Macros

The **X-Bar AuxBus Delegation** setting determines how the delegation row of the Kayak control panel behaves when selecting a RamRecorder/Still Store input source in the Pgm/Preset rows.

The **X-Bar AuxBus Delegation** is in the Sidepanel, **Personality/Panel** Menu.

There are two settings for the **X-Bar AuxBus Delegation**:

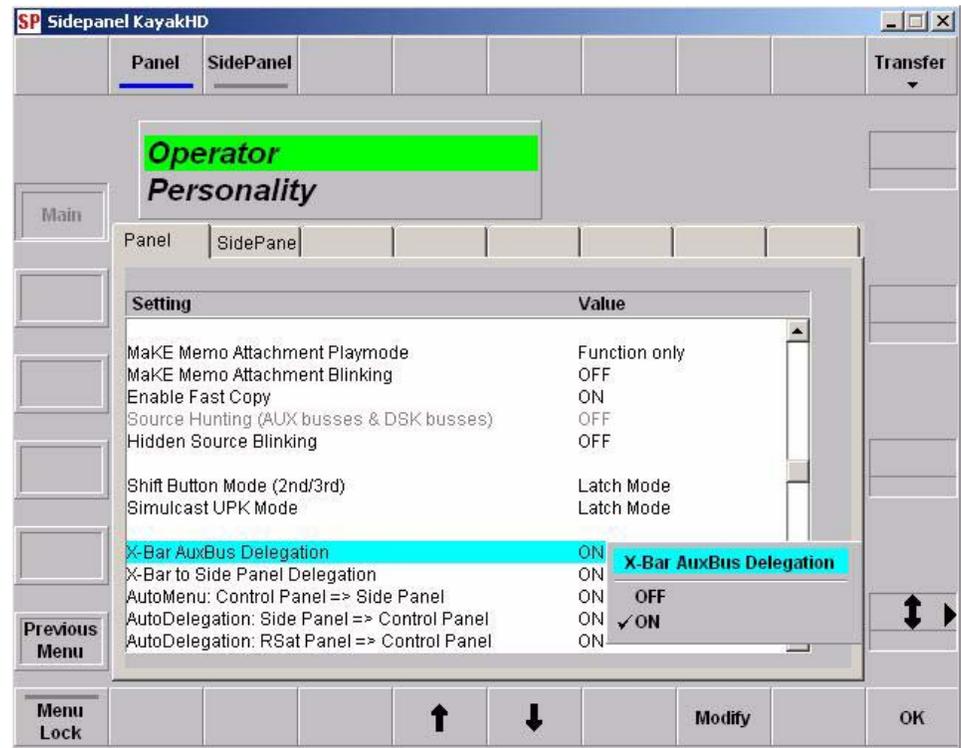
- **ON**—causes the delegation row to delegate to the RamRecorder/Still Store input when you select a RamRecorder/Still Store source from the Pgm/Preset rows.
- **OFF**—the delegation row will *not* be delegated by a RamRecorder/Still Store source selection in the Pgm/Preset rows.

Macros—Use the **OFF** selection for the **X-Bar AuxBus Delegation** if you want to use delegated rows for macros often. This will prevent unwanted delegation to RamRecorder/Still Store inputs.

Press **Personality/Panel/X-Bar AuxBus Delegation**.

Double-press the **X-Bar AuxBus Delegation** line item to select **OFF/ON**.

Figure 1. Personality Menu—X-Bar Auxbus Delegation



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 Spectra	X	
Number of RAM Recorder Channels	X	X
NetCentral	X	X
Half M/E	X	
MatchDef	X	
HD Operation	X	
RAM Recorder Memory Size	4/8	

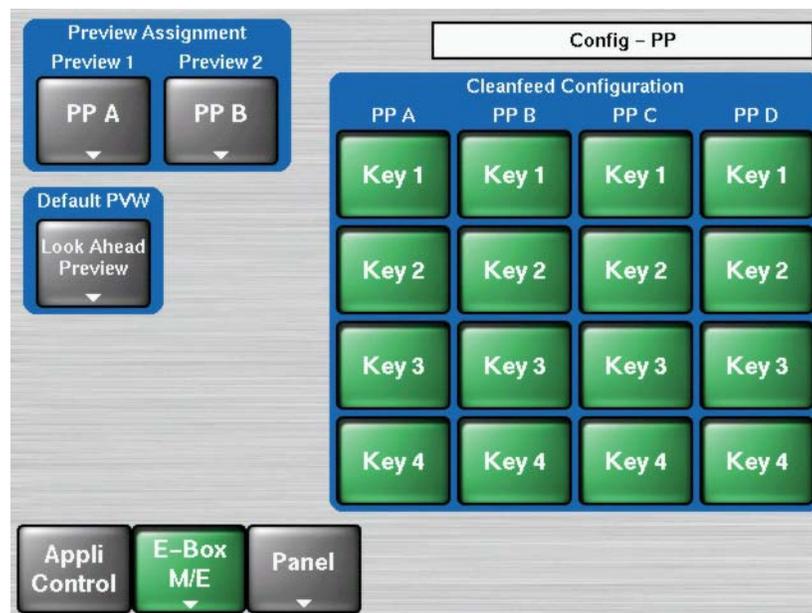
For basic operation, licenses are required for **Switcher Type**, **Number of Inputs**, and **Number of Aux Busses**.

Flexi Key

New with Kayak software V6.9.3, is the **Flexi Key** programmable clean-feed system, see [Figure 2](#). Flexi Key provides two additional program outputs, each with a separately programmable configuration of keys, to satisfy advertising and identity requirements for multiple clients of the same material.

Flexi Key is available for PP to ME3. The Half-ME is not included.

Figure 2. Cleanfeed Configuration

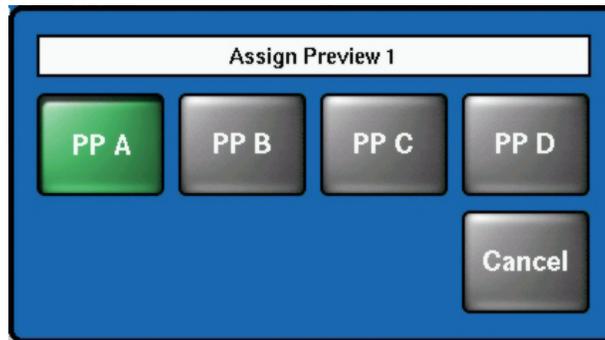


Preview Assignment

New with V6.9.3, the Preview outputs are renamed to **Preview 1** and **Preview 2** (formerly **Clean** and **Clean Preview**).

After pressing the **Preview 1** or **Preview 2** button, a dialog appears in order to preselect one of the cleanfeed configuration channels, see [Figure 3](#).

Figure 3. Preview Assignment



Cleanfeed Configuration

The **Cleanfeed Configuration** pane serves to configure the cleanfeed channels. All available keyers can be selected for each channel (**PP A—PP D**), in addition to the background signal.

Default PVW

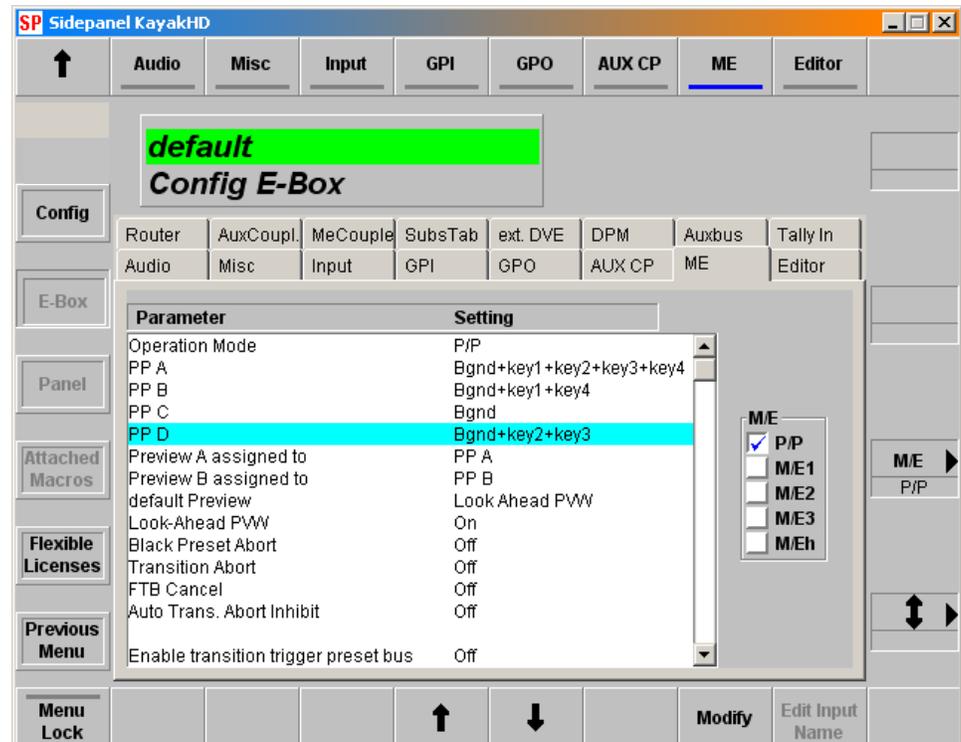
The default preview can be selected between **Look Ahead PVW** and **Perm DSK Preview**.

Flexi Key Selection Using Sidepanel Menu

FlexiKey can also be configured in menu **Config - E-Box - M/E** in the same way as the Cleanfeed Configuration.

1. Select the mixing level **P/P, M/E1, etc.**
2. Select the parameter and modify it by using the **Modify** button (Figure 4).

Figure 4. Flexi Key Settings in Sidepanel Menu



RAM Recorder Audio Functions

From software version V693 the RAM Recorder is extended with basic Audio features with Embedded Audio.

Memory Size vs Storage Time

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

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

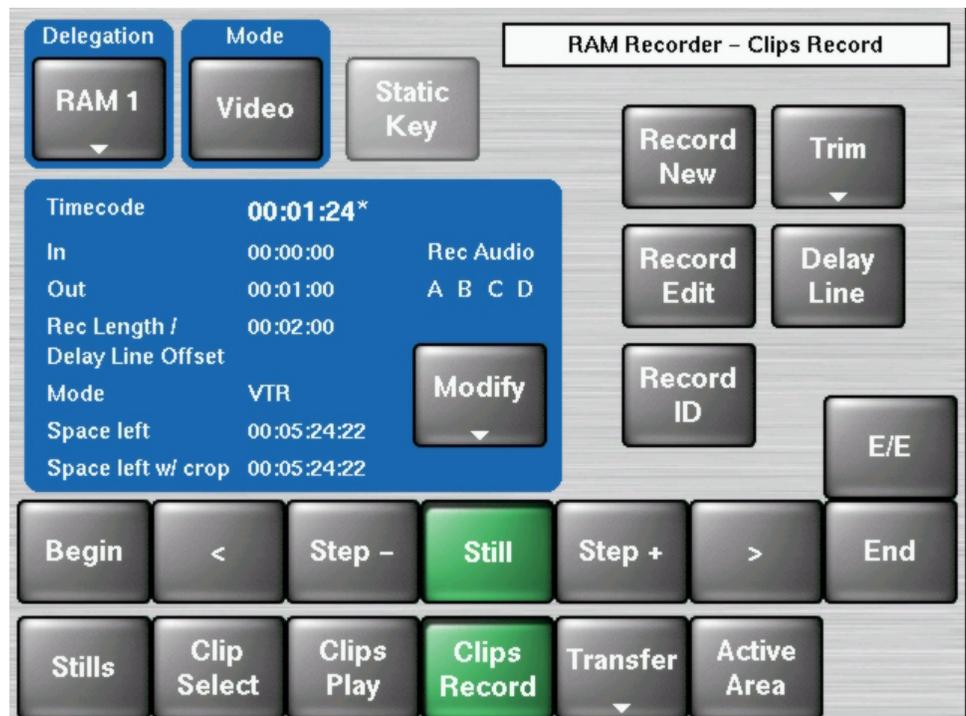
- HD = over 23 seconds per video (over 57 seconds video with KlipCache memory expansion option). The storage time for HD video with embedded audio will be reduced depending on the number of selected audio groups. With four audio groups selected the clip size increases 5%
- SD = approximately 2 min. 15 sec per video (5 min. 30 seconds video with KlipCache). The storage time for SD video with embedded audio will be reduced depending on the number of selected audio groups. With four audio groups selected the clip size increases 20%

Clips Record

Press the **Clips Record** button. The recorded groups A B C D of the embedded audio are displayed above the **Modify** button.

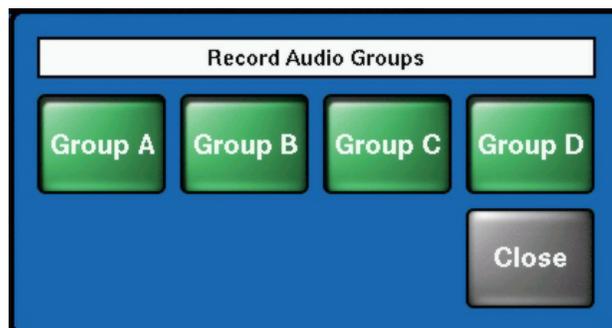
- **Group A** contains audio channel CH1 to CH4
- **Group B** contains audio channel CH5 to CH8
- **Group C** contains audio channel CH9 to CH12
- **Group D** contains audio channel CH13 to CH16

Figure 5. RAM Recorder Clips Record Menu



To change the audio group preselection press the **Modify** button and then the **Audio** button. In the **Record Audio Groups** dialog, the groups and therefore the audio channel quadruples (two pairs can be selected).

