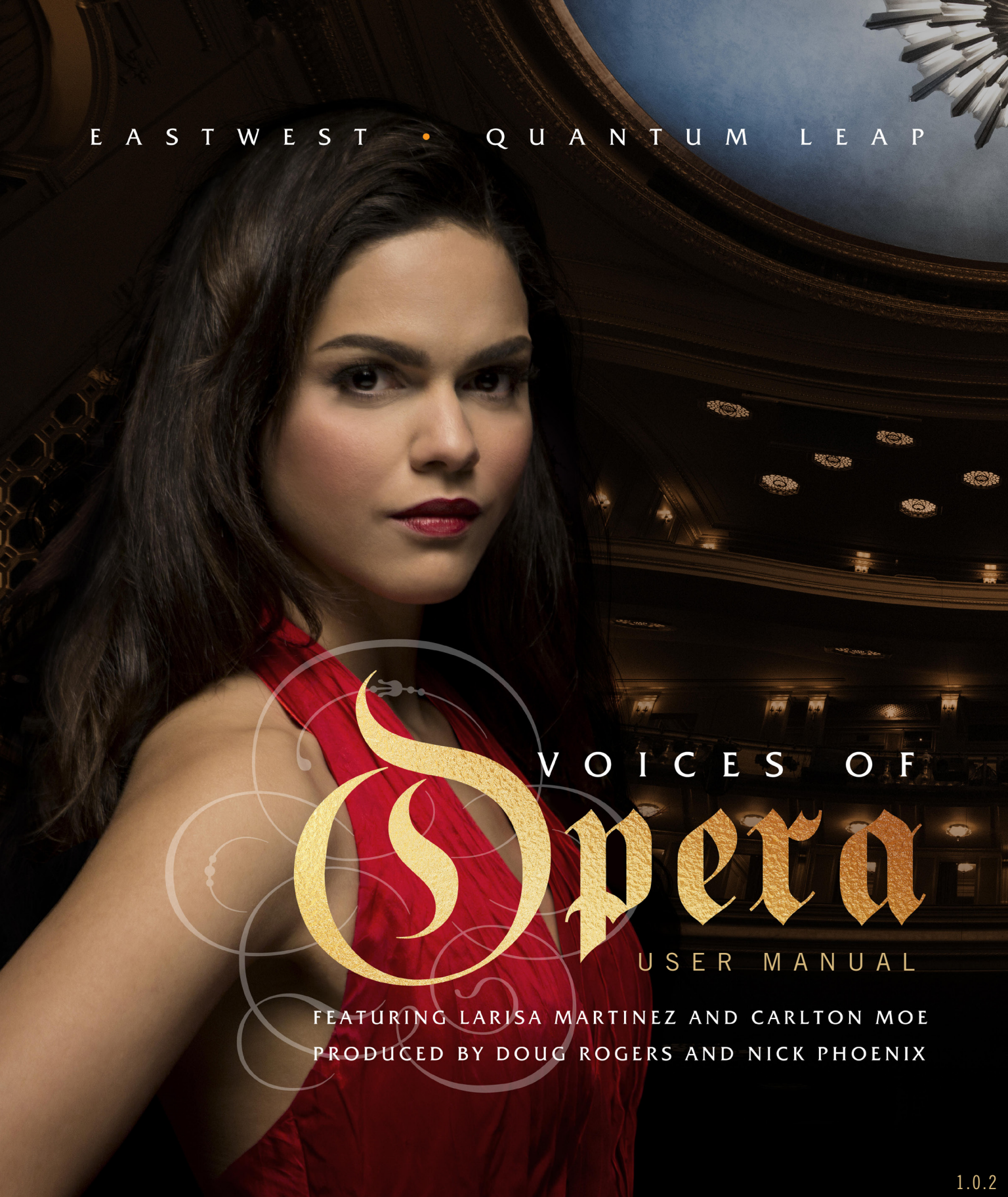

EASTWEST • QUANTUM LEAP
VOICES OF
Opera
USER MANUAL
FEATURING LARISA MARTINEZ AND CARLTON MOE
PRODUCED BY DOUG ROGERS AND NICK PHOENIX
1.0.2

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User Manual

Jay Coffman

In Memoriam

In Loving Memory of Rhys Moody

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Ch. 1: Welcome

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Welcome to Voices of Opera

EastWest is proud to announce the upcoming release of Voices of Opera, a brand new virtual instrument featuring the sensational vocals of soprano Larisa Martinez (Andrea Bocelli) and tenor Carlton Moe (Phantom of the Opera).

"I have always loved opera", said co-producer Doug Rogers "at its best, it can send shivers down your spine. And that's what happened when I saw Andrea Bocelli and Larisa Martinez performing together at the Hollywood Bowl. Then the opportunity arose to add tenor Carlton Moe (Phantom of the Opera) to the project. He just has this incredibly rich tone. It was truly a labor of love."



Larisa Martinez has established a strong and unique presence in the classical performance world. She's currently performing with opera titan Andrea Bocelli as his principal soprano on his world tour. She is a winner of the Metropolitan Opera National Council Audition PR district 2016, where she also received the Angel Ramos Foundation Award and Audience Prize. She earned raved reviews as Musetta in Loft Opera's critically acclaimed production of La Bohéme and for her other leading roles in Verdi's Rigoletto, Gounod's Roméo et Juliette, Rossini's Adina, Floyd's Susannah, and Donizetti's Don Pasquale and Lucia di Lammermoor.

Carlton Moe, heralded by the New York Times as an "ardent tenor," is currently performing as Ubaldo Piangi in Andrew Lloyd Webber's Phantom of the Opera, the longest running show on Broadway. His opera credits include Lakmé (Gerald), I Capuletti e I Montecchi (Tebaldo), The Mother of Us All (John Adams), Ernest Bloch's Macbeth (Malcolm), and Roméo et Juliette (Tybalt). He has also performed as a soloist in major works such as Verdi's Requiem, Beethoven's 9th Symphony, Mozart's Requiem, and Handel's Messiah.

About the Producers

From the most awarded producers in the sounds industry, Doug Rogers and Nick Phoenix, Voices of Opera is the perfect must-have tool to add a pristine, operatic sound to your next project, and fits in perfectly with EastWest's recent slate of award-winning vocal products that includes Hollywood Choirs, Voices of the Empire, and Voices of Soul.

Doug Rogers With over 35 years experience in the audio industry, founder and producer Doug Rogers and his company EastWest is the recipient of over 100 industry awards, more than any other sound developer. His uncompromising approach to quality and innovative ideas have enabled EastWest to lead the sound-ware business for nearly 30 years. "The Art of Digital Music" named him one of "56 Visionary Artists & Insiders" in the book of the same name.



For over 20 years he has partnered with producer/composer Nick Phoenix and set up the Quantum Leap imprint, a subsidiary of EastWest, to produce high-quality, no-compromise virtual instruments. EastWest/Quantum Leap virtual instruments are considered the best available and are in daily use by the who's who of the film, games, tv, and music industries.

Nick Phoenix Since he began scoring film trailers in 1994, and since founding "Two Steps From Hell" with Thomas Bergersen in 2006, Nick has scored or licensed music for the ad campaigns of over 1000 major motion pictures to date. A few recent works include: "Godzilla", "Ender's Game", "Skyfall", "World War Z", "Rush", "The Hobbit", "Avengers", "Star Trek 2", "Inception", and "Harry Potter and the Deathly Hallows".



The journey as a composer has inspired Nick to record and program his own sounds and samples. For over 20 years, a partnership with Doug Rogers and EastWest has yielded award winning software titles such as the Hollywood Series, Stormdrum 1, 2 and 3, Symphonic Orchestra, Symphonic Choirs, Silk, RA, Voices Of Passion, Ministry Of Rock 2, Gypsy, Quantum Leap Pianos, Goliath, and many others.

What's Included

EastWest Voices of Opera includes:

- A collection of 229 instruments that includes 145 multi-sampled instrument files [.ewi] and 84 highly expressive phrases and sub-phrases.
- Over 45 GB of 24-bit, 44.1 kHz samples in 3 Microphone Mixes
- EastWest's Play 6 System (earlier versions of Play do not support this library)
- A license that identifies the product you bought
- Voices of Opera and Play 6 User Manuals (PDFs)
- An Installation Center application to set up the library, software, and documentation

IMPORTANT NOTE! An iLok account is required for a machine-based (electronic) license to be placed on your computer. You may also place the license on an optional iLok key. An internet connection is required for a one-time product activation.

Voices of Opera is now fully NKS-ready, including the ability to browse instruments, preview sounds, and immediately access pre-mapped instrument parameters with Native Instruments' Komplete Kontrol and Maschine hardware and software.

See Voices of Opera Is NKS-Ready for more information.

System Requirements

Below are the minimum and recommended hardware requirements for using Voices of Opera on your computer. Please see the Play 6 User Manual for a complete list of the Hardware and Software Requirements for installing and running any Play Library.

Minimum Spec:

- Intel dual-core i5 (or equivalent) processor, running at 2.7 GHz (or above)
- 8 GB of RAM or more
- Mac OSX 10.7 (or later); Windows 7 (or later) with ASIO sound drivers
- 7200 RPM or faster (non energy saving) hard drive for sample streaming

Recommended Spec:

- Intel Xeon E5 (or equivalent) running at a minimum of 2.7 GHz (or above)
- 16 GB of RAM or more
- Mac OSX 10.7 (or later); Windows 7 (or later) with ASIO sound drivers
- a 64-bit operating system; and a 64-bit host when running Play as a plug-in.
- SSD (Solid State Drive) for sample streaming

IMPORTANT NOTE! Beginning with Play 5 and all subsequent versions, 32-bit operating systems and DAWs are no longer supported (32-bit versions of the Play stand-alone and plug-in no longer exist).

Sequencer Compatibility

The chart below outlines the MacOS and Windows 64-bit operating systems and sequencers that are officially supported (fully tested) with the latest version of Play 6. Please contact support for questions related to compatibility with earlier versions of Play, and please note that while 64-bit sequencers (DAWs) that use VST, VST3, AU and AAX plug-in formats may work fine, only those listed in the chart below are officially supported.

Please note! 32-bit Sequencers and Operating Systems are only supported by Play 4, the last version of Play that was released with a 32-bit installer. Play Libraries released on Play 6 are not compatible with older versions of Play. Please contact support for more information.

DAWs (64-bit)		Operating Systems (64-bit)	
Sequecer Software	**version**	**MacOS**[1] (10.8 - 10.14)	**Windows**[2] (7, 8 and 10)
EW Play 6 Stand-Alone	6.0 +	√	√
Ableton Live	9.0 +	√	√
Apple Logic Pro	9.0 +	√	-
Apple Garageband	3.0 +	√	-
Avid Pro Tools	11.0 +	√[3]	√
Bitwig Studio	2.5 +	√	√
Cakewalk Sonar	6.2 +	-	√
Cockos Reaper	4.0 +	√	√
Image-Line FL Studio	12 +	√	√
Motu Digital Performer	8.0 +	√	√
Steinberg Cubase	7.5 +	√	√
Steinberg Nuendo	6.0 +	√	√
Presonus Studio One	3.0 +	√	√
VSL Vienna Ensemble Pro	5.0 +	√	√
Notation Software	**version**		
Avid Sibelius	7.0 +	√[4]	√[4]
MakeMusic Finale	25.0 +	√[4]	√[4]
Steinberg Dorico	2.2 +	√[4]	√[4]

[1] **MacOS 64-bit Operating Systems** 10.8 through 10.14 are officially supported. Please follow this link for the latest compatibility information regarding MacOS 10.15 (Catalina).

[2] **Windows 7** support is officially being ended by Microsoft on January 14th, 2020.

[3] **Pro Tools 10** users require Play version 4 (32-bit). Please contact support for details.

[4] **Sibelius / Finale / Dorico** notation programs work with Play 6, but do not support the full feature set of some Play Libraries, such as those that use WordBuilder. Please contact support for details.

Support and Documentation

All documentation for Play and individual Play Libraries is provided as a collection of PDFs. An advantage of reading this PDF on an electronic device is the ability to jump directly to a referenced page using links. You can find these in the contents section, at the beginning of each chapter, and within to expand on and / or connect topics.

The Bookmarks pane along the left edge of the PDF allows you to jump to a particular chapter or specific section by clicking on the links. You can also use Page Thumbnails to quickly scan the contents of the PDF and jump to the desired page with a click.

User Manuals and Guides

Visit the EastWest Manuals section of the online Support Center to access the latest User Manuals and Guides for EastWest products.

- **Play 6 User Manual** describes how to use Play 6, the sample engine that powers all the individual Play Libraries.
- **Play Library User Manuals** describe aspects that are specific to each Play Library, including instruments and unique features of each user interface.
- **Master Navigation Document (MND)** is a one-page PDF that allows easy navigation between the Play 6 User Manual and the Play Library Manuals using links. Links to the MND can be found at the bottom of each chapter in both the Play 6 User Manual and Play Library Manuals.
- **Quick Reference Guides** contain the most essential information, intended to get you started quickly.
- **EW Spaces II User Manual** describes how to use the Space II plugin, and provides a glossary of impulse presets.

In addition to online availability, user manuals are installed locally into the main library folder of each Play Library, as well as the directory below:

- (MAC) Mac HD / Applications / East West / Documentation
- (WIN) C:// Program Files / East West / Documentation

EastWest Support Center

Visit the EastWest online Support Center to:

- submit a support ticket
- read FAQs on a variety of commonly asked questions
- view video tutorials, quick start guides, user manuals and more

EastWest Soundsonline Forums

Visit the EastWest Soundsonline Forums to:

- read comments and questions from other users of EastWest products
- find helpful information on both technical and musical aspects of the software
- receive support by posting to the Support section of the forum



Ch. 2: Getting Started

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How To Install Voices of Opera

This section guides you through the process of registering an account with EastWest, and how to use the Installation Center to download, install, and activate Voices of Opera.

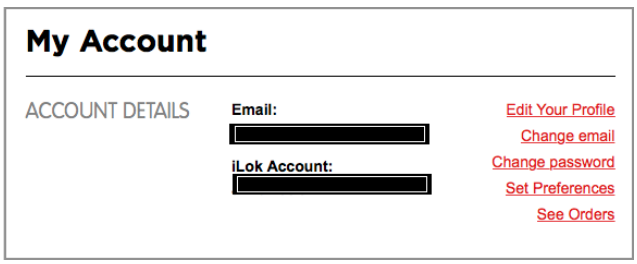
Step 1: Register with EastWest

To purchase a product through Soundsonline.com you must fill out a New Customer Registration form or log in to your existing EastWest account.

EastWest uses the iLok security system, and requires an iLok account in order to complete the registration process.

Licenses for purchased products are deposited directly into the iLok account associated with your EastWest account.

Existing iLok users can enter their iLok account name during registration. Those new to iLok can leave that field blank during registration, and an iLok account name will be created for you based on your EastWest account name.



If you're unsure whether or not an iLok account is already associated with your EastWest account, log in with your EastWest account name at Soundsonline.com and check the 'My Account' section to view your 'Account Details'.

