



Pyramix 10.1 Release Notes

Installation

Please consult the Installation Guide located on the Pyramix Installation Media (USB Memory card) for details on the hardware and software installation procedure and Authorization Key registration process.

RAVENNA users will have to install the NET-MS-C-GBEX1 PCIe Ethernet card provided by Merging Technologies. TURN YOUR COMPUTER OFF (shut down then switch the power off). Next plug the NET-MS-C-GBEX1 card into one of the PCI-Express bus slots on your computer and turn the power back on. The NET-MS-C-GBEX1 card will only be operational once the MassCore runtime is installed. Refer to the Pyramix Installation Guide for more details.

- To install the Pyramix Virtual Studio software insert the Pyramix Virtual Studio Installation Media - the installation program should auto-start.
- To install MassCore launch the MT Security Settings, go to the MassCore page and install the MassCore RunTime (a MassCore base key is required along with MassCore 64bit and a RTX64 key). Refer to installation guide for more details.

Updates

Please check our Web site <http://www.merging.com> periodically for information, patches and updates.

* Mykerinos boards are not supported under 64 OS.



Pyramix v10.1 Install Procedure

Additional details on the System Requirements available in the Pyramix V10.1 Installation Guide.

INSTALLER INFORMATION:

Pyramix v10 is compatible with the following OS

- Windows 7 Professional (64bit): MassCore/RAVENNA, Native & Native/RAVENNA
- Windows 8.1 Professional (64bit): Native & Native/RAVENNA support ONLY (no MassCore).

Notes:

- *RAVENNA users must install the NET-MSC-GBEX1 PCIe Ethernet card provided by Merging Technologies. Refer to the Pyramix v10.1 Install guide for details*
- *As of Pyramix v10 the Mykerinos and 32bit Operating systems are no longer supported*
- *Pyramix v10.1 comes with a new MassCore update*
- *The HASP security dongles are not supported for users running the 64bit installer on a Windows 7 64bit OS. For such configuration you must purchase a SafeNet dongle, see with your local Merging sales office*
- *The Pyramix v10 installer comes only as a 64bit version (64bit OS)*
- *Warning the Pyramix v10.1 are not compatible with v10.0 project. Make sure you use the Save Special as 10.0 to be able to open such project in the Pyramix v10.0 version.*

INSTALLATION:

- User **must** refer to the **Pyramix v10.1 Installation Guide**
- **We highly recommend** users to perform a Windows update prior to installing Pyramix v10.1
- Pyramix v10 users must have valid v10 keys (previous v9 are no longer valid)
- Warning: Flux VS3 users must remove their previous Flux VS3 version and install the Flux VS3 for Pyramix v10 <https://www.fluxhome.com/download> this now has to be done through the Flux Center application

RECOMENDATIONS:

MassCore:

- Pyramix v10 requires v10 keys.
- Pyramix v10.1 requires a New MassCore update (Interval zero Service Pack 2)
- A MassCore Key is required as of the Pyramix v10.0
- Refer to Pyramix v10 Installation Guide for all details as some specific BIOS settings are recommended. MassCore RTX -64 bit users can run with Hyperthreading enabled. Merging recommends Hyperthreading users to run with the MassCore SMP key.
- As of Pyramix v10.1 MassCore user will need to uninstall their previous MassCore before updating to the latest version (refer to installation Steps above)
- Users running MassCore 64bit will not be able to move their license to another system (or the same system after a Windows re-installation) unless first making this demand through Merging keys@merging.com. Please justify the reason of your system migration or reinstallation as the RTX64 key is not meant to be frequently renewed. If Merging cannot follow up in a quick time response (in case of emergency or during weekends) please then contact the Interval Zero (RTX) Sales team sales@intervalzero.com
- This is so because the MassCore/RTX 64bit keys are now linked to the system/hardware. A solution exists for users who would which to have their MassCore/RTX 64bit keys on a second Dongle, instead of having it linked to a unique system. Please contact a Merging sales partner office near you, if this is what you'd desire (Merging option SSK-HUD-RTX)

RAVENNA:

Refer to the Merging RAVENNA Network Guide for all details.

- Disabling Windows Firewall is recommended (no internet connection recommended)
- Merging recommends setting the Merging MassCore NIC Ethernet card and Horus to Auto IP addressing
- Enable RAVENNA mode from the VS3 Control Panel (NOTE: the Merging Interface must be connected)
- We recommend the installation of the Google Chrome browser for Horus remote access
- Use "RAVENNA Easy Connect" (installed with Pyramix v10) to manage the RAVENNA I/O connections



- Users can connect multiple Horus's through the Merging certified Dell network switch. Refer to the Merging RAVENNA Network guide for all details and configuration.
<http://www.merging.com/products/horus/downloads>

Notes:

- *For users with Pyramix and VCube installed on the same system, it is mandatory that you upgrade to VCube 6.1 to go along side this Pyramix v10.1. Be aware that VCube v6.1 is not supported on Windows 8.1.*
- *MassCore RTX64 User upgrading their processor must follow a specific procedure, please contact support@merging.com for more details.*
- *A new MTCleanUp v10 utility is available through Merging's Support for those having problems with their installation*
- *As of Pyramix v10 the splashscreen is displayed on top of the screen at launch to avoid hidden popup messages behind it.*



Pyramix 10.1 Release Notes

New to v10.1.3 HotFix

- Aux Groups now available in Mixdown
- Improvement: MXF handler performance improvement
- Improvement: Added Video support in interchange format XML (Import/Export) CMX EDL (Export)
- Create CD disc from CD marker conversion
- 3DConnexion mouse support: Follow configuration guide [here](#)
- Bug Fixes

New to v10.1

- **New MassCore update:**
 - New MassCore - Interval Zero RTX64 2014 Runtime with Service Pack 2
 - Supporting Intel Skylake processors
Refer to the Pyramix v10.1 installation Guide for the MassCore installation
- **New Drivers signature certificates**
We recommend users to perform a Windows update prior to installing Pyramix v10.1
- **Archiving Metadata improvements:**
 - The Media Properties page, BWF tab now displays the Metadata of the LISTINFO chunk.
 - A new column called "Database Mapping" has been added in the Archiving Metadata Tab allowing to set a Database Mapping information that is exported in the XML so that a database parsing the XML can map this metadata with specific database fields.
 - These values are free text
 - A set of predefined values can be set in the registry in HKEY_CURRENT_USER\Software\Merging Technologies\Pyramix\ArchivingMetaData\DatabaseMapping as String entries where the name of the strings are the preset values for database mapping values.
 - Archiving Metadata can now also be exported and embedded in BWF files during:
 - Render (as per original implementation)
 - Mixdown
 - Directly during Recording
 - The same options as present in the Render dialog are available in the Mixdown dialog and in the Record settings ("Insert Archiving Metadata if target is BWF" and "Generate Archiving Metadata XML along with rendered/mixdown/recorded files")
 - Recording and Dubbing mode are supported
 - Single Media, One File per Track and One File per Bus are supported. The same Metadata Set is embedded in all files in the two latter.
 - A "Clear Metadata Set" button has been added to clear the complete Metadata Set.
 - A Metadata Set can be imported from an existing BWF file by using the "Import Metadata Set from BWF" in the Archiving Metadata Tab.
 - A Metadata Set can be exported to an existing BWF file by using the "Export Metadata Set to BWF" in the Archiving Metadata Tab.
 - The two above allow for importing and modifying existing Metadata in any BWF file.
 - RIFF and RF64 (> 4GB) files are supported.
Important Note: If a file is almost at the 4GB boundary and updating its metadata would make it going over that limit then the update will be refused.
- **New Save Special:**
As of Pyramix v10.1 a new Save Special as v10.0 was introduced to ensure project compatibility with this previous version



- **New Convert > Export Masterclips**
 - There is a new menu in both the Library frames and the Media Manager frames called Convert > Export Masterclips.
 - This new option is similar to the Quick Export menu for the Media Manager, but works for the Libraries as well.
 - It allows in addition for selected Shelves and Media Folders to be exported. Their complete/recursive folder structure is exported as well.
 - Only Masterclips/Media are exported. Compositions or any other objects in libraries are not exported.

- **Video in Timeline "Stretch" option in contextual menu:**
 - "Stretch" will resized the image to match the actual frame size

- **Mixer:**
 - Stereo Panner visual improvement with collapsing view
 - Mixing Console Channel Routing window not accommodates high channel counts for Buses A maximum of 24 channels are displayed vertically and a scrollbar is not available if mode channels
 - Reset Channel routing menu in the Mixing console right context menus, now creates a diagonal unity routing when both the Strips and the Buses channel types are set to none (all was routine to Bus channel 1 previously)
 - Mixing Console Channel Routing window Auto button renamed Reset to match the Reset Channel Routing menu on the Mixing console right pop up menu
 - Flux VS3 users must install the latest version of the Flux plugins in order to be compatible with Pyramix v10.1 <https://www.fluxhome.com/download> this has to be performed through the Flux Center application.
Make sure you download the Flux Center and go to the settings to check the VS3 plugins, then select the VS3 you want to install.
 - New: Flux Bittersweet Pro VS3 plugin support (reference: PSP-FXBSP)
BitterSweet Pro, Frequency Dependent Transient Designer, is built around a new improved design of the algorithm found in Flux acclaimed freeware transient processor.

- **Mixdown improvements :**

The Mix Sources Bus Name selection column no longer requires a Mouse double-click on the check-box. Single click to select/unselect a Bus as a source.


The Mix Sources table now offers a new column called Loudness. It allows selecting independently among the selected Busses which one will perform the Loudness Analysis and True Peak Limiting, however following the global Loudness Analysis and True Peak Limiting settings available in the Processing section.



 - This new feature is only interesting when in "One File per Bus/Stem" mode. This allows performing the Loudness Analysis and Correction on a selection of Busses and not on others, allowing for a single pass mix-down with multiple selections.
 - In "Single Media" mode all Busses will automatically have the same settings, only a global Loudness Analysis/Correction is possible in this mode.
 - In "One File per Track" mode this feature is not available (N/A), no Loudness Analysis/Correction is possible in this mode

- **New "Wrap in Video" option in the Mixdown**
 - Allows the wrapping of audio tracks to a Video file
 - "Wrap in video" is a Post processing option within the Mixdown Dialog
 - Check the Wrap in Video to have access to its setting.
 - Wrap Settings Choices:
 - Source Video option choice:
 - Use the top most video file in Timeline
Includes the top timeline video track in the Wrap content
 - Use the selected Video Clip in Timeline
Includes the selected timeline video track in the Wrap content



- Use a costume file, browser and select the desired Source Video file
- **Wrapped Video resulting file:**
 - Use audio Mixdown name
The resulting file name will have the Mixdown name selected in the Mixdown Dialog
 - Use the Source Video name as the resulting file name
The resulting file name will have same name as the Video Source name
 - User a custom name
 - *WRAP Between File Formats is supported if changing the file extension, refer to WRAPPING Between File Formats below.*
 - *If the Custom name entry is selected but the path empty we will use the Mixdown dialog destination patch as the destination*
 - *When a file with the same name already exists, we postfix the current file name with date-time.*
- **Timecode option**
 - Use source timeline (original Timecode of file)
 - Use Timeline TimeCode (will overwrite with the timeline clip time position, note supported with all formats)
- **Wrap Video dialog monitoring**

When a Wrap is processed a Monitoring Dialog window inform you of the processing and result. The dialog will automatically be displayed when a Wrap is processed. You can also open the MTVideoWrap dialog by selecting its icon. 

 - **Color Codes**
 - **Green: Successful Wrap**
 - You can use the checkmark to view the file ✓
 - You can delete the file 
 - You can open the files details from the left arrow ▾
 - **Red: failed to Wrap file**
 - View the error details by selecting the Question Mark 
 - You can retry, Ignore or Abort the file Wrapping
 - You can open the files error details from the left arrow ▾
 - **Clear Completed:** Will remove all the successful Wraps from the log only (the resulting file will remain in folder)
- **Wrap from timeline:**

The menu Video now offers a new function called "Wrap Selection" allowing for directly wrapping the selected Audio clips to the selected Video clip.