Figure 6. Record Audio Group Dialog



Clips Select

1. Press the **Clips Select** button. The clip list with all available clips appears. Clips with embedded audio are marked with a note on the right-most position.

Figure 7. RAM Recorder Clip List



2. Select a clip and press the **Load Clip** button.

Clips Play

1. Press the **Clips Play** button and set your playout parameters by using the **Modify** button.

Figure 8. RAM Recorder Clips Play Menu



2. If recorded audio groups shall not be played select the **Mute** button in the **Modify** dialog.

Figure 9. Playout Modify Dialog

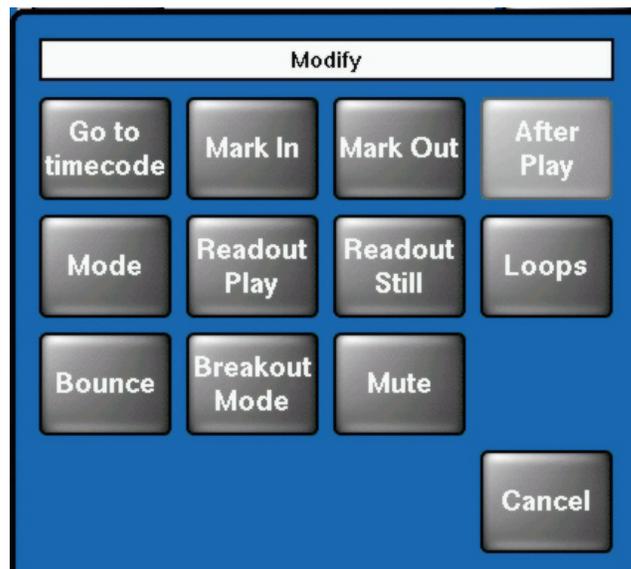


Figure 10. RAM Recorder Mute Audio Groups



3. Select or deselect the audio groups which shall be played with the video clip by pressing the **Group A—D** buttons.

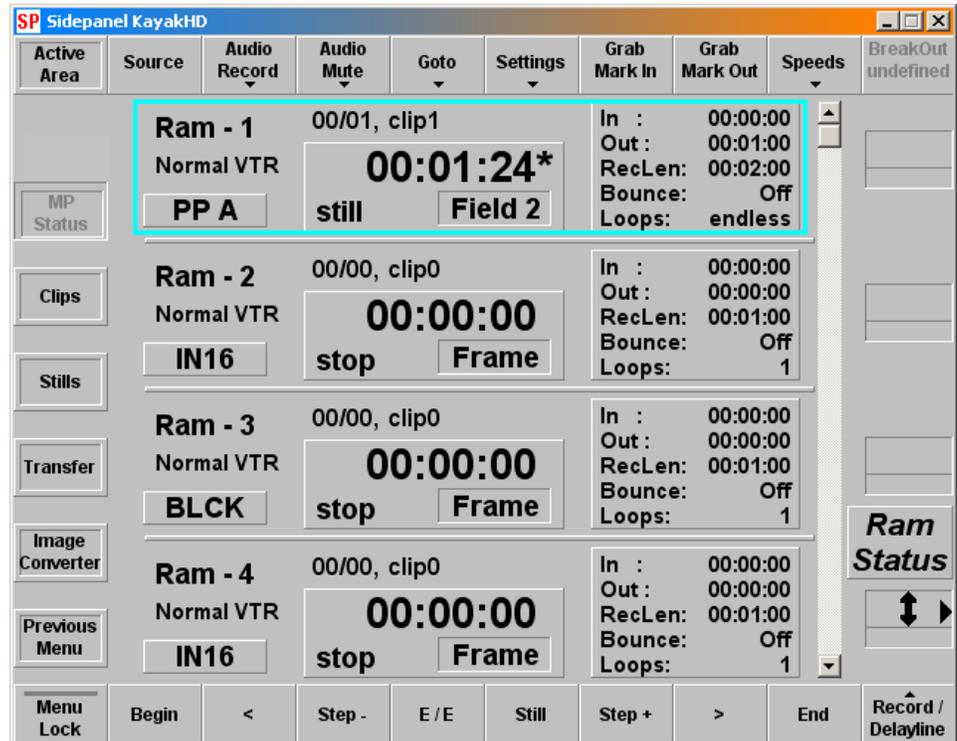
Note In Step or Loop mode the first two frames can show slight interference depending on the quality of the recorded audio signal.

Audio RAM Recorder Using Sidepanel Menu

The audio functions of the RAM Recorder can also be controlled from the sidepanel menu in the same way as described above.

1. Select the audio groups (two channel pairs) to be recorded by pressing the new **Audio Record** button.
2. Select the audio groups (two channel pairs) to be muted by pressing the new **Audio Mute** button.

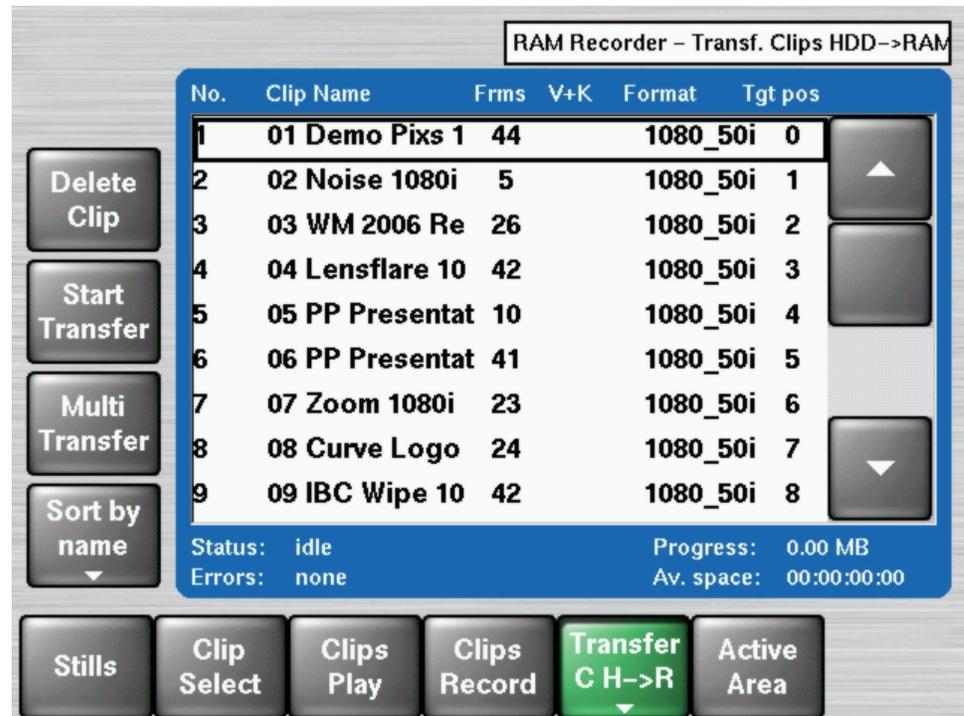
Figure 11. Audio RAM Recorder Settings in Sidepanel Menu



RAM Recorder Transfer Menu (Using Kayak Menu)

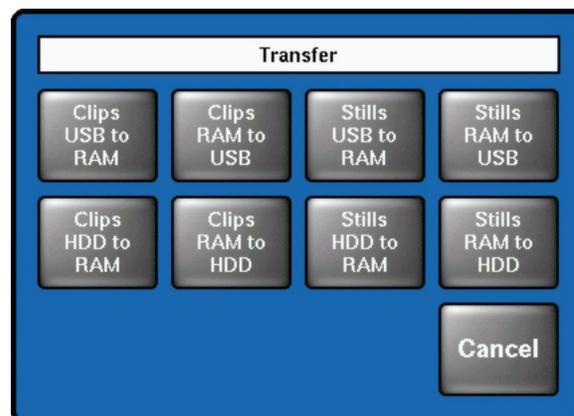
Stills/Clips exported from the KayakHD to the PC contain metadata. In this part additional information is stored; the slot position in the Ram Recorder, active area, included audio channels, etc. The slot position, if available, is used for transferring the files back into the RAM Recorder. If the files on the PC are generated by the Image Converter, or they are retrieved from a KayakDD or an XtenDD series switcher, the slot information is missing and a slot must be selected prior to the transfer.

Figure 12. RAM Recorder Transfer Menu



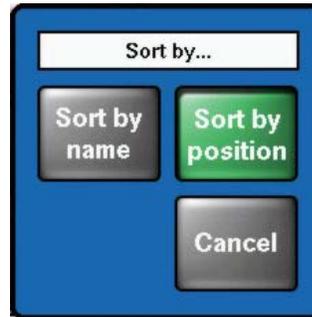
1. Press the **Transfer X->Y** button to select the transfer direction.

Figure 13. Transfer Dialog



2. Press the **Sort by...** button to rearrange the clip list.

Figure 14. Sort by... Dialog



There are two modes for transferring clips and stills to and from the RAM Recorder:

Single Transfer Mode

This is the default mode when you enter the Transfer dialog. Select the desired item and press the **Start Transfer** button. A popup keypad allows you to change the name for the target file. When you are transferring to the ram recorder you will be prompted to change the slot in the ram recorder to which you want to transfer the file.

When a slot is already occupied you will be prompted to overwrite it at the start of the transfer.

Multi Transfer Mode

To enter this mode press the **Multi Transfer** button. Use **Select All, Begin Selection, End Selection, Toggle Selection** to make your selection.

Selected items are indicated by a green color.

Since a transfer in this mode should run without prompting an overwrite, you can choose one of three **Transfer Modes** in the case that the target slot is already occupied:

- **Overwrite**—The slot will be overwritten
- **Skip**—The image in the ram recorder will be preserved and the file selected for transfer will be skipped
- **Next Free**—The image in the ram recorder will be preserved and the next free slot will be used to transfer the selected file

For transfers to the ram recorder you can also decide whether you want to use the slot position stored in the metadata ("Individual Positions") or whether you want to store the files in a subsequent order, starting at a certain position. This position can be changed via **Set start position**. This is particularly useful when you have several files without metadata.

Depending on the transfer direction there can be one or two more types of conflicts which have to be resolved in advance to start the MultiTransfer.

Transfer from the RAM Recorder to the USB Flash Memory

Name Conflicts (indicated by "name!")

Solution: Rename either the target file or the source file

Transfer from the USB Flash Memory to the RAM Recorder

Name Conflicts (indicated by "name!")

Solution—Rename either the target file or the source file

Position Conflicts (indicated similarly to "19!") These conflicts occur when the selected range has several files that have the same target position

Solution—Change the target position to a free position

Color Information for Multi Transfer

- **Green**—Items are selected and will be transferred
- **Yellow**—Items are selected but will be skipped, due to occupied slots, doubles, or missing target positions
- **Red**—Transfer blocking conflict; resolve conflict or deselect item from list

Note Name conflicts must always be resolved manually

RAM Recorder Transfer Menu (Using Sidepanel Menu)

Stills/Clips exported from the KayakHD to the PC contain metadata. In this part, additional information is stored; the slot position in the ram recorder, active area, included audio channels, etc. The slot position, if available, is used for transferring the files back into the ram recorder. If the files on the PC are generated by the Image Converter, or they are retrieved from a KayakDD or an XtenDD series switcher, the slot information is missing and a slot must be selected prior to the transfer.

There are two modes to transfer clips and stills to and from the RAM Recorder:

Single Transfer Mode

This is the default mode when you enter the Transfer dialog. Set the cursor (blue line) to the desired item and press the **Start Import** or **Start Export** button. A popup keypad allows you to change the name for the target file.

When you are transferring to the ram recorder the **to Pos** column shows you the slot where the item will be transferred to. You can change this position via **Change Position**. In case of missing slot information the **to Pos** column shows **pos?** and you have to select a slot via **Set Position** before you can start the transfer.

When a slot is already occupied you will be prompted for overwrite at the start of the transfer.

Multi Transfer Mode

You enter the multi transfer mode when at least one clip/still is selected by the top row buttons **Select All**, **Begin Selection**, **End Selection**, **Toggle Selection**.

Selected items are indicated by a green color.

Since a transfer in this mode should run without prompting for overwrite you can choose one of three Transfer Modes for the case that the target slot is already occupied:

- **Overwrite**—The slot will be overwritten
- **Skip**—The image in the ram recorder will be preserved and the file selected for transfer will be skipped
- **Next Free**—The image in the ram recorder will be preserved and the next free slot will be used to transfer the selected file

For transfers to the ram recorder you can also decide whether you want to use the slot position stored in the metadata ("Individual Positions") or whether you want to store the files in a subsequent order, starting at a certain position. This position can be changed via **Change Start Pos**. This is particularly useful when you have several files without metadata.

Depending on the transfer direction there can be one or two more types of conflicts which have to be resolved in advance to start the MultiTransfer.

