



Pyramix 14 Hotfix 1 Release Notes

Disclaimer

Dolby Atmos ADM support fully approved. Dolby Atmos ADM Masters can be delivered. Dolby Atmos Renderer support pending final approval for generating masters, should be used only for monitoring of beds and static objects purpose.

Important:

Pyramix 14 requires Pyramix v14 keys.

To get a free upgrade, you need a valid ASM contract and contact your Sales Partner, providing your SafeNet Dongle Serial number and/or Cloud Activation Key number.

Do not install this version if you do not yet have valid keys

Installation

Please consult the Installation Guide on <https://www.merging.com/support/downloads#pyramix> for details on the hardware and software installation procedure and Authorization Key registration process.

RAVENNA users will have to install the NET-MSC-GBEX1 PCIe Ethernet card provided by Merging Technologies. TURN YOUR COMPUTER OFF (shut down then switch the power off). Next plug the NET-MSC-GBEX1 card into one of the PCI-Express bus slots on your computer and turn the power back on. The NET-MSC-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 pack one). Refer to installation guide for more details.
- Warning: Make sure that the Windows 10 version you are installing onto is supported by Pyramix, as often update can break the compatibility. All details in the separate Pyramix installation guide.

Updates

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



Pyramix 14 Installer Information

Pyramix 14 is compatible with the following Operating Systems

- Windows 10 Professional (64bit): MassCore/RAVENNA, Native & Native/RAVENNA ASIO

Pyramix 14 is supported under the Windows 10 updates;

- May 2021 update 21H1 supported since Pyramix 25th HotFix3 & RTX64 3.7.4
- October 2020 update 20H2 supported since Pyramix 25th HotFix3 & RTX64 3.7.4
- May 2020 Update 2004 supported since Pyramix 25th HotFix 3 & RTX64 3.7.4
- Nov 2019 Update (1909) supported since Pyramix 25th Anniversary & RTX64 3.7
- May update (1903) supported since Pyramix v12.0.5 HotFix
- October update (1809)

If you run a previous Windows 10 version, Merging recommends you update it.

WARNING: Pyramix 14 running MassCore mode is not supported and certified under the Windows 10 update 21H2 or Windows 11.

WARNING: Pyramix 14 is supported on 4th Generation Intel Core Processors (4XXXK and higher) and will not launch on previous Processors generation

Recommended specification:

<https://confluence.merging.com/pages/viewpage.action?pageId=24608853>

Pyramix 14 installation notes

- Pyramix 14 runs on the new Pyramix 14 keys as of the Release Candidate.
- Pyramix 14 runs on the same MassCore as the 25th Anniversary HotFix 3, RTX64 v3.7.4.5222
- The Pyramix 14 installer comes only as a 64bit version (64bit OS)
- Before you perform a Windows 10 update on a system already running a MassCore version it will be important for users to remove MassCore from the MT Security MassCore tab prior to performing a system update. Details below.
Take note that when selecting uninstall MassCore you will need to reboot your system as the uninstallation is completed during the system reboot

Note #1

We highly recommend users to defer the Windows updates, so that it does not harm your system [here for details on how to defer updates](#)

Windows 10 users should never update to Beta Windows version or major new updates before making sure they are supported by Merging.

Note #2

Users wanting to perform a Windows version update must follow the procedure [here](#)

<https://confluence.merging.com/pages/viewpage.action?pageId=68288591>

Users that apply Windows updates must refer to the Merging Compatible Windows updates [here](#) Once you have updated your Windows 10, follow the Pyramix and MassCore installation.

Note #3

Pyramix 14 running MassCore mode is not supported and certified under the Windows 10 update 21H2 or Windows 11.

- SSK-HUD-RTX is no longer required as of Pyramix 25th Anniversary HotFix 3 and above that includes the MassCore security scheme. The Security now being fully protected by Merging Keys.
- A Cloud Security (dongle-less) is available as of the Pyramix 25th Anniversary
- Pyramix 14 Projects are not backward compatible with Pyramix 25th Anniversary, users must perform a "Save Special as v13.0 / 25th Anniversary" in order to open such project in 25th Anniversary..



- The VB Plugins (VS3) are no longer installed along Pyramix as of the 25th Anniversary version they come with a standalone installer. Download and run the VB Plugin – VS3 installer after having installed Pyramix.
<https://confluence.merging.com/display/PUBLICDOC/VB+Plugins+%28VS3%29+standalone+installer>

Native Installation Notes

- Pyramix 14 runs on the new Pyramix 14 keys as of the Release Candidate
- Pyramix 14 can be installed on Windows 10 – 64 bit (see Windows 10 version details above)
- It is necessary to remove the previous Pyramix version, if there is one, from the Windows Programs and Features, then reboot your system before installing Pyramix 14.
- Follow the Pyramix Installation Guide for all details
- ANEMAN installer is not included in the Pyramix Installer.
Please download and install the latest ANEMAN in order to manage and monitor your AoIP devices from <http://www.merging.com/products/networked-audio/aneman>

MassCore Installation Notes

- Refer to the Pyramix 14 Installation Guide for installation procedure and details on the specific BIOS settings and system configuration.
- Pyramix runs the same MassCore RTX64 v3.7.4.5222 as Pyramix 25th Anniversary HotFix 3>
- It is necessary to remove the previous Pyramix version, if there is one, from the Windows Programs and Features, and then reboot your system before installing Pyramix. Take note that when selecting uninstall MassCore you will need to reboot your system as the uninstallation is completed during the system reboot
Unless you are planning to update your Windows 10 it is recommended to first remove MassCore before performing the update. In such case follow the procedure document <https://confluence.merging.com/pages/viewpage.action?pageId=60031028>
- After installing Pyramix 14 MassCore users might need to uninstall their previous MassCore from the MT Security setting, MassCore Tab, depending on the previous Pyramix version you were running. If there is an older version present you will be warned and required to reboot before updating to the latest version.
- If your Pyramix system never had a MassCore version before, users will have to install the new MassCore version from the MT Security Settings > MassCore tab.
A valid MassCore RTX64 -3.0 key is no longer needed as of Pyramix 25th HotFix 3.

