Mira Express Replay System • Software Release Notes

Welcome to the Mira Express V9.3.1 Software Release Notes. Please read this document to find important information on areas of Mira Express that may not be covered in the Getting Started Guide or the User Help system.

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VERSION HISTORY

VERSION 9.3.1 – SEPTEMBER 2024

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Replay App: Playlist displays incorrect "Total Run Time" Duration

While PL-EDIT mode is active, the Playlist "Total Run Time" (TRT) = 00:00:00:00 when instead the actual total run time of the entire Playlist should be displayed. But when PLAYLIST mode is activated, the TRT is displayed correctly. This issue is now fixed.

VERSION 9.3.0 – AUGUST 2024

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. System: "Behind the scenes" Software License Tool

This new feature does not appear in or affect User Operations—but rather is background 'software hooks' used by the Ross Factory and Ross Support to validate and program Software Licenses for Mira products.

2. System: Video Card Firmware Updater App Changes

This app appears when upgrading the Software version in your Ross video server product that also requires updating the Firmware on the Ross Video Cards fitted in the video server.

This app had small tweaks to have the product logos removed and the Ross logo added.

3. System: Removed "Abekas" Logo and upgraded to latest "Ross" Grayscale Logo

These changes were made to the Mira Config, Mira Import, Mira Explorer, and the AsRun Log Report Generator apps.

4. System: Updated Third-Party Software Information in the "About" Dialogs

Third-Party License information and verbiage was updated to the most recent text within the "About" dialog within the Mira Explorer app.





5. Mira Config App: AMP Protocol Folder Setting for Sony Switcher Control

Sony Switchers have implemented the "media folder listing" command set in the AMP remote control protocol slightly out of specification — so it's different from how other switcher manufacturers have implemented these commands, including Ross.

On the RS422 tab, when "**AMP over Ethernet**" Protocol is active, a new "**Folder format**" radio button pair has been added near the bottom of the "**AMP Protocol Configuration**" section:

AMP Protocol Configuration				
Disable field timecode reporting				
Allow overlapped commands				
Allow playlist control				
Folder format 🖲 Ross	C Sony			

- Select the "**Ross**" radio button when controlling Mira from any Ross Switcher (or any Non-Sony branded Switcher) while using AMP protocol.
- Select the "**Sony**" radio button when controlling Mira from any Sony branded Switcher while using AMP protocol.

6. Mira Explorer App: Count-Down Timer while Playlist is Active

A new "Total Run Time" Count-Down timecode display has been added to the "On-Air" Playlist pane in the "Library" view in the Explorer app.

After a Playlist is first loaded into a player channel after clicking the "**AIR List**" button in the Playlist Editor, the new "Total Run Time" timecode is displayed in green text in the middle of the white-framed banner at the top of the Playlist pane:

ChA Playlist	▼00,10,02,08	•	ChB ➡ ChA	\rightarrow	() ×
Today's Entertain	nent				TAKE
# Clip Name		Duration	@START	@END	TRANS
1. Nature\Blue Sky Clouds		00,00,15,18	PLAY	TAKE	01,00 MIX
2. MUSIC VIDEOS Maria Taylor	Music Video	00,04,06,28	PLAY	LOOP	
Nature\Blue Sky Clouds		00,00,15,18	PLAY	TAKE	
4. MUSIC VIDEOS NIN Music V	ideo	00,02,20,01	PLAY	TAKE	
Nature\Red Sky Beach		00,00,30,15	PLAY	TAKE	
6. Nature\CGI Sea at Night		00,00,20,01	PLAY	TAKE	
MUSIC VIDEOS\RS Demo 20		00,01,53,22	PLAY	TAKE	
8. Nature\Green Mountains		00,00,19,22	PLAY	TAKE	

It should be noted that if the "PVW-PGM playout option" is selected (**blue** checkbox enabled at top of Playlist pane), then the Total Run Time of the playlist takes into account the TRANS durations of all the items in the Playlist, and will reduce the Count-Down timecode:





While **actively** playing out the Playlist, this Count-Down timecode display will **count down** the total time (*towards zero*) as the content advances through the Playlist:

ChA Playlist	▼00,05,26,23		ChB ➡ ChA	•	X
Today's Entertain	ment				TAKE
# Clip Name		Duration	@START	@END	TRANS
1. Nature\Blue Sky Clouds		00,00,15,18	PLAY	TAKE	01,00 MIX
2. MUSIC VIDEOS Maria Taylor	Music Video	00,04,06,28	PLAY	LOOP	01,00 MIX
Nature\Blue Sky Clouds		00,00,15,18	PLAY	TAKE	01,00 MIX
 MUSIC VIDEOS\NIN Music V 	íideo	00,02,20,01	PLAY	TAKE	01,00 MIX
5. Nature\Red Sky Beach		00,00,30,15	PLAY	TAKE	01,00 MIX
Nature\CGI Sea at Night		00,00,20,01	PLAY	TAKE	01,00 MIX
MUSIC VIDEOS\RS Demo 20		00,01,53,22	PLAY	TAKE	01,00 MIX
8. Nature\Green Mountains		00,00, 19,22	PLAY	TAKE	01,00 MIX

When the Playlist finished playing out all content, the Count-Down timer displays zero:

ChA Playlist	▼00,00,00,00		ChB ➡ ChA	-	() ×
Today's Entertain	ment				TAKE
# Clip Name		Duration	@START	@END	TRANS
1. Nature\Blue Sky Clouds		00,00,15,18	PLAY	TAKE	01,00 MIX
2. MUSIC VIDEOS Maria Taylo	r Music Video	00,04,06,28	PLAY	LOOP	01,00 MIX
Nature\Blue Sky Clouds		00,00,15,18	PLAY	TAKE	01,00 MIX
4. MUSIC VIDEOS NIN Music	/ideo	00,02,20,01	PLAY	TAKE	01,00 MIX
Nature\Red Sky Beach		00,00,30,15	PLAY	TAKE	01,00 MIX
Nature\CGI Sea at Night		00,00,20,01	PLAY	TAKE	01,00 MIX
MUSIC VIDEOS\RS Demo 20		00,01,53,22	PLAY	TAKE	01,00 MIX
8. Nature\Green Mountains		00,00, 19,22	PLAY	TAKE	01,00 MIX



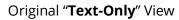


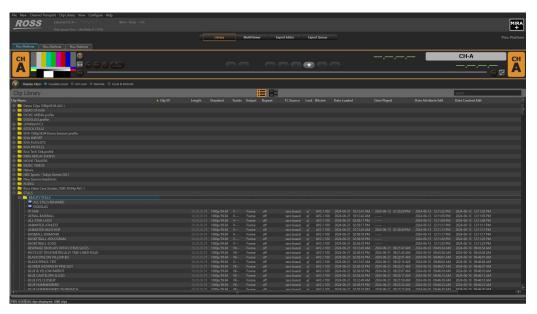
7. Mira Explorer App: Clip Library New "Thumbnails View"

Two new buttons were added to the "Clip Library Ribbon" located at the top of the **Clip Library** listing: . These buttons control the "layout" of the contents in the Clip Library display, as follows:

Click the given "View" button to display the contents of the Clip Library in the desired view...

•







New "Thumbnails" View

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INVA 1080p59.94 Demo Session1.profile NVA IMPORT												
KIVA PLAYLISTS												
KIVA PROFILES												
Kiva Tech Talk profile												
MRA REPLAY EVENTS												
MOVIE TRAILERS												
MUSIC VIDEOS												
NBC Sports - Tokyo Games 2021												
New Season Headshots												
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10s SEGMENTS MIX_1												
10s SEGMENTS MIX_2												
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15s SEGMENTS MIX 10f	O O O O O O											





8. Mira Explorer App: Media File Export with Transcode now a "Background Task" using Software Transcoding

Prior to this V9.3 software release, any media file export that involved a transcode would require selecting a video channel transport which was used to perform the codec transcode operation.

Starting with this V9.3 software release, media file export operations that involve a transcode operation no longer require selecting a video channel and are now performed via a new "software transcode engine" that performs the transcode export "in the background" and without occupying a video channel transport.

9. Mira Explorer App: Media File Export FFmpeg Library Updated

Media file exporting now supports the latest version of FFmpeg, which supports new DNxHD and MPEG-4 transcoding codecs.

10. Mira Explorer App: Media File Export transcode with ProRes Codecs

Media file exporting function now supports a small variety of ProRes codecs while performing media file exports with transcode.

11. Mira Explorer & Mira Replay Apps: Media File Export Failures now result in Error Message

If a media file export operation fails in either the Mira Explorer app or Mira Replay app, a new "Export Failed" error message pop-up now appears with information on the cause of error.

12. Mira Replay App: When 're-exporting' a Playlist that was previously exported now result in Error Message

In the Mira Replay app, when a Playlist has already been successfully exported previously and no changes have been made to the Playlist since, if the User then attempts to export that same playlist again, the following message will appear to remind the User to reset the Melt (Export) Flags so the Playlist can be exported again:

Reset Melt Flags and Export again.





13. Mira Replay App: Option for QWERTY Spacebar to Play/Pause PGM Players

A new parameter was added to the Mira Replay app's User Setup menu that enables and disables the ability to use the QWERTY keyboard's "Spacebar" to Play and Pause the media playback in the PGM Players:

User Setup			
Parameter	Current Value	Default Value	1
P4 Preferred CAM	CAM 4	CAM 4	
P1 Preferred Playlist			
P2 Preferred Playlist	1	1	
P3 Preferred Playlist			
P4 Preferred Playlist	1	1	
AUTO LOAD clip upon cursor move in CLIP PLAY Mode	ON	ON	
Auto-STOP on IN for CLIP PLAY & PLAYBACK Modes	ON	ON	
Auto-STOP on POI for CLIP PLAY & PLAYBACK Modes	ON	OFF	
Auto-STOP on OUT for CLIP PLAY & PLAYBACK Modes	ON	ON	h
SPACEBAR on QWERTY = PLAY/PAUSE	ON	OFF	
ALWAYS use PVW/PGM pair in PLAY LIST AIR	OFF	OFF	1
Vue Marks AUTO Save to Clip Register when Append	OFF	OFF	
Dim for inactive clips and list	50	50	1
Panel brightness	100	100	1
Light contrast	400	400	H
Replay P1 channel color	Yellow	Orange	
Replay P2 channel color	Magenta	Blue	Ĩ
Replay P3 channel color	Red	Red	
Replay P4 channel color	Green	Green	
Desaturate P1/P2/P3/P4 monitor border	100	100	1

When enabled, the QWERTY Spacebar will control Play/Pause in all modes of operation in the currently active PGM Players:

(LIVE EE / PLAYBACK / CLIP PLAY / PL-EDIT / PLAYLIST / VUE MARKS)

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Explorer: Export of Child Clips incorrectly ignored clipped IN point

When any Child clip is added to the Export Queue in Mira Explorer, the IN point of the Child clip was ignored with the Export incorrectly starting at the first frame of the Parent clip. This issue is now fixed, and Child clips are now correctly exported, starting at the first frame of the Child clip.

