

# PLAY 6

## USER MANUAL



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[MASTER NAVIGATION DOCUMENT](#)

## Welcome to the Play 6 System

Play 6 is an advanced sample engine that powers EastWest's vast virtual instrument collection, called Play Libraries. A number of new features, improvements and fixes are included in this latest version, including the following:

- **Instrument Database** allows you to search instruments directly with key words, or by selecting attribute tags to narrow search results across a variety of categories
- **User Interface (UI)** has been redesigned to get around Play 6 easier than ever.
- **Instruments Sidebar** allows access to instruments and advanced instrument properties
- **NKS Compatibility** is now available for Native Instruments Complete Kontrol and Maschine devices, including parameter mapping and browsing.
- **Convolution Engine** has been improved for better performance with reverb and amp



[Play 6 with Instruments Sidebar opened]

## Powering an Award-Winning Virtual Instruments Collection

Play 6 is an advanced sample engine that powers an associated collection of virtual instruments, called Play Libraries. They are the winner of over 100 industry awards, making EastWest the industry leader of highly detailed sampled instruments.



Each Play Library has a custom user interface with a set of controls designed to accommodate the unique needs of that library. Altogether, they make up an expansive collection of sampled instruments that range from orchestral to rock to ethnic to electronic and beyond.

## About EastWest

EastWest ([www.soundsonline.com](http://www.soundsonline.com)) has been dedicated to perpetual innovation and uncompromising quality, setting the industry standard as the most critically acclaimed producer of Sample CDs and Virtual Instruments software.

Founder and producer Doug Rogers has over 35 years experience in the audio industry. His uncompromising approach to quality, and innovative ideas have enabled EastWest to lead the sound-ware business for nearly 30 years.

In 1997 Rogers partnered with producer/composer Nick Phoenix and set up Quantum Leap, a wholly owned division of EastWest, to produce high-quality, no-compromise sample libraries and virtual instruments. Quantum Leap virtual instruments are mostly produced by Nick Phoenix. Some of the larger productions, such as Symphonic Orchestra, Symphonic Choirs, Quantum Leap Pianos, and Hollywood Strings are co-produced by Doug Rogers and Nick Phoenix. As a composer, Phoenix began scoring film trailers and television commercials in 1994. To date, he has either scored or licensed music for the ad campaigns of over 1000 major motion pictures including Tomb Raider 2, Terminator 3, Lord of the Rings Return of the King, Harry Potter 2, Star Wars Episode 2, Spiderman 3, Pirates of the Caribbean 3, Blood Diamond, Night at the Museum, and The Da Vinci Code. Quantum Leap has now firmly established itself as one of the world's top producers of high-end sample libraries and virtual instruments.

In 2006, EastWest purchased the legendary Cello Studios (formerly United Western Recorders) on Sunset Boulevard in Hollywood, re-naming it EastWest Studios. The 21,000 sq. ft. facility, since remodelled by master designer Philippe Starck, houses five recording studios and is the world headquarters for EastWest.

## About Doug Rogers

With over 35 years experience in the audio industry, founder and producer Doug Rogers 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.



He released the very first commercial Drum Samples CD in 1988, and followed it with the multiple award-winning "Bob Clearmountain Drums" sample collection which he co-produced. In the years that followed he practically re-invented the sound-ware industry. EastWest introduced loop sample libraries to the market in the early nineties, followed closely by the first midi driven loops collection (Dance/Industrial). He released the first library to include

multiple dynamics, followed by the first sample library to stream from hard disk, an innovation that led to the detailed collections users expect today.

His recent productions are Symphonic Orchestra (awarded a Keyboard Magazine “Key Buy Award,” EQ Magazine “Exceptional Quality Award,” Computer Music Magazine “Performance Award,” “Sound On Sound Readers Award” (twice), and G.A.N.G. [Game Audio Network Guild] “Best Sound Library Award”); and Symphonic Choirs (awarded Electronic Musician “Editor’s Choice Award,” G.A.N.G. “Best Sound Library Award,” and Keyboard Magazine “Key Buy Award”). Most recently, his productions include Quantum Leap Pianos, the most detailed virtual piano collection ever produced; Fab Four, inspired by the sounds of the Beatles; The Dark Side (Fab Four and The Dark Side were both M.I.P.A. Award winners, judged by 100 music magazines); Hollywood Strings, Hollywood Brass, Hollywood Orchestral Woodwinds, Hollywood Orchestral Percussion; ProDrummer 1, co-produced with Mark “Spike” Stent; ProDrummer 2, co-produced with Joe Chiccarelli; and Ghostwriter, co-produced with Steven Wilson.

Over the last 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 industry.

## About EastWest Studios

EastWest Studios (formerly United Western Recorders) is the world’s premiere studio. Here is a quote from page 33 of the book *Temples of Sound*: “United Western Recorders has been the scene of more hit records—from the 1950’s to right now—than any other studio. No other studio has won more technical excellence awards, and no other studio has garnered as many Best Engineered Grammys as this complex of studios on Sunset Boulevard.” One thing everyone agrees on: The acoustics and the vibe in the recording rooms of 6000 Sunset Boulevard are unmatched.

EastWest Studios has hosted the who’s who of music for over 45 years. In the beginning, artists like Bing Crosby, Frank Sinatra, Dean Martin, Sammy Davis, Nat King Cole, Johnny Mercer and Ray Charles were recording the hits of the day. Ray Charles’ classic, “I



Can’t Stop Loving You” was recorded here as well as Sinatra’s, “Strangers In The Night” and “That’s Life,” and the legendary Beach Boys “Pet Sounds” album, which was the inspiration for The Beatles’ “Sgt. Peppers” album, was recorded here also. The Mamas and Papas “California Dreamin,” “Monday Mon-

day,” and Scott McKenzie’s “San Francisco” were recorded here. Elvis Presley recorded his 1968 Christmas special in Studio 1. Famous themes for film and television were recorded here including the “M\*A\*S\*H” theme, “Mission Impossible” theme, “Hawaii Five-O” theme, “Beverly Hillbillies” theme, “Godfather” theme, plus much of the “Monkees” and “Partridge Family” television series.

It would be impossible to name all the musical royalty who have worked at EastWest Studios, but here are some of them (in alphabetical order) Christina Aguilera, Herb Albert, America, Paul Anka, Fiona Apple, Audioslave, Franky Avalon, Barenaked Ladies, Better Than Ezra, Blondie, Buffalo Springfield, Burt Bacharach, Beach Boys, Blink 182, Glen Campbell, Canned Heat, Vickie Carr, Carpenters, Johnny Cash, David Cassidy, Ray Charles, Chicago, Petula Clarke, Ry Cooder, Elvis Costello, Count Basie & Orchestra, Eric Clapton, Nat King Cole, Natalie Cole, Ornette Coleman, Duane Eddy, Jan & Dean, John Coltrane, Petula Clark, Joe Cocker, Sam Cooke, Bing Crosby, Bobby Darin, Sammy Davis, Jr., Jackie DeShannon, Duke Ellington, Neil Diamond, Fifth Dimension, Bob Dylan, Ella Fitzgerald, Benny Goodman Big Band, Grateful Dead, Grass Roots, Green Day, Guess Who, Lani Hall, Herbie Hancock, Don Ho, Whitney Houston, Howlin' Wolf, Janis Ian, Ike & Tina Turner, Incubus, Isley Brothers, Michael Jackson, Elton John, Stan Keaton, Carole King, Kris Kristofferson, Franky Laine, K.D. Lang, Avril Laverne, Michel LeGrand, Peggy Lee, Little Feat, Trini Lopez, Madonna, Mamas & the Papas, Dean Martin, Johnny Mathis, Meatloaf, Sergio Mendez & Brazil 66, Metallica, Johnny Mercer, Paul McCartney, Barry Manilow, Scott McKenzie, Natalie Merchant, Bette Midler, Monkees, Alanis Morissette, Motley Crue, Muse, Rick Nelson, Willie Nelson, Wayne Newton, Harry Nilsson, Nitty Gritty Dirt Band, Ozzy Osborne, Partridge Family, Paul Revere and the Raiders, Tom Petty and the Heartbreakers, Pointer Sisters, Iggy Pop, Elvis Presley, Lisa Marie Presley, Billy Preston, Rage Against the Machine, Red Hot Chili Peppers, Kenny Rogers, Rolling Stones, Ronnie & the Ronettes, Bonnie Raitt, Helen Reddy, R.E.M., Nelson Riddle, Righteous Brothers, Johnny Rivers, Ronnie & the Ronettes, Dianna Ross, Santana, Jimmy Smith, Sonny & Cher, Phil Spector, Tom Scott, Carly Simon, Frank Sinatra, Nancy Sinatra, Bruce Springsteen, Steppenwolf, Rod Stewart, Mathew Sweet, Stone Temple Pilots, Barbra Streisand, System of a Down, Temptations, The Animals, The Association, The Four Tops, The GoGos, The Kingston Trio, The O'Jays, The Vines, The Who, Mel Torme, U2, Richie Valens, Stevie Wonder, Tool, Turtles, Sarah Vaughn, Jimmy Webb, Weezer, Andy Williams, Nancy Wilson, Young Rascals, Frank Zappa.

## **EastWest Studios History**

What's now called EastWest Studios was founded by Bill Putnam in 1961. Considered to be the "Father of modern recording," he is acknowledged to be the first person to use artificial reverberation for commercial recording. He also developed the first multi-band equalizers and, with his company Universal Audio, was responsible for the development of classic equipment like the Urei 1176LN and Urei Time Align Monitors. He was involved in the early development of stereophonic recording and founded studios in Chicago, Hollywood, and San Francisco. He was responsible for a number of innovations including: the first use of tape echo and echo chambers, the first vocal booth, the first multiple voice recording, the first use of 8-track recording, half-speed disc mastering.

In 1957, he started United Recording Corp. in a building at 6050 Sunset and started new construction on new studios. Stereo was taking off and Putnam was determined to incorporate as many technological innovations into the new complex as possible. In 1961, Western Recorders (now EastWest Studios) at 6000 Sunset was acquired, remodeled, and incorporated into the complex with the facilities being known as United Western Recorders. After Bill Putnam passed away in 1989, the studio was acquired by

Allen Sides and renamed Oceanway recording. In 1999 Rick Adams acquired the studios and renamed it Cello, and in January 2006 it was acquired by Doug Rogers of EastWest Sounds, the #1 sounds producer in the world, with over 50 international awards.

Looking for a designer to take on the task of refurbishing the exterior and non-technical interior areas, while preserving the historic studios, Rogers contacted renowned designer Philippe Starck, whose trend-setting work is known the world over for its sheer brilliance and beauty. Starck jumped at the opportunity and headed to Hollywood. He insisted on restoring all historic elements inside and out, adding new designs to the interior and creating a new exterior look that incorporated elements of the current one. Rogers strongly supported this. Plans are also afoot by Rogers to add historic names and records to the sidewalk on Sunset Boulevard, giving the illustrious studio its own walk-of-fame. Another highlight of the restoration has included Rogers' purchase of other analog studio equipment to be used for recording the classic way and not just digital (including two EMI mixing boards that the Beatles used to record their hits). His plans for reactivating the studios are a model for historic and cultural preservation as well as providing EastWest with the finest recording environment in the world. In addition to EastWest's own use of the facilities, the five studio complex will be open to a limited number of outside clients after the Starck restoration.

## System Requirements

Below are the minimum and recommended hardware requirements for using Play 6 on your computer. Windows and MacOS systems must meet at least the minimum spec listed below.

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.

### Minimum Specification:

- Intel dual-core i5 (or equivalent) processor, running at 2.7 GHz (or above)
- 8 GB of RAM or more
- Mac OSX 10.7 (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 10.7 (or later); Windows 7 (or later) with ASIO sound drivers
- a 64-bit operating system; and a 64-bit host when running Play as a plug-in.
- SSD (Solid State Drive) for sample streaming

**Please Note!** The 32-bit stand-alone and plug-in components are no longer installed because Play 5 and above does not support 32-bit operating systems or DAWs.

## EastWest User Manuals

All documentation for Play and individual Play Libraries is provided as a collection of PDFs that can be viewed on electronic devices or printed to paper.

An advantage of reading this PDF on an electronic device is the ability to jump directly to a referenced page using links, which are available in the contents section, on each chapter title page, and within chapters to expand and/or connect certain 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.

### Different Types of User Manuals

- **Play 6 User Manual** describes how to use the Play 6 sample engine, and aspects that are common to all 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 only 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.

All User Manuals are available on the [EastWest Manuals](#) section of the Support Center, and are installed to your computer into the directory below . Individual Play Library User Manuals are additionally installed into the main library folder of each Play Library.

- **(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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## Creating an EastWest Account

In order to purchase a product through Soundsonline.com, you must create an EastWest account. In that account, an existing iLok Account must also be entered, or one will be created for you based on your EastWest Account username.

Once you create an account and place your order, a confirmation email with steps to proceed will be sent, and a license for the product will be deposited directly into the iLok account associated with your EastWest account.

### My Account

---

ACCOUNT DETAILS

<b>Email:</b>	<input type="text"/>	<a href="#">Edit Your Profile</a>
	<input type="text"/>	<a href="#">Change email</a>
<b>iLok Account:</b>	<input type="text"/>	<a href="#">Change password</a>
	<input type="text"/>	<a href="#">Set Preferences</a>
		<a href="#">See Orders</a>

**Please note!** If the wrong iLok account was entered at the time of purchase, or you already had an iLok account but we accidentally created one for you, please contact [licensing@eastwestsounds.com](mailto:licensing@eastwestsounds.com). The licensing department does their best to answer every case within a 24 hour timeframe, except on the weekends.

## How Content Is Delivered

Most customers will be able to take care of their entire installation and activation setup with the Installation Center, but in some cases a Sound Data Hard Drive is necessary. Boxed DVD products are also still in circulation at retailers, and require special install instructions outlined in the following chapter.

**Installation Center:** The Installation Center makes installation activation and download of Play products straight forward and fast. A download link to the Installation Center is provided in the email confirming your purchase, and is also available to those that did not purchase directly through Soundonline.com at the online [Support Center](#).

**Sound Data Hard Drive:** Certain Diamond and Platinum edition Play Libraries are too large to download and need to be purchased on a [Sound Data Hard Drive](#). You can also purchase one to eliminate the frustration of a slow internet connection, simplify the installation process, or keep the HDD as a backup solution for Play Libraries. The setup instructions are similar to those outlined in this chapter, except that instead of downloading Play Libraries from the Installation Center, they are transferred from the Sound Data Hard Drive to the preferred destination.

If you use the HDD to playback samples from, make sure to backup all Play Libraries to a secondary drive, and be aware of the limitations of streaming all Play Libraries from a single, external USB 3.0 drive. For more information, please see the section related to [Achieving Best Hard Drive Performance](#).

**A Boxed DVD Product:** If you purchased an EastWest product through a retailer, you may have received a Boxed DVD Product. Please note, several installation procedures have changed since the time these products were manufactured. Pay close attention to the installation and activation instructions outlined below.

## How to Install a Play Library

This walkthrough will show you how to download, install and activate a Play Library.

### Step 1: Install the Installation Center

Download the Installation Center package from the email confirming your purchase, or download it directly from the [Support Center](#). After opening and installing the package, you'll find the Installation Center in one of the following directories:

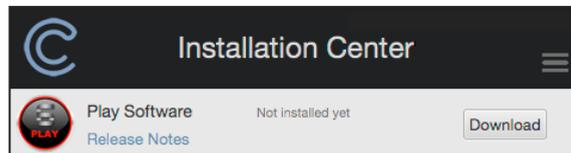
- **(Mac):** Mac HD / Applications / East West / EW Installation Center.
- **(Win):** C: / Program Files / East West / EW Installation Center

Open the Installation Center and sign in with your EastWest account. It may take a moment to load while it gathers data.



### Step 2: Install the latest Play Software

At the top of the Installation Center you will see the latest Play software update available for download. Press the download button, and once it's completed the Play software installer will automatically open. The Play software update is also available to download at the EastWest [Support Center](#).



**Please Note!** The software components necessary to run all Play Libraries will be installed automatically (although you will only have access those you have a license for). Simply proceed through the dialog windows when prompted.

#### Installing Play 6 (Windows):

Make sure all programs are closed before beginning and be aware that 'Windows User Access Control' may ask your permission to launch the installer.

After a welcome window, the **License Agreement** screen will appear. When asked to agree to the terms of the EastWest End User License Agreement, select 'I accept the agreement' and then click 'Next'. If you do not agree, then you will not be able to install the Play software.

The next dialog will ask you to **Select Components**. Unless you do not want to install the AAX plugin, and/or the VST 64-bit plugin, simply proceed to the next dialog by clicking ‘Next’. De-select those options if you do not want to install them.

**Please note!** The Play software installer will read the registry to determine the installation path for the Play VST plugin.

Next, a **Ready To Install** dialog will display a summary of installation. Click ‘Next’ to begin the installation process. Now a window will appear displaying a progress bar of the installation process. When it’s done, another window will appear allowing you to click ‘Finish’ to complete the installation.

If the latest Pace iLok drivers have not been installed, you will also be led through a series of prompts to install it. You will be asked to restart your computer to complete the installation.

## Installing Play 6 (MacOS):

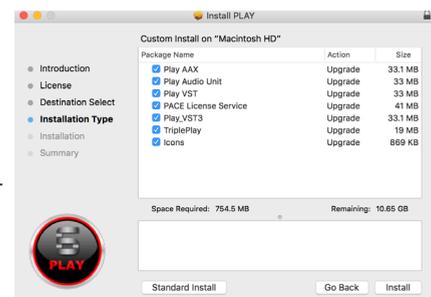
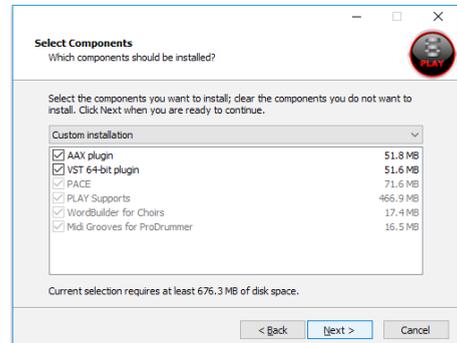
Make sure all programs are closed before beginning and be aware MacOS security preferences may block the installers of unidentified developers. To disable this, click on the Apple icon in the top-left corner, and go to ‘System Preferences’. In the lower-left of the ‘Security & Privacy’ window, click the lock and enter the administrator password. Now, under ‘Allow apps downloaded from...’ header, select ‘Anywhere’. You can change this back after installing PLAY.

Click ‘Continue’ in the **Introduction** dialog to proceed to the **License** dialog. Click ‘Continue’, then click ‘Agree’ to accept the terms of the EastWest End User License Agreement. If you do not agree, you will not be able to install the Play software.