Pyramix 14 users must refer to the 25th Anniversary Installation Guide for details

https://www.merging.com/uploads/assets/Installers/beta/JANUS_X.0_Beta2/Pyramix_25th_Beta2/Pyramix_25th_Installation_Guide.pdf

Warning: Windows 7 is not supported with Pyramix 14.

Merging Windows 10 Configuration Guide

<https://confluence.merging.com/display/PUBLICDOC/Windows+10+Configuration>

Note: At the Pyramix launch a warning message box will be displayed if your system updates settings are not configured upon Merging's recommendations.

Additional Notes

- *For users with Pyramix and VCube installed on the same system, it is mandatory that you upgrade to VCube 10 to run alongside Pyramix 14.*
- *A MTCleanUp utility is available through Merging's Support for those having install issues Please refer to the Knowledge Base*
<https://confluence.merging.com/display/PUBLICDOC/MT+Cleanup>



Pyramix 14 Release Notes

New with Pyramix 14

Dolby Atmos Master Import/Export

Note: Dolby Atmos Master Import/Export/Editing requires Pyramix Premium authorization.
Dolby Atmos Renderer v3.7 required

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Dolby Atmos Master Import

- Accessible under menu **Project > Import Dolby Atmos ADM Master**
- When a proper Dolby Atmos Master file is selected the following options are offered:
- **Timeline Settings:**
 - **Place at Master Start Time** – to import the Dolby Atmos ADM Master file in the timeline at the position specified in the Master ADM file. This is important to sync the Master ADM file with video if needs be.
 - **Place at Cursor** – to import the Dolby Atmos ADM Master file in the timeline at the current cursor position.
Note: in both cases Mark In and Mark Out are positioned at the beginning and end of the imported ADM Master file and a **First Frame of Action** (orange) Marker named **FFOA** is added at the proper position in the timeline, related to the position of the imported ADM Master file as chosen above.
 - **New Timeline** – to wipe off the current timeline and replace it by the ADM Master file. The project takes the name of the imported ADM.
 - **Paste on existing Tracks** – to keep the existing timeline and insert the ADM Master file into the existing track. This is for merging multiple ADM Master files into a single project, in this case import the first ADM Master file using New Timeline option above, then import following ADM Master files using this option. No binaural settings are imported using this option, to preserve previous or existing settings. All further ADM Master files imported with this option should preferably share the same existing Input Configuration.
If the project already contains a CD Disc, CD Start and Stop markers are created for any imported ADM and named accordingly.
- **Mixer Settings:**
 - **Create Strips for imported Beds and Objects** – to create new Strips in the Mixer for each imported Beds and Objects. New Strips are created before any existing strips in the mixer, to match new tracks created in the timeline (see above).
Note: It is necessary to enable this option to import Dynamic Events from the ADM Master file, so they are converted into Panning metadata for these associated new Strips.
 - **Create Mono Strips for Beds** – to create Mono Strips for all Beds channels. If not checked one single multichannel strip is created for each imported beds.
 - **Create new Busses for imported Beds and Objects** – to create new Busses in the Mixer and automatically patch all created strips to these busses. This option completely removes the existing mixer before creating new strips and busses.



- **Send imported Beds and Objects Strips to existing Busses** – to patch/send newly created Strips to any existing Busses, Beds channels to Mix Busses and Objects channels to Object Busses. Imported Beds try to find a new Mix Bus for each to avoid mixing them together, so if using this option, a set of Mix Busses should be prepared in advance to reasonably accommodate any ADM Master Input Configuration.
- **Do not send imported Beds and Objects Strips** – to only create new Strips and patch them to existing Busses later manually
Note: When using the **Create Busses for Beds and Objects** option a completely new mixer is set to accommodate the imported ADM Master file. An Export Dolby Atmos Master done just after importing with both above options (Create Strips and Create Busses) will produce an (almost) similar ADM Master file as the original (see Export Dolby Atmos Master for details).
Note: When using the **Send imported Beds and Objects Strips to existing Busses** option only the Objects Binaural Render Mode are imported to the patched Objects Busses. Existing Beds/Mix Busses keep their Binaural Render Mode settings unchanged.
- **Color Beds Strips and Busses** – to color Strips and Busses relating each beds with a different color for easy identification.
Note: Imported Master Input Configuration channels description will be used to name created Strips and Busses. Beds Busses will get the name of the imported channels, Objects Strips will get the name of their imported channels.
Note: Binaural Render Mode of the imported channels will be transferred to the Busses channels the created Strips are patched to, so a following Dolby Atmos Master Export will inherit of the proper binaural settings. (See Edit Dolby Atmos Master Configuration section below for more details)
- **Options:**
 - **Keep original Master Configuration including unallocated** channels - to import or not the unallocated channels in the current project / mixer. This option is meant to be used when you plan to import several Dolby Atmos ADM Master files, using the same mixer / project, allowing to have different object channels for different audio (CD) tracks. See also the Paste on existing tracks option when importing several ADM Master files.
Limit number of unallocated Objects channels to - to create additional Strips - Objects channels up to the required number of channels (max 128).
This might be useful if you plan to import several Master files in the same project.
 - **Optimize Master Configuration by removing unallocated channels** – to remove the unallocated channels from the imported ADM Master file.
 - **Set Frame Rate according to Master** – to change the application Frame Rate according to the imported ADM Master file.
 - **Create CD Markers fitting Master boundaries** - (Pyramix 14 Hotfix1) to automatically add CD Start and Stop Markers when importing an ADM Master file. If the project does not already contain a CD Album, a new one is created. If a CD Album is already present in the project, the CD Markers are added into it.



