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NEXIO™

Harris Production Playout Center
User Guide

Harris Production Playout Center (PPC)

User Guide

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Broadcast Communications

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Contents

About This Guide 1
Finding Specific Information in This Guide 1
Writing Conventions 2
Related Documentation 3
Obtaining Documentation 3
Purchasing Manuals 3
Unpacking/Shipping Information 4
Unpacking a Harris Product 4
Returning a Harris Product 4
Technical Support 5

Chapter 1 Introduction to Harris Production Playout Center 7
Overview 8
What the PPC Does 8
What PPC Contains 8
Speed to Air 8
Intended Audience 9
Key Features 9
Key Advantages 10
PPC Software-Only Modules 10
Hardware Specifications 10
Shot Box Module 10
Features 10
Fast Replay Module 12

PPC Modules that Use the NX1011PPC 15
Turnkey Specifications 15
Package Builder Module 15
Features 15
Shot Selector Module 17
Features 17
Newsroom Script List Module 18
Features 18
Client Licensing 19
Sample Configurations 20
Basic Model 20
Simple Basic Shot Box Model 21
Moderately Complex Model 22
Comprehensive Model 23

Chapter 2 Configuring Your System 25
Logging On 26
User Management 27
Administrator Settings 27
User Settings 28
General Settings 29
Network Card Settings 33
NEXIO Settings 34
Router Settings 35
Routers 35
Monitoring Tab 36
MediaBase Filter Settings 36
Server Settings 38
VTR Settings 42

Chapter 3 Using PPC Views 43

Server View 44
Server View Buttons 45
Opening Server View 45
Using Loop 47
Naming the Channels 47
Using Jog Knob 48
Server View Menus 49
Main Menu 49
ID Menu 49
Add Window 50
Information Window 52
Load Window 53
Protect Button 53
Mark menu 54
Subclips 54
Restripe 55
Fast Cue 57
Sub Clip Menu 58
Goto Menu 58
Using Preset 58
Using Crash Record 59
Trim Menu 60
Audio Channels 60
Using Link and Unity 61
In and Out States 62
Segmenting View 62
Server Segmenting Timecode Menus 63
Adding a Virtual Subclip 65
Adding a Virtual Subclip (Segmenting) 66
Splitting an ID 68
Updating a Virtual Subclip 70
Updating Mark In and Mark Out Points 71
Navigating with Subclips 71
Opening and Importing Virtual Subclip Lists 71
Deleting Virtual Subclips 72
Creating Real Subclips 73

VTR View 74
Jog (Search) Dial 74
VTR Timecode Window 75
VTR Timecode Menus 75
Selecting a VTR 75
Using Fast Cue 76
Digitizing View and Digitizing Media 77
Digitizing Timecode Window Menus 78
Status While Digitizing 82
Saving Batch Digitizing Files 83
Opening Batch Digitizing Files 83
Adding a Virtual Clip 84
Updating Clip Information 85
Updating Mark In and Mark Out Points 86
Deleting Clips 87
Routing View 88
MediaBase 88
MediaBase Columns 89
MediaBase Tree 90
Organizing the MediaBase 90
Sorting the MediaBase 90
Filtering the MediaBase 91
Searching the MediaBase 92
Loading and Updating MediaBase 93
Working with Media 93
Loading a Clip 93
Changing a Clip ID 94
Deleting a Clip ID 96

Chapter 4 Newsroom Script List (Playlist) Module 97
GUI 98
Server Channels 99
Standard Codec Controls 100
Using the Server Channels 100
Changing the Device 100
Applying Key Lock to a Server Channel 101
Assigning Colors to a Server Channel 101
Playlist Overview 103
Designing the Playlist 104
Pre-roll 104
Changing the Device in the Playlist 104
Creating Playlists On and Off Line 106
Building a Playlist in the Offline State 106
Building a Playlist in the Online State 106
Adding Clips to a Playlist 107
Using an ID to Import a Clip 107
Adding Clips from the MediaBase 108
Adding Clips to the Playlist that are not in the MediaBase 109
Controlling Clips on the Playlist 109
Cueing Clips 109
Loading a Clip not on a playlist 109
Playing Clips 110
Using Loop 111
Using the F Keys by Color Channel 111
Using the Shortcut Keys 112
Stacking and Auto Starting a Clip 113
Auto Start 114
Interrupting an Auto Start 114
Early Advance 114
Gang Roll 114
Cue to a Certain Timecode 115
Lock a Clip Description 115
Inserting a Memo 116
Using News Link 117
Importing Clips 117
Enabling and Disabling News Link 118

Unlinked Clips 119
Save, Open, and Clear a Playlist 120
Saving a Playlist 120
Opening a Playlist 120
Clearing a Playlist 121
Simulating a Production Switcher 121
Using Tallies 122
How the Tallies work 122
Using Tallies to Protect On-Air Channels 122
Using the Next Key with Tallies 123
Auto Start and Stacking: Playing Two Items Back to Back 123
Tally Cue Next 124
Examples of what happen when Tally Cue Next is not Enabled 124
Configure Tally Cue Next as the Default 124
Tally Roll 125
Timecode Numbers Windows 126
Remote View 127
Configuration 128
Playlist Grid Settings 128
Playlist Settings 132

Chapter 5 Shot Selector Module 137
Shot Selector GUI Configurations 138
MediaBases 139
Advantage of a Dual MediaBase 139
The MediaBase Tree 139
Server Channels 140
Choosing a Channel View 140
Disabling a Channel 140
F Key Functions 141
F Keys by Color Channel 141
Stacking a Clip 143
Fast Cue 144
Banks 146
Recalling a Bank for a Loaded Clip 147
Eject a clip 148
Tallies 148
Countdowns 148

Chapter 6 Package Builder Module 149
User Interface Layout 150
Server Control 151
Building a Playlist 152
Playlist Controls 154
Status Bar 156
Auto Update 157
Mix Mode 157
Playlist Banks 158
MediaBase/Replay Banks 159
Creating Playlists Using the MediaBase 159
Creating Playlists using the Replay Banks 160
Package Builder Settings 160
Shortcut Keys Tab 161
Mix Mode Tab 162
The Other Tab 163

Chapter 7 Shot Box Module 165
Designed for Touch Screen Usage 165
The GUI Interface 166
Server Controls 167
Play Controls 167
Bank Controls and Marks 168
Using In and Out Points 168
Marking and Saving In and Out Points 168
Scrolling through In and Out Points 169
Cueing to an In Point 169
Searching (Scrubbing) through a Clip 169
Using Banks 170
Shot Box Playlists 170
Playlist GUI 170
Navigation Buttons 170
Highlight Clip Colors 171
Playlist Function Keys 171
Using the Playlists 172
Cueing a Clip 173

Cue and Play Mode 174
Stacking a Clip 174
Save, Create, Open Playlists 175
The MediaBase 175
MediaBase Buttons 175
Clip Indicators 176
MediaBase Tree 177
Picons 177

Chapter 8 Fast Replay Module 179
Channels 180
Record Channels 180
Playout Channels 181
Fast Replay Settings 182
Server Channels 182
Fonts / Labels 183
Remote PCs 184
Other 184
Creating Replays 185
GoTo Live Button 186
Saving Marked Events Into Banks 187
Recalling an Event from a Bank 188
Viewing Banks from Other Fast Replay Operators 189
Clearing, Saving, and Opening Banks 190
Creating Subclips 190
Pre-Populating User Fields 191
Using a DNF Control Panel 192

Chapter 9 FAQs 195
PPC Features 195
Demonstration of the PPC 195
Super Slow Motion? 195
Quick Replays? 195
Looped Playback 196

Searching Metadata 196
MOS Compliant? 196
Hardware 196
Competition with EVS 196
Where can I get the DNF Controller Panel? 196
NEXIO Servers 196
Graphics 197

Index 199

List of Procedures

Chapter 2 Configuring Your System 25
To Log into PPC 26
To delete the original administrator settings file 27
To delete the original administrator user account 27
To create user accounts 28
To access General Settings 29
To access Network Card Settings 34
To access NEXIO Settings 34
To access Router Settings 35
To access the Monitoring Tab in Router Settings 36
To create and apply MediaBase Filter Settings 36
To access Server Settings 38
To access VTR Settings 42

Chapter 3 Using PPC Views 43
To open Server View 45
To switch server channels 46
To start recording in Server View 47
To use the search dial 48
To switch between the Server View Menus 49
To add an ID 50
To update information about a server channel 52
To load a Clip ID 53
To protect a clip 53
To create a subclip 54
To Re-Stripe a clip 56
To use Fast Cue to search a clip 57
To create a subclip 58

To change an out point preset on a clip that is recording 59
To create a Crash Record 59
To trim a clip 60
To toggle between audio and job 60
To view up to eight channels 61
To link two or more audio channels 61
To open Segmenting View 62
To create virtual subclips: 66
To create virtual subclips 66
To split an ID 68
To update virtual subclip information 70
To update mark in and mark out points 71
To open a virtual subclip file 72
To delete a clip from the list 72
To create real subclips 73
To open VTR View 74
To select a VTR 76
To hide the VTR buttons 76
To use Fast Cue 76
To open Digitizing View 78
To digitize a virtual clip 80
To save a digitizing list 83
To load a saved batch-digitizing file 84
To create virtual clips 84
To update clip information 86
To update mark in and mark out points 86
To delete a clip from the list 87
To open Routing View 88
To open the MediaBase 88
To sort MediaBase 91
To filter MediaBase 91
To search the MediaBase 92
To load a clip from MediaBase 93
To change ID information 94
To delete a clip ID 96

Chapter 4 Newsroom Script List (Playlist) Module 97
To select a device media from the Server Channel 100
To apply Key Lock to a Server Channel 101
To assign or change the color of the server channel 102
To change the device media in the playlist 105
To go on-line 106

To import a clip using its ID 107
To import a clip to the playlist from the MediaBase 108
To replace a clip in the playlist with another clip 108
To add clips not in the MediaBase to the playlist 109
To cue or recue a clip 109
To play a clip 110
To loop a clip 111
To insert a clip using the Insert key 112
To edit a clip 113
To stack a clip using shortcut keys 113
To advance to the next clip 114
To lock a clip 116
To configure a playlist to use a newsroom text file 117
To connect PPC to a News Link file 118
To disable News Link 119
To save a playlist 120
To open a playlist 120
To clear a playlist 121
To change a manual start to an auto start 123
To activate Tally Cue Next 124
To configure a Playlist to use the Tally Cue Next feature 124
To activate Tally Roll 126
To open remote view 127
To access playlist settings 128
To move between tabs in the settings windows 129
To customize the columns in the play list 129
To change the font in the play list 130
To change the status and selected clip colors in the play list 130
To configure the play list settings 132

Chapter 5 Shot Selector Module 137

To toggle between a single and dual MediaBase view 139
To view specific media in the MediaBase 139
To configure the number of channels displayed 140
To disable a channel 141
To configure the F Keys 142
To load a clip into a channel 142
To roll or play a clip 142
To return a clip to the beginning 143
To stack a clip 143
To replace a clip in the stack 143
To interrupt a rolling clip with a stacked clip 144

To empty the stack 144
To mark a point in the clip 144
To advance through a clip in time increments 144
To jump to a time code 145
To store marks in a bank 146
To configure a bank to be stored with a clip. 146
To configure a bank to be stored with a channel 147
To recall a bank that has been stored with a clip 147
To eject a clip from a channel 148
To turn on a Tally 148

Chapter 6 Package Builder Module 149
To launch the Package Builder module 150
To eject a clip from the server control 151
To chase a recording 152
To change the description of the playlist 158
To adjust the Package Builder settings 160

Chapter 7 Shot Box Module 165
To open the Shot Box module 166
To select Server Channels 167
To play a clip 167
To eject a clip 167
To mark and save In and Out points on a clip 168
To scroll through In and Out points on a clip 169
To Cue to an In point on a clip 169
To search through a clip 169
To change banks 170
To create a playlist 172
To rearrange clips in a playlist 172
To delete a clip from a playlist 173
To scroll through a playlist 173
To interrupt a clip 173
To cue a clip 173
To change a cued clip 174
To cue and play a clip 174
To stack a clip using shortcut keys 174
To stack a clip using the touch screen 174
To deactivate stacking 175

To open a different Shot Box playlist 175
To clear a Shot Box playlist 175
To save a Shot Box playlist 175

Chapter 8 Fast Replay Module 179
To launch the Fast Replay module 180
To start a record 180
To enable a channel 181
To customize the look and behavior of the Fast Replay module 182
To play an event back in standard time, ... 186
To play an event back in slow-motion 186
To return to live action 186
To save a marked event in a bank 187
To add information to Bank entry 188
To play back an event from the bank 188
To load all the angles in a row into their equivalent playback channels 188
To recall a clip manually 189
To load an event in a cell into a different playback channel 189
To view another Fast Replay operator's banks 189
To clear all the events in a bank 190
To make a subclip 190
To add information to the NEXIO MediaBase 191
To create pre-defined values for User Fields 1-4 191
To simplify the workflow to its bare essentials 193

About This Guide

About This Guide provides an overview of this guide, describes guide conventions, and tells you where to look for specific information. This section also gives you important information on unpacking and shipping your Harris product.

This guide introduces and describes procedures for installing and using NEXIO PPC.

If the information in the release notes shipped with your product differs from the information in this guide, follow the instructions in the release notes.

Finding Specific Information in This Guide

This table shows the location of specific information in this guide.

If you are looking for	Go to
Configuring your playlist	***Configuration*** on page 128
Configuring your NEXIO	***NEXIO Settings*** on page 34
Using News Link	***Using News Link*** on page 117
Remote View	***Remote View*** on page 127

Writing Conventions

This guide uses the following writing conventions.

Table 1-1 Writing Conventions

Convention	Definition
Bold	Indicates dialog box, property sheet, field, button, check box, list box, combo box, menu, submenu, window, list, and selection names.
Italics	Indicates e-mail addresses, names of books and publications, and first instances of new terms and specialized words that need emphasis.
CAPS	Indicates a specific key on the keyboard, such as ENTER, TAB, CTRL, ALT, DELETE.
`Code`	Indicates variables or command-line entries, such as a DOS entry or something you type into a field.
>	Indicates the direction of navigation through a hierarchy of menus and windows.
hyperlink	Indicates a jump to another location within the electronic document or elsewhere.
Internet address	Indicates a jump to a Web site or URL.
Step_heading	Indicates an introduction to a procedure or series of procedural steps.
 *Note text*	Indicates important information that helps to avoid and troubleshoot problems.
 Caution text	Indicates important information that if not followed could cause system problems.
Tip	Indicates information that may be helpful, including related topics, shortcut keys, or ways to improve smooth operation of hardware and software.
 Danger text	Indicates information that conditions or practices that can result in personal injury or loss of life.
 Warning text	Indicates information that if not followed could prevent system operation or cause it damage.

Related Documentation

- Ingest Control Manager User Guide (175-000229-02)
- LLM User Guide (175-000308-03)

Obtaining Documentation

Manuals, User Guides and other documents can be viewed or downloaded from the Harris Web site at http://ecustomer.broadcast.harris.com.

1 In the **Customer Login** area, enter your **User** and **Password**, and click **Submit**.

OR

Click **New User** to register with Harris.

The **Harris Broadcast Premier Welcome** page displays.

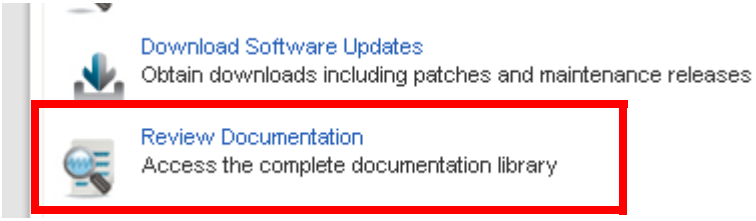


Figure 1-1 Link to Support Documentation

2 Under the **Table of Contents**, click **Servers** and then select **Compressed Media Servers**.

3 Click on the title of the document, and click **Open** to view it.

OR

Click **Save** to download the document.

Alternatively, contact your Harris customer service representative to request a document.

Purchasing Manuals

Alternatively, you can purchase product documentation on our Harris E-commerce site, or contact your Harris customer service representative to request a document.

Unpacking/Shipping Information

Unpacking a Harris Product

All Harris NEXIO products have been carefully inspected, tested, and calibrated before shipment to ensure stable and trouble-free service.

1. Check the equipment for any visible damage that may have occurred during transit.
2. Confirm that you have received all items listed on the packing list.
3. Contact your Harris NEXIO dealer if any item on the packing list is missing.
4. Contact the carrier if any item is damaged.
5. Remove all packaging material from the product and its associated components before you install the unit.

Returning a Harris Product

In the unlikely event that a Harris product fails to operate properly, contact the Harris Customer Service Department to obtain a Return Material Authorization (RMA) number, then send the unit back for servicing. Include the RMA number on the outside of the return box.

Keep at least one set of original packaging in the event that a product needs to be returned for service. If the original package is not available, you can purchase replacement packaging from Harris Corporation. Otherwise, you can supply your own packaging as long as it meets the following criteria:

- The packaging must be able to withstand the product's weight.
- The product must be held rigid within the package.
- There must be at least 2 in. (5 cm) of space between the product and the container.
- The corners of the product must be protected.

If the product is still within the warranty period, Harris Corporation will return it to you by prepaid ground shipping after servicing.

Technical Support

Technical support is available 24 hours a day, 7 days a week. You can contact technical support by phone or e-mail.

Harris Broadcast Division Support:

- **Toll Free:** +1 (888) 534-8246
- **Email:** BCDService@harris.com

Video Server Division

- http://www.broadcast.harris.com/products/servers
- **Email:** LTIServiceServers@harris.com

U.S., Canada, Central America, and Latin America (CALA)

Video Processing, Distribution, Servers, Storage, News, Inscriber and Videotek

- **Call:** 1-888-534-8246
- **Fax:** 1-416-445-9020
- **Email:** BCDService@harris.com

Europe, Middle East, and Africa

24 hours a day, 7 days a week
Regular Business Hours (9am to 5pm, Monday to Friday)
24/7 Support line: +44-118-964-8100

- **Fax:** +44-118-964-8054
- **Email:**
  - **Infrastructure products:** Service.europe@harris.com
  - **RMA's:** RMArequest.europe@harris.com
  - **DAM Support:** HClassDAMsupport.emea@Harris.com
  - **ADC Automation:** HasHelp@Harris.com
  - **D Series Support:** DALSupport@Harris.com
  - **Transmitters:** SupportTX.EMEA@Harris.com

Asia, Pacific Rim

24 hours a day, 7 days a week
Regular Business Hours (9am to 5pm HKT Monday to Friday)

- **Call:** +852-2776-0628
- **After-Hour Hotline:** 1-888-534-8246
- **Fax:** +852-2776-0227
- **Email:** BCDService@harris.com

1 Introduction to Harris Production Playout Center

Topics in this sections include:

- Overview
  - What the PPC Does
  - What PPC Contains
  - Speed to Air
  - Intended Audience
  - Key Features
  - Key Advantages
- PPC Software-Only Modules
  - Hardware Specifications
  - Shot Box Module
  - Fast Replay Module
- PPC Modules that Use the NX1011PPC
  - Turnkey Specifications
  - Package Builder Module
  - Shot Selector Module
  - Newsroom Script List Module
- Client Licensing
- Sample Configurations
  - Basic Model
  - Simple Basic Shot Box Model
  - Moderately Complex Model
  - Comprehensive Model

Overview

What the PPC Does

The Production Playout Center (PPC) is a software control layer designed to control playback of NEXIO server channels for a variety of different live events and production environments. Created using feedback from broadcast leaders heavily involved in both news and sports, PPC is a server ingest and playout application with capabilities that go far beyond other available products. From a single 1RU platform, PPC controls up to 16 NEXIO server channels, 8 routers, and can initialize records.

What PPC Contains

PPC is made up of five software modules that fit into any type of production setting from scripted news, to on-the-fly live productions, to sports arena environments.

All modules are included with the NX1011PPC.One module can be running at a given time. Multiple PPCs can be used simultaneously on a single NEXIO® system. The number of PPCs in any system is limited only by the number of NEXIO® channels the system can support. There is no inherent limit to the number of PPCs which can be used in a single NEXIO® system.

Speed to Air

The overall theme behind this control application is *Speed To Air*. PPC has built-in Fast-Cue technology for instant navigation to key points in long pieces of media, live asset and metadata updates, and configurable shortcut keys you can use to get your material on-air in record time. There are several media preparation tools to create subclips and organize content while recording is still underway. Tally indicators are available for you to use to monitor the production and receive live notification of which channels are on-air. More details on each playout module are listed below.

See the following for an overview of the PPC Modules:

- **Shot Box Module**
- **Fast Replay Module**
- **Package Builder Module**
- **Shot Selector Module**
- **Newsroom Script List Module**

Intended Audience

This guide is intended for users installing and operating PPC.

Intended Uses:

- In-Game Replays (Fast Turnaround)
- Game Day Highlight Packages
- Show Wraps
- Newsroom Sports Segments
- In-Venue Services (i.e. Jumbotron and/or luxury suite monitors)

Work Environment:

- Studio Production
- Stadiums/Arenas
- Temporary Production Facilities (i.e. Olympics)
- Newsrooms

Key Features

The key features of the PPC include the following:

- 16 Channels of playout control
- Crash Record capabilities
- Supports subclipping, trimming, and deleting
- Integration with Jog/Shuttle/T-Bar controller (available from DNF directly)
- Avid iNews Newsroom computer system interface with live updates
- Clip Sync / Protect dual roll (Key/Fill, HD&SD, etc.)
- Instant clip looping without a playlist
- Fast-cue technology with time-code jumping
- Live MediaBase™ updates with selectable colors
- Multi-bank storing and fast recall of pointers
- Non-linear playback on all playout modules
- Clip stacking (manual & automated)
- Focus routing for quality control monitoring
- Full router control (8 routers at 1024x1024 each)
- Tally status from production switcher
- HD/SD compatibility with NXOSTM
- Configurable colors and labels throughout
- Over 30 configurable shortcut keys

Key Advantages

Using the PPC comes with many advantages

- Current NEXIO installs can be *transformed* into replay systems
- Fewer RUs especially as systems scale larger
- True shared storage
- True On-San Editing available with Apple Final Cut Pro and Velocity
- Superior codec flexibility
- Use Software-only Replay Modules to very cost-effectively scale your system
- Very simple interface reduces learning curve

PPC Software-Only Modules

PPC software only modules contain the following:

- **Shot Box Module**
- **Fast Replay Module**

Hardware Specifications

Minimum PC Specifications for Shot Box and Package Builder Modules

- Intel™ Core®2 Duo or AMD Dual-Core Processor (2GHz Dual-Core, 4MB L2 Cache, 800MHz FSB)
- 4GB ECC RAM
- NVIDIA Quadro FX 380 256MB Graphics Card
- 100GB 7200RPM Ultra ATA, SATA or SAS Hard Drive
- Two Gigabit Ethernet Ports
- 1 USB 2.0 Port
- Microsoft Windows 7 x 32 Edition

Shot Box Module

Features

- Unscripted news or sports for on the fly productions
- Incredible flexibility with a MediaBase and up to 8 server channels to quickly load clips from the MediaBase into several available servers
- Shortcut keys
- Can be touch screen based

- MediaBase
- Five simple playlists that you can create
- Up to two server channels
- Easy and simple to operate without a lot of training

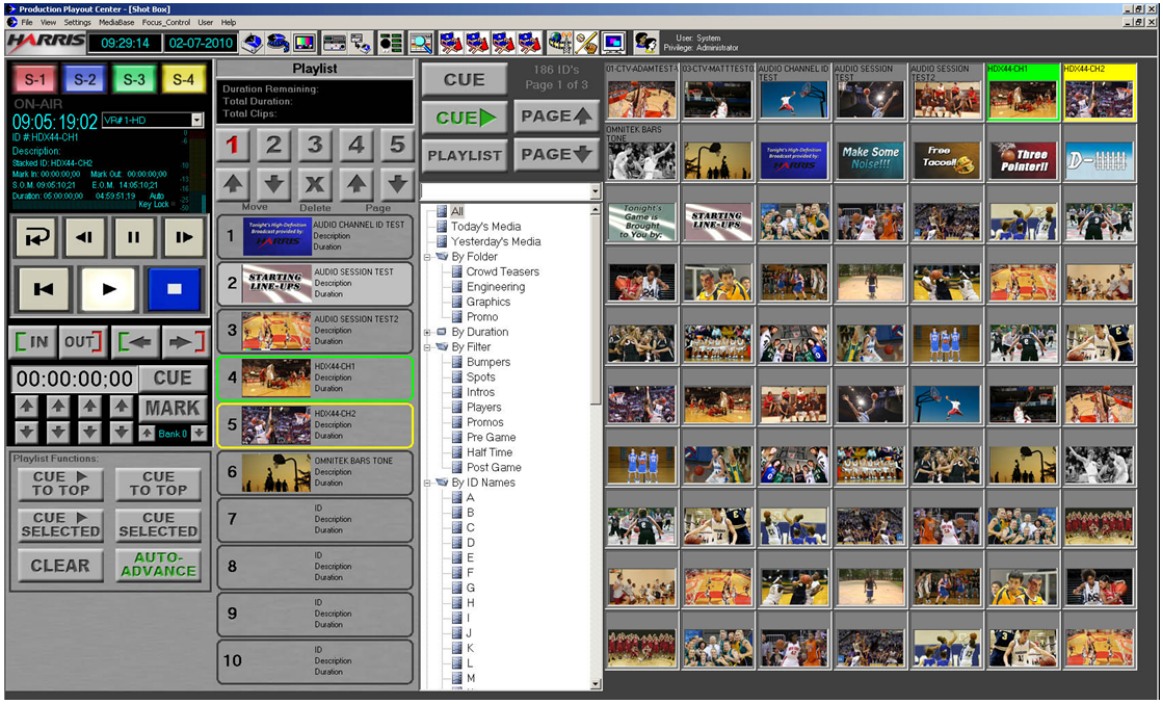


Figure 1-1 Shot Box Module

The Shot Box module provides an extremely visual playback tool ideal for control of scoreboard content in an arena environment, or manual playback in any broadcast environment. Each Shot Box module can control up to 16 different NEXIO® playout channels.

The Shot Box module features seamless integration with NEXIO® MediaBase™, allowing for instant playback of server content with a single click. The Shot Box also provides on-the-fly stacking of a second ID in the queue. Stacking enables the second clip to play seamlessly as soon as the currently loaded clip ends. Large buttons allow for use of a touchscreen monitor instead of a keyboard and mouse. Touchscreen operation also makes this module an ideal option when desk real estate is at a premium.

All MediaBase™ media is represented with a user-adjustable Picture Icon (Picon), allowing the operator to find and identify media quickly and easily. Hover the mouse cursor over a picon for a fast-preview of the clip's content.

Up to 5 simultaneous playlist instances are available for simple playback of a group of clips. An unlimited number of playlists can be saved and loaded for later use. The Shot Box allows for concurrent playback control of up to 4 NEXIO playout channels.

As well as being included with each PPC system, the Shot Box module can be purchased as a standalone, software-only package (NXA1000SBX) to be installed on a customer-supplied PC. The purchase of a full turnkey PPC system is not required if only Shot Box functionality is desired.

Fast Replay Module

The PPC Fast Replay module is the perfect tool for creating fast replays, with slow motion playback, from multiple camera angles in a live event environment. The Fast Replay module provides monitoring of up to 4 camera angles (provided via NEXIO® record channels), and playback from up to 4 NEXIO® playout channels. The operator can create marks from one, or all of the records, and play them back instantly. Or, add them to a highlight bank for playback later. Since all camera angles are being continuously recorded, even if you miss a play, it's easy to go back and mark a key play for later use.

Highlight banks can be shared between up to four Fast Replay module operators, allowing for a dynamic, collaborative workflow. If one operator missed a play, they can easily grab that play from a different operator and play it out of their own playback channel.

Predefined metadata fields make it simple to add key metadata like player name and team simply by punching in the player's number. The operator can also add unique metadata to each mark by merely typing in a description of the play.

Virtually the entire workflow can be run from an external control surface (currently DNF), allowing plays to be marked on one or all angles, and slow-motion playback of one, or all angles. **For optimal slow-motion quality, 720p is the format of choice.**

The Fast Replay module is uniquely configurable to control up to 4 inputs and 4 outputs, depending on your specific needs.

The Fast Replay module can be purchased as a software-only package (NXA1000FRSM) to be installed on a customer-supplied PC to expand Replay capabilities to control another 4 camera angles and 4 outputs. The software-only version of the Fast Replay module requires that each NEXIO system have a turnkey PPC system (NX1011PPC) present.

The number of Fast Replay modules running simultaneously on a system is limited to 4, meaning a total of 16 camera angles can be monitored and 16 NEXIO® playout channels can be controlled.

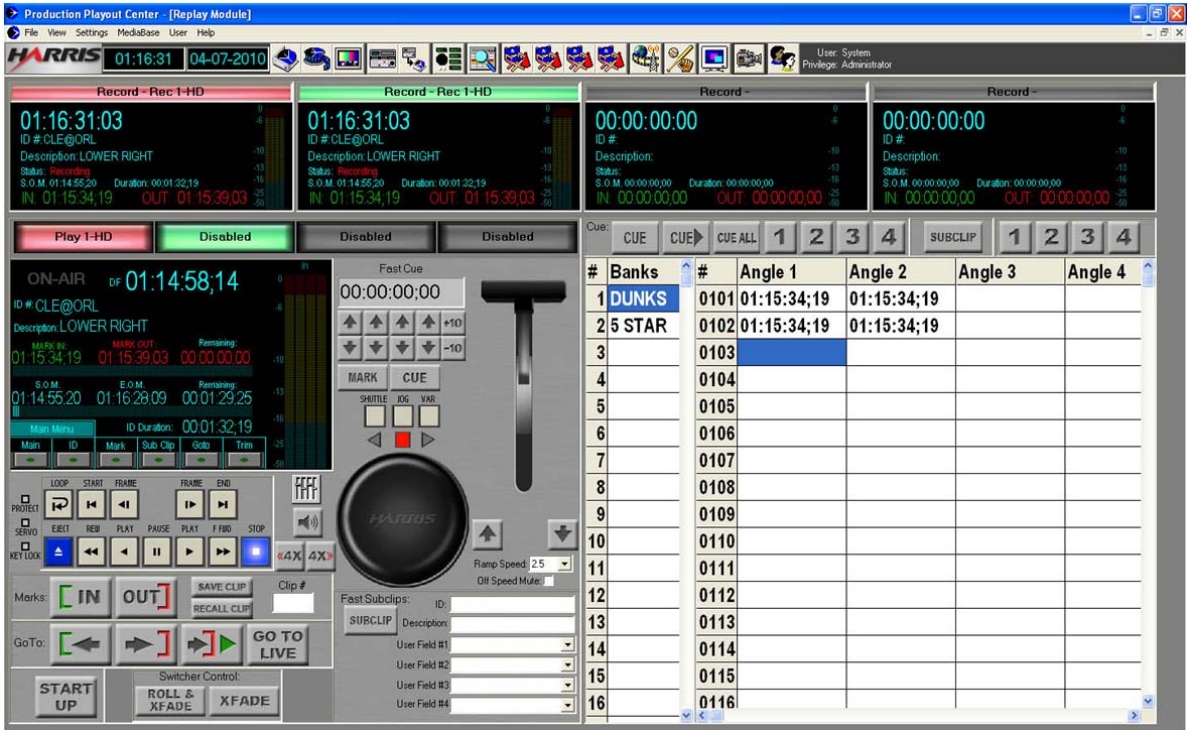


Figure 1-2 Fast Replay Module

Example Fast Replay Module System Layout

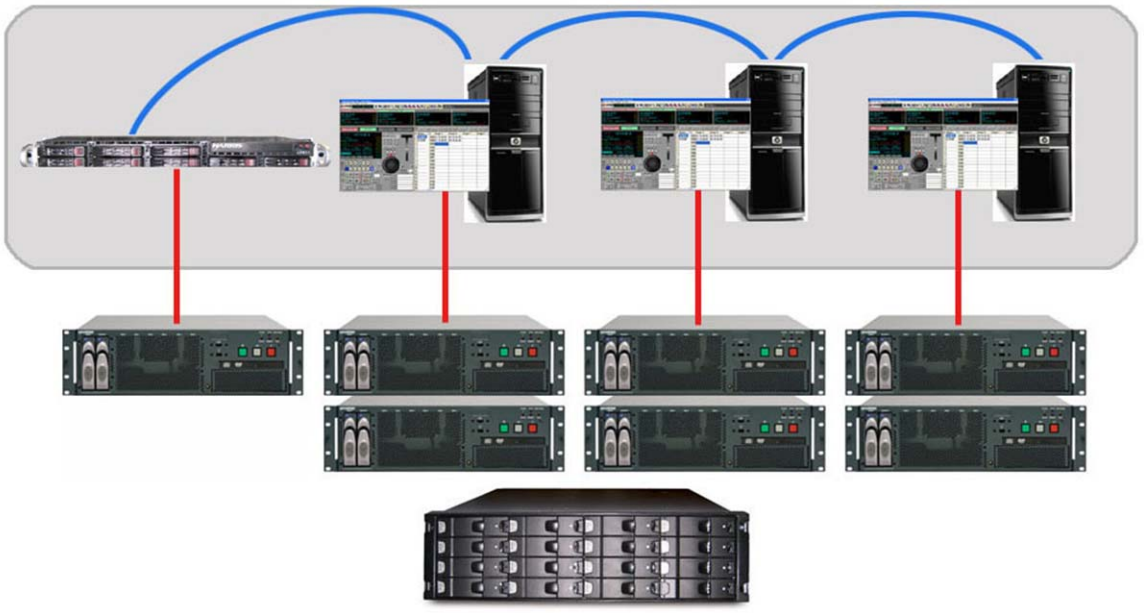


Figure 1-3 Fast Replay Module System

In the system above, there are 28 HDX channels. For the sake of this drawing, we'll assume each HDX is configured as 2 inputs / 2 outputs mode, for a total of 14 inputs, and 14 outputs.

Each Fast Replay module can control up to 4 inputs, and 4 outputs (4 camera angles, and 4 NEXIO Playout channels). So, the Fast Replay modules are handling 12 inputs, and 12 outputs. This leaves an additional 4 NEXIO® channels.

The Fast Replay modules all use a shared database of marks, so if one operator (Operator A) has more good replays than they have playout channels, one of the other Fast Replay operators (Operator B) can play Operator A's replays, using their own playout channels.

A main PPC can use the remaining channels to build packages using marks created in all other Fast Replay Modules (see more on this in the Package Builder Module description below). This main PPC can also be used as a Fast Replay station if desired, since it contains all modules. It will link into the same shared database of marks described above.

PPC Modules that Use the NX1011PPC

The following three modules are only available with the purchase of an NX1011PPC, they are NOT available as separate software-only modules.

- **Package Builder Module**
- **Shot Selector Module**
- **Newsroom Script List Module**

Turnkey Specifications

Turnkey Platform Description for Package Builder Module, Shot Selector Module, and Newsroom Script List Module

- 1RU Chassis
- Dual Power Supplies
- 4 GB ECC RAM

The NX1011PPC does not come with a bezel.

Package Builder Module

Features

- Quickly put live editing together without using an editing suite
- Used for highlighting a play or a sports figure
- Can run two lists at the same time
- Packages can be exported as EDLs

The Package Builder module is designed for fast creation and turnaround of simple packages. This module allows the playout operator to quickly select a number of marks from one or more Fast Replay module operators and create a playlist for immediate playback (in-game editing).

The Package Builder supports two lists running at the same time (preview and program). Playlists can be stored in a playlist bank, which allows the operator to jump around from playlist to playlist in a flash. Bank sharing is also supported among multiple PPC systems. So, for example, one operator can work on packages for players on one team and another operator can create packages for players on the other team. These packages can then be easily shared. The packages can also be exported as EDLs directly to Velocity ESX™, Apple Final Cut Pro, or other NEXIO®-connected third-party editors.

Full, dynamic slow-motion control can be achieved using an external hardware control panel with a T-Bar. When there is no time for an edit suite, the Package Builder module is the ideal package-building tool.

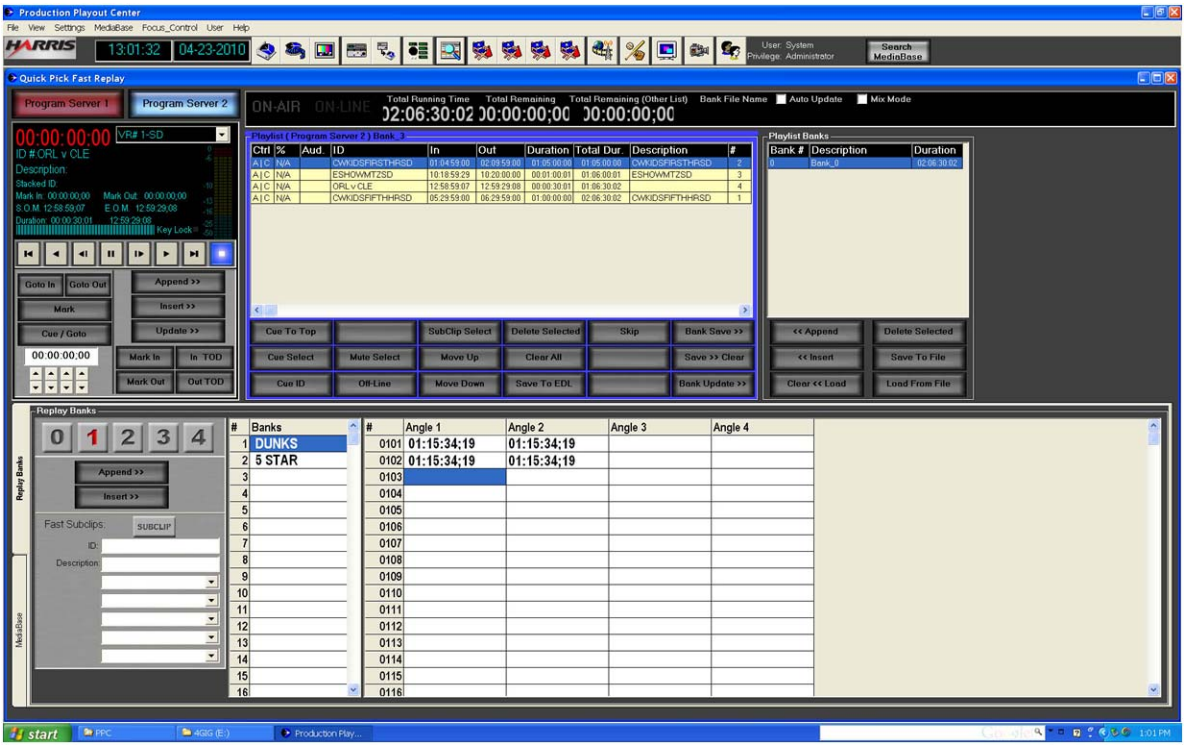


Figure 1-4 Package Builder Module

Shot Selector Module

Features

- Ideal tool for unscripted productions
- Uses Fast-Cue technology
- On-the-fly stacking for seamless playing

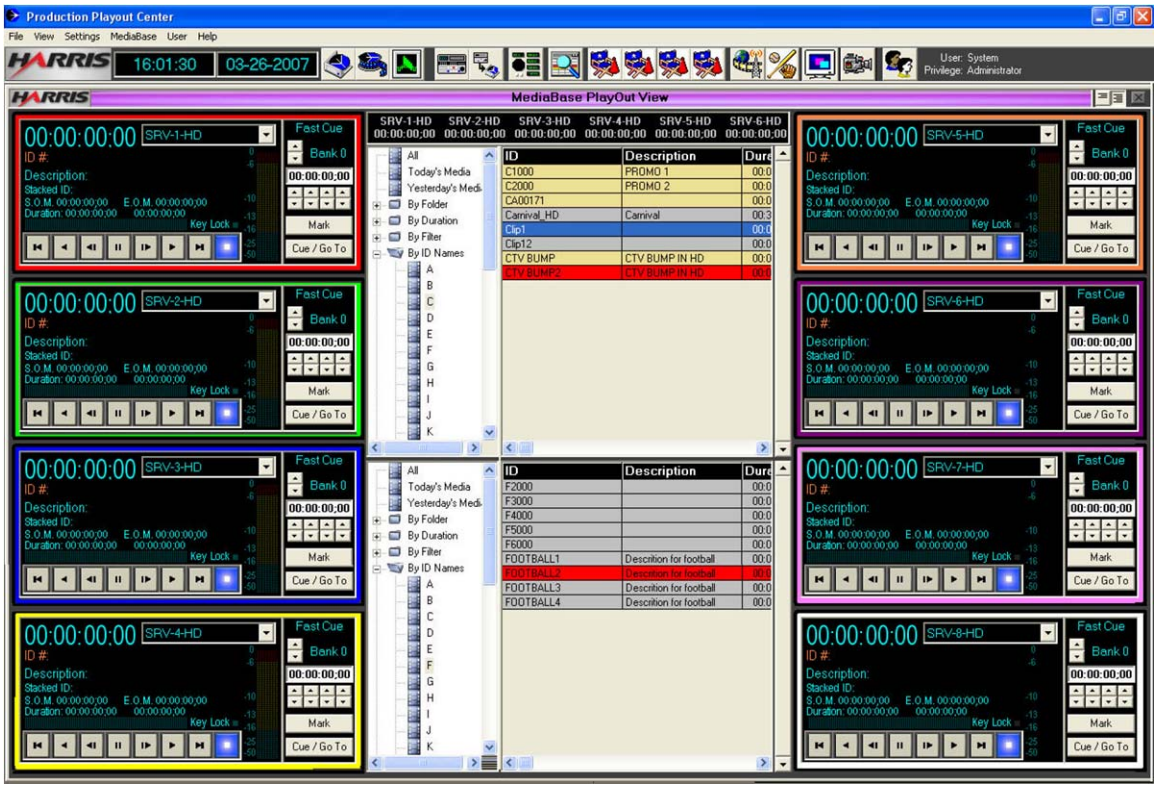


Figure 1-5 Shot Selector Module

The Shot Selector module is designed for live, unscripted playout. Dual or single views of NEXIO's MediaBase™ clips list allow for quick access to any piece of media. Up to eight server channels can be loaded and played backed via drag/drop within the user interface, or with shortcut keys. Bank storage along with Fast-Cue technology allows for quick access and recall of segments from within longer media clips (ideal for growing records of live events). Shot Selector provides on-the-fly stacking of a second ID in the queue. Stacking permits the second clip to play seamlessly as soon as the currently playing clip ends.

