

User Manual

June 2010

Playback Technologies, Inc. Burbank, CA

Table of Contents

Introduction	5
Common Tasks	6
Connections	6
Video Input	6
Auto-detection	6
Changing Input Manually	6
Audio Input	6
Backup Clips	7
Delete Clips	8
Selecting Clips Manually using Windows	8
Deleting All Clips	9
Rename Clips	10
Re-Read Clips on Local Deck	.11
Technical Specifications	
Supported Modes	12
Video I/O	12
Audio I/O	12
Internal Storage	12
Power	12
Weight and Dimensions	12
Optional Accessories	12
Main Interface	13
Deck Status	14
Audio Level (VU Meters)	14
Monitor (Video Window)	14
Timeline	15
Deck Status block	15
Machine Controls	15
Playback: Play	15
Playback: In & Out	
Playback: 1s	16
Playback: 1f	16
Playback: B	16
Recording: Time Available	
Recording: Live	
Recording: Record	16
Recording: Abort	
Recording: In, Book, Out	
Source List	17
Sorting	
Searching	
Filters	
Clip Attributes	
Miscellaneous Options & Status	
1	

Network Master	
Loop Playback	
Camera ID	19
Network Status	19
Quick Mix	
Controls	
Plate settings	
File Menu	
Backup deck & Copy clips	
Burn DVD	
Eject DVD	
Export Clip List	
Re-read clips on local deck	21
Re-read clips on remote decks	21
Delete all clips from this deck	
Restart deck	
Shutdown deck	
Edit Menu	23
Delete Current Bookmark	
Options Menu	23
Video Input Sub-Menu	
Auto-detect video input (all)	
SDI	
Component	
HDMI	
Y/C	
Composite	25
Audio Input Sub-Menu	
Downconverter Sub-Menu	
Analog video output Sub-Menu	
Loop Playback	25
Show Big Video Window	
Combine matching clips in list for sync playback	
Screen Resolution	
Preferences	
Auto-check network master at startup	27
Show Quick Mix controls	27
Show single field when paused	
Record NTSC or PAL to DV AVI files	27
Show Recording status in maroon	27
Don't change list sort order on FP button press	
Clear notes on scene changes	
Show IP address on front panel	
Don't scan external media for clips	
Save audio flags to notes	
Generate ALE files for Avid	

Reset all preferences to factory defaults	
Normal camera rate for off-speed calculations	
VFX Menu	
Locate to plate frame	29
Clear mixer settings	29
Choose image to use for background plate	29
Capture still	
Tools Menu	
Set Date and Time	
Launch disk speed test	30
Launch Decklink control panel	30
Launch Remote Desktop.	
Launch Disk Defragmenter	
Launch video disks error check (quick)	
Launch detailed hard drive testing tool (slow)	30
Launch Windows Explorer on local disk	30
Help Menu	31
Networked Operation	31
Equipment and Wiring	31
Setup	31
Synchronized Recording	
Synchronized Playback	
Network access to video files	34
For Windows users	
For Macintosh users	
Appendix A. Application Keyboard Shortcuts	37
Appendix B. Front Panel Keystrokes	
Keystrokes	
* Reverse Play	
** Clip Naming	
*** Future Feature	39
Appendix C. Rear Panel I/O Diagram	40
Appendix D. Breakout Cable	41
Appendix E. Further Support	42
Warranty	42
Email Support	42
Phone Support	42
Mailing Address	42

Introduction

The Raptor HDx uses the same proven technology base as the standard definition Raptor X and earlier Raptor HD products that total nearly 200 in use around the world. The HDx can be operated from a 12VDC battery for easy integration into smaller carts and more run-and-gun systems used by commercial video assist operators. The input voltage range is 10-16VDC with a current draw of about 5 amps during normal operation; the deck can draw up to 7 amps during start-up.

The Raptor HDx uses a single 3.5-inch fixed internal 2TB hard drive, which can hold about 60 hours of high quality HD material. The HDx records .avi files using a highly efficient Motion-JPEG codec that has a variable quality setting, balancing picture quality and recording time to best suit the job requirements. The application software (version 2.2.2.6 and above) also records standard definition DV codec .avi files, allowing for about 150 hours of SD video that is fully FCP-compliant.

The front panel of the HDx resembles the popular standard definition Raptor 50VA, but currently does not support all of the same advanced playback functions, such as jog/shuttle. The HDx was designed to be operated primarily with an attached VGA monitor and USB keyboard & mouse.

Since the Raptor HDx is designed around an internal computer running a custom version of Windows XP Embedded, the system has a boot-up time of about 60 seconds. We recommend that the HDx be powered from a UPS (uninterruptable power supply), if using the factory-supplied AC to DC power supply. This can help prevent sudden reboots, since power can be interrupted frequently in the hectic production environment.

Common Tasks

This section shows how to complete common tasks. Please refer to the Main Interface section for details concerning specific controls and features.

Connections

Please refer to Appendix C, page 40 for information on the various connectors and I/O ports on the Raptor HDx. Also, the Raptor HDx ships with a breakout cable; see page 41.

Video Input

It is necessary to set the video input in the software application. If you know exactly what your input signal is (interface, resolution, framerate), you can set it directly. Otherwise, the Raptor HDx provides a mechanism to detect the resolution and framerate for a given input. The HDx must be set to "Live" to allow video input to be set.

Auto-detection

e Edit 🔾	ptions Tools Help				
udio levi	Video input	•	🖌 SDI	•	Auto-detect
-50	Audio input Downconverter Analog video output	• •	Component HDMI Y/C Composite))))	HD1080i, 60 HD1080i, 59.94 HD1080i, 50
	Timecode Loop playback Show big video window Combine matching clips in list for sync playback	Ctrl+W		51 -	HD1080PsF, 24 HD1080PsF, 23.98 HD720p, 60 HD720p, 59.94
L	Screen resolution Preferences))			HD720p, 50 NTSC PAL

Simply pull down the *Options* menu, open the *Video Input* sub-menu, open the sub-menu corresponding to your video input, and select **Auto-detect**.

Auto-detection for SDI is shown to the left.

Auto-detection can also be activated via the Front Panel: OPTION + RECORD + >>.

For more information, see Auto detection on page 23.

Changing Input Manually

The Raptor HDx supports a wide variety of formats for video input. These are accessed via the *Options > Video Input* menu. Please see Video Input on page 23 for more information.

Audio Input

The Raptor HDx supports both XLR analog audio input and Embedded audio. These can be selected in the *Options > Audio Input* menu (see page 25).

Backup Clips

The Raptor HDx provides a mechanism for copying the data on the internal drives to an external storage device, in such a way that it can be restored to the deck in the event of data loss.

Pla	ybac	k Techi	nologi	es, Inc
File	Edit	Options	Tools	Help
B	ackup	deck		
	opy clij urn DV			
	ject DV xport (
		l clips on lo I clips on re		

Backup deck Clip type:	Copy clips			
Printee Printee Non-pi Non-re Rehea	inted takes hearsals			
			-	
Options:	ackup clips red	corded today		

- 1. Plug in your USB drive.
- 2. Pull down the *File* menu.
- 3. Select Backup deck.

The following window will appear.

Source	Status	
[Internal storage]	×	
Backup deck Copy clps		
Clip type:		
Al		
Printed takes Non-printed takes		
V Non-rehearsals V Rehearsals		
Options:		
City backup caps recorded cosay		
Destination		
		ip files > 5G8

On the left side of this window,

- 4. In Source, select [Internal storage].
- 5. In Destination, select your external drive by its drive letter (probably D). If it is not listed, close this window and return to step 1.
- 6. Choose the **Backup deck** tab to copy everything, or choose the **Copy clips** tab to copy individual clips (hold CTRL and leftclick clips to select multiple clips at a time).