Dolby Atmos Master Export

- Accessible under menu **Project > Export Dolby Atmos ADM Master**
- This process will produce a Mixdown of the existing Timeline through the existing Mixer and wrap it as a Dolby Atmos ADM Master file.
- Channels that do not contain audio will not be exported to the final ADM Master file, however, channel numbering and source indexes will be preserved.
- The following options are offered when exporting a Dolby Atmos ADM Master:
- **Master:**
 - **Master Name** – to give a file name to the Master, the produced file will be named <Master Name>.wav
 - **Media Folder** – the Media Folder the Master will be created in
- **Timeline Source:**
 - **Whole composition** – to export the whole timeline as an ADM Master file.
 - **Between Marks** – to export the timeline portion between Mark In and Mark Out as an ADM Master file.
 - **Selection** – to export the current selection as an ADM Master file.
Note: The exported Master will have a Start Time set according to the timeline entry point of the above Source point. If a Marker in the Timeline named **FFOA** is found between the start and end point of the exported selection, it will be used to set the **First Frame Of Action** in the exported ADM Master file.
 - **CD Tracks** - to export the timeline, based on the CD Album information:
Single ADM: Single file containing all the CD Tracks (CD Album)
One ADM per track: One ADM Master file per CD Track.
CD Track Name: One ADM Master containing the selected CD Track.
Note: Only CD Album information are used, not SACD Album.
In such case, select your SACD Disk and perform a Create CD Disc from SACD Disc in the CD/SACD tab - Discs menu.
Note on FFOA : FFOA can be inserted in a CD Track by using a CD Index marker. Such Index marker must be named FFOA.
Naming: to set the naming convention for the exported CD Tracks.
Default: Disc Performer_DiscTitle_TrackNumber_TrackTitle (Track Name in the CD/SACD Tab)
Apple Music: Disc_UPCEAN_DiscNumber_TrackNumber
Sony Music: TrackNumber_TrackTitle_ADMBWF (TrackTitle = Track Name in the CD/SACD Tab)
Universal Music:
DiscPerformer_TrackNumber_TrackTile_AtmosMix_Tempo_MixerInitials_StudioLocation_000 bpm_BIMD. (The tempo, studio location,...information cannot be entered by Pyramix, you will have to rename the file to enter the appropriate info.
Warner Music: TrackNumber_Disc_UPCEAN_TrackISRC_AudioSampleRate_AudioBitDepth.
Note: Custom naming currently not available.
 - **Adjust CD Markers to Video Frames** (CD Tracks mode only) - to have the CD Markers in sync with the video frames. CD Start markers are moved to the previous video frame, CD Stop markers are moved to the next video frame.
This setting is highly recommended to avoid Start Time/FFOA issues in the Dolby Atmos Renderer.
- **Master Configuration:**
 - The Master Configuration grid allows for selecting which busses are to be exported to the ADM Master file, as well as setting the Dolby Atmos Mapping mode and Binaural Render Mode. Please see details of this mapping in the section Edit Dolby Atmos Master Configuration below.
 - **Edit Master Configuration:** Opens the complete Master Configuration window for editing additional settings like Downmix and Trim Controls. Please see details in the section Edit Dolby Atmos Master Configuration below.



- **Processing:**
 - **Real time Mix** – to run the Mixdown process in real-time. This is required if the mixer has any external send/returns or any inserts running in real-time.

Dolby Atmos Master Configuration

- Accessible under menu **Project > Edit Dolby Atmos Master Configuration**

- **Concepts & Rules:**

- The Mixer basically holds the entire Dolby Atmos configuration:
- Beds are implemented as Mix Busses
- Objects are implemented as Object Busses
- Beds definition are automatically derived from Mix Busses channel definition. Bottom layer Channels can be exported as Dolby Atmos Beds or as Dolby Atmos Objects. Top layer Channels and Wide Channels of any Mix Busses are always exported as Objects
- Dynamic Events for Objects are implemented as standard Panning Automation of any Strips patched to an Object Bus
- The entire Dolby Atmos Configuration is derived from the above architecture by simply selecting which Bus to export, selecting which mapping mode is preferred for Beds and selecting the Binaural Render Mode for every selected Channels
- Any Mix Busses selected in the configuration with Bed + Object Mode will create a Bed in the ADM Master file. 7.1.x busses will create a 7.1 bed plus x top objects, 5.1.x busses will create a 5.1 bed plus x top objects, stereo busses will create a 2.0 bed. 9.1.x busses will create a 7.1 bed plus two wide objects and x top objects.
- Any Top or Wide channels of any Mix Busses will be exported as Objects
- Any additional Mix Busses selected in the configuration with Bed + Object Mode will create an additional Bed in the Master
- There is one exception to the above rule, 7.1.2 Mix Busses are entirely mapped to 7.1.2 Beds and no objects are created for these Busses. Any other Mix Busses containing Top channels will map them all to objects.
- Any busses selected in the configuration as All Objects will create only objects in the ADM Master file, with one exception, if the first bus is exported as All Objects and contains a LFE then a 5.1 bed is created in the ADM Master file and that LFE sent to it.
- Any Objects Busses selected in the configuration will be exported as Objects. The Dynamic Events for these objects will be extracted from the Strips patched to this Object Bus Channel.
- All objects sharing the same strips have the same binaural settings over all tracks of a CD.

- **Dolby Atmos Master Configuration grid:**

- **Bus Channels** – displays all Mixer Busses and Busses Channels in the order they are created in the Mixer. This is the order they are exported to in the ADM Master file.
- **Assignment** – this is the mode any Bus can be set to be mapped in the Dolby Atmos configuration:
 - **None** – This bus is not exported in the final Dolby Atmos Master
 - **Bed + Top/Wide Channels as Objects** – this bus is exported as a Dolby Atmos Bed for all bottom layer channels and as objects for all top layer channels and wide channels
 - **All Channels as Objects** – all channels of this bus are exported as Objects in the final Dolby Atmos Master. LFE of the first bus in this mode is sent to main bed LFE though.
 - **Enabled Channels only** - only the channels that are routed to an Object Bus will be exported as Objects.
- **Description** – this is the description of all channels that will be exported in the final Dolby Atmos Master. This information is read-only and is derived from the Strips and Busses of the Mixer. The Beds are named from the Mix Busses they are mapped from and the Objects are named from the Strips patched to the Objects Busses they are mapped from.



