

Ms. Sax S.

The Virtual Soprano Saxophone

USER MANUAL



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Before you start

Even if this instrument is easy and intuitive to play, getting excellent results requires some practice and experience. Please read this User Manual carefully. It contains very important information which will help you to achieve best results in a much shorter time. Listen also to the demos and have a closer look into the demo MIDI file(s) available on our homepage www.samplemodeling.com. The demo MIDI files clearly show how the instrument is played and which parameters are most important for a realistic performance.



Note: the MIDI note naming convention we are using is based on the Yamaha standard: the middle C is C3, corresponding to the MIDI note number 60.

Licensing

Even if you purchased one virtual instrument, we provide two license keys. How to use them is a customer's choice. One can elect to install the instrument on two different systems, if both belong to him, and are not used simultaneously. Or, one can spare one license for future upgrades. Please note that operating system, or hard drive changes do not affect instrument activation. However, major hardware upgrades, or installation of the instrument on a new computer require a new activation. That's the main reason for providing two license keys. An additional, "rescue", license key may also be obtained upon request in exceptional cases, like hardware crashes. Sharing unused license keys is strictly forbidden. Please note that all license keys are personalized, making the e-mail address of the owner visible on the instrument GUI.

Product description

Mrs. Sax S. is one of the most expressive virtual musical instruments. You can really PLAY it, shaping the sound like a real saxophone player does. It works on any up-to-date computer (see System Requirements), within any suitable host like a sequencer (Cubase, Logic, etc.), DAW (Digital Work Stations) or a free host application (see below). It uses Stefano Lucato's proprietary SWAM (Synchronous Wavelength Acoustic Modeling) technology, providing the exceptional playability and realism which characterize all Samplemodeling instruments. It's not a sample player, using pre-recorded articulations, but a complex virtual instrument, capable of shaping almost any kind of articulation and phrase in real time. It can be played using any MIDI device like a keyboard, breath- or wind controller. [However, it's essential to provide the suitable control using appropriate MIDI devices, as described in this Manual]. Direct programming in a sequencer (without any MIDI devices) is also possible.



Note: Like a real instrument or other Samplemodeling instruments, and differently from any conventional sample library, Mrs. Sax S. allows continuous transition across the dynamics (from pp to ff), free from any phasing artifacts. To accomplish this, a suitable continuous physical MIDI controller (such as an expression or volume pedal (CC11 or CC7), a breath or a windcontroller (CC2)) is absolutely necessary.

WITHOUT THIS CONTROLLER THE INSTRUMENT WILL NOT WORK, displaying the warning “Expression controller not received. Please move your expression controller”

Other physical MIDI controllers, like sliders, knobs or modwheel, though not recommended, can be used for this purpose. Please refer to other sections of this manual for further details.

System Requirements

Supported Plugin Formats

PC:
VST 32/64 bit

Mac:
AU or VST 32 or 64 bit

Required operating systems

PC:
Windows 7 or XP, 32/64 bit
Mac:
Intel only, Mac OS 10.5, 10.6, 10.7

CPU load

The realism and expressiveness of Mrs. Sax S. is demanding in terms of CPU load. It needs an up-to-date computer with at least 1,6 GHz Core2Duo CPU. Less powerful systems may also prove satisfactory, but may require larger buffer sizes, involving higher latencies



Note: This may not represent a real problem though. Using the freeze feature or bouncing the single MIDI tracks to audio is a useful remedy.

Stand-alone mode

If you are a PC user and do not have any host application being capable of running VST or AU plugins (like a sequencer, DAW or another audio application), you can install a free host application like the excellent SaviHost by Hermann Seib, for example. Mac users may use the Garage Band belonging to the system.

Installation

The ZIP file you've downloaded contains all available versions of the plugin. **Please store all the downloaded files in a safe place for future use!**

After extraction of the archive choose the right version matching your system and extract it to a folder of your choice.