Transfer from the RAM Recorder to the PC

Name Conflicts (indicated by "name!")

Solution: Rename either the target file or the source file

Transfer from the PC to the RAM Recorder

Name Conflicts (indicated by "name!")

Solution—Rename either the target file or the source file

Position Conflicts (indicated similarly to "19!") These conflicts occur when in the selected range several files have the same target position

Solution—Change target position to a free position

Color Information for Multi Transfer

- **Green**—Items are selected and will be transferred
- **Yellow**—Items are selected but will be skipped, due to occupied slots, double or missing target positions
- **Red**—Transfer blocking conflict; resolve conflict or deselect item from list

Note Name conflicts must always be resolved manually

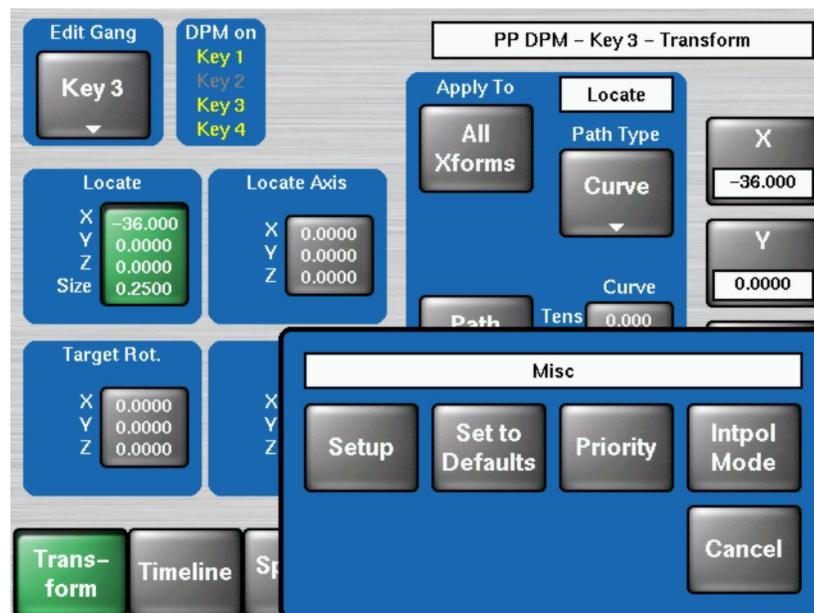
DPM Transform Interpolation

In previous versions, **Adaptive Mode** was the only DPM interpolation mode and remains appropriate for most situations. If you are not experiencing any issues, continue to use **Adaptive Mode**.

Frame and **Field** buttons for DPM Transform Interpolation (the default is Adaptive Mode) have been added to the DPM/Misc menu in Kayak V693 software.

Press **DPM/Misc/Intpol Mode** to access the interpolation modes, see [Figure 15](#).

Figure 15. DPM Transition Interpolation—DPM/Misc/Intpol Mode Button



Choose from Keys 1-4 and select the **Misc Intpol** button (see [Figure 16](#)) to display the **Adapt/Frame/Field** interpolation button group, see [Figure 17](#).

Figure 16. DPM Transition Interpolation—Interpolation Mode



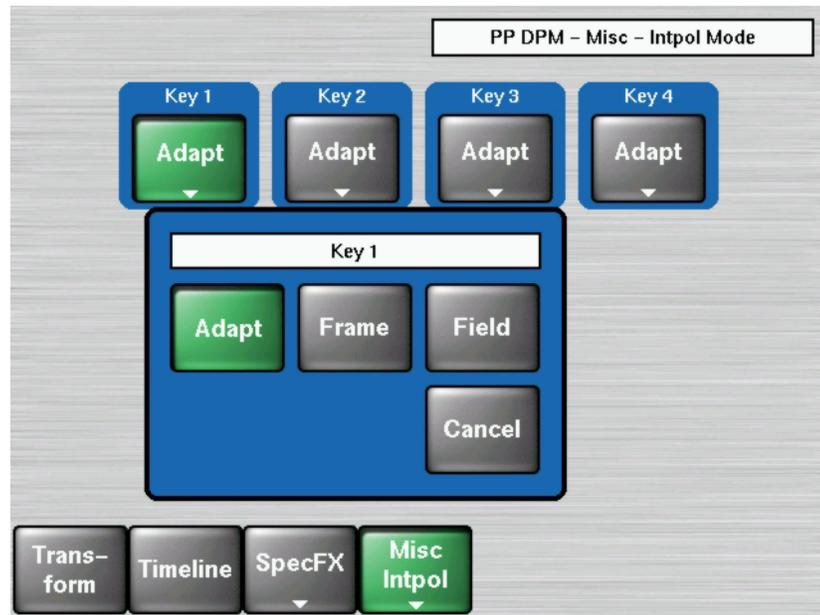
Frame Interpolation Mode button (See [Figure 17](#))—**Frame Mode** preserves fine lines in source material. Kayak interpolates pixels to Field Mode when there are fine horizontal lines in the source material. Some fine lines may be lost for example in text or characters when in motion. Using **Frame Mode** preserves the text and characters.

Field Interpolation Mode button (See [Figure 17](#))—When a video source has unwanted artifacts during a transform, pressing the **Field** button forces it to **Field Mode** which can remove the unwanted artifacts.

For example, when pre-edited material is transformed in the DPM, a cut between similar sources is sometimes interpolated in Frame Mode. The result is a shadow of the frame before the cut, appearing in the frame after the cut. Forcing the Field Mode eliminates this shadow artifact.

Note Recalling an older EMEM will not affect interpolation modes set by new EMEMs, so in some cases it may be necessary to re-save older EMEMs with the desired interpolation modes set. The default mode for older EMEMs is Adaptive.

Figure 17. DPM Transition Interpolation—Adapt/Frame/Field Interpolation Buttons



Protocol Extensions

AMP Protocol

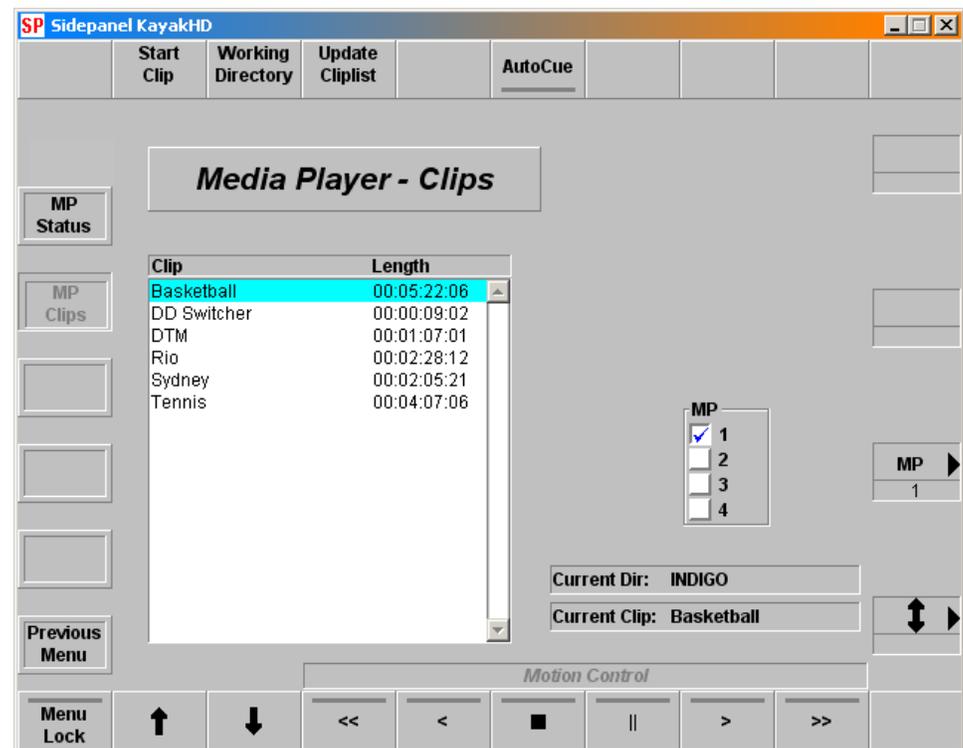
With software V693 the AMP protocol (Advanced Media Protocol) is extended. In order to select media clips from a connected media player, it is now possible to navigate inside an existing directory path.

Press the **Change Folder** button to change from the clip level to the folder level, and select the desired folder.

Figure 18. Clip Select Menu with Change Folder



Figure 19. Sidepanel Menu with Working Directory Button



ACOS Protocol

The ACOS (Automation Control System) protocol is designed to facilitate communication between a Thomson Grass Valley production switcher and a control system.

The communication is from the control system to the production switcher. The control system may issue actions in the production switcher (e.g. cross-point changes) and receive responses.

With software version V693 the protocol is extended with:

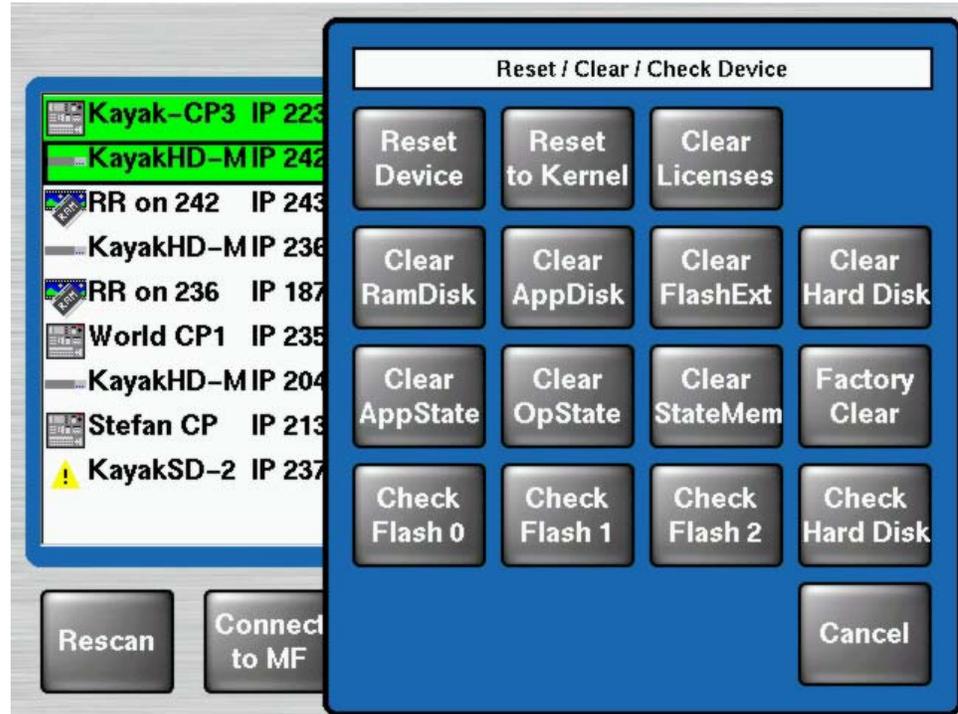
- Tally Out
- 48 Aux busses

Note In the current ACOS implementation only RED tally (OnAir) is supported.

Ram Recorder Hard Disk Support

With software V693 the Ram Recorder hard disk will be supported. For installing the hard disk and servicing, the Device Control menu is extended.

Figure 20. Ram Recorder—Device Control Menu, Reset/Clear/Check Device



Clear Hard Disk—Pressing this button **reformats** the internal hard drive. All data on the drive will be **lost**. After reformatting is finished, the mainframe performs a reset.

Check Hard Disk—Pressing this button allows you to manually check the file system on the hard drive for consistency and the system tries to repair inconsistent data. Use this function when there are problems accessing data on the hard drive. After the check process, the mainframe performs a reset.

Note During normal operating mode the **Clear Hard Disk** and **Check Hard Disk** buttons are locked. In order to unlock the buttons press **MenuLock + User4** buttons simultaneously.

Enhanced USB Software Update

Installing from USB

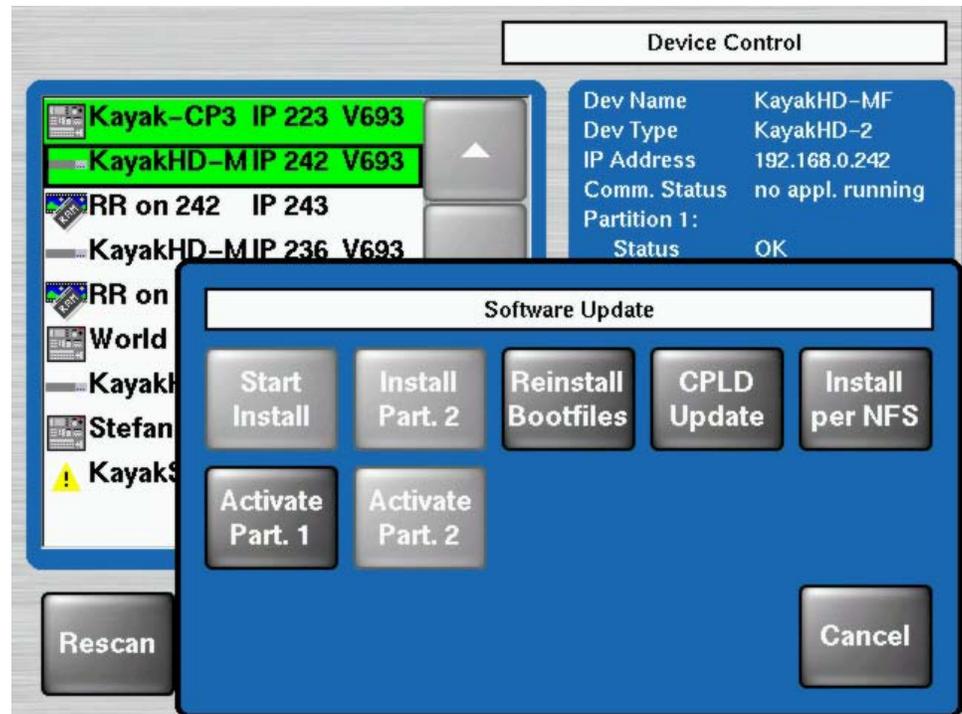
In software version 6.9.3 the software update process from USB has been improved to achieve faster file transfer rates when updating devices.

