String Machine

USER MANUAL

1.0.1

INFORMATION

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USER MANUAL
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1.1 STRING MACHINE OVERVIEW

Featuring samples from some of the greats -- Arp Solina, Oberheim OBX, Roland RS-505, and Roland Jupiter 6 -- String Machine pays homage to vintage string machine synthesizers that defined an era, and continue their influence today.

String Machines were well known for their ensemble chorus effects, and the one included in String Machine features 3 modes, each with distinct characteristics. With effect emulations modeled from the Arp Solina, and Roland VP-330 hardware units, along with a 'Modern' mode, our Ensemble Chorus effect delivers everything from vintage warmth and thickness, to modern transparency and dimension.

String Machine's user interface is inspired by the design of vintage string machine synthesizers, from the chunky instrument switches adorned along the front panel, to the glide of envelope sliders, and the tactile 'feel' of push buttons.

String Machine fits right at home in a variety of genres, electronic or otherwise, but is especially suitable for genres heavy on retro nostalgia, like synthwave or pop.

Instrument Sections

String Machine features 4 color-coded instrument sections, including string machines and pads (red), section strings (green), solo woodwinds and brass (teal), and choirs and soloist (orange).

Each instrument section features a number of instruments and alternatives, giving you countless ways to combine them into a diverse range of timbres. The ease of mixing the individual instrument sections together allows the creation of rich, multi-layered pads.

Control Sets

Each instrument section features a similar set of controls, including volume knobs to balance against the other sections, envelopes to shape their volumes over time, buttons to engage effects, and instrument and alternative switches to combine instrument timbres in unique ways.

Global controls that apply across all instrument sections include volume, pan, stereo field, filter, and reverb sends.

Presets

String Machine comes with 17 presets programmed by Nick Phoenix. These presets demonstrate the type of sounds possible with String Machine, but we encourage you to use String Machine as it was intended -- creating your own presets!

Learn More

The next section in this chapter provides a walkthrough of using String Machine in Opus, the software that powers all EastWest products.

CONTINUE READING **CHAPTER 2:** DIVING DEEPER for more in-depth information about the instruments and controls available in String Machine.

1.1.1 Walkthrough

This section guides you through the first 10 minutes of using Opus, covering basic tasks like setting up your Audio and MIDI devices, navigating the user interface, and loading an instrument. More in-depth coverage of these topics can be found later in the manual.

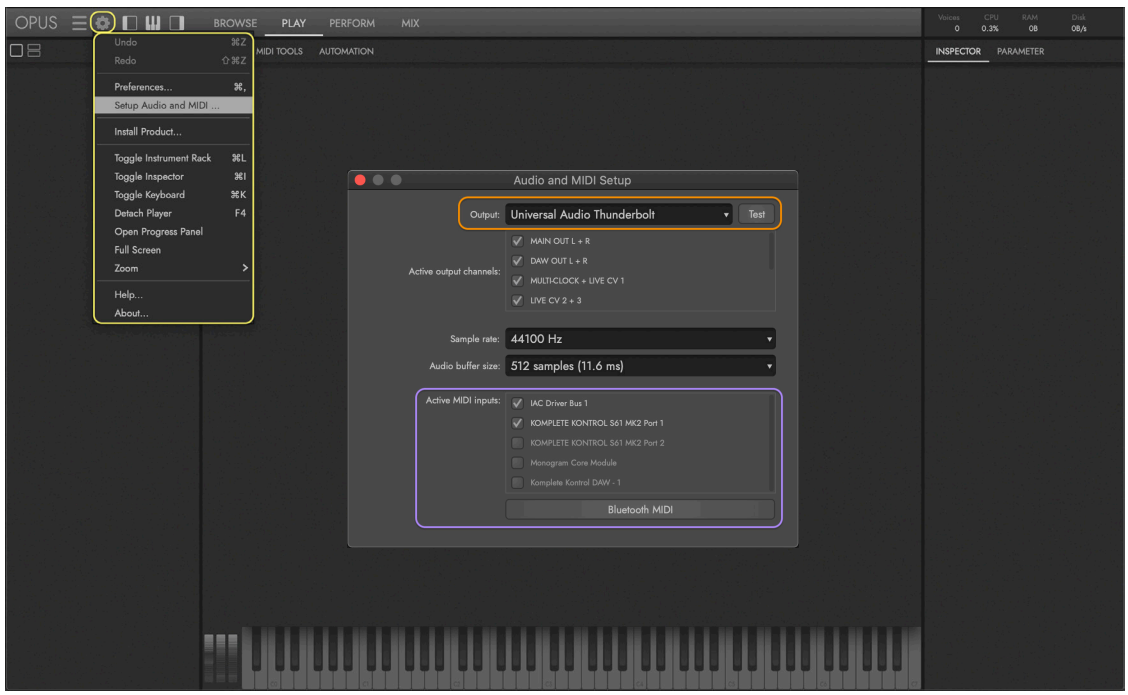
The first time Opus is launched, an initial setup process will begin. It helps to optimize CPU and disk performance based on a number of factors.

Audio and MIDI Setup

Before beginning, click in the **SETTINGS** MENU and select the **SETUP AUDIO AND MIDI** OPTION from the menu to setup your audio and MIDI devices .

Select an audio device from the **OUTPUT** MENU, and test the connection by clicking the **TEST** BUTTON to send a test tone.

The **ACTIVE MIDI INPUTS** AREA will show all MIDI inputs that are available. Check the box next to the MIDI device(s) you wish to enable.



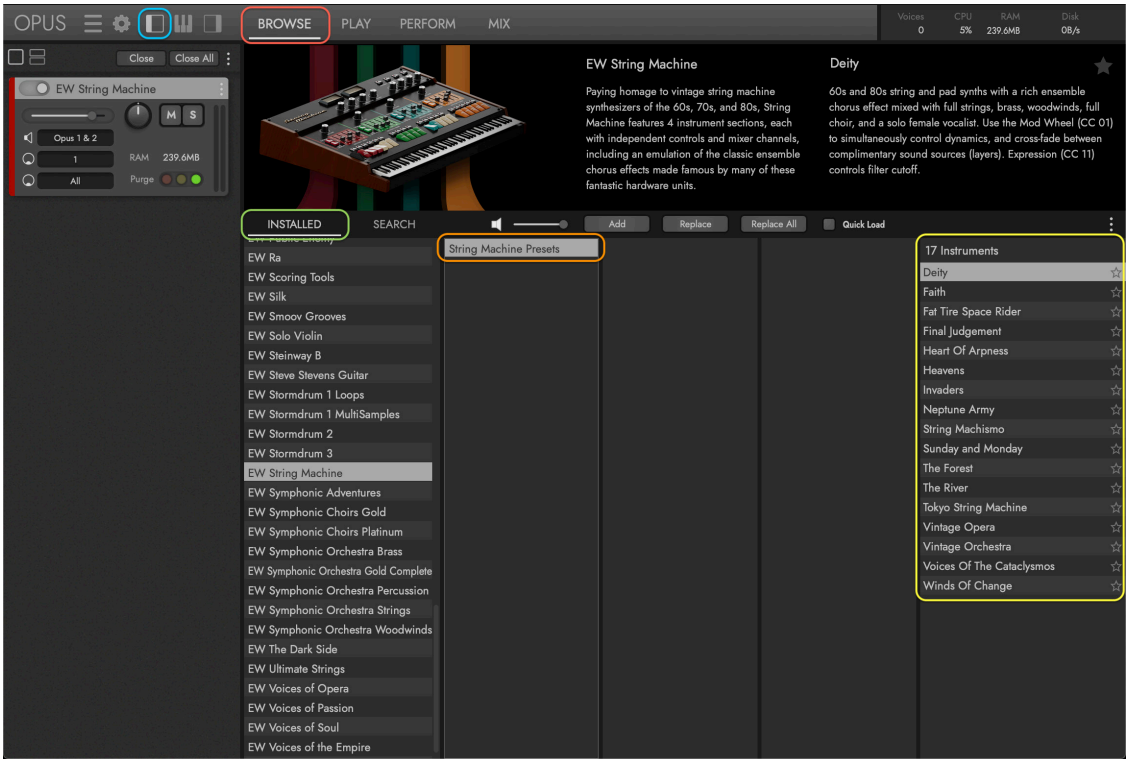
OPUS SOFTWARE MANUAL **SECTION 1.1.6** PREFERENCES contains more information about the settings available in the preferences window.

Loading an Instrument

To load an instrument in String Machine, first click the **BROWSE PAGE** SELECTOR in the NAVIGATION BAR to enter the Browse page.

Next, click on the **INSTRUMENT RACK** BUTTON in the NAVIGATION BAR to open the Instrument Rack that appears on left side of the user interface. It shows all loaded instruments, and a few basic controls like volume, pan, and MIDI channel assignment.

In the **INSTALLED MODE** AREA, select the String Machine entry in the list of EastWest Libraries that populates the column on the left.



Next, double-click on the default 'EW String Machine' instrument that appears in the **RESULTS LIST** COLUMN to load an initialized patch ideal for creating your own presets.

