



THE PLAY 5 SYSTEM

USER MANUAL



EASTWEST SOUNDS

THE EASTWEST PLAY 5 SYSTEM

The information in this document is subject to change without notice and does not represent a commitment on the part of East West Sounds, Inc. The software and sounds described in this document are subject to License Agreements and may not be copied to other media. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without prior written permission by East West Sounds, Inc. All product and company names are TM or ® trademarks of their respective owners.

Solid State Logic (SSL) Channel Strip, Transient Shaper, and Stereo Compressor licensed from Solid State Logic. SSL and Solid State Logic are registered trademarks of Red Lion 49 Ltd.

© East West Sounds, Inc., 2007–2016. All rights reserved.

East West Sounds, Inc.
6000 Sunset Blvd.
Hollywood, CA 90028
USA

1-323-957-6969 voice

1-323-957-6966 fax

For questions about licensing of products: licensing@eastwestsounds.com

For more general information about products: info@eastwestsounds.com

For technical support for products: <http://www.soundsonline.com/Support>

Credits

Project Management

Doug Rogers and Rhys Moody

Software Development

Doug Rogers, Nick Phoenix, Rhys Moody, Justin Harris, Wolfgang Kundrus, Klaus Lebkücher, Klaus Voltmer, Adam Higerd, Bartłomiej Bazior, Stefan Holec, Truc Phan, Thomas Merkle, Shaun Ellwood, Helen Evans, Elon Arbiture, Chris Jeffs, Julian Ringel, Patrick Stinson, Ezra Buchla, Stefan Kersten, Toine Diepstraten.

Manual

Jason Coffman



1. Welcome

- 2 About EastWest**
- 2 About Doug Rogers**
- 3 EastWest Studios**
- 5 The PLAY System**
- 6 A Note About the Documentation**
- 7 Online Documentation and Other Resources**

[**LINK TO MASTER NAVIGATION DOCUMENT \(MND\)**](#)

Welcome

About EastWest

EastWest (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 30 years experience in the audio industry and is the recipient of over 70 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 more than 27 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 30 years experience in the audio industry, founder and producer Doug Rogers is the recipient of over 70 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 more than 27 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

THE EASTWEST PLAY 5 SYSTEM

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 17 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.

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 Monday,” 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

THE EASTWEST PLAY 5 SYSTEM

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

The PLAY System

The PLAY System is comprised of PLAY, an advanced sample playback engine, and an associated collection of virtual instruments, called PLAY Libraries.

PLAY

PLAY was built from the ground up with the highest quality audio engine and most powerful effects available. Designed around 3 main views, the Player view's interchangeable interface offers essential controls for each PLAY Library.

To learn more about PLAY, click here: [4. Getting Started with PLAY](#)

PLAYER view



BROWSER view

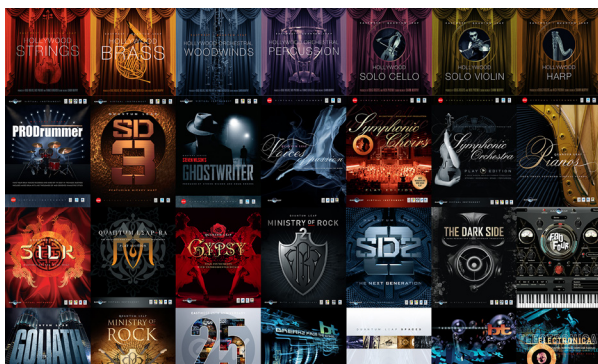


MIXER view



PLAY Libraries

PLAY Libraries are the winner of over 70 industry awards, making EastWest's vast virtual instrument collection the industry leader of highly detailed sampled instruments. Each



PLAY Library has a custom interface that seamlessly integrates into PLAY, providing a set of controls designed to accommodate the unique needs of that library. Altogether, they make up a expansive library of sampled instruments that range from orchestral to rock to ethnic to electronic and beyond.

To learn more about PLAY Libraries, click here: [5. Overview of PLAY Libraries](#)

New Features and Improvements in PLAY 5

- faster load times
- improved CPU usage
- better memory handling
- adjustable streaming settings per drive
- SSL / EW - FX Suite included free for all PLAY 5 Users
- Ohmicide and Amp Simulator added to Goliath

A Note About the Documentation

All documentation for PLAY and individual PLAY Libraries is provided as a collection of Adobe Acrobat files (PDFs) that can be viewed on electronic devices or printed to paper.

One advantage of reading on an electronic device is the ability to jump directly to a referenced page by using hyperlinks. Such hyperlinks are available in the list of sections in each chapter title page, as well as for certain individual words and phrases within the chapters.

Opening the Bookmarks pane along the left edge of the PDF allows you to jump directly to a topic from the section names, or to specific pages by clicking on thumbnails (small images of each page). Please note that older versions of Adobe Acrobat Reader might not support all these features, but the latest version is available for free on the Adobe website.

Manuals for Specific PLAY Libraries

Each PLAY Library has its own PDF manual that is installed into the following directories:

- (Win): C:\Program Files\EastWest\Documentation
- (Mac): MacHD\Applications\EastWest\Documentation

Specific information related to PLAY Libraries includes:

- the controls in the user interface
- the modifiable parameters for the articulations
- the list of available articulations, and their intended uses

A description of how to use the PLAY Software, and any information common to all Play Libraries is contained in this manual.

The Master Navigation Document

A one-page PDF called the Master Navigation Document (MND) is also provided to allow users the ability to jump between the PLAY System manual and the specific PLAY Library manuals using hyperlinks.

Hyperlinks to the Master Navigation Document (MND) can be found in the lower-right corner at the beginning of each Chapter in the PLAY Library manuals. From there, you can open any other document in the collection.

For example, say you're reading the PLAY System manual and need to access the Fab Four library manual. Simply go to any of the Chapter title pages in the PLAY System manual and click the link that says, "Master Navigation Document" (MND). This will open the MND document and display the icons for all PLAY Libraries. Clicking on the Fab Four icon will open that manual.

Regarding the Included Images

Each PLAY Library has a custom interface. Images for various PLAY Libraries are included in this manual, but it may not reflect what you see on screen. Images specific to a particular PLAY Library are included in the library-specific manuals detailed below.

Online Documentation and Other Resources

Please visit EastWest's online [Support Center](#) at Soundsonline.com for:

- information made available after these manuals were written
- FAQ pages for answers to questions you may have
- news about upcoming releases

You can also visit the [Soundsonline Forums](#). There you can read comments and questions from others who use EastWest products and post your own. The many forum participants are a good source of helpful information about both the technical and musical aspects of this software.

Please note! If you visit the forums to receive support from EastWest (instead of going directly to the Support Center listed above), make sure you post your support request in the Support forum and not in the General Discussion forum.



2. System Requirements

- 9 Computer Specifications**
- 10 Hard Drive Performance**
- 11 Space Requirements**

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

System Requirements

The Play 5 Software will run on any Windows or MacOS system that meets at least the minimum requirements outlined below. For larger projects, using a more powerful computer system than the recommended system is encouraged. That means a faster processor, more memory (RAM), an SSD with a fast connection, and so on.

Please see the suggestions for improving performance in the online [Support Center](#)

Computer Specifications

The specifications below list the computer hardware and software required to install the Play Software and run a small project. These are only guidelines, as the amount of processing required to run a sequencer, audio and effects processors, other plug-ins, and so on, draw from finite computer resources. Please note, an internet connection is required for one-time product activation.

Minimum System:

- Intel Core 2 Duo (or equivalent) processor, running at 2.1 GHz (or above)
- 8 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 as a plug-in.
- 7200 RPM or faster (non energy saving) hard drive for sample streaming

Average System:

- Intel 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
- a 64-bit operating system; and a 64-bit host when running as a plug-in
- 7200 RPM or faster (non energy saving) hard drive for sample streaming

Recommended System:

- 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 as a plug-in.
- SSD (Solid State Drive) for sample streaming

IMPORTANT NOTE FOR 32-BIT USERS! PLAY 5 does not support 32-bit Operating Systems or DAWs. The 32-bit stand-alone and plug-ins components are no longer installed. If you still need to use a 32-bit version of PLAY, please continue using PLAY 4.

IMPORTANT NOTE FOR WINDOWS USERS! Our tests have shown that the improvements in performance are more pronounced on Windows 8 and Windows 10 than on Windows 7. This is especially true when loading from a traditional HDD.

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.

Drive Speed and Connection Type

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.

In order to load and playback big templates with resource intensive Play Libraries like the Hollywood Orchestra or ProDrummer series, SSDs may be your only option. This is especially true when loading additional microphone positions, which add to the simultaneous voice count.

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.

Other Considerations

Rounding out this chapter are some of the other factors that can affect performance when streaming large sample libraries from a hard drive.

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

THE EASTWEST PLAY 5 SYSTEM

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” 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.

COMPARISON OF EDITIONS				
	Silver	Gold	Platinum	Diamond
Instruments	Selection	All	All	All
Bit Depth	16-bit	16-bit	24-bit	24-bit
Mic Positions	1	1	3	5

Space Requirements

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.

THE EASTWEST PLAY 5 SYSTEM

DISK SPACE REQUIREMENTS	SILVER (GB)	GOLD (GB)	DIAMOND / PLATINUM (GB)
HOLLYWOOD ORCHESTRA SERIES	39	95	709
Hollywood Strings	12	47	336
Hollywood Brass	10	20	159
Hollywood Orchestra Woodwinds	12	18	144
Hollywood Orchestra Percussion	5	10	70
HOLLYWOOD SOLO INSTRUMENTS	-	18	91
Hollywood Harp	-	2	15
Hollywood Solo Cello	-	8	38
Hollywood Solo Violin	-	8	38
PIANOS	26	50	282
Bechstein	6	12	73
Bosendorfer	8	18	87
Steinway	7	11	58
Yamaha	5	10	46
SYMPHONIC ORCHESTRA	11	33	124 <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>
SYMPHONIC CHOIRS	-	9	41
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.

DISK SPACE REQUIREMENTS	(GB)
Stormdrum 2	14
Stormdrum 2 Pro Expansion	4
Stormdrum 3	84
Silk	25
Ra	14
Gypsy	12
Voices of Passion	8

continued

THE EASTWEST PLAY 5 SYSTEM

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.

DISK SPACE REQUIREMENTS	(GB)
25 ANNIVERSARY COLLECTION	36
'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
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
<i>continued</i>	

THE EASTWEST PLAY 5 SYSTEM

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



3. Installation and Activation

- 16 **Creating an EastWest Account**
- 16 **Installation and Activation Overview**
- 17 **Installation and Activation Walkthrough**
- 17 **Step 1: Download and Install the Installation Center**
- 18 **Step 2: Download and Install the latest PLAY Software Update**
- 21 **Step 3: Activate the PLAY product license(s)**
- 22 **Step 4: Installing the PLAY Libraries**
- 26 **Further Managing PLAY Product Licenses**

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

Installation and Activation

The EastWest Installation Center makes installation and activation of your PLAY products a straight forward process. 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](#).

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

Email: [Edit Your Profile](#)

iLok Account: [Change_email](#)

Your iLok account username (inserted or provided by us) controls access to your licensed products. Any changes can only be done by licensing@eastwestsounds.com and may result in significant delays. [Change_password](#)

VAT Exemption: [SUBMIT](#) [Set Preferences](#)

Example: GB123456789 [See Orders](#)

COMPOSER.CLOUD You currently don't have an active ComposerCloud subscription. [Click here to get started.](#) [Update Payment Info](#)

SUPPORT [Visit SUPPORT CENTER](#)

[See Support Cases](#)

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. The licensing department does their best to answer every case within a 24 hour timeframe, except on the weekends.

Installation and Activation Overview

Most customers will be able to take care of their entire installation and activation setup within the Installation Center, but there are a few exceptions noted in the steps below. The general outline of the setup process is:

- Download and install the Installation Center, then sign in.
- Download and install the latest PLAY software update.
- Activate your PLAY product license(s).
- Download and install PLAY Libraries.

Purchasing a Sound Data Hard Drive

A Sound Data Hard Drive is necessary for PLAY Libraries that are too large to download. Purchasing a Sound Data Hard Drive can also eliminate the frustration of a slow internet connection, simplify the installation process and serve as a backup solution.

THE EASTWEST PLAY 5 SYSTEM

The setup instructions are similar to those outlined above, except that instead of downloading PLAY Libraries from the Installation Center, they are transferred from the Sound Data Hard Drive to the preferred destination.

Both the [CCC Gold Sound Data Hard Drive](#) and the [CCC Pro Sound Data Hard Drive](#) can also serve to playback samples from, but 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 (see [Hard Drive Performance](#)).

Purchasing a Boxed DVD Product

If you purchased an EastWest product through a retailer, you will likely 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 noted below.

Installation and Activation Walkthrough

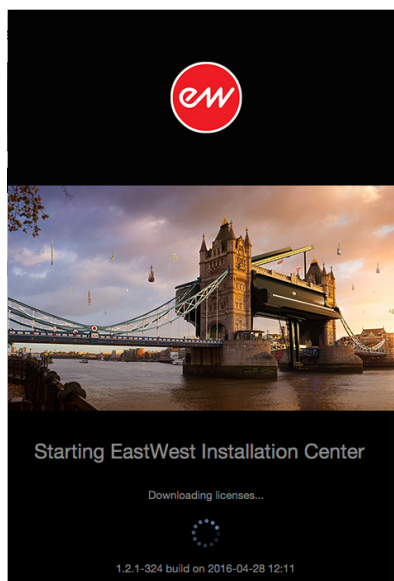
This walkthrough will show you how to install, activate and download your PLAY products.

Step 1: Download and 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:

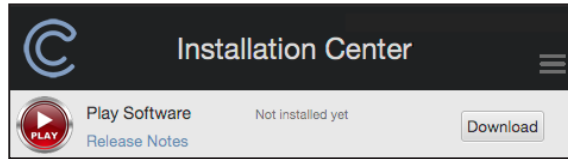
- (Mac) Mac HD / Applications / East West / EW Installation Center.
- (Win) C: / Program Files / East West / EW Installation Center

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



Step 2: Download and Install the latest PLAY Software Update

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.



