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Pyramix 9 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.

To install the Mykerinos* board, TURN YOUR COMPUTER OFF (shut down then switch the power off). Next plug the Mykerinos* board into one of the PCI/PCI-Express bus slots on your computer and turn the power back on.

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.

Additional installation step for multi-board application

In order to enable multi-board operation, all Mykerinos cards in your PC have to be connected together using a special HDTDM ribbon cable. This cable has to be plugged into the multi-pin connectors located on the top edge of the I/O daughter cards. Please contact your Merging Technologies Sales Partner for information on how to order this HDTDM ribbon cable.
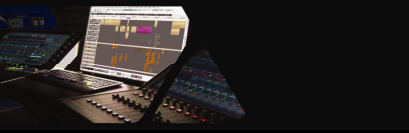- To install the Pyramix Virtual Studio software insert the Pyramix Virtual Studio Installation Media - the installation program should auto-start.
- To install MassCore launch the MT Security Settings, go to the MassCore page and install the MassCore RunTime (a MassCore base key is required).

Updates

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

* The Mykerinos board is not supported under 64 OS.

Pyramix v9 Install Procedure

Additional details on the System Requirements available in the Pyramix V9 Installation Guide.

INSTALLER INFORMATION:

Pyramix v9 is compatible with the following OS
- Windows 7 Professional (32bit): MassCore/Mykerinos, MassCore/RAVENNA, Native/RAVENNA & Native
- Windows 7 Professional (64bit): MassCore/RAVENNA, Native & Native/RAVENNA

Notes:
- *RAVENNA users must install the NET-MSC-GBEX1 PCIe Ethernet card provided by Merging Technologies. Refer to the Pyramix v9 Install guide for details*
- *MassCore/RAVENNA is only supported under Windows 7. The MassCore NET-MSC-GBEX1 PCIe Ethernet card is also only supported under Windows 7 (32bit or 64bit)*
- *Since Pyramix v8 the Mykerinos None-MassCore mode is no longer supported.*
- *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 installer comes in two versions. A 32bit version (32 bit OS) and a 64bit version (64bit OS)*

INSTALLATION STEPS:

User can refer to the Pyramix v9 Installation Guide

Windows 7 Professional (32bit) users:

MassCore/Mykerinos, MassCore/RAVENNA, Native/RAVENNA & Native

STEP 1:
Merging recommends that you remove the present Pyramix version installed
Before doing so you can back up your Projects and save your settings, keyboard shortcuts, templates.
1. Afterwards go to the Windows Control Panel
2. Select "Programs and Features" (Windows 7) and remove the installed Pyramix version (Pyramix 5.X or 6.2.X or 7.X or v8.X versions)

Notes:
- *MassCore users running Pyramix v8.1 and above do not need to remove the RTX version installed*
- *MassCore users running a version prior to Pyramix v8.1 will need to remove the RTX version installed, we recommend that users remove the previous MassCore version from the MT Security MassCore Tab.*
Refer to the Pyramix V9 Installation Guide for more details

STEP 2:
Download the Pyramix 9.0 – 32bit installer
1. Run the Pyramix 9.0 – 32 bit installer
2. If asked to install Uncertified Microsoft Drivers please continue and confirm the install authorization (do not use Wizard automatic detection). You can also enable the "Always trust Merging Technologies" option
3. Users might also be asked to install pending requirements like "Bonjour" for Windows, please proceed
3. Reboot your System

STEP 3:
Enter your V9 keys (Pyramix v8 keys are valid for the duration of Pyramix v9 beta cycle)
1. Launch MT Security Settings from Windows Start>Control Panel>MT Security Settings
2. Enter your Pyramix v9 Keys (effective since v9 RC1)

Windows 7 Professional (64bit):

MassCore/RAVENNA, Native & Native/RAVENNA
STEP 1:
1. Make sure that you download the Pyramix v9 -64 bit installer
2. Log on with administrator rights (If you had a Pyramix version installed under 64bit make sure that you remove it)

3. Run the Pyramix v9.0 – 64bit installer
4. If asked to install Uncertified Microsoft Drivers please continue and confirm the install authorization (do not use Wizard automatic detection). You can also enable the "Always trust Merging Technologies" option
5. Users might also be asked to install pending requirements like "Microsoft Visual C++ 2010" or "Bonjour" for Windows, please proceed
6. Reboot your System

STEP 2:
1. Launch MT Security Settings from Windows Start>Control Panel>MT Security Setting and enter your Pyramix v9 Keys (v8 keys are only valid for the duration of the V9 beta cycle)
2. MassCore users must make sure that they have a valid *MassCore-64 bit* key and the *RTX 64 Activation key*. Make sure that those are entered in the MT Security Settings.
3. MassCore users must install the new MassCore RTX 64bit version from the MT Security Panel under the MassCore Tab. We recommend that your system is connected to the internet for the RTX64 automatic activation process.
4. A reboot of the system is required afterwards
5. Configure your VS3 Control Panel accordingly prior to launching Pyramix
Note: If you get a VS3 error the first time you launch Pyramix, please relaunch Pyramix.