- **Group** - this is the Group field. All channels in a Bed will be in the same group. For Objects, each channel can be in different groups.
- **Binaural Render Mode** – this is the binaural render mode exported to the final Dolby Atmos Master Input Configuration for each exported channel.
Note for Binaural Settings in Dolby Atmos Master file containing several beds:
The Binaural Render Mode settings must be the same for the several Beds included in the ADM Master file; e.g. if the L channel on Bed 1 has been set to Near, the L channel will also be set to Near in the following Beds.
When a difference is detected, Pyramix will display the Binaural setting that will be exported, showing the bed description from which the setting will be applied.
E.g. Near -> Mid (overridden by Bed 1-10) shows that the Near setting will be overridden by Mid, which is inherited from the Bed named "Bed 1-10".
The Top Channels are not affected by this behavior, as those channels are defined as Objects in Pyramix.
- **Downmix and Trim Controls:**
 - **Downmix Controls and Trim Controls** can be set as in the Dolby Atmos Renderer configuration dialogs
- **Update Dolby Atmos Renderer:**
 - The current Mapping, Description, Groups, Binaural Settings, Downmix and Trim Control Settings, as well as the Mixer Bus output routing, will be transmitted to the Dolby Atmos Renderer to match the Pyramix configuration.
The button will not be active until Pyramix is connected to the Dolby Atmos Renderer with the Dolby Atmos Connect feature (see below – Dolby Atmos Connect feature updated). Dolby Atmos Renderer 3.7 (or above) required.
- **Export Configuration as ADM:**
 - The current Mapping, Description, Groups, Binaural Settings, Downmix and Trim Control Settings can be exported as an ADM "empty" file from within the Dolby Atmos Master Configuration and imported in the Dolby Atmos Renderer to match the Pyramix configuration. After import in the Dolby Atmos Renderer please selected the INPUT Source button to listen to the Pyramix output.
 - Note: A final Dolby Atmos ADM Master exported by Pyramix can also be imported in the Dolby Atmos Renderer to configure it and will produce the same results. Exporting the configuration only is of course much quicker.
- **Number of bus channels connected to the Dolby Atmos Renderer Input:**
 - When using the *Dolby Atmos Connect* feature, the Pyramix Mixer Bus output routing is automatically set and transmitted to the Dolby Atmos Renderer input, based on the Dolby Atmos Mapping set.
The unused bus channels (channels with Mapping set to None) will not have an output assigned and will not be routed to the Dolby Atmos Renderer.
This setting allows to define the bus channel number above which such automatic routing is not applied.
Eg. You have 26 bus channels with a valid Dolby Atmos mapping (10 channels Bed and 16 channels Objects) and you have additional buses that does not need to be sent to the Dolby Atmos Renderer (a pre-renderer monitoring, a custom downmix, ...).
When using the *Update Dolby Atmos Renderer*, all the bus channels that doesn't have a Dolby Atmos mapping will have their routing removed; the additional busses won't be routed anymore.
If you set the *Number of bus channels connected to the Dolby Atmos Renderer Input* to 26, then the Update Dolby Atmos Renderer will not modify the bus routing for channels above 26.
Note : This setting is global and not linked to specific projects, allowing the user to keep the same audio setup. For example, if the Dolby Atmos Renderer is on an external computer, and you have connected 64 AES67/RAVENNA channels from Pyramix to the ASIO or VAD computer hosting the Dolby Atmos Renderer, set the *Number of bus*



*channels connected to the Dolby Atmos Renderer Input to 64. The same applies if both Pyramix and the Dolby Atmos Renderer are on the same computer with the Merging Audio Device driver, you can set this number of channels according to the number of bridge channels set in MAD (with the *List Bridge channels before I/O's* option).*

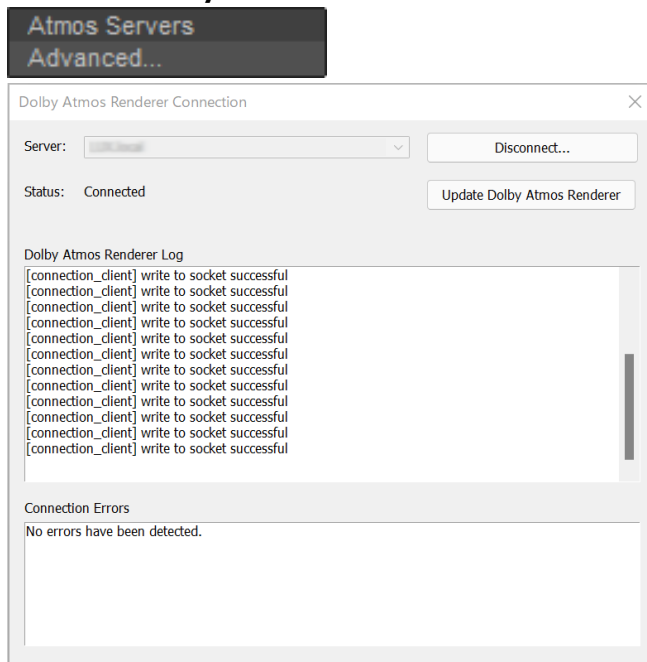
Known limitations or comments

- Known limitation: Only 48kHz Dolby Atmos Masters are supported for now as export. If the source project is set at a different sampling rate then the Mixdown process will convert automatically to 48kHz using the highest quality settings of the Hepta sampling rate converter.
- Terminology mismatch: Pyramix Divergence is equivalent to Dolby Atmos Size and imported and exported as such.

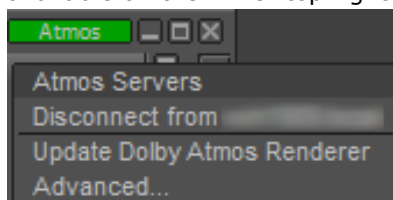


Improvements

- **Hotfix 1 : Atmos ADM Import - Option for adding CD Markers.**
- **Hotfix 1 : Dolby Atmos Connect Advanced menu**



- Status and log of the current connection
 - Server - Custom Server option, allowing the user to manually enter the IP address of the computer hosting the Dolby Atmos Renderer.
 - Update Dolby Atmos Renderer button
- **Hotfix 1 : Dolby Atmos Connect - Update Dolby Atmos Renderer**
When Pyramix is connected to a Dolby Atmos Renderer, the Update Dolby Atmos Renderer is now also available on the mixer top right button.