The **Installation Type** dialog will perform a Standard Installation by default. Click ‘Install’ to perform a Standard Installation (recommended). If you wish to modify the Standard Installation, click the ‘Customize’ button instead. In this dialog window you can (de)select the various Play plugin types, as well as the Pace iLok drivers. When ready, click the ‘Install’ button.

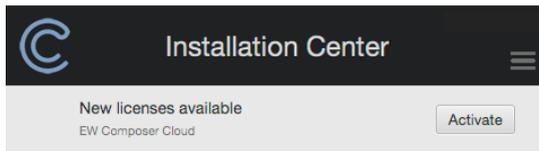
MacOS will require the administrators password to proceed with the installation. Please enter the password and click, ‘Install Software’.

The **Installation** window will appear displaying a progress bar of the installation process. When it’s done, the **Summary** window will report that the installation was successful and allow you to click ‘Close’ to complete the installation.



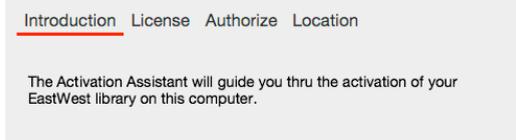
## Step 3: Activate the Product License

When you purchase a product through Soundsonline.com, a license for the product you purchased will be deposited directly into the iLok account associated with your EastWest account. Use the Installation Center to Activate a product license.



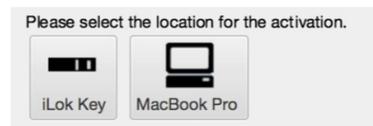
At the top of the Installation Center, click the “Activate” button to open the Activation Assistant window, which will lead you through the activation process.

Click ‘Next’ to proceed past the **Introduction** tab, then select the license(s) you want to activate in the **License** tab and click ‘Next’.



If you have an iLok account but you have not connected it to your Soundsonline account, the Activation Assistant will help you link the two accounts. This only need to be done one time.

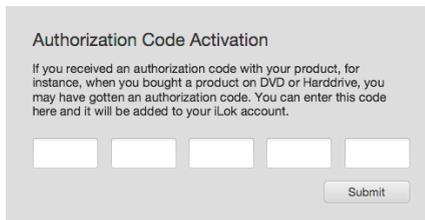
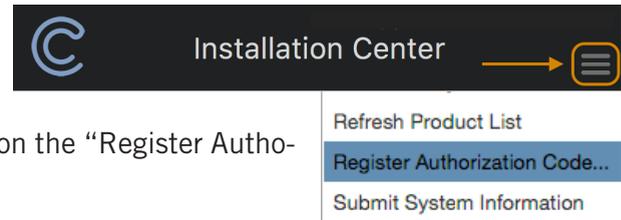
The Location window will give you the option to activate your license on your computer (a machine-based license) or to a registered iLok security key. Make sure your iLok key is plugged in if that’s your preferred option.



## Activation the Authorization Code for Boxed DVD Products

At the time the Boxed DVD Products were released, they came with an Authorization Code which was entered into the now defunct Authorization Wizard. That code is still valid, but now you have to enter into the Installation Center.

To activate a Play product that came with a legacy Authorization Code, go to the Main Menu in the top-right corner of the Installation Center and click on the “Register Authorization Code...” option.



Type in the 20-digit authorization code that came with your product and click “submit”. A prompt should appear letting you know the authorization was a success and that the license is ready to activate.

Click “Refresh Product List” from the Main Menu (top-right) of the Installation Center to update your account with the new license, and activate that license by with these instructions: [Step 3: Activate the Product License](#).

## Step 4: Download the Play Library

Before you begin, you may want to review the [Achieving Best Hard Drive Performance](#) section to determine the best hard drive configuration to store and stream Play Libraries.

If you're unsure whether you have enough free disk space check the [Space Requirements for Play Libraries](#) section to view the size of each Play Library in gigabytes (GB).

Play Libraries can also be installed to multiple hard drive locations. You can find these instructions on the EastWest [Support Center](#).

### Download Play Libraries from the Installation Center

Before you begin downloading, create a new folder at the desired hard drive location and name it 'Play Libraries'.

Once created, go to the Installation Center and click the download icon (downward arrow) in the product panel of the Play Library you wish to download.



A browser window will where you can navigate to the 'Play Libraries' folder you just created in the step above. Click 'Remember' in the dialog that appears if you wish to save this location for future downloads.



The download process will now begin, with a blue bar displaying the download progress. Hit the small "X" button in the lower-right corner of the product panel to pause the download process, and click "Resume" to continue the download where you left off. The remaining time left to complete the download process is found at the very bottom of the Installation Center window.



## **Transferring Play Libraries from a Sound Data Hard Drive**

At this point, decide whether you'd like to use the Play Libraries on the supplied hard drive, or would rather transfer them to another drive.

To transfer the Play Libraries to another drive, simply drag the Play Libraries folder from the supplied hard drive and drop it into the preferred location on the other hard drive and wait for the files to copy over.

Then click on the Main Menu in the Installation Center, and select the 'Library Directories' option from the list. In the bottom-left corner of that window, click the 'Add' button and navigate to the 'Play Libraries' folder that you just transferred (or the one on the supplied hard drive). Now click the 'Play Libraries' folder to select it, then click the 'Open' button to add it to the Library Directories list.

Closing the Library Directories window should begin the process of adding each Play Library directory into the Browser view in Play, where all installed Play Libraries appear. You can also manually initiate the process by selecting 'Reconnect Libraries' in the Main Menu after adding it to the Library Directories list.

## **Installing a Play Library from a Boxed DVD Products (Windows)**

Do not install the Play software from the DVDs (it is outdated). Instead, follow the instructions \_\_\_\_\_. These instructions below only refer to installing the Play Library itself.

1. Before inserting the DVD, decide where you would like to install the library content and create a folder called "Play Libraries" at that location.
2. Now, insert Disc One into your DVD Drive (do not run the installer from the DVD).
3. Locate the library folder (it contains the product's Instruments and Samples folder).
4. Drag this library folder from the DVD and drop it into the Play Libraries folder you created in step 1.
5. Once the transfer is complete proceed to Disc Two and repeat the drag and drop process with the remaining DVDs, grabbing the library folder and dropping it into the same location and allowing windows to merge your samples into the library folder.

## **Installing a Play Library from a Boxed DVD Products (MacOS)**

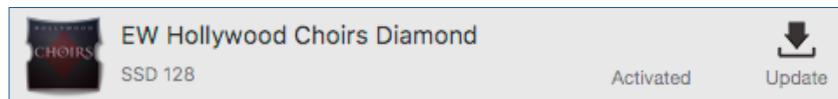
Do not install the Play software from the DVDs (it is outdated). These instructions only refer to installing the Play Library itself.

1. Before inserting the DVD, decide where you would like to install the library content and create a folder called Play Libraries at that location.
2. Now insert Disc One into your DVD Drive.
3. Locate the library folder (it contains the product's Instruments and Samples folder). Drag this folder from the DVD and into the Play Libraries folder you created in step 1.

4. Once the transfer is complete, proceed to Disc Two.
5. On Disc Two, open the “\_Data” folder, then double-click on library installer. When presented with the welcome screen, press “continue”.
6. The next prompt will ask you to select a destination. Choose the hard drive where the product’s library folder is installed to, then click the “choose folder” button.
7. A window will appear. Navigate to the product’s library folder within the Play Libraries folder and click “choose”. Now, press “continue” to proceed.
8. Next, click “install” to begin. You may need to enter the administrator password.
9. Repeat steps 5 through 8 for each subsequent disc until all library content has been installed. You’re now ready for the next phase of the installation process.

## Step 5: Update the Play Library

When an update becomes available for a Play Library, it will appear in the Installation Center with the downward arrow icon above the word ‘Update’. Click the ‘Update’ icon to download the latest Play Library update. The installer will run automatically once the download is complete. Proceed through the prompts to install the updates to either the Instruments or Samples folder, or both.



## Managing Play Library Licenses

EastWest uses the Pace iLok system for license management. Licenses for EastWest products can be activated directly on your computer (called a machine-based license), or activated to an optional iLok key.

The iLok Key is a hardware device made available by Pace Anti-Piracy, Inc., that holds licenses for a variety of software developers. The advantage of an iLok key is portability. If you have installed a Play Library on two separate computers, you can move the iLok between those computers at any given time to authorize them for use.



The iLok system is well integrated into the Installation Center, but in case you need more options to manage your licenses, download the [iLok License Manager](#). While a physical iLok key is optional, an iLok account must be entered into your EastWest account details. Please see the iLok.com website for more detailed information on license management.



## An Overview of the User Interface

Play 6 is the latest version of EastWest's advanced sample engine that powers all of EastWest's Play Libraries. Use the **Navigation Bar** located at the top to access all main areas (from left to right):



- **Main Menu** enables the opening and saving of instruments and more.
- **Settings Menu** includes access audio/midi setup, streaming settings, and more
- **Browser** search and browse for instruments in the Libraries and Database areas
- **Mixer** features channel strips, FX Racks and Sub-Mixers for loaded instruments
- **Player** displays custom controls and a unique user interface for each Play Library
- **Instrument Selector** select between loaded instruments
- **Instruments Sidebar** access instruments and their Advanced Instrument Properties



[Voices of the Empire: Player View with Instruments sidebar]

See [Chapter 3: Play 6 User Interface](#) to learn more.

## Initial Setup in Stand Alone Mode

The steps below guide you through the initial setup of Play 6 in stand alone mode, including how to launch the software, load an instrument, select a MIDI controller and setup an audio output. For learn more about a given topic, follow the links provided below.

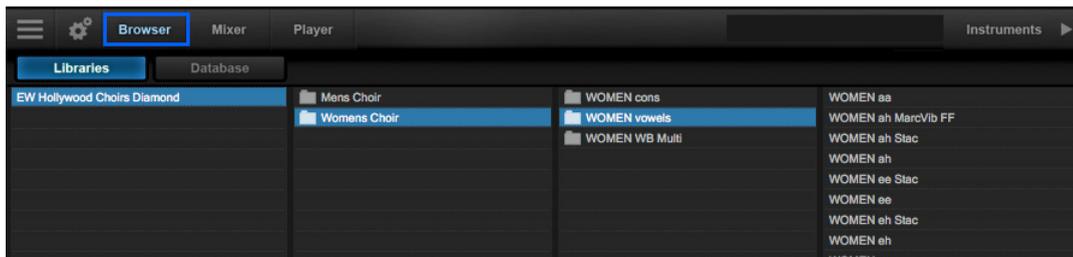
### Step 1: Launch Play 6

Launch Play 6 in stand-alone mode from one of the following directories:

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

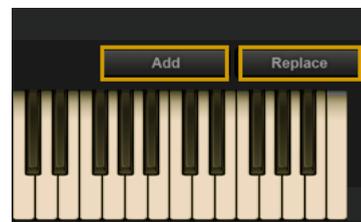
### Step 2: Load an instrument from the Browser

Click on the Browser button located in the Navigation Bar at the top of the Play 6 interface, then click on the Libraries button just below that. Click on a Play Library in the left column, where all Play Libraries populate, then navigate through the sub-folders in the middle two columns until the right column populates with instruments.



Highlight an instrument, then click the 'Add' button to add an instrument to the existing selection, or the 'Replace' button to replace the currently selected instrument.

You can also double-click on any instrument to load it, replacing the current instrument selection, or double-click while holding [shift] to add that instrument to the currently loaded instruments.



See [The Browser View](#) to learn more.

Loaded instruments will appear in the Instrument Selector (with a check-mark indicating the currently selected one) and in the Instruments sidebar panel (which will highlight the current selection). Additionally, the Instruments sidebar contains Advanced Instrument Properties for the selected instrument.

See [The Instruments Sidebar](#) to learn more.

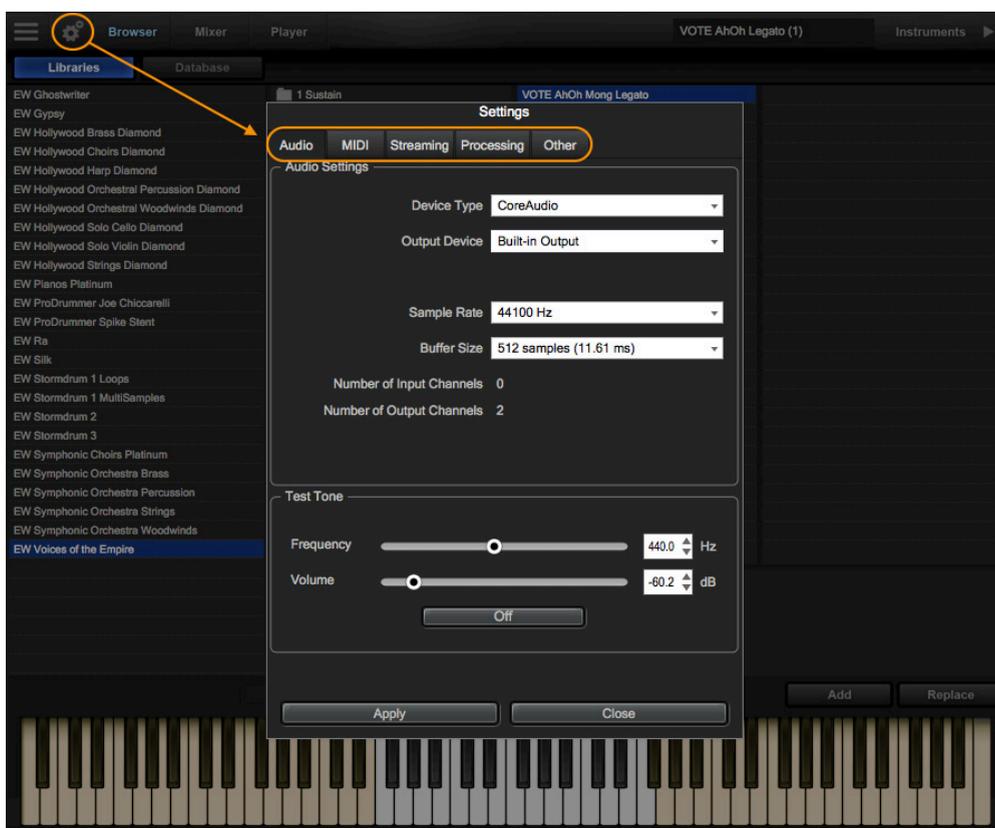
## Step 3: Setup Audio and MIDI Devices

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

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

**MIDI Settings:** To setup a MIDI controller to play the instrument, click on the Settings Menu in the Navigation Bar, then click on the MIDI Settings tab and select a MIDI Device.

See [The Settings Menu](#) to learn more.



## Step 4: Learn More

Continue reading to learn about the following topics and more:

- How to use Play 6 as a plug-in inside a variety of DAWs.
- How to use the included Mixer FX, including SSL Channel Strip and Ohmicide
- How to use MIDI CCs (Continuous Controllers) to create realistic performances..

## Optimizing 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.

## Achieving Best Hard Drive Performance

There are several factors that determine what kind of performance you can expect when streaming large sample libraries from a hard drive. Some are obvious, like the speed of the drive itself and the speed of the connection type. Others are less obvious, like only filling your drive up to 70% capacity, or spreading large libraries across multiple drives.

**Hard Disk Drive (HDD):** The minimum hard drive specification to achieve reasonable performance is a mechanical 3.5" HDD (Hard Disk Drive) running at least 7200 rpm (non-energy saving). 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 some instruments that load a large number of voices simultaneously.

**Solid State Drive (SSD):** By far, the best hard drive option is a SSD (Solid State Drive). The seek and retrieval times are nearly instantaneous, allowing for smooth performance at low latencies 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 fast enough to take advantage of SSDs.

**Mac Pro Retrofit:** Older Mac Pro towers 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.

**Dedicated Sample Drive:** It is not ideal to install PLAY Libraries on the system drive (the drive where the operating system and programs run). Better performance can be achieved when installing PLAY Libraries to a dedicated drive with it's own connection.

**Free Disk Space:** We recommend keeping a percentage of disk space free on the drive where PLAY Libraries are installed. Our tests have shown that the speed at which data can be read from a drive decreases as disk space is used up. Try to keep 30% of each library drive empty to avoid reduced performance, which can drop by half with the drive 90% filled.

**Spreading Libraries Across Multiple Drives:** We recommend separating the most resource intensive PLAY Libraries (like the Diamond edition of Hollywood Orchestra) across multiple drives to avoid bottlenecks when pushing large voice counts. For instance, installing Hollywood Strings and Hollywood Brass on separate drives would help avoid performance issues when playing back large projects with large voice counts.

**RAID 0:** For professional users, we recommend consulting computer system specialists to achieve the best performance, which may include using a hardware RAID 0 solution.

**“Lite” Instruments:** Many PLAY Libraries provide “lite” or “LT” instruments that require less resources. This is helpful to relieve computer resources from being taxed as the instrument count rises.

**Using Smaller Editions:** Since higher bit depth and the additional microphone positions require more computer resources, some PLAY Libraries are released in multiple editions to allow those with less capable systems access to the same basic soundset. Below is a breakdown of the different editions with their their bit depth and available mic positions.

<b>COMPARISON OF EDITIONS</b>					
	<b>Silver</b>	<b>Gold</b>	<b>Gold X</b>	<b>Platinum</b>	<b>Diamond</b>
<b>Instruments</b>	<b>Selection</b>	<b>All</b>	<b>All</b>	<b>All</b>	<b>All</b>
<b>Bit Depth</b>	<b>16-bit</b>	<b>16-bit</b>	<b>16-bit</b>	<b>24-bit</b>	<b>24-bit</b>
<b>Mic Positions</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>5</b>



## Chapter 3: Play 6 User Interface

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## The Main Navigation Bar

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



## The Player View

When an instrument is loaded into Play, the Player view will display the custom user interface of the Play Library associated with the loaded instrument. The user interface of Voices of the Empire is shown below.



## The Virtual Keyboard

The virtual keyboard at the bottom of the Play user interface is color coded: White keys represent the playable range of an instrument, Tan keys indicate no samples are loaded, and Blue keys are keyswitches that enable the ability to switch between different articulations within an instrument.

## Main Controls and Library-Specific Controls

While they may vary in appearance, basic controls like envelopes, effects, MIDI parameters, and status indicators have the same function in all Play Libraries.

Information about controls that only appear in certain Play Libraries (like performance scripts, microphone positions, or the articulation pane) can be found in the individual Play Library User Manuals.

See [EastWest User Manuals](#) to learn more.

There are five distinct types of controls in the Player view. Some controls can accept data from both the keyboard and the mouse; others can have their values changed with the mouse only. The exact appearance of control may vary from one Play Library to the next, but they behave the same.