Windows

Before running the installer, please make sure that you know the exact path to your VST Plugins. This path must be entered during the installation procedure. It is usually the VST folder of your host application.

Make sure that you are installing the right version for your system (32 or 64 bit). Please note that the 64bit plugin version cannot be used on a 32 bit system.

Path examples:

Cubase, 32bit:

C:/Programs/Steinberg/VST Plugins

Cubase, 64bit:

C:/Programs/Steinberg/VST Plugins 64bit

On a 64bit system, please do not confuse the folder "Programs" (which contains 64bit applications only) with „Programs (x86)“, which is for 32bit applications!

If you use a 64bit computer, we strongly recommend to install just the 64bit plugin version.

If you are not sure about the location of your VST plugin folder, please refer to the User Manual of your host application.

In case no host application is available, please refer to the section "Stand-alone mode" above.

The installer will also create the folder Programs/Samplemodeling/Swam where the uninstaller and the User Manual can be found.

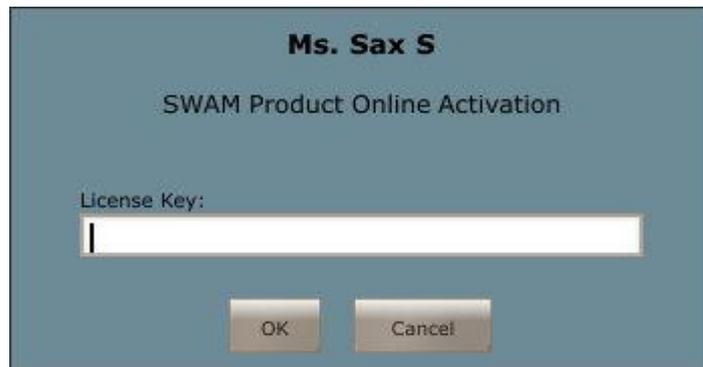
Mac OS

Run the installer and follow the instructions. This will install both 32 and 64 bit version in the appropriate "Components" folders. Per default, the installer will install the plugin for all users.

Online activation

After installation of Ms. Sax S. an activation of the software is necessary, otherwise the instrument will not work, showing "not licensed" on the GUI.

1. Launch your host application and open Ms. Sax S. (Please refer to the Manual of your host application if it does not recognize the plugin). The Online Activation window appears:



2. Enter one of the License Keys you received with the download links (the same keys have been sent to you via a separate email).

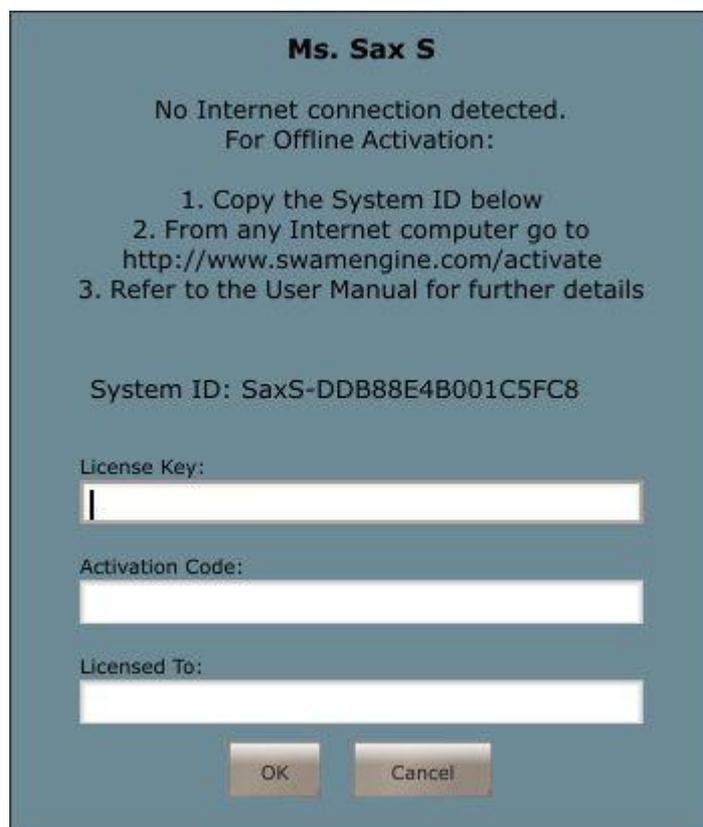
After a few seconds the authorization procedure is completed. The instrument installed on your system is permanently personalized and activated, and your e-mail address will appear on the instrument GUI. Please note that the above procedure may take a while in case of a very slow Internet connection.