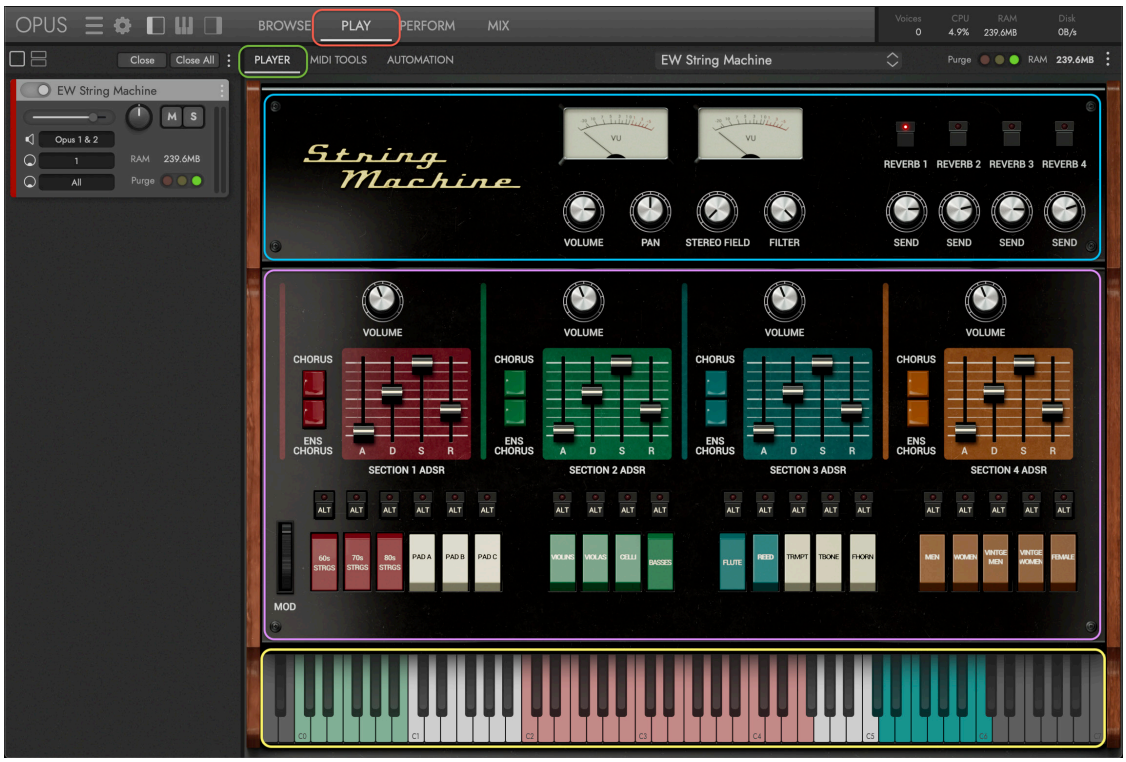
To populate the Results List column with a selection of presets designed by producer Nick Phoenix, click on the **STRING MACHINE** PRESETS sub-folder in the left-most middle column, then double-click on one of the preset names.

CONTINUE READING **SECTION 2.1** STRING MACHINE INSTRUMENTS for details about the instrument and presets available in String Machine.

Playing an Instrument

To access String Machine's controls, click the **PLAY PAGE** SELECTOR in the NAVIGATION BAR to enter the Play page.

The **PLAYER SUB-PAGE** SELECTOR is selected by default in the PALETTE MENU, showing the custom String Machine user interface (shown below).



Adjust parameters in the **GLOBAL CONTROLS** AREA to finalize the master stereo output of an instrument by using volume, pan, stereo field, filter, and reverb controls.

The **INSTRUMENT CONTROLS** AREA contains 4 sets of controls, one set for each of the instrument sections: string machines and pads (red), section strings (green), solo woodwinds and brass (teal), and choir and soloist (orange). Each instrument section contains the same set of controls, including a volume knob and envelope, instrument and alternative switches, and Chorus and Ensemble Chorus effects buttons.

The **VIRTUAL KEYBOARD** AREA is located in the lower area of the interface, and displays the note range of each instrument section according to its respective color-code. Overlapping note ranges between instrument sections are color-coded white.

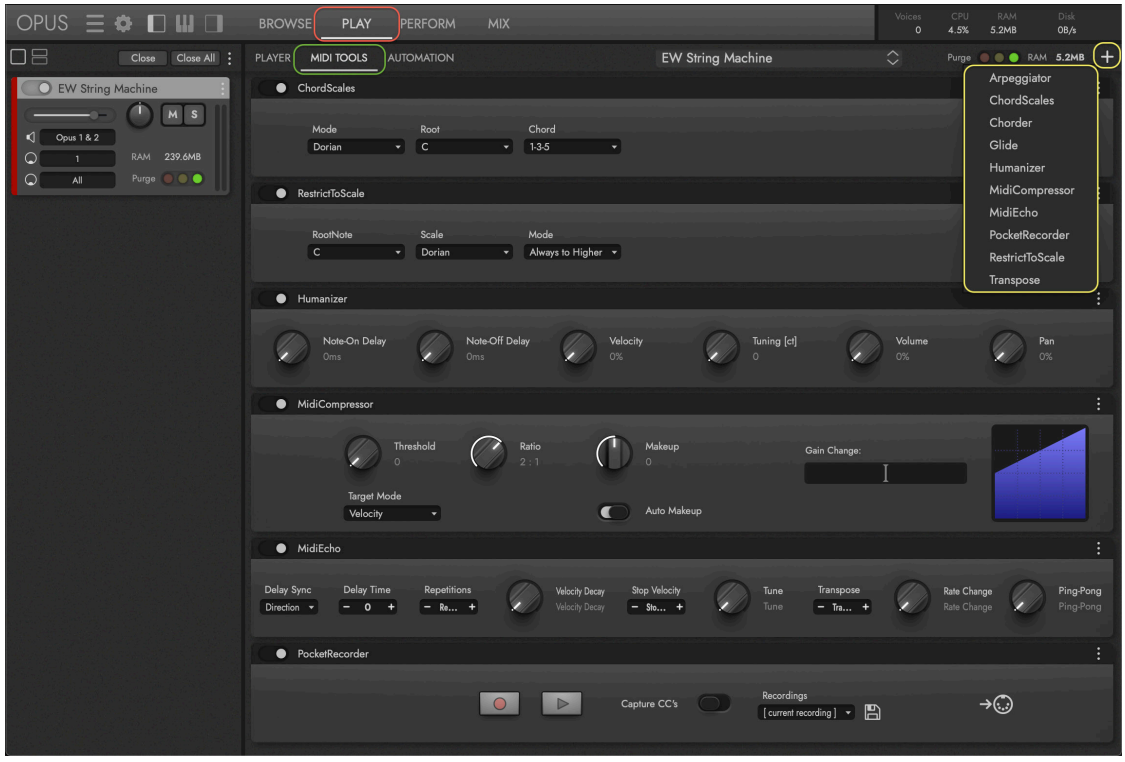
CONTINUE READING **SECTION 2.2** STRING MACHINE CONTROLS for more details about the parameter controls available to manipulate an instrument's sound.

Using the MIDI Tools

A suite of MIDI Tools are available that offer a range of MIDI processing options.

To enter the MIDI Tools sub-page, click on the **PLAY** PAGE SELECTOR in the NAVIGATION BAR, then clicking on the **MIDI TOOLS** SUB-PAGE SELECTOR in the PALETTE MENU.

To load a MIDI Tool, click in the **ADD MIDI TOOL** MENU in the secondary PALETTE MENU, then select one from the list.

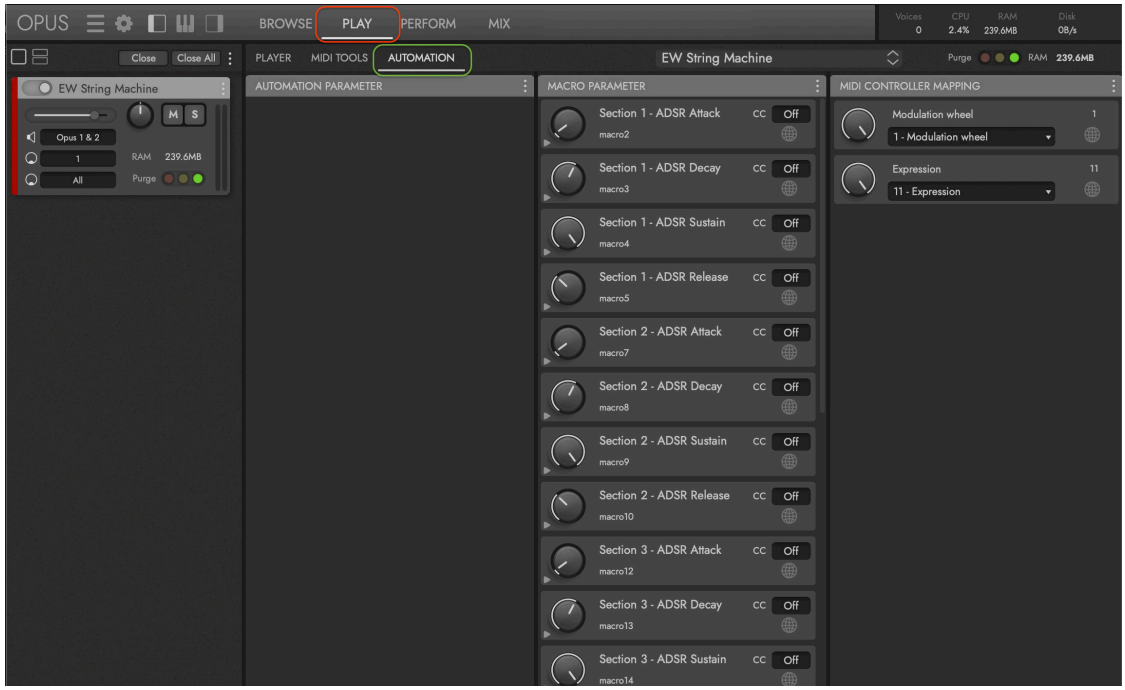


OPUS SOFTWARE MANUAL **SECTION 2.2.2** MIDI TOOLS SUB-PAGE contains more details on all the tools and options available in this area .