If it is uncertain how much time is available to perform the backup operation, consider checking the box to skip very large files (larger than 5GB), which is located on the right side of the window. Generally, the backup can be interrupted with the **Stop copy** button; however, once the deck starts backing up a large file, it cannot be interrupted.

Finally, click the **Start copy** button.

The status will be shown in the large pane on the right side of the window.



If the copy must be stopped, simply click the **Stop copy** button, which is enabled when a copy operation is in progress.

When everything is finished, close the Backup window.

Delete Clips

There are two ways to delete clips – manually select clips to delete using Windows, or delete all clips from the application. There are safeguards in place to avoid accidental deletion.

Selecting Clips Manually using Windows

Playback Tech	nologies, Inc Raptor HD version 2.
File Edit Options	Tools Help
Audio level	Set date and time
1	Launch disk speed test
-50 -40	
Monitor	Launch Remote Desktop
WORITO	Launch Disk Defragmenter
	Launch video disks error check (quick)
	Launch detailed hard drive testing tool (slow)
	Launch Windows Explorer on local disk



First, open Windows Explorer on the Local Disk:

- 1. Open the *Tools* menu.
- 2. Select the last item, "Launch Windows Explorer on local disk."

This opens to $\underline{E:RXVideo}$, which contains all of the video recorded on the deck.

Simply delete the .avi files representing the video you wish to delete. The file names follow the following format: *Scene_Take_Camera*.avi

After deleting the files, close Windows Explorer and return to the Raptor software.

Since clips were deleted, it is advisable to force the software to re-read the clips from disk (see page 11).

Deleting All Clips

This section describes the procedure to delete all clips from the deck using the software application. This is useful when starting a new job and reclaims all available storage on the deck. Note that it is also possible to delete all clips via the manual method described above.

Pla	ybac	k Techi	nologi	es, Inc
File	Edit	Options	Tools	Help
C	ackup opy cli urn DV	ps		
	ject D\ xport (
		l clips on la I clips on re		
D	elete a	all clips from	n this de	eck
	estart hutdov	deck vn deck		

1. Open the *File* menu.

2. Select Delete all clips from this deck.

This produces the following dialog box.

	Erase all video?	
	Are you sure you want to permanently delete all video from this deck	,
Out	Yes No	

To continue with the process of deleting all clips
on the deck, you must select "Yes" - if you select
"No" the process will be aborted immediately.

Erase all clip			×
Please type 8 in to permanently a this deck.			
ОК	Can	cel	

Upon selecting "**Yes**" in the previous dialog, this dialog appears. This is your final confirmation – enter the number of clips on the deck to confirm deletion. Then select "**OK**" – if you select "**Cancel**" the process will be aborted immediately.



This dialog is the last chance to abort the delete process. Select "**Yes**" to delete all clips or "**No**" to return to the application.

A final dialog will show the progress of the delete process, which could take some time, depending on the number and size of clips on the deck.

Rename Clips

There is currently no feature within the application software that allows the renaming of recorded clips. If you wish to rename recorded clips, follow these instructions.

Playback Techr	nologies, Inc Raptor HD version 2
File Edit Options	Tools Help
Audio level	Set date and time
1	Launch disk speed test
-50 -40	Launch Decklink control panel
Monitor	Launch Remote Desktop
WOHILOF	Launch Disk Defragmenter
	Launch video disks error check (quick)
	Launch detailed hard drive testing tool (slow)
	Launch Windows Explorer on local disk

Note: The control of the control o	RXVideo File Edit View Favorites Too	is Help		
Address D LURXXMe Address D LURXXMe				
Webson tasks Biodedwise in Prior all Biodedwise in Title and Folder Tasks Biodedwise in Pite folder Tasks Biodedwise in Other Flaces Biodedwise in Vision (Eff) Biodedwise in Vision (Ff)				
	Video Tasks Image: Comparison of the compari	II Servance.in II conthin-ini Potes.ini Potes.ini Potes.ini Potes.ini Resolution.ini Beeddam Districtory.org. Acri Districtory.org. Acri Districtory.o		

Example:



- 1. Open the *Tools* menu.
- 2. Select "Launch Windows Explorer on local disk."

This opens My Computer at the video folder, <u>E:\RXVideo</u>. This folder contains .avi video files, as well as .txt and .ini files that are used to store clip attributes.

- 3. Locate the video file that represents the clip you wish to rename. The naming convention is: *Scene_Take_Camera*.avi
- 4. Click the file name once to edit it, and follow the same naming convention: *Scene_Take_Camera*.avi
 The filename may **not** contain spaces, and you must use the underscore character to separate scene, take, and camera ID. The *take* should be a number. The *camera ID* should be a capital letter and be valid for the deck setup you are using. Also, do not remove the *.avi* at the end of the file name.
- 5. Close Windows Explorer (red X button in upper right corner).
- 6. Notify the application of the new name by Re-reading clips (instructions below, page 11).

Re-Read Clips on Local Deck

It is necessary for the deck to re-read clips if they are copied directly to the video folder or moved, renamed, or deleted.

Pla	ybac	k Techi	nologi	es, li	NC.	
File	Edit	Options	Tools	Help		
c	ackup opy clij urn DV	ps				
Eject DVD Export clip list						
Re-read clips on local deck						
R	e-read	clips on re	emote d	ecks		
D	elete a	Il clips from	n this de	eck		
	estart hutdov	deck vn deck				

- 1. Open the *File* menu.
- 2. Select "Re-read clips on local deck."

This can take some time (up to a couple minutes), and the main status block contains a rough count of how many clips have been processed during the re-read process.

Technical Specifications

Supported Modes

- High Definition:
 - 720p @ 50, 59.94 and 60
 - $\circ~$ 1080PsF @ 23.98 and 24.00
 - 1080i @ 50, 59.94 and 60
- Standard Definition: NTSC and PAL

Video I/O

• HD-SDI, HDMI, Component, Composite, Y/C

Audio I/O

- Two-channel balanced XLR analog
- Two-channels of HD-SDI & HDMI embedded audio

Internal Storage

• 2TB Hard drive

Power

- 10-16VDC; optimal 5-6A @ 12VDC
- Uninterruptible Power Supply (UPS) strongly recommended

Weight and Dimensions

- 2U chassis (8.5" W \times 3" H \times 13" D / 21.59 cm W \times 7.62 cm H \times 33.02 cm D)
- Weight: 8 lb. (3.63 kg)

Optional Accessories

- 15-pin VGA Monitor, USB keyboard (US layout) & mouse
- Gigabit router (Linksys RVS4000 or equivalent) and Cat5 cables
- HD-SDI Reclocking Distribution Amplifier (suggested AJA model HD10DA)
- 3rd Party HD-SDI capable video monitor (please ensure 24-frame compatibility)

Main Interface

Source List 2310 Deck Status Find Op Monday, Jun 21, 2010 - 12:15 Next scene -3 0 +3 Clip Take 50A 01 50A 02 50A 03 60 01 60 02 And -20 -10 *Created* Oct 14, 2009 11:37a Oct 14, 2009 11:37a Oct 14, 2009 11:38a Oct 14, 2009 11:38a Oct 14, 2009 11:38a Oct 14, 2009 11:38a -40 -30 Print Camera :10 :08 :09 :06 :10 Video Window 04:13:37;02 us (SDI. 1280 x 720, 59,940, XLR analog audio) Machine Live Controls 50_01 Play In Live **Clip Attributes** Record Pickup 🗌 Reh 🗌 Take 01 50 Print 🔲 red 🔽 🔽 (24f) JPG Q 90 🛟 6 clips, 0:00:53 to Ne Loop playback All dates V All scenes ~ ar filters ork status: CONNECTED (IP: 192.168.1.101, name: RHD11: A 🛟 Camera ID Position (Yro Enable mixer 100 🛟 H pos 0 * 0 🗘 Left Тор * * Scale Grab plate Opacity 50 💲 -V pos 0 Bottom 0 C Right 0 ^ ate to plate Miscellaneous Options & Status Quick Mix

This is the main application window. The sections that follow detail its contents and operation.