 - A dialog windows will open indicating you information about the file and its location
 - This feature is meant to quickly and easily wrap new audio into a video file directly in the Pyramix timeline.
 - One single Video clip and one or multiple Audio clips must be selected in the timeline and the menu Video > Wrap Selection can be called
 - The Wrap function, as per the one available in the Mix-down dialog, processes a whole Video file. If the selected Video clip has been trimmed, this trimming will be ignored and the whole Video file will be wrapped with new audio. A message is displayed in this case.
 - If the Audio clips either reference a single multi-track audio file, or a set of aligned in time audio files, without any editing and/or fades within the Video range, the Audio is wrapped within the Video directly from the audio files.
 - If the Audio clips come from various audio files, are edited within the Video range, have fades, crossfades, etc... then the Audio is automatically rendered first and then wrapped with the Video. No message is displayed in this case.
 - If any effects processing, automation, mixing, etc... is meant to be used during the Wrap process, then the Mix-down with Wrap should be used instead.
 - This "Wrap Selection" option is available from the Mouse+Right Click context menu
- **Wrap support specification:**
 - AVI & MPEG: Unsupported in Pyramix
 - MXF: Audio: Only 16/24 AES3 samples
 - MP4: Audio: 2-6, 8 channels, 16bits only. Start Timecode not supported



- **WRAPPING Between File Formats**

Constraint if changing extensions in the "Custom Name field" when wrapping are as follow:

- Codec is DNXHD: MXF <-> MOV
- Codec is DV: MXF <-> MOV
- Codec is IMX:\D10: MXF <-> MOV
- Codec is AVCINTRA: MXF <-> MOV
- Codec is Apple PRORES: Valid for mov only
- Codec is MJPEG: Valid for mov only
- MP4 to MOV: Any content. Audio converted to 16 bit pcm
- MOV to MP4: Only H264, MPEG content. Audio converted to AAC
- Codec is XDCAMHD: not recommended, not supported

Any format not listed is unsupported and could produce corrupted file.

- **VS3 control panel renaming**

- ASIO Device mode is now the MT ASIO Bridge Host
- Secondary Audio device Host Mode is now the Secondary ASIO Hardware Connection

- **Mouse middle scrub is now supported under 64bit OS**

- **Secondary Audio Device improvements**

Under the Pyramix settings>Hardware>Secondary Device a reset option button was added for users that experience issues such as Mutes or Glitches. Please use this Reset option to reinitialize your device/interface.



V10 Features

New General Mixing Bus:

- A set of new Mixing/Aux Bus types have been added: the General Mixing Bus
- It provides a replacement for the pre-existing buses
 - ** The old buses are considered "Legacy" and are in a sub-menu called "Legacy"
- The General Mixing Bus can have 4 flavors:
 - Mix Bus
 - Mix Group
 - Aux Bus
 - Aux Group
- Bus have outputs that can be connected to physical outputs (I/O or internal Buses)
- Groups are summing objects which can then be routed directly to another Bus or Group
- General Mixing Buses have a maximum speaker count/bus currently limited to 32 speakers
- Each channels can be typed, out of the new extended Channel Types listed below, including 3D types
- When creating a new General Mixing Bus, (Right-click menu > Bus > Add > New General Mixing Bus or by using the Configure Page>Topology) the choice is given for one of the 4 flavors, the number of channels and a choice of predefined channel types (or speaker arrangements)
- General Mixing Buses can also be given an optional Room Size. In this case the panning algorithm changes to a distance based algorithm. (see below)
- An existing General Mixing Bus speaker topology can be modified after its creation by using the Room Editor, available by clicking on the top control of the I/O & VCA section on the bottom of the Mixer.
- General Mixing Buses (each flavor) have the same controls in the Mixer user interface:
 - A send peak meter. Clicking on it collapses/expands the bus
 - An On/Off button
 - A Gain value box to enter a precise value manually
 - An horizontal Gain display and control box
 - A Pre-Fader option button
 - A Routing/Panning option box
 - When Channel Router is selected
 - a little grid appears below it allowing to open an extended grid router
 - When Panner is selected (or Panner 1, Panner 2, etc...)
 - The bus will follow the selected Panning bus to pan/mix the signal in its channels. (see below for details on the Panning Bus)
 - A New Bus Trim option will appear when Bus Panner mode is selected. This allows Speakers/Buses to be independently configured per Strip to Bus. The Bus Panner mode once selected will display a Speaker Bus Trim configuration where users can calibrate or mute speaker independently.
- Expected Limitation with the New General Bus and old Legacy Bus combinations:

Due to the different architecture used in the new buses, it is not recommended that you operate a mixer containing both if at all possible. There are a number of limitations surrounding this outlined below. When deciding on which types of buses to use, it is crucial to understand the limitations that are inherent in a system with 2 ways of employing Buses. Please ensure that if you are going to use the new Buses and panning that you convert ALL of your Buses to this new type. Or if you are building a new project, make sure to choose to use the new buses only.

 - Legacy SubGroup buses will not feed into New General Buses
 - Please convert the SubGroup to the New Aux Group
 - Old and New Buses will not work together when connected to SmartAV Tango & Tango2 controllers
 - This can cause a crash of the Tango2 firmware.
 - Please ensure your mixer contains only old or only new buses before connecting to the Tango/Tango2 controller.



- Former legacy Buses can be converted to new General Mixing Buses. Right click on the legacy bus and select "Bus > Convert 'Bus XXX' to the General Mixing Bus model"

Warning: It is important to convert legacy Buses for compatibility purposes

- A new "General" Mixing Bus will be created for legacy Surround Buses, Stereo Buses and Mono Buses
- A new "General" Aux Bus will be created for legacy Aux Buses
- A new "General" Aux Group will be created for legacy SubGroup Buses
- In any case a new Panning Bus is created (see below New Panning Bus) and associated with the New General Mixing Bus and all automation related to the legacy bus is transferred to the new Panning Bus.
- For Surround Buses:
 - For Multi-Stems Surround groups, multiple General Mixing Buses will be created, one per stem. This is the new paradigm for multi-stem. Each new Bus/Stem can be modified later with the room editor (see above) to reduce (or extend) the number of channels independently for a more optimized use of Buses channels and I/Os.
 - The new Panning Control Bus Panner Type is set to Surround Panner for all input strips, but can be changed later to 3D Panner or Pan/Balance strip per strip.
 - The new Panning Control Bus is set to Dual Source Mode Dual Panner for each Stereo input strips.
 - The Channel Router option is selected for any MCS (formerly GPS) input strips and the grid set as per the legacy bus. However it's recommended to switch back to the Panning Bus for a full new re-panning mode.
- For Stereo Buses:
 - The new Panning Control Bus Panner Type is set to Pan/Balance for all input strips, but can be changed later to 3D Panner or Pan/Balance strip per strip.
 - The legacy mode is converted to the new Panning Bus modes Balance, Single Pan, Dual Pan (see below)
- For Mono Buses:
 - Due to the architecture of the new busses, mono mix busses are now converted into Mono Aux busses and not anymore to Mono Mix buses as Mix buses have no gain control

New Panning Control Bus:

- A new Panning Control Bus has been added
- This bus allows for controlling panning information in 1D (Left/Right), 2D (Surround) or 3D (Full Space)
- This bus doesn't process any audio and has no channels, no associated output strip and no I/O
- Any New General Mixing/Aux Bus/Groups will use the Panning Control Bus for panning sound in their channels.
- The same Panning Control Bus can pan sound for any channel mapping of any General Mixing Bus, i.e. the same panning information of the same input strip can control a 9.1 Mixing Bus, a 5.1 Mixing Group and a Stereo Aux Group at the same time, for instance.
- Generally one single Panning Control Bus is required for all Mixing Buses, however Multiple Panning Control Buses can be created if needed if different panning information is required for the same input strip on different Mixing Buses. (Right-click menu > Bus > Add > New Panning Control Bus)
- The in-strip User Interface for the Panning Control Bus can be switched to 3 different Panner Types (Right-click menu on the Panning Bus > Set Panner Type):



- 3D Panner, giving access to the standard 2D surround control plus the Height/Z axis, the divergence and the LFE gain.
- 2D Panner, giving access to the standard 2D surround, the divergence and the LFE gain.
- Pan/Balance (1D Panner), giving access to three flavors of panning (below) plus divergence and LFE gain:
 - When on a Mono Strip, the control is always a Pan
 - When on a Stereo Strip, the following choice is offered as Dual Source Mode (Right-click menu on the Panning Bus > Dual Source Mode):
 - Single Pan
 - Dual Pan
 - Balance
- Divergence has been given a Type:
Divergence Type are:
 - 1D (Left/Right) : the divergence only spreads Left/Right
 - 2D (L/R - F/R) : the divergence spreads on the traditional surround space, like per legacy surround Buses
 - 3D (L/R - F/R - T/B) ; the divergence spreads on the whole 3D space
- The Divergence Type can be changed per Strip
- The Divergence Type can be changed by right clicking on any strip in the console
- The Divergence Type can be changed in the 3D Panning Control Bus window
- The selected Divergence Type is displayed in the 3 views of 3D Panning Control Bus window
- The 3D Panning Control Bus window controls and buttons have changed their look to accommodate with the Left/Right Pan/Dual Pan and Balance mode and to the Top/Bottom Color Coding
- The Automation for the panning information is associated with the Panning Control Bus and the same for any General Mixing Bus sharing the Panning Control Bus (obviously). Automation for the Send On/Off, Send Gain, Pre/Post Fader is associated with each General Mixing Bus, independently
- New MS (Middle Side) Decoding in New Bus Architecture
 - The new General Mixing Bus now decodes the MS directly and without the addition of any additional user interface. Users can feed an MS strip with Middle and Side information as before, and now the panner itself will decode the Left and Right information and feed it directly to the connected Buses.
 - If you switch the Bus connection to use the Channel Router instead of the Panner, you will be able to then route the raw C and W signal through the bus instead.
 - There is a temporary loss of the additional Middle and Side “Mixing” controls which existed in the old-style bussing connection. So, when using the new General Mixing Buses, users will need to mix between the Middle and Side levels by using Clip Gains & Clip Envelopes. This functionality will return in a subsequent release of the Pyramix software.

Advanced Panning Control Bus Window:

- When Double Mouse Clicking on a Panning Control Bus Panner, the Advanced Panning Control Bus Window opens.
- It gives access to 2 views for 3D panning, Top View (from Top), Back View (from Back).
- All speakers/channels of all General Mixing Buses connected to that Panning Control are displayed in grey
- The level of audio/gain actually sent to these speakers are indicated in the layer color code proportionally of the sound level.
- The speakers color code is Red for the standard layer, Green for the Top Layer, Blue for the Bottom Layer and Yellow for the LFEs.
- Panning can be done directly by moving the Panner in any of the three views
- Sliders for the X, Y Z axis are available below the three views
- When on a Stereo Strip, the choice for the Re-Panner or the Dual Source sliders are available depending on the selected Dual Source Mode (see above)
- The “Single Pan” Dual Source mode default Source Size value is 100%



- When on a Multi-Channel Strip or on a Stereo Strip with Dual Source Mode set to Single Pan, the Re-Panner controls are available:
 - A Source Size slider allows for spreading the input Sources
 - Three Rotation Sliders allows for rotating the input Sources in the X, Y, Z axis
- A new Objects Bus has been created:
 - Specially created for Dolby Atmos workflows, this bus provides a separated output to send to a console when mixing for this format
 - An Objects Bus is created by selected the right mouse button menu > Bus > Add > General Mixing Bus or by using the configure page>Topology>Add Bus..., then selecting the "Object Bus" option in the dialog box, then choosing Channels Mapping to Custom and entering the desired number of Object Channels for the bus
 - The Objects Bus shows a Grid for every Strips allowing the display the Objects Router. The Objects Router allows for selecting one or more Objects Channels to send all input channels of the given Strip to that Object Channel. When input is routed to the Object bus, all other Buses for that strip input are muted, like for a Solo.
 - Objects Bus Routing is automated. Input sound can be sent for a limited time to any Objects Channel.
 - When the object bus is enabled, it DISABLES feeds to all other buses, ensuring that only the object bus receives the signal.
 - Objects Buses can be enabled and Disabled through the right side [+] popup menu. This allows temporarily disabling any Object sending in the Object Bus and keep all input audio in its Bed for editing and monitoring.