Automating Parameters

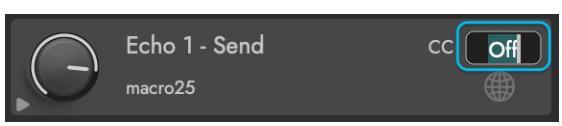
Add movement to an instrument by automating their parameters in a DAW, or program your MIDI controller to control and record them into a DAW in real-time.

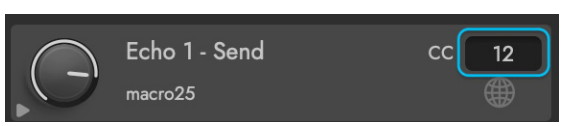
To enter the Automation sub-page, click on the **PLAY** PAGE SELECTOR in the NAVIGATION BAR, then click on the **AUTOMATION** SUB-PAGE SELECTOR in the PALETTE MENU.



The Automation Parameters area populates with controls that will appear in a DAW's plug-in automation lane. You can add your own using the ellipsis menu found in the Automation Parameters header area.

The Macro Parameters area populates with controls that can be automated in a DAW's MIDI automation lane. To assign or reassign a Macro Parameter to a MIDI CC, click once inside the **MIDI CC ASSIGNMENT** FIELD, enter a number between 1 and 127, and then hit the enter or return key.





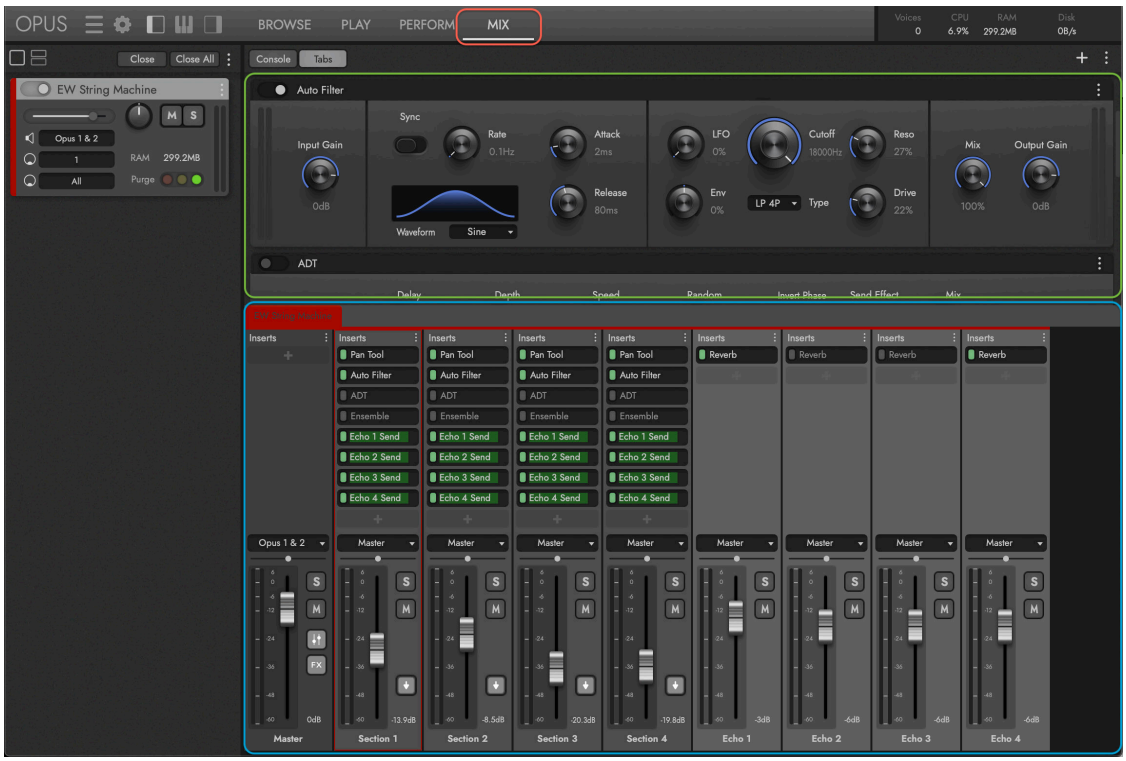
OPUS SOFTWARE MANUAL **SECTION 2.2.3** AUTOMATION SUB-PAGE contains more information about how to use the Automation sub-page.

Mixing an Instrument

To change an instrument's mix and effect settings, click the **MIX PAGE** SELECTOR in the NAVIGATION BAR to enter the Mix page.

The **EFFECTS** AREA occupies the top half of the Mix page, and displays the insert effects loaded on the selected channel (by default, the Master channel).

The **MIXER** AREA is located in the bottom-half of the Mix page, and populates with the standard mixer channel setup for String Machine: a Master channel, 4 Sub Mixer channels, and 4 FX Bus channels.



The 4 Sub Mixer channels provide independent outputs for Instrument Sections 1-4, enabling unique effects settings for each. The Pan Tool and Auto Filter effects are enabled across all 4 sections by default, and the ADT and Ensemble effects can be turned on here in the Mix page, or in the Play page by clicking the respective 'Chorus' and 'Ens Chorus' buttons.

> OPUS SOFTWARE MANUAL **SECTION 2.4** THE MIX PAGE for details about how to mix and finalize and instrument's output.

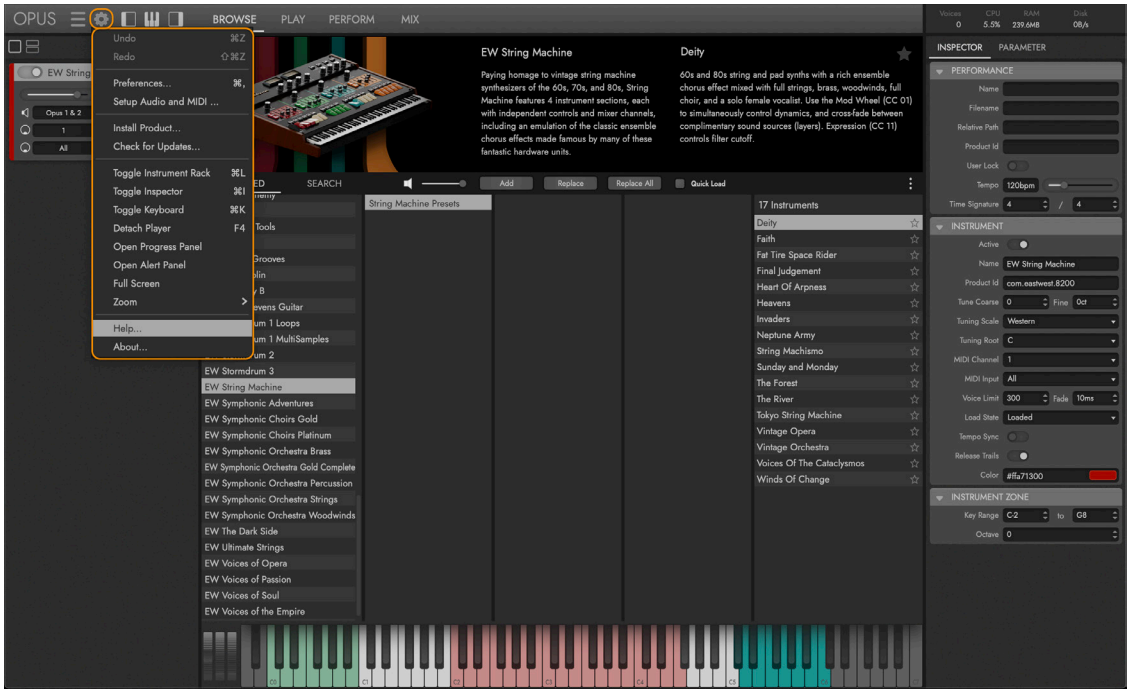
PLEASE NOTE! Each Instrument Section's Sub Mixer channel can send signal to each of the Reverb FX Bus channels independently, however we recommend using the Send knobs in the Global controls section of String Machine's user interface to change send levels across all 4 instrument sections simultaneously for a more cohesive sound.