Deck Status



Audio Level (VU Meters)

The VU meters measure the audio levels in both channels of audio, scaled logarithmically from -50dB on the far left to +3dB on the far right.

Monitor (Video Window)

The video window shows the video corresponding to the current state of the deck. In Live and Record, it shows a passthrough of the input. In any of the playback states, it shows the video accordingly (play, pause, scrubbing).

Double-click anywhere on the video window to change to an enhanced view, in which the video window takes up the majority of the screen. Double-click again to return to normal view.



Normal video window



Enhanced video window

Timeline

The timeline shows information about the clip currently cued (it is blank in Live):



Deck Status block

The title of the **Deck Status** block contains information about the current video format (see Deck Status screenshot above). This includes the interface (SDI), resolution (1280x720), frame/field rate (59.940), and audio input (XLR analog audio).

The first main line of the status block displays the current motion state, which can be Live, Recording, Play, and will also show special operations during startup, when copying clips, and when an error occurs.

Finally, the status block shows the current clip name. In Live, this will be the name of the next recorded clip; in playback mode, this is the name of the cued clip.

The remaining recording time is displayed in the Machine Controls area (see p. 15).

Machine Controls



Playback: Play

Press the *Play* button to play/pause the cued clip. (Keyboard shortcut: SPACE)

Playback: In & Out

Press *In* or *Out* to seek to the In-point or Out-point of the clip. If these have not been specified, they are the first and last frames, respectively. (Keyboard shortcut: I / O)

Raptor HDx User Manual

Playback: 1s

Press *Is* (on the left side of *Play*) to move one second toward the head of the clip (if the current location is less than one second from the first frame, it will move to the first frame). Likewise, press *Is* (on the right side of *Play*) to move toward the last frame of the clip (again, if one second past the current location is beyond the last frame, it will move to the last frame). (Keyboard shortcut: Ctrl + Left arrow / Ctrl + Right arrow)

Playback: 1f

Similar to *Is*, *If* moves in frame increments. (Keyboard shortcut: Left arrow / Right arrow)

Playback: B

Press **B** to navigate backward (left of *Play* button) or forward (right of *Play* button) between bookmarks. Bookmarks are represented by a small diamond above the timeline (see page 15). (Keyboard shortcut: Tab (forward) / Shift + Tab (backward))

Recording: Time Available

In the heading area of the recording controls, an estimate of the remaining recording time is displayed in *hh:mm:ss* format. This is based on remaining disk space and the data rate of the current video format.

Recording: Live

Press *Live* to get ready to record. In Live, the deck passes the input to its outputs, including the Monitor video window. (Keyboard shortcut: Ctrl + L)

Recording: Record

Once in Live, the *Record* button is enabled. Press it to begin recording immediately. Its border will flash to indicate that the deck is recording. (Keyboard shortcut: Ctrl + R)

Recording: Abort

During record, it is possible to abort a recording. As a safeguard against an accidental abort, you must first enable the *Abort* button by pressing *Enable abort*; after this, you can abort the recording with no further confirmation by pressing *Abort*.

Recording: In, Book, Out

During record or playback, these three buttons can be used to place markers in a clip's timeline. *In* marks the current frame as the in-point of the clip; *Book* places a bookmark at the current frame; *Out* marks the current frame as the out-point of the clip. See also Timeline, 15. Note that a clip can only have one in-point and one out-point, but an unlimited number of bookmarks. (Keyboard shortcuts for In, Book, Out: I / B / O)

Source List

Scene	*Clip*	Take	Print	*Cam*	Speed	Notes	B	Created	Length	
50	50	01		Α	24			Yesterday, 8:13a	:04	
	50	02		A	24			Yesterday, 8:14a	:06	
	50	03		A	24			Yesterday, 8:14a	:04	
	50	04		A	24			Yesterday, 8:14a	:30	
51	51	01		Α	24			Yesterday, 8:30a	:05	
	51	02		А	24			Yesterday, 8:30a	:03	

The **Source List** maintains the list of clips on the deck. To refresh the listing, use the Re-read clips function (see p. 11). The various columns present the information that can be set in the **Clip Attributes** area (described below), in addition to the date and time of the recording and its length. In the lower right corner, the total number of clips present is shown along with their combined length.

Sorting

The list may be sorted by clicking the column header (Scene-Clip-Take, Print, Speed, Notes, Created, Length, Resolution, and Rate).

Searching

The list may also be searched, using the controls in the upper-left corner of the list:

- 1. Enter your query in the text box.
- 2. Select a direction to search, starting at the currently-selected clip (Up or Down).
- 3. Press the **Find** button. Successive presses will continue searching through the list until the end is reached. (Keyboard shortcuts: Ctrl + F and F3)

It is also possible to jump from scene to scene using the **Prev scene** and **Next scene** buttons.

Filters

In the lower-left corner of the source list are controls for filtering the list. You can select either a date or scene, or both, and only show clips that match these criteria.

Press Clear filters to return to a full list of all clips present on the deck.

Clip Attributes

This information area, located in the lower left portion of the application window, displays information regarding the current clip (in cued/playback state) or the clip about to be recorded (in Live).

Clip attributes			
Scene	51	Take 03 😂	Rehearsal 📃
Notes			
Speed	24 🔽 (base: 24f)	JPG Q 70 🏮	Print take 📃

The Scene and Take may be set.

Any **Notes** may be added to help identify or describe the clip. In some cases, additional information may be reported in the Notes field of a clip.

The **Speed** setting allows for off-speed playback and recording; the base framerate is given as a reference to the right of the box (see also Preferences: normal camera rate, p. 28).

The **JPG Q** setting allows fine-tuning of the quality of the Motion JPEG recording (this is a number, from 45-95). A higher **JPG Q** number causes recordings to occupy more space on the disk, which reduces the remaining recording time available. For DV AVI (the default in SD), this setting has no effect.

The **Rehearsal** and **Print take** checkboxes allow you to mark clips accordingly; these do not affect the recording itself.

Miscellaneous Options & Status



Network Master

For networked operation, this box may be checked to declare that this deck is the master deck. It will then list all the other decks on the local network, and allow this deck to synchronize their operation. If the deck is connected to the network, the text may change to "**Another deck is master**" to indicate that a network master is already present. See Network Operation, p. 31.

Loop Playback

If checked, when a clip is played and the out-point (could be the end of the clip) is reached, the deck will locate to the in-point of the clip (if not specified, then the first frame) and continue playback.

Camera ID

This feature is useful for multi-camera operation, with a deck capturing the output of each camera. The decks can be connected together in networked and synchronized operation, or operated independently. The Camera ID is saved in the file name of the clip, so it is very easy to identify them later, even if the clips are all consolidated into the same location for review or editing.

Network Status

In the lower-right corner of the application window, the network status is displayed. It consists of the following components:



Connection Status will read "CONNECTED" or "DISCONNECTED."

IP Address shows the current IP address (if connected), or 127.0.0.1 (if disconnected).

Network Name is "RHD" followed by a 4-digit serial number.

This entire status line is shown in boldface when the deck is part of a networked setup (see p. 31).

Quick Mix

Controls	Config	Position	Crop
Grab plate	Scale 100 🗘	H pos 0 🛟	Top 0 🗘 Left 0 🗘
Locate to plate	Opacity 50	V pos 0 💲	Bottom 0 🗘 Right 0 🗘

Quick Mix is used to overlay a still frame (either selected from video on disk or a JPG image) over either live or previously-recorded video. The Quick Mix panel is initially hidden – simply click "^ Quick Mix" on the bottom edge of the screen to expose these settings.