Please note: if you are prompted to enter more data than just the License Key, you are not connected to the internet and the Offline Activation is started. You can either continue (see below), or repeat the Online Activation when you are online.

Offline activation

If you cannot connect your system to the Internet even temporarily, follow the instructions below to complete the offline activation:

1. Open the Plugin. The Offline Activation window appears:



2. Copy the System ID making sure that no characters are missing.
3. From a computer with an Internet connection go to www.swamengine.com/activate
The Offline Activation Page appears:

The screenshot shows the 'SWAM Product Activation' page. At the top, there is a 'SITEMAP' link and the 'SWAM engine' logo. Below the logo is a navigation menu with 'Home', 'About', 'News', 'Demos', 'People', and 'Contact'. A search bar is also present. The main heading is 'SWAM Product Activation'. The page contains the following text:

Welcome to the Offline SWAM Product Activation page.

Please insert the License Key you have received by e-mail upon the product purchase and the System ID you find on the Offline Product Activation popup window you see when you run the product in offline mode.

A message containing the Activation Code will be sent to the email address used for purchasing the product. The email address specified must match the one used for the product purchase.

System ID:

License Key:

Email Address:

SWAM

Synchronous Wave Acoustic Modeling, an innovative technique that makes virtual acoustic instruments incredibly real.

Distributed by



Copyright © SWAM engine

SITEMAP

Enter the System ID, an unused License Key and your e-mail address into the appropriate fields. (The License Keys have been sent to you together with the download links and via an email). Please note that the entered e-mail address must be identical to the address used for the purchase. After clicking on “Submit” the Activation Code will be displayed, and an e-mail with all the above data will be sent to the given e-mail address.

4. Go back to the previous, offline computer and enter the License Key, the Activation Code and your e-mail address into the appropriate fields of the Ms. Sax S. Offline Activation window. Please note: your e-mail address must be written exactly like the e-mail used for the purchase!
5. In a few seconds the plugin will be permanently personalized and activated, and your e-mail address will be displayed on the instrument GUI.



Note: Please safely store all the activation data! (License Keys, Activation Codes, as well as the e-mail address and the name belonging to them). They are necessary in case of any new installation on the same system.

Hardware Requirements

Audio Interface (Sound Card)

A good quality audio interface (USB, FireWire, PCI) with suitable low latency drivers (like **ASIO for the PC**) is required. The allowed buffer size are 128 - 2048 samples. Recommended settings are 256 samples, or 512 samples (higher latency, but less CPU load).

MIDI devices

Ms. Sax S. (like any other virtual instruments) can be successfully used without any additional hardware (except the audio interface) by drawing the controller curves and programming the notes directly in the host sequencer. However, a much more “human” and interactive configuration is recommended - especially for real time playing - using external MIDI devices:

- A MIDI keyboard with at least 5 octaves, Modwheel & Pitchbend, connected to the computer via USB or an external MIDI interface, equipped with a set of physical continuous MIDI controllers (usually knobs or sliders) to control effects like overblow, subharmonic, growl, etc.
- An Expression pedal, controlling the dynamics via CC11. Although the dynamics can be controlled with any other physical controller (knob, slider), a pedal is highly recommended. As an alternative, a Breath Controller, like Yamaha BC3 will do.
- Woodwind or brass players may prefer a Wind Controller like Yamaha WX or Akai EWI (USB or 4000S); both provide excellent results.