1.1.2 Powered By Opus

Opus is the new software engine that powers EastWest virtual instruments. It is faster, more powerful, more flexible, and better looking than the previous generation software engine, and it comes with some incredible new features.

To learn more about the Opus Software, beyond those specifically related to String Machine, refer to the Opus Software Manual. It covers all aspects of the Opus software's features, controls, and options.

The Opus Software Manual is accessible by clicking on the **SETTINGS MENU** BUTTON in the top-left corner of the Navigation Bar, and selecting the **HELP** OPTION that appears at the bottom of the menu.



When topics can be expanded upon beyond the scope of String Machine, a message like the one below will direct you to a specific chapter or section of the Opus Software Manual to learn more.

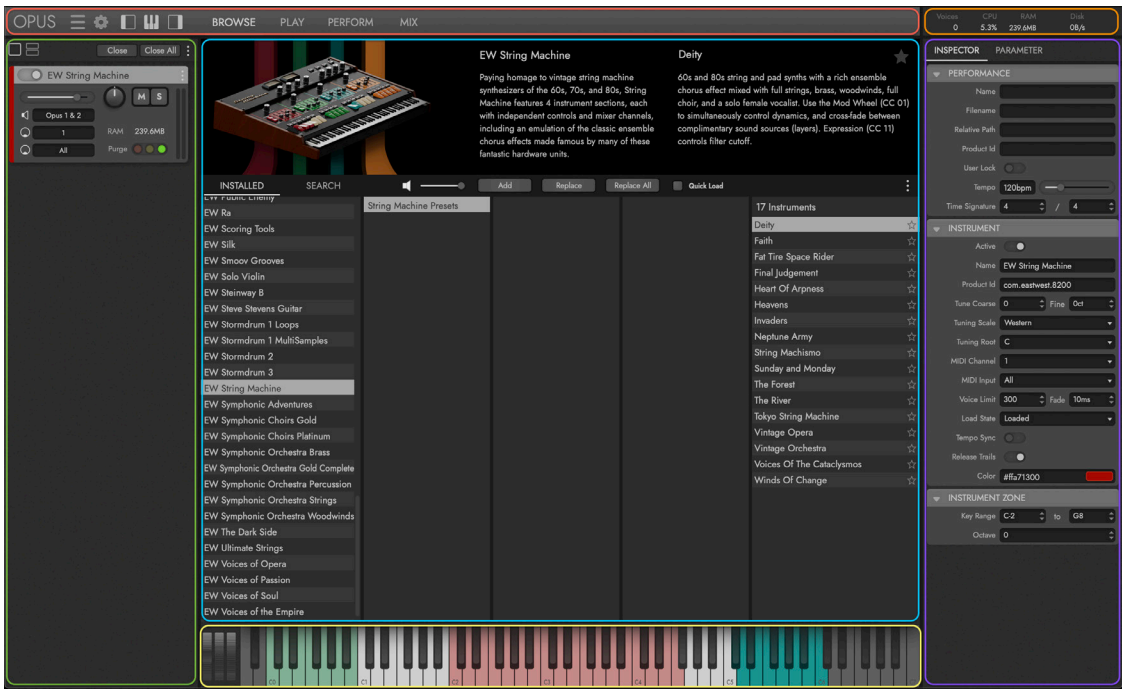
> OPUS SOFTWARE MANUAL explores the entire control and feature set of Opus.

User Interface Layout

The Opus user interface is divided into 6 main areas (some initially hidden from view).

At the top is the **NAVIGATION BAR** AREA that contains important menus and buttons to access all the main areas of the Opus user interface. From left to right that includes:

- The **OPUS** BUTTON prompts an 'About' window to appear with software information.
- The **MAIN MENU** OPTIONS (horizontal lines) are related to saving and opening instruments and performances, and the **SETTINGS MENU** OPTIONS (gear icon) contain preferences for audio and MIDI, and more.
- The **INTERFACE** TOGGLES show and hide parts of the Opus user interface: the Instrument Rack (left), the Virtual Keyboard (middle), and the Inspector (right).
- The **PAGE** SELECTORS switch the **MAIN DISPLAY** AREA between the Browse (shown), Play, Perform, and Mix pages.



The **INSTRUMENT RACK** AREA populates with loaded instruments, and includes basic controls for volume, pan, solo / mute, and more. Further details are just below.

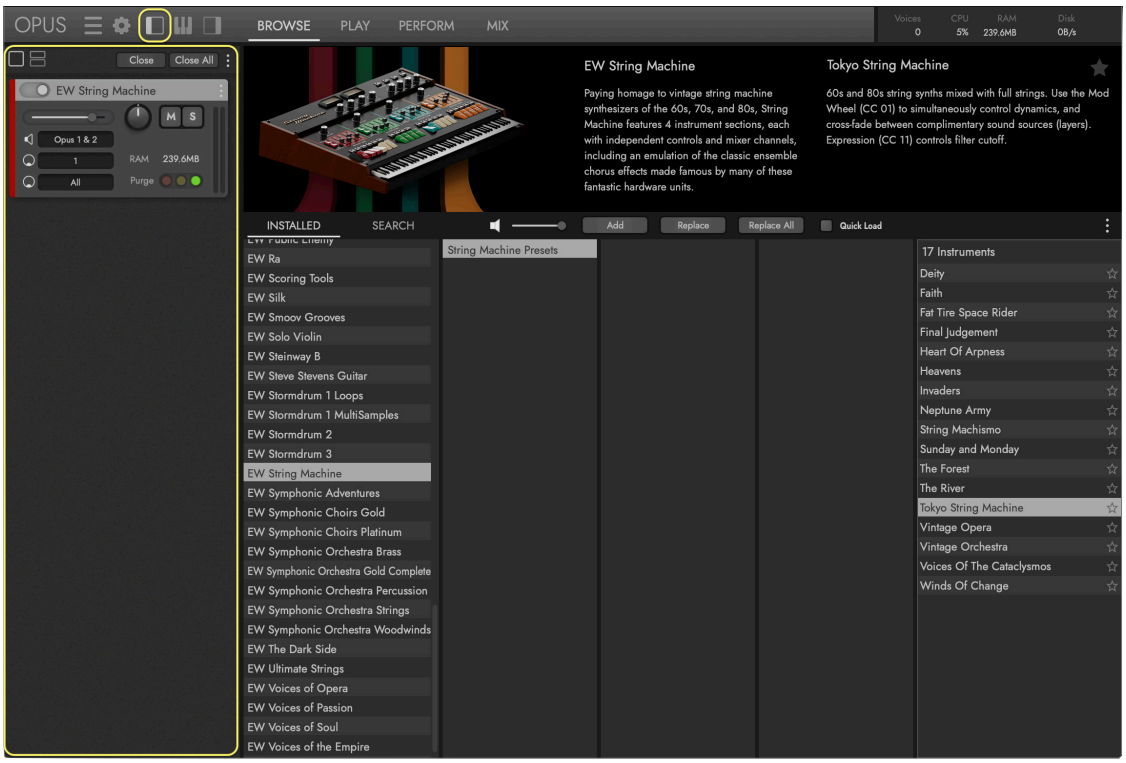
The **VIRTUAL KEYBOARD** AREA shows the selected instrument's sampled key range, pitch wheel, modulation wheel (CC 1), and expression wheel (CC 11).

The **SYSTEM USAGE** AREA area provides real-time stats related to the number of simultaneous voices, CPU usage, RAM usage and disk usage.

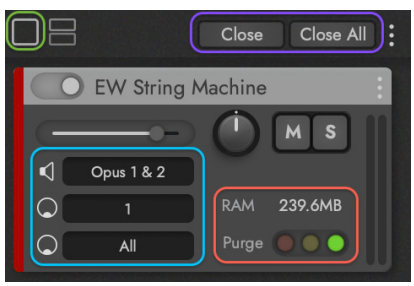
The **INSPECTOR** AREA shows information pertaining to the current selection, whether that's an instrument selected in the Browse page, or a channel selected in the Mix page.

Instrument Rack

Click the **INSTRUMENT RACK** TOGGLE in the NAVIGATION BAR to open and close the **INSTRUMENT RACK** that appears on the left side of the Opus user interface. Each loaded instrument appears in the Instrument Rack, with a number of controls and options available.



Loaded instruments appear by default in the **FULL RACK** VIEW (accessible by clicking on the full square icon). It provides a larger rack space with access to all available controls.



The **HALF RACK** VIEW (accessible by clicking on the stacked rectangle icon) provides a smaller rack space that only contains **ESSENTIAL CONTROLS** including volume, pan, mute, and solo.

The **CLOSE** BUTTON removes the currently selected instrument, and The **CLOSE ALL** BUTTON removes all currently loaded instruments.