- **On/Off Buttons** have two states: On and Off. The On position is indicated when its light is illuminated. The only way to toggle a button between its On and Off states is by clicking the button with the mouse cursor. Some knobs and other controls are inactive unless their button is turned on.
- **Action Buttons** performs an action when clicked with the mouse. Examples include: opening an instrument, moving between the Player and Browser views, and adding a new folder to your list of favorites.
- **Knobs** are used to modify a numeric value over a definite range. Rotate the knob until the desired value appears in text adjacent to the knob. Most knobs will jump to specific, preset values in the permissible range, so it may not be possible to set the value to a specific arbitrary number. Select the number that most closely approximates the effect you want to achieve.



To modify a knob's value, always start by clicking on the knob with the mouse cursor. To *increase* the value, drag the mouse cursor *upward* with the mouse's left button held down. To *decrease* the value, drag the mouse cursor *downward* with the same button held down. To set the knob to the center, "12 o'clock" position, double-click on it. Holding down control-command while dragging with the mouse allows for finer adjustment.

- **Drop-Down Lists** can select from a selection of text strings. Click on the control to display the list of options, and with the mouse, scroll through the list (if necessary) and then click on the choice.
- **Spinners:** A spinner allows the user to change a value incrementally by clicking on the little arrows, or by clicking on the number itself to highlight it, then typing a new value.



## Master Instrument Channel

The Master Instrument Channel affects the master output for the selected instrument. The individual controls are detailed below.

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

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

Playing samples in Stereo provides a perceived spatial distance between the two sounds. Playing them with a Mono (Sum) output merges them to a single location in the stereo sound field, making them harder to pick out individually. Choosing Mono From Left or Mono From Right removes one or the other from the mix.

It's possible for the left and right input audio to be something other than the data from left and right mics capturing the same audio event. A PLAY Library producer might choose to capture two related but different events and record each on a separate stereo channel within the same samples.

There may be lots of reasons for selecting a mode other than Stereo, for example, faithfully reproducing the sound of pre-stereophonic recording techniques.

**Tuning:** The Tune control includes coarse and fine tuning modes. Coarse tuning adjusts the pitch up or down in semitone increments, while fine tuning moves the pitch up or down in increments of 1/100<sup>th</sup> of a semitone (called “cents”).

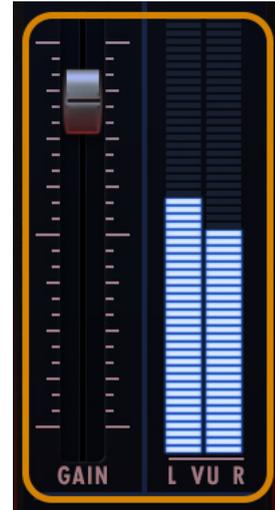
Change the tuning value by clicking on the arrows inside the spinboxes above the coarse and fine tuning buttons, or use the Tune knob with a selected tuning mode. The spinboxes display the tuning values for both the coarse and fine tuning modes.



**Panning:** The Pan knob adjusts the volume of the left and right audio signal to change the perceived position of the sound source, while perserving the relative panning of the individual microphones contained in the Microphone / Mixes section.



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



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

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



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

## 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 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.

## 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.

**Please Note!** All Play Library instruments are programmed with default Envelope values to achieve a natural sound. Changing this may result in less than natural results.

### Stages of an Envelope

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

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



## 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.

- **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.



- **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. 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.

## Delay

One common processing effect is known as Delay. When turned on, this effect causes each original note in this instrument to be repeated one or more times, producing something like an echo effect. The three knobs in this section of the interface define how this effect generates the output.

- **On/Off Button:** This button activates the Delay controls. When it's off, PLAY generates no delay.
- **Time:** This parameter specifies the time interval between each repeat of the note. The minimum value is one-tenth of a second, and the maximum value is five seconds.
- **Feedback:** With this parameter, it's possible to specify that some fraction of each repeat be fed back into the delay generator, causing a series of echoes. When the second knob is set at 100%, each repeat is fully as loud as its predecessor, causing the echo to continue forever with no diminution. A setting of 75% causes each repeat to be three-quarters as loud as its predecessor; eventually dropping below the level of audibility. Very low feedback levels will effectively limit the number of audible echoes to one or two. If you need to stop a series of echoes that seem likely to persist longer than desired, the On/Off button will kill the effect.
- **Level:** The third knob specifies the relative loudness of the first echo in decibels. A value of 0 dB indicates that the first echo is to be as loud as the original (and the feedback, if any) regulates the subsequent dynamics. A positive value, for example 2.0 dB, makes the first echo louder than the original. A negative value reduces the loudness of the first echo relative to the original note.

## System and Sensitivity

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

See [The Instruments Sidebar](#) to learn more.

- **MIDI Port** defines which available MIDI devices are enabled (stand-alone only).
- **Channel** allows you to assign an instrument to receive MIDI in a variety of different ways. A specific MIDI channel can be selected so that an instrument receives MIDI information only on the specified channel (from 1 to 16), or the MIDI channel can

# PLAY 6 USER MANUAL

be assigned to OMNI, which allows the instrument to receive MIDI on all channels (1 through 16). Two additional MIDI modes are also available for special applications: Multi mode and MPE mode.

See [Using the Different MIDI Modes](#) to learn more.

- **Transpose** raises or lowers the incoming MIDI note by increments of +/- 1 semitone.
- **Velocity Min and Max** specify the minimum velocity and maximum velocity range for a given instrument. Values below the minimum or above the maximum velocity are respectively remapped to the lowest and highest values.
- **Voice Limit** specifies the maximum number of voices that an instrument can playback. If an instrument receives more voices than the voice limit value, it will cut off voices that began playing first. Keep in mind that there are instruments that play more than one sample when sounding a note (such as instruments that use cross-fading, have release trails and/or multiple microphone positions).
- **Sensitivity** determines what part of the dynamic range the instrument is most sensitive to, ranging in values between -100 and +100.



## Status Indicators

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



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

See [Optimizing Playback and Performance](#) to learn more.

## The Browser View

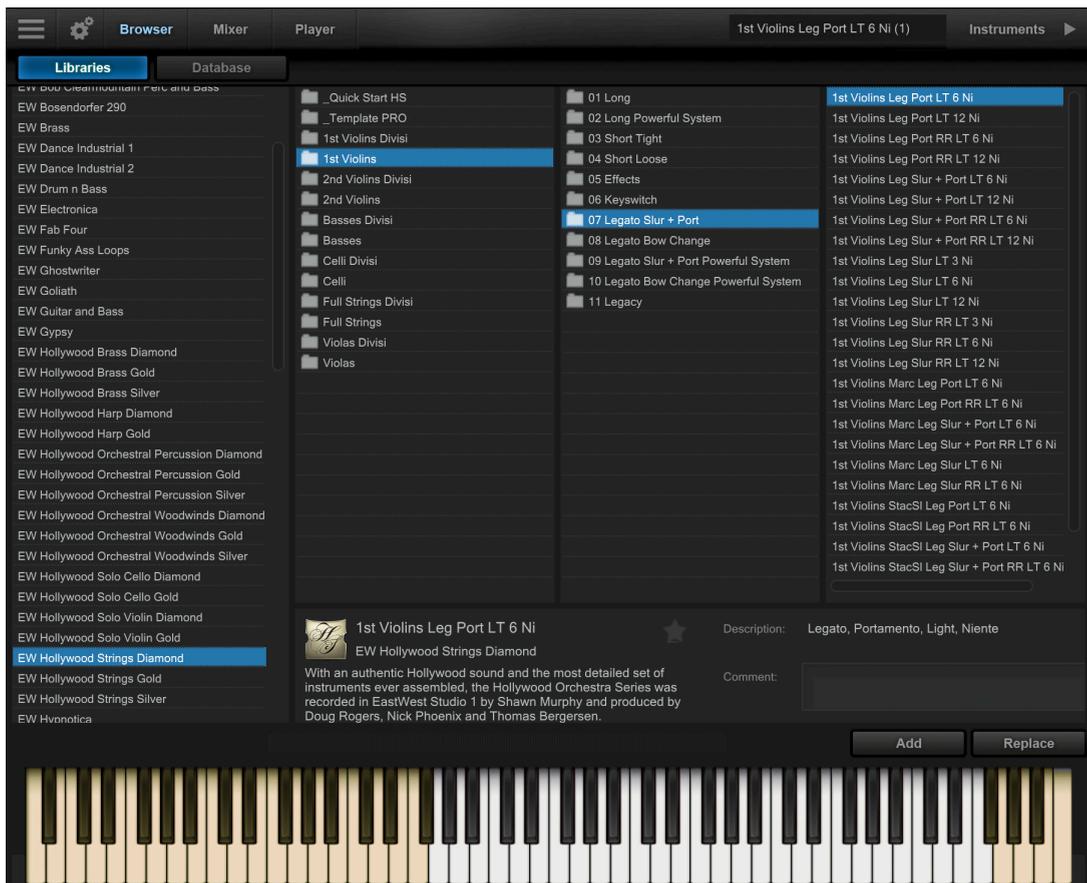
2 different modes are available in the Browser view that enable you to find the instrument you're looking for.

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

## Libraries Browser

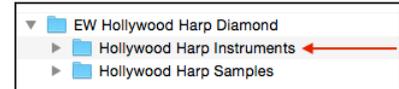
The Libraries browser allows you to browse for instruments within each Play Library.

The left column displays all installed Play Libraries, the two middle columns display the sub-folders within each main library folder, and the right column displays instruments within the selected folder.



## How to Add or Reset a Play Library in the Browser view

If a Play Library does not appear in the Browser view where all Play Libraries populate, right-click in an empty space in the left column of the Libraries browser and choose 'Add Another Product Library' from the pop-up window. Selecting a Play Library from the menu will bring up a search window. Locate the Instruments folder for that Play Library, then highlight it and click 'okay' to set the library path.



If a Play Library has been moved from its original location, it will appear grayed out in the Libraries browser. Click on the library name in the left column and use the search window to find the Instruments folder of that Play Library. Highlight it and click 'okay' to set the library path.

## Selecting a MIDI Channel Assignment Mode

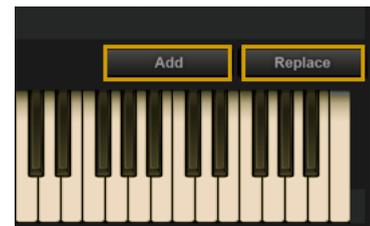
This option can be changed in the Settings Menu under the Other tab in the MIDI Channel Assignment section. Instruments are automatically assigned to MIDI channels in one of two ways:

- **Omni** mode assigns an instrument to receive MIDI on all channels
- **Automatic Increment** assigns each new instrument to the subsequent MIDI channel (1, 2, 3, etc).



## How To Load Instrument(s)

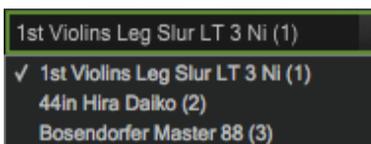
To load an instrument, select the instrument name in the right column, then click either the 'Add' button or the 'Replace' button. Click the 'Replace' button, or simply double-click, to replace the currently selected instrument with a new one. Click the 'Add' button, or double-click while holding [shift], to add the instrument to the existing loaded instruments..



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

## How To Use the Instrument Selector

The Instrument Selector field displays the current instrument selection (highlighted in green), which when clicked on will reveal a drop-down menu showing all loaded instruments and their MIDI channel assignments. A check-mark indicates the current selection. Clicking on an instrument will make it the current selection, and the Player view will change accordingly.



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## How to Create a User Favorites Location

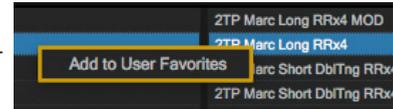
To create a new location to store all your favorite instruments, right-click in the left column of the Libraries browser and select 'Add New Favorites Folder' from the menu.



Enter a name for the folder ("User Favorites" in the example) and click 'okay' to create it.



To add an instrument to this location, right-click on an instrument name in the right column and choose the option 'Add to [folder name]'.

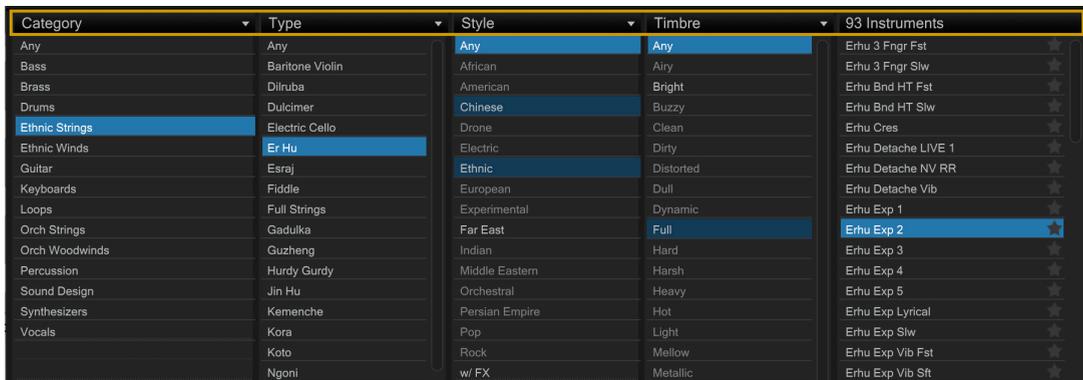


## Database Browser

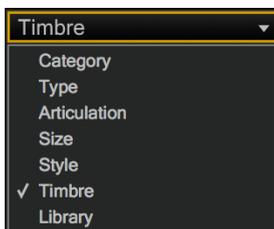
The Database browser allows you to search for instruments by selecting attribute tags from a variety of categories, or entering search word queries directly in the [Search Field](#).



By default, the left column contains the main [Category](#), the 3 middle columns contain [Type](#), [Style](#) and [Timbre](#), and the right column contains a [Results List](#) showing instruments that match the selected criteria, with an [Instrument Counter](#) at the top.



Additional attribute categories are available including [Articulation](#), [Library](#) and [Size](#).

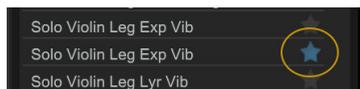


Click on a category name to reveal the [Category Selector](#) dropdown menu, where you can select from among 7 attribute categories shown on the left. A check-mark indicates the current selection for that column.

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

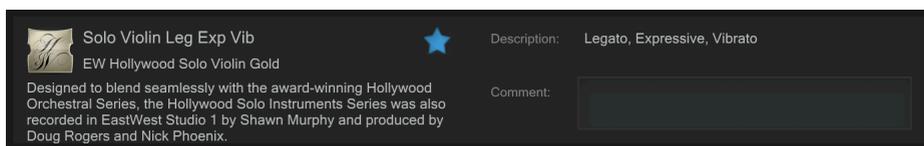
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At the bottom of the column are a set of [Result Filters](#) that allow you to further narrow the current selection of instruments to only show those tagged as Favorites, or Installed and/or Licensed to your computer.



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

The [Instrument Panel](#) is located in the lower center area, and contains information for the instrument selected in the results list. This information includes the instrument name, the Play Library or Collection it's from, a blurb about the library, a description of the instrument and comments box for user notes.



## Database Hierarchy

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

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

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

## Tag Selection Rules

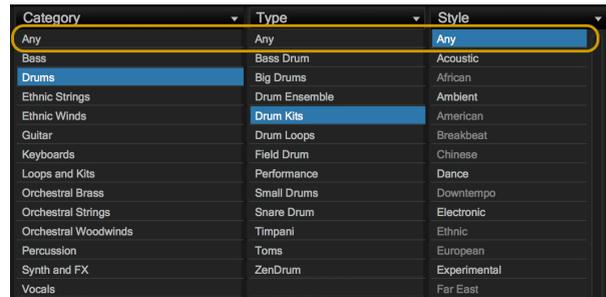
The Category and Type categories enable one tag to be selected at a given time, while all other categories enable multiple tag selections by holding down 'command' (Mac) or 'alt' (Win) keys while selecting tags.

When selecting multiple tags in the Style, Timbre, Articulation, Library and Size categories, please note that only instruments containing all selected attributes will appear in the results list, not just one or the other. This allows you to find, for example, drums that are both fat and punchy.

## How To Reset Tag Selections

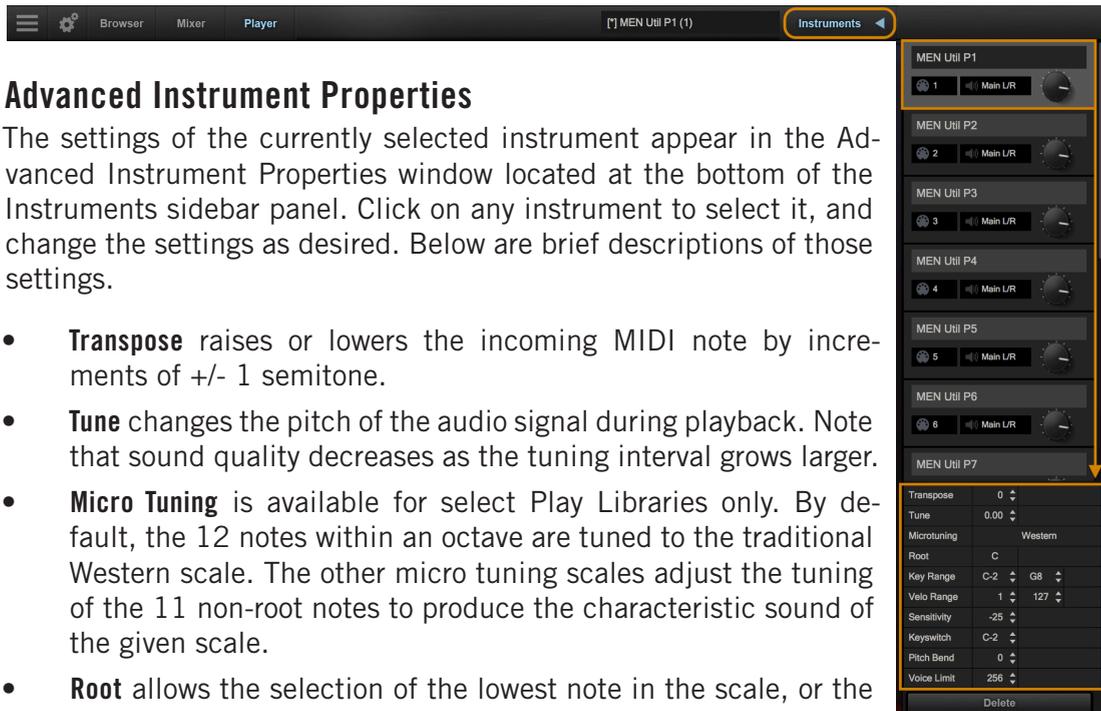
Clicking the 'Any' tag at the top of the Category column will reset existing tag selections across all categories.