3D Room Editor:

- All General Mixing Buses can have their channel configuration edited at all time with the 3D Room Editor
- All channels of the Mixing Bus can be seen as a Speaker in that Room
- The 3D Room Editor is available by clicking on the top control of the I/O & VCA section on the bottom of the Mixer
- Double clicking on a speaker in the 3D Panning Control Bus window sets the Panner exactly to that speakers, in every X/Y/Z axis. This ensures sounds only outputs to that very speaker.
- The channel configuration or 3D Room can have two types:
 - Virtual:
 - Virtual Room do use a Stereo Panning based algorithm using either a Square Root or Sin/Cos panning law, extended to all 3 dimensions
 - The only parameter in the Square Root - Sin/Cos choice available either in the Mixer Settings > All Settings > Mixer Settings page
 - This parameter called "Virtual Pan Law" has been added in the 3D Panner Window as well
 - In this mode the Channels or Speakers can only be of the 32 predefined types listed below
 - The Channel Type directly defines the position of the Speaker in the Room
 - The Room has no real size, the panning algorithm only uses amplitude for computing levels based on the position of each Speakers/Channels, that is defined by its Channel Type
 - The algorithm makes sure that the levels are very focused near the closest speaker to the Panner
 - This mode is designed for Film, Post-production or Music where no real room definition is needed or known in advance and precision is needed to focus on a given Speaker
 - Sized:
 - Sized Rooms do use a Sound in Air propagation/attenuation based algorithm
 - By default the sound attenuation depends on the distance from the panning source to each speakers by $1/d$



- A parameter called "Sized Pan Attenuation" has been added in the 3D Panner Window to allow exaggerating or reducing the effect of distance on the attenuation by a factor of 5 times in either exaggerating or reducing.
 - Central position means default attenuation is $1/d$, moving the parameter to the right exaggerates the effect of distance, moving the parameter to the left reduces the effect of distance.
 - In this mode the Room has a size and the Speakers have a editable position, independently of their Type, that is only informative in this model
 - The Room Size definition is the Radius of the cubic Room, i.e. half its boundary size
 - The position of each Speakers is editable in the Room Editor. The selected Speaker displays in Orange and its coordinates can be changed in the editor
 - The Editing Tools allow for editing the Speakers position either relative to the center of the room, or to a given reference Speaker
 - The panning algorithm uses real distances to compute levels. In this mode basically all Speakers output some level, even is very low, wherever the Panner is positioned
- An Output Gain Trim is available for each Speakers/Channels
 - The physical routing of each Speakers/Channel can be changed in the Room Editor



Monitoring Section:

- The Monitoring Section has been modified to accommodate with the new Channel Types (listed below)
- The central section displaying the Solo/Mute button has been replaced by a 3D view potentially displaying all available new Channel Types
- The output level for each monitoring output is now displayed as a glowing effect around each Channel buttons for easy identification
- Additional Factory Speakers Sets with Down-Mix have been added
- Added link for Solo(X), Mute, Phase. When a speaker is part of a group, the speaker action is applied to the whole group. A button has been added next to the Mute Solo.

Link Modes Menu:

- Link OFF: No link applied to selected parameters (Mute, Solo, Solo X, Phase...)
- Link X
 - Links Left with Right (and everything along each X Axis)
 - Links the left side with the right side (L+ C + R & Ls +Rs & Lr + Cs + Rr etc in each in each height layer separately)
- Link Y
 - Links the Front with the Back (and everything along the Y Axis)
 - Links the associated Front with the side and rears (L + Ls + Lr & C + Cs & R +Rs + Rr etc in each height layer separately)
- Link Z
 - Links the associated speaker in all the height layers (TI + L + BI etc)
- Link L
 - Links the associated speaker that are on the same Z layer
- LFE
 - Includes the LFE on the selected Link mode

Mixer:

- Configure Page
 - New General Bus support
 - Known Limitation: SubGroups and Aux Groups will not appear on the Strip side and can't be moved from the Configure page. If you want to move those around use the Mix page (CTRL+SHIFT+ALT)
- Working from Mix Page was improved.
Most functions from the configure page can now be achieved from the Mix page by in either in the Mouse+Right click dialog menu or at the bottom of the Mixer in the Strip pop-up menu.

Some tips on Mixer workflow:

- Move Strip position selecting the strip numbering and using the CTRL+SHIFT+ALT keys pressed
 - Select Multiple Strips by selecting the strip numbering with the CTRL key pressed
 - Select a Range of Strips by selecting the strip numbering (first and last of the range) with the SHIFT key pressed
 - Remove or add Strips from the Mouse+Right click dialog menu: Strip>Add or Remove
 - Use the CTRL + SHIFT keys kept pressed to add Effects on all selected Strip
 - Use the CTRL + SHIFT keys kept pressed to remove an effect position all selected Strip
 - Change a Strip channel Type from the bottom of the strip pop-up menu
- Bus, Auxes and Routing collapsing
 - New: +- Button option added to the Mixer side context menu. Option to hide or show the desired Buses or Auxes (available by Bus or Aux Types)



- New: +_ Button option in the Routing section. To Hide or Show All Bus routing sections. When all Buses (Mix or Aux) are hidden, a routing summary on one single line is Visible



displayed. This is typically useful when working on multi-stems Buses to see a summary of all Buses connections on one line. Click to change the routing per bus.



Project Management: New Wizard

- Pyramix v10 project containing the new Buses layout/Structure cannot be saved within a Save Special project, a warning message will prevent you from doing so.
- Layout is integrating new Buses (available since v10)
- Users to choose between different Buses
 - Mixing Bus
 - Mixing Group
 - Aux Bus
 - Aux Group
- Allows users to then choose from a list of predefined layout types.
- User can create multiple different strips types

Miscellaneous:

- GPS strips have been renamed Multi-Channel Strips (MCS)

New Channel Types:

L"Left",
L"Center",
L"Right",
L"Surround Left",
L"Surround Right",
L"LFE",
L"Center Left",
L"Center Right",
L"Surround Center",
L"Side Left",
L"Side Right",
L"Center Surround Left",
L"Center Surround Right",
L"Voice of God",
L"Top left",
L"Top Center",
L"Top Right",
L"Top Surround Left",
L"Top Surround Center",
L"Top Surround Right",
L"Top Side Left",
L"Top Side Right",
L"Bottom left",
L"Bottom Center",
L"Bottom Right",
L"Bottom Surround Left",
L"Bottom Surround Center",
L"Bottom Surround Right",
L"Bottom Side Left",
L"Bottom Side Right",



L"Voice of Devil",
L"LFE2",

Predefined Speaker Arrangements:

L"Mono",
L"Stereo",

L"3.0 Front",
L"3.1 Front",
L"3.0 Surround",
L"3.1 Surround",

L"4.0 Quadro",
L"4.1 Quadro",
L"4.0 Surround",
L"4.1 Surround",

L"5.0 Side (THX)",
L"5.1 Side (THX)",
L"5.0 Surround (SACD)",
L"5.1 Surround (SACD)",

L"6.0 Side",
L"6.1 Side",
L"6.0 Surround",
L"6.1 Surround",

L"7.0 Side",
L"7.1 Side",
L"7.0 Surround (SDDS)",
L"7.1 Surround (SDDS)",
L"7.0 Surround (THX)",
L"7.1 Surround (THX)",

L"8.0 Surround",
L"8.1 Surround",

L"9.0 Surround",
L"9.1 Surround",

L"11.0 Surround",
L"11.1 Surround",

L"5.0 Dolby",
L"5.1 Dolby",
L"7.0 Dolby",
L"7.1 Dolby",
L"9.0 Dolby",
L"9.1 Dolby (Atmos)",

L"7.0 DTS (Neo:X)",
L"7.1 DTS (Neo:X)",
L"9.0 DTS (Neo:X)",
L"9.1 DTS (Neo:X)",
L"11.0 DTS (Neo:X)",
L"11.1 DTS (Neo:X)",

L"10.2 TMH",
L"12.2 TMH",

L"8.0 Auro",



L"9.1 Auro",
L"10.1 Auro",
L"11.1 (7+4) Auro",
L"11.1 Auro",
L"13.1 Auro",

L"22.2 Hamasaki/NHK",

L"30.2 La Totale",

New VS3 Plugin:

- VS3 Algorithmic DeNoiser & DeScratcher are supported as of v10.0.7 HotFix
Known issue: They might display Demo (while fully functional) until the project is saved, closed & reopen.
- New Flux VS3 Reverb (requires the proper IRCAM Tools Verb Merging Key)
 - Flux *IRCAM tools Verb Session*: Supports 2 channels and up to 384 kHz
 - Flux *IRCAM tools Verb*: Supports 24 channels and up to 384 kHz

The IRCAM Verb v3 is an algorithmic room acoustics and reverberation processor. It has a modular construction, employing a recursive filtering reverb engine, reproducing and synthesizing the specific acoustical characteristics of any spatial sound environment.

Important: As of Pyramix v10 a new Flux VS3 plugin version is required.

Find the first v10 Flux VS3 version here.

<https://www.fluxhome.com/download>

Controllers:

- OASIS – EUCON
Pyramix v10 Mixer component Support
 - Pyramix v10 Mix Bus, Aux Bus, Mix Group, Aux Group support
 - New 3D Panner Support
 - Horus/Hapi Mic Pre remote (from EUCON controller "Input" section) available since v9. All parameters supported, exception of Phantom power (for security reasons)
 - Labelling updated to EUCON2 in Settings
 - Avid S3 requires the Business OASIS Key
 - Avid S6 requires the First Class OASIS. S6 users should use the latest S6 firmware (v2.1>) for the Pyramix Appset support.

Note: EUCON v3.2 Supported

- Ramses:
 - The v10 New General Buses are not supported
 - Project created with in a previous release (e.g. v8-v9) can be open in v10 and will be supported with Ramses
 - There will be a warning error If a v10 Project with New General Buses is opened
- TANGO I or II users.
 - Merging recommend users to update to ConsoleSoft v3.3.0.18_2015.05.20 available at <http://www.merging.com/downloads>
 - Supports New General Bus structure (Pyramix v10 comes with new BUSES, refer to Release notes)
 - Metering & Monitoring is limited to a maximum of 6 channels (5.1 surround)
This means that the Tango I or II will not display the Surround Panner by example in 7.1 Channel Mapping view, you can still move the Panner Ball of a 7.1 channel mapping from the Tango but the Surround Panner will be displayed in a 5.1 Channel Mapping view.



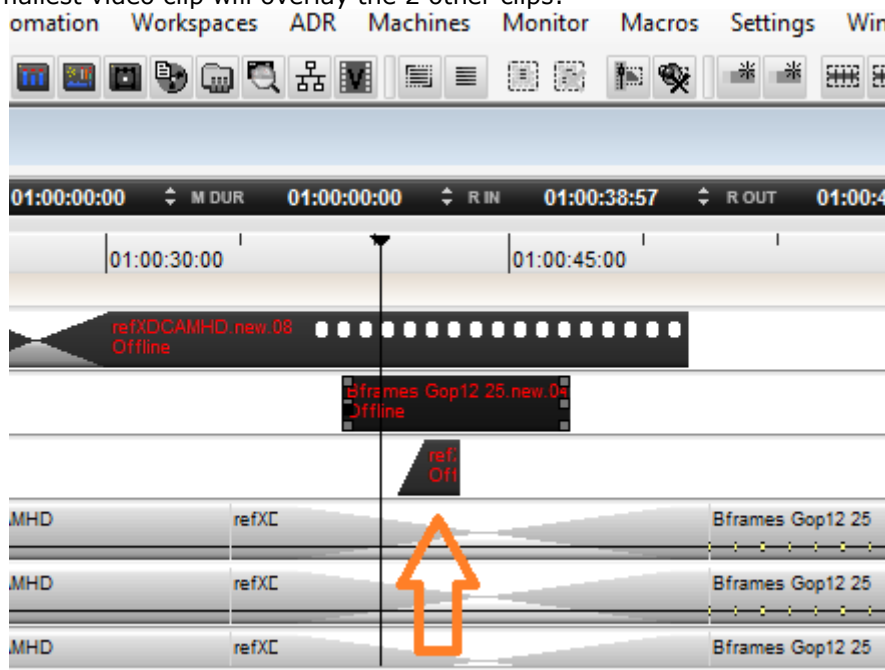
- V10 project containing simultaneously the New v10 and Legacy Master (v9<) Buses are not supported. Due to a limitation in your control surface. A warning will be posted in Pyramix if you have such an incompatibility, if so the OASIS Transport will be DISABLED in your Pyramix Settings.
This means that you can open a Pyramix v9.1 project in Pyramix V10 and work with your Tango II but you cannot use the V9.1 Buses with the v10 New General Buses simultaneously. So you have 2 options:
 - 1) Work with only Legacy v9 and below Buses (Do not add New v10 General Buses)
 - 2) Work only with New v10 General Buses (recommended).
 Please follow the steps below to successfully use your pre-v10 projects with Your OASIS controller by converting the Legacy Buses to the New v10 General Buses
 - 1) Once your project is open, convert your legacy Master Buses to new ones (Right-Click>Bus>Convert ...)
 - 2) Save As... And give your project an amended name
 - 3) Close the project and go into Settings>Controllers and Re-enable the Oasis Controller
 - 4) Open the new project with the converted buses.