- **Dolby Atmos Connect feature updated:** Revamped dialog, and now able to transmit Mapping, Description, Group, Binaural render mode, Downmix and Trim Controls, as well as the Mixer Bus output routing.
Dolby Atmos Renderer 3.7 (or above) required.
A new Dolby *Atmos* button has been added on the mixer top row.
By clicking on it, any Dolby Atmos Renderer present on the network or on the computer will be detected.
Simply select the detected device to connect it. The Dolby *Atmos* button will then turn green.
To disconnect, click on the green Dolby *Atmos* button and unselect the detected device.
To send the Dolby Atmos Configuration to the Renderer, please now go in Project > Edit Dolby Atmos Master Configuration and click on Update Dolby Atmos Renderer.
- **Busses with Auro 3D layouts:** Mappable to Atmos in the Edit Dolby Atmos Master Configuration and Export Dolby Atmos ADM Master.
- **3D Panner updated:**
New Dolby Atmos Zones, Elevation and Snap features, to accommodate Dolby Atmos workflow.
3D Panning mode enabled by default in new projects.
- **Media Manager - Reveal in File Explorer:** opens the folder containing the selected file in Windows Explorer.



- **VS3 Generator plugin - LTC Generator:** Timecode generator option available in the VS3 Generator plugin, allowing to output LTC on an audio track.
Note: Since Pyramix 14 / Ovation 10 Hotfix 1, the Mute on Stop option is enabled by default.
Current Limitations:
In Background recorders, will generate an internal timer TC
Reverse Playback not supported.



Fixed Bugs in Pyramix 14 Hotfix 1

- PMX140-36: Fixed. Stereo Dual Pan.
- PMX140-39: TC Generator plugin: mute on stop by default
- Atmos ADM Import - Fixed import of FFOA at 00:00:00:00
- Atmos ADM Import - Fixed import of NOT_INDICATED render wrap mode
- Several Atmos maintenance
- Mixer Strip panner may display wrong front/rear values (display issue only)
- PMX140-38: Fixed. Mixdown between marks.

Fixed Bugs in Pyramix 14

New keys required for Pyramix 14 / Ovation 10 (as of the RC1).

- PMX140-31: Fixed. Some MTFB files can't be mounted.
- PMX140-24: Fixed. CD Index as FFOA not working when exporting One ADM per Track

Fixed Bugs in Pyramix 14 RC2

New keys required for Pyramix 14 / Ovation 10 (as of the RC1).

- PMX140-29: Fixed. Clips no longer grouped when re-opening projects

Fixed Bugs in Pyramix 14 RC1

New keys required for Pyramix 14 / Ovation 10 (as of the RC1).

- PMX140-19: Fixed. VS3 Control Panel: Hires Screen resolution prevents the user from selecting Bridge or other items.
- PMX140-25: Fixed. Mixdown crash when changing Record setting.

Fixed Bugs in Pyramix 14 Beta3

Runs on Pyramix 25th / Ovation 9 / VCube 9 keys during the beta cycle.

- PMX140-23: Fixed. ADM Import Create up to xx additional Objects and Strips to accommodate for the following Import
- PMX140-22: Fixed. Crash Update Renderer when sending more than 128 channels
- PMX125-109: Fixed. TC chase not working when having a video track in the timeline.
- PMX140-16: Fixed. Poor Video Display Performance
- PMX140-17: Fixed. Cannot assign objects to channels above 64
- PMX140-9: Fixed. Crash when setting CD markers after ADM Import

Fixed Bugs in Pyramix 14 Beta2

Runs on Pyramix 25th / Ovation 9 / VCube 9 keys during the beta cycle.

- PMX140-11: Fixed. Mixdown / Export ADM window hidden at times

Fixed Bugs in Pyramix 14 Beta1 (inherits of the Hotfix fixes)

Runs on Pyramix 25th / Ovation 9 / VCube 9 keys during the beta cycle.

- PMX111-327: Fixed. Media Manager: Renamed media can stay online despite unmounting the folders.
- REP-349: Fixed. Library and Media Manager: Copy / Paste not possible if Tab is undocked
- REP-44: Fixed. Libraries: dragging composition snapshots can rename them
- GAIA-1282: Fixed. Media Manager copy from Media Browser
- PMX120-29: Fixed. Library: Paste with Media does not create a library pointer
- PMX125-179: Fixed. Media Manager columns display lost when performing a refresh folder
- PMX125-185: Fixed. Global library - consolidated media path lost
- PMX125-186: Fixed. DNxHD authorization key not working on PMX
- PMX125-188: Fixed. Pyramix crash when opening project with a VST Design Works EQ6 VST3 with UI left open
- MSC-86: Fixed. VS3 control panel will warn user if a MassCore update needs to be installed.



Fixed Bugs in Pyramix 25th Anniversary HotFix4

Requires Pyramix 25th / Ovation 9 / VCube 9 keys

- PMX125-188: Fixed. Pyramix crash when opening project with some VST
- PMX125-190: Fixed. Pyramix crash when removing an Atmos bus.
- PMX125-175: Fixed. Changing channel count error (referring to 4 billion channels)
- PMX125-45: Fixed. MXF - ActiveFormatDescriptor: Add undefined if no value already exists
- Fixed. Change Cross Point Level After Snapshot Automation Cue
- Fixed. Sometimes Delay compensation not called properly.
- Fixed. Issue in Mixer (Atmos) with soloing strips
- Fixed. Album Publishing. Albums in 7.1.4 MTF 32/352 are now supported
- Fixed. Object Router display better identification of if a strip is sent in an object bus.
- Fixed. issue of duplicated VST plug-ins in VST Scanner
- Fixed. Video Playback engine reliability improvements and bug fixes
- Fixed. Added VST scanning option to properly support Waves Plugins
- Fixed. Aux Busses are now safe when an Object Bus is enabled (meter was not fixed)



Pyramix 14 Product Changes

- Windows 7 No longer supported
- New Save format, added save special as Pyramix 25th.

