Ovation 10.1.2 – Release Notes

Important:
Ovation **10.1** version requires Ovation **v10.1** keys.
To get a free upgrade, you need a valid ASM contract and to ask for the new keys by writing to keys@merging.com providing us with 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#ovation 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 Ovation Installation Guide for more details.

- To install the Ovation software insert the Ovation Installation Media - the installation program should auto-start.
- To install MassCore launch the MT Security Settings, go to the MassCore page and install the MassCore RunTime (a MassCore base key is required along with MassCore 64bit and a RTX64 3.0 key). Refer to installation guide for more details.
- Warning: Make sure that the Windows 10 version you are installing onto is supported by Ovation, as often updates can break the compatibility.
  All details in the separate Ovation installation guide.

Updates

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

Ovation 10.1 Installer Information

Ovation 10.1 is compatible with the following Operating Systems
- Windows 10 Professional (64bit): MassCore/RAVENNA, Native & Native/RAVENNA ASIO
- Windows 11 Professional (64bit): MassCore/RAVENNA, Native & Native/RAVENNA ASIO

Ovation 10.1 is supported under the Windows 10 updates;
- November 2022 Update 22H2 supported since Ovation 10 & RTX64 3.7.4
- November 2021 Update 21H2 supported since Ovation 10 & RTX64 3.7.4
- May 2021 update 21H1 supported since Ovation 9 HotFix3 & RTX64 3.7.4
- October 2020 update 20H2 supported since Ovation 9 HotFix3 & RTX64 3.7.4
- May 2020 Update 2004 supported since Ovation 9 HotFix 3 & RTX64 3.7.4
- November 2019 Update (1909) supported with Ovation 9 & RTX64 3.7
- May update (1903) supported as of Pyramix v8.0.5 HotFix
  If you run a previous Windows 10 version, Merging recommends you update it.

Ovation 10.1 is supported under the Windows 11 updates - MassCore, Native & Native/RAVENNA ;
- 22H2 supported since Ovation.1.0 Beta1: MassCore, Native & Native/RAVENNA
- 21H2 supported since Ovation 10 Hotfix 2: Native & Native/RAVENNA

WARNING: MassCore and Intel 12th / 13th Gen CPU: Ovation 10.1. & RTX64 4.4 required.
WARNING: Ovation 10 is supported on 4th Generation Intel Core Processors (4XXXK and higher) and will not launch on previous Processors generation
Recommended specification:
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4817980
WARNING: Ovation 10 is no longer supported on Windows 7.

Ovation 10.1 installation notes

- **Ovation 10.1 runs on the new Ovation 10.1 keys as of the Release Candidate.**
- Ovation 10.1 MassCore runs on a new RTX64 4.4 version. A MassCore Runtime update is mandatory, see MassCore installation notes below.
  The RTX64 4.4 requires a new license, only available in Ovation 10.1 keys.
- The Ovation 10.1 installer comes only as a 64bit version (64bit OS)
- Ovation 10.1 users must refer to the Ovation 10 Installation Guide for details
- Pyramix is automatically installed along Ovation - no need to install Pyramix separately.
- Before you perform a Windows 10 major version update on a system already running a MassCore, it is 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 on Windows 10
  Or on Windows 11.
  Windows 10 and 11 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://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4817977/Windows+Configuration+Guide
  Users that apply Windows updates must refer to the Merging Compatible Windows updates here Once you have updated your Windows, follow the Ovation and MassCore installation.

- SSK-HUD-RTX is no longer required as of Ovation 9 HotFix 3 and above that includes the MassCore security scheme. The Security now being fully protected by Merging Keys.
- A new Cloud Security (dongle-less) is available as of Ovation 9.
- The VB Plugins (VS3) are becoming legacy; while it is still possible to use those plugins, there will be no more active development or support. VB Plugins 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 Ovation.
  https://merging.atlassian.net/wiki/display/PUBLICDOC/VB+Plugins+%28VS3%29+standalone+installer

Native Installation Notes

- Ovation 10.1 can be installed on Windows 10 – 64 bit (see Windows 10 version details above) or Windows 11 – 64 bit (see Windows 11 version details above).
- It is necessary to remove the previous Ovation and Pyramix versions, if there is one, from the Windows Programs and Features, then reboot your system before installing Ovation 10.
- Follow the Ovation Installation Guide for all details
- ANEMAN and MTDiscovery installers are not included in the Ovation Installer.
  Please download and install the latest ANEMAN - MTDiscovery in order to manage and monitor your AoIP devices from https://www.merging.com/support/downloads