Video Timeline/Playback Support:

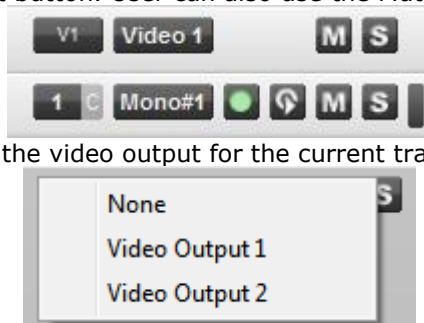
It's now possible to playback video directly within Pyramix.

This video can be imported thru the Interchange Import (Video Clips, AAF, XML).

When a multi-layer composition is imported, Pyramix displays the layers under the main video track (layers are inverted compared to most video editors). The composition is done bottom-up. In this example the smallest video clip will overlay the 2 other clips:



From the video track header it is possible to patch the video track to 1 of the 2 available video outputs. Click on the video output button. User can also use the Mute and Solo for Video display



And a popup menu let you select the video output for the current track.



When several tracks are patched to the same video output, they are composed in the bottom-up order described previously.

2 tracks patched on 2 different outputs will be displayed separately (see video tab and video Frames).

This can come handy for video comparison or in a multi-camera type workflow.

Note that by default, all imported layers are patched and composed into video output 1.

Video Format Support

Merging Technologies have tested and validated for use the following file types and codecs in Pyramix's video-in-timeline feature. Other codecs and file types may work, but we currently will only support the ones listed below.

Mov: DNxHD (8bit) **, ProRes 422 HQ, ProRes 422 LT, ProRes 422 Proxy, DV25, DV50, H264**

MXF: DNxHD (8bit) **, XDCAM HD**, AVCi**, IMX**.

Note: 10bit DNxHD is not supported (performance issue)

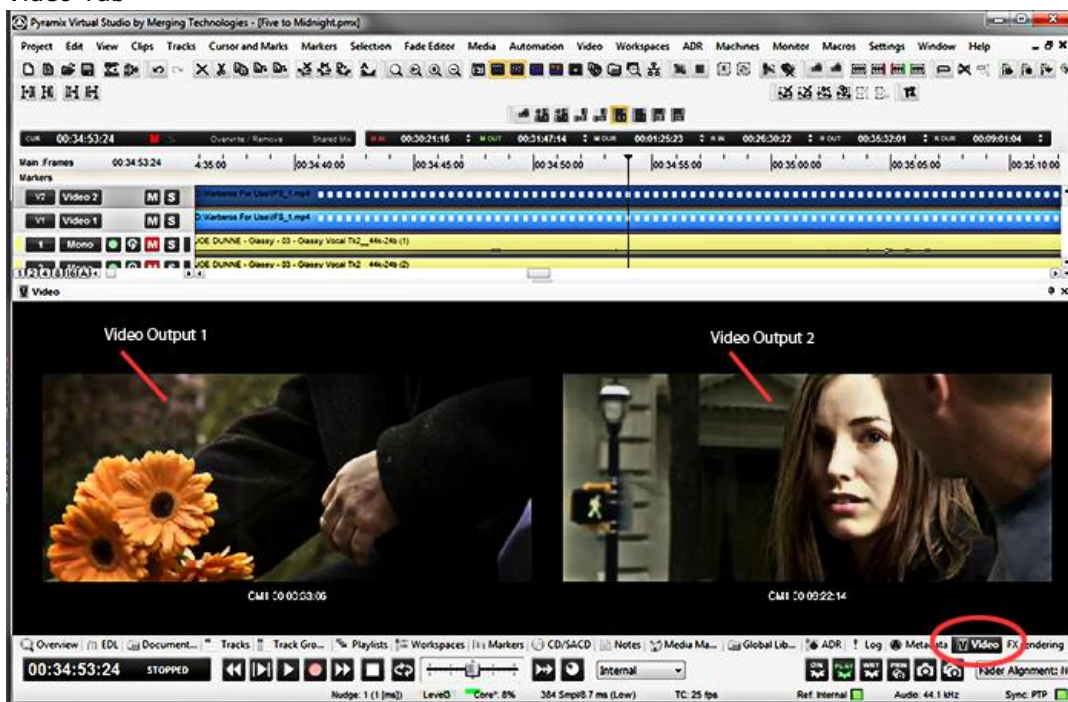
Recommendations:

- To avoid memory consumption and impact on audio performance, work with intra-frame proxy files whenever possible
- H264 is not recommended for editing
- Video files should be on separate drive, especially for heavy Pyramix projects

*** DNxHD, AVCi, IMX, XDCAM HD (for Encoding via VCube Render), H264 (for Encoding via VCube Render) are all optional codecs come at an additional cost to the Pyramix pack. Please contact your local Merging sales office if you want to purchase one or more of these options. ***

Video Outputs can be displayed in 3 ways:

1- Video Tab



In View/Editor Tabs, you can select the "Video" tab. It displays all the patched video outputs in a side-by-side condensed manner.

2- Video Output Frames

You can also create Video Output Windows(s) easily, each one monitoring a single Video Output. Click the Video Output windows button or to Video/New Video Window > New Video



Output Window 1 - 2. This will create a standard window where the video is displayed. The window can be resized, moved, minimized, and maximized. It is useful in a multiple displays configuration or when a large video surface is required.

Right-click the Video Output Frame to get access the contextual menu. You can also expand the frame to Full Screen (right-click Full Screen again to exit the Full Screen mode). Save frame parameters (position, size and controls) are preserved at the application level so global to application and not saved within project.

New toolbar video option:

One icon per video output is now available, you will see 4 icons but only two are usable at most depending of your Key pack. If you do not have access to 1 or 2 Video output this means that you do not have an eligible key.

Two modes are available:

- A. Create video output frames (unlimited count)



- B. Toggle video output frames, show/hide mode



In such mode you can assign a shortcut and display or hide all the video frames that are routed to the respecting video output (1 or 2). This can be bypassed using the Always Visible contextual option (see below)

Note: We recommend users working in DXD or DSD projects to use only 1 Video Output track for performance reasons.

3- Video Output Contextual menu:

Available from Mouse+Right click on Video output frame



No aspect ratio: Will not resize the video output to its ratio when changing the video frame size

16:9 aspect ratio: The Video output frame will display a 16:9 aspect ratio

4:3 aspect ratio: The Video output frame will display a 4:3 aspect ratio

Video display size: Double/Normal/Half/Quarter size options in contextual menu



Hide Windows Frame: Hides the frame border around the video. In such mode you can move the Video windows by selecting it

Always Visible: Will bypass the Video toggle option and always keep the video frame displayed. It means that this particular window doesn't hide when you press the "toggle video window" for this specific video output. This can be useful for a booth or fixed DVI screen configuration where you always want the video to be displayed.

Top Most: Will display the Video output on top of all other windows or dialogs

Full Screen: Will display the Video output in full display screen

Show Overlay: Refer to Pyramix Settings>Video

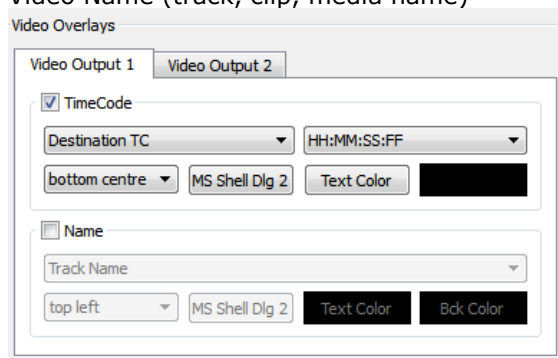
Video Settings (under All Settings>Video):

Video Overlay:

Users can enable:

TimeCode Overlay (Destination TimeCode or Source TimeCode)

Video Name (track, clip, media name)



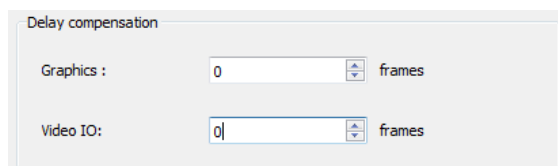
Video Delay compensation:

Use Delay compensation when video is late on audio. The value is in frames.

Graphics delay: compensates the graphic card(s) output (compute screen)

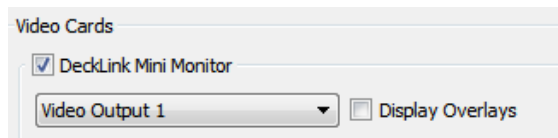
Video delay: compensated the video card(s) output (Blackmagic Design).

These are global user settings.



Video Card Outputs:

The Video card can be enabled under the Video Settings (Requires the proper Merging Key)



The Video Output(s) are mirrored to this hardware when a supported Blackmagic DeckLink hardware is installed on the computer.

Black Magic support:

Merging now supports Blackmagic design Video Cards thru the DeckLink SDK. This covers DeckLink, UltraStudio and Intensity product lines. Only Decklink Studio 4K has been validated so far. The DeckLink Studio monitor is known to be working be has no Video reference to ensure genlock.



Blackmagic design installer version recommended is 10.3.7 and above (latest certified 10.4)
Go to <https://www.blackmagicdesign.com/support>

Video System Configuration:

Recommended configuration

<http://newwww.merging.com/support/pc-config>

Known:

Pyramix MassCore with on-board graphic: Could potentially experience performance issue (Core Peaks) with Video projects that have Core readings of 30% to 35 % at base.
Refer to our recommended configuration

Pyramix MassCore with dedicated graphic card (non on-board): Such configuration will improve the video performance.

Refer to our recommended configuration

Pyramix and VCube combo on same system should not be used with a PCIe Graphic card, only the onboard graphic is supported in that

Refer to our recommended configuration

Pyramix Native system: Video Performance will mostly depend on the system configuration
Laptop users must set their Windows Power Scheme to High Performance.

Refer to our recommended configuration

Notes:

- Within the Pyramix timeline, you can move, cut, edit and dissolve video clips, the same way as audio. On the other hand, you can choose to lock video clips, like any other clip (Ctrl+L) to avoid modification of the video composition while working on audio.
- The Video thumbnails image frames generation for timeline display must be manually generated. This can be done by selecting the Video context menu (right Click on Video track) and select Display>Generate Image. The Generation can also be cancelled by Mouse+Right Clicking and selecting "Cancel Image Generation" on the generation message at the bottom left corner of the Pyramix GUI
- Video Formats and Editing: Refer to the User Manual recommendations
- The Wrap is not support
- The Video playback drops are now indicated, if the Playback Stall option is enabled (Settings>Application>Playback/Record)



Improvements

MassCore:

- New MassCore version (RTX64-2014 SP1) as of Pyramix v10.0 and new MassCore update ((RTX64-2014 SP2) as of Pyramix v10.1
- MassCore Memory 64-bit allocates has been increased from 128 up to 256MB
- MassCore 256+ key holders have now Support for 64 IO of 8FS/DXD/DSD64/128/256. Such *performance can only be guaranteed with those requirements*
Requirements for 64 I/O of 8FS/DXD/DSD:
 - Pyramix v10
 - Merging Turnkey System Windows 7-64bit
 - MassCore 256+ Key
 - MassCore SMP key recommended (with Hyperthreaded configuration)
 - System configuration based on Intel Core i7-4790 or above
 - SSD required (Recommended: 4x SSD Crucial M550 disks configured in Raid 0 / 64k block size or 4x Crucial® MX200 1TB 2.5" SSD in Raid 0 / 64k or SSD-SAMSUNG MZ1000 available on Merging price list)
 - MassCore must be set to Low latency mode
 - Record in single media (not one file per track)
 - Use a Windows 7 Basic Theme for optimal performance (avoid Windows 7 Aero)

Restriction: You will not be able to perform 64 Inputs of DSD256 or DSD128 or DSD64 (DSDIFF) in a DXD project, but only a lower count of inputs in such modes.