Use the **I/O SELECTOR** MENUS to determine (from the top) an instrument's audio output, MIDI Channel Assignment, and MIDI input port.

Use the **PURGE** CONTROL to change the selected instrument's memory footprint. To remove it from memory, click the red 'purge' button on the left. As notes are played, the yellow light in the middle indicates only notes played since last purging are loaded into memory. To load an instrument back into memory, click the green 'load' button on the right.

1.1.3 What's Included

EastWest's String Machine includes:

- A collection of 18 instruments / presets
- Approximately 13 Gigabytes (GB) of 24-bit, 44.1 kHz samples
- EastWest's powerful, new Opus software engine.
- A license that identifies the product you bought.
- A String Machine User Manual.pdf
- An Opus Software Manual.pdf
- The EW Installation Center to setup the libraries, software, and documentation

An **iLok** account is required for a machine-based (electronic) license to be placed on your computer. You may also place the license on an optional iLok 2 or 3 key. The iLok 1 key is not longer supported.

An internet connection is required for several things:

- The first time download of the EW Installation Center and Opus software
- The first time activation of perpetual licenses
- The renewed activation of subscription licenses (ComposerCloud)
- The download of EastWest Libraries (see below for other options)

Once everything is setup, you will only need a connection once per month so that the license remains active. If you're not active and the sync doesn't happen automatically, you will need to deactivate, then reactivate the license using the iLok License Manager.

1.1.4 System Requirements

Below are the minimum and recommended hardware and software specifications for using Opus on Windows and MacOS systems.

Minimum System:

- CPU: Quad-core (four cores), running at 2.7 GHz (or above)
- RAM: 16 GB
- OS: MacOS 10.13 (or later); Windows 10 with ASIO sound drivers
- Drive: HDD (7200 rpm, non-energy saving)

Recommended System:

- CPU: Octa-core (eight cores), running at 2.7 GHz (or above)
- RAM: 32 GB or more
- OS: MacOS 10.13 (or later); Windows 10 with ASIO sound drivers
- Drive: SSD (SATA or PCIe)

PLEASE NOTE! Opus runs natively on Apple M1 CPUs, and Intel-based Macs, as well as the latest MacOS Monterey and Microsoft Windows 11 operating systems.

1.1.5 Sequencer Compatibility

The chart below outlines the MacOS and Windows 64-bit operating systems and sequencers that are officially supported (fully tested) with the latest version of Opus.

PLEASE NOTE! Most DAWs (Sequencers) are VST2, VST3, AU and AAX plug-in format compatible, but only those specified in the chart below are officially supported.

Sequencer		Operating Systems	
DAW Software	**Version**	**MacOS (10.13 +)**	**Windows 10**
EW Opus Stand-Alone	1.2 +	√	√
Ableton Live	10.0 +	√	√
Apple Logic Pro	10.0 +	√	-
Apple Garageband	10.3 +	√	-
Avid Pro Tools	2018.1 +	√	√
Bitwig Studio	3.0 +	√	√
Cockos Reaper	6.0 +	√	√
Image-Line FL Studio	20 +	√	√
Motu Digital Performer	9.0 +	√	√
Steinberg Cubase (1)	9.0 +	√	√
Steinberg Nuendo (1)	8.0 +	√	√
Presonus Studio One	4.0 +	√	√
VSL Vienna Ensemble Pro	6.0 +	√	√
Notation Software			
Avid Sibelius (2)	7.0 +	√	√
MakeMusic Finale (2)	25.0 +	√	√
Steinberg Dorico (2)	2.2 +	√	√

(1) VST3 Usage is recommended.

(2) Notation programs work with Opus, but do not support the full feature set of some East West Libraries, such as those that use WordBuilder. Please contact support for details.

1.2 ABOUT THE PRODUCERS

String Machine was produced by Doug Rogers and Nick Phoenix.

1.2.1 Doug Rogers

With over three decades of experience in the audio industry, founder and producer Doug Rogers is the recipient of many industry awards including "Recording Engineer of the Year". "The Art of Digital Music" named him one of "56 Visionary Artists & Insiders" in the book of the same name.

In 1988 he founded EastWest, the most critically acclaimed virtual (software) instrument developer in the world. Since then, EastWest has been the recipient of over 120 international industry awards. Rogers uncompromising approach to quality, and innovative ideas has enabled EastWest to lead the industry for over 30 years.

After forming EastWest, he produced the very first commercial drum samples collection, followed with a sequel co-produced with Bob Clearmountain, which was so successful a new industry was born. Rogers and Clearmountain produced subsequent releases that won many awards. In 1991, Rogers released the first collection to include MIDI driven drum loops, which enabled users to adjust each loop tempo in their sequencer without adjusting pitch or decreasing quality.

With sampling technology improving, Rogers released the Ultimate Piano Collection in 1995, the first multi-velocity sampled piano collection, which received many industry awards. In 1997 Rogers partnered with Nemesys to create the GigaSampler software and instrument collections, which pioneered the use of "streaming from hard drive technology", a technical breakthrough without which, the high quality virtual instruments of today would not be possible.

In 2003 he co-produced with Nick Phoenix the first surround sound virtual orchestra, Symphonic Orchestra, engineered by 11-time Grammy nominated classical recording engineer Keith Johnson, and recorded in a 'state of the art' concert hall (awarded Keyboard Magazine "Key Buy Award," EQ Magazine "Exceptional Quality Award," Computer Music Magazine "Performance Award," and G.A.N.G. [Game Audio Network Guild] "Best Sound Library Award"); and followed that release with Symphonic Choirs (awarded Electronic Musician "2006 Editor's Choice Award," G.A.N.G. "Best Sound Library Award," and Keyboard Magazine "Key Buy Award"). Symphonic Choirs and it's predecessor Voices of the Apocalypse were the first music software products to enable users to type in words for the choirs to sing in any key with a computer. This was followed in 2007 with EastWest/Quantum Leap Pianos, the most detailed virtual piano collection ever produced, also in surround sound.

In 2005 Rogers established a software development division for EastWest, and released the first 64-bit virtual instruments that became the new standard. Rogers most recent productions include Forbidden Planet, co-produced with Nick Phoenix;

Hollywood Orchestra Opus Edition, co-produced with Nick Phoenix; Hollywood Orchestrator, co-produced with Sonuscore; Hollywood Backup Singers, co-produced with Nick Phoenix; Voices Of Opera featuring Larisa Martinez (Andrea Bocelli's soprano) and Carlton Moe (Phantom of the Opera tenor), co-produced with Nick Phoenix; Voices Of Soul featuring C.C. White, co-produced with Nick Phoenix; Hollywood Choirs, co-produced with Nick Phoenix; Spaces II Reverb, co-produced with Nick Phoenix; Voices Of The Empire featuring Uyanga Bold, co-produced with Nick Phoenix; EastWest MIDI Guitar Series, co-produced with Nick Phoenix; ProDrummer 1, co-produced with Mark "Spike" Stent; ProDrummer 2, co-produced with Joe Chiccarelli; Ghostwriter, co-produced with Steven Wilson; Hollywood Solo Violin, Hollywood Solo Cello, and Hollywood Harp, co-produced with Nick Phoenix; Hollywood Strings, Hollywood Brass, Hollywood Orchestral Woodwinds, and Hollywood Orchestral Percussion, co-produced with Nick Phoenix and Thomas Bergersen. The Hollywood Orchestra series was engineered by 2019 Grammy winner (Best Engineered Album, Classical) Shawn Murphy (Indiana Jones and the Kingdom of the Crystal Skull, Star Wars: Episode II - Attack of the Clones, Star Wars: Episode III - Revenge of the Sith, Star Wars: A Musical Journey, Solo: A Star Wars Story, Star Wars: Rise Of Skywalker, Jurassic Park, Jurassic Park The Lost World, Harry Potter and the Prisoner of Azkaban, Titanic, Minority Report, Saving Private Ryan, Munich, The Passion Of The Christ, X-Men: The Last Stand, Memoirs of a Geisha and Ice Age, etc.); The Dark Side, co-produced with David Fridmann; and Fab Four with Beatle's engineer Ken Scott, inspired by the sounds of the Beatles. Both Fab Four and The Dark Side won M.I.P.A Awards, judged by over 100 international music magazines.

1.2.2 Nick Phoenix

Nick Phoenix joined Doug Rogers in the early days of sampling and together they have produced dozens of the most popular virtual instruments available today.

Phoenix's career has been driven by new ideas and innovation. He pioneered concepts like creating choirs that can sing the words you type on the keyboard and reverse engineered musical performances to create virtual instruments capable of flowing and expressive performances. Virtual instruments like Silk captured the "complete" sound of unusual world instruments using an innovative multi-mic, phase aligned technique. Phoenix co-produced the EastWest Quantum Leap Symphonic Orchestra and Hollywood Orchestra, the two most popular complete orchestral virtual instruments ever released. These collections were the result of many talents, with Phoenix directing the performance, attitude and articulation of the orchestra. Cutting edge reverb to accompany these orchestral sounds became an obsession for Phoenix. After many years of struggling with available reverbs, Phoenix created a method of capturing instrument specific and stage location specific convolution reverb and created Spaces and Spaces 2.