MassCore Installation Notes

- Refer to the Ovation 10.1 Installation Guide for installation procedure and details on the specific BIOS settings and system configuration.
- Ovation 10.1 MassCore runs on a new RTX64 4.4 version. A MassCore Runtime update is mandatory.
  Please first install Ovation 10.1, then go in MT Security panel to uninstall the previous MassCore Runtime.
  Once uninstalled, go back in MT Security panel to install the RTX64 4.4 MassCore Runtime.
  Please then configure Ovation / Pyramix in the VS3 Control Panel.
  The RTX64 4.4 requires a new license, only available in Ovation 10.1 keys.
- MassCore is compatible with Windows 11 (since Ovation 10.1 Beta 1).
- It is necessary to remove the previous Ovation and Pyramix versions, if there is one, from the Windows Programs and Features; and then reboot your system before installing Ovation.
  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, it is recommended to first remove MassCore before performing the update. In such case follow the procedure document https://merging.atlassian.net/wiki/display/PUBLICDOC/Windows+Configuration+Guide
  Updating Windows 10 to Windows 11 is potentially risky, please make a full backup of all your data before performing such update.
- After installing Ovation 10.1 MassCore users will need to uninstall their previous MassCore from the MT Security setting, MassCore Tab, depending on the previous Ovation 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 Ovation system never had a MassCore version before, users will have to install the MassCore Runtime from the MT Security Settings > MassCore tab.

Warning: Windows 7 is not supported with Ovation 10.

Merging Windows 10 Configuration Guide

https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818297/Windows+10+Configuration
Note: At the Ovation or Pyramix launch, a warning message box will be displayed if your system updates settings are not configured upon Merging's recommendations.

Merging Windows 11 Configuration Guide

https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4820313/Windows+11+Configuration.
Note: At the Ovation or 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 Ovation and VCube installed on the same system, it is mandatory that you upgrade to VCube 10.1 to run alongside Ovation 10*.1.
- *A MTCleanUp utility is available through Merging's Support for those having install issues*
  Please refer to the Knowledge Base
  https://merging.atlassian.net/wiki/display/PUBLICDOC/MT+Cleanup

Ovation 10.1 New Features

New with Ovation 10.1

Intel 12th / 13th gen CPU Compatibility - MassCore & Native/ASIO

Ovation 10.1.0 Beta 1 is now compatible with Intel 12th and 13th gen CPU, in both MassCore and Native/ASIO running modes.

Windows 11 Compatibility – MassCore.

Ovation 10.1.0 Beta 1 is now compatible with Windows 11, in MassCore mode (MassCor Runtime RTX64 4.4 required)

Sony 360 Speaker layouts

Two new speaker layouts for Sony 360 support have been added:

- Sony 360 13.0:
  Mapping: C, L, R, Lrs, Rrs, Ctf, Ltf, Rtf, Ltr, Rtr, Cbf, Lbf, Rbf
- Sony 360 15.0:
  Mapping: C, L, R, Lss, Rss, Lrs, Rrs, Ctf, Ltf, Rtf, Ltr, Rtr, Cbf, Lbf, Rbf
- Both are properly supported by the Atmos ADM Export feature and allow exporting Dolby Atmos ADM Masters out of a Sony 360 layout either in Bed+Objects or Objects-only mode.

Improvements

- **Ovation 10.1.0 Beta 1: New rule - Random Sibling Cue:**
  New Target rule: Random Sibling Cue, allowing rules to interact with random sibling cues (in addition to the existing random Child cues).
  (Sibling means a Cue on the same level.)
- **Ovation 10.1.0 Beta 1: Bus/Group Solo Safe improvements**
  Mix Bus:
  Solo Safe protects any input strip sending to that Bus from being muted when soloing any other input strip. (Unchanged)
  Mix Group:
  Solo Safe protects any input strip sending to that Group from being muted when soloing any other input strip. It also protects the Mix Group Return Strip from being muted when soloing any other strip. When Solo Safe is not enabled, the Mix Group Return Strip is automatically protected anyway when soloing any input strip sending to that Group, but not when soloing any input strip not sending to that Group. (Changed as described above since 14.0.6)
  Aux Bus:
  Solo Safe protects any input strip sending to that Bus from being muted when soloing any other input strip. (Unchanged)
  Aux Group:
  Solo Safe protects the Aux Group Return Strip from being muted when soloing any other strip. (Unchanged)
- **Ovation 10.1.0 Beta1: Updated Channel naming.**
  Channel types/Speakers naming convention has been updated to the Dolby standard, being:
  Left : L
  Center : C
  Right : R
  Surround Left : Lrs
  Surround Right : Rrs
  LFE : LFE
  Center Left : Lc
  Center Right : Rc
  Surround Center : Cs
  Side Left : Lss
  Side Right : Rss
  Wide Left : Lw
  Wide Right : Rw