Fully interactive tally status keeps the operator aware of what's happening in the control room, helping to avoid on-air mistakes. NEXIO MediaBase™ clip list searching and filtering is supported and allows the operator to be in two places at the same time. An optional jog/shuttle knob with T-bar controller has access to all 8 server channels.

Newsroom Script List Module

Features

- Run a scripted show
- Non-linear playlist so you don't have to play the clips in a particular order
- Server channels are on the side for easy viewing
- Designed for ABCD rolls designed specifically for news and scripted sports
- Can have up to four playlists open at one time

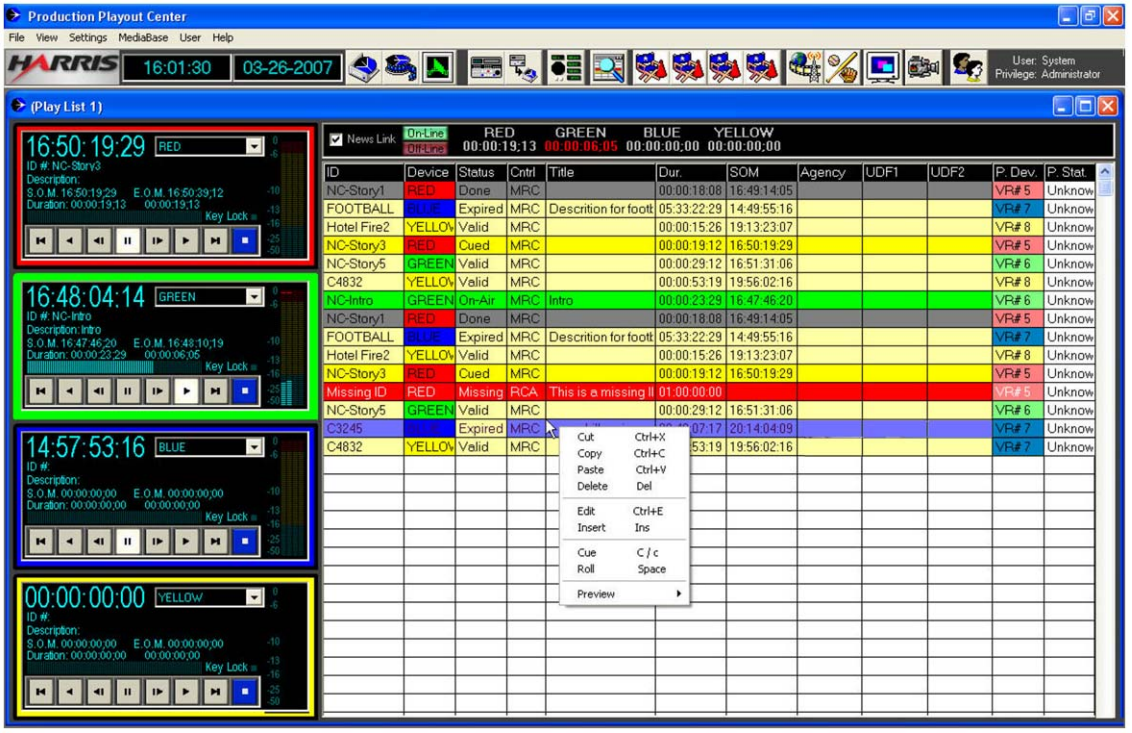


Figure 1-6 Newsroom Script List Module

The Newsroom Script List module allows an operator to control 4 server channels from a single playlist. The software allows 4 playlists to be running simultaneously, meaning the operator can control 16 total NEXIO channels (4 channels in each of the 4 playlists). Configurable colors and grid layout provide a customized operator experience. The playlist allows for non-linear control so the operator is not necessarily tied to the playout order presented by the newsroom system. Status updates indicate which items in the play list are ready for playout, which items are cued, and most importantly, which items are NOT ready. Full tally support from the production switcher aids in supporting your productions.

In addition to standalone operation, the Newsroom Script List module also interfaces with Avid iNews. The PPC is designed to accept Avid Control Air protocol directly. This means an Avid iNews server can make a direct TCP socket to the PPC for the purpose of sending a dynamically changing rundown (playlist) to the PPC. The current release of the PPC only supports one direction. This is a great option for budget-conscious customers who don't need full MOS integration.

Client Licensing

You won't run more than one module at a time. If you need to use more than one module simultaneously, we recommend that you use a PPC for each module you use. Use a dedicated PPC for a specific module.

Sample Configurations

This section shows the versatility of using PPC with your system. It can easily accommodate large or small systems.

Some ways that PPC can be used:

- **Basic Model**
- **Simple Basic Shot Box Model**
- **Moderately Complex Model**
- **Comprehensive Model**

Basic Model

In this simplest configuration, one PPC (NX1011PPC) controls the Playout and Record channels of a 4 channel HDI. This is useful for small arenas with minimal replay requirements or small Newsrooms.

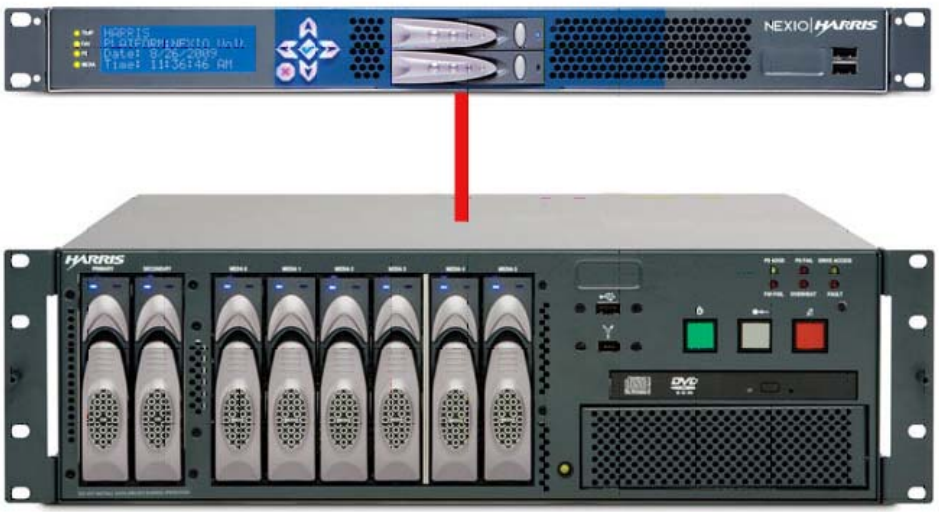


Figure 1-7 1 HDI and 1 NX2000PPC

Simple Basic Shot Box Model

This is an example of a very simple standalone Shot Box Module (NXA1000SBX) configuration that runs on an off-the-shelf, customer supplied PC. This setup can control a 4 channel HDI with up to 4 simultaneous playout channels. This is useful for small arena scoreboard playback.

Figure 1-8 1 HDI and 1 NXA1000SBX

Moderately Complex Model

A slightly more complex system that contains one main PPC (NX1011PPC) and one Package Builder Module (NXA1000FRSM). Both jointly control 3 HDX servers (12 channels total).

In this example, the Package Builder module would most likely control at least 8 of the channels for fast replays.

The main PPC in this example could be used for any or all of the following:

- Use the Package Builder Module to build packages.
- Serve as an auxiliary Replay station using the Package Builder module.
- Use the Shot Box module or any of the other included modules.

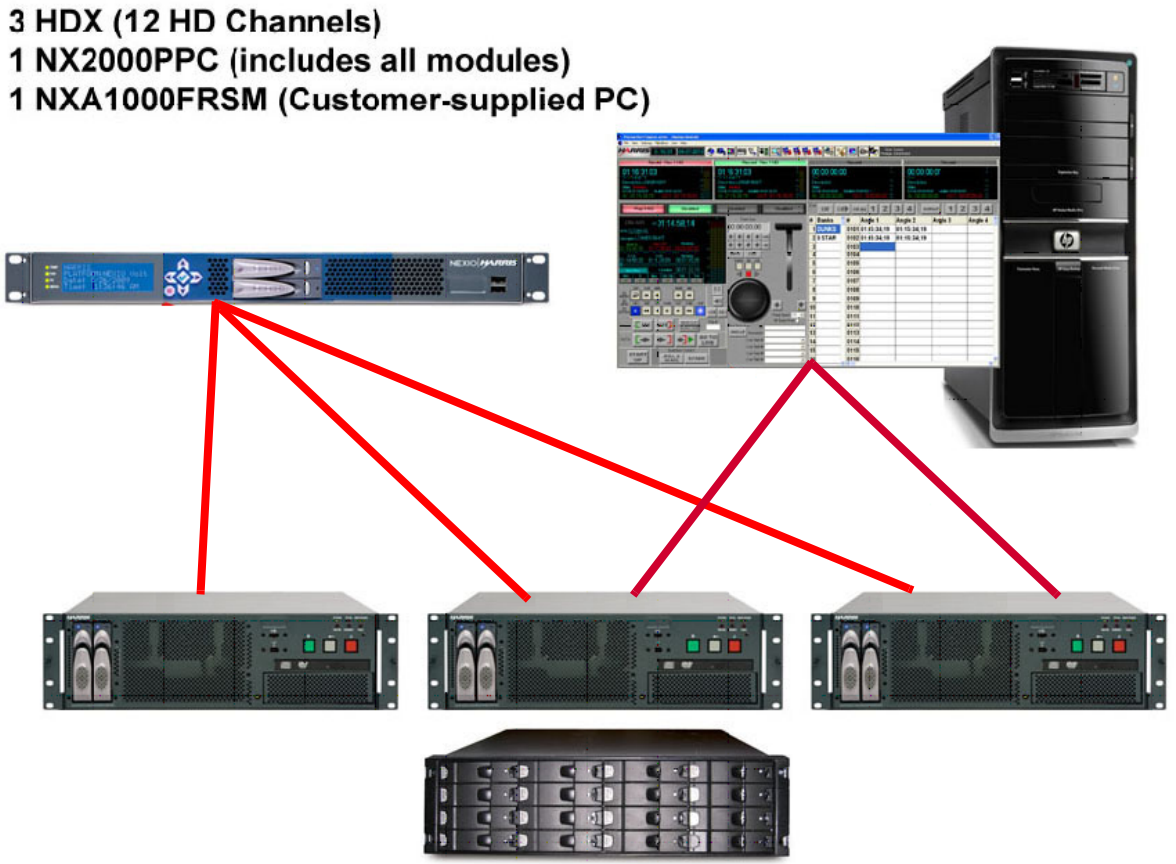


Figure 1-9 3 HDX, 1 NX2000PPC, and 1 NXA1000FRSM

Comprehensive Model

This complex model contains a large system of HDX servers (32 HD channels total) that are controlled by a variety of PPC applications. Useful in larger arenas, demanding multiple replay operators and package builders.

This powerful configuration contains the following:

- 3 Package Builder modules control 12 inputs and 12 playouts.
- 1 Shot Box module controls up to 4 additional channels.
- 2 main PPCs for building packages, creating playlists, and more.

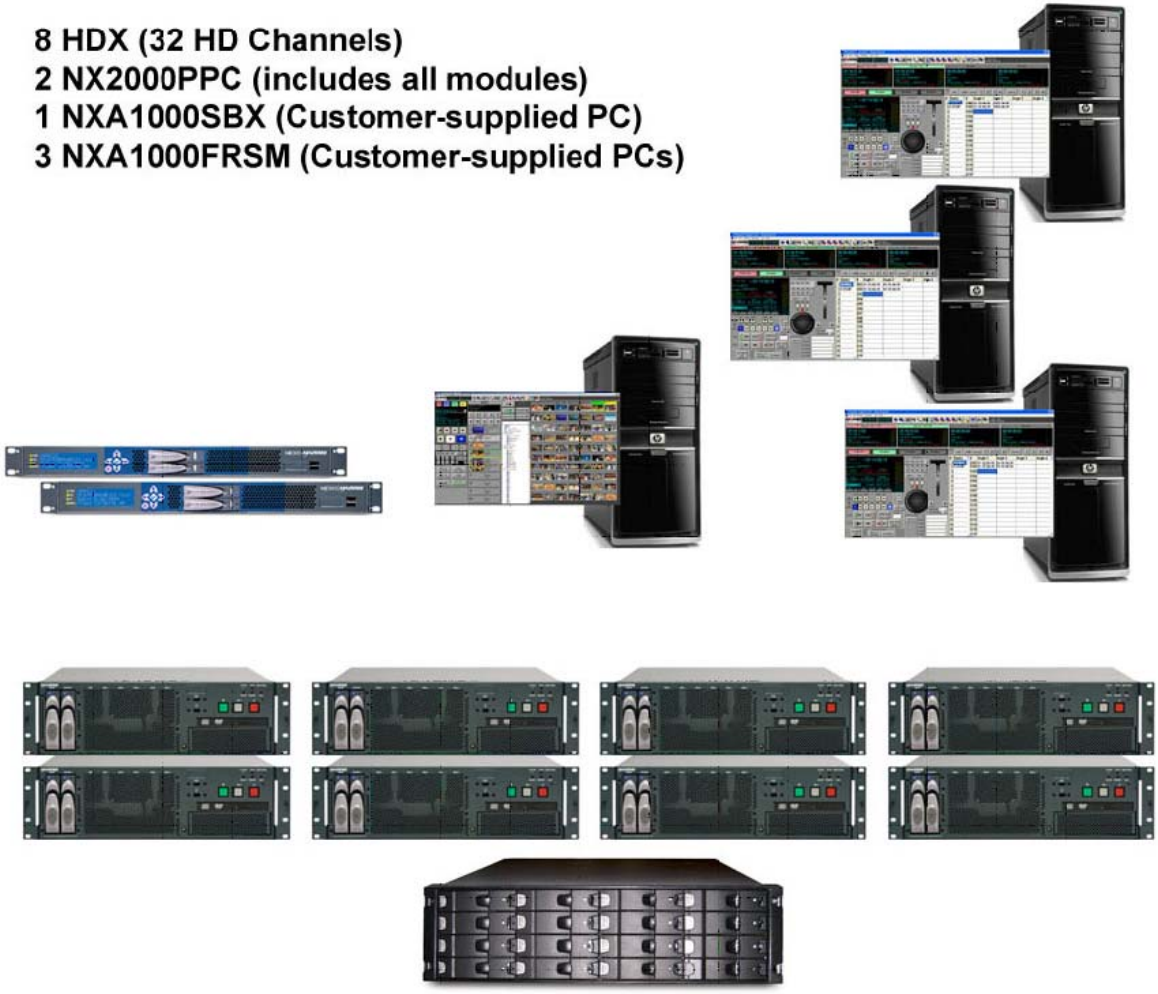


Figure 1-10 8 HDX, 2 NX2000PPC, 1 NXA1000SBX, and 3 NXA1000FRSM

2 Configuring Your System

Topics in this sections include:

- **Logging On** and **User Management**. User these two sections to logon and create user settings.
- **General Settings.** Use this area to set MediaBase colors, durations, fonts, bank settings and the number of Shot Selector channels.

Tip Even though you have the option to change these settings to suit your particular needs, we recommend using the default settings for this area as much as possible.

- **GPI Settings.** Currently not supported.
- **Network Card Settings.** Use these settings to connect to network cards on your PPC machine and to establish redundancy if needed.
- **NEXIO Settings.** Use this area to customize the names of the four user fields seen in the MediaBase, the Playlist, and throughout the PPC. Once you configure them here, go to ***Playlist Grid Settings*** on page 128 to add them to the playlist columns.
- **Router Settings.** Use this area to control up to eight different routers.
- **MediaBase Filter Settings.** If you are the administrator, you can create and give descriptive names to up to eight different filters.
- **Server Settings.** Use this area to control up to 16 server channels.

This is the only area that requires configuration. We recommend that you use the PPC default settings whenever possible.

- **VTR Settings.** Use this area to select and label network cards for the VTR. This is also where you configure the IP address of the DS_LLM.

Each module contains the configuration settings instructions at the end of the chapter.

Logging On

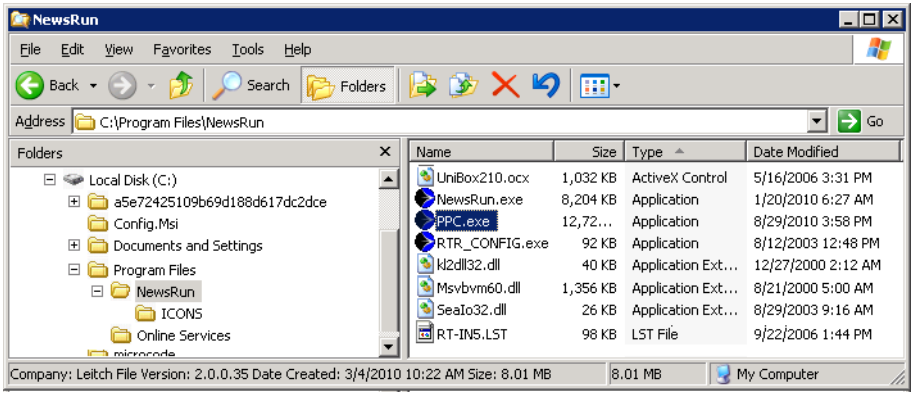
By default, PPC comes with one user already set up. The User Name is *system* with no password. Use this Administrator level to create additional users accounts.

To Log into PPC

1 Click on the **PPC** icon located on your desktop.

PPC launches and the log in window displays.

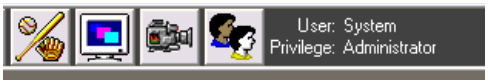
Tip You can also navigate to **C:\Program Files\PPC\PPC.exe**.



2 For **User Name**, enter **system** in lower case and click **OK**.

There is no password. You are now logged in as Administrator.

Your log in status is displayed to the right of the icon menu.



User Management

Administrator Settings

If you forget your administrator password, you can go back to the original administrator setting to recreate your specific administrator user name and password. Go into the application folder, delete the user.ini file, and restart PPC. The original *system* user name and password are reset. You can then login as administrator to re-create the user accounts again under user management. You can then delete the original administrator setting.

Tip The user.ini file can be found at `C:\Program Files\PPC`.

To delete the original administrator settings file

Be sure to do this only after you can created your own administrator user name and password.

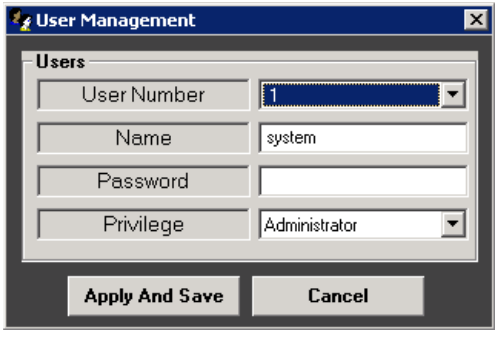
1. Close the **PPC** application.
2. Navigate to **`C:\Program Files\PPC.`**
3. Delete the **USER.INI** file.
4. Relaunch PPC and login using **system**.

   You are now able to create user accounts.

To delete the original administrator user account

Be sure to do this only after you can created your own administrator user name and password.

1. Click on **Settings** > **User Management**.
2. Delete the word **system** from the **Name** field.



3 Click **Apply And Save** to delete the account and close the window.

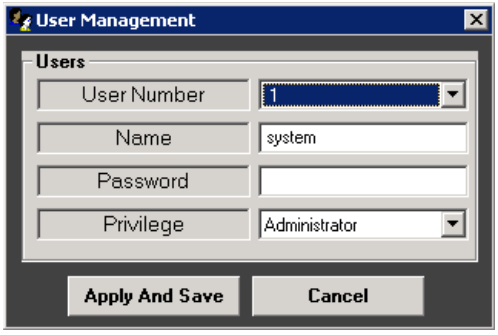
This user name is no longer available.

User Settings

All the configuration is done under the settings menu. If you don't see the Settings menu, you are not logged in as Administrator.

To create user accounts

1 Click on **Settings** > **User Management**.



2 Enter the **Name** and **Password** for the new user.

3 Select one of the **Privilege** levels from the drop-down menu:

- **Administrator.** Can do everything and has access to the Settings menu.
- **Master Operator.** Can perform all operational functions and can delete media from the MediaBase. However, the Settings menu is hidden.
- **Operator.** Can do all operational functions, but cannot see the Settings menu and cannot delete media from the MediaBase.

Tip We recommend that only engineering or a super user on the operational side have administrator privileges. All others should be assigned as Master Operators to protect the configuration.

4 Click **Apply and Save** to accept the changes and close the window.

General Settings

We recommend that you use the default settings for these attributes. However, you may need to change them to suit your particular needs.

Use this area to configure the following attributes:

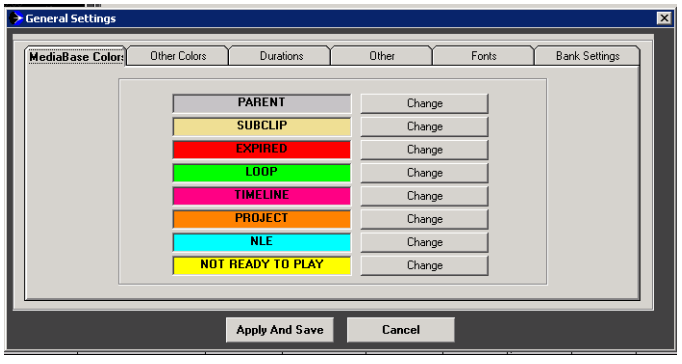
- **MediaBase Colors.** Set these colors to give you a quick reference to identify the clip and its status.
- **Other Colors.** Use this area to change the colors of the ID fields in the server.
- **Durations.** Use this area to enter the durations choices available in the drop-down menus in the Adding ID window, etc.
- **VR Record Duration.** Set maximum VR durations.
- Application VR UDP ID Code.
- **Video Standard.** PAL or NTSC
- **Non-DOS character filtering.** Apply this to the ID field, to other fields or to both.
- **Search Knob Settings and Range.** Set the COM port, type, speed, and range.
- **Unicode.** You can either enable or disable this option.
- **Fonts.** Set the font and font size for VR/VTR, data entry, and EventBase/ SpotBase.
- **Bank Settings.** Enable or disable storing bank settings and set the default recall bank.

To access General Settings

1 Click on **Settings** > **General Settings**.

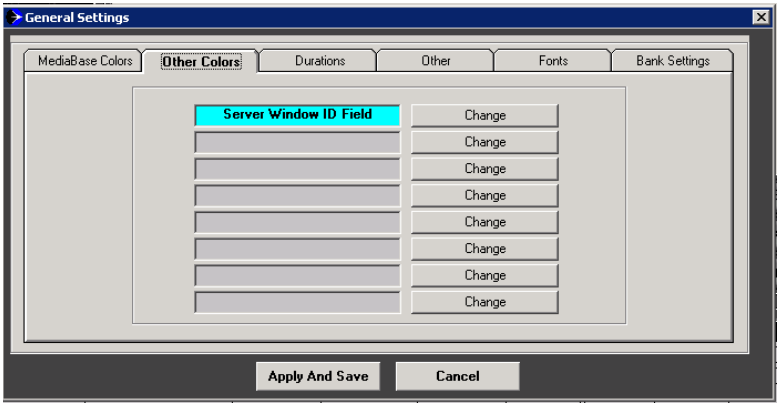
The following tabs are available in the General Settings window:

- **MediaBase Colors.** These colors convey status information about the clips.

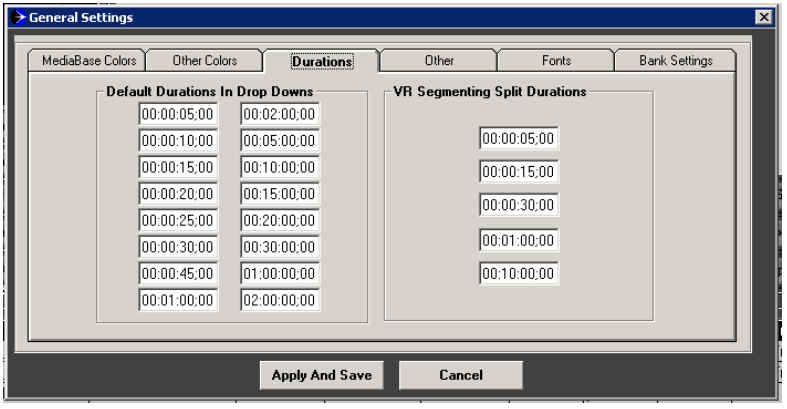


- **Parent.** This is a parent clip.
- **Subclip.** This is a subclip.
- **Expired.** This clip has expired.
- **Loop.** This clip is looping.
- **Timeline.** This clip is currently on the timeline.
- **Project.** This clip is a part of a project.
- **NLE.** This clip is being edited.
- **Not Ready To Play.** This clip is not ready because it may be missing, corrupted, or may not be in the correct formatting.

- **Other Colors.** Use this area to change the ID field in the server windows to a different color.

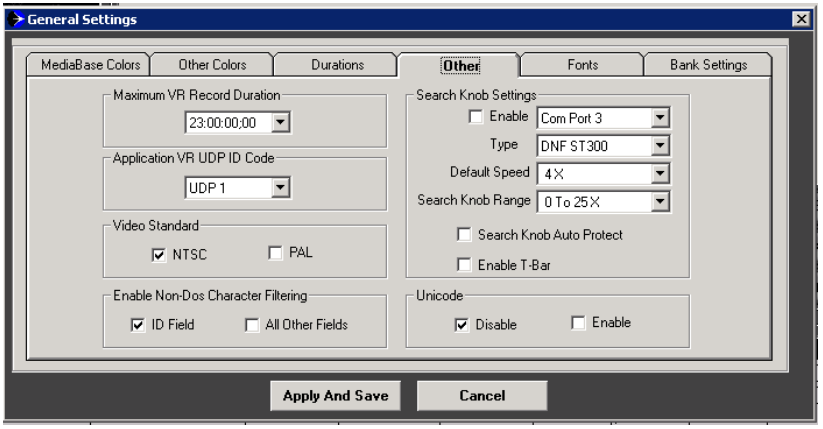


- **Durations.**



- **Default Durations In Drop Downs.** These durations are added in the drop-down menus by the administrator.

- **Other.**

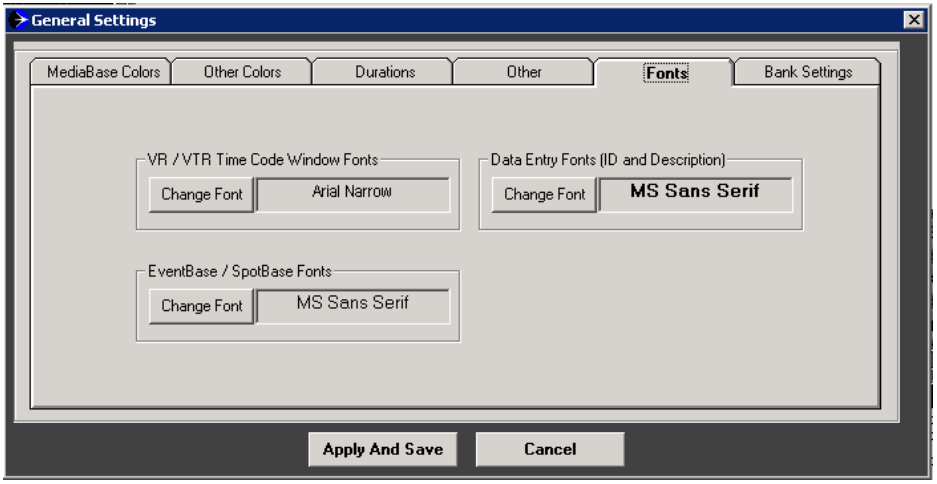


  - **Maximum VR Record Duration.** The administrator uses this area to set the record time. If an operator goes beyond the hours set for that limit, a message displays indicating that the administrator maximum for that duration has been reached.
  - **Application VR UDP ID Code.**This is a network communication code between your PPC in the NEXIO channels. If you are using more than one PPC to control server channels in your facility, give each one a unique number to easily distinguish them apart.
  - **Video Standard.** Select either NTSC or PAL. All the time code calculations are based on this setting.
  - **Enable Non-Dos Character Filtering.** This is used for naming FTP files for transfer. If this is enabled, you will not be able to type in periods, slashes, nor any other characters that may interfere with transferring an FTP file.
    - **ID Field.** Check this if you want to limit the character usage for files being transferred via FTP. This helps to ensure that those clips transfer and work correctly.
    - **All Other Fields.** Check this if you want to limit the character usage for all the fields.
  - **Search Knob Settings.** Supports the ST300-CP-RS422 which has special firmware. Check *Enable* to establish communication between the ST300-CP-RS422 and the PPC.
    - **COM Port.** Select which COM port PPC is connected to. This will probably be COM port 3.

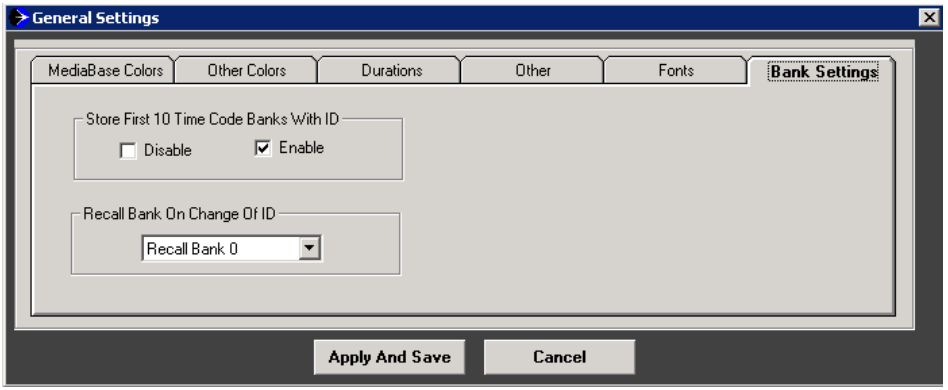
- **Default Speed.** These speeds are the Reverse (rewind) and the Forward speed. If you push the SHIFT button on the DNF and hold Rewind or Fast Forward, the speed is increased four times faster than the button alone. When you release the button, play is paused.

- **Search Knob Range.** You can change what type of range you want on the dial on the DNF. There is also an Auto Protect. This option disables the dial when it is not in use. You can also disable the T. bar.
- **Unicode.** If you are outside of North America and need unicode, you can enable it. By default unicode is enabled. If you are experiencing some unusual characters in your MediaBase and you are in North America, you can disable it. If you disable this option, you are reminded to restart your system.

- **Fonts.** We recommend that you leave the default fonts as they are. However, if you do need to change them, first try changing the size of the fonts to see if that works better.



- **Bank Settings.** You can store up to twenty banks with a particular clip. The first ten banks are stored with the clip. The last ten are stored with the channel. If you enable *Store first 10 timecode banks with ID*, the first ten preset points are stored with the ID which is stored in the LXF data and is transferred in the FTP data.



This uses the old description and old agency fields that were used in pre-NEXIO products. Therefore, if you are using the PPC to control a VR300 or VR400 server, please disable this option.

- **Recall banks on change of ID.** When you change the ID, PPC automatically recalls to a certain bank. PPC will not cue to the preset point in the bank. The clip is loaded at frame one. But if you want to jump to the preset point, press Cue. Bank One is the default.

- **GUI.** Use this to set the Shot Selector channels to either 4 or 8. The Shot selector is the module with the MediaBase in the middle with 8 channels on each side. Selecting this option reduces the channels down to four and gives the MediaBase window more space to display information.

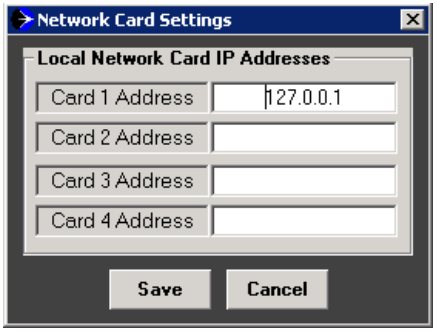
2 Click **Apply And Save** to accept the changes and close the window.

Network Card Settings

Enter local IP addresses of the network cards on this PPC machine. If you want to establish redundancy, type in the second IP Address. Otherwise, leave the additional fields empty.

To access Network Card Settings

1 Click on **Settings** > **Network Card Settings**.



2 Enter the **IP Address** of one or more **Local Network Cards**.

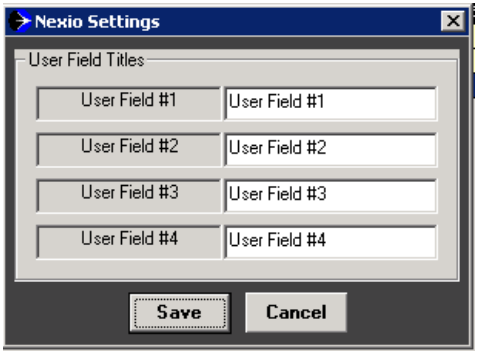
3 Click **Save** to accept the changes and close the window.

NEXIO Settings

You can customize the names of the four user fields seen throughout the application. You can use these fields to search for clips in the MediaBase and use them in **MediaBase Filter Settings**.

To access NEXIO Settings

1 Click on **Settings** > **NEXIO Settings**.



2 Enter a descriptive name for one or more of the **User Fields**.

3 Click **Save** to accept the changes and close the window.

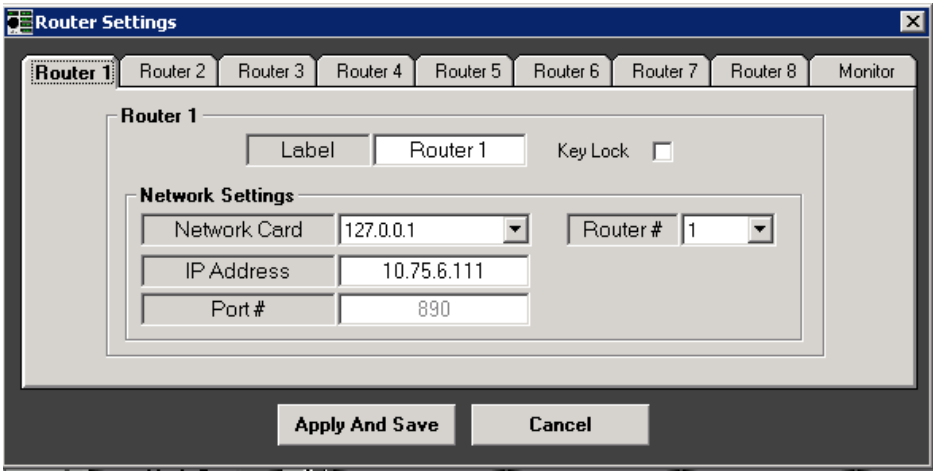
Router Settings

The PPC can control up to eight different routers. Use this area to configure each one separately.

Routers

To access Router Settings

1 Click on **Settings** > **Router Settings**.

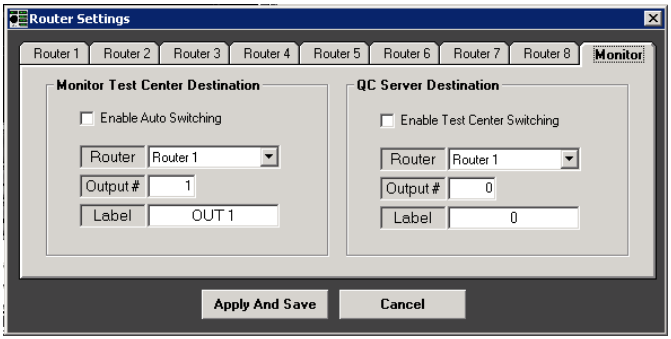


- **Label.** Use this field to assign a name to a router.
- **Network Card.** Enter the IP Address of the local network card.
- **IP address.** This is the IP address of the *DSL module*. If you have an ICM at your facility already and that ICM is already hooked onto the router, set the IP address to the IP address of the ICM (the factory default is 131). Then choose the router number in the DSL which is probably your first router. The PPC sends the network command through the network from PPC to the ICM's DS_LLM and then routes that out to the router. If you don't have an ICM, then set the IP address as 192.168.90.141. The default is 141 for the PPC; therefore the PPC is pointing to itself. Run the DS_LLM locally on your machine. The DS_LLM sends information out serially to the router.

2 Click **Apply And Save** to accept the changes and close the window.

Monitoring Tab

Use this for *Auto Switching* (also called *Focus Routing)*. If you enable *Auto Switching*, choose the router and the output. When you select a VR server, it will look up the service configuration for its input. A route is automatically sent from the input you selected to the output and acts as an automatic router. No matter what you select in the application, that channel is always routed to what you've selected.



To access the Monitoring Tab in Router Settings

1. Click on **Settings** > **Router Settings**.
2. Select the **Monitor** tab.
3. Click **Apply and Save** to accept the changes and close the window.

MediaBase Filter Settings

You can create and give a descriptive name to up to eight filters. You can base the filter on any column and then specify what you want that information to start with or to contain. You can use wild-cards to customize the filtering. You can use one or more wild-cards in any configuration. For example, you can use *sp*, sp*, or *sp. Then anytime the column you are filtering for starts with or contains what you're looking for, you will see those particular clips in the MediaBase under filters.

To create and apply MediaBase Filter Settings

1. Select **Settings** > **MediaBase Filter Settings**.

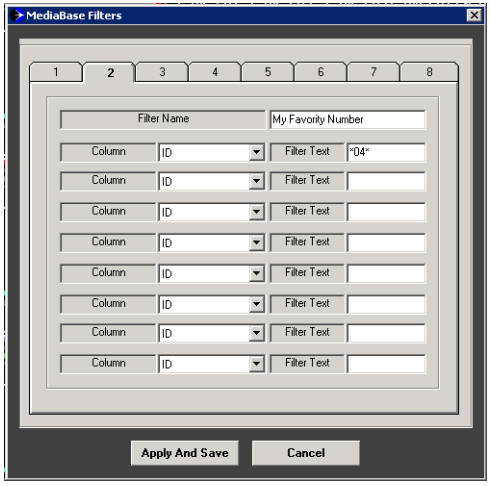
   The **MediaBase Filters** window displays.

