The All-In-One Digital Broadcast System

RAPIDFIRE

Table of Contents

Preface

Thank you for selecting Pristine RapidFire as your digital studio system. By listening to our thousands of users over the past decade, Pristine has developed RapidFire, the most powerful Digital Studio System in the industry. While other companies come and go, Pristine Systems' commitment since 1988 to the entertainment and radio industry is proven by its' growing list of hundreds of satisfied customers worldwide. RapidFire continues Pristine's tradition of offering the best integrated music scheduling, production and on-air systems in the industry. So blow away your competition with the exiting new Pristine RapidFire!

About this manual

This manual is divided into three main sections:

I. Hardware Configuration
This section of the manual explains hardware configurations and setup information necessary
 for your system to perform optimally.

II. Software Installation
This section of the manual will walk you through installing your RapidFire software.

III. User's Guide
This section of the manual will familiarize you with the many rich functions of RapidFire.

Technical Support

Our friendly knowledgeable technical support representatives are always glad to help out with any difficulties you may be having with the system. Technical support can be reached in a variety of ways.

1. Fax   (310) 670-0133

To obtain technical support via Fax, an "INFO-PRT," which is explained in the following paragraph, should be faxed with a detailed description of the problem encountered. The Fax should also include how to reach you by voice, e-mail, and fax.

An INFO-PRT is a print out of your system's settings and memory that will help our technical support representatives in trouble-shooting any problems. To generate an "INFO-PRT," simply go to the computer you are having difficulties with, get to a DOS prompt that resembles the following **C:\MUSICMGR> or C:\MUSICPLS>.**. Then get a formatted diskette and place it into the A: Drive. Once the diskette is secured, type the following command at the prompt: **INFO-CPY**. Follow the on-screen instructions and an "INFO-PRT" should be generated and faxed to us at the above number.

2. E-mail   tech@pristinesys.com

Pristine Systems technical support over the internet via E-mail is one of the fastest technical support resources at Pristine. The reason that technical support via E-mail is quicker than any other service is that it provides the use of file attachments over the internet, thus facilitating the sending and receiving of program and database files. Simply write an E-mail detailing the problem you are experiencing, attach a "psi-zip" of your databases, and send it to the above E-mail address. An E-mail will then be reviewed by one of our resourceful technical support representatives and a solution will be promptly E-mailed back to you.

3. Phone Direct (310) 670-7500

When calling direct to Pristine Systems, make note of any changes that had occurred prior to the problem. Make notes as to the specific error encountered. Technical representatives are available Monday thru Friday from 8:00am - 5:30pm Pacific Time Zone. 24 Hour Voice Mail is checked periodically.

I. Hardware Configuration

Recommended Computer Specifications

For Hard Disk only Systems:

Pentium II 300 or better
8 Slot Motherboard (3 ISA 4 PCI 1 AGP)
Minimum 32MB of RAM
MS-DOS 6.22
17" SVGA Color Monitor
2.0 GB or larger internal hard disk drive and/or external drives
(depending on size of library, this number varies; 2MB per stereo minute storage)
1.44MB floppy drive
Trackball or Mouse
1 Dual Device 32k or 48k Professional Digital Audio Playback Card
1 Dual Device 32k or 48k Professional Digital Audio Production Card

For Hard Disk and Satellite:

Same configuration as above plus the following,

1 Metrabyte I/O Card
1 STA-U I/O Box
1 ERB Relay Board
1 Stereo Switcher

Optimal Card Placement (inside computer)

For 2 Audio Card Setup:

ISA Slot 1   Audio Card #1 Recording/Playback Card
ISA Slot 2   Audio Card #2 Playback Only Card
ISA Slot 3   Metrabyte Card (only for satellite systems)
PCI Slot 4
PCI Slot 3   SCSI Controller Card (only when using SCSI drives)
PCI Slot 2   Network Card
PCI Slot 1   VGA Display Adapter Card (or AGP slot)

For 3 Audio Card Setup:

ISA Slot 1   Audio Card #1 Recording/Playback Card
ISA Slot 2   Audio Card #2 Playback Card
ISA Slot 3   Audio Card #3 Playback Card
ISA Slot 4   Metrabyte Card (only for satellite systems)
PCI Slot 4
PCI Slot 3   SCSI Controller Card (only when using SCSI drives)
PCI Slot 2   Network Card
PCI Slot 1   VGA Display Adapter Card (or AGP slot)

External Requirements

1. RapidFire Dongle must be attached to LPT1 port or the printer port of the on-air computer.
2. Mouse, Trackball, or Touchscreen Interface must be connected to COM1.
3. General I/O (input/output) devices, such as monitor and keyboard and SCSI Drive
   connections should also be made.

Audio Connections

ADAPTER INSTALLATION

Make sure the main power to your computer is OFF. You will need a full-size, 16 bit/AT slot. If you are unfamiliar with the internal design of your computer see its "Guide to Operations" manual for step by step installation procedures. Read **JUMPER SETTINGS** and **CONNECTIONS** for information about configuring the adapter before plugging it into the slot.

JUMPER SETTINGS

The Antex SX series audio adapters have several hardware jumpers which are used for multiple board operation. Refer to the Antex User's Manual for your particular Audio Card for the proper jumper settings.

NOTE: On the SX-7, jumper JP2 serves as the adapter selection jumper. Adapter 1 is at the top, with adapter 4 at the bottom.

```
1   O O ———— PLACE JUMPER HERE IF YOU HAVE ONLY ONE
2   O O                          ADAPTER
3   O O
4   O O
```

Connections

SX-7

There are four external connectors located on the SX-7 audio board's metal mounting bracket. See Figure 4. There is also one three pin header (JP1) for an optional user-supplied headphone connection, which would allow for a front panel headphone jack.
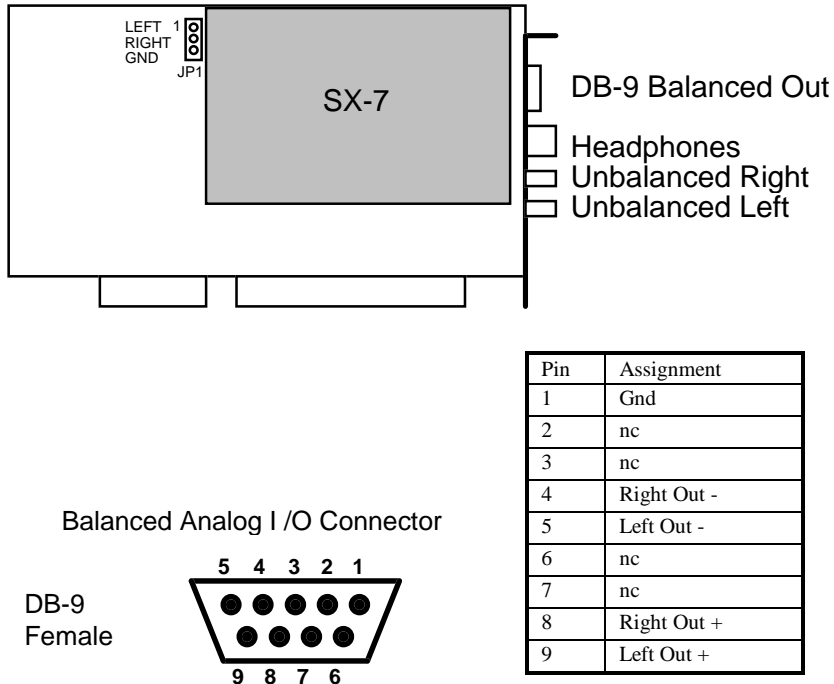

Pin	Assignment
1	Gnd
2	nc
3	nc
4	Right Out -
5	Left Out -
6	nc
7	nc
8	Right Out +
9	Left Out +

Figure 4: SX-7 Connector Locations

Audio Output:

Line:
   Unbalanced - RCA jacks, 2VRMS/+6dBV max (digital clipping), with an impedance of 470 ohms and a load impedance of > 10 k ohms
   Balanced - Nine pin D connector, -16 dBm maximum, with an impedance of 47 ohms and a load impedance of 600 ohms
Headphone:
   1/4" Stereo Phone Jack, 0.5 VRMS into eight ohms

NOTE: We recommend using the balanced Analog I/O for professional broadcast applications

SX-9

There are 5 connectors located on the SX-9 audio board's metal mounting bracket. See Figure 5.
Audio Output:
Line:

> Balanced - Nine pin D connector 0 to +26dBu(digital clipping) - software selectable
> with 1dBu resolution, with an impedance of 50 ohms and a load impedance of 600 ohms