Phoenix's career as a composer has always been a huge part of what he does as a virtual instrument producer. He was involved in the birth of trailer music in the early 90s. Epic collections like Stormdrum and Voices Of The Apocalypse were created to allow him to compose huge soundscapes on a very tight schedule for blockbuster trailers. In the early 2000s, Phoenix scored over 1000 film trailers and TV ads.

Phoenix partnered with Thomas Bergersen in 2006 and started Two Steps From Hell. Two Steps From Hell is credited as starting a whole new genre of music called "Epic Music." Two Steps is currently the #1 streaming film music artist worldwide with 1.6 million YouTube subscribers. Their albums "Invincible" and "Battlecry" both went gold. They are touring Europe in 2022.

For more information, please visit: www.twostepsfromhell-live.com

Phoenix and Rogers have never been interested in rehashing old ideas. Every product has been an attempt to bring something new to the table. Stormdrum 3 with Mickey Hart captured unique instruments way outside the spectrum. Hollywood Pop Brass is the first pop brass collection that sounds like a hit record out of the box. Hollywood Choirs has taken the word building concept to new levels and has won numerous awards. The latest release "Forbidden Planet" is the result a 20 year journey with analogue synthesizers. It is unlike any synth plug-in ever created.

Phoenix also started a solo rock career in 2021. The band has members from John Mayer's band and Death Cab. Phoenix has described it as modern rock with classic rock undertones. It is his current passion. Phoenix has a unique website that allows you to create your own mixes of his music, among other things.

For more information, please visit: www.nickphoenix.com

1.3 ABOUT EASTWEST

EastWest (soundsonline.com) is the #1 online source for professional sounds and virtual instruments. It operates sounds and software development divisions in Hollywood, USA; and Berlin, Hamburg, and Munich, Germany.

1.3.1 EastWest Sounds

With clientele that spans the music, film, television, games, multimedia and performing arts, EastWest has led the industry for 30+ years and provides professionals with the very best music creation tools available.

Virtual instruments enable composers and others involved in music production to use music keyboards connected to computers to create music that is virtually indistinguishable from a live performance, at a fraction of the cost. A high percentage of the music produced for all media today is produced on computers using EastWest Virtual Instruments.

EastWest won the NAMM TEC Award "Best Music Software Instrument" for Hollywood Choirs, the industries top award. Pictured receiving the award are (from L-R) Dinshah Sanjana (Vice-President of Sales), Rhys Moody and Blake Rogers (Production Coordinators), Wolfgang Kundrus (Software Development), and Doug Rogers (Producer).

EastWest/Quantum Leap virtual instruments are considered to be the best available, and are used and endorsed by the who's who of the music, film, TV, and games industries, including James Newton Howard (The Hunger Games, King Kong, Bat-

man Begins), Danny Elfman (Fifty Shades Of Grey, Silver Linings Playbook, Alice In Wonderland), John Powell (Solo: A Star Wars Story, Rio, Kung Fu Panda), Brian Tyler (Avengers: Age of Ultron, Iron Man 3, Thor), Jeff Beal (House of Cards, Blackfish, Rome), Thomas Newman (Skyfall, Saving Mr. Banks, Wall-E), David Newman (Ice Age, Tarzan, Scooby-Doo), J.J. Abrams (Director/Creator: Star Wars VII, Star Trek, Lost), Zedd (Zedd, Lady Gaga, Ariana Grande), Mark "Spike" Stent (Coldplay, Lady Gaga, Bruce Springsteen, Muse), Herbie Hancock (12-time Grammy Winning Pianist and Composer), David Kahne (Producer Paul McCartney, Miley Cyrus, Lana Del Rey), David Campbell (Pearl Harbor, Armageddon, World War Z, Adele's 21, Muse's 2nd Law), Mac Quayle (The People v. OJ Simpson, Mr. Robot, American Horror Story), Alex Lacamoire (Hamilton, Dear Evan Hansen, In The Heights), Jeff Russo (Star Trek: Discovery, Legion, The Night Of), Jordan Rudess (Dream Theatre, David Bowie, Enrique Iglesias), Brody Brown Grammy-Award Winning Producer and Songwriter for Bruno Mars, Teddy Riley (Producer Michael Jackson "Dangerous" and "Invincible"), Paul 'Wix' Wickens (Keyboards/Musical Director, Paul McCartney), Rob Abernethy (Video Games: Pacific Rim, Despicable Me, Dead Space), Christophe Beck (Frozen, Pink Panther 2, Under the Tuscan Sun), Steve Jablonsky (Desperate Housewives, Transformers), and countless others.

EastWest launched the first subscription service in the sounds industry, ComposerCloud, which dramatically lowered the cost of entry to more than 40,000 virtual instruments included in ComposerCloud, so anyone interested in fully exploring their musical creativity could also afford it without compromise.

1.3.2 EastWest Studios

EastWest owns and operates a large recording studio complex in Hollywood. 136 Grammy nominations were recorded or mixed at EastWest The 21,000 sq. ft. facility, since remodelled by master designer Philippe Starck, houses five recording studios and is the world headquarters for EastWest.

For more information, please visit: eastweststudios.com.

1.4 SUPPORT

Visit the EastWest Support Center to Live Chat with a Support Agent, download Software and Product Updates, and access FAQs, guides, and manuals.

1.4.1 Installation Guides

Installation instructions are available in our Getting Started guides that are available online by following the links below.

- ComposerCloud Getting Started (for subscription-based users)
- Eastwest Libraries Getting Started (for perpetual license users).

1.4.2 Video Tutorials

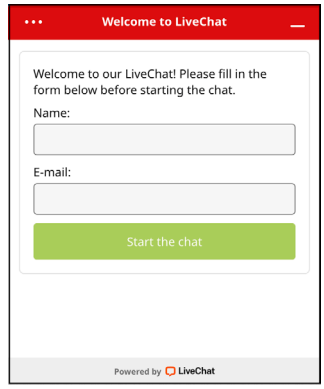
Visit us on YouTube for video walkthroughs, tutorials, and trailers, and join the discussion on Facebook for the latest announcements.

- **YouTube:** https://www.youtube.com/user/EWQLTutorials
- **Facebook:** https://www.facebook.com/eastwestsound

1.4.3 Live Chat

EastWest's Support Center offers Live Chat, the fastest way to reach a Support Team Member to help resolve any technical issues you may be having.

Click on the red "Chat Now" box that appears in the lower-right corner. Fill in your name and email address, then click "Start the Chat", or if an agent is not available click "Leave a Message" by explaining your issue, and a Support Agent will respond as soon as they're available.

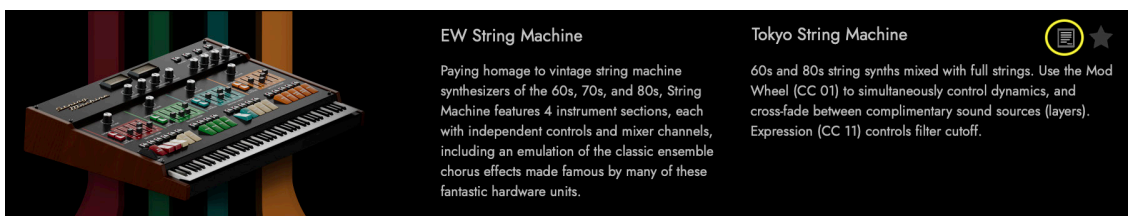


1.4.4 Manuals

In addition to being available at the EastWest Support Center, the latest User Manuals for each product, and the Opus Software Manual are accessible directly inside the Opus Software itself.

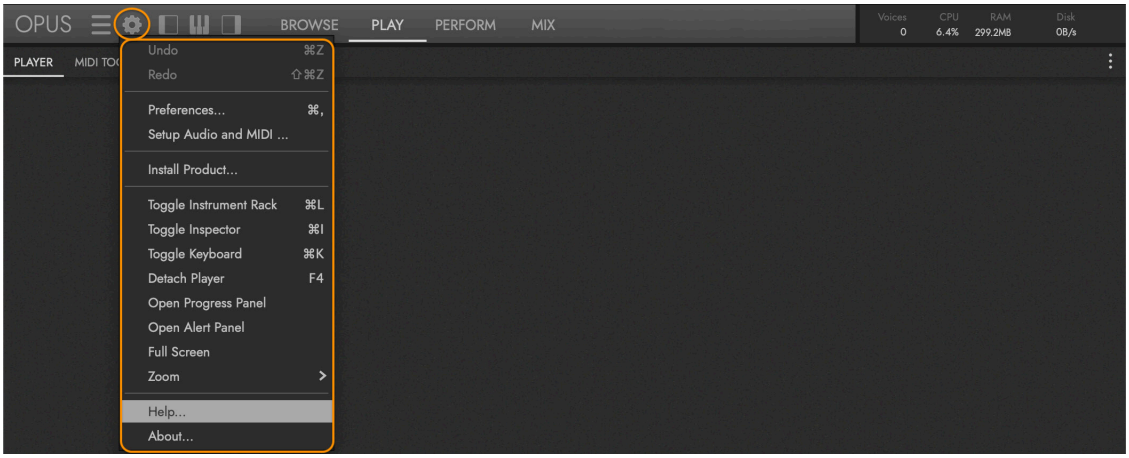
String Machine User Manual

This String Machine User Manual is accessible by clicking on the **USER MANUAL** BUTTON located in the top-right corner of the Description Box, found in the Browse page. It focuses on topics that are specific to String Machine.