2. Select a tab from the eight options available.
3. (optional) Enter a name for the filter.

4 Select a column name from the drop-down menu.

5 In the corresponding **Filter Text** field, enter the information you want to filter for.

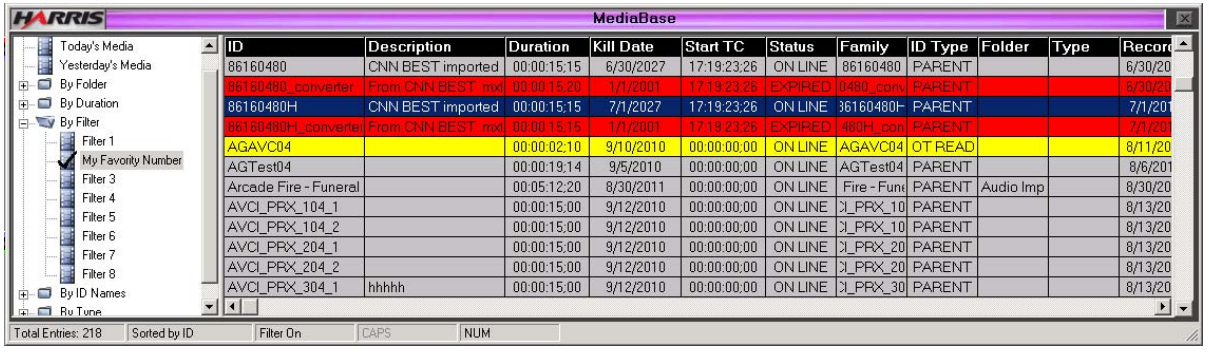
6 Click **Apply And Save** to accept the changes and close the window.



7 Open the **MediaBase** or any module that contains a MediaBase view.

8 In the **MediaBase tree**, click on the **Filter** you recreated.

A check mark displays over the filter that is currently being used and the clips that meet the criteria are listed in the MediaBase.

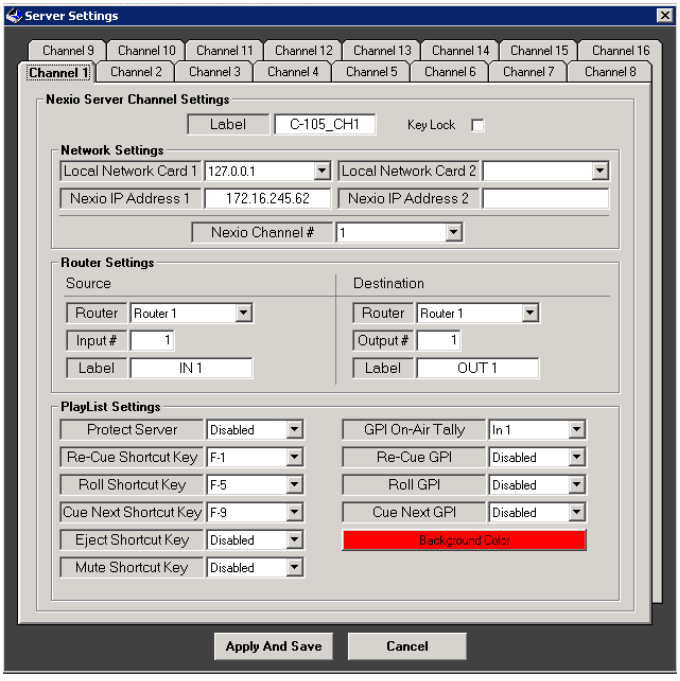


Server Settings

Server Settings is the only area that needs to be configured. The other settings have defaults that are generally good enough to get you started. The PPC can control up to 16 server channels. Each one of the server channels is configured on these Settings tabs.

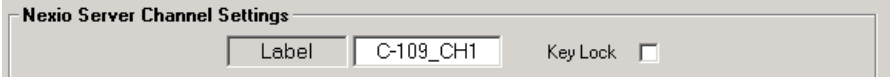
To access Server Settings

1 Select **Settings** > **Server Settings**.



The following options are available in the Server Settings window:

- **NEXIO Server Channel Settings.**

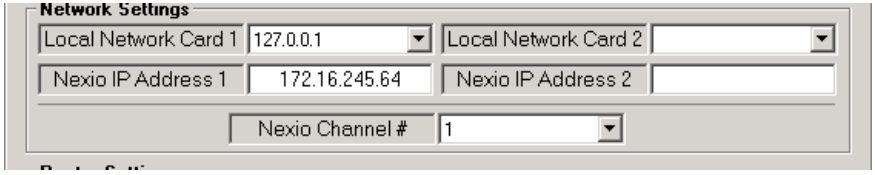


  - **The Label.** The first thing on the tab is the label for the channels. You can name the channels whatever you like. However, they are typically given a double name made up of a color and a number such as Red VR27. In general, directors will call to roll or cue a channel color such as red, blue, green, or yellow. For example, the direct may call out, "Cue red." The

second aspect is the actual number or name of the router or server such as VR 27. For this reason, we recommend giving each channel a double name.

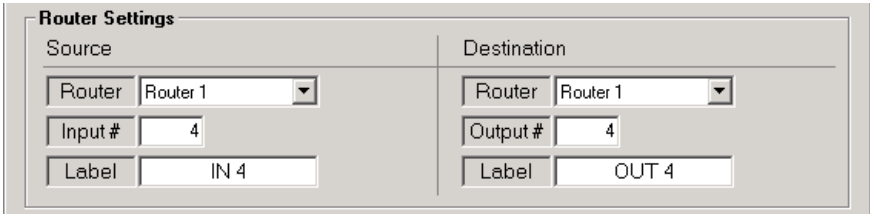
- **Key Lock.** Key lock was designed to help you keep an eye on a channel but not to control it. For example, you may have a channel that's running on automation. You may need to keep an eye out on that channel, so you can configure it and key lock it. In this way even though it cannot be controlled, you can still monitor what's going on.

- **Network settings.** The PPC contains two network cards. You can have up to four. However, there is no advantage to going beyond two which is discussed in more detail for ***Using News Link*** on page 117.

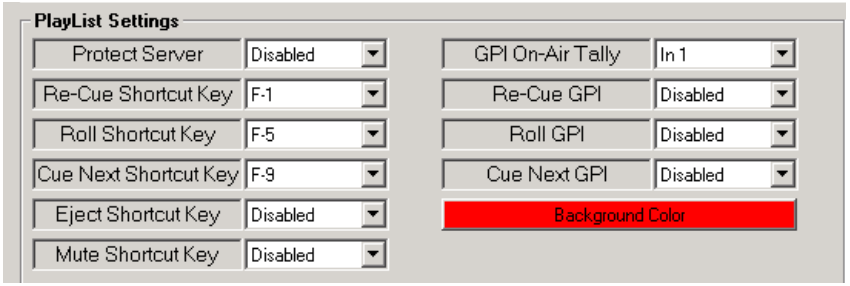


- **Local Network Cards.** Select one of the four local network cards. Then type in the NEXIO IP address. This Local Network Card is actually the network card inside the PPC. This is where the PPC IP Address is entered. The NEXIO IP address is for the server that you are controlling.
- **Redundant Networks.** For redundancy, you can also set up a second network. However, to do this you must have two network cards in your PPC; each one is set to a different IP address.
- **Network Failover.** The NEXIO channel is used for network failover. If the first path to the NEXIO is lost, the PPC will automatically failover to the other path. Only one path is used at a time. However, you may not know which path is being used at any particular time because the PPC jumps back and forth between paths based on network bandwidth and bit rates.
- **NEXIO channel numbers.** This is the actual server channel on the NEXIO. The default is set for the first channel. You can choose any of the channels as the default in this location.

- **Routing settings.** This optional setting is used if you have the routing capabilities within the software. Otherwise, use the default. Basically, this uses one of the eight available routers.
  - **Input.** This input number is actually the BNC connector that this channel is being applied to. If a red BR one is going into input 27, then enter 27 here. If you have a label called IN 27, then this would be the pneumonic that's used on the router. The same thing applies to the output. If it's a recordable channel, it has an output of the router going into it. Enter that information here.

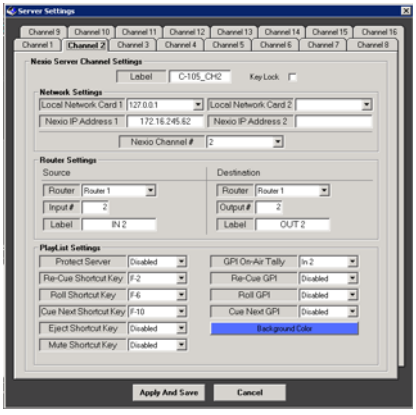


- **Playlist Settings.** This area contains some of the playlist functionalities. After you have made changes, click **Apply And Save** and restart the applications.

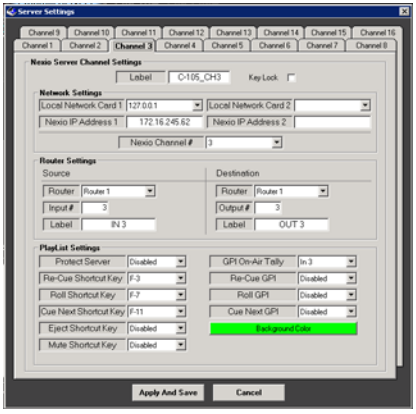


  - **Protect Server.** If Server One is the main server channel, you can have Server Channel Two track Server One. Anytime a clip is loaded into Server One, it will also load into Server Two. This creates redundancy. This is not used that often because it doubles your required playout ports, so this feature is usually disabled.
  - **Re-cue.** This is a shortcut key that you can assign to any key. We recommend using the default F keys. For Server Channel One, the default to re-cue is F1 which takes the clip to the first frame. F5 would roll the clip. F9 advances the clip down the playlist. For Server Channel Two, the default keys are F2, F6, and F10, etc. But those can be reconfigured to whatever you want.
  - **Eject Shortcut Key.** If you want the ability to eject, assign a shortcut key here. The default to eject a clip is to press the *Stop* button twice.
  - **GPI On-air Tally.** Tallies are supported and we highly recommend that you enable tallies. They work by moving the tally out of the production switcher and applying it to the PPC. When that channel is on the air, the tally displays a message indicating that the channel is on the air. It also protects you from accidentally cueing a channel that is currently on air. If the you accidentally hit the Cue key, or if you want to load a clip into that channel, you are given a warning message asking if you want to do that. On the GPI hardware on the back of the PPC, this indicates which GPI input number is set as a tally for a specific channel.

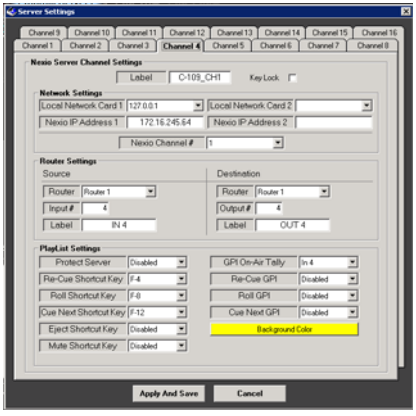
- **Mute Shortcut Key.** You can also assign a Mute shortcut key which toggles between muting and un-muting the audio on a channel.
- **Re-Cue GPI.** You can build your own GPI box to send out pulses and roll the channels. You can also hook those onto the NEXIO directly, and the PPC will still support it. The PPC doesn't care what triggers the clip to roll. You can roll it via the PPC software or from a GPI that is connected onto the back of the NEXIO server.
- **Background Color.** Assign a color for the channels here. The advantage of using a background color is that you can easily identify the channels by the colors framing them. A segment of the line on the playlist also displays in that color to let you know that a particular clip is scheduled to play out of that corresponding channel.



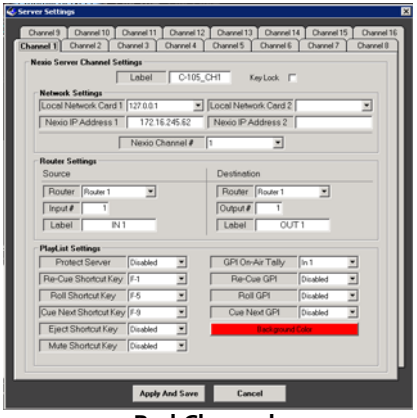
Blue Channel



Green Channel



Yellow Channel



Red Channel

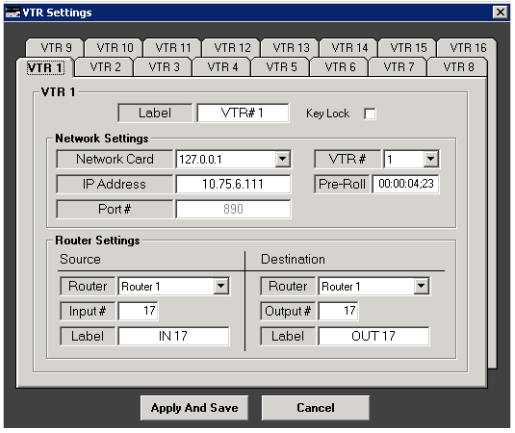
2 Click **Apply And Save** to accept the changes and close the window.

VTR Settings

VTR settings are very similar to routing settings. You can choose your label, the network card, the IP address of the DS_LLM and your local network card. You can configure up to 16 VTRs.

To access VTR Settings

1 Click on **Settings** > **VTR Settings**.



- **Label.** Use this field to assign a name to a router.
- **Network Card.** Enter the IP Address of the local network card.
- **IP address.** This is the IP address of the *DSL module*. If you have an ICM at your facility that is already attached to the router, set the IP address to the ICM (the factory default is 131). Then choose the router number in the DSL which is probably your first router. The PPC sends the network command through the network from PPC to the ICM's DS_LLM and then routes that out to the router. If you don't have an ICM, then set the IP address as 192.168.90.141. The default is 141 for the PPC; therefore the PPC is pointing to itself. Run the DS_LLM locally on your machine. The DS_LLM sends information out serially to the router.
- **Pre-roll.** This is the amount of time PPC uses to pre-roll. A good number is 4 seconds and 23 frames which works very well.
- **Routing Settings.** You can configure the routing. It applies to the Auto Switch routing as well.

If you change the IP address of the PPC, and the supplies in ICM also, also go through the Routing Settings and the VTR settings and change this value as well. Most of the time, the PPC will be using the local DS_LLM.

2 Click **Apply And Save** to accept the changes and close the window.

3 Using PPC Views

Almost everything you need to control the PPC is located on the icon menu bar. This chapter contains information about the seven items highlighted in red.

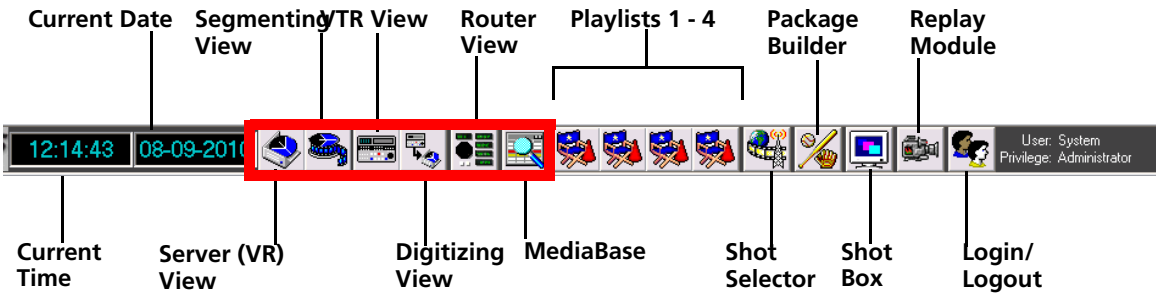


Figure 3-1 The PPC Icon Menu

This section describes the functions of the following icon menu options:

- **Server View.** Use this icon to control the server channels. The PPC can control up to 16 channels. Unlike the NXOS, these channels are agile which means that they can be configured to any one of the server channels.
- **Segmenting View.** Even though this is not needed for the PPC, Segmenting View has extended basic subclip creation to a more sophisticated level. With segmenting, you can use a single clip to create many subclips quickly and easily.
- **VTR View.** VTRs can be used in PPC for batch digitizing. If you want to use PPC for batch digitizing when not on the air, you will need the digitizing tool.

- **Digitizing View and Digitizing Media.** Digitizing is the recording of video and audio source material as a digital signal. When you digitize media, you ingest it into a digital system such as a non-linear editing system or a digital video server system. Digitizing through PPC generally refers to ingesting video or audio media from a live feed or pre-recorded from a VTR.
- **Routing View.** Use this area to control a router. You can control a variety of different manufacture routers (this is covered in the engineering section). You can have up to eight different routers. You have different sources and destinations so this operates as a routing panel. You can choose the source you're interested in, choose the destination, and press *Take* to switch to the new router. The drop-down menus are configured by the Administrator who can assign different icons and labels. This is an alternative to using a routing panel.
- **MediaBase**. MediaBase shows the inventory of media that resides in the server. You can find the media servers in the four domain trees in the left navigation pane. All media IDs are represented by a single entry in MediaBase. Different types of ID are represented by different colors.

Server View

This is a basic server channel view; it looks like and functions like a VTR. You can open up to eight servers at one time on the screen. Everything you need to know is in the system menu.

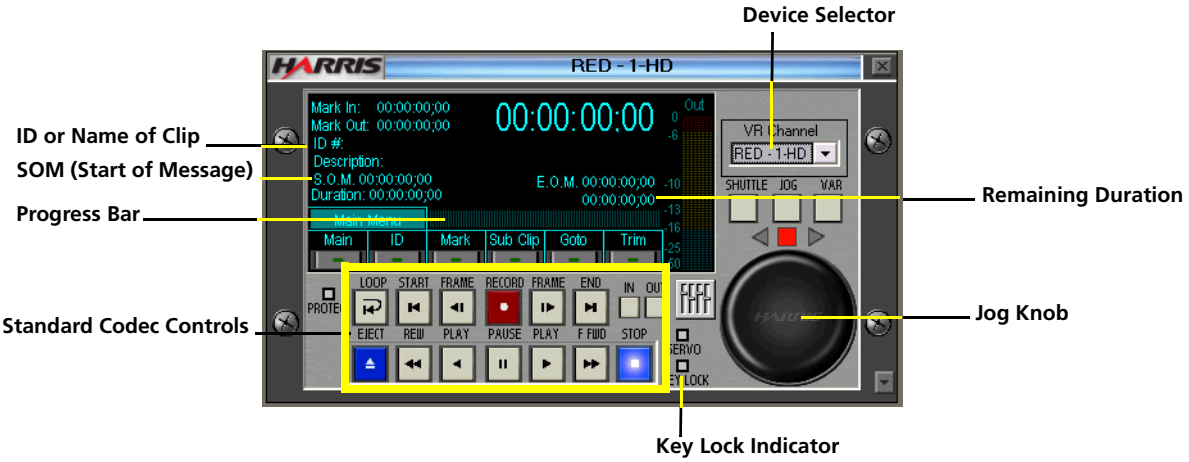


Figure 3-2 Server View

Server View Buttons

	**Loop.** To use this feature, press Loop on and then Play. When the clip reaches the last frame, it will automatically replay the clip again.
	**Start.** This takes you to the first frame.
	**Frame Back.** Use this to go one frame backwards.
	**Record.**
	**Frame Forward.** Go one frame forward.
	**End.** This you to the last frame.
	**Eject.** Use this to unload the clip.
	**Rewind.** Use to rewind the clip.
	**Play Reverse.** Use to play forward.
	**Pause.**
	**Play.** Use to play forward.
	**Fast forward.** Fast forward through the clip.
	**Stop.** Use to stop the clip.

Opening Server View

To open Server View

- On the icon menu, click on **Open New VR View** 

The **Server View** window displays.

Tip You can click on that icon to open up to eight server channels. In the figure below, you can see that three of the servers have the extended view open.

To switch server channels

- Do one of the following:
  - Select a server channel from the drop-down menu.

  - Click on the button in the lower right to open the lower panel. From here, you can quickly jump between different server channels.

To start recording in Server View

- Hold down the **Left** mouse button and tap the **Right** mouse button. It will go into record. The button changes from dark red to bright red.

Not recording

Recording

Using Loop

To use this feature, press Loop on and then Play. When the clip reaches the last frame, it will automatically replay the clip again. You don't have to leave the Server View window open to use loop. You can close the window and the looping continues. You can use this feature if you have background video that you want to continuously roll. For example, if you are running some B-roll footage and it's running out, turn on the loop and it will loop the footage. As soon as you load another clip into that channel, the loop is automatically turned off.

Naming the Channels

We recommend naming the channels by color because, from a production standpoint, channels are usually named red, green, yellow, or blue. The actual server usually has a color associated with it to easily distinguish the servers from each other.

Using Jog Knob

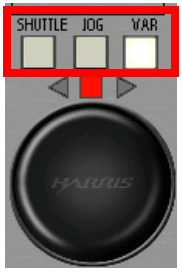
There are two views that use the Job Knob: **Server View** and **VTR View**. You can use the Job Knob to Shuttle, Jog, or use Variable Speed to move through a clip. Use Variable Speed to play back media with finely adjusted speed. The search dial in the VTR view works in the same way as a conventional VTR. PPC pauses the VTR when the mouse is released to make it easier for you to search through material quickly.

Tip You can easily return to a mark in or out point by holding down the SHIFT key while clicking the IN or OUT buttons 

in the VTR view.

To use the search dial

1. Open either the **Server View** or **VTR View**.
2. Select the **Device** or **VTR** with the loaded clip ID.
3. Click one of the following the search modes:
   - **Shuttle.** The Shuttle control allows you to move forward or backward over the tape at different speeds. When Shuttle is selected, the farther you turn the search knob, the faster the playback speed.
   - **Jog.** The Jog control allows you to roll over the tape one frame at a time.
   - **Var.** The Var (variable clip speed) control allows you to vary the tape's speed as it plays out.



4. Hold down the Left mouse button and move either to the left or right to jog forward or reverse. If you release the left mouse button, it will snap back to the beginning of the clip and pause the media.

Server View Menus

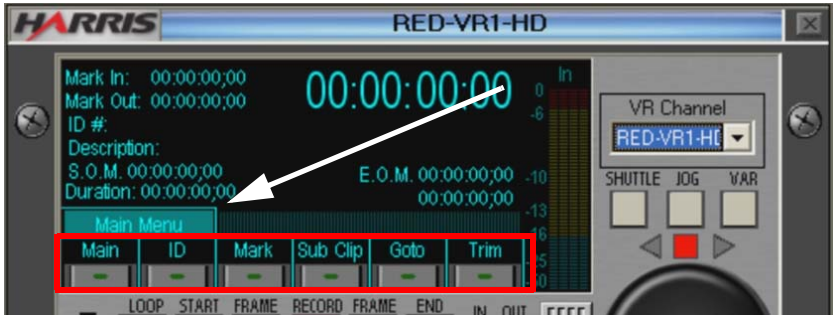
The Main Menu has five menus:

- **ID Menu.** Contains functions for Add, Info, Load, and Protect.
- **Mark menu.** Contains functions for Sub Clip, In, Out, Re-Stripe, and Fast-Cue.
- **Sub Clip Menu.** Contains functions for In, Out, Add, and Segmenting.
- **Goto Menu.** Contains functions for In, Out, Preset, and Fast Cue.
- **Trim Menu.** Contains functions for In, Out, Front, and Back.

Main Menu

To switch between the Server View Menus

- In **Server View** from the **Main** menu, click on any of the other available menus. You can only go to the other menus from the Main menu. The area just above the buttons indicates which menu you are in.



ID Menu

Use this menu to add a new IDs to the server channel, update information about a clip, load it into the server, and protect it from deletion.

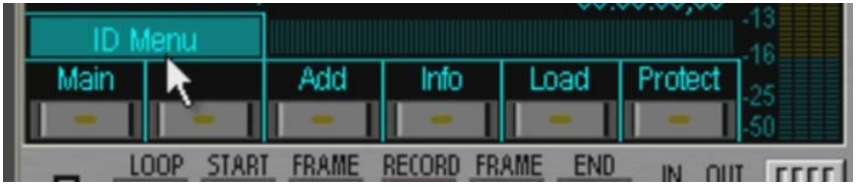


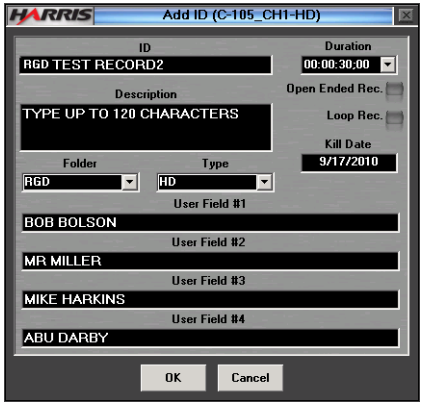
Figure 3-3 Server View — ID Menu

Add Window

To add an ID

1 In the **ID Menu**, click on **Add** to add an **ID** to the server.

The **Add ID** window displays.



2 Enter the following information:

- **ID.** Enter a name for the ID.

Tip Use uppercase only. Using uppercase and lowercase creates different IDs. You can type in a description up to 120 characters.

- **Duration.** You can either specify a duration in the configuration. Or the administrator can create a list to choose from. You can enter durations as short as a one frame and up to two hours.
- **Open Ended Rec.** Select this to continuously record media. If you choose an open-ended recording, that recording will continue until it reaches the administrator maximum record set in configuration, or you can stop the recording at any time. The ID will record forever or until the administrator setting terminates the recording after so many hours. Selecting this option automatically grays out duration.
- **Description.** You can enter up to 120 characters.
- **Loop Rec.** Use to record a news feed 24 hours a day but only take three hours of hard drive space. You have those three hours to jump back.

We recommend not using loop recording on the newer NEXIO systems.

- **Kill Date.** Enter the date the clip expires. The clip is not deleted, but displays as red in the MediaBase. Use this to determine which clips need to be purged on a certain date.
- **Folder.** Select a Folder or Agency from the drop-down menu. Harris has adopted both names Agency and Folder interchangeably.

Tip You can also create a new folder by typing it in.

- **Type.** Select a type from the drop-down menu or type in a name. This field is similar to the Agency field but only contains up to five characters. You can use it as another way sort information.
- **User Fields #1 to #4.** There are four user definable fields that you can enter a name for. They support drop-downs to import text files and drop-downs menus. You can use names such as the names of players, teams, locations, etc.

3 Click **OK** to accept the changes and close the window.

You see that the **ID** is **RGD TEST RECORD**. The duration is one frame a long.

Duration is 1 frame long

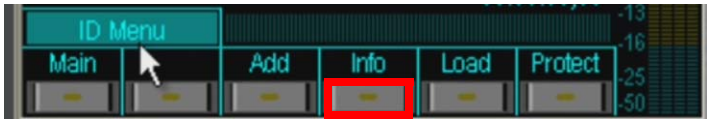
Information Window

Use this window to update information about clips that already exist.

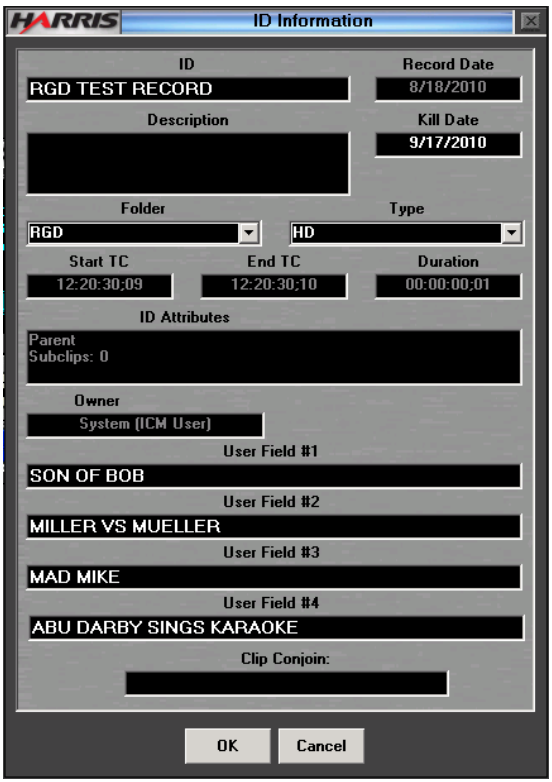
To update information about a server channel

1 In the **Server View** window, click on **ID** to activate the **ID Menu**.

2 Press **Info** on the menu.



The **ID Information** window displays.



3 Add or change information for the media that is currently loaded.

4 Click **OK** to save and close the window.

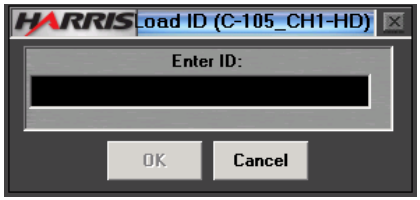
Load Window

To load a Clip ID

1 In the **Server View** window, click on **ID** to activate the **ID Menu**.

2 Press **Load** on the menu.

The **Load ID** window displays.



3 Enter the **ID name** and then press **OK** to load the clip into the server channel.

Protect Button

Use this to protect the video from being deleted. The video would first have to be unprotected to be deleted which can be done on any NEXIO workstation.

To protect a clip

1 In the **Server View** window, click on **ID** to activate the **ID Menu**.

2 Press **Protect** on the menu.

The **Protect** box turns red.

Mark menu

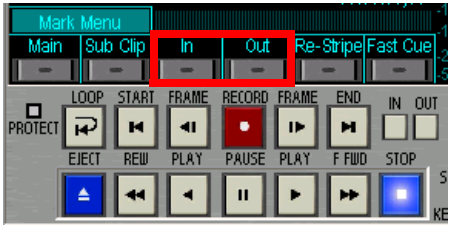
Use this menu to make subclips. You can do this by marking an In point and an Out point.

Subclips

You can make as many subclips as you want off of parent clips. They do not take additional hard drive space. For example, if you have a three-hour clip and created 157 clips, you would still be only using three hours of hard drive space. The parent clip is now protected from being deleted because it has subclips associated with it. If you were able to delete the parent, the subclips would have no video associated with them. Therefore, the parent clip is automatically protected. If you want to delete the parent, you must first delete all of the associated subclips.

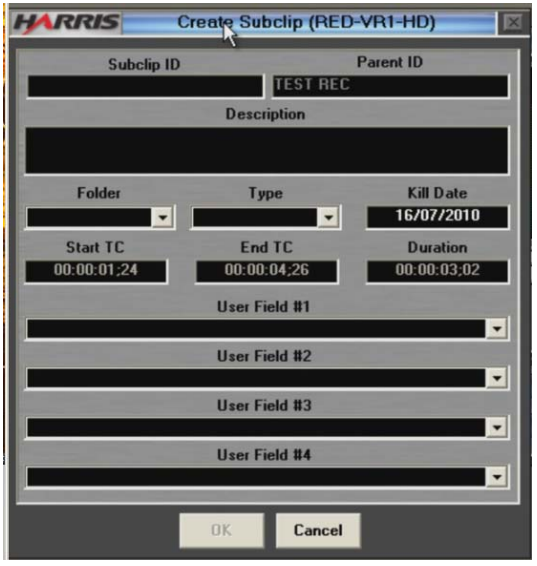
To create a subclip

1. In the **Server View** window, click on **Main** to activate the **Main Menu**.
2. Press **Mark** on the menu.



3. While a clip is playing, press **In** and **Out** on the menu to select the in and out points.
4. Once you have marked the in and out points, press **Sub Clip**.

   The **Create Subclip** window displays. This window also contains the name of the server channel that the parent clip is on.



5 A subclip is given an ID name or you can enter a name for the subclip.

The parent ID, which is the actual ID that it's coming from, is shown.

6 Enter the metadata for the subclip. This includes *Description, Folder, Type, Kill Date,* and *User Fields*.

7 Press **OK** to create the subclip.

Restripe

Use this feature to re-stripe a clip that already exists. The clip can be in record, or it can be paused. For example if you want a clip to start at 10 hours, after you re-stripe it, you will see that the SOM is 10 hours. If you play through this clip, everything moves up and starts at 10 hours. Most of the time, the news environment uses Time of Day timecode. But on occasion, there is a need to re-stripe clip to line it up with another clip.

You can also re-stripe a current clip frame. If you pause this clip and then go under re-stripe, you can specify the current frame to be 10 hours and press re-stripe. The current frame is re-striped at 10 hours. This forces the clip to re-cue to the beginning. You can press Go To to return to that frame.

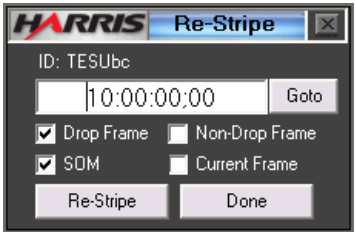
To Re-Stripe a clip

1 In the **Server View** window, click on **Main** to activate the **Main Menu**.

2 Press **Mark** on the menu.

3 Press **Re-Stripe**.

The **Re-Stripe** window displays.



4 Enter the time you want the clip to be re-striped with.

5 Select one or more of the following:

- **Drop Frame.** This is a default setting.
- **Non-Drop Frame.**
- **Current Frame.** If you choose Current Frame, the clip is re-striped from the current frame the clip is on. If you don't choose Current Frame, the clip is re-striped from the SOM.
- **SOM (start of message).** This is a default setting.

6 Press **Re-Stripe**.

7 Press **Yes** to confirm the re-striping.

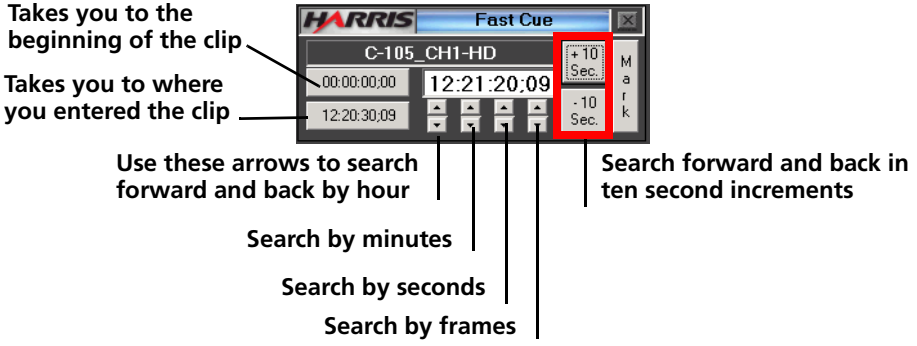
Fast Cue

Use Fast Cue to quickly jump through a clip. For example if you have a three hour clip, you can use Fast Cue to jump through the clip in whatever increment of time you want. You can move through the clip in an hour, a minute, or a second. If you know the exact time code, you can also type in the time code that you're interested in and the clip will go to that time code. You can also jump 10 seconds forward and 10 seconds backwards as well. There is also a button that indicates where you were at the point in the clip when you opened Fast Cue. You can press that button to return to where you were when the clip was first opened.

To use Fast Cue to search a clip

1. In the **Server View** window, click on **Main** to activate the **Main Menu**.
2. Press **Mark** on the menu.
3. Press **Fast Cue**.

The **Fast Cue** window displays.

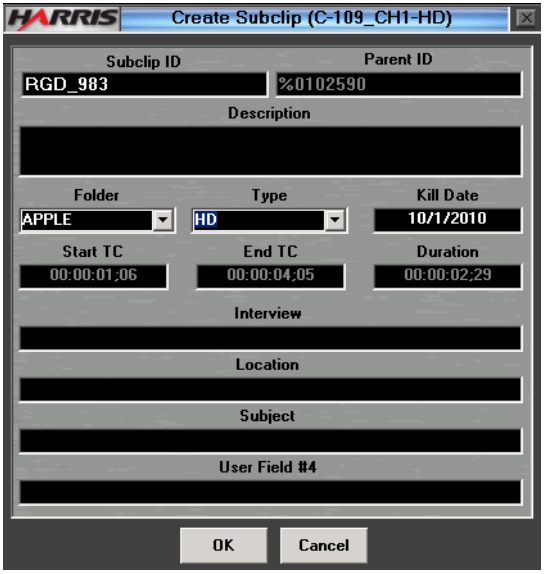


Sub Clip Menu

Use this menu to create subclips from media that is loaded in the server channel.

To create a subclip

1. In **Server View** from the **Main** menu, click on Sub Clip.
2. Load a clip into the server channel and press **Play**.
3. Press the **In** and **Out** buttons to surround the segment you want.
4. Press **Add** to open the **Create Subclip** window.



5. Enter the appropriate information and press **OK** to accept the changes and close the window.

Goto Menu

In the Goto menu, you can use the In Point and Out Point buttons to store two points. You can also change the preset for a record out point and you can do a crash record as well.

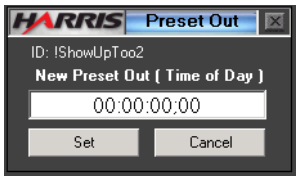
Using Preset

Preset only works when you are in record. For examples, if you are recording a game from 7 PM to 10 PM but the game is going long, use this to extend the record past 10 o'clock by changing the preset. Preset will only work while you are in record, and it is not duration-based; therefore, do not type in three hours. Instead, type in 11 PM or 2300 hours while the game is being recorded.

To change an out point preset on a clip that is recording

1 While a clip is recording go into the **Goto Menu**, press **Preset**.

The **Preset** window displays.



2 Enter the **time** (i.e. 22:00:00 or 05:00:00) to end the recording.

3 Click **Set** to save the changes and close the window.

Using Crash Record

To create a Crash Record

1 In the **Goto Menu**, press **Preset**.

2 Select the server channel you want to create the crash record.

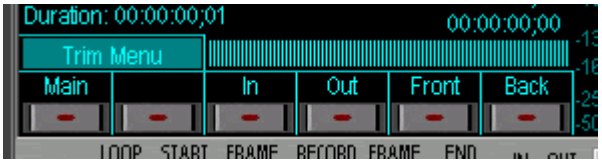
3 Press **CTRL+ALT+Q** to go into a crash record.

A brief message will flash indicating that the **Crash Record** is starting.

It automatically generates an ID and will continue to record for whatever the duration of the clip is.

Trim Menu

This only works on unprotected clips that do not have subclips. You can mark an In point to trim off the front of the clip and an Out point to trim off the end of the clip. Therefore, the In point becomes the new first frame and the Out point becomes the last frame.



To trim a clip

1. In the **Server View**, play an **unprotected** clip.
2. Use the **In** button on the **Trim Menu** to select the new first frame of the clip.
3. Then press **Front**. This removes all the frames that come before the new **In Point**.
4. Use the **Out** button to select a new last frame.
5. Press **Back** to remove all the frames that follow the **Out Point**.

Audio Channels

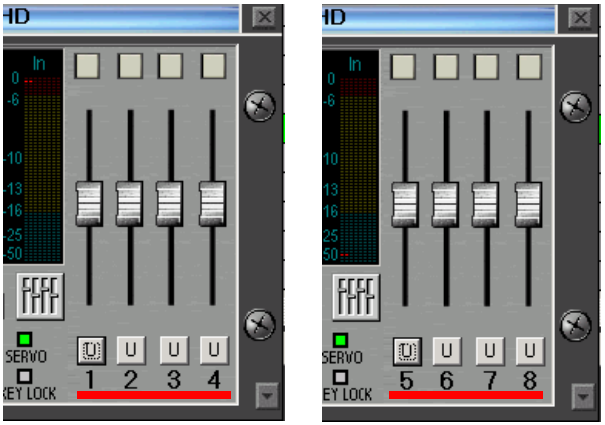
You can control basic audio functions from Server View by pressing the audio sliders to the left of the Job Knob. You can control up to eight audio channels. If you are the Administrator, there is an LLM setting you can use to enable or disable the faders.

To toggle between audio and job

- Use the **Audio Sliders** icon located to the left of the **Jog** button.

To view up to eight channels

- If you have eight channels configured, use the **Audio Sliders** icon to toggle between them and Jog.



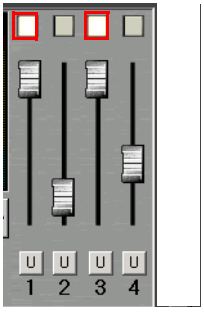
Using Link and Unity

If you link two or more audio together, they become linked. However, the audio is not locked together. For example, if you click on the U, that brings a linked audio back to unity, however the other audio does not move. Typically, these are left in the default unity position.