> Unbalanced - 1/8" stereo mini jack 2VRMS/+6dBV max (digital clipping), with an impedance
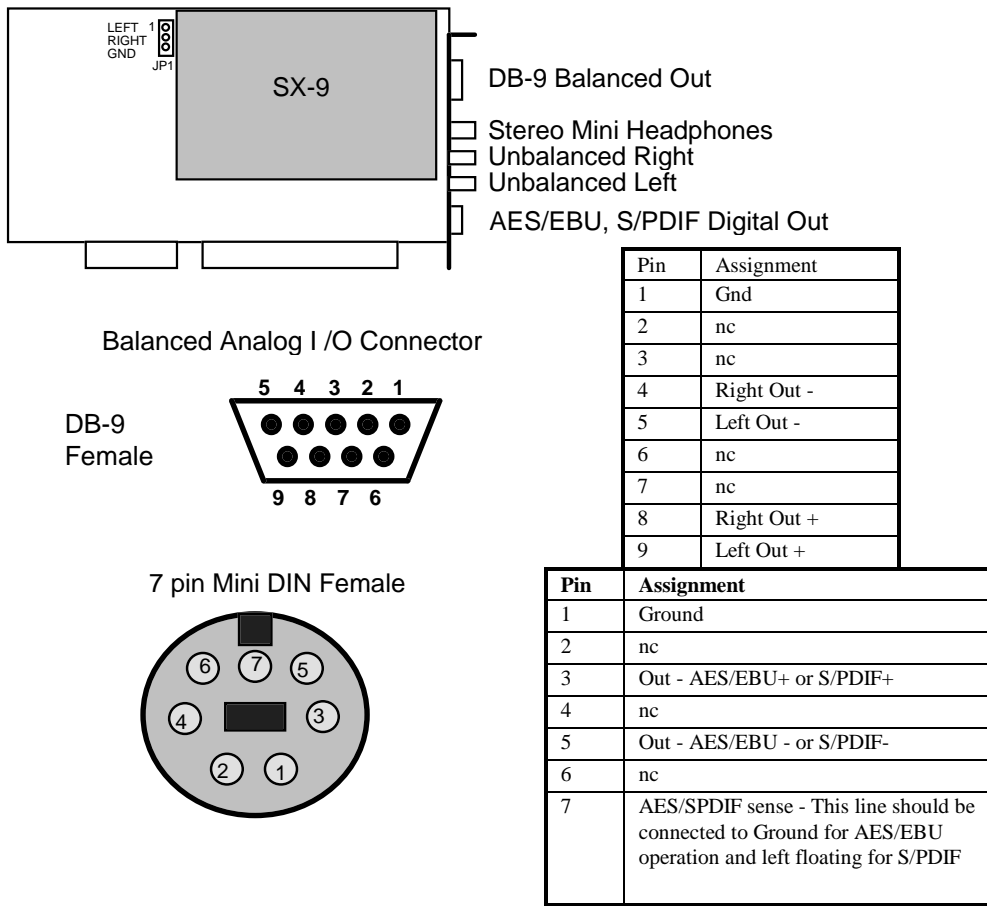> of 470 ohms and a load impedance of 10k ohms

> Unbalanced - 1/8" stereo mini jack 2VRMS/+6dBV max (digital clipping), with an impedance of 470
> ohms and a load impedance of 10k ohms

Balanced Analog I /O Connector

DB-9 Female

Pin	Assignment
1	Gnd
2	nc
3	nc
4	Right Out -
5	Left Out -
6	nc
7	nc
8	Right Out +
9	Left Out +

7 pin Mini DIN Female

Pin	Assignment
1	Ground
2	nc
3	Out - AES/EBU+ or S/PDIF+
4	nc
5	Out - AES/EBU - or S/PDIF-
6	nc
7	AES/SPDIF sense - This line should be connected to Ground for AES/EBU operation and left floating for S/PDIF

Figure 5: SX-9 Connector Locations

AES/EBU Digital:

> 7 pin Mini DIN jack. Professional AES/EBU: EIAJ CP-340 Type I / IEC-958 Pro or Consumer S/PDIF:
> EIAJ CP-340 Type II / IEC-958 Consumer

> **NOTE: We recommend using the balanced Analog I/O for professional broadcast applications**

SX-23e

There are 7 external connectors on the SX-23e. See Figure 6.
Audio Input:
Line:

Balanced - Nine pin D connector 0 to +26dBu (digital clipping) - software selectable with 1dBu resolution, with an impedance of 20k ohms

Unbalanced - 1/8" stereo mini jack 2VRMS/+6dBV max (digital clipping), with an impedance of 20k ohms and a load impedance of 10k ohms

AES/EBU Digital:

7 pin Mini DIN jack. Professional AES/EBU: EIAJ CP-340 Type I / IEC-958 Pro or Consumer S/PDIF: EIAJ CP-340 Type II / IEC-958 Consumer

Audio Output
Line:

Balanced - Nine pin D connector 0 to +26dBu(digital clipping) - software selectable with an impedance of 50 ohms and a load impedance of 600 ohms or greater.
Unbalanced - 1/8" stereo mini jack 2VRMS/+6dBV max (digital clipping), with an impedance of 470 ohms and a load impedance of 10k ohms

Headphone :

1/4" stereo phone jack, 0.5 VRMS into 600 ohms or greater.

AES/EBU Digital:

7 pin Mini DIN jack. Professional AES/EBU: EIAJ CP-340 Type I / IEC-958 Pro or Consumer S/PDIF: EIAJ CP-340 Type II / IEC-958 Consumer
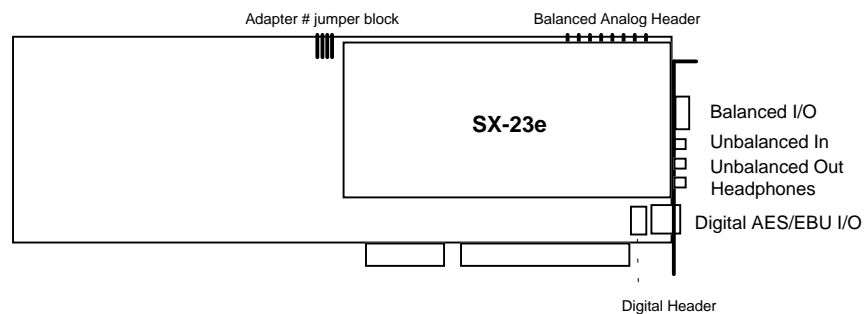
Figure 6: SX- 23e Connector Locations

Balanced Analog I /O Connector

DB-9
Female
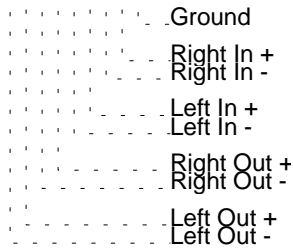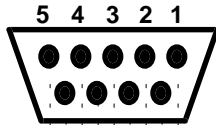
Pin	Assignment
1	Ground
2	Right In -
3	Left In-
4	Right Out -
5	Left Out -
6	Right In +
7	Left In +
8	Right Out +
9	Left Out +

5 4 3 2 1

9 8 7 6

Ground
Right In +
Right In -
Left In +
Left In -
Right Out +
Right Out -
Left Out +
Left Out -

Balanced Analog Header

2 4 6 8 10 12 14 16

1 3 5 7 9 11 13 15
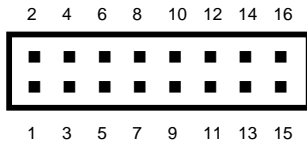
Pin	Assignment	Pin	Assignment
1	Right In +	2	Ground
3	Right In -	4	Ground
5	Left In +	6	Ground
7	Left In-	8	Ground
9	Right Out +	10	Ground
11	Right Out -	12	Ground
13	Left Out +	14	Ground
15	Left Out -	16	Ground

7 pin Mini DIN Female
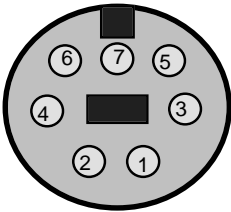
Pin	Assignment
1	Ground
2	In - AES/EBU -
3	Out - AES/EBU+ or S/PDIF+
4	In - AES/EBU +
5	Out - AES/EBU - or S/PDIF-
6	In - S/PDIF+
7	AES/SPDIF sense - This line should be connected to Ground for AES/EBU operation and left floating for S/PDIF

Figure 7: SX- 23e Balanced and Digital Connectors

NOTE: We recommend using the balanced Analog I/O for professional broadcast applications

Satellite Relay Connections

Pre-made Metrabyte shielded cables should connect from the back of a Metrabyte PIO-12/24 card (which is inside the computer) to the STA-U (Blue Box), and then from the STA-U to the Relay Board. Then the wiring should go as follows:

The STA-U acts as an input/output interface. The following Pin Assignments are used by RapidFire. A contact closure from Pin 18 to the Pins listed below will result in the function described next to the Pin #.