Note: Waveform while recording (Display&Generation) are known to be very demanding. For better performance it is better to disable them while recording. For long cabling setup consider using cat-fiber extender

RAVENNA ASIO:

The Driver no longer follows the ASIO clock sampling rate provided by Horus/Hapi

- This have been changed so that Pyramix or external player (jRiver) can change the sampling rate according to the format played.
- Initialize the ASIO driver only when needed and no longer set sample rate to 44k1 at ASIO Interface's initialization
- Three ways to change the Horus/Hapi sampling rate.
 - 1) Manually change the sampling rate of the Horus/Hapi device (in Format page)
 - 2) Configure the Horus/Hapi to Auto mode (in Format page)
 - 3) In RAVENNA Easy Connect enable the "Easy force" then the RAVENNA Easy Connect will configure the Horus/Hapi with the ASIO Driver Sampling Rate.
Note: RAVENNA Easy Connect applies "easy force" to RAVENNA ASIO

Mixer:

- Final Check and the Meter Bridge are now supporting New General Bus structure.
Limitations:
 - Meter Bridge support for Mixing , Aux busses and Groups
 - Final Check doesn't check the channel typing, so any busses that have two channels will be processed as a L/R and any busses that have 6 channels will be processed as a L/C/R/Ls/Rs/LFE. Buses above 6 channels are not supported
- Channel Mapping in Mixdown up to 8 channels with 3 channel order flavors:
- Cedar support for 64bit (refer to <http://www.cedaraudio.com/>)



Pyramix Native:

- Timecode and Audio synchronization improvements (benefiting for long runs)
Warning: When the Native Audio engine is not running the Timecode will not be updated
- RAVENNA ASIO driver increased to 128 IO
Refer to User Manual for all details.
Warning:
 - Some system configuration will not be able to support such Input / Output number count as this will largely depend on the system configuration.
 - If you experience noise or glitches try reducing the IO count in the RAVENNA ASIO Panel and enable only what is needed.
 - If you still experience noise or glitches try different Buffer Sizes in the RAVENNA ASIO Panel
 - Merging Recommended Desktop systems configured for Pyramix Native (RAVENNA ASIO) are known in general to have better performance than laptops

Album Publishing:

- The Album Publishing now includes Trellis E Sigma Delta and SRC filter type setting. Those additional settings were added to provide users with more flexibility in their signal workflow.
- Existing output formats can now be modified by double clicking on their entry in the list

Pyramix Playback Settings:

SRC Settings were renamed accordingly:

- Disabled:
SRC will not be employed in real time on the timeline. Files at sample rates not matching the project can still be placed on the timeline, but will be played at the wrong speed.
- SRC Enabled:
SRC will be employed on the timeline to correct the playback speed of files which do not match the project sample rate
- Ultra-High Quality SRC:
A more refined SRC for those running smaller sessions and requiring even better real time conversion. Due to the additional processing resources required this should only be used on small track count projects and if you notice drop outs when using this SRC type, you should revert back to "SRC enabled" as the project is drawing too many resources to playback faithfully
- HEPTA SRC:
Specially designed real time SRC for use with DSD playback in DXD projects or with ultra-low track count mastering projects. This SRC should not be employed outside of these specific workflows as the processing power required will not allow for faithful playback in other scenarios.



Fixed Bugs in V10.1.3 HotFix:

- GAIA-1188: Fixed. Export Video TimeCodes from a CD Album for BluRayAudio
- GAIA-1187: Fixed. Added Video Clip support in CMX EDL Export interchange
- GAIA-1185-963: Fixed. Different whether the postprocessing checkbox 'keep in default library' was enabled or not. Resulting in several wrap bugs
- GAIA-1184: Fixed. Added Video Clip support in MTXML Import and Export interchange
- GAIA-1183: Fixed. Pyramix crash when playback and generating MXF waveform
- GAIA-1173: Fixed. Create CD Disk from Media Markers
- GAIA-1169: Fixed. Add Aux busses in Mix-down
- GAIA-1168/1170: Fixed. Wrap supports audio format PMF, BWF & MTFF. Filtering non-supported file format
- GAIA-1167: Fixed. Changed 22.2 channel mapping to match ITU BS.2159-7 (Table 6 page 77)
- GAIA-1165: Fixed. Loop selection not working for video track
- GAIA-1164: Fixed. V10.0 Project Video file not relinking in 10.1. Refer to the known issues below
- GAIA-1161: Fixed. MP4 Waveform generation can make Pyramix crash
- GAIA-1156: Fixed. MXF files with special characters no audio imported
- GAIA-1152: Fixed. Import Video Clips does not add the file path in project media folders
- GAIA-1145: Fixed. Video clip offline after re-importing it
- GAIA-1134: Fixed. Enabling the Meter Bridge during record will cause glitch, we now prevent en feasibility to enable it during recording
- GAIA-1097: Fixed. Pyramix Video Media Manager not showing the Frame Rate of some files
- GAIA-792: Fixed. Improved MXF performance

Fixed Bugs in V10.1 RC2:

- GAIA-1148: Fixed. Video output freezes during play when loop is enabled in Pyramix
- GAIA-1139: Fixed. Mixdown one file per track crash if create media fails (e.g. sample rate unsupported by media handler)
- GAIA-1115: Fixed. Sample Rate mismatch indicated when it was not the case
- GAIA-1109: Fixed. Firewall issues
- GAIA-1106: Fixed. Video stop working without crashing after a long playback (plugin enabled)
- GAIA-1103: Fixed. DVCPROHD with MXF badly displayed in Pyramix timeline
- GAIA-1077: Fixed. Automation mode reverts to Touch - Release when reopening a project
- GAIA-1098: Fixed. Pyramix video crash when reading MXF
- GAIA-1041: Fixed. Background Recorder missing warning when disk if full
- GAIA-1040: Fixed. Safe record: recording not stopping when disk Full despite the warning, Pyramix Hang
- GAIA-1038: Fixed. Mixer Dual Pan display % issue on the Right side
- GAIA-1021: Fixed. Bus channel count Summary was incorrect for Multi Stereo Buses, scroll down now allowed as well
- GAIA-867: Fixed. Mixer & Video in timeline: Preview offset when delay compensation
- RAV-535: Fixed. RAVENNA ASIO Driver reported delay problem, causing latency issue
- Fixed. Wrap & Mixdown Loudness improvements

Fixed Bugs in V10.1 RC1:

- GAIA-1102: Fixed. Truncated or Corrupted files hang Pyramix, VCube
- GAIA-1073: Fixed. Reconfirm Picture change can crash Pyramix (in changeanalyzer.dll)
- GAIA-1058: Fixed. Pyramix video crash when reading MXF
- GAIA-1049: Fixed.: creating a v10 mono bus now defaults to channel router rather than panner
- GAIA-1044: Fixed. Pyramix Wrap: remove some key requirements
- GAIA-1032-33-34-35: Fixed. Secondary Audio Device: instabilities fixes (phase I)
- GAIA-1021: Fixed. Multiple Stereo Bus: Config window halves channel count



- GAIA-1014: Fixed. Pyramix Video: Some MXF file show interlacing artefact
- GAIA-940: Fixed. Removing Solo from Mixer right option doesn't enable the Aux Group Effect
- GAIA-928: Fixed. Mixdown & Generate CD-SACD Image's Channel Routing drop down selection (was not properly working for 9 and 10 channels speaker sets)
- GAIA-926: Fixed. Error when switching between Digitizing session and Timeline
- GAIA-906: Fixed .Reordering Strips in Configure page mess strips order
- Fixed. Project and Media DSD mismatches are now correctly displayed in the timeline
- Fixed. Wrap file name error in process
- New Drivers signature certificates

Fixed Bugs in V10.1 Beta1:

- GAIA-987: Fixed. Mouse middle scrub not working. The cursor is blocked (64bit only)
- GAIA-986: Fixed. Pyramix Video not following play then REW - FFWD
- GAIA-942: Fixed. Some AAF import can make Pyramix & VCube crash
- GAIA-277: Fixed. Pyramix: mute speakers in the panner support
- GAIA-733: Fixed. Playback Engine Dropouts due to readying cues
- GAIA-852: Fixed. Final Check: Not working on surround 5.1 Buses unless adding a Aux Bus
- GAIA-816: Fixed. Video Offset should only be applied in Playback
- GAIA-543: Fixed. Hovering over file path should show the entire path name in all windows
- GAIA-604: Fixed. Hide "Publish to Edit Logger" from UI with registry key
- GAIA-706: Fixed. Provide RGB LXProcessing Engine
- GAIA-937: Fixed. Digitize Session not working with active timeline
- GAIA-452: Fixed. Pyramix Video: potential Black Video frame displayed when trimming
- GAIA-453: Fixed. Pyramix in chase MTC does not update TC value
- GAIA-466: Fixed. Mixer: FLUX VST: Crash Pyramix when changing the VST plugin IO count (> to the Bus Outs) use latest version of Flux VST plugins
- GAIA-490: Fixed. Avoid relinking video tracks for now. Relink ONLY AUDIO tracks
- GAIA-492: Fixed. Pyramix Video Settings: Overlay not always displayed
- GAIA-773: Fixed. ASIO Driver network throttling not always configured
- GAIA-830: Fixed. Stereo Panner visual improvement
- GAIA-860: Fixed. Pyramix remote preamp not working
- GAIA-866: Fixed. Library improvements
- GAIA-817: Fixed. Pyramix Video Aspect Ratio improvement
- GAIA-277: Fixed. Pyramix: mute speakers in the panner
- GAIA-599: Fixed. Rename VS3 Settings: ASIO Bridge Host and Secondary ASIO Hardware Connection
- Fixed. Removed un-necessary MXF key check for Pyramix users



Fixed Bugs in V10.0.8 HotFix:

- GAIA-859: AD DSD to DXD real time conversion not working adequately with MassCore SMP, it can cause Core overload
- GAIA-844: Fixed. m4a/mp4 with 7.1 audio seen as 7 channels instead of 8
- GAIA-910: Fixed. MP4 video file bigger than 2 GB hangs playback in Pyramix due to AAC decoding
- RAV-470: fixed. Ravenna Easy connect CTRL+Clear all connections broadcasted to all network

Fixed Bugs in V10.0.7 HotFix:

- GAIA-883: MTF lossless causing artefacts, MTF Lossless format option have been from Pyramix within the media manager and audioengine,. Note that the lossless option still available as an output format.
- NAD-442: Fixed. JuceHandler Japanese Windows crash on some files
- GAIA-881: Pyramix projects V9, open in V10: once busses converted to General busses, project saved, Pyramix crashes (refer to known issue below GAIA-881)
- GAIA-821: Fixed. Potential editing glitches and gaps
- GAIA-823: Fixed. New General Buses not displayed in the sources list of SACD Cutting Master Wizard
- GAIA-825: Fixed. Pyramix dialog no longer opening unless pressing ATL key
- GAIA-818: Pyramix video jog and nudge should follow in sync
- GAIA-815: Fixed. Audio editing crash/hang when slipping some medias
- GAIA-816: Fixed. Video Offset should only be applied in Playback When getting back to preview state, we resync the video so the offset is reset.
- GAIA-855: Fixed.
 - 2D/3D panners show the 1D UI when collapsed
 - The Single Panner and Dual Panner mode show the same as the Balance mode when panned full left or full right to show that we are at full end.
- GAIA-815: Fixed. Audio editing crash/hang when slipping some medias
- GAIA-789: Fixed. Pyramix crashes while reading prores444
- GAIA-490: Fixed. Avoid relinking video tracks. Relink ONLY AUDIO tracks
- Fixed. Data update for Cedar integration
- Fixed. VS3 Algorithmix DeNoiser & DeScratcher are supported as of v10.0.7 HotFix
known issue: They might display Demo until the project is save & re-open.