Install Per NFS

The original transfer method (NFS) can be reactivated if there are issues while updating software. To use the original approach, press the **Install per NFS** button and install the software without resetting the panel being installed. After reset the enhanced USB method becomes the default again.

Note During normal operating mode, the **Install per NFS** button is locked. In order to unlock the button press the **MenuLock** and **User4** buttons simultaneously.

Figure 21. Installing from NFS—Install per NFS Button



Enhanced Source Shift Button Mode (Sidepanel)

Setting the Source Shift Button Mode

New with Kayak V693, the “Zodiak Mode” in previous versions in the Source Shift Button Mode selections, has been renamed **Touch Mode**.

There are three source shift button modes that can be set through the sidepanel:

- **Latch Mode** (the default)—Is recommended for Kayak and XtendDD panels. Shift selections stay latched and only sources on the selected bus row are displayed,
- **Momentary Mode**—If a source is selected with the shift button depressed and then released, the shift selection will return to the first level and shifted sources will *not* be displayed,
- **Touch Mode**—When a shifted source is selected, the bus row displays the selected source even if it appears on a shifted row, however the next selection will be from an unshifted source unless a shift button is pressed.

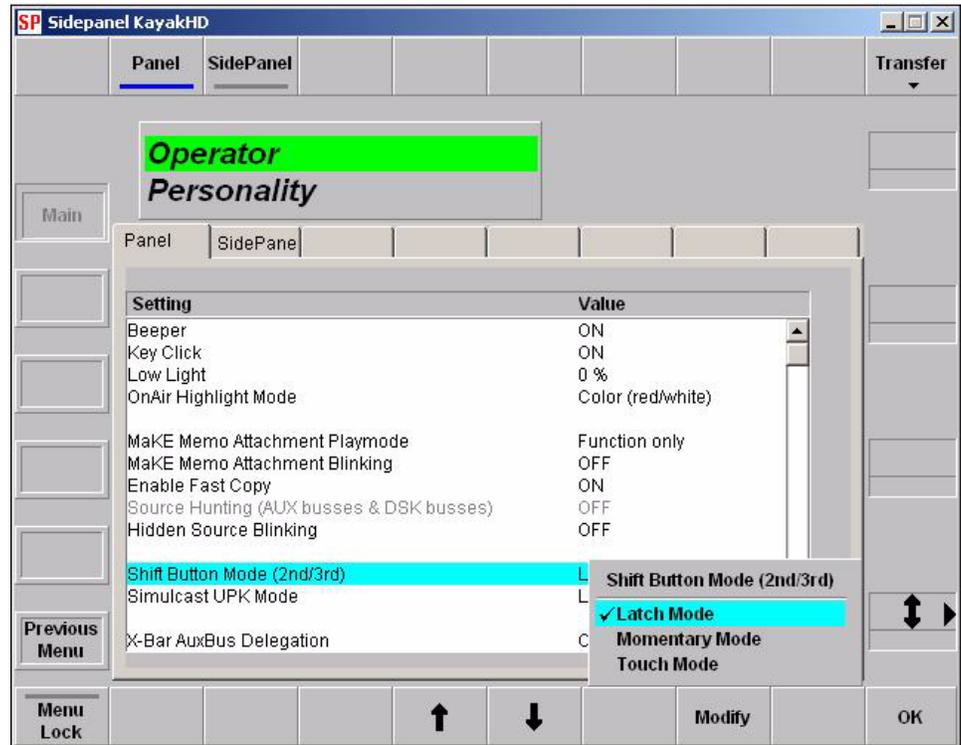
You can view and modify the behavior of the source button shift modes.

Note These settings are only available through the **Sidepanel**.

To configure the recommended settings for Kayak and XtendDD, complete the following steps:

1. On the sidepanel, press **Personality/Panel/Shift Button Mode (2nd/3rd)**, as shown in [Figure 22](#).

Figure 22. Personality Menu—Shift Button Mode



2. Verify that the **Shift Button Mode (2nd/3rd)** is set to **Latch Mode** (refer to [Figure 22](#)).
3. If not, double-touch the **Shift Button Mode (2nd/3rd)** line item and modify the selection to **Latch Mode**.
4. **Save your Personal Settings.**

Kayak Software CD

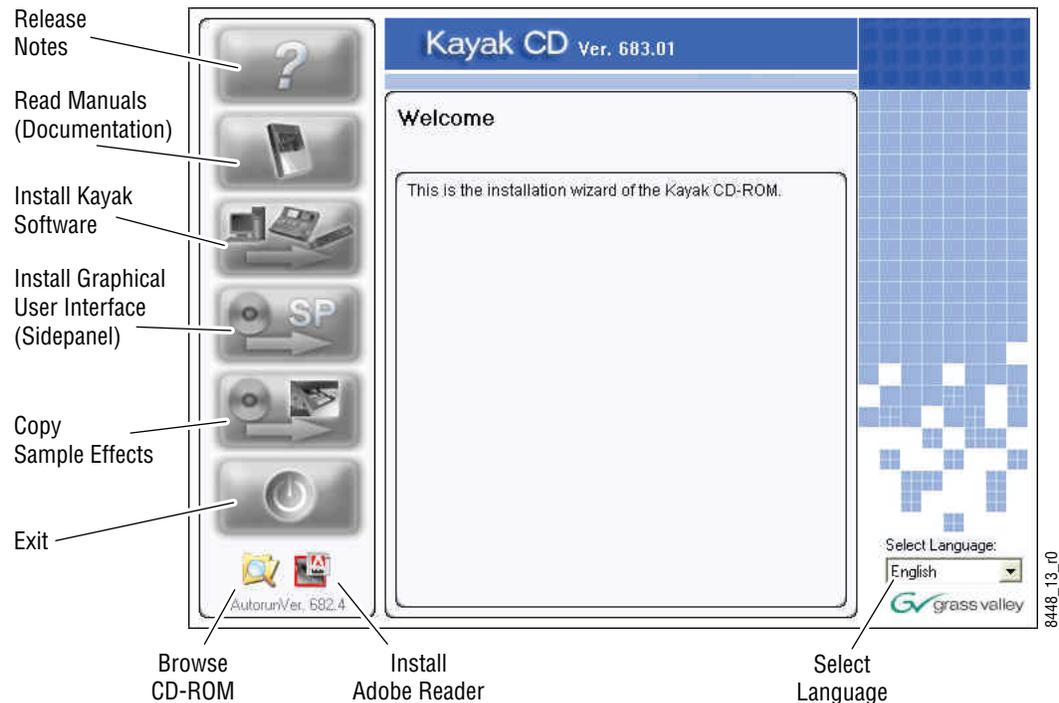
Kayak menu panel software can be installed from the Kayak Software CD over a network connected to the Kayak switcher or to a USB flash drive that can then be used to install software on the control panel.

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 23).

Figure 23. 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:

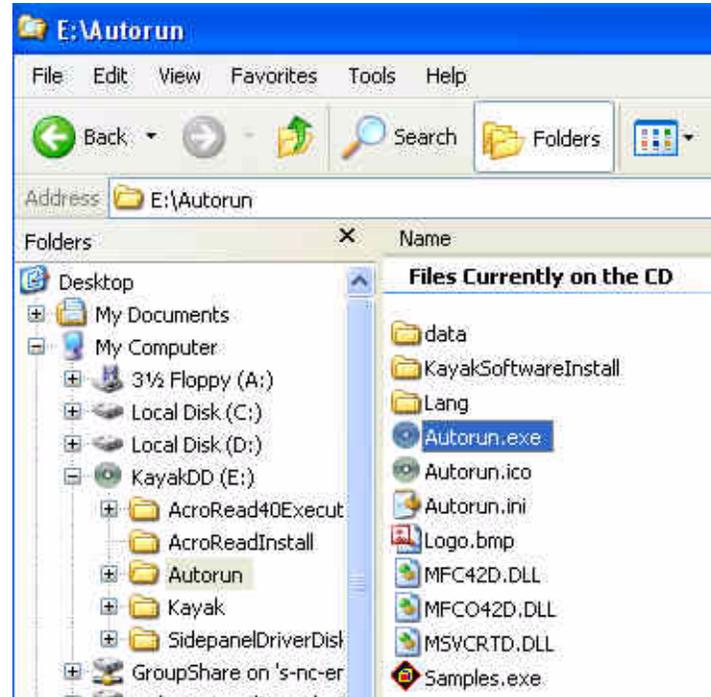
- Read the *Release Notes* and *Release Notes Addendum* for the latest information on this software release. (See *Kayak Release Notes* [on page 37](#).)
- Read documentation including the User and Installation manuals for both Kayak DD and Kayak HD switchers. (See *Kayak Manuals* [on page 38](#).)

- Install Kayak software to a USB flash drive or to devices connected to the network. (See *Install Kayak Software on page 42.*)
- Install the graphical user interface (Kayak PC Sidepanel software) to a PC computer. (See *Install Graphical User Interface (PC Sidepanel Software) on page 51.*)
- 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 53.*)
- 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 36.*)
- Install Adobe Reader to read Kayak documentation. (See *Install Adobe Reader on page 36.*)
- 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 24).

Figure 24. Kayak Software CD-ROM Directory

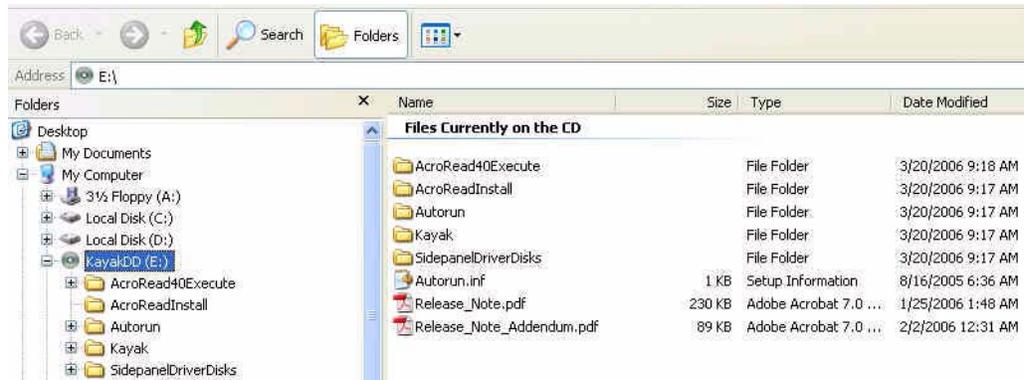


Browse the Contents of the Installer CD-ROM

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 23 on page 34).

A window displays showing all the files and directories contained within the Installer CD-ROM (Figure 25).

Figure 25. Browse the CD-ROM Contents



Kayak Documentation

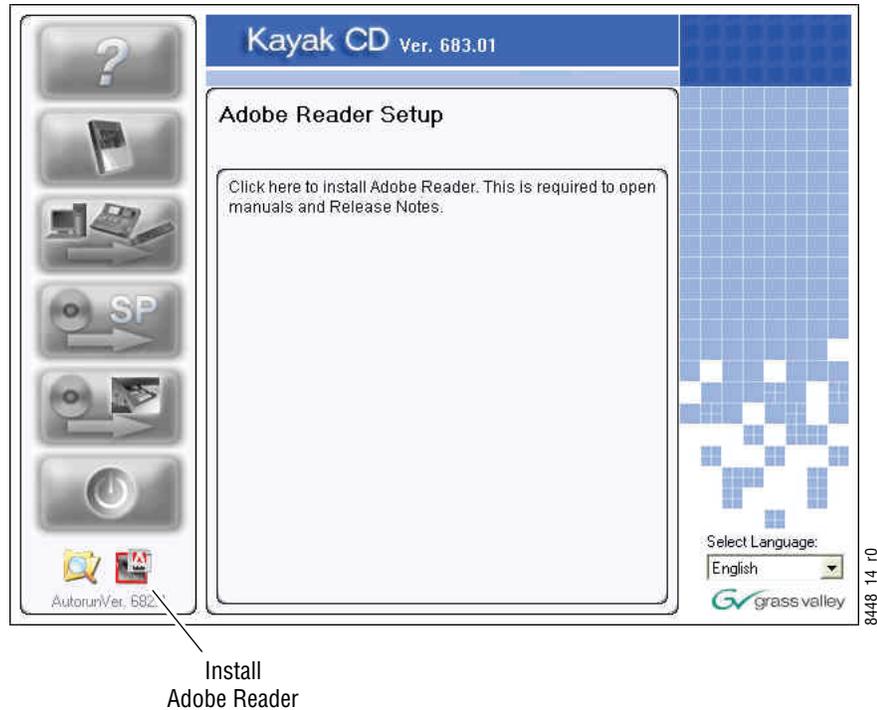
Note If you cannot read the Kayak documentation, available in Adobe PDF (Portable Document Format), you may need to install Adobe Reader software.