Pin #	Function
18	+5 Volts
30	"AUTO" Mode
31	Liner 1
32	Liner 2
33	Liner 3
34	Time Sync (refer to the rapid.ini)
35	"LIVE" Mode
36	Relay Recording Notification (TimeWarp!)
37	EAS (refer to page 38 in this manual)
32+33	Liner 4
31+33	Liner 5
31+32	Liner 6

II. Software Installation

Step 1 DOS Setup

Make sure that DOS is installed and that the system is correctly booting off the first hard drive. If DOS is not on the computer system, then it must be installed. To install DOS, consult your MS-DOS user's guide.

Step 2 Pristine Software Installation

Place the first diskette labeled Pristine RapidFire into Drive A:. Then type in the following:

A:RF-SETUP (Enter)

Then follow the on-screen instructions to finish the installation.

After the files have been installed from the diskettes, the autoexec.bat must be edited to include the following statement:

CD \RAPID
CALL PLAY

The following is an example of what a typical RapidFire autoexec.bat should look like:

```
@ECHO OFF
PROMPT $p$g
PATH C:\;C:\DOS;C:\LANTASTI;C:\CTRL;c:\RAPID
SET TEMP=C:\DOS
LH C:\DOS\SMARTDRV.EXE 2048 /X
call C:\LANTASTI\STARTNET.BAT
CD \RAPID
CALL PLAY
```

The following is what a typical RapidFire config.sys should look like:

```
DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\EMM386.EXE NOEMS
DOS=HIGH,UMB
FILES=60
BUFFERS=30
LASTDRIVE=Z
DEVICEHIGH=C:\LANTASTI\PROTMAN.DOS /I:C:\LANTASTI
DEVICEHIGH=C:\LANTASTI\EL90X.DOS
```

The following is what a typical RapidFire play.bat should look like:

```
C:\AUDIODRV\SX25 /U                         (OR SX-34 DRIVER)
C:\MOUSE\MSCMOUSE  /A4  /1
C:\AUDIODRV\SX25 /B32 /B32 /B32 /B32        (OR SX-34 DRIVER)
RAPID
C:\AUDIODRV\SX25 /U                         (OR SX-34 DRIVER)
C:\MOUSE\MSCMOUSE /U
```

The **rapid.ini** file and settings:

```
AudioBaseAddressCard1     = 1   iIOAdd1
                                1 = 180      4 = 220
                                2 = 280      5 = 300
                                3 = 380      6 = 320

AudioInterruptCard1       = 3   iInter1      2,3,4,5,10,11,12

AudioBaseAddressCard2     = 2   iIOAdd2
                                1 = 180      4 = 220
                                2 = 280      5 = 300
                                3 = 380      6 = 320

AudioInterruptCard2       = 5   iInter2      2,3,4,5,10,11,12

AudioBaseAddressCard3     = 0   iIOAdd3      0 = No Card
                                1 = 180      4 = 220
                                2 = 280      5 = 300
                                3 = 380      6 = 320

AudioInterruptCard3       = 0   iInter3      0,2,3,4,5,10,11,12

AudioSampleRate           = 1   iSR1      1 = 48000
                                          2 = 44100
                                          3 = 32000

AudioFormat               = 1   iTWFormat    1 = MPEG
                                             2 = DOLBY-AC2

AudioChannels             = 2   iNoChannels   1 = MONO
                                              2 = STEREO

AutoBreakMinutesDefault   = 59 iABreaksMM

AutoBreakSecondsDefault   = 00 iABreaksSS

AutoBreakTypeDefault      = A  cABreaksTp    A = -GO-END
```

```
                                        B = -GO-TOP NO FADE
                                        C = -GO-TOP WITH FADE
AutoStartMode            = 1  iAutoStartMode      0 = LIVE MODE
                                                  1 = AUTO MODE


MetrabyteBaseAddress     = 3  iMetraPort    0 = NO CARD
                                            1 = 310
                                            2 = 320
                                            3 = 330


MetrabyteCardType        = 0  iMetraCard    0 = NO CARD
                                            1 = PIO-24
                                            2 = PIO-96


MetrabyteSignalDuration  = 3  iMetraSigD    (0 - 10)


Satellite Liners123      = 0  iSLiners123   0 = OFF
                                            1 = ON


Satellite Liners456      = 0  iSLiners456   0 = OFF
                                            1 = ON


TimeWarpActive           = 0  iTWActive     0 = OFF
                                            1 = ON


VolumeOutputDefaultPlayer1 = 10             iVolOutput[0]  (0-10)
VolumeInputDefaultPlayer1  = 10             iVolInput[0]   (0-10)
VolumeFadeDefaultPlayer1   = 6              iFadeStep[0]   (0-10)


VolumeOutputDefaultPlayer2 = 10   iVolOutput[1]  (0-10)
VolumeInputDefaultPlayer2  = 10   iVolInput[1]   (0-10)
VolumeFadeDefaultPlayer2   = 6    iFadeStep[1]   (0-10)


VolumeOutputDefaultPlayer3 = 10  iVolOutput[2]  (0-10)
VolumeInputDefaultPlayer3  = 10  iVolInput[2]   (0-10)
VolumeFadeDefaultPlayer3   = 6   iFadeStep[2]   (0-10)


VolumeOutputDefaultPlayer4 = 10  iVolOutput[3]  (0-10)
VolumeInputDefaultPlayer4  = 10  iVolInput[3]   (0-10)
VolumeFadeDefaultPlayer4   = 6   iFadeStep[3]   (0-10)


SyncTimeToExternalSource  = 0   iON=1  OFF=0
SyncTimeMinutes           = 0   iSyncTimeMinutes 0-59
SyncTimeSeconds           = 0   iSyncTimeSeconds 0-59


DaylightSavingsOption     =0    iON=1  OFF=0
DaylightSpringMonth       =4
DaylightSpringDay         =4
DaylightFallMonth         =10
DaylightFallDay           =31
```

III. User's Guide

The Playback Screen

The Playback Screen is divided into four color-coded sections: **The Players** (Green), **The Drop Box** (Yellow), **The Selection Section** (Blue), and **The Playlist Management Area** (Purple).

The Players   The Playlist Management Area

The Selection Section   The Drop Box

The Selection Section

What is it?
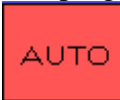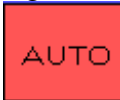
 Designates live mode. When activated, the button will switch to designating auto mode or "walk-away" mode. In live mode, the Jock is responsible for cueing up and playing items manually within the virtual player environment, when in "walk-away" mode, the computer is responsible for playing the playlist as scheduled. You can also think of the Live as Pause Mode since the system will stop playing after the current event stops. This is an ideal way for a jock to do live reads. The jock simply start the system back up when he changes the mode back to Auto Mode and the system starts to play again.

The , , , , , , and icons will bring you into **The Quick Pick Screens** when activated. Each button will activate the corresponding **Quick Pick Screen** according to their headings. The icon allows for additional function icons. The Login icon allows you to update any information found in the Drop Box.

How do I use it?
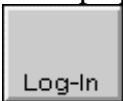
To get into Live Mode or Pause Mode

The program starts out in the default as Live Mode . When the mode has been changed to Auto Mode , and you want to change it back to Live Mode , simply click on the icon once, so that it displays .

To get into Auto Mode

Since the program starts out in the default as Live Mode , to change it to Auto Mode , simply click on the icon to change to Auto Mode .