Once you sucessfully create an account and place an order, a confirmation email will be sent with steps on how to procede. These instructions are also contained below.

Step 2: Download and Install the Installation Center

The Installation Center can be downloaded from the 'Software & Product Updates' section of the EastWest Support Center. After downloading and installing the package, the Installation Center will open automatically. It is found here:



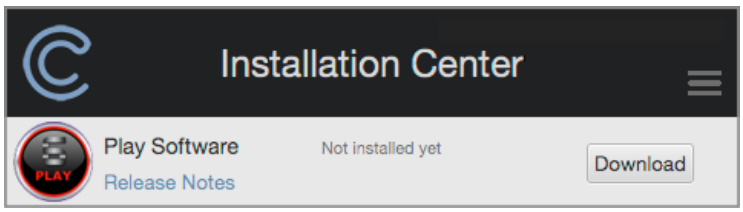
- (MAC): Mac HD / Applications / EastWest / EW Installation Center
- (WIN): C:// Program Files / EastWest / EW Installation Center

When the Installation Center opens, enter the EastWest account name and password created during registration and allow a moment while it gathers data from your account.

If the Installation Center is already installed, log in and download the latest version by clicking the 'Download' button on the the update panel located near the top the Installation Center. The installer will launch automatically, allowing you to procede through the prompts to update your software.

Step 3: Download and Install Play 6

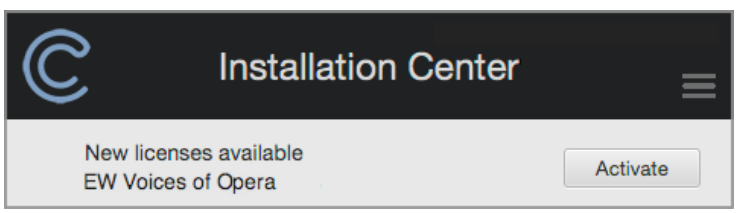
Click the 'Download' button in the Play Software panel that appears near the top of the Installation Center. Once the download is complete, the installer will launch automatically, allowing you to proceed through the dialog windows to install Play 6, the sample engine that powers Voices of Opera. The installer includes the necessary software to run all Play Libraries, but requires library content and a license to use it.



WINDOWS USERS! The default installation path for the Play VST plugin (Play_VST_x64.dll) is: C://ProgramFiles/VSTPlugins. Do not change this unless you have a custom VST location.

Step 4: Activate Voices of Opera

Click the "Activate" button near the top of the Installation Center to open the Activation Assistant window, which will lead you through the activation process. Click 'Next' to proceed past the Introduction tab, then select the license(s) you want to activate in the License tab and click 'Next'.



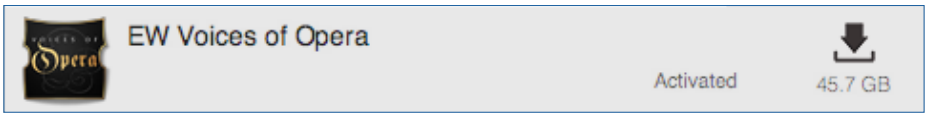
The Location window will give you the option to activate your license on your computer (called a machine-based license) or to a registered iLok security key. Make sure your iLok security key is plugged in if that's your preferred option.



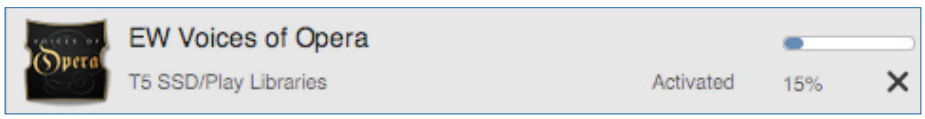
IMPORTANT NOTE! If you have an iLok account but you have not connected it to your East-West account, an Activation Assistant will help link the two accounts. This only needs to be done once

Step 5: Download Voices of Opera

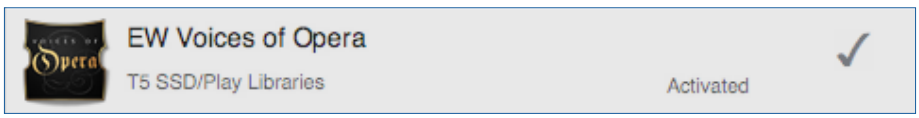
Before you begin downloading the library content for Voices of Opera, create a new folder called 'Play Libraries' in the location you wish to store the library. Once created, click the download icon (below) within the product panel to open a browser window where you can navigate to the 'Play Libraries' folder you just created.



The download process will now begin, with a blue bar displaying its progress. Click the "X" button to pause the download process, and click "Resume" to continue the download where it was left off.

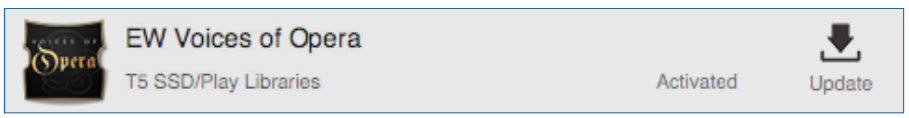


When a product is installed and ready to use, a check-mark is displayed.



Step 6: Update Voices of Opera

When an update becomes available for the Voices of Opera, it will appear in the Installation Center with the downward arrow icon above the word 'Update'. Simply click the 'Update' icon to download and install the latest Voices of Opera update.



An Overview of the User Interface

Voices of Opera is powered by Play 6, the latest version of EastWest's advanced sample engine that powers all of EastWest's Play Libraries.

Use the **Navigation Bar** located at the top to access all main areas (from left to right):



- **Main Menu** enables the opening and saving of instruments and more.
- **Settings Menu** access audio/midi setup, streaming settings, and more.
- **Browser** search and browse for instruments via the Libraries and Database panes.
- **Mixer** features channel strips, sub-mixes, and FX for loaded instruments.
- **Player** displays custom controls and a unique user interface for each Play Library.
- **Instrument Selector** use the drop down menu to select between loaded instruments.
- **Instruments Sidebar** access instruments and their Advanced Instrument Properties.



See Ch. 4: Voices of Opera User Interface to learn more.

An Overview of the Instruments

Voices of Opera joins EastWest's vast virtual instrument collection with 229 instruments, across 7 categories described briefly below. Adding over 45 gb of new content to an ever growing library of sounds, Voices of Opera joins a collection that are altogether the winner of over 100 industry awards, making EastWest the industry leader in highly detailed sampled instruments that encompass a wide cross section of musical styles, from ethnic and orchestral, to rock and electronic, and beyond.



- **Sustain** contains a variety of sustained vowel vocal instrument types, including Ah, Ee, Eh, Oh, and Oo. Each contain 3 velocity-sensitive dynamic layers, and use Expression (CC11) to control overall loudness.
- **Staccato** contains a variety of staccato single syllable vocal instrument types, including Ci, Fa, Joh, Oo, Te, and more. Velocity-sensitivity and Expression (CC11) are used to control overall loudness.
- **Legato** contains 2 dynamics of true legato intervals that playback when two notes are played in a connected fashion (legato) for every interval up to an octave in either direction, and a sustain layer that will playback when playing disconnected.
- **Combo** contains instruments that combine multiple articulations and use the Mod Wheel (MOD) or Round Robin (RR) to determine playback.
- **Words** contain instruments that include performances of a variety of words sung over a 2 octave range, including Amore, Cielo, Morte, Vincero, and more.
- **Phrases** contain instruments featuring phrases from popular operas. Each were recorded in multiple transpositions, with each mapped to their respective root note positions to enable their use in a variety of key signatures.
- **Keyswitch** contains instruments that combine multiple articulations into a single instrument and uses keyswitches to activate the desired articulation.

See Ch. 3: Voices of Opera Instruments to learn more

Initial Setup in Stand Alone Mode

The steps below outline how to setup Voices of Opera in stand-alone mode. While it's easy to get started, familiarity with the Play 6 User Interface and understanding how the instruments in Voices of Opera are programmed will help achieve best results.

Step 1: Launch Play in Stand-Alone Mode

Launch Play in stand-alone mode, found in one of the following directories:

- **(Mac)** Mac HD / Applications / East West / Play
- **(Win)** C:// Program Files / East West / Play

Step 2: Load an instrument from the Browser View

Click on the Browser button in the top-left area of the Navigation Bar, then find 'EW Voices of Opera' in the left column of the Libraries area.

Now click on 1 of the 7 instrument sub-folders to view the instruments within each category in the column to the right. Double-click on any instrument to load it, or to replace the currently selected instrument (if one is already loaded). Holding [shift] while double-clicking will add an instrument.

The loaded instrument will appear in the Instrument Selector and in the Instruments sidebar panel, which also contains the Advanced Instrument Properties for the selected instrument.

See The Browser View to learn more.



Step 3: Play Your Keyboard To Hear Voices of Opera

The playable range of the loaded instrument will appear highlighted on the virtual keyboard. If a keyswitch (KS) instrument is loaded, blue keys will also appear. Click in the playable range to playback the instrument.

- **Audio Settings:** If you do not hear sound, make sure your audio output is setup correctly by clicking on the Settings Menu in the Navigation Bar, then click on the Audio Settings tab and select an Output Device.
- **MIDI Settings:** To setup a MIDI controller to play the instrument, click on the Settings Menu in the Navigation Bar, then click on the MIDI Settings tab and select a MIDI Device.

See The Settings Menu to learn more.



Step 4: Add Effects in the Mixer View

Click on the Mixer button in the top-left area of the Navigation Bar to add effects like the SSL Channel Strip, EP-1 Delay, and ADT (Automatic Double Tracking).

See The Mixer View to learn more.

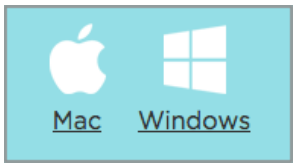
Voices of Opera Is NKS-Ready

EastWest's award-winning collection of virtual instruments are now fully compatible with NKS, including the ability to browse instruments, preview sounds, and immediately access pre-mapped instrument parameters all within Native Instruments' Komplete Kontrol and Maschine hardware and software. Follow the steps below to make all installed Play Libraries NKS-ready, including Voices of Opera.

See Native Instruments - This is NKS to learn more.

Step 1: Download the NKS Support Installer

To visit the Software & Product Updates page of the EastWest Support Center, please click the following link: http://www.soundsonline.com/Support

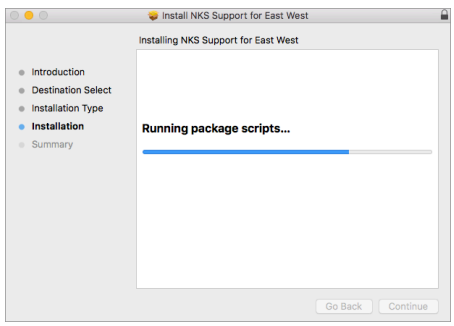


Scroll down to find the 'NKS Support Installer' section, then click on either the Mac or Windows icons to download the installer per your operating system. The download size is approximately 790 mb.

Step 2: Run the NKS Support Installer

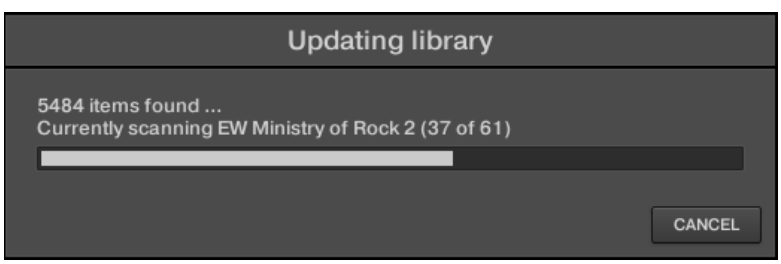
Once the NKS Support installer has downloaded, close all programs, then double-click on the installer to launch it and proceed through the prompts to complete the installation.

Please note! The NKS Support Installer can be run anytime after installing additional EastWest Play Libraries to make them NKS-Ready.



Step 3: Launch Native Instruments Software to Update Libraries

Now launch either the Komplete Kontrol or Maschine software to begin the 'Updating Library' scan of all installed Play Libraries, making them NKS-ready for use with Native Instruments Komplete Kontrol and Maschine software and hardware.



How To Optimize Playback and Performance

The Sample Cache settings optimize the streaming settings based on your computer specifications. The right settings can improve the streaming performance of Play 6.

Adjusting the Streaming Cache

To access the Streaming Cache, click on the Settings Menu button (the gear icon located in the top-left corner) in the Navigation Bar, then click the Streaming tab.

IMPORTANT NOTE! As a general rule, find the lowest setting that also results in smooth playback. If dropped voices or CPU spikes occur, simply raise the 'Cache Level'.

The lowest recommended 'Cache Level' setting depends on:

- the speed of the computer's processor (CPU)
- the amount of installed memory (RAM)
- the drive type and connection
- the demands of a project

Adjusting the 'Cache Level' affects the following:

- the loading time of your project
- the amount of memory usage
- the playback performance

Outlined below are recommended 'Cache Level' settings based on your computer specifications, but please be aware that the demands of a given project are also a factor in determining the best 'Cache Level' setting. For example, with the same computer specifications, a large Hollywood Orchestra template will require a higher setting than a project with a few small instruments from Fab Four. That's because raising the 'Cache Level' results in more of each sample being loaded into memory (RAM), reducing the reliance on disk streaming, which allows larger and/or more instruments to playback smoothly at a given time.

In the 'Settings' menu under the 'Streaming' tab is a list of available drives that appear under 'Disk Volume' with their respective 'Cache Level' settings to the right. Use the up and down arrows to adjust this level for each drive.

- **A 'Cache Level' between 0 - 1**: results in the fastest load times and smallest memory (RAM) usage, but requires a fast, multi-core processor (CPU) and Solid State Drives (SSD) with a fast connection type to achieve smooth playback
- **A 'Cache Level' between 2 - 3**: results in less demands on the processor (CPU) but requires more memory (RAM) usage. These settings are best for a computer with an average CPU, but still plenty or RAM and SSDs with a fast connection type
- **A 'Cache Level' between 4 - 5**: results in the most memory (RAM) usage, but makes less demands on the processor (CPU) and hard drive. These settings are recommended for computers with an aging CPU and/or traditional 3.5" HDD.

Hard Drive Specifications

There are several factors that determine what kind of performance you can expect when streaming large sample libraries from a hard drive. Those outlined below include details on the speed of the drive itself, the speed of the connection type, and other options for increasing data transfer speed.