RECOMENDATIONS:

MassCore:
▪ Under Windows 7 – 32bit make sure that your system is configured with the HyperThreading disabled, otherwise MassCore cannot be installed. Refer to Pyramix v9 Installation Guide for all details as some specific BIOS settings are recommended. Only MassCore RTX -64 bit users can run with Hyperthreading enabled, this is so since v9.0Beta2 >. By default 2 Cores will be assigned to MassCore, as we leave a pair number of Cores for Windows. Merging recommends Hyperthreading users to run with the MassCore SMP key.
▪ Reboot your system and make sure that you select the "MassCore" boot entry line at Windows Start Up. If you do not select the MassCore boot line you could end up with an RTX blue screen*.*
▪ Users running MassCore 64bit will not be able to move their license to another system unless making this demand through the Interval Zero (RTX) Support IntervalZero Support site
This is so because the MassCore/RTX 64bit keys are now linked to the system.
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 Merging if this is what you'd desire.
▪ Do not un-install MassCore/RTX64 bit as this will void your current RTX 64bit key. The key relocation in such case will have to issue by Interval Zero.
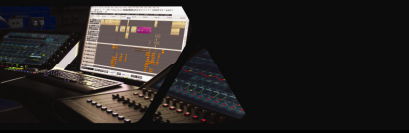
RAVENNA:
Refer to the Merging RAVENNA Guide for all details.
▪ Disabling Windows Firewall is recommended (no internet connection recommended)
▪ Merging recommends setting the Merging MassCore NIC Ethernet card and Horus to Auto IP addressing
▪ Enable RAVENNA mode from the VS3 Control Panel (NOTE: the Merging Interface must be connected)
▪ We recommend the installation of the Google Chrome browser for Horus remote access
▪ Use "Easy Connect" (installed with Pyramix v9) to manage the RAVENNA connection
▪ Users can now connect multiple Horus's through the Merging certified Dell network switch. Refer to the Merging RAVENNA MassCore 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 5.0 to go along side this Pyramix v9.0.*
▪ *A Save Special as v8.1 was added for user that wish to open Pyramix v9 project in a v8.1*
▪ *MassCore RTX64 User upgrading their processor must follow a specific procedure, please contact support@merging.com for more details.*
▪ *A new MTCleanUp v9 utility is available through Merging's Support for those having problems with their installation*

Pyramix 9 Release Notes

New Features

Pyramix full 64 bit Support:
- Pyramix v9 has been ported to 64bit. This means a big gain when using project that demand a great amount of Memory.

Mixer ReVamp:
The Pyramix mixer went though a revamping. Please refer to the description below for details on the updates and new features.

Coloring:
- The Strips and Busses colors are now displayed in the background of the components.
    - Two buttons have been added the right side of the mixer to show/hide these coloring
        - [SC] Strips Coloring
        - [BC] Buses Coloring
- The selected Strips are now properly highlighted on the whole strip surface.
- The selected Busses are now properly highlighted on the whole surface as well as on their Master Strip.
- The VCA Groups have a color that is displayed on the VCA master fader and on all faders in the group
    - A new button, [GC], on the right side of the mixer to show/hide the Group Coloring.
- The Routing Page now displays the Strips and Busses colors
- The Automation status of all components is now displayed as a background color. See details below under the Mixer Automation changes.

Sections:
- Mix Busses, Aux Busses and Effects are now grouped by sections. Each section has a header to visually separate them.
- Sub Groups are now displayed in the Input Strips section for better readability and to allow multi-selection actions.
- The Mix and Aux sections have a popup menu available by clicking on a [+] button on the right of the section header to focus on a given bus. This menu also allows for collapsing or expanding all busses in the section.
- Clicking on the Aux VU-Meter focuses that bus

Aux busses:
- The Aux Busses now have a VU-Meter in display.
- Stereo Aux busses in "Disabled IP" state, will display a pan or balance button for the mono or stereo strips feeding it.
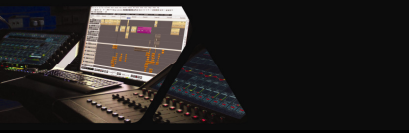
Effects:
- The effects section will show empty effects slots. Left clicking on an empty slot will show the Add Effect menu

Preamp:
- The Message displayed when loading a project to update the Preamp settings of the Horus has been updated for clarification
- The PreAmps gain will now go from 0dB to +66dB

Automation:
- The Automation modes have been redefined to match industry standards.
- These new modes are displayed on the bottom of the mixer for each Strips.
- The new modes are a concatenation of the former Automation modes and Automation Auto-Write modes:
    - Touch (former Auto-Write + Write & Release)
    - Latch (former Auto-Write + Write & Hold)

- Trim Touch (former Auto-Write + Update & Release)
- Trim Latch (former Auto-Write + Update & Hold)
- Record (former Record)
- Read (former Play)
- Isolate (former Isolate)