To update Drop Box Data

From time to time, new drops are created and need to be implemented to add flair to a jock's program. In order to keep up to date with new drops that have been created in the Drops Data section, simply click on the Login Icon to refresh the Drop Box with new changes.
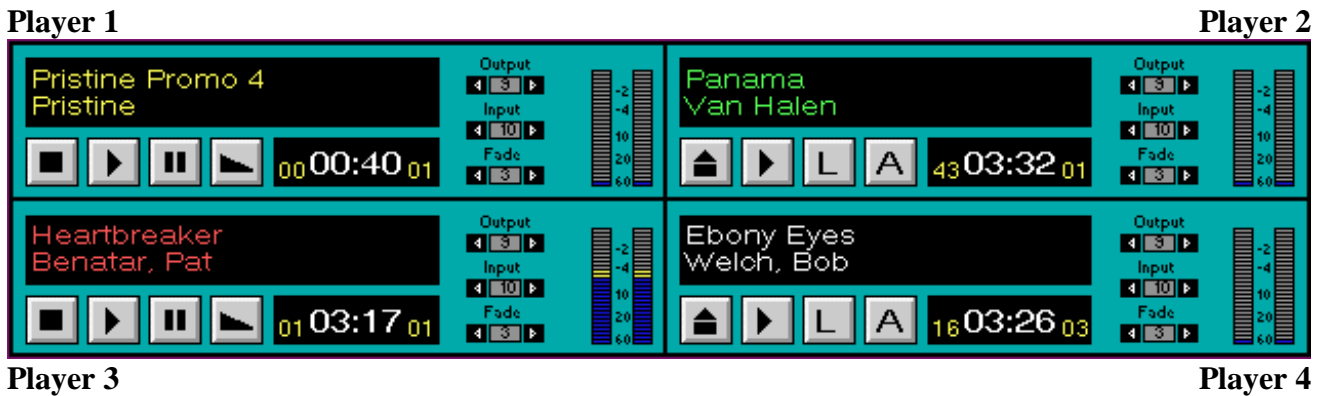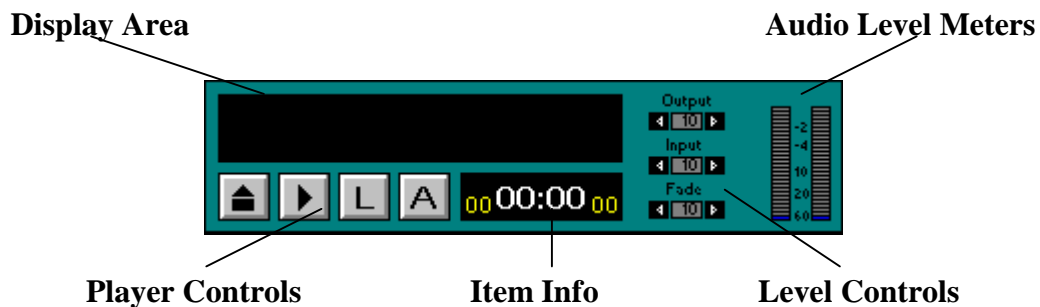
The Players

What is it?

The players are arranged and will be referred to in this documentation in the following order:

Player 1   **Player 2**

Player 3   **Player 4**

Each player represents an individual virtual cart machine which can be loaded and played just like a physical cart machine.

Display Area - shows the current item loaded into the player and its status. Status of the item is displayed in the color of the item:
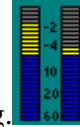If the item is....

Green the item is loaded and ready

Red the item is playing

Yellow the item is in pause

White the item has already been initiated and stopped

Audio Level Meters - displays the audio level in db's of an item while playing. The blue represents audio levels below "0", the yellow represents "safe" audio levels below "0", and red represents an overload level.

**Item Info** - displays the intro. time, actual time remaining, and fade time of the item:
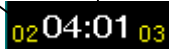
The intro time will count down to "0" so the jock will know where the intro post is. The true time of the audio file will appear when the event is loaded. It will count down to zero for the time remaining, note: at 30 seconds left it will turn RED. The fade time will count down to zero. In Auto Mode it will start the next event at the fade time of the current event.

Level Controls - allow you to control output, input, and fade levels. The levels range from "0-10" with "0" designating no level input or output. With relation to fade level, "0" sets the manual fade to none or sudden fade out, whereas "10" represents the maximum fade out time. The levels are changed by clicking on the arrows to the left and right of the level display. The right arrow lowers the level and the right arrow raises the level.

Player Controls - Each player has two different modes of action: **Ready Mode** and **Play Mode**.

Ready Mode

The buttons on the virtual cart machine work as follows in "ready mode":

Eject   Play Load   Auto-Load
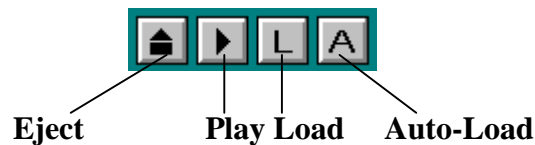
Clear - removes anything loaded and resets the player.

Play - plays the item loaded in the player and brings the player into **Play Mode**.

Load - allows you to manually load an item from the playlist section. Simply click on and the player will display , then go to the playlist section and click on the item you want to load into the player.

Auto-Load - will automatically load the next item in the playlist. Continuously hitting this button will cycle sequentially through the items in the playlist.

Play Mode

The buttons on the virtual cart machine work as follows in "play mode":

Stop   Play   Pause   Fade
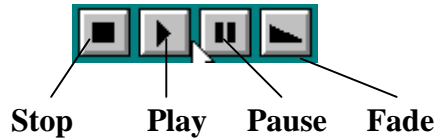
Stop - will stop the item currently active in the player and go back into **Ready Mode**.

Play - will resume play of an item in pause.

Pause - will pause an item in play.

Fade - will initiate a manual fade on an active item in the player.

How can I use it?

Manually loading a player with a song from the playlist

To manually load a player simply click on the of the designated player, then click on an item in the playlist. The item will then be placed in the player.

example:

If I wanted to play Total Eclipse of the Heart, I would click on the of the player, then the message

 would appear inside the player window. I would then click on the song title from the playlist, and it would appear in the window to replace the message. Then I could simply hit play to play the item.

Automatically loading a song from the playlist

To automatically load a song from the playlist, simply click on the of the player. The first item in the playlist que will be loaded.

example:

If I wanted to automatically load the first item in the playlist, Sussudio by Phil Collins, I would simply click on

the and it would automatically be loaded into the player. The next item to be automatically loaded would then be Total Eclipse of the Heart , since it appears next in the playlist.

Loading an item from the Quick Pick Screens

The [Spots $], [Promos], [Efx Effects], [Music ♪], [PSA], [Jingles J], and [Liners] icons will bring you into **The Quick Pick Screens** when activated. Each button will activate the corresponding **Quick Pick Screen** according to their headings. Once in a quick pick screen, simply click on the load control of the player you wish to load the item into, then click on the item you wish to load, and it should appear in the player display.

example:

If I wanted to load a player with the song _____, then I would fist click on the music icon in the selection section Then click on the load of the player and the song should be loaded.

Click on here to bring up the music listings. This button brings you to the Music Quick Pick Screen.

Ending a Hard Disk Audio Item

There are three ways to end the play of a Hard Disk Audio Item. One way is to simply let it finish playing. The second ways to stop it manually, and the third way is to fade out of it. To stop it manually, simply click on the stop button of the player which the item is playing on. To fade out of an item, I would first set my fade adjustments to 5 if I were using a Pentium 133. To set the fade level, click on the arrow to the left of level display of the player which is about to fade. Then click on the fade button and the song should fade out according to the fade level set. The level number set indicates how tight a fade is. The lower the number, the tighter the fade, thus the higher the number, the longer the fade.

example:
I want a tight fade out of a song. I would set my fade level to 2 by clicking on the right arrow of the fade level adjuster ◄ 5 ►. Then I would simply hit the fade button.

Fade Button
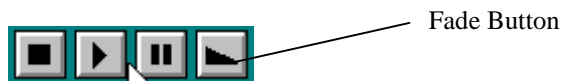
Clearing out a player

To clear out a player will get the player back to "ground zero." If a song is playing or active, the player controls will look like this . First you must stop the song by hitting the left most button or the stop button. Then the

player controls will become like this . From this point to clear out the program, simply click on the left most button again and this should clear out the player.

example:
I want to clear out an event that is playing currently. I would first click on the button shown here on the particular player:

This is the Stop
Button. Click here
to stop song.
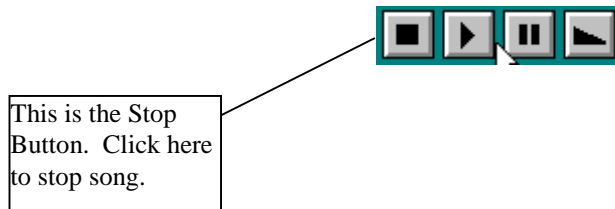
Then the player control buttons should change to , and I would simply click on the left most button.

