SSG7 V

User's Manual

Version 1.1.0

Studio Major7th

Thank you for using SSG7V.
This is the manual for SSG7V.

SSG7V is a 64-bit version of VST3 for Windows. It will not work with the 32-bit version.

SSG7V is available for commercial use.
However, secondary distribution is not permitted.

SSG7V has only been in production for a short time. Since it was created by someone inexperienced in programming, we are not yet confident in its stability.
By using or purchasing SSG7V, you agree that the stability of the software is not yet guaranteed.

Please observe the rules. Let's make music happily.

Studio Major7th

How to Install

Copy the included "SSG7V.vst3" to the VST3 folder on your PC. When you launch your DAW, it should load as a VSTi.

To uninstall, simply delete the first set of files you downloaded and the `"C\User\{user}\Documents\Studio Major7th\SSG7V"` directory.

(Caution)

Please make sure that your DAW is compatible with 64-bit VST3.

Installation is simply copying the files into the VST3 directory, so installation is not supported.
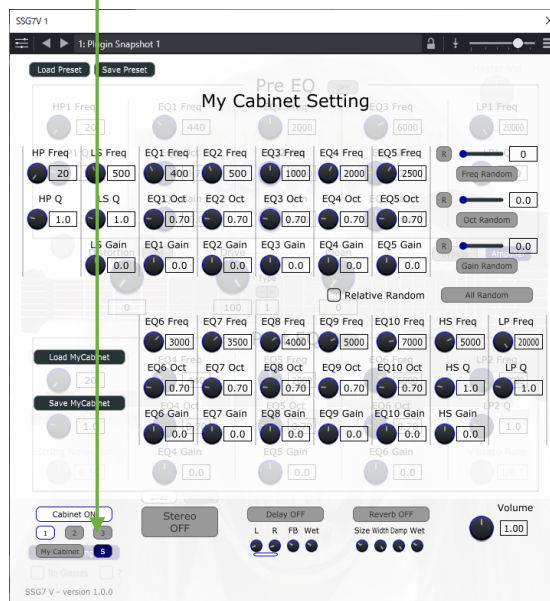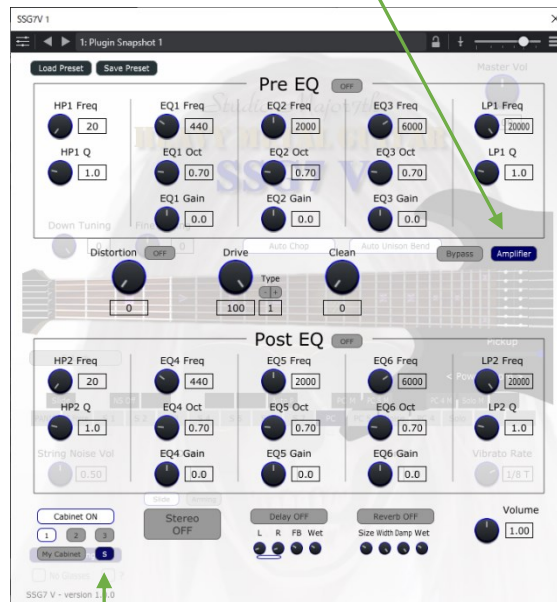
SSG7 V GUI

SSG7V has 4 GUIs.
The first is "Main".
The second is "Setting".
The third is "Amplifier".
The fourth is "My Cabinet Setting".

Main is the first screen displayed, **Setting** can be displayed by clicking the blue button in the lower left corner, **Amplifier** is the blue button in the middle row on the right, and **My Cabinet Setting** is the blue S button to the right of the My Cabinet button at the bottom of the Amplifier screen.

SSG7V 1 ×

1: Plugin Snapshot 1

Load Preset Save Preset

Studio Major7th
HEAVY METAL GUITAR
SSG7 V

Master Vol
1.00

Down Tuning Fine Tuning
0   0

Auto Chop   Auto Unison Bend

Amplifier

Pickup
< Power Chord >

SoLock

Slide   NS Off   Auto P   PC M PC 5 M   PC 4 M Solo M
PANIC S Force S 1 S 2 S 3 S 4 S 5 S 6 S 7   PC PC 5 Noise PC 4 Solo

String Noise Vol PB Down PB Up Vibrato Vibrato Rate
0.50   6   2   2   1/8 T
                  Slide Arming

To Setting

No Glasses   ?