▪ These new modes are also available in the main Pyramix Automation Menu and set the complete console to these modes.
▪ The buttons on the bottom of the strips set the mode for the whole strip. Each component can still be changed independently.
▪ When changing the Automation mode of a part of the strip, the UI now shows a visual representation when in Follow Strip Mode
  The component center is colored with such Automation code.
  - Isolate=Grey
  - Read=Green
  - Write = RED.
▪ A second button under the Automation mode of each Strip allows setting the Automation Release Mode. Based on the former Automation Release Modes.
  - Auto-Release
  - Snap
  - Write To Next
  - Write to End

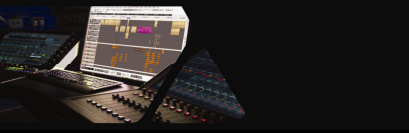There are now two "levels" of automation modes in the console:
o Level 1:
  ▪ The modes as defined per Strip on the bottom of the mixer, they are Touch, Latch, Trim Touch, Trim Latch, Record, Read, Isolate
  ▪ These modes are now also available through the contextual right-click mouse button under Strips > Automation and simply affect the bottom buttons
  ▪ These modes do not color the mixer strips, only the buttons on the bottom of strips
  ▪ The Automation menu in Pyramix does affect these modes for the complete mixer and are now properly renamed Console Strips Mode - XXX and Console Strips Release Mode - XXX. They are now also properly checked to reflect the console mode when in a toolbar.
o Level 2:
  ▪ The modes available through the contextual right-click mouse button under Automation (per component), Bus > Automation (for the whole bus), Mixer > Automation for the whole mixer
  ▪ These modes supersede the Strips level 1 mode and they are: Follow Strip Mode, Record, Read, Isolate.
  ▪ When in Follow Strip Mode, the level 1 Strip mode for the whole strip applies to the component, when in Record, Read or Isolate the component ignores the Strips mode.
  ▪ These modes DO color the mixer components and overwrite any strip or bus color.

I/O section:
▪ The Mixer I/O section is shared with the Automation buttons section
▪ When collapsed the section displays the Automation Strip Automation status buttons
▪ When expanded the section displayed the Mixer I/O section and VCA settings
▪ The Direct Out controls are now only visible in the I/O section if they are enabled in the configuration page.

Signal Flow [FL]:
• When selecting a Strip its VU-Meter turns to green and the complete signal path where the signal is sent from that strip is also colored to green. Loops are taken into account in the signal flow coloring
▪ New added Signal Flow button [FL] on the right side of the Mixer. It will colors the mixer components background in green to show the signal flow, even when no actual signal is traversing the mixer
▪ If a VCA Group is selected, all Strips in that group are used to compute the signal flow information
▪ If a multi-strip selection is done (see below for details) the whole selection is used to compute the signal flow information
▪ If a Master fader is selected in this mode, the signal flow is colored in blue to show all strips feeding that bus. No loops are taken into account in this case

- Pressing the Control key when clicking on the [FL] button, will reduce the Mixing console to the only components participating to the signal flow. Control clicking again restores the mixer to its original state
- There are four new menu in the main Pyramix Selection menu:
  - Show Selection Console Signal Flow: To display the signal flow on the console of the current clips selection on the timeline
  - Toggle Selection to Console Mapping: To toggle both above actions with a single command/keyboard shortcut
  - Map Selection to Console: To reduce all components of the console to the signal flow of the current clips selection on the timeline
  - Reset Console Mapping: To restore the console the its original state

Groups:
- Pressing the Control key when moving a VCA master fader disables the delta between the faders in the group

Strips Multi-Selection:
- Strips in the console can now be multi-selected
- Click on a Strip then press Control and click on other Strips number to add remove other strips
- Click on a Strips then press Shift and click on another Strip number to select a range of Strips
- When Pressing Control + Shift the following actions are performed on all highlighted strips:
  - Double-click on any Faders, Gain Knob or Pans to reset them
  - Move Faders or Gain Knobs and preserve their delta
  - Click on any On/Off, Mute, Solo, IP, Phase, Record Ready, etc… Any buttons
  - Adding strips in VCA groups
  - Adding Effects (Support for VS3 effects)
  - Copying Effects (Support for VS3 effects)
  - Stem change
- When Pressing Shift only the above behavior is performed on ALL strips.
- When Pressing Control + Alt on a MultiBus Matrix router the patching is performed on the selected strips by incrementing the patched slot for each strips

Strips :
Rearrangement:
- Strips can now be moved directly in the console UI
- Only Input Strips, Groups and SubGroups can be moved. The Masters Strips cannot.
- Using menu:
  - Select one or more Strips
  - Select the menu Strip > Copy Selected Strips
  - Select a destination Strips <x>
  - Select the menu Strip > Paste Copied Strips Before <x> or Paste Copied Strips After <x>
- Using Drag & Drop:
  - Select one or more Strips
  - Press Control + Shift + Alt
  - Drag the selected Strips onto any other Strips
  Note: If a SubGroup is not moved, i.e. sitting on the right side of every input strips, it stays in place when scrolling input strips. When moved in the middle of other input strips it is then scrolled with them.
Level :
- Increase resolution of .1 dB on all gain controls when using CTRL as a modifier in the mixer