- **Solid State Drive (SSD)** is the best drive option, giving you seek and retrieval times that are nearly instantaneous, allowing for smooth performance at low latencies even when working with larger projects. To take full advantage of the speed offered by SSDs, they must be installed internally to a SATA III connection, or externally via a USB 3.0 or Thunderbolt port. Connection types like SATA II, USB 2.0 and Firewire 400 / 800 do not offer speeds that take full advantage of SSDs.
- **Hard Disk Drive (HDD)** running at 7200 rpm (non-energy saving) is the minimum hard drive specification that will achieve adequate performance. It's best to install this internally to either a SATA II or SATA III connection, or externally via eSATA or USB 3.0. Slower connection types like USB 2.0 or Firewire 400 / 800 will offer less performance, and may not be fast enough for instruments with heavy sample loads that playback many simultaneous voices.
- **Raid 0 Configuration** is an option for professional users to achieve high performance when using streaming drives. There are many resources available online that provide instructions, or you can consult a computer specialist.
- **Mac Pro Retrofit** is a way to optimize older Mac Pro towers that have previous generation ports like USB 2.0, and the internal hard drive bays use SATA II connections. Neither take full advantage of the speed offered by SSDs. A way around this is to install an expansion card into a PCI-e slot (x2 or larger). The biggest boost in performance is provided by SATA III interface cards that connects up to two 2.5" SSDs. When used in a RAID 0 setup, speeds of up to 800 mb/s can be achieved. This is much greater than the 300 mb/s offered by SATA 2 interface.

Hard Drive Considerations

Some less obvious considerations include only filling your drive up to 70% capacity, spreading libraries across multiple drives, and dedicating drives only to stream libraries.

- **Dedicated Streaming Drives** can achieve better performance because they are dedicated to streaming and do not share the connection's throughput with other tasks like running an operating system or loading projects files.
- **Managing Drive Space (HDD only)** is important to maintain the speed at which data can be read from a drive. Try to keep around 30% of each streaming drive empty to avoid reduced performance, which can drop by half when the drive is up to or greater than 90% filled.
- **Using Multiple Streaming Drives** is recommended when using large sample libraries like the Diamond edition of Hollywood Orchestra. For instance, because Hollywood Strings and Hollywood Brass are both large libraries, putting them on separate drives will help avoid performance issues when playing back large projects that have high voice counts.

Library Considerations

Another way to improve performance when streaming large libraries is to use libraries that have smaller CPU footprint, like the Gold edition libraries that use 16-bit samples as opposed to 24-bit samples, or 'Lite' instrument versions designed with fewer samples.

- **'Lite' Instrument (LT)** are available for many Play Libraries that are programmed with few samples, lowering voice counts. This can help relieve computer resources that are being taxed as the instrument count rises.
- **Using Smaller Library Editions** require less computer resources by using a lower bit depth (16-bit versus the standard 24-bit) and fewer microphone positions. This enables those with less capable systems access to the same basic soundset. Below is a table showing the differences between the different editions.

COMPARISON OF EDITIONS

	Silver	Gold	Gold X	Platinum	Diamond
Instruments	Selection	All	All	All	All
Bit Depth	16-bit	16-bit	16-bit	24-bit	24-bit
Mic Positions	1	1	2	3	5

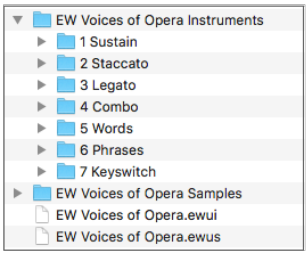


Ch. 3: Voices of Opera Instruments

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Inside the Main Library Folder

EW Voices of Opera is the name of the main library folder of Voices of Opera. Inside this folder is the EW Voices of Opera Instruments folder that contains a numbered set of 7 categories: 1 Sustain, 2 Staccato, 3 Legato, 4 Combo, 5 Words, 6 Phrases, and 7 Keyswitch. In each of these folders are a set of instruments matching the description on their given category. There are a total of 229 instruments, including 145 instrument files [.ewi] and 84 phrases and sub-phrases.



The Voices of Opera Instruments folder is linked to the Libraries Browser in Play, where Instruments can be viewed in their original file structure. When choosing an instrument, Play will load the associated samples from the EW Voices of Opera Samples folder, which contains encrypted content that is only accessible in Play with the respective product license and activation. Samples cannot be loaded or accessed directly. Also contained in the main library folder is the [.ewui] and [.ewus] files that allow the EW Installation Center to track the version of the Instruments and Samples and notify you when instrument and/or sample updates become available.

See Step 6: Update Voices of Opera to learn more.

Instrument Descriptions

This section contains descriptions of the instruments included in Voices of Opera, including how the instrument is designed, abbreviations and any other relevant information.

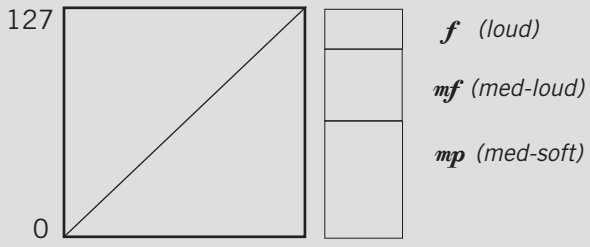
- **Sustain** contains a variety of sustained vowel vocal instrument types, including Ah, Ee, Eh, Oh, and Oo. Each have 3 velocity-sensitive dynamic layers, and use Expression (CC 11) to control overall loudness.
- **Staccato** contains a variety of staccato single syllable vocal instrument types, including Ci, Fa, Joh, Te, and more. Velocity-sensitivity and Expression (CC 11) are used to control overall loudness.
- **Legato** contains 2 dynamics of true legato intervals that playback when two notes are played in a connected fashion (legato) for every interval up to an octave in either direction, and a sustain layer that will playback when playing disconnected.
- **Combo** contains instruments that combine multiple articulations and use the Mod Wheel (MOD) or Round Robin (RR) programming to determine playback.
- **Words** contain instruments that include performances of a variety of words sung over the entire vocal range, including Amore, Cielo, Morte, Vincero, and more.
- **Phrases** contain instruments featuring phrases from popular operas. Each were recorded in multiple transpositions, with each mapped to their respective root note positions to enable their use in a variety of key signatures.
- **Keyswitch** contains instruments that combine multiple articulations into a single instrument and uses keyswitches to activate the desired articulation.

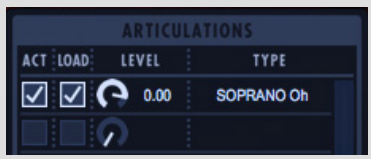
Sustain

This category contains 10 vocal instruments consisting of single syllable vowels. These instruments use MIDI velocity to trigger samples recorded at multiple dynamics (*mp*, *mf*, and *f*), and Expression (CC 11) to control overall loudness.

MIDI Velocity Controls Dynamics

MIDI Velocity controls the playback of different dynamic levels based on how hard or soft you play between a value range of 1 and 127. Velocities between 1 and 79 will playback an *mp* (medium-soft) dynamic, velocities between 80 and 115 will playback an *mf* (medium-loud) dynamic, and velocities between 116 and 127 will playback an *f* (loud) dynamic.





Articulation Pane displays loaded instrument that contain a single articulation with multiple dynamics.

The Legato or Portamento performance scripts can be enabled on Sustain instruments to create smooth monophonic playback, or disabled to play polyphonically.

See Performance Scripts to learn more.

SOPRANO Instruments	TENOR Instruments
VOO SOPRANO Ah	VOO TENOR Ah
VOO SOPRANO Ee	VOO TENOR Ee
VOO SOPRANO Eh	VOO TENOR Eh
VOO SOPRANO Oh	VOO TENOR Oh
VOO SOPRANO Uh	VOO TENOR Uh

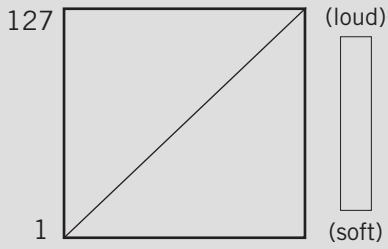
Staccato

This category contains 32 vocal instruments with a variety of short, single syllables that includes Ci, Fa, Joh, Oo, Te, and more. MIDI Velocity and Expression (CC 11) can be used to control overall loudness. The diagonal line in the diagram below represents the default linear MIDI velocity curve, which can be modified to be convex or concave to achieve more or less responsiveness respectively.

See System and Sensitivity to learn more.

MIDI Velocity Controls Loudness

MIDI Velocity is used to control the overall loudness based on how hard or soft you play between a range of values; 1 (soft) and 127 (loud).





Articulation Pane will display the loaded instrument that contains a single articulation.

SOPRANO Instruments	TENOR Instruments
VOO SOPRANO Stac Bra	VOO TENOR Stac Bra
VOO SOPRANO Stac Cher	VOO TENOR Stac Cher
VOO SOPRANO Stac Ci	VOO TENOR Stac Ci
VOO SOPRANO Stac Don	VOO TENOR Stac Don
VOO SOPRANO Stac Fa	VOO TENOR Stac Fa
VOO SOPRANO Stac Goh	VOO TENOR Stac Goh
VOO SOPRANO Stac Joh	VOO TENOR Stac Joh
VOO SOPRANO Stac Ki	VOO TENOR Stac Ki
VOO SOPRANO Stac Kom	VOO TENOR Stac Kon
VOO SOPRANO Stac Lu	VOO TENOR Stac Lu
VOO SOPRANO Stac Na	VOO TENOR Stac Na
VOO SOPRANO Stac Oo	VOO TENOR Stac Oo
VOO SOPRANO Stac Prey	VOO TENOR Stac Prey
VOO SOPRANO Stac Te	VOO TENOR Stac Te
VOO SOPRANO Stac Toh	VOO TENOR Stac Toh
VOO SOPRANO Stac Voh	VOO TENOR Stac Voh

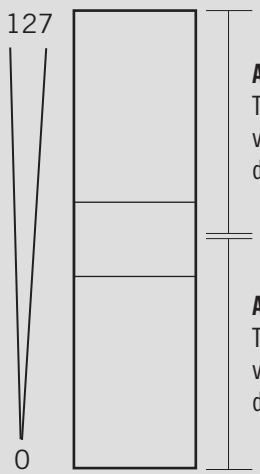
Legato

This category contains 8 instruments that playback true legato intervals up to an octave in either direction when playing in a legato fashion (connected notes), and a sustain sample layer when playing in a non-legato fashion (separation between notes). The Oh and Ah instruments for Soprano and Tenor are each programmed with a standard version and a MOD version. Both use Expression (CC 11) to control overall loudness.

- **Ah / Oh Legato** instruments use MIDI velocity to determine which dynamic level will playback based on how hard or soft you play.
- **Ah / Oh Legato MOD** instruments use the Mod Wheel (CC 1) values to determine which dynamic level will playback.

Mod Wheel (CC 1) Controls Dynamics

Instruments containing 'MOD' in their names use the Mod Wheel to control dynamics. The values that playback the legato intervals are outlined in the diagram below. The Mod Wheel simultaneously controls the playback of sustain layer dynamics; *mp* (0-64), *mf* (65-95), and *f* (96-127).

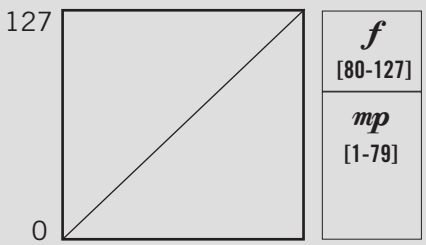


Ah Legato *f* [65 - 127]
These Mod Wheel (CC 1) values playback the F dynamic.

Ah Legato *mp* [0 - 64]
These Mod Wheel (CC 1) values playback the MP dynamic.

MIDI Velocity Controls Dynamics

The standard version of the instruments use MIDI Velocity to control dynamics. The values that playback the legato intervals are outlined in the diagram below. The Mod Wheel simultaneously controls the playback of sustain layer dynamics; *mp* (1-79), *mf* (80-119), and *f* (120-127).



Articulation Pane displays the separate layers used to create the instrument. The standard version uses a single layer, while the MOD version contains 2 layers for legato intervals, and 1 layer for the sustain samples.

SOPRANO Instruments	TENOR Instruments
VOO SOPRANO Ah Legato MOD	VOO TENOR Ah Legato MOD
VOO SOPRANO Ah Legato	VOO TENOR Ah Legato
VOO SOPRANO Oh Legato MOD	VOO TENOR Oh Legato MOD
VOO SOPRANO Oh Legato	VOO TENOR Oh Legato

Combo

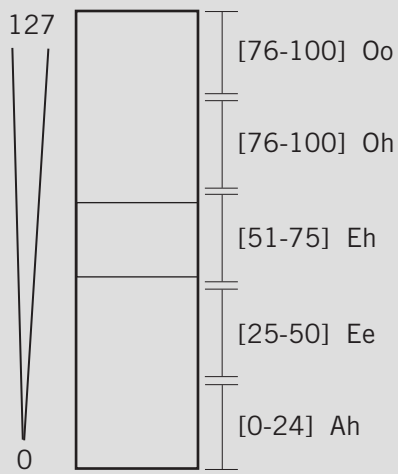
This category contains 8 Instruments that combine multiple articulations into a single instrument, and use either the Mod Wheel (MOD) or Round Robin (RR) programming to determine how each playback.

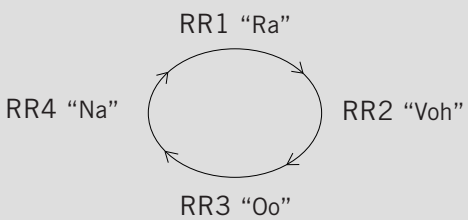
- **Sustain MOD** instruments use the Mod Wheel (CC 1) to switch between multiple single syllable vowels, each of which contains multiple dynamics (*mp*, *mf*, and *f*) that use MIDI Velocity and/or Expression (CC 11) to control overall loudness.
- **Legato MOD** instruments use the Mod Wheel (CC 1) to switch between multiple legato types that playback true legato intervals up to an octave in either direction.
- **Staccato Combo RR** instruments use Round Robin programming to cycle through multiple articulations with each new MIDI 'Note On' message received. To avoid the limitation of Round Robin programming that doesn't account for the fact that you may have restarted your sequencer in the middle of a Round Robin cycle, use the Round Robin Reset control to reset the cycle back to the beginning (RR1).

See Round Robin Reset to learn more.

MOD WHEEL (CC 1) Controls Articulation Switching

Instruments containing 'MOD' in their name use the Mod Wheel (CC 1) to control articulation playback. The Articulation Pane displays the available articulations and their associated MOD values between a range of 0 and 127. The diagram shown in the bottom left is an example of the MOD values for VOO SOPRANO Sus MOD.





ROUND ROBIN (RR) Cycles through Articulations

Instruments containing 'RR' in their name use Round Robin programming to cycle through articulations with each new MIDI 'Note On' message received. The diagram above is a visual representation of this continuous cycle.