This is the clear or eject
button. Click here to clear
song

The Drop Box

Crowd Cheer	Crowd Boo's	Laser EFX	Bomb Blast	K-RF Drop	Sports Opener	Group A	P4
Weather Opener	Weather Closer	News Opener	News Closer	Image Liner	K-RFDROP #4-8	RapidFire	
YOUNG CTRY 1-8	YOUNG CTRY 2-8	CARTNS DROP-8	105 DROP #1-4	105 DROP #2-8	105 DROP #3-11	Pristine Systems	

Drop Buttons
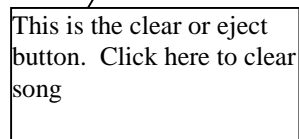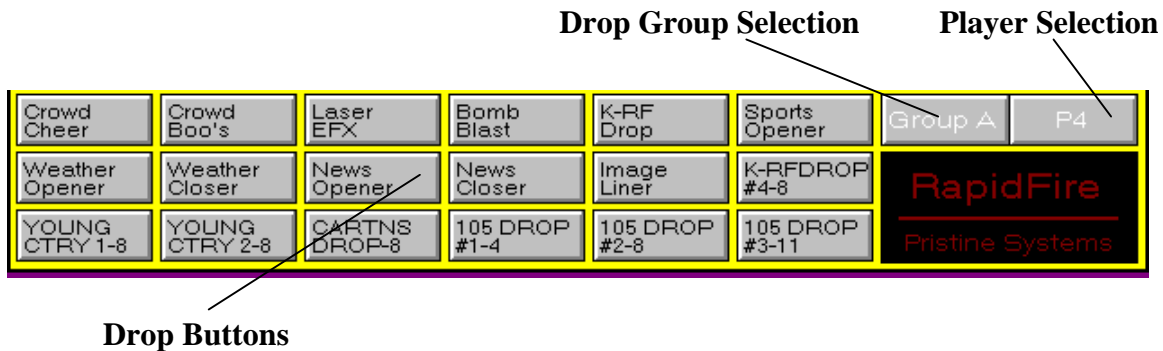
What is it?

The Drop Box is basically an "instant-play" tool. It holds 90 drops per jock for 12 jocks. Any type of hard disk audio may be stored in the Drop Box, from songs and intros, to sound effects and even commercials. The Drop Box is an easy and fun to use tool for the live jock that needs instant playing power.

Drop Buttons - activate a button and the drop listed will play instantly. If more than one drop is activated, they will play in the order that the drop was selected.

Drop Group Selection - changes the available drops currently on the screen. Continuous hitting of the button will cause the buttons to cycle through 5 different groups of drops: Groups A-E.

Player Selection - changes the drop playing arrangement to incorporate two players or one player (default). By allowing two players to be active, two drops can be made to overlap each other with sequential drops to be played after them with the first available player.

How do I use it?

Playing One Drop

Make sure that the player selection area displays P4. This means that only one drop player is activated. Simply activate any of the Drop Buttons to instantly play the drop listed.

example:
If I wanted to play Laser EFX, then I would click on the box and it would play.

Playing Multiple Drops One After Another

First, the player selection area must display P4, as stated above, this setting allows for only one player to be allotted for drop playing. If more than one drop is then selected, the drops will play in the order that they were selected in.

example:
If I wanted Laser EFX to play first , followed by a Bomb Blast, then I would simply click on the Laser EFX box and then click on the box labeled Bomb Blast, what would happen is that the Laser EFX will play instantly followed by the Bomb Blast.

Overlapping Multiple Drops.

However, if P3 & P4 were displayed in the Player Selection area, then multiple drops would play simultaneously.

example:
If I wanted to play a Sports Opener with Laser EFX at the same time, I would click on the Player Selection Area to display P3 & P4. Then I would click on the box labeled Sports Opener, and then Click on the Laser EFX box when I wanted the effect to play.

Editing the contents of the Drop Boxes

Refer to Rapid Drop Box Editor-Walkthrough when editing Drop Box Items.

The Playlist Management Area

Info Display   **Reset Home**   **Editing Tool Bar**   **Home**

| 1:03:45 P | | | | | | | | |
| Thu, Oct 17 | R | Ins | Move | Edit | Clear | Swap | Del | H |

13:16	Wait A Million Years	Grass Roots	15/ 02:39 /03	↑
13:16	Pristine Promo 4	Pristine	01/ 00:42 /01	Pg Up
13:17	102.7	KIIS FM	00/ 00:04 /00	
13:17	The Stroke	Squier, Billy	05/ 03:37 /01	
13:21	Margaritaville	Buffett, Jimmy	10/ 04:07 /01	Pg Dn
13:25	Danger Zone	Loggins, Kenny	16/ 03:26 /03	
13:28	Pristine Promo 2	Pristine	01/ 00:47 /01	↓

Playlist Display   **Scroller**

What is it?

Info Display - displays current time and date. With future enhancements, it will display temperature and other various pertinent information.

Playlist Display - displays the playlist as follows:

time scheduled to play   Intro. time   Fade time

| 12:41 | Jump | Van Halen | 28/ 03:48 /03 |

Title   Artist   Actual time
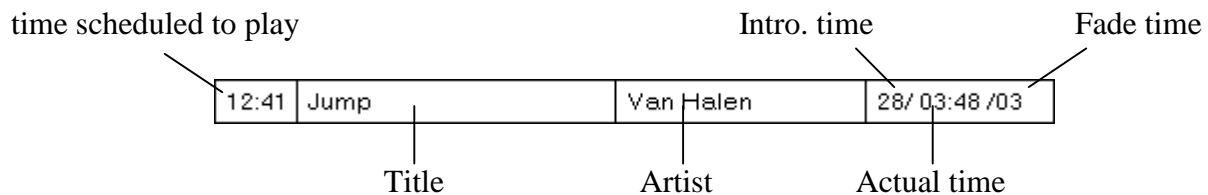
Scroller - The arrows at the top and bottom of the scroller let you advance one item up or down on the playlist, while the [Pg Up] area will allow you to advance a whole page up and the [Pg Dn] area will allow you to advance a whole page down.

Home - [H] brings the item "next up" to the top of the **Playlist Display**

Reset Home - designates what is "next up" on the play list. Click on [R] and then click on the item in the playlist that you want to play next.

Editing Tool Bar - has two different modes: **Current Hour** and **Extra Hours**. In the **Current Hour** mode, the tool bar is as seen above. The buttons are as follows:

is used to get to "ground zero". The button clears any commands that the program has in memory. Whenever you lose your bearings this icon is a safety feature to get you back to start. If you click on the right mouse button, it will activate the clear icon automatically.

is used to move items in the playlist to a new location in the playlist. Simply click on the icon and then click on the item of the playlist you wish to move, then click on the item in the playlist you want to place the moved item to.

works in the same manner as the Move except that the first item activated by the swap will switch places in the playlist with the second item activated. Simply click on the icon, then click on the items to be swapped, one after another.

will delete items from your playlist. As a precaution, hit the clear button when finished deleting playlist items to remove the command from program memory.

allows you to insert music, spots, promos, psa's, etc... Click on the icon, choose an option from **The Selection Section**, find the appropriate item to insert and then click on the location of the playlist you wish to put it.

toggles between current hour and other hours editing modes

Other hours editing mode; the tool bar changes to the following display

The buttons remain the same in functionality, except for there is no home or reset home buttons. They have been replaced with an hour advancer and an hour decreaser buttons, which allow you to cycle through the hours accordingly.

As you may have noticed, the edit button [Edit] has been replaced with an [Exit] so that you may exit the extra hours editing mode.

How do I use it?

The Playlist Management Area helps you manage the playlist with status checking and playlist manipulation. You may edit the hour that is currently playing or any other hour of the day. All editing is done with simple point and click operation.

Bringing the active event (the event set to play next) in the current hour playlist to the top of the list

After scrolling through the playlist, often people lose their place and wonder what is going to play next. With the home option [H] the item which is going to play next will automatically be updated to the top of the Playlist Display.

example:

If I was scrolling up and down to see the upcoming items in the playlist, and had lost my place, I would simply click on the home icon [H] and the Playlist Display area would automatically update the next item in the playlist to the top of the display.

Resetting the active event in the current playlist hour

The reset command [R] is the same as telling the playlist where to begin in the playlist. To use the option, simply click on the icon [R] and then click on which song you would like to set as the next event. The auto-load command [A] in each of the players would now be pointed to the new item selected by the reset command [R].

example:

If I wanted to go to the sixth event on the playlist rather than start playing it from the top. I would click on the reset home icon [R] and then click on to the sixth event. The item is now designated as the first event to play

next in Auto-Load or Auto Mode. To double check, just click on the home icon and the sixth event should be highlighted in blue and at the top of the playlist display.