Side effects / limitations:
- The Double-Rows mode of the mixer is no longer supported
- The Control and Shift modifiers used to change the Auto-Write and Release Automation Mode are no longer supported. They have been replaced by the per-strip mode

MeterBridge and SubGroups:
- The MeterBridge and the SubGroup now follow the same behavior than in the main Mixer, i.e.
  Examples:
  - If they are positioned at the far right, after all input strips, they are not scrolled with input strips and remain always visible near the busses masters, and are displayed on the second row busses section of the MeterBridge

- If they are moved between input strips, they are therefore scrolled along with input strips in the main Mixer and are displayed on the first row section of the MeterBridge along with input strips.
▪ MeterBridge Labels are now following the Strips and Busses colors, like the Routing Page.

Monitor Panel
The Monitoring Section has received a minimalistic revamp to be slightly aligned to the Mixing Console

New VS3 plug-ins available (from FLUX)
Those new VS3 plugins are available in 32bit & 64bit and require that you have the valid key
The Flux VS3 plugins come with a separate installer, a 32bit and a 64bit installer.
A detailed documentation of each plug-in can be found under C:\Program Files\Flux
▪ Elixir v3: Elixir is a novel kind of program limiter carefully designed to accomplish a truly natural sounding result without changing the nature of the audio material and its timbre, presenting none, or effectively reduced, conventional limiting "pumping" effects even during heavy processing.
▪ Epure v3: Epure is a state of the art five-band equalizer using a special state space based implementation to ensure the best signal to noise ratio.
▪ Bitter Sweet v3: FREE / No key Requires.
  Bitter Sweet Is a transient manager allowing to magnify or to lower a particular instrument in a mix by increasing or decreasing transients of the complete signal.
▪ Syrah v3: Creative adaptive dynamics processor.
  New generation dynamics processor utilizing real time dynamic detection and level dependent processing, providing adaptive dynamic capabilities, which mean that Syrah is always trying to adapt to the music and to the beat of the material.
Pure Series:
▪ Pure Compressor v3
▪ Pure DCompressor v3
▪ Pure DExpander v3
▪ Pure Expander v3
▪ Pure Limiter v3
▪ Solera v3
Note: More VS3 Flux plugins be ported to VS3 in a near future.
Warning: Pyramix v8.1 or v9 projects (32bit) that used the previous VS3 series (e.x. PureCompressor) will not transfer their parameters to the new VS3 Flux v3 plugins series (e.x PureComp v3) which are supported under 64bit, as those version are different. This means that users of such plugins have to be careful if they open their 32bit projects under 64bit OS.
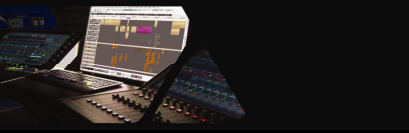
Mixdown Dialog ReVamp and new option:

Revamping of the Mixdown dialog window
▪ Mixdown media output file set up has a selector which comes with 3 options.
  o Single Media
  o One File per Track
  o One file per Bus/Stem
▪ The Mix Source section provides the User the option to select which Mix Sources will be contained in the Mixdown. Columns description.
  o Bus section: Select the desired Bus source by double clicking its checkbox
  o Channel Mapping: Change the Channel Mapping layout (applies mainly to Auxes & Surround Buses). A dropdown menu will become available when a Channel Mapping is possible.
  o Destination Track: User can decide where the Mixdown resulting file will be placed in their Timeline. This feature replaces the "Place in Timeline" option (only available in Bus/Stem set up mode).
▪ New channel mappings allowing no LFE (e.g. 5.0 mix from a 5.1 bus)

Loudness and True peak Limiting:
New options available in Mixdown dialog, which can be activated in order to apply loudness and true peak limiting to your Mixdown.
▪ One file per Bus/Stem mode must be enabled
▪ Settings Option

- o True Peak Limiting Normalizations must be enabled (checked) in order to be applied
- o Three parameters
  - Target Loudness
  - Max. True Peak
  - Max. Gain change
- A measurement report will be displayed after the Mixdown processing
- The measurement report is available in a Log file that can be found next to the Mixdown media
- 2nd pass (normalizing) loudness analysis is aware of the channel mapping. For example, it now gives accurate Post normalization Loudness measurement results with 5.1 SMPTE mixes

Improvements

New MassCore (RTX) version for 64bit users:

A new MassCore RTX 64bit version is available only for MassCore users under Windows 7 – 64bit
- This new version requires a new MassCore-64bit key and a new RTX 64 Key
- Windows 8 is currently not supported

Technical Notes:
- We recommend user to be logged on their system with Administrator rights
- MassCore 64bit RTX Key Replacement demand have to be made through the Interval Zero Support team IntervalZero Support site
- Users running MassCore 64bit will not be able to move their license to another system unless making this demand through the Interval Zero (RTX) Support IntervalZero Support site . This is so because the MassCore/RTX 64bit keys are now linked to the system.
- 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 the system where it has been installed in the first place. Please contact Merging if this is what you'd desire. Special installer procedure will be required in such case.
- Hyperthreading:
  - Not supported under Windows 7 – 32bit make sure that your system is configured with the HyperThreading disabled. Refer to Pyramix v9 Installation Guide for all details as some specific BIOS settings are recommended.
  - Supported with MassCore RTX -64 bit since v9.0Beta2 >. By default 2 Cores will be assigned to MassCore as we leave a pair number of Cores for Windows. Merging recommends Hyperthreading users under 64bit OS to run with the MassCore SMP key.