To link two or more audio channels

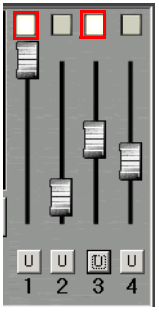
You can also sync two or more audio channels together.

- Click on the boxes above the sliders to link channels.



Channels 1 and 3 are linked. Typically, this means they move together.

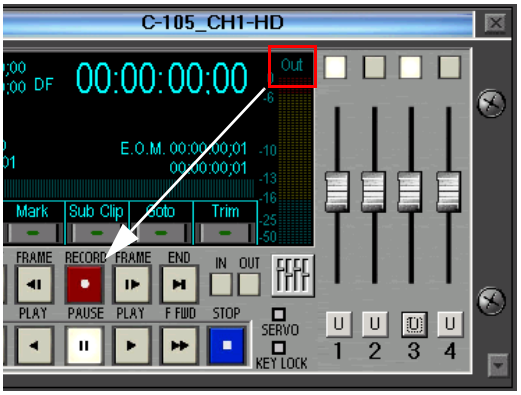
However, if you click on the U on one of the linked audio, only that one will move.



In and Out States

The Note State indicates whether your audio is input or output. If you are in record, then this would be the In State and the faders would adjust the input. In the Out State, they will adjust the output.

In record, audio is in the In State.



In play, audio is in the Out State.

Segmenting View

Even though this is not needed for the PPC, Segmenting View has extended basic subclip creation to a more sophisticated level. Through segmenting, you can take a single clip and create many subclips quickly and easily.

The Segmenting view is used to create and view subclips and virtual subclips. The Segmenting view contains basic information about the loaded ID in the timecode window and a list of virtual subclips.

Virtual subclips are pointers to timecode positions on the currently loaded ID. They do not display in the MediaBase and can only be viewed and edited with the segmenting view. After creating virtual subclips, you can create real subclips which are available to all users in the MediaBase.

To open Segmenting View

- On the icon menu, click on **Open New Segmenting View** 

The **Segmenting View** window displays.

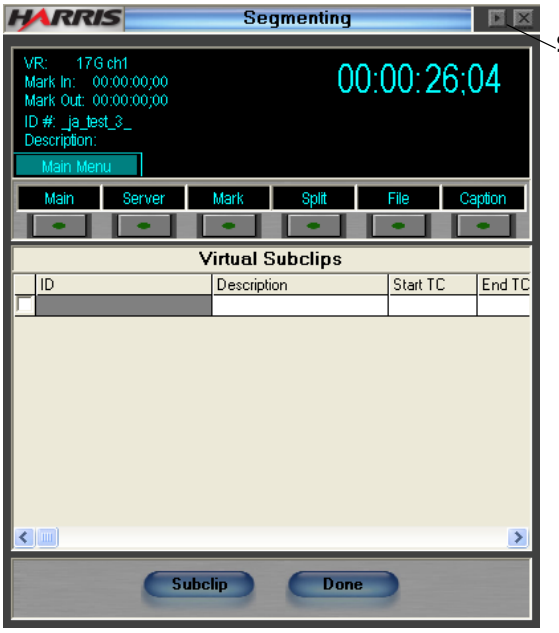


Figure 3-4 Server Segmenting View—Virtual Subclips List

Tip Click the **Size** button to extend the digitizing screen and display more clip information columns.

Server Segmenting Timecode Menus

The Server Segmenting view has menus located within the Timecode window for additional control. The Server Segmenting Timecode Main Menu contains buttons to access five additional menus: Server, Mark, Split, File, and Caption.

Figure 3-5 Server Segmenting Timecode Main Menu

The Server menu includes the following functions:

Figure 3-6 Server Segmenting Timecode Server Menu

- **Main.** Returns you to the Main Menu.
- **VR#.** Selects the server channel this segmenting session is using.
- **>>.** Scrolls server list to the right.
- **<<.** Scrolls server list to the left.

The Mark menu includes the following functions:

Figure 3-7 Server Segmenting Timecode Mark Menu

- **Main.** Returns you to the Main Menu.
- **In.** Stores current timecode location as an in point.
- **Out.** Stores current timecode location as an out point.
- **Add.** Adds a virtual subclip using the in and out points.
- **Update.** Updates the currently selected virtual subclips timecode pointers.
- **Fast Cue.** Opens the Fast Cue window. Use this to quickly jump to any timecode within the clip. See ***Fast Cue*** on page 57 for instructions.

The Split menu includes the following functions:

Figure 3-8 Server Segmenting Timecode Split Menu

- **Main.** Returns you to the Main Menu.
- **Split Duration#**. Shows available split durations.

The File menu includes the following functions:

Figure 3-9 Server Segmenting Timecode File Menu

- **Main.** Returns you to the Main Menu.
- **Open.** Opens a virtual subclip (*.vsc*) file.
- **Import.** Imports a virtual subclip (*.vsc*) file.
- **Save.** Saves a virtual subclip (*.vsc*) file.
- **Clear.** Clears all the virtual subclips on the grid.
- **Open TXT.** Opens a text-based file from a third-party application. For settings information, see ***Using News Link*** on page 117.

The Caption menu includes the following functions:

Figure 3-10 Server Segmenting Timecode Caption Menu

- **Main.** Returns you to the Main Menu.

Adding a Virtual Subclip

Virtual subclips can be created any time the server has a valid ID loaded. This means you can create virtual subclips even while the server is in record. Hundreds of virtual subclips can be created.

To create virtual subclips:

- Select one of the following options.
  - Adding the clip through the Server Segmenting view. See ***Adding a Virtual Subclip (Segmenting)*** on page 66.
  - Splitting the ID through the Split menu. See ***Splitting an ID*** on page 68.

When virtual subclips are created, the ID field is automatically filled.

Adding a Virtual Subclip (Segmenting)

You will need to use the Server View and the Segmenting View to perform this task.

To create virtual subclips

1 On the icon menu, click on **Open New VR View (Server View)** 

The **Server View** window displays.

2 Select a channel device in the **Server View** and load an **ID** to be segmented. See ***Load Window*** on page 53 for instructions if needed.

3 On the icon menu, click on **Open New Segmenting View** 

The **Segmenting View** window displays.

4 From the **Main** menu, select the same channel device in the **Segmenting View** that is selected in the **Server View**.

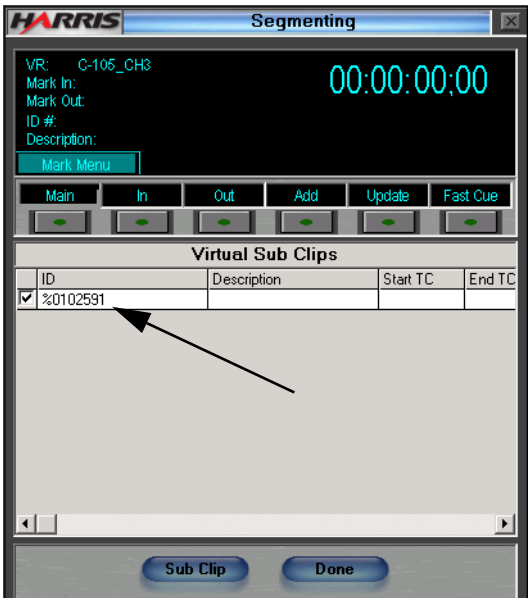
5 On the **Segmenting View Main Menu**, click **Mark**.

6 Click **In** at the mark in point.

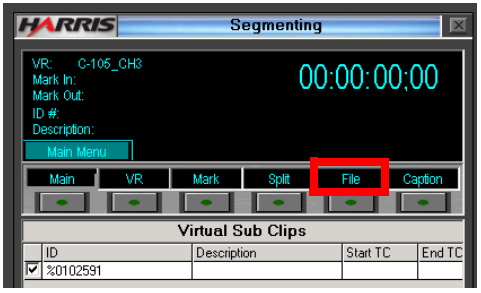
7 Click **Out** at the mark out point.

8 Click **Add**.

The virtual subclip displays in the grid.

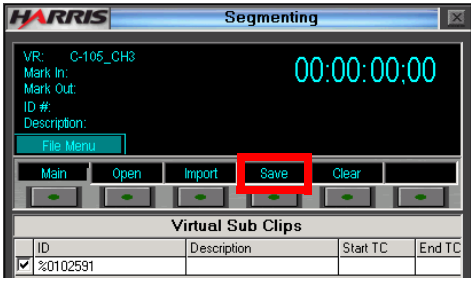


9 On the **Server View Main Menu**, click **File**.



The **File Menu** displays.

10 Click **Save** to open the **Save Virtual Sub Clip File** window and save the file.



Splitting an ID

Splitting IDs can be helpful when you need to create subclips from IDs with a long duration. A maximum of 100 virtual subclips can be made using the split command.

You will need to use the Server View and the Segmenting View to perform this task.

To split an ID

1 On the icon menu, click on **Open New VR View (Server View)** 

The **Server View** window displays.

2 Select a channel device in the **Server View** and load an **ID** to be segmented. See ***Load Window*** on page 53 for instructions if needed.

3 On the **Server View Main Menu**, select **Sub Clip** and then select **Seg**.

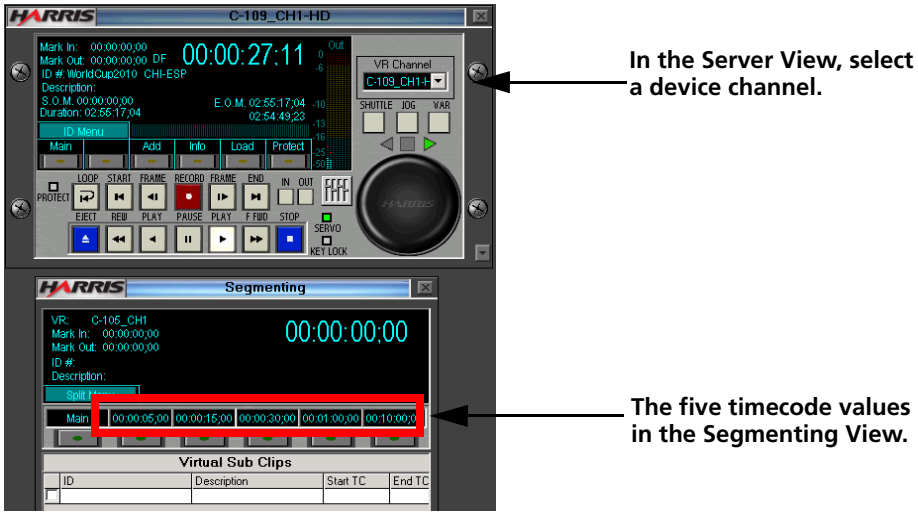
4 On the icon menu, click on **Open New Segmenting View** 

The **Segmenting View** window displays.

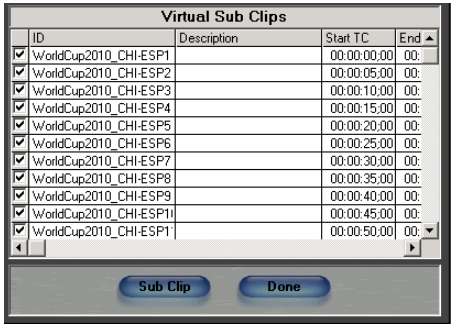
5 From the **Segmenting View Main** menu, select the same channel device in the **Segmenting View** that is selected in the **Server View**.

6 On the **Segmenting View Main Menu**, click **Mark**.

The Split menu shows five timecode values.



7 Click a timecode value to determine the number of virtual subclips to be made.
The virtual clips are created.



Tip You can customize the five split durations. See ***To split an ID*** on page 68.

8 Click **OK** to verify that the subclips have been created.

9 On the **Segmenting View File** menu, click **Save**.
The **Save Virtual Sub Clip File** window displays.

10 Name the clips and click **Save**.

Updating a Virtual Subclip

Use the ID Information box to edit all the information related to a virtual subclip.

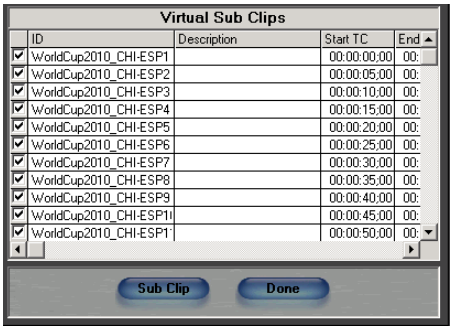
Tip You can edit the ID and description of a virtual subclip by entering the information in the Virtual Subclips list.

To update virtual subclip information

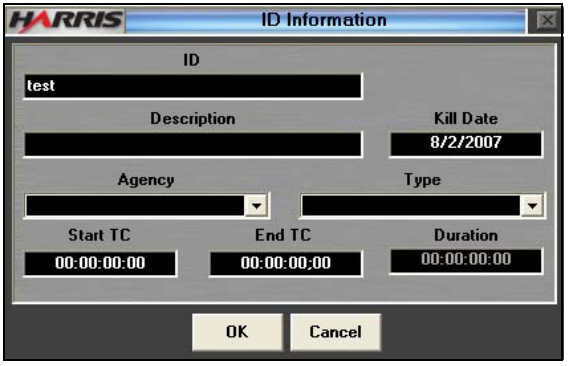
1 On the icon menu, click on **Open New Segmenting View** 

The **Segmenting View** window displays.

2 Double-click on a clip in the **Virtual Subclips** list.



The **ID Information** dialog box displays.



3 Edit the information as needed.

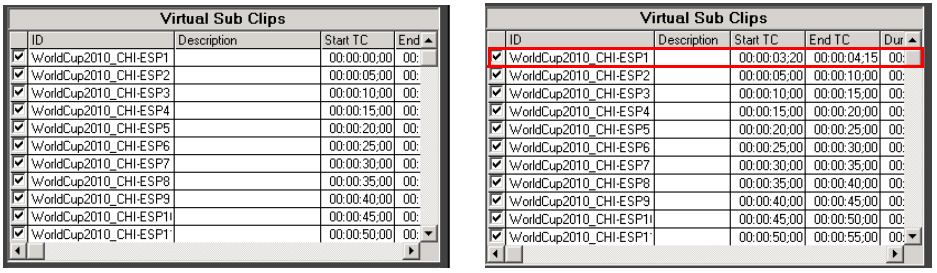
4 Click **OK** to accept an close the window.

Updating Mark In and Mark Out Points

To update mark in and mark out points

1. In the **Server View**, select a channel device and load a clip to create an updated virtual clip.
2. In the **Segmenting View** on the **Main** menu, click **Mark**.
3. In the **Server View**, play the clip.
4. Click **In** to select the new mark in point.
5. Click **Out** to select the new mark out point.
6. Click **Update**.

Updated clip



The timecode values associated with the selected virtual subclip are updated.

Navigating with Subclips

Use the virtual subclips list to navigate through the subclips:

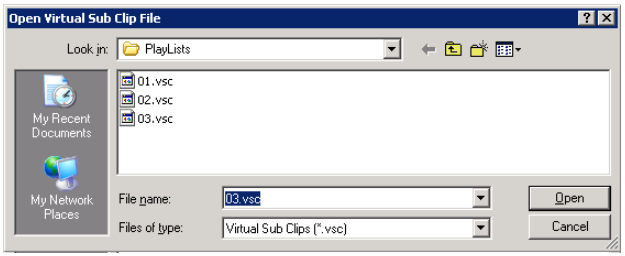
- Click on a subclip in the list to jump to its beginning or end.
- Click the ID, Description, or SOM columns to jump to the start of media (SOM).
- Click the EOM column or any column right of the EOM column to jump to the end of media (EOM).
- Right-click on a virtual subclip to display more navigation options.

Opening and Importing Virtual Subclip Lists

Virtual subclip lists are small files you can use to quickly restore subclips in your system or another system that is sharing the same material.

To open a virtual subclip file

- In the **Segmenting View**, select **File** menu and then click **Open**. This loads the .vsc file with the same ID names that were saved.



- In the **Segmenting View**, select **File** menu and then click **Import** and select a.vsc file. The import feature loads the file with incremental ID names of the currently loaded ID. Use Import when you are sharing your virtual subclip file with another station.

Deleting Virtual Subclips

You can delete a subclip from the subclips list.

To delete a clip from the list

1. Click any column of the clip to be deleted.
2. Right-click, click **Delete**.

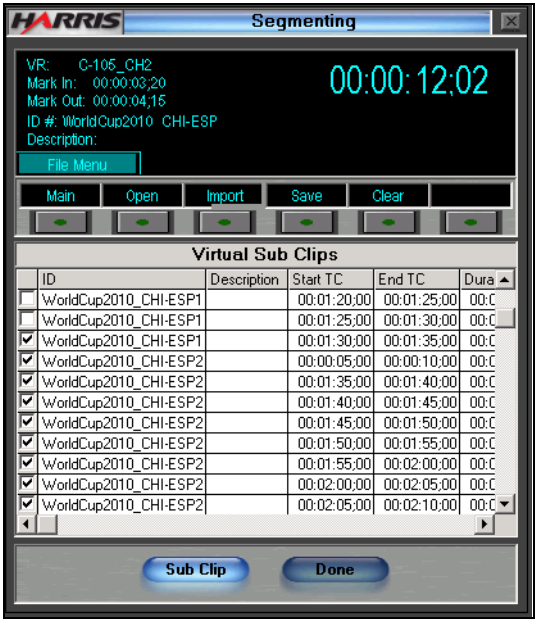
Creating Real Subclips

After a number of virtual subclips have been created, you can turn them into real subclips.

To create real subclips

1 On the icon menu, click on **Open New Segmenting View** 

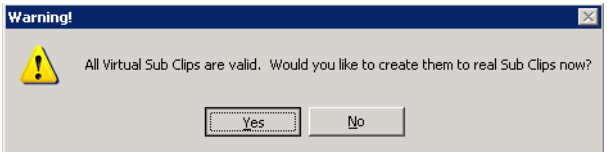
2 In the **Virtual Subclips** list, select the clips that you would like turned into real subclips.



3 Click **Sub Clip**.

PPC validates the clips to ensure that they can be converted to real subclips. If any problems occur, a message displays.

When all virtual subclips are valid a final warning displays.



4 Click **Yes** to change the virtual subclips to real subclips in the **MediaBase**.

VTR View

VTRs can be used in PPC mainly for batch digitizing. If you want to use PPC for batch digitizing when it's not on the air, you will need the digitizing tool  .

Use this to control up to 16 VTRs. You can simultaneously digitize eight of them if you want to. If you do not have an ICM, you can use this tool as an alternative to that application.

To open VTR View

- On the icon menu, click on **VTR View** 

The **VTR View** window displays.

You can use the PPC and VTRs make one-time adjustments that are not added to an event schedule and modify settings for videotape recording (VTR) devices.

Before performing any of these functions make sure that you have connected:

- Your VTR deck's video cable to a video server
- The VTR deck's RS-422 cable to RS-422 interface and have launched the Device Server (DS_LLM)

The VTR view contains information about videotape recorders. The controls on the VTR view are similar to the front of a VTR for basic control over the deck. The active VTR is represented in the top red title bar. When working with VTRs, all related forms show a red title bar.

Jog (Search) Dial

For more information on how to use this feature, see ***Using Jog Knob*** on page 48.

VTR Timecode Window

The VTR Timecode window shows a few parameters about the state of the deck.

The VTR Timecode window has the following parameters:

- **Mark In.** A pointer to mark the beginning of material.
- **Mark Out.** A pointer to mark the end of material.
- **Timecode.** The large timecode numbers represent the current timecode location of the VTR.

VTR Timecode Menus

The VTR view has menus located within the Timecode window for controlling the active VTR. The VTR Timecode Main Menu contains buttons for marking Goto In, Goto Out, Mark In, Mark Out, Fast Cue, and Digitize.

Figure 3-11 VTR Timecode Main Menu

The VTR view Timecode menu includes the following functions:

- **Goto In.** Cues the VTR to the mark in point.
- **Goto Out.** Cues the VTR to the mark out point.
- **Mark In.** Stores the current VTRs timecode as an in point.
- **Mark Out.** Stores the current VTRs timecode as an out point.
- **Fast Cue.** Opens the Fast Cue window, which allows you to enter a timecode to immediately move the VTR to a desired location. See ***Using Fast Cue*** on page 76 for instructions.
- **Digitize.** Shows the Digitizing window.

Selecting a VTR

The VTR view gives you manual control over a VTR. Manual control of the VTR works similar to the controls found on a standard VTR.

You can monitor and control multiple VTRs by opening more than one VTR view at the same time. A total of eight VTR Views can be opened simultaneously.

To select a VTR

- Do one of the following:
  - Select a VTR from the **VTR** list.
  - Click the arrow in the bottom right of the VTR view, then click a channel button.

Tip You can scroll down the list to view other VTRs.

The active VTR displays as a bright red button.

To hide the VTR buttons

- Either double-click on the VTR or press the arrow button in the lower right of the main VTR view.

Figure 3-12 VTR View

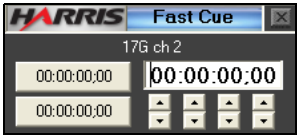
Using Fast Cue

Use Fast Cue to enter a timecode to immediately move the VTR to a location.

To use Fast Cue

1. Click **Open VTR View**.
2. Select a **VTR**.
3. In the timecode **Main** menu, click **Goto**, then click **Fast Cue**.

   The **Fast Cue** window displays.



4 Enter the timecode in the timecode field, or click the up and down arrows to scroll to the number.

The VTR automatically cues to the timecode entered.

Tip You can also do the following:

- Click the timecode 00:00:00;00 button  to cue the VTR to the start timecode.
- Click the lower timecode button to re-cue the VTR to its original location in the media.

Digitizing View and Digitizing Media

Digitizing is the recording of video and audio source material as a digital signal. When you digitize media, you ingest it into a digital system such as a non-linear editing system or a digital video server system. Digitizing through PPC generally refers to ingesting video or audio media from a live feed or pre-recorded from a VTR.

Use PPC batch digitizing to mark a number of in and out points on a tape, assign IDs and other parameters, then automatically digitize them onto the server.

You cannot digitize on a server that is currently recording or playing media.

Up to eight sessions of batch digitizing can occur simultaneously. Hundreds of in and out points can be stored in a single batch-digitizing list.

When digitizing media, do the following:

1 Create virtual clips. See ***Adding a Virtual Clip*** on page 84.

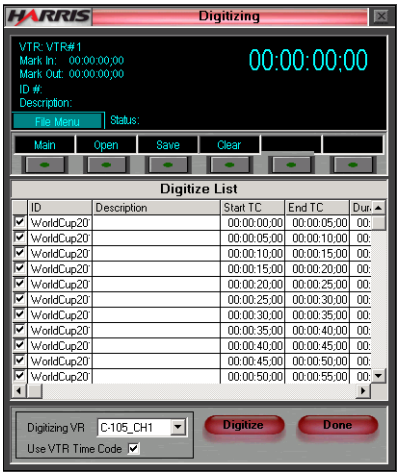
2 Digitize the virtual clips to make them available to all users in the MediaBase.

The Digitizing View is similar to the Segmenting View. The bottom portion of the windows contains a list of clips to be digitized.

To open Digitizing View

- On the icon menu, click on **Digitizing View** 

The **Digitizing View** window displays.



The PPC software automatically digitizes all the clips without manual intervention. After clips have been created, you can digitize them into the server.

Tip We recommend that you start a digitizing session by first selecting the VTR using the VTR view and then selecting **Digitize** from the **Main** timecode menu.

Digitizing Timecode Window Menus

The Digitizing View has menus located within the Timecode window for additional control. The Digitizing Timecode Main Menu contains buttons to access five additional menus: VTR, Mark, Split, File, and Caption.

Figure 3-13 Digitizing View—Timecode Main Menu

The VTR menu includes the following functions:

Figure 3-14 Digitizing View—Timecode VTR Menu

- **Main.** Returns you to the Main Menu.
- **VTR#.** Selects which VTR this digitizing form is using.
- **>>.** Scrolls the VTR list to the right.
- **<<.** Scrolls the VTR list to the left.

The Mark menu includes the following functions:

Figure 3-15 Digitizing View—Timecode Mark Menu

- **Main.** Returns you to the Main Menu.
- **In.** Stores the current timecode location as an in point.
- **Out.** Stores the current timecode location as an out point.
- **Add.** Adds a clip using the in and out points.
- **Update.** Updates the currently selected clip's timecode pointers.
- **Fast Cue.** Opens the Fast Cue window. Use this to quickly jump to any timecode within the clip. See ***Using Fast Cue*** on page 76 for instructions.

The Split menu includes the following functions:

Figure 3-16 Digitizing View—Timecode Split Menu

- **Main.** Returns you to the Main Menu.
- **Split Duration#**. Shows available split durations.

The File menu includes the following functions:

Figure 3-17 Digitizing View—Timecode File Menu

- **Main.** Returns you to the Main Menu.
- **Open.** Opens a virtual subclip (*.vsc*) file.
- **Save.** Saves a virtual subclip (*.vsc*) file.
- **Clear.** Clears all the virtual subclips on the grid.
- **Open Txt.** Opens a text (*.txt*) file of the digitized subclip.

The Caption menu includes the following functions:

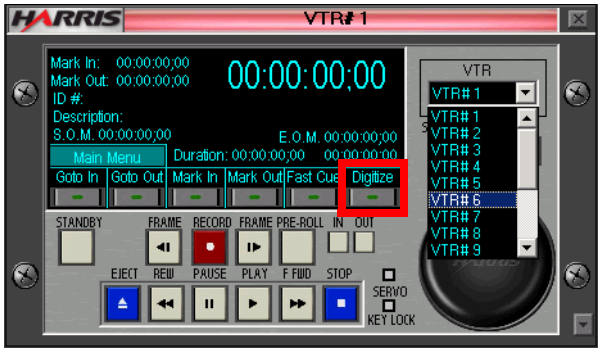
Figure 3-18 Digitizing View—Timecode Caption Menu

- **Main.** Returns you to the Main Menu.
- **View**. Not available in this version.
- **Open**. Not available in this version.

To digitize a virtual clip

1 From the icon menu, click on **Open VTR View**  .

2 Select a **VTR** from the drop-down menu.



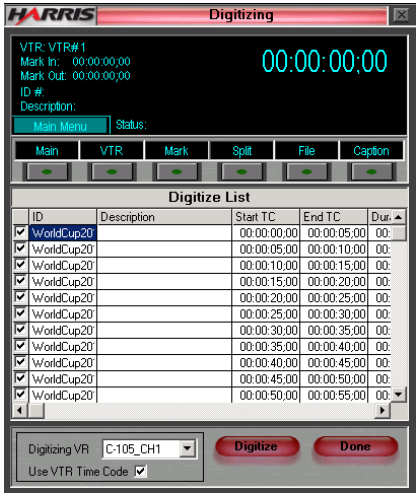
VTR drop-down menu

3 On the **Main** menu, click **Digitize**.

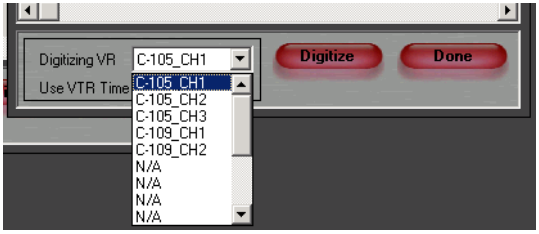
The **Digitizing** view displays.

4 Select the clip that you would like to digitize.

A check mark displays beside each selected clip.



5 Select the server channel to be used to record the clips from the list at the bottom of the form.



6 Click **Route** to route the VTR to the server.

Check the server and VTR settings before routing the devices and ensure that your use of the channel will not send a conflicting message with a current operation.

7 Enable **Use VTR Timecode** to match the clip ID's SOM with the mark in point of the VTR.

8 Click **Digitize**.

The PPC software validates the clips by making blank clips in the MediaBase. Messages display if any problems occur. If all the clips selected are valid a final message displays.

9 Click **Yes** to start the digitize session.

The status area displays the batch digitizing session progress. After all the clips have been digitized, the status indicates **Digitizing Complete**.

A warning displays if you attempt to digitize on a server that is currently playing or recording.

Status While Digitizing

If PPC runs into any problems digitizing a clip, the clip is flagged with an error and the next clip in the list begins the digitize process.

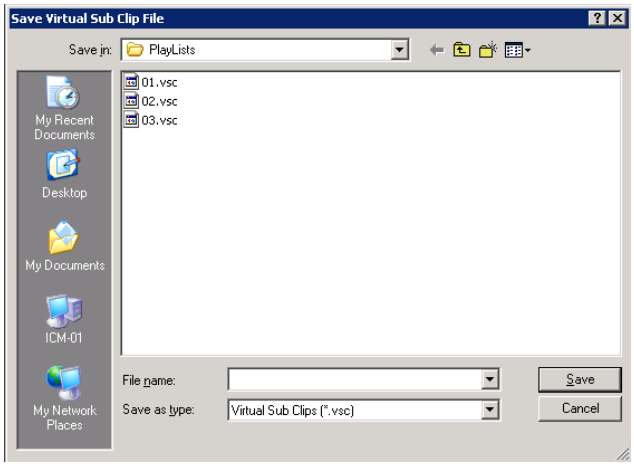
Saving Batch Digitizing Files

You can save and load batch digitizing clip lists. Batch digitizing lists are small files you can use to quickly restore digitized media to your system or to a shared system.

To save a digitizing list

1 In **Digitizing View** on the **Main** menu, click **File** > **Save**.

2 When the **Save** window displays, name the **.vsc file** and click **Save**.



Opening Batch Digitizing Files

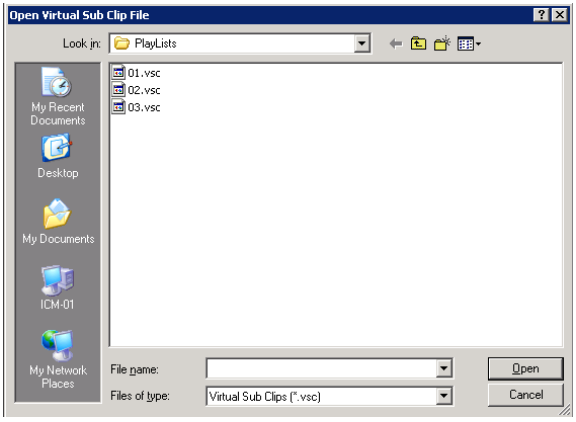
The file format used for batch digitizing is identical to that used for segmenting. This means that files can be interchanged.

You can import text files through the **Digitizing View** and **Segmenting View**. For instructions on creating settings for different file configurations, see ***Using News Link*** on page 117.

To load a saved batch-digitizing file

1 In **Digitizing View** on the **Main** menu, click **File** > **Open**.

2 Select the file you want and click **Open**.



Adding a Virtual Clip

Virtual clips are pointers to timecode positions on the currently loaded tape. Virtual clips can be created with the VTR in any state. This means you can create clips even while the VTR is in record. You can create hundreds of clips.

Tip You can create virtual clips before marking in and out points. To do this, right-click in the **Digitizing** view, then click **Add Blank**. The blank virtual clip is added to the Digitizing list.

To create virtual clips

1 Click **Open VTR View** .

2 Select a **VTR**.

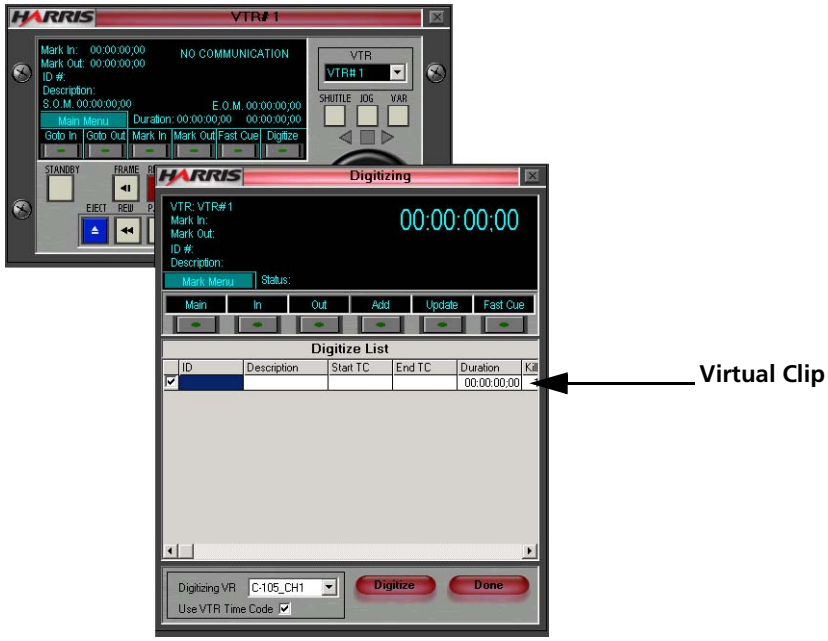
3 Click **Digitize**.

The **Digitizing View** displays.

4 In the timecode **Main** menu, click **Mark**.

5 Click **In** at the Mark In point, and click **Out** at the Mark Out point.

6 Click **Add**.



The digitizing list shows the newly created virtual subclip ID. The ID field is automatically filled when clips are made.

Tip After the grid is populated with clips, you can make changes to a clip by selecting it then right-clicking to display a menu.

After creating virtual clips, you can select which clips to turn into server IDs and then digitize them to make them available to all users in MediaBase by placing a check mark on the line item.

Updating Clip Information

You can update clip information after it has been created. Use the ID Information dialog box to edit all the parameters of the clip.

Tape #, *Store Room* and *Bin* are provided for tracking purposes and are not transferred to the server or the MediaBase. These fields are stored with the batch-digitizing file.

Tip You can change a clip ID and description by selecting the clip in the grid and entering the needed edits.

To update clip information

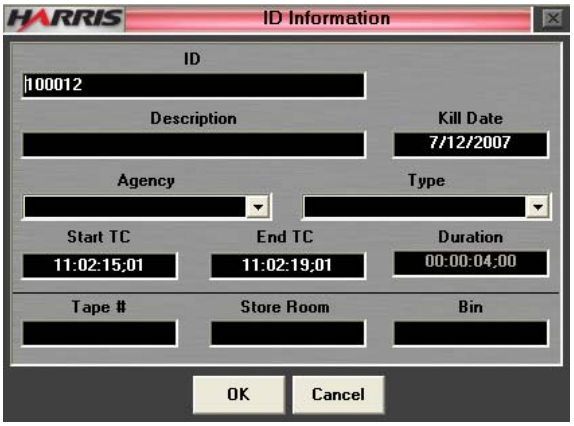
1 Click **Open New Digitizing View** .

The **Digitizing View** displays.

Tip If you don't see a list of clips, on the **Main** menu select **File** > **Open** and select the file you want. A list of clips displays.

2 Double-click the clip to update.

The clip's **ID Information** dialog box displays.



3 Edit the clip parameters as needed.

4 Click **OK**.

Updating Mark In and Mark Out Points

To update mark in and mark out points

1 Click **Open New Digitizing View**.

The **Digitizing View** displays.

Tip If you don't see a list of clips, on the **Main** menu select **File** > **Open** and select the file you want. A list of clips displays.

2 Select a clip to update.

3 Open the **VTR View**.

4 Use the **VTR View** to shuttle, jog, or var to the **In Point**.

Tip If you know the timecode of the in/out points you want, you can use *Fast Cue* to immediately jump to that location. See ***Using Fast Cue*** on page 76 for instructions.

5 In the timecode **Main** menu, click **Mark**, then click **In** to select the new mark **In Point**.

6 Use the **VTR View** to shuttle, jog, or var to the out point.

7 Click **Out** to select the new mark **Out Point**.

8 Click **Update**.

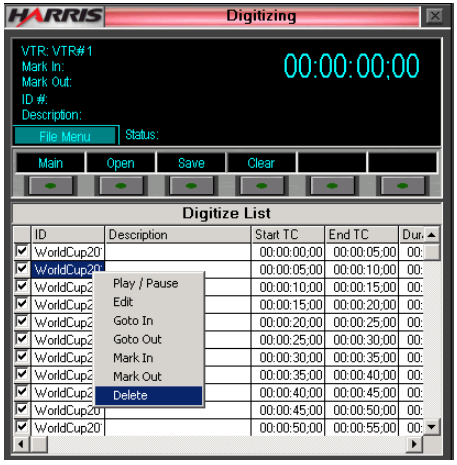
The timecode values associated with the selected virtual subclip are updated.

Deleting Clips

To delete a clip from the list

1 Click **Open New Digitizing View**.

The **Digitizing View** displays.



2 Select a **VTR** from the drop-down menu.

3 Select the clip to be deleted.

4 Right-click, click **Delete**.

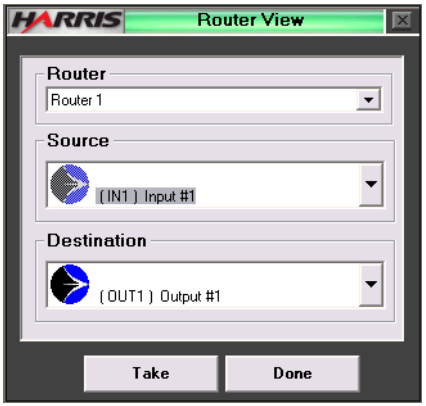
Routing View

Use this area to control a router. You can control a variety of different manufacture routers (this is covered in the engineering section). You can have up to eight different routers. You have different sources and destinations so this operates basically as a routing panel. You can choose the source you're interested in, choose the destination, and press Take to switch to the new router. The drop-down menus are configured by the Administrator who can assign different icons and labels. This is an alternative to using a routing panel.

To open Routing View

1 On the icon menu, click on **Routing View**  .

The **Routing View** window displays.



2 Use the drop-down menus to select a **Router**, **Source**, and **Destination**.

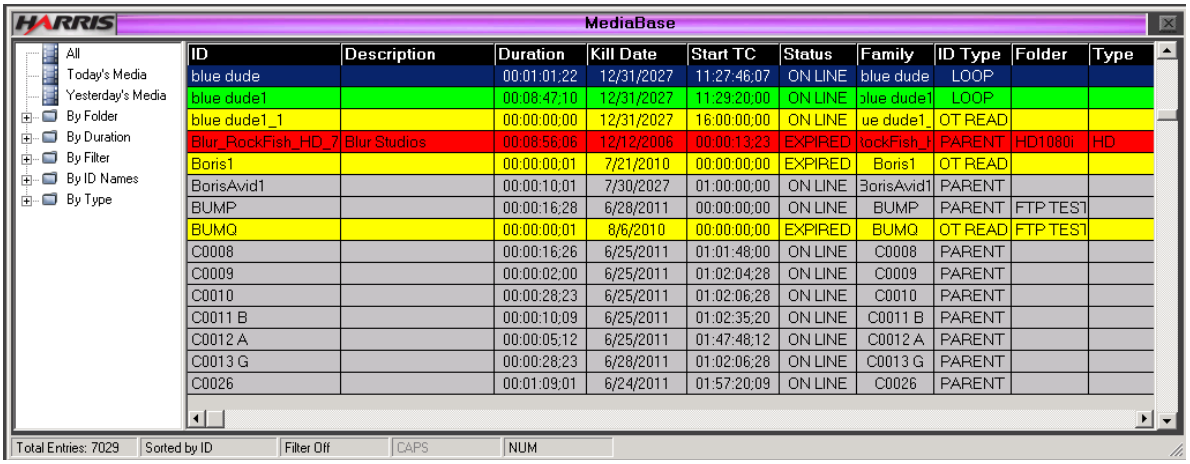
3 Click **Take** to accept and close the window.

MediaBase

MediaBase shows the inventory of media that resides in the server. You can find the media servers in the four domain trees in the left navigation pane. All media IDs are represented by a single entry in MediaBase. Different types of ID are represented by different colors.

To open the MediaBase

- On the icon menu, click on **MediaBase**  .