Opus Software Manual

The Opus Software Manual is accessible by clicking on the **SETTINGS MENU** BUTTON in the Navigation Bar, and selecting the **HELP** OPTION at the bottom of the menu. It provides a comprehensive dive into all the features and controls available in Opus more broadly, beyond those specific to String Machine.



Continued Reading

Throughout this manual there are references to sections in the Opus Software Manual that expand upon the current topic in greater detail. For example:

> OPUS SOFTWARE MANUAL **SECTION 1.1.6** PREFERENCES contains more about the settings available in the preferences window.

There are also references that direct you to continue reading in other parts of this manual to expand upon the current topic. For example:

> CONTINUE READING **SECTION 2.2** STRING MACHINE CONTROLS of this manual for more in-depth coverage of the controls and features of the Player sub-page.

Navigating the Manuals

The numbering system identifies the chapter, section, and sub-section to identify the referenced section. For instance, this section is numbered 1.5.3, meaning it's from chapter 1, section 5, sub-section 3.

Use either the included chapter links that are a standard in PDF formatted documents, or use the link in the top-left area of the header on each page to reach the Contents (< CONTENTS) of the manual.

2.1 STRING MACHINE INSTRUMENTS

String Machine comes with 17 presets programmed by Nick Phoenix. These presets demonstrate the type of sounds possible with String Machine, but we encourage you to use String Machine as it was intended -- building presets of your own!

Instrument Sections

String Machine features 4 color-coded instrument sections that includes string machines and pads (red), section strings (green), solo woodwinds and brass (teal), and choir and soloist (orange).

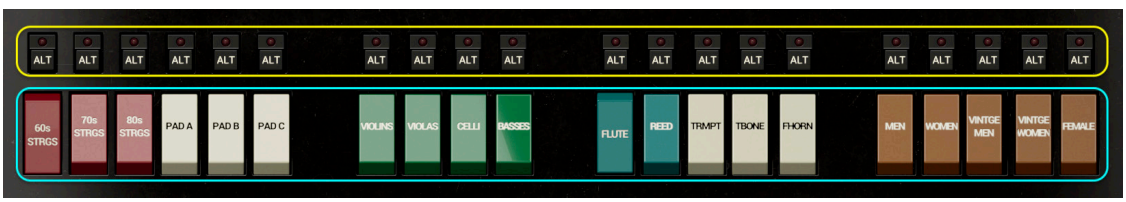
A similar set of instrument controls are available for each of the instrument sections, and global controls can be applied to all instrument sections.

CONTINUE READING **SECTION 2.2** STRING MACHINE CONTROLS for details on the controls available in String Machine that allow you to build your own presets.

Instruments and Alternatives

Instruments contained in each instrument section can be turned on and off using the **INSTRUMENT** SWITCHES that run along the bottom of the user interface.

Above this row are **ALTERNATIVE (ALT)** SWITCHES that swap the main instrument out for an alternative (ALT) one.



Use these switches to activate the instruments / alternatives in each instrument section to create a diverse range of timbres, combining up to 4 instrument sections together to create complex, multi-layered instruments.

- **Section 1 (Red): String Machines and Pads**
  This instrument section contains 6 instruments: 3 vintage string machines, and 3 analogue pads. Each instrument also has an alternative (ALT), for a total of 12 possible instrument timbres, and countless combinations. Use the Mod Wheel (CC 01) to cross-fade between complimentary sound layers.
    - 60s Strings
    - 70s Strings
    - 80s Strings
    - Pad A
    - Pad B
    - Pad C

- **Section 2 (Green): String Section**
  This instrument section contains the 4 instruments that make up a string section. The main instruments are played with vibrato, while the alternatives (ALT) are played without vibrato. Use the Mod Wheel (CC 01) to cross-fade between 2 dynamic layers.
    - Violins
    - Violas
    - Celli
    - Basses

- **Section 3 (Teal): Solo Woodwinds and Brass**
  This instrument section contains 5 solo woodwind and brass instruments. The main instruments are played with vibrato, while the alternatives (ALT) are played without vibrato. Use the Mod Wheel (CC 01) to cross-fade between 2 dynamic layers.
    - Flute
    - Reed
    - Trumpet
    - Trombone
    - French Horn

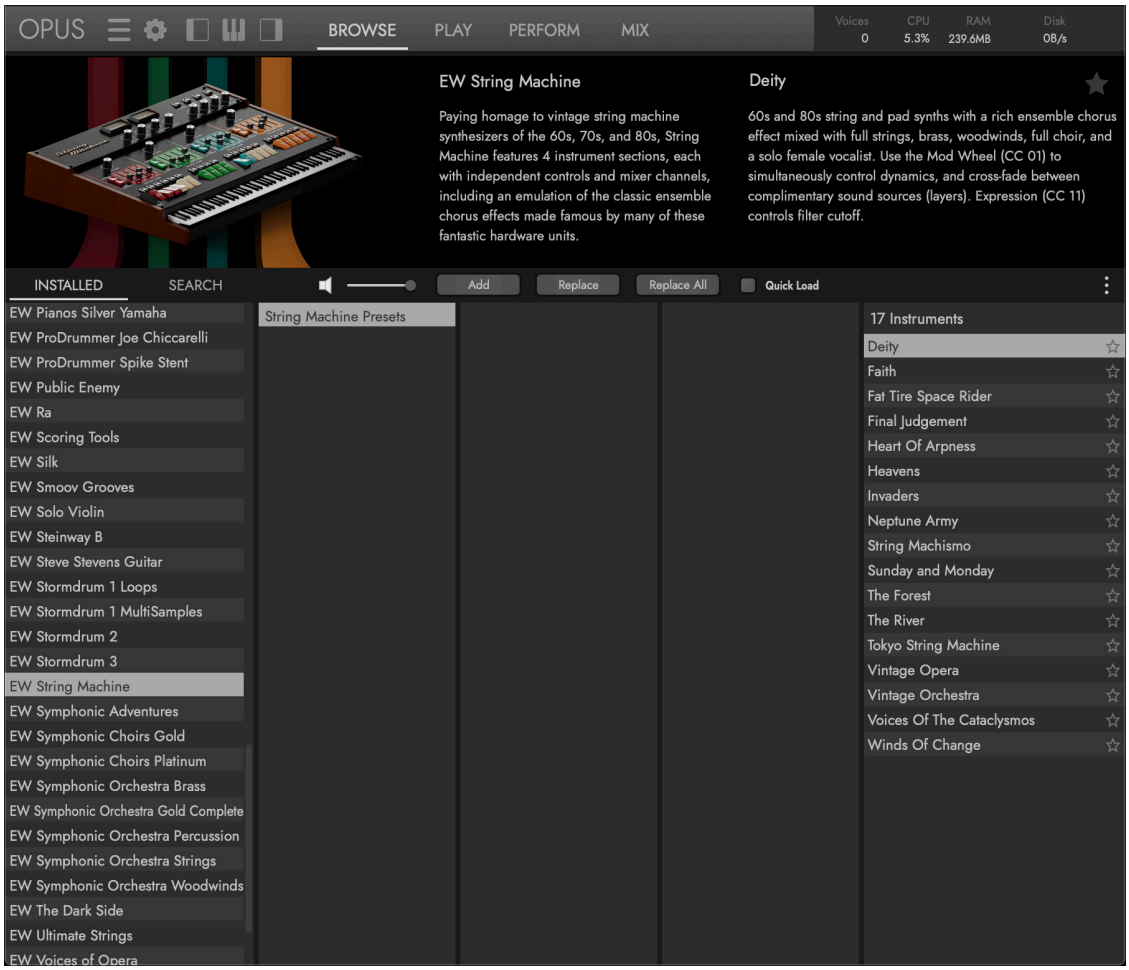
- **Section 4 (Orange): Choir and Soloist**
  This instrument section contains 5 instruments including 2 types of men's and women's choirs, and a solo female vocalist. The main instruments for the 2 choirs feature a sustained 'oh' vowel, while the alternatives (ALT) feature a sustained 'ah' vowel. Use the Mod Wheel (CC 01) to cross-fade between the 2 dynamics layers.
    - Men's Choir
    - Women's Choir
    - Men's Vintage Choir
    - Women's Vintage Choir

  The main instrument for the solo female vocalist features an 'oh' vowel without vibrato that cross-fades into a 'ah-oo' vowel with expressive vibrato by using the Mod Wheel (CC 01). The alternative (ALT) instrument features a solo female vocalist with an 'oo' vowel without vibrato that cross-fades into an 'oh' vowel without vibrato by using the Mod Wheel (CC 01).
    - Female

2.1.1 Instrument Descriptions

At the top of the Browse page is the Description Box, which contains the artwork, library description, and instrument description (from left to right) of the currently selected instrument or preset.