Ultra and Extra Low latency mode support:
- The MassCore Latency modes (VS3 Control Panel) supported are:
  - Low latency (5.33 ms @ all FS)
  - Extra Low Latency (2.66 @ all FS)
  - Ultra Low latency (1.33 @ all FS)
- The latency mode can be selected from the VS3 Control Panel. Be aware that the Horus also has its latency setting.
- Merging recommend the use of Ultra and Extra Low latency only the recommended Merging RAVENNA configurations.

VST plugins (Scan):

- VST Scanner has been removed from the Pyramix installation
- By default the "\Program Files\VstPlugins" and/or "\Program Files\Steinberg\VstPlugins" directory will be scanned if it exists. User can select their VST plugins directory by going under the Pyramix Settings>Mixer>VST Plug-ins Settings and adding the directory where the installed VST plug-ins are

Notes:
- The initialization of third parties VST plugins takes place at the Pyramix Launch and can take a long period of time (Close to 4 minutes for a Waves plugins bundle scan). Be patient if you see that your Splash screen remains in display.
- If a crash occurs during the scanning the VST scan will be automatically relaunched, up to 3 times in a row, if a forth crash occurs the user will be ask if he wants to relaunch the VST scan
- Users can bypass the VST Scan by launching Pyramix if the CTRL key kept pressed
- The faulty plugins dll will be stored under C:\Program Data\Merging Technologies\VSTplugins\VSTPluginsBlacklist.crash
- Force Rescan will retry to register the VST blacklisted plugins
- Under 32 bit OS: Merging will support VST 32bit plug-ins only

- Under 64 bit OS: Merging recommends its users to install VST 64bit plug-ins versions
- Pyramix v9 – 64bit does not support VST plug-ins that are in 32 bit
  A workaround for VST 32bit plugins users under a 64bit OS is possible by installing the jBridge application. Find more details here: http://jstuff.wordpress.com/jbridge
- 32 bit Waves plugins not supported by Merging when using jBridge under a 64bit OS. Please use Waves 64bit plugins in such case.

Final Check:

- New Final Check preset "ARIB TR-B32" was added in the Final Check SetUp page

Virtual Transport 2 (VT2):

- Revamping of the Virtual Transport
- At Pyramix launch users must approve the Firewall message box to allow VT2 to launch
- Updated Settings Page
  - Location: All Settings>Remote Control>Virtual Transport 2
  - The new dialog page shows all the VCube available over your LAN
  - The dialog shows 4 columns
    - Computer: System name of the available VT2 device
    - Application: Only VCube for now is available (Pyramix planned for further beta)
    - Port: VT2
    - Status of the connection: 3 status possible
      - Available: VCube allowed to be connected to
      - Connected: Will display the currently attached VCube
      - Not Available: Will list the VCube that were previously connected (as a history)
  - Connection procedure (buttons)
    - Connect: When a VCube is Available for connection, select it in the list and press the connect button. Its status should now change to "Connected"
    - Disconnect: User that whish to disconnect a VCube can simply select the VCube listed and press the Disconnect button. The VCube status will then change to Available.
    - Remove: To be used if you want to Remove a VCube from the list. In such case the entry line will be completely removed from the Dialog.

- GUI updates
  - Pyramix Transport Windows replaces the VT1 application GUI
  - The Pyramix VT2 settings replaces the Network Frame
  - The VT1 video player is replaced by the VCube Essential Player
  - Cluster notion has been replaced by the VT2 settings

- Pyramix & VCube Interoperability:
  - Import: Video clips will automatically be opened in VCube for AAF, FCP-XML & Video Clips
  - Timeline range display will auto-match in both Pyramix and VCube if setting is enabled within VCube.
  - All Pyramix timeline operations with an impact on the Sound & Picture (Auto-Ripple, Insert Silence…) will remain synchronized on both the Pyramix and VCube side.
  - Pyramix clip Editing functions will be reflected in VCube

- Removed or replace since VT2
  - TC Player (Planned in Pyramix upgrade)
  - QT Video Player (Replaced by VCube Essential)
  - DS Video Player (Replaced by VCube Essential & VCube SE for capture)
  - MIDI Sync (Planned in Pyramix upgrade)
  - Pyramix client (Removed/Revamp)
  - VCube client (Removed/Revamp)
  - The Chase mode: Has been replaced by the Pyramix built-in Chase synchronizer
  - Client State Saving: Obsolete as the state is now saved within the Pyramix project
  - The Editing mode is by default set to Synchronize with VCube editing moves