The Instrument and its controls

Main Instrument GUI

If properly activated (see “Installation” above), this is how the instrument looks after loading:



When you start playing, a warning message may appear, reminding you that an expression controller (preferably CC11, CC7 or CC2) is absolutely necessary for the proper functioning of the instrument:



Upon receiving the appropriate CC (from your keyboard or any other midi source, including a wind controller or sequencer) the warning disappears, the current value of the expression CC is continuously displayed in the dynamic envelope window, and the instrument is ready to play.

Please note: Per default, the software recognizes the first incoming CC number (among 11, 2 and 7) and assigns it as expression parameter automatically. If you prefer to define the Expression CC manually, open the Option Page (clicking on the Option Page button), disable "ExprsCC AutoLearn" and set the Expression CC to the desired number. From now on, only that CC will control the dynamics. If needed, store it as preset (see below).

A new instrument will start with the Preset " **Default Sax S. Keyb.Contrl** ". These settings are suitable to play the instrument with a MIDI (or USB) Keyboard, expression pedal (or breath controller), pitchbend and modWheel. Note: using a breath controller needs remapping the expression to CC2 on the Option Panel (see below).

To play the instrument with a Wind Controller (eg EWI or WX), please load the preset :
" **Default Sax.. Wind.Contrl** " .

Main Controls vs. articulations

Velocity controls:

- Initial Attack (for detached notes)
- Portamento Time (for Legato, if Port.Time Button is set to Velocity)

Expression (CC11, CC2, CC7 or other CCs set on the Options Page) controls the Dynamics (from pp to ff)

ModWheel (CC1) controls Vibrato intensity

CC19 controls Vibrato Rate

PitchBend controls the pitch within -3 to +2 semitones (default)

Staccato, “SemiLegato”, and Legato Articulations are managed by a special algorithm which takes into account :

- Note Velocity
- Interval between the notes (semitones).
- Time between Note-OFF and subsequent Note-ON

GUI Parameter Controls

There are three types of Controls on the Main Instrument GUI enabling a convenient data entry:

- Sliders
- +/- Buttons
- Switches

Sliders

Set the desired value either by

- dragging the Slider (while holding the left mouse button) or
- acting on the slider with the mouse wheel

+/- Buttons

The values can be set in 3 different ways :

- Clicking on “+” and “-“
- Acting on the label with the mouse wheel (small steps), or on the +/- Buttons (larger steps)
- Dragging the mouse vertically after clicking on the displayed value

Double-clicking on the slider or on the number displayed aside the +/- button reloads the previously saved or default settings.