Voice of God : VoG
Top left : Ltf
Top Center : Ctf
Top Right : Rtf
Top Surround Left : Ltr
Top Surround Center : Ctr
Top Surround Right : Rtr
Top Side Left : Ltm
Top Side Right : Rtm
Bottom left : Lbf
Bottom Center : Cbf
Bottom Right : Rbf
Bottom Surround Left : Lbr
Bottom Surround Center : Cbr
Bottom Surround Right : Rbr
Bottom Side Left : Lbm
Bottom Side Right : Rbm
Voice of Devil : VoD
LFE2 : LFE2
Note : Projects created from previous versions are automatically updated to the new naming convention.

- **Ovation 10.1.0 Beta1 : 5.1.2 / 7.0.2 / 7.1.2 / 9.1.2 busses/strips plug-ins**
Some VST3 plug-ins inserted on x.x.2 busses (5.1.2, 7.0.2, 7.1.2, 9.1.2) where instantiated as Stereo only.
This was due to the definition of .2 in Ovation being *Top Front Left* and *Top Front Right* channels where these plug-ins were expecting *Top Side Left* and *Top Side Right.*
Four new speaker layouts have been added to solve the issue: 5.1.2 Side, 7.0.2 Side, 7.1.2 Side and 9.1.2 Side. These layouts should now be used for inserting such plug-ins.
Former 5.1.2, 7.0.2, 7.1.2, 9.1.2 layouts have been preserved for compatibility and renamed 5.1.2 Front, 7.0.2 Front, 7.1.2 Front, 9.1.2 Front.

Fixed Bugs in Ovation 10.1 RC1

- New keys required for Pyramix 14.1 / Ovation 10.1 (as of the RC1)
- Various improvements for Dolby Atmos workflow (DASSIDK storage kit 2.x final certification)

Fixed Bugs in Ovation 10.1 Beta 2

- PMX140-208: Fixed. Pan Noir: Opening the "source placement" window and makes it larger generates a critical error.
- PMX140-205: Fixed. Improper Argument when VCA in mixer
- PMX140-170: Fixed. Channel nomenclature renaming
- PMX140-204: Fixed. Update Plugins Routing page with new channel types

Fixed Bugs in Ovation 10.1 Beta 1

- OV100-3: Ovation launch and exit improvements
- PMX140-179: Fixed. Disable Windows Core Parking
- PMX140-186: Fixed. Dolby Renderer connection with a Connection Offset shifts the objects metadata
- OV100-9: Fixed. Show logging not reporting some audio files information.
- PMX150-48: Fixed. VST3 : Check if strip names are correctly passed to the plugin (SSL VST3)
- PMX140-151: Fixed. Windows Update Warning message on MassCore systems - remove branch readiness
- PMX140-158: Fixed. Bus Repro fails to work on stop if some strips are soloed during playback
- PMX140-156: Fixed. Mix Group Solo Safe issues
- OV100-7: Fixed. Active Cue Window selection change resets a playing cue
- PMX140-70: Fixed. Waves VST / VST3 scanning issue

Fixed Bugs in Ovation 10 Hotfix 4

- PMX140-129: Fixed. MackieCTRL surface meters only works for the first channel
- PMX140-125: Fixed. HUI - MackieCTRL Mute-Solo-Rec not reset on strips not having these controls (bank switch)
- PMX140-124: Fixed. HUI - MackieCTRL - PMX Mixer Mute - Solo - Rec Ready status not always in sync with controller.
- PMX140-114: Fixed. HUI - MackieCTRL The channel strip name and number are not updated during bank/channel switch
- PMX150-29: Fixed. Ovation playback improvements (GetMediaDescription)
- PMX140-112: Fixed. Strip Tools / Bus Tools : EQ expanded window truncated
  PMX140-34: Fixed. Ovation Media Manager settings cleanup.
- PMX140-119: Fixed. Plugins can mute the sound if changing sampling rate, bypass then mutes the signal.
- PMX140-111: Fixed. CD Import Database - replace server address
- PMX111-184: Fixed. Mixer: BusTool and Strip tool incoherency when added or moved in Mixer
- PMX140-103: Fixed. Bypass/OnOff/Automation buttons missing on VST windows
- PMX140-106: Fixed. Projects with VSTs on legacy MultiStem bus may crash upon opening.
  Note : Adding VSTs on such legacy Multistem bus is no longer allowed. Previous projects containing such VST - Multistem bus are not modified and will continue to work as is.
- PMX150-29: Fixed. Playback improvement (GetMediaDescription)