- o TC Master: The Pyramix transport will now list the TC Master for each device (refer to the Transport Master section)
- o A Virtual Transport Key is no longer required
- o The Sony IP (Ethernet) Pipe

- ▪ Configuration prerequisites:
  - o Pyramix & VCube combo (on same system)
    - ▪ We recommend that Pyramix is configured for MassCore or Native use (VS3 Ctrl Panel)
    - ▪ VCube should be in Mykerinos or ASIO Bridge mode
    - ▪ VCube configured with AJA must a common Video Ref feeding the AJA and the Horus/Mykerinos. In such case Pyramix in Native mode is not recommended (potential drift issue)
  - o Pyramix & VCube on different system (standalone)
    - ▪ Both system must be on the same LAN
    - ▪ Each system must receive a common Video Reference

Record:

- ▪ We now allow recording of unpatched strips

Automation Improvements:

Improvement to avoid timeline zooming issues
- ▪ On Automation Line:
  - o Nothing=Move or Create Automation Point
  - o CTRL= Trim Automation Line
  - o CTRL+SHIFT= Draw Automation Line
  - o CTRL+ALT= Delete Automation Points
- ▪ On Envelope:
  - o Nothing=Move or Create Envelope Point
  - o CTRL= Trim Envelope Line
  - o CTRL+SHIFT= Draw Envelope Line
  - o CTRL+ALT= Delete Envelope Points
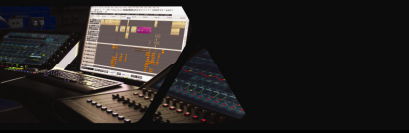
New Preview Modes
- ▪ Added options under Pyramix> General Settings>Application>Automation
- ▪ User can now determine which automation state is affected by the Preview using checkboxes Affect Parameters in:
  - o Isolate
  - o Read
  - o Touch/ Latch
  - o Write / Record

Track Header
- ▪ Modification to the behavior of the [A] and Automation Track Name in the Track Headers:
  - o Both the Left and Right mouse button have the same action on the Automation Track Name that what the Right Mouse button did (and still does) when clicked on the [A] button.
  - o This allows for accessing to the Init, Snapshot, Delete and Trim commands on extra automation tracks that purposely don't have the [A] button.

Misc.

- ▪ Improved accuracy of sine generator for frequency values being fraction of the sampling rate

Bugs fixed Pyramix v9.0 Release

- MT5943: Fixed. Add/Remove VT2 machine with ISIS attached produces a crash
- MT5942: Fixed. ISIS random Hang if VCube in Chase
- MT5933: Fixed. Fixed. Jog/Shuttle potential crash or bluescreen
- MT5931: Fixed. Undo operation that adds a track -> crash
- MT5874: Fixed. VT2 potential crash when closing Pyramix or disconnecting VCube
- MT5459: Fixed. Library snapshot: Single clip takes wrong TimeCode In
- Fixed. RTX shutdown procedure
- Fixed. Eucon MTOASISTPortEUCON.dll registration issue

Bugs fixed Pyramix v9.0 RC1

- MT5915: Fixed. Cannot launch Pyramix MassCore 32bit if you have Mykerinos only
- MT5908: Fixed. Mixdown Channel mapping does not work with OGG/FLAC/MP4
- MT5905: Fixed. Digital Release cannot process due to Error "No Mix Bus in you Virtual Studio"
- MT5904: Fixed. Mixer's Dither user interface rotary button display problem
- MT5903: Fixed. Potential feedback opening Mixers as monitoring mode changes
- MT5902: Fixed. Pyramix Cursor not auto-playing if a VCube is chasing (VT2)
- MT5892: Fixed. PreAmps: the Mic/Line gain range not working well with ASIO Driver
- MT5879: Fixed. Groups: the groups can break down when using Edit Fade Near Cursor (Q)
- MT5861: Fixed. Pyramix Settings changes very slow to update
- MT5858: Fixed. Pyramix Settings changes can cause random crash
- MT5856: Fixed. DSDIFF non dubbing chase record : TC is not correct
- MT5855: Fixed. Digital Release should not use Mixer Dither setting
- MT5796: Fixed. Import AAF (OMF): Added Incremented Folder ignored
- MT5709: Fixed. Fade editor focus wrong fade
- MT5486: Fixed. Strip Tools: Automation does not update plugin GUI status (On Off)
- MT4437: Fixed. Newly created Machine does not have a TC Master
- Fixed. VCA do not scroll anymore and stay in display if on the far right of Mixer
- Fixed. SACDDiscBuilder registration issue
- Fixed. Mixdown: Wrong file naming for "one file per track" media generated with channel mapping filename suffix shows unmapped channel information instead of the remapped one