Fixed Bugs in V10.0.6:

- GAIA-784: Fixed. Editing issue when inserting Audio in tracks (causes a overlapping bug)
- GAIA-783: Fixed. Changing all the strips to Pan if the buses are off confuses the Bus trims
- GAIA-782: Fixed. Mixer Wizard's bus creation always default to PAN (Not Channel Router)
- GAIA-778: Fixed. saving as v9 legacy subgroups will crash on opening in v9 or v10
- GAIA-777: Fixed. SACD Cutting Master Import place in timeline doesn't work properly
- GAIA-776: Fixed. Removed PMF from the recording formats list of Background recorder properties page
- GAIA-755: Fixed. Potential crash grouping and making selections in timeline
- GAIA-749: Fixed. Playback in trimmer crash Pyramix v10 RC1
- GAIA-742: Fixed. Media Manager Quick Export: DXD media to DSDIFF is broken
- GAIA-734: Fixed. Album Publishing: Include Trellis E Sigma Delta and SRC filter type setting
- GAIA-519: Fixed. Cannot Communicate with VCube wrong error message for Pyramix project with video track
- GAIA-475: Fixed. Pyramix Video: Editing Video and Audio can extend video selection and can break audio edits
- GAIA-268: Fixed. Remove VS3 Check component from Virtual Studio installer
- RAV-454: Fixed. Potential BSOD/GSOD when disconnecting/reconnecting Horus to the MassCore NIC card



- Fixed. Mixdown: Channel mapping available up to 10 channels (instead of 8) to allow a channel mapping which matches Auro encoder
- Fixed. DSD waveforms are not displayed consistently when moving DSD clips in the timeline

Fixed Bugs in V10 RC1:

- GAIA-254 & 729: Fixed Pyramix Toolbar at times disappears or causes a crash.
Note: We do not recommend users to move Pyramix toolbar items during playback since it's freezing the all application UI and may lead to an application crash.
- GAIA-717: Fixed. Import DDP can crash Pyramix v10 and random crashes
- GAIA-716: Fixed. Pyramix crash at times when importing some AAF files
- GAIA-714: Fixed. Pyramix Video: Drag and drop V12 track to timeline not accurate
- GAIA-538: Fixed. Save special as v9 not working adequately
- GAIA-535: Fixed. Inconsistent Video Overlays settings
- GAIA-532: Fixed. Pyramix behavior when user imports video file but has no key for the video codec
- GAIA-527: Fixed. Optimize Video frame composition
- GAIA-526: Fixed. Handle video transition (Fade, Xfade)
- GAIA-523: Fixed. Faders Video timeline files appear offline
- GAIA-520: Fixed. Pyramix Import Video Clips: should filter non supported file types
- GAIA-518: Fixed. Pyramix video: thumbnails generation can sometimes cause MassCore peaks in playback, generation must now be done afterwards from the Video track context menu
- GAIA-517: Fixed. Pyramix Video: Slowdown when moving Video files in timeline
- GAIA-515: Fixed. Pyramix Video: causing system timeout Hang when going to the Mixer Routing Page and doing routing.
- GAIA-512: Fixed. Automation: Bus are a times turned ON when they should stay Off
- GAIA-508: Fixed. Digital Release should not check 16bit if Mixer dither is active
- GAIA-505: Fixed. Mixer: Moving VCA causing strip VCA assignments confusion
- GAIA-504: Fixed. Video (offline) in Timeline creating timeouts and slowdown
- GAIA-503: Fixed. Pyramix tracks: Missing Strips input connections when Mixer's AG or SG are placed before the end of the strips
- GAIA-502: Fixed. Database potential corruption "Failed to create empty document." Cannot open project (unless cleaning database)
- GAIA-499: Fixed. VST Host reports non realtime status too late to allow plug-ins report their correct offline latency before process starts (e.g. VST such as Equilibrium)
- GAIA-498: Fixed. ADR Countdown Wipe setting updated
- GAIA-496: Fixed. Mixer Delay Compensation issue when using AG to MG to Master
- GAIA-489: Fixed. Import Video does not respect the "Auto-Group Aligned Clips" tick box
- GAIA-487: Fixed. Object Buses Broken
- GAIA-485: Fixed. VST Effects Editor's program list drop down does not adjust its width to fit long program names
- GAIA-484: Fixed. Final Check Bus selection name and channel labels are not always correctly initialized upon project opening or Pyramix startup
- GAIA-481: Fixed. Handle delay compensation for Audio/Graphics/Video
- GAIA-477: Fixed. Mixer: Some project can Crash when moving Strips/Tracks
- GAIA-476: Fixed. Pyramix Video: Auto-Ripple can delete selecting range without asking
- GAIA-473: Fixed. Video UI not on the frame when using Copy / Paste
- GAIA-470: Fixed. Video Playback: When performance cannot be achieved drops are indicated
- GAIA-465: Fixed. MT ASIO bridge crashing
- GAIA-460: Fixed. Final check gets the wrong track order in the 5.1 bus if the bus track order is NOT LCRLsRsLfe.
- GAIA-459: Fixed. Trimmer view should not be in full display
- GAIA-457: Fixed. Mixer: Un-Mute option will reset the solo ones
- GAIA-456: Fixed. Digital Release generation: added check and warning if channel types don't match the MTFF standards
- GAIA-454: Fixed. Pyramix crash random when switching from one ADR loop to another
- GAIA-453: Fixed. Pyramix Video: potential Black Video frame displayed when trimming
- GAIA-451: Fixed. Album Publishing does not embed artwork for CD and Digital Release in Pyramix
- GAIA-447: Fixed. Pyramix Video: Offline Video track causing slowdown (open settings ALT+G)



- GAIA-445: Fixed. EUCON2 security issue causing "unknown protocol error"
- GAIA-433: Fixed. Mixer VCA reset bus will raise strips to maximum level
- GAIA-430: Fixed. Pyramix Video in Timeline not Delay Compensated when plugins requiring a delay are inserted in the Mixer
- GAIA-429: Fixed. Loudness analysis during One file per bus Mixdown is not working when output format is not PMF
- GAIA-428: Fixed. Video in Timeline: Auto-Ripple not working.
- GAIA-427: Fixed. Crash in some timeline editing
- GAIA-425: Fixed. Bus Automation components lost when converting a Legacy Bus to a New General Bus
- GAIA-424: Fixed. MassCore in AES67 (48smpl) generating multiple glitches
- GAIA-423: Fixed. DSD converter crash with some files (track mapping)
- GAIA-419: Fixed. Pyramix goto Midi timecode messages are not correctly decoded (causing Timecode jumps)
- GAIA-417: Fixed. Pyramix: Video in timeline TC overlay has to be Timeline TC position, not the video duration.
- GAIA-413: Fixed. Ovation installer doesn't allow Pyramix to install correctly when performing an update
- GAIA-355: Fixed. Pyramix Native no longer Timecode Free run based
- GAIA-331: Fixed. New v10 Mixer presets, VS3 presets and default Mixer based on New General Buses
- GAIA-321: Fixed. Mixer: Add extra VST speaker Arrangements to address the whole range of Pyramix v10 speaker arrangements
- GAIA-380: Fixed. Pyramix Video: Pad edits outside of frame boundaries with video black
- GAIA-371: Fixed. RAVENNA ASIO has been extended to 128 IO
- RAV-386: Fixed. Easy-Connect only configure devices which are on the same network as the Master (others will be grayed out)
- RAV-390: Fixed. Horus/Hapi Losing banks of channels on some RAVENNA set up.
- GAIA-727: Fixed. Menu/Toolbars disappears when resizing screen
- GAIA-299: Fixed. Automation: Losing VST Automation Link when removing or adding VST (MT6540)
- NAD-241: Fixed. MassCore no longer install RTX64 TCP/IP stack nor "Windows Virtual RTX64 Ethernet" adapter
- SUP-10: Fixed. MXF XDCAMHD NTSC audio clicks
- RAV-441: Fixed. RAVENNA: Can perform interoperability with Directouts interface (Mic to DA) using latest firmware
- Fixed. ADR: Wipes working in countdown & loops

Fixed Bugs in V10 Beta4:

- MT6539: Fixed. Mixer: VS3 presets loading does not update Delay Compensation
- MT6534: Fixed. Mixer Configure: Adding strips can move some of them to the Bus section.
- MT6529: Fixed. Strip tool automation could overload in non-real time Mixdown
- MT6520: Fixed. Mixer & External Insert on v10 bus: Crash when changing the bus number of channels
- GAIA-400: Fixed. Mixer: Cannot add VST from the Mix page on Strips of more than 8 channels.
- GAIA-393: Fixed. Changed Video Clips default color from black to blue, in order to read name and see selection range
- GAIA-389: Fixed. Meter Bridge: Remove Error when Mix Group present in Mixer.
- GAIA-388: Fixed. Some Mixer crash when going to Mix page
- GAIA-386: Fixed. Crash in Pyramix. Quicktime Handler. Audio playback + waveform display x1
- GAIA-382: Fixed. Pyramix: Labelling in routing section of MS Strip says LR, should be CW
- GAIA-381: Fixed. MS Decoding into New Buses does not match old bus levels
- GAIA-372: Fixed. Pyramix Video: Black Magic Decklink overlays required a refresh
- GAIA-369: Fixed. Pyramix Video: Fade Out not applied
- GAIA-368: Fixed. Video: Media manager doesn't show video-only media
- GAIA-365: Fixed. Thumbnails generation is very slow, specially, in mp4.
- GAIA-364: Fixed. Pyramix Video stability: fixing a random crash
- GAIA-357: Fixed. Mixer Wizard: cannot create 64 IO Mixer in DSD 256
- GAIA-352: Fixed. Updated Channel Mapping in Mixdown
- GAIA-341: Fixed. Pyramix Video: Thumbnail not accurate on video frame



- GAIA-336: Fixed. Mixer: Bad cohabitation of MixGroups and SubGroups leads to silent mixdown when both are present
- GAIA-332: Fixed. Album Publishing artwork metadata: Some JPG files are not supported, you will be warned if Invalid file (preferred standard color format is RGB 24 bit)
- GAIA-330: Fixed. Video media can end up in the Audio tracks if done from Windows Explorer
- GAIA-329: Fixed. Mixer: Add Mix Group possibility to Mixdown
- GAIA-324: Fixed. Delay Compensation not automatically updating the settings (Mixer Delay)
- GAIA-323: Fixed. Long folder path, hovering full path popup is no longer display 64bit-MT6250
- GAIA-322: Fixed. When selecting single pan, the default for Source Size should be 100%
- GAIA-319: Fixed. Pyramix: Duplicating tracks can create duplicate Direct output connections
- GAIA-307-336: Fixed. Monitor Panel: New Mix Group not audible on some projects
- GAIA-237: Fixed. Video playback: Play/Stop does not display the correct Burn In Timecode
- GAIA-236: Importing Video should not put the file into audio tracks
- GAIA-308: Fixed. Pyramix Video MXF XDCAM-HD not decoded (DNxHD145 as well)
- GAIA-328: Fixed. Mixer: Crash when adding Mix Group in Configure Page
- GAIA-318: Fixed. Discwrite: Gear DDP Export truncates Disc CD Text Genre string to 9 characters max
- GAIA-316: Fixed. VS3 effect ON/OFF button not working on New General Buses
- GAIA-314: Fixed. Eucon DLL not properly registered after installation
- GAIA-312: Fixed. Mixer: Losing strip Names when going to Configure page and back to Mix page.
- GAIA-311: Fixed. ADR key causing Delay Compensation issue
- GAIA-291: Fixed. Remove FX Rendering TAB from view options
- GAIA-284: Fixed. Pyramix; Save time too long, VT connected to VCube with more than 5 clips
- GAIA-226: Fixed. Pyramix Video Overlays are not displayed in Black Magic DeckLink output.
- GAIA-222: Fixed. Pyramix Video: Slipping video not updating Thumbnail display
- GAIA-325: Fixed. Aux Group and Subgroup are no longer visible in Mixdown Mix sources, since they have no record feasibility.
Note: A warning was added in case of a Mix of Aux and Master Buses in the selection (causes out of phase mix if not one file per bus)
- GAIA-278: Fixed. When selecting Aux Groups and Mix Groups, the mixer strip focus slides to the right-most edge
- SUP-12: Fixed. Album Publishing creates DSF files with noise beyond the 4GB limit
- SUP-8: Fixed. Digital release follows Mixdown Destination Track setting
- Fixed. Selecting Aux Groups and Mix Groups was moving the Mixer scroll position
- Fixed. Updated Mixer dither renamed to "Equal Loudness" rather than "acoustic" and PDF (Probability Density Function) replaced to Dither Noise Type

Fixed Bugs in V10 Beta3:

- MT6445: Fixed. Crash after AAF export (video only media)
- MT6517: Fixed. Mixer: Losing VST plugins when converting Legacy Bus to New General Bus
- MT6518: Fixed. Mixer: Adding Strips before any existing strip in Configure page will crash Pyramix
- MT6535: Fixed. VS3 plugins automation not working in non-real time mixdown
- MT6505: Fixed. Mixdown: Loudness True Peak Limiting can generate glitches in certain compositions.
- MT6029: Fixed. SACD Disc Builder: some dll are not registered
- MT6510: Fixed. Automation can cause Mixdown or Image generation crashes with some projects.
- MT6514: Fixed. Mixer: Phasing issue when monitoring projects with Aux Groups returns sent to new General Buses
- MT6079: Fixed. Automation: BUS (VST-VS3) Automation keeps being written after a move
- MT6391: Fixed. Video playback: Loop now working
- MT6217: Fixed. MTOASISTPortEUCON.dll not always properly registered
- MT6478: Fixed. Pyramix Video: Crash drag&drop video in from Media Manager to Timeline in newly created video tracks.
- MT6444: Fixed. Delay Compensation not working properly using New General Buses.
- MT6441: Fixed. Video ratio not update at first opening
- MT6414: Fixed. Pyramix Not importing Video or crash if option open in VCube is enabled



