



Mira & Mira+ Replay System • Software Release Notes

Welcome to the Mira and Mira+ V9.3.1 Software Release Notes. Please read this document to find important information on areas of Mira and Mira+ 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 & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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 & MIRA+ REPLAY SYSTEMS)

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.

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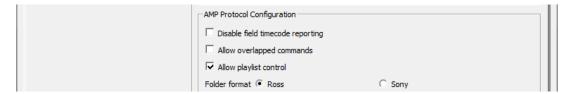




5. Mira Config App: AMP Protocol Folder Setting for Sony Switcher Control

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:

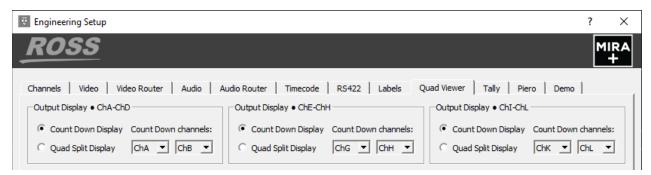


- Select the "**Ross**" radio button when controlling Mira from any Ross Switcher (or any Non-Sony branded Switcher) while using AMP protocol.
- Select the "**Sony**" radio button when controlling Mira from any Sony branded Switcher while using AMP protocol.

6. Mira Config App: Quad Viewer "Count Down" View assignable on a "per video card" Basis

The Quad Viewer HD-SDI output in the past could be configured for either "Quad Split" or "Count Down" display—and that single setting would apply to all (one, two, or three) video cards fitted in the Mira server.

New additional controls have been added to the Quad Viewer tab in the Mira Config app to allow this setting to be applied on a card-by-card basis (ChA-ChD / ChE-ChH / ChI-ChL):



When set for "Count Down" display, even more controls are added to allow the two Count-Down Channels to be assigned to any available channel pair.

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

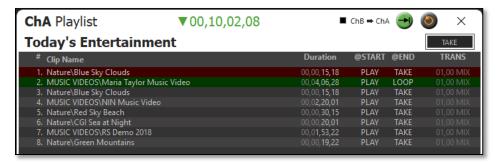
A new "Total Run Time" Count-Down timecode display has been added to the "On-Air" Playlist pane in the "Library" view in the Explorer app.

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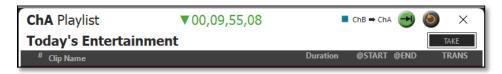




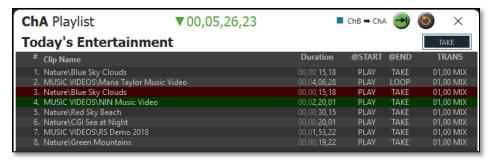
After a Playlist is first loaded into a player channel after clicking the "**AIR List**" button in the Playlist Editor, the new "Total Run Time" timecode is displayed in green text in the middle of the white-framed banner at the top of the Playlist pane:



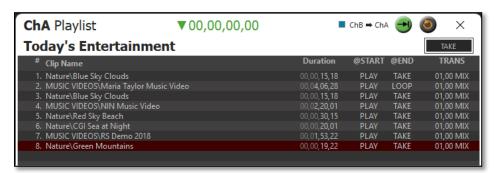
It should be noted that if the "PVW-PGM playout option" is selected (**blue** checkbox enabled at top of Playlist pane), then the Total Run Time of the playlist takes into account the TRANS durations of all the items in the Playlist, and will reduce the Count-Down timecode:



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:



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



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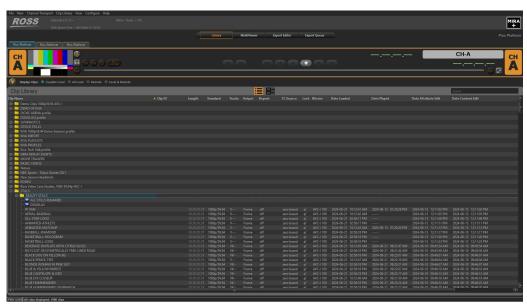


8. Mira Explorer App: Clip Library New "Thumbnails View"

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...