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



## The Instruments Sidebar

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

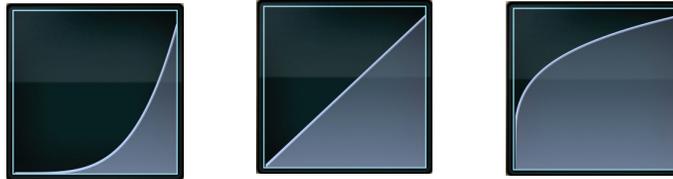


## Advanced Instrument Properties

The settings of the currently selected instrument appear in the Advanced Instrument Properties window located at the bottom of the Instruments sidebar panel. Click on any instrument to select it, and change the settings as desired. Below are brief descriptions of those settings.

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

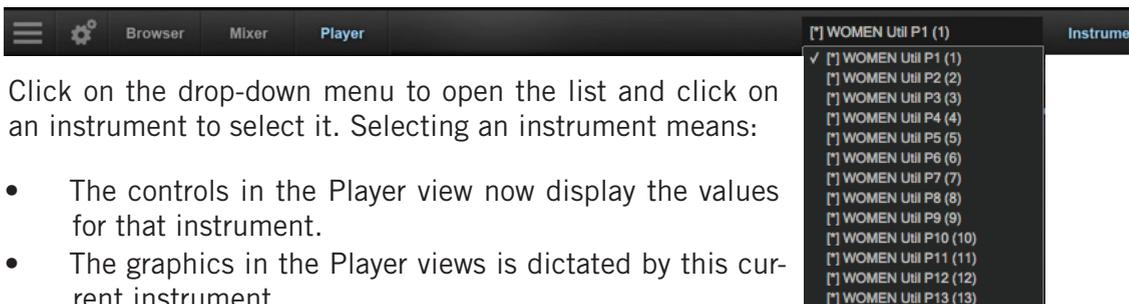
- **Velocity Range** specifies the minimum velocity and maximum velocity range for a given instrument. Values below the minimum or above the maximum velocity are respectively remapped to the lowest and highest values.
- **Sensitivity** determines what part of the dynamic range the instrument is most sensitive to, ranging in values between -100 (left) and +100 (right). The Sensitivity Curve Graph included in the Player view of some Play Libraries will reflect changes made here.



- **Keyswitch** sets the selected instrument's default keyswitch note, which specifies the articulation in the keyswitch file that plays when no keyswitch note has been played in its MIDI channel in the current session. Please note, the instrument must be saved and reopened for the new default value to take effect. For more on saving an instrument please see: [The Main Menu](#)
- **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.

## Instrument Selector

All instruments currently loaded in an instance of Play are listed in the Instrument Selector, with a check-mark denoting the currently selected instrument, with its MIDI channel assignment in parenthesis.

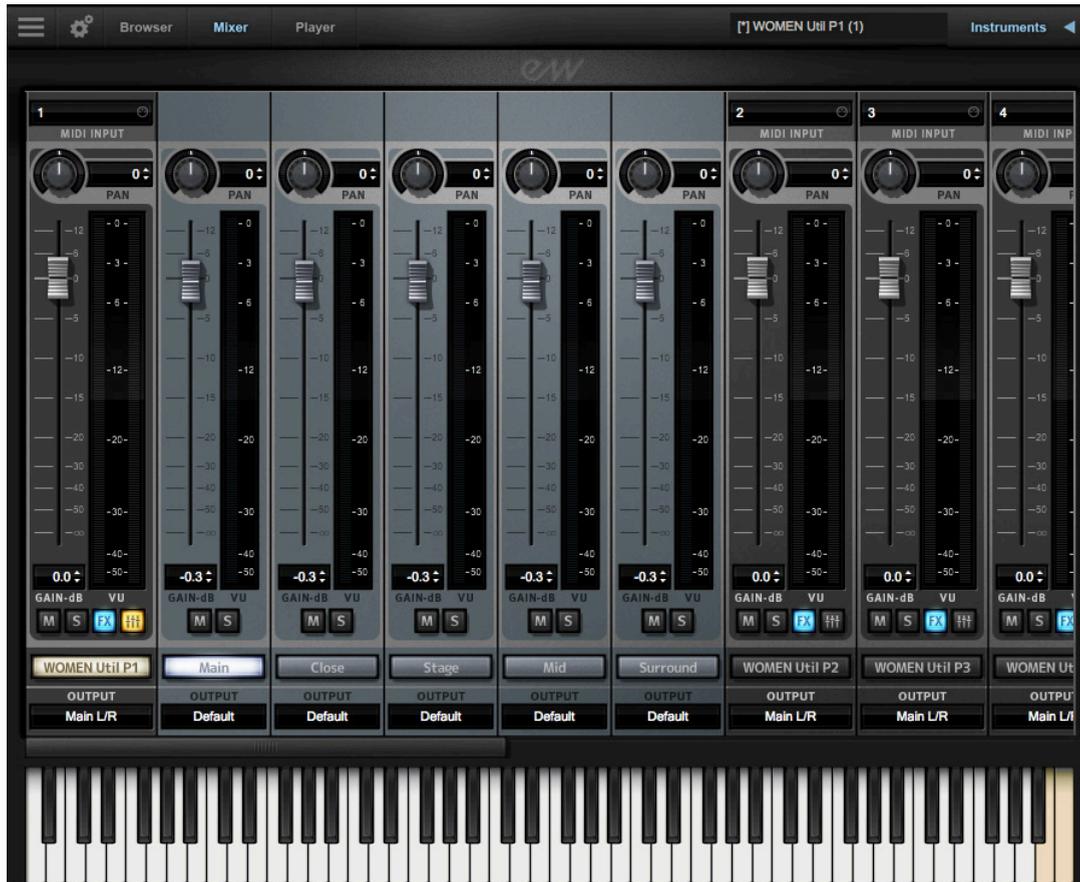


Click on the drop-down menu to open the list and click on an instrument to select it. Selecting an instrument means:

- The controls in the Player view now display the values for that instrument.
- The graphics in the Player views is dictated by this current instrument.
- The virtual keyboard plays notes from this instrument.
- Any actions that apply to the current instrument, such as Remove Instrument, affect the one you select from this menu.

## The Mixer View

The Mixer view displays a channel strip for each loaded instrument with controls for volume, panning, mute and solo, as well as buttons to access an FX Rack and to open Sub-Mixer channels for instruments with multiple microphone positions. The MIDI input and Audio Output can also be set here.



The meter and slider for each instrument or mic represents the current output level for that audio channel. The Pan knob at the top of each strip moves the apparent position of the instrument left or right within the stereo field. And note that you can pan the individual mics separately.

At the very top of a mic strip is another knob marked REV SND (which stands for Reverb Send) that allows you to indicate how much of the sound from this mic direct to the currently selected Main reverb. The REV SND control applies a second gain to the signal going to the Reverb, allowing you to send up to 12 dB more to the Reverb than to the standard output, or to reduce the signal as much as 60 dB. In other words, both the gain from the strip's vertical fader and the gain from the REV SND knob are applied together to the signal going to the Play Convolution Reverb. This approach maintains a consistent ratio between the strength of the main and reverb outputs.

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At the very bottom, just above a horizontal scrollbar (which is only visible when the channels strips together are wider than the width of the window), is a drop-down list labeled Output. This control allows you to select which of the 9 stereo pairs of audio buses should receive the output.

- For an instrument strip, the default is Main L/R, the first pair—and in many projects the only pair used. Click on the control to open a list of other options.
- For a mic strip, the Default setting directs the audio to the output for its instrument strip (immediately to the left of the 5 mic strips). Selecting any of the other pairs directs the output to a different bus pair. You would likely want to select anything other than Default only if you want to do mixing of the individual mic signals in a mixing board or mixing program external to Play.

## How To Open The Sub-Mixer Channels

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

Click on the Sub-Mixer button to reveal a channel strip for each available microphone position. Loaded microphones are illuminated in white, while unloaded instruments are gray. Click on the microphone name to load and unload an instrument.



## How To Access The FX Rack

The FX Rack contains EastWest's Amp Simulator and Convolution Reverb, Ohm Force's Ohmicide distortion plugin, and SSL's suite of audio processing tools that includes a Filter, EQ, Compressor, Gate/Expander, Transient Shaper and Stereo Buss Compressor



## The Preset Control

In the top-left corner of the plug-in drawer is a drop-down list labeled Preset. Once you have set the values of the controls in a configuration you might want to use again, you can click on the drop-down list and select Save Preset. Then provide a name for that preset. Later on, when you want to set all controls to the saved configuration, select the named preset from the drop-down list.

At the top of the drawer are 2 controls: a Preset list and a Channel list, where you can use the left and right arrow buttons to move to a different strip, including to a mic strip that is currently hidden. Using this Channel list, you can move through the various strips without having to close one drawer and open another.



Included in the FX drawer are:

- an EQ & Dynamics plug-in, consisting of: a Filter, an EQ, a Compressor / Noise Gate
- a Transient Shaper plug-in
- a Convolution Reverb plug-in (only available only on channel strips, not mic strips)
- a Stereo Compressor plug-in (only available only on channel strips, not mic strips)
- The specific controls are described in detail after this overview.

To hide the interface for all the plug-ins, click on the X button in the lower right corner. The settings are preserved while the controls are hidden, with the saved values reappearing when they are reopened with the FX button.

The following image shows the plug-ins that appear when the FX button is clicked in a mic strip. Only the plug-ins in the top section of the image above are available for the audio output from a single mic. This image shows the plug-ins for the Close mic, as indicated in the Channel drop-down list in the lower right.

## SSL Channel Strip

This plug-in can be used on both the Instrument (Main) and Microphone (Sub) channel strips. The signal is passed through 5 separate sections, as described below.



### Input Section and Output Section

Turn the Gain knob in the Input Section to control the level of the incoming audio signal. The post-gain signal level is shown in lights to its left. As a rough guide, the ‘-6’ yellow indicator should occasionally come on but the red ‘0’ indicator should remain off.

Press the Ø button to invert the phase of the input signal.

The Output Section is the last step in the processing. The Gain knob controls the audio level of the output signal. Adjust this level last to achieve the loudness of the signal that you want. The same rules for the yellow and red indicator lights apply here as in the Input Section.

The S/C Listen button directs the Dynamics Side Chain to the channel output.

### Filter Section

The Filter controls provide access to two separate kinds of filters. The black knob controls an 18dB/Octave high-pass filter (20Hz to 500Hz). Use it to remove lower frequencies from the audio. The purple knob controls a 12dB/Octave low-pass filter (3kHz to 22kHz). Use it to remove higher frequencies.



Turn either knob fully left (marked OUT) to turn that filter off. Turn either one (or both) clockwise to move the filter frequency in from its extremity.

You have a choice where to insert the Filters in the audio stream. To place the Filters immediately following the Input control, press the Input button. To switch the Filters into the Dynamics Side Chain, press the Dyn SC button. Note that when the Syn SC button is engaged the Input button has no effect.

### Equalizer Section

To use the EQ, switch it into circuit by pressing the EQ In button, which is near the top in the center of the interface for this section.

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The EQ section has four bands, each with its own knob color. All bands have gain and frequency control. The low (LF) and high (HF) bands are shelved by default but can be switched to a bell shape (parametric) by pressing the Bell button; the Bell option gives you more control over the exact shape of the EQ curve. The low-mid (LMF) and high-mid (HMF) bands have Q controls (to adjust the sharpness of the modified curve) in addition to what the others have.



Listed in the table below are the ranges for the knobs in each section.

Band	LF	LMF	HMF	HF
<b>Frequency range</b>	40Hz – 600Hz	200Hz – 2kHz	600Hz – 7kHz	1.5kHz – 22kHz
<b>Gain range</b>	±16.5dB	±20dB	±20dB	±20dB
<b>Q range</b>	—	0.5 – 2.5	0.5 – 2.5	—

The E button in the center toggles the EQ emulation between the G Series and E Series consoles. The difference between them is described in the following table.

G Series	E Series
The bell curve has a more rounded shape at low gains, and the shelf curve overshoots zero slightly at the base of the curve.	The bell curve is slightly more pointed, and there is no overshoot on the shelf curve.
G Series EQ is more subtle and is generally more suited to instruments and vocals.	E Series EQ is more aggressive and is therefore better for removing problem frequencies. It is generally more suited to drums.
Note: At full boost or full cut, the E and G Series curves are identical.	

To switch the EQ into the Dynamics Side Chain, press Dyn SC.

## Dynamics Section

This section consists of both Compressor controls and Noise Gate/Expander controls. Both sections work independently but can be operational at the same time, providing sophisticated control of signal levels. The example image of the interface is shown below, after the description of the Compressor.

There are two buttons at the top. The Dyn In button turns on the whole section. The Pre EQ button moves this section before the Equalizer; otherwise, this processing is performed after the Equalizer.

**Compressor:** On the left are 3 blue knobs for controlling the Compressor: Threshold, Release, and Ratio. To activate the Compressor/Limiter, turn the Ratio knob so that its ratio is no longer set at 1:1.

To turn the compressor into a  $\infty$ :1 limiter, turn the knob fully to the right.

There is no gain makeup control because the T/HOLD (threshold) knob controls both the level at which gain reduction is introduced and the gain make-up, thus keeping the output level steady regardless of the compression.

The Release knob controls how quickly the level returns to normal after the input level has dropped below the threshold (measured in seconds). The attack time is adjusted automatically to match the audio. To choose a consistently fast attack time, press the Fast Att button.

Turn on the PK button to switch from RMS to Peak signal detection. In normal RMS mode, the compressor reacts to the average signal level and has a soft knee characteristic. When switched to Peak mode, it responds to peak signal level and introduces a hard knee characteristic, resulting in more dramatic compression.

The level of compression being introduced is shown in the left-hand of the two meters in the centre of the Dynamics section.

**Noise Gate/Expander:** To activate the Noise Gate/Expander, turn the Range knob so that its range is no longer zero. The green indicators in the right-hand of the two meters in the centre of the Dynamics section show the amount of gain reduction being introduced.

By default, the Noise Gate/Expander section functions as a Gate. To switch to the Expander, press the Exp switch.

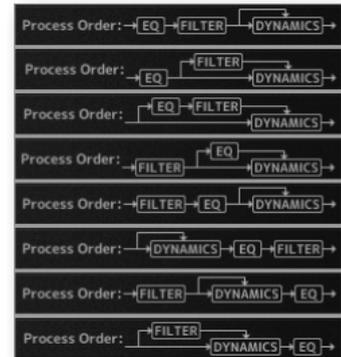
The Threshold function uses different levels to open the gate to audio and to close it again: the level at which the expander opens is higher than the level at which it closes again. In other words, when the expander is opened, it stays open until the signal level crosses the quieter Close threshold. This is known as hysteresis and is very useful as it allows instruments to decay more naturally. The word “Threshold” normally refers to the Open threshold.

The Hold knob controls the delay before the signal level starts reducing again. The Release knob controls how quickly the level then reduces. Note that the Release knob interacts with the Range knob, which determines the depth of gain reduction.

The Attack Time (the time taken for the Expander/Gate to ‘recover’ once the signal level is above the ‘deactivate’ threshold) is normally set to 1.5ms per 40dB. Press the Fast Att button to introduce a faster attack time of 100 $\mu$ s per 40dB. This is useful when gating signals with a steep rising edge, such as drums.

## Processing Order

The graphic at the right shows the 8 possible orderings for the 3 processing stages, with and without a Side Chain. The original audio signal starts at the left and the processed signal exits at the right of each diagram. The lower (straight) line is the standard audio path. When the EQ and/or Filter is in the upper path, then that component is in the Side Chain (as described below). The one of these 8 diagrams currently in effect appears in the upper-right corner of the drawer.



The default order is Filter >> EQ >> Dynamics, with nothing in the Side Chain, as shown in the 5th diagram in the image.

To place the Filter section after the EQ section, deactivate the Input button in the Filter section so that its light is off.

To place the Dynamics before the EQ, press the Pre EQ button in the Dynamics section, so that its light is on.

When the Input and Pre EQ switch are active simultaneously, the processing order becomes Filter >> Dynamics >> EQ.

## The Side Chain

The Side Chain is a path for the audio signal that is used to control the Dynamics section when it acts on the main audio signal. The Side Chain is not normally audible, but can highlight aspects of the audible signal that need processing.

The EQ and Filter sections can be assigned to the Dynamics Side Chain, allowing for advanced processes like de-essing, as described below. This is done using the Dyn S/C switches in the respective sections.

Both EQ and Filter sections can be assigned to the Side Chain together, in which case the EQ precedes the Filter.

Here's an example of using the Side Chain to remove the hissing sound of the letter S when it's too prominent. First, the audio is split into 2 signals. EQ is applied to the signal in the Side Chain to make the hisses louder, so that the compressor can use the louder S sounds as a clue that the main signal needs to be compressed (made softer) at those moments more than at other moments. In the main signal, the S sounds are made softer.

To listen to the signal feeding the Side Chain, press the S/C Listen button in the Output section to route the Side Chain signal to the channel output. It is important to remember to cancel the S/C Listen button once you have finished auditioning the Side Chain!

## SSL Transient Shaper

The Transient Shaper plug-in can be used on both the Instrument (Main) and Microphone (Sub) channel strips. It allows you to augment the attack at the start of a drum hit (or any note) by increasing the amplitude of the attack portion of the signal while leaving the decay and held note unchanged. In the image at the right, the right hand waveform

is a processed version of the one on the left. It has been passed through the Transient Shaper where the amplitude of the attack portion has been increased.

Switch the Shaper on by clicking on the Power button in its top left-hand corner. The lights at the right give visual feedback on how much attack is being added using the Gain and Amount controls. If the top red light illuminates, reduce the effect.

The **Gain** knob controls the detection level of the controller signal, and should be set so that only the transients you want to shape are detected. If this is set too low then the Shaper will do nothing; if it is set too high then the Shaper will detect too many transients, resulting in an exaggerated process, and the attack appearing too long. The default setting of 0dB should be a good starting point.

Note that the Gain setting here does not directly affect the output signal's gain.

**Amount** controls the amount of the processed signal added to the unprocessed signal. This process can increase the peak level of a signal significantly, so watch the output meter carefully.

**Speed** controls the length of time the added attack takes to fall back down to the normal signal level once it has reached the top of the attack phase. Turn the knob clockwise for a slower speed, and longer transients.

The **Inv** button inverts the processed signal so that it is subtracted from the unprocessed signal. This has the effect of softening the attack, resulting in more body in the drum sound.

Press the **Audition** button to listen to the processed signal to assist in the setup process.

Note that when the Inv and Audition buttons are both pressed, the signal is not inverted.