Controls

To use the mixer, check the box labeled **Enable mixer**.

Grab plate will use the current frame as the background plate.

Locate to plate will seek to the clip and frame the current plate was taken from.

Plate settings

Scale is a percentage value used to size the plate.

Opacity is a percentage representing how strongly the plate is overlaid onto the video.

Position offsets may be specified here, relative to the upper left corner.

Crop settings may also be specified.



File Menu

The *File* menu contains operations that apply to the deck and the clips on it.

Pla	ybac	k Tech	nologi	es, Inc	
File	Edit	Options	Tools	Help	
c	ackup opy clij urn DV	ps			
· ·	ject DV xport o				
Re-read clips on local deck Re-read clips on remote decks					
D	elete a	all clips from	n this de	eck	
	estart hutdov	deck vn deck			

Backup deck & Copy clips	Provides clip backup and clip copying to external media (see Backup Clips, p. 7).
Burn DVD	Launches an application that can be used to write data from the deck to DVD (requires external USB DVD writer to be connected).
Eject DVD	Provides a convenient way to eject any disc in an external DVD drive, if present.
Export Clip List	Saves a simple text file containing all of the information in the Source List (see p. 17) to a location of your choosing.
Re-read clips on local deck	Scans the video folder, recognizing clips and refreshing the source list. (see also Source List, p. 17; and Re-read clips, p. 11)
Re-read clips on remote decks	When connected to a network of Raptor HDx decks, scans the other connected decks for linked clips.

Delete all clips from this deck	Restores the deck to an empty state, reclaiming its full capacity and removing all video.
Restart deck	A soft reboot of the operating system and application software (will not power-cycle).
Shutdown deck	Shuts down the deck gracefully. The deck must then be powered up by disconnecting and reconnecting the power supply.

Edit Menu

Delete Current Bookmark

When a clip has been cued and there is a bookmark at the current location, this menu item will be enabled. Click to remove the bookmark at the current frame.

Options Menu



Video Input Sub-Menu



The *Video input* menu. Subsequent instructions will refer to the sub-menus contained in the *Video input menu*.

Auto-detect video input (all)



Each input video type supports auto-detection of the input video format. Simply choose **Auto-detect** from the appropriate sub-menu.

An example for SDI Auto-detection is shown to the left.

SDI

e Edit 🔾	otions Tools Help			
Audio levi	Video input	Þ	🗸 SDI 🔶	Auto-detect
-50	Audio input Downconverter Analog video output	+	Component HDMI Y/C Composite	HD1080i, 60 HD1080i, 59.94 HD1080i, 50
	Timecode Loop playback Show big video window Combine matching clips in list for sync playback	Ctrl+W	5	HD1080PsF, 24 HD1080PsF, 23.98 HD720p, 60
L	Screen resolution Preferences))	3	HD720p, 55.94 HD720p, 50 NTSC PAL

SDI, or Serial Digital Interface, can carry multiple signal formats.

Select the desired input resolution and framerate to change the Raptor HDx video format.

Component

e Edit 🔾	ptions Tools Help				
Audio levi	Video input		🖌 SDI	•	
	Audio input	,	Comp	onent 🕨	Auto-detect
-50 tonitor	Downconverter Analog video output Timecode) 	HDMI Y/C Comp	osite	HD1080i, 60 HD1080i, 59.94 HD1080i, 50
	Loop playback Show big video window Combine matching clips in list for sync playback	Ctrl+W			HD1080PsF, 24 HD1080PsF, 23.98
÷	Screen resolution Preferences	;		51	HD720p, 60 HD720p, 59.94 HD720p, 50
-					NTSC PAL

The Raptor HDx supports component video.

Select the desired input resolution and framerate to change the Raptor HDx video format.

HDMI



The Raptor HDx supports HDMI input.

Select the desired input resolution and framerate to change the Raptor HDx video format.

Y/C

ile Edit 이	ptions Tools Help					
Audio levi	Video input	Þ	🖌 SDI	•		
1	Audio input	•	Componer	nt 🕨	scene	Next
-50	Downconverter	•	HDMI		Auto-r	
	Analog video output		Y/C Composite	•	Auto-o	jetect
Monitor	Timecode	•	Composite		NTSC	
	Loop playback				PAL	
		Ctrl+W				5
	Combine matching clips in list for sync playback	contra				5
÷.				51		5
	Screen resolution	•				5
	Preferences			1		

The Raptor HDx supports Y/C input.

Select the desired input resolution and framerate to change the Raptor HDx video format.

Composite

ile Edit	Options Tools Help						
Audio levi	Video input	•	🖌 SDI	•			
1	Audio input	•	Component	+	scene	Next s	
2	Downconverter	•	HDMI				
-50	Analog video output	•	Y/C	• 1	Auto-detect		
Monitor	Timecode		Composite	-	Auto-de	etect	
	Loop playback				NTSC		
		trl+W			PAL		
	 Combine matching clips in list for sync playback 					51	
-				51		5	
	Screen resolution						

The Raptor HDx supports composite input.

Select the desired input resolution and framerate to change the Raptor HDx video format.

Audio Input Sub-Menu

The *Audio Input* sub-menu allows you to choose between **XLR analog audio** and **Embedded audio**. Default: **XLR analog audio**.

Downconverter Sub-Menu



The Raptor HDx has a hardware downconverter, which is enabled by default. This sets the SDI output adjacent to the input (see Rear Panel, p. 40) to the down-converted signal specified:

- Letterbox 16:9
- Anamorphic 16:9
- Center-cut 4:3
- None (no down-conversion)

Once set, also specify the analog video output:

Analog video output Sub-Menu



The Raptor HDx application controls which type of analog signal is sent over the breakout cable: Component, Y/C, and Composite.

Simply select the desired format.

The Raptor HDx will only allow one type of analog video output at a time.

Loop Playback

When enabled and a clip is playing, when the out-point is reached, it will seek to the in-point and continue playback. See Miscellaneous Options: Loop Playback on page 18.

Show Big Video Window

Select this menu item to enable the enhanced video window display. This feature is equivalent to double-clicking on the Monitor window and is also accessible via the Ctrl+W keyboard shortcut. Please see page 14 for more information.

Combine matching clips in list for sync playback

This feature applies only to networked operation. When checked, it will consolidate the source list (see p. 17) to account for clips that were recorded in sync on different cameras during previous networked operation. It will then be possible to have synchronized playback of these clips across multiple decks. See page 31 for a more complete description of networked operation.

Screen Resolution



To change the screen resolution:

- 1. Open the *Options* menu.
- 2. Open the *Screen resolution* sub-menu.
- 3. Select the desired resolution from the list.

Only resolutions supported by the currentlyattached monitor are listed.

The resolution change is not saved for the next power-up; the application will use the highest available resolution it can recognize when it starts.

Preferences



Auto-check network master at startup	When checked, this deck will become a network master every time it starts up (see Network Master, p. 18 and Network Operation, p. 31).
Show Quick Mix controls	Toggles showing the Quick Mix control panel below the source list (see Quick Mix,p. 20).
Show single field when paused	Displays only one field of video in pause mode. Default: checked.
Record NTSC or PAL to DV AVI files	Use DV instead of Motion JPEG for both NTSC and PAL recordings. Default: checked.
Show Recording status in maroon	Change text color of "Recording (00:00.00)" in Status Block to a dark red color (when un-checked, the text is blue). See Deck Status Block, page 15.
Don't change list sort order on FP button press	Normally, doing playback using the front panel causes the source list to sort by date created. This option allows you to avoid that behavior.
Clear notes on scene changes	If checked, when the "scene" text box contents change, the notes field will be cleared. Default: checked.