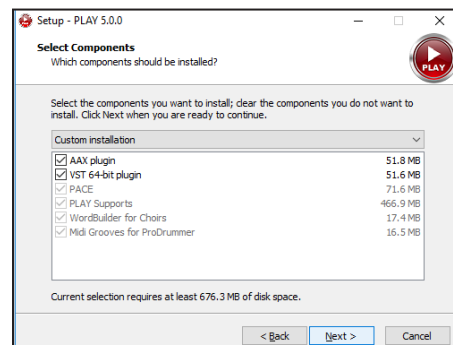
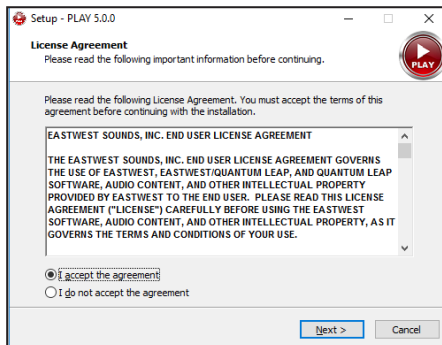
The PLAY software update is also available to download at the EastWest [Support Center](#).

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.

Install the latest PLAY Software Update (Win)

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

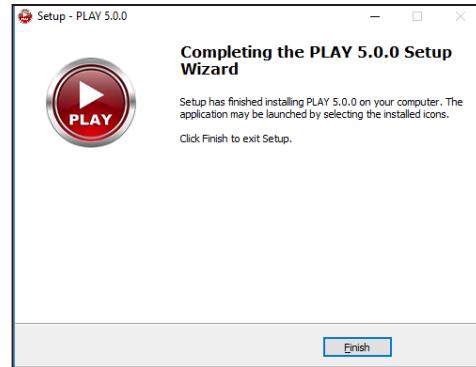
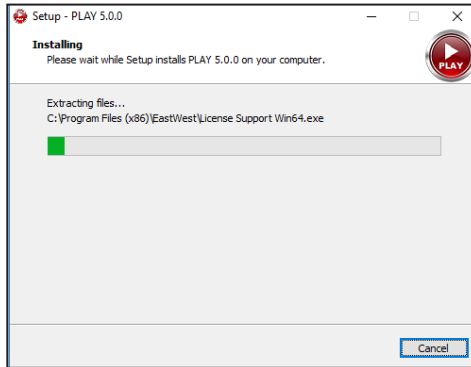
After a welcome window, the **License Agreement** screen will appear. When asked to agree to the terms of the EastWest End User License Agreement, select 'I accept the agreement' and then click 'Next'. If you do not agree, then you will not be able to install the PLAY software.



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.

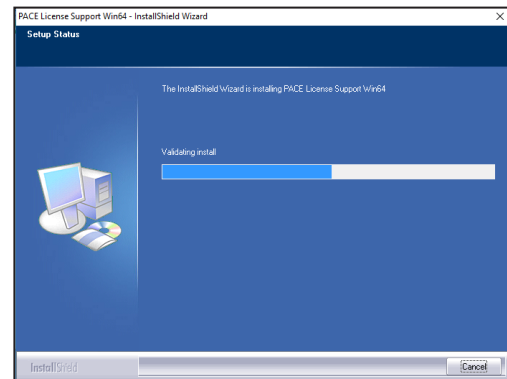
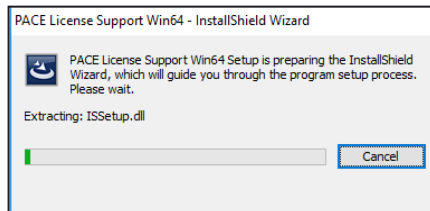
Next, a **Ready To Install** dialog will display a summary of installation. Click 'Next' to begin the installation process.

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



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.



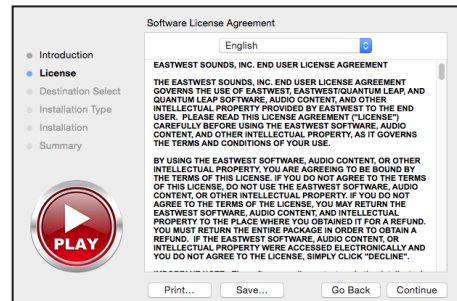
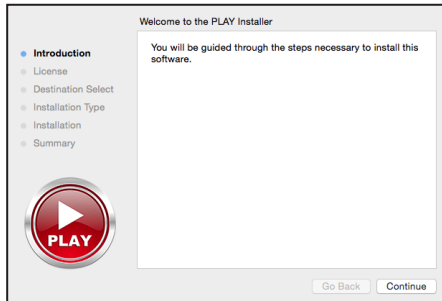
Install the latest PLAY Software Update (Mac)

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.

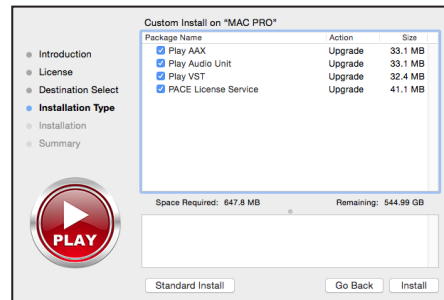
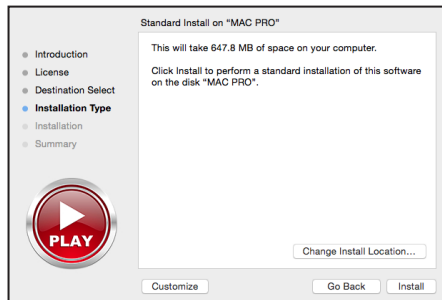
Click 'Continue' in the **Introduction** dialog to proceed to the **License** dialog. Click 'Continue', then click 'Agree' to accept the terms of the EastWest End User License Agreement. If you do not agree, you will not be able to install the PLAY software.

THE EASTWEST PLAY 5 SYSTEM

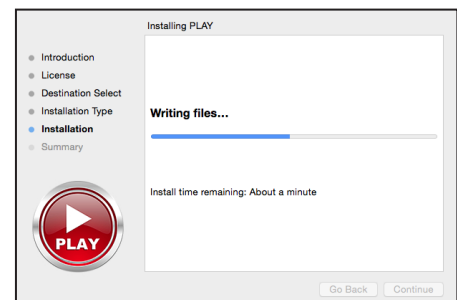
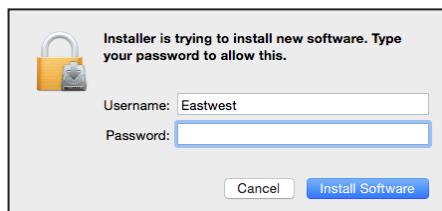


The **Installation Type** dialog will perform a Standard Installation by default. Click 'Install' to perform a Standard Installation (recommended).

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'.



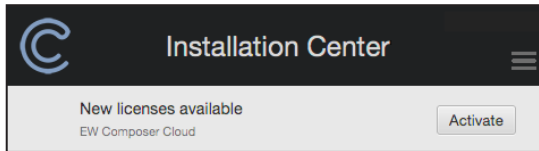
The **Installation** window will appear displaying a progress bar of the installation process. When it's done, the **Summary** window will report that the installation was successful and allow you to click 'Close' to complete the installation.

Step 3: Activate the PLAY product license(s)

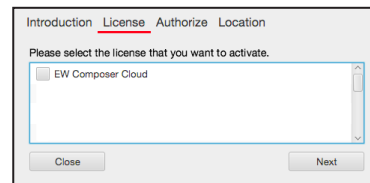
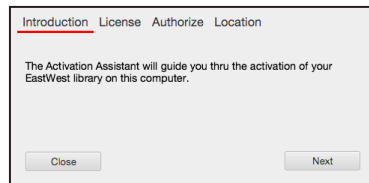
When you purchase a product through Soundsonline.com, a license for the product you purchased will be deposited directly into the iLok account associated with your EastWest account. Please see the beginning of this chapter for account details.

Use the Installation Center to Activate a License

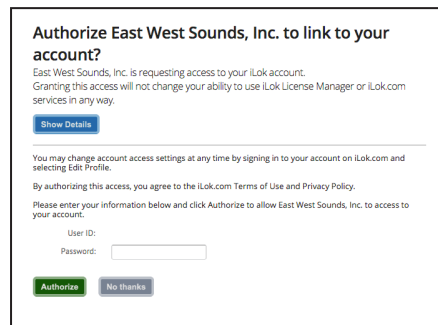
At the top of the Installation Center, click the “Activate” button to open the Activation Assistant window, which will lead you through the activation process.



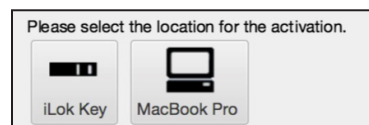
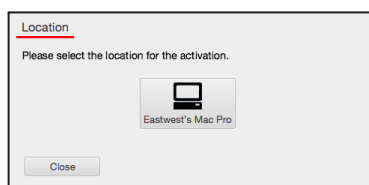
Click ‘Next’ to proceed past the **Introduction** tab, then select the license(s) you want to activate in the **License** tab and click ‘Next’.



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.



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

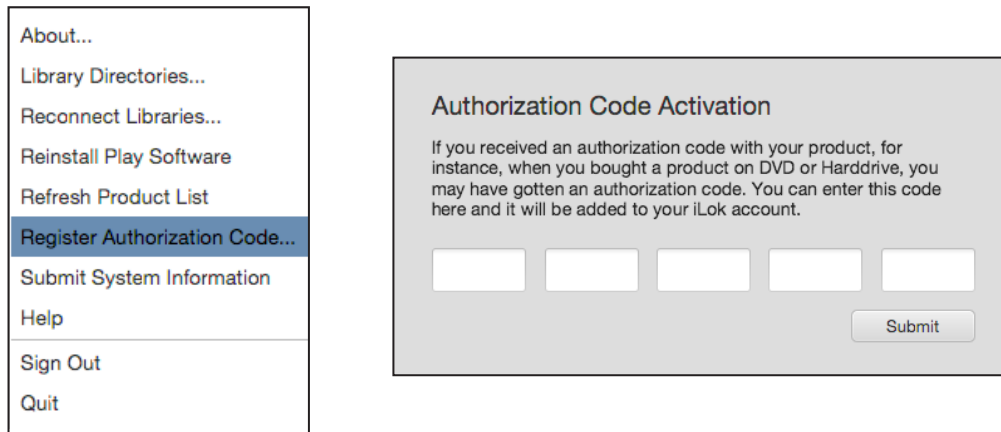


Activation Instructions for Boxed DVD Products:

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. Now activate that license by following the instructions on how to [Use the Installation Center to Activate a License](#).

Step 4: Installing the PLAY Libraries

Please review the section on [Hard Drive Performance](#) to determine the best location to install the PLAY Libraries to, and check the [Space Requirements](#) section to determine if you have enough free disk space on the drive you intend to install the PLAY Libraries to.

Download a PLAY Library from the Installation Center

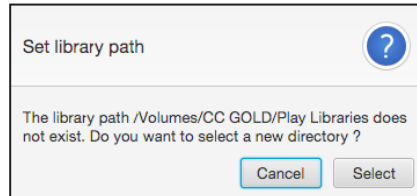
Before you begin downloading, create a new folder at the desired hard drive location and name it ‘Play Libraries’.

In the Installation Center, click the download icon (below) within the product panel.

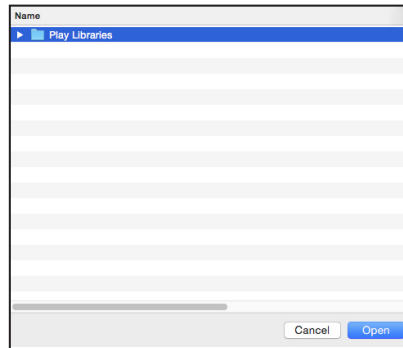


THE EASTWEST PLAY 5 SYSTEM

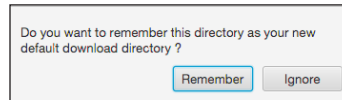
A dialog window will appear asking you to 'set library path' (below). Click the 'Select' button to open a finder window.



In the finder window, navigate to the 'Play Libraries' folder you created in the step above.



If you want all PLAY Libraries to be installed to this location, click "Remember".



The download process will now begin, with a blue bar displaying the download progress. Hit the "X" button if you want to pause the download process.



Press "Resume" to continue the download where you left off.



The remaining time left to complete the download process is found at the bottom of the Installation Center

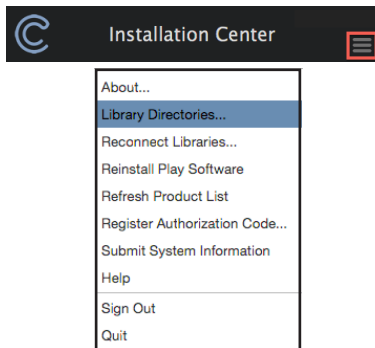


THE EASTWEST PLAY 5 SYSTEM

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.



In the Installation Center, click on the Main Menu (top-right) and select the 'Library Directories' option from the list. In the bottom-left (below) corner of that window, click the 'Add' button and navigate to the 'Play Libraries' folder that you just transferred (or on the supplied hard drive).

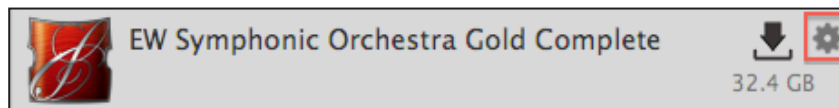


Click the 'Play Libraries' folder to select it, then click the 'Open' button to add it to the Library Directories list. Closing the Library Directories window should begin the process of adding each PLAY Library to the Favorites window in PLAY's Browser view.

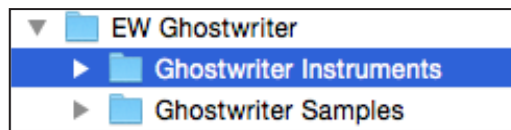
You can also manually initiate the process by selecting 'Reconnect Libraries' in the Main Menu after adding it to the Library Directories list.

Using the 'Locate Directory' Option

To add a single PLAY Library to PLAY, hover the mouse over a product panel to display a gear icon (below). Click on this gear icon and choose the option "Locate Directory" from the pop-up menu to open a finder window.



Navigate to and select the Instrument folder that is within the product's main library folder (below).



Please note! PLAY Libraries can be installed to multiple hard drive locations. Visit East-West's online [Support Center](#) for more information.

Installing a PLAY Library from a Boxed DVD Products (MAC)

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 - 8 for each subsequent disc until all library content has been installed. You're now ready for the next phase of the installation process.