SSG7 V - version 1.0.0

SSG7V 1 ×

1: Plugin Snapshot 1

Load Preset Save Preset

Studio Major7th
HEAVY METAL GUITAR
SSG7 V

Sound Setting

Sound Humanizer   Offset Humanizer
0.0   0.010 sec   MIDI CH
                                                                      - + 1

Pick Noise Strength Pick Noise Volume Pull Off   Hammer On   Chord Mute Release
0.0   1.00   0.050 sec   0.050 sec   0.30

Detune   Detune Volume   Sustain   Mute   Solo Mute Release
3 cent   0.50   0.000 sec   0.000 sec   0.30

                     Voice of Group   Alternate Picking Tempo   Alternate Picking Note   Sound Quality
                     - + 4   120   1/16   50

To Main

SSG7 V - version 1.0.0

SSG7V 1 ×

1: Plugin Snapshot 1

Load Preset Save Preset

Pre EQ OFF   Master Vol

HP1 Freq EQ1 Freq EQ2 Freq EQ3 Freq LP1 Freq
20   440   2000   6000   20000

HP1 Q   EQ1 Oct   EQ2 Oct   EQ3 Oct   LP1 Q
1.0   0.70   0.70   0.70   1.0

          EQ1 Gain EQ2 Gain EQ3 Gain
          0.0   0.0   0.0

Distortion OFF   Drive   Clean   Bypass   Amplifier
                    Type
                    - +
0   100 1   0

Post EQ OFF

HP2 Freq EQ4 Freq EQ5 Freq EQ6 Freq LP2 Freq
20   440   2000   6000   20000

HP2 Q   EQ4 Oct   EQ5 Oct   EQ6 Oct   LP2 Q
1.0   0.70   0.70   0.70   1.0

          EQ4 Gain EQ5 Gain EQ6 Gain
          0.0   0.0   0.0

Cabinet ON   Stereo   Delay OFF   Reverb OFF   Volume
1 2 3   OFF   L R FB Wet   Size Width Damp Wet   1.00
My Cabinet   S

SSG7 V - version 1.0.0

SSG7V 1 ×

1: Plugin Snapshot 1

Load Preset Save Preset

Pre EQ

My Cabinet Setting

HP Freq LS Freq EQ1 Freq EQ2 Freq EQ3 Freq EQ4 Freq EQ5 Freq
20   500   400   500   1000   2000   2500   R 0

HP Q   LS Q   EQ1 Oct   EQ2 Oct   EQ3 Oct   EQ4 Oct   EQ5 Oct   Freq Random
1.0   1.0   0.70   0.70   0.70   0.70   0.70   R 0.0

         LS Gain EQ1 Gain EQ2 Gain EQ3 Gain EQ4 Gain EQ5 Gain   Oct Random
         0.0   0.0   0.0   0.0   0.0   0.0   R 0.0
                                                                       Gain Random

                            Relative Random   All Random

         EQ6 Freq EQ7 Freq EQ8 Freq EQ9 Freq EQ10 Freq HS Freq LP Freq
         3000   3500   4000   5000   7000   5000   20000

Load MyCabinet EQ6 Oct   EQ7 Oct   EQ8 Oct   EQ9 Oct   EQ10 Oct   HS Q   LP Q
                0.70   0.70   0.70   0.70   0.70   1.0   1.0

Save MyCabinet EQ6 Gain EQ7 Gain EQ8 Gain EQ9 Gain EQ10 Gain HS Gain
                0.0   0.0   0.0   0.0   0.0   0.0

Cabinet ON   Stereo   Delay OFF   Reverb OFF   Volume
1 2 3   OFF   L R FB Wet   Size Width Damp Wet   1.00
My Cabinet   S

SSG7 V - version 1.0.0

How to set up the GUI

The Main screen shows the parameters involved in operating the SSG7V and the fretboard so that the user can visually see the notes being played.

The Setting screen allows detailed sound settings.

The Amplifier screen allows distortion, equalization, and processing of the sound being played.

The My Cabinet Setting screen allows you to manipulate the 14 equalizers to create the sound you prefer.

These settings can be loaded and saved using Load Preset and Save Preset in the upper left corner of the screen.

You can also load and save only the Cabinet settings on the My Cabinet Setting screen.

Main screen

On the Main screen, from the top, you can see the **Master Volume**, the **Down Tuning**, **Fine Tuning**, **Auto Chop**, **Auto Unison Bend**, **Amplifier**, **Fretboard Display**, **SoLock**, **Pickup**, **Keyswitch Display**, **String Noise Volume**, **PB Down**, **PB Up**, **Vibrato**, **Vibrato Rate**, **Slide Arming button** and finally There is a button to go to the **Setting** screen.

Master Volume controls the final volume of the SSG7V.

Down Tuning can lower the pitch of the entire sound source down 7 semitones in semitone steps.