Original "**Text-Only**" View



· 🔠

New "Thumbnails" View



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9. 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.

10. Mira Explorer App: Media File Export FFmpeg Library Updated • with more 1080p Transcode Codecs

Media file exporting now supports the latest version of FFmpeg, which supports new DNxHD and MPEG-4 transcoding codecs while operating in 1080p video standards.

11. 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.

12. 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.

13. 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.

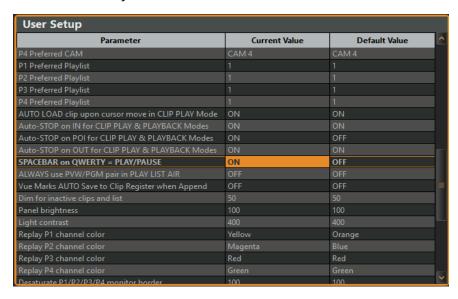
ROSS





14. 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:



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 & MIRA+ REPLAY SYSTEMS)

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.

2. Mira Replay App: Super Slow Motion (SSM) Clips played from Foreign Replay Event via Clip Networking incorrectly plays at slowed speed during 1X Play

Fixed an issue when multiple Mira servers are networked together: any SSM clipped content stored within a "Foreign Replay Event" on a <u>remote</u> Mira server that's played across the network using the "Clip Network" feature would incorrectly play at "slow play speed" whenever the "1X Play Speed" control is activated in the Mira Replay PGM Players. This bug did not happen when playing SSM clipped content from the "Local Replay Event" hosted on the local Mira server.

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VERSION 9.2.4 - JULY 2024

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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.

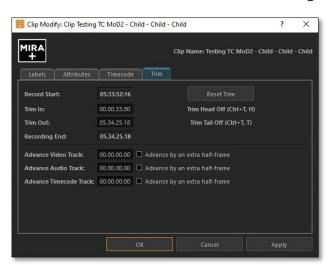
VERSION 9.2.2 - JUNE 2024

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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 detailed below, 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**)

3. Mira Explorer App: Channels configured for Super Slow Motion (SSM) did not record audio

Fixed an issue in which digital audio — including either "AES Audio IN" or audio embedded within the HD-SDI video input — was not recorded into any SSM clips.

4. Mira Explorer App: Channels configured for Super Slow Motion (SSM) did not record external timecode

Fixed an issue in which external timecode — including either analog "Time of Day" LTC external timecode or external timecode embedded in the HD-SDI video input — was not recorded into any SSM clips.

VERSION 9.2.1 - MARCH 2024

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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.

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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 & MIRA+ REPLAY SYSTEMS)

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 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 LOAD_PLAYLIST B:A:Sports_Show

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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.

4. 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 Loop Playlist (see: "Examples of Loop Playlist Command" below)
	(See. Examples of Loop Haylist Command Below)

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.

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

6. 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 (transition) clip content in <i>channel</i>
TAKE channel	(see: "Examples of TAKE Command" below)

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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 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.

7. 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)

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.

8. 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.





9. 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
	(see: "Example of RECUE_TO_FIRST_ITEM Command" below)

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.

10. 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:

EJECT_PLAYLIST channel	Unloads (Ejects) Playlist that's currently loaded in <i>channel</i> (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

11. 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.

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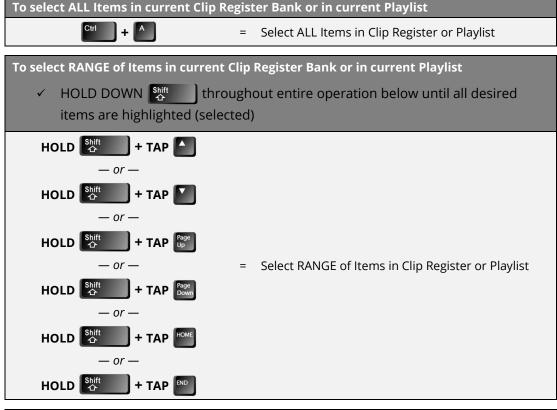


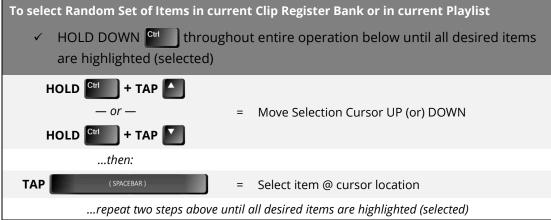
12. Mira Replay App: STOP@IN and STOP@POI new User Setup Parameters

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.