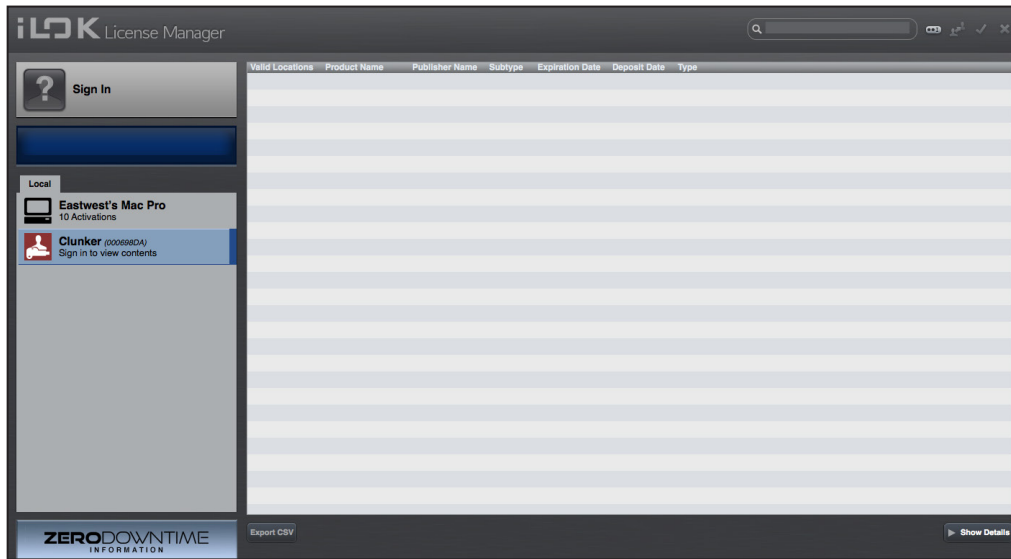
Installing a PLAY Library from a Boxed DVD Products (WIN)

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

Further Managing PLAY Product Licenses

EastWest uses the PACE iLOK system for license management. While a physical iLOK key is optional, an iLOK account must be entered into your EastWest account details. 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](#). Please see the iLok.com website for more detailed information on license management.



The iLOK Security Key (optional)

The iLOK Key is a hardware device made available by PACE Anti-Piracy, Inc., that holds licenses for a variety of software developers. Licenses for EastWest products can now be activated directly on your computer (called a machine-based license), so an iLOK key is now optional.

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.





4. Getting Started with PLAY

- 28 **PLAY Overview**
- 30 **Standalone and Plug-in Modes**
- 31 **Exploring the Settings Menu**
- 37 **Generating a Sound**
- 37 **Using a MIDI Keyboard**
- 38 **Next Steps**

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

Getting Started with PLAY

This chapter introduces the basics of working with PLAY and walks you through the process of setting it up to work in your computer's hardware and software environment. Most of these settings only need to be completed after the initial installation of the PLAY, but others you may need to return to in order to fine-tune the performance of PLAY based on your computer and project specifications.

PLAY Overview

PLAY is made up of 3 main views that can be accessed by clicking on the View Selector buttons at the top of the PLAY interface. The three main views (Player, Browser and Mixer) are described in brief below, and in further detail in later chapters.

PLAY can operate in Standalone Mode, where it runs as its own program with audio and MIDI connections made directly with the sound card's driver, and as a Plugin, where it runs as part of a host program that handles all audio and MIDI connections.

The Player View

To learn more about the Player view, click here: [6. The Player View](#)



The Player view displays a custom interface for each PLAY Library. The controls and layout in the central section are designed with the specific needs of each library. Other aspects of the PLAY Software, such as the Browser and Mixer views, remain the same throughout all libraries.



The custom interface displayed in the Player view reflects the currently selected instrument, which appears in the Instrument List with a check-mark next to it. The Instrument List is a drop-down menu located in the top-right corner of PLAY, and contains a list of all currently loaded instruments and their MIDI channel assignments.



THE EASTWEST PLAY 5 SYSTEM

The Browser View

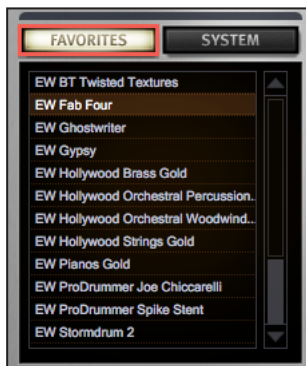
To learn more about the Browser view, click here: [7. The Browser View](#)



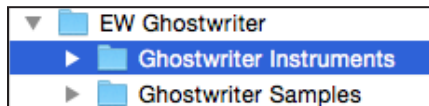
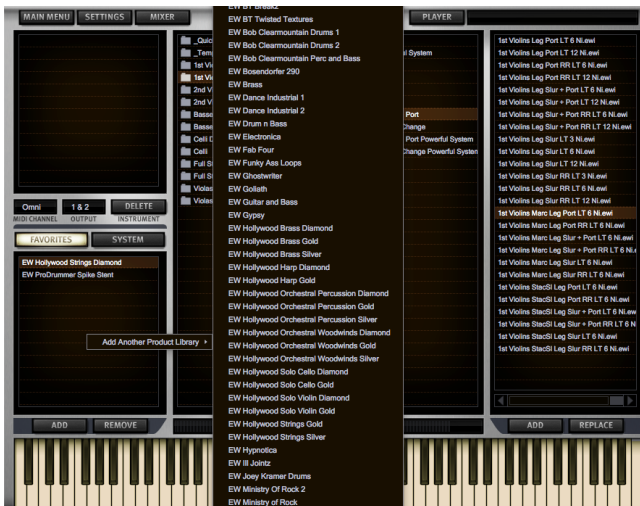
The Browser view provides access to all installed PLAY Libraries. In addition to the ability to load and unload instruments, MIDI channels and audio outputs can be assigned.

How to Load an Instrument

To load an instrument, click on the Browser button in the top of the interface. Look in the lower-left corner in the 'Favorites' window, which displays all installed products. Click on a product and navigate through the sub-menus until you reach an instrument [.ewi] file. Click on the instrument file, then click the 'Add' button in the lower-right, or simply double-click on the instrument file.



Please note! If you do not see a particular PLAY Library in the Favorites window, simply right-click inside the window and select "Add Another Product Library" from the pop up menu and choose the PLAY Library from the list. Then, navigate to and select that products Instrument folder (within the main library folder) and click choose.



The Mixer View

To learn more about the Mixer view, click here: [8. The Mixer View](#)



The Mixer view displays a channel strip for each loaded instrument, allowing you to control volume, panning, mute, solo, and FX. Instruments with multiple microphone positions also have a button that opens and closes a sub-mixer containing a channel strip for each microphone position.

The FX button enables the SSL / EW - FX GLOBAL SUITE, which is now included for free for all PLAY 5 users. Also new to PLAY 5, OhmForce's Ohmicide and EastWest's Amp Simulator are available for the PLAY Library, Goliath.



Standalone and Plug-in Modes

To ensure the PLAY 5 Software has been installed properly, go to one of the following directories based on your operating system and launch PLAY 5 in stand-alone mode.

- (Win) C:/ Program Files / East West / PLAY
- (Mac): MacHD / Applications / East West / PLAY

If PLAY 5 opens up, then the software was installed correctly. If you get an error message, or you encounter technical issues, try running the latest PLAY Software Update as described in the Installation and Authorization chapter. If you continue to experience problems, please contact EastWest Technical Support.

- In **Standalone Mode** PLAY runs as its own program. MIDI and audio connections are usually made directly with the sound card's driver.

Only one instance of PLAY can be running in standalone mode at a time. It's possible to open as many instruments within that instance as your computer's resources allow. The number of unique MIDI channels for playing instruments within the standalone version of PLAY is limited by the number of MIDI ports defined; for example, if 10 MIDI ports are

available then 160 instruments can create 160 unique channels. That's 10 ports times 16 MIDI channels per port.

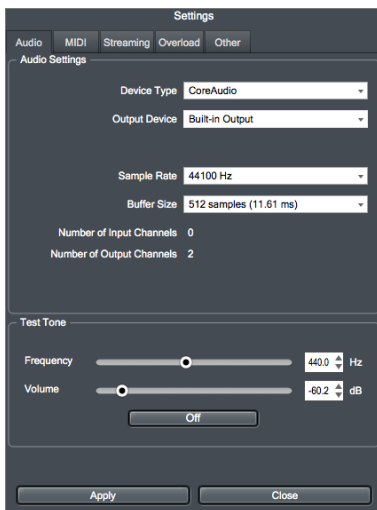
- In **Plug-in Mode** PLAY runs as part of a host program, usually a sequencer. The host handles all MIDI and audio connections.

When in Plug-in mode only, it is possible to open more than one instance of PLAY at a time. One consideration in deciding how many instances to open simultaneously is the question of how many instruments you want to be able to be able to manipulate at once through its library's user interface.

Exploring the Settings Menu

Click on the Settings button near the top-left of the PLAY interface to open the Settings menu. Each of the five tabs across the top are explained in detail below. Please take the time to familiarize yourself with the settings and set things up in Standalone mode to ensure everything is working properly.

The Audio Tab



The Audio tab allows you to configure the Audio connections in PLAY. If there is any doubt about which options to select in the settings below, please check the documentation that came with the sound card.

Please note that when running in Stand-Alone Mode, audio connections are made directly with the sound card's driver. When running as a Plug-in, the host will handle the audio connections and PLAY's Audio tab will be disabled (this is normal).

Device Type: Select an audio driver from the drop-down menu that will be handling the audio input and output. The options that appear in this list depend on the operating system and what's installed on your computer.

Output Device: Select the audio interface hardware from the list. If you have more than one audio interface attached to your computer, you can choose which one will handle the audio output.

Sample Rate: This drop-down menu presents the values supported by your audio interface. Select the value you will be using in your current project.

Buffer Size: Select from a range of values available from your audio interface. Lower buffer settings reduce the delay time between when you play your keyboard and when you hear a sound, but require more computer resources. Find the best buffer setting by finding a balance between acceptable latency (delay) and smooth playback. Please note, if you

can't open this drop-down list, it's because the sample rate (and/or audio buffer size) need to be set in your audio interface software.

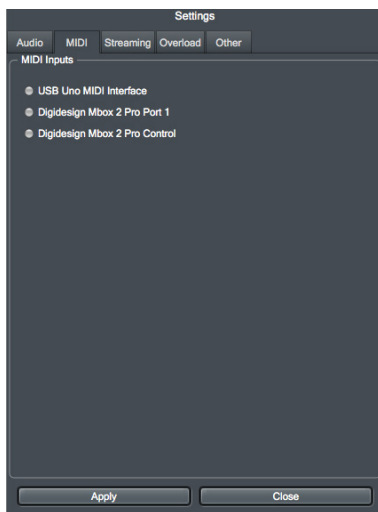
Input / Output Channels: This reports the number of audio channels available on your audio interface. It is static data and cannot be changed.

ASIO Settings: You will only see this button if you are using an ASIO driver in Microsoft Windows. It is provided as a shortcut so you can open the audio driver to set Sample Rate and Audio Buffer Size.

Test Tone: These controls can be used to verify that audio being generated by PLAY is correctly routed to your speakers, headphones, or any other destination. Use the two sliders to set the frequency and volume, then click on the long button to start or stop the tone. Make sure to keep the volume low at first! Try the test tone now, if you like.

To make changes and save them before moving on to another tab, click on the Apply button at the bottom of the dialog box.

The MIDI Tab



The MIDI tab allows the user to specify which MIDI devices can send 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.

Please note that when running in Stand-Alone Mode, MIDI connections are made directly with the MIDI device driver itself. When running as a Plug-in, the host will handle the MIDI connections and PLAY's MIDI tab will be disabled (this is normal).

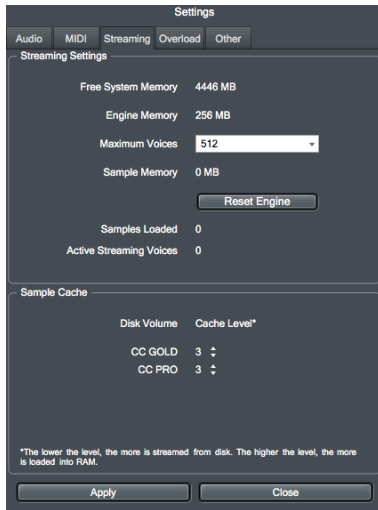
Click to leave a check-mark next to the MIDI device to enable it, and click again to remove the check-mark and disable it. All MIDI devices enabled here will appear in the MIDI Port drop-down list in the Player view.

If you do not see a given MIDI device in the list, it may be because it is currently turned off. If that's the case, close the PLAY window completely, turn on the MIDI device, and then re-open PLAY. When you return to the MIDI tab in the Settings Menu, the MIDI device should appear in the list.

The Streaming Tab (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.

The **Maximum Voices** option provides five values, ranging from 128 to 2048, to control how much memory (RAM) is allocated to pre-buffer samples.

The goal is to use the lowest Maximum Voices setting while avoiding performance issues like pops, clicks, or drop-outs. If you encounter these issues, raise this setting to the next highest value. If notes continue to drop-out when using the highest Maximum Voices setting, you may need to render some instruments to audio (freeze the track). Be aware that the larger the value you select, the longer each project will take to load.

Please note! The Maximum Voices value is a global setting for all instances of PLAY, but each instrument also has a Voice Limit. If you believe the Maximum Voices is optimized for your system but you still experience performance issues, check the Voice Limit per instrument by going to the Main Menu / Advanced Instrument Properties.

The factors that influence the total voice count include:

- how many instrument are being played simultaneously
- how many voices each instrument is playing (polyphony)
- how many microphone positions are loaded
- whether the instruments include release trails
- whether the instrument uses layered samples

The **Reset Engine** button 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 later in the manual.

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.

The Streaming Tab (Sample Cache)

The new ‘Sample Cache’ feature is the most important new enhancement in PLAY 5. Adjusting this setting will change the amount of each sample that is loaded into RAM, which affects the following:

THE EASTWEST PLAY 5 SYSTEM

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

A list of available drives will appear under ‘Disk Volume’ with their respective ‘Cache Level’ settings to the right. Use the up/down arrows to adjust this level for each drive. The recommended ‘Cache Level’ depends on your computer specifications, including:

- the type of drive you are streaming from
- the speed of your computer processor
- how demanding your project is

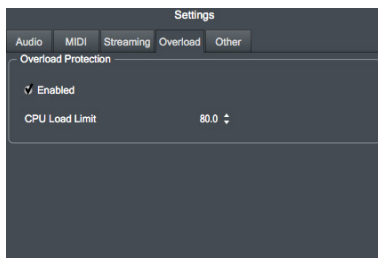
Below is a chart outlining recommendations based on computer specifications. As a general rule, always go with the lowest setting that performs best for you. If you experience CPU spikes or voice dropouts during playback, raise the ‘Cache Level’.

SYSTEM	DRIVE	PROJECT	CACHE
Recommended	SSD	demanding	0
Average	SSD	demanding	2
Minimum	HDD	less demanding	4

A ‘Cache Level’ of 0 is recommended for users with high-performance computer setups. This includes a fast, multi-core CPU and SSD drives for sample streaming. This setting uses the least amount RAM (resulting in the fastest load times and smallest memory usage), but requires fast SSD drives for smooth playback. **A ‘Cache Level’ of 2** is a good starting point for users with mid-range computer setups that have an aging CPU, but with SSD drives for sample streaming and plenty of RAM. The setting will result in more RAM usage, but less demanding playback for the CPU. **A ‘Cache Level’ of 4** is best for users with slower computer setups that are using less demanding sample libraries streaming from traditional, mechanical HDDs.

