
EASTWEST / QUANTUM LEAP
HOLLYWOOD
BACKUP SINGERS
FEATURING: DURGA MCBROOM / LORELEI MCBROOM / C.C. WHITE
PRODUCED BY DOUG ROGERS AND NICK PHOENIX
USER MANUAL
1.0.2

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In Memoriam

In Loving Memory of Rhys Moody

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Ch. 1: Welcome

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Welcome to Hollywood Backup Singers

EastWest/Quantum Leap is proud to announce Hollywood Backup Singers, a game changing vocal product that allows you to type any word and have it sung by the industry's top backup singers using its award-winning WordBuilder technology.



Produced by Doug Rogers and Nick Phoenix, the most awarded producers in the sounds industry, this sound library features the powerful vocals of legendary singers Durga McBroom, Lorelei McBroom, and C.C. White.

The Hollywood Backup Singers come from a rich musical background, having performed with the biggest names in the industry. Durga McBroom and Lorelei McBroom toured with Pink Floyd as backup singers for many years. C.C. White has worked with many iconic artists including Lenny Kravitz, Al Green, Jason Mraz, and Crosby, Stills & Nash. She is also the star vocalist of EastWest's blockbuster product Voices of Soul, one of the top selling vocal products ever produced.

Studio 3 is legendary for it's lush, syrupy vocal sound making it the perfect place to capture the vocals for Hollywood Backup Singers. It is home to some of the most iconic hits from the 1960s till the present day, including the Beach Boys masterpiece Pet Sounds, Mamas and Papas, Blondie, through to modern day productions from Ariana Grande, Frank Ocean, and Lady Gaga and Bradley Cooper's Grammy and Academy award-winning "A Star Is Born" soundtrack.



Hollywood Backup Singers was recorded on the classic Trident "A" Range Console, the "original" and one of six surviving in the world which has been used on some of the most famous recordings in music history.

EASTWEST HOLLYWOOD BACKUP SINGERS

A collection of vintage tube microphones captured the vocals, and were mixed into 3 main microphone mixes:

- **Close** microphone mix features 3 microphones in front of each singer that includes a Neumann U47, a Telefunken 251, and a Shure SM7.
- **Rear** microphone mix features a stereo Neumann KU100 Binaural Dummy Head, a pair of vintage RCA 77's, and a pair of Sennheiser MKH800s.
- **Room** microphone mix features 3 vintage Neumann M50 tube condenser microphones in a Decca-Tree configuration, and a pair of Neumann U67's.
- **Leslie** recordings are available in addition to the standard 3-microphone mix for both expressive vowel and solo phrase instrument types. Instruments that contain the abbreviation 'LES' in their names contain an additional mixer channel of vocals recorded through a Leslie speaker cabinet.



Hollywood Backup Singers features 87 vocal instruments, 588 solo adlib phrases, and 222 WordBuilder phrases, ready-to go presets for the award-winning software that will sing phrases that you type. Continue reading and learn how to create realistic phrases of your own. Hollywood Backup Singers features:

- **New Phrases** are available in 4 categories: Common Words, Gospel, Pop, and Soul.
- **Parameter Grouping** for volume, pan, mixes, and reverb enables these effects to be applied globally to all instruments within a WordBuilder Multi.
- **Global Phoneme Volume Sliders** can be used to balance the relative volumes of the 3 phoneme types: vowels, pitched consonants and non-pitched consonants.
- **Intelligent Consonants** feature (1) non-pitched consonants that are sampled at low and high frequencies and playback according to key range, (2) independent handling of consonants that fall at the beginning or end of words, and (3) consonant volume is scaled based on the number of notes in a chord, ensuring intelligibility as voice count rises.



- **Sync to DAW** links DAW playback to WordBuilder's Text Editor position.

About the Producers

From the most awarded producers in the sounds industry, Producers Doug Rogers and Nick Phoenix recorded some of the top session singers in the industry, in one EastWest's most famous Hollywood studios, using an array of priceless vintage tube microphones to deliver a rich backup vocal sound presented in 3 microphone mixes.

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 Hollywood Backup Singers includes:

- A collection of 87 instrument files [.ewi], and 588 expressive solo phrases.
- WordBuilder software that turns text into sung words, with 222 WB phrase presets.
- Approximately 9 Gigabytes (GB) of 24-bit, 44.1 kHz samples with 3 Mixes
- EastWest's Play 6 System (earlier versions of Play do not support this library)
- A license that identifies the product you bought
- Hollywood Backup Singers and Play 6 User Manuals (PDFs)
- An Installation Center application to set up the library, software, and documentation

Please 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.

Hollywood Backup Singers 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 Hollywood Backup Singers Is NKS-Ready to learn more.

System Requirements

Below are the minimum and recommended hardware requirements for using Hollywood Backup Singers 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 Specification

- Intel dual-core i5 (or equivalent) processor, running at 2.7 GHz (or above)
- 8 GB of RAM or more
- Mac OSX 10.8 (or later); Windows 7 (or later) with ASIO sound drivers
- 7200 RPM or faster (non energy saving) hard drive for sample streaming

Recommended Specification

- Intel Xeon E5 (or equivalent) running at a minimum of 2.7 GHz (or above)
- 16 GB of RAM or more
- Mac OSX 10.8 (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

Please 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



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How To Install Hollywood Backup Singers

This section guides you through registering an account with EastWest, and how to use the Installation Center to download, install, and activate Hollywood Backup Singers.

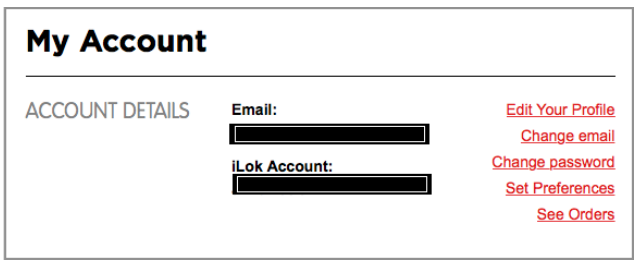
Step 1: Register with EastWest

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.

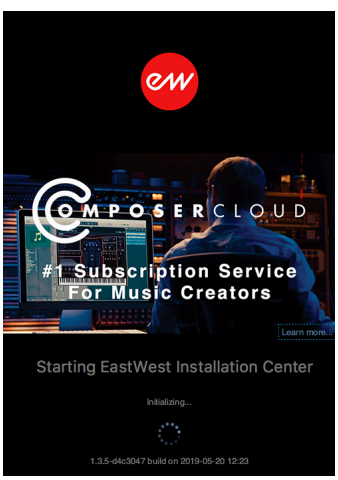


If you're unsure whether or not an iLok account is already associated with your EastWest account, log in with your EastWest account name at Soundsonline.com and check the 'My Account' section to view your 'Account Details'.

Once you have successfully create an account and place an order, a confirmation email will be sent with steps on how to proceed. 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:



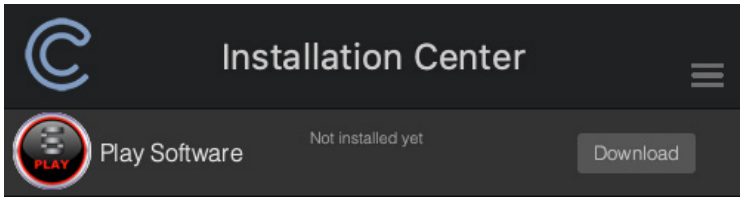
- (MAC): Mac HD / Applications / EastWest / EW Installation Center
- (WIN): C:// Program Files / EastWest / EW Installation Center

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 update panel located near the top the Installation Center. The installer will launch automatically, allowing you to proceed through the prompts to update your software.

Step 3: Download and Install Play 6

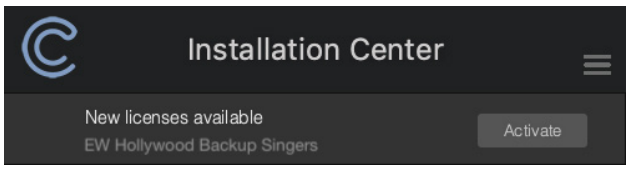
Click the 'Download' button in the Play Software panel that appears near the top of the Installation Center. Once the download is complete, the installer will launch automatically, allowing you to proceed through the dialog windows to install Play 6, the sample engine that powers Hollywood Backup Singers.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



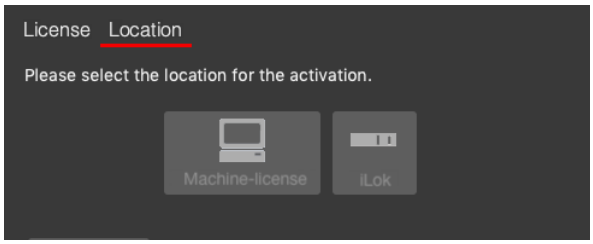
Please note! For Windows users, the default installation path for the Play VST plugin (Play_VST_x64.dll) is: C://ProgramFiles/VSTPlugins. Do not change this unless you have a custom VST location.

Step 4: Activate Hollywood Backup Singers

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'.



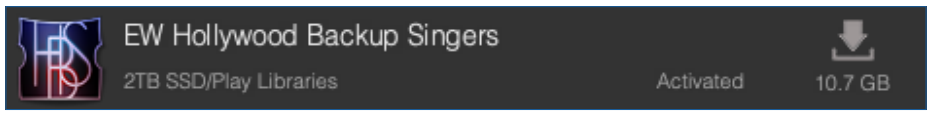
The Location window will give you the option to activate your license on your computer (called a machine-based license) or to a registered iLok security key. Make sure your iLok security key is plugged in if that's your preferred option.



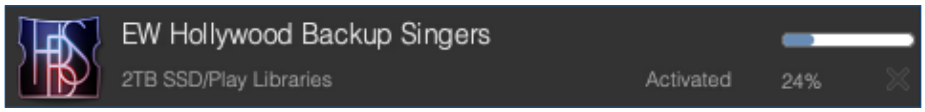
Please note! If you have an iLok account but you have not connected it to your EastWest account, an Activation Assistant will help link the two accounts. This only needs to be done once.

Step 5: Download Hollywood Backup Singers

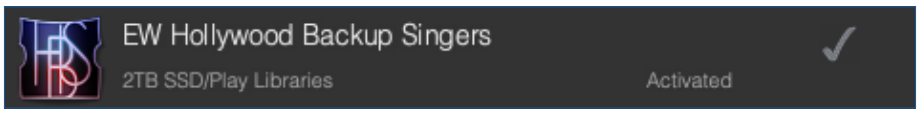
Before you begin downloading the library content for Hollywood Backup Singers, create a new folder called 'Play Libraries' in the location you wish to store the library. Once created, click the download icon (below) within the product panel to open a browser window where you can navigate to the 'Play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

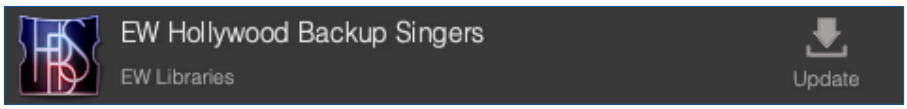


When a product is installed and ready to use, a check-mark is displayed.



Step 6: Update Hollywood Backup Singers

When an instrument and/or sample update becomes available for the Hollywood Backup Singers, 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 Hollywood Backup Singers update.



An Overview of the User Interface

Hollywood Backup Singers is powered by Play 6, the latest version of EastWest's advanced sample engine that powers all of EastWest's Play Libraries. It is designed around 3 main areas; the Player, Browser and Mixer views. Use the buttons in the **Navigation Bar** located at the top of the user interface to access all main areas, described briefly below as they appear from left to right.



- **Main Menu** open and save instruments, access sample purge, and more.
- **Settings Menu** access audio/midi setup, streaming settings, and more.
- **Browser** find instruments in Database mode, or browse for them in Libraries mode
- **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 Panel** access instruments and their Advanced Instrument Properties.



To access the WordBuilder interface a 'WB Multi' instrument must first be loaded. Once loaded, a WordBuilder button located in the top-left corner of the Player view will appear. Click on this button (highlighted in red above) to enter WordBuilder.

See Ch. 4: Hollywood Backup Singers User Interface to learn more.

The WordBuilder Interface

When a WB Multi (WordBuilder Multi-Instrument) is loaded from the Browser view in Play, the Hollywood Backup Singers interface appears in the Player view. In the top-left corner of this interface is a WordBuilder button highlighted to indicate its active state. When an instrument other than a WB Multi is loaded, the button is inactive.

TO ENTER WORDBUILDER click the 'WordBuilder' button located in the top-left corner of the Player view, just under the main Navigation Bar.



TO EXIT WORDBUILDER click on the 'Player' button located in the top-left corner to exit WordBuilder and return to the Player view.



Please note! The button state changes between 'WordBuilder' and 'Player' based on which interface is currently selected.

See Ch. 5: WordBuilder User Interface to learn more.

An Overview of the Instruments

Hollywood Backup Singers joins EastWest's vast virtual instrument collection with 87 new instruments spanning 6 categories, adding approximately 9 gigabytes (GB) of new content to an ever growing library of sounds. Hollywood Backup Singers joins a collection that is 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.



- **Vowels** includes regular and expressive vowel instruments, and sustain expressive vowel instruments (which is a combination of the two vowel types). The expressive vowels also have Leslie ('LES') versions, which contain additional samples of the vocals recorded through a Leslie speaker cabinet.

- **Consonants** includes b, d, g, j, l, m, n, r, th, v, w, y, and z consonant instruments, as well as an unpitched consonants instrument. Each are programmed to cross-fade between multiple dynamic layers using the Mod Wheel (CC1).

- **Combo MOD** includes a variety of instruments that use the Mod Wheel (CC1) to switch between multiple layers of regular and expressive vowel types, or in the case of the 'Xfde' sub-folder, use the Mod Wheel (CC1) to cross-fade between these layers. The expressive vowels also have 'LES' versions, which contain additional samples of the vocals recorded through a Leslie speaker cabinet.

- **Solo Phrases** includes instruments that feature solo phrases and sub-phrases that were recorded over a drone in multiple root note positions for use in a variety of keys and modes. Leslie ('LES') versions that contain additional samples of the vocals recorded through a Leslie speaker cabinet are available. Each vocalist was recorded as a soloist, whereas the rest of the library features 3 vocalists recorded together.

- **Keyswitch** includes instruments that combine multiple articulations into a single instrument that uses blue-colored keyswitches to activate a given articulation. There are keyswitch instruments available for vowels, consonants, and solo phrases, including Leslie ('LES') versions where available.

- **WB Multi** contains a specially designed multi-instrument that is pre-configured for use with WordBuilder. Simply load the WB Multi containing all the necessary phonetic sounds required to build words, type a phrase in the Text Editor (or choose from 222 phrase presets) and the backup singers will sing the words.

See Ch. 3: Hollywood Backup Singers Instruments to learn more.

Initial Product Walkthrough

These steps cover the basics of how to use Play 6 in stand-alone mode, including how to load and view instruments, hear audio playback, and add effects.

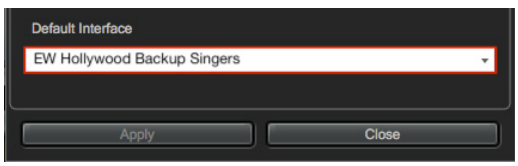
Step 1: Launch Play 6

Launch Play in stand-alone mode by double-clicking on the application in this directory:

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



When Play 6 is launched, the Player view will show the Play Library that is selected in the **Default Interface** menu. To change this selection, go to the Settings Menu, click on the Other tab, and select the desired Play Library from the drop-down menu in Misc section, at the bottom half of the window. Click 'Apply', then quit and re-launch Play 6 to apply the changes.



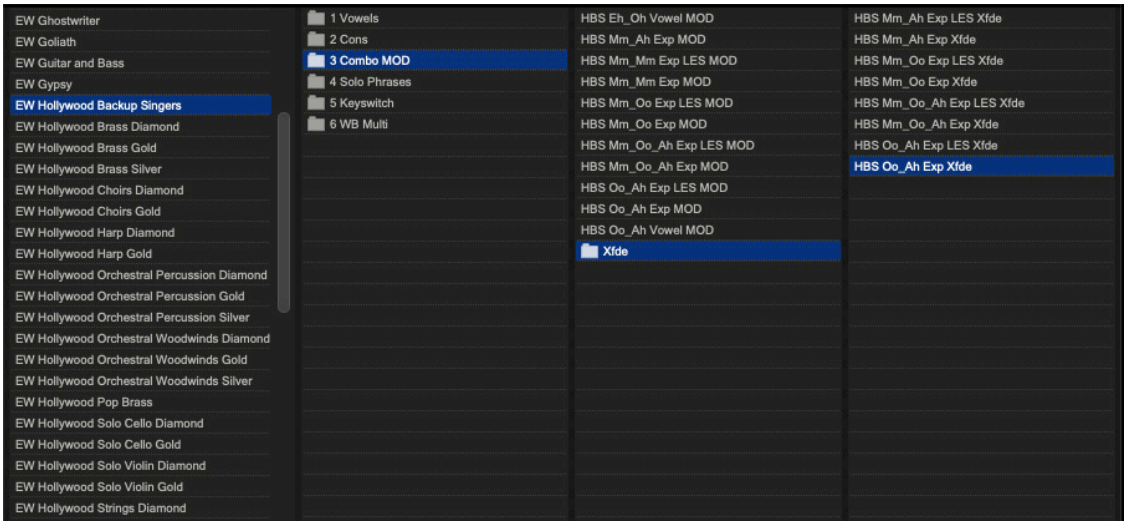
See The Player View to learn more.

Step 2: Load an Instrument from the Browser

To load an instrument, click on the Browser button located in the top-left area of the Navigation Bar that opens to the default Libraries mode.

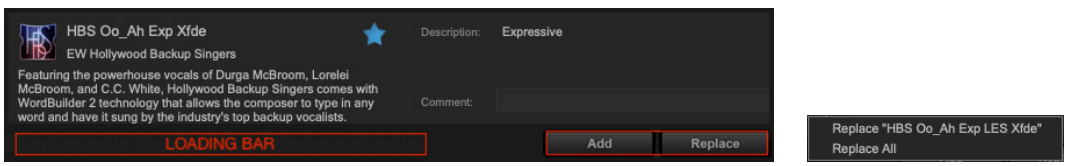


Select one of the installed Play Libraries that populate the left column, then browse its contents using the columns on the right to find an instrument to load.



Click on an instrument from the column on the right to select it, then click either the **Add or Replace button** to load it. Use the **Replace button** to load a new instrument in place of the existing one, or use the **Add button** to load multiple instruments.