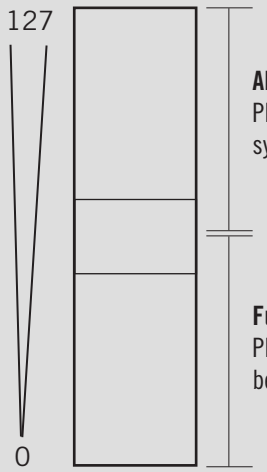
SOPRANO Instruments	TENOR Instruments
VOO SOPRANO Legato MOD	VOO TENOR Legato MOD
VOO SOPRANO Stac Combo 1 RRx8	VOO TENOR Stac Combo 1 RRx8
VOO SOPRANO Stac Combo 2 RRx8	VOO TENOR Stac Combo 2 RRx8
VOO SOPRANO Sus MOD	VOO TENOR Sus MOD

Words

This category contains 42 instruments with performances of specific Italian words mapped chromatically across the keyboard. The English translations of those words are provided in the table below. The Mod Wheel (CC1) value determines the playback position of the word; allowing the word's syllables to be split between notes. Expression (CC11) is used to control overall loudness.

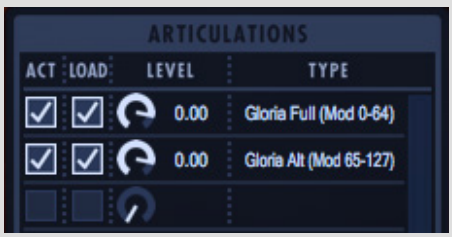
Mod Wheel (CC 1) Controls Playback Position

The Mod Wheel (CC 1) controls playback position; a value between 0 and 64 will playback the entire word from the beginning, and a value between 65 and 127 will playback beginning at the next syllable.



Alt [Mod = 65 - 127]
Playback begins at the next syllable of the word.

Full [Mod = 0 - 64]
Playback begins at the beginning of the word.



Articulation Pane displays the full word and alternative part of the word, followed by a range of Mod Wheel values that switch playback to the corresponding part of the word.

SOPRANO Instruments	TENOR Instruments	English Translation
VOO SOPRANO Addio	VOO TENOR Addio	Farewell
VOO SOPRANO Amore	VOO TENOR Amore	Love
VOO SOPRANO Bravissimo	VOO TENOR Bravissimo	Very Good
VOO SOPRANO Cara	VOO TENOR Cara	Dear (Female)
VOO SOPRANO Caro	VOO TENOR Caro	Dear (Male)
VOO SOPRANO Cielo	VOO TENOR Cielo	Sky
VOO SOPRANO Dolore	VOO TENOR Dolore	Pain
VOO SOPRANO Donna	VOO TENOR Donna	Woman
VOO SOPRANO Ella	VOO TENOR Ella	Her (She)
VOO SOPRANO Fiore	VOO TENOR Fiore	Flower
VOO SOPRANO Fortuna	VOO TENOR Fortuna	Luck

continued...

SOPRANO Instruments	TENOR Instruments	English Translation
VOO SOPRANO Forza	VOO TENOR Forza	Strength
VOO SOPRANO Gloria	VOO TENOR Gloria	Glory
VOO SOPRANO Insieme	VOO TENOR Insieme	Together
VOO SOPRANO Mai	VOO TENOR Mai	Never
VOO SOPRANO Morte	VOO TENOR Morte	Death
VOO SOPRANO Nobilta	VOO TENOR Nobilta	Nobility
VOO SOPRANO Potere	VOO TENOR Potere	Power (Authority)
VOO SOPRANO Sacro	VOO TENOR Sacro	Sacred
VOO SOPRANO Signore	VOO TENOR Signore	Lord
VOO SOPRANO Vincero	VOO TENOR Vincero	I'll Win

Phrases

This category contains 84 phrases and sub-phrases from popular opera arias in the public domain; 29 for Soprano, 27 for Tenor, and 28 for Duet. Phrases were recorded in a few different key transpositions, with each mapped to their respective root note positions that enable their use in a variety of key signatures.

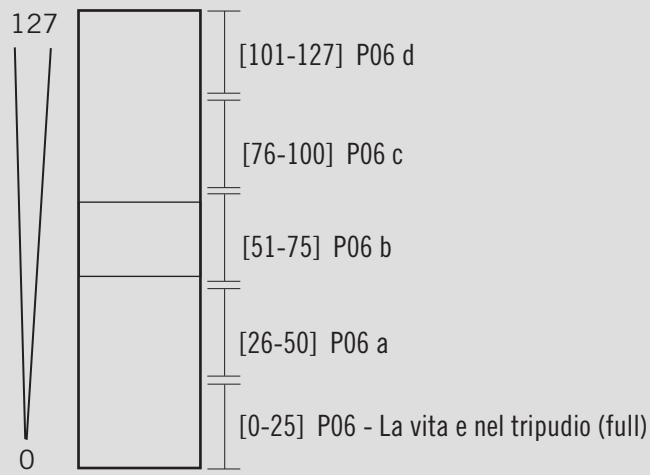
The red key highlighted on the virtual keyboard below indicates the original key the phrase is typically sung in, and the white keys represent the playable range of notes. A full phrase will playback when a note is held down, and Expression (CC 11) can be used to control loudness for additional control beyond inherent dynamics of the phrase.



Sub-phrases, the separate parts that make up a full phrase, can be switched between using the Mod Wheel (CC 1). The number of sub-phrases varies depending on the phrase, from a few upward to 8.

Mod Wheel (CC1) Controls Phrase Playback

The Mod Wheel (CC 1) controls which portion of a phrase will playback. The Articulation Pane displays the full phrase, each sub-phrase, and their associated Mod Wheel values.





Articulation Pane displays the full phrase and each of its sub-phrases. Use the Mod Wheel values in brackets to switch playback to the corresponding phrase or sub-phrase.

The table below contains information about the origin of each phrase, as well as the original lyrics and English translation. The left column contains the Phrase number and name as it appears in the instrument file, and below that the Aria, Opera and Composer of the phrase. The middle column contains the original lyrics of the phrase, and the right column provides the English translation. The rows below each phrase contain the individual sub-phrases that make up the full phrase.

SOPRANO Phrases	Original Lyrics	English Translation
Phrase 01 (Italian) **O mio babbino caro** Aria – O mio babbino caro Opera – Gianni Schicchi Composer – Puccini	O mio babbino caro Mi piace, é bello, bello	Oh my dear papa I like him, he's so handsome, handsome
sub-phrase 1 a	O mio bab ...	Oh my pa ...
sub-phrase 1 b	... bino caro	... pa, dear
sub-phrase 1 c	Mi piace, é be ...	I like him, he's so hand ...
sub-phrase 1 d	... llo, bello	... some, handsome
Phrase 02 (Italian) **Quando m'en vo'** Aria – Quando m'en vo' Opera – La bohéme Composer – Puccini	Quando m'en vo' Quando m'en vo' soletta per la via La gente sosta e mira	When I walk When I walk down the street alone People stop and stare
sub-phrase 1 a	Quando m'en vo'	When I walk
sub-phrase 1 b	Quando m'en vo' soletta per la via	When I walk down the street alone
sub-phrase 1 c	La gente sosta e mira	People stop and stare
Phrase 03 (Italian) **E la bellezza mia tutta ricerca in me** Aria – Quando m'en vo' Opera – La bohéme Composer – Puccini	E la bellezza mia tutta ricerca in me	And examine my beauty
sub-phrase 1 a	E la bellezza mia	And my beauty
sub-phrase 1 b	tutta ricerca in	they examine
sub-phrase 1 c	me	me
Phrase 4 (Italian) **Ed assaporo allora la bramosia** Aria – Quando m'en vo' Opera – La bohéme Composer – Puccini	Ed assaporo allora la bramosia Sottil, che da gli occhi traspira	And then I taste the slight yearning Which transpires from their eyes
sub-phrase 1 a	Ed assaporo allora la	And then I taste the
sub-phrase 1 b	bramosia sottil	slight yearning
sub-phrase 1 c	che da gli occhi traspira	Which transpires from their eyes

continued...

SOPRANO Phrases	Original Lyrics	English Translation
Phrase 5 (Italian) **Nasca il giorno, o, il giorno muoia** Aria – Sempre libera Opera – La traviata Composer – Verdi	Nasca il giorno, o il giorno muoia	As each day dawns, as each day dies
sub-phrase 1 a	Nasca il giorno,	As each day dawns,
sub-phrase 1 b	o il giorno ...	as each day ...
sub-phrase 1 c	... muoia	... dies
Phrase 6 (Italian) **Tra voi tra voi sapro dividere** Aria – Libiamo, ne' lieti calici Opera – La traviata Composer – Verdi	Tra voi, e tra voi e saprò dividere Il tempo mio giocondo	With you, with you, I'm able to share My cheerful time
sub-phrase 1 a	Tra voi,	With you,
sub-phrase 1 b	e tra voi e saprò di...	with you, I'm able to ...
sub-phrase 1 c	... dividere	... share
sub-phrase 1 d	Il tempo mio giocondo	My cheerful time
Phrase 7 (Italian) **La vita e nel tripudio** Aria – Libiamo, ne' lieti calici Opera – La traviata Composer – Verdi	La vita é nel tripudio	Life is about enjoyment
sub-phrases	n/a	n/a
Phrase 8 (Italian) **Addio del passato** Aria – Addio del passato Opera – La traviata Composer – Verdi	Addio, del passato	Goodbye, from the past
sub-phrase 1 a	Addio,	Goodbye,
sub-phrase 1 b	del passato	from the past
Phrase 9 (French) **L'amour est un oiseau rebelle** Aria – Habanera Opera – Carmen Composer – Bizet	L'amour est un oiseau rebelle	Love is a rebellious bird
sub-phrases	n/a	n/a
Phrase 10 (Italian) **Vissi d'arte, vissi d'amore** Aria – Vissi d'arte Opera – Tosca Composer – Puccini	Vissi d'arte, vissi d'amour	I lived for art, I lived for love
sub-phrase 1 a	Vissi d'arte,	I lived for art,
sub-phrase 1 b	vissi d'amour	I lived for love

continued...

SOPRANO Phrases	Original Lyrics	English Translation
Phrase 11 (Italian) **Sognando o vigile sempre lo chiamo** Aria – Giovanna ho dei rimorsi Opera – Rigoletto Composer – Verdi	Sognando o vigile sempre lo chiamo	Dreaming or awake, I call to him
sub-phrase 1 a	Sognando o	Dreaming or...
sub-phrase 1 b	vigile sempre lo	... awake, I to him...
sub-phrase 1 c	chiamo	... call
Phrase 12 (Italian) **E l'alma in estasi gli dice** Aria – Giovanna ho dei rimorsi Opera – Rigoletto Composer – Verdi	E l'alma in estasi	My soul in ecstasy
sub-phrase 1 a	E l'alma in...	My soul in...
sub-phrase 1 b	...estasi	...ecstasy
Phrase 13 (Latin) **Ave Maria** Aria – Ave Maria Opera – Opus 52 Composer – Schubert	Ave Maria	Hail Mary
sub-phrases	n/a	n/a
Phrase 14 (Latin) **Gratia Plena** Aria – Ave Maria Opera – Opus 52 Composer – Schubert	Gratia plena	Full of grace
sub-phrases	n/a	n/a

TENOR Phrases	Original Lyrics	English Translation
Phrase 1 (Italian) **Che gelida manina** Aria – Repetition Generale Opera – La bohéme Author – Puccini	Che gelida manina se la lasci riscaldar	What a frozen little hand Let me warm it for you
sub-phrase 1 a	Che gelida manina	What a frozen little hand
sub-phrase 1 b	se la lasci riscaldar	Let me warm it for you
Phrase 2 (Italian) **La brevita, gran pregio** Aria – Che gelida manina Opera – La bohéme Author - Puccini	La brevità, gran pregio	Brevity, a great value
sub-phrase 1 a	La brevità,	Brevity,
sub-phrase 1 b	gran pregio	a great value
Phrase 3 (Italian) **Questa o quella per me pari sono** Aria – Questa o quella Opera – Rigoletto Author – Verdi	Questa o quella per me pari sono a quant' altre	This girl or that girl are equal to all the others
sub-phrase 1 a	Questa o quella	This girl or that girl
sub-phrase 1 b	per me pari sono a quant' altre	are equal to all the others
Phrase 4 (Italian) **La donna e mobile** Aria – La donna è mobile Opera – Rigoletto Author – Verdi	La donna è mobile Qual piuma al vento	Woman is fickle Like a feather in the wind
sub-phrase 1 a	La donna è mobile	Woman is fickle
sub-phrase 1 b	Qual piuma al vento	Like a feather in the wind
Phrase 5 (Italian) **Uno alla volta, per carita!** Aria – Largo al factotum Opera – Il Barbiere di Siviglia Author – Rossini	Uno alla volta, per carità!	One at a time, for goodness sake!
sub-phrase 1 a	Uno alla volta,	One at a time,
sub-phrase 1 b	per carità!	for goodness sake!
Phrase 6 (Italian) **Il mio tesoro intanto** Aria – Il mio tesoro Opera – Don Giovanni Author – Mozart	Il mio tesoro intanto	My treasure, meanwhile
sub-phrases	n/a	n/a

continued...

TENOR Phrases	Original Lyrics	English Translation
Phrase 7 (Italian) **Un'aura amorosa del nostro Tesoro** Aria – Un aura amorosa Opera – Così fan tutte Author – Mozart	Un'aura amorosa del nostro Tesoro	A breath of love from our sweetheart
sub-phrase 1 a	Un'aura a...	A breath of...
sub-phrase 1 b	...morosa	...love
sub-phrase 1 c	del nostro	from our
sub-phrase 1 d	Tesoro	sweetheart
Phrase 8 (Italian) **Se di lauri il crine adorno** Aria – Se di lauri il crine adorno Opera – Mitridate, re di Ponto Author – Mozart	Se di lauri il crine adorno	If I put the laurel crown on my head
sub-phrase 1 a	Se di lauri	If I put the laurel
sub-phrase 1 b	il crine adorno	crown on my head
Phrase 9 (Italian) **Quel ribelle e quell'ingrato** Aria – Quel ribelle e quell'ingrato Opera – Mitridate, re di Ponto Author – Mozart	Quel ribelle e quell'ingrato	That rebel and ungrateful
sub-phrase 1 a	Quel	That...
sub-phrase 1 b	ribelle e quell'ingrato	...rebel and ungrateful
Phrase 10 (German) **Dies Bildnis ist bezaubernd schon** Aria – Dies Bildnis ist bezaubernd schön Opera – Die Zauberflöte Author – Mozart	Dies Bildnis ist bezaubernd schön	This image is enchantingly lovely
sub-phrase 1 a	Dies Bildnis ist bezaubernd...	This image is enchantingly...
sub-phrase 1 b	...schön	...lovely
Phrase 11 (French) **Le temps des lilas et le temps des roses** Song – Le temps des lilas Author – Chausson	Le temps des lilas et le temps des roses	The season for lilac and the season for roses
sub-phrase 1 a	Le temps des lilas	The season for lilac
sub-phrase 1 b	et le temps des roses	and the season for roses
Phrase 12 (Italian) **Dei miei bollenti spiriti** Aria – Dei miei bollenti spiriti Opera – La traviata Author – Verdi	Dei miei bollenti spiriti	My passionate spirit
sub-phrase 1 a	Dei miei	My
sub-phrase 1 b	bollenti spiriti	passionate spirit

continued...