Inserting a audio event in current hour playlist

In order to add new events to the playlist while on the air, they must be inserted using the insert icon .

First you must click on the icon , then you must decide what it is you would like to add. The choices for addition are found on the Selection Section Area. From the Selection Section, you can choose either , , , , , , and icons. From there, they will bring you into **The Quick Pick Screens** when activated. Each button will activate the corresponding **Quick Pick Screen** according to their headings. When in the appropriate **Quick Pick Screen**, you may choose an event to be inserted. After a choice has been made, simply click on Insert again at the bottom of the screen and then place the event in the playlist. To place the even in the playlist, click on the event already in the playlist that you wish to place the new event ahead of.

example:

If I wanted to add Toto by Africa to my current hour playlist, I would select the insert icon . Then I would select the Music Quick Pick icon . Then I would do the following:

RapidFire	Jump			Stop	Play	Load	Auto
Pristine Systems				Stop	Play	Load	Auto
				Stop	Play	Load	Auto
4:14:13 PM				Stop	Play	Load	Auto

(don't Fear) The Reaper Blue Oyster Cult B-1 05334 13/ 04:02 /03	(i Can't Get No) Satisfa Rolling Stones A-1 05073 14/ 03:33 /03	(i Know) I'm Losing You Stewart, Rod B-1 05109 40/ 05:19 /01
19th Nervous Breakdown Rolling Stones B-1 05137 05/ 03:51 /03	96 Tears ? & The Mysterians B-1 05165 10/ 02:55 /03	A Well Respected Man Kinks B-1 05540 02/ 02:39 /01
A Whiter Shade Of Pale Procol Harum B-1 05199 28/ 03:56 /03	Addicted To Love Palmer, Robert B-1 05345 24/ 03:50 /03	Africa Toto A-1 05545 31/ 04:49 /03
After Midnight Clapton, Eric B-1 05175 12/ 03:01 /03	Against The Wind Seger_&_the, Bob B-1 05487 10/ 05:19 /03	All Along The Watchtower Hendrix, Jimi B-1 05384 18/ 03:53 /03
All Day And All Of The N Kinks B-1 05170 07/ 02:21 /01	All My Loving Beatles B-1 05041 00/ 02:06 /01	All Right Now Free B-1 05166 15/ 05:30 /01

Click here to choose this item.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

| Title | Artist | Cat | Time | A♭c Insert | Audition | Pg Up | Pg Dn | Cancel | Exit |

Then click here to insert the event into the playlist.

Then I would finally choose a place in the playlist to add the event and simply click on the area.

Moving a audio event within the current hour playlist

Depending on the mood of the jock at the time, a playlist may be altered by moving events from one place in the playlist to another. This can be achieved quick and easy with the move icon [X→Y Move]. Simply click on the move icon [X→Y Move] then click on the event you wish to move, and then click on the location where you want to place the event. The playlist will update immediately with your changes.

example:

If I wanted to move the song Danger Zone to be the first song in the three song lineup it was currently in, I would use the move function. I would first click on the move icon [X→Y Move], and then click on the song Danger

Zone, and then click on the song The Stroke, since I want to move Danger Zone ahead of this song. Here is an illustrated example:

1:03:45 P Thu, Oct 17								
13:16	Wait A Million Years	Grass Roots	15/ 02:39 /03	↑
13:16	Pristine Promo 4	Pristine	01/ 00:42 /01	PgUp
13:17	102.7	KIIS FM	00/ 00:04 /00	
13:17	The Stroke	Squier, Billy	05/ 03:37 /01	
13:21	Margaritaville	Buffett, Jimmy	10/ 04:07 /01	PgDn
13:25	Danger Zone	Loggins, Kenny	16/ 03:26 /03	
13:28	Pristine Promo 2	Pristine	01/ 00:47 /01	↓

The result of the move function should display Danger Zone first in the set, followed by The Stroke and finally with Margaritaville finishing the three song set.

Swapping two audio event within the current hour playlist

If I wanted to switch the position of the two songs rather than just place one ahead of the other, the swap icon Swap would be implemented rather than the move Move. The swap simply replaces one item with the other. The steps remain the same as the previous example, except for the first step being that you must choose the swap icon Swap rather than the move icon Move. The result would list the songs as Danger Zone being first, with The Stroke playing last in the set. Simply click on the right button of the mouse to clear the function or click on the icon marked clear Clear.

Deleting a audio event within the current hour playlist

Sometimes audio events that are not desired to play enter the playlist, this is why the delete function Del was created. By using the delete icon Del, unwanted playlist items can be removed painlessly.
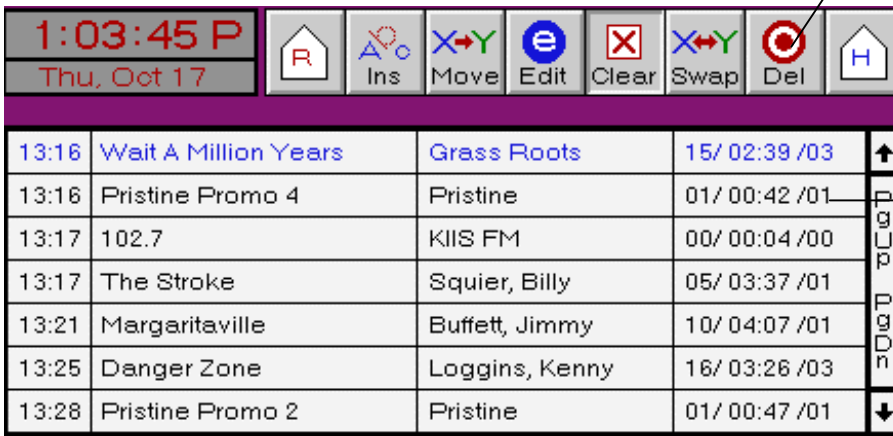
example:

If I wanted to remove Pristine Promo 4 from the playlist, I would simply go to the delete icon ⊙ Del and click on it, then go to Pristine Promo 4 in the playlist and click on that. Then I would click on clear to stop myself from deleting any other items from the playlist by accident.

Click here first to enable the delete function.

1:03:45 P Thu, Oct 17	⌂ R	⚲ Ins	X→Y Move	e Edit	☒ Clear	X↔Y Swap	⊙ Del	⌂ H

13:16	Wait A Million Years	Grass Roots	15/ 02:39 /03	↑
13:16	Pristine Promo 4	Pristine	01/ 00:42 /01	P g U p
13:17	102.7	KIIS FM	00/ 00:04 /00	
13:17	The Stroke	Squier, Billy	05/ 03:37 /01	
13:21	Margaritaville	Buffett, Jimmy	10/ 04:07 /01	P g D n
13:25	Danger Zone	Loggins, Kenny	16/ 03:26 /03	
13:28	Pristine Promo 2	Pristine	01/ 00:47 /01	↓

Then click here to delete this item from the playlist.

Editing the other hours of the day

In editing other hours of the day, you would use the same functions as stated above except for the reset home and home functions. The only difference is that you would be editing hours that have not played yet. To begin editing these hours simply click on the edit icon e Edit. When the edit icon is activated, the Playlist Display will automatically bring up the next hour in the playlist and a slightly modified the tool bar which looks like the following:

➕ Hour	⚲ Ins	X→Y Move	Exit	☒ Clear	X↔Y Swap	⊙ Del	➖ Hour

The buttons remain the same in functionality, except for there is no home or reset home buttons. They have been replaced with an hour advancer ➕ Hour and an hour decreaser ➖ Hour buttons, which allow you to cycle through the hours accordingly. As you may have noticed, the edit button e Edit has been replaced with an

 so that you may exit the extra hours editing mode. Otherwise all other editing functions still remain the same as described prior to this section.