VERSION 9.2.4 – JULY 2024

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. System: Motherboard Intel Driver Issue causes rare Mira Explorer / Mira Replay App Crash and/or degraded app performance

Fixed a slow memory leak caused by a change to driver for the Intel GPU integrated into the computer motherboard. This leak had potential to degrade the GPU performance and/or cause a very rare crash of the Mira Explorer and Mira Replay Apps.

VERSION 9.2.3 – (SKIPPED)

This version number was skipped.

VERSION 9.2.2 – JUNE 2024

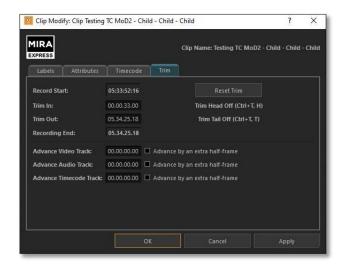
NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Explorer App: Clip Modify Dialog "Trim" Errors when using 'External Timecode'

When clips that were recorded with External Timecode are modified using the "**Clip Modify**" dialog:





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...a couple of errors occurred:

- A manual timecode entry made within the **Trim In** entry field could not be set to any valid TC value of the External Timecode recorded into the clip.
- Clicking the **Reset Trim** button created a bogus timecode value. Once this happens, the length of the clip changed to 1 frame duration.

Both these issues are now resolved.

2. Mira Replay App: "Mira Clip Library" Clips stored in Clip Registers BANK 1 thru BANK 99 with GANG Active during CLIP PLAY Mode

Under specific operations <u>detailed below</u>, the incorrect "Mira Clip Library" clip stored in the Mira Replay Clip Register is loaded into the PGM-2 Player.

This issue is now resolved.

- A. Configure Mira to operate as Replay; open Replay Event on Mira Control Surface (Demo Mode is OK) with at least **two** CAMs and with exactly **two** PGM Players.
- B. In **USER SETUP** Menu:
 - a) Ensure "P1 Preferred CAM" = "CAM 1"
 - b) Ensure "P2 Preferred CAM" = "CAM 2"
- C. In Clip Registers of **BANK 1**, store different "Mira Clip Library media clips" into these Clip Registers:
 - a) Reg 104 CAM-1 = 'Video-1' from Mira Clip Library
 - b) Reg 104 CAM-2 = 'Video-2' from Mira Clip Library
 - c) Reg 105 CAM-1 = 'Video-3' from Mira Clip Library
 - d) Reg 105 CAM-2 = 'Video-4' from Mira Clip Library
- D. Activate **GANG** mode so PGM-1 & PGM-2 Players are controlled together.
- E. Tap **LIVE EE** button to activate LIVE EE mode in both PGM-1 & PGM-2
- F. Move orange highlighting cursor onto Reg 104 CAM-1
- G. Tap **LOAD** button. Note:
 - a) Video-1 loads into PGM-1
 - b) Video-2 loads into PGM-2
- H. Move orange highlighting cursor to Reg 105 CAM-1
- I. Tap LOAD button. Note:
 - a) Video-3 loads into PGM-1
 - b) Video-3 also loads into PGM-2 (WRONG!)



- J. Tap **LIVE EE** button to activate LIVE EE mode in both PGM-1 & PGM-2
- K. Tap **LOAD** button. Note:
 - a) Video-3 loads into PGM-1
 - b) Video-4 loads into PGM-2

SOLUTION:

At step **#I-b)** above, PGM-2 is now loaded with **Reg 105 CAM-2 Video-4** (not with **Reg 105 CAM-1 Video-3**)

VERSION 9.2.1 – MARCH 2024

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. System: RossTalk RECEIVE Commands Inoperable after "Abekas SE" Service Restart

When the Abekas SE service is manually restarted, the RossTalk service would not start up automatically afterward, resulting in RossTalk RECEIVE commands becoming disabled. This issue is now resolved; RossTalk service now automatically starts after restarting Abekas SE.

2. System: Chassis Service stops logging after a few hours

The background Chassis Service diagnostic logger would halt logging errors after a few hours machine operation. This issue is now resolved. The Chassis Service now continuously logs all errors.

3. File Import App: File Import causes Color Shift

An error in the color space conversion caused media file import to subtly shift colors of the imported media. This issue is now resolved; there is no longer any color shift when importing media files.

4. File Import App: App crash after several hundred media file imports

A slow memory leak caused the File Import app to crash after several hundred media files are imported. This issue is now resolved; the File Import app no longer crashes.



VERSION 9.2.0 - NOVEMBER 2023

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Config App: Change Default Image upon "Unload Video Channel"

Prior to V9.2 Software, whenever a video channel transport was "Unloaded" that channel would be automatically loaded with "Internal Color Bars".

A new feature has been added to the **Mira Config** app on the **Channels** tab to allow the User to change the image that gets loaded upon a Channel Unload operation. The choices are:

- Color Bars (Default)
- Black
- Stored Still/Clip from Clip Library

NOTE: The "Stored Still or Clip" selection will present <u>all</u> .clip files stored in the Clip Library, including clips that are in video standards *different* from the video standard the video server is currently operating in. If a still or clip is chosen that's in a *different* video standard, then when the Unload command is executed the "Color Bars" will be loaded instead (*because it's impossible to load a .clip file that's in another video standard*).

2. Mira Config App: RossTalk Protocol • Change Port Number

In the **Mira Config** app on the **RS422** tab, a new feature has been added to allow the "RossTalk port number" to be changed. The default port number is 7788.

The RossTalk port number can now be changed to a new port number ranging from 7788 to 7798 to help avoid duplicate RossTalk port numbers with other devices on the same Ethernet network.

3. Mira Config App: RossTalk Protocol • Change Port Number

In the **Mira Config** app on the **RS422** tab, a new feature has been added to allow the "RossTalk port number" to be changed. The default port number is 7788.

The RossTalk port number can now be changed to a new port number ranging from 7788 to 7798 to help avoid duplicate RossTalk port numbers with other devices on the same Ethernet network.

4. Mira Remote Control: Added RossTalk Receive Command: Load Playlist

A new RossTalk Receive command has been added to load Playlist media content into specific video player channel(s), with the following syntax:

LOAD_PLAYLIST (pvw-channel:)pgm-channel:playlistname	Load playlist in specific channel or channels
	(see: "Examples of Load Playlist Command" below)

Examples of Load Playlist Command



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LOAD_PLAYLIST B:A:Sports_Show

Loads playlist titled "**Sports_Show**" into **ChA** as PGM Player and with **ChB** as PVW Player. The **first** playlist item is loaded into **ChA**, while the **second** playlist item is loaded into **ChB**.

LOAD_PLAYLIST D:Good Morning Show

Loads playlist titled "**Good Morning Show**" into **ChD** as PGM Player; first item is loaded into **ChD**.

5. Mira Remote Control: Added RossTalk Receive Command: Loop Playlist

A new RossTalk Receive command has been added to loop all Playlist content in a specific video player channel, with the following syntax:

LOOP_PLAYLIST channel:mode Enable Loc (see: "Examp

Examples of Loop Playlist Command

These commands can be issued *during* playlist playout.

LOOP_PLAYLIST A:loop

Enables "loop" command for playlist currently loaded in ChA.

LOOP_PLAYLIST A:off

Disables "loop" command for playlist currently loaded in ChA.

6. Mira Remote Control: RossTalk Receive Commands: 'forward slash' to indicate 'Folder'

While using RossTalk Receive commands that can include 'folders' and 'subfolders' in the video server's Clip Library, the 'forward slash' character (/) is now allowed, in addition to the 'back slash' character (\), as has always been the case.

Example:

(H:\Video) SPORTS\HOCKEY\Finals or (H:\Video) SPORTS\\HOCKEY\\Finals

Can now be simply:

(H:\Video) SPORTS/HOCKEY/Finals

RossTalk Receive Commands affected by this change:

CUE channel:clipname	Load clipname on channel
CUE channel:clipname:position	Load clipname on channel and seek to position
PLAY channel:clipname	Load clipname and start playing
PLAY channel:clipname:position	Load clipname and start playing from position
LOAD_PLAYLIST (pvw-channel:)pgm-channel:playlistname	Load playlist in specific channel or channels

7. Mira Remote Control: Added RossTalk Receive Command: TAKE

A new RossTalk Receive command has been added to transition ("take") media content within specific video player channel, with the following syntax:



TAKE channel	Take (transition) clip content in channel (see: "Examples of TAKE Command" below)
	(see. Examples of TAKE Community below)

Examples of TAKE Command

TAKE A

While Playlist is loaded in ChB as (PVW) with ChA as (PGM): Transitions currently highlighted playlist item into ChA.

TAKE G

With the Mira Replay app configured with two PGM Players (ChG=PGM-1 / ChH=PGM-2): Swaps content from ChH into ChG and content from ChG into ChH.

TAKE C

With the Mira Explorer app configured with two PGM Players while a Playlist is "ON-AIR" in the channel pair (ChC=PGM / ChD=PVW): Swaps PVW content of the Playlist from ChD into PGM ChC, and advances the Playlist forward by one item.

8. Mira Remote Control: Added RossTalk Receive Command: UP_ONE_ITEM

A new RossTalk Receive command has been added to move an active Playlist's "current item highlighting cursor" UP by one item in the Playlist, with the following syntax:

UP_ONE_ITEM channel	Move Playlist "current item highlighting cursor" for playlist active in <i>channel</i> UP by one item (see: "Example of UP_ONE_ITEM Command" below)
	(see. Loumple of or _one_real community below)

Examples of UP_ONE_ITEM Command

UP_ONE_ITEM B

While Playlist is loaded in ChB as (PVW) with ChA as (PGM): moves the "current item highlighting cursor" UP by one item within the playlist that's currently active in ChB.