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 26) and then follow the instructions in the installation wizard.

Figure 26. Install Adobe Reader

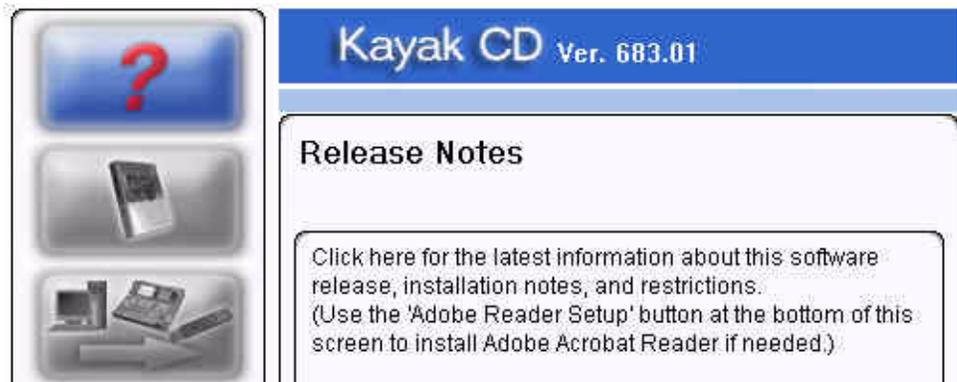


Kayak Release Notes

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

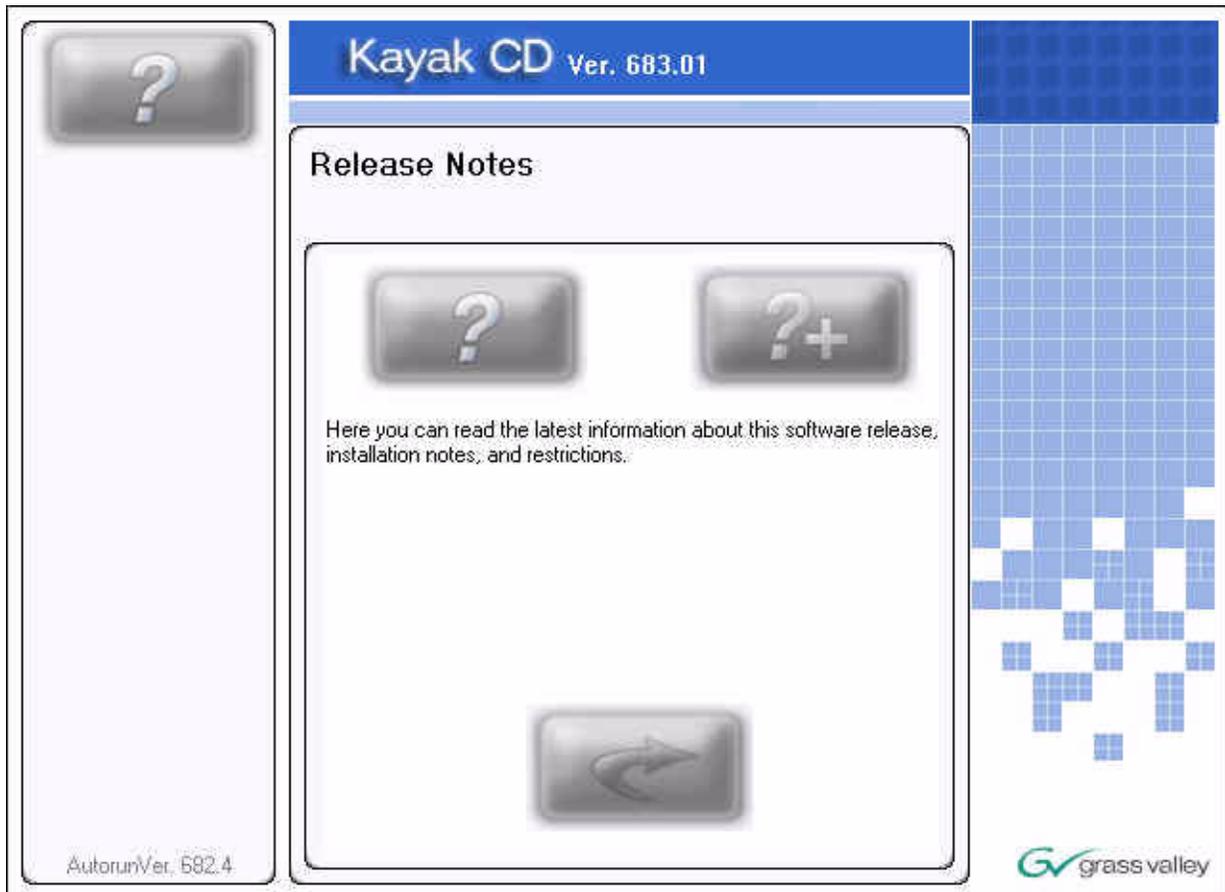
1. From the **CD Installer Welcome** screen click on the **Release Notes** button (red question mark) in the upper left-hand corner (Figure 27)

Figure 27. Release Notes Button on the CD Installer Welcome Screen



2. The **Release Notes Welcome** screen displays (Figure 28).

Figure 28. 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:

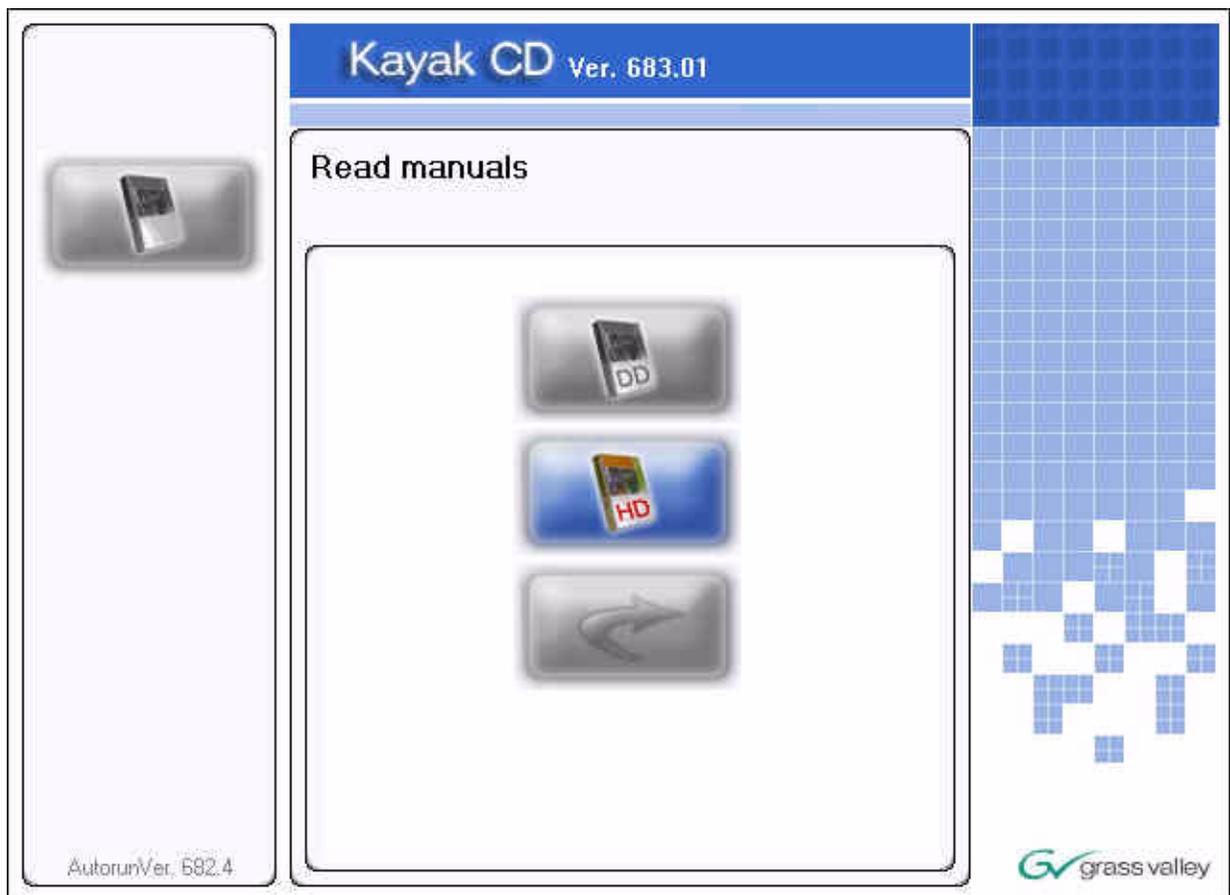
1. From the **CD Installer Welcome** screen click on the **Read Manuals** button (Book icon in Figure 29) in the upper left.

Figure 29. Read Manuals Button on the CD Installer Welcome Screen



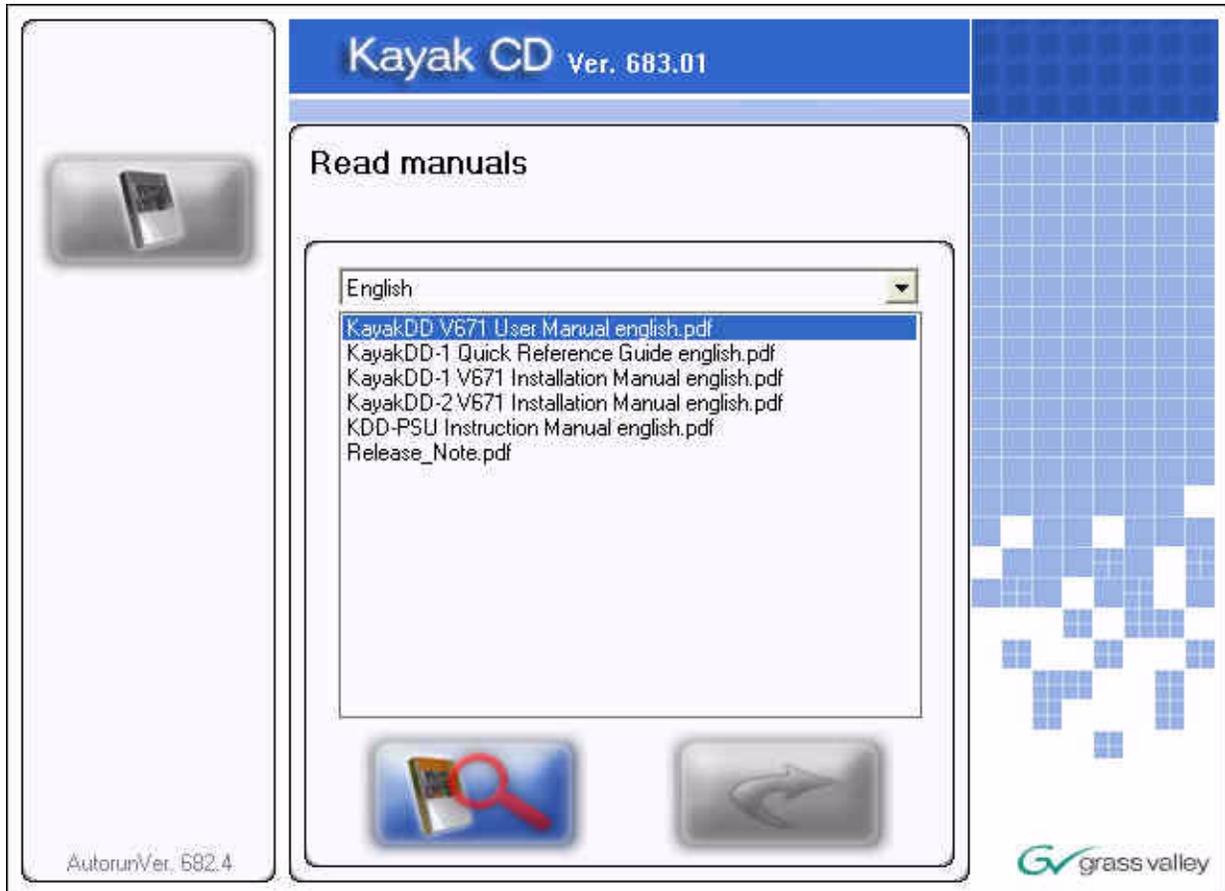
2. The **Kayak Read Manuals Selection** screen displays (Figure 30).

Figure 30. 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 31).

Figure 31. Kayak DD Documentation Screen 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 63*).

Install Kayak Software

CAUTION Save your **Personal Settings** before installing new software.