MassCore Technical Notes

- MassCore not supported on Core2Duo. Minimum requirement is a QuadCore. Find system recommendations here: <http://www.merging.com/support/pc-config>
- MassCore is supported under Windows 10 (64bit).
- Pyramix 14 runs on the new Pyramix 14 keys as of the Release Candidate
- Pyramix 14 runs on the same MassCore (RTX64 3.7.4) as of the Pyramix 25th HotFix 3 & 4. MassCore is now protected by Merging key security.
- MassCore Ultra Low latency mode can generate noise if used on some configurations (Turnkey recommended).
In such cases we recommend instead the use of the AES67 mode or Extra Low latency mode.
- Pyramix Core indicator overloading (red) issue. 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 having an SMP key under such configurations.
 - If, under the Bios power options, you have entries such as the *Intel SpeedStep* and *CPU C State* make sure that these options are disabled, as they are potential problems for MassCore. Refer to installation guide or the Windows Configuration guide for all details.
- MassCore & CPU load indicator range (as of Pyramix v10.2 and above)
 - Green from 0% to 74% = Safe mode*
 - Orange from 75% to 84% = Moderate Risk*
 - Red from 85%->100% = High Risk

**MassCore users will have enhanced Core stability when using recommended dedicated Graphic Cards.*

**Native users: Recent laptop owners are often confronted with performance problems when the CPU load is near the mid-point of load, where random CPU jumps can cause sudden glitches. This has also been seen when benchmarking with Non-Merging Applications on recent laptops.*
- When the Core indicator blinks (red), it indicates a drop. Only be concerned if it occurred during Playback/Mix down or Record. To reset the Core drop simply click on the Core indicator. For more information please refer to the appropriate section in the User Manual.
- If you have VST Core peaks under MassCore, users should increase their VST Engine Buffer size value, located under the Pyramix Settings. More information is 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, as they are exclusive to either one.

Plugin Engine Notice

The plugins engine Core distribution is done automatically for optimal performance. The total Core load of the Strips plugins will be processed first, followed by the total Core load of the Bus plugins. The engine is sequentially performing those two processing tasks. Meaning that a high Core load on the Strips plugins side is not summed with a high Core load on the Bus plugins side. Changing a designated Core load to another one is not possible (unless modifying the Mixer configuration) and in no way would it change the total sum of processing passed to the engine for the chosen plugins.

About the Plugins Distribution Core Reading

We measure the time duration of the plugin itself. Time to process Audio Frame / Duration of the plugin itself * 100 = Load for a single plugin. We then compute the multiple plugins (on a chosen Strip or Bus by example) and we calculate the summation of those.

Do not to confuse with the readings below :

Pyramix CPU reading:

The CPU load displayed in the Pyramix bottom bar is not the CPU usage as computed in Windows task manager. CPU load in Native is computed in this way: (time to process audio frame) / (duration of one frame) * 100. Thus, it is the percentage of time used to process in one audio frame duration; this indicator is more useful than CPU Usage because it takes in account CPU stall during processing time.



In MassCore based systems the CPU: load indicator is supplemented by a VST: Core load indicator in the Title Bar. Refer to the Pyramix User Manual for more details.

Windows Task Manager:

Then windows will on its Task Manager CPU measures the CPU time as a percentage of the CPU's capacity.

So, in the end you just cannot open those 3 Windows and expect to have the same readings.

Merging Audio Device (MAD) 2.0

This ASIO RAVENNA/AES67 device supports Multi ASIO Clients and integrates WDM Support. With this new Device Driver multiple applications running ASIO can be launched in parallel on a same system, sharing the same sampling rate and at the same time multiple applications running WDM can be launched in parallel and have their own sampling rate automatically converted to the ASIO sampling rate. This allows monitoring the Windows system sound and any application (such as Spotify, YouTube, PC Sounds files,...) along with any ASIO applications.

Refer to the online MAD documentation for all details.

<https://confluence.merging.com/display/DSI/MAD+Docs>

- Two different modes supported
 - Unite Mode (Automatic Simplified connectivity for Anubis Music Mission, Horus and Hapi).
Unite does not support the Anubis running the Monitor Mission.
 - RAV/AES67 mode (Pro usage for Anubis, Hapi and Horus)
 - NADAC mode (HiFi usage for NADAC users)
 - MassCore mode
- Multi-Client ASIO and thus hosts supported
- Bridge channels support between ASIO clients
- WDM Support and second AUX WDM (as of MAD 2.0)
- Bridge channels support for WDM and Host.

Note: One sampling rate at a time supported for ASIO (The default host one). WDM supports SRC.

MAD Infrastructure Pack (PSO-MAD-INF) required for:

- Virtual Machine Support
- ST2022-7 Support
- NMOS Support

ANEMAN

Important: The ANEMAN comes as a separate installer.

Please download and install the latest ANEMAN in order to manage and monitor your AoIP devices from

<https://www.merging.com/products/aneman>

Ambisonic

Since Pyramix 12 we include a complete hybrid Channel Based/Ambisonic workflow, allowing for encoding, mixing, rotating and decoding Ambisonic signal directly in the mixing console.

Ambisonic Decoders:

- Ambisonic Decoders supported up to 7th in v12, and the b<>com Decoders are now integrated within the Pyramix mixer as of Pyramix 12.0 and upwards.

VR Pack Key option:

- Ambisonic Strips and Ambisonic Groups of 1st and 2nd order are always decoded even if the VR Pack key is not present
- Ambisonic Strips and Ambisonic Groups of 3rd to 7th order are properly decoded if the VR Pack key is present
- Ambisonic Strips and Ambisonic Groups of 3rd to 7th order are decoded using a 2nd order decoder if the VR Pack key is NOT present

To summarize, a user will need the VR Pack key to encode and/or decode HOA, meaning 3rd to 7th order. 1st and 2nd orders are free of charge for both encoding and decoding.