9. Mira Remote Control: Added RossTalk Receive Command: DOWN_ONE_ITEM

A new RossTalk Receive command has been added to move an active Playlist's "current item highlighting cursor" DOWN by one item in the Playlist, with the following syntax:

DOWN_ONE_ITEM channel	Move Playlist "current item highlighting cursor" for playlist active in <i>channel</i> DOWN by one item (see: "Example of DOWN_ONE_ITEM Command" below)
-----------------------	--

Examples of DOWN_ONE_ITEM Command

DOWN_ONE_ITEM B

While Playlist is loaded in ChB as (PVW) with ChA as (PGM): moves the "current item highlighting cursor" DOWN by one item within the playlist that's currently active in ChB.



10. Mira Remote Control: Added RossTalk Receive Command: RECUE_TO_FIRST_ITEM

A new RossTalk Receive command has been added to move an active Playlist's "current item highlighting cursor" to FIRST item in the Playlist, with the following syntax:

RECUE_TO_FIRST_ITEM channel	Move Playlist "current item highlighting cursor" for playlist active in <i>channel</i> to FIRST item (<i>see: "Example of RECUE_TO_FIRST_ITEM Command"</i> <i>below</i>)
-----------------------------	--

Examples of RECUE_TO_FIRST_ITEM Command

RECUE_TO_FIRST_ITEM B

While Playlist is loaded in ChB as (PVW) with ChA as (PGM): moves the "current item highlighting cursor" to FIRST item within the playlist that's currently active in ChB.

If you want the newly highlighted playlist item to transition into the PGM player, you'll need to follow this RECUE command with a TAKE command.

11. Mira Remote Control: Added RossTalk Receive Command: EJECT_PLAYLIST

A new RossTalk Receive command has been added to unload (EJECT) a Playlist that's currently loaded in the specified video channel, with the following syntax:

	Unloads (Ejects) Playlist that's currently
EJECT_PLAYLIST channel	loaded in channel (see: "Example of EJECT_PLAYLIST
	Command" below)

Examples of EJECT_PLAYLIST Command

EJECT_PLAYLIST A

While Playlist is loaded in ChB as (PVW) with ChA as (PGM): halts playout of the active Playlist but keeps the currently playing item in ChA (PGM) playing out.

To completely clear the Playlist from all playout channels, follow with another command:

EJECT_PLAYLIST A

— or —

EJECT A

12. Mira Replay App: Support for Audio Swap & Mute from Foreign Replay Events

When a Foreign Replay Event is accessed in the Local Replay Event's Clip Registers, and a given clip from the Foreign Replay Event has Audio Swap & Mute (AS&M) attributes applied, those AS&M attributes are now obeyed when such a clip is loaded and played from the Local Replay Event.

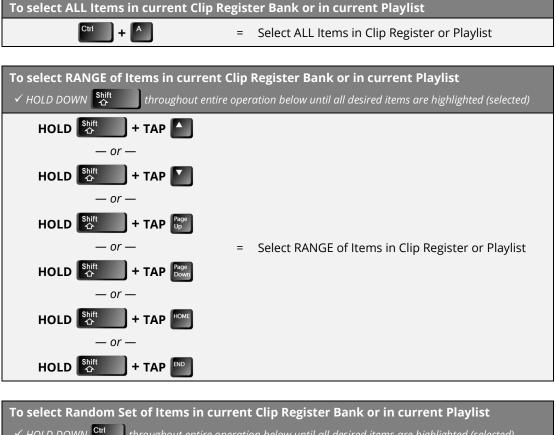


13. Mira Replay App: STOP@IN and STOP@POI new User Setup Parameters

Two new **User Setup** menu parameters were added to determine playback behavior during **PLAYBACK** mode while IN & POI points are set and during **CLIP PLAY** mode. When each parameter is ON, the PGM Player will stop at the set IN / POI during playback.

14. Mira Replay App: Multi-Select items in Clip Registers and Playlist

It's now possible to select multiple items in the Mira Replay app's Clip Registers and Playlist, by using QWERTY keyboard shortcuts that are identical to the Windows Explorer file management app. These shortcuts include:





15. Mira Replay App: Clip Register & Playlist Cut, Copy, & Paste

While one or multiple items (*see item 14 above*) in the current Clip Register or current Playlist during PL-EDIT mode are highlighted, it's now possible to use QWERTY keyboard shortcuts to **Cut** (C^{IIII} + X^{III}), **Copy** (C^{IIII} + C^{III}), and **Paste** (C^{IIII} + V^{III}) with those multiple items.

These functions are useful to remove and move multiple items in the currently active Clip Register and Playlist.

16. Mira Replay App: Modify multiple items in Playlist using Multi-Select

While multiple playlist items (*see item 14 above*) in the current Playlist are highlighted during PL-EDIT mode, it's now possible to then use the **Edit Item Flags** sub-menu to then modify any of the attributes (TRANS, TRANS DUR, @START, @END, and RUN TIME), and have that change apply to all the currently selected/highlighted playlist items.

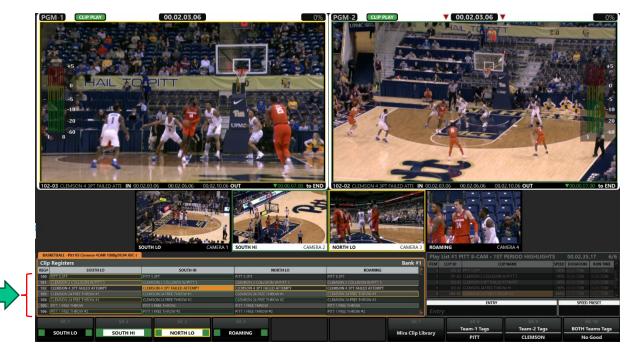
17. Mira Replay App: Clip Registers "Preferred CAM Angles" in CLIP PLAY Mode

The camera angles that were loaded in the PGM Players when clips are saved is now an attribute stored with each clip in the Clip Registers.

As part of this new feature, the User can also turn ON or OFF visual "colored indicators" (that highlight which camera angles in each clip were loaded all PGM Players when the clip was saved), coupled with an "auto-angle select" function during **CLIP PLAY** mode that automatically loads the highlighted camera angles into the appropriate PGM Player.

• To turn ON this function: Double-Tap the button

The Clip Register colored highlighters and camera angle auto-load function is enabled:





As the current clip item "orange highlighter" is moved UP and DOWN through the Clip Register rows, the PGM Players are automatically loaded with the camera angles that are highlighted with the corresponding-colored rectangles (**PGM-1** with **magenta-colored** rectangles, and **PGM-2** with **cyan-colored** rectangles in the image above).

• To turn OFF this function: Double-Tap the button

The Clip Register colored highlighters and camera angle auto-load function is disabled.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. File Import: Photoshop (PSD) media file support

Fixed bug that prevented Photoshop files (.PSD) from being imported. These files now import.

2. Mira Replay App: Exit from "PLAY LIST" to "PL-EDIT" remains at Current Item

This long-standing issue has been resolved. When exiting PLAY LIST mode back into PL-EDIT mode, the PGM Player now remains parked at the current position in the Playlist!

In previous software releases, the "current item cursor" within the playlist would move down by one item whenever PLAY LIST mode was exited.

And if the LAST item in the playlist was highlighted during PLAY LIST mode, exiting back to PL-EDIT mode would move the cursor upward to the penultimate item in the playlist.

Both issues are now resolved, and the "current item cursor" within the playlist remains at the current position when exiting PLAY LIST mode.

3. Mira Replay App: Non-matching Folders appear in Search Results

When performing a clip search in the Clip Registers using the **SEARCH** button, the Search Results would sometimes display Folders of clips that did not match the search filter. This bug is now fixed.

4. Mira Replay App: Inability to Save a STILL as a Mira Server Clip in Bank 0

While Mira Clip Library is opened in the Mira Replay app, when a STILL clip file is highlighted and SAVE is tapped to save the clip in Bank 0, the STILL would not get saved. This bug is now fixed.

5. Mira Replay App: GANG in PL-EDIT mode with active Foreign Replay Event

While a Foreign Replay Event is active in the Playlist pane during PL-EDIT mode, it was impossible for the GANG button to be activated. This bug is now fixed.

6. Mira Replay App: MARK then SAVE incorrectly saves to Foreign Replay Event

While a Foreign Replay Event is active in the Playlist pane during PL-EDIT mode, tapping the button (*to save active camera timecode to MARKS List*), then tapping **SHIFT** + **MARK** buttons

(*to activate* **VUE MARKS** *mode*), followed by a tap of the **SAVE** button would incorrectly save that Mark timecode as a new clip in the Foreign Replay Event instead of the Local currently active Replay Event. This bug is now fixed.

7. Mira Replay App: Mira Clip Library pane always displays BANK #1 as "Active Bank"

While BANK #2 thru BANK #99 is active during LIVE EE, PLAYBACK, CLIP PLAY, or VUE MARKS modes, if the Mira Clip Library is activated (SK-7), the banner in the Mira Clip Library pane is supposed to display the currently operating BANK #. However, it always displays "BANK #1" even while BANK #2 thru BANK #99 is active. This bug is now fixed.

8. Mira Replay App: Trimmed Clip LOAD with GANGED PGM Players seeks secondary PGM Player to wrong IN / POI

While **CLIP PLAY** mode is active with trimmed clips loaded into the PGM Players and with GANG active on two PGM Players, using any of the yellow GOTO buttons (**COTO** • **COTO**

9. Mira Replay App: Two Server Clips loaded into 'GANGED' PGM Players, tapping yellow GOTO button during PLAY incorrectly Auto-Plays

This bug happens only when:

- Two "Server Clips" are saved into two separate Clip Register slots are loaded into both PGM Players
- **GANG** is active
- **PLAY**> or **<PLAY** is active

10. Mira Replay App: Two Server Clips loaded into 'GANGED' PGM Players, tapping yellow GOTO button incorrectly seeks secondary PGM Player to same timecode as primary PGM Player

This bug happens only when:

- Two "**Server Clips**" are saved into two separate Clip Register slots are loaded into both PGM Players, each with different timecode values
- **GANG** is active

When any of the three yellow **GOTO** buttons are tapped (**GOTO** • **GOTO** • **GOTO** • **DOT**), **both** PGM Players will incorrectly seek to the **same** IN / POI / OUT timecode point of the primary PGM Player; in other words, the secondary PGM Player goes to the wrong timecode. This bug is now fixed.



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11. Mira Replay App: MARK button incorrectly applies User Setup Parameter "AUTO-MARK IN" Value to MARK timecode

Whenever the button is tapped, it is supposed to store into the VUE MARKS list the current timecode of the LIVE EE video feeds. However, what happens instead: the stored timecode is the current LIVE EE timecode minus the value of the User Setup parameter AUTO-MARK IN value. This bug is now fixed.