13. 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:





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

While one or multiple items (see item 13 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 (CIT) +



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

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

While multiple playlist items (*see item 13 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.

16. 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.

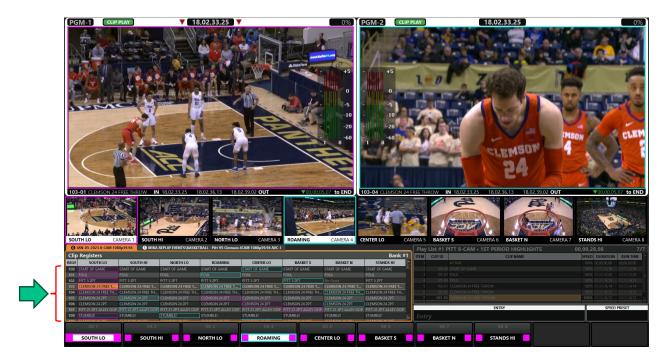
• To turn ON this function: Double-Tap the button

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

ROSS







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 & MIRA+ REPLAY SYSTEMS)

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.

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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 (of

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.

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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 (• • • • • • •), **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.

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 upon 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 and 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 no 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.

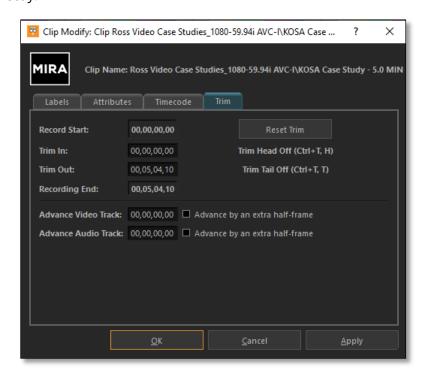
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13. Mira Explorer App: "Clip Trim" functions broken in "Clip Modify" dialog window

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.



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

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.

ROSS





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.

19. Mira Explorer & Mira Replay Apps: Export to "Nearly Full" Drive crashes both Apps.

When exporting media files to an external storage device, and that storage is "nearly full" with content with not enough open space for the exported media file content, the Mira Explorer and Mira Replay apps would crash. This bug is now fixed.

VERSION 9.1.0 – (SKIPPED)

This version number was skipped.

VERSION 9.0.2 – AUGUST 2023

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

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BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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.

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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.

VERSION 9.0.1 - APRIL 2023

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Mira Replay App: Play List Edit "Edit Item Flags" Submenu "@END" Softkey Missing

V9.0.0 software introduced this bug in which the "@END" softkey label was missing, which prevents the User from changing the "at END" flags in the Play List.

VERSION 9.0.0 - APRIL 2023

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Software Licensing Feature

Added new feature that "keys" a new software license for the "Mira Software Suite" to the Mira 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. 14-Tracks of Embedded Audio

Increased the number of embedded audio tracks from 8-tracks to 14-tracks.

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

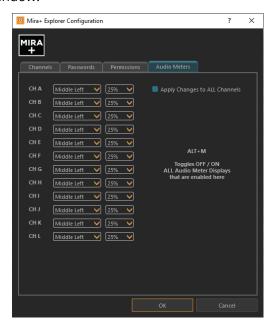
a) **Mira Explorer app**: The new Audio Metering Displays can be superimposed over the active video image within the video panes independently for each video channel, but only within the MultiViewer display (when VIEWER is active).