ID	Description	Duration	Kill Date	Start TC	Status	Family	ID Type	Folder	Type
blue dude		00:01:01;22	12/31/2027	11:27:46;07	ON LINE	blue dude	LOOP		
blue dude1		00:08:47;10	12/31/2027	11:29:20;00	ON LINE	blue dude1	LOOP		
blue dude1_1		00:00:00;00	12/31/2027	16:00:00;00	ON LINE	ue dude1_	OT READ		
Blur_RockFish_HD_7	Blur Studios	00:08:56;06	12/12/2006	00:00:13;23	EXPIRED	ockFish_H	PARENT	HD1080i	HD
Boris1		00:00:00;01	7/21/2010	00:00:00;00	EXPIRED	Boris1	OT READ		
BorisAvid1		00:00:10;01	7/30/2027	01:00:00;00	ON LINE	BorisAvid1	PARENT		
BUMP		00:00:16;28	6/28/2011	00:00:00;00	ON LINE	BUMP	PARENT	FTP TEST	
BUMQ		00:00:00;01	8/6/2010	00:00:00;00	EXPIRED	BUMQ	OT READ	FTP TEST	
C0008		00:00:16;26	6/25/2011	01:01:48;00	ON LINE	C0008	PARENT		
C0009		00:00:02;00	6/25/2011	01:02:04;28	ON LINE	C0009	PARENT		
C0010		00:00:28;23	6/25/2011	01:02:06;28	ON LINE	C0010	PARENT		
C0011 B		00:00:10;09	6/25/2011	01:02:35;20	ON LINE	C0011 B	PARENT		
C0012 A		00:00:05;12	6/25/2011	01:47:48;12	ON LINE	C0012 A	PARENT		
C0013 G		00:00:28;23	6/28/2011	01:02:06;28	ON LINE	C0013 G	PARENT		
C0026		00:01:09;01	6/24/2011	01:57:20;09	ON LINE	C0026	PARENT		

The MediaBase is a database shows all the clips that are in the server at any one time. It is shared from all the other NEXIO applications and is in sync with all the applications.

MediaBase Columns

A description of he MediaBase columns is as follows:

- **ID.** This is a 32-byte ID assigned to the clip.
- **Description.** Use this to provide a description of the clip.
- **Duration.** Indicates how long the clip
- **Kill Date.** This indicates when a clip is scheduled to expire by turning red in the MediaBase. The clip is not deleted. You can also use this to identify which clips need to be purged from the MediaBase.
- **Start Timecode (SOM).** This is the very first frame of the clip.
- **Status.** This indicate if the clip is online, expired or looping.
- **Family.** Use this to determine which parent clip owns a video. You can use this to sort based on this family column to find all the subclips of a given parent, so you can delete all the subclips first in order to delete the parent.
- **ID type.** Indicates the type of clip it is such as parent, subclip, not ready, etc.

Clips that are typically one frame long are considered not ready.

- **The Folder.** This is the agency or folder that the clip belongs to.
- **Clip Type.** Use this as a way to sort clips.
- **Record Date.** This is fixed by NEXIO so it automatically stamps it.
- **Clip conjoin.** This feature is used in 3-D TV. You can use this to join two clips to each other to create a joined pair.

- **Codec Recorded In.** Indicates from where this clip was recorded.
- **User Name.** Future feature.
- **User Fields.** You can assign unique names to these fields.

MediaBase Tree

Organizing the MediaBase

Use this to sort, organize, and search for entries. If you only want to see a small section, you can use the tree to see clips that were created today, yesterday, etc. You can also sort by folder or by different filters.

There are several ways to sort and search the MediaBase:

- **Filters.** You can create filters to group a bunch of clips together. For example, if you promos and commercials that start with the letter PR and CO, you can create a promo or commercial filter or a sports filter that looks for PR and CO. You can create the filters under the administrative settings. Once they are created, you can activate them by checking them.

Tip For information on how to apply the filters, see ***Filtering the MediaBase*** on page 91. For information on how to create the filters, see ***MediaBase Filter Settings*** on page 36.

- **Sorting by ID.** You can also sort by ID to see any clip that starts with a particular letter. It goes up to 31 in case you want to sort using the days of the week as well.
- **Search MediaBase.** Open it up and type what you are looking for. The Search will automatically decrease the MediaBase based on what you've enter.
- **Search Options.** Search options are under the main menus. You can choose your search options or use the description fields. Once you find the clip you want, you can drag and drop it into one of the play channels to review it.

The PPC extracts MediaBase inventory from the server channel when PPC is first started. PPC then monitors MediaBase to reflect any changes to the inventory.

Sorting the MediaBase

MediaBase can be sorted by any of the columns in either ascending or descending order.

Tip You can click a column header to toggle the sorting between ascending to descending order.

To sort MediaBase

1 On the **MediaBase** menu, click **Sort MediaBase**.

2 Click on of the following sorting options:

Filtering the MediaBase

MediaBase filters provide a way of viewing only a selection of media IDs that meet a criteria. Your PPC administrator can program up to eight different types of filters.

To filter MediaBase

1 On the **MediaBase Tree**, click **By Filter**.

2 Click the filters that you want to apply. A check mark displays in the MediaBase Tree next to the filters that are selected.

Tip To turn a MediaBase filter off, click the filter that you want to turn off to clear the check mark.

3 To view the entire **MediaBase** again, click **All** on the **MediaBase Tree**.

Tip For information on how to create the filters, see ***MediaBase Filter Settings*** on page 36.

Searching the MediaBase

When you open the MediaBase, the Search button displays next to the login information.

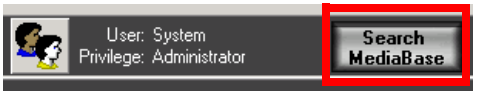


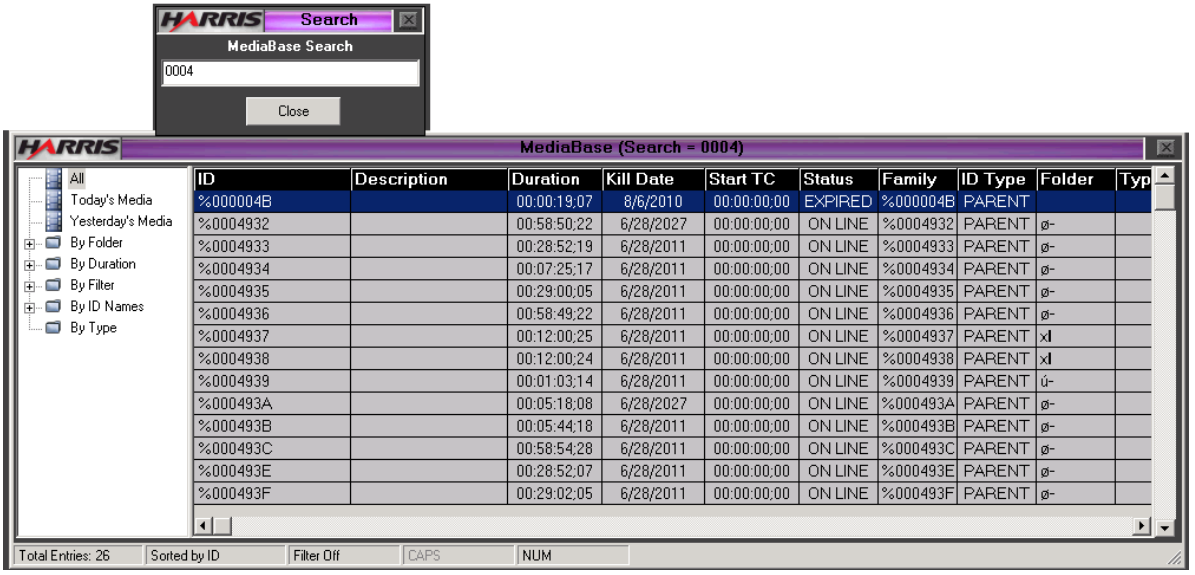
Figure 3-19 The MediaBase Search Button

To search the MediaBase

1. On the icon menu, click on the **MediaBase View** icon.

   The MediaBase and the Search button display.

2. Click on the **Search MediaBase** button in the upper right.
3. Enter the characters you are searching for. The MediaBase starts filters for files as you type.



Loading and Updating MediaBase

PPC reads the contents of MediaBase from any operational server channel. If a server is shut down (LLM), PPC looks to the next server on the same domain. If you start PPC when the first server is not started, MediaBase connects to the next available server on the same domain. If no servers are available on a given domain, MediaBase is not loaded for that domain.

Tip

We recommend that you allow MediaBase to fully load before using PPC.

If the PPC MediaBase gets out of sync with the server system, you can refresh MediaBase by exiting and restarting PPC.

Working with Media

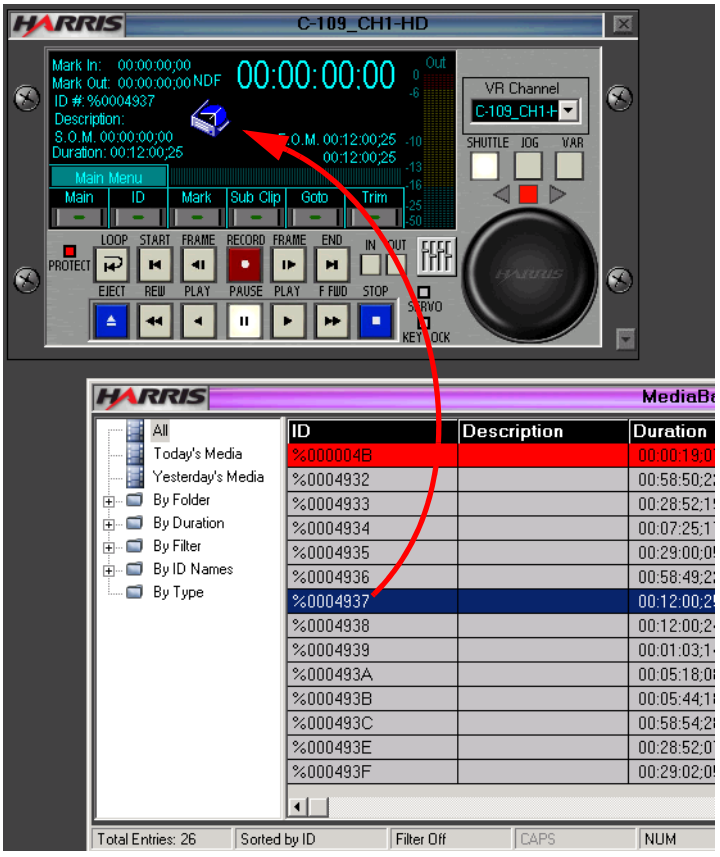
You can perform the following tasks through MediaBase

- **Loading a Clip**
- **Changing a Clip ID**
- **Deleting a Clip ID** (when logged in as an administrator)

Loading a Clip

To load a clip from MediaBase

1. Click **Open MediaBase View**.
2. Click **Open new Server View**.
3. In the Server View, select the **server channel** you want to use. For more information about using the Server View, see ***Using the Server Channels*** on page 100.
4. Drag a clip from the **MediaBase** to the **Server View** to immediately load it.



Tip If you drag an item from the MediaBase to a Server View's play button, the ID will load and begin to play.

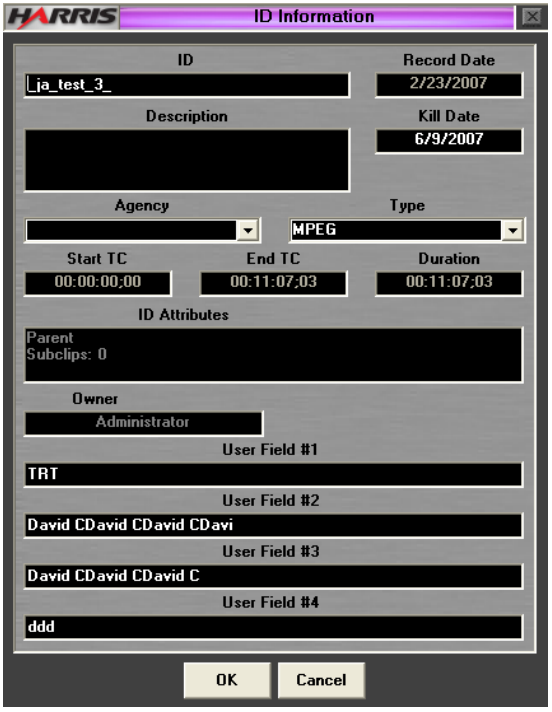
Changing a Clip ID

You can add or edit the ID information of IDs that already exist in MediaBase. You can also rename an ID on systems that support greater than eight-character IDs. IDs can even be renamed while the ID is being recorded.

To change ID information

1. Click Open MediaBase view.
2. Double-click on the ID that requires editing.

   The ID Information dialog box displays. This dialog box allows you to change some of the parameters on an ID.



3 Edit the ID information as needed. The following information can be added or edited in the MediaBase ID Information dialog box.

- **ID.** The clip's ID name. You can rename as clip ID in PPC if it is not already in use.
- **Description.** A short description of the clip.
- **Kill Date.** The date for which the clip is set to expire.
- **Agency.** The category of this ID. A list shows existing agencies.

Tip You can create a new agency category by entering it into this field.

- **Type.** A category identifier similar to the Agency field.
- **User Fields # 1-4.** Additional fields that are defined by your administrator. See ***NEXIO Settings*** on page 34 for more information.

4 Click **OK**.

Deleting a Clip ID

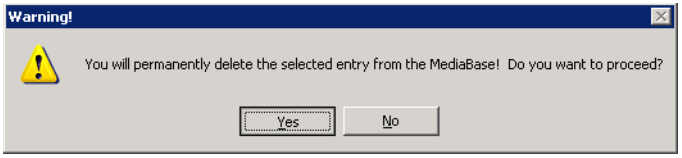
You must have Master Operator or Administrator privileges to delete a clip ID using PPC. When you delete a clip ID, the ID is permanently removed from MediaBase.

Tip You cannot delete a clip that is protected.

To delete a clip ID

1. Click **Open MediaBase View**.
2. Select the **ID** in **MediaBase**.
3. Press **Delete** on your keyboard.

   A message displays to confirm.



4. Click **Yes**.

4 Newsroom Script List (Playlist) Module

This is the Newsroom Script List module. It is displayed as four playlists. You can use this to control four server channels from a single playlist with the scripted playout module that can run up to four playlists simultaneously. Configurable colors and grid layout provide a customized experience. The playlist is non-linear which means the clips can be played in any order. Status updates indicate which files in the play list are ready for playout, which file is cued, and most importantly, which files are NOT ready. Full tally support from the production switcher ensures a flawless production.

Topics in this section include the following:

- GUI
- Server Channels
- Playlist Overview
- Designing the Playlist
- Controlling Clips on the Playlist
- Save, Open, and Clear a Playlist
- Simulating a Production Switcher
- Using Tallies
- Remote View
- Configuration

GUI

The Playlist Module is made up of a collection of servers and a playlist that is connected to the MediaBase and an assigned server channel. This module is most often used with the MediaBase.

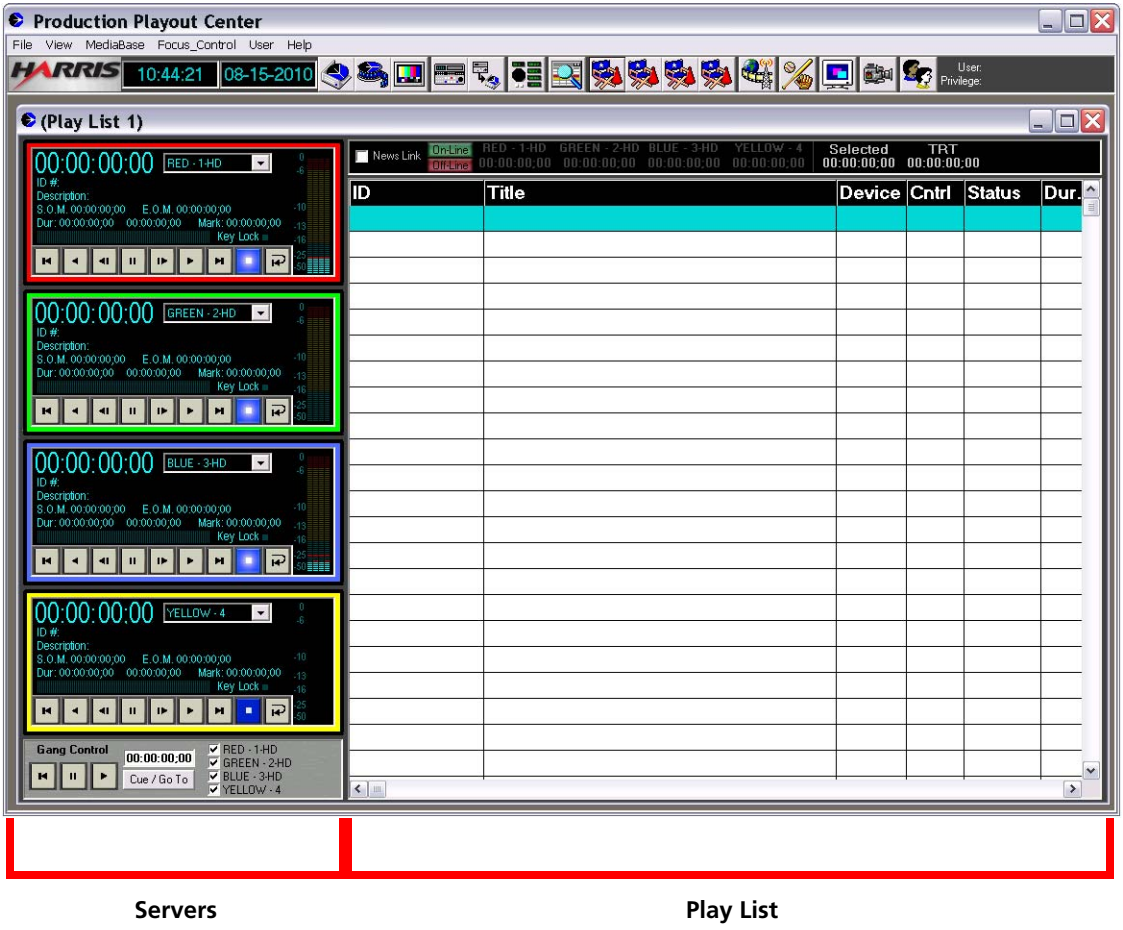
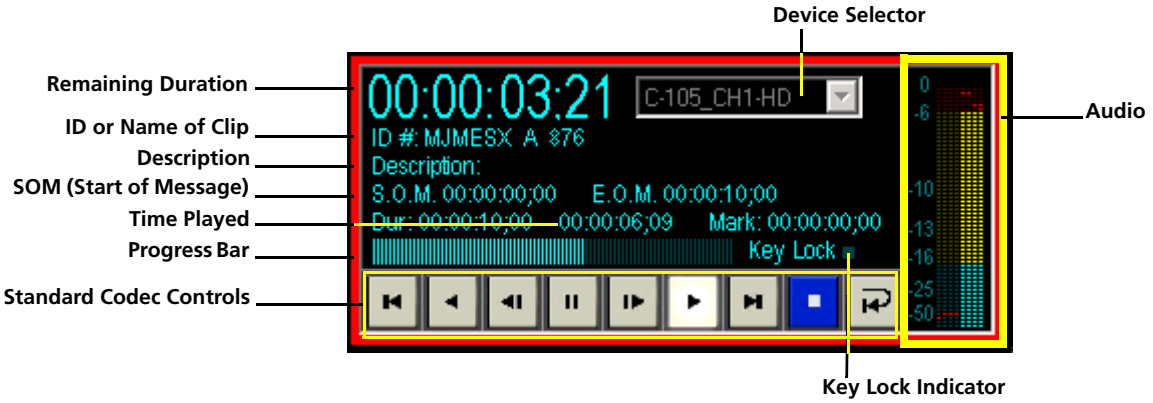


Figure 4-1 Newsroom Script List Playlist Module

Server Channels



The server channel contains the following:

- **Remaining Duration.** This is how much time the clip has left to play.
- **Device Selector.** Use this area to select a device for the server channel.
- **ID.** This is the name of the clip.
- **Description.** If the clip has a description, that information displays here.
- **SOM.** This indicates the time code for the Start of Message.
- **EOM.** This indicates the time code for the End of Message.
- **Duration.** This is how long the clip is. It also displays how much time has played.
- **Mark.** Indicates where the In or Out points have been marked.
- **Key Lock.** When enabled, this indicates if a channel is being controlled through automation. Even though it cannot be controlled, you can still monitor what's going on.
- **Standard Codec Controls.** Use this to stop, play, cue, etc. a clip.
- **Audio.** You can monitor the audio sound.

Standard Codec Controls

Table 4-1 Server View Buttons

	**Start.** This takes you to the first frame.
	**Play Reverse.** Use to play forward.
	**Frame Back.** Use this to go one frame backwards.
	**Pause.**
	**Frame Forward.** Go one frame forward.
	**Play.** Use to play forward.
	**End.** This you to the last frame.
	**Stop.** Use to stop the clip.
	**Loop.** To use this feature, press Loop on and then Play. When the clip reaches the last frame, it will automatically replay the clip again.

Using the Server Channels

Changing the Device

To select a device media from the Server Channel

- Select a **device** from the drop-down menu.

Tip You can also change the device channel in the playlist. For information on how to do that, see ***Changing the Device in the Playlist*** on page 104.

Applying Key Lock to a Server Channel

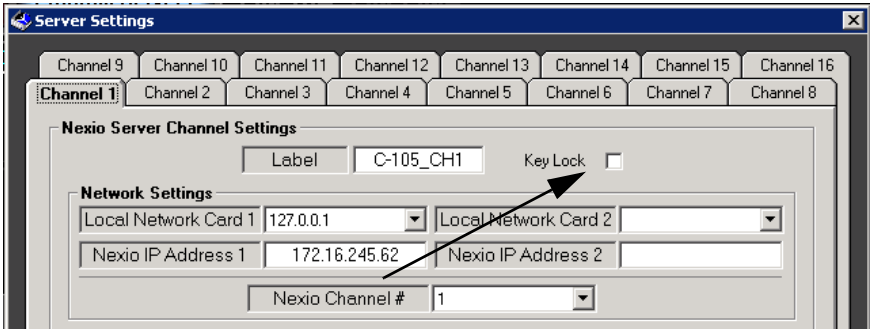
When enabled, this indicates if a channel is being controlled through automation. Even though it cannot be controlled, you can still monitor what's going on.

To apply Key Lock to a Server Channel

1 Select **Settings** > **Server Settings**.

The **Server Settings** window displays.

2 Click on the **Key Lock** check box.



3 Click **Apply And Save** to accept the changes and close the window.

4 Close and restart the **PPC**.

Key lock was designed to help you monitor a channel but not to control it. you can configure it and key lock it.

Assigning Colors to a Server Channel

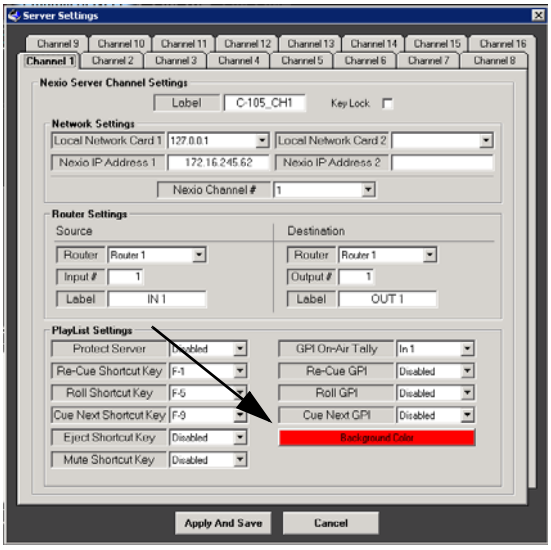
You can select the server channel colors. When you add a clip to the playlist, the color of the channel also displays the channel color that the media is played out of. When it comes time to play media in a playout environment, these colors make it very easy to see which channels are playing which clips.

If you highlight a number of items on the playlist, the highlight color is blue but the device column and the status column do not change to the highlighted color. This is done so you will always know which channel that media is assigned to and that the item is valid.

To assign or change the color of the server channel

1 Select **Settings** > **Server Settings**.

The **Server Settings** window displays.



2 Click on **Background Color**.

The **Color** dialog displays.

3 Select the color you want and press **OK**.

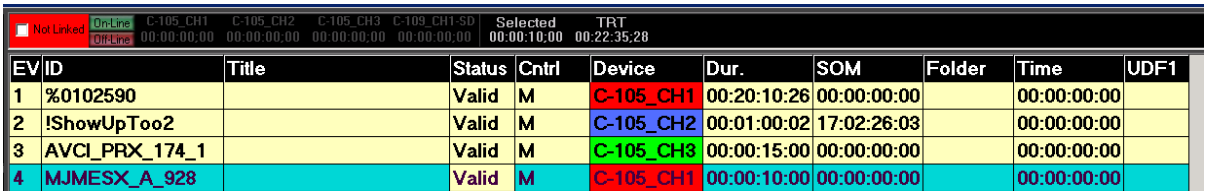
The **Server Settings** window comes back into focus.

4 Click **Apply And Save** to accept the changes and close the window.

Playlist Overview

The PPC playlist is not like a conventional playlist which plays media in order from top down from a single server channel. The PPC Playlists control multiple server channels and are nonlinear. Clips can be played in any order from more than one server.

PPC also comes with four playlists. These playlists can be configured completely differently from each other. For example if you have 16 channels, you can assign four different channels to each playlist. When you open the playlist, the appropriate channels display.



EV	ID	Title	Status	Cntrl	Device	Dur.	SOM	Folder	Time	UDF1
1	%0102590		Valid	M	C-105_CH1	00:20:10:26	00:00:00:00		00:00:00:00	
2	!ShowUpToo2		Valid	M	C-105_CH2	00:01:00:02	17:02:26:03		00:00:00:00	
3	AVCI_PRX_174_1		Valid	M	C-105_CH3	00:00:15:00	00:00:00:00		00:00:00:00	
4	MJMESX_A_928		Valid	M	C-105_CH1	00:00:10:00	00:00:00:00		00:00:00:00	

The playlist contains the following:

- **News Link.** Indicates if this playlist is connected to a text file.
- **On/Off Line.** Click on these buttons to go on or off the air.
- **Channel Information.** Indicates which channels are playing.
- **Selected.** Length of selected clip.
- **TRT.** Total Roll Time is the duration of the playlist.
- **ID.** Name of the clip. This information comes from the MediaBase.
- **Title.** Also works as the description column within the MediaBase.
- **Device.** Indicates which channel the clip is assigned to. By default, media imported into a playlist is always assigned to the first channel. The default is Red.
- **Control.** Indicates if the clip is set to start playing automatically or manually.
- **Status.** Indicates if a clip is valid, missing, expired, not ready, etc.
- **Duration.** Duration of the clip.
- **Other fields.** You can assign names to these fields in the *Playlist Grid Settings* and *Playlist Settings*; these two areas affect the playlist.

Tip **There are two locations for configuring the PPC:**

- ***Playlist Grid Settings*** on page 128**.** Affects how the playlist is going to look.
- ***Playlist Settings*** on page 132**.** Affects how the playlist is going to react. Go here to configure server channels, news links, etc.

Designing the Playlist

You can also play a clip from any timecode within the clip. You can also use the DNF controller. Typically, if you are in the Playlist Module, you have completed clips that are played from the first frame to the last one. But if you need to move into them, you can.

Workflow for Rolling a Clip

- Assign a channel to a device
- Build a playlist
- Assign a clip to a channel
- Cue the clip
- Play the clip

The Playlist Process

- The clip turns a light green indicating that it's pre-rolling. This is connected to the tally of the production switcher. So until the production switcher takes that channel and puts in on the air, the clip is still pre-rolling because it is not on the air.
- Bright green indicates that the clip is on the air.
- Then the channel starts flashing to indicate that this channel is on the air. This also acts as a warning to not stop the channel.
- Once the clip ends, it will hold on the last frame.

Pre-roll

When your system is connected to the tallies of the production switcher, until the production switcher actually takes that source channel and puts it on the air, that clip is still essentially pre-rolling. You hit play, it says pre-roll, and then the production switcher takes the source, and then it will be on the air.

Changing the Device in the Playlist

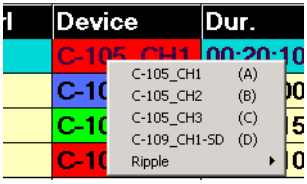
Server Channels are framed with the assigned color. The Playlist indicates the channel color that the media is played out of. When it comes time to play media in a playout environment, these colors make it very easy to see which channels are playing which clips.

If you highlight a number of items on the playlist, the highlight color is blue but the device column and the status column do not change to the highlighted color. This is done so you will always know which channel that media is assigned to and that the item is valid.

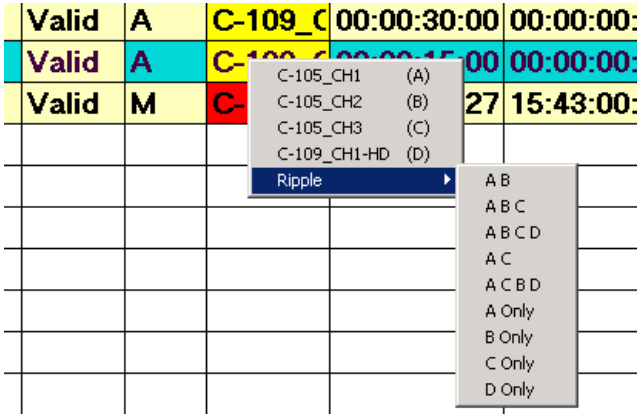
From time to time, you may need to change the server channels that a clip is assigned to. You can easily and quickly change the assignment in the playlist.

To change the device media in the playlist

- Do one of the following:
  - In the playlist, select a row and right-click in the **Device** column and select the device to play the clip on.



  - If you are using the default shortcut keys, select a row and press the **S** or **s** key to scroll through the available devices.
  - Use the **SHIFT** key to select several rows. Right-click on the row and select the device you want. There are several options to choose from.
  - You can also use the shortcut key for *Ripple* by selecting the row and pressing **R**. The ripple starts from that row down. Clips above that row are not affected.



Creating Playlists On and Off Line

Building a Playlist in the Offline State

At the top of the playlist, you will see if it is on or off-line. If a playlist is off-line, that playlist does not have the authority to take control of the assigned channel(s). So in the off-line state, you can build a playlist without affecting the server channels.

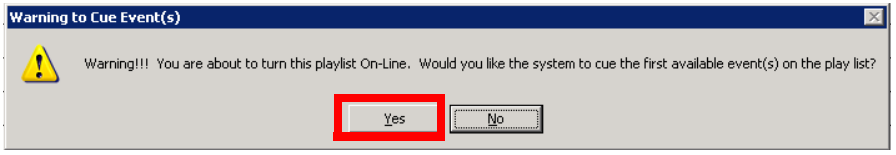
Building a Playlist in the Online State

You can also build a playlist in the on-line state. However, the playlist has the authority to start cueing and playing media and to control the server channels.

To go on-line

1 At the top of the playlist, press the green **On-line** button.

2 A message displays confirming that you want to go on line and to cue the first item.



3 Click **Yes** to go on-line and to cue the first item.

The first item is cued. The item is placed into the appreciate channel and is ready to play.

*If you select **No**, the playlist goes on-line without cueing any of the clips in that playlist. The playlist is active without doing anything.*

Adding Clips to a Playlist

There is a number ways to get items onto the playlist. Usually, you will import from a file or from a newsroom system. You can also type the IDs that you want into the playlist, or you can drag and drop media from the MediaBase onto the playlist (this is not the standard way to place media into the playlist).

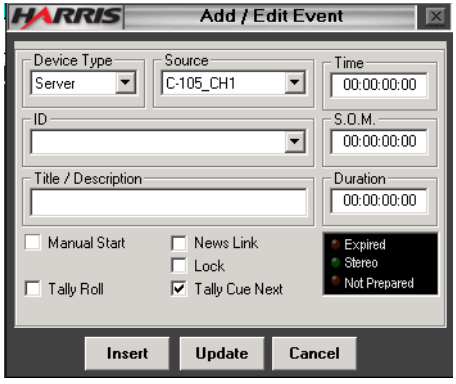
Using an ID to Import a Clip

To import a clip using its ID

1 On a blank row in the playlist, do one of the following to open the **Add/Edit Event** window.

- Double-click on the row.
- Right-click on the row and select **Insert**.
- Select a row and press the **Ins** key. For this to work, the **Num Lock** must be **Off**.

The **Add/Edit Event** window displays.



2 Enter the name of the clip in the **ID** field and press **Insert**.

IDs are case sensitive. The correct name entered using the incorrect case will display as missing.

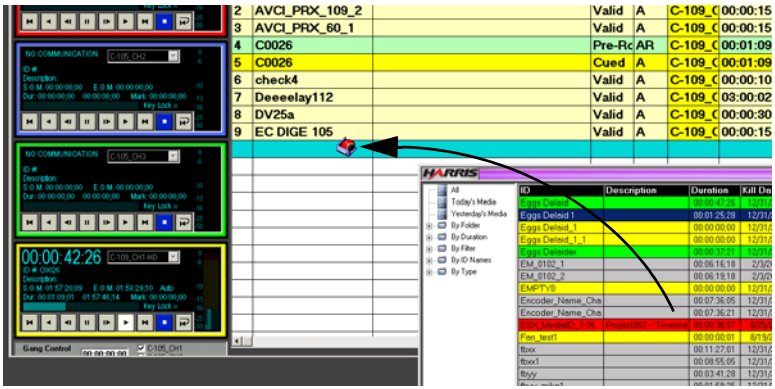
This clip displays as *missing* because the correct case wasn't used.

Adding Clips from the MediaBase

To import a clip to the playlist from the MediaBase

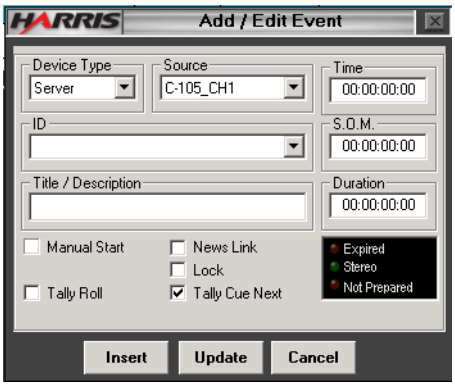
This is the least used method.

- From the **MediaBase**, select a clip and drag and drop it into the playlist.



To replace a clip in the playlist with another clip

1. Double-click on the row of the clip to replace.
2. When the **Add/Edit Event** window displays, enter the name of another clip and press **Update** to replace the original clip.



If you are replacing a clip with a valid clip from the MediaBase, as you are typing in the name a little stereo light comes on. If there is a description for that clip, it will automatically display here. In this way, you know if the clip is valid or not.

Adding Clips to the Playlist that are not in the MediaBase

To add clips not in the MediaBase to the playlist

1. Highlight the playlist row where you want to place the clip.
2. Double-click on the row to open the **Add/Edit Event** window and enter the name of the clip in the **ID** field.
   - Press **Insert** to add a new row in.
   - Press **Update** to replace the next clip in the playlist. This clip will be listed as missing because it's not in the MediaBase.

   The clip is added to the playlist.

Controlling Clips on the Playlist

Cueing Clips

You can manually cue and recue clips even if they have already been played before.

To cue or recue a clip

- Do one of the following:
  - Highlight the clip using either the mouse or the arrow keys and press **Cue**.
  - You can also press the **C** key which is the default for **Cue**.

When a clip is cued, it is automatically cued to the channel it is assigned to.

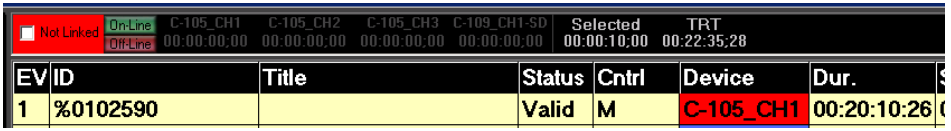
Loading a Clip not on a playlist

You can also load media that is not on the playlist directly into a server channel. For example, if you need to play an item that is in the MediaBase, drag and drop it right into the playout channel to play it. Media does not have to be on the playlist in order to play the clip. You can still take it to air. You can also drag and drop clips from one server channel to another server channel to play it out from there as well without the clip being on a playlist.

- **Using F1.** The F1 key is assigned to server Red by default. If you hold down SHIFT when you press F1, the *Load ID* dialog displays. If you know the ID of a clip, you can type it in and hit ENTER. The clip is loaded. If you press SHIFT+F2, by default, the dialog to load a clip into Green displays. Press ENTER to load the

clip. Use this to quickly add a clip into a server channel. If the clip is not on the playlist but you know what the clip is called and that it resides on the MediaBase, you can quickly retrieve and play the clip even if it is not on a playlist.

- **Remaining Playlist Time.** This displays how much time is left on this playlist. This tells you the amount of content on this playlist that has not been on the air. The Total Remaining Time (TRT) for that playlist decreases as the clips are being aired. The selected time indicates how much playing time one or more selected clips contain. For example, if you highlight five items in the playlist, this will tell you how much time these clips need to play out.



- **Basic countdowns.** These indicate how much time is left in each one of the clips.

Tip You can also pre-configure a ten-second beep to indicate when there is ten seconds left on the clip. The timecode number also changes to red.

Playing Clips

There are several ways to play (roll) a clip.

To play a clip

- Do one of the following:
  - Use the ***Standard Codec Controls*** on page 100.
  - Use the default **F key** assigned to that clip. ***Using the F Keys by Color Channel*** on page 111.
  - Select a clip and press **Space Bar**. See ***Using the Shortcut Keys*** on page 112.
  - Use a GPI to play clips.

Using Loop

To use this feature, press *Loop* and then *Play*. When the clip reaches the last frame, it will automatically replay the clip again. You don't have to leave the Server View window open to use loop. You can close the window and the looping continues. You can use this feature if you have background video that you want to continuously roll. For example, if you are running some B-roll footage and it's running out, turn on the loop and it will loop the footage. As soon as you load another clip into that channel, the loop is automatically turned off.

To loop a clip

- Press **Loop**  and then **Play**  a clip on the server channel.

Tip You can build your own GPI box to send out pulses and roll the channels. You can also connect those onto the NEXIO directly, and the PPC will still support it.

Using the F Keys by Color Channel

Red	
Back to the beginning of a clip	F1
Play or roll a clip	F5
Load and play next clip	F9
Stack a clip	Shift+F9
Green	
Back to the beginning of a clip	F2
Play or roll a clip	F6
Load and play next clip	F10
Stack a clip	Shift+F10
Blue	
Back to the beginning of a clip	F3
Play or roll a clip	F7
Load and play next clip	F11
Stack a clip	Shift+F11

Yellow	
Back to the beginning of a clip	F4
Play or roll a clip	F8
Load and play next clip	F12
Stack a clip	Shift+F12

Using the Shortcut Keys

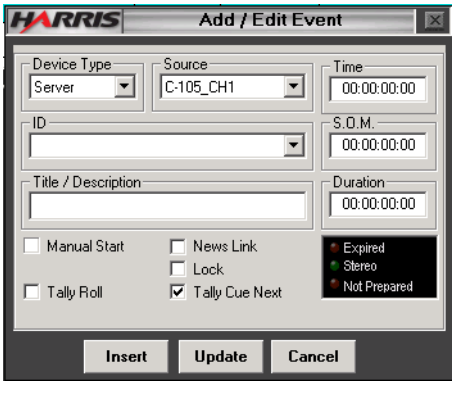
PPC contains the following shortcut keys:

- **Play (Roll).** Space Bar
- **Cue.** C or c
- **Start Type.** A or a
- **Switch Device.** S or s
- **Pause.** Disabled.
- **Tally type.** T or t
- **Ripple.** R or r
- **Insert.** Use this to insert a clip into the playlist. The *Num Lock* must be off for this to work.
- **Edit.** CTRL+E opens the Add/Edit window.

To insert a clip using the Insert key

1 Highlight a clip and press **Insert**.

The Add/Event window displays.

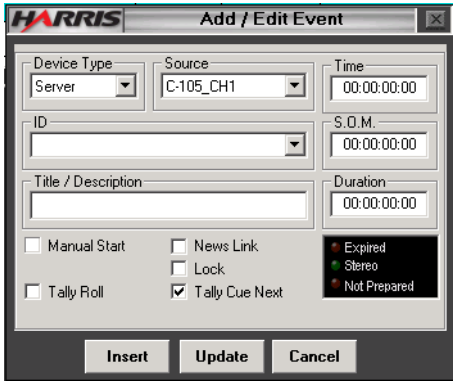


2 Enter the name of the clip you want to add and press **Insert**.

To edit a clip

1 Press **CTRL+E** to edit the clip.

The **Add/Edit Event** window displays.