TENOR Phrases	Original Lyrics	English Translation
Phrase 13 (German) **Dein Bildnis wunderselig** Song – Intermezzo Opera – Liederkreis Author – Schumann	Dein Bildnis wunderselig	Your portrait wondrously merry
sub-phrase 1 a	Dein	Your
sub-phrase 1 b	Bildnis wunder...	portrait wondrously...
sub-phrase 1 c	...selig	...merry

DUET Phrases	Original Lyrics	English Translation
Phrase 1 (Italian) **Il sogno, Ch'io vorrei sempre sognar!** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton: il sogno, Ch'io vorrei sempre sognar! Larisa: Ah, tu sol comandi, amor! (and) Carlton: Fremon nell'anima Carlton: dolcezze estreme (and) Larisa: Tu sol comandi, amor!	Carlton: It's the dream I'll always dream! Larisa: Oh, you rule me alone, Love! (and) Carlton: Tremble in my soul Carlton: The sweetest passions (and) Larisa: You rule alone, oh love!
sub-phrase 1 a	Carlton: il sogno, Ch'io vorrei sempre	Carlton: It's the dream I'll always
sub-phrase 1 b	Carlton: sognar!	Carlton: dream!
sub-phrase 1 c	Larisa: Ah, tu sol (and) Carlton: Fremon	Larisa: Oh, you alone ... (and) Carlton: Tremble ...
sub-phrase 1 d	Larisa: comandi, amor! (and) Carlton: nell'anima	Larisa: ... rule me, Love! (and) Carlton: ... in my soul
sub-phrase 1 e	Carlton: dolcezze estreme (and) Larisa: Tu sol comandi	Carlton: The sweetest passions (and) Larisa: You rule alone, oh ...
sub-phrase 1 f	Larisa: amor!	Larisa: love!
Phrase 2 (Italian) **Dammi il braccio, o mia piccina** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton: Dammi il braccio, o mia piccina... Larisa: Obbedisco, signor! Carlton: Che m'ami...di'. Larisa: Io t'amo	Carlton: Take my arm, my dear young lady… Larisa: As you say, my dear sir… Carlton: Do you love me, say! Larisa: I certainly do
sub-phrase 1 a	Carlton: Dammi il braccio, o mia piccina...	Carlton: Take my arm, my dear young lady…
sub-phrase 1 b	Larisa: Obbedisco, signor!	Larisa: As you say, my dear sir…
sub-phrase 1 c	Carlton: Che m'ami...di'.	Carlton: Do you love me, say!
sub-phrase 1 d	Larisa: Io t'amo	Larisa: I certainly do
Phrase 3 (Italian) **Amor! Amor!** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton and Larisa (together): Amor! Amor! Amor!	Carlton and Larisa (together): Love! Love! Love!
sub-phrase 1 a	Carlton and Larisa (together): Amor! (low)	Carlton and Larisa (together): Love! (low)
sub-phrase 1 b	Carlton and Larisa (together): Amor! (mid)	Carlton and Larisa (together): Love! (mid)
sub-phrase 1 c	Carlton and Larisa (together): Amor! (high)	Carlton and Larisa (together): Love! (high)

continued...

DUET Phrases	Original Lyrics	English Translation
Phrase 4 (Italian) **Amor! v1** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton and Larisa (together): Amor! Amor! Amor!	Carlton and Larisa (together): Love! Love! Love!
sub-phrase 1 a	Carlton and Larisa (together): Amor! (low)	Carlton and Larisa (together): Love! (low)
sub-phrase 1 b	Carlton and Larisa (together): Amor! (mid)	Carlton and Larisa (together): Love! (mid)
sub-phrase 1 c	Carlton and Larisa (together): Amor! (high)	Carlton and Larisa (together): Love! (high)
Phrase 5 (Italian) **Amor! v2** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton and Larisa (together): Amor! (low)	Carlton and Larisa (together): Love!
sub-phrases	n/a	n/a
Phrase 6 (Italian) **Amor! v3** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton and Larisa (together): Amor! (mid)	Carlton and Larisa (together): Love!
sub-phrases	n/a	n/a
Phrase 7 (Italian) **Amor! v4** Aria – O soave fanciulla Opera – La bohéme Author – Puccini	Carlton and Larisa (together): Amor! (high)	Carlton and Larisa (together): Love!
sub-phrases	n/a	n/a
Phrase 8 (Italian) **Godiamo, la tazza, la tazza e il cantic** Aria – Libiamo ne' lieti calici Opera – La traviata Author – Verdi	Carlton and Larisa (together): Godiamo, la tazza, la tazza e il cantico La notte abbella e il riso In questo, in questo paradiso ne scopra il nuovo dì.	Carlton and Larisa (together): Let's enjoy the cup, the cup and the chants, the embellished night and the laughter; let the new day find us in this paradise.
sub-phrase 1 a	Godiamo, la tazza, la tazza e	Let's enjoy the cup, the cup and ...
sub-phrase 1 b	il cantico, la note abella e il riso	... the chants, the embellished night and the laughter;
sub-phrase 1 c	in questo , in questo	in this, in this
sub-phrase 1 d	paradiso ne scopra il nuovo di	let the new day find us in this paradise.
sub-phrase 1 e	Ah, Ah, ne scopra di	Ah, Ah, find us in this
sub-phrase 1 f	Ah, Ah, ne scopra di	Ah, Ah, find us in this
sub-phrase 1 g	Ah	Ah
sub-phrase 1 h	Ah si!	Ah, yes!

continued...

DUET Phrases	Original Lyrics	English Translation
Phrase 9 (Italian) **Sospiro e luce tu mi sarai** Aria – Parigi, o cara Opera – La traviata Author – Verdi	Larisa: Sospiro e luce tu mi sarai, Tutto il futuro ne arriderà. Carlton: Parigi, o cara, noi lasceremo… Larisa: De' corsi affanni compenso avrai, La mia salute rifiorià. Carlton: La vita uniti trascorreremo. Larisa: De' corsi affanni compenso avrai, La mia salute rifiorià.	Larisa: You will be light and breath to me, all the future will smile on us. Carlton: We'll leave Paris, my dearest… Larisa: We shall have compensation for past troubles, My health will bloom again. Carlton: We will spend our lives together. Larisa: We shall have compensation for past troubles, My health will bloom again
sub-phrase 1 a	Larisa: Sospiro e luce	Larisa: You will be light
sub-phrase 1 b	Larisa: tu mi sarai	Larisa: and breath to me,
sub-phrase 1 c	Larisa: Tutto il futuro ne arriderà	Larisa: all the future will smile on us.
sub-phrase 1 d	Carlton: Parigi, o cara, noi lasceremo… Larisa: De' corsi affanni compenso avrai, La mia salute rifiorià. Carlton: La vita uniti trascorreremo. Larisa: De' corsi affanni compenso avrai, La mia salute rifiorià.	Carlton: We'll leave Paris, my dearest… Larisa: We shall have compensation for past troubles, My health will bloom again. Carlton: We will spend our lives together. Larisa: We shall have compensation for past troubles, My health will bloom again

Keyswitch

This category contains 9 instruments that combine multiple articulations into a single instrument by using blue colored keyswitches (highlighted below) to switch between the desired articulations in realtime as you play or sequence. Keyswitch instruments are available for Phrases, Staccato, Sustains, and Words.

Voices of Opera - Using Keyswitches to Change Articulations



Use the Blue Keyswitches highlighted on the Virtrual Keyboard (above) to switch between articulations listed in the Articulation Pane (center). Each articulation responds to its corresponding MIDI Note (starting at note C0).

Use the Articulation Pane, which displays each articulation name and its MIDI note number mapping, to mix and match various legato types, melismas, phrases, sustains and words by playing (or programming) the corresponding blue keyswitch keys to switch between the various articulation layers.

See Articulation Pane to learn more.

SOPRANO Instruments	Key Features
VOO SOPRANO Phrases KS C0_C#1 • C0 - Phrase 01 • C#0 - Phrase 02 • D0 - Phrase 03 • Eb0 - Phrase 04 • E0 - Phrase 05 • F0 - Phrase 06 • F#0 - Phrase 07 • G0 - Phrase 08 • G#0 - Phrase 09 • A0 - Phrase 10 • Bb0 - Phrase 11 • B0 - Phrase 12 • C1 - Phrase 13 • C#1 - Phrase 14	• **Keyswitches** (KS) control which of the 14 phrases playback. • **Mod Wheel** (CC 1) controls which portion of each phrase will playback. This varies between phrases (see the Phrases section for further details). • **Expression** (CC 11) controls overall loudness.
VOO SOPRANO Staccato KS C0_Eb1 • C0 - Cher • C#0 - Ci • D0 - Don • Eb0 - Fa • E0 - Goh • F0 - Joh • F#0 - Ki • G0 - Kom • G#0 - Lu • A0 - Na • Bb0 - Oo • B0 - Prey • C1 - Ra • C#1 - Te • D1 - Toh • Eb1 - Voh	• **Keyswitches** (KS) control which of the 16 single-syllable articulations playback. • **MIDI Velocity** controls overall loudness depending on how hard or soft you play. • **Expression** (CC 11) can also be used to control overall loudness.
VOO SOPRANO Sustain KS C0_E0 • C0 - Ah • C#0 - Ee • D0 - Eh • Eb0 - Oh • E0 - Oo	• **Keyswitches** (KS) control which of the 5 single-syllable vowel articulations playback. • **MIDI Velocity** controls overall loudness depending on how hard or soft you play. Velocities between 1 and 79 will playback an *mp* (medium-soft) dynamic, velocities between 80 and 115 will playback an *mf* (medium-loud) dynamic, and velocities between 115 and 127 will playback an *f* (loud) dynamic. • **Expression** (CC 11) can also be used to control overall loudness.

continued...

SOPRANO Instruments	Key Features
VOO SOPRANO Words KS C0_G#1 • C0 - Addio • C#0 - Amore • D0 - Bravissimo • Eb0 - Cara • E0 - Caro • F0 - Cielo • F#0 - Dolore • G0 - Donna • G#0 - Ella • A0 - Fiore • Bb0 - Fortuna • B0 - Forza • C1 - Gloria • C#1 - Insieme • D1 - Mai • Eb1 - Morte • E1 - Nobilta • F1 - Potere • F#1 - Sacro • G1 - Signore • G#1 - Vincero • A1 - Ah Sus • Bb1- Ee Sus • B1 - Eh Sus • C2 - Oh Sus • C#2 - Oo Sus	• **Keyswitches** (KS) controls which of the 21 different word articulations, or 5 different vowel sustain instruments, playback. • **MIDI Velocity** controls overall loudness depending on how hard or soft you play. • **Expression** (CC 11) can also be used to control overall loudness.

TENOR Instruments	Key Features
VOO TENOR Phrases KS C0_C1 • C0 - Phrase 01 • C#0 - Phrase 02 • D0 - Phrase 03 • Eb0 - Phrase 04 • E0 - Phrase 05 • F0 - Phrase 06 • F#0 - Phrase 07 • G0 - Phrase 08 • G#0 - Phrase 09 • A0 - Phrase 10 • Bb0 - Phrase 11 • B0 - Phrase 12 • C1 - Phrase 13	• **Keyswitches** (KS) control which of the 13 phrases playback. • **Mod Wheel** (CC 1) controls which portion of each phrase will playback. This varies between phrases (see the Phrases section for further details). • **Expression** (CC 11) controls overall loudness.
VOO TENOR Staccato KS C0_Eb1 • C0 - Cher • C#0 - Ci • D0 - Don • Eb0 - Fa • E0 - Goh • F0 - Joh • F#0 - Ki • G0 - Kon • G#0 - Lu • A0 - Na • Bb0 - Oo • B0 - Prey • C1 - Ra • C#1 - Te • D1 - Toh • Eb1 - Voh	• **Keyswitches** (KS) control which of the 16 single-syllable articulations playback. • **MIDI Velocity** controls overall loudness depending on how hard or soft you play. • **Expression** (CC 11) can also be used to control overall loudness.
VOO TENOR Sustain KS C0_E0 • C0 - Ah • C#0 - Ee • D0 - Eh • Eb0 - Oh • E0 - Oo	• **Keyswitches** (KS) control which of the 5 single-syllable vowel articulations playback. • **MIDI Velocity** controls overall loudness depending on how hard or soft you play. Velocities between 1 and 79 will playback an ***mp*** (medium-soft) dynamic, velocities between 80 and 115 will playback an ***mf*** (medium-loud) dynamic, and velocities between 115 and 127 will playback an ***f*** (loud) dynamic. • **Expression** (CC 11) can also be used to control overall loudness.

continued...

TENOR Instruments	Key Features
VOO TENOR Words KS C0_G#1 • C0 - Addio • C#0 - Amore • D0 - Bravissimo • Eb0 - Cara • E0 - Caro • F0 - Cielo • F#0 - Dolore • G0 - Donna • G#0 - Ella • A0 - Fiore • Bb0 - Fortuna • B0 - Forza • C1 - Gloria • C#1 - Insieme • D1 - Mai • Eb1 - Morte • E1 - Nobilta • F1 - Potere • F#1 - Sacro • G1 - Signore • G#1- Vincero • C4 - Ah Sus • C#4 - Ee Sus • D4 - Eh Sus • Eb4 - Oh Sus • E4 - Oo Sus	• **Keyswitches** (KS) controls which of the 21 different word articulations, or 5 different vowel sustain instruments, playback. • **MIDI Velocity** controls overall loudness depending on how hard or soft you play. • **Expression** (CC 11) can also be used to control overall loudness.

DUET Instruments	Key Features
VOO TENR_SOPR DUET Phrases KS C0_G#0 • C0 - Phrase 01 • C#0 - Phrase 02 • D0 - Phrase 03 • Eb0 - Phrase 04 • E0 - Phrase 05 • F0 - Phrase 06 • F#0 - Phrase 07 • G0 - Phrase 08 • G#0 - Phrase 09	• **Keyswitches** (KS) control which of the 9 phrases playback. • **Mod Wheel** (CC 1) controls which portion of each phrase will playback. This varies between phrases (see the Phrases section for further details). • **Expression** (CC 11) controls overall loudness.



Ch. 4: Voices of Opera User Interface

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60 The Mixer View
63 The Main Menu
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The Main Navigation Bar

The Navigation Bar is located at the top of Play 6 and includes (from left to right): Main Menu, Settings Menu, the Browser, Mixer and Player buttons, an Instrument Selector, and the Instruments Sidebar panel.



The Player View

When an instrument from Voices of Opera is loaded into Play 6, the Player view will display the Voices of Opera user interface and the loaded instrument will appear in the Instrument Selector.

See How To Load Instruments to learn more.



The Virtual Keyboard

The virtual keyboard at the bottom of the Play user interface is color coded: White displays the playable range of an instrument, Tan indicates no samples are loaded, and Blue represents keyswitches that handle articulation switching.

The Master Instrument Channel

The Master Channel is a strip along the right side of the Voices of Opera UI that affects the master output for the selected instrument.



Channel Source

Click in the Channel Source field to reveal a drop-down list with options to configure the output.