Show IP address on front panel	This causes the IP address to be displayed on the front panel Pause + Out keypress instead of the deck name. This is useful if you manage the deck using Remote Desktop for Mac.
Don't scan external media for clips	Suppress scanning external media when they are attached. Default: scan external media. Note: this prevents clip backup to USB hard drives.
Save audio flags to notes	Save notes about audio input status (e.g. only one channel, muted audio, etc).
Generate ALE files for Avid	ALE files are generated when a clip is recorded with valid timecode present. Avid will then import this original timecode with the supplied ALE.
Reset all preferences to factory defaults	Resets all preferences, setting only Show single field when paused , Record to DV AVI files , Clear notes on scene changes , and camera speed to 24fps. This requires restarting the deck to save all settings.

Normal camera rate for off-speed calculations



Select the base rate of the camera for calculations of off-speed operation. Three rates are supported: 24, 25, and 30fps.

Once set, the base rate is shown in the *Clip Attributes* area next to the **Speed** box (see p. 18).

VFX Menu

Playback Technologies, Inc Raptor HD version											
File Edit	Options	VEX	Tools	Help							
Audio lev	/el	Lo	Locate to plate frame								
1		Clear mixer settings									
-50	-40	Cł	Choose image to use for background plate								
Monitor		Ca	apture s	till							

Locate to plate frame	When using a background plate, seeks to the clip and frame the current plate was taken from.
Clear mixer settings	Clears mixer settings to 0 except: scale 100% and opacity 50%.
Choose image to use for background plate	Allows inclusion of a JPG image for the background plate by browsing the RXVideo folder on the deck.
Capture still	Saves the current frame to JPG.

Tools Menu

Playback Tech	nologies, Inc Raptor HD version 2.
File Edit Options	Tools Help
Audio level	Set date and time
1 2 -50 -40	Launch Remote Desktop
	Launch Disk Defragmenter Launch video disks error check (quick) Launch detailed hard drive testing tool (slow)
	Launch Windows Explorer on local disk

Set Date and Time	This opens the Windows dialog to set the system date and time.
Launch disk speed test	This utility tests the data transfer rate of the internal disk(s).
Launch Decklink control panel	This utility allows configuration of the Decklink HD Extreme video card.
Launch Remote Desktop	This starts the Windows Remote Desktop client, which can be used to directly control other decks on the network.
Launch Disk Defragmenter	If necessary, the disks may be defragmented. This is not normally needed.
Launch video disks error check (quick)	Provides basic drive diagnostics. This check requires the application to be closed, and after the check is complete, the deck will restart. After selecting this menu item, there is a warning and confirmation to proceed.
Launch detailed hard drive testing tool (slow)	This is a thorough disk check (not repair). It also requires the application to be closed and the deck to be restarted (after the testing is complete). After selecting this menu item, there is a warning and confirmation to proceed.
Launch Windows Explorer on local disk	Opens My Computer in the video folder (E:\RXVideo).

Help Menu



The first item, Keyboard Shortcuts, provides the identical resource as is available in Appendix A, p. 37.

The remainder of the Help Menu displays information concerning the version of the application. This information may be requested when contacting Playback Technologies for support.

Networked Operation

Equipment and Wiring

It is recommended to use a single Gigabit (10/100/1000) router (such as the Linksys RVS4000), and one (1) Cat5 cable for each deck connected. It is not recommended to connect the router to the Internet, or to connect Raptor HDx decks to an existing router that is used by other computers and to access the Internet.

Setup

- 1. Connect all the cables to the router.
- 2. Choose one deck to be the central point of control for all decks' recording and playback and set its Camera ID (see page 19) to A (this is just a convention, not a requirement).
- 3. On the remaining decks, set the Camera IDs to all different letters (B, C, D, etc).
- 4. Verify that all the decks are connected to the network (see Network Status, p. 19).
- 5. Set the A deck to be the Network Master, either via the **Network Master** checkbox in the Options area (p. 18) or the Front Panel (p. 38). At this point, the Master will scan the network and the other decks will respond. All the decks will synchronize their source lists; the Camera column will specify which decks the clips were recorded on, by Camera ID.
- 6. Once this process is complete, the Master should show a small status block (above the source list) showing the other decks, including their Camera IDs (p. 19) and Network Names (p. 19), their current clip name, and their current motion state (Live, Play, etc). Make sure that all of their boxes are checked and that there is no red text in any box. (A common cause for red text is different clip names. Change or re-type the clip name for the next recording on the Master and all remotes will be updated).

Raptor HDx User Manual

-50 -40 -30 -20 -10 -3 0+3			L ive 5_01				- RHD1117 (31:02 Live 55_01		
				0.14			J Obown		009 - 2 3
	Scene 50	*Clip*	Take 01	Print	Camera A A	Speed 24	Notes	B Created Today, 11:05a	Leng :06
	50		02		A-	24		Today, 11:05a	
	51		01		A-	24		Teday, 11:05a	
	51		02		A-	24		Today, 11:11a	
		51			A-	24		Today, 11:11a	
		51	04		A-	24		Today, 11:11a	
		51			A-	24		Today, 11:12a	
		51	06		A-	24		Today, 11:12a	
			07		A-	24		Today, 11:26a	
		51	08		A-	24		Today, 11:26a	
	1001	TEST	01		- A	24		Yesterday, 11:23	7p :20
		TEST	02		- A	24		Yesterday, 11:23	7p :20
	1002	TEST	01		- A	24		Dec 19, 2009 5:4	2p :20
		TEST	02		- A	24		Dec 19, 2009 5:4	
ck status (SDI, 1280 × 720, 59.940, XLR enalog audio)	1003	TEST	01		- A	24		Yesterday, 11:3	
Live		TEST	02		- A	24		Yesterday, 11:30	
55 01	1005	TEST	01×		- A	24		Yesterday, 11:33	
ntack		TEST	01		- A	24		Dec 19, 2009 5:4	
l) Cark		TEST	02×		- A	24		Yesterday, 11:33	
In 1s 17 B Play B 17 1s Out	4007	TEST	02		- A	24		Dec 19, 2009 5:4	
	1007	TEST	01		- A	24		Yesterday, 11:3	
cording (about 49:37:14 available)	1008	TEST	02		- A - A	24		Yesterday, 11:38 Dec 19, 2009 5:4	
	1008	TEST	02		- A - A	24		Dec 19, 2009 5:4	
Live Record Enable abort Abort	1009	TEST	01		- A	24		Yesterday, 11:3	
	1003	TEST	02		- A	24		Yesterday, 11:38	
	1011	TEST	01×		- A	24		Yesterday, 11:4	
	1011	TEST	01		- A	24		Dec 19, 2009 5:5	
p attributes		TEST	02x		- A	24		Yesterday, 11:42	
Scene 55 Take 01 C Rehearsal		TEST	02		- A	24		Dec 19, 2009 5:5	
	1017	TFOT	01		- A	24		Yesterday, 11:4	
Options					- A	24		Yesterday, 11:46	
_					- A	24		Dec 19, 2009 5:5	
Network master	yback				- A	24		Dec 19, 2009 5:5	4p :20
					- A	24		Yesterday, 11:4	Bp :20
A 🚊 Camera ID					- A	24		Yesterday, 11:48	
					- A	24		Yesterday, 11:5	lp :20
					- A	24		Yesterday, 11:5	
					- A	24		Dec 19, 2009 5:5	
					- A	24		Dec 19, 2009 5:5	7p :19
					- A	24		Yesterday, 11:5	4n :20
	1000								2