It’s important to point out that the demands of a given project will change the recommended ‘Cache Level’ setting. For example, on the same computer, a large Hollywood Orchestra template will require a higher ‘Cache Level’ setting than a small project using a less demanding library, like Fab Four.

The Overload Tab

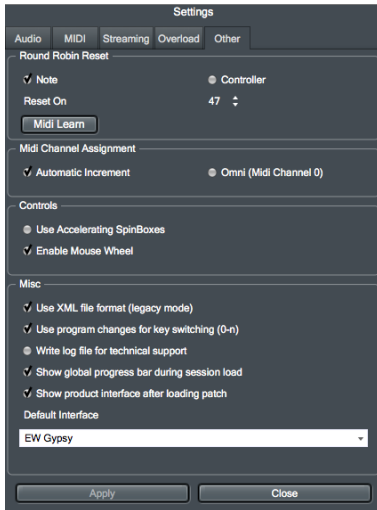


The Overload tab allows you to specify how much of your computer’s processing power is available to PLAY. Check the ‘Enabled’ box to turn Overload Protection on. If the box is not checked, changes to the CPU Load Limit have no effect and PLAY will use all available resources. The spin control allows you to specify the percentage of the computer’s processor that PLAY will use.

If the CPU Load Limit is exceeded, PLAY will begin dropping voices that started playing the earliest. Dropped voices is more ideal than a CPU overload, which can cause digital artifacts. This protection is most often needed in projects with lots of instruments playing at once. Keep an eye on the CPU display in the Player view to see how close the CPU is to reaching the CPU Load Limit.

As a general rule, set the CPU Load Limit control as high as you can without getting the digital artifacts, but not all the way up at 100%. The default value of 80% is good for most systems, so leave it there unless you start hearing problems in the playback.

The Other Tab



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

A round-robin articulation contains two or more slightly different samples for the same note. The samples are played in rotation each time the key is struck in succession, giving a more realistic performance and avoiding what's called the "machine gun effect".

The **Round Robin Reset** options allow the user to specify either a MIDI note or MIDI Continuous Controller (CC) to reset a round-robin cycle to the beginning. Being able to reset all round-robin articulations to the beginning of the cycle allows for consistent playback.

For example, if a round-robin instrument contains two samples, A and B, and the MIDI sequence uses that note 7 times, the engine plays A B A B A B A. If the piece is played again from the beginning, the engine will play starting with B, because that's next in order. The second play through will be subtly different.

First, select either MIDI note or MIDI Continuous Controller (CC) as the source. Next, specify which MIDI note (Middle C=Note 60) or MIDI CC will be interpreted as the reset. by inputting a numeric value in the spin box.

You can set the numeric value by clicking on the up / down arrows, clicking on the current value and inputting a new value on your computer keyboard, or hovering the cursor over the spin box and using the mouse wheel. You can also click on the MIDI Learn button, then play a MIDI note or send a MIDI CC data to change this value. Once the value is set, click the MIDI Learn button again to turn it off.

Once you have set this value, all the round robin instruments in any given MIDI channel will be reset when that MIDI note or MIDI CC is received.

The **MIDI Channel Assignment** group allows the user to select what happens when a new instrument is opened in PLAY:

- Automatic Increment assigns each new instrument to the next MIDI channel (1, 2, 3, etc) in the order they are loaded.
- Omni (MIDI Channel 0) causes each new instrument to be assigned MIDI channel 0, which receives MIDI on channels 1–16.

There are a few behaviors to be aware of when Automatic Increment is selected. First, if you delete an instrument or manually change channels, a new instrument may open with an already used channel. Second, if you replace one instrument with a different one, the new instrument will inherit the MIDI channel of the instrument being replaced. Third, if you open a multi (file containing multiple instruments) where the instruments were set to Omni (MIDI channel 0), they will be assigned to channels 1, 2, 3, etc.

The **Controls** group gives the user the options to **Use Accelerating Spin Boxes**, meaning values change faster the longer you hold down the mouse on an up or down arrow, and the ability to **Enable Mouse Wheel** to make value changes in Spin Boxes.

The **Misc** group contains a variety of user options.

The **Use XML File Format** option should only be enabled if you work with older projects and go back and forth between old and new versions of PLAY. The current “binary format” is more efficient.

The **Use program changes for key-switching** option allows PLAY to accept incoming MIDI Program Change messages to change keyswitches. Program 0 is the first keyswitch (usually on MIDI note 0), Program 1 is the second keyswitch, etc.

Selecting the **Write log file for technical support** 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: / ProgramData / East West / Log

The **Show global progress bar during session load** 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.

The **Show product interface after loading a patch** 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.

The **Default Interface** 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.

Generating a Sound

With an instrument opened successfully, use the mouse to click on a white key to hear a note. The white keys are velocity mapped so that clicking near the bottom of a key will generate a louder sound than clicking near the top.

- White keys are the playable range of notes
- Tan keys have no samples loaded (null)
- Blue keys are keyswitches (for selecting articulations)



If you don't hear a sound from a white key, it could be for one of the following reasons:

- The PLAY Library has not been authorized
- The PLAY Library has not been activated (an error message should appear)
- The settings in the Audio tab are not setup properly
- The audio interface and/or speakers are not turned on

If you're still not getting a sound, turn the Test Tone in the Audio tab on. If there is no sound, then you know the audio path from PLAY to your speakers / headphones is not working correctly. In this case, check the audio setup on your computer.

Using a MIDI Keyboard

If you were able to play a sound using the mouse and the onscreen keyboard, the next step is to do the same with a MIDI keyboard (or other MIDI device).

First, make sure the MIDI keyboard is attached to the computer and powered on before opening the PLAY software. Also verify that the MIDI, USB, or other cable is securely connected at both ends. If your keyboard plugs into a MIDI hub or a sound card, make sure that device is powered up. If you have not yet used this keyboard successfully on this computer, check with the keyboard's documentation to verify both the keyboard and the driver are properly installed.

Next, with an instrument loaded, press a key within the playable range (white keys). If you hear a sound, then the MIDI keyboard is successfully sending MIDI notes to PLAY.

If there is no sound, play a note on the MIDI keyboard and see if the corresponding note on the virtual keyboard has darkened slightly. If playing a note does not cause a note on the virtual keyboard to darken, then PLAY is not receiving the MIDI data. Revisit the MIDI tab to make sure the MIDI keyboard is selected in the Settings menu.

Next Steps

Once you can load an instrument into the standalone version of the PLAY and can hear a note by playing on a keyboard, you're ready to explore the other features. Here are some of the things to try next:

- Open more than one instrument and assign each its own MIDI channel so they can be played individually.
- Open a sequencer or other host and insert one PLAY as a plug-in. Write a MIDI melody in the sequencer and have play it back with the PLAY plug-in.
- Play with the controls in the Articulations window, including the Active and Loaded buttons, as well as the articulation-specific volume controls.
- Load an instrument with keyswitches and play a musical phrase that jumps from one articulation to another mid-phrase. This can be performed in both the standalone and plug-in versions.
- Adjust the parameters for specific articulations; that is, learn how to use all those knobs and buttons in the user interface.
- Learn how to save your settings so they can be reloaded at a later time. (Be careful when you save a new instrument to the hard drive so that you do not overwrite the original instrument definitions.)



5. Overview of PLAY Libraries

- 40 Folder Hierarchy
- 40 Instruments
- 41 Articulations
- 42 Keyswitches
- 43 Master and Elements
- 43 Samples

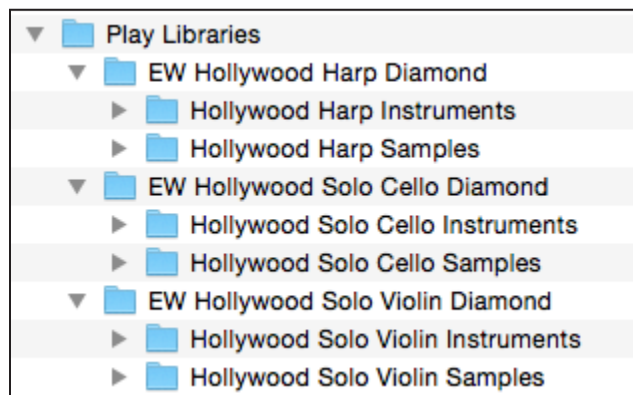
[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

Overview of PLAY Libraries

Each PLAY Library is made up of an Instrument folder, a Samples folder and a custom interface that has a set of controls designed to accommodate the needs of that library.

Folder Hierarchy

Below is an example of the folder hierarchy for PLAY Libraries. The Main Library folder (EW Hollywood Harp Diamond, as an example) contains both an Instruments and Samples folder. 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].



PLEASE NOTE! The Samples cannot be accessed directly, but are instead loaded when opening an Instrument file [.ewi] in PLAY.

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).

Viewing 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 instruments 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.

How to Position Keyswitch Notes

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.

Tips on Using Keyswitches

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: 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:** 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: 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:** 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

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

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.



6. The Player View

- 45 Different Areas of the Player View
- 46 Control Types
- 47 Basic Controls
- 53 The Instrument List
- 54 Main Controls
- 60 The Virtual Keyboard

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

The Player View

PLAY is designed around 3 main windows: the Player view, the Browser view, and the Mixer view. The Player view displays the controls for one instrument at a time, with the ability to switch between them in the Instrument List (top-right).

The exact set of controls and their appearance vary from one PLAY Library to the next, but will always reflect the currently selected instrument (denoted by a check-mark when viewed within the Instrument List). The Player view is where much of the work is done to define the audio output.

Different Areas of the Player View



Please note! The exact layout of the areas mentioned below can vary significantly from one PLAY Library to the next. Please see the separate manuals for each PLAY Library for specifics related to the Player view interface. In general terms, the different areas are:

- Basic Controls (blue) - this includes the Main Menu, Settings and View Selectors.
- Instrument List (green) - the drop-down menu in the top-right corner (available in all views) that displays all loaded instruments (a check-mark denotes the currently selected instrument).
- Main Controls (yellow) - includes envelopes, effects, articulation window, MIDI parameters, status indicators, and specific PLAY Library controls like performance scripts, microphone positions, etc.
- Virtual Keyboard (red) - displays visual representation of the playable range (white keys), null keys (off-white keys) and keyswitches (blue keys).

Control Types

Before discussing what's included in each area of the Player view, it's important to define the types of controls used to change parameters.

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 how they behave remains the same.

On/Off Buttons: This kind of button has 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 may use a button as an over-riding on/off switch. That is, the controls are inactive unless their button is turned on.

Action Buttons: This type of button 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.

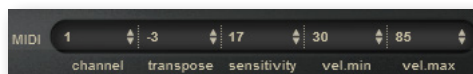
Knobs: A knob is used when it's possible to modify a numeric value (for example, loudness or a time interval) over a definite range. The knob can be rotated until the desired value appears in text immediately adjacent to the knob.

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: When the user can select from a selection of text strings, click on the control to display the list of options. 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.



Basic Controls

In a band along the top of PLAY are four basic controls:

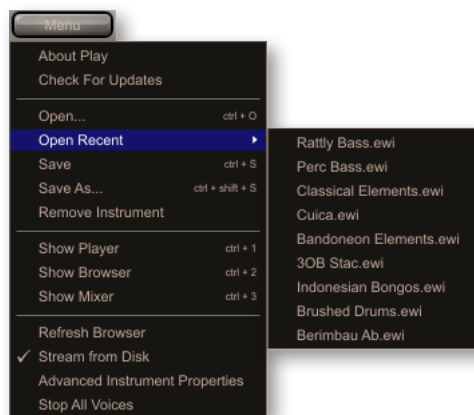
- the Main Menu
- the Settings button
- View Selector buttons to move between the Player, Browser, and Mixer views

These buttons are present regardless of the current view selected. As shown below, their appearance and layout can vary from one PLAY Library to the next.



The Main Menu

The Main Menu drop-down list operates much like the menu bar in most other programs, including its use of cascading menus, as shown in the small menu that opens to the right of “Open Recent” in the adjacent image. Click on the Main Menu control to get quick access to these tasks. In some libraries, it is called only Menu.



About PLAY: Clicking on this first item in the menu opens the “About Box.” The upper part shows pertinent information about the product, including the version, and brief copyright information. If you ever need to contact EastWest about support, please copy down the complete version number from this window and include it with your question.

The lower part lists information about the library of the currently selected instrument in this instance of PLAY.

Check for Updates: This menu item uses your Internet connection to see whether a version newer than this one is available to be downloaded.

Open: This menu item is one way to load an instrument from the file system. You can open one of the original instruments installed on your hard drive, or a file you saved from the Save operation (see below).

Only a file with the extension [.ewi] can be opened. You cannot, for example, open a [.aif] or [.wav] file, or any instrument not specifically designed to work with the PLAY.

It’s usually faster to open instruments from the Browser view, and it’s recommended that the Browser be used for both out-of-the-box instruments and those you have modi-

fied and saved to the file system. Opening an instrument from the Main Menu is the equivalent to double-clicking on an instrument [.ewi] from the Instrument Browser. If an instrument is already loaded, you will be asked to 'Add', 'Replace', or 'Cancel'. If there are two or more instruments already loaded you will be asked to 'Add', 'Replace Current' (that is, the currently selected instrument), 'Replace All', or 'Cancel'.

Once the instrument has been opened, it becomes the currently selected instrument. All the controls in the Player view apply to the newly opened instrument.

Open Recent: If you hover the mouse cursor over the Open Recent item in the Main Menu, a list appears of the last 9 instruments opened. This list includes instruments opened from the Open menu item as well as from the Browser. Click on an instrument's file name to reopen it. This list of recent instruments is shown in the Main Menu image at the start of the description of the menu.

Save: It's possible to write the current collection of instruments—including any changes you made with controls in the Player view—to a file in the file system so that it can be reopened at a later time. The file you save to will have a [.ewi] extension. When you're ready to reopen the file, you can use either the Open command in the Main Menu or the Browser view controls.

Note that when PLAY is run as a plug-in, the host saves the current status of its plug-ins with every save operation. There are two reasons you might want to do an additional, explicit save from the Main Menu:

- As a further precaution, in case of an unexpected problem.
- To be able to open this same configuration in another project. When you've selected several instruments that sound good together and have maybe made some modifications to individual instruments, you might want to reuse this ensemble in another piece. If so, save it now to the file system and open it already configured when you're ready to reuse it.