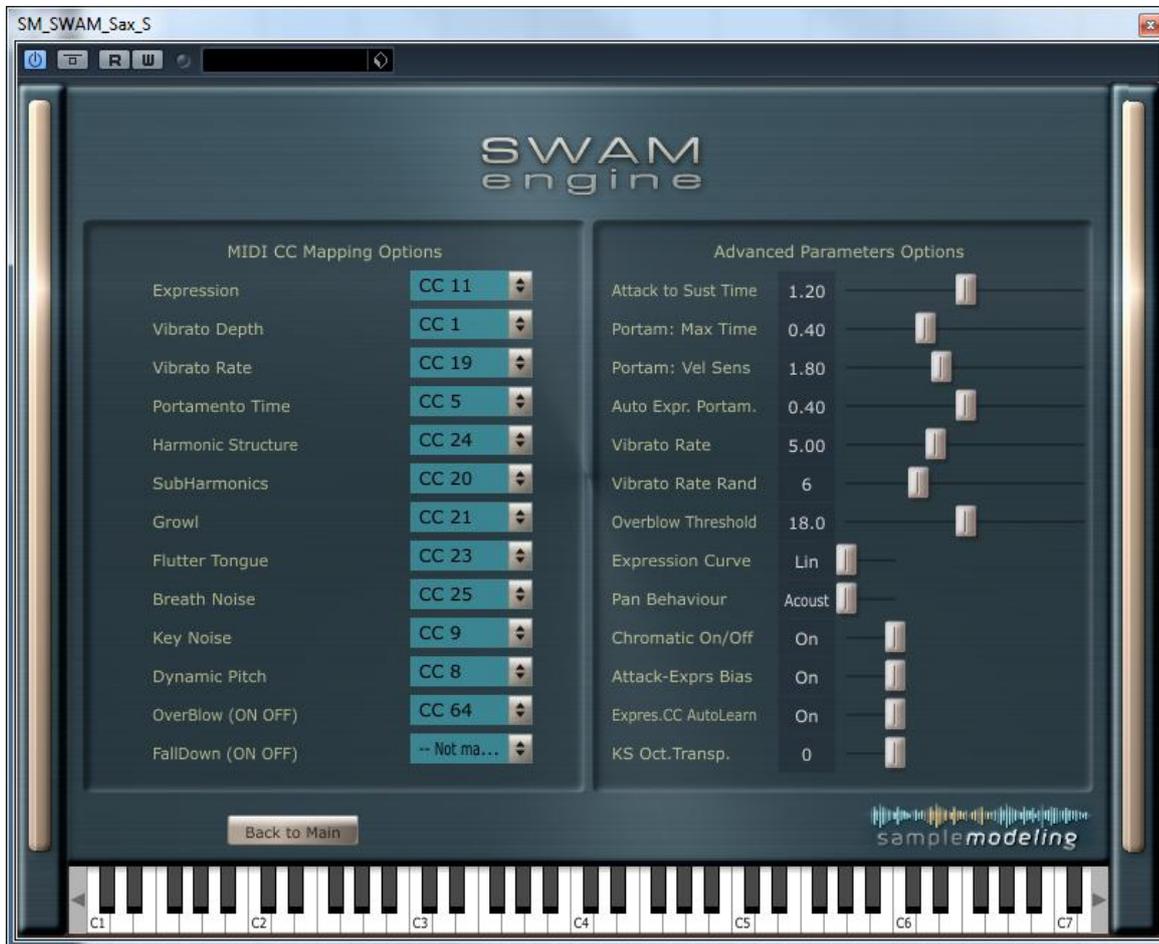


- Load & Save :** Loads and saves instrument settings
- M.Tune Hz :** Master Tune frequency in Hz
- M.T.Cents :** Master Tune in Cents (Linked to M.Tune Hz, A3 = 440Hz)
- Reverb Time :** Reverb Duration
- Reverb Mix :** Reverb Amount (if set to 0 Reverb is bypassed, saving CPU)
- Transp :** Instrument Transpose (Key Switches are not transposed)
- PB D .. U .. :** Pitch Bend Range; can be set for Down and Up Bending independently
- Panpot :** Panning between L and R (see also Pan Type on the Options Page)
- Main Volume :** Instrument volume (in dB)
- Instr. :** Changes the instrument timbre (e.g. due to a different microphone position)
- Rand.Dyn :** Controls the amount of the random fluctuation of the dynamics
- Dyn.Pitch :** Amount of Pitch Modulation while changing the dynamics. Also controlled by CC8
- Attack Dyn :** Changes the attack behavior, assigning it to: 1. velocity (linear response, “Hard”), 2. Velocity (non-linear response, “soft”), and directly to Expression