- **Stereo** outputs the original stereo channels as they were recorded.
- **Mono** sums the left and right channels into a dual mono channel.
- **Mono From Left** outputs the left channel to a dual mono output, discarding the right channel.
- **Mono From Right** outputs the right channel to a dual mono output, discarding the left channel.
- **Swap Left and Right** outputs a reverse stereo image of the original audio (swapping the left and right channels).



Tuning

The Tune control includes coarse and fine tuning modes. Coarse tuning adjusts the pitch up or down in semitone increments, while fine tuning moves the pitch up or down in increments of 1/100th of a semitone (called "cents").



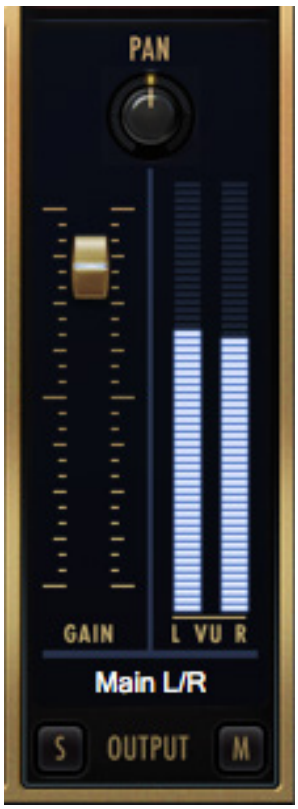
Change the tuning value by clicking on the arrows inside the spinboxes above the coarse and fine tuning buttons, or use the Tune knob with a selected tuning mode. The spinboxes display the tuning values for both the coarse and fine tuning modes.

Panning

The Pan knob adjusts the volume of the left and right audio signal to change the perceived position of the sound source, while preserving the relative panning of the individual microphones in each of the 3 Microphone Mixes. Use the Pan knob to define the position in the stereo image, or for special effect.

Master Fader

The Master Fader adjusts the volume of the instrument's master output, without affecting the relative mix of the microphone sub-mixer channels. Two audio meters display the signal of the stereo output in real-time.



Stereo Outputs

By default the 'Main L/R' option in the Output Channel dialog is selected. To assign an instrument to a stereo output other than the default, click in the field and select 1 of 9 stereo outputs.

This option allows you to send the stereo outputs of each loaded instrument to separate audio tracks in your system's sound card (in stand alone mode) or in your host sequencer (as a plug-in).

Mute and Solo

When enabled, the Mute button silences the audio output for the selected instrument. When enabled, the Solo button silences the audio outputs for all instruments that are not currently soloed.

Mixes

The Mixes section is located to the left of the Master Channel, and to the right of the Articulation Pane on the Voices of Opera UI. Here, the volume, pan, on/off state, and the mute/solo state of the 3 Microphone Mixes can be modified.



Click on the light below each sub-mix to toggle its on/off state, effectively loading or unloading the samples from memory.

- **Front:** this microphone position is a single vintage Telefunken 251 tube microphone. A vintage Neumann U67 tube microphone was added to this configuration when recording the Duet phrases.
- **Rear:** this microphone mix consists of a pair of vintage Coles 4038 ribbon microphones.
- **Room:** this microphone mix consists of a pair of vintage AKG C12 tube microphones, and 3 vintage Neumann M50 tube microphones in a Decca-tree configuration.



The Mute (M) and Solo (S) buttons function the same as in the Master Channel. That is, when enabled, the Mute button silences the audio output for the selected instrument. When enabled, the Solo button silences the audio outputs for all instruments that are not currently soloed.

Reverb

Play uses a special type of reverb called Convolution that uses short impulses to excite a space, like a studio or cathedral, and capture the resulting "impulse response" (IR). That IR contains the characteristics of that space, which can then be applied, or convolved, with the input signal to simulate that sound playing in that given space.

IMPORTANT NOTE! A default reverb setting is applied to all instruments, but can be modified, changed, or disabled for a more dry sound.



- **On Button:** Click the 'On' button to toggle the on/off state of the Reverb. When enabled, the Reverb 'On' button becomes illuminated.
- **Preset List:** Click in the field containing the name of the currently selected IR to reveal a drop-down list of all available IRs, with a check-mark indicating the current selection. Click on the desired IR to select it.



- **Pre-Delay:** Adjust this value to change the onset time (in milliseconds) of the convolved audio output.
- **Volume Knob:** Adjust this value to specify the amount of reverb to apply to the signal.
- **Master Button:** Click on this button to toggle the on/off state of the Master Reverb control. When enabled the Reverb 'On' button becomes illuminated and reverb is applied to all instruments within a given instance of Play. The Master Reverb control saves CPU resources by applying the selected IR to all loaded instruments within a single instance of Play, including Play Libraries that do not include a Master Reverb button themselves.

Stereo Double

The Stereo Double controls allow you to set the width of the stereo spread. This only works when 'Stereo' is selected in the Channel Source of the Master Channel (which is the default setting).



Select between the Left (L) and Right (R) signal with the buttons on either side of the On button, then use the 'Amount' knob to dial in the desired depth.

Turning the 'Amount' knob all the way to the left results in no effect, the equivalent of disabling the effect entirely. Turning the 'Amount' knob all the way to the right results in the maximum stereo spread.



Articulation Pane

The Articulation Pane is located in the center of the Voices of Opera UI. It contains all the individual articulations available for the selected instrument.

Depending on what instrument is loaded, there may be many articulations present, or just one. Instruments containing multiple articulations are programmed to respond to various commands for real-time control over articulation switching, including the use of keyswitches, the mod wheel (CC1) or MIDI velocity sensitivity.

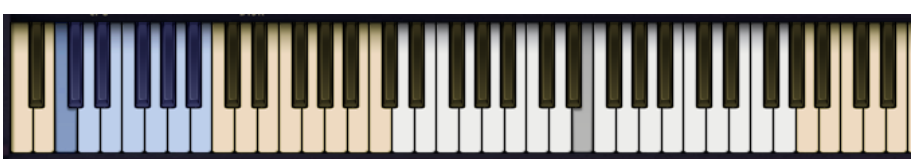
See Ch. 3: Voices of Opera Instruments to learn more





Each articulation in the Articulation Pane contains the following:

- **Active:** check this box to make an articulation active.
- **Loaded:** check this box to load the corresponding articulation into memory.
- **Level:** adjust the volume of an articulation by moving the Level knob of the corresponding articulation.
- **Type:** displays the articulation type, and in the case of keyswitch instruments, the MIDI note number the keyswitch is programmed on. Note that the blue keyswitch selected (highlighted) below corresponds to the 'C0 - Phrases C' in the Articulation Pane above.



Envelope

The Envelope controls the volume of a sound over time across 5 stages. Each knob controls the length or loudness of one or more stages of the envelope. All Play Library instruments are programmed with default Envelope values to achieve a natural sound. Changing this may result in less than natural results.



Stages of an Envelope

The Attack, Hold, and Decay stages of the envelope determine how long it takes for the sound to go from the initial attack to the beginning of the sustain stage. Typically, a sound begins to drop in volume immediately after reaching its loudest point, but using the Hold value maintains the volume at its loudest point until reaching the decay stage.

- **Attack**: measured in milliseconds (ms), this stage starts at the beginning of the note until it reaches its highest volume.
- **Hold**: this stage maintains the loudest volume of the attack for the number of milliseconds (ms) specified.
- **Decay**: the time in milliseconds (ms) it takes to drop from the highest point of the attack or hold stage, to the sustain stage that follows.
- **Sustain:** specifies the loudness of the sound in decibels (db) after the initial attack, and until the note is released.



- **Release:** determines how long the sound remains audible, in milliseconds (ms) after a note is released.

Performance Scripts

A performance script changes the sample playback of an instrument, and can be automated using MIDI Continuous Controllers (CCs). Voices of Opera contains 4 performance scripts that are described below.



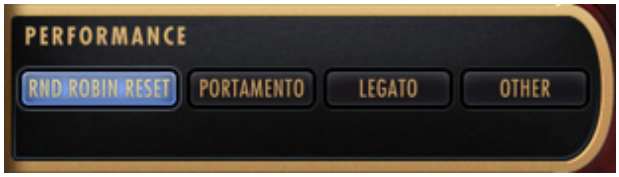
Automatation: Performance scripts can be automated by sending MIDI Continuous Controller (CC) values to the specified controller lane.

In order to automate a performance script to turn on or off over the course of a sequence, use the MIDI CC number that is assigned to the script (see table below) you wish to change and send a value between 0 and 63 to disable it and a value between 64 and 127 to enable it. If no MIDI CC value is present, the script retains it's default setting.

CC	Portamento	Legato	Other (True-Legato)
5	Time	Time	
22			Poly / Mono
65	On/Off		
68		On/Off	

Round Robin Reset

Round Robin (RR) is a sampling technique of recording multiple takes of the same note (played in a similar manner), to capture the inherent variation from one to the next. When playing an instrument that includes RR samples, Play will alternate between these samples to avoid the unnatural sound of the same note (and identical sample) playing repeatedly. Any articulation with "RR" in its name uses round robin technology. Those with an "x3," "x4," etc, use 3, 4, or more sample variations per note.



The Round Robin Reset control solves the one potential problem with this sampling technique. For example, because Play remembers which sample should be played the next time a note sounds, if a round-robin patch contains two samples, A and B, and a piece uses that note 7 times over the whole piece, the playback will be A B A B A B A. If the piece is played again from the beginning, the engine will play starting with B, because that's next in order. The second rendition will be subtly different. Being able to reset all round-robin articulations to the beginning of the cycle allows for consistent playback.

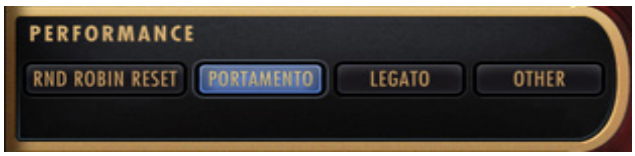
How To Automate RR Reset: You can use the Round Robin button to reset all round robin articulations on demand, or assign either a MIDI note or MIDI Continuous Controller (CC) to reset them directly from a MIDI controller or from the controller lane in your DAW.

These options are found in the 'Other' tab of the Setting menu. The numeric value in the spin box specifies which note number (C3 = 60) or which MIDI Continuous Controller (CC) will be interpreted as a reset. Once set, all the round robin instruments in any given MIDI channel will be reset when that note or CC value is received.



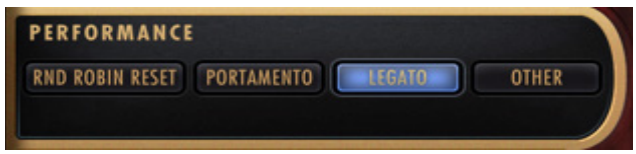
Portamento

This script emulates portamento playing by applying a short, anticipatory movement between the pitches of two adjacent notes in a phrase. You can make the portamento effect more pronounced by sending higher values on a scale between 0 and 127 on MIDI Continuous Controller 5 (CC5).



Legato

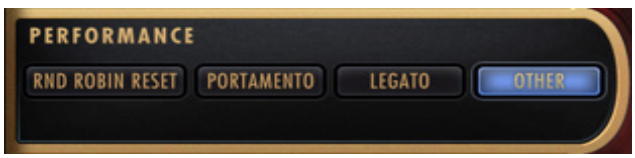
This script emulates legato playing by forcing monophonic behavior and adjusting note timing. You can make the legato effect more pronounced by sending higher values on a scale between 0 and 127 on MIDI Continuous Controller 5 (CC5). The legato script also disables release trails and turns on reverb to ensure smooth playback of a melodic line.



IMPORTANT NOTE! The Legato script is only an effect applied to an instrument and doesn't actually playback "true" legato intervals. The 'Other' script described below, however, is intended to work with such instruments.

Other

The 'Other' (True Legato) script is forces monophonic behavior and uses MIDI Velocity sensitivity to adjust the timing of the legato transition's playback.



By playing softly (around a velocity range of 50-60) a longer legato transition time will playback, allowing slow music to breathe more. By playing more forcefully (within a velocity range of 110-127), a shorter legato transition time will playback, tightening up the timing between notes.

When MIDI Velocity is being used to control Legato Speed, it does not affect loudness.

The forced monophonic behavior in the 'Other' script can be turned on and off by sending a values on MIDI CC 22. Send values between 0 and 63 to enable polyphony, and values between 64 and 127 to enable monophonic behavior.

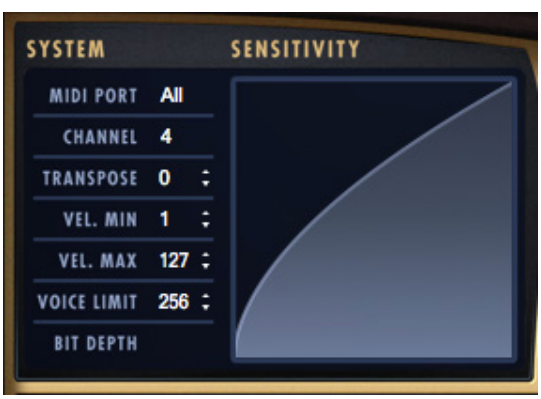
MIDI Velocity sensitivity will continue to affect legato transition time unless the 'Other' button is turned off from the Player view. Please be aware that disabling monophonic behavior runs the risk of inadvertently playing back unwanted legato transitions when there is more than one melodic line being played.

System and Sensitivity

This area contains several settings, some of which can also be found in the Advanced Instrument Properties within The Instruments Sidebar.



- **MIDI Port** defines which available MIDI devices are enabled (stand-alone only).
- **Channel** Omni mode receives MIDI data on all channels, while 1 through 16 indicates a specific channel for receiving the MIDI data.
- **Transpose** raises or lowers the incoming MIDI note by increments of +/- 1 semitone.
- **Velocity Min / Max** specifies the minimum velocity and maximum velocity range for a given instrument. Values below the minimum or above the maximum velocity are respectively remapped to the lowest and highest values.
- **Voice Limit** specifies the maximum number of voices that an instrument can playback. If an instrument receives more voices than the voice limit value, it will cut off voices that began playing first. Keep in mind that there are instruments that play more than one sample when sounding a note (such as instruments that use cross-fading, have release trails and/or multiple microphone positions).



- **Sensitivity** determines what part of the dynamic range the instrument is most sensitive to, ranging in values between -100 and +100. The Sensitivity Curve graph included in Voices of Opera will reflect changes made here.

Status Bar

The Status Bar tracks system usage for CPU, Disk, Voices, and RAM usage. Monitor the usage and if necessary adjust the 'Sample Cache' settings located in the Settings Menu under Streaming tab to improve performance.



- **CPU** the percentage of the total processor capacity Play is consuming.
- **Disk** the number of megabytes per second (MB/s) data is being streamed from disk
- **Memory** the number of megabytes (MB) of RAM being used by loaded samples.
- **Voices** the number of samples, not just notes, currently being played.

See How To Optimize Playback and Performance to learn more.