12. Mira Replay App: Mira Explorer/Replay App Crash at Load or Save Replay Event Template file

Mira Explorer and Mira Replay apps crash in certain situations when loading or saving Replay Event Templates:

- If the Replay Event in use has **no** "Clip Naming" softkeys defined, then the Mira Replay app doesn't crash...
- But as soon as the User Setup menu's Clip Naming data are entered, and then later, when SK8 or SK9 buttons are tapped to begin naming a Clip Register clip, the Mira Replay and Mira Explorer apps will crash
- And if a New Replay Event is being created, a pre-stored Replay Event Template is selected in the Wizard at Step #4 <u>and</u> that template has Clip Naming softkeys defined, then the Mira apps will crash at that point in the Wizard.
- But if the Replay Event Template has <u>no</u> Clip Naming softkeys defined, then the Wizard will proceed, and the Replay Event will be properly created, and recording will commence, etc.

These bugs are now fixed.

13. Mira Explorer App: "Clip Trim" functions broken in "Clip Modify" dialog window

When using the "Clip Modify" dialog window with the "Trim" tab selected (*shown below*), the "Trim In" and "Trim Out" functions did not operate correctly, while the associated QWERTY keyboard shortcuts did operate correctly.

ROFF

😨 Clip Modify: Clip	Ross Video	Case Studie	s_1080-5	9.94i AVC-I\KOSA	Case	?	\times
MIRA EXPRESS	ame: Ross V	'ideo Case St	udies_10	80-59.94i AVC-I\K -	OSA Case S	Study - 5	.0 MIN
Labels Attri	butes	Timecode	Trim				
Record Start:	00,00,	00,00		Reset Trim			
Trim In:	00,00,	00,00		Trim Head Off (C	rl+T, H)		
Trim Out:	00,05,	04,10		Trim Tail Off (Ctr	1+T, T)		
Recording End:	00,05,	04,10					
Advance Video Tra	ck: 00,00,	00,00 🗆 Ad	lvance by	an extra half-frai	ne		
Advance Audio Tra	ick: 00,00,	00,00 🗖 Ad	ivance by	an extra half-frai	ne		
	<u>(</u>	<u>2</u> K		<u>C</u> ancel		pply	

These bugs are now fixed.

14. Mira Explorer App: LOAD Button "Grayed Out" when Locking/Unlocking a Channel Transport

When Mira Explorer app is closed/quit *while* a "Channel Transport" is locked (*via the* **CTRL+Mouse Click** lock function), then launch Mira Explorer app again and unlock the Channel Transport, the Clip Load button is grayed out and inaccessible. The only way to regain access to the Clip Load button it to close/quit Mira Explorer again while the Channel Transport is unlocked.

This bug is now fixed.

15. Mira Explorer App: Using "GoTo/Seek to Timecode" function with imported clips, seeks to wrong timecode

This bug is now fixed.

In the Mira Explorer app, Users can easily seek to a desired timecode point within the currently loaded clip while a clip is loaded in a given video channel transport:

- a) Double-Click the "Count Up" timecode (the "lower" green timecode number); this changes that timecode display into a "Timecode Entry Field".
- b) Type value of the desired timecode into numeric keypad on QWERTY.
- c) Tap ENTER on QWERTY to "seek" or "goto" the defined timecode within the currently loaded clip.

This works fine if the clip loaded in the channel was recorded via HD-SDI video input.

This procedure does NOT work if the clip loaded in the channel transport was imported via the File Import app. The procedure will "seek" to an incorrect timecode value.

And if the imported clip is parked on the first frame this "seek" operation does NOTHING.

This bug is now fixed.

16. Mira Explorer App: Unable to create Child Clips from previously used Clip Name

When a clip is created with a given Clip Name, you're able to create Child Clips from that Parent Clip. However, when these Parent and Child Clips are all deleted, and then a newer Parent Clip is recorded with the *exact same* Clip Name as the old Parent Clip that was deleted earlier, then it is impossible to create Child Clips from this newer Parent Clip.

This bug is now fixed.

17. Mira Explorer App: Rare Crash

Fixed app crash that was quite rare but happened most often while playing out Playlists of Stills.

18. Mira Explorer & Mira Replay Apps: Audio Meter Scaling Changes

Audio Meters level scaling was adjusted to correct a 12dB offset with respect standard audio reference scaling.

VERSION 9.1.0 – (SKIPPED)

This version number was skipped.

VERSION 9.0.2 – AUGUST 2023

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. AMP Protocol: "Get Clip List" Command Broken

The AMP protocol command "Get Clip List" returned only one clip from the Clip Library, no matter how many clips are stored. This bug is now fixed.

2. All Remote-Control Protocols:

Improved command latency of video servers running in video standards below 30Hz.



3. Mira Explorer App: Very Rare App Crash

When running a Playlist with a series of stills in a loop for several hours non-stop, the Mira Explorer App would eventually crash. This bug is now fixed.

4. File Import App: Video not Centered upon file import

When importing media files with a video aspect ratio that's different from the current operating video standard, the media file's video would not be 'centered' in the raster. This bug is now fixed, and the video is now centered in the raster.

5. File Import App: Photoshop media files (.psd) do not import

When a still media file with the .psd file extension was imported, an error message resulted, and the file was not imported. This bug is now fixed.

6. File Import App: Black frame added to end of clip

For media files created with certain video codecs, upon import of these media files an extra frame of black was added to the end of the clip. This bug is now fixed.

7. Piero Broadcast Interface: Clip deleted in Mira Replay App Clip Register remains visible in Piero user interface 'Mira Clip Register'

Deleting a 'camera clip' from the Clip Register within the Mira Replay app would not update that same clip listing in the Mira Clip Register display within the Piero Broadcast user interface leaving the ability to load a camera clip that was deleted in the Mira replay system itself. This bug is now fixed; the deleted clip is now immediately removed from the Piero Broadcast user interface.

NOTE: The Piero Broadcast Operator must manually "refresh" the Mira Clip Register listing in the Piero user interface before seeing the deleted camera clip. This issue will be resolved in a future Piero Broadcast software release (which will "auto-refresh" the listing).

8. Mira Replay App: Play List Melt (Export) does not include "Server Clips" in Melted (exported) Media File

If a Mira Replay app's Play List contains "Server Clip" items from the Mira Clip Library, those clips are not included in the exported media file when a Play List Melt operation is performed on that Play List. This bug is now fixed.

9. Mira Replay App: Export Destination that exports Play Lists into "One" media file does not always include all items from Play List

If a Play List is exported *before* adding more items to the Play List, and then later the Play List with more items is exported as "One" media file, the previously exported items in the Play List would not be included in the most recent export. This bug is now fixed.





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VERSION 9.0.1 – APRIL 2023

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. Software Licensing Feature

Added new feature that "keys" a new software license for the "Mira Software Suite" to the Mira Express motherboard serial number.

<u>Learn more</u> about the purpose behind this new software license.

2. Support clips longer than 24 hours

Increased maximum duration of SDI input recordings to go beyond 24-Hours and up to currently available media storage open space.

3. Audio Level Metering Displays in Mira Explorer MultiViewer and Mira Replay PGM Players Features of the new Audio Metering Displays:

- a) **Mira Explorer app**: The new Audio Metering Displays can be superimposed over the active video image within the video panes independently for each video channel, but only within the MultiViewer display (when VIEWER is active).
 - Position & Opacity of each Audio Meter Display can be set to one of six locations within each video pane through the "Audio Meters" tab in the General Configuration dialog window:



b) Mira Replay app: The new

Audio Metering Displays will be

superimposed over the video image within the PGM-1 / PGM-2 (and PGM-3 / PGM-4 output channels, if enabled)...

- **Position** & **Opacity** of each Audio Meter Display can be set to one of six locations within each PGM Player video pane through a new set of USER SETUP menu parameters.
- c) The "**ALT+M**" keyboard shortcut can be used at any time to toggle ON or OFF **all** the Audio Meter Displays in both the **Mira Explorer** app and the **Mira Replay** app.
- d) The number of audio tracks displayed in the Audio Metering Displays is dictated by:



- How many audio tracks exist in the clip currently loaded in the given video channel (during PLAY operations)
- How many audio tracks exist in the clip currently recording in the given video channel (during LIVE EE and RECORD operations)
- 4. Mira Replay app: Save "Server Clips" from Mira Explorer Clip Library into any Mira Replay Clip Register Location

In previous Mira software versions, "Server Clips" stored in the Mira Explorer Clip Library could be saved only into "BANK #0" of the Clip Registers within the Mira Replay app.

With Version 9.0 software and above, these "Server Clips" can now be saved into **any** "BANK #" (BANK #1 — BANK #99) of the Clip Registers. To use this feature:

a) Activate the desired **BANK #** and **CLIP ID Row** in the **Clip Register** into which you want to save the Mira Clip Library Server Clip

(If there are **six** or fewer Cameras in your Mira Replay Event, **skip** this step)



If there are **seven** or more Cameras in your Mira Replay Event:

Double-Tap button to display the "Alternate set of Softkeys"...