## EastWest Convolution Reverb

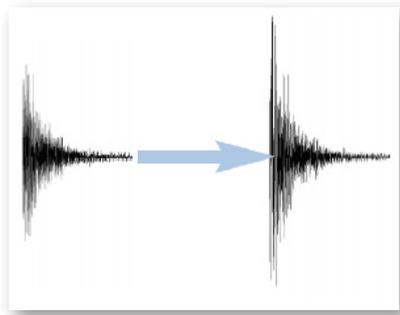
This Convolution Reverb is an extension of the one in the Player view. It adds some features that are not part of the Player view Reverb:

- the ability to load true stereo reverbs
- a high-pass and low pass filter set, with 2 handles on the graph for modifying the filters visually
- a mono button
- additional reverb environments that are not available on the Player view Reverb



To include a reverb effect on an instrument, turn it on by clicking on the button in the upper left corner. Or you can also turn it on from the Reverb controls on the Player view. When the button is illuminated, the plug-in is turned on.

This plug-in can be used on the Instrument (Main) channel strips. To add reverb on a specific mic channel, turn up the Reverb Send at the top of that mic's channel strip. That mic's signal is then directed into the reverb in the instrument channel.



Turn on the **Filter** for the Convolution Reverb by clicking on the Filter button so that it is illuminated. Then use the two circular handles on the graph to control the frequencies affected by the filter. Drag the handles with the mouse (or with a stylus or finger when a touch-screen provides that capability).

The **Pre-Delay** knob controls the amount of time (if any) that the Reverb effect is delayed after the attack of each note. Postponing the start of the effect allows the attack to sound without processing and to have the reverb affect only the sound of the note as it is held and/or decays. Use your ear to determine how long of a pre-delay works for each instrument. The Pre-Delay can be changed with the knob on the Player view.

Use the **Reverb** drop-down list to select the name of the environment, as shown in the image at the right.

This EastWest Convolution Reverb can use true stereo reverbs. The **Mono** button, when illuminated, indicates that the processing should be performed without separate left and right channels for the IR.

The **Amount** knob controls how much of the effect to include in the output. Drag downward with the mouse to create a more subtle reverb, or drag up to increase the effect. The Amount can be changed with the knob on the Player view.

## SSL Stereo Bus Compressor

This plug-in can only be used on the Instrument (Main) channel strips. This SSL compressor has become legendary in the music industry for its unique sound, so you may want to see how it can improve the sound of your mix.

This is a stereo version of the center section stereo bus compressor found on the XL 9000 K Series console. It provides high quality stereo compression, giving you critical control over the dynamic range of audio signals.



The compressor UI consists of 1 meter, 5 knobs, and 1 button, as in the image below.

### Compression

This meter shows the real-time gain reduction in decibels (dB).

## Threshold

With this knob you can controls the level at which gain reduction is introduced. The value is continuously variable:  $-20$  dB to  $+20$  dB.

## Attack

This knob controls response time when the Threshold is crossed. Choose among the following times: 0.1, 0.3, 1, 3, 10 and 30 ms.

## Make-Up

This knob selects the level of compensation to offset the compressor's action. It is continuously variable over the range:  $-5$  dB to  $+15$  dB.

## Release

This control sets how quickly the level returns to normal. Choose between 0.1, 0.3, 0.6, or 1.2 seconds, or you can select Auto. In the case of Auto, the release time is dependent upon the duration of the signal peak.

## Ratio

This knob controls the degree of compression. Choose among the ratios of: 2:1, 4:1, and 20:1.

## Comp In

This button switches the compressor in and out of the signal path. Use this button to do a quick comparison between the compressed and uncompressed signal to judge the effect of the current settings.

## EastWest Amp Simulator

This effects processor provides distortion and re-amping characteristics. There are about eighty options in the Preset drop-down list included with these libraries. Each of these options can be tweaked and manipulated using the Amp Simulator's parameters as described below.

This effects processor is turned on or off by clicking in the button in the upper-left corner. In the image it's illuminated yellow, meaning that it's turned on.



## Preset Menu

Clicking on the Preset control at the left displays a drop-down menu displaying the Amp Simulator's starting points, which you can then customize to fit your needs. To select an item, click on its name. Each name in the list is the name of an amp followed by the name of a mic it's paired with. For example, selecting "Marshall EV RE-20" gives you a simulation of an Electrovoice RE20 microphone run through a Marshall amp.

The image above highlights the drop-down menu. With nearly 80 entries, the list is quite large. A check mark in the list indicates which item is the current selection.

Once you've selected an amp and mic combination, you can use the other controls here to customize the audio output. They're described below.

### **Drive Knob**

The Drive knob controls how much signal is sent into the Amp Simulator's virtual circuit. Turning the Drive knob increases or decreases the amount of distortion and saturation to create either a more or a less intense effect.

Note that overdriving the Amp Simulator can result in reduced dynamic range and reduced punch of the drum's sound. Use the SSL Channel Strip's Transient Shaper to compensate for this side effect, if necessary.

### **Bass, Middle, and Treble Knobs**

Each of these 3 knobs boosts or cuts the range of frequencies named in the button's title, and always after the distortion is applied. Together they act as a rough equalizer of the distortion output.

### **Pre/Post**

This up-down switch effects where the Amp Simulator sits in the chain of effects. When Pre is selected, then it is the first effect in the chain. When Post is selected, it comes after the SSL Channel Strip.

### **Dry/Wet**

The Dry/Wet knob adjusts how much of dry incoming signal is mixed back into the output from this effects processor. When this knob is set to 100% Wet, only the processed signal is heard. When set to 0%, none of the Amp Simulator's processing is heard.

### **Master**

The Master knob controls the volume of the signal coming out of the Amp Simulator. This differs from the Drive knob in that the Master knob controls the volume post-processing, while the Drive knob controls the loudness of the signal coming into the effect. On all these knobs, hover over the knob with the mouse to see the current numerical value in a small tool tip window, as shown at the left.

## Ohm Force Ohmicide

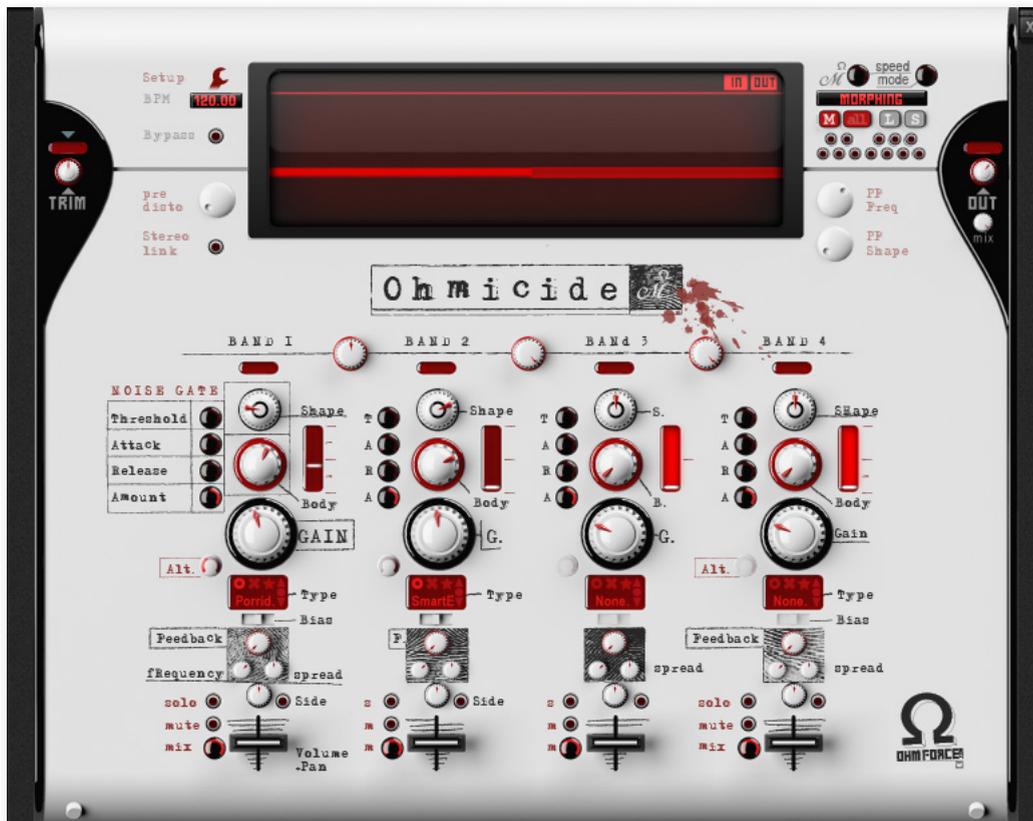
Ohmicide is an advanced multiband dynamics and distortion effects processor. Each of the four bands has an array of distortion, saturation, width, gate, and feedback controls. There are also over eighty different types of distortions. Ohmicide can produce a wide variety of different distortion effects from slight tape saturation, to ruckus overdrive. Its creator, Ohmforce, calls it an “audio-mangling tool.”

When the EastWest FX drawer is first opened, the Ohmicide window is closed. It appears as a narrow strip across the drawer, as seen in the image below.



Click on the Edit button to open the full window. Note that any parameters you’ve set in the window are still in effect when the window is closed. Once opened, this effects processor appears as in the image below.

Note that if you click the Edit button to open the Ohmicide interface, you’re turning it on. But when you close the interface it stays on even when the it is hidden. If you want to turn off the Ohmicide processing, you need to use the power button that can be seen to the left of the Ohmicide logo.



First of all, for users familiar with the Ohmicide plug-in in other contexts, please note that preset morphing using the Melohman feature is not available in this version. This difference also affects some of the items in the Setup menu, namely Load, Save + Autoload settings, all MIDI settings, Program Change Assignment, and Melohman Settings.

## Setting up Oversampling

One Setup feature that you might find most useful is Oversampling, found in the Setup menu, which you can open by clicking on the wrench symbol in the upper-left corner of the interface. It is an optional Ohmicide feature that reduces unwanted aliasing artifacts produced by the distortion process. Turn on Oversampling by selecting the High Quality mode near the bottom of the Setup menu. Be aware that turning on this feature asks your computer to do extra processing and, therefore, might cause problems with other software running on a less capable computer.

## Setting Up the Ohmicide Input Signal Trim for Each Song

Ohmicide's developers introduced input signal trimming to attenuate the incoming signal before it gets to the main stages of Ohmicide in order to tame its wild nature. You need to ensure that the trimming of the input signal is calibrated correctly for the song you're working on. Once you accomplish that, you're able to adjust the distortion without having to make drastic changes to the band gains, thus allowing you to shape your sound faster and in a more intuitive way.

This means:

- that the overall perceived volume, when changing parameters, ends up closer to the level of the input signal (unless you change the main output gain)
- that presets sound more like their designers' original intentions
- that morphs are more consistent in their overall loudness

Immediately above the Trim knob is a red indicator that shows 3 small red lights inside. To calibrate any given input, adjust the Trim knob so that the left light is on constantly in response to the incoming sounds, the center light flickers, and the right-most light does not flicker at all. The image at the left shows the Trim knob (near the left edge) set to a value of -15.9 dB, as shown in the value at the top of the large red readout (far to the right and above the graph). If you look closely in the image, you can see that the left of the three lights directly above the Trim knob is lit (is a brighter red).



If the lights behave as described above, the signal is roughly calibrated, and that may be all you need to do. However, you might want to run the following simple test, to see whether you need to fine-tune the Trim:

1. While still playing the audio, right click on a Distortion Gain knob, and raise it to the 3 o'clock position.
2. If the overall volume remains constant as the gain increases, you're set to go!
3. If the overall volume rises, then increase the Trim.

4. If the overall volume lessens, then decrease the Trim.  
That's it! You're now in the optimal operation range for Ohmicide.

Note that you can double-click on the Trim knob to set it back to 0.0 dB.

## Setting Up the Output Stage

As a result of the calibration process above, the input and output signals are now matched in volume. You might need to change the main output to suit your needs. The Output knob is at the right edge of the interface. In the image at the right, you can see that the output has been raised by 5.9 dB, as shown at the top of the red screen.



Below the Out knob is the smaller Mix knob, which allows you to adjust the wet/dry mix of the output signal.

Double-clicking the Out knob resets it to 0.0 dB. And double-clicking the Mix knob resets it to 100% wet.

## The Ohmicide Controls

The image at the right shows 2 controls to the left of the central display in Ohmicide: the Pre-distortion knob and the Stereo Link button. As with all knobs in this plug-in, the current value as you turn a knob is shown at the top of the large red display in the center. Also, as you turn a knob, a ring appears around it showing the values at the left, center, and right of the knob's range.

### The Pre-distortion Knob

The Pre-distortion knob (abbreviated “Pre disto” in the interface) allows you to add some color and distortion to the audio signal without affecting its original dynamic quality and prior to the signal reaching the main effect stages.



### Stereo Link Button

Some sections of Ohmicide are triggered by the levels in the signal and the Stereo Link button affects the way the signal levels are detected.

When this button is active, the two stereo signals are merged prior to level detection, so that both channels behave the same dynamically. When inactive, the level detection is done separately on each channel. In both cases, the signal processing remains in stereo.

Stereo Link has an impact on the following behaviors:

- The Dynamic section: You have a more faithful stereo image if it's active.
- The Gate section: Left and right channels are gated synchronously if it's active.
- Feedback behaves the same on both channels if it's active.

## Per-Band Processing

One of the main features of Ohmicide is that you can split your audio into frequency bands and apply the main effects sections to each band separately. For example, assume you have a drum loop playing and you want to apply distortion to everything except the kick drum. By setting up two bands, you can get a drum loop that sounds as though it's just gone through an overdriven blender in the higher frequencies and yet still retain a clean and powerful kick. Each band also has dynamic and feedback sections, which means that the possibilities are endless.

If you want to set a parameter on the four bands at once, right-click on the controls instead of left-clicking.

### Setting the Frequency Range of Each Band

You can have up to four active bands, which are stacked on top of each other in such a way that the ceiling cutoff frequency of one band acts as the floor cutoff frequency of the next band (hence the need for only three frequency cutoff knobs).



The floor of Band One is fixed at 20hz, and the ceiling of Band Four at 20khz. The three frequencies that divide the bands are set with the three shown knobs in the image above. As you turn the knobs, the exact setting is shown at the top of the red display, as is always the case with knobs.

Note that if your sample rate is less than 42106 Hz then your range is smaller than 20 Hz to 20 kHz. The maximum range is, in any case, 0.475 times the sample frequency.

Also, any band that has its floor set to any value between 20000 and 20480 Hz (the upper limit of the operating range) is effectively disabled, which means that if all knobs are set to 20khz (far right), then only Band One is active and processing audio.

Finally, to maintain the frequency band design of Ohmicide, the frequency knobs may move automatically in order to insure that the value in every knob is less than or equal to the value in all knobs to the right of it.

---

**ADVANCED:** The filters that do the dividing into band, as with any filters, may introduce frequency-dependent phase shifts. These shifts are cancelled out by the reconstructing filters post-band.

---

The per-band processing is divided into six steps:

- Mid/Size
- Gate
- Dynamics
- Distortion

- Gain and Stereo Field
- Feedback

These controls are the same for each of Ohmicide's 4 bands.

## Mid/Side Button

One exciting feature of Ohmicide is its ability to process a band in Mid/Side mode, which you activate by clicking the Side button in the band's Stereo Control section. The image at the left shows this button in the context of other controls near the bottom of the plug-in.



This feature works as follows: Instead of processing normal stereo left/right channels, the stereo image is split up into middle and side channels, with the mid signal sent to the left channel for processing and the side signals sent to the right channel.

Switching to and from Mid/Side mode produces an audible click in the audio. You should take caution when changing this parameter.

## Gate Controls

Traditionally, Noise Gates are used to remove unwanted sound in an audio track. They work by allowing audio to pass through only when it exceeds a user-defined decibel threshold.

But a gate can also be used creatively, such as when a guitarist uses a gate before a distortion pedal to get sharp and well defined chords.

More advanced gates, such as what are in Ohmicide, have two inputs, one to process the audio, and one, known as a side-chain, to trigger the gate by comparing its signal to the threshold. Generally, the audio to be processed is also the side-chain, but you can come up with useful results that use a different audio signal to trigger the gate, such as a kick drum on a bass guitar track to tighten up both instruments.

In Ohmicide the side chain is the main, pre-split signal. Which means that each band's gate threshold comparison is made using the same signal, and if they have the same threshold value, then they'll open and close at the same time. But controlling the parameters of the side chain independently, as described below, gives more creative results.

Before describing the Gate controls, here's an image that shows the controls for Bands 1 and 2. For Band 1, the names of the four small knobs on the far left are spelled out. For the other three bands, the names are abbreviated: T A R A. In the image, in Band 2, you see the typical green value bubbles that appear whenever you're setting a knob with the mouse.



You control the gate by using the following knobs:

- Threshold
- Attack Time
- Release Time
- Amount

The Threshold knob defines the decibel level needed to open the gate. There's a fixed hysteresis on the gate, which means that the close-gate threshold is lower than the gate-open threshold; that way, the gate does not chatter while the signal level is near the threshold setting.

The Attack and Release Time knobs control how fast the gate opens and closes.

The Amount knob sets how much the gate closes. It closes all the way when set to 100%, and barely closes when set to 0%. With a negative setting, the gate shape is inverted, which means it opens below the threshold, and closes above it.

The gate can add snap to a sound, such as making shorter drum hits. Or by inverting the gate on a band you can have one band's gate open while the other's closes. The gate works best with sounds having a lot of dynamic movement. A pad won't gate so well because it has very slow Attack and Decay envelopes.

### Dynamics: Shape and Body Knobs

The Shape parameter determines how the audio dynamics are changed:

- In the neutral position (center), the audio is unmodified.
- In the Phat zone, the audio is compressed, that is, dynamics are reduced, but the overall sound is perceived to be louder and sustained longer. This is not a compressor in the traditional sense, as it usually just increases low volume levels, leaving higher levels untouched.
- In the Sharp zone (right), the audio is expanded, that is, dynamics are increased and attacks emphasized, producing percussive and generally faster-decaying sounds.



Use the Body parameter to adjust the amount that the Shape parameter affects the audio. In addition, Body also progressively adds a limiter to the end of the band processing, so that even if Shape is set to the central, neutral position, Body may have an affect on the audio. The red VU-meter to the right uses its white line to give you visual feedback on how much the section affects the audio gain. It also lights up in red when the limiter kicks in.