- MT6472: Fixed. Video playback: Crash with some video timeline manipulation or Media Manager drag and Drop
- MT6343: Fixed. Pyramix: Video reverse playback not working
- MT6345: Fixed. Crash when docking/undocking menu toolbars (QT migrate?)
- MT6465: Fixed. Pyramix Document Library crashes when playing files
- MT6475: Fixed. Video: Drag and Drop video file can end up putting no Video track and Audio instead in the Video track
- MT6474: Fixed. Video Import: All imported video will add a duplicated video track (and only a single Audio for a stereo)
- MT6457: Fixed. VCA Mixer snapshot not always accurate (summing)
- MT6407: Fixed. Init automation track sometimes not working when displayed on a separate track
- MT6462: Fixed. Pyramix Video: Trimming video Tail does not updating Thumbnail display
- MT6443: Fixed. Faders Alignment: Not supporting the New Bus Structure
- MT6435: Fixed. Pyramix crash if Video is used and doing play and moving cursor.
- MT6434: Fixed. Pyramix Settings hang or long timeout if Video tracks is displayed in timeline
- MT6424: Fixed. Media Manager: Drag and Drop or place do not carry all tracks or miss places them
- MT6423: Fixed. Copy / Paste video clip from Media Manager to timeline will crash Pyramix
- MT6421: Fixed. Digital release: only working at 44k or DXD
- MT4292: Fixed. Clip gain keyboard shortcut not working
- MT5550: Fixed. TC increment/decrement buttons (in frame mode) do not actually increment/decrement by a frame when in 29.97
- MT6400: Fixed. Mixer: Adding an M&S input strip crashes Pyramix
- MT6410: Fixed. Final Check was not supporting New General Bus structure
- MT6411: Fixed. Meter Bridge not supporting New General Bus structure
- MT6412: Fixed. Automation: New General Bus Panning not available in track Header
- MT6413: Fixed. Mixer new model buses: cannot adjust the send level for top bus
- MT6408: Fixed. Pyramix crash with some automation shortcut used
- MT6398: Fixed. Mixer crash selecting two Strips to delete them
- MT6387: Fixed. Media Manager: Slow mounting folders/medias
- MT6354: Fixed. Random crash when adding a Panning Control Bus
- MT6384: Fixed. Pyramix Crash mounting certain PMF files
- MT6347: Fixed. PMX Mixdown Place in VCube removes VCube video track (media not)
- MT6341: Fixed. Video file with QT audio can make Pyramix crash
- MT6383: Fixed. Pyramix Settings: Rename DSP Power Saving to Core Power Saving
- MT6396: Fixed. MassCore crashes when Alchemist is running at 8FS
- MT6322: Fixed. Video Playback: Imported video show as offline.
- MT6224: Fixed. Ravenna PreAmps: Reconnecting Modules shows gains at 0
- MT6081: Fixed. Automation: Menus list not consistent in order
- MT6039: Fixed. Mic PreAmps parameters are not always correctly recalled from Pyramix
- MT6209: Fixed. Fade editor show large gap a basic fade in, auto-zoom should avoid that *A setting called "Treat Gap as Fade" has been added in the Control settings of the Fade Editor to allow two clips with overlapping media but not overlapping clips to be edited in the fade editor as a fade. This option is set to No by default.*
- Fixed. Adding Strips before existing ones causes a crash

Fixed Bugs in V10 Beta2:

- MT6368: Fixed. Monitor Panel crash in Talkback IO if the Input is no longer available
- MT6260: Fixed. Naming inconsistency between multibus routing pop up and strip name
- MT6168: Fixed. Installer: Pyramix installer putting old Wallpaper images under windows.
- MT6225: Fixed. RAVENNA ASIO Panel: show error when wrong GO packet
- MT6271: Fixed. Aux and SG Pan automation not working
- MT6321: Fixed. Video Playback goes black after some edits
- MT6329: Fixed. PMX Installer : Complete installation replaced with "Typical Installation" Since VB plugins Aphro are in the "complete" installation, the rest of the VB are optional at install
- MT6338: Fixed. Pyramix setting: Open in VCube will not open Video in VCube
- Fixed. Mixdown/Generate CD. Channel Mapping issues with new Bus structure
- Fixed. Potential crash on second Mixdown in a row



- Fixed. Generate CD Image now supports new General Mixing Buses for Stereo and 5.1
- Fixed. "Offline" video track status import fps mismatch problem (24fps video in 25fps timeline): now we can play 24 fps will stay in sync in 25 fps timeline (but can skip/repeat frames).
- Fixed. Fixes black video preview after re-starting PMX



Pyramix v10 Product Changes:

32bits

- No longer support as of Pyramix v10
- Pyramix v9.1 is the last version supported under 32bit OS
- RAVENNA ASIO v9.1.6 is the last version supported on 32bit OS

64bits

- New MassCore versions (RTX64-2014 based)
- MassCore 48 no longer an option, choice between MassCore 128 or 256+ Refer to new Pack models
- New key options for Pyramix Video Integrated Support, refer to Packs.
- Render: Nova & Levelizer are not supported. Nova users should migrate to ReNOVAtor
- Interchange: Akai DD/DR, ProTools and DAR are no longer supported under 64bit
- The Timezone time-stretch tool is no longer supported as of Pyramix v9 and has been removed. Prosoniq MPEX4 or Zynaptiq ZTX (Dirac) are recommended. Contact your local dealer.
- SD2 handler is not supported under 64bit
- HASP dongle is no longer supported under 64bit OS, a SafeNet dongle is required. Contact your local dealer.
- The Mykerinos cards are not supported under 64bit OS
- Background Recorder: The PMF file format support was remove due to non-recovery issue
- MTFE lossless causing artefacts, MTFE Lossless format option has been from Pyramix within the media manager and audioengine. Note that the lossless option still available as an output format.

MassCore Technical Notes:

- MassCore not supported on Core2Duo since Pyramix v8. Minimum requirement is a QuadCore.
- MassCore is supported under Windows 7 (64bit only) for Pyramix v10
- MassCore 64bit: Activation key is linked to the system and not the dongle) and can only be activated once on a dedicated system. This only applies to 64bit. If you need to re-install MassCore/RTX64 bit on another system using the same key this will not be possible if the key has already been used. For such RTX64 Activation Key Replacement the demand can be made at keys@merging.com or in case of weekend emergency through the Interval Zero Support team [IntervalZero Support site](#) This means that if you already have install MassCore 64bit on system and want to move it to another system you must contact interval zero and RTX64 so that they re-issue the key.
- In order to run MassCore 64bit users will need to have both the RTX64bit Activation key and the MassCore 64-bit key.
- MassCore Ultra Low latency mode can generate noise if used on some configuration (not optimal). In such case we rather recommend to use the Extra Low latency mode.
- If your Core indicator in Pyramix is always overloading (red). Recommendation:
 - Under a 64 bit OS: MassCore RTX 64bit users are allowed to run with Hyperthreading enabled. In such case users will by default have 2 Core allocated to MassCore RTX64, as we leave a pair number of Cores for Windows. Merging recommends to have a SMP key under such configuration.
 - If under the Bios power options you have entries such as the *Intel SpeedStep* and *CPU C State* make sure that those options are disabled, they are potentials problems to MassCore. Refer to installation guide or the Windows Configuration guide for all details.
- We recommend that you do not use more than 65-70% of the Core resources, to avoid intense graphic refresh burst related problems. Three safe core zones have been set. Eventually this will be optimized further.
 - 0% to 65% Green zone (best performance)
 - 65% to 75% Orange zone (moderate risk)
 - 75% to 100% Red zone (performance could be at risk if major screen redraws are initiated by the user).
- Merging recommends for optimal performance that MassCore users select the Windows 7 Basic display theme (under Windows>Control Panel>Personalization).



- If the Core indicator blinks (red), this will indicate a drop, only be concerned if the drop occurred during Playback/Mix down or record. To reset the Core drop simply do a Mouse click on the Core indicator, for more information please refer to the appropriate section in the User Manual.
- If you have VST Core peaks users should increase their VST Engine Buffer size value, located under the Pyramix Settings. More information available in the User Manual.
- External Insert plug-ins: The same input and output cannot be used in the External Insert plug-in and the Mixer at the same time, they are exclusive to either one.

Mykerinos:

- The Mykerinos cards no longer supported (as of Pyramix v10) User with Mykerinos cards must remain on Pyramix v9.1 where a 32bit installer remains available.

V10 Known issue:

Merging Public Known Issues online database:

<https://confluence.merging.com/display/PUBLICDOC/Known+Issues>

- New MassCore/RTX64 key required as of v10.0 and a new MassCore/RTX64 update as of v10.1
- Save Special (to a version prior to v10) does not support the new v10 General Buses and panner
- Pyramix v10.1 includes a new Save Special as v10.0. It was introduced to ensure project compatibility with this previous version
- Pyramix Toolbar: We do not recommend users to move Pyramix toolbar items during playback
- Mixer Automation: We advise that users do not automate the ON/OFF of Buses Aux Send and instead simply automate the Gain of the Aux. As this could cause Delay Compensation issue
- TANGO I or II users.
 - Merging recommend users to update to ConsoleSoft v3.3.0.18_2015.05.20 available at <http://www.merging.com/downloads>
 - Supports New General Bus structure (Pyramix v10 comes with new BUSES, refer to Release notes)
 - Metering & Monitoring is limited to a maximum of 6 channels (5.1 surround)
This means that the Tango I or II will not display the Surround Panner by example in 7.1 Channel Mapping view, you can still move the Panner Ball of a 7.1 channel mapping from the Tango but the Surround Panner will be displayed in a 5.1 Channel Mapping view.
 - V10 project containing simultaneously the New v10 and Legacy Master (v9<) Buses are not supported. Due to a limitation in your control surface. A warning will be posted in Pyramix if you have such an incompatibility, if so the OASIS Transport will be DISABLED in your Pyramix Settings.
This means that you can open a Pyramix v9.1 project in Pyramix V10 and work with your Tango II but you cannot use the V9.1 Buses with the v10 New General Buses simultaneously. So you have 2 options:
 - A) Work with only Legacy v9 and below Buses (Do not add New v10 General Buses)
 - B) Work only with New v10 General Buses (recommended).
Please follow the steps below to successfully use your pre-v10 projects with Your OASIS controller by converting the Legacy Buses to the New v10 General Buses
 - 1) Once your project is open, convert your legacy Master Buses to new ones (Right-Click>Bus>Convert ...)
 - 2) Save As... And give your project an amended name
 - 3) Close the project and go into Settings>Controllers and Re-enable the Oasis Controller
 - 4) Open the new project with the converted buses.

Tango Known issues:

- Automation Release mode with ALL modifiers is not yet supported
- On the Tango, the Automation Follow set on Plugin section will reset the Automation to isolate
- The Tango modes: Isolate, Read, Touch, Write are not working adequately with the VST plugins.
- Adding a VST plugin within the Mixer, will not be visible on the Tango, unless you close and re-open the project
- Tango: V10 Aux Bus Sends not seen or working on Tango.