Clin	Registers							Bank #1		y List #5	
EG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI			
05	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT			
06											
07	PITT 21 2PT ALLEY OOP	PITT 21 2PT ALLEY OOP	PITT 21 2PT ALLEY	PITT 21 2PT ALLEY OOP							
08	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!			
10											
12											
13									En En	trv	
		1									
		SK 2					SK 5				
	IELT All Angles	MELT Current				Male	o Router			Mira Clip	

b) **Tap Softkey 2** button (**Mira Clip Library**) to activate the **Mira Clip Library** submenu:

0.	JAN-05-2023 8-CAM	1 MIRA REPLAY EVEN	NTS\BASKETBALL - P	MIRA REPLAY EVEN	ITS\BASKETBALL - P	SSM SONY CAMER	A TESTS - ISO3		_ Pla	av List #5	
Clip	Registers							Bank #1	ITE	M CLIPID	
REG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI		1	
105	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT			
106											
			PITT 21 2PT ALLEY					PITT 21 2PT ALLEY OOP			
108	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!			
113								· · · · · · · · · · · · · · · · · · ·	Er		
	SK 1 SK 2					SK 5		٦ſ	SK 7		
N	MELT All Angles MELT Current Angle			Video Router					Mira Clip I	.ibrary	



- c) **Tap Softkey** button (**Mira Clip Library**) to activate the **Mira Clip Library** submenu; then highlight the desired Mira Server Clip you want to save into the current Clip Register Bank.
- d) **Tap Softkey** button (**SAVE in ACTIVE BANK**) to save the highlighted clip into Active BANK #1:

🕽 JAN-05-2023 8-CAM 🔹 1 MIRA REPLAY EVENTS\BASKETBALL - P 🔹 🙆 M	IRA REPLAY EVENTS\BASKETBALL - P	SSM	SONY CAMERA TESTS - ISO3		Play List	
ira Clip Library			Clip Register AC	TIVE BANK: Bank #1	ITEM CLIF	2 ID
Name	Clip Duration	Tracks		^	1	
				E.		
	00,00,49,03					
··· Night - Downtown - Clear Skies - Fall	00,00,48,13					
Out of Tunnel	00,00,20,28	V-A-				
Panther Statue	00,00,37,28	V-A-				
					Entrv	
··· Pete Snow 3	00,00,38,29	V		<u>×</u> _	Linury	<u> </u>
SK 1 SK 2 SK	3		SK 5	SK 6	n – – – – – – – – – – – – – – – – – – –	
SAVE in BANK #0 SAVE in ACTIVE BANK SAVE in OTI	HER BANK		INSERT in PLAY LIST	APPEND to PLAY LIST		

- e) Repeat previous step for any additional clips you want to save into BANK #1
- f) **Tap EXIT** button to finish. The Server Clips you've added to BANK #1 will be displayed with green text:

0	JAN-05-2023 8-CAM	1 MIRA REPLAY EVEN	NTS\BASKETBALL - P	MIRA REPLAY EVEN	ITS\BASKETBALL - P	SSM SONY CAMER	A TESTS - ISO3		Play List #5
Clip	Registers							Bank #1	ITEM CLIP ID
REG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI	1
105	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	CLEMSON 24 2PT	
106								CLEMSON 24 2PT	
107			PITT 21 2PT ALLEY 😑					PITT 21 2PT ALLEY OOP	
108		STUMBLE!						STUMBLE!	
		Out of Tunnel							
									j
113									Entry
	SK 1	SK 2		SK 3	SK 4		SK 5	SK 6	SK 7
	SOUTH LO	SOUTH	н	NORTH LO	ROAMING	CEI		BASKET S	BASKET N

5. Mira Replay app: Audio Tracks Swap and Mute in saved Clips

This feature allows the Mira User to swap or mute individual audio tracks within clips stored in the Clip Registers during **CLIP PLAY** mode.

Individual audio tracks can be swapped with other audio tracks within the clip itself, or swapped with audio tracks from an entirely separate clip stored elsewhere within the Clip Registers—including with audio tracks from "Server Clips" stored in the Clip Registers from the Mira Explorer Clip Library. To use this feature:

a) **Tap** button to load a clip stored in any Clip Register into any available PGM Player; this activates **CLIP PLAY** mode in the PGM Player (**CLIP PLAY** mode **must** be active to access the Audio Swap & Mute functions!):

0,	IAN-05-2023 8-CAM	MIRA REPLAY EVEN	NTS\BASKETBALL - P	MIRA REPLAY EVEN	NTS\BASKETBALL - P	SSM SONY CAMER	A TESTS - ISO3		Play List #5		
Clip	Registers							Bank #1	ITEM CLIP ID	5	CLIP NAME
REG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI	1		
100	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME			
								FOUL			
102	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	No Good	PITT 5 2PT			
								CLEMSON 24 FREE TH			
04								CLEMSON 24 FREE TH			
05								CLEMSON 24 2PT			
06								CLEMSON 24 2PT		·	
07							PITT 21 2PT ALLEY OOP	PITT 21 2PT ALLEY OOP			ENTRY
								STUMBLE!	Entry		
20	0 11 011	A 1 /7 1						Ľ	<u> </u>		
		SK 2		SK 3	SK 4		SK 5		S		
	SOUTH LO	SOUTH	н		ROAMING	CE		BASKET S	BAS	SKET N	STANDS HI







b) **Double-Tap** SHIFT button to display the "Alternate set of Softkeys":

0	IAN-05-2023 8-CAM	MIRA REPLAY EVEN	ITS\BASKETBALL - P	MIRA REPLAY EVEN	TS\BASKETBALL - P	SSM SONY CAMER	A TESTS - ISO3		Play List #5		00,
Clip	Registers							Bank #1	ITEM CLIP ID		CLIP NAME
REG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI	1		
100	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME			
101								FOUL			
102	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	No Good	PITT 5 2PT			
103								. CLEMSON 24 FREE TH			
104								. CLEMSON 24 FREE TH			
105								CLEMSON 24 2PT			
106								CLEMSON 24 2PT			
107								P PITT 21 2PT ALLEY OOP			ENTRY
108	STUMBLEI	STUMBLE	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLEI	STUMBLE!	STUMBLE!	Entry		
400	n 11 Ci 1	N IT I				N N	1		<u> </u>		
		SK 2					SK 5		SK		SK 8
	TIT All Ameles	MELT Commen	A secolo		Andle Come and	All and a second se	eo Router		Mine Cilin	1.11	Team-1 Tags
	IELT All Angles	MELT Current	Angle		Audio Swap & I	viute via	eo kouter		Mira Clip	Library	PITT

c) **Tap Softkey 4** button (**AUDIO SWAP & MUTE**) to activate the Audio Swap & Mute sub-menu:

0	JAN-05-2023 8-CAM	1 MIRA REPLAY EVEN	NTS\BASKETBALL - P	MIRA REPLAY EVEN	NTS\BASKETBALL - P	SSM SONY CAMER	A TESTS - ISO3		Play	/ List #5	00
Clip	Registers							Bank #1	ITEM	CLIP ID	CLIP NAME
REG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI	1		
100	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME			
								FOUL			
102	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	PITT 5 2PT	No Good	PITT 5 2PT			
								. CLEMSON 24 FREE TH			
								CLEMSON 24 2PT			
								PITT 21 2PT ALLEY OOP			ENTRY
108	STUMBLEI	STUMBLEI	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	STUMBLE!	Ent		
100	SK 1	SK 2	1		SK 4	ľ	SK 5			SK 7	SK 8
	/ELT All Angles	MELT CHARGE			Availa Course Re		eo Router			Mine Olive Library	Team-1 Tags
N	ALLI All Angles	MELT Curren	TAngle		Audio Swap &	viute Vide	eo Router			Mira Clip Library	PITT

d) **Move** highlighting cursor to desired audio track you want to swap or mute; in this example, **Track 3** is highlighted:

O JAN-09	i-2023 8-CAM 📜	MIRA REPLAY EVENTS\BASKETB	ALL - P 🛛 😧 MIRA REPLAY EVEN	ITS\BASKETBALL - P 🛛 🕑 SSI	I SONY CAMERA TESTS - ISO)3		Play	List #5	00,
Audio T	Audio Track Swap and Mute 102-04 PITT 5 2PT									CLIP NAME
Clip ID		Audio Source Clip from Clip Registe	r / Mira Clip Library	Source Camera Angle	Source Audio Track	Audio Track OUT	MUTE	1		
102-04	PITT 5 2PT			Camera 4	Track 1 🛏	Track 1	0			l i i i i i i i i i i i i i i i i i i i
102-04	PITT 5 2PT									
102-04	PITT 5 2PT			Camera 4	Track 3 ⊨					
102-04	PITT 5 2PT									
102-04										
102-04										
102-04	PITT 5 2PT			Camera 4						ENTRY
								Ent		
	SK 1	SK 2		SK 4	SK 5	1	SK 6			SK 8
COURCE		SOURCE: CLIP LIBRARY		SOURCE CAM ANGLE	SOURCE AUDIO TR	MUTE-	UNMUTE ALI			NORMALIZE ALL
SOURCE:	LLIP REGISTER	SOURCE: CLIP LIBRART		SOURCE CAM ANGLE	SOURCE AUDIO TR	MUTE-UI	NMUTE TRAG	к		NORMALIZE TRACK

e) To swap to an audio track from another Camera Angle of the same Clip, type the desire Camera # into the numeric keypad (i.e. "1"), then Tap Softkey 4 button (SOURCE CAM ANGLE):

O JAN-05	-2023 8-CAM	MIRA REPLAY EVENTS\BASKETB	ALL - P 🛛 🙆 MIRA REPLAY EVEN	TS\BASKETBALL - P 🛛 🕑 SSI	N SONY CAMERA TESTS - ISO	3		Play Lis	t #5	00.
Audio Tr	ack Swap and	l Mute	ITEM CL	IP ID	CLIP NAME					
Clip ID		Audio Source Clip from Clip Registe	r / Mira Clip Library	Source Camera Angle	Source Audio Track	Audio Track OUT	MUTE 🛆	1		
102-04	PITT 5 2PT			Camera 4	Track 1 🛏	Track 1	0			
102-04										
102-01	PITT 5 2PT			Camera 1	Track 3 🛏	Track 3				
102-04							0			
102-04							0			
102-04										
102-04								<u> </u>		
102-04										ENTRY
							~	Entry		
:	SK 1	SK 2		SK 4	SK 5		SK 6			SK 8
SOURCE (SOURCE: CLIP LIBRARY		SOURCE CAM ANGLE	SOURCE AUDIO TR	MUTE-	UNMUTE ALL			NORMALIZE ALL
SOOKCE: C	LIF REGISTER	SOURCE: CEIF LIBRART		SOURCE CAM ANGLE	SOURCE AUDIO TR	MUTE-UI	NMUTE TRAC	К		NORMALIZE TRACK



This swapped Audio Track #3 from Camera #1 into Track #3 of the loaded clip.

f) To swap to an audio track from another Clip from the Clip Register, first highlight the target audio track with the highlighting cursor; then Tap Softkey button (SOURCE: CLIP REGISTER):