### Distortion Controls

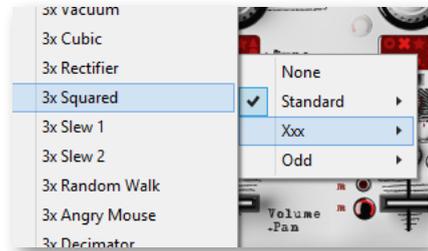
After the Dynamics stage, described above, the band signal can be optionally distorted. The parameters for this stage are:

- Type
- Gain
- Bias
- Mode



Ohmicide provides 28 distortion algorithms with three variants (Standard, Xxx, and Odd) for a total of 84 distortion types. To select a distortion algorithm either:

- Click on the lighter red up and down arrows at the right side of the small red display labeled Type to cycle through the patch names, with each name abbreviated at the bottom of the small red display and also in full at the top of the large red display near the top of the window. Or click on the center of the small red display and move your mouse up or down (just as you would do on a knob) to change the distortion without repeated clicking. In the image above, the names inside the red display are Crest, Vacuum, and Porridge. At the top of those small red displays are icons for the three variants, from left to right: a circle for Standard, an X for Xxx, and a star for Odd. Click one to select it.
- Alternatively, click in the small red Type display and choose a type from a pop-up menu, as shown partially in the following image. Select the variant first, which opens a menu of all 28 distortion algorithms for that variant. In the image, the Xxx variant menu is open, as indicated by the blue highlight.



The Gain knob (above the small red display) is adjustable in a range from  $-20$  dB to  $+60$  dB. The higher the gain, the more distortion is applied to the sound. However, the overall perceived volume should not deviate by too much (though this is somewhat dependent on the level you're listening at), and provided the Trim has been correctly set.

Refer to the [Setting Up the Ohmicide Input Signal Trim for Each Song](#) section for more information on balancing the input level.

The two controls Bias and Alteration can be used to further color the chosen distortion type, though bear in mind that for some algorithms the controls are irrelevant and are grayed out.

The horizontal Bias slider (below the small red display) emulates malfunctioning hardware circuitry and adds a DC offset before the distortion is applied. The control is very sensitive, so even very small changes can make dramatic changes to the sound. To break up the sound completely, move the slider all the way to the right.

The Alteration knob further changes the color of the distortion. This change depends greatly on the Distortion type, so you should audition various levels to see whether any setting works in your song.

### Gain and Stereo Controls

The output volume of each band can be set by moving its fader near the bottom of the band controls. It has a range of  $-\infty$  dB to  $+20$  dB.

The Gain stage is before the limiter and you can see on the band's dynamic VU meter that increasing the band's Volume fader (as seen in the image at the right) activates the limiter. Directly above the Volume



fader is the Pan control, which can be used in conjunction with the other bands' pans to create wider sounds. In the image, the green value markers indicate the 3 values of Left, Center, and Right because the knob has just been turned with the mouse.

When the Mid/Side mode is active, the Pan control behaves differently: turning the Pan knob to the left attenuates the side channel, and turning it to the right attenuates the mid channel.

The remaining controls in this section are the Wet/Dry knob (labeled Mix in the interface) and the Mute and Solo buttons. The Solo button takes precedence over the Mute control, which means that a soloed band is heard regardless of its mute state. The Solo state is ignored if the band is turned off using the Band Split knobs.

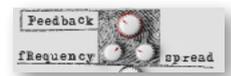
### Feedback Controls

The Feedback section simulates a microphone recording the signal coming out of loudspeakers and then amplified back into the signal chain. For Ohmicide, turning on feedback takes the wet signal, after the signal reconstruction, and loops it back, with a slight delay, into the signal path before the Gate section.

The Feedback behavior works on each band independently, so that you can use a different configuration of the parameters on each band. Note, however, that the feedback frequency content can exceed the boundaries of the current band and, therefore, can leak into the other bands!

- The Feedback parameters are:
- Amount
- Frequency
- Spread

The Amount knob (the control at the top of the section) determines the simulated microphone sensitivity. To turn off all feedback on this band, turn this knob all the way to zero.



The Frequency sets the Feedback frequency, in a range from 16 Hz to 1024 Hz, and simulates the distance separating the microphone from the loudspeaker. The further away the microphone, the lower is the resulting pitch. The fact that you can set this parameter per band goes beyond reality, and does not reflect a real world phenomenon. It is, however, sonically interesting and that's what matters!

The Spread control changes the stereo field of the feedback. At mid position, the feedback is mono, while on the right, the feedback is stereo. When turned left of center, the feedback crosses channels (left channel feeds the right channel and *vice versa*).

## Overall Tone Setting

After the per-band processing, the signals are mixed together and a low pass filter can optionally be applied to attenuate any hyper-bright frequencies. The two controls are located to the right of the large red display:

- PP Shape
- PP Frequency

The PP Shape knob determines the color of the filter. Turned to the far left, the filter is disabled. Raising it to the mid position increases the slope, effectively making it a 48 dB/octave low pass filter. Turning further right adds some resonance.

The PP Frequency knob has a range from 2 KHz to 8 KHz and it determines the cutoff frequency of the filter.

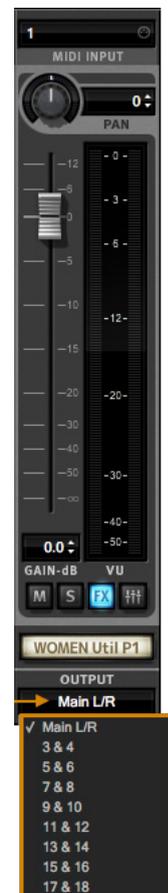
## Multi-channel Audio Output

It is often the case that a composer wants different parts of the audio output to go to different channels so that mixing can be done either in the host or in an external mixing board in the studio. In many Play libraries, that selection of output channels can be performed in the Player view.

### In the Mixer View

Along the bottom of the Mixer view, just below the buttons that turn on or off an instrument or a mic, is a row of Output controls. At the far left of the image at the left is the strip for the instrument. Note that when the instrument was assigned to output channels 5 and 6 in the Browser view, that same selection appeared here, as well. The other three strips in the image are individual mic positions. When a value of Default is selected, then Play uses the output assigned to the whole instrument, in this case channels 5 and 6.

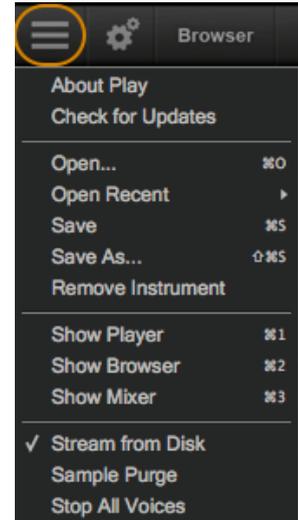
If a different output pair is selected, such as the 3 and 4 being selected for the Snare Top mic in the image, then that selection overrides the selection for the whole instrument. In this example, the Kick Drum mic will be output on channels 5 and 6 (because Default is selected) and the Snare Top mic will be output on channels 3 and 4.



## The Main Menu

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

- **About Play:** Displays pertinent information about the product, including version number, copyright, and information about the Play Library the currently selected instrument comes from.
- **Check for Updates:** Use an internet connection to check for a new version of the Play software (if available).
- **Open:** Load an instrument file with the extension [.ewi] from it's 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 6 user interface.
- **Refresh Browser:** Use this option if changes to Play Libraries file system were made while Play is open. This option will force Play to rescan and update the file directory.
- **Stream From Disk:** This option is enabled by default upon loading an instrument. It loads the beginning portion of each sample into RAM and streams the rest from the hard drive. When the item is not checked, the entire instrument is loaded into RAM. This setting only applies to the currently selected instrument.
- **Sample Purge:** contains a set of options that allow you to free up system resources in large projects by removing unused samples from memory. This can be done across all instruments, or on a per-instrument basis.

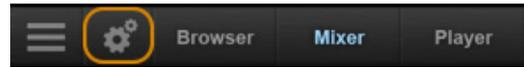


To begin, click the 'Reset' button to clear the memory of previous playback information. Next, playback the sequence in your DAW. Any notes not played since the last reset will be removed by clicking the 'Purge' button. To bring back purged samples, click the 'Reload' button.



## The Settings Menu

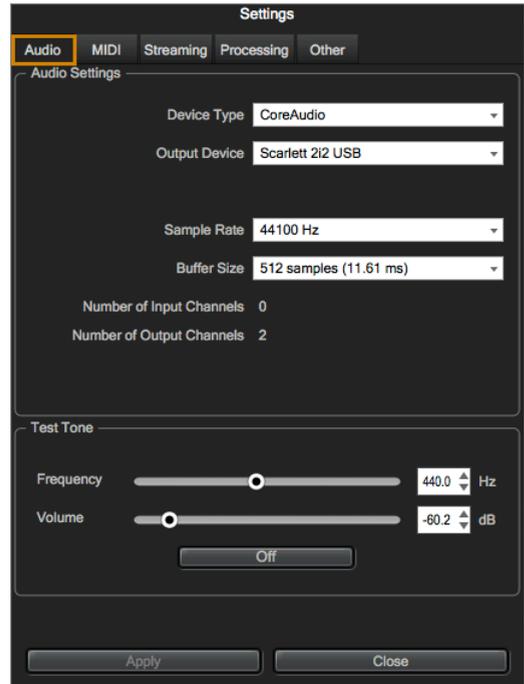
The Settings Menu appears as a gear icon located in the top-left corner of the Play interface, to the right of the Main Menu. Click on it for quick access to the 5 categories of options detailed below.



### Audio Settings

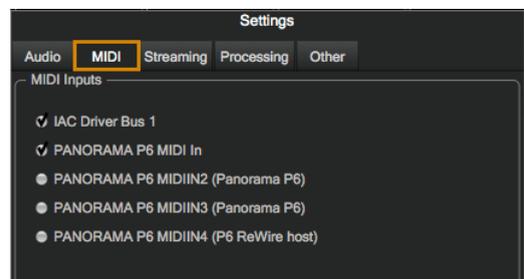
The Audio Settings tab enables you to configure audio connections when running Play in stand alone. When running as a plug-in, the DAW will handle the audio connections and Play's Audio Settings tab will be disabled.

- **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 by using the two sliders to set the frequency and volume, then click on the button to start or stop the tone.



### MIDI Settings

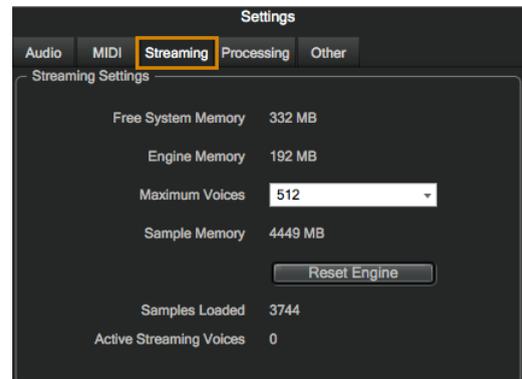
The MIDI Settings tab allows you to specify which MIDI devices can send MIDI data to Play. The types of devices that will be listed here include MIDI keyboards, control surfaces, and the MIDI I/O from an audio interface. Click to leave a check-mark next to the MIDI device to enable it, and click again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



## Streaming Settings

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

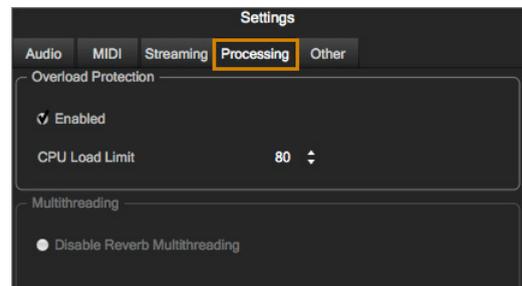
- **Free System Memory:** reports the amount of memory (RAM) the computer has available after the operating system and programs have taken their cut.
- **Engine Memory:** reports the amount of memory (RAM) being used by PLAY to pre-buffer samples. This value is affected by the Maximum Voices selection.
- **Maximum Voices:** the number of maximum voices that can be played back simultaneously within a project (all Play instances).
- **Reset Engine:** can be used to kill all notes being played and to return the audio engine to its initial state. Use this button when experiencing a so-called “stuck note”, which is a note that continues to play beyond its indicated length.
- **Samples Loaded:** reports the number of samples currently pre-buffered in memory (RAM). Use this value to determine whether enough RAM is allocated for playback. If this number is too large, use the Purge feature described in the Main Menu section.
- **Active Streaming Voices:** reports the total number of voices being played back in all instances of Play. This is different than the Voices value reported in the Player view, which only applies to that particular instance of Play.
- **Sample Cache** is the most important feature in this menu. As a general rule, find the lowest setting that also results in smooth playback. If dropped voices or CPU spikes occur, simply raise the ‘Cache Level’.



See [Instrument Selector](#) to learn more.

## Processing Settings

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



## Other Settings

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

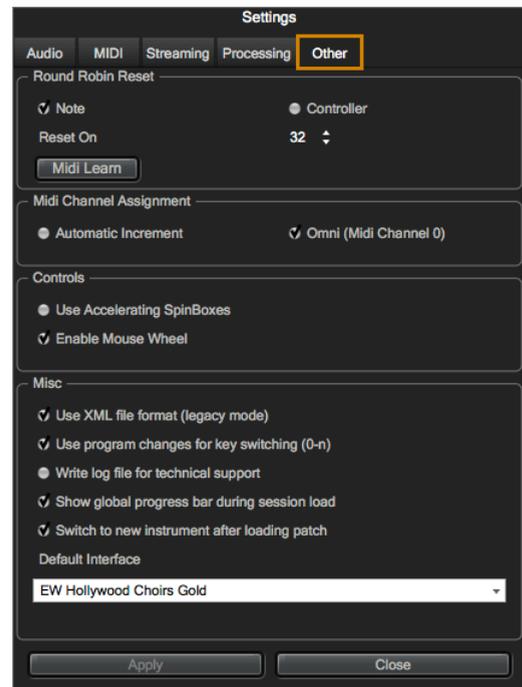
- **Round Robin Reset:** this technique cycles through two or more samples of the same note, each with inherent variation. It provides a realistic performance, avoiding what's called the "machine gun effect". To ensure this cycle repeats in the same order each time, use a Round Robin Reset to reset the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

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

- **MIDI Channel Assignment:** these options determine the MIDI channel assignment when loading a new instrument in Play:
  - Automatic Increment: assigns each new instrument to the next available MIDI channel (1, 2, 3, etc) in the order they are loaded.
  - Omni: assigns each new instrument to MIDI channel 0, which receives MIDI on all channels (1–16).
- **Controls:** provides options to modify the behavior of controls.
  - Accelerating Spin Boxes: allows you to change values faster the longer you hold down the mouse on an up or down arrow.
  - Enable Mouse Wheel: to make value changes in Spin Boxes with the scroll wheel of your mouse.
- **Miscellaneous:** contains a variety of options.
  - Use XML File Format: this enables you to work with projects using older versions of Play.
  - Use program changes for key-switching: this allows Play to accept MIDI Program Change messages to change keyswitches. Program 0 is the first keyswitch, Program 1 is the second keyswitch, etc.
  - Write log file for technical support: this option will create a log file to help technical support address technical issues. The log file is written to the following locations:

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

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



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

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

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



## Chapter 4: Play Libraries Overview

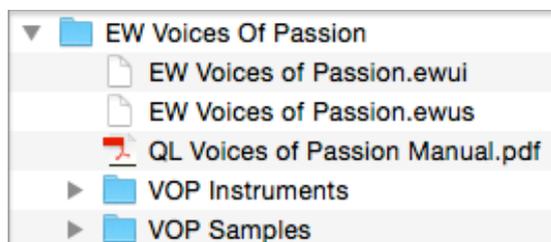
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## Inside the Main Library Folder

Inside the Main Play Library folder for each product (EW Voices of Passion, in the example below) is an Instrument folder, a Samples folder, Documentation, and [.ewui] and [.ewus] files that allow the EW Installation Center to track the version of the Play Library contents and notify you if updates are available.

See [Instrument and Sample Updates](#) to learn more.

Within the Instruments folder are sub-folders of categories that eventually lead to Instruments with the extension [.ewi]. Likewise, within the Samples folder are sub-folders of categories that eventually lead to Samples with the extension [.ews].



This library folder is linked to the [Libraries Browser](#) in Play, where Instruments can be viewed and loaded from their original file heirarchy.

When loading an instrument, Play will load the associated samples, which contains encrypted content that is only accessible in Play with the respective product license and activation. Samples cannot be loaded or accessed directly.

## Instruments

Instruments are what users will interact with the most inside of Play. They instruct Play what samples to load, what effects are enabled by default, and contain parameter settings that shape the sound.

There are various types of instruments throughout Play Libraries, including Master and Elements instruments, Keyswitch instruments, and Single-Articulation instruments.

Most articulations are programmed into more than one instrument type to meet the various needs of a composer. In Hollywood Solo Violin, for instance, the Spiccato RRx4 articulation is available as both a Single-Articulation instrument and within a keyswitch instrument of short articulations.

**MIDI Channel Assignment:** All MIDI channel assignments are made at the instrument level. With this approach, using a keyswitch instrument is ideal for a phrase that needs multiple articulations within a single MIDI channel. If instead you need to layer the Staccato articulations of each string section on separate MIDI channels, the Single-Articulation instruments are ideal.

This flexibility enables a composer to build an instrument template in their host sequencer in an intuitive way that best suits the needs of a project.

**How to Save Changes to an Instrument :** to save changes made to an instrument, you can:

- Click on the Main Menu and choose Save. This saves all the open instruments into a single [.ewi] file, along with any parameter settings. You can save it anywhere you like, but be careful not to overwrite the original instrument file in case you need to start with the default values at a later time.
- To save a single instrument, modify and save it when only one instrument is open.
- If you're running Play as a plug-in to a host, save the host project to the hard drive. All supported plug-in parameters are saved with the project file. Please note, this option does not allow you to load the modified instrument into another project.

## Articulations

Most instruments can be played in a variety of different ways. The resulting sound of an instrument based on the performance technique employed is called an articulation.

Play Libraries handle articulations in a few different ways. Sometimes instruments contain only a single articulation, usually specified in the instrument name. Other times instruments are programmed with keyswitches, enabling the user to switch between articulations within a single line of music. A keyswitch instructs Play to use the specified articulation until a new keyswitch note changes it.

**Depth of Sampling:** Each articulation is made up of its own set of samples, and each note of an articulation is sampled within the range of that instrument, usually at several dynamic levels (pp, mp, mf, or ff).

**The Articulation List:** All articulations within an instrument appear in the Player view in an Articulation list. The location of the Articulation list is different depending on the Play Library, so please refer to the library-specific manual if you have trouble locating it. Use the scroll bar if there are too many articulations to view at once.

Each row in the list displays the articulation name, the note number of the keyswitch that selects the use of that articulation, an active and loaded checkbox, and a volume control.

The checkbox labeled “active” allows the user to turn on and off the playback of a given articulation. It's like a Mute button, but at the level of an individual articulation.

The checkbox labeled “loaded” allows the user to load or unload the samples of that articulation from the computer's memory (RAM). This is helpful to free up resources.

The volume control allows you to adjust the loudness of any specific articulation relative to others in the same instrument.

## Keyswitches

A keyswitch instrument allows you to switch between articulations on the fly using MIDI notes. Each articulation is assigned to a particular MIDI note number, and playing that note will switch to that articulation.