Because much of the time with String Machine will be spent creating your own presets, the Instrument Descriptions don't play as big a role as other libraries. However, the Instrument Descriptions for the 17 presets programmed by Nick Phoenix contain details about which instruments, effects, and MIDI controls are used.



For instance, when you navigate through the String Machine library, and click on the preset named 'Diety', the Description Box is as follows:

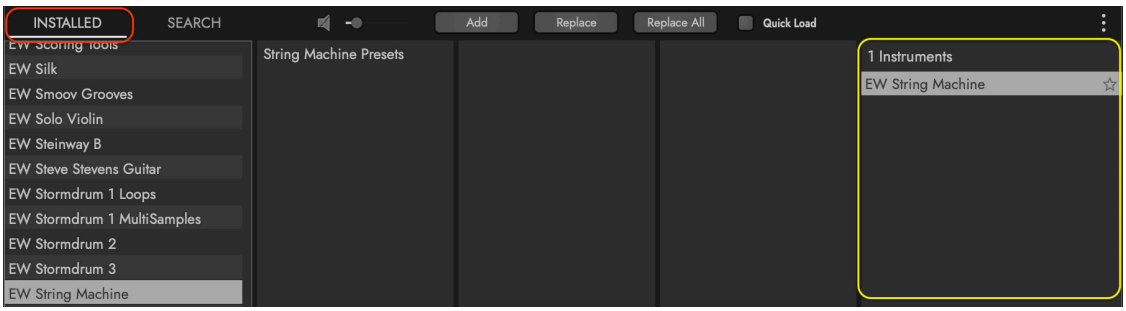
60s and 80s string and pad synths with a rich ensemble chorus effect mixed with full strings, brass, woodwinds, full choir, and a solo female vocalist. Use the Mod Wheel (CC 01) to simultaneously control dynamics, and cross-fade between complimentary sound sources (layers). Expression (CC 11) controls filter cutoff.

2.1.2 Ways to Find Instruments

There are several ways to find instruments in the Browse page that includes browsing the library folders of a given product in the Installed mode, and by narrowing down instrument selections using attribute tags in the Search mode. Key words can also be directly entered into the Search Field also found in the Search mode.

Browsing the String Machine Library

Click on the **INSTALLED** MODE button to browse for instruments based on the product's library folders. To begin, click on **EW STRING MACHINE** product entry in the list of installed EastWest Libraries that populate in the left column (in alphabetical order).



With String Machine selected, double-click the 'EW String Machine' instrument that appears in the **RESULTS LIST** COLUMN (shown above). It loads an initialized state ideal for creating your own presets, with only the 60s Strings instrument active, and the first reverb send effect enabled.

To audition presets that demonstrate the sounds String Machine is capable of, click on the **STRING MACHINE** PRESETS sub-folder to populate the Results List column with the 17 presets programmed by Nick Phoenix. Double-click on any preset to load it.

OPUS SOFTWARE MANUAL **SECTION 2.1** THE BROWSE PAGE contains more details on all the ways to find, preview, and load instruments.

2.1.3 Saving Your Own Presets

String Machine was designed to enable you to quickly build your own presets in the spirit of string machine synthesizers of the past. However, unlike many of the original hardware units, String Machine settings can be saved for later recall.

Click the **SNAPSHOT MENU** in Opus to reveal a menu of options related to storing, resetting, and restoring instrument snapshots (presets).

When you're ready to save instrument settings, click the **STORE SNAPSHOT OPTION**, then enter a name in the dialog window that appears, and click the 'Store' button.

Use the **RESET INSTRUMENT OPTION** to restore an instrument to its original settings.

To recall a saved snapshot (preset), hover over the **RESTORE PATCH OPTION** to reveal a sub-menu that populates with all previously saved snapshot (presets). Click on one of the saved snapshot to see your settings restored.

2.2 STRING MACHINE CONTROLS

An array of controls populate String Machine's main user interface (shown below).

To find them, click on the **PLAY** PAGE SELECTOR in the NAVIGATION BAR to enter the Play page, where the **PLAYER** SUB-PAGE is selected by default.

The String Machine user interface is divided into 3 main areas:

- **GLOBAL** CONTROLS are located at the top area, and apply to the master stereo output.
- **INSTRUMENT** CONTROLS are located in the middle area, with controls that can be applied independently to each of the 4 instrument sections.
- **VIRTUAL** KEYBOARD is located in the lower section, and displays the note range of each instrument section according to its respective color-code. Overlapping note ranges between instrument sections are color-coded white.

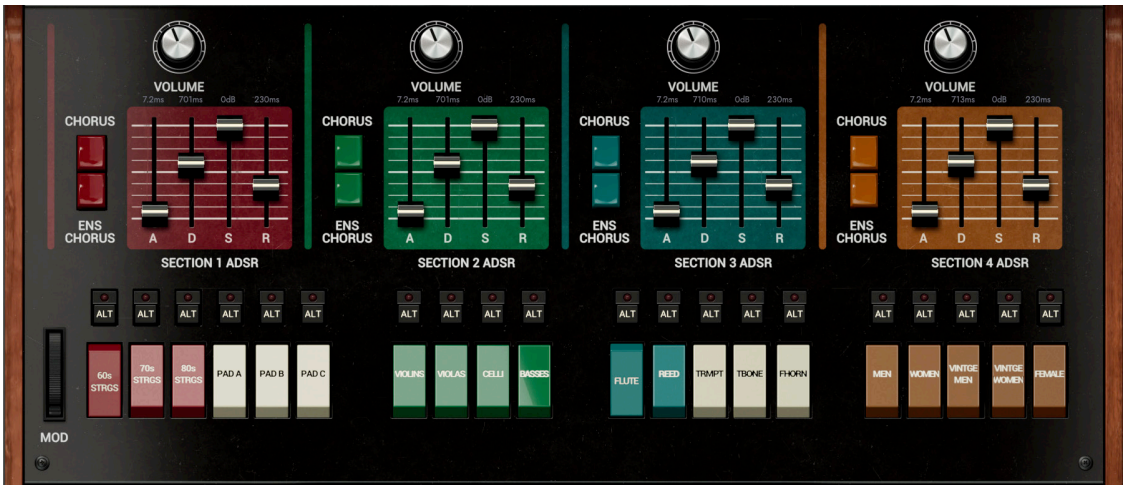
2.2.1 Global Controls

The top area of String Machine's user interface is populated with global controls that affect an instrument's master stereo output.

- **Volume** controls an instrument's master volume.
- **Pan** controls an instrument's pan position in the stereo field.
- **Stereo Field** controls the perceived width of the stereo image by adjusting how far apart the stereo channels are positioned.
- **Filter** controls the cutoff frequency of the low-pass filter, removing the frequencies above the cutoff point.
- **Reverb 1 - 4** buttons turn the reverb send effects on and off, which allow the different reverb effect settings to be auditioned, and combined in different ways.
- **Send 1 - 4** knobs change the send level to a given effect bus across all 4 instrument sections simultaneously.

2.2.2 Instrument Controls

The middle area of the String Machine user interface is populated with 4 sets of controls, one for each of the 4 instrument sections: string machines and pads (red), section strings (green), solo woodwinds and brass (teal), and choir and soloist. (orange).



Each instrument section contains the same set of controls, which includes:

- **Volume Knobs** control the volume of each instrument section, allowing you to blend multi-layered sounds together with ease.
- **Volume Envelopes (ADSR)** control the volume of each instrument section over time with a 4-stage envelope (attack, decay, sustain, and release).
- **Instrument Switches** populate each instrument section, allowing you to combine instruments in various ways using the switches to turn them on/off.
- **Alternative Switches** are available for each Instrument Switch, and will swap the main instrument out for an alternative (ALT) one.
- **Effects Buttons** turn the Chorus and Ensemble Chorus effects on and off. The effect presets provide default settings that work in most situations. If you wish to change the effect settings, please visit the Mix page.

2.2.3 MIDI Controls

Each instrument in String Machine is made up of 2 layers that can be cross-faded between using the Modulation Wheel (CC 01) on a MIDI controller. This enables the blending instruments layers, or the transformation from one layer to another.

Use the **MOD WHEEL** CONTROL located in the lower-left corner of the String Machine user interface to view its current position (value).

The **FILTER** CONTROL located in the Global Controls section is a macro parameter that simultaneously controls the filter cutoff on the Auto Filter effects inserted on each of the 4 instrument section's mixer channels. Program a MIDI controller to send Expression (CC 11) data to control this macro parameter in real-time.

CONTINUE READING **SECTION 1.1.1** WALKTHROUGH for more details about modifying these parameters for use in a DAW's MIDI controller automation lane in the section 'Automating Parameters'.

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