When multiple instruments are loaded, pressing the Replace button will bring up the dialog box pictured below, allowing you to replace the current instrument selection, or **Replace All** instruments.



The shortcut to **load an instrument** is to simply double-click on an instrument file. Hold the [shift] key while double-clicking on an instrument to **add additional instruments**. To **replace an instrument**, select it in the Instrument Panel (see the next step on how to do this), then double-click on a new instrument file.

See The Browser View to learn more.

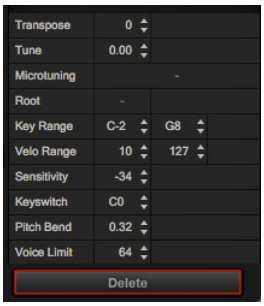
Step 3: Open the Instruments Panel

To view all currently loaded instruments, click on the **Instruments button** located in the top-right area of the Navigation Bar.



To select an instrument, click on the gray area where the instrument name appears. Once an instrument is selected, there are several options available.





The selected instrument can be replaced with a new one, as explained in the step above, its instrument settings can be changed in the **Advanced Instrument Properties** (left) window that appears in the bottom half of the panel, or the instrument can be removed by clicking the Delete button.

See Instruments Panel to learn more.

Alternatively, the **Instrument Selector** is a quick way to change the selected instrument without having to open the Instruments Panel, freeing up screen space.

Click in the field where the currently selected instrument appears to reveal a drop-down menu showing all loaded instruments and their respective MIDI channel assignments in parenthesis.



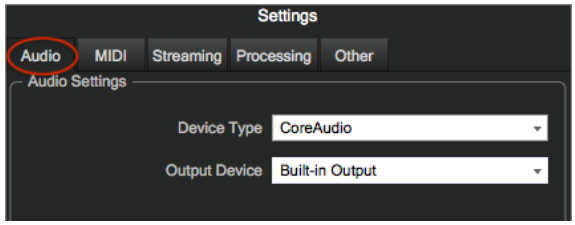
A check-mark indicates the current instrument selection, and clicking on another instrument will make it the current selection. The Player view will change, reflecting the custom user interface associated with the selected instrument.

Step 4: Select Audio and MIDI Devices

To hear a sound, select an instrument, then click inside the highlighted range of notes that appears on the Virtual Keyboard. If you don't hear a sound, click on the **Settings button** in the left corner of the Navigation Bar to access the Settings Menu.



In the **Audio Settings** tab, ensure the desired audio device has been selected in the Device Type and Output Device drop down menus.



In the **MIDI Settings** tab, ensure the preferred controller has a check-mark next to it, indicating it is enabled for use.

In the **Other Settings** tab, 2 MIDI Channel Assignment modes are available. 'Auto-Increment' will assign each new instrument to the subsequent MIDI channel (1, 2, 3, etc), and 'OMNI' will set instruments to receive MIDI on all channels (1-16). Other MIDI Modes such as 'MPE' are available.

Other useful options are available in the Main Menu and Settings Menu, including a Sample Purge feature, assigning Round Robin Reset controllers, and more.

See Main Menu and Settings Menu to learn more.

Step 5: Add Effects in the Mixer

Click the **Mixer button** in the top-left area of the Navigation Bar to access the Mixer.



A channel strip for each loaded instrument will appear, with basic controls like volume, pan, mute, solo, and output. Instruments with multiple microphone positions will display a yellow **Sub-Mixer button**. Click the button to access each microphone sub-channel that makes up the main instrument channel.



Please note! Expressive vowel and solo phrase instruments (and their respective keyswitch and combo versions) contain additional Leslie samples that feature an extra mix fader (shown highlighted to the right).

To enter the FX Rack and use a suite of effects to process an instrument, click the light blue **FX button.** Effects include EastWest's Amp Simulator, Convolution Reverb, EP-1 Delay, and ADT, as well as a suite of SSL audio processing tools that includes an EQ, Compressor, Gate/Expander, Transient Shaper and Stereo Bus Compressor.



See The Mixer View to learn more.

Step 6: Use MIDI Controllers to Shape Performance

In order to achieve realistic performances that mimic the way a live musician plays or sings, use MIDI CCs to control dynamics, expression, and articulation selection. Below is a brief overview of the most common MIDI CCs used in Hollywood Backup Singers.

After loading an instrument and record enabling its track, move the Mod Wheel (CC1) and Expression (CC11) controls to prime the instrument for use. Its highly recommended that you assign the most important MIDI CCs to the knobs or sliders of your MIDI controller, however, you can also draw them into the controller lanes of each instrument inside your preferred DAW.

- **Mod Wheel (CC 1)** controls various aspects that includes cross-fading between up to 3 dynamic layers as in the Mod Xfde instruments, as an articulation switcher as in the Combo MOD instruments, or a Phrase Position selector as in the Solo Phrases instruments. It is also used to smooth the transition between sample layers by shaping the overall volume.
- **Expression (CC 11)** is used to control overall loudness in order to mimic the way live musicians continuously adjust their force of breath or pressure on the bow to achieve musicality by giving nuance to a melodic line, or producing dramatic swells on individual notes.

See Ch. 3: Hollywood Backup Singers Instruments to learn more.

Initial WordBuilder Walkthrough

This section covers how to load a WB Multi, playback the pre-loaded phrase, adjust global parameters, try out other phrase presets, and more. It is recommended that you review the Initial Product Walkthrough before this section.

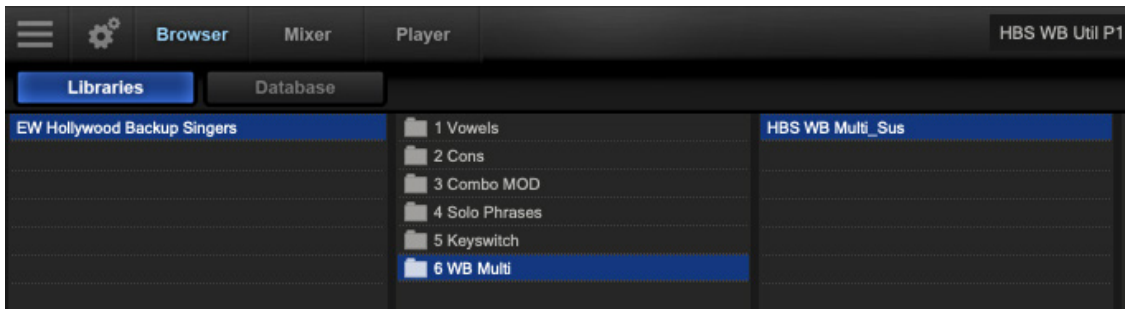
Step 1: Launch Play 6

Launch Play in stand-alone mode by double-clicking on the application in this directory:

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

Step 2: Load a WB Multi from the Libraries Browser

Click on the Browser button in the top-left area of the Navigation Bar, then click on the product entry for 'EW Hollywood Backup Singers' in the left column of the Libraries area.

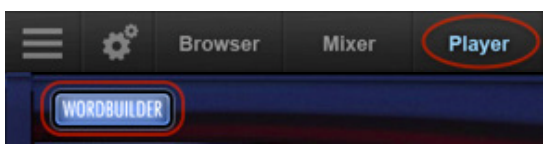


The contents of the 'EW Hollywood Backup Singers' Instruments folder will appear in the columns to the right. Click on the '6 WB Multi' category to show its contents, and double-click on one of the multi-instrument files to load it.

Please note! Always select the **'Replace All'** option to remove any previously loaded instruments, as WordBuilder requires a dedicated instance of Play to work properly.

Step 3: Enter WordBuilder and Play the Pre-loaded Phrase

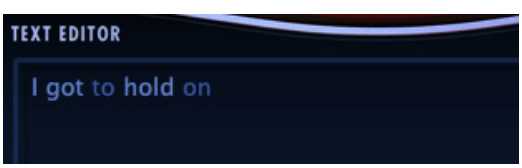
Return to Hollywood Backup Singers main Player view by clicking the **Player button** in the Navigation Bar.



Now click the **WordBuilder button** that appears in the top-left area.

The WordBuilder interface will appear with a phrase pre-loaded, the text of which appears in the Text Editor.

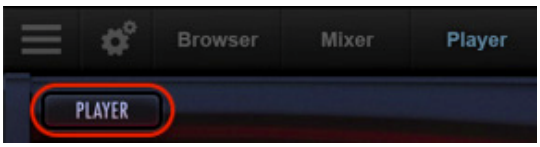
Play your MIDI controller, or send a MIDI sequence within the key range of the WB Multi. Each successive MIDI Note On message will playback the next word or syllable in the phrase until the end, and then the phrase repeats.



Audition Other WordBuilder Phrase Presets: To begin, delete the existing phrase in the Text Editor, then click the Phrases button in the Tool area to open the Phrases menu. Select 'Backup Singers' from the menu, select one of the 4 sub-categories (Common Words, Gospel, Pop, or Soul), then click on a phrase to load it into WordBuilder. There are 222 preset phrases in total.



Step 4: Exit WordBuilder and Dial In a Vocal Sound



Click on the 'Player' button located in the top-left corner to exit WordBuilder and return to the Player view (the button state changes to 'Player' when in WordBulder area).



Once there, apply desired changes to the volume, pan, mixes, and reverb controls. These changes apply globally to all instruments within a WB Multi.

Please note! While using Reverb with a WB Multi, leave the Reverb 'Master' button in its default ON state to apply it to all loaded instruments.

If you wish to make changes to non-global parameters, use either the Instrument Selector or Instruments Panel to switch between instruments and quickly apply parameter changes to each of the 14 instruments that make up a WB Multi.

Step 5: Other Quick WordBuilder Tips

In addition to these quick tips below, click on the following links on how to Create Your Own Phrases in WordBuilder, and for some helpful Hints from the Producers.

Reset Position Command: WordBuilder will advance to the next syllable in a word or phrase with every MIDI Note On message received, unless it receives the Reset Position command. This command tells WordBuilder to start playback at the first word in the Text Editor when it receives the next incoming MIDI Note On message.



More specifically it repositions the syllable cursor to the beginning of the text, resets any open keyswitch files back to the default keyswitch (C0) of "normal" attack, and resets the Mod Wheel. There are three ways to send the Reset Position command in WordBuilder:

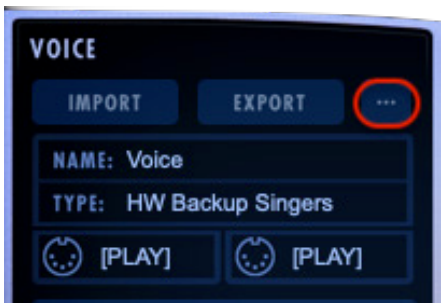


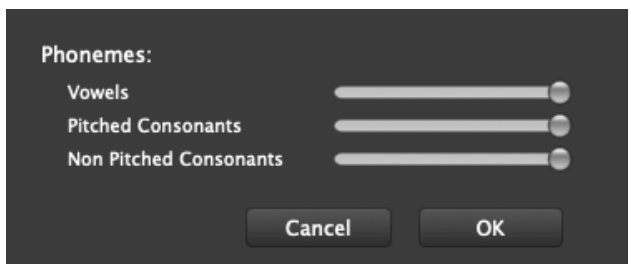
- Click the Reset Position button.
- Press the F5 key.
- Send a MIDI CC (details below).

By default, MIDI CC 20 is used to trigger the 'Return to Beginning' (Reset Position command) when a value of 127 is sent. Automate this MIDI CC before the first note of a phrase you wish to start with at the beginning of the text. To change the MIDI CC that triggers this command, click on the Options menu, then the Events tab, and select a MIDI CC from the drop-down menu in the 'Return to Beginning' area.

To Reset Position to any word or syllable in the Text Editor, click the mouse to position the cursor before the syllable you want to start with, then press the F4 key.

Adjusting Global Phoneme Volumes: The volume of vowels, pitched consonants and non-pitched consonants can be adjusted relative to each other by moving their respective sliders in the Voice Properties menu. To access this menu, click on the ellipsis in the Voice area (highlighted) to open the Voice Properties menu, which contains volume sliders for the phonemes.





Pitched consonants like b, m , and z are sung with breath, and carry a pitch, while Unpitched Consonants like, p, t and s do not use breath to activate the voice box, and do not carry pitch. Boost the Consonant volume if the singers are hard to decipher, or lower the volume to soften the delivery, then press OK to apply changes.

Sync WordBuilder to DAW: When applying the 'Learn' function while using Play and WordBuilder as a plug-in within your DAW, the text position in WordBuilder will sync to the cursor position in the DAW. This will keep the playback in the correct order when you start playback in the middle of a song or phrase. If you need to change existing 'Learn' automation, simply run the 'Learn' process again. These instructions are outlined here: Use Learn to Sync WordBuilder to DAW Playback.

Create Your Own Phrases in WordBuilder

This section covers typing a phrase into the Text Editor, using Votox Text Mode and Time Editor functions to make fine-tune adjustments, and how to save these changes for later recall. It is recommended that you review the Initial WordBuilder Walkthrough before this section.

Step 1: Type a Phrase into English Mode

In the beginning you may find it easiest to enter text in the English Text Mode, which WordBuilder will translate automatically into the Phonetics and Votox Text Modes simultaneously. Type a phrase into English mode, then click over to Votox mode to continue.



Step 2: Enter Votox Mode and Separate Syllables

Once in Votox mode, notice how the English phrase is translated into Votox letters, WordBuilder's own phonetic language where each letter corresponds to individual phonemes (the smallest individual unit of sound).



Separate Words Into Syllables: Words entered into the English Text Mode are translated into the Phonetic and Votox Text Modes as a single word, with no spaces in between syllables. When playing your MIDI controller, the word "dragon" (English) or "drAgun" (Votox) will be triggered with a single note or chord. If you would rather play each of the two syllables in the word "dragon" as separate notes or chords, place a cursor in the Text Editor between the syllables and put a space in between them. Now when playing your MIDI controller, each of the syllables, "drA" and "gun", will be triggered with a single note or chord.





Solo a Word or Syllable: Place the cursor on a word or syllable in the Text Editor, then click the 'Solo' button found in the Word area. Now this word or syllable can be played over and over again while you adjust various parameters.



Understanding Votox Pronunciation: To achieve realistic phrases, learning the sounds of the Votox phonetic alphabet is important. Votox is a phonetic language developed for WordBuilder that gives you direct control over each part of a word.

Use the charts in the Mastering the Phonetic Alphabets section that use examples in the pronunciation guide to familiarize yourself with the different sounds created by each Votox letter.

Step 3: Make Adjustments in the Time Editor

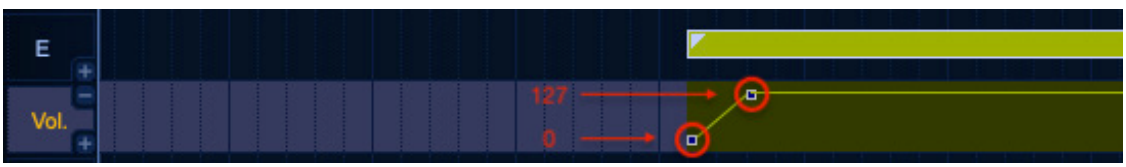
By default, WordBuilder uses standard lengths for each letter in the text when first entering it into the Text Editor, but you can drag the ends of the bars with your mouse to change the start time and duration of each letter within a syllable, giving total control over when each sample begins and ends as well as how much each overlap.

Changing Default Note Lengths: The colored bars represent the duration of each Votox letter. The timeline across the top of the Time Editor displays a marker every 50 milliseconds, with white vertical lines separating the MIDI Note On portion of the timeline (the note itself) from the MIDI Note Off portion (the release trail).

The last Votox letter in the Note On portion, which appears to the left of the white vertical line separator, continues indefinitely until you release a held note. If you drag the separator to the right you'll notice it will go along with it.



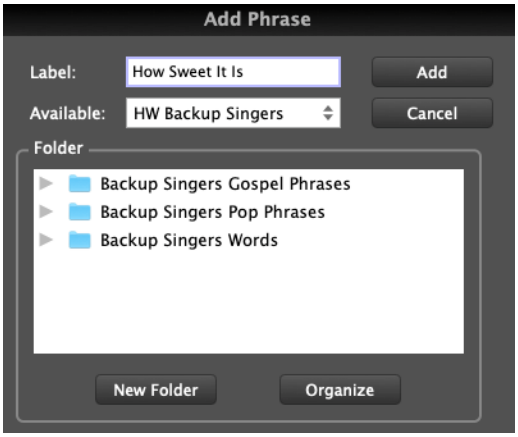
Creating Volume Envelopes Between Letters: The default automation value is 127, but nodes can be placed between the values of 0 and 127 to create an envelope. Double-click anywhere on the envelope to create a node that displays as a small square. To delete this node, double-click with the right mouse button.



Step 4: Save and Organize Your Phrases

A phrase file contains all the information relevant to a phrase, including the phonetics used, timing values, and cross fade values.

Save a Phrase: To begin, highlight the phrase in the Text Editor, then click on the Phrase button and select the 'Add to Phrases' option from the menu. This will bring up the 'Add Phrase' dialog window. Here, name the phrase file in the 'Label' field, then select a Voice Type you wish to save the phrase with from the 'Available' drop-down menu. Next, select the folder you wish to store the phrase in, then click 'Add'.



New Folder: If you wish to create your own folder to store phrase presets in, click the 'New Folder' button, then enter the folder name in the dialog window that appears, and click 'OK'.

Organize Phrases: You can then click the 'Organize' button to open your computer's file browser window, which will display the default location of the 3 folders that come with WordBuilder, as well as any new folders you create. Here, you can organize the folders and sub-folders anyway you like.

Step 5: Going In-Depth With WordBuilder

For more details and descriptions of the features included in WordBuilder, follow the link below to the last chapter in the manual.

See Ch. 5: WordBuilder User Interface to learn more.

Hints from the Producers

We want to mention a few things about using WordBuilder that may not be obvious. These hints are the sort of thing you can find being posted on our Soundsonline.com forum, so please contribute there anything you find that may help others.