VGA screen of Network Master (A) with one other connected deck

	Prev scene	Next so	ene			Find] Oup Opwn	Mor	, Dec 28, 2009	9 - 2:4
0 -40 -30 -20 -10 -3 0 +3	Scene	Clip	Take	Print	Camera	Speed	Notes	B	*Created*	Leng
lor	1475	TEST	01		A	24			Today, 11:28a	:20
		TEST	02		A	24			Today, 11:29a	:20
	1477	TEST	01		A	24			Today, 11:31a	:20
		TEST	02		A	24			Today, 11:32a	:20
	1479	TEST	01×		A	24			Today, 11:34a	:20
		TEST	02×		A	24			Today, 11:35a	:20
	1481	TEST	01		A	24			Today, 11:37a	:20
		TEST	02		A	24			Today, 11:38a	:20
	1483	TEST	01		A	24			Today, 11:40a	:20
		TEST	02		A	24			Today, 11:41a	:20
	1485	TEST	01×		A	24			Today, 11:43a	:20
		TEST	02×		A	24			Today, 11:44a	:20
07:46:51:13	1487	TEST	01		A	24			Today, 11:46a	:15
07:46:31;13		TEST			A	24			Today, 11:47a	:20
	1489	TEST	01		A	24			Today, 11:50a	:20
		TEST	02		A	24			Today, 11:50a	:20
	1491	TEST	01×		A	24			Today, 11:53a	:20
		TEST	02x		A	24			Today, 11:53a	:20
status (SDI, 1280 x 720, 59.940, XLR analog audio)	1493	TEST	01		A	24			Today, 11:56a	:20
Live		TEST	02		A	24			Today, 11:56a	:19
	1495	TEST	01		A	24			Today, 11:59a	:20
55_01	4 407	TEST	02		A	24			Today, 11:59a	:20
	1497	TEST	01×		A	24			Today, 12:02p	:20
eck	1499	TEST	02×		A	24			Today, 12:02p	:20
n 1s 1f B Play B 1f 1s Out	1499	TEST	02		A	24			Today, 12:05p Today, 12:05p	:20
In 1s 1f B Play B 1f 1s Out	1501	TEST	02		A	24				:20
	1501	TEST			A	24			Today, 12:08p	:20
rding (about 15:33:34 available)	1540	TEST	02		A .	24			Today, 12:08p Today, 2:02p	:20
	1940	TEST	02		A	24			Today, 2:02p	:20
Live Record Enable abort Abort	1542	TEST	01		A	24			Today, 2:05p	:20
	1942	TEST	02		A	24			Today, 2:05p	:19
In Book Out	1544	TEST	01×		A	24			Today, 2:08p	:20
	1344	TEST	02x		Â	24			Today, 2:08p	:20
thributes	1546	TEST	01		Â	24			Today, 2:11p	:20
Scene 55 Take 01 C Rehearsal		TEST	02		A	24			Today, 2:11p	:20
	1548	TEST	01		A	24			Today, 2:14p	:19
Notes		TEST	02		A	24			Today, 2:14p	:19
Options					A	24			Today, 2:17p	:19
Options					A	24			Today, 2:17p	:19
Another deck is master					A	24			Today, 2:20p	:19
- Another deck is master - Loop playback					A	24			Today, 2:20p	:19
B 🚖 Camera ID					A	24			Today, 2:23p	:20
					A	24			Today, 2:23p	:20

VGA screen of remote deck (B) connected to Master

Synchronized Recording

Once all the decks are connected, any operation done on the Master will be passed to each of the other connected decks. They will begin and end recording simultaneously, place in-points, outpoints, and bookmarks in a synchronized fashion, and record scene and clip names together.

Audio level	Deck c								_	
2	A-R	HD1057	7 (49:2	9 avai)	🕑 B -	RHD1117 (31:02	avail)-		
-50 -40 -30 -20 -10 -3 0 +3	Po	cordir	na (0	0.10	47)	Por	ording (00:1	10 17	N	
antor	Rei				41)	Rec		10.47	/	
			55_01				55_01			
				ec 28, 2009	- 2:54					
	Scene	*Clip*	Take	Print	Camera	Speed	Notes	В	Created	Lengt
	50	50	01		AA	24			Today, 11:05a	:06
			02		Α-	24			Today, 11:05a	:06
	51		01		Α-	24			Today, 11:05a	:02
		51			A -	24			Today, 11:11a	:04
		51	03		A -	24			Today, 11:11a	:04
			04		A -	24			Today, 11:11a	:04
			05		A -	24			Today, 11:12a	:18
		51			A -	24			Today, 11:12a	:10
		51	07		A -	24			Today, 11:26a	:02
	1001	51			A -	24			Today, 11:26a	:11
	1001	TEST	01		- A	24			Yesterday, 11:27p	:20
	4000	TEST	02		- A	24			Yesterday, 11:27p	:20
	1002	TEST	01		- A				Dec 19, 2009 5:42p	:20
eck status (SDI, 1280 x 720, 59.940, XLR analog audio)	1003	TEST	02		- A - A	24			Dec 19, 2009 5:43p	:19
	1003	TEST	02		- A - A	24			Yesterday, 11:30p	:19
Recording (00:11.00)		TEST	02 01×		- A - A	24			Yesterday, 11:30p	:20
55_01	1005	TEST	01		- A - A	24			Yesterday, 11:33p Dec 19, 2009 5:45p	:20
avback		TEST	01 02x		- A - A	24				:20
		TEST	023		- A	24			Yesterday, 11:33p Dec 19, 2009 5:46p	:19
In 1s 1f B Play B 1f 1s Out	1007	TEST	02		- A	24			Yesterday, 11:36p	:20
	1007	TEST	02		- A	24			Yesterday, 11:36p	:20
ecording (about 49.37:11 available)	1008	TEST	01		- A	24			Dec 19, 2009 5:48p	:19
	1000	TEST	02		- A	24			Dec 19, 2009 5:49p	:20
Live Stop Rec Enable abort Abort	1009	TEST	01		- A	24			Yesterday, 11:39p	:20
	1003	TEST	02		- A	24			Yesterday, 11:39p	:19
In Book Out	1011	TEST	01×		- A	24			Yesterday, 11:42p	:20
		TEST	01		- A	24			Dec 19, 2009 5:51p	:20
ip attributes		TEST	02x		- A	24			Yesterday, 11:42p	:20
Scene 55 Take 01 👙 Rehearsal		TEST	02		- A	24			Dec 19, 2009 5:51p	:20
	1013	TEST	01		- A	24			Yesterday, 11:45p	:20
Notes		TEST	02		- A	24			Yesterday, 11:45p	:20
Speed 💁 🗸 (base: 24f) JPG 0: 90 🏩 Print take 🗌	1014	TEST	01		- A	24			Dec 19, 2009 5:54p	:20
		TEST	02		- A	24			Dec 19, 2009 5:54p	:20
tions	1015	TEST	01		- A	24			Yesterday, 11:48p	:20
AUTIS		TEST	02		- A	24			Yesterday, 11:48p	:20
Network master	1017	TEST	01		- A	24			Yesterday, 11:51p	:20
Canera D		TEST			- A	24			Yesterday, 11:51p	:19
Callera D	1018	TEST	01		- A	24			Dec 19, 2009 5:57p	:20
		TEST	02		- A	24			Dec 19, 2009 5:57p	:19
	1819	TEST	01		- A	24			Yesterday, 11:54n	:20
										>
	Filters								7509 clips,	41:05:37 to

Synchronized Playback

Similarly, properly connected decks will cue clips and perform all playback commands in synchronized fashion, provided the clips are shared amongst them (note the **A B** camera ID).