- **Pyramix v10 project containing the new Buses layout/Structure cannot be saved within a Save Special v9.0 project or older as warning message will prevent you from doing so.**
- GAIA-881: Legacy Bus conversions. Due to the architecture of the new busses, mono mix busses are now converted into Mono Aux busses and not anymore to Mono Mix busses as Mix busses have no gain control
- Secondary Audio Device:
 - As of Pyramix v10.1 a Reset option is available under the Settings>Secondary Audio device. If you have glitch issue we recommend that you Reset the Secondary Audio Device and make sure that the device settings are followed as well
 - We recommend that the Secondary Audio device is used at the same sampling rates as the project
 - Secondary Audio device is to be used as a basic Monitoring guide and not to record its outputs
- ISIS controller New General Bus mapping must be done via the General Settings>project>Controller Mapping where the Bus numbering (order counting the strip) has to be added to the Channel Strip function dialog
- Pyramix video: issue GAIA-1164. Video files from Pyramix V10.0 versions appears offline in Pyramix V10.1 find workaround here: <https://confluence.merging.com/display/PUBLICDOC/Video+files+from+Pyramix+V10.0+versions+appears+offline+in+Pyramix+V10.1>
- Pyramix Video in timeline: if the Video file shows offline at project opening please refresh your media manager to regenerate the Quickmount
- Pyramix Video in timeline: Opening a project referring to multiple MXF video files or edits can take some time, be patient.
- Pyramix Video Relink: In order to reconfirm a Video file, select the Video clips to reconfirm only (no audio media) and then perform the reconfirm.
- The Timezone time-stretch tool is no longer supported since Pyramix v9 and has been removed. Prosoniq MPEX4 or Zynaptiq ZTX (Dirac) are recommended. Contact your local dealer.
- Windows 8.1 -64bit has been certified by Merging but only for Native and ASIO RAVENNA
- Merging does not recommend users to editing while recording when medias present in the timeline that are not at the same sampling rate as the project. This is so because a realtime SRC will also be processed causing potential performance problems.
- Merging does not recommend the use Disk models: Green, Eco series and Seagate.
- Merging recommend users with External USB disk to have those disks configured to "Better Performance" under Windows disk properties, profiling option.
- MassCore: Core indicator will show a peak/overload after a save on large project or when rebuilding the Mixer (project open-close). Known as issue MT3113. Simply reset the core indicator by clicking on it.
- Since Pyramix v9 users running in 64bit no longer have the interchange Akai DD/DR support. This option is only available for users running Pyramix v9 in 32bit. Note that this option is no longer maintained nor developed.
- VS3 Algorithmix DeNoiser & DeScratcher are supported as of v10.0.7 HotFix
Known issue: They might display Demo (while fully functional) until the first project is saved, closed & reopen.
- Warning message of "Not Enough Streams available" this happens when reaching the maximum record inputs available. In such case we recommend that you reduce your inputs number count or disable the Background Recorder that are consuming inputs
Known issue: If you afterwards get a constant Message Box "Re-activating Project" at each Playback start, close and re-open your project to avoid this.
- Pyramix v8.1, Pyramix v9.0 and Pyramix v10 Library format are compatible between such versions but not with the previous Pyramix Releases. In order to open such libraries in an older Pyramix version please make sure that you perform the proper Save library option. A Save "Save as Version 7.X" was added to the list
- The Final Check Metering is not supported in DXD/DSD mode
- Cannot use DiscWrite with Pyramix:
Workaround: Re-install Pyramix (maybe run clean up after un-installing Pyramix) or Re-install the Gear driver. Users can consult the Gear site for more details <http://www.gearsoftware.com>
- Cannot install Pyramix Native: If you have an error and rollback, make sure that you unplug your Merging Dongle from the system and try to re-install Pyramix
- Mixdown: Aux Busses and Aux Groups buses selection can be potentially out of sync with Mix Busses/Groups. If those Aux busses are actually patched back to a Mix Bus/Group, the delay



compensation will push them ahead of time to align them properly, the result of the mix-down will include this shifting.

- Timeline and Realtime Sampling Rate Conversion: clicks may occur when doing playback or mixdown in a region where 2 overlapping clips reference the same media with different sampling rate than project.
Workaround: Convert those Medias to the project's sampling rate, prior to using such a workflow
- ADR keyboard is by default disabled. To enable it you must download and run the proper Registry Key. <http://download.merging.com/beta/AssociatedTools/ADRKeyboard.zip>
ADR keyboard users should update the Keyboard driver and "changeme" software in order to prevent a potential freeze under 64bit of Ovation/Pyramix.
Refer to the public known issues.
<https://confluence.merging.com/display/PUBLICDOC/Known+Issues>
- Safety Record issue with the take logger. Pressed commands erroneously will be applied when the transport is stopped. Meaning that if you press Abort & Delete while in safety record, nothing will happen. But, when you come out of safety record and stop, it will apply the command and delete the take. To handle with care.
- Multiple projects opened simultaneously: We do not recommend users to have more than 8 project opened at the same time (due to GDI object limitation).
- The Render Tool will create a temp file for the CEDAR and Nova v0.99 in C:\ Be aware that Merging cannot change the Temp file patch of such third party Render.
- Interchange: AAF non-embedded export to Pro Tools 7x could generate « Could not complete your request because an unexpected error happened while trying to find an audio media file's format" error. We recommend to use AAF Embedded when exporting to ProTools 7. ProTools 8 is known to be working in such case.
- Eucon/Euphonix
 - v3.3 can be installed along Pyramix for 64bit users

Media Manager and Library recommendations and changed behaviors

- The Database Location path is set under Settings>Application>Location>Default Database Location. Otherwise the database path will be C:\Documents and Settings\\Application Data\Merging Technologies\Pyramix
- For better performance Merging strongly recommends that you move the Database location on your fastest system Drive. SATA2 - 7200 rpm Disks are recommended and not necessarily C:\OS default drive (as a drive with less activity and more speed should be performing better)
- Merging recommends that your Disk have the indexing disabled and that you make sure that the Power Management is set accordingly for better performance.
 - Disable File Indexing:
 1. Open "My computer"
 2. Right click on each drive and select "Properties" from dropdown menu
 3. Un-Check the indexing check box
 - Verify the Power Management:
Go under Windows Control Panel and open Power options
 - XP Users: Set "Power Scheme" to "Always On" and set Turn off Hard disks to "Never" and System Standby to "Never"
 - MassCore users Under Windows 7: Power plan should be "RTX – recommended"
 - Native Users: Make sure you select the "High Performance" power plan
- For ultimate performance Merging recommends that you (not mandatory)
 - Set your Antivirus to off while running Pyramix
 - Set Windows Automatic-Update to "notify me"
 - Avoid active internet connection while running Pyramix
- Keeping Mounted Folders when closing and restarting Pyramix can speed up your workflow: Set option under All Settings>Application>General> "Mount all Media folders that were Mounted at previous Application Exit"
- You can clear the History of the Media Manager under the Media Manager>Media Folder menu, or that you disable the Keep Media Manager History option located in the Pyramix Settings, this will clear the History at each Pyramix exit.
- Merging recommends Pyramix users save their project on a Disk were no OS resides for better performances (C:\ not recommended).

RAVENNA Technical Notes:



- Windows 7 SP1 (64bit) is mandatory for MassCore RAVENNA (32bit OS and XP/Vista not supported)
- 32bit OS no longer supported as of Pyramix v10
- Mykerinos no longer supported as of Pyramix v10, users with Mykerinos must remain on v9.1
- Pyramix v10 system recommendations. Details here:
<http://www.merging.com/pages/pconfig>
- The Horus RAVENNA interface is limited to 32 input Banks + 31 output Banks
E.g. 32 banks of 8 inputs channels under Easy Connect equals a 256 inputs limit
- For ultimate performance we recommend that under Easy Connect you enable only the necessary connections, as every extra RAVENNA connection will use some bandwidth (Core or Network)
- The Network must be Layer 3 compliant and must be a Gigabit network
- Merging has certified the Dell PowerConnect 2816 and 2808 Network Switch for use with Horus – Ravenna find details and configuration file here:
<http://www.merging.com/products/horus/downloads>
- RAVENNA user should avoid connecting multiple Horus to any a router/Network not certified by Merging. Refer to the Merging RAVENNA Network Guide for all details on the certified RAVENNA switch and configuration. <http://www.merging.com/products/horus/downloads>
- Only RAVENNA devices can be connected to the Merging PCIe Ethernet Controller Card NET-MS-GBEX1. Avoid mixing up non-RAVENNA device on this network, like Controllers such as Tango/Isis/Euphonix or other network devices. The same will apply if you are connected to the Dell Power Connect 2816 or 2808 certified for RAVENNA network use
- Don't connect a 100MB Ethernet device if the switch is not multicast; otherwise the flow control will reduce drastically the bandwidth.
- A RAVENNA ASIO driver is available for Horus users that wish to use their notebook GbE Network RJ-45 system socket. Refer to <http://www.merging.com/products/horus/downloads>

RAVENNA Known issues:

- RAVENNA Easy Connect is known to potentially have ghost connections (inaccurate banks) remaining, especially if the Horus is moved from a system to another. In such case we recommend users to perform a CTRL+Clear All Connections to make sure that you get rid all connections (and ghosts' ones). Afterwards reconnect your I/O module banks.
- RAVENNA users with non-Merging interfaces should run Pyramix v10 and avoid using Pyramix v9.
- If using multiples Pyramix or RAVENNA drivers over a RAVENNA network the Easy Connect option "Easy Force all Connected Devices" should be enabled only on **one** system.
- Horus RAVENNA: Switching from MADI Standard (56) to MADI Extended (64) can generate small glitch, avoid doing so during realtime operations
- Be aware that non-certified RAVENNA configurations might not capable of sustaining 384 I/O @ 1FS (44.1/48 kHz). If you experience noise similar to static reduce the RAVENNA I/O count enabled in the RAVENNA Easy Connect. We also recommend that if you have such static noise not to run MassCore in Ultra Low Latency mode but rather Extra low or simply Low latency mode.
- Merging recommends that RAVENNA users disable the Windows Firewall, as it can partially block some of the RAVENNA I/O connections
- Peaks might show up under Pyramix Core section if you power OFF or disconnect the Horus. Recommendation: A valid connection an online Horus is always required if the Horus is PTP Master. Reset peaks by Mouse Clicking on the Core section.
- Avoid changing a network address on your system or disconnecting Ethernet ports on your system when MassCore RAVENNA is running
- Cannot use the ISIS since running RAVENNA with the Merging PCIe Ethernet Controller Card NET-MS-GBEX1
Recommendation: Refer to the ISIS support document below
http://download.merging.com/beta/SupportTools/Docs/AccessoryHardware/ISIS_Vista_or_7_dedicated_lan.pdf
- AES67 is supported in MassCore Mode or with Merging's Virtual Audio Device Driver (VAD, AES67 AES67 is not supported with the Merging RAVENNA ASIO.
- DSD issues
 - Background Recorders: If the Mixer is not a DSD compatible Mixer (square mixer), the record fails, but no message displayed. We recommend users to create a DSD project prior to enabling and starting to work with Background Recorders in DSD.
 - When creating/opening a DSD project the Horus will not switch accordingly between 64/128/256 this has to be done manually



RAVENNA I/O Connections:

In order to create RAVENNA I/O connections please refer to the RAVENNA Easy Connect guide (installed along with Pyramix)

Each Horus will then appear in your RAVENNA Easy Connect utility where you will see the name of each Horus online. You will be able to dispatch each Horus I/O connections with the RAVENNA Easy Connect utility.

RAVENNA Troubleshooting:

Sudden stoppage of the RAVENNA Easy Connect:

If the RAVENNA Easy Connect utility ends up crashing or stopping you can simply launch it back from the Windows Start menu under Merging Technologies>RAVENNA Easy Connect.

Windows Firewall:

The Windows Firewall can block communication between MassCore and Horus. We recommend users to disable the Public Network Firewall

Procedure:

1. Go in Windows Control Panel > Windows Firewall.
2. Click on "Turn Windows Firewall on or off"
3. Go to the Public Network section and select "Turn Off Windows Firewall"

Windows UAC:

User should disabled the Windows User Account Control

Procedure:

1. Go in Windows Control Panel\All Control Panel Items\User Accounts
2. Open the Change User Account Setting
3. And set it to never notify

Disable Antivirus:

Merging also recommends users to disable their Antivirus, some Antivirus as Avast or Sophos have been known to block the Horus discovery and RAVENNA I/O Connections

Pyramix Native Recommendations:

- Windows 7 and Windows 8.1 -64bit supported as of Pyramix v10 Native
- RAVENNA ASIO users should have administrator rights
- Disable the WIFI (disable the Wireless adaptor not only the WIFI connection)
- Disable Bluetooth if active (under Windows Device Manager)
- Make sure you select the "High Performance" power plan (very common that Powerful laptop are at times in energy saving mode, create a High Performance power plan)
- Avoid using battery power, rather have you power cable connected
- Set all your Antivirus to off
- Disable the Windows Public Firewall
- Put Windows UAC (User Account Control) to the lowest level (disabled)
- Set Windows Automatic-Update to "notify me"
- Avoid active internet connection while running Pyramix
- Verify the performance of your Native system by running the DPC Latency checker:
http://www.thesycon.de/deu/latency_check.shtml