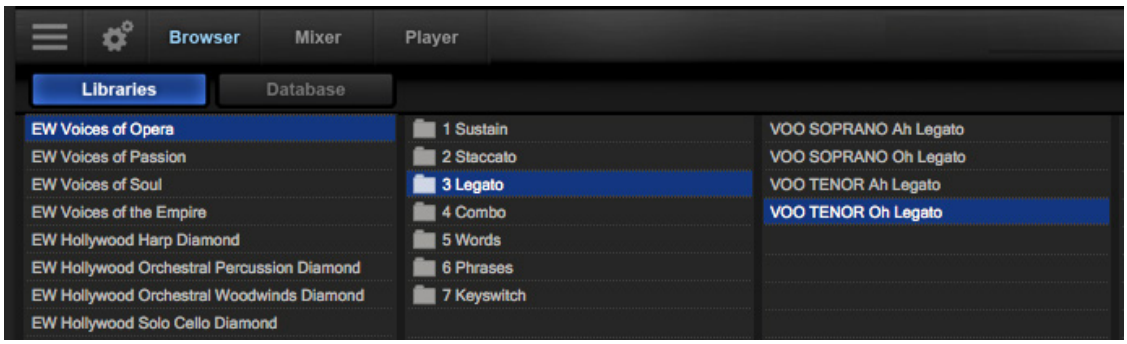
The Browser View

2 different modes are available in the Browser view that enable you to find the instrument you're looking for.

- **Libraries** allows you to browse for instruments within their original Play Library file structure. Existing Play users will be familiar with this one.
- **Database** allows you to conduct a direct search with key words, or narrow down search results by selecting attribute tags across a variety of categories.

Libraries Browser

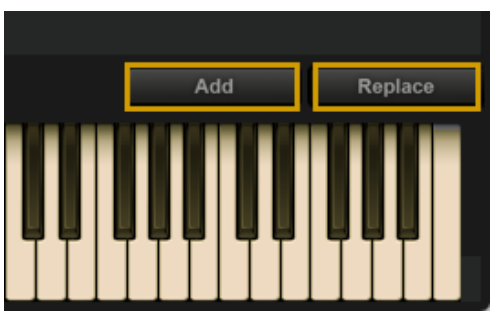
The left column of the Libraries browser is where all installed Play Libraries populate. Click on EW Voices of Opera in this column and browse through the 7 sub-categories that includes Sustain, Legato, Combo, Phrases and Keyswitch. to find and load an instrument



See Ch. 3: Voices of Opera Instruments to learn more

How To Load Instruments

To load an instrument, select it from the right column, and click either the 'Add' button or the 'Replace' button.



Click the 'Replace' button, or simply double-click, to replace the currently selected instrument with a new one.

Click the 'Add' button, or double-click while holding [shift], to add the instrument to the existing loaded instruments.

If more than 1 instrument is loaded when you click the 'Replace' button, a prompt will give you the option to replace the current selected instrument, or replace all loaded instruments.

How To Use The Instrument Selector

When multiple instruments are loaded, click the Instrument Selector field to reveal a drop-down menu showing all loaded instruments and their respective MIDI channel assignments.



A check-mark indicates the current instrument selection, and clicking on a loaded instrument will make it the current selection.

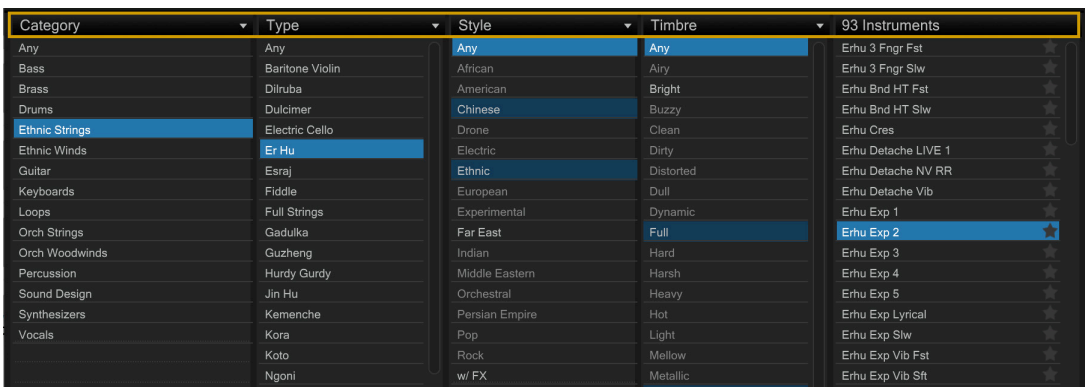
The Player view follows the current instrument selection as well, displaying the appropriate user interface.

Database Browser

The Database browser allows you to search for instruments by selecting attribute tags from a variety of categories, as well as query search words directly in the Search Field.

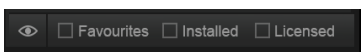


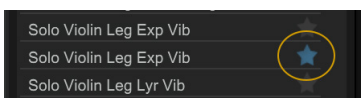
By default, the left column contains the main Category, and the 3 middle columns contain Type, Style and Timbre.



The right column contains a Results List that populates with instruments that match the selected criteria. At the top of that column is an Instrument Count that provides the number of resulting instruments.

At the bottom of the column are a set of Filters that allow you to further narrow the current selection of instruments to only show those tagged as Favorites, or Installed and/or Licensed to your computer.

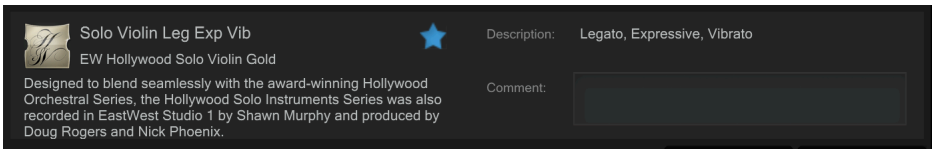




To tag an instrument as a Favorite, click on the star icon to the right of the instrument name in the results list. The star icon will light up to indicate it has been tagged.

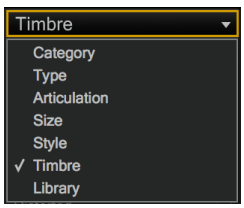
The Instrument Panel is located in the lower center area, and contains information for the instrument selected in the results list. This information includes the instrument

name, the Play Library or Collection it's from, a blurb about the library, a description of the instrument and comments box that can be freely edited.



Access Additional Attribute Categories

To access additional attribute categories that include Articulation, Library and Size, click on any category name to reveal a drop-down menu, then click on the desired category. A check-mark indicates the current selection.



QUICK TIP! If using Play Libraries with a lot of articulations, like the Hollywood Series, swap Timbre for the Articulation category for better results.

Database Hierarchy

The Category column has the highest level of hierarchy in the database. It contains broad attribute tags such as instrument groups like 'Ethnic Strings' and special categories like 'Loops & Kits'. Selecting a tag in this column will affect all other columns, narrowing down the visible results in each.

The Type column has the second highest level of hierarchy in the database. It contains attribute tags that are a subset of Category, including instrument types like 'Dulcimer' and special category types like 'Drum Loops'. Selecting a tag in this column will affect all other columns (except Category) by graying out the visible results in each. This behavior allows you to always see the narrowed results in all other columns based on the main Category selection, even as you further define the search in the Type category.

The remaining categories represent the third tier of hierarchy in the database. Style tags pertain to musical style (genre) and production style (w/FX), Timbre tags describe the quality or tone of a sound, Articulation tags define the performance technique(s) used, and Size tags are related to the loading size of an instrument: small, medium, large and x-large. Libraries tags can be used in conjunction with other search categories to find "all the guitars in Fab Four", for example. This differs from the search function in the Libraries area, where instruments are located by searching for instruments within the individual Play Libraries' folder structure.

Tag Selection Rules

The Category and Type categories enable one tag to be selected at a given time, while all other categories enable multiple tag selections by holding down 'command' (macOS) or 'alt' (Win) keys while selecting tags.

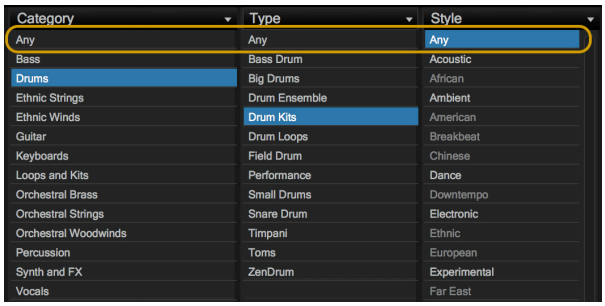
When selecting multiple tags in the Style, Timbre, Articulation, Library and Size categories, please note that only instruments containing all selected attributes will appear in

the results list, not just one or the other. This allows you to find, for example, drums that are both fat and punchy.

How To Reset Tag Selections

Clicking the 'Any' tag at the top of the Category column will reset existing tag selections across all categories.

Clicking the 'Any' tag at the top of every other category will reset the tag selections in only that given category.



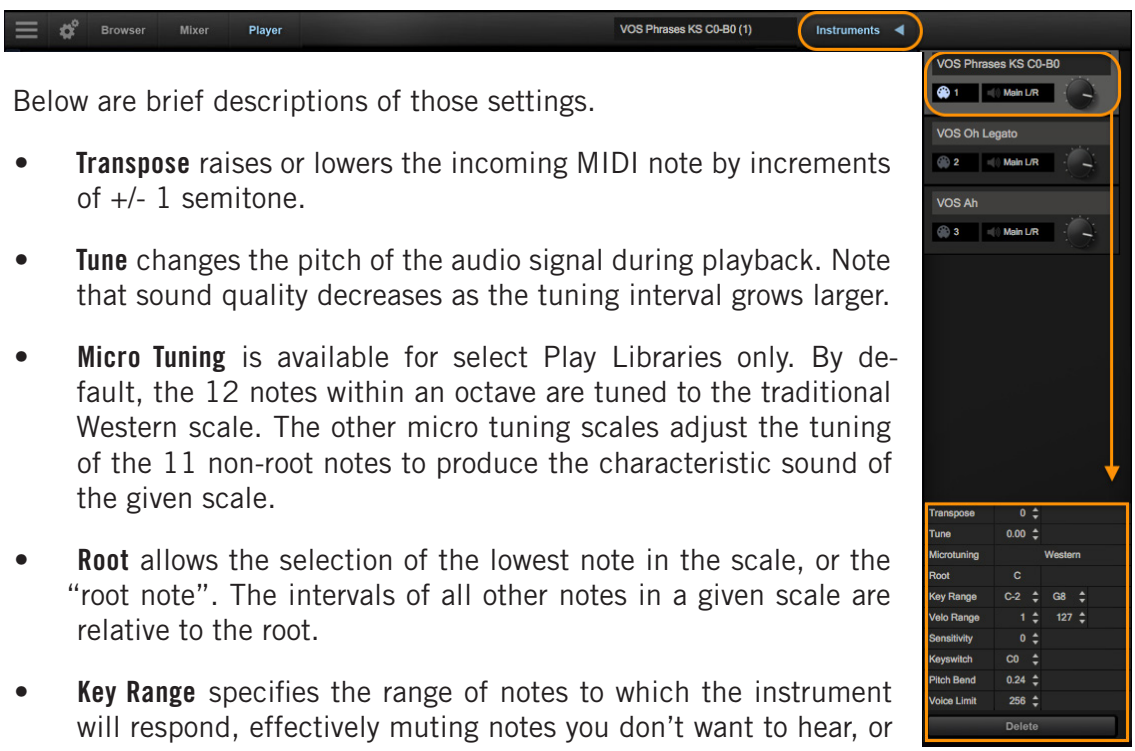
The Instruments Sidebar

Click the Instruments Sidebar button on the right side of the Navigation Bar to open a panel that displays all loaded instruments and their MIDI channel, audio output and volume controls.

Advanced Instrument Properties

The settings of the currently selected instrument appear in the Advanced Instrument Properties window located at the bottom of the Instruments Sidebar panel.

To make an instrument the current selection, click on it from the Instruments Sidebar, the Instrument Selector, or Mixer areas, then change the settings as desired.



Below are brief descriptions of those settings.

- **Transpose** raises or lowers the incoming MIDI note by increments of +/- 1 semitone.
- **Tune** changes the pitch of the audio signal during playback. Note that sound quality decreases as the tuning interval grows larger.
- **Micro Tuning** is available for select Play Libraries only. By default, the 12 notes within an octave are tuned to the traditional Western scale. The other micro tuning scales adjust the tuning of the 11 non-root notes to produce the characteristic sound of the given scale.
- **Root** allows the selection of the lowest note in the scale, or the "root note". The intervals of all other notes in a given scale are relative to the root.
- **Key Range** specifies the range of notes to which the instrument will respond, effectively muting notes you don't want to hear, or

giving you the ability to split the keyboard between multiple instruments on a single MIDI channel.

- **Velocity Range** specifies the minimum velocity and maximum velocity range for a given instrument. Values below the minimum or above the maximum velocity are respectively remapped to the lowest and highest values.

- **Sensitivity** determines what part of the dynamic range the instrument is most sensitive to, ranging in values between -100 (left) and +100 (right). The Sensitivity Curve Graph included in the Player view of some Play Libraries will reflect changes made here.



- **Keyswitch** sets the selected instrument's default keyswitch note, which specifies the articulation in the keyswitch file that plays when no keyswitch note has been played in its MIDI channel in the current session. Please note, the instrument must be saved to the file system with an [.ewi] extension and reopened from that [.ewi] file for the new default value to take effect.

- **Pitch Bend** specifies the range of the Pitch Bend Wheel in semitones. The value can be set between -12 semitones and +12 semitones. Negative values reverse the direction of the Pitch Bend Wheel, so pushing it up lowers the pitch.

- **Voice Limit** specifies the maximum number of voices that an instrument can playback, up to a limit of 999. If an instrument receives more voices than the voice limit value, it will cut off voices that began playing first.

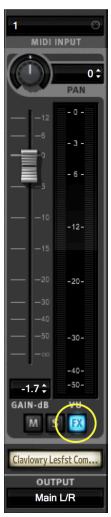
The Mixer View

The Mixer view displays a channel strip for each loaded instrument with controls for volume, panning, mute and solo. It also contains buttons that open the FX Rack and Sub-Mixer channels (see below) for instruments with multiple microphone positions.



How To Access The FX Rack

The FX Rack contains the EastWest Amp Simulator, EP-1 Delay, ADT (Automatic Double Tracking) Effect and Convolution Reverb, as well as the Ohm Force Ohmicide distortion plugin, and an suite of SSL audio processing tools that includes a Filter, EQ, Compressor, Gate/Expander, Transient Shaper and Stereo Buss Compressor.





How To Save Your Own FX Rack Presets

If you wish to save the settings in the FX Rack section as a preset file for later recall, click inside the 'Preset' field then click 'Save Preset' from the drop-down menu to bring up a dialog box where you can 'Enter New Preset Name'.

Once saved, presets can be loaded from the 'User-Defined Presets' location, which populates just above the 'Save Preset' option in the drop-down menu of the 'Preset' field.