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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)
- 5. 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

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

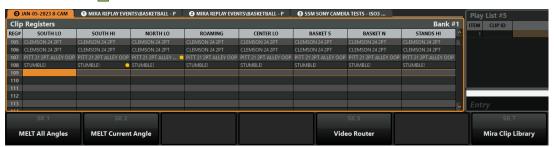


If there are **seven** or more Cameras in your Mira Replay Event:

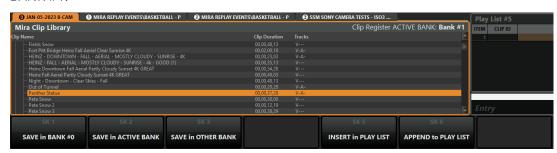
Double-Tap button to display the "Alternate set of Softkeys"...



b) Tap Softkey 2 button (Mira Clip Library) to activate the Mira Clip Library sub-menu:



- c) **Tap Softkey** button (**Mira Clip Library**) to activate the **Mira Clip Library** sub-menu; 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:



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



1. **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!):



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



c) **Tap Softkey** button (**AUDIO SWAP & MUTE**) to activate the Audio Swap & Mute submenu:

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



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** button (**SOURCE CAM ANGLE**):



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**):



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**):

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



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:



Then Tap Softkey button (MUTE-UNMUTE TRACK):



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.
 - 2. **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:

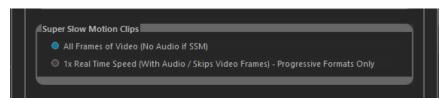
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- a) Tap SHIFT + SEARCH to access the "Select Foreign Replay Event" menu.
- b) Highlight desired Foreign Replay Event, then **Tap 3** button (**SET Favorite**), followed by a Tap of a softkey (SK-1 through SK-9) to set the Favorite #.
- c) **Tap EXIT** button to finish.
- d) **Tap** | PLAY | button to activate | PL | EDIT | mode in the selected PGM Player.
- e) Hold Down Ctrl then **Tap** on QWERTY (the "Favorite #"); this will load the desired "Favorited Foreign Replay Event" in the Play List pane.
 - 3. New Export Configuration Settings for Super Slow Motion (SSM) Clip Export

Selections added to Export Destination settings to choose how Super Slow-Motion clips are exported:



- "All Frames of Video" to preserve the super slow-motion speed in the exported media file. Video will play out with the super slow-motion speed.
- "1X Real-Time Speed" to remove the super slow-motion speed in the exported media file. Video will play out at 1X real-time speed.
 - 4. 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.

6. 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

) and then using SK-9 PASTE to paste that Play List item into the Local Replay Event (Replay Event.

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

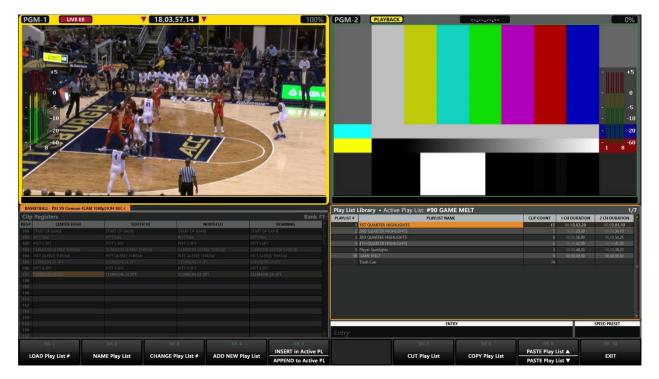
While the Play List Library is active (shortcut = SHIFT + PLAY LIST), a set of new softkeys are now present to make it simpler to copy one or more Play Lists into the currently active Play List.

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

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- 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.

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BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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.

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: Select Foreign Replay Event on Event with 9-11 Cameras

Fixed issue in which the highlighting cursor in the "Select Foreign Replay Event" dialog would sometimes skip over Replay Events containing 9 or more cameras.

9. 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.

10. 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.

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11. Mira Replay App: Super Slow-Motion ISO Clip Missing Audio

Fixed issue where only the first camera angle of a multi-camera SSM ISO clip contained audio, and no other camera angles contained audio.

12. 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.

13. 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

14. 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.

15. Mira Config App: Backward "Super Slow-Motion ISO" selection buttons

Fixed the radio buttons to select "SSM2+ISO3" and "SSM3+ISO2"; they were backward.