🛈 JAN-05	5-2023 8-CAM 📜	1 MIRA REPLAY EVENTS\BASKETB	ALL - P 🛛 😢 MIRA REPLAY EVEN	ITS\BASKETBALL - P 🛛 🚯 SSI	M SONY CAMERA TESTS - ISO3	i		_ Pla	ay List #5	00,
Audio Tr	rack Swap an	d Mute	ITE	A CLIP ID	CLIP NAME					
Clip ID		Audio Source Clip from Clip Registe	r / Mira Clip Library	Source Camera Angle	Source Audio Track	Audio Track OUT	MUTE	<u>`</u>	1	
102-04	PITT 5 2PT			Camera 4	Track 1 🛏	Track 1				
102-04	PITT 5 2PT			Camera 4	Track 2 🛏		0			
102-01										
102-04	PITT 5 2PT			Camera 4	Track 4 ⊷	Track 4	0			
102-04										
102-04	PITT 5 2PT			Camera 4	Track 6 🛏	Track 6	0			
102-04										CHITON .
102-04	PITT 5 2PT			Camera 4	Track 8 🛏	Track 8	0			ENTRY
								Er	ntry	
	SK 1	SK 2	Ĩ	SK 4	SK 5		SK 6			SK 8
COURCE		SOURCE: CLIP LIBRARY		SOURCE CAM ANGLE	SOURCE AUDIO TRA	MUTE-	UNMUTE AI	L		NORMALIZE ALL
SOURCE: 0	CLIP REGISTER	SOURCE: CLIP LIBRARY		SOURCE CAM ANGLE	SOURCE AUDIO TRA	MUTE-U	NMUTE TRA	ск		NORMALIZE TRACK

This displays the list of clips in the Clip Register; position the highlighting cursor over the clip you want to select for the audio track swap, then **Tap Softkey** button (SELECT CLIP):

0	JAN-05-2023 8-CAM	1 MIRA REPLAY EVER	NTS\BASKETBALL - P	MIRA REPLAY EVEN	NTS\BASKETBALL - P	SSM SONY CAM	ERA TESTS - ISO3		Play List #5	00,
Aud	lio Track Swap a	nd Mute					ange Track 4 SOU	JRCE: CLIP REGISTER	ITEM CLIP ID	CLIP NAME
REG#	SOUTH LO	SOUTH HI	NORTH LO	ROAMING	CENTER LO	BASKET S	BASKET N	STANDS HI	1	
100	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME	START OF GAME		
							FOUL	FOUL		
				PITT 5 2PT				PITT 5 2PT		
							CLEMSON 24 FREE T	CLEMSON 24 FREE T		
								CLEMSON 24 FREE T		
							CLEMSON 24 2PT	CLEMSON 24 2PT		
106								CLEMSON 24 2PT		
	PITT 21 2PT ALLEY O	PITT 21 2PT ALLEY O		PITT 21 2PT ALLEY O	PITT 21 2PT ALLEY O	PITT 21 2PT ALLEY O.	PITT 21 2PT ALLEY O	. PITT 21 2PT ALLEY O		ENTRY
108								STUMBLE!	Entry	
400	0 11 (11)	A					<u> </u>			
					SK 4		SK 5			
	SELECT CLIP				CAMERA AN	IGLE CAM	ERA ANGLE 🕨			

The selected Clip Register clip is swapped into Track #4:

O JAN-05	5-2023 8-CAM 1 MIRA REPLAY EVENTS\BASKETBALL - P	3 MIRA REPLAY EVENTS\BASKETBALL -	P SSM SONY CAME	A TESTS - ISO3		Play List #5	00,
Audio Ti	rack Swap and Mute				102-04 PITT 5 2PT	ITEM CLIP ID	CLIP NAME
Clip ID	Audio Source Clip from Clip Register / Mira Clip L	brary Source Cam	era Angle Source Au	lio Track Audio Tra	ck OUT MUTE	1	
102-04	PITT 5 2PT	Came	ra 4 Track	l 🛏 🛛 Track	k1 O		
102-04	PITT 5 2PT				k2 O		
102-01				3 🛏 Track			
107-02	PITT 21 2PT ALLEY OOP	Came	ra 2 Track	1 🛏 🛛 Track	k4 O		
	PITT 5 2PT				k6 O		
	PITT 5 2PT				k8 O		ENTRY
						Entry	
	SK 1 SK 2	SK	4	SK 5	SK 6		SK 8
					MUTE-UNMUTE AL	L	NORMALIZE ALL
SOURCE	CLIP REGISTER SOURCE: CLIP LIBRARY	SOURCE CA	MANGLE SOURCE	AUDIO TRACK	UTE-UNMUTE TRA	ск	NORMALIZE TRACK

You can then optionally change the SOURCE CAM ANGLE (using SK4) and/or the SOURCE AUDIO TRACK (using SK5) from this other Clip.

g) To **MUTE** an audio track, first highlight the target audio track with the highlighting cursor:

O JAN-0	5-2023 8-CAM	1 MIRA REPLAY EVENTS\BASKETB	ALL - P 🛛 🙆 MIRA REPLAY EVENT	TS\BASKETBALL - P 🛛 🕑 SSI	M SONY CAMERA TESTS - ISO	3		_ Pla	y List #5	00,
Audio T	rack Swap an	id Mute	ITEM	CLIP ID	CLIP NAME					
Clip ID		Audio Source Clip from Clip Registe	r / Mira Clip Library	Source Camera Angle	Source Audio Track	Audio Track OUT	MUTE	<u>`</u>		
102-04	PITT 5 2PT			Camera 4	Track 1 🛏	Track 1	0			
102-04	PITT 5 2PT						0			
102-01										
102-04	PITT 5 2PT			Camera 4	Track 4 🛏		0			
102-04										
102-04	PITT 5 2PT						0			
102-04										
102-04	PITT 5 2PT						0			ENTRY
								; En		
	SK 1	SK 2		SK 4	SK 5		SK 6	Î		SK 8
COURCE		SOURCE: CLIP LIBRARY		SOURCE CAM ANGLE	SOURCE AUDIO TR	MUTE-	UNMUTE AL	L		NORMALIZE ALL
SOURCE:	CLIP REGISTER	SOURCE: CLIP LIBRART		SOURCE CAM ANGLE	SOURCE AUDIO TR	MUTE-UI	NMUTE TRA	ск		NORMALIZE TRACK

Then **Tap Softkey 6** button (**MUTE-UNMUTE TRACK**):



O JAN-05	5-2023 8-CAM 1 MIRA REPLAY EVENTS\BASKETBALL - P	🕑 MIRA REPLAY EVENTS\BASKETBALL - P	SSM SONY CAMERA TESTS - ISO	3	[Play List #5	C
Audio Tr	rack Swap and Mute			102-04 PI	TT 5 2PT	ITEM CLIP ID	CLIP NAME
Clip ID	Audio Source Clip from Clip Register / Mira Clip	Library Source Camera Angle	Source Audio Track	Audio Track OUT	MUTE	1	
102-04	PITT 5 2PT	Camera 4	Track 1 🛏	Track 1	0		
	PITT 5 2PT				0		
					0		
	PITT 21 2PT ALLEY OOP				0		
	PITT 5 2PT	Camera 4	Track 5 ⊨		•		
	PITT 5 2PT				0		
					0		
	PITT 5 2PT				0		ENTRY
					I		
	SK 1 SK 2	SK 4	SK 5	SK	6		SK 8
	CLIP REGISTER SOURCE: CLIP LIBRARY	SOURCE CAM ANG	LE SOURCE AUDIO TR	MUTE-UNI	MUTE ALL		NORMALIZE ALL
OURCE: C	CLIP REGISTER SOURCE: CLIP LIBRART	SOURCE CANTAINS	LE SOURCE AUDIO IR	MUTE-UNM	UTE TRACK		NORMALIZE TRAC

The highlighted audio track is muted, as indicted with red "Track" text and red "dot" in the MUTE column.

h) **Tap EXIT** button to finish.

6. Mira Replay app: Loading & Playing Play Lists from Foreign Replay Event

Added new feature to allow Play Lists from Foreign Replay Events to be opened and played through the active Local Replay Event.

To use this feature:

- a) **Tap** SHIFT + SEARCH to access the "Select Foreign Replay Event" menu
- b) Highlight desired Foreign Replay Event, then **Tap** button (**SET Favorite**), followed by a Tap of a softkey (SK-1 through SK-9) to set the Favorite #.
- c) **Tap EXIT** button to finish.
- d) **Tap** button to activate **PL EDIT** mode in the selected PGM Player.
- e) **Hold Down C**^{ttl} then **Tap 1 9** on QWERTY (the "Favorite **#**"); this will load the desired "Favorited Foreign Replay Event" in the Play List pane.

7. Mira Replay App: "Replay Event Name" displayed in Clip Register

The name of the currently active Replay Event is now displayed above the Clip Register pane in the Mira Replay app.

8. Mira Replay App: Copy & Paste Play List items from Foreign Replay Event

While a Foreign Replay Event is active in PL EDIT mode, it's now possible to copy an item from a Play List in the Foreign Replay Event by using the **SK-8 COPY** softkey, switching back to the Local Replay Event (Ctrl) and then using **SK-9 PASTE** to paste that Play List item into the Local Replay Event.

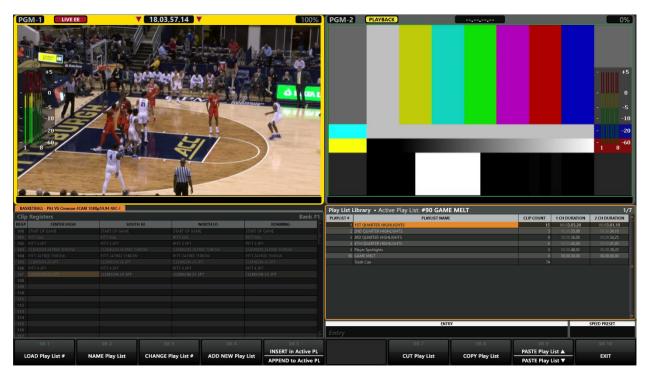
9. Mira Replay App: Play List Library – New Softkey functions for Play List 'Copy', 'Paste', 'Insert', & 'Append' to 'Current Play List'

While the Play List Library is active (shortcut = **SHIFT** + **PLAY LIST**), a set of new softkeys are now present to make it simpler to copy one or more Play Lists into the currently active Play List.





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These new softkeys make it much easier to create a final "Game Melt" Play List, for example.

- a) Create a Game Melt Play List, keeping it as the currently active Play List.
- b) Enter the Play List Library by tapping **SHIFT** then **PLAY LIST** buttons (shown below).
- c) Highlight the Play List you'd like to add to the Game Melt
- d) Tap **SK-5** "**APPEND to Active PL**"; this adds all items from the currently highlighted Play List into the Game Melt Play List.
- e) Repeat steps (c) and (d) for additional Play Lists you'd like to add to the Game Melt.
- f) When finished, tap **PLAY LIST** button to exit Play List Library and to exit back to the Play List Edit mode.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Replay App: Paste/Restore in CLIP PLAY mode didn't load Pasted/Restored Clip

Fixed issue in which clip was not loaded after Paste/Restore operation.