- Unusual and non-English vowel or consonant sounds can be created by layering vowels or consonants in WordBuilder. For example: the French word "Louvre" can be created in Votox with this text: IOU vrgU. In the first syllable overlap "O" and "U" so that they play together until note off. (To accomplish this overlap, drag the ends of the horizontal bars in WordBuilder's Time Editor). In the second syllable, overlap "r" and "g" for a French R. Experiment to find your own combinations and post what you find on the WordBuilder forum.
- The Latin word "maximus" can be written either like this in Votox: "maX E mOS", or like this: "maX SE mOS". In the second example, the S-sound within the "maX" syllable gets connected to the next syllable because the S-sound is triggered again at the beginning of the next syllable.
- Many words work better if you repeat a vowel twice. The word "drum" is usually written like so in Votox: "drum", but it can also be written as: "druum". When you let go of the note, "u" is triggered again for a short period of time before the "m." You can overlap and cross-fade the second "u" and the "m" for a smooth realistic effect.
- Consider a word like "rain," which can be written like so in Votox: "reEn". The realism of the vowel sound can be enhanced by adjusting the curve on the "eE" cross-fade. Have the "e" decrease from 127 down to y=50, instead of near 0. This detail makes for a more convincing diphthong.
- When consonants are even slightly too loud, it can sound unnatural. Consonants that are too soft are preferable to consonants that are too loud.
- Use the Mod Wheel and CC 11 for expression. It really helps.
- The preset, default relationship in volume between the vowels and consonants in all the multis is supposed to be consistent, but slight differences may be present. For this reason, we recommend that you don't do any final tweaking in WordBuilder until you have loaded the multi you plan to use in the final version.
- If the background singers are sounding fake, try leaving more space between consonants, or make each consonant longer. Try overlapping certain consonants and possibly cross-fading them. Sometimes it's a good idea to fix MIDI velocity in your sequencer at a single value. This can improve smoothness and make editing in WordBuilder easier. Use CC 11 and the Mod Wheel to inject dynamics.
- We really recommend using Votox exclusively. Once you get good at sounding things out and you learn the letter symbols, it's powerful stuff.
- If the background singers are sounding fake, try leaving more space between consonants, or make each consonant longer. Try overlapping certain consonants and possibly cross-fading them.
- If all else fails we have included 222 phrases to get started and speed up your work flow.

Enjoy, Nick Phoenix and Doug Rogers

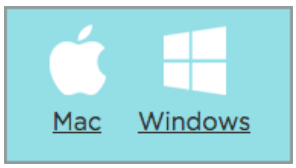
Hollywood Backup Singers Is NKS-Ready

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 Hollywood Backup Singers.

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

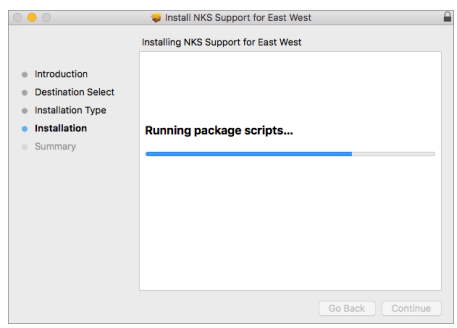


Scroll down to find the 'NKS Support Installer' section, then click on either the Mac or Windows icons to download the installer per your operating system. The download size is approximately 790 mb.

Step 2: Run the NKS Support Installer

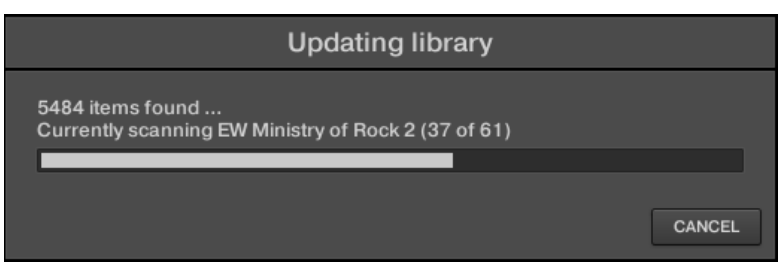
Once the NKS Support installer has downloaded, close all programs, then double-click on the installer to launch it and proceed through the prompts to complete the installation.

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.

Please 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 of 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

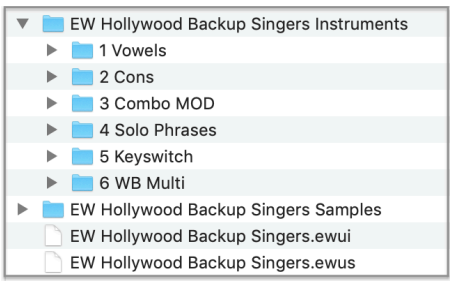


Ch. 3: Hollywood Backup Singers Instruments

32 Inside the Main Library Folder
32 Instruments and Multis Categories
33 Instruments and Multis Descriptions
33 Vowels
35 Consonants
36 Combo MOD and Xfde
37 Solo Phrases
38 Keyswitch
40 WB Multi

Inside the Main Library Folder

EW Hollywood Backup Singers is the name of the main library folder of Hollywood Backup Singers. Inside this folder is the EW Hollywood Backup Singers Instruments folder that contains a numbered set of 6 categories: 1 Vowels, 2 Cons, 3 Combo MOD, 4 Solo Phrases, 5 Keyswitch, and 6 WB Multi. Each of these folders contains instruments matching the description on their given category. There are a total of 87 instruments, including over 588 solo phrases and sub-phrases.



The contents of the Hollywood Backup Singers Instruments folder appears in the Libraries Mode of the 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 Hollywood Backup Singers 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 Hollywood Backup Singers to learn more.

Instruments and Multis Categories

This section details each instrument category contained in Hollywood Backup Singers, including the WB Multi category that contains specially designed instrument multis that are pre-configured and ready to use with the WordBuilder program.

Note About Leslie ('LES') Instruments: The naming convention 'LES' denotes instruments that were recorded with additional samples of the vocals recorded through a Leslie speaker cabinet, where speakers rotate inside a cabinet to create a warbly or fluttery texture. Famous acts that have used this recording technique on vocals include The Beatles, The Grateful Dead, and Pink Floyd.



To mix the Leslie samples as desired, go to the Mixer view in the top Navigation Bar. Then, open the Sub-Channel Mixer (yellow button) to reveal the individual mixer channels, including the Leslie channel furthest to the right. The Leslie mixer channel is not available in the Player view

See The Mixer View to learn more.

- **Vowels** includes regular and expressive vowel instruments, and sustain expressive vowel instruments (which is a combination of the regular and expressive vowel types). Each instrument is programmed to cross-fade between multiple dynamic layers using the Mod Wheel (CC1).

- **Consonants** includes b, d, g, j, l, m, n, r, th, v, w, y, and z consonant instruments, each programmed to cross-fade between multiple dynamic layers using the Mod Wheel (CC1). An unpitched consonants instrument is available as well.

- **Combo MOD** includes a variety of instruments that use the Mod Wheel (CC1) to switch between multiple layers of regular and expressive vowel types, or in the case of the 'Xfde' sub-folder, use the Mod Wheel (CC1) to cross-fade between these layers.

- **Solo Phrases** includes instruments that feature solo phrases and sub-phrases that were recorded over a drone in multiple root note positions for use in a variety of keys and modes. Each vocalist was recorded as a soloist, whereas the rest of the library features 3 vocalists recorded together.

- **Keyswitch** includes instruments that combine multiple articulations into a single instrument that uses blue-colored keyswitches to activate a given articulation. There are keyswitch instruments available for vowels, consonants, and solo phrases.

- **WB Multi** contains a specially designed multi-instrument that is pre-configured for use with WordBuilder. Simply load the WB Multi, then enter WordBuilder to type a phrase into the Text Editor to have backup singers sing the phrase you type. There are 222 phrase presets to get you started.

Instruments and Multis Descriptions

This section details the instruments contained in each category, including how they are programmed to respond to MIDI, an explanation of their respective naming conventions (abbreviations), and any other relevant information.

Vowels

The instruments in this category contain different types of vowel instruments, including regular, expressive ('Exp'), and combo versions ('Sus Exp').

- **Vowels** instruments include those listed in the table below. These instruments use the Mod Wheel (CC 1) to cross-fade between 2 dynamic layers (*mp* and *f*), simultaneously controlling loudness to create smooth transitions between layers. The Expression control (CC 11) is used to control overall volume, fading to silence.

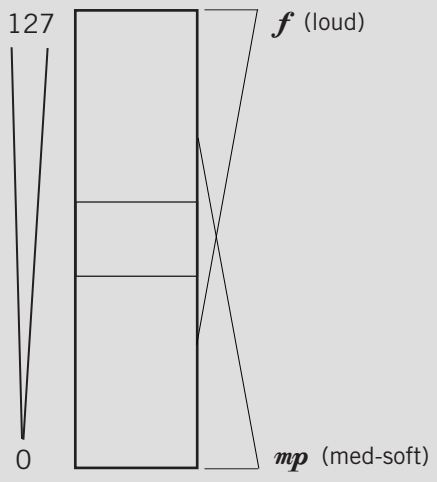
Vowels Instruments		
HBS Aa.ewi	HBS Eh.ewi	HBS Oh.ewi
HBS Ah.ewi	HBS Eu.ewi	HBS Oo.ewi
HBS Ee.ewi	HBS Ih.ewi	HBS Uh.ewi

- **Vowels Expressive (LES)** instruments include those listed in the Instruments table below. These instruments use the Mod Wheel (CC 1) to cross-fade between 2 dynamic layers (*mp* and *f*). Expression (CC 11) is used to control overall loudness, fading to silence. Each expressive instrument is also available in an optional Leslie ('LES') version, where the vocals were recorded through a Leslie speaker cabinet.

Vowels Expressive (LES) Instruments	
HBS Ah Exp.ewi	HBS Mm Exp LES.ewi
HBS Ah Exp LES.ewi	HBS Oo Exp.ewi
HBS Mm Exp.ewi	HBS Oo Exp LES.ewi

- **Vowels Sustain Expressive (LES)** instruments contain 3 dynamic layers that use the Mod Wheel (CC 1) to cross-fade between them. The two lower dynamics consist of regular vowels types and the top dynamic consists of an expressive vowel type. Expression (CC 11) is used to control overall loudness, fading to silence. Each sustain expressive instrument is also available in an optional Leslie ('LES') version, where the vocals were recorded through a Leslie speaker cabinet.

Vowels Sustain Expressive (LES) Instruments	
HBS Ah Sus Exp.ewi	HBS Mm Exp.ewi
HBS Ah Sus Exp LES.ewi	HBS Mm Exp LES.ewi



Vowels (Regular + Expressive)	Vowels Sustain Expressive
Mod Wheel (CC# 1) cross-fades between 2 dynamics, and controls volume smoothing	**Mod Wheel (CC# 1)** cross-fades between 3 dynamics, and controls volume smoothing
Expression (CC# 11) controls overall volume that fades to 0 db (silence).	

Consonants

This instrument category contains different types of consonants, which are produced by obstructing the breath in a different way to create unique speech sounds that when combined with vowels create syllables and words. Pitched consonants produce a note with a definite pitch and make up a majority of the instruments in this category. Un-pitched consonants do not have a definite pitch, and are contained in a single instrument.

- **PItched Consonants** include all those listed in the Instruments table below, except the one marked 'unpitched'. They all use the Mod Wheel (CC 1) to cross-fade between 2 dynamic layers (***mp*** and ***f***), which simultaneously controls loudness to create smooth transitions between layers. The Expression control (CC 11) is used to control overall volume, fading to silence.

Pitched Consonants			
HBS b.ewi	HBS l.ewi	HBS th.ewi	HBS y.ewi
HBS d.ewi	HBS m.ewi	HBS unpitched.ewi	HBS z.ewi
HBS g.ewi	HBS n.ewi	HBS v.ewi	
HBS j.ewi	HBS r.ewi	HBS w.ewi	

- **Unpitched Consonants** are included in a single instrument, with each phoneme mapped to a MIDI note number as detailed in the table below. The low frequency versions span between notes D2 and C#2, and the high frequency versions between D3 and C#3. The Mod Wheel (CC 1) is used to cross-fade between 2 dynamic layers (***mp*** and ***f***), and simultaneously controls loudness to create smooth transitions between layers. Expression (CC 11) is used to control overall loudness.

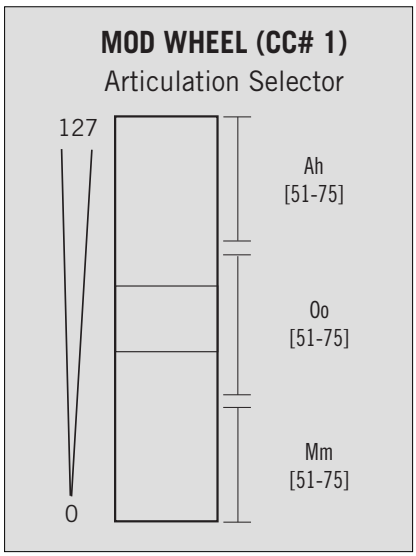
Unpitched Consonants			
(low frequency)		(high frequency)	
D2	s	D3	s
Eb2	ch	Eb3	ch
E2	f	E3	f
F2	ch	F3	ch
F#2	k	F#3	k
G2	p	G3	p
G#2	qu	G#3	qu
A2	sh	A3	sh
Bb2	t	Bb3	t
B2	th	B3	th
C2	c	C3	c
C#2	h	C#3	h

Combo MOD and Xfde

The instruments in this category combine multiple vowel types into a single instrument, and use the Mod Wheel (CC1) to either switch between them, or cross-fade between them. Expression (CC 11) is used to control overall loudness.

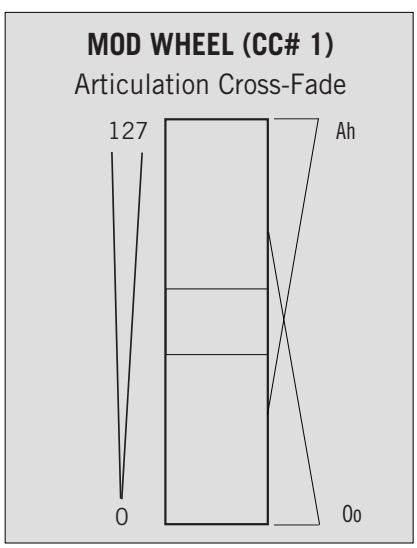
- **Combo MOD** instruments (see diagram to the right) combine multiple vowel types in a single instrument, and uses the Mod Wheel (CC1) to switch between them in real-time.

Instruments
HBS Eh_Oh Vowel MOD.ewi
HBS Mm_Ah Exp MOD.ewi
HBS Mm_Mm Exp LES MOD.ewi
HBS Mm_Mm Exp MOD.ewi
HBS Mm_Oo Exp LES MOD.ewi
HBS Mm_Oo Exp MOD.ewi
HBS Mm_Oo_Ah Exp LES MOD.ewi
HBS Mm_Oo_Ah Exp MOD.ewi
HBS Oo_Ah Exp LES MOD.ewi
HBS Oo_Ah Exp MOD.ewi
HBS Oo_Ah Vowel MOD.ewi



- **MOD Xfde** instruments are contained in the 'Xfde' sub-folder within the Combo Mod category. Here, multiple articulations are contained in a single instrument and the Mod Wheel (CC 1) is used to cross-fade between them.

Instruments
HBS Mm_Ah Exp LES Xfde.ewi
HBS Mm_Ah Exp Xfde.ewi
HBS Mm_Oo Exp LES Xfde.ewi
HBS Mm_Oo Exp Xfde.ewi
HBS Mm_Oo_Ah Exp LES Xfde.ewi
HBS Mm_Oo_Ah Exp Xfde.ewi
HBS Oo_Ah Exp LES Xfde.ewi
HBS Oo_Ah Exp Xfde.ewi

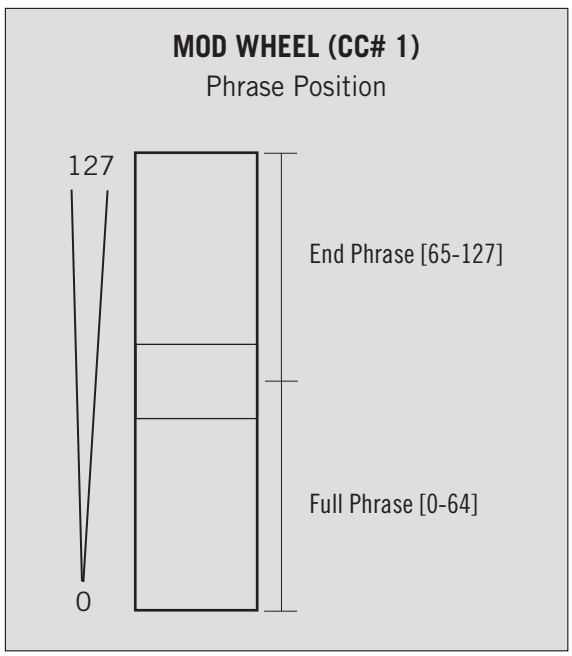


Solo Phrases

This instrument category contains instruments that feature solo phrases and sub-phrases that were recorded over a drone in multiple root note positions for use in a variety of keys and modes. While the rest of the library features 3 vocalists in unison, in this category each vocalist was recorded as a soloist.

The diagram below depicts how the Mod Wheel (CC# 1) is used to switch between different parts of the phrase. To playback the entire phrase, position the Mod Wheel between a value of 0 and 64, or to playback the second part of the phrase (end phrase) position the Mod Wheel between 65 and 127.

Solo Phrases Instruments
HBS Solo Phrases 01 - A.ewi
HBS Solo Phrases 02 - Bb.ewi
HBS Solo Phrases 03 - B.ewi
HBS Solo Phrases 04 - C.ewi
HBS Solo Phrases 05 - C#.ewi
HBS Solo Phrases 06 - D.ewi
HBS Solo Phrases 07 - Eb.ewi
HBS Solo Phrases 08 - E.ewi
HBS Solo Phrases 09 - F.ewi
HBS Solo Phrases 10 - F#.ewi
HBS Solo Phrases 11 - G.ewi
HBS Solo Phrases 12 - G#.ewi



There is a sub-folder within the Solo Phrases folder marked ‘w Leslie’ contains Instruments that include an additional mix of vocals recorded through a Leslie speaker cabinet. See the description at the beginning of the chapter for details.

A keyswitch version of the Solo Phrases is also available in the Keyswitch category, allowing you to switch between all 12 root note positions on the fly. See the next section for details.

Keyswitch

The instruments in this category combine multiple articulations into a single instrument and use blue-colored keyswitches to activate a desired articulation. Keyswitch instruments are available for vowels, consonants, and solo phrases. The Solo Phrases KS instrument is available in multiple versions, with those differences outlined below.