MIDI notes that are keyswitches appear on Play's virtual keyboard as blue keys. When a keyswitch is selected, the key changes to a darker shade of blue.

MIDI notes used as keyswitches are always outside the playable range of the instrument (white keys). Most are between MIDI notes C0 and C1, but there are a small number of instruments with very low ranges that require their keyswitches to be above their playable range of notes. Please see library-specific manuals for details.

A MIDI note-on message for the keyswitch that is assigned to a given articulation must be received by Play before that articulation is active (playable). In other words, you must first trigger the keyswitch, allowing Play to switch articulations, before it's playable.

**Troubleshooting:** Once a keyswitch note is sent to Play, its articulation remains in effect until another keyswitch note is sent. This behavior can have unwanted side effects when moving back to an earlier position in the piece to replay it. As an example, suppose you place four keyswitch notes in a track at the given measures:

- D# measure 5
- E measure 12
- F# measure 17
- E measure 23

Problem 1: You play the piece through to the end. You then play it over again. The first time you play it, the beginning is played with the default articulation (keyswitch note C). The second time you play it, the beginning is played with the articulation controlled by note E. That's the state the instrument was left in at the end of the piece and there's nothing to reset it. Solution 1: Put an explicit keyswitch before the first audible note in the track. Do not rely on the default unless there will be no keyswitches in the entire track.

Problem 2: You stop at measure 19, move back to measure 14, and start playback from there. The first time, measures 14, 15, and 16 play the articulation on note E. The second time, those measure use the articulation on note F#. That's the state the instrument was left in when the piece was stopped. Solution 2: Have predetermined places to restart and position keyswitches at each one. Any solution here would require more keyswitch notes and would be more intrusive. It's nice to have the freedom to stop and start a piece at any point. At least be aware of this problem and decide whether to live with it or take steps to avoid it.

**Special Cases:** Occasionally an instrument will contain an articulation that plays regardless of the currently selected keyswitch. These articulations will show up in the Articulation list with checkboxes for active and loaded states, as well as volume controls. A prime candidate for this type of programming is the key-clicks of a woodwind instrument, which are considered optional.

## Master and Elements

Some Play Libraries contain Element and Master instruments. They appear with similar instrument names in the Browser view except that one has “Master” and the other has “Elements” at the end of their names. The two instruments are similar except that only the Master patch uses a keyswitch to select among the included articulations.

**Master** Instruments have all articulations active when first opened and use a keyswitch to select articulations. Unload any articulations you don't need to remove their samples from memory.

**Elements** instruments open with only the default articulation active. All others articulations are inactive and not loaded into memory (RAM). Use the Active and Loaded checkboxes to setup different configurations, including a single articulation, or the layering of two or more articulations together. You can also load the same Elements instrument multiple times and set each one to a unique articulation and MIDI channel. This is a nice alternative to a keyswitch instrument, as each articulation is given its own MIDI channel.

## Samples

Samples are the individual recordings of each articulation, note, and dynamic level possible by a given instrument. Samples are not directly accessible in Play, but are instead loaded into Play when an Instrument file is opened.

Play knows which samples to playback based on MIDI data, including the selected keyswitch articulation, the MIDI velocity of the incoming note, and in some cases, whether to use a legato sample in the case where the end of a MIDI note is close enough to note ahead of it.

Samples are what make up the bulk of what gets written to the hard drive during the download and installation process.

## Instrument and Sample Updates

To ensure Instruments and Samples are updated with the latest fixes, launch the Installation Center and scroll through the product panels until you locate the ‘Updates’ section. Any Play Libraries that have updates available will appear here. Click the ‘Update’ button to download and install that product’s Instrument and/or Sample updates.



In addition to being able to update products when they appear in the ‘Updates’ product category, the option to ‘Update Instruments’ is also available in the Tool Menu. Hover the mouse pointer inside a product panel to reveal the gear icon (shown below), then click on the gear icon to display the Tool Menu options

## Space Requirements for Play Libraries

This section covers the amount of disk space required for each PLAY Library, rounded to the nearest gigabytes (GB).

**PLEASE NOTE!** The numbers here represent an approximation. File size values vary depending on the operating system and/or hard drive format. Also, we recommend the standard practice of leaving a certain percentage of disk space free (covered above).

### Multi-Edition Play Libraries

These PLAY Libraries are the largest in EastWest's catalog. They are deeply sampled, feature multiple microphone positions, and contain a wide range of instruments and articulations. Please see above for details regarding the differences between editions.

<b>DISK SPACE REQUIREMENTS</b>	<b>SILVER (GB)</b>	<b>GOLD (GB)</b>	<b>DIAMOND / PLATINUM (GB)</b>
<b>HOLLYWOOD ORCHESTRA SERIES</b>	<b>39</b>	<b>95</b>	<b>709</b>
Hollywood Strings	12	47	336
Hollywood Brass	10	20	159
Hollywood Orchestra Woodwinds	12	18	144
Hollywood Orchestra Percussion	5	10	70
<b>HOLLYWOOD SOLO INSTRUMENTS</b>	<b>-</b>	<b>18</b>	<b>91</b>
Hollywood Harp	-	2	15
Hollywood Solo Cello	-	8	38
Hollywood Solo Violin	-	8	38
<b>PIANOS</b>	<b>26</b>	<b>50</b>	<b>282</b>
Bechstein	6	12	73
Bosendorfer	8	18	87
Steinway	7	11	58
Yamaha	5	10	46
<b>SYMPHONIC ORCHESTRA</b>	<b>11</b>	<b>33</b>	<b>124</b> <small>PlatinumPlus (194)</small>
Strings	4	14	51 <small>(85)</small>
Brass	3	11	37 <small>(62)</small>
Woodwinds	3	7	25 <small>(42)</small>
Percussion	3	5	12 <small>(21)</small>
<b>CHOIRS</b>	<b>-</b>	<b>9</b>	<b>41</b>
Hollywood Choirs	-	8	59
Symphonic Choirs	-	9	39
Symphonic Choirs Expansion	-	-	2

## Single-Edition Play Libraries

These Play Libraries were released as single editions. They come standard with 24-bit samples, and encompass a large amount of instruments and articulations. While most of these Play Libraries do not come with multiple microphone positions, the ProDrummer Series is an exception.

<b>DISK SPACE REQUIREMENTS</b>	<b>(GB)</b>
Stormdrum 2	14
Stormdrum 2 Pro Expansion	4
Stormdrum 3	84
Silk	25
Ra	14
Gypsy	12
Voices of Passion	8
Voices of the Empire	14
Solo Violin	5
Ghostwriter	56
Goliath	41
Ministry of Rock 1	20
Ministry of Rock 2	58
The Dark Side	38
Fab Four	13
ProDrummer Vol.1 Spike Stent	55
ProDrummer Vol.2 Joe Chiccarelli	33

## 25th Anniversary Collection

This collection of re-issued titles include many award winning sample libraries that have withstood the test of time. They are available for individual purchase and many are included in ComposerCloud.

<b>DISK SPACE REQUIREMENTS</b>	<b>(GB)</b>
<b>25 ANNIVERSARY COLLECTION</b>	<b>36</b>
'56 Strat	2.2
Adrenaline	1.4
BT Breakz	0.7
BT Twisted Textures	1.3
Bob Clearmountain Drums 1	0.6
Bob Clearmountain Drums 2	0.4
Bob Clearmountain Perc and Bass	0.4
<i>continued</i>	

Bosendorfer 290	3.2
Brass	1.8
Dance Industrial 1	0.3
Dance Industrial 2	0.8
Drum n Bass	0.8
Electronica	0.5
Funky Ass Loops	0.5
Guitar and Bass	0.5
Hypnotica	0.6
Ill Jointz	1.0
Joey Kramer Drums	2.9
Percussive Adventures 1	1.4
Percussive Adventures 2	3.0
Phat n Phunky	0.8
Public Enemy	1.1
Scoring Tools	0.4
Smoov Grooves	0.7
Steinway B	1.6
Steve Stevens Guitar	0.5
Stormdrum 1 Loops	3.5
Stormdrum 1 MultiSamples	2.6
Symphonic Adventures	0.6
Ultimate Strings	0.5

## The MIDI Guitar Instruments Series

A wide ranging collection of instruments optimized for guitar players by the EastWest production team, working closely with Fishman's software developers for their TriplePlay MIDI guitar controller.

<b>DISK SPACE REQUIREMENTS</b>	<b>(GB)</b>
MIDI Guitar Series Vol 1: Orchestra	18
MIDI Guitar Series Vol 2: Ethnic & Voices	17
MIDI Guitar Series Vol 3: Soundscapes	11
MIDI Guitar Series Vol 4: Guitar & Bass	38
MIDI Guitar Series Vol 5: Keys & Percussion	23



## Chapter 5: Using Play as a Plug-in

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## Opening Play in a Host Sequencer

Most software sequencers permit software written by other companies to run within the sequencer. All the plug-in's input and output (I/O) is managed by the sequencer host. And several plug-ins—from the same or different manufacturers—can run concurrently, each contributing its part to the audio output. Some virtual instrument plug-ins, such as Play, are sound generators that respond to MIDI data. Other plug-ins might provide effects, such as signal compression, EQ filtering, or echo simulation.

The details of how to open Play in several popular sequencers are covered in the following sections. In each case, you need to first open the sequencer host. Then follow the directions below. If you are familiar with inserting other sample players and synthesizer plug-ins, the procedure for Play will be the same.

The sequencer hosts mentioned here are the most commonly used with plug-ins like Play; many others can also be used and the instructions for how to open the plug-in will likely be similar. Also, because information can change on short notice, it's best to check the online [Support Center](http://www.soundsonline.com) at Soundsonline.com to read the most recent information.

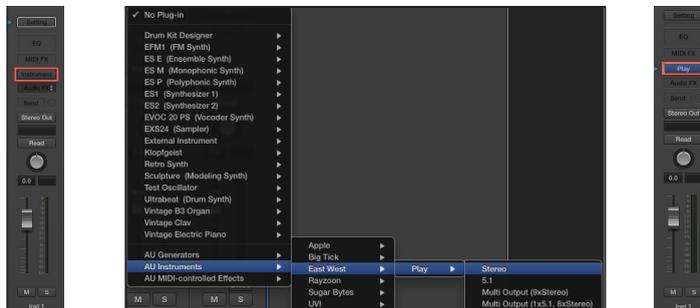
## Using PLAY as a Plug-in with Logic Pro

1. Once Logic Pro has opened, a window will appear asking you to create a track of your choosing. Click on 'Software Instrument' in the top-left, then select Play in the 'Instrument' drop-down menu, then click 'Create'.



2. If instead you chose 'Empty Channel Strip' (the default) in the 'Instrument' drop-down menu, you can manually add Play to a channel strip by clicking in the 'Instrument' menu and navigating to the Play plugin. Once loaded, it will appear in the channel strip. Click on the Play plug-in to show / hide the Play interface.

You're now ready to load your first instrument and begin composing!



## Using Play in a Multi-Timbral Setup in Logic Pro

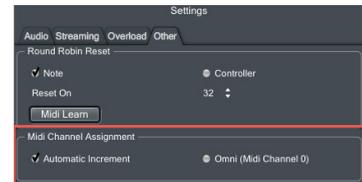
1. Once Logic Pro has opened, a window will appear asking you to create a track of your choosing. Click on 'Software Instrument' in the top-left, select Play from the 'Instrument' drop-down menu, then click the 'Multi-Timbral' check-mark box and define the number of parts (up to 16 midi channels are available per midi port). Next, make sure that 'Open Library' is not selected, then click 'Create'.



2. You will now see (x) number of instrument tracks appear, where x equals the number of parts you chose to create. Each instrument track is assigned to its own MIDI channel (1, 2, 3, etc). These will correspond to the MIDI channels assigned to instruments loaded in Play.

3. If instead you chose 'Empty Channel Strip' (the default) in the 'Instrument' drop-down menu, you can manually add Play to a channel strip by clicking in the 'Instrument' menu and navigating to the Play plugin (see screen shots in Step 2 of Using Play as a plug-in with Logic Pro, above). Once loaded, it will appear in the channel strip as Play. Click on this button to show / hide the Play interface.

4. Click on the Settings menu near the top of the Play interface and then navigate to the Other tab. Here, under MIDI Channel Assignment, select Auto Increment. This will assign each new instrument loaded in Play to the next MIDI channel (1, 2, 3, etc), corresponding to the assignments in Logic Pro X's multi-timbral instrument setup.



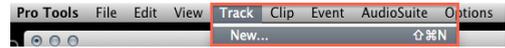
5. Now begin loading instruments into Play. Selecting 'Add' will load multiple instruments into Play.

6. You can see what you currently have loaded by looking in Play's Instrument Selector. The MIDI channel assignment is in parenthesis next to the instrument name.

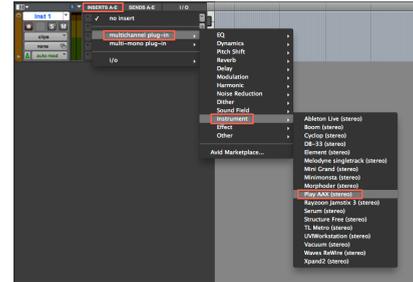
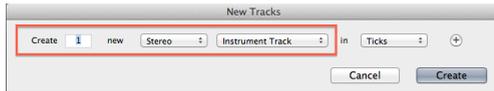
7. Now, each instrument you have loaded into Play will correspond with the midi channels in Logic Pro. You can now record enable the specified track in Logic Pro and and play the corresponding instrument loaded into Play.

## Using Play as a Plug-in with Pro Tools

1. Once Pro Tools is open, navigate to Track in the top menu bar, then down to New Track.



2. Create a new stereo instrument track.

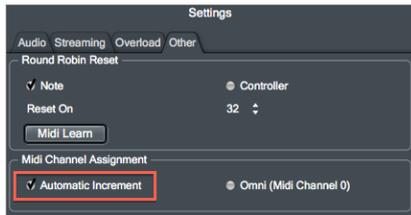


3. Now click inside the Inserts bar of the instrument track, go to multi-channel plug-in, then find Play AAX (stereo) from the list in the Instrument category.

You're now ready to load your first instrument and begin composing!

## Using Play in a Multi-Timbral Setup in Pro Tools

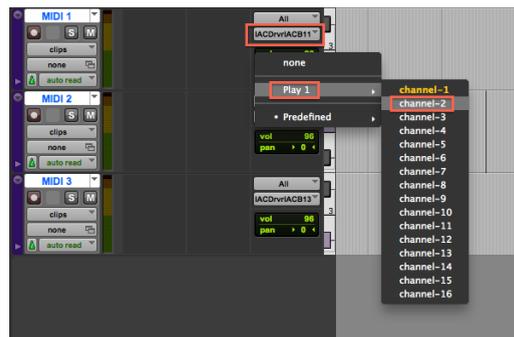
1. Go to Play's Settings menu (top-left corner in Play), then click on the Other tab and choose Auto-Increment from the menu options. This will assign each new instrument you load into Play to the next MIDI channel assignment (1, 2, 3 , etc).



2. In Pro Tools, go to the Track menu and down to New Track. This time, create (x) number of MIDI tracks, where x equals the number of instruments you want to load into Play. The MIDI Standard allows up to 16 MIDI Channels per MIDI Port.

3. On the MIDI track, click inside the MIDI output and choose Play 1, then the channel assignment. Do this for each MIDI track you created until everything is assigned to its own MIDI channel (channel-1, channel-2, and so on).

4. Now begin loading instruments into Play, click 'Add' each time your prompted. If you set the Auto-Increment in Step 5 (above), each Instrument will be assigned to its own MIDI channel and will correspond to the MIDI channel assignments in Pro Tools. In Play, the MIDI channel assignment is in parenthesis next to the Instrument name as seen below.



Record enable the MIDI track in Pro Tools to begin composing!

## Using Play as a Plug-in with Cubase



1. Open Cubase and go to Project > Add Track > Instrument.
2. An 'Add Instrument Track' window will appear. Click in the drop down menu and select Play from the plugin list.



3. Click 'Add Track' to create the Play plugin track.

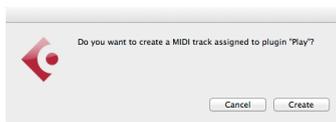


You're now ready to load your first instrument and begin composing!

## Using Play in a Multi-Timbral Setup in Cubase



1. Open Cubase and go to Devices > VST Instruments.
2. In the VST Instrument window, click in the Rack Instrument menu and select Play. You should see a Rack Instrument created inside the VST Instruments window.



3. When asked to create a MIDI track assigned to the Play plugin choose 'Create'.

4. Cubase will create a Rack Instrument and associated MIDI track assigned to Play.



5. Create up to 16 individual MIDI tracks by right-clicking in the empty track space and choosing to 'Add MIDI Track'.

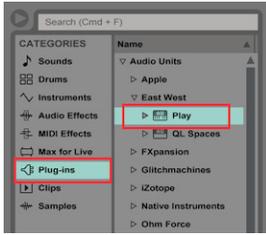


In Cubase's Inspector window, you can check the MIDI Channel assignments of each MIDI track highlighted below.

6. In Play, go to the Settings menu, and click on the Other tab. Under MIDI channel assignment, select Auto-Increment. This will ensure every instrument you load into Play will advance to the next MIDI channel assignment (1, 2, 3, etc) and correspond to the MIDI channel assignments in Cubase. You can begin loading instruments in Play now.



## Using Play as a Plug-in with Ableton Live



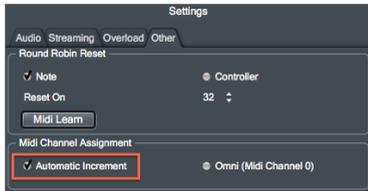
1. Open Live, go to the Browser window and click on 'Plug-ins' in the left column under the 'Categories' heading to find the East West Folder.

2. Double-click on the Play plug-in to load it into an Instrument track. To show and hide the Play interface, click on the Gear icon (Ableton's plug-in edit button).



You're now ready to load your first instrument and begin composing!

## Using Play in a Multi-Timbral Setup in Ableton Live



1. After loading Play as a plugin (see above), open the Play interface and click on the Settings menu (top-left corner in Play), then click on the Other tab and checkmark the box next to Auto-Increment under the MIDI Channel Assignment heading. Click 'Apply' then close.

2. Begin loading instruments. Each new instrument you load into Play is assigned to the next MIDI channel (1, 2, 3...), up to 16 MIDI Channels per MIDI Port. You can see your currently loaded instruments and their MIDI Channel assignments in the Instrument List.