2. Mira Replay App: Play List Library's Play List Names Reset to 'Untitled'

In the Play List Library when an entire Play List is copied and pasted, the title of that Play List was reset to "Untitled". The Play List name is now preserved when pasted.

3. Mira Replay App: Contrast of "No Good" Clip Name in Clip Register / Play List

Adjusted the contrast of the "No Good" text for better visibility.

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4. Mira Replay App: "Tags Editor" on SK-10 re-labeled as "BOTH Teams Tags"

The SHIFTED label for SK-10 in the Alternate set of softkeys was incorrectly labeled as "Tags Editor". This has been changed to the correct label "BOTH Teams Tags".

5. Mira Replay App: Tags Incorrectly Applied to new Clip Register Clips

In certain situations, SAVE a new clip into the Clip Register would incorrectly and automatically apply pre-defined metadata tags.

6. Mira Replay App: Tags Editor Crash

Fixed issue in Tags Editor in which tapping or on QWERTY keyboard would sometimes cause a Mira Replay app crash.

7. Mira Replay App: Tags Editor Unexpected Behavior

Fixed issue in Tags Editor in which tapping button or tapping would sometimes cause unexpected behavior in the Mira Replay app.

8. Mira Replay App: Play List Edit sub-menu incorrectly Exited

Fixed issue in Play List Edit submenu (Edit Item Flags), in which the sub-menu would incorrectly exit upon selecting SK-3 through SK-9.

9. Mira Replay App: Play List Names lost when using Replay Event Template

Fixed an issue when creating a new Replay Event from an Event Template would not apply the Playlist Names from the Template into the Play Lists in the new Replay Event.

10. Mira Replay App: Deleting Play Lists contents created duplicate Trash Bin

Fixed an issue when deleting Play Lists that added the contents to Trash Bin but also created a duplicate Trash Bin with zero items in it.

11. Mira Replay App: Last item in BANK 0 incorrectly added to Play List

Fixed issue in which the last item in BANK 0 is incorrectly appended/inserted into the current Play List instead of the currently highlighted item in BANK 0

12. Mira Replay App: Two different Play Lists cannot be loaded into PGM-1 & PGM-2

Fixed issue in which two different Play Lists cannot be loaded into PGM-1 and PGM-2; the same Play List would sometimes incorrectly get loaded into both PGM Players.

13. Mira Explorer App: Added Window Title of Undocked MultiViewer

Now displays "Mira MultiViewer" in Windows title bar.

14. Mira Explorer App: Keywords Column in Clip Library

Fixed issue in which "Keywords" column could not be made visible in Library view.



Keywords are now also searched with a Clip Library search operation.

15. Mira File Import App: 720p DVCPRO-HD Media Files imported only half the File

Fixed issue when importing 720p DVCPRO-HD MXF media files in which only half the duration of the media file is imported.

16. Security Fix: Ethernet Port 8080 no longer has Remote Access

Fixed issue to restrict remote access to Ethernet port 8080.

VERSION 9.0.0 (SKIPPED)

This version number was skipped.

VERSION 8.3.2 – JANUARY 2023

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. AMP Protocol: Clip Library Listing caused system crash in "certain cases"

Fixed an issue in which clips that are named in certain ways would result in a Mira Express system crash when the "Get Clip List" command was issued from AMP remote controllers.

2. Mira Replay App: "Page Up" / "Page Down" buttons not working

Fixed an issue with the "Page Up" / "Page Down" buttons not working in the Mira Replay app, to move the "highlighting cursor" within the Clip Register, Play List, and User Setup menu panes.

3. Mira Replay App: "Numeric Clip Load" in Clip Register not working

Fixed a broken function in the Mira Replay app: typing a number into the QWERTY keypad and then tapping the LOAD button on Mira Control Surface must LOAD that defined Clip ID # into the active PGM Player.

VERSION 8.3.1 – AUGUST 2022

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features



BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Replay app: PL-EDIT Mode CUT operation that deletes all Playlist items causes Mira Replay & Mira Explorer app crash

Fixed Bug: When a CUT operation is performed on a Playlist during PL-EDIT mode, and all items in the Playlist are deleted, the Mira Replay and Mira Explorer apps both close / crash.

2. Mira Replay app: PL-EDIT Mode CUT operation on 1st Playlist item causes last Playlist item to be replaced with duplicate of penultimate Playlist item

Fixed Bug: When a CUT operation is performed on the 1st item in a Playlist during PL-EDIT mode, the last item in the Playlist is replaced with a duplicate of the penultimate playlist item.

3. Mira Replay app: PL-EDIT Mode "SHIFT+SK-9" (PASTE ▲) operation broken

Fixed Bug: The **PASTE** ▲ function did not function at all.

4. Mira Replay app: Applying a Replay Event Template to a New Replay Event will not apply stored "Playlists with Server Clips"

Fixed Bug: Applying a Replay Event Template with stored Playlists containing Server Clips would not apply the Playlists to the New Replay Event.

5. Mira Replay App: Broken Playlist AUX Audio

Fixed Bug: When a Playlist is aired with AUX audio enabled, the main audio from SDI Output would be a mix of AUX Audio and the Audio from the video portion of the Playlist (when it should be only AUX Audio). Also, when monitored from Mira Control Surface headphone output, only the Audio from the video portion of the Playlist is heard (when it should be only AUX Audio).

6. Mira Replay App: Distorted Headphone Audio from Mira Control Surface panel

Fixed Bug: Intermittent issue caused severe distortion in Headphone audio from Mira Control Surface panel.

7. Mira Replay App: During 2-PGM Playlist AIR (PVW>PGM), Headphone Audio from Mira Control Surface panel is not heard on *every other* Playlist Item

Fixed Bug: Headphone audio from Mira Control Surface panel was present only on every other Playlist item.

8. Mira Explorer app: Unable to re-arrange items in Playlist while Playlist Editor is active

Fixed Bug: Applies to the Playlist Editor in the Mira Explorer application only; items could not be rearranged with drag-and-drop operation.



VERSION 8.3.0 – JUNE 2022

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. System: Windows Security Patch

Added work-around security patch for Microsoft Windows CVE-2022-30190.

2. Mira Explorer app: Search now 'Auto-Expands' Folder(s) with matching clips/playlists/subfolders

When searching for text in Mira Explorer, the Clip Library now automatically expands any folder containing matching clips, playlists, and sub-folders.

3. Mira Explorer app: New Timecode Chase Feature

Added new timecode chase functionality, where a "Chase List" of clips can be created (similar to a Playlist), with each item/clip is assigned a timecode at which the clip is loaded into a video channel and played. This timecode chase list follows the incoming timecode signal fed from an external "master" device and into the "LINE IN" 3.5mm audio jack on the motherboard audio I/O at the rear of the Mira Express chassis.

4. Mira Explorer app: New "Viewer" Feature

A new button is added near the top of the Mira Explorer app that activates a MultiViewer to display all video channels of Mira Express on the computer display. This Viewer can also be "Undocked" (via the "View" menu) with the undocked Viewer window placed onto a secondary computer display.

5. Mira Explorer & Mira Replay apps: New "Clip Networking" Feature

Enables two or more Mira Express video servers to be interconnected via 1G Ethernet, with .clip files played across the network from one Mira Express server and into another Mira Express server. This feature applies to both the Mira Explorer app and the Mira Replay app.

To enable this feature: In Mira Config app on the Video tab, enable the "Net Video" checkbox on all Mira Express servers interconnected via 1G Ethernet network.

6. Mira Explorer apps: New "Transport Controls" Feature

Adds a new menu item in Mira Explorer "Transport Controls" that provides a series of QWERTY keyboard short-cuts to the Mira Explorer app. These shortcuts can also be used by external third-party control panels via any USB port on Mira Express (such as P.I. Enterprise "X-Keys" control panels).

7. Mira Import app: New "Watch Folders" Feature

Adds the Watch Folder functionality to the Mira Import app running on Mira Express.



8. Mira Replay app: Short-Cut to change Play List # from Play List Library

In the Mira Replay app, while while while while while mode is active in PGM Player, press and hold down the button, then tap the while while buttons on Mira Control Surface to change to a new Play List # from the Play List Library.

9. Mira Replay app: Replay Event Name now displayed in Window Title Bar

The Replay Event Name is now displayed in the Mira Replay app window within the Title Bar at the very top of the window.

10. Mira Replay app: Tagged Team Name displayed on Tag Softkey label

Within the Mira Replay app, when a "team name" is assigned to the Tag function, that "team name" is now displayed on the Tag Softkey label on SK-8 and SK-9.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. System: Functional hang-up after deleting .clip files via Mira Explorer app and via remote control interfaces.

In rare cases under very particular conditions, deleting a .clip file via the Mira Explorer app or from remote control interfaces would then cause the controlling app to "functionally hang"; the only remedy was to quit and re-start the controlling app. This bug is now fixed.

2. Mira Explorer / Mira Replay apps: Export of .clip Files stored on Drive Volumes other than "H:\Video"

Fixed issue where the Mira Explorer and Mira Replay applications would not export content from ".clip" files stored on drive volumes other than "H:\".

For Mira Express, that means Mira Replay app would not export content from ".clip" files stored on the "K:\" or "M:\" drive volumes (a.k.a. "CLIPS SSD").

3. Mira Explorer app: Playlists containing "missing items" now skips those items

When a Playlist contains "missing items" (items in which the underlying clip files were either renamed, deleted, or moved to another folder), the Playlist playout would halt on the missing item(s). This bug is now fixed.

4. Mira Import app: Failure to 'close' MXF media file after import during "native" codec import

This bug would leave the source MXF media files "open" from the file system point of view, preventing other applications from moving, deleting, re-naming, or otherwise altering the source media files after they were imported. This bug is now fixed.

5. Mira Replay app: Entry Field text when navigating to/from Play List Library

Any text in the Entry Field within the Mira Replay app window is now cleared when using the softkeys to navigate to or from the Play List Library.



VERSION 8.2.4 – 8.2.1 (SKIPPED)

These version numbers were skipped.

VERSION 8.2.0 – FEBRUARY 2022

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. System: Timecode Chase Input

Changed Timecode Chase feature to use 'stereo audio input' on computer motherboard instead of 'mono audio input' to allow Timecode Chase to work on legacy motherboards.

2. Mira Replay app: New Tags Feature

Added new functionality to Mira Replay app to allow metadata tags to be applied and saved with Clip Register clipped content, and exported as a 'sidecar' XML file when clip content is exported from a Clip Register.

3. System: New "As Run Log" Report Generator app

Added this new feature to filter, display, and generate a PDF or CSV file of media clips that have been played in any video channel for up to the previous 90 days.