- **HBS Solo Phrases KS (LES)** instruments map the entire solo phrase chromatically up the keyboard starting on note E2. There are no sub-phrases.
- **HBS Solo Phrases KS MOD (LES)** instruments map each solo phrase chromatically up the keyboard starting on note E2, and use Mod Wheel to playback the full phrases when its between the values of 0 and 64, and the sub-phrases between 65 and 127.
- **HBS Solo Phrases Oo / Ah MOD (LES)** instruments contains a sustain layer between notes D1 and G3, and a selection of solo phrases spanning from note C4 to C7. The Mod Wheel is used to playback full phrases between values of 0 and 64, and sub-phrases between values of 65 and 127.



Solo Phrases KS	
HBS Solo Phrases KS MOD.ewi • C0 - Key of C • C#0 - Key of C# • D0 - Key of D • Eb0 - Key of Eb • E0 - Key of E • F0 - Key of F • F#0 - Key of F# • G0 - Key of G • G#0 - Key of G# • A0 - Key of A • Bb0 - Key of Bb • B0 - Key of B	**Keyswitch (KS)** notes C0 through B0 determine which of the 12 root note positions of the solo phrases will playback. **Mod Wheel (CC 1)** is used to determine Phrase Position; the Full Phrase is active between values between 0-64, and the End Phrase is active between values between 65-127. **Expression (CC 11)** controls overall loudness; fading to 0 db. **For more information see:** Solo Phrases
HBS Vowels KS.ewi • C0 - Aa • C#0 - Ah • D0 - Ee • Eb0 - Eh • E0 - Eu • F0 - Ih • F#0 - Oh • G0 - Oo • G#0 - Uh	**Keyswitch (KS)** notes C0 through C1 determine which of the 13 pitched consonants will playback. **Mod Wheel (CC 1)** is used to cross-fade between the *mf* and *f* dynamic levels, while simultaneously controlling overall loudness to create a smooth transition between layers. **Expression (CC 11)** controls overall loudness; fading to 0 db. **For more information see:** Vowels
HBS Consonants KS.ewi • C0 - b • C#0 - d • D0 - g • Eb0 - j • E0 - l • F0 - m • F#0 - n • G0 - r • G#0 - th • A0 - v • Bb0 - w • B0 - y • C1 - z	**Keyswitch (KS)** notes C0 through G#0 determine which of the 9 vowels will playback. **Mod Wheel (CC 1)** is used to cross-fade between the *mf* and *f* dynamic levels, while simultaneously controlling overall loudness to create a smooth transition between layers. **Expression (CC 11)** controls overall loudness; fading to 0 db. **For more information see:** Consonants

WB Multi

This folder contains a special WB Multi (short for WordBuilder Multi-Instrument) that is setup and ready to use with WordBuilder. Please note that WordBuilder requires an entire instance of Play in order to function properly, as it loads 14 individual instruments that act as a single multi-instrument in order to accommodate all the phonetic possibilities WordBuilder requires to build words.



Once loaded, use the Mod Wheel (CC1) on your MIDI controller to initialize the separate instruments contained in the Multi. Continue to use the Mod Wheel (CC 1) to cross-fade between 2 dynamic layers, which simultaneously controls loudness to create smooth transitions between layers. The Expression control (CC 11) is used to control overall volume, fading to silence.

To sing the phrase that is pre-loaded by default, play your MIDI keyboard to cycle through the phrase, with every keystroke advancing to the next syllable in the word or phrase.

See Initial WordBuilder Walkthrough to learn more.



Ch. 4: Hollywood Backup Singers User Interface

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52 The Browser View
55 Instruments Panel
56 The Mixer View
58 Main Menu
59 Settings Menu

Navigating the User Interface

Play 6 is the latest version of EastWest's software that powers all EastWest's Virtual Instruments collections, called Play Libraries. The Play software is designed around 3 main areas; the Player, Browser and Mixer views.

Use the buttons in the **Navigation Bar** located at the top of the user interface to access all main areas, described briefly below as they appear from left to right.



- **Main Menu** open and save instruments, access sample purge, and more.
- **Settings Menu** access audio/midi setup, streaming settings, and more.
- **Browser** find instruments in Database mode, or browse for them in Libraries mode
- **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 Panel** access instruments and their Advanced Instrument Properties.

The **Player** view of **Hollywood Backup Singers** contains controls for shaping envelopes, mixing microphones, and applying effects like Reverb. The button to access **WordBuilder** is located in the top-left corner (highlighted in red below).



The Player View

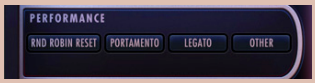
The Hollywood Backup Singers user interface features 10 main areas briefly outlined below, and covered in detail in the sections that follow. For more information regarding the common elements shared by all Play Libraries, such as the individual effects in the Mixer section, please see the Play 6 User Manual.

See Support and Documentation to learn more.

WordBuilder (highlighted in red) button opens the WordBuilder user interface window.



System & Sensitivity changes instrument settings like MIDI channel and velocity scaling.



Performance contains scripts that change the sample playback behavior of instruments.



Envelope contains control knobs for a 5-stage envelope: Attack, Hold, Decay, Sustain, and Release (AHDSR).

Hollywood Backup Singers

Click on the links for more details regarding each area.



Articulation Pane (shown) displays articulations for the selected instrument.

Microphone Array shows the configuration of microphones.

Master Instrument Channel (right) controls source, tune, pan, volume and solo / mute for the selected instrument.



Stereo Double controls the width of stereo spread ('stereo' must be selected as channel source).



Reverb features convolution reverb, and a large selection of impulses.





Mixes (left) controls the microphone position volume, pan, mute / solo and load state.

System Usage (from left to right) tracks CPU, Disk, Voices and RAM usage.



The **Virtual Keyboard** is color coded: White keys represent the instrument range, Tan keys indicate no samples are loaded, and Blue keys are "keyswitches" that switch between multiple articulations within a single instrument.

The Master Instrument Channel

Along the right side of the Hollywood Backup Singers user interface is the Master Instrument Channel of the selected instrument.



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).



The **Tune knob** 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.



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.

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.

The **Stereo Outputs** default to 'Main L/R' in the Output Channel field. 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).

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

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.

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.

Please 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.

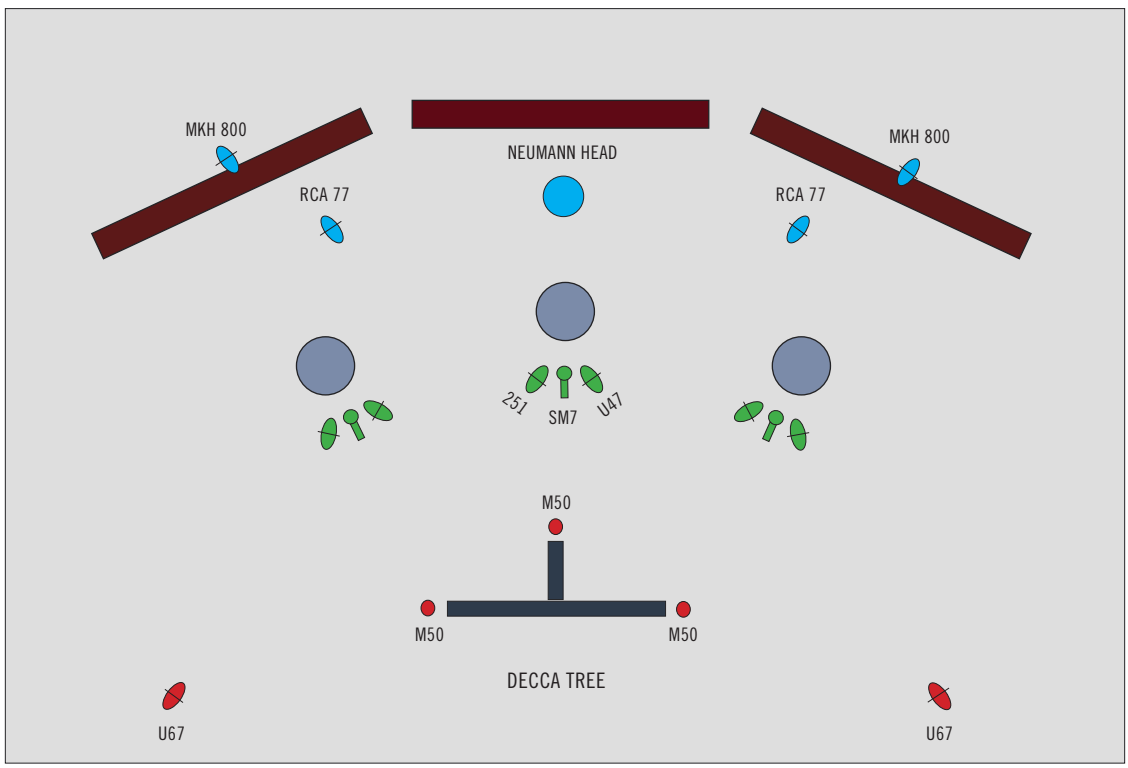
Mixes

Hollywood Backup Singers features 3 microphone mixes that includes Close, Rear, and Room. The diagram below depicts the recording setup, and each of the microphones contained in each mix.



The Mixes section features controls for volume, panning, on/off state, and mute/solo. Click on the light below each sub-mix to toggle its on/off state, loading or unloading the samples from memory, or use the Mute (M) and Solo (S) buttons that behave in the same manner as they do in the Master Instrument Channel described above.

- **Close (green)** microphone mix features 3 microphones in front of each singer that includes a Neumann U47, a Telefunken 251, and a Shure SM7.
- **Rear (blue)** microphone mix features a stereo Neumann KU100 Binaural Dummy Head, a pair of vintage RCA 77's, and a pair of Sennheiser MKH800.
- **Room (red)** microphone mix features 3 vintage Neumann M50 tube condenser microphones in a Decca-Tree configuration, and a pair of Neumann U67's.

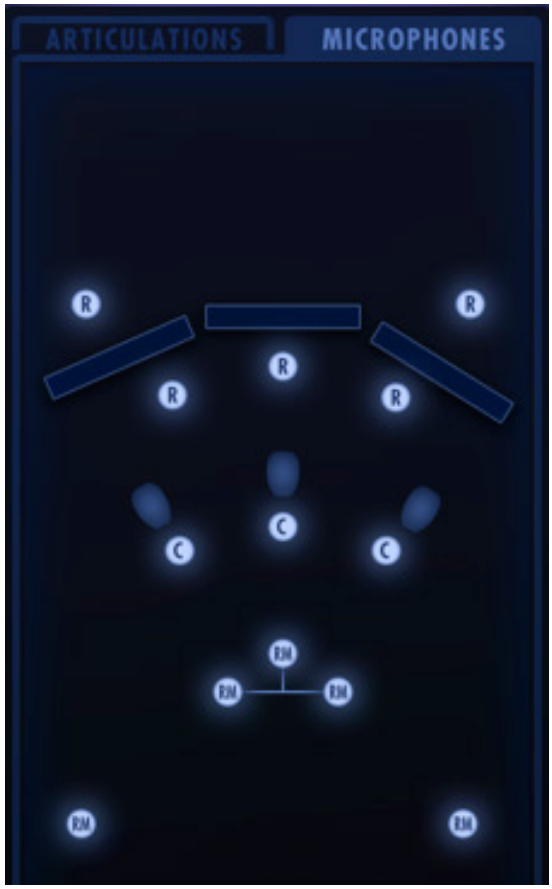


Please note! An additional microphone mix that features vocals recorded through a Leslie speaker cabinet is available in the Mixer view in Play for expressive vowel and solo phrase instruments that contain 'LES' in their instrument names.

Center Display

The center of the Hollywood Backup Singers interface features both an Articulation Pane and Microphone Array that can be accessed by clicking on their respective tabs.





The **Articulation Pane** contains the articulation or articulation set for the selected instrument, and the following basic controls:

- **ACT (Active):** click the ACT box next to an articulation to activate or deactivate it.
- **LOAD (Loaded):** click the LOAD box next to an articulation to load or unload it.
- **Level:** click, hold and drag on the level knob to control an articulation's volume level.
- **Type** displays the articulation name, which may include important information like which MIDI note its keyswitch (KS) is programmed to, or the Mod Wheel (MOD) values between which an articulations within a set will playback.

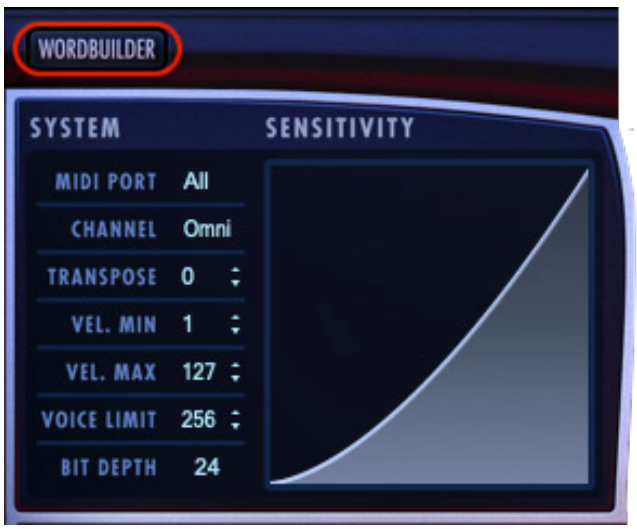
See Ch. 3: Hollywood Backup Singers Instruments to learn more

The **Microphone Array** displays the microphone configurations used in each of the 3 Mixes (Close, Rear, and Room) described in detail in the previous section.

System and Sensitivity

This area contains several settings, some of which can also be found in the Advanced Instrument Properties in the Instrument Panel.

- **WordBuilder** is not technically apart of the System and Sensitivity area, but the button to access the WordBuilder interface appears just above it.
- **MIDI Port** defines which available MIDI devices are enabled (stand-alone only).
- **MIDI 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, 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.
- **Bit Depth** describes the audio resolution of the samples of the loaded instrument. 24-bit audio is standard, however 16-bit is used for Gold and Silver edition libraries.
- **Sensitivity Curve** 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 Hollywood Backup Singers will reflect changes made here.

System Usage

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.

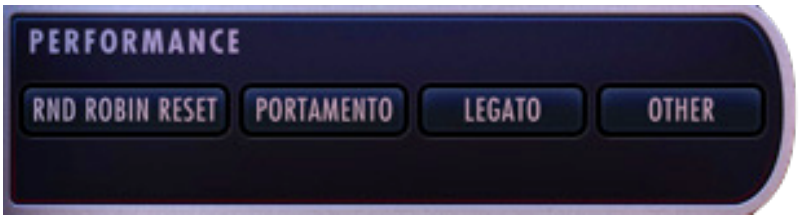


- **CPU** the percentage of the total processor capacity Play is consuming.
- **Disk** the number of megabytes per second (MB/s) data is being streamed from disk
- **Memory** the number of megabytes (MB) of RAM being used by loaded samples.
- **Voices** the number of samples, not just notes, currently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

Performance Scripts

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

The **Portamento** 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).



The **Legato** 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. This 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.

Please note! The **Other** performance script is made for use with 'True Legato' instruments. As Hollywood Backup Singers does not include this instrument type, we recommend using the the Legato or Portamento performances scripts to achieve those playing styles.

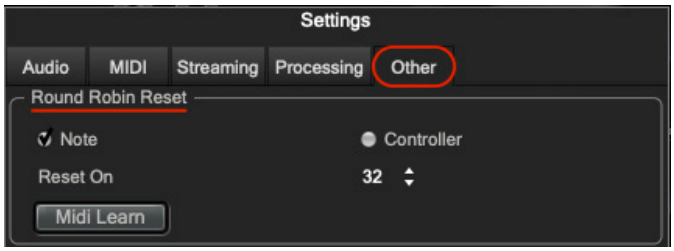
Some **Performance scripts controls can be automated** by sending MIDI Continuous Controller (CC) values to the specified controller lane. In order to automate a performance script to turn on or off over the course of a sequence, use the MIDI CC number that is assigned to the script (see table below) 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 its default setting.

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

The forced monophonic behavior in the 'Other' script can be turned on and off by sending 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.

The **Round Robin Reset** indicator will light up when activated. 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.



The **Round Robin Reset control can be automated** 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.

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. Please be aware that changing these default settings may result in less than natural results.

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.



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 make the corresponding articulation listed in the Articulation Pane above selected for use.

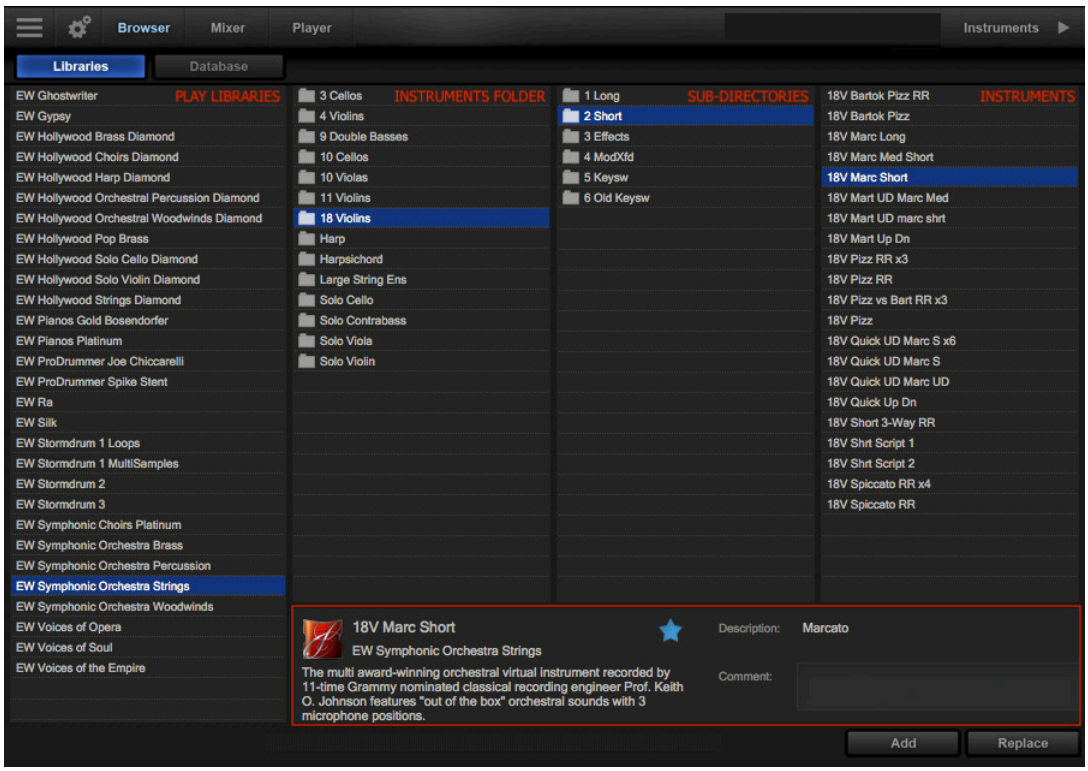


The Browser View

Search for instruments by selecting between 1 of 2 modes: **Libraries** mode displays all installed Play Libraries, allowing you to browse for Instruments by title, and **Database** mode can search for instruments by entering key words into a search bar, or by selecting attribute tags across a range of categories to narrow down results.