Note: HOA to Binaural is not available into Pyramix but users can run the B<>COM Binaural



encoder licence, available in trial. Follow the instruction here for more information:
<https://confluence.merging.com/display/PUBLICDOC/Bcom+plugins>

RAVENNA Technical Notes

- Windows 10 (64bit) is supported by Pyramix 14 MassCore RAVENNA and Native
- Pyramix 14 system recommendations. Details here:
<http://www.merging.com/pages/pcconfig>
- For ultimate performance we recommend that under ANEMAN you only connect the necessary I/O 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 new Network Switches for use with Horus/Hapi – Ravenna users will find all details along with the configuration guide here:
<https://confluence.merging.com/display/PUBLICDOC/Network+Switches+for+RAVENNA+-+AES67>
<http://www.merging.com/products/horus/downloads>
- RAVENNA users should avoid connecting multiple Horus or Hapi units to any a router/Network not certified by Merging. Refer to the Merging RAVENNA Network Guide for details on the certified RAVENNA switches and their 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 connecting non-RAVENNA devices to this network, such as Tango/Isis/Euphonix controllers or other network devices.
- Don't connect a 100MB Ethernet device if the switch is not multicast; otherwise, the flow control will reduce the bandwidth drastically.
- **RAVENNA I/O Connections :**
In order to create RAVENNA I/O connections please refer to the ANEMAN User Manual (installed along with Pyramix). ANEMAN Quick Connection Guide here below.
<https://confluence.merging.com/display/PUBLICDOC/ANEMAN+-+Quick+Connection+Guide>
Refer to the ANEMAN User Manual for more details.
Recalling RAVENNA connections for a complete setup.
Despite not yet having a complete recall of IO Connections it is possible on certain setups to recall the Presets store in the device (Horus, Hapi, Anubis) that holds one end of the RAVENNA connections and at the same time recall the ANEMAN save connections that holds the other connections end.
Warning: It is strongly advised that before recalling connection that users clear the existing connections.
- **Firewall**
Firewalls can block communication between the computer and the Ravenna devices.
The Merging installers automatically opens the required communication ports in the Windows Firewall.
If you don't use the Windows firewall or if you encounter connection issues, we recommend to disable the Network Firewall.
Windows Firewall Procedure:
Go in Windows Control Panel > Windows Firewall
Click on "Turn Windows Firewall on or off"
Go to the Public Network section and select "Turn Off Windows Firewall"
For other firewalls, please consult the manufacturer documentation.
- **Antivirus**
Some Antivirus such as Avast or Sophos have been known to block the Horus discovery and RAVENNA I/O Connection. Merging also recommends that any Antivirus software is properly configured to not interfere with the DAW. See this page for further details
<https://confluence.merging.com/display/PUBLICDOC/Antivirus+and+Merging+Technologies+Softwares>
- **Windows UAC**
Users should disable the Windows User Account Control
Procedure:
Go to the Windows Control Panel\All Control Panel Items\User Accounts
Open the Change User Account Setting
Set it to "Never Notify"



Pyramix Native Recommendations

- Windows 10 - 64bit supported with Pyramix 14.
- Please refer to our [Windows configuration guides](#) to optimize system performance.
- Administrator rights are required to configure VS3 Control Panel and the RAVENNA ASIO panel.
- The Merging RAVENNA ASIO Frame Mode size can be configured to AES67 (6, 12, 48) of RAVENNA mode (64), verify your network and devices configuration.
- The Merging Audio Device driver can be set to buffer size multiples of 48 (AES67) or 64 samples (RAVENNA), adjust the buffer size to your system in order to get the best performance
- Configure your [Antivirus and Merging Technologies Softwares](#) or turn it off
- Configure your Windows Firewall [Windows Firewall Troubleshooting](#) or turn it off for Public Networks
- Put Windows UAC (User Account Control) to the lowest level (disabled).
- Disable the WIFI (disable the Wireless adaptor not only the WIFI connection)
- Disable Bluetooth if active (under Windows Device Manager)
- Avoid active internet connection while running Pyramix
- Avoid connecting audio interfaces to USB or Firewire hubs, plug it directly into your computer.
- We recommend to activate HyperThreading if allowed by your CPU.
- Power management features must be configured to get a stable system.
- In Windows Control Panel > Power Options, make sure you select the "High Performance" power plan (or "Ultimate Performance" on Windows 10).
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
- Make sure all unnecessary programs are closed. They can tie up useful resources.
- Turn off any software utilities that run in the background, such as Windows Messenger, calendars, and disk maintenance programs.
- Laptops usually have small graphical resources; Merging recommends you pay extra caution when using the Fixed Cursor option.
- Verify the performance of your Native system.
On Windows 10, DPC latencies can be monitored with Latency Mon
<http://www.resplendence.com/download/LatencyMon.exe>
- Laptop users should set their ASIO interface to Topmost Priority in VS3 Control Panel.