4. System: RossTalk RECEIVE Commands

Added new feature to support RossTalk protocol "receive" commands via Ethernet to control video channels in the Mira replay system.

5. System: Updated MXF Media File Libraries to latest version

These updated MXF libraries improves handling of MXF media files during Import and Export operations when the MXF contains native video codec essence.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Mira Replay App: Rare Crash

Fixed an issue where the Mira Replay application would sometimes crash on very rare occasions.

2. System: Missing Video Panes in DashBoard

Fixed an issue where the video panes would not appear in a DashBoard panel running on the Mira replay server itself.

3. Mira Explorer app: "Create Child Clip" from non-existent angles in a multi-angle .clip file

Angles that were not present in the .clip file would be offered for creating a Child clip. These angles are now dimmed and un-selectable in the pop-up menu that appears when you right-click on this .clip file and select > "Create child clip from angle".



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4. System: Erroneous Error Messages about assigning RS422 to a Video Channel

Fixed an issue in which erroneous error messages would appear asking the User to assign an RS422 port to a video channel.

5. Mira Import app: Media Files Imported with "Frame of Black" at Start or End of .clip file

Fixed an issue with the Media File Import app (using FFmpeg libraries) when importing certain content that caused a frame of Black to be included at either the start or end of the imported .clip file.

6. Mira Import app: Media Files Imported with "Audio Glitches" in .clip file

Fixed an issue that caused "audio glitches" when importing media files containing audio with a 44.1kHz sample rate.

7. Mira Import app: Media Files Imported with Incorrect Aspect Ratio

Fixed an issue with the Media File Import app (using FFmpeg libraries) when importing media files with an aspect ratio different from the currently active video standard. The File Import app now anchors video into upper-left corner, instead of resizing it.

8. System: AMP Protocol - Root folder now called "Default" in command replies

Some external third-party applications require this exact name for the 'root folder' (a.k.a. "H:\Video" folder) in order to function properly.

9. System: AMP Protocol – Received Command "No Reply"

Fixed an issue where received AMP protocol commands sometimes resulted in 'no reply' to the external controlling device.

10. System: AMP Protocol - Record Cue Command when used with 'long' clip name

Fixed an issue where the AMP protocol RECORD_CUE command would fail when a 'long' clip name was specified with the command.

11. System: Timecode Output Error

Corrected an issue with error in the embedded ATC and LTC timecode output on the two PGM Players in Mira Express.

VERSION 7.1.18 – JULY 2021

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUG FIXES • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.17 – JULY 2021

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUG FIXES • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.16 – JUNE 2021

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUG FIXES • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.15 – MAY 2021

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUG FIXES • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.14 – APRIL 2021

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUG FIXES • (MIRA EXPRESS REPLAY SYSTEM)

1. Quad Viewer SDI OUT Display

Fixed an issue where data overlaid onto the Quad Viewer SDI Output (i.e. Clip Name and Timecode) would not appear.

This bug was introduced in V7.1.13 software.



VERSION 7.1.13 – NOVEMBER 2020

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. Piero Broadcast Integration with Mira Replay systems

Added integration of Ross PIERO sports graphics analysis system (Broadcast edition) with all Mira replay systems.

2. Default Softkey Label Toggle in Mira Replay App

Changed default softkey menu for Mira Control Surface when entering Playlist Edit mode—so camera angles are now presented first.

• Double-tap **SHIFT** button (on either Mira Control Surface or QWERTY Keyboard) to switch to Playlist editing softkeys. Tap again to return to Camera-select softkeys.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.12 – SEPTEMBER 2020

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED – MIRA FILE IMPORT APP

1. Media File Import App Compatibility Fixes

Improved compatibility of certain media files codecs and wrappers during media file import transcoding while using the FFmpeg codec libraries.

VERSION 7.1.11 – AUGUST 2020

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. Unresponsive Mira Control Surface panel

Corrected an issue which could cause Mira Control Surface control panel to become unresponsive after 2 to 3 hours (or more) of continuous operation.





2. Mira Control Surface Jog Control Playback Error

Corrected very rare JOG playback issue: When Rotary Dial stops spinning, the PGM playout channel sometimes would not stop playing.

VERSION 7.1.10 – MARCH 2020

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

1. New Motherboard Support

The motherboard for the 2RU chassis video server/replay systems (Mira Express) migrated to a new model. This software version adds support for this new motherboard.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.7 THROUGH VERSION 7.1.9

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features. These release version numbers were only for Tria News video servers.

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes. These release version numbers were only for Tria News video servers.

VERSION 7.1.6 – AUGUST 2020

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.5 – NOVEMBER 2019

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features



BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes

VERSION 7.1.4 – NOVEMBER 2019

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

1. File Import on Mira Express while operating in 720p Video Standards

Corrected an issue where Media file import while operating in 720p standards would not function at all.

VERSION 7.1.3 – OCTOBER 2019

NEW FEATURES • (MIRA EXPRESS REPLAY SYSTEM)

No New Features

BUGS FIXED • (MIRA EXPRESS REPLAY SYSTEM)

No Bug Fixes



KNOWN ISSUES

VERSION 9.3.1 – SEPTEMER 2024

No Known Issues

VERSION 9.3.0 - AUGUST 2024

1. Mira Replay App: Operations of Mira Control Panel "Slows Down"

On some Mira systems, if there are many "active video panes" across several open Mira app windows and/or if Background Media File Export and/or Background Media File Import operations are all happening at the same time, the responsiveness of the Mira Control Surface in the Mira Replay app my suffer. Button taps will take longer than normal to execute, and/or Rotary Dial operations (such as Jog) become sluggish.

SOLUTIONS

To help **resolve** this issue, try **one** or **more** of these solutions:

- ✓ If the **MultiViewer** is "Undocked" then "**Re-Dock**" it back into the main **Mira Explorer** app window. Having the MultiViewer in a separate app window will consume more CPU and GPU resources which may impact the Mira Control Surface operations.
- ✓ Select the "Export Queue" button in the Mira Explorer app window. This "view" of the Mira Explorer app window has no video panes and will therefore reduce the CPU and GPU load and may improve the performance of the Mira Control Surface and Mira Replay app.
- ✓ If you've assigned "extra" PGM Player channels to the Mira Control Surface for use in the Mira Replay app (besides the usual two PGM-1 and PGM-2), consider "unassigning" these Players from the Mira Control Surface, and instead controlling these Players from either the Mira Explorer app, from a Ross Dashboard panel that's running on a remote computer (and <u>not</u> on Mira itself!), or from an external remote-control device, such as from a custom controls and/or emem's on a Production Switcher or other third-party controller.
- ✓ Halt all active "background" Media File Export operations that involve transcoding into non-native codec files. This consumes extra CPU and GPU resources which may impact the Mira Control Surface operations.

Exporting to the native recording codec is okay (AVC-Intra for Mira+; DVCPRO-HD for Mira Express; and possibly either one of these codecs for legacy Mira machines).

 Halt all active "background" Media File Import operations that involve transcoding from non-native codec files. This consumes extra CPU and GPU resources which may impact the Mira Control Surface operations.



Importing Media Files with the **native** recording codec is **okay** (AVC-Intra for Mira+; DVCPRO-HD for Mira Express; and possibly either one of these codecs for legacy Mira machines).

VERSION 9.2.4 – JULY 2024

No Known Issues

VERSION 9.2.3 (SKIPPED)

This version number was skipped.

VERSION 9.2.2 – JUNE 2024

No Known Issues

VERSION 9.2.1 – MARCH 2024

No Known Issues

VERSION 9.2.0 – NOVEMBER 2023

No Known Issues

VERSION 9.1.0 (SKIPPED)

This version number was skipped.

VERSION 9.0.2 – AUGUST 2023

No Known Issues

VERSION 9.0.1 – APRIL 2023

1. Audio Swap & Mute with "Foreign Replay Events"

While using a "Foreign Replay Event" (which is a Mira Replay Event that's not actively recording), the Audio Swap & Mute functionality will experience these known issues:

a) Audio Swap & Mute (AS&M) attributes **will not** operate with Clips from a "Foreign Replay Event" when that Foreign Replay Event is hosted on a **remote** Mira machine. When such a clip is played across the Ethernet network from the remote Mira server and through the PGM Players of the local Mira server, the AS&M attributes will be ignored, and the "regular" audio tracks will be played from those remote Foreign Event Clips.

Please also note: Audio Swap & Mute attributes **will** operate properly with Clips from a "Foreign Replay Event" when that Foreign Replay Event is hosted on the **local** Mira



machine. The AS&M attributes will be obeyed in those Clips as they are played in the PGM Players of the **local** Mira machine.

b) When a Clip with AS&M attributes from a Foreign Replay Event that's hosted on **either** the **local** or a **remote** Mira server is added to a Play List on the local Mira server, if/when that Play List is later exported from the local Mira server, the AS&M attributes will be ignored by the file export operation—and only the 'regular' audio track mapping will be present in the exported media file.

VERSION 9.0.0 (SKIPPED)

This version number was skipped.

VERSION 8.3.2 – JANUARY 2023

No known issues.

VERSION 8.3.1 – AUGUST 2022

No known issues.

VERSION 8.3.0 – JUNE 2022

No known issues.

VERSION 8.2.4 – JUNE 2022

No known issues.

VERSION 8.2.0 – FEBRUARY 2022

1. Missing Video Panes in DashBoard V9.5 and above

Video panes will not appear in a DashBoard panel running on the Mira replay video server itself. If the DashBoard app software version is V9.4 or below, the video panes operate properly.

VERSION 7.1.14 – APRIL 2021

(MIRA EXPRESS REPLAY SYSTEM)

1. Embedded timecode of a clip may not appear within the SDI video output stream.

(Issue resolved in V7.1.15 software release)





GETTING HELP

- Ross Online Mira Express Help on the Web: Mira Express Online Help
- Ross Support on the Web: <u>https://support.rossvideo.com/hc/en-us</u>
- Our 24-hour hotline service provides access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross Video personnel...
 - During business hours (Eastern Standard Time):

Ross Technical Support personnel are available by telephone:

- Technical Support: (+1) 613-652-4886
- After Hours Emergency: (+1) 613-349-0006
- After hours and on weekends:

Emergency technical support is available. A telephone-answering device will provide the names and phone numbers of technical support and field service personnel who are on call. Ross staff are available to react to any problem and to do whatever is necessary to ensure customer satisfaction.

• Serious issues needing urgent attention and tracking:

Please ensure you are given a ticket number and refer to this number in follow-up communications.