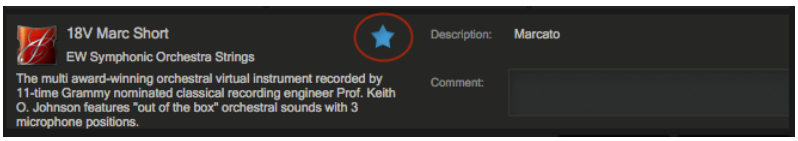
Libraries Mode

Select an installed Play Library from the list that populates in the left column to view the contents of its Instruments folder. Columns to the right display the sub folders within, eventually leading to the instruments themselves (see red text below).



The **Instrument Panel** highlighted above contains information related to the selected instrument. On the left half of the panel the Instrument name is displayed, along with the Play Library it originates from, and a description of that library. On the right half of the panel, abbreviations used in instruments are decoded in the Description field, and users can type notes into the Comments field.

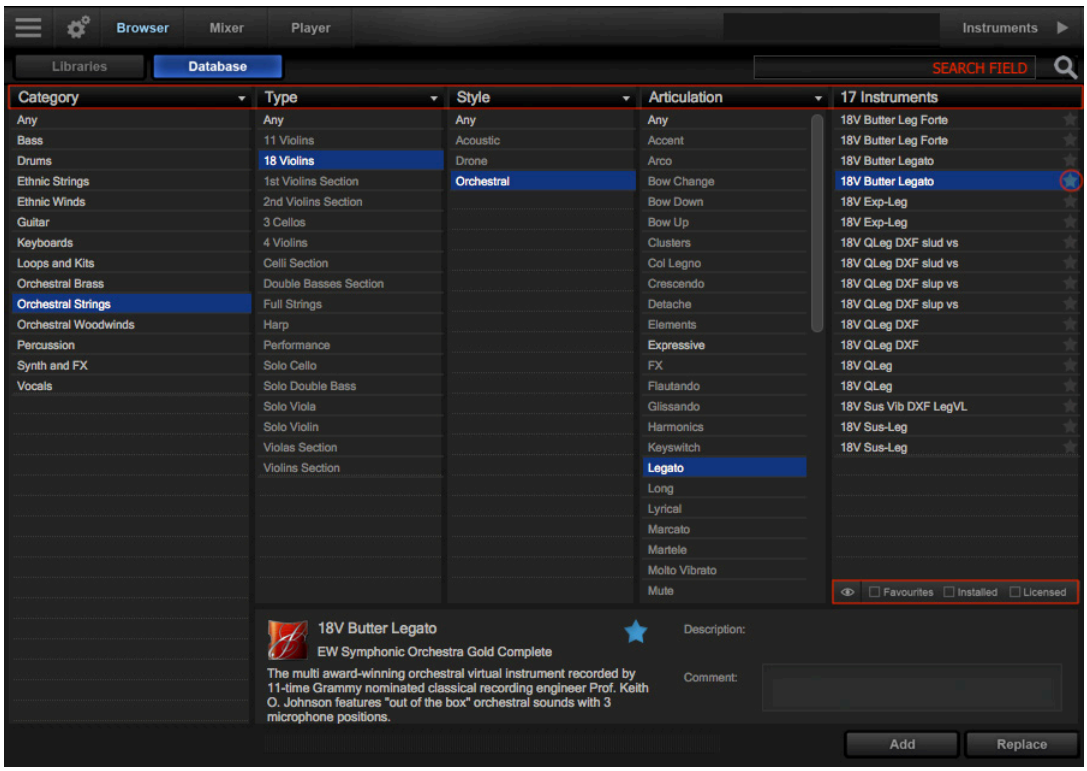
Tag an instrument as a **Favorite** by clicking the star icon in the center of the panel. It is highlighted in blue above, meaning the instrument is already tagged.



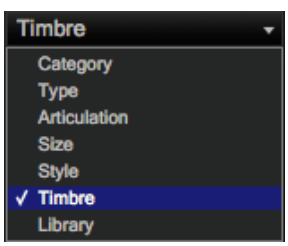
Database Mode

Instruments can be found by either entering key words into the **Search Field** located near the top-right corner, or by narrowing down the instrument selection by choosing between desired attributes in several categories.

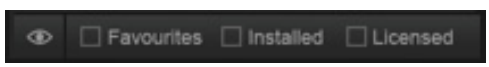
Those categories, from left to right, default to: Category, Type, Style and Timbre. The **Results List** displays the number of instruments that match the selected criteria at the top, and populates those instruments in a list below.



Additional **Attribute Categories** are available, including Articulation, Library and Size, To access them, click on any category name to reveal a drop-down menu, then click on the desired category to place a check-mark that indicates it is the current selection.



At the bottom of the Results List column are a set of **Filters** that allow you to further narrow the results to only show those tagged as a Favorite, or only those Installed and/or Licensed (available) on the computer.



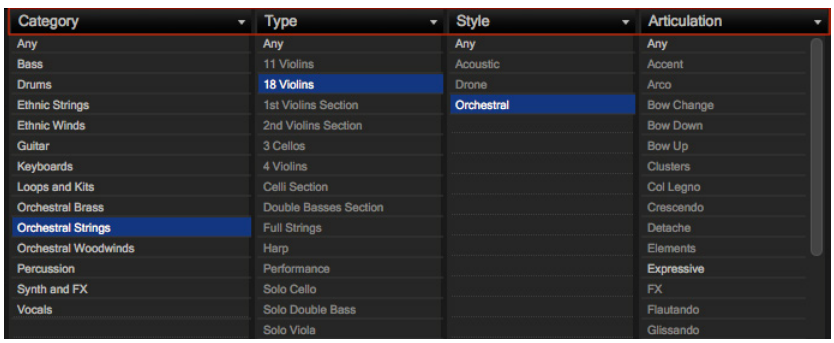
To tag an instrument as a **Favorite**, click on the star icon to the right of the Instrument name in the Results List. The star icon will light up to indicate it has been tagged.



The highest level in the **Database Hierarchy** is simply called **Category**. 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 browsing the Instruments folder of a given Play Library.



To **Reset Tag Selections**, click 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 everything but the Category column.

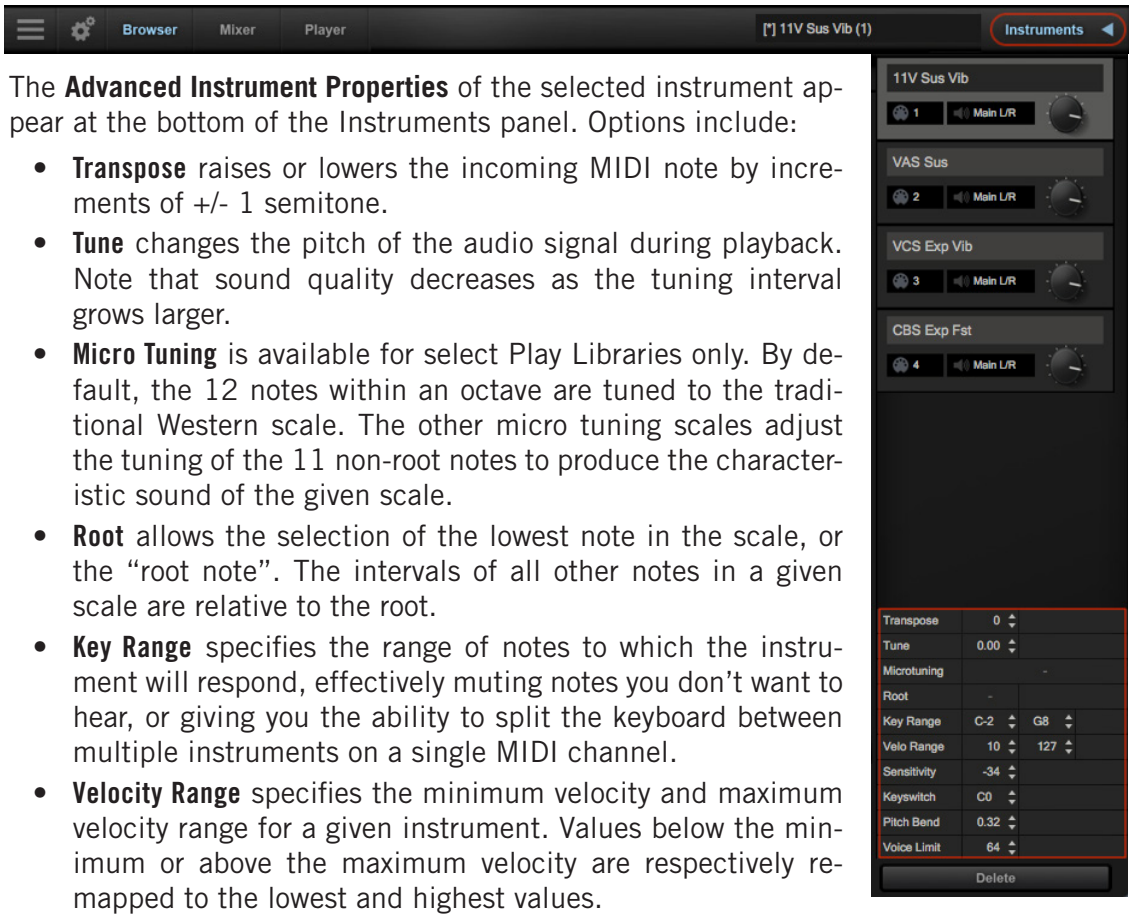


There are a few **Tag Selection Rules** to keep in mind as you select attributes. The Category and Type categories allow one tag to be selected at a given time, while all other categories allow multiple tag selections by holding down 'command' (macOS) or 'alt' (Win) keys while adding tags.

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.

Instruments Panel

Click the Instruments button on the right side of the Navigation Bar to open the panel that displays all loaded instruments along with their MIDI channel, audio output and volume controls that populate from the top down.



The **Advanced Instrument Properties** of the selected instrument appear at the bottom of the Instruments panel. Options include:

- **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, solo, on/off load state, output channel, as well as the **FX button** and **Sub-Mixer button** to access those respective areas described below.



Sub-Mixer Channels

The Sub-Mixer button will appear when Instruments that contain multiple microphone mixes are loaded. Instruments that do not contain multiple microphone mixes will not display this button.



Click on the Sub-Mixer button to reveal a channel strip for each available microphone mix position, and click on the buttons containing the microphone names to load and unload them, which will illuminate or become grayed out respectively.

Please note! Expressive vowel and solo phrase instruments contain a Leslie ('LES') mix fader in addition to the standard 3-microphone mix. This mix fader is only available in the Mixer view (it does not appear in the Player view).



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 Bus Compressor. For more information, see the Play 6 user manual.



To save an **FX Rack Preset** 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'.

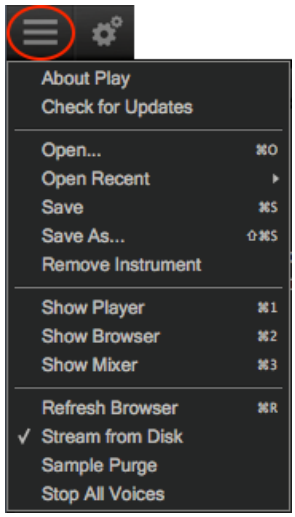


Once saved, presets can be loaded from the 'User-Defined Presets' location, which populates just above the 'Save Preset' option in the drop-down menu of the 'Preset' field

Main Menu

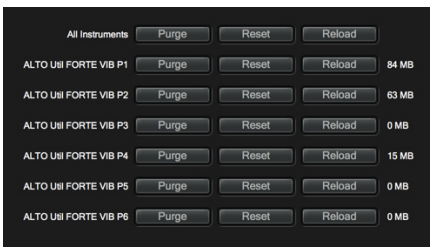
The Main Menu appears as three horizontal bars located in the top-left corner of the Play interface. Click on it for quick access to the options detailed below.

- **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.

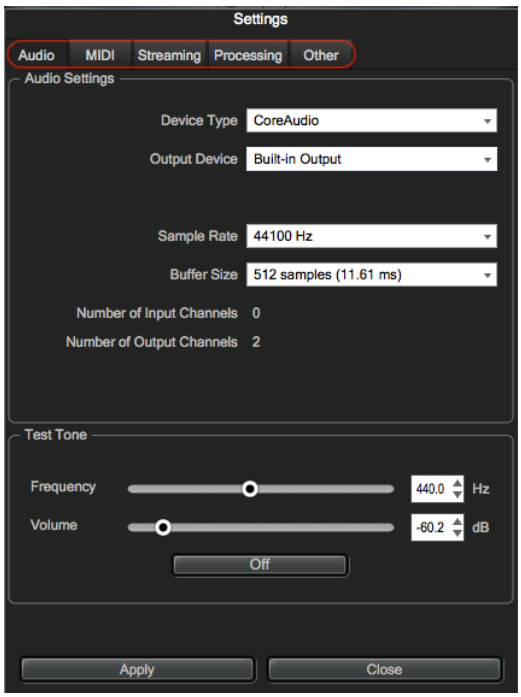


Settings Menu

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 enable you to configure 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 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 features streaming technology that stores 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 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 the Play 6 software will use.

OTHER Settings contains a variety of miscellaneous (useful) options and settings for Play.

- **Round Robin Reset** is a technique that cycles through two or more samples of the same note, each with inherent variation, providing a realistic performance of note repetitions and avoiding the so-called "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** consists of two modes that determine how MIDI channels are assigned to an instrument when it's loaded.

  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** allows you to modify how controls behave.

  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 enables you to change the value in Spin Boxes with the scroll wheel of your mouse.

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

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

  Use program changes for key-switching enables 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 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 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 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 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.



Ch. 5: WordBuilder User Interface

63 The WordBuilder Interface
65 Voice
67 Text Editor
71 Tools
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76 Syllable
79 Letter
81 Time Editor
85 Mastering the Phonetic Alphabets
86 Phonetic Pronunciation Tables

The WordBuilder Interface

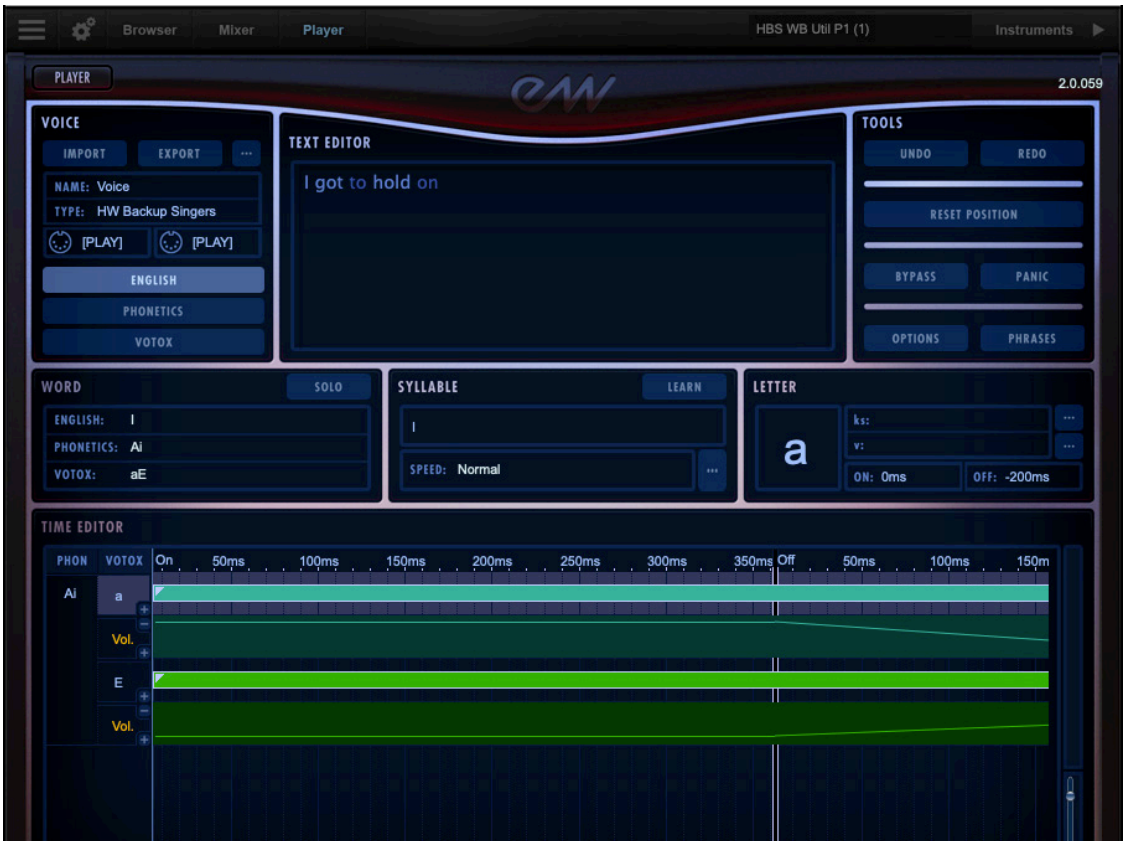
When a WB Multi (WordBuilder Multi-Instrument) is loaded from the Browser view in Play, the Hollywood Backup Singers interface will appear in the Player view. Note that The WordBuilder button will only appear if a WB Multi is loaded, not single instruments.

Please note! A WB Multi (WordBuilder Multi-Instrument) requires a dedicated instance of Play in order to accommodate the 14 individual instruments that contain all the vowels and consonants needed to build words.

To enter WordBuilder from the Player view, click the 'WordBuilder' button located in the top-left corner, just under the Navigation Bar.



To exit WordBuilder and return to the Player view, click on the 'Player' button located in the top-left corner of the WordBuilder interface.