Fixed Bugs in Ovation 10 Hotfix 3

- MSC-128: Fixed. Intel 11th gen support.
- Fixed. ADM Export and Dolby Renderer panning Balance mode implemented
- Fixed. Dolby Atmos: Failed to send configuration error

Fixed Bugs in Ovation 10 Hotfix 2

- PMX140-71: Fixed. VST3 Plug-ins state and settings saving/load.
- RAV-1568: Fixed. TC Interrupt Timer Improvement (Native - ASIO)
- PMX110-67: Fixed. Projects with Tracks in Repro or Auto at opening will be in Input mode for a second.
- PMX140-77: Fixed. Delay Compensation issue when changing object routing

- Audio / Automation offset when publishing from Pyramix, if the mixer contains unused tracks.
- PMX140-74: Fixed. Mixer Effects menu missing bypass and on off at times.

Fixed Bugs in Ovation 10 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)

Fixed Bugs in Ovation 10 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.

Fixed Bugs in Ovation 10 Beta 3

Runs on Pyramix 25th / Ovation 9 / VCube 9 keys during the beta cycle
- PMX140-17: Fixed. Cannot assign objects to channels above 64

Fixed Bugs in Ovation 10 Beta 1 (inherits of the Hotfix fixes)

Runs on Pyramix 25th / Ovation 9 / VCube 9 keys during the beta cycle
- PMX125-186: Fixed. DNxHD authorization key not working.
- PMX125-188: Fixed. 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.

Ovation 10.1 Product Changes

- VB Plugins (VS3) are becoming legacy; while it is still possible to use those plugins, there will be no more active development or support.

Ovation 10 Product Changes

- Windows 7 No longer supported
- MT Discovery is no longer bundled with Pyramix / Ovation.
  Please download and install manually from
  https://www.merging.com/support/downloads#accessory-installers-3

MassCore Technical Notes

- MassCore not supported on Core2Duo. Minimum requirement is a QuadCore. Find system recommendations here: http://www.merging.com/support/pc-config
- Ovation 10.1 runs on a new MassCore Runtime (RTX64 4.4), requiring a RTX64 4 license (included in V10.1 keys)
- Intel 12th &13th Gen CPU supported since Ovation10.1 (RTX64 4.4)
- MassCore is supported under Windows 10 (64bit).
- 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.
- Ovation 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 Ovation 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/Ovation 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://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4819685/Merging+Audio+Device.
- 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/Ovation 8 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://merging.atlassian.net/wiki/display/PUBLICDOC/Bcom+plugins

RAVENNA Technical Notes

- Windows 10 (64bit) is supported by Ovation 10 MassCore RAVENNA and Native
- Windows 11 (64bit) is supported by Ovation 10 MassCore RAVENNA and Native
- Ovation 10 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 Network Switches for use with Merging devices – Ravenna users will find all details along with the configuration guide here:
  https://merging.atlassian.net/wiki/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-MSC-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://merging.atlassian.net/wiki/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://merging.atlassian.net/wiki/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"

Ovation Native Recommendations:

- Windows 10 - 64bit & Windows 11 - 64bit supported with Ovation 10.
- 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 / Ovation.
- 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" if available).
  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 and 11, 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://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4820497/Native+recommendations

V10 Known issues

Merging online knowledge database for updates on the known issues
https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4820406/Ovation+v10+Known+issues.

- Windows 10 2004, 20H2, 21H1, 21H2 are compatible with MassCore/RTX64 -4.4, Ovation10.1 Beta 1
- Windows 11 21H2, 22H2 are compatible with MassCore/RTX64 -4.4, Ovation10.1 Beta 1
- WARNING: Ovation 10 is supported on 4th Generation Intel Core Processors (4XXXK and higher) and will not launch on previous Processors generation
  Recommended specification:
  https://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4817980/Computer+Specifications.
- Custom installation is known to potentially have issues at installation. We recommend that you install the recommended full Ovation.
- Ovation 10 Projects are not backward compatible with Ovation 7.x, users must perform a "Save Special as" in order to open such project in a Ovation 7.x
- Ovation shows with v6/7/8/9/10 Bus layout/Structure cannot be saved within a Save Special v5.0 project. A warning message will prevent you from doing so.
- All of the Mixer Amibsonic components cannot be saved within a Save Special 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
- 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 Ovation supported remote controllers is available here
- 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://merging.atlassian.net/wiki/spaces/PUBLICDOC/pages/4818504/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.
- The ADR Keyboard users:
  ChangeMe version 5.25.8 required.
  Follow the installation instruction on our knowledge base to update :
  https://merging.atlassian.net/wiki/display/PUBLICDOC/Pyramix+ADR+and+Ovation+keyboard+install+guide

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