Bugs fixed Pyramix v9.0 beta4

- MT5893: Fixed. Render FX Rack crash with Runtime Error
- MT5900: Fixed. Mixdown Limiter when applied to BWF will not get back proper waveforms.
- MT5249: Fixed. VS3 Parametric EQ display mismatch
- Fixed. MassCore boot problem and potential blue screen
- Fixed. Mixdown Normalizer and Limiter options are now working

Bugs fixed Pyramix v9.0 beta3

- MT5886: Fixed. Some Generated CD images crash due to Dither
- MT5885: Fixed. Allow for editing Envelope of clips having different media
- MT5876: Fixed. Group poorly regrouped after a slice in a nested group
- MT5873: Fixed. Wrong rating line displayed for some custom media markers
- MT5872: Fixed. Automation + Envelopes modifiers change
- MT5869: Fixed. Automation global automation icons status no longer displayed
- MT5867: Fixed. SubGroups not working in Monitor Panel (muted)
- MT5866: Fixed. Pyramix & VCube project opening option, not opening Video on the VCube side
- MT5862: Fixed. GPIO: Driver included in installer not working (not loaded)
- MT5851: Fixed. Mixdown should not perform the automatic DSDIFF master re-mapping
- MT5849: Fixed. Mixer: Route Page Direct Out might crash Pyramix
- MT5848: Fixed. Mixer: Meter Bridge error or crash when opening some project
- MT5787: Fixed. Library: Closing Search Media Libraries breaks the following searches
- MT5778: Fixed. Pyramix v9 64bit gets repaired if EuCon is removed from system
- MT5745: Fixed. AMR: Drag & Drop not working under 64bit OS
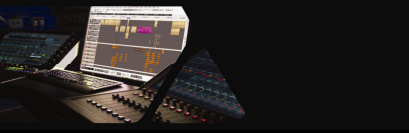- MT5689: Fixed. Automation Preview options to improve workflow.

- MT5564: Fixed. Timeline Automation Editing not enabled after a S/D edit when "Auto Select Destination after edit" is enabled
- MT5561: Fixed. Source Destination - Undo causes confusion to soloed groups
- MT5526: Fixed. Source Destination - Automation does not always follow fade editor changes
- MT5249: Fixed. VS3 Parametric EQ display mismatch
- MT4101: Fixed. Automation editing in Auto-Ripple mode: various bad behavior
- Fixed. Editing of grouped clips envelopes not sharing the same media file
- Fixed. MassCore users under 64bit who encountered a RTSS Failed Exception message after a crash will not longer need to restart their system in order to launch back Pyramix.

Bugs fixed Pyramix v9.0 beta2

- MT5802: Fixed. RTX64 Re-Activation not working from MT Security Panel
- MT5785: Fixed. CD player: not opening in 64bit
- MT5763: Fixed. VST Scan: Will keep correctly scanned VST plugins if crash occurred
- MT5753: Fixed. MassCore/RTX64 installation and configuration issue
- MT5746: Fixed. Horus: RAVENNA ASIO driver not working in 64bit
- MT5749: Fixed. AAF support of Stereo Tracks
- MT5740: Fixed. VST Plugin Folder: Horizontal scroll bar not working
- MT5739: Fixed. VST scan potential crash
- MT5727: Fixed. Pyramix crash when deleting CD tracks.
- MT5714: Fixed. Lacking VST scan info on splashscreen
- MT5700: Fixed. Mixer: Cannot add VST plugin (64bit) from Mix page
- MT5680: Fixed. Disc Write: Crash when changing the CD write speed
- MT5677: Fixed. Strip Tools: cannot use horizontal scroll (64bit)
- MT5663: Fixed. Mic PreAmp settings not correctly recalled
- MT5644: Fixed. Improve loading of Horus settings warning message
- MT5623: Fixed. Allow recording of unpatched strips
- MT5597: Fixed. Shift + Drag and Select does not change clip colour on selection
- MT5594: Fixed. Open most recent icon makes Pyramix crash at startup
- MT5567: Fixed. SubGroups solo safe not working adequately
- MT5548: Fixed. RAVENNA ASIO panel shows a "Network Throttling error" message under 64 bit
- MT5479: Fixed. AVID/EuCon v3 issues
- Improved Bonjour version for Horus stability and discovery

Bugs fixed Pyramix v9.0 beta1

- MT5732: Fixed. Scene & Take parsing broken in Wave/BWF files
- MT5713: Fixed. Horus MTC stream was not correct on minute change, causing Third Party DAW (Live and Reaper) MTC chase was inaccurate at each minute edge.
- MT5690: Fixed. CD Image & DDP export has glitch a ~2 samples at end of last track on burned CD
- MT5688: Fixed. minus one frame error in backward chase
- MT5687: Fixed. AAF containing files with different sampling rates makes Pyramix crash
- MT5657: Fixed. Secondary Audio devices option not working in 64bit
- MT5650: Fixed. Noise converting a Project DSD to DXD at opening (if input connected)
- MT5583: Fixed. The PreAmps Hot Level gain non audible in RAVENNA. When in DSD 256
- MT5459: Fixed. Library snapshot: Single clip takes wrong TimeCode In
- MT4528: Fixed. USB Sync 9pin is not working immediately