Harm.Struct :	Spectral characteristics of the instrument (balance between odd and even harmonics)
FallDown :	Clicking on this button triggers a fall. This effect is assigned also to the Key Switch C1. Assigning to a CC is also possible (see Options Page)
OverBlow :	Clicking on it creates overblow. Also assigned to the Key Switch D1 (momentary) and D#1 (latch), as well as to the sustain pedal (CC64)
SubHarm :	SubHarmonic Intensity, also controlled by CC20
Growl :	Growl Intensity, also controlled by CC21
Flutter T :	Flutter Tongue Intensity, also controlled by CC23
Breath N. :	Breath Noise Intensity, also controlled by CC25
Key Noise :	Key Noise Intensity, also controlled by CC9
Dyn.Harm :	Amount of Harmonics and SubHarmonics modulation during Attacks and Dynamics changes
Release :	Release Time on Note-Off
Compressor :	Audio Dynamic Compression Intensity
Formant :	Changes the Formants, hence the timbre of the instrument
Modal Res. :	Intensity of Instrument Pipe Modal Resonance
Port.Time :	Selects the source of the portamento time control. The portamento time (on legato) can be controlled by: Velocity (default), CC. or CC inverted (low value = long Time)
Reset :	Resets the engine and reloads the default or previously saved parameters
Options Page :	Opens Midi CC Remapper and Advanced Parameter Settings (see below)
Help & Credits :	Opens Help and Credits page

Options Page

Clicking on the Options Page button opens the Midi CC Remapper and Advanced Parameter settings.



MIDI CC Mapping Options

MIDI CC remapper allows to remap all the control parameters to any MIDI CC according to your needs.

Note: OverBlow and FallDown have only On (CC>64) and Off status (CC<64)

Advanced Parameters

Attack to Sust Time : Affects the velocity-dependent duration of the transition from attack to sustain.

Portam: Max Time : Maximum duration of the Portamento, i.e. the duration of a legato transition played at the lowest velocity-

Portam: Vel Sens :	Controls the relationship between velocity and portamento duration (only if the Port.Time button on the Main Instrument GUI is set to velocity)
Auto Expr.Portam :	Amount of an dynamics modulation during legato
Vibrato Rate :	Default Vibrato Rate (also controlled by CC19)
Vibrato Rate Rand :	Amount of a random fluctuation of the vibrato rate
Overblow Threshold :	Expression CC overcoming this value triggers the OverBlow (only if enabled by the KeySwitch or CC)
Expression Curve :	To cope with linear or logarithmic expression controls (e.g. pedal) and optimize the overall expression controller curve
Pan Behavior :	Selects the pan behavior of the instrument vs. reverb (“Acoustic”: pan does not affect the reverb; “Balance”: pan affects both the instrument and the reverb)
Chromatic On/Off :	Activates an automatic chromatic scale during slow portamentos on larger intervals.
Attack-Exprs Bias :	Complex algorithmic remapping of Attack v.s Velocity curve, depending on Expression (disabled on the default setting “Sax S Wind.Contrl.”)
ExprsCC AutoLearn :	Enables or disables AutoLearn, i.e. the automatic detection of the incoming Expression CC
KS Oct.Transp. :	KeySwitch Octave Transpose; 0 KS starts from C0, 1 KS starts from C1
Back to Main :	Returns to the Main Page GUI

Technical Support

Before requesting technical support, please make sure that you have carefully read the User Manual and the pertinent FAQ on our website:

www.samplemodeling.com/en/faq.php

You will find there the appropriate answer to the most questions quickly.

Our Forum might also be a valuable source of technical information:

<http://www.samplemodeling.com/forum>

In case you still need a support, our first line customer care will be provided via email :

info@samplemodeling.com

or via our Contact page:

<http://www.samplemodeling.com/en/contact.php>



Note: write your email address carefully - it's not possible to reply to a misspelled address!

More specific technical questions should be addressed to:

<http://www.swamengine.com/contact/>

When asking for a technical support, please do not forget to provide as much system information as possible, including computer, OS, audio interface, host application, software version, etc. If the problem can be demonstrated, a MIDI and/or an audio file is usually very helpful.



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