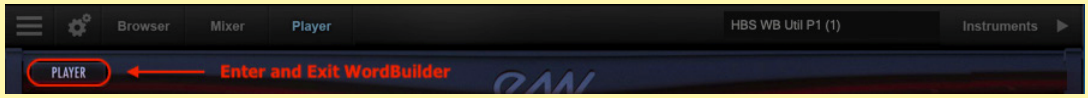


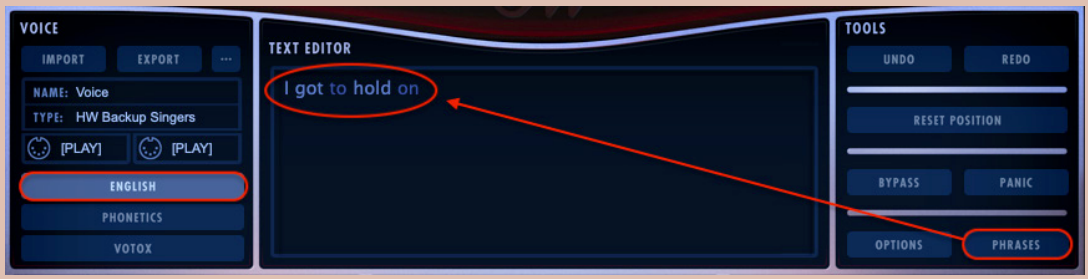
Please note! The button state changes depending on whether you are entering WordBuilder from the Player view ("WordBuilder" button) or exiting WordBuilder and returning to the Player view ("Player" button).

Different Areas of the WordBuilder Interface

The WordBuilder interface is broken down into the 7 main areas described briefly below. For more details, click the blue colored text to link to the relevant section.

WordBuilder / Player Button is located in the top-left corner of the Player view, just above the Voice section.

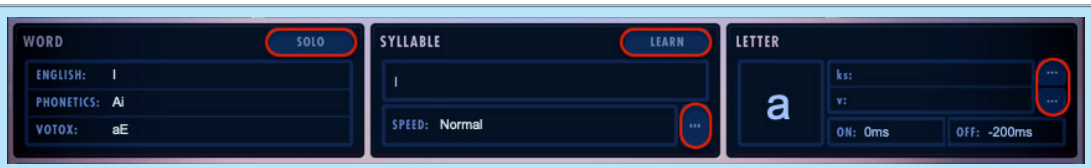




Voice contains Voice Properties, Text Mode selection (English, Phonetics and Votox) and the Import and Export of Voice Files that store essential text and timing data.

Text Editor is the area to enter text by typing into 1 of 3 Text Modes that includes English, Phonetics, and Votox. A glossary of 'letters' is available for both Phonetic and Votox Text Modes.

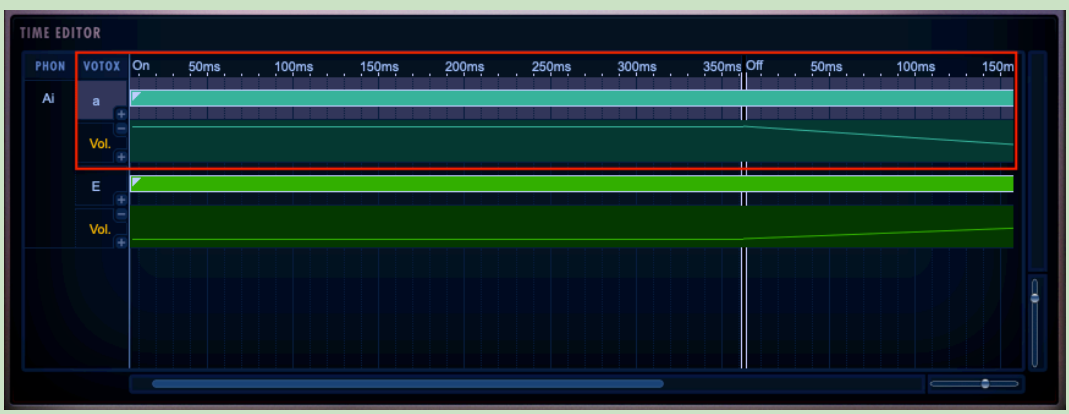
Tools contains a menu of preset Phrases, the ability to switch between English and Latin vowel modes in the Options dialog, an Undo/Redo, MIDI Panic, Bypass, and a 'Reset Position' to the cursor in Text Editor.



Word displays the selected syllable in all three Text Modes: English, Phonetics, and Votox. It also has an option to solo the selected syllable.

Syllable is the area to apply the Learn function in 1 of 2 modes (Change Speed or Sync/Draw Only), and adjust the Syllable Speed.

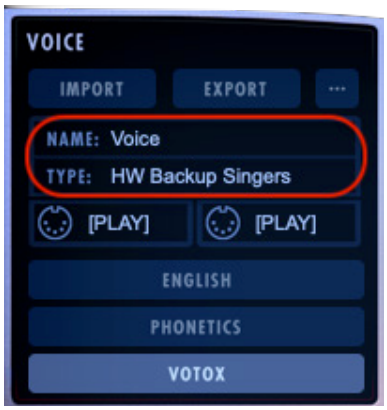
Letter contains options for modifying the velocity of a letter selected in the Time Editor, and to select among types of syllable transitions (normal, legato, staccato, etc).



Time Editor displays the selected syllable in the Text Editor, enabling letter length and volume to be adjusted.

Voice

Located in the top-left corner of the WordBuilder interface, the Voice area displays the Voice Name and Voice Type of the currently loaded WB Multi. All text, timing and controller data in WordBuilder is stored as a Voice File that can be exported and imported from the Voice area (see below).

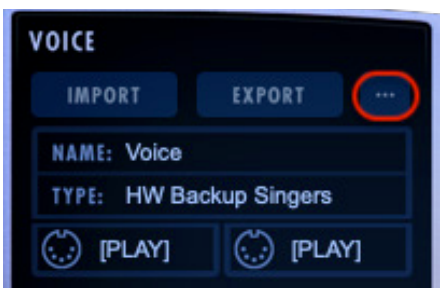


Please Note! The data contained in a Voice File is automatically saved in your DAW when using WordBuilder as a plug-in, but this option is useful to transfer WordBuilder settings between project files.

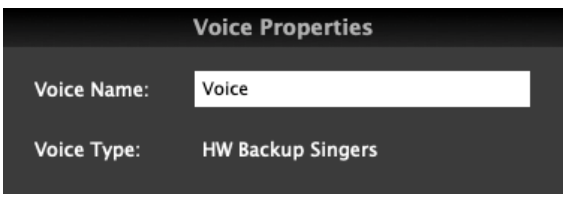
Renaming a Voice File

To prepare a Voice File for Exporting, first give it a unique Voice Name by clicking the "..." button highlighted in the picture below.

In the Voice Properties window, rename the existing Voice Name (which defaults to "Voice") to something that will distinguish it from the other Voice Files in your project.



Please Note! While the Voice Name can be edited, the Voice Type is automatically set to HW Backup Singers and cannot be changed.

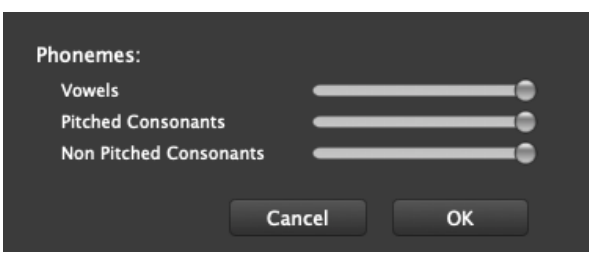


Adjusting Phoneme Volumes

The volume of vowels, pitched consonants and non-pitched consonants can be adjusted relative to each other by moving their respective sliders in the Voice Properties window.

Pitched consonants like b, m , and z are sung with breath, and carry a pitch, while Unpitched Consonants like, p, t and s do not use breath to activate the voice box, and do not carry pitch.

Boost the Consonant volume if the singers are hard to decipher, or lower the volume to soften the delivery, then press OK to apply changes.



Exporting and Importing a Voice File

Voice Files must be imported and exported between the same Voice Type. In Hollywood Backup Singers the only Voice Type is 'HW Backup Singers', so this won't be a problem.



When you've made changes to the Voice File that you're happy with, click the 'Export' button. Your computer's file window will appear, where you can name the file and save it to a chosen destination.

Click the 'Import' button to import an existing Voice File. Your computer's file window will appear where you can navigate to the file, click on it, then click the 'Open' button.

Please Note! Importing a saved voice file overwrites anything currently in WordBuilder, and it does so without asking whether you want to lose the previous information.

The Text Modes

Any word or phrase entered in the Text Editor exists simultaneously in all 3 Text Modes: English, Phonetics and Votox.

The currently selected Text Mode is highlighted in bright blue and is the active mode that appears in the Text Editor. Click on one of the other two buttons to select that Text Mode.

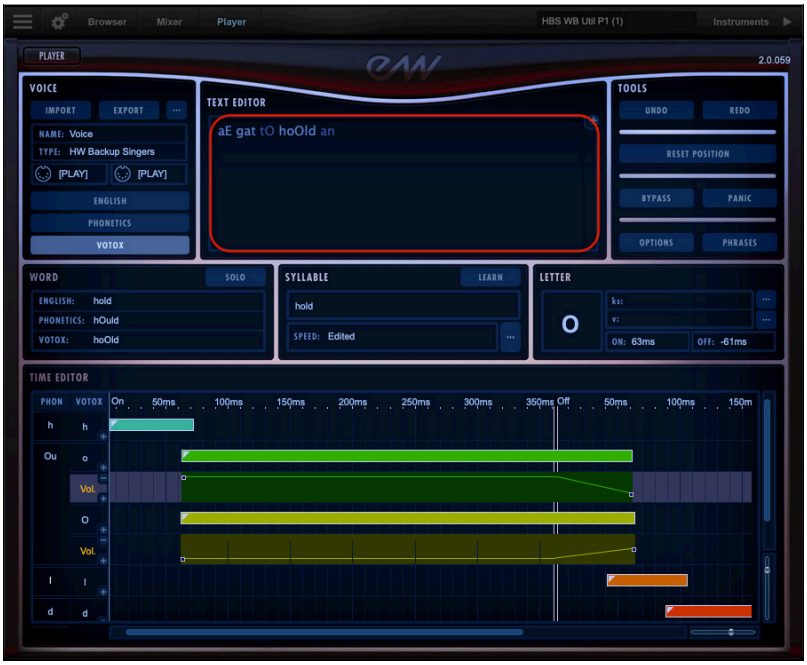
When typing in the English Text Mode, WordBuilder automatically translates any English word it finds in its 100,000-word dictionary into the other two modes.

Correctly formatted text typed into the Phonetics or Votox modes will translate into each other, but not into the English mode.



Text Editor

In the center-top portion of the WordBuilder Interface is the Text Editor, where text you wish the backup singers to sing is entered. The following sections describe the ways to use the features of the different Text Modes to achieve this.

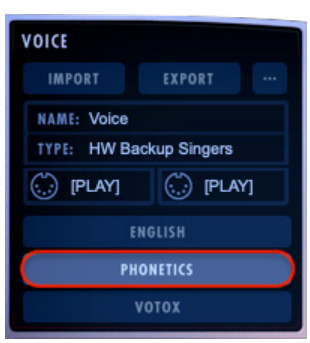


Deciding Which Text Mode Works Best

In the beginning you may find it easiest to enter text in the English Text Mode, which WordBuilder will translate automatically into the Phonetics and Votox Text Modes simultaneously. This allows you to start with English, then switch to Phonetics or Votox to make adjustments to get the exact performance you want.

If you are writing lyrics in any language other than English, or have extra syllables in a given phrase ("I love you-ou-ou") you will be working in either the Phonetic or Votox Text Modes. The latter is strongly recommended if you plan on using WordBuilder a lot, as it gives you much greater control.







English Text Mode

The Text Editor uses a color code system to indicate the status of the words typed into the English Text Mode.



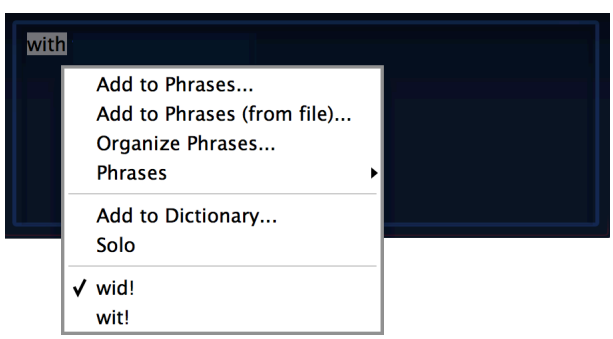
- **Medium Blue** means the word was found in WordBuilder's 100,000-word dictionary.
- **Light Blue** means the word was originally typed into the Phonetics or Votox Text Modes, and is displayed phonetically, even though it appears in the English layer.

  For example, scat syllables words like "she-bop" are not in the English dictionary and must be entered in the Phonetics Text Mode. When returning to the English Text Mode, they will appear in light blue, along with text entered in languages other than English.

- **Dark Red** means either the word was not found in the dictionary, or there is an error in syllable separation. In the first case, the word must be corrected, or if it's not a common word, entered in the Phonetic or Votox Text Modes. In the case of incorrect syllable separation (where an English word is separated into syllables, but WordBuilder cannot make good automatic phonetic separations) use the Phonetics Text Mode to enter words with the syllable separations.

- **Dark Blue** means that a word can be pronounced in two or more ways, and has more than one entry in the dictionary. Right-click (Win) or Control-Click (Mac) on the word to bring up a menu allowing you to select the desired pronunciation.

  For example, there are two possible pronounciations for the word "with". The "th" in the word is typically pronounced as it is in "thigh" (voiced), but in certain situations it is pronounced as it is in "thy" (unvoiced).



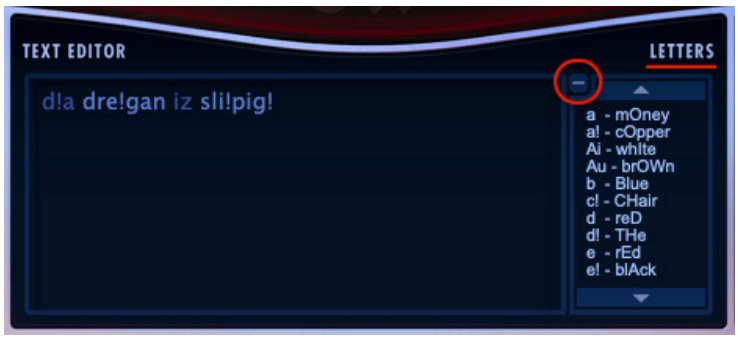
- **Gray** indicates a comment, which WordBuilder will not sing. All text entered after a number sign (#) is considered a comment. Note that you can also insert the #-symbol to remove text temporarily from what's being sung. Then delete the # and WordBuilder will sing that text again. The effect of the # ends at the end

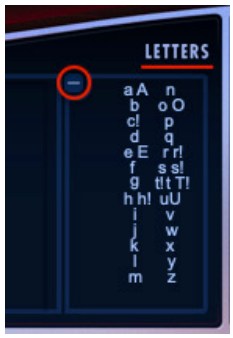
of the current line, i.e., until the next carriage return (which may be different from where the phrase automatically wraps to the next line).

- **Bright Red** indicates that a word is soloed.

Phonetics and Votox Text Modes

Text can also be entered using one of two phonetic alphabets: Phonetics and Votox. In Phonetics Text Mode, text is entered with a traditional Phonetics alphabet, and in Votox Text Mode, text is entered using WordBuilder's own phonetic symbols.





Click on the plus sign (+) to open the Phonetic or Votox Letter Glossary, and the minus sign (-) to close it.

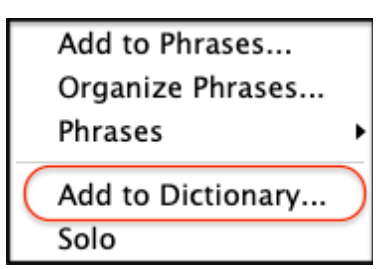
These glossaries provide a guide to their respective phonetic alphabets. The Phonetics 'Letters' menu contains a list of examples of how each of the phonetic symbols are pronounced in the English language, and the Votox Text Mode also provides a 'Letters' menu that contains all the recognized symbols available in the language.

Please Note! Symbols in the phonetic language that are made up of two vowel sounds are called 'Diphthongs, like the "Au" symbol used in the English word "brown".

Adding New Words or Pronunciations To The Dictionary

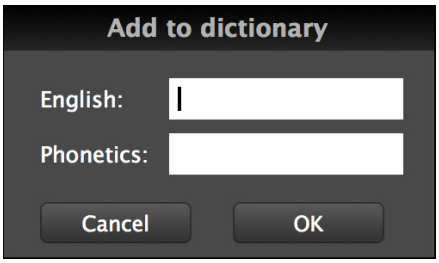
If you intend to use a word not available in the English dictionary again in the future, use the 'Add to Dictionary' option to add that word and its phonetic spelling to the dictionary, so it will translate automatically the next time you use it.

You can also use this option to add new pronunciations to existing words, or even teach your choir to sing in regional accents.



To do this, right-click (Win) or control-click (Mac) on the word (that appears in red because it was not found in the dictionary), to open the context menu, and select 'Add to Dictionary'.

The word will appear in the field next to English, with a blank field next to Phonetics. Enter the phonetic spelling for the word (not Votox) in the Phonetics field, without using hyphens to separate syllables. If you wish to have an alternative way to pronounce a word, as opposed to replacing the existing pronunciation, save it under a different name in the English field.



For example, if you want to use a different pronunciation for the word “maybe” you can save it under “MaybeAlt”, so it doesn’t replace the existing “maybe” pronunciation.If you’re sure that you want to use the specified pronunciation, save it under “maybe” to replace the standard pronunciation.

Separating Words Into Syllables

Words entered into the English Text Mode are translated into the Phonetic and Votox Text Modes as a single word, with no spaces in between syllables. When playing your MIDI controller, the word “dragon” (English) or “drAgun” (Votox) will be triggered with a single note or chord.

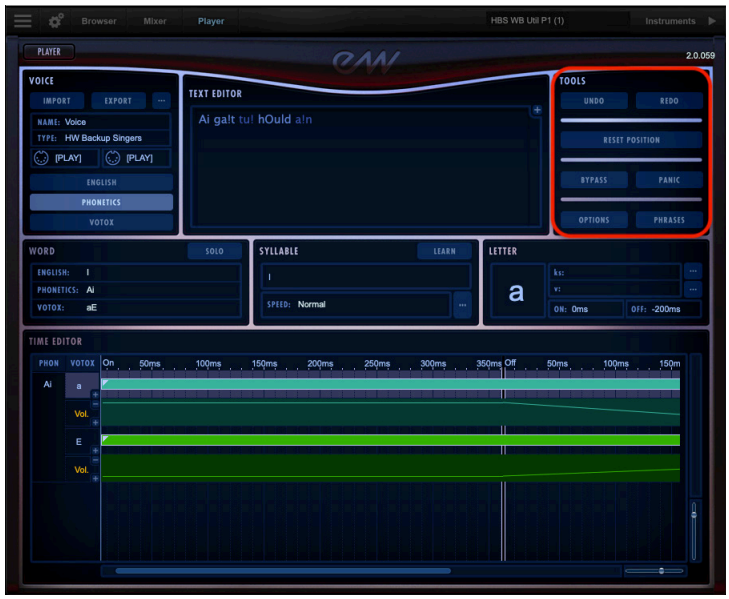




If you would rather play each of the two syllables in the word “dragon” as separate notes or chords, place a cursor in the Text Editor between the syllables and put a space in between them. Now when playing your MIDI controller, each of the syllables, “drA” and “gun”, will be triggered with a single note or chord.