Fine Tuning allows fine pitch adjustment to the nearest 1/100th of a semitone.

Auto Chop, when turned on, will automatically input the Chop technique according to velocity.

Auto Unison Bend, when turned on, allows unison choking by pressing two keys simultaneously.

Amplifier moves to another screen to process the sound. We will explain later.

Fretboard display shows the currently selected fret or string, or the fret being played with an X.

When **SoLock** is turned on, only the keyswitches for solo and noise sounds are enabled.

Pickup simulates the front pickup when moved to the left and the rear pickup when moved to the right.

Keyswitch Display shows the currently selected key switch, etc.
String Noise Volume controls the volume of the noise sound made when the key is turned off.

PB Down and **Up** adjust the pitch of the pitch bend operation.

Vibrato adjusts the pitch during vibrato by modulation wheel or aftertouch.

Vibrato Rate controls the speed of vibrato.

Slide Arming allows you to choose either one. If you choose Slide, the pitch changes in a staircase-like manner, like sliding strings when pitch bending down. If you choose Arming, the pitch changes smoothly.

Setting button takes you to a screen where you can make more detailed adjustments.

Setting screen

The Setting screen shows the following screens. Sound Manipulation **Sound Setting**, **Chord Mute Release** and **Solo Mute Release** to control the release time of muted sounds, **Sound Quqlity** to control the quality of sounds by increasing or decreasing sound processing, **Voice of Group** to set the number of simultaneous sounds, and **Alternate Picking Tempo**, and **Alternate Picking Note**.

In **Sound Setting**, the offset and volume are adjusted to control the tone. The **Sound Humanizer** in the upper left corner moves various settings at random. The **Offset Humanizer** in the upper right corner randomly shifts the playback timing back and forth.

The **Release knob** adjusts the predetermined release time, not the absolute value, 1.00 being 100%.

Increasing the value of **Sound Quality** makes processing heavier, but the tone is cleaner. Conversely, lowering the value will result in a rougher tone. Since there is no significant change, leave the value at 50.

Voice of Group is the number of simultaneous tones for each string, but if it is too large, the processing speed cannot keep up and noise may occur, or in the worst

case, the system may crash. If it is too small, the number of simultaneous voices may not be enough and noise may occur. Try to find just the right value. (About 4~8 is recommended.)

Alternate Picking Tempo and **Note** will automatically make consecutive notes alternate picking when this speed is exceeded. These are approximate values, so if you want alternate picking on eighth notes at 200 BPM, you should lower the tempo slightly below 200. Also, if the slider is set to the leftmost position, it will be the tempo of the current host.

Amplifier screen

On the Amplifier screen, the sound flows from the top to the bottom right.

Pre EQ
↓
Distortion and **Drive** and **Clean**
↓
Post EQ
↓
Cabinet (14 EQs)
↓
Stereo
↓
Delay
↓
Reverb
↓
Volume

The sound is processed in this order.

Pre EQ is the equalizer for the clean guitar sound before it goes through Drive, which is distortion. It can be considered as a guitar sound creation.

Distortion can distort the sound.

Drive can distort the sound even more, and should be used in combination with Distortion. Several types are available for selection.

Clean is the clean tone. You can independently adjust the volume of the undistorted clean tone.

Post EQ is the equalizer after distortion by Drive.

Cabinet, when turned on, makes it sound as if it is being played through a cabinet. 4 types can be selected from 3 types plus one of your own making. For My Cabinet, press the red S button to go to the detail screen.

Stereo, when turned on, splits the sound into left and right, creating a doubling effect.

Delay allows the sound to repeat, creating a delay effect. The effects of each knob are, from left to right, L time, R time, Feedback, and Wet. the bar below LR can be turned on to link LR.

Reverb allows you to get a resonance to the sound. The effects of each knob are, from left to right, Room Size, Width, Dump, and Wet. By reducing the   Width, the resonance becomes mono, creating an effect similar to the boxy sound of a cabinet.

Volume allows you to adjust the volume of the sound processed here.

The two EQs have a switch to turn them on and off. When the EQs are not used, turning them off reduces CPU usage. Also, when Drive is set to 0, Post EQ is automatically turned off regardless of the switch.

The **Bypass** button turns yellow when turned on, disabling any sound processing set in this screen and returning to a clean tone. When using an external amp simulator, it is recommended to keep this Bypass button ON.

My Cabinet Setting screen

This screen allows you to control 14 equalizers.
To the right, there are three **R buttons**, **Freq Random**, **Oct Random**, **Gain Random**, **All Random**, and **Relative Random checks**.

The **R button** resets the respective value. (For example, the bottom R button resets all of Gain to 0.)