16. 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.

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

Now displays "Mira MultiViewer" in Windows title bar.

18. Mira Explorer App: ISO-9 and Above Recordings missing Audio

Fixed issue in which recording into an ISO-9, ISO-10, ISO-11, and ISO-12 clip would have all audio missing.

19. Mira File Import App: Importing MXF media files with VANC data Corrupts Video

Fixed an issue in which importing AVC-Intra MXF media files containing VANC data (such as Closed-Caption data) would sometimes corrupt video—resulting in "tearing" in the video image during playback.

20. Mira File Import App: MXF media files with VANC data Truncated after 5 Minutes

Fixed an issue in which importing AVC-Intra MXF media files containing VANC Closed-Caption data would have the Closed-Caption data truncated after 5-Minutes into the clip playback.

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

Fixed issue to restrict remote access to Ethernet port 8080.

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22. Security Fix: Disabled Areca RAID Controller web server from Remote Access

Fixed issue to restrict remote access to the built-in Areca RAID controller.

VERSION 8.3.2 - JANUARY 2023

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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 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 & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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

When a CUT operation is performed on a Playlist during PL-EDIT mode, and <u>all</u> 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.

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

The **PASTE** \triangle 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"

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

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**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

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 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 & MIRA+ REPLAY SYSTEMS)

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

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

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

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

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3. 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.

4. 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 & MIRA+ REPLAY SYSTEMS)

1. System: Corrupted audio output while operating in video standards with 29.97Hz frame rate

Fixed issue of corrupted audio playback in the embedded and AES audio outputs while operating the video server in a video standard with the 29.97Hz frame rate.

2. System: Audio-Video timing error while operating in video standards with frame rates below 30Hz

Fixed issue of audio-video timing error during clip playback while operating the video server in a video standard with the frame rates below 30Hz.

3. System: Clips created in Video Standards with frame rates below 30Hz would display incorrect timecode

This bug is now fixed.

4. 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.

5. 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:\".

6. 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.

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7. 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.

8. 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 – JUNE 2022

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

1. System: Windows Security Patch

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

VERSION 8.2.3 – (SKIPPED)

This version number was skipped.

VERSION 8.2.2 – FEBRUARY 2022

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

1. System: New Video Standard Frame Rates

(Mira & Mira+ with AVC-Intra Hardware Only)
These new frame rates were added to the 1080p video standard:

1080p60 ("True 60p") | 1080p30 | 1080p29.97 | 1080p25 | 1080p24 | 1080p23.98

2. 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.

3. Mira Replay app: 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.

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4. System: "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.

5. System: RossTalk RECEIVE Commands

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

6. System: VANC record and play in 720p & 1080p video standards (Mira & Mira+ with AVC-Intra Hardware Only)

Expanded the ability for record and playback of VANC data contained within the SDI video I/O pathways in 720p and 1080p video standards—so VANC data such as closed-captioning, HDR flags, etc. are preserved during base-band record and playback on the SDI video I/O pathways.

7. Mira Import app: 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 & MIRA+ REPLAY SYSTEMS)

1. Mira Replay App: Rare Crash

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

2. 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".

3. 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.

4. 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.

5. 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.

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6. 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.

7. 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.

8. System: AMP Protocol - Received Command "No Reply"

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

9. 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.

VERSION 7.1.19 THRU 8.2.1– (SKIPPED)

These version number series were skipped.

VERSION 7.1.18 - JULY 2021

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Embedded Timecode Out Missing in Quad Link SDI video streams while operating in UHD-4K video standard

(Mira & Mira+ with AVC-Intra Hardware Only)

Repaired the missing timecode out (fixed on "second and third video boards" ChE-ChL).

VERSION 7.1.17 – JULY 2021

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

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BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Embedded Timecode Out Missing in Quad Link SDI video streams while operating in UHD-4K video standard

(Mira & Mira+ with AVC-Intra Hardware Only)
Repaired the missing timecode out (but fixed only on "first video board" ChA-ChD).