Save As: This performs the same operation as the Save option (see above), except that it allows you to change:

- The directory on the hard disk in which the file will be saved.
- The name of the file.

Use this kind of save when you want to save your changes without overwriting the state of the instrument file before you made the recent changes.

Remove Instrument: This menu pick removes the currently selected instrument from this instance of PLAY.

Show Player, Browser, Mixer: These 3 options afford the user another way (besides the buttons at the top of the screen) to change the view. And note the listed accelerators of Ctrl 1, Ctrl 2, and Ctrl 3 that are a third way to change to a different view.

Refresh Browser: This option appears only when the Browser view is open. If you have made a change in the file system while this instance of PLAY is open, and the change is not shown in the list of folders and files in the Browser, then use the operation to force PLAY to reread the directory in the file system.

Stream From Disk: PLAY has two ways to play sample data. This menu item allows you to toggle between these two approaches.

- When the menu item “Stream From Disk” is checked, only a small part of the sample data is loaded when the instrument is first opened, enough to start playing the sample immediately while it waits for the rest of the data to arrive from the file system. This option is enabled (checked) by default.
- When the item is not checked, the entire set of sample data is loaded into RAM when the instrument is first opened.

This setting applies only to the currently selected instrument. Therefore, it’s possible to have some instruments entirely loaded into the computer’s memory and others ready to stream from the hard drive.

Advanced Instrument Properties: Selecting this option opens a dialog box, allowing the user to perform several actions that apply to the current instrument. See the description of that dialog box after all the Menu picks have been listed.

Stop All Voices: Select this item if a note continues to playback after the Note Off event, often called a “stuck note.” It will shut down all notes immediately.

Advanced Instrument Properties

Selecting the Advanced Instrument Properties from the Main Menu opens the following window, with an Instruments Properties tab and a Sample Purge tab.

The Instrument Properties Tab

Note that each open instrument from the current instance of PLAY has a row in the table. If more instruments are loaded than can fit in the dialog box, use the scroll bar to move up and down through the list.

The **Engine Tempo Sync** control is the one control in this dialog that applies to PLAY in general and not to specific instruments in the table. But only some instruments can actually use this tempo setting. An example of this is 1st Violins Measured Tremolo TS.ewi from Hollywood Strings. The “TS” in the name indicates that the patch uses tempo sync to determine the rate of the tremolo. Another example is the many performances in the Mickey Hart Live Loops folder that comes with Quantum Leap Stormdrum 3.

This control only applies when PLAY is run in standalone mode. When run as a plug-in, PLAY uses the tempo from the host to sync to. The value displayed here is a tempo in beats-per-minute (bpm).

For each instrument open in this instance of PLAY, its name appears at the left, followed by 10 modifiable parameters. Some of these controls are duplicates of those in the Player view, and changing the setting in one place also changes it in the other.

THE EASTWEST PLAY 5 SYSTEM

Transpose raises or lowers the incoming signal by one MIDI note (one semitone). For example, let's say you transpose by +1. If you then play C3 (middle C, MIDI note 60), PLAY will convert that to C#3 (MIDI note 61) before turning it into audio. No processing is done to the audio signal. Note that this will not affect the highest or lowest note in the range; if E5 is the highest note for some instrument that has been transposed by +1, and you play the E5 key, you will not hear F5 because there is no audio available for F5.



The **Tune** controls retune the audio signal during playback. Unlike the Transpose control (discussed above), Tune change the pitch of the audio. As an example, a value of “-1.30” in this control moves the pitch of this instrument down 1 half-step plus another 30 cents. The larger the interval you specify, the more the sound quality will degrade, so be sure to listen to the output to make sure you like what you hear.

The **High Key** and **Low Key** controls specify a range of notes to which this instrument will respond. You can use this to remove notes you don't want to sound, even if the note is played on the keyboard or in the sequencer.

You can also use these controls to combine multiple instruments in a single MIDI channel. As an example, maybe you want to play guitar chords from E1 to E2 and guitar picks from F2 to C4 on your MIDI keyboard, even though chords and picks are separate articulations. Load 2 separate files in the same MIDI channel, or, when available, the same guitar Elements file twice. In one of them, set the High Key to E2 and set the articulation to some type of chords. In the other, Set the Low Key to F2 and set the articulation to single picked notes. With this setup, a single MIDI keyboard—or single track in a sequencer—can play both articulations.

THE EASTWEST PLAY 5 SYSTEM

The **Velo Min** and **Velo Max** controls specify the minimum velocity and maximum velocity to be processed for that instrument. If PLAY receives a value below the minimum, it will use the stated minimum instead. And a similar remapping occurs at the upper end, as well. These are most useful when playing live on a keyboard, but they might help create dynamic boundaries in a sequencer, too.

The **Sensitivity** control accepts values in the range from -100 to 100. This value determines in what part of the dynamic range the instrument is most sensitive. If the Player view includes a Sensitivity graph, changing the value in this dialog will change the graph, too. The image at the right shows a sensitivity of +90, which translates mid-level velocities higher (velocities are along the horizontal axis, loudness along the vertical axis). This compresses forceful hits on the keyboard into a narrow range of loudness;



at the same time, light keyboard touches might vary from *pp* all the way to *mf*, giving you greater control over the softer sounds and less control over the louder sounds.



The image at the left shows a sensitivity graph for a value of -40. In this case, it's easier to get the loud sound you want because a greater range of velocity values will give you the same loudness.

The **Keyswitch** control sets the default keyswitch note for the selected instrument. The default note specifies the articulation in the keyswitch file that plays when no keyswitch note has been played in its MIDI channel in the current session. For example, if you usually want the articulation assigned to note D#0 to be heard at the beginning, then you can set the default to D#0 and not have to add a D#0 before the first note.

The instrument must be saved to the file system with an [.ewi] extension and reopened from that [.ewi] file for the new default value to take effect.

The **Pitch Bend Intensity** control specifies how strongly the Pitch Bend Wheel modifies the pitch. A value of “100%” specifies that pushing the Pitch Bend Wheel all the way up or down moves the pitch by an octave. The smaller the value, the finer the control the user has when making subtle bends of only a few cents. Negative values reverse the direction, so pushing the wheel up lowers the pitch.

The **Voice Limit** control specifies the maximum number of voices that can play at once for this instrument, up to a limit of 5000. The default value depends on the PLAY Library, and sometimes on the instrument. If you notice the value in the Voices display (directly above the onscreen keyboard) getting very close to the currently set limit, then you should consider raising the Voice Limit. If PLAY needs more voices than this control allows, it will start turning off the samples that started playing first.

Generally, instruments that can play more than one note at a time, such as those with keyboards, require more voices than monophonic instruments, such as the woodwinds. remember that some instruments may play more than one sample when sounding a note (most notably any instrument that includes a cross-fade, but others as well). And for

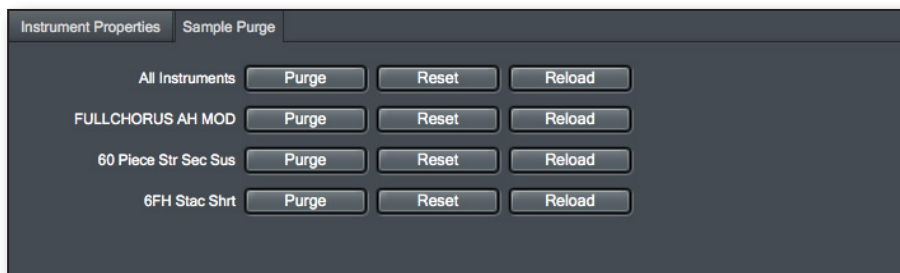
any instrument that includes release trails, those are separate samples and, therefore, separate voices.

One reason you might want to reduce the Voice Limit parameter to a very low number is to ensure that an instrument never plays more than one note at a time, such as in the bass line; this technique maintains the monophonic sound even when the MIDI keyboard player is slow to release a key. Be sure to factor in release trails (if any) when setting the parameter for such a reason.

Another reason to reduce the Voice Limit is on a piano part that uses CC64 to hold down the sustain pedal. If the sound gets muddy, consider lowering the Voice Limit so that the longest-held notes get shut off when too many notes would otherwise sound at once.

The Sample Purge Tab

The controls on the **Sample Purge** tab provide a means for the user to remove from the computer's memory any samples not actually necessary to render the current project. Each open instrument has 3 buttons to manage this task, and the top row of buttons applies the process to all instruments in this instance of PLAY in a single step. That means you can run a Purge one instrument at a time or for the whole project.



The key to how Purge works is that each sample keeps track of whether it has been played since the point when this instance of PLAY was most recently opened. Any samples that have not been played are assumed to be not needed for this project.

Do not purge too soon. Wait until you have a core of instruments and parts that are fairly stable, even if you will be adding more instruments. If you purge while you're in the middle of significant changes, you'll end up repeating the process more often than you need to. The goal of purging is to free RAM for loading more instruments and their samples; if you're not running low on available sample memory, there is little benefit in a Purge.

The 3 buttons are labeled Purge, Reset, and Reload. Here are the steps to use when purging samples:

1. Optionally, press the **Reset** button to un-tag all samples. This step is required if there's reason to believe a significant number of notes not in your project have been played in this session.
2. Play your project—or at least the instrument(s) you're about to purge—all the way through. This step tags all the samples you want to preserve in memory.

3. Press the **Purge** button. This step removes from memory all the un-tagged samples for the current instrument, that is, the samples not used in your project.

The **Reload** button reloads the samples for the current instrument that were purged with the Purge button. Press this button any time you make changes to an instrument's part where you may have added notes that were purged earlier. You can then re-run the steps above.

The Settings Button

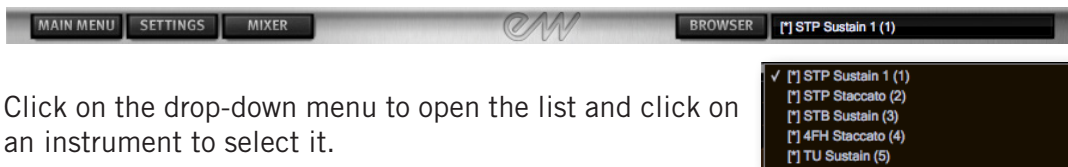
Please see the following section in Chapter 4: [Exploring the Settings Menu](#)

View Selector Buttons

The View Selector buttons move between the 3 views. Buttons appear only for the 2 views not currently visible.

The Instrument List

In the top-right corner of the PLAY window is the Instrument list. It is present regardless of the current view selected. All instruments currently loaded in this instance of PLAY are listed here, with a check-mark denoting the currently selected instrument.



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 and Browser views are dictated by this current instrument.
- The onscreen 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 list.

The number in parentheses is the MIDI channel currently assigned to each instrument. Or the word “Omni” means no specific channel has been assigned, meaning that it responds to all channels. Use the MIDI Channel control to set this value for each open instrument. To have this value set when an instrument is opened, read the description of the [MIDI Channel Assignment](#).

Note that selecting an instrument in this control does *not* indicate which instrument will sound when you press a note on an external MIDI keyboard. That behavior is controlled by the choice of MIDI channels.

Main Controls

The next set of controls to be described are in the large, center section of the Player view. Remember that controls for a single purpose can vary a lot in appearance from one PLAY Library to the next.

Stereo Channel Controls

There are three controls that affect how the left and right stereo input channels contribute to the audio output of each note. Two of them are common to many PLAY Libraries and are described below. The third varies from one PLAY Library to the next, so it is described in the library-specific manuals.



Channel Source

If present, this drop-down list provides four possibilities for using the separate left and right tracks of the stereo signal.

- **Stereo:** This is the default setting. The input audio data in the left channel feeds the left channel output, and the input data in the right channel feeds the right channel output.
- **Mono (Sum):** Selecting this option mixes the two stereo channels from the input into a single mono channel, so that the output signals of the two channels are now identical.
- **Mono From Left:** When this option is selected, the input audio data from the left channel is used for both the left and right output. The right channel input is ignored.
- **Mono From Right:** This option, the opposite of the one above, uses input audio data only from the right channel and sends it to both left and right output. The left channel input is ignored.

Note that 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.

Playing the samples in **Stereo** yields a layered sound with 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. Look in the articulation listings within each PLAY Library manual to see how this feature will affect the sound of its instruments.

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

Pan

This knob controls the relative dynamics of the two stereo channels, effectively moving the sound source to the left or right within the stereo field.

Delay Controls



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.

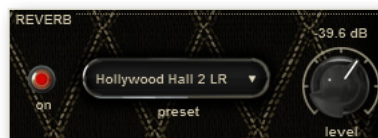
Feedback: With this parameter, it's possible to specify that some fraction of each repeat be fed back into the delay generator, causing a series of echoes. When the second knob is set at 100%, each repeat is fully as loud at its predecessor, causing the echo to continue forever with no diminution. A 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.

Reverb Controls

The Reverb controls in PLAY can simulate the natural reverberations produced when a sound is generated by the natural reflections from the surrounding surfaces. They give an instrument or group the more natural sound we are accustomed to hearing when music is played live—or even in a recording of a live performance.



PLAY uses a type of reverb known as Convolution Reverb in which a short sound called an “impulse” is generated in a real space, such as a Hollywood recording studio or cathedral. That “impulse response” is digitized and PLAY knows how to convolve this “IR” with the samples at playback time to approximate the sound of playing the specified notes in the specified performance space.

THE EASTWEST PLAY 5 SYSTEM

On/Off Button: This button activates the Reverb controls. When it's off, PLAY generates no reverb effect.

Preset: This drop-down list contains the names of all the available spaces for which IR's have been made available. Select the one that best describes the recording space you are trying to simulate.

Level: This knob specifies the loudness of the reverb relative to the loudness of the note. Negative values indicate that the reverb is quieter than the played note. If the level is too low, the effect may be barely audible or even not perceptible.

Envelope Controls

The term “envelope” refers to a series of five stages that shape the dynamics of each note, from the moment the sound starts until it ends. The stages are called:

- **attack:** the time in milliseconds from the beginning of the note until it reaches its highest volume
- **hold:** the time in milliseconds that the loudest point of the attack is maintained
- **decay:** the time in milliseconds that it takes to drop from the highest point of the attack to the sustained tone that follows
- **sustain:** the loudness of the tone, in decibels, that continues after the attack until the note is released
- **release:** the time in milliseconds for the note to diminish from the sustain level to silence (after the end of the MIDI note)

The initial letters of these five parameters give this envelope the name AHDSR.

ADVANCED: Many sample players and synthesizers from other manufacturers do not include the Hold parameter in the envelopes. You may, therefore, see this type of envelope referred to elsewhere as “ADSR.”