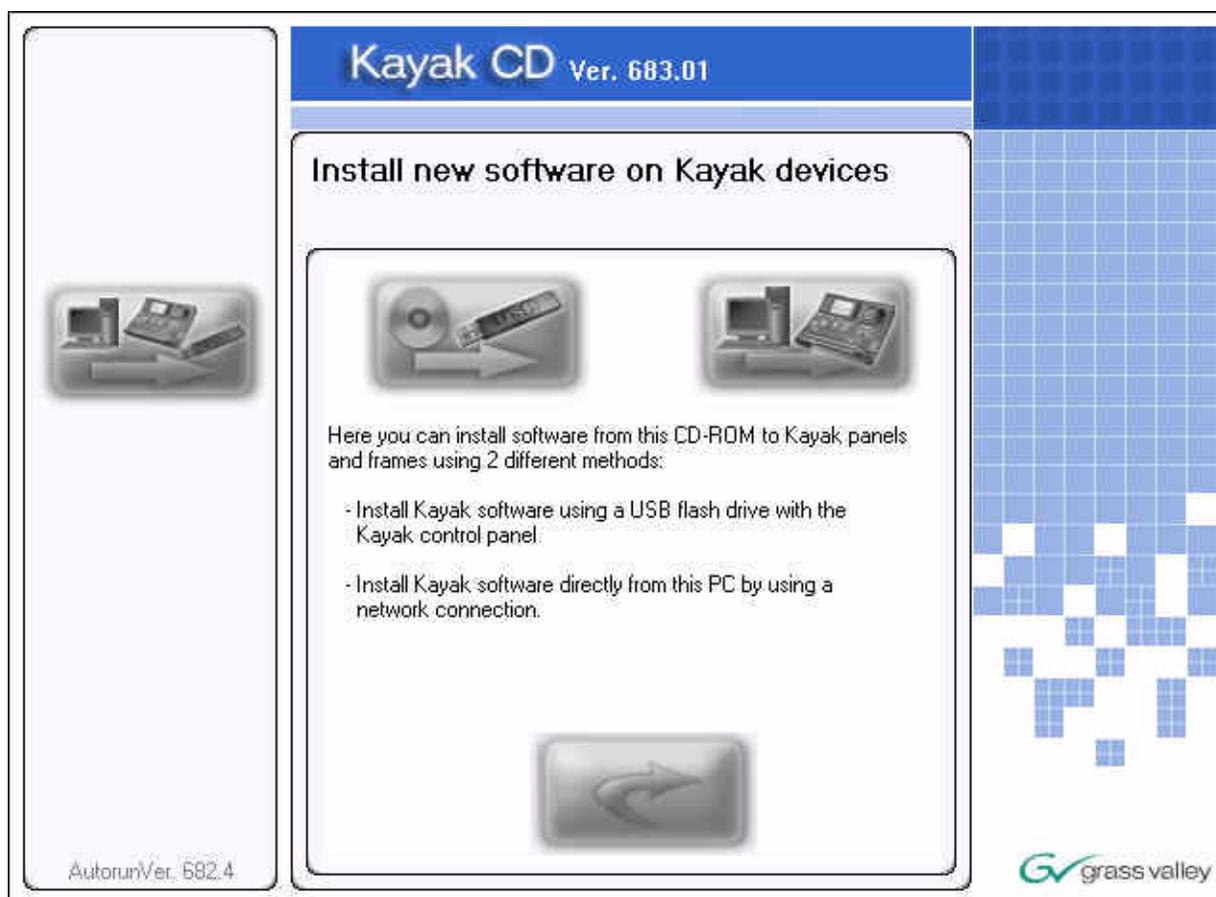
1. From the **CD Installer Welcome** screen click on the **Install Kayak Software** button (third from the top on the left as shown in [Figure 32](#)):

Figure 32. Install Kayak Software Button on the CD Installer Welcome Screen



2. The **Install new software on Kayak devices** selection screen displays (Figure 33).

Figure 33. 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 44.

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 2.

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 33 on page 43](#)) 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.

CAUTION When using a USB Flash drive to update the panel software, it is recommended that any **frame** updates be performed first.

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 44*

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 34. 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 34 on page 45). The **Software Update** dialog box displays.

Figure 35. Device Control Menu with Software Update Dialog Box



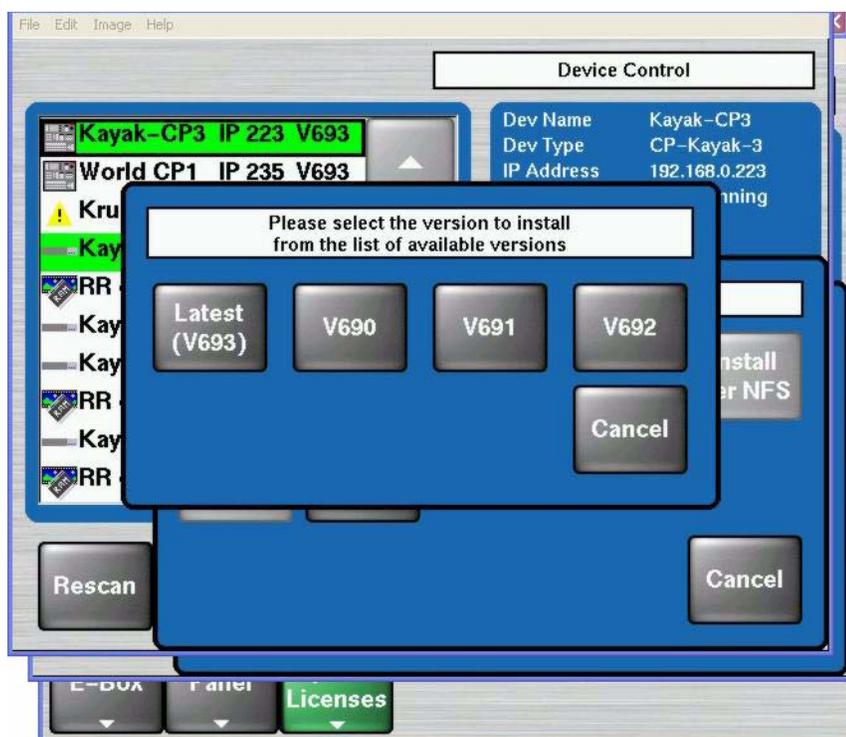
- Click either the **Start Install** or the **Install Part.x** button (Figure 35). The correct software will be installed in the respective device (MF or CP) automatically.

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 36. 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.

10. Click to select the software version to install from the dialog box display (Figure 36). 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 38 on page 48. The partition used for the cancelled installation is no longer available for use and cannot be activated.

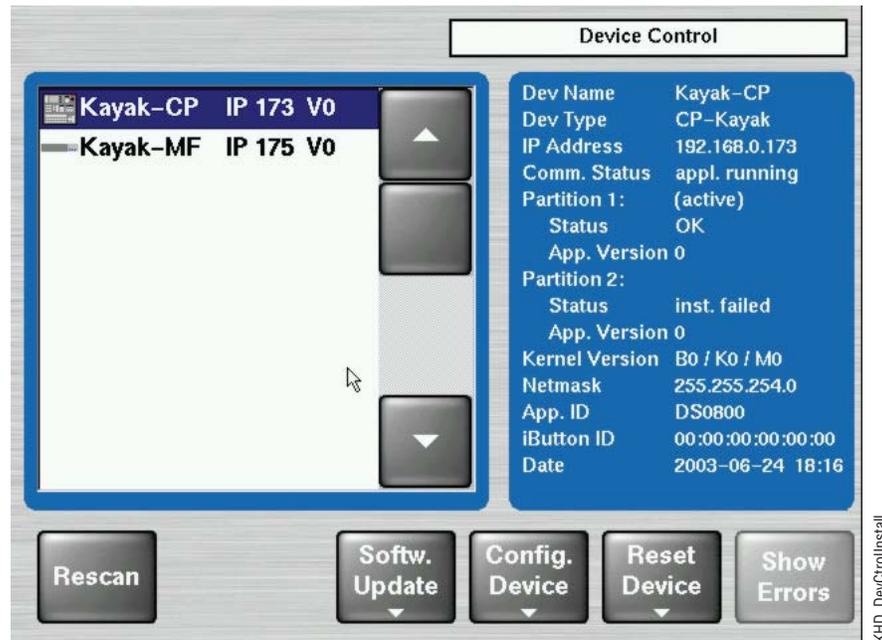
Figure 37. Abort Install Button



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.

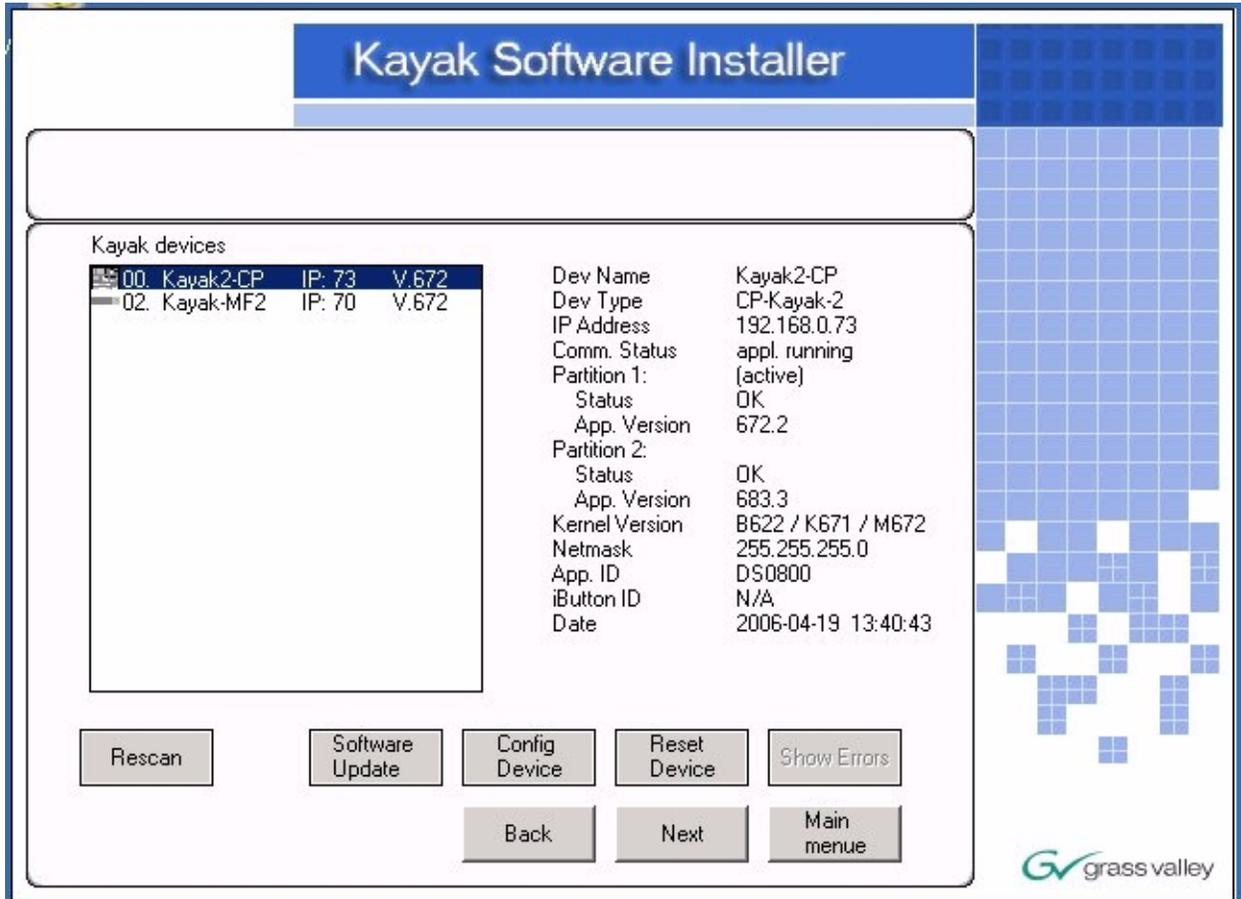
Figure 38. Device Control Installation Failure Status on Partition 2



KHD_DevCtrlInstall

3. Clicking the **Next** button displays the **Kayak Device Selection** screen (Figure 40). 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 40. Kayak Network Device Selection



4. Once you have selected a device click one of the active buttons below the device list (see [Figure 40 on page 50](#)) 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.

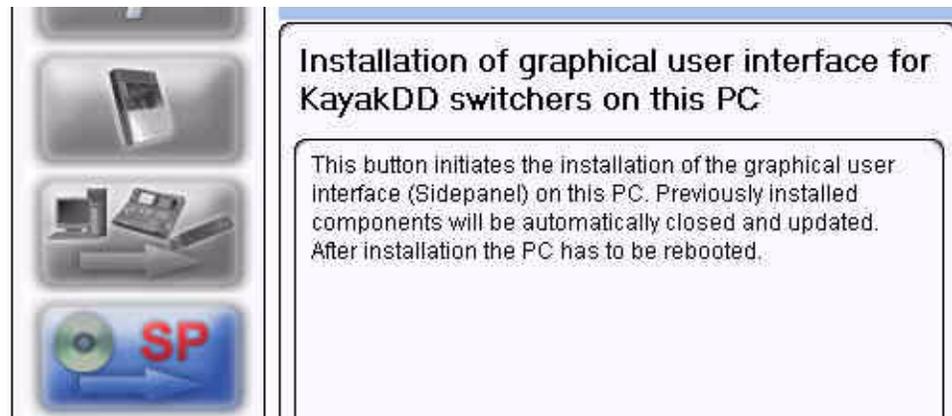
Install Graphical User Interface (PC Sidepanel Software)

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 41](#)).