VERSION 7.1.16 - JUNE 2021

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Firmware Update to support HDR VPID metadata in UHD-4K Video Standards (Mira & Mira+ with AVC-Intra Hardware Only)

Specific FPGA firmware update to add HDR VPID metadata on the SDI video I/Os during UHD-4K video standard operation. This applies specifically to the "Quad-Link" 3G SDI I/Os only.

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

No Bug Fixes

VERSION 7.1.15 - MAY 2021

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

1. VANC record and play in 1080i video standards (Mira & Mira+ with AVC-Intra Hardware Only)

Added ability for record and playback of VANC data contained within the SDI video I/O pathways **in 1080i video standards**—so VANC data such as closed-captioning, HDR flags, etc. are preserved during base-band record and playback on the SDI video I/O pathways.

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

No Bug Fixes

VERSION 7.1.14 - APRIL 2021

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

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BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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 & MIRA+ REPLAY SYSTEMS)

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:

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

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Video Server Products with AVC-Intra Video Hardware Initialization Error (Mira & Mira+ with AVC-Intra Hardware Only)

Fixed rare issue in which AVC-Intra video hardware that would **sometimes** not initialize at O/S restart and/or at power-on, resulting in 'no video channels'.

VERSION 7.1.12 – SEPTEMBER 2020

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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.

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VERSION 7.1.11 - AUGUST 2020

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

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 7.1.7 THROUGH VERSION 7.1.10

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

These release version numbers were only for **Tria News** & **Mira Express**.

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

No Bug Fixes

These release version numbers were only for **Tria News** & **Mira Express**.

VERSION 7.1.6 - AUGUST 2020

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. 6-Channel / 8-Channel Licensing bug in Mira+ fitted with DVCPRO-HD Hardware

Affected no customers in field. Solved a factory build issue for Mira+ only.

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VERSION 7.1.5 – NOVEMBER 2019

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Fix for new Xilinx part used on AVC-Intra video boards in Mira and Tria platforms (Mira & Mira+ with AVC-Intra Hardware Only)

Xilinx changed something subtle in the newest fab of their chips, which in turn could sometimes cause 'green artifacts' on some SDI video outputs.

VERSION 7.1.4 - NOVEMBER 2019

NEW FEATURES • (MIRA & MIRA+ REPLAY SYSTEMS)

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

No Bug Fixes

VERSION 7.1.3 – OCTOBER 2019

NEW FEATURES - MIRA REPLAY SYSTEMS

No New Features

BUGS FIXED • (MIRA & MIRA+ REPLAY SYSTEMS)

1. Import of ANC data from MXF media files while operating in 59.94 frame-rate video standards

(Mira & Mira+ with AVC-Intra Hardware Only)

Corrected an issue when MXF media files were imported, ANC data present in the media file header were not imported.

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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).

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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

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.

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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 - APRIL 2023

1. MultiViewer Appearance while operating in UHD-4K

Only while operating in UHD-4K video standards, the MultiViewer in the Mira Explorer app incorrectly displays the UHD video images as four separate video tiles, when it should display as a single UHD video tile.

As a result, the new Audio Meters displayed in the MultiViewer will show audio levels activity only in the **ChA** transport video tile.

For the Audio Meters displayed in the **ChB** video tile (for an 8-Channel Mira/Mira+ server) and in the **ChC** video tile (for a 12-Channel Mira+ server), audio levels activity will not be displayed.

2. 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:

c) 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.

This issue will be fixed in a future software release.

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.

d) 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.

This issue will be fixed in a future software release.

VERSION 8.3.2 - JANUARY 2023

No known issues.

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VERSION 8.3.1 - AUGUST 2022

No known issues.

VERSION 8.3.0 - JUNE 2022

No known issues.

VERSION 8.2.2 - 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

1. Embedded Timecode sometimes Missing

Embedded timecode of a clip may not appear within the SDI video output stream. (Issue resolved in V7.1.15 software release)

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GETTING HELP

- Ross Online Mira/Mira+ Help on the Web: Mira/Mira+ Online Help
- Ross Support on the Web: https://support.rossvideo.com/hc/en-us
- 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.

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