The Quick Pick Screens

Time Display   **Players' Status**   **Players' Controls**

***VOICE TRACK # 8101 V.T. # 8101 V-1 08101 00/ 00:15 /00	***VOICE TRACK # 8102 V.T. # 8102 V-1 08102 00/ 00:15 /00	***VOICE TRACK # 8103 V.T. # 8103 V-1 08103 00/ 00:15 /00
***VOICE TRACK # 8104 V.T. # 8104 V-1 08104 00/ 00:15 /00	***VOICE TRACK # 8105 V.T. # 8105 V-1 08105 00/ 00:15 /00	***VOICE TRACK # 8106 V.T. # 8106 V-1 08106 00/ 00:15 /00
***VOICE TRACK # 8107 V.T. # 8107 V-1 08107 00/ 00:15 /00	***VOICE TRACK # 8108 V.T. # 8108 V-1 08108 00/ 00:15 /00	***VOICE TRACK # 8109 V.T. # 8109 V-1 08109 00/ 00:15 /00
***VOICE TRACK # 8110 V.T. # 8110 V-1 08110 00/ 00:15 /00	***VOICE TRACK # 8111 V.T. # 8111 V-1 08111 00/ 00:15 /00	***VOICE TRACK # 8112 V.T. # 8112 V-1 08112 00/ 00:15 /00
***VOICE TRACK # 8113 V.T. # 8113 V-1 08113 00/ 00:15 /00	***VOICE TRACK # 8114 V.T. # 8114 V-1 08114 00/ 00:15 /00	***VOICE TRACK # 8115 V.T. # 8115 V-1 08115 00/ 00:15 /00

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z

Title | Artist | Cat | LIVE | Insert | Audition | Pg Up | Pg Dn | Cancel | Exit

Quick Pick Items   **Indexer**   **Quick Pick Tool Bar**

What is it?

Players' Status

Player 1   **Player 2**
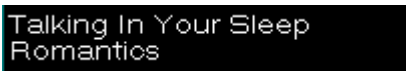
Liner 1
BLUE MORNING, BLUE DAY
TURN! TURN! TURN!
Brown Sugar

Player 3   **Player 4**

The colors of the items in the player status displays denote the status of the item in the display. The colors correspond to the status in the same manner as in the **Playback Screen**:

Green the item is loaded and ready

Red the item is playing

Yellow the item is in pause

White the item has already been initiated and stopped

Quick Pick Items display the available items within the section selected from the **Selection Section.**

The Indexer helps you find available items quickly by jumping to the items which contain the corresponding first letter.

The Quick Pick Tool Bar helps you navigate through the quick pick screens by letting you choose to view the items either by title, artist, category, or time. It also includes an insert function and the ability to control live and auto modes of playback. as found in the selection section.

The Player Controls is one of the most unique options that RapidFire has to offer. Total control over all four players are still maintained within the quick pick screens. From these controls within the quick pick screens, you are able to stop, load, play, or auto-load an item into any of the four players. The stop command simply stops the player from playing an item currently in progress. The load command loads an item off of the quick pick screen that you choose. The play simply plays the currently loaded item in the playlist. The auto-load command will automatically load the next designated item in the playlist for the day from the Play Back Screen.

How do I use it?

Searching for events

To search for a desired event simply use the page up and page down icons to scroll through the items until the desired event is seen on the screen.

example:

If I wanted to find an event that was not currently on the initial screen I would use the page down icon and simply scroll down the pages until the item I wanted appeared.

Finding items quicker with the Indexer

With the same scenario in mind as above, instead of paging down with the page down icon, I would simply select the letter that my event begins with and the pages would automatically update to the one that begins with the letter I have selected.

Loading a player directly

To load an item directly into a player from the quick pick screen, simply go to the top right corner of the screen and choose the load function on the player you wish to load with an item. Then simply click on the item you wish to load and it should appear in the player status area.

example:

Click here first to select the load function on this player.

Then click here to select this item to load in the player you have chosen.

Inserting an event to the playlist

To insert an event to the playlist, simply click on insert, then click on the event you wish to insert into the playlist and the screen will change to the playback screen. Simply go to the location of the playlist you wish to

insert the event into and it will appear there.

E-List or Emergency Playlist

What is it?

This E-List or Emergency Playlist is a playlist that will play if a current hour or days' playlist are not found. The system automatically loads the E-List's playlist.

How do I use it?

Simply copy a days playlist to the E-List extension. This will create an Emergency Playlist for those unexpected times of need.

Dos Commands that are necessary to create an E-List:

copy jan17.0* e-list.0*

In the place of jan17, you would place the date of the playlist you wish to copy into the emergency playlist.

Helpful Hint:

Place unique station liners in the emergency playlist is that the station personnel would recognize that the correct playlist is not currently airing. When the correct playlist is transferred to the On-Air machine, RapidFire will automatically switch to the proper playlist.

TimeWarp Execution

RapidFire is able to process TimeWarp logs that will allow you to record certain programs while on the air. Simply process your TimeWarp.dat file using the TimeWarp software and RapidFire will record your programmed events as scheduled.

Refer to Pristine TimeWarp manual on detailed instructions on how to define and schedule events for timeshift recordings through RapidFire.

TimeWarp recording within RapidFire

Player 4 is used as a recording device within RapidFire. Events are recorded into the C:\SPC directory of the on-air machine. RapidFire converts a four digit SP#### from TimeWarp into a Five digit SP9#### by adding a leading 9.

TimeWarp records either using time definitions or tone notification. Time definitions are defined through TimeWarp and cause RapidFire to record events based on time. Tone notification causes RapidFire to wait for a contact closure to Pin 36 on the STA-U (Blue Box) to start recording an event, it also relies on a contact closure to Pin 36 again to stop the recording of the event.

Wiring the Satellite connections should be made according to the setup of RapidFire earlier noted in this documentation.

EAS (Emergency Alert System)

What is it?

The FCC has required that all stations must include EAS devices in the event that the government needs to make public announcements. RapidFire is programmed to handle and interact with Burk Technology's EAS Device through the existing satellite hardware(PIO-12, STA-U, ERB-24).

The system works in the following manner:

When the EAS device receives a signal, it will automatically record the message. Then it will alert RapidFire that the device has a message to play. RapidFire will let current event finish playing, then signal to play a pre-recorded opener, then it will play the device's message, then play a pre-recorded closer, and finally resume the current playlist.

How do I use it?

To begin implementation of the system, make sure all hardware connections are made. Pin 37 of the STA-U should be used as the contact closer to alert RapidFire that the EAS device has a message to play. Relay 23 on the ERB-24 is the relay output that should be connected to the EAS device to actually play the message.

To pre-record the opener and closer for an EAS broadcast, simply record two hard disk audio events labeled as SP99998.SPC as the opener and SP99999.SPC as the closer.

Sage ENDEC

(Front View)

(Rear View)

Sage EAS

April 10 8:20 AM The NWS in Las Vegas has issued a Flood Watch for Clark County for

Incoming Alert
Outgoing Alert
Attention Tone
Automatic

Mic   Enter   Option   ⇧   ⇩   Com Port 1   Speaker   Printer

Sage Alerting Systems, Inc.

Com Ports 2 thru 6

L   R   L   R
Main Audio In   Main Audio Out

Attention Active
Attention Active
Encoder Active
Encoder Active
Decoder Active
Decoder Active

Monitor Inputs 1-6

Speaker In
Speaker Out
Speaker LineOut
Manual Overflow
Encoder Audio In

Power

How Options Interface

The Sage features three programmable relays:

1. Attention Active
2. Encoder Active
3, Decoder Active

The Sage Endec Connections to the Metrabyte Setup are as follows:

Decoder Active & Attention Active or Encoder Active should be connected to Pin 37 on the STA-U (Blue Box)
Note: Depending on which ones are programmed for EAS Alert and End of Message tones, the two should be connected to Pin 37. Default Setup has Decoder Active set to EAS Alert, so you would only have to program one of the other relays. These relays contain a +5 volts.

Manual Override should be connected to Relay 23 on the ERB-24 (Relay Board).
Note: A +5 volt needs to be connected to the manual override relay and then back to any ground through Relay 23 on the ERB-24 to complete the loop.

RapidFire Autobreaks & Liners

Using the RapidFire Autobreaks and Liners Utility, setting up these formats is simple.

End of Hour AutoBreak Options

-GO-END (finishes playing current event and begins next hour)
-GO-OUT (cuts current event and begins next hour)
-GO-TOP (fades out current event and begins next hour)

Time Critical Options

-GO-TO (finishes current event and goes to marker)

RapidFire Reference	MusicPlus ID Marker
1st event	HD99901
2nd event	HD99902
3rd event	HD99903
4th event	HD99904

-GO-CUT (fades out current event and goes to next marker)

RapidFire Reference	MusicPlus ID Marker
1st event	HD99905
2nd event	HD99906
3rd event	HD99907
4th event	HD99908

-GO-FDE (fades out current event and crossfades with next marker)

RapidFire Reference	MusicPlus ID Marker
1st event	HD99909
2nd event	HD99910
3rd event	HD99911
4th event	HD99912

RapidFire gives you the option to launch 6 different liner/jingle formats. RapidFire liners are played through Player 4 of the virtual players. Liners are launched through contact closures from Pins 31-33 of the STA-U (Blue Box). Instructions on how to wire the connection were stated in the setup section of this manual.