Parameters for the five stages can be controlled individually with the five knobs in the Player view. The exact location and appearance varies from one PLAY Library to the next, but how to use the controls applies to them all. Here's the appearance of the Envelope controls from the Fab Four library.

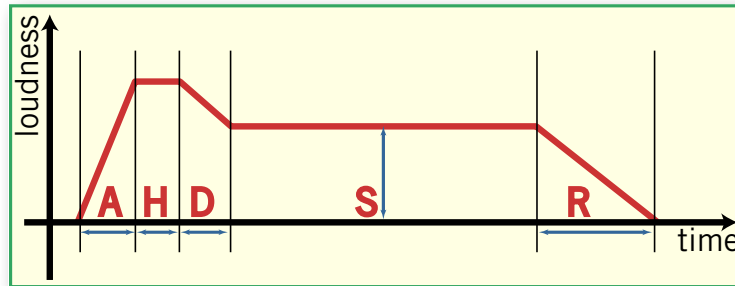


Each instrument in every PLAY Library is preprogrammed with its own AHDSR values when installed. In many cases, there's no need to change these values; they can be used as they are, right out of the box. Or you may decide to modify these values to achieve a particular sound for that instrument. Note that in most cases these values have been set to achieve a natural, authentic sound to the instrument being sampled; the more you vary these values from the presets the less natural a PLAY instrument is likely to sound.

THE EASTWEST PLAY 5 SYSTEM

Only you can decide whether varying these parameters in a particular way achieves the sound you're looking for.

The following diagram charts how these five values shape a sound.



Attack, Hold, and Decay Parameters

These three values determine the overall length of the attack: the sum of the three numbers defines how long it takes for the sound to get past the initial force that might cause a louder beginning and start the sustained part of the note. Struck and plucked sounds tend to have more forceful and briefer attacks. Bowed and blown notes often have more gradual attack and decay parameters, achieving a more subtle attack. These are general guidelines with many exceptions.

The attack of a note normally spikes to a high point and then almost instantaneously begins to fall back to the sustainable tone. Setting the Hold value much above zero intensifies the attack by making it more prominent without making it louder, but can also make the sound less natural, which may or may not be what you want to achieve.

Making a change to these parameters can cause a significant change in how the instrument is perceived. For example, giving a piano sound long Attack and Delay values can make it seem less like an acoustic piano, more like a synthesized instrument.

Sustain Parameter

This is the only parameter of the five that is not a time interval. It specifies the loudness of the sustained part, in other words, what level the decay should drop to below the high point of the attack.

The length of the sustain section is specified by the MIDI Note events. That is, the sustain ends when the MIDI note or the sample ends.

Release Parameter

Once the bow leaves the string of a violin or the damper falls on the piano string, the note is finished. But the sound does not immediately drop to silence. The physical instrument and its environment continue to transmit sounds for a brief period. The Release parameter specifies how long it should take for the sounds to drop from the sustain level to inaudibility.

A Graphical Envelope

Many, but not all, of the PLAY Libraries have an interface that displays a graph, similar to the one above. When present, it is useful both to understand the default envelope for each instrument and to help in shaping a new envelope should you decide to make that change. See the library-specific manual for more information about this graphical feature when it's present.

Volume, Solo, and Mute Controls

The **Master Volume** control might be a knob (as in the image at the right) or might be a slider (see the image on the left). Either way, it specifies the dynamic level for the current instrument. It applies equally to all sounds generated by this instrument. In contrast, the volume sliders within the Articulations control apply to only that one articulation.



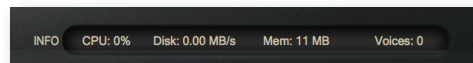
The **Solo** button (sometimes marked simply as S), when turned on, turns off the audio output of all *other* instruments in this instance of PLAY, leaving only the current instrument to generate sounds. This is useful when trying to focus on what's happening in only one instrument out of the entire mix.

The **Mute** button (sometimes marked simply as M), when turned on, turns off the audio output of the current instrument. It has no effect on other instruments.

If the **Solo** and **Mute** buttons are both turned on for any given instrument, all audio output for all instruments in that instance of PLAY is turned off.

Status Indicators

Information about usage of computer resources is provided in the Info display. This is a read-only presentation of 4 parameters. Sometimes the values are laid out horizontally, as in the image, and sometimes vertically.



- **CPU:** the percentage of the total processor capacity PLAY is consuming. It can be useful in deciding whether you need to take advantage of strategies for lowering processor usage, such as “freezing” or other selective bouncing to audio tracks.
- **Disk:** the rate at which data is being streamed from the hard drive, measured in kilobytes per second (kB/s)
- **Memory:** The number of megabytes (MB) of RAM being used by loaded samples. One way to lower this value if it gets too high is to unload unused articulations with the Purge function. Note that this control may be labeled “Mem” or “RAM,” depending on the library.
- **Voices:** the number of samples currently being played. Note this is not the number of notes; it's often higher than that figure because PLAY may achieve a particular sound by playing more than one sample per note. Plus release trails may continue playing the final decay of the sound after the MIDI note ends, overlapping the next note's

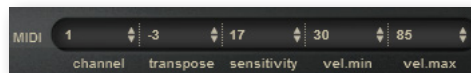
THE EASTWEST PLAY 5 SYSTEM

samples. It sometimes takes 10 or more voices to sound a single note. Double clicking in this field will stop all currently playing voices (just like the ‘Reset Engine’ button in the Settings/Streaming menu or the ‘Stop All Voices’ option in the Main Menu).

MIDI Parameters

There are 5 controls that affect how MIDI data is received:

- **Channel** (from 0 to 16): Omni indicates that the instrument is listening for MIDI data on all channels; 1 through 16 indicate a specific channel for receiving the MIDI data.
- **Transpose** (from -24 to 24): This number specifies how many semitones to transpose the incoming MIDI note values. Negative values lower the pitch. This control, when non-zero, replaces the incoming MIDI notes with new MIDI notes higher or lower by this amount. It does not process the audio.
- **Sensitivity** (from -100 to 100): This value specifies the extent to which note velocity affects dynamics. See the description of Sensitivity in the [Advanced Instrument Properties](#) description above.
- **Minimum Velocity** (from 0 to 127): Any MIDI note with a velocity below this value will instead be played at this minimum value. This is a way to assign a minimum loudness to notes played by this instrument. This control and the next can be used to limit a live keyboard performance to a certain range. Or use these two control in a plug-in to raise the dynamics of the softest notes—and/or soften the loudest notes—without affecting other notes.
- **Maximum Velocity** (from 0 to 127): Any MIDI note with a velocity above this value will instead be played at this maximum value. This is a way to assign a maximum loudness to notes played by this instrument.



MIDI Port and Output Controls

In the MIDI tab of the setup dialog, you are able to turn on one or more MIDI devices, such as keyboards, sound cards, and control surfaces. It's in the MIDI Port control that you specify which of them to listen to for the current instrument. The choices are “All” or any one of those turned on in the Setup dialog. For example, if you open a guitar, a bass, and a drum set, you can specify which keyboard or drumpad or other device will control each PLAY instrument.

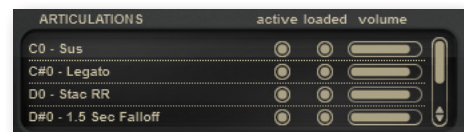


Note that the MIDI Port control is empty when being run as a plug-in. That's because in that mode the host program manages all interaction with external MIDI devices.

The Output control specifies to which of the sound card's audio output channels PLAY's output should be sent. These are listed in pairs “1 & 2,” “3 & 4,” and so on because they are accepting stereo signals.

The Articulation Window

The Articulations list displays the names of all articulations in the current instrument together with sub-controls for specifying parameter values de-



THE EASTWEST PLAY 5 SYSTEM

fined at this level. Depending on the PLAY Library, it may be as small as 4 entries, as shown here, or much larger at 16 entries. For more details, see the [Articulations](#) section.

Library-specific Controls

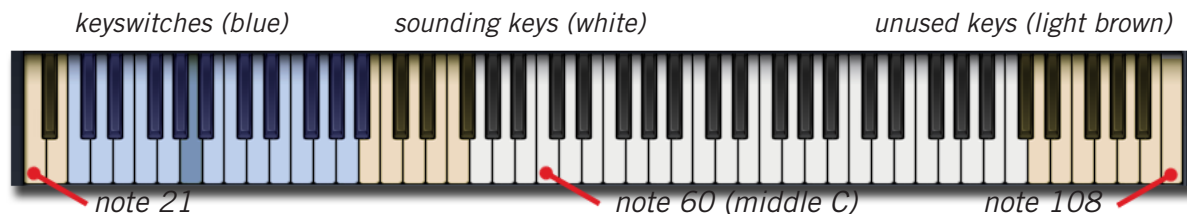
It's likely there are other controls in the Player view that are not listed in this chapter. They are controls that do not apply to all libraries. Read the library-specific manual for information about these controls.

The Virtual Keyboard

At the bottom is an 88-key keyboard. This part of the display can be used in several ways:

- Each selected instrument indicates its range by turning all keys associated with playable notes white.
- When a keyswitch instrument is current, the keys available as keyswitch notes are displayed in blue. And the currently selected keyswitch note is shown in a darker blue.
- You can use the mouse to click on any white key to audition that note for the selected instrument. Likewise, you can use the mouse to click on any blue keyswitch key to select a different articulation within the selected keyswitch file.
- Clicking near the top plays the note with a lower MIDI velocity, and near the bottom with a higher velocity. In this way you can hear both soft and loud versions of the note.
- When this instance of PLAY receives MIDI Note-On and Note-Off data, the keyboard responds by depressing and releasing keys, much like a “player piano.” When troubleshooting a system, watching the keyboard is one way to determine whether MIDI note data is reaching the player and, for example, whether it's in the correct octave.

The 88 keys in this display match the 88 keys on a standard acoustic piano keyboard. As such, the lowest and highest keys correspond to MIDI note numbers 21 and 108, respectively.



ADVANCED: The note *names*, such as A#2 and C3, are not uniformly applied in all systems; for example, where PLAY and many other software packages use C3 for Middle C—note number 60—some other packages use the name C4 or C5. Internally, all interaction between software packages uses the consistent note *numbers*; just be careful when selecting notes by *name*. When using PLAY in a host, you may be able to adjust the naming convention in the host to make different systems conform in their naming conventions.



7. The Browser View

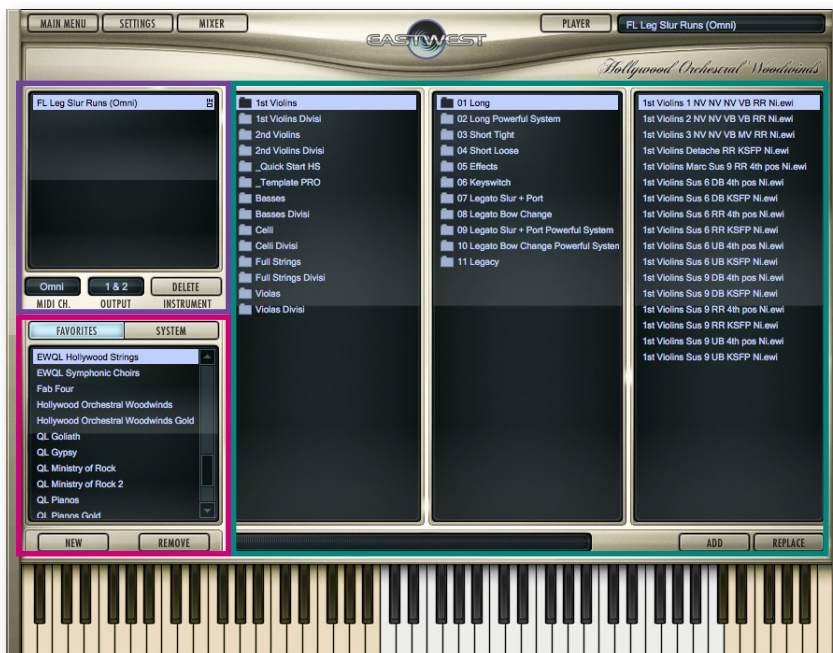
- 62 Different Areas of the Browser View**
- 62 Instrument Window**
- 63 System Window**
- 63 Favorites Window**
- 65 Instrument Browser**
- 65 Opening an Instrument**

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

The Browser View

The Browser view is where instruments from PLAY Libraries are loaded and managed. Each section of the Browser view is described below.

Different Areas of the Browser View



The Browser view is made up of the Instrument window, the Favorites/System window and the Instrument Browser columns.

- Instrument Window (purple) - located in the top-left corner, this window displays all loaded instruments, the ability to assign MIDI channel and audio output per instrument, as well as delete a selected (highlighted) instrument.
- Favorites/System Window (pink) - located in the bottom-left corner, this dual function window is accessed by clicking on either the Favorites or System buttons just above the window itself. The Favorites window displays all installed PLAY Libraries, while the System window displays the computer's directory.
- Instrument Browser (turquoise) - The three columns on the right half of the Browser view are used to navigate to the instrument [.ewi] you want to open.

Instrument Window

The image shows instruments that have been loaded into PLAY. The number in parentheses next to each instrument name is the currently assigned MIDI channel (a number from 1 to 16).

To the far right of each instrument name is a small square (called a "light") under the word "IN". Use these lights during setup of



THE EASTWEST PLAY 5 SYSTEM

a new project to make sure each set of MIDI data is going to the correct instrument. Or use the lights during playback to verify that all instruments are receiving MIDI input.

The three controls directly below this list allow you to:

- change the MIDI channel for the selected instrument
- change the audio outputs for the selected instrument
- delete the selected instrument

System Window

The System window displays the computer's drives, as well as the folders that the operating system maintains for the current user. This is a starting point from which to navigate to any folder in the file system. Removable media, such as DVD readers and flash drives, are also included. If a removable drive is added or removed while the Browser view is open, the listing is refreshed immediately to reflect the change.

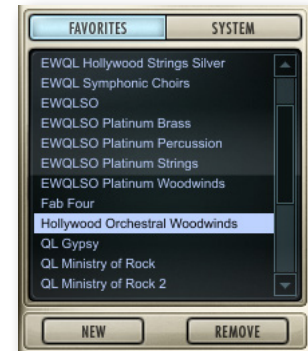
Please note! There are two important aspects to remember when using the System Window. First, in order to load an instrument from the System Window, the PLAY Library must be setup in PLAY's Favorites Window (see below). Second, the New and Remove buttons do not apply to the System window, they only apply to the Favorites window.



Favorites Window

The Favorites window displays all installed PLAY Libraries listed by name. Use the instructions on 'Establishing a connection between PLAY and a PLAY Library' below if you do not see an installed PLAY Library in the Favorites window, or you have moved a PLAY Library from its original location.

Also displayed in the Favorites window are User Favorites folders, which can store the most frequently used instrument files [.ewi] for easy access.