Figure 41. 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:

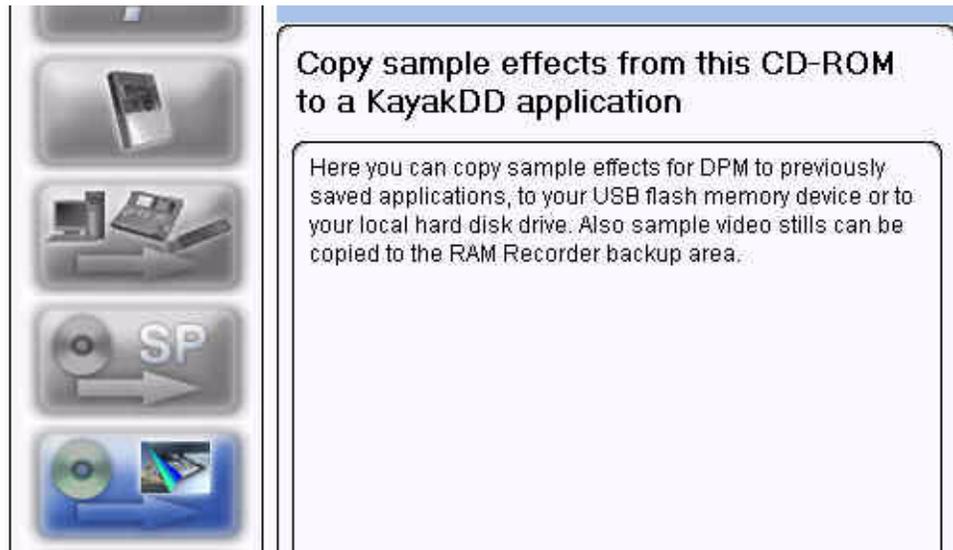
1. Launch the Sidepanel software application.
2. Right-click the **Menu** button and select the **Startup** option.
3. Click to select the box for E-Box at the top of the screen. A blue line displays in the bottom of the box to indicate that it has been selected.
4. Click to select the box for **Panel** (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, panel, and computer Sidepanel for this session.
8. Click **Attach** to make the connection from the frame, panel, and computer Sidepanel 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.

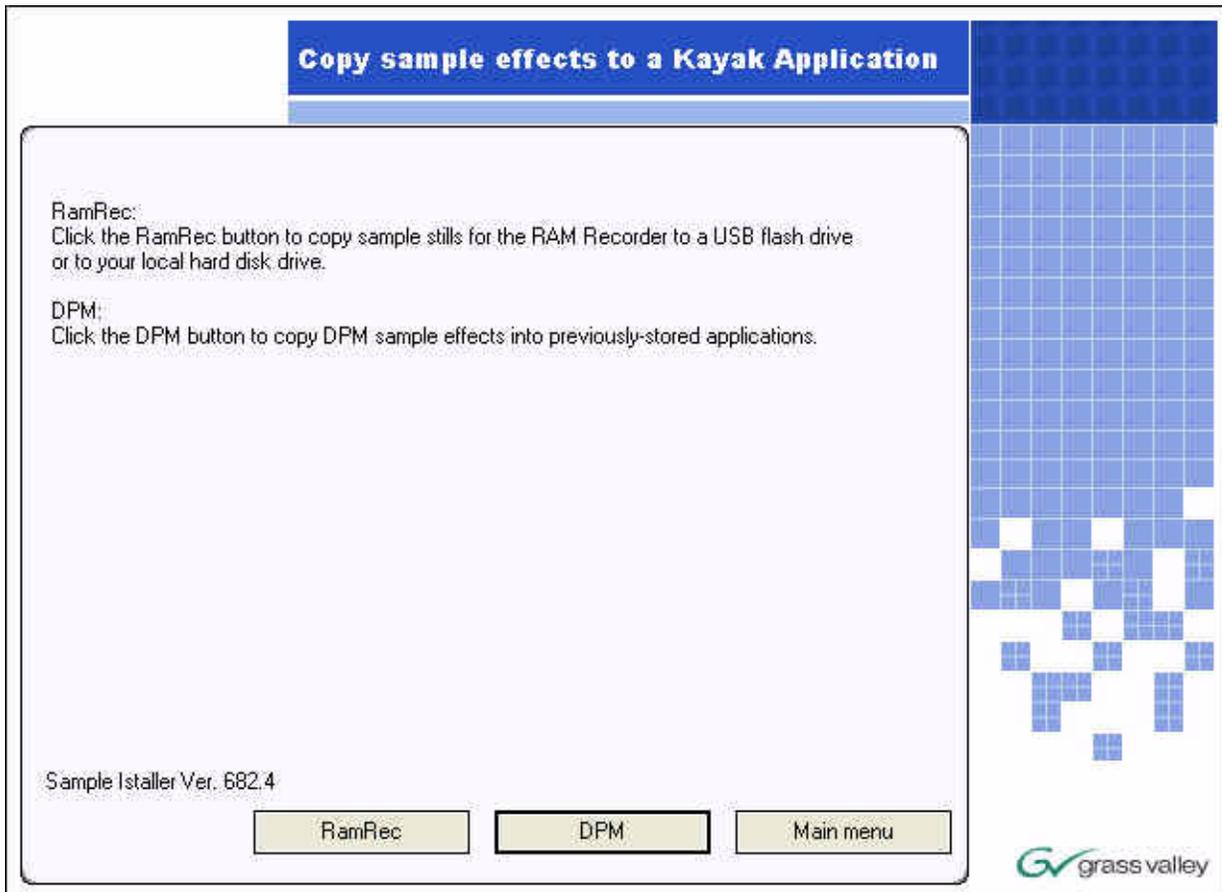
1. From the **CD Installer Welcome** screen click on the **Copy Sample Effects** button (with the disc and the page turn icon as shown in [Figure 42](#)) in the upper left-hand corner to copy sample effects to a USB flash drive for use on the RAM Recorder or to copy DPM sample effects into previously-stored applications.

Figure 42. Copy Sample Effects Software Button on the CD Installer Welcome Screen



The **Copy Sample Effects to a Kayak Application** screen displays (Figure 43).

Figure 43. Copy Sample Effects to a Kayak Application Screen

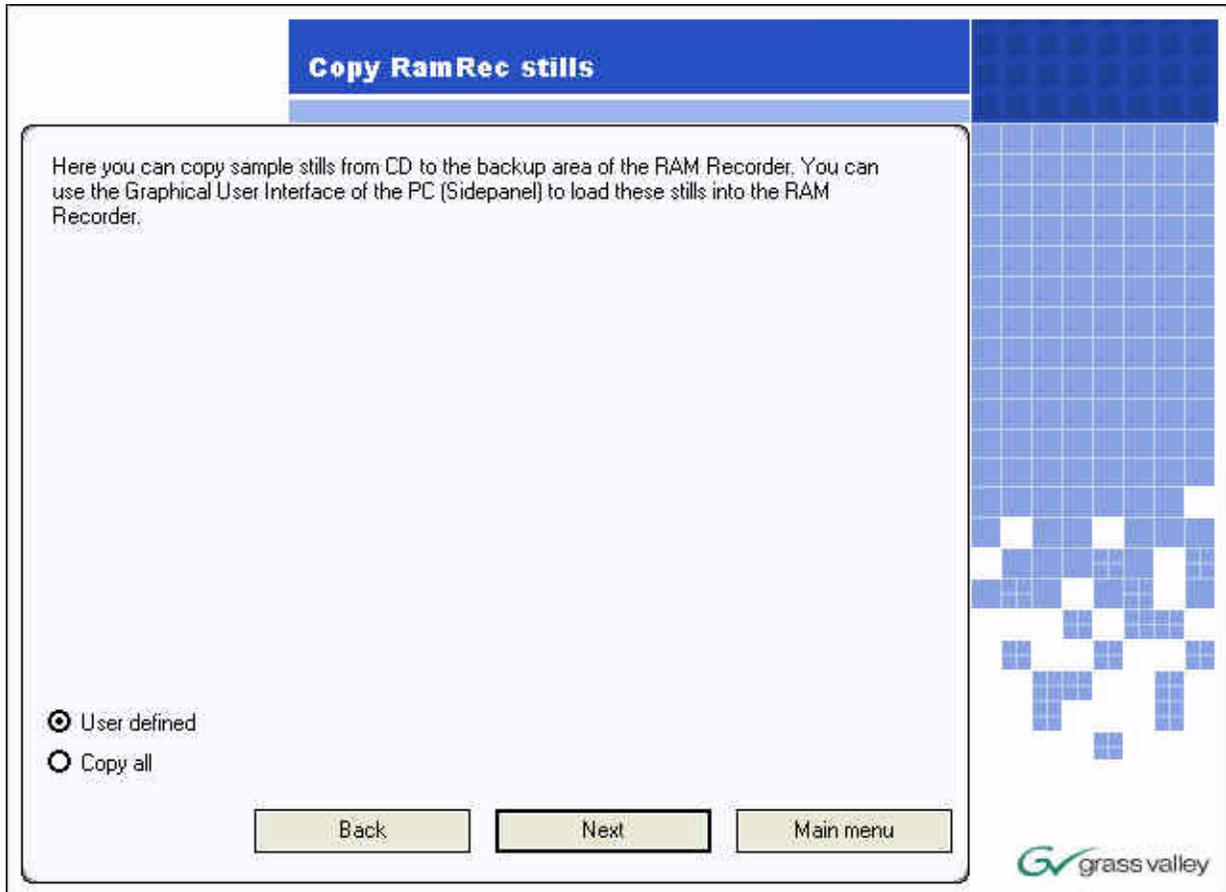


2. From this screen you can:

- 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.

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

Figure 44. 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.

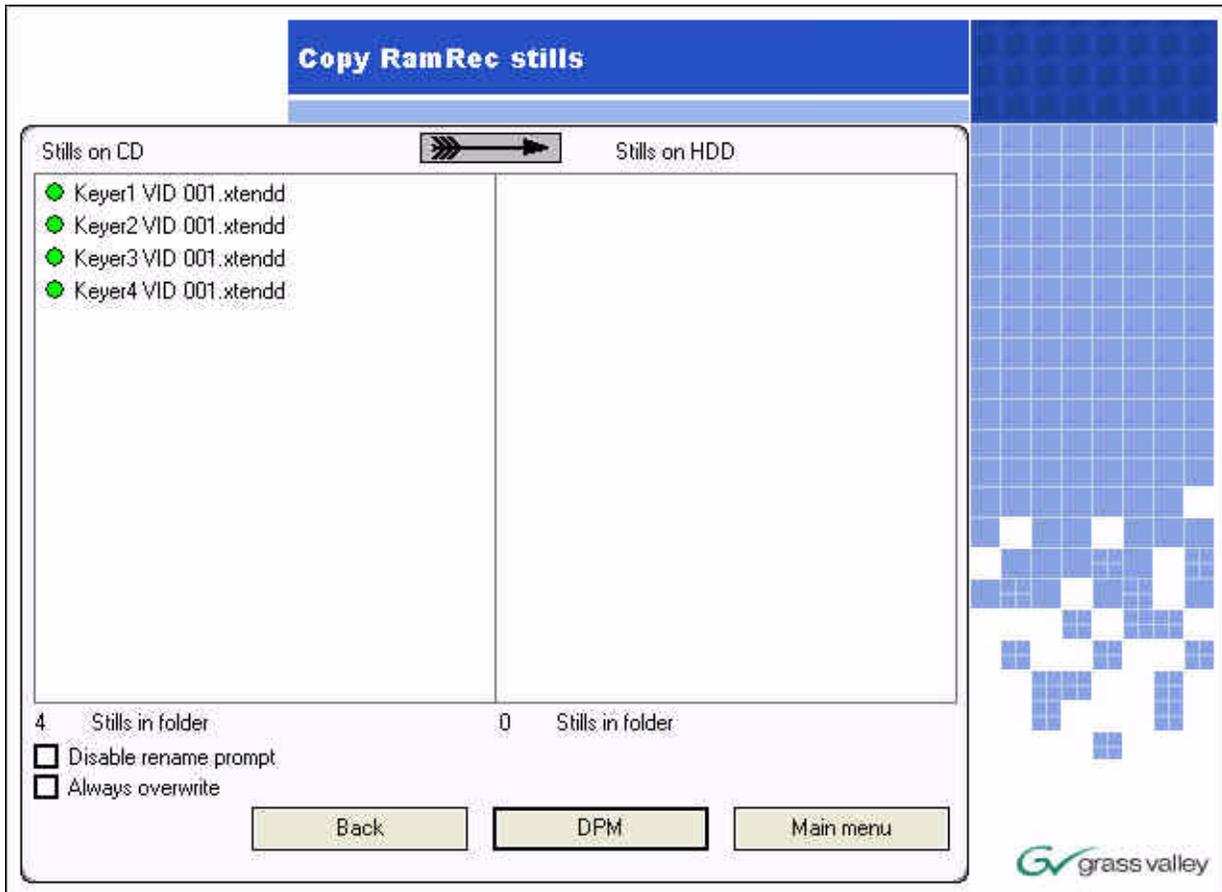
- Click on the **User defined** radio button at the bottom left to copy only those still images that were created by the user, or select the **Copy all** radio button to copy all still images, and then click the **Next** button to begin the copy process.