Tools

In the upper-right corner of the WordBuilder Interface are the Tools buttons, that provide several important functions.



- **Undo** allows you to backtrack through an undo history log of the last 100 changes you've made in WordBuilder.
- **Redo** allows you to re-apply changes that were undone by the Undo operation.
- **Reset Position** instructs WordBuilder to reset the playback position to the start of the text. The next incoming MIDI note will "sing" the first word in the Text Editor.



- **Bypass** sends incoming MIDI data directly to a MIDI port without passing it through WordBuilder for processing.
- **Panic** silences "stuck notes" on every MIDI channel within a single instance of Play, in cases where a MIDI Note-Off message was note received.
- **Options** contains a variety of settings that can be adjusted relating to timers, voice defaults, events, and general data.
- **Phrases** opens a menu that allows you to select from a variety of phrase presets to import into the Text Editor, or add your own phrases for later recall.

Using the Reset Position Command

WordBuilder will advance to the next syllable in a word or phrase as it receives incoming MIDI notes, unless it receives the Reset Position command. This command tells WordBuilder to start playback at the first word in the Text Editor when it receives the next incoming MIDI note.

More specifically it repositions the syllable cursor to the beginning of the text, resets any open keyswitch files back to the default keyswitch (C0) of "normal" attack, and resets the Mod Wheel.



There are three ways to send the Reset Position command in WordBuilder, which will reset the playback to the first word in the Text Editor.

- Click the Reset Position button in the Tools menu.
- Send a MIDI CC (see: Events Options) to specify the message WordBuilder looks for.
- Press the F5 key.

Quick Tip! To Reset Position to any word or syllable in the Text Editor, click the mouse to position the cursor before the syllable you want to start with, then press the F4 key.

Loading, Saving and Organizing Phrases



The Phrases menu contains options to load existing phrase presets, save your own phrases, and organize them anyway you like.

A phrase file contains all the information relevant to a phrase, including the phonetics used, timing values, cross fade values and so on.

Using The Included Phrases

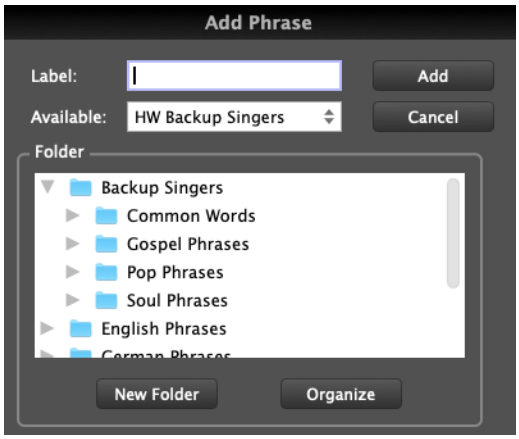
To load one of the 222 phrase presets into the Text Editor, click on the Phrases button, then select a phrase from within one of the categories at the bottom of the menu.



Phrase presets provide a good place to become familiar with WordBuilder and specifically how to use the Votox Text Modes to achieve the desired pronunciation. You may need to adjust the timings and other settings to fit your music, or it may work as is. Either way, they are a good learning tool to become familiar with the Votox Text Mode.

Saving Your Own Phrases

To save a phrase for later recall, highlight the phrase in the Text Editor, then click on the Phrase button and select the 'Add to Phrases' option from the menu. This will bring up the 'Add Phrase' dialog window, where you can determine how and where to save the file.

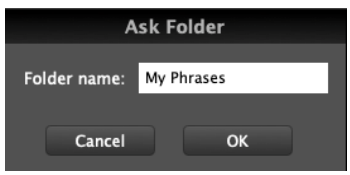


In the 'Add Phrase' dialog window, name the phrase file in the 'Label' field, then select a Voice Type you wish to save the phrase with from the 'Available' drop-down menu.

Next, select the folder you wish to store the phrase in, then click 'Add'.

Creating New Folders and Organizing Phrases

Click the 'New Folder' button highlighted above to add a new folder to store phrase presets in. Enter the folder name in the dialog window that appears, then click 'OK'.



Clicking the 'Organize' button will open your computer's file browser window, which will display the default location of the WordBuilder phrase presets, as well as any new folders you create. Here, you can organize the folders and sub-folders anyway you please.

The Options Menu

Click the 'Options' button in the Tools menu to open a dialog box shown below. From here you can change a number of settings that affect the ways the program operates.

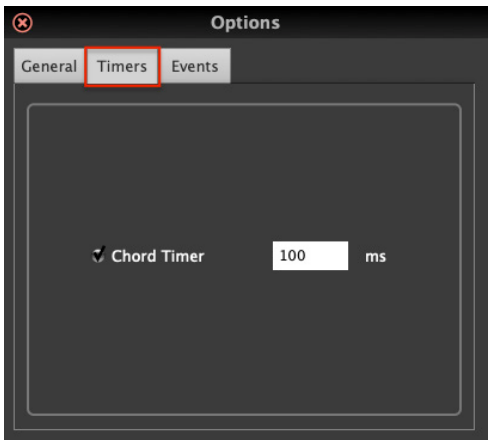
General Options



- **Sound Library** allows you to choose between sound libraries that have WordBuilder functionality. At the moment this includes the Hollywood Backup Singers, Symphonic Choirs and the Hollywood Choirs.
- **Language** specifies what language the dictionary will translate to Phonetics. English is the only available option at the moment.
- **Vowels** allows you to choose between English Mode and Latin Mode. The different modes change how symbols are translated into the Votox Text Mode, but do not affect the sound.

Timers Options

The Chord Timer controls which notes are considered part of a chord (that playback the same syllable of text) by how far apart they are in time.

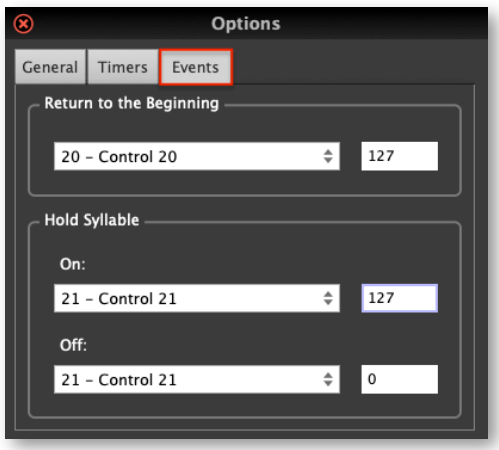


When using the Chord Timer, experiment to find a value that works best for your playing style, or for the piece you're writing, and be mindful to play with accurate timing based on the timer value. This feature is especially helpful when playing melodic lines on top of chords, but can be disabled when writing solo melodic lines.

1. Click the small checkbox to the left of Chord Timer to enable and disable it.
2. When enabled, enter a value in milliseconds into the field to set the tolerance.

Events Options

Here you can assign MIDI CCs to trigger the Return to Beginning and Hold Syllable commands, which determines the position of the syllable playback cursor in the Text Editor.

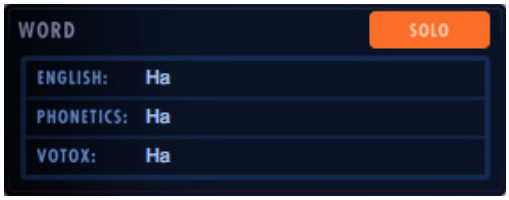


- **Return to Beginning:** this command instructs WordBuilder to reset the syllable cursor to the first word in the Text Editor, and is assigned by default to MIDI CC20 with a value of 127. It's recommended that you automate this MIDI CC before the first note of a phrase you wish to start with at the beginning of the text.
- **Hold Syllable** commands instruct WordBuilder to start holding a syllable when it receives an ON command, and stop holding a syllable when it receives an OFF command. For example, if you want the "ee" sound of "sweet" to hold over five notes, send the MIDI CC assigned to ON from the sequencer before the "ee" has started on its first note, and send the OFF command after the start of its fifth note. The ON and OFF commands are not assigned by default, but can be assigned to any unused MIDI CCs and values.

Word

When placing a cursor on a word or syllable in the Text Editor, the Word area will display the English, Phonetics and Votox spelling of the selection

How to Solo a Word



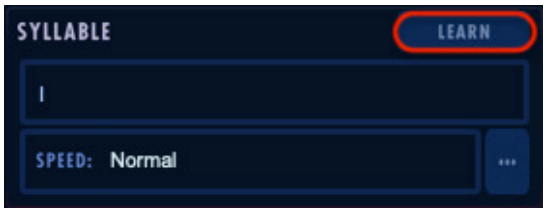
This selection can be soloed by clicking the 'Solo' button, so that it can be played over and over while settings are adjusted.

The selection will turn red in the Text Editor to indicate it has been soloed. Click the Solo button again to turn it off.

Syllable

When placing a cursor on a word or syllable in the Text Editor, the Syllable area will display the English spelling of the selection, and the state of the Syllable Speed function (explained below). This area also contains buttons to access the 'Learn' and 'Syllable Speed' functions themselves.

When entering text into the Text Editor, WordBuilder uses default lengths for each sound that makes up a syllable. These default values are good approximations, but if the tempo is fast the note may end too soon, or if a particular syllable lasts too long, the word may not sound natural.



Instead of manually setting the number of milliseconds each sound within a syllable lasts, the 'Learn' function records you playing the phrase and adjusts these timings automatically. This function provides a way to automate letter timings to match note durations, but does not achieve perfect enunciation without some fine-tune editing of the performance in the Time Editor.

Use Learn to Sync WordBuilder to DAW Playback

When applying the 'Learn' function while using Play and WordBuilder as a plug-in within your DAW, the text position in WordBuilder will sync to the cursor position in the DAW. This will keep the playback in the correct order when you start playback in the middle of a song or phrase. If you need to change existing 'Learn' automation, simply run the 'Learn' process again. These instructions are outlined below.

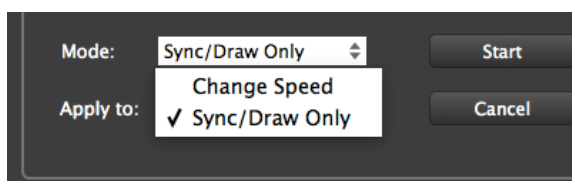
Setting Up the Learn Function

To begin the process, click on the Learn button in the Syllable area to open a dialog box and select and click in the Mode drop-down menu to select between 2 modes:

- **Change Speed** mode instructs WordBuilder to adjust the duration of phonetic segments based on the playback information it learns, providing the greatest benefit when used on fast-paced music, where the default durations of phonetic segments may not have time to play out before the notes end.

  When the Learn function is run with the Change Speed mode selected, the Time Editor will display a lighter blue interval that is the duration of the note itself, and a dark red interval that is the time for singing the consonants and glides that close the syllable.

- **Sync/Draw Only** mode does not make actual timing changes, but instead provides useful information in the form of displaying the length of each syllable in the timeline at the top of the Time Editor.



This allows you to make informed decisions when manually adjusting the timings of the phonetic segments by showing a note's timings as it relates to the default letter timings of the syllables.

When the Learn function is run with the Sync/Draw Only mode selected, the Time Editor displays the length of notes and rests into the gray, red, and blue regions of the timeline at the top, but does not change the actual lengths of the phonetic letters (the colored bands next to each phonetic letter in the Time Editor). You can then manually drag the ends of the bands to achieve the desired effect.

Running the Learn Function

Click the Start button to open another dialog box that instructs you to play the melody. Play the passage in real-time from your MIDI controller, or playback the sequence from your DAW.



When the progress bar fills in completely, WordBuilder has received as many notes as there are matching syllables.

Click on 'OK' to return back to the WordBuilder interface, or click 'Cancel' to discard the learned information.

Once WordBuilder has "learned" the note-on and note-off events of a musical line, you can manually tweak the timings to fine-tune the performance to your tastes.

If you change the tempo or the rhythm, you may want to rerun the "Learn" feature to conform the phonetic segments to the shape of the new melodic line. Changing pitches does not require rerunning "Learn."

Removing Changes Made by the Learn Function

To remove all data used by the Learn function, highlight the syllable(s) you want to revert back to default timings and then select 'Normal' in the Syllable Speed menu. This action also strips all other changes made to those syllables, as if you had deleted and re-added them.

Adjust Timing with Syllable Speed Options

The Syllable Speed displays 4 states, one of which is displayed in the Speed dialog:

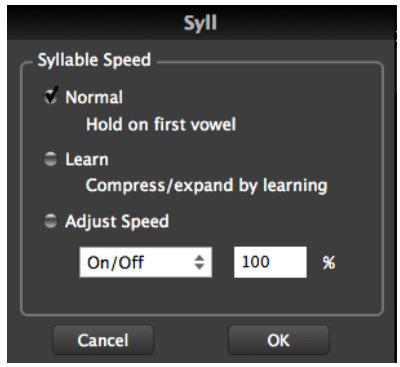
- **Normal** indicates the default timings are in effect.
- **Learned** indicates the timings have been modified by the Learn functions.
- **Edited** indicates the timings have been modified with the mouse.
- **Adjusted** indicates the Syllable Speed function was used to modify timings.

Click on the "..." button in the Syllable area to open the Syllable Speed menu and select between 3 modes that adjust the speed of the selected syllable by changing the duration of its individual segments in the following ways:



- **Normal** mode reverts timings to their default values and removes all MIDI CC data that had been automated.

- **Learn** mode is useful when the Learn function has been run with the Sync/Draw Only mode selected, which doesn't actually apply changes to the phonetic timings. Select Learn and click 'OK' to complete the process that would have been done had Learning been done in Change Speed mode. You can also use this mode if you want to change a word in the text while leaving the notes as they are, and want WordBuilder to learn timings for the new phonetic segments.



- **Adjust Speed** mode allows you to change the duration of the syllable as a percentage of the current duration. Select this mode for the settings below it to become active. In the left drop-down list, you can choose whether to apply changes to only the Note On portion of the Time Editor to the left of the dividing line, the Note Off portion of the Time Editor to the right of the dividing line, or to both Note On and Off portions.

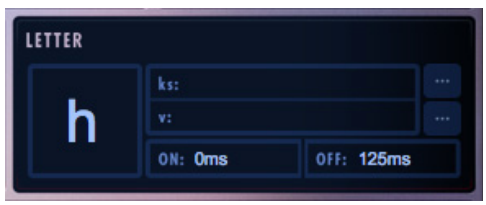
Letter

Clicking on a Votox Letter in the Time Editor's left column will select it and make it available for editing in the Letter area. Here, you can change the volume of each letter within a syllable by applying a MIDI Velocity transform option, and select between 4 playing styles to control how syllables transition from one to another.

Please note! The options in the 'Letter' section do not apply to the WordBuilder Multis in Hollywood Backup Singers, however, they are left in the manual as reference when using other products with this functionality, like Hollywood Choirs and Symphonic Choirs.

How To Set Letter Velocities

These options transform incoming MIDI velocity data, which come along with MIDI note data and is calculated by the speed with which you depress the keys on your MIDI controller (how hard you play). MIDI velocity values range from 0 (silent) to 127 (played with maximum force). All results are rounded to the nearest whole number between these values. For example, if the English word "fun" is being sung on a single note, there are three letters being played to enunciate the syllable, and WordBuilder gives you the control to adjust the velocities on the Votox "F" and "u" and "n" separately.



1. Click on a syllable in the Text Editor to select it. Once selected, varying parts of that syllable will appear in the Word, Syllable, and Letter areas of WordBuilder.
2. Click on one of the individual Votox letters that makes up a syllable in the left column of the Time Editor, highlighting it. The Votox letter will now appear in the Letters area and is available for editing.
3. Click on the "..." button in the Letters area to open the Letters menu,
4. Click in the drop-down menu in left side of the 'Velocity' section and choose between 6 MIDI velocity transform options: Nothing, (=), (+), (-), (*) and (/).
5. Type a value into the field on right side of the 'Velocity' section. This value will transform the MIDI velocity based on the transform option selected in the step above.
    - **Nothing** leaves the MIDI velocity unchanged from the original sent from your DAWs playback or a MIDI controller.
    - **Equal Sign (=)** forces the MIDI velocity to the exact value specified in the field at the right, regardless of the incoming MIDI note velocity.
    - **Plus (+)** transforms the MIDI velocity by adding the number in the dialog box to its value.
    - **Minus (-)** transforms the MIDI velocity by subtracting the number in the dialog box from its value.
    - **Multiply (*)** transforms the MIDI velocity by multiplying its value by the number in the dialog box.
    - **Divide (/)** transforms the MIDI velocity by dividing it's value by the number in the dialog box.

How to Control Syllable Transitions

Both instrumental and vocal musicians perform musical lines in varying styles, playing or singing legato or staccato and more. When writing lyrics, it's important to consider how each syllable flows into the next, or doesn't. For example, even though the sounds of the letters are the same, as in "alone" and "a loan", the phrase may be articulated differently to make the meaning more clear.

WordBuilder uses keyswitching to move between the 4 available articulations, or playing styles. Each letter within a syllable can be controlled in one of three methods: using Text Syntax symbols in the Text Editor, assigning an articulation to a letter within the Letters menu, or sending keyswitch notes manually.

Text Syntax is the default option to control syllable transitions. The table below shows the symbols that can be entered in the Text Editor to control which articulation is applied to a letter. An example of using the Text Syntax in the Text Editor to specify a type of playing style (articulation) to a letter is : ">the why and (where-fore >of the <mer-ry =day".

TEXT SYNTAX

Articulations	Symbol
Normal	=
Legato	(
Staccato	>
Slur, Slide	<

Direct Assignment involves using the Letters menu to assign an articulation directly to a letter. Follow steps 1-3 in the 'How To Set Letter Velocities' to select the letter you wish to edit, then select one of the 4 articulations outlined below, and click 'OK'.