do level	Deck c	ount: 2 !HD105'	7 (10-2		n	M B	RHD1117 (31:02 a	dievo		
-50 -40 -30 -20 -10 -3 0 +3										
-50 -40 -30 -20 -10 -3 0+3 antor	Playing (00:04.11) Playing (00:04.11)									
			55_01				55_01		ec 28, 2009	- 2:58
	Scene	*Clip*		Print	Camera	Speed	Notes	В	Created	Lengt
		51	03		A -	24			Today, 11:11a	:04
		51	04		Α-	24			Today, 11:11a	:04
		51			A-	24			Today, 11:12a	:18
		51			Α-	24			Today, 11:12a	:10
			07		Α-	24			Today, 11:26a	:02
		- 61	- 19		A -	24			Today, 11:26a	:11
	55		5	5 0			AB		Today, 2:54p	:20
	1001	1691	01		- 8	24			Yesterday, 11:27p	:20
		TEST			- A	24			Yesterday, 11:27p	:20
	1002	TEST	01		- A	24			Dec 19, 2009 5:42p	:20
		TEST	02		- A	24			Dec 19, 2009 5:43p	:19
	1003	TEST	01		- A	24			Yesterday, 11:30p	:19
04.11 (0:15.42)	1005	TEST	02		- A	24			Yesterday, 11:30p	:20
sk status (1280 × 720, 59.940)	1005	TEST	01 01x		- A	24			Dec 19, 2009 5:45p	:20
Playing (00:04.11)		TEST	01x		- A	24			Yesterday, 11:33p	:19
55_01		TEST			- A	24			Dec 19, 2009 5:46p	:20
	1007	TEST	02x		- A	24			Yesterday, 11:33p Yesterday, 11:36p	:20
vback	1007	TEST	02		- A	24			Yesterday, 11:36p	:20
	1008	TEST	01		- A	24			Dec 19, 2009 5:48p	:19
In 1s 1f B Stop Play B 1f 1s Out	1000	TEST	02		- A	24			Dec 19, 2009 5:49p	:20
	1009	TEST	01		- 4	24			Yesterday, 11:39p	:20
cording (about 49:37:08 available)	1005	TEST			- A	24			Yesterday, 11:39p	:19
	1011	TEST	01		- A	24			Dec 19, 2009 5:51p	:20
Live Record Enstrie short Abort	1011	TEST			- A	24			Yesterday, 11:42p	:20
		TEST	02		- A	24			Dec 19, 2009 5:51p	:20
in Book Out		TEST			- A	24			Yesterday, 11:42p	:20
	1013	TEST	01		- A	24			Yesterday, 11:45p	:20
o attributes		TEST	02		- A	24			Yesterday, 11:45p	:20
Scene 55 Take 01 🔅 Rehearsal	1014	TEST	01		- A	24			Dec 19, 2009 5:54p	:20
		TEST	02		- A	24			Dec 19, 2009 5:54p	:20
Notes	1015	TEST	01		- A	24			Yesterday, 11:48p	:20
Speed 🔯 👽 (base: 24f) JPG G 90 🔮 Print take 🔲		TEST	02		- A	24			Yesterday, 11:48p	:20
	1017	TEST	01		- A	24			Yesterday, 11:51p	:20
ions		TEST	02		- A	24			Yesterday, 11:51p	:19
_	1018	TEST	01		- A	24			Dec 19, 2009 5:57p	:20
Network master		TEST	02		- A	24			Dec 19, 2009 5:57p	:19
🗧 Canera D	1019	TEST	01		- A	24			Yesterday, 11:54p	:20
×.		TEST	02		- A	24			Yesterday, 11:54p	:20
	1021	TEST	01		- A	24			Dec 19, 2009 6:00p	:20
	<	TEST	01v		- A	74			Yesterday 11:57n	-20
	1.00								7510 clips	

Network access to video files

When a Raptor HDx is connected to a local network, it provides easy access to the video recorded on the deck, for backup and editing. You will need to know the network name of the deck, once it is connected to the network (lower-right corner of the application window; see p. 19). Connect both the computer you will be working on and the Raptor HDx to the same LAN for this to work.

For Windows users

In order to work with the video stored on the deck, you need to map a network drive from a PC (desktop or laptop) to the Raptor HDx.

😂 My Computer				
File Edit View Favorites	Tools Help			
Map Network Drive Back • •		-		
Address Wy Computer	Folder Options	×	SootDisk (C:)	💌 🄁 Go
B B B My Documents B My Comparing B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B B <	Recorder/Player		Wide (E) Control Panel @Avic Compliant D1 Tape Recorder/Player @Avic Compliant D1 Tape Recorder/Player @Shord: Documents @Liker's Documents	
Connects to a network drive.				



- 1. On the PC, Open My Computer.
- 2. From the *Tools* menu, select **Map Network Drive...**

- 3. For Drive, choose an available letter.
- 4. Then, for **Folder**, enter the network name of the deck (like *RHD1057*) followed by *RXVideo*, like this: \\RHD1057\RXVideo
- 5. You may choose to leave the **Reconnect at logon** box checked so that you do not have to complete this process at the beginning of every session.
- 6. Click Finish to complete the process.



A new window should appear, showing the contents of the video folder on the deck.

You may now use the video files that are stored on the deck directly on your PC.

For Macintosh users

In order to work with the video stored on the deck, you need to connect to the Raptor HDx as a Windows server.

Finder	File	Edit	View	Go	Window	Help	
				Ba	.ck		¥[
				Fo	rward		爰]
				En	closing Fo	lder	第 ↑
				-	Computer		<mark>ት</mark> #C
					Home		Ωжн
					Desktop		企業D
				0	Network		<mark>ፚ</mark> ፞፞፞፞፝ЖК
					iDisk		•
				A	Applicatio	ns	ΰжA
				3	Document	ts	企業O
				×	Utilities		企業U
				Re	cent Folde	rs	
				Go	to Folder.		企業G
				Co	onnect to S	erver	. ЖК
				a section of		50 B. S	-75

00	Connect	to Server	
Server Address:			
smb://RHD1057	/RXVideo		+ 0-
Favorite Servers:			
(?) Remove		Browse	Connect
			Connect

	Connecting to Server Connecting to smb://RH01057/RXVideo
***	Enter your name and password for the server "RHD1057".
	Connect as: • Guest Registered User
	Cancel Connect

00	RXVide	0	\odot
< > (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\$* <u>-</u> *	Q	
Back View	Action Path	Search	
T DEVICES	Name	Date Modified	Size
🖾 iDisk	50_01_A.avi	Yesterday, 8:13 AM	15.5 MB
Macintosh HD	50_02_A.avi	Yesterday, 8:14 AM	22.9 MB
Project Files	20_03_A.avi	Yesterday, 8:14 AM	17.1 MB
	50_04_A.avi	Yesterday, 8:14 AM	107.5 MB
V SHARED	51_01_A.avi	Yesterday, 8:30 AM	18.8 MB
□ P81	2 51_02_A.avi	Yesterday, 8:30 AM	12.8 MB
💻 RHD1057 🗶	Bookmarks.ini	Yesterday, 8:30 AM	56 bytes
📃 bigdevbox	InFrames.ini	Yesterday, 8:49 AM	32 bytes
📃 comp2	Europhis.ini	Yesterday, 8:30 AM	4 KB
🧮 dbserver	Motes.ini	Yesterday, 8:30 AM	Zero KB
📕 hp1	m opts.ini	Today, 11:03 AM	4 KB
minipc2	CutFrames.ini	Yesterday, 8:49 AM	40 bytes
@ All	m play.ini	Jan 6, 2010 10:05 AM	40 bytes
V PLACES	Prints.ini	Yesterday, 8:30 AM	Zero KB
V PLACES	Resolutions.ini	Yesterday, 8:30 AM	4 KB
Numb3rs Sample Gallery	Speeds.ini	Yesterday, 8:30 AM	Zero KB
	VideoRates.ini	Yesterday, 8:30 AM	4 KB
Applications	(14

1. From the Finder's *Go* menu, select **Connect to Server...**

- For Server Address, enter an address similar to the following: smb://RHD1057/RXVideo
 You will need to replace *RHD1057* with the network name of your deck.
- 3. You may be prompted for a password simply choose "Guest."