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`

- 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 45](#).

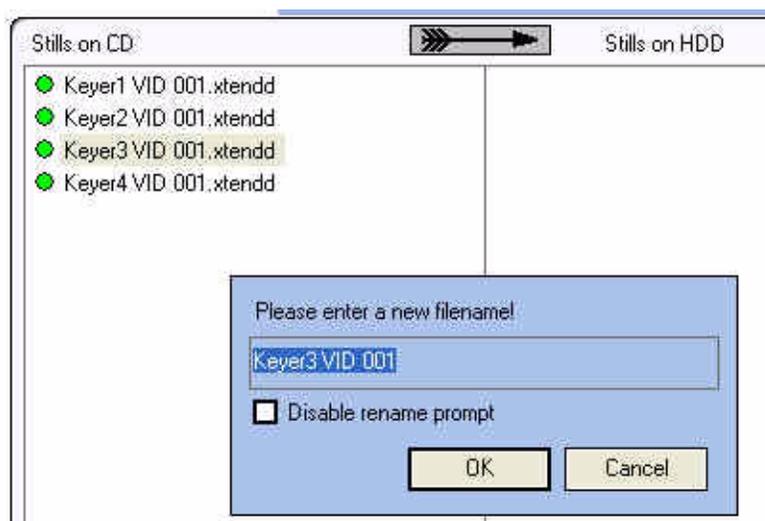
Figure 45. Copy User Defined Stills



- 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.
- 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 46). 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 46. 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 47).

Figure 47. 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 43 on page 54) click on the **DPM** button to display the **Copy DPM effects** screen (Figure 48).

Figure 48. 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 panel 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 DPM effects, then click the **Next** button to begin the copy process.

Licenses

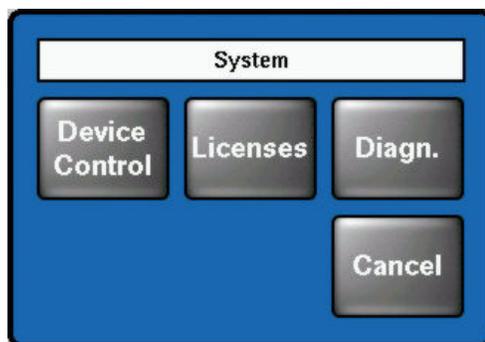
Basics

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 on 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

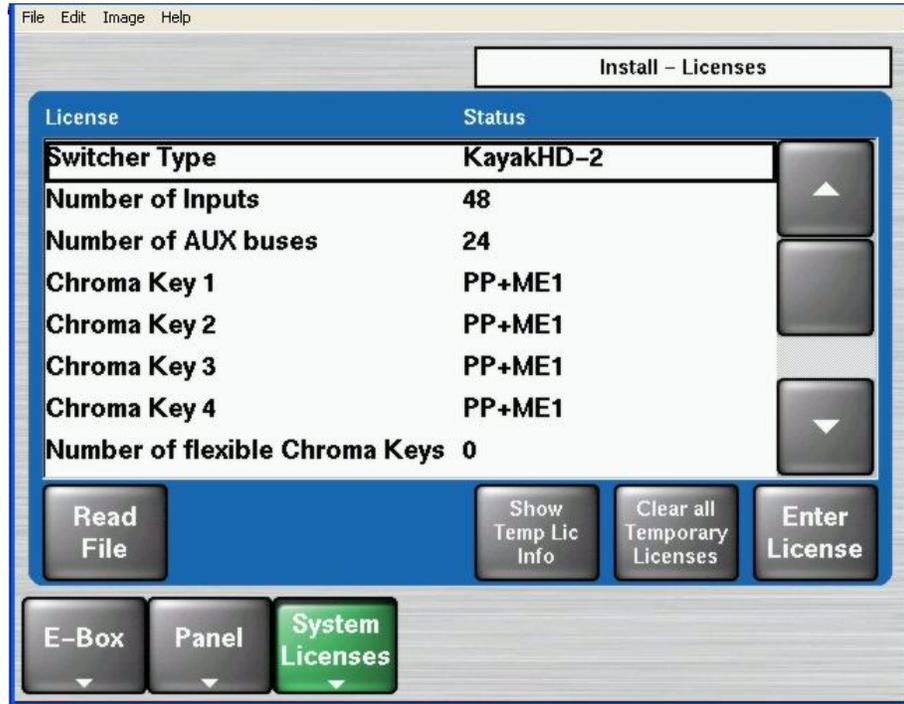
The Licenses menu is available from the control panel by pressing **Home – Install – System**.

Figure 49. System Setup Dialog Box



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

Figure 50. 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:

License name	LIC_CHROMA_KEY1
License value:	1
Start date:	0000:00:00
End date:	9999:12:31
Serial no:	34567
wksID:	5-xyz
License creation date:	2005:12:06
LicenseKey:	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.

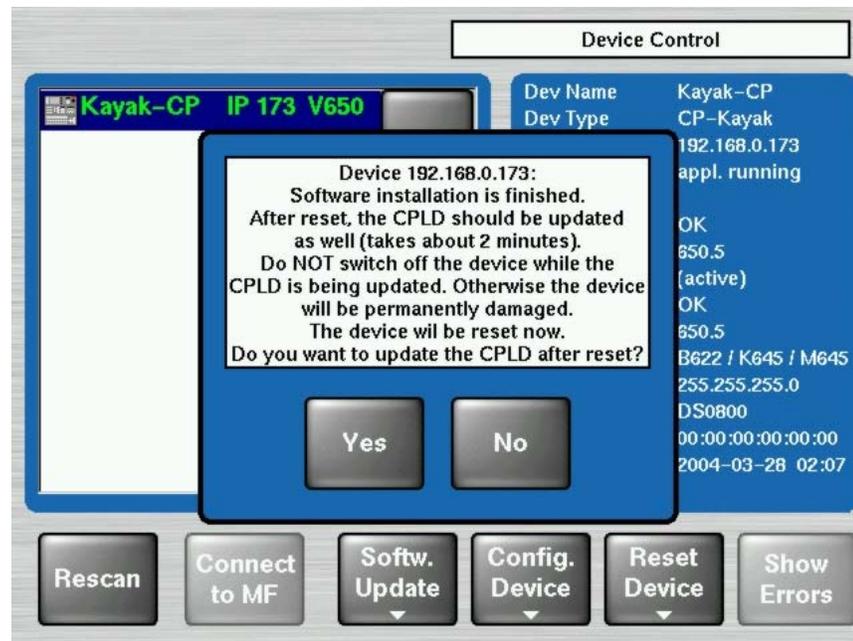
Manual Entry with Internal GUI Keyboard

1. Connect the Kayak control panel to the frame.
2. Go to the Panel 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 51. Error Message During 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.

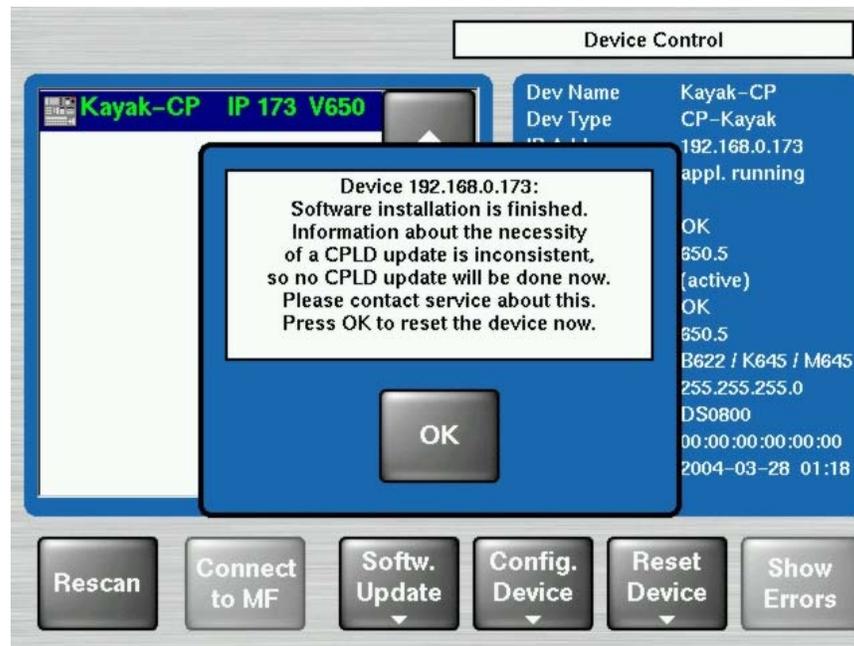
After the CPLD update is finished the system must be restarted. This brings the device to normal operation mode. If the installation process is terminated from the system, refer to [CPLD Update Troubleshooting](#).

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 52. 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.

After Installing New Software

It is important to verify that your **Personal Settings** have been restored for the Mainframe, Control Panel, Sidepanel, and saved to a USB thumb drive. See the [Kayak HD User Manual](#) for more information.

Verify Key and EMEM Settings

At the Control Panel, navigate to **Install/Ebox/Misc** and verify the Key and EMEM settings are correct; Default-Mode or DD35-Mode matches the Control Panel button layout of the related section.

Troubleshooting Tips

No Video Output Signal

If there are no video output signals after the installation process, toggle to the **VideoStandard** in the Control Panel Menu **Install/Ebox/Timing**, and verify that the settings match the desired line rate.

No Serial Connection

If a peripheral device controlled through a serial connection is longer available, reselect the protocol in the related Control Panel Menu **Install/Ebox/Machine Control**, see [Figure 53](#) and [Figure 54](#).

Figure 53. Install Machine Control—Protocol

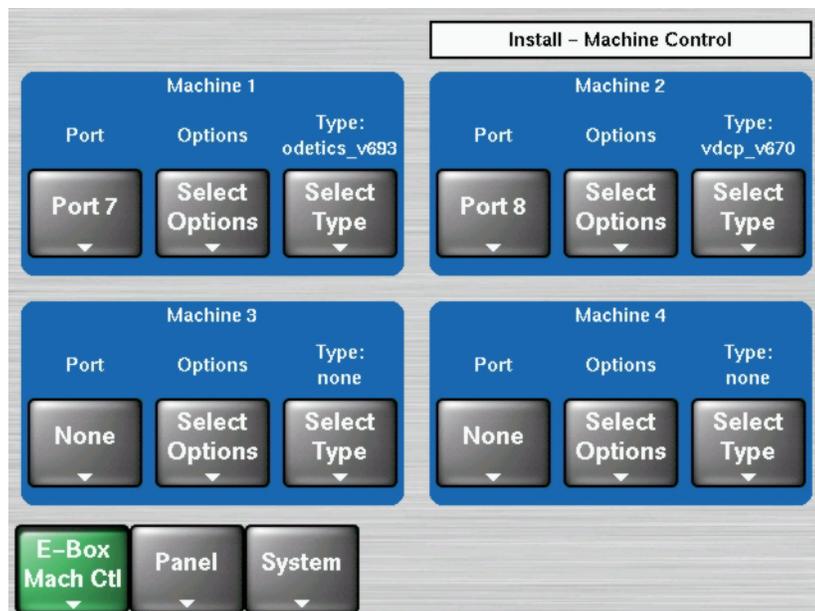
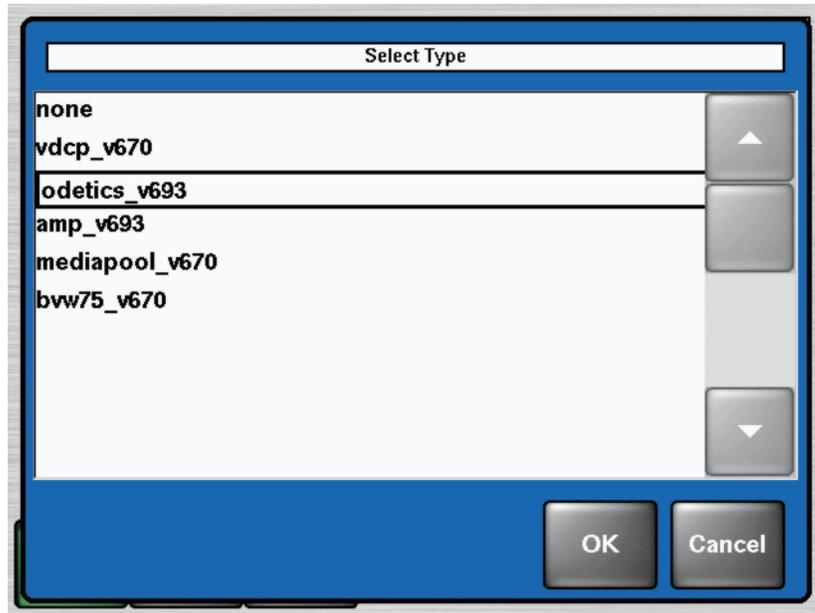


Figure 54. Install Machine Control—Select Type



Note For additional **Troubleshooting** information, see the [Kayak HD Installation & Service Manual](#).

Ram Recorder Option

If you have the **RAM Recorder** option, **power cycle** the mainframe after installing new software.