- **Normal Attack** is the natural articulation of sung speech
- **Legato** will smoothly connect one syllable to the next.
- **Staccato** plays disconnected from the next syllable.
- **Slurred, Sliding** will slide upward into the next syllable.

Keyswitch Triggers involves sending a keyswitch note to WordBuilder directly from your MIDI keyboard, or when playing back a sequence from your DAW, as opposed to handling it internally. The table below contains the list of articulations with their respective note numbers that trigger them. Keyswitches continue to affect a letter until a new keyswitch overrides the previous one.

KEYSWITCHES

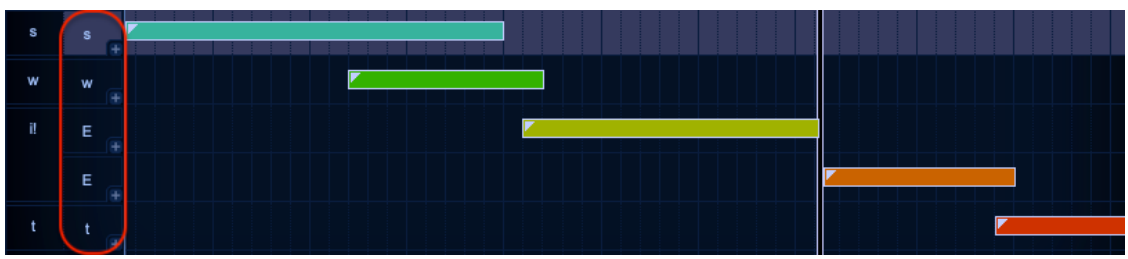
Articulation	Note Number
Normal	24 (C0)
Legato	25 (C#0)
Staccato	26 (D0)
Slur, Slide	27 (D#0)

Time Editor

The Time Editor allows you to fine-tune how each letter within a syllable sounds when moving from one to the next during playback.



Using the word “sweet” as an example, the Time Editor gives you the ability to control how quickly or slowly the vocal line moves from the “s” to the “w”, either holding on the “w” or getting to the “ee” as soon as possible. You may also want the “ee” to continue after the MIDI note off message is received, to mimic the time it takes singers to close the “t” with their tongues.



Default Note Lengths

Playing a single note from your MIDI controller or DAWs playback will trigger 5 samples, one for each Votox letter in the word “sweet”. By default, WordBuilder uses standard lengths for each letter in the text when first entering it into the Text Editor, but you can drag the ends of the bars with your mouse to change the start time and duration of each letter within a syllable, giving total control over when each sample begins and ends as well as how much each overlap.

Different Parts of the Time Editor

Phonetic and Votox letters appear in the two left columns, displaying their respective phonetic alphabets. All words typed in WordBuilder are translated into Votox letters (including Phonetics), which in turn trigger the sounds that make up each syllable. This is a big reason it's advantageous to learn the Votox Text Mode, to have direct control over the sounds that make up each syllable.

The timeline across the top of the Time Editor displays a marker every 50 milliseconds, with white vertical lines separating the MIDI Note On portion of the timeline (the note itself) from the MIDI Note Off portion (the release trail).



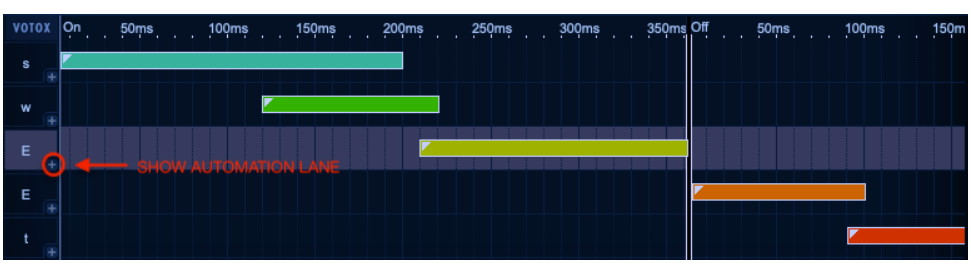
The last Votox letter in the Note On portion, which appears to the left of the white vertical line separator, continues indefinitely until you release a held note. If you drag the separator to the right you'll notice it will go along with it.

The colored bars represent the duration of each Votox letter, which in this case is three notes during the Note On portion and two notes during the Note Off portion.

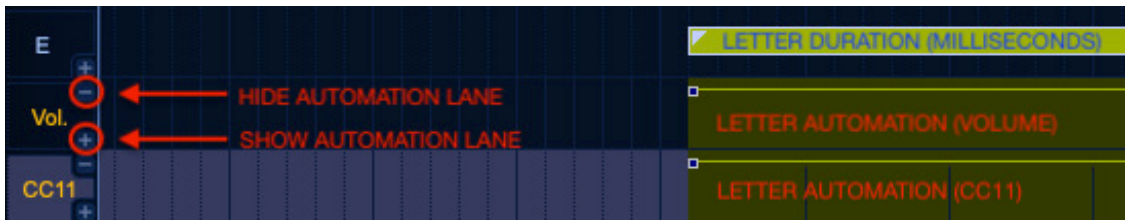
Using Per-Letter Automation

The Time Editor gives you expressive control by allowing you to use MIDI CCs (Continuous Controllers) to automate things like Modulation (CC1), Volume (CC7) and Expression (CC11) for each letter within a syllable over time.

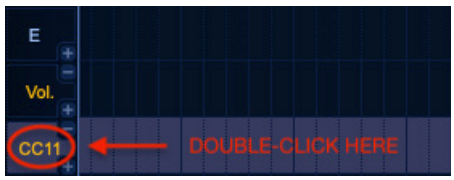
To open a MIDI CC lane, click the plus (+) button in the bottom-right corner of any Votox letter box in the left column of the Time Editor, exposing the default Volume automation lane.



Each automation lane contains a plus (+) button allowing you to open another automation lane, and a minus (-) button to close the existing lane. Each additional automation lane added will be assigned to the subsequent MIDI CC number: CC0, CC1, CC2, etc.

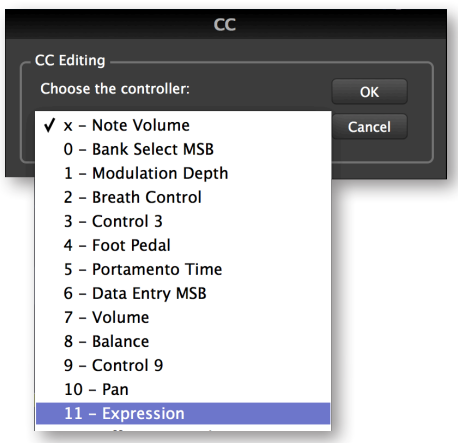


Selecting a MIDI CC to Automate



To change the default parameter assigned to an automation lane, double-click on the parameter name below the Votox letter box to open the CC Editing dialog box.

Click in the drop-down menu under the header 'Choose the Controller' and select the parameter you wish to automate and click 'OK'. Notice the parameter name will change accordingly in the left-column under the Votox letter you are automating.

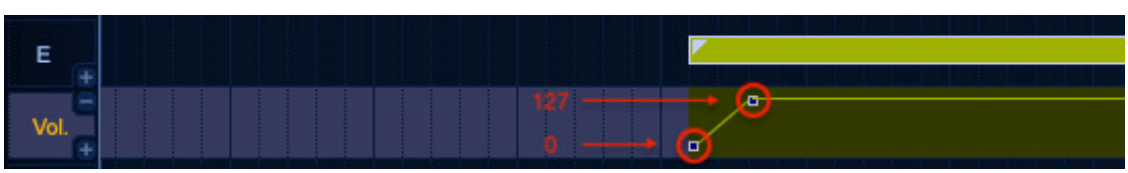


Creating an Automation Envelope

The default automation value is 127, but nodes can be placed between the values of 0 and 127 along the to create an envelope.

Double-click anywhere on the envelope to create a node that displays as a small square. To delete this node, double-click with the right mouse button.

Drag this node within the designated colored area to create a change in the time value (x-coordinate) and/or parameter value (y-coordinate). When dragging the node, a small Tool Tip dialog will open and show the exact location in terms of these x - y coordinates.

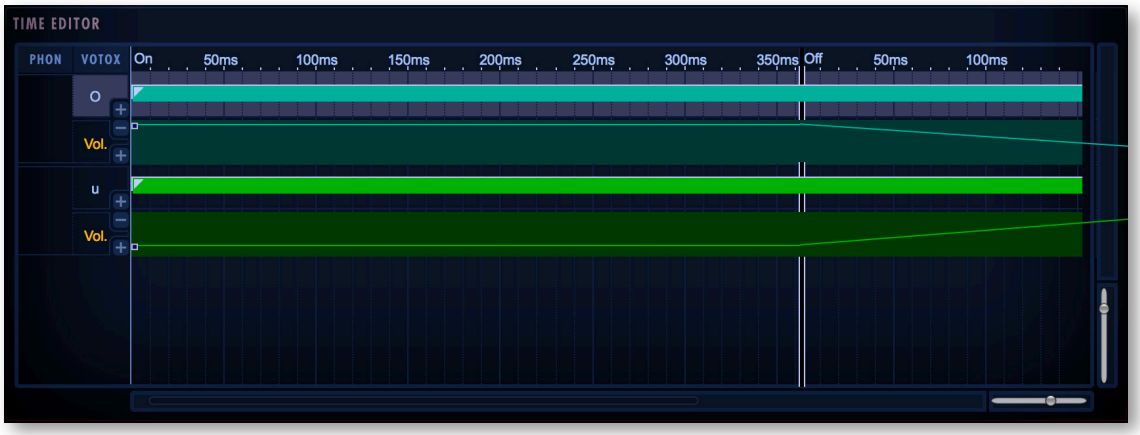


Cross-Fades Between Phonetic Letters

Letters within a syllable do not always follow each other sequentially in the Time Editor. In certain circumstances blending two together by using a cross-fade, where one letter fades out as another fades in, is necessary to achieve a particular pronunciation.

This type of pronunciation, where two vowels are contained within a single syllable, is called a Diphthong. WordBuilder handles this situation by creating these cross-fades automatically where needed, but you can modify or eliminate these automation envelopes as described above.

See Types of Speech Sounds to learn more



Mastering the Phonetic Alphabets

The Phonetic and Votox alphabets used in WordBuilder share a close relationship, but the Votox alphabet was designed exclusively for WordBuilder for the sole purpose of notating individual sounds that, when combined, form words that are sung.

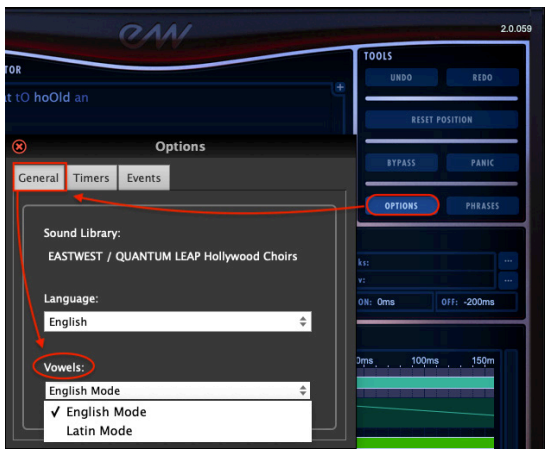
Please note! WordBuilder functionality is only available for the following Play Libraries: Symphonic Choirs, Hollywood Choirs, and Hollywood Backup Singers.

The Importance of Votox

We recommend learning Votox text mode. The English text mode is a good starting place, and the Phonetic text mode is useful, but both are converted to Votox text mode where WordBuilder gives you control over each component of sound used to construct syllables and words.

Language options are available in Votox text mode. This option does not affect the sound of the words, just the symbols used to represent them.

- **Latin** uses Votox symbols that more closely reflect spellings in Romance languages.
- **English** uses Votox symbols that more closely reflect spellings in English languages.



To select a language option, click on the Options button to open the Options Dialog. In the default tab, General Options, click in the drop-down menu under the Vowels header, to select between 'English' and 'Latin' language options.

Types of Speech Sounds

All of the different types of speech sounds are included in the Phonetic Pronunciation Table below, as well as being broken down into their separate types: vowels, diphthongs, pitched consonants, and non-pitched consonants.

- **Vowels** are a speech sounds produced by vibrating vocal chords in an open vocal tract with no obstruction. When sung, it forms the voiced pitch of the syllable.
- **Consonants (pitched)** are speech sounds where the breath is (partly) obstructed. When combined with a vowel sound a syllable is formed.
- **Consonants (non-pitched)** are produced by breath alone, and do not engage the vocal tract to produce a definite pitch. This is also referred to as Unvoiced.
- **Diphthongs** are speech sounds that consist of two distinct vowels sounds that are cross-faded between each other within a single syllable.

Phonetic Pronunciation Tables

The tables in the section contain the different alphabet symbols used in both the Phonetic and Votox languages, and examples of English words to help contextualize the sound of each pronunciation. The Votox alphabet is further broken down into English and Latin alphabet language options.

The first table contains the entire set of alphabet symbols regardless of speech type, with subsequent tables containing only specific speech types, including vowels, diphthongs, and consonants (both pitched and non-pitched).

PHONETIC PRONUNCIATION TABLE

Phonetic alphabet	Votox alphabet		English Reference
	Latin	English	
a	A	u	m**o**ney, r**ou**gh
a!	a	a	c**o**pper, w**a**nder
Ai	ai	aE	wh**i**te, s**igh**
Au	Au	uO	br**ow**n, m**ou**se
b	b	b	**b**lue, sla**b**
c!	C!	C!	**ch**air, cat**ch**
-	h!	h!	na**cht** (night)
d	d	d	re**d**, can**d**or
d!	t!	t!	**th**e, nei**th**er
e	e	e	r**e**d, st**ea**dy
e!	a!	A	bl**a**ck, **a**fter
Ei	Ei	iE	gr**ay**, sl**a**te
f	F	F	**f**ile, enou**gh**
g	g	g	**g**reen, le**g**
g!	ng	ng	pi**ng**, ha**ng**ar
h	H	H	**h**at, a**h**ead
i	i	E	**i**ndex, f**i**nger
i!	ii	EE	gr**ee**n, sk**i**
j	j	j	oran**g**e, fi**dg**et
k	K	K	bla**ck**, **c**oal
l	l	l	b**l**ue, **l**ess
m	m	m	**m**oney, ha**mm**er
n	n	n	gree**n**, s**n**ug
o	o	o	**o**range, n**augh**ty

| *continued* |

PHONETIC PRONUNCIATION TABLE

Phonetic alphabet	Votox alphabet		English Reference
	Latin	English	
Oi	oi	oE	**oi**l, b**oy**
Ou	ou	oO	yell**ow**, **o**cean
p	P	P	**p**ink, u**pp**er
-	Q	Q	**qu**ick, **qu**een
r	r	r	**r**ed, ca**r**
r!	Ar	ur	p**ur**ple, low**er**
rr	r!	r!	**r**ojo, pe**rr**o
s	S	S	**s**ilver, la**c**e
t	T	T	whi**t**e, **t**rue
t!	T!	T!	**th**eme, slo**th**
u	U	U	p**u**t, c**ou**ld
u!	u	O	bl**ue**, p**oo**l
v	v	v	oli**v**e, a**v**ert
w	w	w	**w**ait, a**w**ash
x	X	X	fi**x**, e**xc**ess
x!	S!	S!	fle**sh**, na**ti**on
y	y	y	**y**ellow, **y**onder
z	z	z	**z**ero, poi**s**on
z!	zj	zj	vi**si**on, a**z**ure

PHONETIC PRONUNCIATION GUIDE VOWELS & DIPHTHONGS

VOWELS are speech sounds produced by vibrating vocal chords in an open vocal tract with no obstruction. When sung, it forms the voiced pitch of the syllable.

Phonetic alphabet	Votox alphabet		English Reference
	Latin	English	
a	A	u	m**o**ney, r**ou**gh
a!	a	a	c**o**pper, w**a**nder
e	e	e	r**e**d, st**ea**dy
e!	a!	A	bl**a**ck, **a**fter
i	i	E	**i**ndex, f**i**nger
o	o	o	**o**range, n**augh**ty
u	U	U	p**u**t, c**ou**ld
u!	u	0	bl**ue**, p**oo**l
-	i	E	*only used in diphthongs*

DIPHTHONGS are speech sounds that consist of two distinct vowels sounds that are cross-faded between each other within a single syllable.

Ai	ai	aE	wh**i**te, s**igh**
Au	Au	u0	br**ow**n, m**ou**se
Ei	Ei	iE	gr**ay**, sl**a**te
i!	ii	EE	gr**ee**n, sk**i**
0i	oi	oE	**oi**l, b**oy**
0u	ou	o0	yell**ow**, **o**cean
r!	Ar	ur	p**ur**ple, low**er**

PHONETIC PRONUNCIATION GUIDE CONSONANTS

PITCHED CONSONANTS are speech sounds where the breath is (partly) obstructed. When combined with a vowel sound a syllable is formed.

Phonetic alphabet	Votox alphabet		English Reference
	Latin	English	
b	b	b	**b**lue, sla**b**
d	d	d	re**d**, can**d**or
g	g	g	**g**reen, le**g**
j	j	j	oran**g**e, fi**dg**et
l	l	l	blue, **l**ess
m	m	m	**m**oney, ha**mm**er
n	n	n	gree**n**, sna**g**
r	r	r	**r**ed, ca**r**
t!	T!	T!	**th**eme, slo**th**
v	v	v	oli**v**e, a**v**ert
w	w	w	**w**ait, a**w**ash
y	y	y	**y**ellow, **y**onder
z	z	z	**z**ero, poi**s**on

NON-PITCHED CONSONANTS are produced by breath alone, and do not engage the vocal tract to produce a definite pitch. This is also referred to as Unvoiced.

c!	C!	C!	**ch**air, cat**ch**
-	h!	h!	na**cht** (night)
d!	t!	t!	**th**e, nei**th**er
f	F	F	**f**ile, enou**gh**
g!	ng	ng	pi**ng**, ha**ng**ar
h	H	H	**h**at, a**h**ead
k	K	K	bla**ck**, **c**oal
p	P	P	**p**ink, u**pp**er
-	Q	Q	**qu**ick, **qu**een
rr	r!	r!	**r**ojo, pe**rr**o
s	S	S	**s**ilver, la**c**e
t	T	T	whi**t**e, **t**rue
x	X	X	fi**x**, e**xc**ess
x!	S!	S!	fle**sh**, na**ti**on
z!	zj	zj	vi**si**on, a**z**ure

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