Establishing a Connection between PLAY and a PLAY Library

These steps will re-establish the connection from PLAY to a PLAY Library that has been moved or does not appear in the Favorites window.

1. If you have moved a PLAY Library from its original location, use the 'Set Product Library Directory' option by right-clicking (or control-clicking) on the PLAY Library name inside the Favorites window and selecting the "Set Product Library Directory" option from the pop up menu.

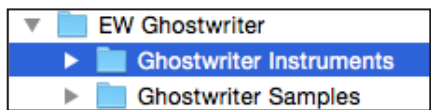
THE EASTWEST PLAY 5 SYSTEM

Alternatively, if a PLAY Library does not appear in the Favorites window at all, use the ‘Add Product Library Directory’ option by right-clicking (or control-clicking) inside the Favorites window and selecting “Add Product Library Directory” from the pop up menu.



2. In either case, once the file browser window appears, navigate to the location that PLAY Library is installed to.

3. Now, highlight that PLAY Libraries’ Instruments folder, and select “open” or “choose”.



Creating a ‘User Favorites’ Folder

To add a new User Favorite folder, click on the New button below the Favorites window. A pop-up window will appear where you can enter a folder name. Click OK to create a User Favorites folder with that name.

Once a User Favorites folder has been created, you can add any instrument to any available User Favorites folder by right-clicking (or control-clicking) on an instrument file [.ewi] and selecting the desired User Favorites folder from the list.

Please note! It is not possible to create a hierarchy of subfolders with a User Favorites folder. Only a single level is possible, but you can create as many folders as you like.

Any User Favorites folder in the Favorites window can be removed by selecting it (the color behind the text changes) and clicking on the Remove button. A message appears asking whether you’re sure you want to delete the folder. Answer Yes or No.

If you click on the Remove button when an installed PLAY Library is selected, you will be asked whether you want to remove that PLAY Library from this list.

Instrument Browser

The Instrument Browser is made up of the main three columns on the right half of the Browser view. They are used to navigate to the instrument you want to open. Each column has its own function, and the way to use these columns differs somewhat depending on whether you start from the System window or the Favorites window. Most of the time, you'll want to start from the Favorites window.

Starting from the System Window

If you know the path to an instrument you want to open, select the drive—or the Desktop, if appropriate. All its folders open in the first column. Each time you select a folder in the first or second column, its subfolders open in the column immediately to the right. If the newly selected folder contains one or more instrument files with the extension [.ewi], they appear. Continue to select folders along the path until you see the instrument file [.ewi] you're looking for.

Please note! In order to load an instrument from the System Window, that PLAY Library must be setup in PLAY's Favorites Window. Please see: [Favorites Window](#)

Starting from a PLAY Library Folder in the Favorites Window

Selecting a PLAY Library name opens a list of folders. Depending on the PLAY Library, this list might include:

- geographical regions
- instrument groups (such as Guitars or Drums)
- specific brands of pianos
- etc

Click on a folder to see either a list of sub-folders or a list of instrument names in the next column. In the case of sub-folders, continue to click until you see instrument files [.ewi]. Select the instrument file you want to open.

Starting from a User Favorites folder in the Favorites Window

Because a User Favorites folder cannot contain subfolders, selecting it will immediately open a list of the instrument files it contains.

Please note! Some PLAY Libraries contain more than three levels of sub-folders and files. If necessary, the lists move one column to the left to create an empty column at the right. The way to open the parent folder of a subfolder listed in the first of the three columns is to click on any name in that first column.

Opening an Instrument

When an instrument file [.ewi] is selected (indicated with a highlight), there are three ways to open it.

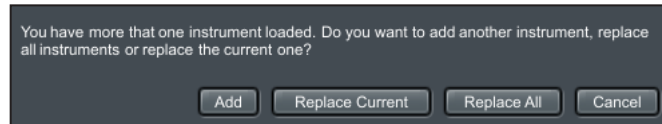
Click on the Add Button: This button opens the instrument, adding it to the list of open instruments in the Instrument Window. This instrument becomes the selected instrument,

THE EASTWEST PLAY 5 SYSTEM

meaning its interface and controls will be displayed in the Player view once that view is opened.

Click on the Replace Button: This action replaces the open instrument with the new one. If the current instrument has unsaved changes, you are asked whether you want to save the changes before continuing.

Double-click on the Instrument File Name: If at least one instrument is already open, a message box asks whether you want to perform an Add or a Replace. Otherwise, the selected instrument is opened immediately.



Once PLAY starts to load the instrument, the progress bar (below) displays the progress. The Abort button allows you to end the process immediately. When it's pressed, the components of the partially opened instrument are removed from the computer's memory (RAM).





8. The Mixer View

- 68 The Mixer Controls**
- 69 FX Plug-ins in the Mixer View**
- 71 SSL's EQ & Dynamics Channel Strip Plug-in**
- 75 SSL's Transient Shaper Plug-in**
- 78 EastWest's Amp Simulator**
- 77 SSL's Stereo Bus Compressor**
- 78 EastWest's Amp Simulator**
- 79 Ohm Force's Ohmicide**

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

The Mixer View

The Mixer view allows the user to view and control the output from all the channels within the current instance of PLAY. Here, you can control the loudness and the pan position, as well as the MIDI input and the audio output channel. You can also mute or solo each track (the M button or S button, respectively). In any PLAY Library that features multiple microphone positions, it is also possible to mix and blend the output from those mics.



The Mixer Controls

The image above shows the PLAY Mixer view with a Hollywood Strings instrument loaded into the left-most column. At the top, where the MIDI input for the instruments read “Omni”, means it responds to all MIDI channels. Click in this control to see a list of other input options you can select.

The small button with the fader symbol lit in yellow has been pressed to open 5 more strips to the right, representing the 5 mics available in this PLAY Library. Clicking on the yellow button again hides the mic strips so that you can see more channel strips, but any values you set still apply when the strips are hidden. The name of each mic is listed at the bottom. In the image above, the Main button is lit in white to indicate that those samples are loaded in memory and the mics are currently active. To load or unload the

samples from memory, click on the button for that mic position. The names of the mic positions vary from one PLAY Library to the next.

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 to direct to the currently selected 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.

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.

FX Plug-ins in the Mixer View

The SSL/EW - FX Global Suite is now included for free to all PLAY 5 users. Now you can integrate a collection of FX processors licensed from Solid State Logic (SSL), plus a Convolution Reverb from EastWest. Also new to PLAY 5 is the addition of OhmForce's Ohmicide and EastWest's Amp Simulator available for the PLAY Library, Goliath.

Please note! For PLAY Libraries not originally produced with the FX section integrated, once the FX button is clicked the reverb will be switched from the default PLAY reverb to the EW Convolution Reverb included in the FX section. If the regular reverb was already activated the sound may change. The change cannot be undone once the FX button has been engaged.

To open the plug-in interface for an instrument, first change to the Mixer view, then click on the FX button in the channel strip for that instrument. To open the plug-in interface for a single mic position, click on the FX button in that mic's channel strip. The controls for the plug-in sit on top of the channel strips in what's called a "drawer." Note that the bottoms of the channel strips are still visible below the FX drawer, as in the image that follows.



The Preset Control

In the bottom-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.

The image above shows the full set of plug-ins for the instrument loaded into the second instrument strip (Acapulco 115 BPM).

At the bottom of the drawer are 2 controls: a Preset list (which is empty in the image) 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 and Noise Gate/Expander
- a Transient Shaper plug-in

THE EASTWEST PLAY 5 SYSTEM

- a Convolution Reverb plug-in. This plug-in is available only on channel strips, not mic strips.
- a Stereo Compressor plug-in. This plug-in is 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.

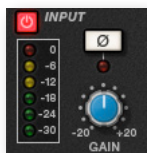
The following image shows the plug-ins that appear when the FX button is clicked in a mic strip. Only the plug-ins in the top section of the image above are available for the audio output from a single mic. This image shows the plug-ins for the Close mic, as indicated in the Channel drop-down list in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



SSL's EQ & Dynamics Channel Strip Plug-in

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.

THE EASTWEST PLAY 5 SYSTEM

Filter Section



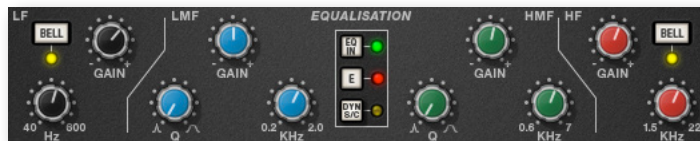
The Filter controls provide access to two separate kinds of filters. The black knob controls an 18dB/Octave high-pass filter (20Hz to 500Hz). Use it to remove lower frequencies from the audio. The purple knob controls a 12dB/Octave low-pass filter (3kHz to 22kHz). Use it to remove higher frequencies.

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.



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
Frequency range	40Hz – 600Hz	200Hz – 2kHz	600Hz – 7kHz	1.5kHz – 22kHz
Gain range	±16.5dB	±20dB	±20dB	±20dB
Q range	—	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.

THE EASTWEST PLAY 5 SYSTEM

G Series

G Series EQ is more subtle and is generally more suited to instruments and vocals.

E Series

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.

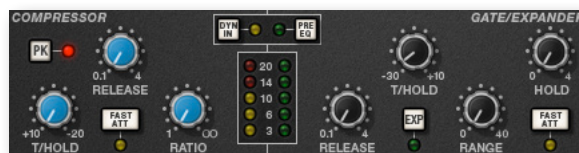
To turn the compressor into a ∞ :1 limiter, turn the knob fully to the right.

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.



THE EASTWEST PLAY 5 SYSTEM

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.

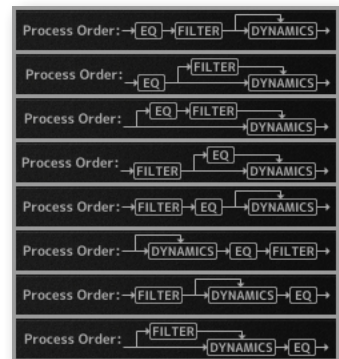
The Threshold function uses different levels to open the gate to audio and to close it again: the level at which the expander opens is higher than the level at which it closes again. In other words, when the expander is opened, it stays open until the signal level crosses the quieter Close threshold. 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 100µs 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.

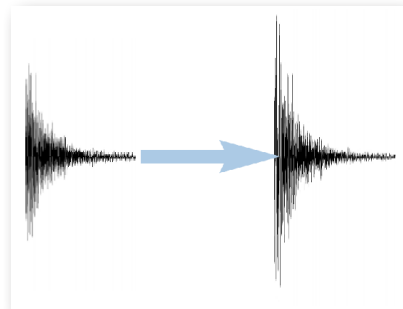
Both EQ and Filter sections can be assigned to the Side Chain together, in which case the EQ precedes the Filter.

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's Transient Shaper Plug-in

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's 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.

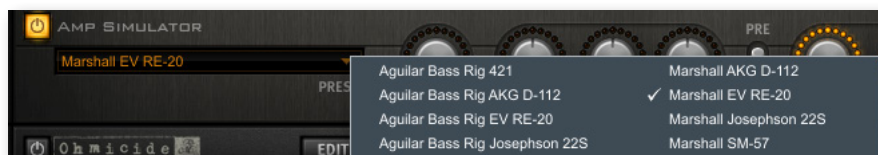
Comp In

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's 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 shows only the top of the drop-down menu, because the full list is large, at almost 80 entries. Note that the 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's 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

THE EASTWEST PLAY 5 SYSTEM

to turn off the Ohmicide processing, you need to use the power button that can be seen to the left of the Ohmicide logo in the image above.



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

THE EASTWEST PLAY 5 SYSTEM

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.

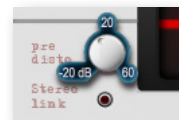


Below the Out knob is the smaller Mix knob, which allows you to adjust the wet/dry mix of the output signal.

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.

Here's what you can do with each band:

THE EASTWEST PLAY 5 SYSTEM

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.

THE EASTWEST PLAY 5 SYSTEM

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 EASTWEST PLAY 5 SYSTEM

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



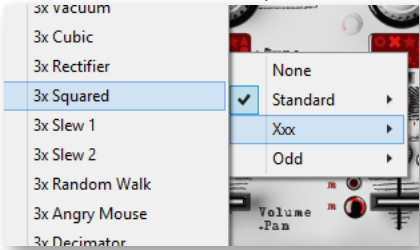
Ohmicide provides 28 distortion algorithms with three variants (Standard, Xxx, and Odd) for a total of 84 distortion types.

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 EASTWEST PLAY 5 SYSTEM

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. Otherwise, it is in either the Browser view or the Mixer view that the user makes such a selection.

In the Browser View

On the left side of the Browser sits a control for assigning a pair of output channels to each open instrument. The image at the right shows the drop-down list of outputs that appears when a user clicks on the Output. Here the stereo channels 5 and 6 have been selected for the drum kit highlighted at the top.

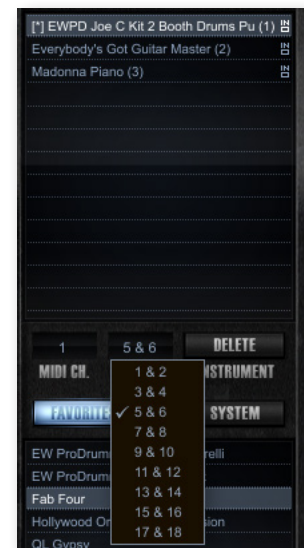
In the Mixer View

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.





9. Using PLAY as a Plug-in

- 90 Opening PLAY in a Host Sequencer
- 90 Using PLAY as a Plug-in with Logic Pro X
- 92 Using PLAY as a Plug-in with Pro Tools
- 93 Using PLAY as a Plug-in with Cubase 8
- 94 Using PLAY as a Plug-in with Ableton Live 9
- 94 Using PLAY as a Plug-in with Sonar
- 95 Using PLAY as a Plug-in with Digital Performer 9
- 96 Using PLAY as a Plug-in with Garageband
- 97 Using PLAY as a Plug-in with Studio One
- 98 Automation

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

Using PLAY as a Plug-in

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.