Using the EP-1 Delay and ADT Effects

In addition to the standard suite of effects available to all Play users, Voices of Opera includes two additional effects: the EP-1 Delay and ADT Effect.

EP-1 Delay models the Echoplex Delay designed in 1959, which uses magnetic tape to create it's highly prized vacuum tube delay sound.



- **Echo** controls the amount of the time between echoes. The time values span between 20 m/s (milliseconds) and 2.0 seconds when the Sync button is disabled.

  When the Sync button is enabled (lit up blue) the Play plug-in will sync to the DAW's host tempo, and use time (note) values spanning between a 1/32nd note and 2 bars. Triplet and Dotted note values are abbreviated 'T' and 'D'. See table below.

Echo Sub-Divisions	
1/32	1/8 D
1/16 T	1/4
1/32 D	1/2 T
1/16	1/4 D
1/8 T	1/2
1/16 D	1/2 D
1/8	1 bar
1/4 T	2 bars

- **Drive** controls the intensity of harmonic distortion added to the delay line, with a range of values between 0 (none) and 10 (maximum).
- **Flutter** emulates the pitch wobble created by variations in tape speed in the original Echoplex Delay. The knob controls the intensity of flutter, which with a range of values between 0 (none) and 10 (maximum).
- **Repeats** controls the decay time of the delay line between a range of 0% and 100%. The lower the percentage, the more quickly the repeats decay.
- **Level** controls the overall loudness of the repeats (between -60 db and +6 db) relative to loudness of the original signal. A value of 0 db means the audio signals are of equal loudness levels.
- **On** will glow blue when enabled, and becomes grayed out when disabled. Click the button to enable and disable the EP-1 Delay effect.

ADT (Automatic Double Tracking) emulates the technique made famous by the Beatles when recording at Abbey Road Studios, which was achieved by combining an audio signal on one tape machine, with an identical, delayed copy of that same audio signal on another tape machine.



- **On** will glow yellow/orange when enabled, and becomes grayed out when disabled. Click the button to enable and disable the ADT effect.
- **Delay** controls the delay time between the original audio signal and the secondary audio signal between a range of 0.1 milliseconds and 50 milliseconds. A delay time of 40 ms is a good place to start.
- **Depth** controls the amount of modulation affecting the delay time.
- **Speed** controls the rate at which the modulation affects the delay time between a range of 0 and 1 hertz.
- **Level** controls the loudness of the secondary audio signal (between -60 db and +6 db) relative to the original audio signal. At a setting of 0 db the effect is most prominant, while higher and lower decibel values favor one signal over the other.

How To Access Sub-Mixer Channels

For Instruments that contain multiple microphone positions, a Sub-Mixer button will appear to the right of the mute, solo and FX buttons. Single microphone instrument do not display this button.



Click on the Sub-Mixer button to reveal a channel strip for each available microphone position.

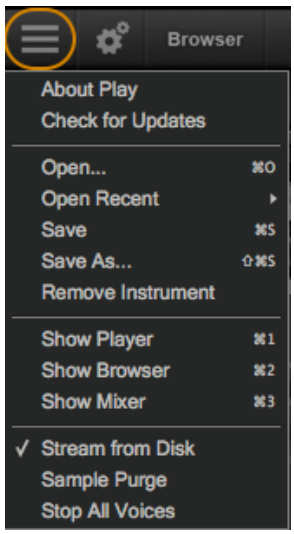
Loaded microphones are illuminated in white, while unloaded instruments are gray.

Click on the microphone name to load and unload an instrument.

The Main Menu

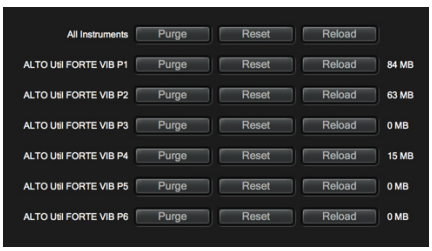
The Main Menu appears as three horizontal bars located in the top-left corner of the Play interface. Click on it for quick access to the options detailed below.

- **About Play:** Displays pertinent information about the product, including version number, copyright, and information about the Play Library the currently selected instrument comes from.
- **Check for Updates:** Use an internet connection to check for a new version of the Play software (if available).
- **Open:** Load an instrument file with the extension [.ewi] from its current location.
- **Open Recent:** The last 9 previously opened instruments appear in this list. Click on an instrument's file name to reopen it.
- **Save:** Any changes you made with controls in the Player view can be saved to an existing instrument [.ewi] and reopened.
- **Save As:** Performs the same operation as the Save option (above), except that the instrument name and save location can be changed, without overwriting the original instrument [.ewi]



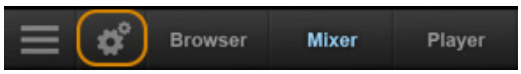
- **Remove Instrument:** Removes the currently selected instrument from this instance of Play.
- **Show Player, Browser, Mixer:** Use these shortcuts as an alternative to switching between the 3 main views in the Navigation Bar at the top of the Play user interface.
- **Refresh Browser:** Use this option if changes to Play Libraries file system were made while Play is open. This option will force Play to rescan and update the file directory.
- **Stream From Disk:** This option is enabled by default upon loading an instrument. It loads the beginning portion of each sample into RAM and streams the rest from the hard drive.When the item is not checked, the entire instrument is loaded into RAM. This setting only applies to the currently selected instrument.
- **Sample Purge:** contains a set of options that allow you to free up system resources in large projects by removing unused samples from memory. This can be done across all instruments, or on a per-instrument basis.

  To begin, click the 'Reset' button to clear the memory of previous playback information. Next, playback the sequence in your DAW. Any notes not played since the last reset will be removed by clicking the 'Purge' button. To bring back purged samples, click the 'Reload' button.

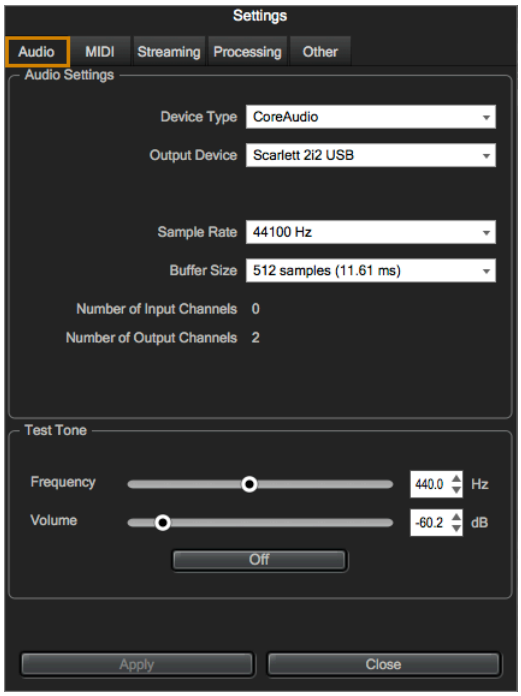


The Settings Menu

The Settings Menu appears as a gear icon located in the top-left corner of the Play interface, to the right of the Main Menu. Click on it for quick access to the 5 categories of options detailed below.



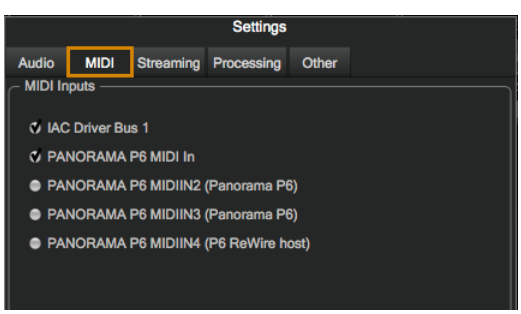
Audio Settings



The Audio Settings tab enables you to configure a audio connections when running Play in stand alone. When running as a plug-in, the DAW will handle the audio connections and Play's Audio Settings tab will be disabled.

- **Device Type:** Select an audio driver from the drop-down menu to handle the audio input and output.
- **Output Device:** Select an audio interface from the drop-down menu, or choose built-in audio if you do not have an audio interface
- **Sample Rate:** Select a sample rate from the drop-down menu. The options that appear here will depend on the supported sample rates of your audio interface
- **Buffer Size:** Select from a range of buffer sizes available from your audio interface. Lower buffer settings result in less latency (delay), but require more computer resources.
- **Input / Output Channels:** These readouts gives the number of audio channel inputs and outputs available on your audio interface.
- **ASIO Settings:** A shortcut is available to Windows users that allows you to open the ASIO audio driver to set Sample Rate and Audio Buffer Size.
- **Test Tone:** Use these controls to verify that audio being generated by Play is correctly routed to your speakers, headphones, or any other destination. Use the two sliders to set the frequency and volume, then click on the button to start or stop the tone.

MIDI Settings

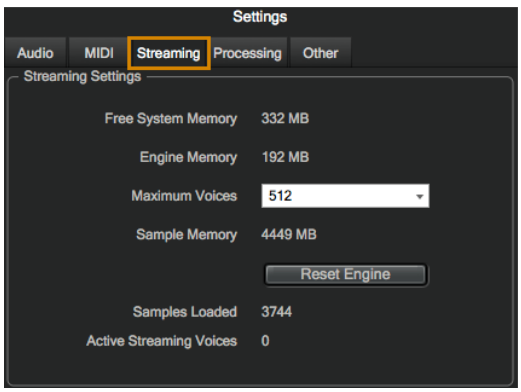


The MIDI Settings tab allows you to specify which MIDI devices can send MIDI data to Play. The types of devices that will be listed here include MIDI keyboards, control surfaces, and the MIDI I/O from an audio interface. Click to leave a check-mark next to the MIDI device to enable it, and click again to remove the check-mark and disable it.

Streaming Settings

Disk streaming technology involves storing a small portion of the beginning of each sample into RAM (called "pre-buffer") and streaming the rest from a drive in real-time. This combination allows for immediate playback without using vast amounts of RAM.

- **Free System Memory:** reports the amount of memory (RAM) the computer has available after the operating system and programs have taken their cut.
- **Engine Memory:** reports the amount of memory (RAM) being used by Play to pre-buffer samples. This value is affected by the Maximum Voices selection.
- **Maximum Voices:** the number of maximum voices that can be played back simultaneously within a project (all Play instances).
- **Reset Engine:** can be used to kill all notes being played and to return the audio engine to its initial state. Use this button when experiencing a so-called "stuck note", which is a note that continues to play beyond its indicated length.

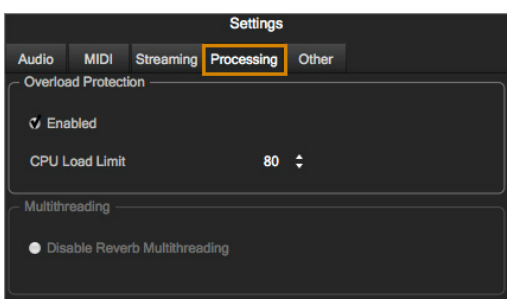


- **Samples Loaded:** reports the number of samples currently pre-buffered in memory (RAM). Use this value to determine whether enough RAM is allocated for playback. If this number is too large, use the Purge feature described in the Main Menu section.
- **Active Streaming Voices:** reports the total number of voices being played back in all instances of Play. This is different than the Voices value reported in the Player view, which only applies to that particular instance of Play.
- **Sample Cache** is the most important feature in this menu. As a general rule, find the lowest setting that also results in smooth playback. If dropped voices or CPU spikes occur, simply raise the 'Cache Level'.

See How To Optimize Playback and Performance to learn more.

Processing Settings

The Processing tab allows you to specify how much of your computer's processing power is available to Play. Check the 'Enabled' box to turn Overload Protection on and use the spin control to specify the percentage of the computer's processor that Play will use.



Other Settings

The Other tab contains a variety of options and settings for Play.

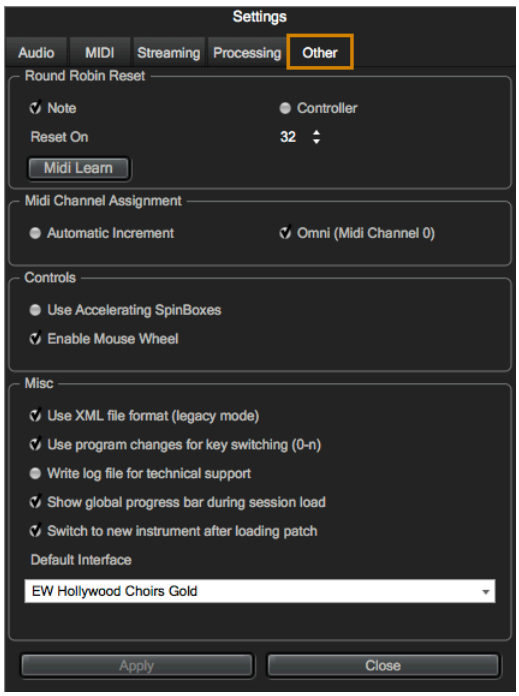
- **Round Robin Reset:** this technique cycles through two or more samples of the same note, each with inherent variation.It provides a realistic performance, avoiding what's called the "machine gun effect". To ensure this cycle repeats in the same order each time, use a Round Robin Reset to reset the cycle back to the beginning, allowing for consistent playback each time

  Select either a MIDI note or a MIDI Continuous Controller (CC) as the source, then specify which MIDI note (Middle C=Note 60) or MIDI CC will trigger the reset by inputting a numeric value in the spin box.

- **MIDI Channel Assignment:** these options determine the MIDI channel assignment when loading a new instrument in Play:

  Automatic Increment: assigns each new instrument to the next available MIDI channel (1, 2, 3, etc) in the order they are loaded.

  Omni: assigns each new instrument to MIDI channel 0, which receives MIDI on all channels (1–16).



- **Controls:** provides options to modify the behavior of controls.

  Accelerating Spin Boxes: allows you to change values faster the longer you hold down the mouse on an up or down arrow.

  Enable Mouse Wheel: to make value changes in Spin Boxes with the scroll wheel of your mouse.

- **Miscellaneous:** contains a variety of options.

  Use XML File Format: this enables you to work with projects using older versions of Play.

  Use program changes for key-switching: this allows Play to accept MIDI Program Change messages to change keyswitches. Program 0 is the first keyswitch, Program 1 is the second keyswitch, etc.

  Write log file for technical support: this option will create a log file to help technical support address technical issues. The log file is written to the following locations:

  (Mac) Mac HD / Library / Application Support / East West / Log

  (Win) C:// Program Data / East West / Log

  Show global progress bar during session load: this option allows you to enable or disable the global progress bar that appears when loading a project. This allows users to work on other tasks while projects are loading, without the progress bar in the foreground.

Show product interface after loading a patch: this option will change the Play interface based on the instrument you just loaded. If left unchecked, Play will continue to use the existing interface until a new instrument is explicitly selected.

Default Interface: this option displays a list of all the currently installed Play Libraries. Select the Play Library whose custom interface you want to display when opening Play. Once you open any specific instrument, the custom interface will appear regardless of the default interface.

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