Refer to the online documentation for more details

<https://confluence.merging.com/display/PUBLICDOC/Native+recommendations>



V14 Known issues

Merging online knowledge database for updates on the known issues

<https://confluence.merging.com/Pyramix25thAnniversary>

- Windows 10 2004, 20H2, 21H1 are compatible with MassCore/RTX64 -3.7.4, Pyramix 14 Beta 1
<https://confluence.merging.com/pages/viewpage.action?pageId=41713669>
- **WARNING:** Pyramix 14 is supported on 4th Generation Intel Core Processors (4XXXK and higher) and will not launch on previous Processors generation
Recommended specification:
<https://confluence.merging.com/pages/viewpage.action?pageId=24608853>
- Custom installation is known to potentially have issues at installation. We recommend that you install the recommended full Pyramix.
- Pyramix 14 Projects are not backward compatible with Pyramix 25th Anniversary, users must perform a "Save Special as v13.0 / 25th Anniversary" in order to open such project in 25th Anniversary.
- Pyramix projects with v10/v11/v12/25th/14 Bus layout/Structure cannot be saved within a Save Special v9.0 project. A warning message will prevent you from doing so.
- All of the Mixer Ambisonic components cannot be saved within a Save Special v11.1 project and prior, as Ambisonic was not supported at that time.
- Ambisonic decoders only decode to Virtual Rooms with standard channel types and positions. If a custom room is needed, then they need to first decode to a standard bus, having speakers as close as possible to the custom room, then send that bus into the custom bus through a GPS strip
- Saved projects with some tracks unmuted (so that audio plays) will open with all tracks Muted. You are most probably using a Source/Destination project or Template Pyramix where all Track Groups are set to Auto-Solo, Auto-Mute or both by default.
With both settings enabled at project loading time no track is selected by default and all track groups are then muted.
- Legacy Bus conversions to New General Bus. Due to the architecture of the new busses, mono mix busses are now converted to Mono Aux busses and not anymore to Mono Mix busses. Refer to the Pyramix User manual for more details.
- The listing of the Pyramix supported remote controllers is available [here](#)
- Mixdown SRC: The SRC option in the Mixdown is shared with the Media Manager Sampling Rate Conversion tool. Be warned that following a Mixdown that is applying a SRC if you then use the Media Manager Sampling Rate Conversion tool and change the SRC parameters, then those values will also be changed in the Mixdown Dialog Box SRC section.
- Pyramix Video in timeline: if the Video file is shown as offline at project opening, please refresh your media manager to regenerate the Quickmount
- Pyramix Video in timeline: Opening a project referring to multiple video files or edits can take some time (will indicate finishing for a minute or so), be patient.
- Merging does not recommend users that edit while recording do so with timeline media clips that are not at the same sampling rate as the project. This is because a realtime SRC will have be processed could cause potential performance problems.
- Waves plugins users running with a NVidia graphic card should make sure that they have the Threaded Optimization OFF, if set to ON it may cause issue with Waves VST plugins.
Refer to link here:
<https://confluence.merging.com/display/PUBLICDOC/Graphic+cards+recommended+settings>
- Merging does not recommend to use Disk models: Green, Eco series and Seagate.
- Merging recommends that users with External USB disks to have those configured using the "Better Performance" option under Windows disk properties, profiling tab. Refer to the Merging system configuration guide for more details.
<http://www.merging.com/support/system-configurations>
- MassCore: Core indicator will show a peak/overload after a save on large project or when rebuilding the Mixer (project open-close). Simply reset the core indicator by clicking on it.
- VS3 Algorithmix DeNoiser & DeScratcher are supported but will not be maintained anymore
Known issue: They might display "Demo" (while fully functional) until the first project is saved, closed & re-opened.
- Warning message "Not Enough Streams available": This happens when reaching the maximum number of record inputs. In such case we recommend that you reduce your input number count or disable any Background Recorders that are consuming inputs
Known issue: If afterwards, you get a constant Message Box showing "Re-activating Project" at each Playback start, close and re-open your project to correct this.
- Pyramix v8.1, Pyramix v9.0, Pyramix v10, Pyramix v11, Pyramix v12 and Pyramix 25th Anniversary Library formats are compatible between such versions but not with the previous



Pyramix Releases. In order to open these libraries in an older Pyramix version please make sure that you use the proper Save library option. A "Save as Version 7.X" was added to the list

- Final Check Metering is not supported in DXD/DSD mode
- DiscWrite known issues": <https://confluence.merging.com/display/PUBLICDOC/Disc+Write>
- The ADR Keyboard users:
Windows 10 October 2018 Update (1809) and higher requires ChangeMe version 5.25.8. Previous versions will not work along those Win10 updates.
Follow the installation instruction on our knowledge base to update :
<https://confluence.merging.com/display/PUBLICDOC/Pyramix+ADR+and+Ovation+keyboard+inst+all+guide>
- Safety Record issue with the take logger: Pressed commands will be applied incorrectly when the transport is stopped. This means that if you press Abort & Delete while in Safety Record, nothing will happen. However, when you come out of Safety Record and Stop, it will apply the command, and delete the take. Handle with care.
- Multiple projects opened simultaneously: We do not recommend users to having more than 8 Projects open at the same time (due to GDI object limitation).
- Cedar users should install the latest certified version for Pyramix 64bit
<https://confluence.merging.com/display/PUBLICDOC/Cedar+Renderer>
- The Render Tool will create a temp file for the CEDAR and Nova v0.99 at the root of the C:\ Be aware that Merging cannot change the Temp file path of such a third party Renderer.
- Interchange: A non-embedded AAF 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 message. We recommend the use of AAF Embedded when exporting to ProTools 7. ProTools 8 known to be working properly in this case.
- Media Recoverer and DSDIFF Recoverer, those utilities should allow you to repair a corrupted file
<https://confluence.merging.com/display/PUBLICDOC/Media+Recoverer>

RAVENNA Known issues:

- RAVENNA: Switching from MADi Standard (56) to MADi Extended (64) can generate a small glitch, so please avoid doing so during realtime operations
- Merging recommends the use of ANEMAN in order to manage all RAVENNA I/O connections, please refer to the ANEMAN User Manual installed with Pyramix for more details.
- Non-certified RAVENNA configurations might not be capable of sustaining 384 I/O channels @ 1FS (44.1/48 kHz). If you experience noise similar to static, reduce the RAVENNA I/O channel count enabled in ANEMAN. We also recommend that if you have experience such static noise, do not run MassCore in Ultra Low or Extra Latency mode but rather Low latency mode.
- Peaks might show up under the Pyramix Core section if you power OFF or disconnect the Horus/Hapi. Recommendation: A valid connection to an online Horus is always required if the Horus is PTP Master. Reset peaks by Mouse Clicking on the Core indicator section.
- Avoid changing a network address, or disconnecting Ethernet ports on your system when MassCore RAVENNA is running
- ANEMAN quick connection guide available [here](#)
- DSD issues
 - Background Recorders: If the Mixer is not a DSD compatible Mixer (square mixer), the record fails, but no message will be displayed. We recommend that users create a DSD project prior to enabling and starting to work with Background Recorders in DSD.
 - When creating/opening a DSD project the Horus might not switch accordingly between 64/128/256. This has to be done manually