2 Enter the name of the clip you want to insert and press **Enter**.

Stacking and Auto Starting a Clip

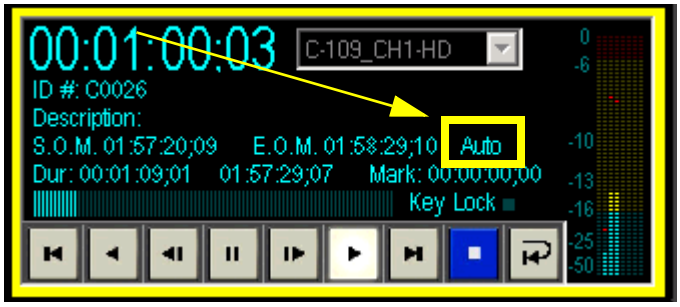
To stack a clip using shortcut keys

1 Double-click on a row to open the **Add/Edit Event** window.

2 Disable **Manual Start** by unchecking it.

3 Click **Update** to accept the changes and close the window.

The **Control** column for that clip changes to **A**. Once the clip before it is finished playing, this clip automatically starts. The server channel displays **Auto** to let you know that another clip is scheduled to start immediately after.



Auto Start

You can place autos on all the clips in the list. When you drag and drop a clip from the MediaBase to the list, the Playlist automatically places an M for manual start. You can set configuration of the software under settings and change it so that it will automatically place an A for auto start. You can also configure one of the Playlists to be an *Auto Start* and the others to be *Manual Start*.

EV	ID	Title	Status	Cntrl	Devi
1	!ShowInPRXPlayer4		Valid	A	C-10
2	AVCI_PRX_109_2		Valid	A	C-10
3	AVCI_PRX_60_1		Valid	A	C-10
4	C0026		Pre-Rc	AR	C-10
5	C0026		Cued	A	C-10
6	check4		Valid	A	C-10

Interrupting an Auto Start

If you have two clips that are set up for an auto start, but you insert another clip between those two clips, the auto start is removed. The rule is that for the auto start to work, the clip must be touching or consecutive to the previous clip.

Early Advance

To advance to the next clip

- Press **Play** to advance down the playlist. The currently rolling clip is interrupted to start the next clip.

Gang Roll

You can link two clips together. Use this to roll two clips simultaneously. When this is activated, you will see that the first frame of each clip is cued. When you press Play, they are played. Use this if you have some pre-canned interviews and need two channels to play out in one shot. Microsoft supports pressing two keys at the same times, so if you press the F5 and F6 keys at the same time the cued clips will roll together.

Pressing three keys at once is not reliable, so we don't recommend using that method.

Cue to a Certain Timecode

Use this to cue to a certain timecode position. This makes all the server channels cue to that timecode. Use this if you have boxes or pre-canned double-end interview that you need to cue.

Figure 4-2 Cue to a Timecode

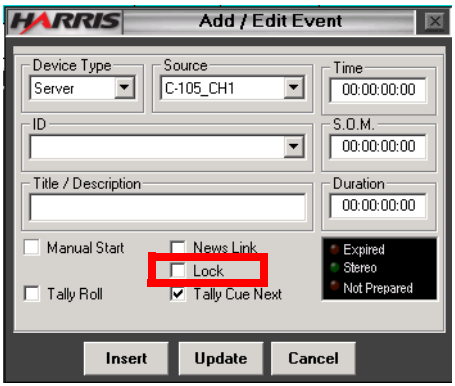
Lock a Clip Description

This is used to lock a different description of a clip in PPC. This description isn't stored in the server. For example in the MediaBase, a clip may have *NFL* for the description. You can change and lock a different description in PPC to better describe that clip for your needs.

To lock a clip

1 Double-click on a clip in the playlist.

The **Add/Edit Event** dialog displays.



2 Click on the **Lock** check box.

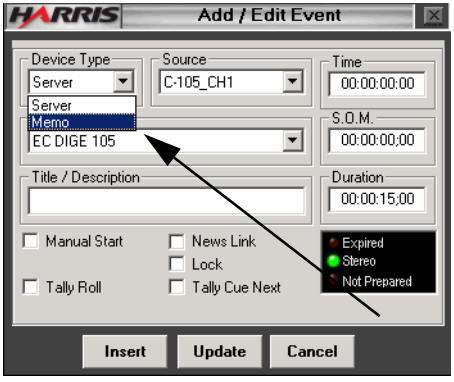
3 Add new information in the **Title/Description** field.

4 Click **Update**.

The description you entered displays in the **Title** column.

Inserting a Memo

You can add a memo with a description of what the clip is. For example, you can specify that it's a commercial break or a particular play. You can also add dashes and indicate which segment they are on. This information doesn't exist in the server but it is a nice way to separate lines.



Using News Link

Importing Clips

Use this to import text files and connect to iNews directly. There are also other file formats that are supported such as Easy News, iNews, and ENPS (you can do exports from ENPS. There is a driver for that).This feature has the ability to add linked items to the playlist. It can also delete the linked items as well. This is similar to a file-based MOS interaction with the playlist. This text file acts as a script and can be created from different sources such as a newsroom system, an Excel spreadsheet, etc.

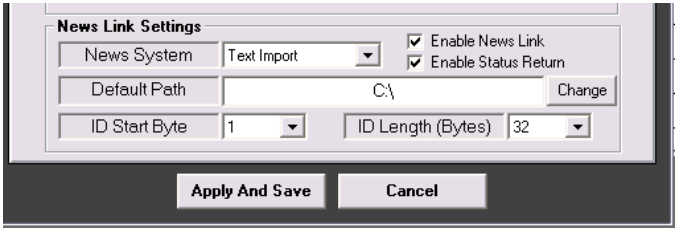
Sports Operators use this to cue a clip to a certain point that has been stored in that bank. For more information on how to use the Banks, see the ***Banks*** on page 146.

The PPC can also act like a Control Air. Go into iNews and set up a Control Air to point to the PPC. Set this to iNews. The PPC will emulate the Control Air and will work with the iNews server.

To configure a playlist to use a newsroom text file

1 Select **Settings** > **Playlist Settings**.

The **Play List Settings** window displays.



2 At the bottom of the window in **News Link Settings**, under **News Systems** select **Text Import**.

3 Select **Enable News Link**.

4 Enter the **Default Path** where the text file is kept.

5 For **ID Start Byte**, select from 1 to 80. The default is set to **1**.

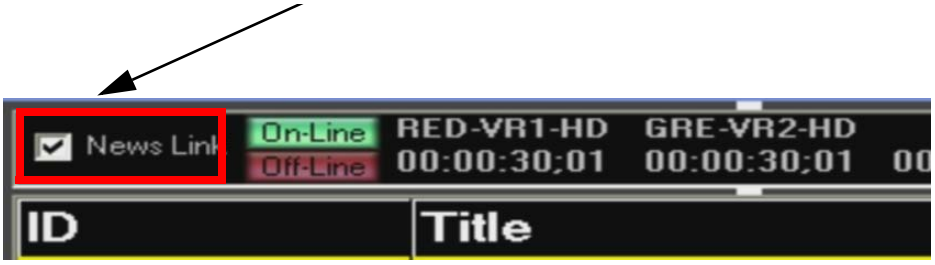
6 For **ID Length (Bytes)**, select from 1 to 32. The default is set at the maximum **32**.

7 Click **Apply and Save** to accept the changes and close the window.

Enabling and Disabling News Link

To connect PPC to a News Link file

1. Minimize **PPC**.
2. Create a text file on the desktop.
3. Open the new text file and add text to it.
4. Save the file.
5. In **PPC**, select **File** > **Open News Link Text File**.
6. Navigate to the text file location.
7. Make sure that the check box for **News Link** in the upper left is enabled.



PPC links to the file.

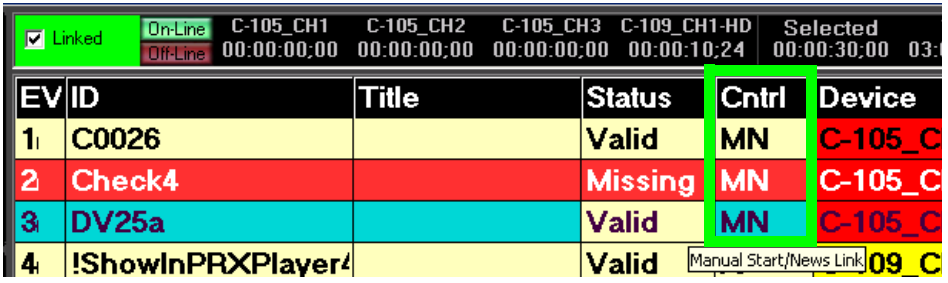


Figure 4-3 News Link Clips

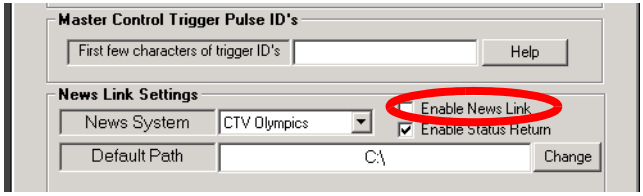
You will notice that the first few items in the example above show an *MN*. This means they are News Linked. The News Link box in the upper left has also turned bright green and is checked. The Newsroom System is now controlling these items and has the authority to add and remove clips based on what's in the text file. Playlists can contain both news linked and unlinked clips.

If you enable the check box, PPC will constantly monitor text file for updates. Any changes made to a linked text file, either additions or deletions, are automatically updated in PPC.

To disable News Link

1 Select **Settings** > **Server Settings**.

2 Uncheck the check box next to **Enable News Link**.



3 Click **Apply And Save** to accept the changes and close the window.

PPC is no longer tracking that file. Therefore, any changes made to the text document are not reflected in PPC.

Tip If the file is changing while you're in a segment, disable News Link so the playlist won't be updated until you enable News Link to update the list.

Unlinked Clips

Clips on the playlist that do not have an *MN* are not linked to nor controlled by the newsroom system (News Link). That means that News Link has no control over them because they are not listed in the text file. If you give the newsroom system control over that clip (add that clip ID to the text file), that clip will be kept or deleted depending on whether or not it is listed in the text file.

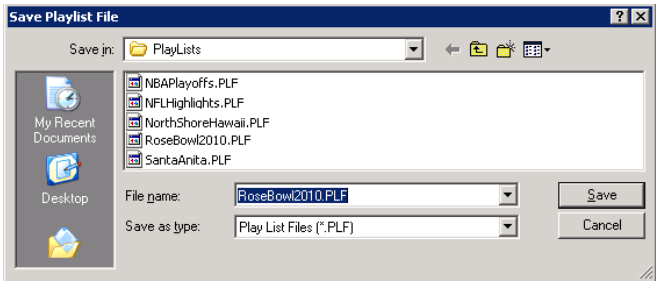
Save, Open, and Clear a Playlist

Saving a Playlist

To save a playlist

1 Select **File** > **Save Playlist**.

The **Save Playlist File** window displays.



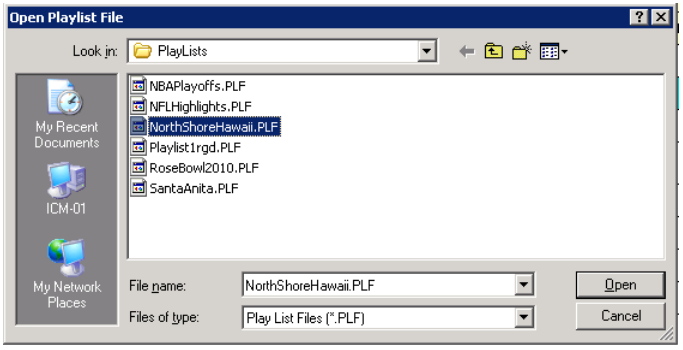
2 Enter a descriptive name for the playlist and click **Save** to accept the changes and close the window.

Opening a Playlist

To open a playlist

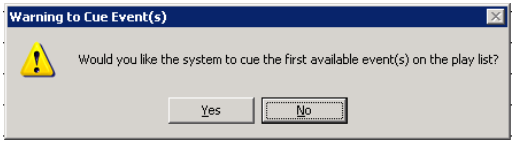
1 Select **File** > **Open Playlist**.

The **Open Playlist File** window displays.



2 Select a playlist and click **Open**.

A message asks if you want to cue the first clip in the new playlist. The default is set for **No**.



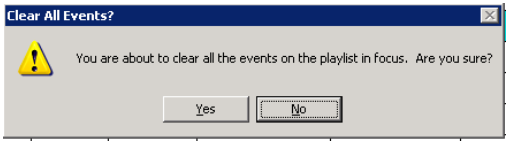
3 (Optional) If you click **Yes**, the first clip is cued. When you are ready, press **Play** to start the clip.

Clearing a Playlist

To clear a playlist

1 Select **File** > **Clear Playlist**.

2 A message displays to confirm clearing the playlist. The default is set for **No**. Confirm **Yes** or **No** to accept or reject the request.



Simulating a Production Switcher

If you don't have a production switcher available, you can use buttons that simulate a production switcher. Use a shortcut key to roll the clip. The number 1 is simulating that the production switcher is taking this source and putting it on the air. The clip goes from light green to bright green, then starts flashing as an indication that the channel is on the air and should not be stopped at this time. Once the clip ends, it will hold on the last frame.

Figure 4-4 Product Switcher Buttons

Using Tallies

How the Tallies work

The tallies can be used with the production switcher. A tally is more than just an indicator; once a clip has finished rolling, the system understands that the clip still on the air. So the playlist is holding the last frame because it recognizes that it's better to show the last frame of the clip than to advance down the playlist to the next clip and show the first frame of that clip. When the production switcher releases the tallies, that clip is unchecked and the playlist advances. This also acts as protection to guarantee that the correct clip is played.

Using Tallies to Protect On-Air Channels

Tallies can be used to protect what is currently playing on-air. For example, if you accidentally cue a clip to a channel that is currently rolling, a message displays indicating that the channel you are cueing is currently rolling. At that point, you have the option to interrupt that channel or not. Otherwise, if the tallies had not been connected into the system and you cued an incorrect clip to a channel that is rolling, the clip that was playing would have been interrupted.

An example of when you would want to say yes to the message is during a production when Master Control is playing the commercials out to air. Sometimes, the next thing to air is a bumper coming up from the NEXIO servers, so the production switcher may have already switched to that bumper. However, the Playout Operator hasn’t loaded the bumper in yet. As a result, the tally would be flashing prematurely. Therefore in that particular case, the Playout Operator would say yes and to cue that clip.

Using the Next Key with Tallies

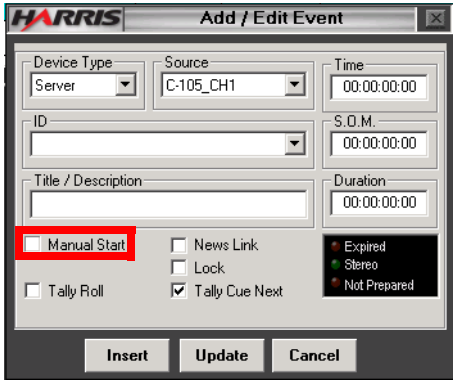
When a clip playing on red has been taken off early by the production switcher, it goes into a post-roll. If you don't want to wait until the end of the post-roll, you can press F9 which is the next key for red channel and cue the next item. So any time a clip is off the air, you can press F9 (or whatever key you have configured for that channel) to advance down the playlist. Another option is to highlight the next item in the playlist, and press C to cue the next clip.

Auto Start and Stacking: Playing Two Items Back to Back

On occasion, you may want to play directly from one clip directly into another clip. The Control field has an M listed for Manual start. You can uncheck manual start to auto start.

To change a manual start to an auto start

1 Double-click on the selected clip to open the **Add/Edit Event** window.



2 Disable the **Manual Start** to **Auto Start** a clip. Enable the box for **Manual Start**.

3 Press **Update**.

Manual start changes to Auto start. That means that both clips will be cued. When the first clip ends, it will automatically do a frame accurate cut from the last frame of the first clip to the first frame of the next clip.

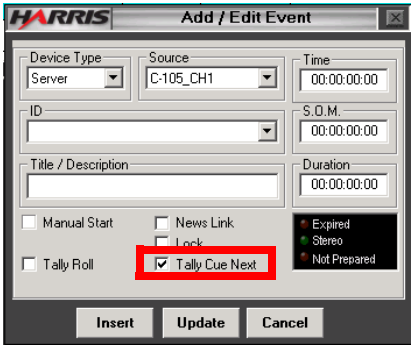
Tally Cue Next

Examples of what happen when Tally Cue Next is not Enabled

When *Tally Cue Next* is not enabled, f you remove a clip that is currently rolling from air, you can let it post-roll out on its own. When it gets to the end of that clip, the playlist will automatically advance to the next clip. You can also highlight the next clip and press C to cue the next clip. An easier solution is to enable *Tally Cue Next*.

To activate Tally Cue Next

1 Double-click on a clip to open the **Add/ Edit Event** window.



2 Check **Tally Cue Next**.

3 Press **Update**.

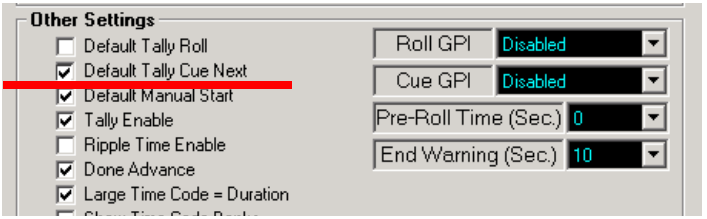
As soon as the production switcher takes the clip off the air, the *Tally Cue Next* automatically cues the next clip without waiting for the post roll. All you have to do is press *Play*.

Configure Tally Cue Next as the Default

To configure a Playlist to use the Tally Cue Next feature

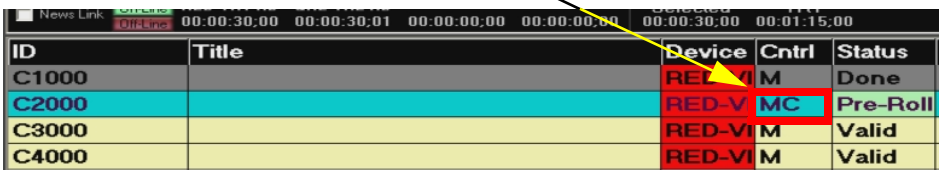
1 Select **Settings** > **Playlist Settings**.

2 Check the box for **Default Tally Cue Next**.



Anytime you play something onto this playlist, it will have *MC* in the Control column.

Tally Cue Next indicator



Tally Cue Next is not a default setting because you may have an introduction to a show that contains audio, if you dissolve to another shot of the camera, the audio which is coming from the server will automatically stop. Therefore, use Tally Cue Next with caution. This feature is great for tight sports transitions if you only have two server channels and you have to move through several items in less than a one minute.

Tally Roll

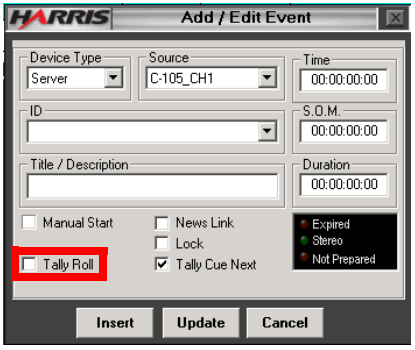
This is the opposite of *Tally Cue Next*. You will see that the clip has a *Manual Start* with the *Tally Roll*. As soon as the production switch goes to air, it automatically rolls the clip.

WARNING: Unless you know you have a specific use for this feature, we recommend not using this.

A potential use for this feature is that you can turn on a *Tally Roll* and *Tally Cue Next*. When the production board switches, the clip is automatically rolled and advances down the list and cues the next item.

To activate Tally Roll

1 Double-click on a clip to open the **Add/ Edit Event** window.



2 Select the **Tally Roll** check box.

3 Press **Update**.

Timecode Numbers Windows

The timecode window contains large timecode numbers that count down the remaining duration. The colors change to indicate how much time is remaining. The color for the timecode window is solid when clips have more than 3 seconds remaining. When the clip has 3 second or less seconds, it turns red and rotates. This is to warn you that there is less than 3 seconds left in the clip. The clip could be at the end, or close to the end, and may need to be recued or the playlist advanced.

Remote View

This gives you the capability to monitor what's going on remotely on this playlist. This is a separate application that requires no license and is free. It is located in the PPC Installation directory. You can install it as much as you need to. PPC supports up to 64 simultaneous connections.

To open remote view

1 Minimize **PPC**.

2 Double-click on **Remote View** 

.

Remote view launches. Use this to look into the playlist and view any of the active playlists available. You can see which clips are on the playlist, their status, their control and if they are cued.

If you want to make changes to the playlists, contact the playoff operator to make your suggestions. Any changes made to the playlist are instantaneous seen on remote view. This feature can be used by a director or a producer to monitor what's going on in the program. This is a great utility that you can install as many times as you need. You can scroll down the playlist independently from PPC, see everything that's going on, view total remaining time in the countdowns without affecting or controlling the playlist.

Figure 4-7 Remote View

Configuration

Two locations where you can configure how the Play List displays:

- **Grid Settings.** Use the Play List Grid Settings to design how the play list looks. You can customize how the columns, fonts, and colors that display.
- **Playlist Setting.** Use this area to name the play list, assign a device server, shortcut keys, tallies, etc.

To access playlist settings

- Select **Settings** > **Playlist Grid Settings** or **Playlist Settings**.

Playlist Grid Settings

There are four tabs that are included in Grid Settings:

- **Columns.** Use this tab to select which columns display in the play list.
  - **Hide/ show columns.** The default columns are: ID, title, device, control, status, and duration.
  - **Placement.** You can change the order of the columns by dragging and dropping the columns to different locations.
  - **Text Alignment.** You can also adjust the text alignments to left, centered, right, or justified.
  - **Default Width.** The default width of the column can be changed.
  - **The tool tip.** Use this to create a custom tool tip for a specific column.
- **Font.** Use this area to adjust the font size for the grids.
  - **Grid Header Font.** This font displays in the play list.
- **Status Colors.** You can change the default status colors.
  - **Cued.** Bright yellow with black text.
  - **Missing Clip.** Red with white text.
  - **Not Ready.** Pink with black text.
  - **PreRoll.** Light green with black text.
  - **Pri Done.** Gray with black text.
  - **Pri. On-Air.** Bright green with black text.
  - **Program.** Yellow with black text.
  - **Sec. Done.** Light gray with blue text.
  - **Sec. On-Air.** Light gray with blue text.
  - **Valid.** Pale yellow with black text.
- **Select Color.** The color of a selected item blue color and the fixed columns

- **Blank.** White with black text.
- **Fixed.** Black with white text.
- **Selected.** Bright teal with black text.

Tip We recommend that you leave the defaults as they are in case you need to call Harris support. If you tell the technician that the item is red, customer support assume that the clip is missing.

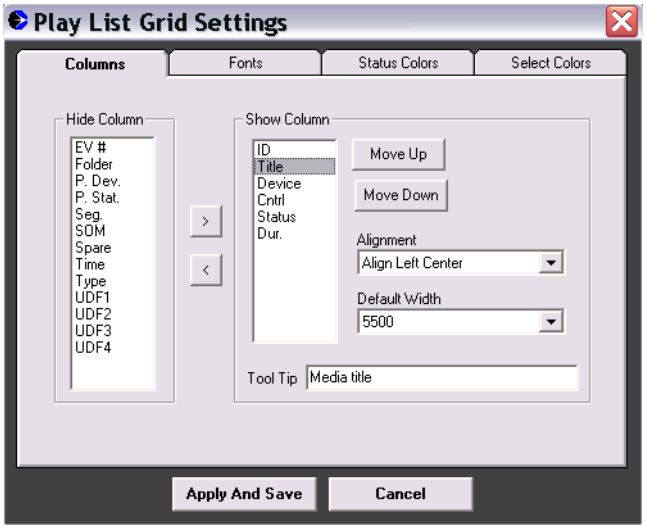
To move between tabs in the settings windows

- Use the right and left arrow keys to move between tabs.

To customize the columns in the play list

1 Select **Settings** > **Playlist Grid Settings**.

The **Play List Grid Settings** window displays.



2 Use the **Arrow** keys between the **Hide** and **Show** columns to move columns between the two lists.

3 Use the **Move Up** and **Move Down** buttons to arrange the columns as needed.

4 (Optional) To adjust the alignment of the text in a column, select an item in the **Show Column** list and select an **Alignment** from the drop-down menu.

5 (Optional) To specify a width for a column, select an item in the **Show Column** list and select a **Default Width** from the drop-down menu.

6 (Optional) to create a custom Tool Tip, select an item in the Show Column and enter information in the **Tool Tip** text box.

7 Click **Apply And Save** to save your changes and close the window.

To change the font in the play list

1 Select **Settings** > **Playlist Grid Settings**.

The **Play List Grid Settings** window displays.

2 Select the **Fonts** tab by using the mouse or by using the right or left arrow keys.

3 Use the **Arrow** keys between the **Hide** and **Show** columns to move columns between the two lists.

4 Select **Grid Header Font** to change the font that displays in the play list.

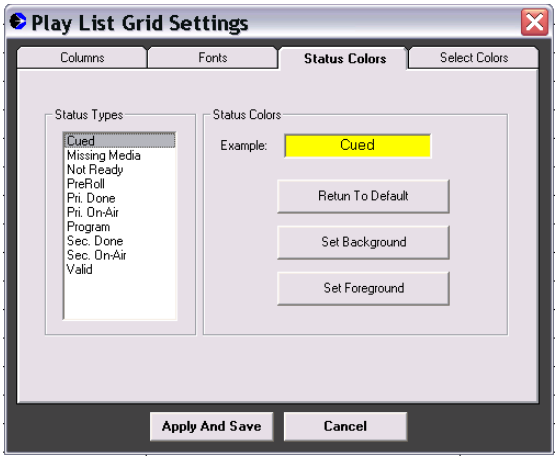
5 Click **Apply And Save** to save your changes and close the window.

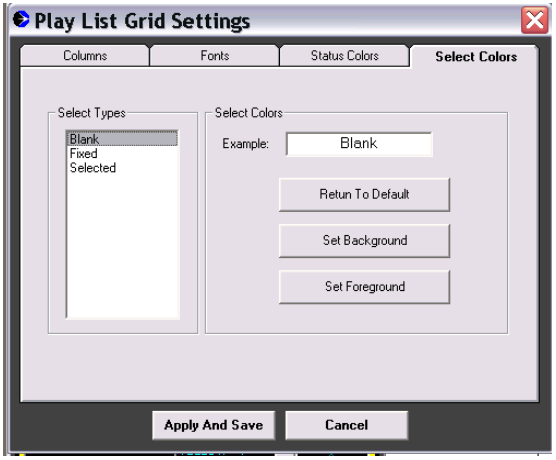
To change the status and selected clip colors in the play list

1 Select **Settings** > **Playlist Grid Settings**.

The **Play List Grid Settings** window displays.

2 Select the **Status Colors** or **Selected Colors** tab by using the mouse or by using the right or left arrow keys.





3 From the **Types** list, select the item you want to update.

4 Click **Set Background**. The colors dialog displays.

5 Choose a color for the background from the options and click **OK** to save and close the window.

6 Click on **Set Foreground** to change the font color.

7 Choose a color for the font from the options and click **OK**.

8 Click **Apply And Save** to save your changes and close the window.

Playlist Settings

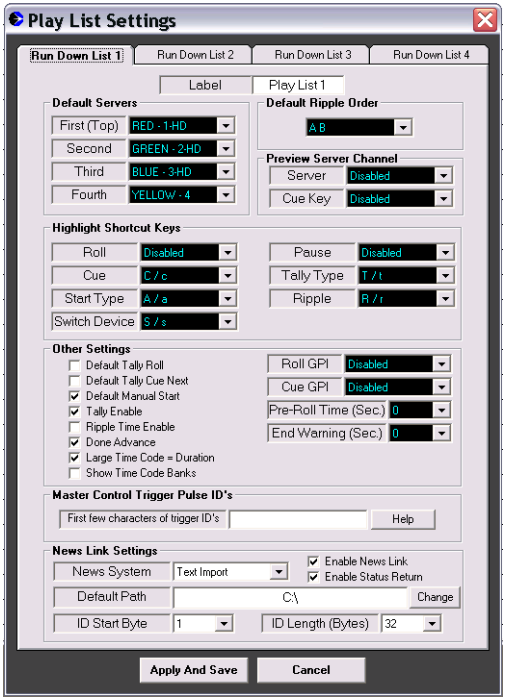
Each playlist can have unique settings. You can create completely different settings for each one. For example, if you routinely use wild reel roll-offs on Playlist 4, you can configure the playlist to use *Auto Start* on all the items on the playlist.

If you don't require specific requirements for a playlist, we recommend that you keep the settings for all the playlists the same to ensure that they behave in the same way.

To configure the play list settings

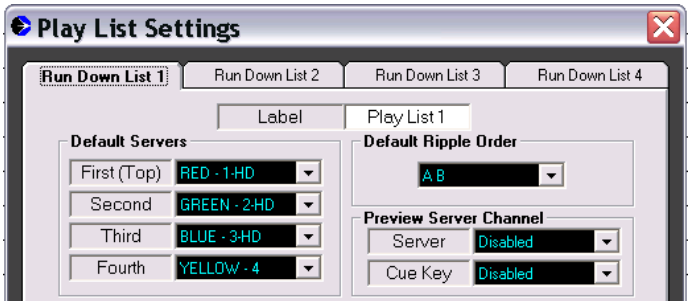
1 Select **Settings** > **Playlist Settings**.

The **Play List Settings** window displays.

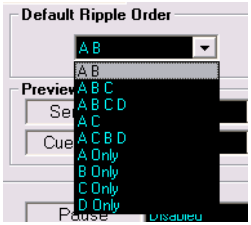


2 You can configure the following:

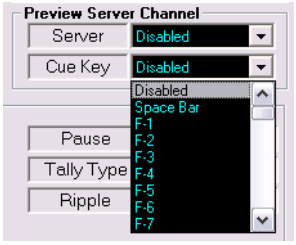
- **Label.** Use this to give the playlist a descriptive name.
- **Default Server.** Select a default server for each playlist by selecting what you want from the drop-down menu.



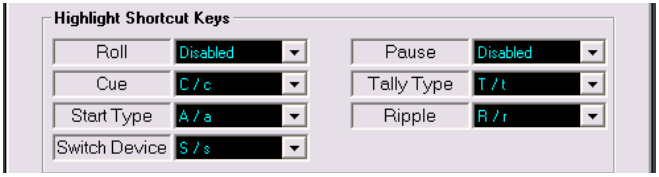
- **Default Ripple Order.** Select a the default ripple from the drop-down menu.



- **Preview Server Channel.** Use this to enable a preview server. For example if you select green and assign a shortcut key to it, any time you highlight an item and press that shortcut key that item will be put into green and play it. If you have enough server channels, you can preview a highlighted clip by pressing the shortcut key you assigned for a preview channel. If you have enough server channels, this is a great little feature.
  - **Server.** Select a server from the drop-down menu.
  - **Cue Key.** Select a shortcut key to assign to a server.



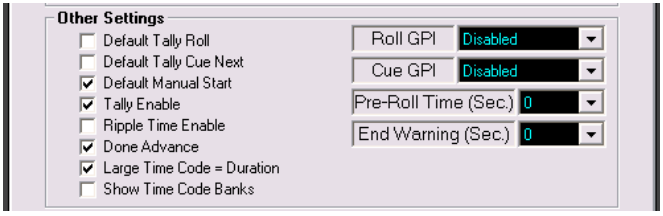
- **Highlight Shortcut Keys.** This will let you know which shortcut keys do what.



- **Roll.** This is not recommended.
- **Cue key.** The default for this is **C**. If you highlight a clip and press **C**. This cues the clips. You can select another shortcut key from the drop-down menu.
- **Start Type.** The default is set to the **A** key. Use this to toggle between auto or manual start.
- **Switch Device.** The default is set to the **S** key to switch between channels.
- **Pause.** Use Disabled. We recommend not using this.
- **Tally Type.** The default is **T** to toggle through the tally types. You can set it for *Tally Cue Next*, *Tally Roll*, *Manual*, or *No Tally*.
- **Ripple.** The default is set for **R** which will ripple the playlist.

Tip If you are not going to use these shortcut keys, we recommend that you disable them because the playlist is affected if the operator accidentally presses those keystrokes. You may also want to put a little sticker on those keys to indicate what they do.

- **Other Settings.**



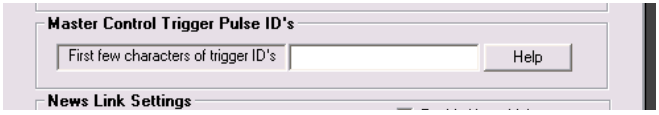
- **Default Tally Roll.** If this is checked, when an item is added on the playlist the default tally roll displays in the control field. For example, if you have the default
- **Tally Cue Next enabled.** all items added to the playlist will have the default with the Tally Cue Next on.
- **Default Manual Start.** If this is enable, items added to the playlist comes up with a manual start. If it is unchecked, the items added to the playlist are configured to auto start.

- **Tally Enabled.** The playlist is using Tallies and expects to see them. If you turn off the Tallies, turn off the Done Advance. If you have Tally off and Done Advance on, SOMETHING is really hard to operate.

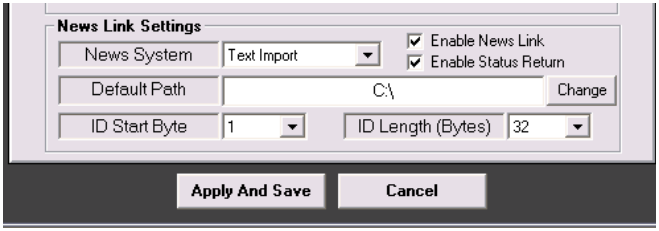
If you do not have the Tallies wired, you must disable Tallies.

- **Ripple Time Enable.** This changes timing of the system, so your TRT will use ripple time.
- **Done Advance.** When a clip is finished rolling, the next clip is automatically cued. If you want to cue the next clip manually, disable this feature.
- **Large Time Code = Duration.** The default for this is to display the large numbers which displays the duration. When unchecked, this displays the current timecode position of the server channel.
- **Show Timecode Banks.**
- **Roll GPIs.** You can assign a GPI input. When that pulse enters the PPC, the specified item is played.
- **Cue GPIs.** This cues the selected item.
- **Pre-roll Time.** Not currently supported.
- **End Warning Time.** The default is set to 10 seconds. A beep sounds when 10 seconds are left and the clip turns red. You can select between 0 to 30 seconds.

- **Master Control Trigger Pulse IDs.** The master control trigger pulse is used to automatically send a pulse to master control at the start of certain IDs. The first few characters of the IDs need to start with the first few characters that are indicated in the box provided. For example if the ID box contains *BLK,* then when an ID called **BLK60SECONDS** is started, a pulse will be sent to master. The IDs are all case sensitive. If no ID is indicated then this feature is disabled. Note: The pulse will ONLY be sent to master if the ID meets the criteria and is started automatically using the A in the control field of the playlist. All manual starts will NOT send this pulse.



- **News Link Settings.** Use this area to select the news link and how it works.



- **News System.** Select from several different options.
  - **The Text Import.** Use this to select the text file that contains the playlist information. You can also indicate which start byte. You can select or restrict which bytes you can bring in. When *Text Import* is enabled, *ID Start Byte* and *ID Length (Bytes)* display also.
    - **ID Start Byte.** Select from 1 to 80. Only available with *Text Import*.
    - **ID Length (Bytes).** Select from 1 to 32. Only available with *Text Import*.
- **Enable News Link.** Use this to enable that a playlist uses News Link.
- **Enable Status Return.** This will feed information back to the newsroom system.
- **Default Path.** Select the location where the file is located.

3 Click **Apply And Save** to accept your changes and close the window.

4 Close and restart **PPC**.

5 Shot Selector Module

The shot selector module is easy to operate and is used when you don't necessarily have a script. It's used for on-the-fly productions. For example, for the halftime show of a live sporting event, the broadcasters want to have a number of plays up and available but aren't sure what the talent is going to talk about. As a result, they want to have as many possible options available on and cued at any one time.

Topics in this section include the following:

- MediaBases
  - Advantage of a Dual MediaBase
  - The MediaBase Tree
- Server Channels
  - Choosing a Channel View
  - Disabling a Channel
  - F Key Functions
  - Stacking a Clip
  - Fast Cue
  - Banks
  - Recalling a Bank for a Loaded Clip
  - Eject a clip
  - Tallies
  - Countdowns

Shot Selector GUI Configurations

You can set up the Shot Selector a number of ways to fit your needs. You can have 4 or 8 server channels display and view one or two views of the MediaBase.

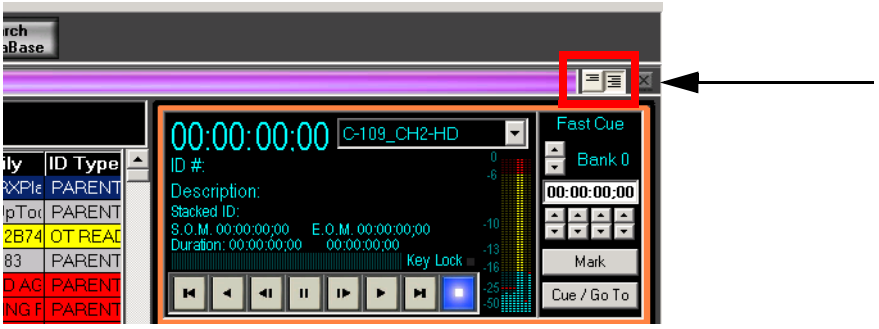
Figure 5-1 Shot Selector — Showing 4 or 8 Servers and 1 or 2 MediaBase Views

MediaBases

In the middle you'll see that the default is set to view two MediaBases which are the same. This gives you the option to view two different locations at the same time. If you prefer, you can reduce the view down to a single MediaBase. This will show a more lengthy view of the MediaBase. You can easily toggle back and forth between a to a dual or single MediaBase.

To toggle between a single and dual MediaBase view

- Click on the top-right hand corner to display a single MediaBase.



Advantage of a Dual MediaBase

In a dual MediaBase view, you can expand the MediaBase tree in the top and look at IDs that start with the letter C; and down in the bottom you might want to look at IDs that start with the letter H. As new material comes into the server and is filed, the MediaBase automatically updates. So if you are waiting for an ID that starts with the letter H, it displays once the editors are finished with it.

The MediaBase Tree

You can look at all the media, today's media, or yesterday's. You can also view by folders, or agencies. Those two terms mean the same thing. You can use that to sort and look at different parts of the centralized MediaBase.

To view specific media in the MediaBase

- You can either use the MediaBase tree or the Search MediaBase button to search for media. See the following for more information:
  - ***Searching the MediaBase*** on page 92
  - ***MediaBase Tree*** on page 90

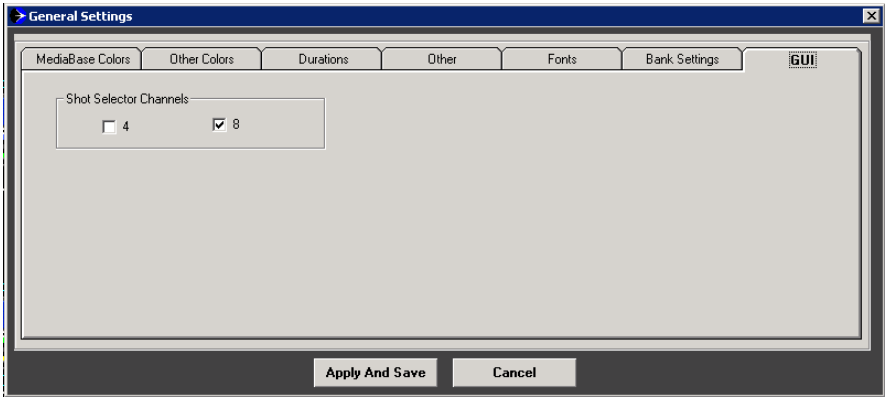
Server Channels

Along the outside, are the server channels that are Red, Green, Blue, and Yellow. You can go up to eight server channels in this view. There is also a way to configure the view down to four.

Choosing a Channel View

To configure the number of channels displayed

1. Select **Settings** > **General Settings**.
2. Select the **GUI** tab.



3. Under **Shot Selector Channel**, select either a four or eight channel view.
4. Click **Apply and Save**.
5. Close the **Shot Selector**, wait a moment, and then reopen it.