RapidFire Drop Box Editor

The RapidFire Drop Box editor allows you to set up jock profiles along with the necessary drops to make their shows sound great. Refer to RapidFire Drop Box Editor Manual.

RapidFire Quick Keys

Esc - Toggles between Live Mode and Auto Mode .

F1 - Play button for Player 1
F2 - Play button for Player 2
F3 - Play button for Player 3
F4 - Play button for Player 4

F10 - Exit RapidFire

RapidFire Time Update

You can now update the clock within RapidFire to keep your clock in sync with real-time. to implement this

option simply click on the Options Icon in the Selection Section and adjust the clock using the arrows above and below the time display.

RapidFire Satellite Time Synchronization

What is it?
RapidFire will keep your clock in sync with a satellite's clock, if your satellite signal provides tones.

How do I use it?
A contact closure must be established between Pin 18 and Pin 34 on the STA-U (see hardware section page 9) from either a tone decoder or "intelligent" satellite receiver. The rapid.ini file in the \rapid directory must also be configured for time synching to occur properly. The last three lines of the file deal with time synching options. The first line could have a setting of wither 1 or 0(1 being active and 0 being inactive). The next option provides for the minutes that the closure will sync to, and the last option provides for the seconds element of the time sync. For example, if you wanted to time sync at the top of every hour, the value for the first line of the three would be 1 and the last two items would be 0.

RapidFire Audio File Compatibility

Antex Header Format (SPC)

RapidFire will play antex header audio files. These hard disk audio events are the recommended files for the RapidFire Digital Studio System.

Wave Header Format (WAV)

RapidFire will play windows wav files. An important note is to be sure that Music Plus database times for these hard disk audio items are correct. RapidFire will reference fade times according to the database times given, so make sure that the database run times are accurate.

RapidFire "Filler" Files (for missing playlist items)

Using the RapidFire "Filler" files for missing playlist items is as simple as recording the proper audio file number according to the following table:

Audio File Number	Play List Item's Run Time
SP99801.SPC	less than 5 seconds
SP99802.SPC	less than 10 seconds
SP99803.SPC	less than 20 seconds
SP99804.SPC	less than 35 seconds
SP99805.SPC	less than 50 seconds
SP99806.SPC	less than 65 seconds
SP99807.SPC	less than 95 seconds
SP99808.SPC	less than 125 seconds
SP99809.SPC	less than 155 seconds

Some examples:

PlayList Item that's Missing	Filler File that will play
4 second liner	SP99801.SPC
7 second legal ID	SP99802.SPC
30 second spot	SP99804.SPC
60 second spot	SP99806.SPC

RapidFire Time Announcements

Using the RapidFire Time Announcements requires two things:

1) Scheduling the Time Announcement
2) Recording the Proper Audio File Number(s)

Scheduling

Create the Music Plus Member HD999-90 with a length of 5 seconds.
Schedule it in a music or break format so that it will appear in your playlist.

Recording

The 70000 series of audio file numbers has been reserved for time announce files.
The audio file numbering scheme is as follows:

> SP7HHMM.SPC, where HH is the hour (in military time 00-23)
> and MM is the minute (00-59)

TIP: It's a good idea to record time announce files +/- 3 minutes around the time that you expect them to be scheduled. For example, if I schedule a time announcement at 2:30 p.m., I probably should record the audio files numbers: SP71427.SPC through SP71433.SPC (this covers me for +/- a 3 minute time window).

Some examples:

PlayList Time	Time File that will play
1:30 a.m.	SP70130.SPC
5:15 a.m.	SP70515.SPC
11:30 a.m.	SP71130.SPC
2:30 p.m.	SP71430.SPC
9:45 p.m.	SP72145.SPC

NOTE: If the audio file for a time announcement does not exist, the system will play SP99990.SPC

RapidFire "Shrink / Stretch" Playback Feature

The RapidFire "Shrink/Stretch" Feature is designed for stations that are receiving their programming via a satellite delivery service (i.e. ABC, Jones, SMN, Westwood One) that requires your stations local break sets to fit a specific length of time (i.e. 2:00, 2:30, 3:00).

The Shrink/Stretch playback feature requires two things:

    1) Creating the Shrink/Stretch Members in Music Plus
    2) Scheduling the Shrink/Stretch Members in a playlist

Creating the Shrink/Stretch Members

■ Create the Music Plus Member "HD000-01" with the title ">>> Begin Set" with a length of one second, with no fade time and fade code of "P" (PAUSE after this item).

■ Create the Music Plus Member "HD000-02" with the title ">>> End Set"   with a length of one second, with no fade time and no fade code.

```
 Files   Criteria   Rules   Utilities   Reports   Programmer   Exit          MP0120

  Create A New MUSIC PLUS Member

        Member I.D.  (HD000) Track No. (01)    Source(H)   Active: (Y)
                                        ↓
          Title: (>>> Begin Set                )  Total Airtime: ( 0):( 1)
       Artist 1: (>>> Begin Set                )     Intro Time: ( 0)
       Artist 2: (                             )      Pre-Roll: ( 0)
    Artist Grp 1: (    )                               Fade Time: ( 0)
    Artist Grp 2: (    )                               Fade Code: (P)
    Artist Grp 3: (    )                                End Code: ( )

       Category: (R)    Level: (1)                        Gender: (1)
         Packet: (  0)                                      Type: (1)
        Daypart: ( 0)                         Sound Codes: (1)
        Texture: (1)                   Title Separation Min: (  0)
         Timbre: (1)                   Title Separation Max: (   )
          Tempo: (3)                  Artist Separation Min: (  0)
         Opener: (N)                  Artist Separation Max: (   )
         Closer: (N)              Relaxed Artist Separation: (  0)


 Enter Source:   [C] CD   [D] DAT   [H] HDA   [R] Relay
        <F1 END>   <F3 HISTORY>   <F4 SAVE>   <F6 PRINT HIST>   <PgDn NEXT>
```

Scheduling the Shrink/Stretch Members

The member HD000-01 should be scheduled prior to the first hard disk audio item of the break set, and the member HD000-02 should be scheduled after the last hard disk audio item of the break set. See the music format below as an example:

```
 Files   Criteria  Rules  Utilities   Reports   Programmer   Exit        MM-PLUS

 Music Format ID: (SA)

 Music Format Name: (SAMPLE SATELLITE FORMAT                 )      Active: (Y)

        C L T G O C B
        A V M N P L R
        T L P D N S K DISK-TRK   DESCRIPTION
  01.   R 1     N N * HD000-01   ♪  >>> Begin Set               F1  Save/Exit
  02.   R 1     N N * -G010-01   ♪  Mute All Satellites          F2  Ch Name
  03.   R 1     N N 1 -G011-01   ♪  Un-Mute Satellite Network    F3  Ch Status
  04.   R 1     N N * HD000-02   ♪  >>> End Set                  F4  Print
  05.   R 1     N N * HD000-01   ♪  >>> Begin Set                F5  Save
  06.   R 1     N N * -G010-01   ♪  Mute All Satellites          F6  Copy To
  07.   R 1     N N 4 -G011-01   ♪  Un-Mute Satellite Network    F7  Copy From
  08.   R 1     N N * HD000-02   ♪  >>> End Set                  F8  Switch To
  09.   R 1     N N * HD000-01   ♪  >>> Begin Set                INS Insert
  10.   R 1     N N * -G010-01   ♪  Mute All Satellites          DEL Delete
  11.   R 1     N N 6 -G011-01   ♪  Un-Mute Satellite Network    ENT Edit
  12.   R 1     N N * HD000-02   ♪  >>> End Set                  ESC Bell


        Use ↑↓ Arrow Keys Or Function Keys To Make Selections
```

** **NOTES:** Be sure the RAPID.INI on your playback computer has been updated with the proper hard disk audio format and sample rate (ex: MPEG, 48000)

The Shrink/Stretch function can only accommodate a 3% variation from the original sample rate. For example, to exact fit a 3 minute break set, the total time of original audio files must be between 2:55 and 3:05.

This RapidFire utility is only compatible with audio cards that can handle a sample rate up to 48k (i.e. SX-7, SX-9, SX-20, SX-23), and NOT with audio cards that have a 32k sample rate limit (i.e. SX-34, SX-35, SX-36).