Product Changes, Technical Notes & Known Issues

Product Changes:

<u>32bits</u>
- Interchange: DAR no longer supported
- The Timezone time-stretch tool is no longer supported in Pyramix v9 and has been removed. Prosoniq MPEX4 or Dirac are recommended. Contact your local dealer.
- Virtual Transport changes (refer to release notes below)

<u>64bits</u>
- Missing VS3 plugins (Some plugins under 64Bits are not yet available).
  - Aphro and VB plugins VS3 series
  - DeNoiser & DeScratcher
  - Arkamys
- Render: Nova & Levelizer are no longer supported
- Interchange: Akai DD/DR, ProTools and DAR are no longer supported under 64bit
- The Timezone time-stretch tool is no longer supported in Pyramix v9 and has been removed. Prosoniq MPEX4 or Dirac are recommended. Contact your local dealer.
- Middle mouse scrub not yet supported
- 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
- Virtual Transport changes (refer to release notes below)

MassCore Technical Notes:
- MassCore not supported on Core2Duo since Pyramix v8. Minimum requirement is a QuadCore.
- MassCore is supported under Windows 7 (32bit and 64bit)
- MassCore 64bit RTX Key Replacement demand has to be made 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 Activation key is linked to the system and not the dongle. This only applies to 64bit.
- In order to run MassCore 64bit users will need to have both the RTX64bit Activation key and the MassCore 64-bit key.
- If your Core indicator in Pyramix is always overloading (red). Recommendation:
  - Under a 32 bit OS: The Hyper-Threading must be disabled in the Bios. If it was enabled you might have to un-install RTX MassCore and re-install it.
  - 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
- 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% to100% Red zone (performance could be at risk if major screen redraws are initiated by the user).
- 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 are not supported under a 64bit Operating System and will only remains supported under 32bit.
- Since the Release of version 8.0, Pyramix systems are only available in either Native or MassCore versions. Mykerinos Technology can still be used for I/O, but the DSP mixing power on the cards officially becomes legacy technology. This doesn't mean that your Mykerinos Based systems is obsolete as you can upgrade any Mykerinos system to MassCore without having to do anything but purchase a MassCore License *.
  * please consult the recommended minimum PC requirements for MassCore at
  http://www.merging.com/pages/pcconfig

Known Issues:
- The Timezone time-stretch tool is no longer supported in Pyramix v9 and has been removed. Prosoniq MPEX4 or Dirac are recommended. Contact your local dealer.
- Windows 8 has not been certified by Merging.
- 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 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 under 64bit has potential issue at system shutdown. Either improper Shutdown or an automatic Reboot can occur. Merging is currently looking into those issues.
- 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.
- 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 Error: It is possible to get a VS3 error the first time you launch Pyramix after installation. In such case re-launch Pyramix afterwards. Refer to beta forum or rryan@merging.com
- 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 and Pyramix v9.0 Library format is 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
- VT Removal known issues
  - MIDI TimeCode: Not available for the moment
  - TC Display reader: Not available for the moment
  - DS Video Player & QuickTime Player: Replaced by VCube essential
- The Final Check Metering is not supported in DXD/DSD mode
- The PureNotes Denoiser VST plug-in (developed by Flux) is no longer supported since Pyramix v8. Contact your local dealer.
- Low Memory Condition Warning: Users running Pyramix on a 32 OS using large project or multiple VST plugins are subject to having Low memory Warning or Runtime errors.
  Merging recommends that those users move to the Pyramix 64bit version.
- 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 a HASP error and rollback, make sure that you unplug your Merging Dongle from the system and try to re-install Pyramix
- 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
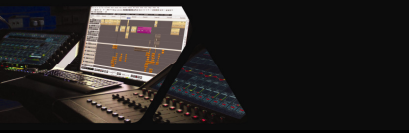
rate than project.

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
- Since Pyramix v8.1 Merging does not support Virtual Tape anymore
- 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
  - v2.7 must be the version used for Pyramix 32bit users
  - v3.1 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\<User Name>\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 your 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 (32 bit or 64bit) mandatory for MassCore RAVENNA (XP not supported)
- Pyramix v9 system recommendations. For now we recommended the v9 configurations to be based on the Pyramix v8 RAVENNA supported systems. Details here:
http://www.merging.com/pages/pcconfig
- 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 Network Switch for use with Horus – Ravenna find details and configuration file here: http://www.merging.com/products/horus/downloads
The Dell PowerConnect 2808 is also now certified.
- 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-MSC-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.
- When configuring the VS3 Control Panel it will not be possible to choose a mode where both Mykerinos and RAVENNA will function at the same time. User must either work in MassCore Mykerinos or MassCore/RAVENNA or Native
- 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

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.
- 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
- 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-MSC-GBEX1
Recommendation: Refer to the ISIS support document below
http://download.merging.com/beta/SupportTools/Docs/AccessoryHardware/ISIS_Vista_or_7_dedicated_lan.pdf
- 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