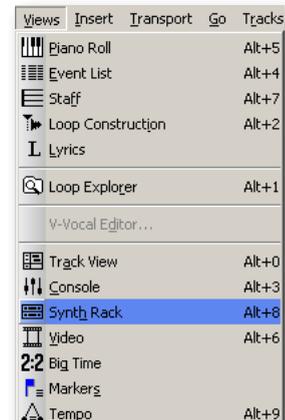
3. In Live, create the same number of MIDI tracks as there are instruments loaded into Play. Now, click in the first field under Live's "MIDI To" menu and assign it to Play. In the second field below that, assign the specific MIDI channel. Each MIDI track will correspond to an Instrument in Play on that same MIDI channel.



## Using Play as a Plug-in with Sonar

In Cakewalk's Sonar, you can load Play from either the Insert menu or the Synth Rack. Whether loaded from the one or the other, every instance running in Sonar appears in the Synth Rack. The picture on the next page shows the Synth Rack with two instances of Play running concurrently.

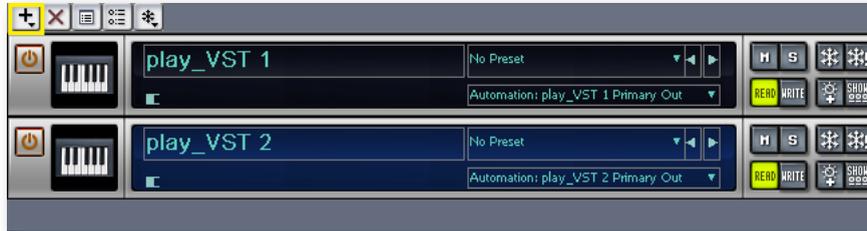
If the Synth Rack is not visible, you can open it from the View Menu, as shown at the right, or by clicking on the button with the same small icon in the toolbar.



**From the Insert Menu:** Open this menu to reveal an option labeled “Soft Synths.” Moving the mouse over that item opens a cascading menu that lists all the installed plug-ins that Sonar has learned about on this computer.

Note that some of the plug-ins, including Play, may be grouped in submenus; for example, all the VST plug-ins are likely to be found by opening the “vstplugins” submenu. Click on the Play VST to insert it.

**From the Synth Rack:** Click on the “Add” button (in the upper-left corner, outlined in yellow in the picture below) to open the same menu described in the two paragraphs immediately above.



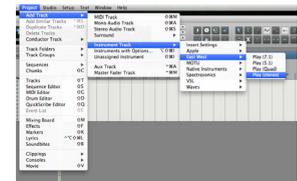
**ADVANCED:** Sonar calls all these plug-ins “Soft Synths,” short for “software synthesizers,” even though Play is not literally a synthesizer. The term “synth” is often used informally to indicate any electronic sound generator, including a sample player such as PLAY.

In a not-yet-used MIDI track in Sonar’s Track View window, assign Play as the track’s plug-in, as shown in the image at the right. Create up to 16 tracks per instance of the Play plug-in. The MIDI channel selected in the “CH” drop-down, also shown in this same image determines which instrument in Play will respond to MIDI notes in the track. Assign the corresponding MIDI channel in PLAY.



## Using Play as a Plug-in with Digital Performer

1. Go to Project > Add Track > Instrument Track > East West > Play [stereo]. This will load a new instance of Play.



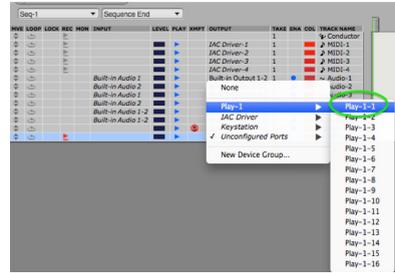
2. Now create a MIDI track by going to Project > Add Track > MIDI Track



3. On this new MIDI track...



... set the output to Play 1-1



4. Now, record-enable the Play track



5. Click on Play's Browser button. In the Favorites window (lower-left) select the desired library from the list, then navigate to the instrument you wish to load.



6. Double-click on the instrument file (.ewi) to load it. Now, highlight the corresponding PLAY 1-1 track in Digital Performer 9 and you're ready to start composing!

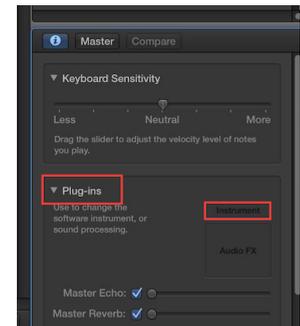
## Using Play as a Plug-in with Garageband

1. Once Garageband has opened, click on the Smart Tools icon in the top-left.



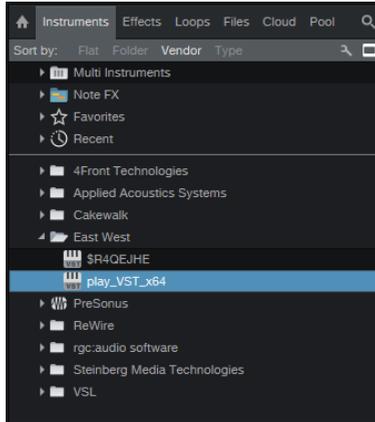
2. In the window that appears, click on the "i" Info Icon in the top-left corner to reveal the plugins button.

3. Click in the Instrument menu and navigate to Play Stereo by going through the following sub-menus: AU Instruments / East West / Play



You're now ready to load an instrument and begin composing!

## Using Play as a Plug-in with Studio One

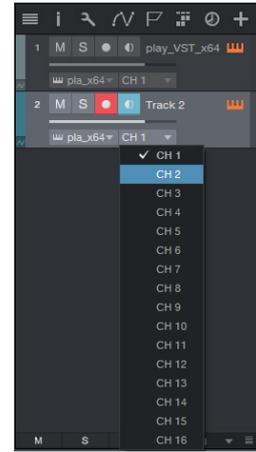


1. Open Studio One and drag Play from the Instruments list and drop it onto the timeline, or on the panel on the left-hand side of the project window.

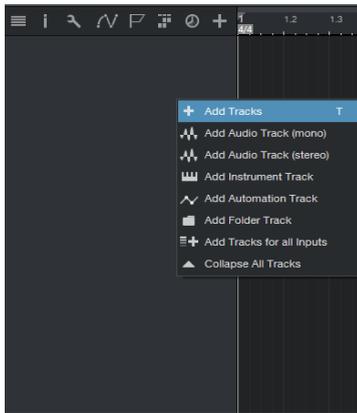
2. Assign the instrument track to Play, on a specified MIDI channel.

3. Open Play, load an instrument and specify the MIDI channel assignment to correspond to the one created in Studio One.

4. For each instrument you load into Play, create another Instrument track in Studio One, assign it to Play and specify the MIDI channel assignment.



## Using Play in a Multi-Timbral Setup with Studio One



1. To add multiple tracks at once using Studio One, right-click (or control-click) in the panel on the left-hand side of the project window and choose 'Add Tracks'.

2. In the 'Add Tracks' window enter a name, select Instrument under 'Type', choose the number of tracks (up to 16) under 'Count', and check the 'Pack Folder' box.

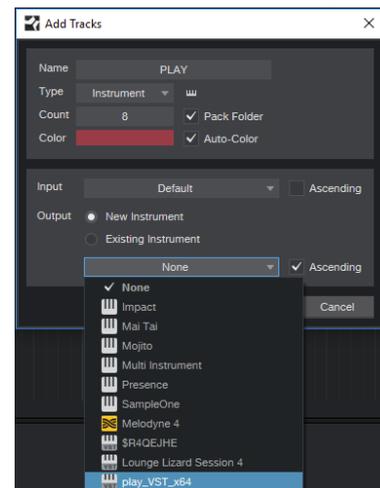
3. Under 'Output', click 'New Instrument', select Play from the drop-down list, and click 'Ok'.

An instance of Play will open with the number of tracks specified in the

'Count' field, all collected into one folder.

4. Open Play and click on the Settings menu (top-left corner), then click on the Other tab and check-mark the box next to Auto-Increment under the MIDI Channel Assignment heading. Click 'Apply' then close.

Each new instrument you load into Play will now be assigned to the next MIDI channel (1, 2, 3...), up to 16 MIDI Channels per MIDI Port. You can see your currently loaded instruments and their MIDI Channel assignments in the Instrument List.



## Automation

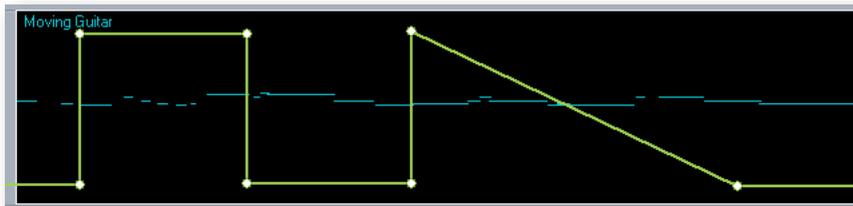
The term “Automation” refers to a facility for manipulating knobs, sliders, and other controls with an external process and being able to repeat the same movements automatically on subsequent playback. This feature is available in many modern sequencers. The details of the implementation vary from one software product to the next, but the goals are similar. Read the sequencer’s documentation to find out how to set up automation that can affect the controls in the Player view within Play.

For example, suppose you want to have an instrument jump back and forth between the left and right speakers and then seem to move slowly from right to left across the “sound stage” of the resulting audio track. It’s possible to manipulate Play’s Pan control to accomplish this effect, and to automatically do it the same way each time the sequencer’s project is played back.

The two most common ways to achieve such an effect are as follows:

- **Record the movements** of a physical knob—or slider—on MIDI hardware known as a control surface. To do this, map a specific hardware control to Play’s Pan knob and then turn on automation recording for that mapping. While the project is playing in the sequencer, move the hardware control as needed. At the end turn off automation recording. The next time you play back the project, the Pan knob will move the same way without having to move it yourself.
- **Draw the automation** in what’s called an “envelope.” To do this, set up a mapping so that the sequencer knows which of Play’s controls to manipulate. Then create an envelope for that control in the appropriate track of the sequencer. Then use the tools provided to draw in the movement of the knob. The following image shows such an envelope for the panning example described above.

Specific details on how to do both of these tasks with your sequencer can be found in its documentation.



In this image, the short, horizontal blue segments are MIDI notes played on a guitar. The continuous green line indicates graphically the position of the Pan knob: 90% left, 90% right, left, right, and then moving slowly to the left.



## Chapter 6: Using MIDI Continuous Controllers

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## What Is MIDI?

MIDI is a digital data specification by which one musical device can communicate with another to describe a musical performance. A “musical device” can be an electronic instrument as well as a computer running MIDI-aware programs. (The term MIDI is an acronym for the name, “Musical Instrument Digital Interface.” The specification is maintained and published by the MIDI Manufacturers Association.)

MIDI data describes much more than what notes are to be played and when. It includes information describing dynamics, tempo, expression, and much more. (See the table below.) One thing that MIDI cannot specify, though, is the sound of each note. The exact same MIDI data can be sent to sound generators that imitate a flute and a ukulele, with very different results. While this independence of MIDI data from the audio can sometimes cause problems, it can be used to great advantage with sound libraries like those from EastWest.

This spec has become the standard means for conveying musical data in several very different types of environments:

- MIDI can be used in real time. A musician plays a keyboard—or other instrument that can generate MIDI—and the data is sent via a cable to a sound generator that understands the codes. The keyboard makes no musical sound itself, relying on the device at the other end of the MIDI cable to do so.
- MIDI can be stored in a program for later playback. Such a program is called a sequencer. A musical piece stored in a sequencer can consist of any number of concurrent musical lines, from one to an entire orchestra—and more.
- MIDI can be used to share musical data between computer programs. A typical use of this capability is the export of data from a sequencer (good at creating audio files) and its import into a notation program (good at creating printed scores). Or *vice versa*.
- A file containing MIDI data can be sent from one computer to another as a way of sharing a musical piece. Because there is no audio data in the file, a “MIDI song” is typically much smaller than even a compressed audio file, such as an MP3. The downside is that the instrumentation and sound of the file on the receiver’s computer are entirely dependent on the local setup, especially the sound card (if the piece can be played at all). While the notes and rhythm will be preserved, there’s no guarantee the sounds of the instruments will be the same. Ways around this problem are out of scope in this manual.

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**ADVANCED:** Play, like many other MIDI-based programs, calls the 16 MIDI channels 1 to 16. Some other software, including some host programs, may number the MIDI channels 0 to 15 (which is still 16 separate numbers). If you set matching values in Play and the host sequencer, but the expected instrument does not sound, try adding one to the channel number in Play or subtracting one in the sequencer (but not both). If the instrument now sounds correctly, you have found such a mismatch.

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## The Most Common MIDI Continuous Controllers

In addition to data about notes, tempo, meter, the published spec for MIDI defines continuous controllers so that various aspects of a performance can be conveyed along with the basic note data. There are potentially up to 128 possible continuous controllers, but not all numbers from 0 to 127 are necessarily defined. Below are some of the most commonly used MIDI continuous controllers (CCs).

MOST COMMON MIDI CONTINUOUS CONTROLLERS (CC)			
0	Bank Select	64	Hold Pedal (on/off)
1	Modulation Wheel *	65	Portamento (on/off)
2	Breath Controller	66	Sostenuto Pedal (on/off)
4	Foot Pedal	67	Soft Pedal (on/off)
5	Portamento Time	68	Legato Pedal (on/off)
6	Data Entry	69	Hold 2 Pedal (on/off)
7	Volume *	120	All Sound Off
8	Balance	121	All Controllers Off
10	Pan Position *	123	All Notes Off
11	Expression *	124	Omni Mode Off
12	Effect Control 1	125	Omni Mode On
13	Effect Control 2	126	Mono Operation
		127	Poly Operation

This information is included here for the benefit of those users who might choose to use these MIDI continuous controllers (CCs) to control a performance in ways beyond the scope of this manual. Here, we will discuss only four of the CCs: 1, 7, 10, and 11, as indicated by the asterisks in the table.

## Using MIDI to Shape a Performance

The sound of a performance by a live musician differs from that of a cheap music box in all the ways that the musician interprets the music: through tempo adjustments, expressive dynamics, accents, timbre changes, decisions about which articulation to use for each note, and so on.

But a MIDI stream is only digital data; it's the job of the musician—whether playing in real time or adding data to a sequencer project—to use MIDI to convey his or her musical intentions. The MIDI standard was designed to convey all these interpretive elements. And the Play Libraries were designed to respond appropriately to expressive cues.

## MIDI CC 1: Mod Wheel

Mod Wheel data is added to the MIDI stream each time the position of the wheel changes. There are 128 positions from Off (value = 0) to Full (value = 127). How the sound generator responds to Mod Wheel values is implementation-specific. It might adjust the distortion on an electric guitar, affect the loudness in a Dynamic Cross-Fade patch (DXF), or change the amount of an LFO filter on the patch. Really, almost anything is possible.

Some of the Play Libraries include articulation files called Dynamic Cross Fades, also called “DXF files.” As the name indicates, the Mod Wheel is used to fade between two or more sets of samples that differ in loudness—and usually, therefore, timbre as well.

A typical articulation file contains several layers of samples, each layer recorded with the instrument being played at a specific loudness: such as *pp*, *mp*, *mf*, or *ff*. And typically, it is the Velocity parameter of the note that determines which layer is played back. In a DXF file, it is the position of the Mod Wheel that determines the layer. That difference means that which sample is played can be modified mid-note, instead of having to wait for the next Note-On event. The documentation for those libraries that include such files provides more information where the articulations are described.

## MIDI CC 7: Volume

Both CC7 and CC11 affect dynamics. In Play Libraries, Volume data is designed to be relatively static, perhaps even to be set once near the beginning and left unchanged thereafter. The recommendation is to use Volume to adjust the relative loudness of each track; if it’s discovered during a final mix session that the lead guitar needs to be boosted throughout the piece—or in certain large sections—adjust the Volume where appropriate. Expression is designed more for continuous dynamics; see below.

## MIDI CC 10: Panning

Sound generators, including Play Libraries, respond to Panning codes by adjusting the relative loudness of the sound in the two stereo channels, giving the listener an impression of the instrument being left or right of the center line, and by how much, if any. Some libraries may have the instrument already positioned correctly in the sound space, such as instruments in a symphony orchestra being recorded where they normally sit in a concert hall. Listen to the sounds in your specific library to see whether that’s the case.

## MIDI CC 11: Expression

As mentioned above, Expression and Volume are two different codes associated with dynamics. CC11 is *intended* to be used to add the moment-by-moment dynamics that mimic the way live musicians are constantly adjusting the force of the breath or the pressure of the bow on the strings to achieve musicality. These changes produce the dynamic arc of a melody or even swells in individual notes.

## MIDI Learn

Most controls in Play can be connected to MIDI Continuous Controllers (CCs) using the MIDI Learn feature. To engage this feature, right-click on a control in the Play interface and click on “Midi Learn...”. Then move a knob or slider (CCs) on an attached MIDI controller. The control in the Play interface on which you right-clicked will receive the incoming MIDI continuous controller (CC) data, and assign that CC number to the control.

To disconnect a control from the learned CC, right-click and select “Detach From Midi”. In this way you can adjust instrument parameters in real time. It can be done either from a MIDI keyboard or other control surface during a live performance, or by capturing the MIDI continuous controller (CC) data in a sequence and playing it back every time the sequence is run.

## Using the Different MIDI Modes

Two additional MIDI Modes, Multi and MPE, have been added to the MIDI channel dropdown menu in Play. These two new modes are in addition to the option of assigning each instrument to its own MIDI channel (1-16), or assigning an instrument to receive MIDI on all channels (OMNI). Like OMNI mode, these new modes receive MIDI on all channels, but differ in the way they handle Mod Wheel (CC1), Expression (CC11) and Pitch Bend messages, which in most cases can be applied on a per-note basis. Global MIDI messages, like Sustain Pedal (CC64), are still treated globally and will affect all notes, regardless of channel.

**OMNI** - this mode will set an instrument to receive MIDI on all channels (1-16), with Mod Wheel (CC1), Expression (CC11) and Pitch Bend modulation applied to notes on all MIDI channels. This is useful when layering sounds intended to be played together, like when stacking separate string sections together to create a full string patch.

**MULTI** - this mode is useful to MIDI guitar controllers by allowing per-note control of Mod Wheel (CC1), Expression (CC11) and Pitch Bend by sending those MIDI messages only to the voices on the same MIDI channel as the controller event.

**MPE** - this mode stands for “Multi-Dimensional Polyphonic Expression” and is a MIDI standard developed by the MIDI Manufacturer Association to accommodate a new class of MIDI controllers like the Roli Keyboard, the Linnstrument, and the EigenHarp.

In this mode, each note is sent to its own MIDI channel, cycling through an allocated block of channels that enables MIDI messages (restricted to Note On, Note Off, Channel Pressure, Pitch Bend and CC74) to be sent per-note, while global MIDI messages like CC7 (Volume) and CC64 (Sustain) are applied to all voices, regardless of the MIDI channel they were sent over.