   You will see the number of channels specified.

Disabling a Channel

When this module opens up, it remembers which channels were up and their location. So if you disable channels that you're not using and then close the view down. When you reopen the view, it remembers which channels were active and which ones were not being used.

To disable a channel

- Select **Disabled** from the drop-down menu located next to the time code for that channel.

F Key Functions

If you highlight a clip, press the F9 key to load the clip into the red channel and it is ready to roll. Then press the F5 key to roll that clip. If you press F1, the clip is returned to the beginning. The next keys become the load keys. If you load another clip into red by pressing F9 again, press F5 again to play red.

F Keys by Color Channel

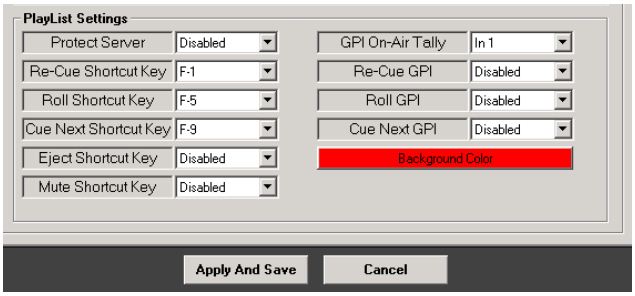
Red	
Back to the beginning of a clip	F1
Play or roll a clip	F5
Load and play next clip	F9
Stack a clip	Shift+F9
Green	
Back to the beginning of a clip	F2
Play or roll a clip	F6
Load and play next clip	F10
Stack a clip	Shift+F10

Blue	
Back to the beginning of a clip	F3
Play or roll a clip	F7
Load and play next clip	F11
Stack a clip	Shift+F11
Yellow	
Back to the beginning of a clip	F4
Play or roll a clip	F8
Load and play next clip	F12
Stack a clip	Shift+F12

To configure the F Keys

1 Select Settings > Server Settings.

2 At the bottom of the window, configure the keys you want to use to perform these functions.



3 Click **Apply And Save** to accept the changes and close the window.

To load a clip into a channel

- Select a clip in the **MediaBase** and press **F9, F10, F11** or **F12** (whichever is appropriate for that channel).

To roll or play a clip

- Select a clip in the **MediaBase** and press **F5, F6, F7** or **F8** (whichever is appropriate for that channel).

To return a clip to the beginning

- Select a clip in the **MediaBase** and press **F1**.

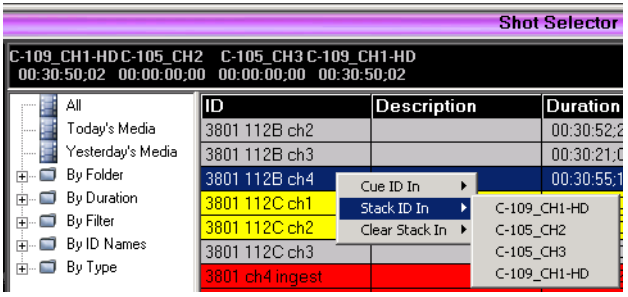
Stacking a Clip

Highlight a third clip and press SHIFT+F9, the third clip is placed in the stack. One item is now stacked into Red and at the end of the second clip, this module will frame accurately switch into the next clip which is the third clip that you stacked using SHIFT+F9. You can only put one item in the stack at a time. If you put another item in the stack, it will replace what is currently in the stack. When the stack is free, select the second clip again and press SHIFT+F9 to place it in the stack. If you want to interrupt the current clip and start playing what's currently in the stack, press Play on the GUI or the appropriate F key for that channel. The current clip stops and the one in the stack begins.

To stack a clip

- Do one of the following:
  - Select a clip in the **MediaBase** and press **SHIFT+F9, SHIFT+F10, SHIFT+F11 or SHIFT+F12** (whichever is appropriate for that channel).
  - Right-click on the clip you want to stack and select **Stack ID In**.

Choose from the available servers listed.



To replace a clip in the stack

- Do one of the following to replace a stacked clip:
  - Highlight the clip you want and press **SHIFT+F9**. This will replace what's current in the stack.
  - Drag and drop another clip from the MediaBase to the server channel.

To interrupt a rolling clip with a stacked clip

- Press **Play** in the GUI. The stacked clip replaces the current clip and begins rolling.

To empty the stack

- Press **CTRL+F9** to empty the stack.

F9 key is the default for the red channel. If you wanted to use load into Green, use F10 key to load. To stack Green, press SHIFT+F10. And to play what is stacked in Green, just press Play. If you have changed the default keys, use the ones you have assigned.

Fast Cue

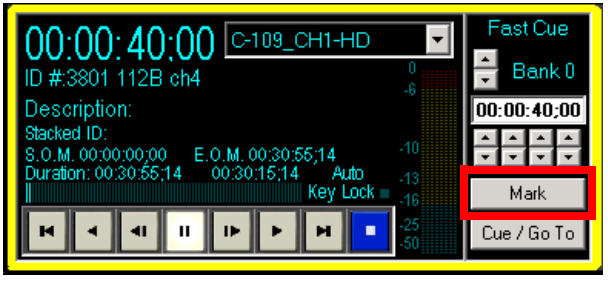
This area has two purposes:

- You can store several different pointers.
- You can quickly move through a longer clip easily.

This is a quick way to quickly look through material and jump around. For example, load a longer clip by dragging and dropping it into the channel. Place a mark point at any point and then advance through by a second, a minute, or even by an hour. If you know the time code number that you're interested in, enter the time code and press Go To. You are automatically taken to that point

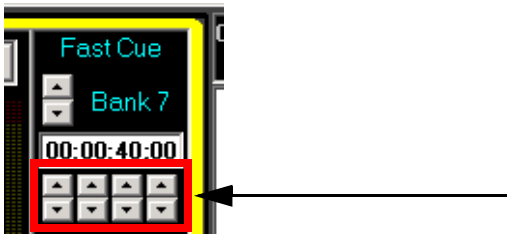
To mark a point in the clip

- Go to a time code and press **Mark**.



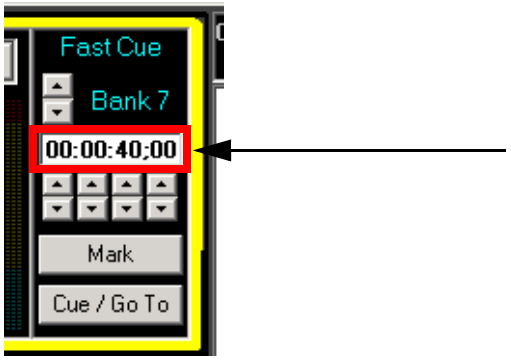
To advance through a clip in time increments

- Under the time code, press the arrow key directly under the amount of time you want to advance by. If you want to advance by a minute, press the up or down arrow keys under the minute in the time code.

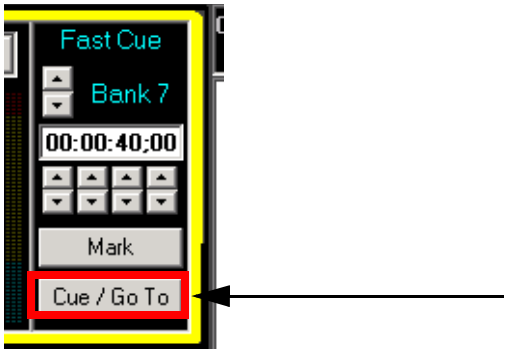


To jump to a time code

- Do one of the following:
  - Type the time code you want into the time code box.



  - If you have marked points in the time code, you can also press **Cue/Go To**.

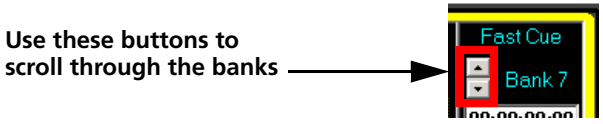


Banks

As you type information, that information is stored in the bank that you are in. There are twenty-one (21) banks. Bank zero is used as a scratch pad. The other banks you can store different time codes. The advantage is that you can go back to a particular bank that you've stored something under and then just press Go To and it will go to that point. There is also a setting in the General Settings where you can store the banks with the actual clip. Therefore, when you make an entry in the banks, you can press Go To to jump into that time code in the video clip. For banks 1 through 10, that bank information is stored in that clip, so if you take this same video clip and drag and drop it down to the Green channel, you'll see that Bank One's time code is there. Bank Two's time code is also there. If you press Go To is will go to that time code. The first 10 banks are actually getting stored with the actual clip in the LXF file and they're using the old description in the old agency field to do this.

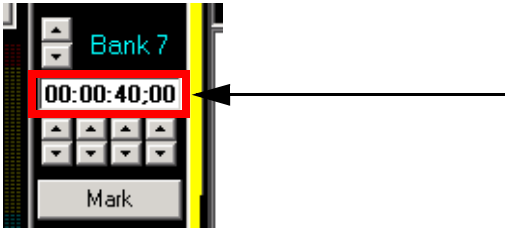
How the Banks are assigned

- **Bank 0.** This is used as a scratch pad.
- **Banks 1 - 10.** These banks can be assigned to individual clips.
- **Banks 11 - 20.** These banks are assigned to specific channels.



To store marks in a bank

1. Select a **Bank** from **1** to **10** for a clip.
2. Go to the **time code** you want to mark.
3. Press **Mark**.



To configure a bank to be stored with a clip.

This only applies to the first ten banks. Banks 11 through 20 are stored with a specific channel color.

1 Select **Settings** > **General Settings**.

The **General Settings** window displays.

2 Select the **Bank Settings** tab.

3 Verify that under **Store First 10 Time Code Banks With ID** the check box for **Enable** is selected.

For VR300 and VR400 systems, make sure that Disable is checked.

4 Click **Apply and Save**.

To configure a bank to be stored with a channel

- Channels 11 through 20 are automatically stored with the channels. See the ***Bank Settings*** on page 32 for more information.

If you are running on an older NEXIO, you would not want this feature turned on. You need to be on a newer platform with the newer, longer descriptions in order for this to work. Under General Settings, select Bank Settings, you can see that there are a couple of items here. The first is Store First 10 Time Code Banks with ID. If that's enabled it's actually getting stored with the ID. If you are on an older NEXIO system, disable that. Those banks are stored with the server channels, which means that those banks are stored in that channel. The banks really don't apply to the loaded ID they are assigned to the channels. For banks 11 and higher, they are stored with the actual channel. So once you put something in bank 11 and load different clips, Bank 11 will always be the same.

Recalling a Bank for a Loaded Clip

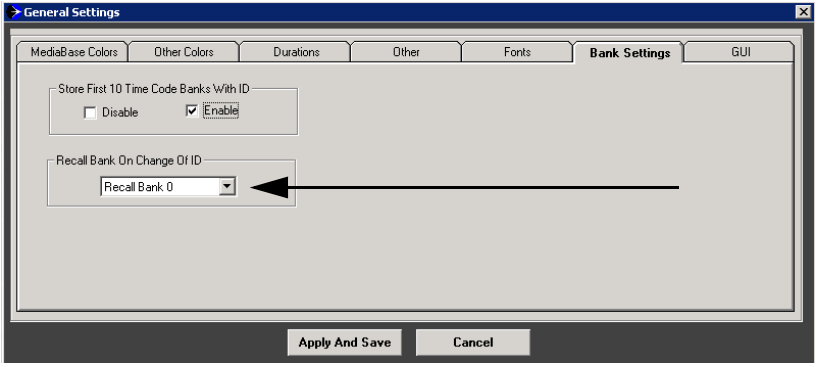
On the other item here is the recall banks on change of ID. You can set the bank to recall a specific number from one to ten. For that clip, it will automatically jump back to the bank you specified for that clip. You are not going to the time code. You are returning to the bank you specified for that clip. Press *Go To* to move the server channel to that point if needed. T

To recall a bank that has been stored with a clip

1 Select **Settings** > **General Settings**.

The **General Settings** window displays.

2 Select the **Bank Settings** tab.



3 Under **Recall Bank on Change Of ID**, select the bank you want to recall from the drop-down menu.

4 Click **Apply and Save**.

Eject a clip

You can also eject the clip by double-clicking on the stop button.

To eject a clip from a channel

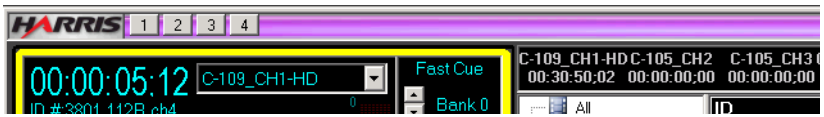
- Double-click on **Stop** and that will eject the clip.

Tallies

This shot selector has tallies. There are buttons to turn the tallies on to simulate if they took red on the production switcher. It shows you a flashing box similar to the playlist. This lets you know that red is on the air. Also, if you highlight a clip and then give the instruction on F9 to load that clip and the tally was on, you receive a message as well indicating that the server is on the air. In this way, the tallies provide additional protection which makes them worthwhile to set up.

To turn on a Tally

- Press one or more of the **Numbered** keys next to the **Harris** logo.



Countdowns

At the top, you have some countdown here as a way to summarize all the durations remain. Based on the configuration, this will change to red and sound a little beep to let you know that the clip is getting close to the end.

6 Package Builder Module

Use the Package Builder module to create simple playlists (or packages) using material from one of three sources: Live Recordings, MediaBase entries, or Events from a Fast Replay bank. Material can be mixed and matched from all of these sources into a single playlist. The playlists can be played back at normal speed or slow-motion. The playlist can then be saved for later use.

The Package Builder is designed as an intermediate step between playback of individual replays and full-blown non-linear editing.

The Package Builder module can control up to two simultaneous server channels. This can be used in a program/preview-style workflow or to create dissolves (this requires GPO control of a production switcher).

The following topics are included:

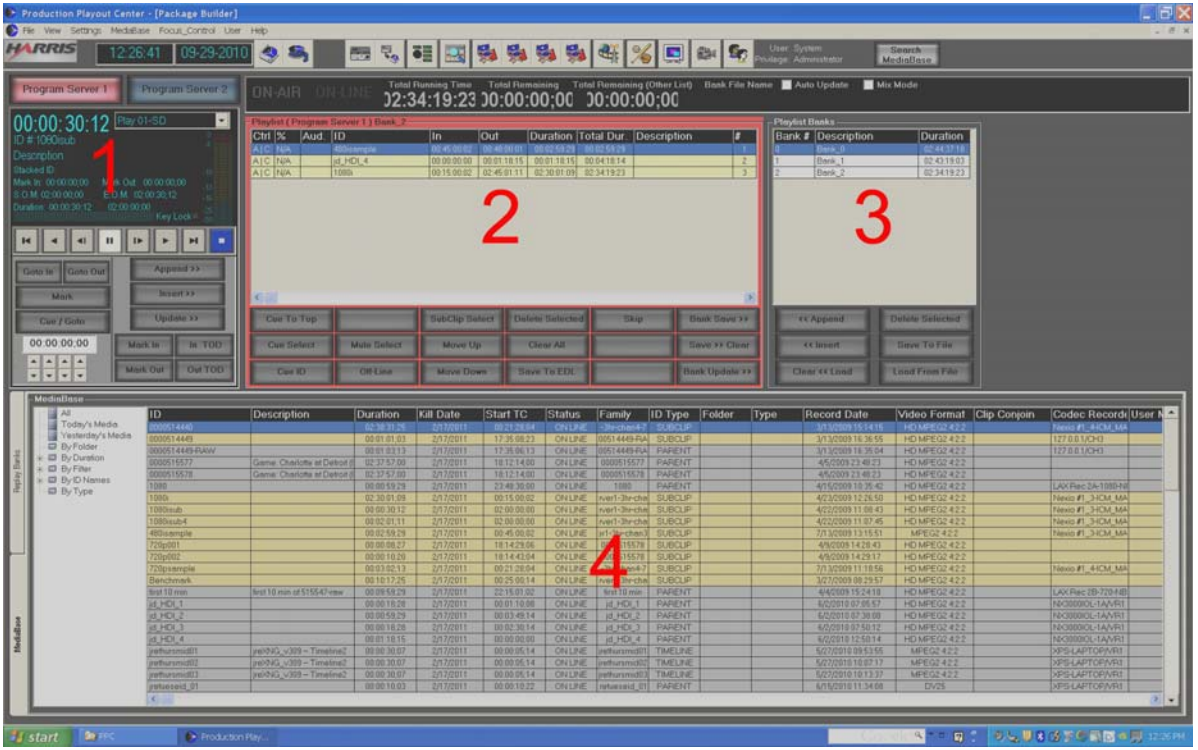
- User Interface Layout
  - Server Control
  - Playlist Controls
  - Playlist Banks
  - MediaBase/Replay Banks
- Package Builder Settings

User Interface Layout

To launch the Package Builder module

- Press the baseball bat icon  .

The User Interface is broken into four main areas:



1 **Server Control.** See page 151.

2 **Playlist controls.** See page 154.

3 **Playlist Banks.** See page 158.

4 **MediaBase/Replay Banks.** See page 159,

Server Control

The Server control area features a server channel status display and navigation tools very similar to those described in the ***Server View*** on page 44. Beneath those navigation controls are additional tools specific to the Package Builder module.

Figure 6-1 Server Control

This server control area can be used to play back and mark media which is currently being recorded or pre-recorded material. This is also the control that plays back completed playlists. Whether a clip is currently recording, or has already been recorded, simply drag it from the MediaBase window into the Server Control window to begin marking it.

Once loaded, the navigation controls work as they do in other modules.

To eject a clip from the server control

- Double-click the **Stop** button.

If you have loaded a clip which is currently being recorded and want to closely follow the action of the live event, you will want to *chase* the recording. This means you jump to ten seconds from the end of the recorded clip and play it back from that point. Do this to mark key events mere seconds after the event has taken place.

To chase a recording

- Double-click the **Go To End** button  .

Building a Playlist

To build a playlist, select key events from within the recorded clip and place those events into the playlist. This is done using the Mark controls beneath the navigation controls.

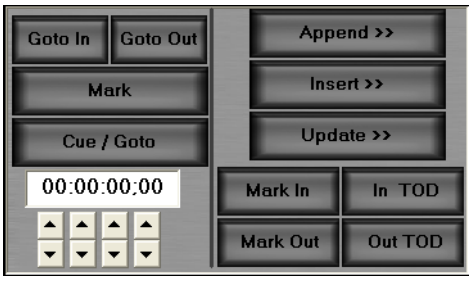


Figure 6-2 Playlist Controls

In its simplest form, you can choose *Mark In* and *Mark Out*, and then *Append* the event onto the end of the playlist. There are more complex controls available however.

Button	Function
	Jumps to the marked In point
	Jumps to the marked Out point
	Creates a Mark In with a pre-defined Mark Out position

Button	Function
	Moves the currently loaded ID to the timecode indicated
	Appends the ID including In and Out marks into the playlist
	Inserts the ID including In and Out marks before the currently selected item in the playlist
	Updates the currently loaded item in the playlist with new In and Out marks
	Marks an In point on the loaded ID
	Marks an In point on the loaded ID based on the Time of Day timecode
	Marks an Out point on the loaded ID
	Marks an Out point on the loaded ID based on the Time of Day timecode

Playlist Controls

The playlist area displays the current playlist. Use this area to manipulate the running order and behavior of the playlist.

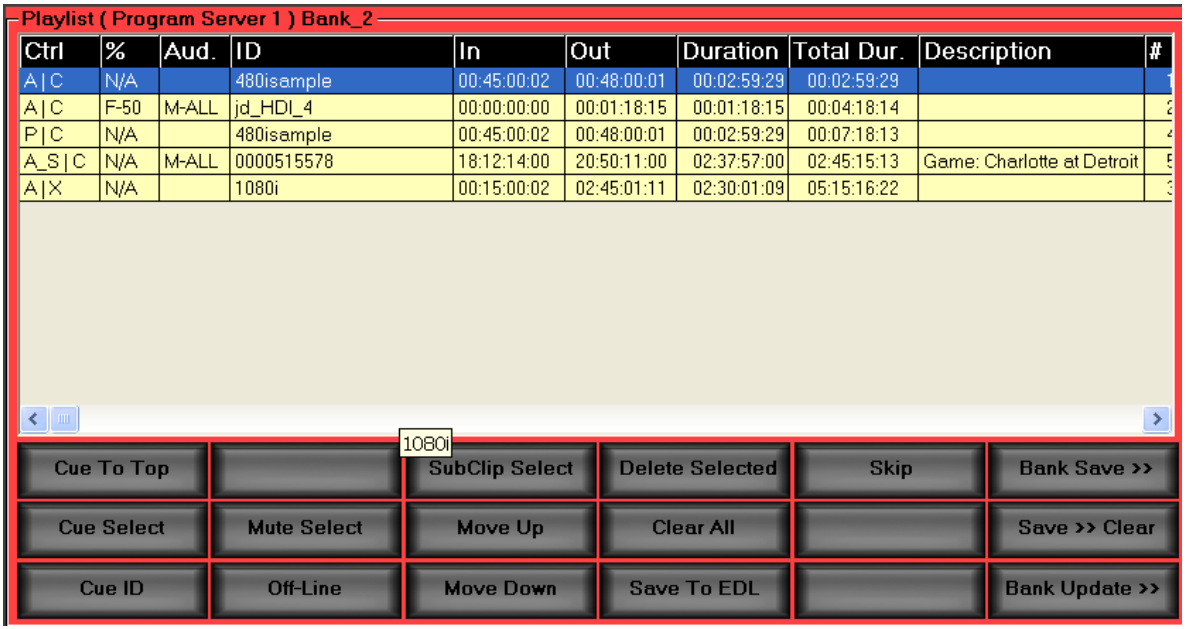


Figure 6-3 Playlist Controls

Each line of the playlist displays the behavior of the clip, the name, and the relevant metadata associated to each clip.

The control column determines how the playlist progress from one entry to the next.

- **A (Auto).** This means the playlist automatically plays this entry after the previous one is complete.
- **P (Pause).** This means the playlist pauses at the end of the previous entry.
- **A_S (Skip).** This means this entry is skipped and the following entry is played automatically.
- **C (Cut).** This means the entry is played with a cut between it and the previous clip.
- **X (Dissolve).** This means the entry dissolves into the end of the previous clip. This requires using *Mix Mode*, which is described in detail on page 157.

- **Percentage (%).** The % column indicates the speed that the entry is played back.
- **Number (10%, 20%, etc).** This is the speed the entry is played, which is expressed as a percentage of real time (100%)
- **N/A.** This means the entry is played back at the same speed as the previous entry. If an entry is set at 50% and the following entry is set at N/A, it also plays at 50%.
- **The Aud.** This column shows whether the audio for that entry is muted or audible. When Muted, it shows **M-ALL**. When audible, nothing displays in this field.

The remaining fields are standard metadata fields displaying clip name, description, In / Out Marks, etc.

Button	Function
	This cues the first item in the playlist
	This cues whichever item in the playlist is selected
	This cues just the selected ID but does not play the remainder of the playlist
	This turns off the audio channels of the selected clip
	This takes the playlist off-line. We recommend taking a playlist offline before editing it.
	This creates a subclip of the selected entry using the In / Out Marks
	This moves the selected entry up in the list
	This moves the selected entry down in the list
	This removes the selected entry from the list

Button	Function
Clear All	This removes all entries from the list, essentially creating a new playlist
Save To EDL	This saves the playlist into an EDL format, which can be imported on a Velocity editing station
Skip	This sets the *skip* attribute on the selected entry in the playlist
Bank Save >>	This saves the playlist into the Playlist Bank
Save >> Clear	This saves the playlist into the Playlist Bank and also clears it so the Playlist area is ready for a new playlist to be created
Bank Update >>	This updates a Playlist which was saved into the Playlist Bank after changes were made in the Playlist control

Please note that each of the two Server Channels can have its own playlist. This means you can play a playlist out of one channel and build a new playlist on the second channel. When you switch server channels, the outline of the playlist changes color to clearly indicate which server channel is currently active.

Status Bar

At the top of the Package Builder window is a status displaying key data.

Figure 6-4 Status Bar

Look here to see if the playlist is offline or on-air (determined by whether any entries in the playlist are currently cued or playing).

In the center of the display is the Total Running Time and Total Remaining Time of the currently displayed playlist as well as the Total Remaining Time of the playlist attached to the other server channel. The display showing the Total Remaining Time of the other playlist is useful if you are playing back the playlist on the other channel while building a playlist on the current channel.

Next to the timecode displays is the Bank File Name. This displays the file name of any bank which is loaded from or saved as a physical file on the hard drive.

Auto Update

You are able to save a playlist to a centralized network location in order to share it with another Production Playout Center operator. If Auto Update is enabled on both PPC stations any time you add an item to one of the playlists in the Playlist Bank, it automatically updates that playlist at the other workstation.

Mix Mode

Mix Mode allows the Production Playout Center to send a GPO trigger to a production switcher, and create a dissolve between two NEXIO playout channels. When enabling Mix Mode, the two server channels become linked, so only one playlist can be played.

Mix Mode makes use of three GPO triggers. The first tells the switcher to go to Server Channel A. The second tells the switcher to go to Server Channel B. The last one tells the switcher to trigger a dissolve effect. These are all configured in the Package Builder settings covered on page 160.

Playlist Banks

The Playlist Banks area stores saved Playlists. Use this area to append or insert these playlists into the currently displayed playlist.

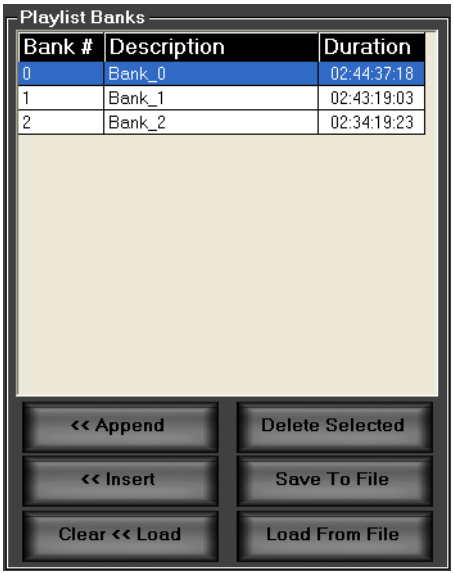


Figure 6-5 Playlist Banks

The Playlist Banks area displays all the playlists which were added to it using the *Bank Save* button described in the previous section. The total duration of each playlist is also displayed.

To change the description of the playlist

- Double-click the Description field.

The playlists in the Playlist Bank can be manipulated using the buttons at the bottom of the window.

Button	Function
Append >>	This appends the selected playlist at the end of the entries that are currently in the playlist window
<< Append	This inserts the selected playlist before the currently selected entry in the playlist window
Clear << Load	This loads the selected playlist into the playlist window and removes all entries currently in the playlist window
Delete Selected	This deletes the currently selected playlist from the Playlist Bank
Save To File	This saves the currently selected playlist to a physical file on the hard drive so it can be re-used at a later time
Load From File	This loads a previously saved playlist into the Playlist Bank

MediaBase/Replay Banks

Creating Playlists Using the MediaBase

In addition to creating playlists from media which is currently being recorded, you can also create playlists from previously recorded material. This is achieved using the MediaBase window at the bottom of the screen.

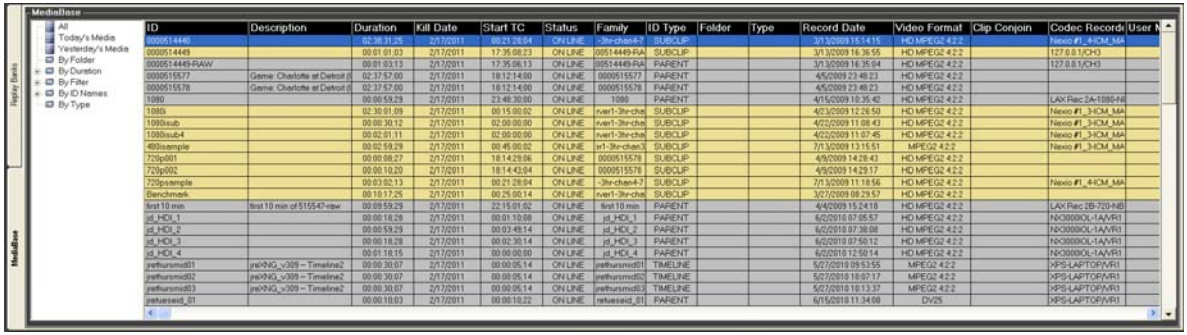


Figure 6-6 The MediaBase

This is a standard MediaBase window which displays all the media on the NEXIO storage and the associated metadata for each entry. Clips can be dragged out of this window either directly into a playlist or into the Server Control for preview and for marking In and Out points.

If the clip is dragged directly into the playlist, the entire piece of media is used. If you only want to use a small piece of that media, then the media should be loaded into the Server Control and marked appropriately before being added to the playlist.

Creating Playlists using the Replay Banks

At the left of the MediaBase window is a tab labeled *Replay Banks*. Select this tab to see the replay banks of up to four other Fast Replay operators.

Figure 6-7 Replay Banks

Select any of the numbers at the top left. Zero (0) represents your machine. Buttons 1-4 represent the four other Fast Replay operators. You can see the marks created by all the other operators and can then choose to append or insert them into the current playlist using the buttons at the left. You can also choose to create a subclip out of one of the marks using the tools at the lower left.

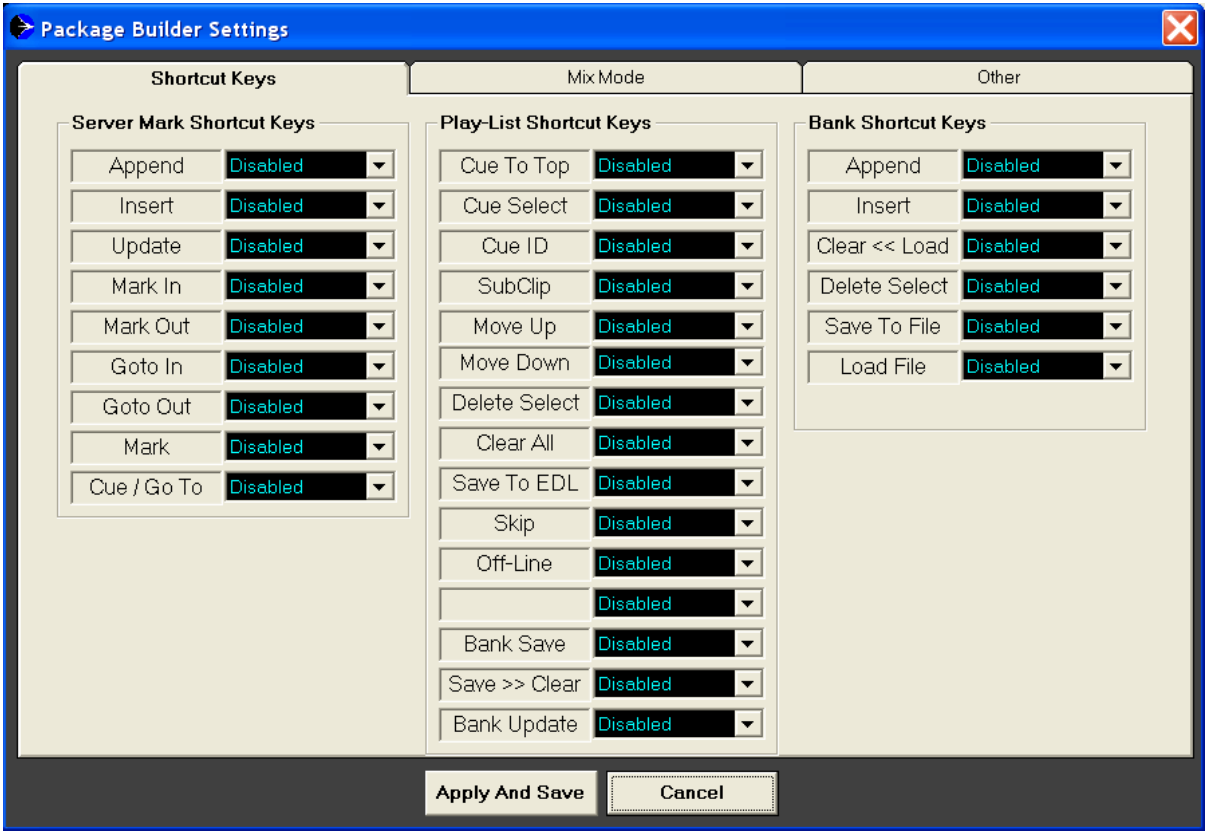
Package Builder Settings

To adjust the Package Builder settings

- Select **Settings** > **Package Builder Settings**.

The **Package Builder Settings** window displays. Three tabs are contained in this window: Shortcut Keys, Mix Mode, and Other.

Shortcut Keys Tab



The shortcut keys settings are broken into three categories representing the controls in the Server Controls, Playlist Controls, and Playlist Bank Controls. All buttons are capable of having a shortcut key assignment.

Mix Mode Tab

The Mix Mode tab is where the GPOs are configured for the Production Switcher.

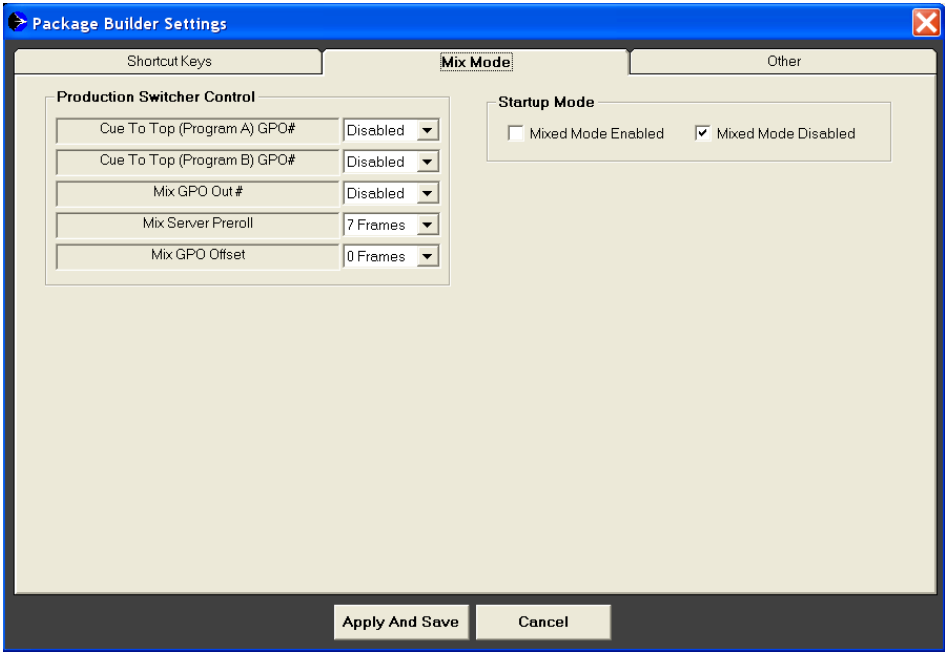


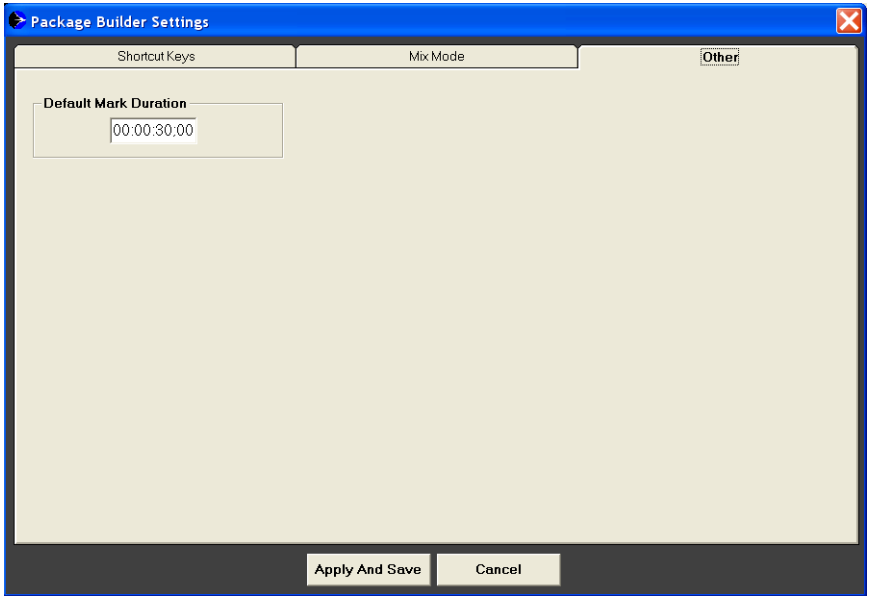
Figure 6-8 Mix Mode

The top three drop-downs all are used to tie a GPO trigger from the Package Builder module to an event on the production switcher. The first tells the switcher to go to Server Channel A. The second tells the switcher to go to Server Channel B. The last one tells the switcher to trigger a dissolve effect.

Production Switcher Controls

- **Mix Server Preroll.** Determines how early the clip in the second half of the dissolve begins playback.
- **Mix GPO Offset.** Accounts for the latency between the time the Package Builder sends the GPO and when it is actually received by the production switcher.
- **Startup Mode.** Use this to make *Mix Mode* the default behavior for the Playlist.

The Other Tab



Currently, the only setting on this tab is the *Default Mark Duration* setting. This comes into play if you use the *Mark In* tool in the Server Control, but choose not to add a Mark Out point.

7 Shot Box Module

Shot Box Module is designed for quick playback from finished clips or closed clips that are produced such as commercials or bumpers.

You can use the Shot Box module in arenas to quickly play small segments to the crowd on the jumbo screen. It can also be used with the production switcher so an operator can roll a few short clips or graphics off the screen as well.

Designed for Touch Screen Usage

All the buttons in this module are larger because this module was specifically designed to give you the optional feature of using it with a Touch Screen. The Shot Box is the only one that is touch screen compatible (The other modules will work with a touch screen but you will notice that the sizing is incorrect). The Shot Box was also designed to be easy to learn and can be used proficiently the same day that it's learned. It's also a great playback module.

Topics in this section include the following:

- **The GUI Interface**
- **Server Controls**
- **Bank Controls and Marks**
- **Shot Box Playlists**
- **The MediaBase**

The GUI Interface

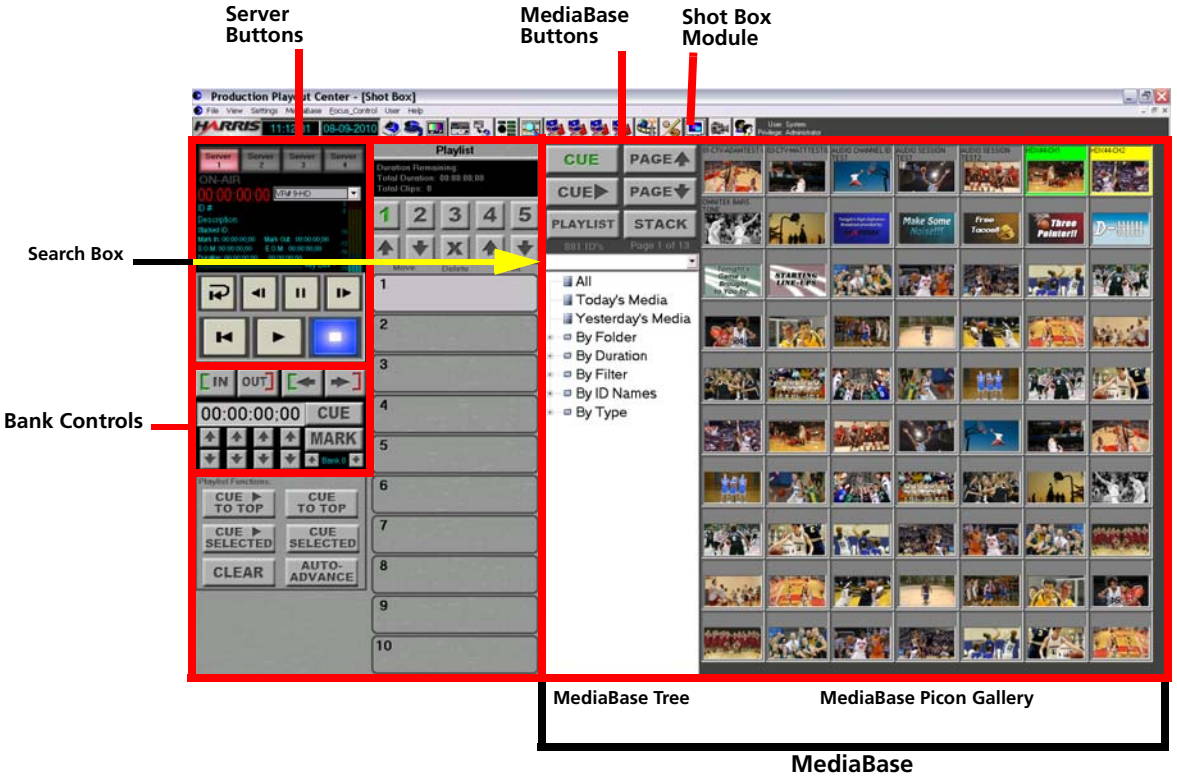


Figure 7-1 Shot Box Module

The Shot Box Module contains the following areas:

- **Server Area.** Use this area to select up to four servers, assign devices, and monitor the clips.
- **Bank Controls.** Use this area to mark and store In and Out Points.
- **Playlist.** Create playlists and galleries as well as cue and play clips.
- **MediaBase.** Use this area to search for and pull media from to create the playlists. Clips can also be cued and played from here.