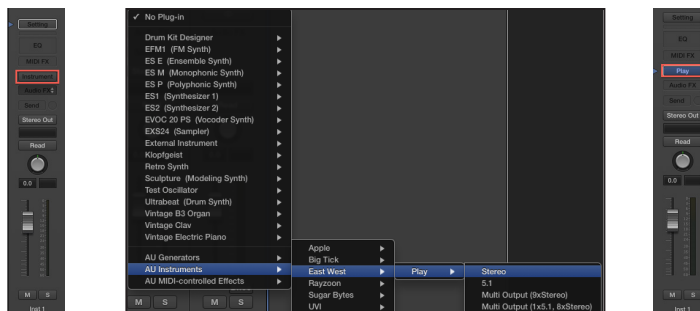
Using PLAY as a Plug-in with Logic Pro X

1. Once Logic Pro X 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'.



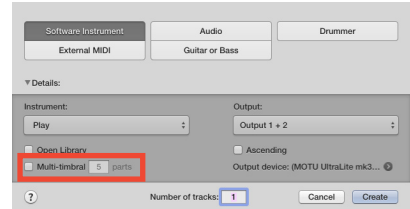
2. If instead you chose 'Empty Channel Strip' (the default) in the 'Instrument' drop-down menu, you can manually add PLAY to a channel strip by clicking in the 'Instrument' menu and navigating to the PLAY plugin. Once loaded, it will appear in the channel strip. Click on the PLAY plug-in to show / hide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

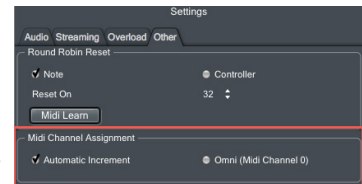
1. Once Logic Pro X has opened, a window will appear asking you to create a track of your choosing. Click on 'Software Instrument' in the top-left, select PLAY from the 'Instrument' drop-down menu, then click the 'Multi-Timbral' check-mark box and define the number of parts (up to 16 midi channels are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



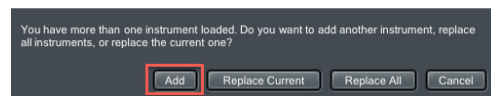
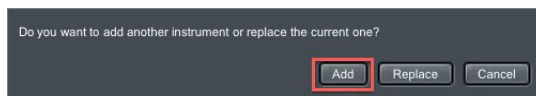
2. You will now see (x) number of instrument tracks appear, where x equals the number of parts you chose to create. Each instrument track is assigned to its own MIDI channel (1, 2, 3, etc). These will correspond to the MIDI channels assigned to instruments loaded in PLAY.

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 X, 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. Choose 'Add' in the following prompts to load multiple instruments into PLAY.

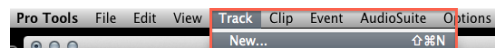


6. You can see what you currently have loaded by looking in PLAY's Instrument List. The MIDI channel assignment is in parenthesis next to the instrument name.

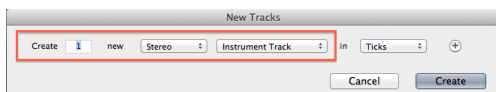
7. Now, each instrument you have loaded into PLAY will correspond with the midi channels in Logic Pro X. You can now record enable the specified track in Logic Pro X and and play the corresponding instrument loaded into PLAY.

Using PLAY as a Plug-in with Pro Tools

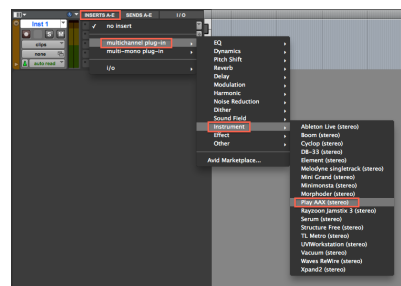
1. Once Pro Tools is open, navigate to Track in the top menu bar, then down to New Track.



2. Create a new stereo instrument track.



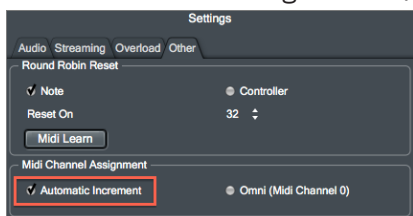
3. Now click inside the Inserts bar of the instrument track, go to multi-channel plug-in, then find PLAY AAX (stereo) from the list in the Instrument category.



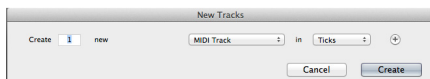
You're now ready to load your first instrument and begin composing!

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).



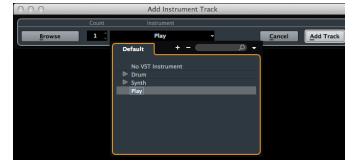
4. Now begin loading instruments into PLAY, click 'Add' each time your prompted. If you set the Auto-Increment in Step 5 (above), each Instrument will be assigned to its own MIDI channel and will correspond to the MIDI channel assignments in Pro Tools. In PLAY, the MIDI channel assignment is in parenthesis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

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

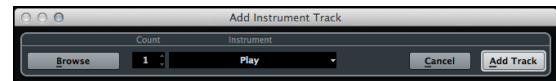
Using PLAY as a Plug-in with Cubase 8



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.

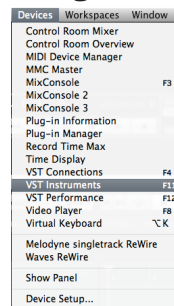


3. Click 'Add Track' to create the PLAY plugin track.



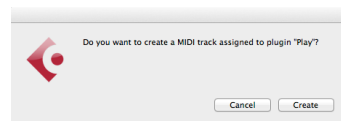
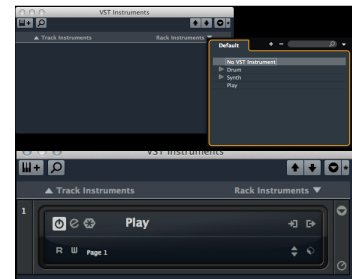
You're now ready to load your first instrument and begin composing!

Using PLAY in a Multi-Timbral Setup in Cubase 8



1. Open Cubase and go to Devices > VST Instruments.

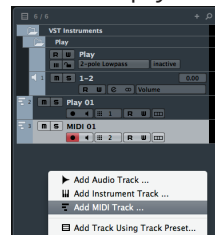
2. In the VST Instrument window, click in the Rack Instrument menu and select PLAY. You should see a Rack Instrument created inside the VST Instruments window.



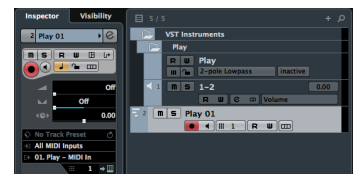
3. When asked to create a MIDI track assigned to the PLAY plugin choose 'Create'.

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'.



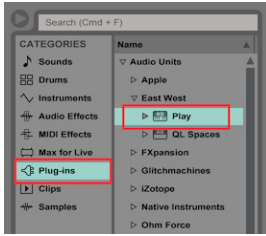
In Cubase's Inspector window, you can check the MIDI Channel assignments of each MIDI track highlighted below.



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 9



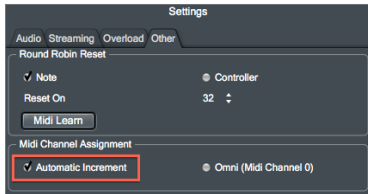
1. Open Live, go to the Browser window and click on 'Plug-ins' in the left column under the 'Categories' heading to find the East West Folder.

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 9

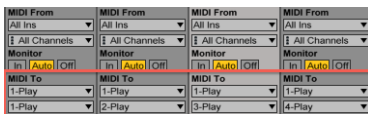


1. After loading PLAY as a plugin (see above), open the PLAY interface and click on the Settings menu (top-left corner in PLAY), then click on the Other tab and check-mark the box next to Auto-Increment under the MIDI Channel Assignment heading. Click 'Apply' then close.

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.

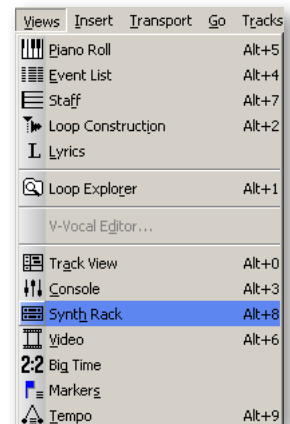


Using PLAY as a Plug-in with Sonar

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 cascad-



THE EASTWEST PLAY 5 SYSTEM

ing 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.

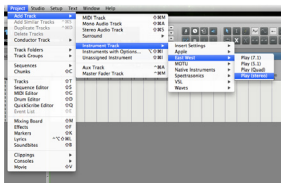


ADVANCED: Sonar calls all these plug-ins “Soft Synths,” short for “software synthesizers,” even though PLAY is not literally a synthesizer. The term “synth” is often used informally to indicate any electronic sound generator, including a sample player such as PLAY.

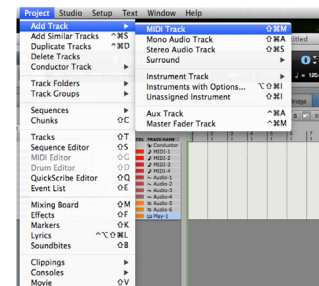
In a not-yet-used MIDI track in Sonar’s Track View window, assign PLAY as the track’s plug-in, as shown in the image at the right. Create up to 16 tracks per instance of the PLAY plug-in. The MIDI channel selected in the “CH” drop-down, also shown in this same image determines which instrument in PLAY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



Using PLAY as a Plug-in with Digital Performer 9

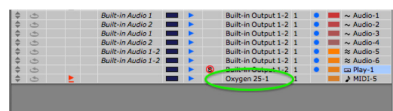


1. Go to Project > Add Track > Instrument Track > East West > Play [stereo]. This will load a new instance of PLAY.



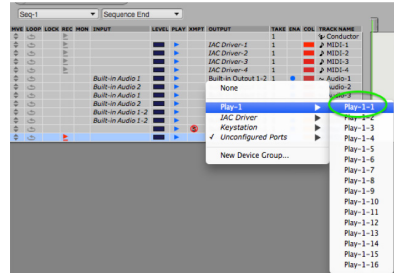
2. Now create a MIDI track by going to Project > Add Track > MIDI Track

3. On this new MIDI track...

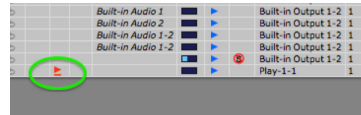


THE EASTWEST PLAY 5 SYSTEM

... set the output to PLAY 1-1



4. Now, record-enable the PLAY track



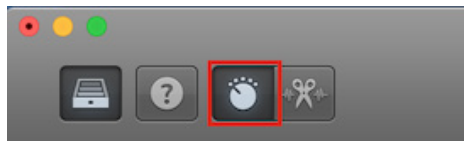
5. Click on PLAY's Browser button. In the Favorites window (lower-left) select the desired library from the list, then navigate to the instrument you wish to load.



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!

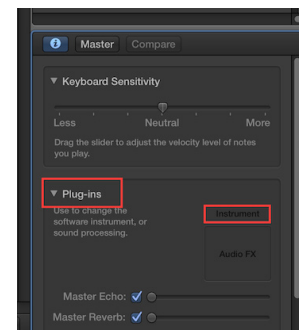
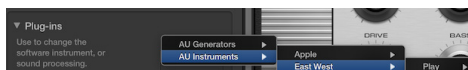
Using PLAY as a Plug-in with Garageband

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



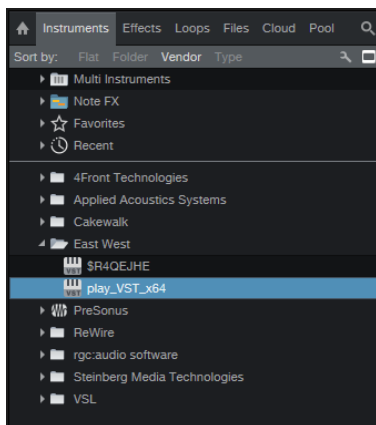
2. In the window that appears, click on the "i" Info Icon in the top-left corner to reveal the plugins button.

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

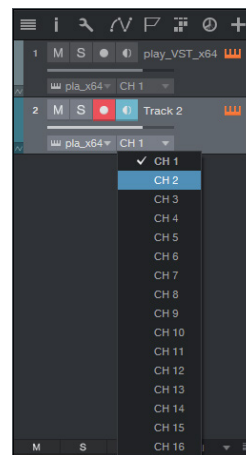


1. Open Studio One and drag PLAY from the Instruments list and drop it onto the timeline, or on the panel on the left-hand side of the project window.

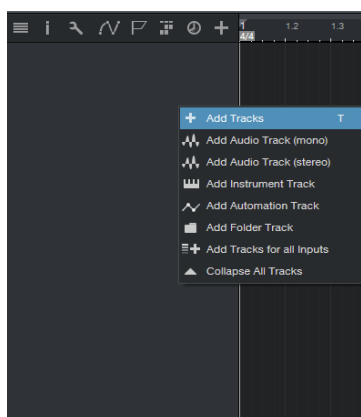
2. Assign the instrument track to PLAY, on a specified MIDI channel.

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.

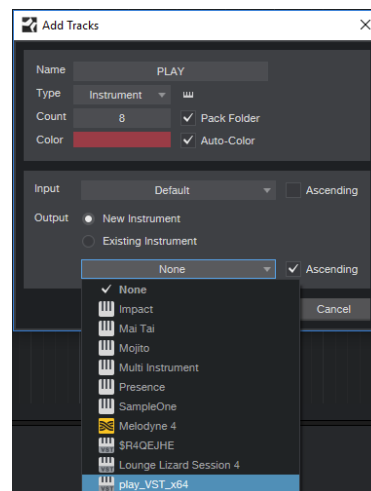
3. Under 'Output', click 'New Instrument', select PLAY from the drop-down list, and click 'Ok'.

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

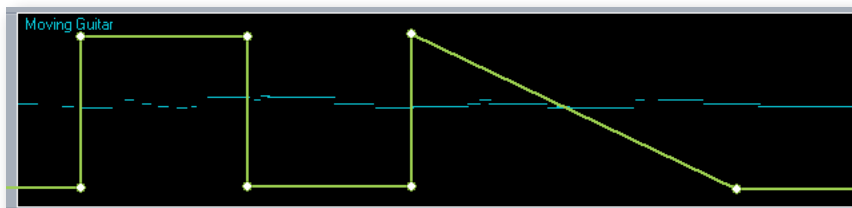
The term “Automation” refers to a facility for manipulating knobs, sliders, and other controls with an external process and being able to repeat the same movements automatically on subsequent playback. This feature is available in many modern sequencers. The details of the implementation vary from one 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.



10. MIDI Continuous Controllers

- 100 What Is MIDI?
- 101 The Most Common MIDI Continuous Controllers
- 101 Using MIDI to Shape a Performance
- 102 MIDI CC 1: Mod Wheel
- 102 MIDI CC 7: Volume
- 102 MIDI CC 10: Panning
- 102 MIDI CC 11: Expression
- 103 MIDI Learn

[LINK TO MASTER NAVIGATION DOCUMENT \(MND\)](#)

MIDI Continuous Controllers (CCs)

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.

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.

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 pre

sure 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.