4. A new Finder window will open, showing the contents of the video folder on the deck. After this point, the deck will appear by name (e.g. rhd1057) in the Finder's sidebar under "Shared."

Now you can use the files on the deck as though they were stored on your local computer.

Appendix A. Application Keyboard Shortcuts

This reference is accessible via the *Help* menu – choose Keyboard Shortcuts.

Key Combination	Function	
Ctrl+R	Start recording	
Ctrl+L	Go to Live	
Enter	In Live, starts recording. In Record, stops recording. When selecting clips in list, cues clip immediately.	
В	Place bookmark at current frame	
I	In Record, marks current frame as in-point. In Play/Pause, seeks to in-point.	
0	In Record, marks current frame as out-point. In Play/Pause, seeks to out-point.	
Up arrow	Cue in-point / head / previous clip	
Down arrow	Cue next clip	
Ctrl+Up arrow	Go to previous scene	
Ctrl+Down arrow	Go to next scene	
Spacebar	Toggle play/pause. After typing in search box, executes search. When selecting a clip in list, cues clip immediately.	
Left arrow	Seek back one frame	
Ctrl+Left arrow	Seek back one second	
Right arrow	Seek forward one frame	
Ctrl+Right arrow	Seek forward one second	
Tab	Go to next bookmark in current clip	
Shift+Tab	Go to previous bookmark in current clip	
Ctrl+F	Selects text in find box – press enter to execute search	
F3	Repeat last find	
Ctrl+P	Toggle "Print Take"	
Ctrl+G	Clicks "Grab Plate" button	
Ctrl+M	Toggles "Enable mixer" checkbox on or off	
Ctrl+S	Select "Scene" text box	
Ctrl+T	Select "Take" text box	
Ctrl+N	Select "Notes" text box	
Ctrl+D	Select "Speed" combo box	
Ctrl+W	Toggle normal/enhanced video window	

Appendix B. Front Panel Keystrokes

The keystrokes listed below correspond to the 12 buttons and the knob on the front panel. The keys must be pressed in the order indicated.

Keystrokes

Key 1	Key 2	Key 3	Notes
Record			If in Live, starts recording. If not in Live, goes to Live. Press twice to start recording from Play or Pause.
Play			If paused, starts playing. If playing, pauses.
Play	<<		Scans backward at -4x
Play	<		Scans backward at -2x
Play	>		Scans forward at 2x
Play	>>		Scans forward at 4x
Pause			If in playback: pauses the DDR. If in Record: stops recording.
Pause	<<		Decrease next playback speed: used for setting variable speed playback. * <i>see notes</i>
Pause	>>		Increase next playback speed: used for setting variable speed playback. * <i>see notes</i>
Pause	<	>	Asks to confirm, then deletes current clip *** <i>future feature</i>
In, Out			If in Play or Pause, locates to In-point or Out-point. If in Record, saves current frame as In-point or Out-point
Next, Prev			If in Play or Pause, locates to Bookmarks: Next or Prev. If in Record, Next places a bookmark at the current frame.
Option	In, Out, Next, Prev		Save current frame: In, Out, and Bookmark (Next). Option + Prev deletes a bookmark, if one has been set at the current frame.
<			Frame steps backward
>			Frame steps forward
<<			Locates to In-point or head of current clip, or cues previous clip. If in Live, locates to most recently recorded clip.
>>			Locates to head of next clip.
Jog/ shuttle push			Pause deck if in Play or Record. Toggles between clip or scene mode.

Key 1	Key 2	Key 3	Notes	
Option	Play		Loop-plays between In & Out	
Option	<		Locates back one second	
Option	>		Locates forward one second	
Option	<<		Locates to first frame of video on deck *** future feature	
Option	>>		Locates to last frame of video on deck *** <i>future feature</i>	
Option	<	>	Asks to confirm, then deletes all video from the hard disk (must hold for about 1 second).	
Option	Pause		In Live, names next clip. Otherwise, renames current clip. ** <i>see notes</i>	
Pause	In		Displays internal temperature	
Pause	Out		Displays system information (Versions, Network Name and IP Address)	
Pause	Next		Asks to confirm, then shuts down Raptor HDx	
Pause	Prev		Asks to confirm, then toggles network master	
Option	Record	Prev	Cycles through available VGA screen resolutions (at least 1024x768)	

* Reverse Play

Use the "decrease next playback speed" command. After you select the fastest variable playback speed, the display will show a series of "-" speeds.

** Clip Naming

The Raptor HDx does not currently support renaming existing clips from the front panel.

To name the next recording, the deck must be in Live. This is when the deck is stopped and the REC button's LED is lit (not flashing). Press Option and Pause. Follow the on-screen menu to delete, select and change characters.

Use the << and >> keys to select characters, and the < and > keys to modify the current character. Next inserts a blank space and Prev deletes the current character. Press Play to save and exit.

Turning the Jog/Shuttle wheel will let you quickly select characters. Pushing the Jog/Shuttle knob will move the cursor one character to the right.

*** Future Feature

Keystrokes for future features are listed because they are reserved for those functions. These features are not yet included in Raptor HDx shipments.

Appendix C. Rear Panel I/O Diagram

The following diagram shows the purpose of each I/O port on the rear panel of the Raptor HDx.



Appendix D. Breakout Cable

The Raptor HDx utilizes a breakout cable for all analog audio and analog video I/O. HD-SDI and HDMI in and out are part of the rear panel connectors (see p. 40).

Some of the connectors on the breakout cable are not used in the current product design. This includes the RS-422 Deck Control 9-pin D-SUB, the two AES audio in/out BNC's and the External Reference BNC.

The remaining 6 BNC's are "multiplexed" or switched between the desired analog video format you need to record and playback. The BNC's are marked *Y in*, *Y out*, *R-Y in*, *R-Y out*, *B-Y in*, and *B-Y out*.

To record and playback composite NTSC/PAL, use the *Y* in & *Y* out connectors. This requires specifying the analog video output to **Composite** (see p. 25).

Two channels of balanced audio in/out are also in the breakout cable.

Connector Type	Function	Notes
9-pin D-SUB-F (2)	Deck Control	RS-422, Unused
BNC-M (3)	R-Y In	
BNC-M (4)	Y In	For Composite input (see page 25)
BNC-M (5)	B-Y In	
BNC-M (6)	Ref In	Unused
BNC-M (7)	R-Y Out	
BNC-M (8)	Y Out	For Composite output (see page 25)
BNC-M (9)	B-Y Out	
BNC-M (10)	AES/EBU Out	Unused
BNC-M (11)	AES/EBU In	Unused
XLR-M (12)	Audio Out Left	Always available as output (including when
XLR-M (13)	Audio Out Right	embedded audio is selected with HD-SDI or HDMI, p 25).
XLR-F (14)	Audio In Left	
XLR-F (15)	Audio In Right	

The following table describes each connector.

Appendix E. Further Support

Warranty

Playback Technologies, Inc. warrants that each Raptor HDx will be free from defects in materials and workmanship, covering parts and labor for a period of one year from the date of purchase.

Email Support

Steve Irwin: steve24@playbacktech.com

Steve Sexton: steves@playbacktech.com

Phone Support

Call Playback Technologies at +1-818-556-5030, Monday-Friday 9am-5pm except U.S. holidays.

If you call when the office is closed, please leave a voicemail message including your contact information; we are sometimes able to respond outside of normal business hours.

Mailing Address

Playback Technologies, Inc. 135 N. Victory Blvd. Burbank, CA 91502