To open the Shot Box module

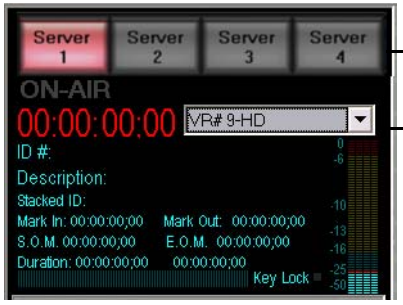
- Click on the **Shot Box** icon located on the icon menu at the top of your screen.

Server Controls

Use this area to quickly move between server channels and perform basic play functions.

To select Server Channels

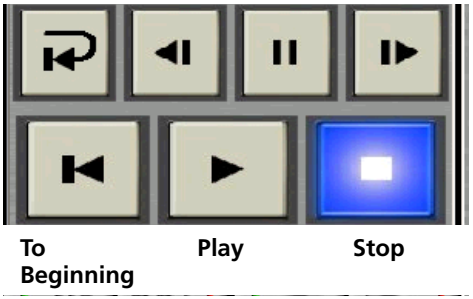
- Do one of the following:
  - Click on the large numbered button. You switch between four servers.
  - Select a device from the drop-down menu.



You can switch between servers here

Or select one from this drop-down menu

Play Controls



Double-click on Stop to eject a clip.

Figure 7-2 Play Controls

To play a clip

- Select a clip from the playlist and press the **Play** button.

Tip You can also play a clip directly from the playlist. See ***Cue and Play Mode*** on page 174 for more information on that subject.

To eject a clip

- Press the **Stop** button twice to eject a clip.

Bank Controls and Marks

Use this are to mark, cue and store In and Out points in banks. You can have up to twenty. The first ten banks are stored with the clip; if you unload this clip and bring in a new clip, then reload the original clip, the In and Out pointers are still available.

Button	Function
	Use these to mark In and Out Points.
	Use these to scroll through the In and Out Points.
	Use to Cue an In or an Out Point.
	Use this to save an In or an Out Point to a bank.
	Use these to job through the clip by hour, minute, second or frame increments.
	Use to scroll through your banks.

Using In and Out Points

Marking and Saving In and Out Points

To mark and save In and Out points on a clip

1. Select a clip from the playlist and press **Play**.
2. When you come to a section of the clip you want to use, press **IN**.
3. If you want to save the **In Point**, select a **Bank** to save it to and press **Mark**.
4. When you come to the end of that segment that you want to keep, press **OUT** and **Mark** again. These points are saved to the same bank.

Scrolling through In and Out Points

If you have marked several In and Out points in a clip, you can easily view them by using the left and right arrow keys.

To scroll through In and Out points on a clip

1 Play a clip from the playlist.

2 Use the left arrow to find In points. Use the right one to scroll through Out points.

You can use this feature to cue and then play a clip from that point on.

Cueing to an In Point

You can either scroll through the In points or enter a timecode to cue to.

To Cue to an In point on a clip

1 Select a **clip** from the **Playlist**.

2 Use either the **Left arrow** key to find the **In Point** you want or enter the **Timecode** in the timecode box.

3 Press **CUE**. The clip is now ready to play.

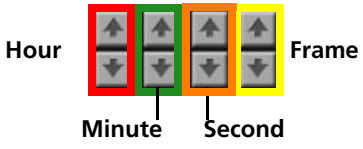
Searching (Scrubbing) through a Clip

For long clips, you can quickly scrub it by using buttons that move in increments by the hour, minute, second or frame.

To search through a clip

1 Play a **clip** from the **Playlist**.

2 Use one of the buttons below to move quickly through the clip.



Using Banks

You can save the In and Out Points for a specific clip to a bank.You have twenty banks available to use. The first ten banks are stored with a clip. The other ten can be applied to any clip. Use the Bank area to change or review the points for a clip.

Tip To mark and save a clip's In and Out points to a bank, see ***Marking and Saving In and Out Points*** on page 168.

To change banks

- Use these arrows to scroll forward and back to select the bank you want.

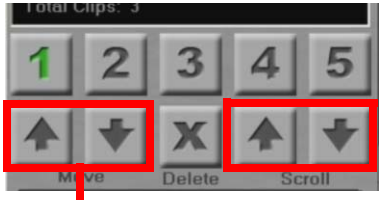
Shot Box Playlists

Use Playlist mode to play three or more clips in a row or to create a gallery of clips to group common media. You don't have to play the playlist in a specific order; you can select any clip in the playlist to play from that point.

You can create up to five playlists. All five can be active at one time. You can jump between playlists to add or delete clips. Playlists can be shared between multiple channels. You can cue the same clip off of the two different channels. These playlists are share across all the server channels. You can use the playlists to either play the clips in a certain order. Or you can use the playlist as a gallery.

Playlist GUI

Navigation Buttons



Use these buttons to create up

Use these buttons to scroll through the playlists

Use these buttons to scroll through the playlists

Figure 7-3 Playlist Navigation Buttons

Highlight Clip Colors

Figure 7-4 Cued Clip

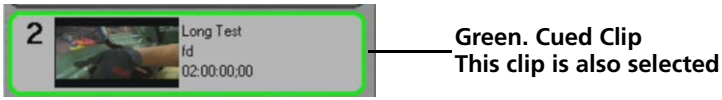


Figure 7-5 Selected Clip

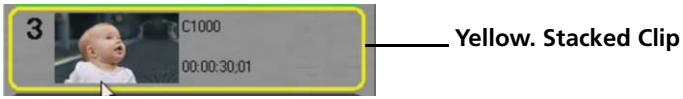


Figure 7-6 Stacked Clip

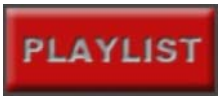
Playlist Function Keys

Button	Function
CUE ▶ TO TOP	**Cue Play To Top.** Moves selected clip to the top of the playlist, cues and plays the clip. Clip is highlighted in green.
CUE ▶ SELECTED	**Cue Play Selected.** Cues and plays selected clip in the playlist. Clip is highlighted in green.
CLEAR	**Clears the playlist.** Removes all clips from the playlist.
CUE TO TOP	**Cue To Top.** Moves selected clip to the top of the playlist and cues it. The clip is not played until you press Play.
CUE SELECTED	**Cue Selected.** Cues selected clip to play next. The clip is not played until you press Play.
AUTO-ADVANCE	**Auto-Advance.** Once a clip is cued in the playlist, if you click Auto Advance the next clip is automatically cued and played on the list. The next clip is highlighted in yellow.

Using the Playlists

To create a playlist

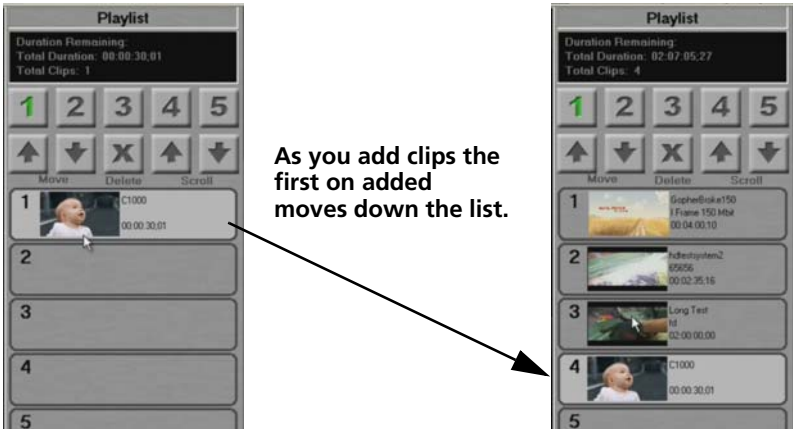
1 Click on the **Playlist** button. The playlist flashes red.



2 Click on clips in the **MediaBase** to add them to the playlist.

Every time you add a clip, it is placed in the first position adding the clip above the previous one.

Tip You can add jump from playlist to playlist to add clips.



To rearrange clips in a playlist

1 Select a clip. Selected clips are highlighted in light gray.

2 Use the **Arrow** buttons to move the clips either up or down.

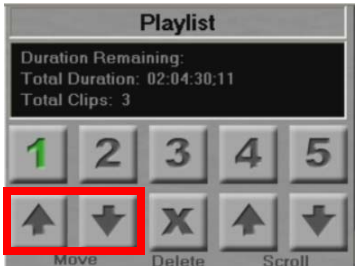
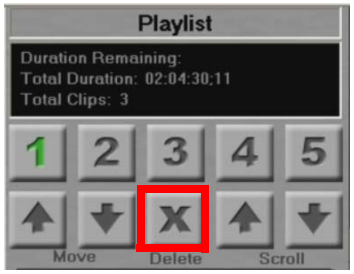


Figure 7-7 Move Clips Up and Down the Playlist

To delete a clip from a playlist

- Select a clip in a playlist and click the **X**. The clip is deleted.



If you have several pages of clips in a playlist, you can scroll through them using arrow keys just above the clips.

To scroll through a playlist

- Press on either the **Up** or **Down** arrows to move through the playlist.

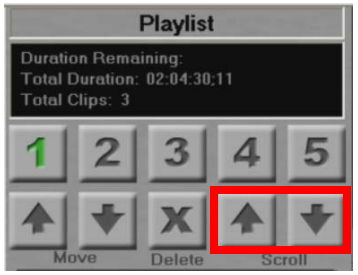


Figure 7-8 Scroll through the Playlist

To interrupt a clip

- You can interrupt a clip with another one by selecting another clip and pressing Play. The next clip starts playing. This applies to stacked clips also. If a base clip is playing, you can press Play to jump out of that clip and start the next stacked clip.

Cueing a Clip

By default, Cue mode is enabled. As soon as you select an ID by touching the screen, or by pushing the left mouse button, the clip is cued. A green box around it indicates it's cued and is ready to go. The clip will not run until you play it.

To cue a clip

1 Click on the **Cue** button.

2 Select a clip. It will highlight in green.

The clip is cued to the first frame. It will not run until you press Play.

To change a cued clip

- If a clip is already cued, click on another clip to remove the originally cued clip and replace it with the new one.

You can load any clip by clicking on the picon.

Cue and Play Mode

In Cue and Play mode, the clip you select is cued and played as quickly as possible. There is some latency between the time you select the clip and it cues and plays. This is based on your system performance and how quickly it can load the clip. As soon as PPC verifies that the clip is loaded, the clip is played.

To cue and play a clip

1 Press the **Cue/Play** button.

2 Select a clip. It will be highlighted in green.

If a clip is currently playing, the cued clip will play as soon as the first one is finished. If no clip is playing, the clip you selected will start to play.

Stacking a Clip

You can only stack one clip at a time. There are two ways to stack a clip. You can either use a shortcut key or you can use the Stack button. When the Stack button is activated, it is green. Once a clip is stacked, the button automatically becomes disabled. Therefore, if you clip on another clip before the stacked clip plays or while the base clip is playing, the stacked clips are cleared.

To stack a clip using shortcut keys

1 Press either **Cue** or **Cue/Play**.

2 Select a **Base Clip**.

3 Press and hold the **SHIFT** key and then select another clip.

The clip is highlighted in yellow to indicate that it is stacked. The clip will transition on its own and will turn green to indicate that it's loaded.

To stack a clip using the touch screen

1 Press the **Stack** button. The stack light turns on to indicate that the stacking feature is activated.

2 Touch a clip or use the left mouse button to load that clip into stack.

The stack light then goes off. The next clip you select will be a base clip.

To deactivate stacking

- Remove or change the base clip deactivates the stack.

Save, Create, Open Playlists

You can save, create a new, or open a different Shot Box playlist from the File menu.

To open a different Shot Box playlist

- Select **File** > **Open Shotbox List**.

To clear a Shot Box playlist

- Do one of the following:
  - Select **File** > **New Shotbox List**.
  - Press the **Clear** button in the lower left.

To save a Shot Box playlist

- Select **File** > **Save Shotbox List**.

The MediaBase

This database uses picons to display the clips. There is a picon generator that generates the icon and decides which frame to select. In future versions, you will be able to right-click on the picon and choose a different portion of the clip.

MediaBase Buttons

These buttons were designed specifically for touch screen use to quickly move through the media base.

Button	Name	Function
	**Cue Clip**	Cues a clip to the first frame without playing it. Clips that are selected, display in green.
	**Cues/Play**	Cues and plays and clip.
	**Playlist**	Add clips to a playlist. You can select any of the 5 playlists available to add to.
	**Page Up**	Pages up in the MediaBase
	**Page Down**	Pages down in the MediaBase
	**Stack Clip**	Stacks a clip. Only one clip can be stacked at a time.

Clip Indicators

Color	Status	
	**Cued Clip (Base Clip)**	This clip is cued and ready to play
	**Stacked Clip**	This clip is stacked and will cue and play as soon as the base clip finishes
	**No Bitmap**	This clip does not have a bitmap associated with it. This is likely because the associated MediaBase entry is an Empty ID (a one frame placeholder ID commonly used in conjunction with Newsroom Computer Systems).

MediaBase Tree

Use this to sort entries. If you only want to see a small section, you can use the tree to see clips that were created today, yesterday, etc. You can also sort by folder or by different filters. See ***MediaBase*** on page 88 for more information.

Picons

Picons are created by the Picon Generator which runs in the background and launches automatically when PPC is opened. If a clip displays in the MediaBase with a film strip icon instead of an image of video; that means it does not have a bitmap created for the clip. Either the Picon Generator has not created the bitmap yet, or it is unable to create the bitmap. This is likely because the associated MediaBase entry is an Empty ID (a one frame placeholder ID commonly used in conjunction with Newsroom Computer Systems).

The number of picons you see displayed is based on the size of your screen; this is because the size of the picon is based on resolution. If you have a bigger screen, you will automatically see more picons. The picon sizes themselves are fixed for the size of this module. You can get more or less of them. But the size is fixed to optimize the resolution of the picons for performance.

By hovering over the a picon, you can scroll through 5 different picons from different points in the associated piece of media. This gives you an idea of the contents of that clip.

You can save, create a new, or open a different Shot Box playlist from the File menu.

8 Fast Replay Module

The Fast Replay module of the Production Playout Center is designed for fast turnaround of replays during live events. Often this means sporting events, but it could just as easily mean multi-camera in-studio productions like game shows and talk shows.

Each Fast Replay module can control up to four inputs and four outputs. Each input represents a different camera angle, and each output represents a NEXIO Playout channel. The interface is easily configurable to support any combination of inputs and outputs (up to four in each category). Additional software-only Fast Replay modules may be purchased to expand the number of inputs and outputs supported.

Topics in this section include the following:

- **Channels**
- **Fast Replay Settings**
- **Creating Replays**
- **Creating Subclips**
- **Using a DNF Control Panel**

Channels

To launch the Fast Replay module

- Press the camera icon  .

Record Channels

Across the top of the interface are the record channels. Each record channel represents an incoming camera feed. Each feed is a different angle of the same game or studio action.

These windows provide feedback to you as a confidence monitor. Use this to determine if the feed is recording properly and has audio.

Tip If the record window is flashing *No Communication*, this indicates that the PPC is not communicating properly with the NEXIO servers. Please check network settings and connections.

In order for the Fast Replay module to work properly, there must be records in progress on the record channels.

To start a record

1 Click on the **VR View** icon  .
The **VR View** displays.

2 Select the channel to start the record using the drop-down menu in the upper right.

3 Press **CTRL+ALT+Q** to start a crash record.

This record can be started from any NEXIO-connected interface, including Ingest Control Manager, Invenio Capture, or NXOS.

4 (Optional) Once the record starts, you may close the **VR View**.

Notice that the record channels now have moving timecode, and indicate both a duration and an ID name.

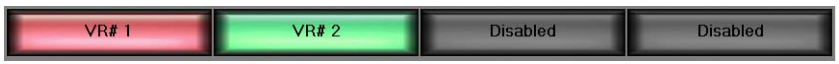
Playout Channels

The portion of the interface beneath the record channels is dedicated to the control of the Playout channels. All Playout channels are managed from a single set of navigation controls. These controls include VTR-style play controls (play, stop, rewind, etc.), a jog/shuttle knob, and a T-Bar. All of these navigation controls are also available on an optional control panel (DNF ST300-Harris-T-RS422, available directly from www.dnfcontrols.com).

The playback channels controlled by these navigation tools are determined by which channels are enabled.

To enable a channel

- Click on its associated button just beneath the record channels.



In the scenario above, playback channels *VR# 1* and *VR# 2* are enabled, and the other two channels are disabled. When multiple channels are enabled, the navigation tools affect all of the channels equally. So, if channels *VR# 1* and *VR# 2* are enabled, and the T-Bar is activated to start a slow-motion playback, both channels are played in slow-motion.

The *Jump Back* setting in the lower left is used to determine how far back in time the play controls jump when playing back the recorded clip. If you are monitoring live action, and hit Play, or Jog, or Pause, or any of the other playback controls, the playback server jumps out of E-E mode and into Playback mode. Because the playback of the recorded clip is a certain amount behind the live action, the playback controls have to jump back an appropriate amount of time to accommodate this discrepancy. In most cases, 5 seconds is appropriate for the *Jump Back* setting. In a traditional replay environment, this setting rarely comes into play because you are creating specific marks to go to.

All the controls in the playback section, such as Goto, Trim, and Fast Cue function exactly as described in the ***Server View Menus*** on page 49.

Fast Replay Settings

To customize the look and behavior of the Fast Replay module

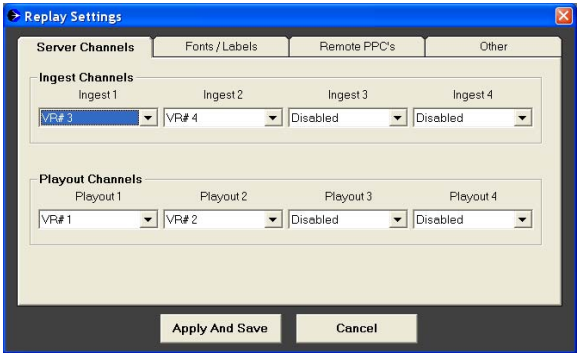
- On the **Main** menu, select **Replay Settings**.

Tip If you don't see this menu item, you are not logged in as an administrator. See your system administrator for access.

The Replay Settings dialog has four sections:

- ***Server Channels*** on page 182
- ***Fonts / Labels*** on page 183
- ***Remote PCs*** on page 184
- ***Other*** on page 184

Server Channels



In this section, you assign each Ingest and Playout channel to a NEXIO server channel. Take care to ensure that you select NEXIO Record ports in the Ingest Channels section and NEXIO Playout ports in the Playout Channels section. You may also choose to have certain Ingest and Playout Channels disabled.

In order to achieve optimum replay performance, Harris STRONGLY recommends that you configure the underlying NEXIO server systems as two in, two out. Then, in this dialog box, select record/playout pairs for your Ingest and Playout Channels.

For example, in the above example, channels *VR# 3* and *VR# 4* are record channels 1 and 2 from NEXIO A. Channels *VR #1* and *VR# 2* are playback channels 1 and 2 from NEXIO A.

Tip To create an efficient workflow, pair Ingest 1 and 2 with Playout 1 and 2 so the Fast Replay module can use the NEXIO server's E-E function.

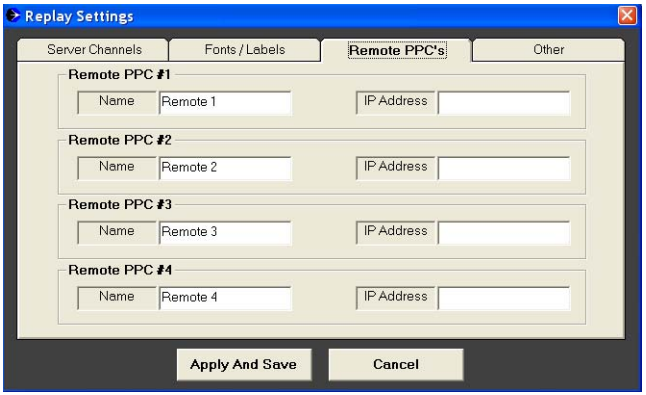
By using E-E mode, you can monitor the live action as it happens. If you do not configure the NEXIO servers in this way, the Fast Replay module still works, but you are forced to monitor the live action several seconds after the fact.

All of these server labels and configurations are set in the Server Settings *section of the Settings. For more information, see* ***Server Settings*** *on page 38***.**

Fonts / Labels

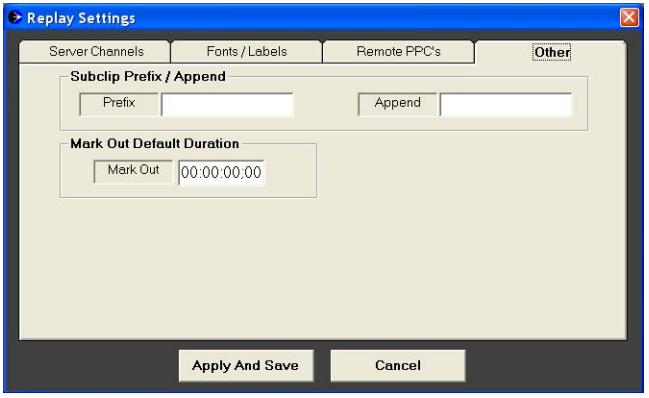
Use this area to change the font used in the Banks section of the interface and the names of the four columns used in each back. Traditionally, these labels are descriptions of different camera angles, such as *mid-field*, *end-line*, etc.

Remote PCs



With the Fast Replay module, you are capable of viewing work from up to four other Fast Replay module operators. Use this section to add a descriptive title to each operator. This is also where you enter the IP address of each remote PPC Fast Replay computer.

Other



The Fast Replay module has a Fast Subclip function that you can use to quickly create subclips without having to enter data. Use the *Prefix* and *Append* fields to create pre-defined tags that automatically generate a subclip name for easy metadata searching later.

Tip Use the *Mark Out Default Duration* to mark an In point while watching live action. The Out point is automatically populated 10 seconds later. You don't have to mark an Out if you don't want to.

Creating Replays

Once the module is configured using the settings and the Record Channels are recording, you are ready to create replays. There are seven key buttons used for creating replays.

	**Go To Live** puts the NEXIO server in E-E mode; the Playout Channel displays the same video as the Record Channel.
	**Mark In** creates an In Mark on the recording clip.
	**Mark Out** creates an Out Mark on the recording clip.
	**Go To In** jumps the playback channel to the In Mark on the recording clip.
	**Go To Out** jumps the playback channel to the Out Mark on the recording clip.
	**Chase** loads the recording clip into the playback channel and plays it back 10 seconds behind live action. For productions which don't require *Instant* replay, this may be an acceptable way to mark key events.
	**Save Clip** places a key event into the bank by using the marked In and Out points.

GoTo Live Button

The most important function in the Fast Replay module is the *Go To Live* button. Use this button to always returns to monitoring live action. When configured as described in the **Server Channels** section of the settings, this places the NEXIO server in E-E mode.

While monitoring the live game action, press the *Mark In* button whenever a potential key event occurs. The event may turn out not to be noteworthy. If this is the case, press *Mark In* again. When a noteworthy event happens, you may choose to press *Mark Out* at the end of the event (though this step is not necessary.

If no Out point is marked, the Out point is determined using the Mark Out Default Duration *setting described in the* **Other** *section of the Replay Settings.*

After making the marks, press the *Go To In* button to place the recording clip at the marked In point. You can also choose *Go To Out* to go to the marked Out point. But the vast majority of the time, the replay begins from the In point.

After hitting *Go To In*, if the mark was placed accurately, you have the option to immediately play back the event.

To play an event back in standard time,

- Press the **Play** button.

To play an event back in slow-motion

- Click and drag the **T-Bar** to the appropriate speed.

Remember, whether performing standard playback or slow-motion playback, the channels affected are the channels that are enabled. If all four playback channels are enabled and the T-Bar is moved to 50% slow-motion, then all four playback channels play back at 50% speed.

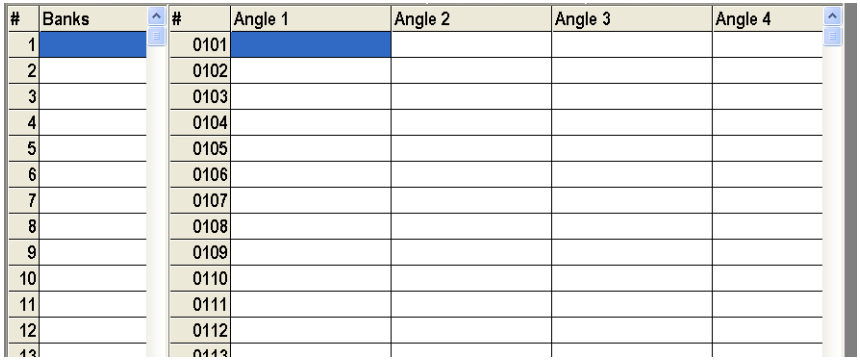
Sometimes the marked point may not be perfectly placed since live action is difficult to predict. If this is the case after hitting *Go To In*, you may want to use the Jog knob to move the recording clip forward or back a small amount. This ensures that Replay starts at the appropriate point.

To return to live action

- Once the Replay has been played, press the **Go To Live** button to return to the live event action.

Saving Marked Events Into Banks

Sometimes an event is noteworthy enough to be saved for potential re-use later in the game or to archive. The lower right of the interface is called a *Bank* and is dedicated to the storing of and fast access to these saved events. These banks are also **available in the PPC Package Builder module described in Chapter 8**.



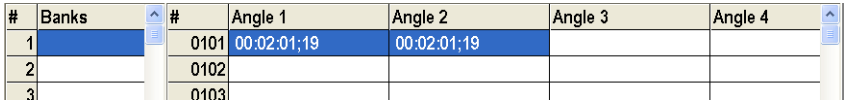
To save a marked event in a bank

- Press the **Save Clip** button.

This places the event into the bank. The playback channels enabled when the button is pressed are also added to the bank. If all four channels are enabled, then all 4 columns of the bank are populated. The events are added to the bank on whatever line is currently selected (line one in the example above).

There are 99 Banks, and each Bank has room for 99 events.

When an event is added to the bank, it displays the Mark In timecode.



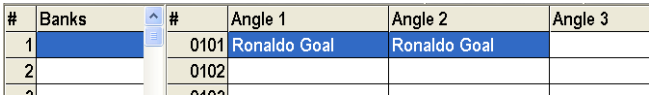
In the above example, notice that only two of the four channels were enabled at the point the *Save Clip* was executed.

While this timecode information is mildly useful, you may likely want to add more descriptive information.

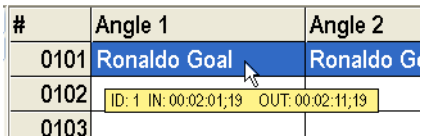
To add information to Bank entry

- Double-click on an **Angle** cell, enter in a useful description of the play (*Ronaldo Goal* for example) and press **Enter**.

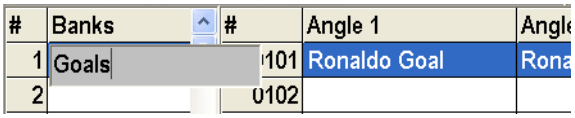
All entries in the row are updated with the description.



Tip After adding the description, to see the key Timecode of the marks, hover over the description with your mouse cursor:



You may also add a label to each of the 99 banks using the same method. Double-click the cell and type in the name of the bank.



Tip Organize your banks by players. For a sporting event, you may want to keep a separate bank for each player on the field.

Recalling an Event from a Bank

To play back an event from the bank

- Select the appropriate cell and press the **Cue** button located above the banks.

This loads the selected event on the equivalent playback channel. If you choose the first cell and press *Cue*, it loads on playback channel one. If you choose the second cell, it loads on playback channel two, and so on. You may also choose *Cue/Play*, which cues and plays the selected cells in a single step; however, this is not a common mode of operation.

To load all the angles in a row into their equivalent playback channels

- Select any of the cells in a row and select **Cue All**.

To recall a clip manually

1 Type the bank and row number (02-03 would be Bank two, Row 3).

2 Press **Recall Clip**.

Active playback channels are loaded with the events from that row.

To load an event in a cell into a different playback channel

- Select the appropriate cell and press the number of an alternate playback channel using the numbered buttons next to the **Cue All** button.

Tip Remember, hitting *Go To Live* always takes you back to a clean slate so you can go back to monitoring live action.

Viewing Banks from Other Fast Replay Operators

In addition to your own 99 banks, you can also see the banks from up to four other Fast Replay operators. This may be handy when a fellow operator has several great angles, but not enough playback channels to play them on. In this instance, an operator with available playback channels can view the other operator's banks, select an event, and play it back from his own playback channels. No push or pull of media is required in this scenario because of NEXIO's shared-storage architecture.

To view another Fast Replay operator's banks

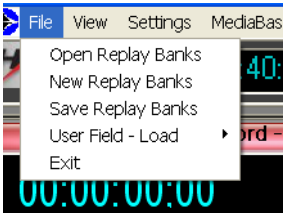
- Select one of the operators using the numbered buttons at the top right of the banks.

When the *Zero* button is selected, you are viewing your own banks. While viewing another operator's banks, select the cells you'd like to playback. Then choose the channel you'd like to play that cell in. Be sure to use the numbered buttons next to the *Cue All* button.

Clearing, Saving, and Opening Banks

To clear all the events in a bank

- On the Main menu, select **File** > **New Replay Banks**.



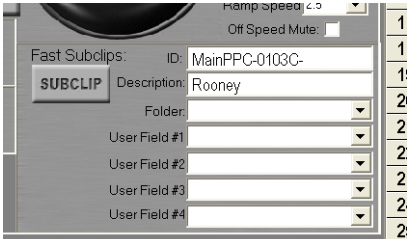
Banks may also be saved and loaded, using the appropriate menu items.

Creating Subclips

When you've added an event to a bank, it is still simply a pointer. It doesn't exist as a physical entry in the NEXIO MediaBase yet. It is useful to other PPC operators but not to anyone else on the system.

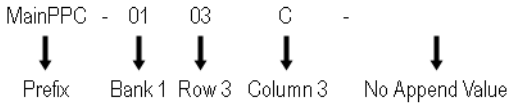
To make a subclip

- Select the cell in the bank and press **Subclip** just beneath the **Jog knob**.



The ID field is automatically populated using the prefix (if any) determined in the **Other** section of the Replay settings. You can also use this section to populate the Bank number, Row number, and Column number (followed by the append value, if any).

In the above example *MainPPC-0103C-*, the operator set the prefix to be *MainPPC* and selected bank 1, row 3, column 3 (columns are indicated via letters, where A is column one, B is column two, C is column three, and D is column four). No append value was set.



When the user enters a description into a cell, instead of the default timecode value, this data is automatically placed into the Description field of the Subclip section.

All of this data are defaults that can be changed to any value.

To add information to the NEXIO MediaBase

1 Select a folder (agency) and enter user field information.

2 Press the **Subclip** button.

A subclip is instantaneously added to the NEXIO MediaBase and is available to all other NXOS operators, Playlist operators, Editors, and any other users attached to the NEXIO Shared Storage.

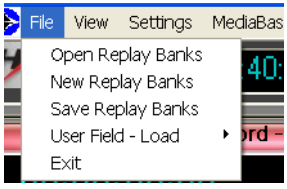
Pre-Populating User Fields

To create pre-defined values for User Fields 1-4

1 Create a text file that contains one player name on each line.

For example:
Jim Jones
Jack Johnson
Jerry Jefferson
Jed Jackson

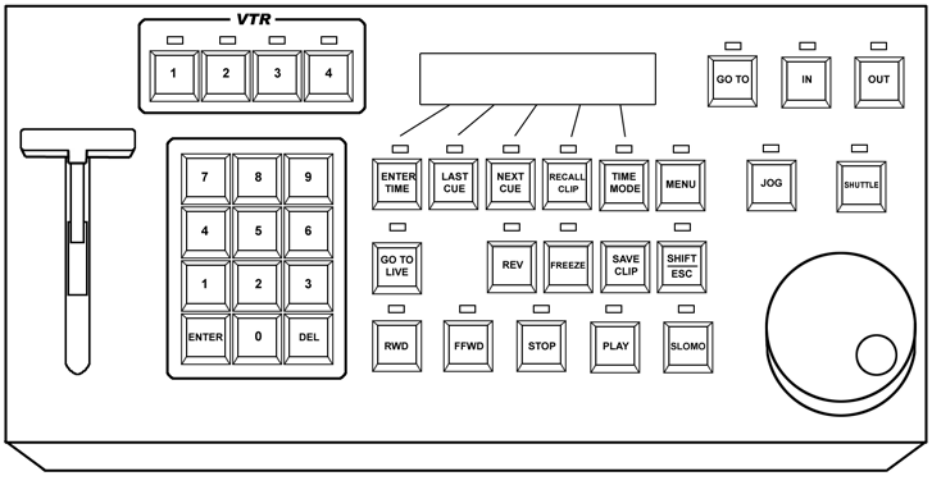
2 Select **File** > **User Field – Load**.



You may now select a different text file for each User Field. This is an invaluable timesaver, allowing the operator to add rich metadata during a live event, when there isn't time for a great deal of typing.

Using a DNF Control Panel

The Fast Replay Module can be operated in a more efficient manner by using a DNF Control Panel. The model that works with the PPC is the ST300-Harris-T-RS422. This is an RS-422 connected control panel. The majority of the above described steps can be done using the control panel.



The DNF Control contains the following functions:

- **VTR Buttons.** These buttons, labeled 1-4, control which of the four playout channels are active.
- **Number Pad.** This is used to numerically recall an event. Simply type the bank and row number of the event you wish to recall, and hit Enter
- **In, Out.** This is where the user creates the Mark In and optional Mark Out
- **Go To.** Takes the user to the Mark In position
- **T-Bar.** Used for Slow Motion playback of the enabled Playout channels
- **Jog/Shuttle.** Used to fine tune start positions of marked events
- **Save Clip.** This will save a marked event into the bank
- **Last Cue/Next Cue.** This will move the operator to different cells within a bank
- **Recall Clip.** This will load the currently selected cell in a bank into a playout channel

To simplify the workflow to its bare essentials

1. Press **Mark In**.
2. (Optional) Press **Mark Out**.
3. Select **Go To**.
4. Select the channels you want to play back.
5. Play back using either the **Play** button (standard time) or **T-Bar** (slow-motion)
6. Press **Go To Live** when **Replay** is complete.

9 FAQs

The following topics are included:

- PPC Features
- Hardware

PPC Features

Demonstration of the PPC

Q: Is it possible to see a demonstration of this product in the Northridge demo room?

A: Yes, this capability is in place today.

Super Slow Motion?

Q: Does PPC support Super Slow Motion?

A: Super Slow Motion is not supported by PPC. PPC is a controller for NEXIO servers and only contains functionality supported by NEXIOs.

Quick Replays?

Q: How fast can replays be "turned around" during live game action?

A: NEXIO servers can turn around a record for playback within 3 seconds. However, when a play in live event is marked, generally 2-3 seconds pass while the marked play is completed. You can begin replaying the start of that play almost immediately.

Looped Playback

Q: Does PPC support looped playback?

A: Yes, media can be looped infinitely.

Searching Metadata

Q: Does PPC have metadata search capabilities?

A: Yes, PPC can add predefined metadata values to media. Those fields can be searched.

MOS Compliant?

Q: Is the Newsroom Script tool MOS-compliant?

A: PPC communicates with iNews via iNews monitor. There is currently no support for MOS and other Newsroom Computer Systems (NRCS). MOS Playlist Manager remains the proper tool for general NRCS integration.

Hardware

Competition with EVS

Q: Is this product a direct competitor to EVS?

A: For certain environments, yes, though this is not so in all cases. The initial focus for PPC is permanently staffed locations (arenas, studios, etc). EVS is a very rugged box which survives frequent cross-country shipping and also has a huge amount of trained freelance operators in every city.

Where can I get the DNF Controller Panel?

Q: Is the DNF Control panel available through Harris?

A: Harris does not resell the DNF controller. If you want to purchase this control panel, go to www.dnfcontrols.com. Model required is the ST300-CP-RS422.

NEXIO Servers

Q: Is the PPC sold with NEXIO Volt or NEXIO AMP?

A: This is determined by your needs and workflow requirements. To see the differences between NEXIO AMP and NEXIO Volt, please refer to the VOLT MPR.

Graphics

Q: Is there any control of AMP graphics through the PPC?

A: PPC does not support graphics playout. This is controlled via automation applications.

Index

A

administrator 28
agencies 139
audio 41
automation 39

B

background color 41
bandwidth 39
bank settings 32
banks 146
bit rates 39
BNC connector 39

C

channel 40, 41
channel view 140
channels 25, 38, 39, 40, 140, 144
clip 41
color 41
COM Port 31
configuration 28
configure 140, 142
configure a bank 146
countdown 148
customer support 5

D

default speed 32
digitizing
  virtual subclip 84
disable a channel 141
DNF 32
DS_LLM 35, 42
DSL module 35, 42
durations 30

E

eject 40, 148
empty the stack 144
expired 30

F

F keys 40
  F1 40
failover 39
fast cue 64, 75, 79
file
  .vsc 80
finding information 1
folders 139
function keys 111, 141

G

Go To 146
GPI 40

I

ICM 35

ID
  splitting 68
intended audience 9
interrupt a rolling clip 144
IP address 39

K

Key lock 39, 101

L

label 38, 39
load a clip 142
Local Network Cards 39
loop 30

M

mark in point
  updating 71
mark out point
  updating 71
MediaBase 33, 139
  changing ID information 94
  deleting an ID 96
  filtering 91
  loading clips 93
  obtaining inventory 93
  sorting 90
  turning filters off 91
module 137, 140
mute 41

N

network cards 39
network failover 39
NEXIO 39, 41, 111, 147
NLE 30
Non-Dos 31
NTSC 31

O

on-the-fly 137

P

PAL 31
parent 30
play a clip 142
playlist 40, 41
playout 40
plays 137
pointers 144
port 40
production switcher 40

R

re-cue 40
redundancy 39, 40
redundant networks 39
replace a clip 143
router settings 39
routing a VTR to a server 82

S

script 137
search dial
  jog 48
  shuttle 48
  var 48
  VTR 74
segmenting 66
segmenting menu 63
server channels 25, 38, 140
settings 28
shortcut key 40
Shot Selector 33
shot selector 137
splitting IDs 68
stacking a clip 143
Style Issues 1
subclip 30
  creating from virtual 73
  restoring 71
support 5

T

talent 137
tally 40, 148
technical support 5

time code 144
timecode
  VTR 82
timecode menu 75
timeline 30
turning filters off 91

U

unicode 32
un-muting 41
use VTR timecode 82

V

videotape recorders *see also VTR*
virtual subclip 62
  creating 65, 84
  creating multiple 68
  creating through segmenting 66
  deleting 72
  updating information 70
virtual subclip lists
  importing 71
  opening 71
VR UDP ID Code 31
VTR
  mark in 75
  mark out 75
  menus 75
  search dial 74
  selecting 75
  timecode 75, 82
  timecode menu 75
  window 74

W

writing conventions 2

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