Freq Random changes the Freq value randomly over the range of slider values. **Oct Random** and **Gain Random** also randomly change Oct and Gain, respectively. **All Random** changes everything. At this time, the range of change is **based on the default value** and changes within the range of the slider value, but if the **Relative Random button** is checked, the change is not based on the default value but relative to the current value.
Adjusting the sound at random may produce unexpected changes and interesting sounds, but it is also **possible to generate extreme sounds**, so it is recommended that the volume in the lower right corner be kept low.

Only the settings on this screen can be loaded and saved using the buttons on the left.

Operation Method

The SSG7V is operated from a MIDI keyboard or DAW by **operating keyswitches**.

The **keyswitches** are located on the lowest notes of the piano keyboard, **A-1 to G♯1**.

The **keys that actually sound the notes** are located from **A1 to E7**.

The key that plays the sound is called the **sound key**. When the **sound key** is played, the **fret and string are automatically selected**. Of course, you can also **use the keyswitch to specify the strings yourself**.

The Chord system can be played from 0 to around the 12th fret, and the Solo system from 0 to the 24th fret.

Keyswitch

First, let's start with the keyswitch for switching tones.

There are nine major types of tones.

Tones	Keyswitch
Octave Power Chord	C1
Octave Power Chord Mute	C♯1
5th Power Chord	D1
5th Power Chord Mute	D♯1
Slide Noise	E1
4th Power Chord	F1
4th Power Chord Mute	F♯1
Solo	G1
Solo Mute	G♯1

When A2 is sounded on each of them, it looks like this.

Octave Power Chord	5th Power Chord
4th Power Chord	Solo

Muting here refers to a technique called bridge mute or palm mute. Please confirm it by actually playing the sound.

Chord, Solo, and Mute each have their own characteristics. Here is an explanation of them.

The higher the velocity of Chord, the stronger the picking noise.

Solo is from 1~100, the higher the velocity, the stronger the picking noise.

In the 101~110 range, the attack becomes even stronger as the chop technique is gradually introduced. 110 is the maximum chop. **111~127 is where the picking harmonics come into the mix**, and 127 is the full picking harmonics.

Please refer to the figure below.

Chord	Solo
Velocity 100 to 127 The higher the value, the stronger the picking noise.	**111 to 127** Picking harmonics **101 to 110** Gradual chop **Velocity 1 to 100** The higher the value, the stronger the picking noise.

Sliding noise is assigned to keyswitch E1. When the modulation wheel (CC1) is set to 0, the noise is played for two measures in length. At 127, it is one beat. Try it out by actually playing it.

When Chord is selected, the stroke speed can be controlled by operating the modulation wheel.

Next, **the keyswitches B-1 to B0** are explained. These are keyswitches for selecting strings.

First, **strings 1 to 7 are assigned in order from C0 to B0**. For example, if E0 is pressed, the next note to be played is the third string. If the note cannot be played on the third string, it will be played on a string closer to that string.

Pressing **B-1 at the same time** as these keyswitches will **lock in the strings**. For example, pressing G0 and B-1 at the same time will preferentially play on the 5th string until it is released. To release the string fixation, press the string selection key again or press B-1.

There are **other keyswitches**.

C♯0 is the **Noise OFF** switch. While this key is pressed, the noise sound that is produced when the sound key is turned off will not sound.

When **A♯1** is pressed at velocity **64 to 127**, all Solo mute sounds will **be downpicked** as long as it is pressed. While pressing at velocity **1 to 63**, all the time is **uppicking**. In normal operation, the picking starts with downpicking, and when a series of notes exceeds the value set in **Alternate Picking**, the downpicking and uppicking are repeated alternately.

A#-1 is a **slide switch**. When sound keys are placed on top of each other with this key pressed, two notes are

slide. The speed of the slide can be adjusted according to the velocity of the sound to be stacked later. Releasing the slide key stops the slide, so if you want the sound to continue to play after the slide, hold down the slide key while placing the sound.

A-1 is a **forced stop switch**. If for some reason the sound is left on, pressing this key may stop the sound. If the sound does not stop, wait until the sound disappears or restart the plugin.

Unison Bend

In the Solo sound, when the higher note is on the first or second string, you can **unison bend** on the higher note by pressing semitones at the same time. At this time, the lower note is automatically bent.

Normally, bends can be bended at a specified value, but in unison bends, Up is set to 1 and Down to 2, **allowing the bends to add a bend effect to the lower notes**. **The modulation wheel (CC1) can also be used to apply vibrato in semitones downward**. Similarly, **harmonized bends in the minor and major third degrees are supported**.

To use unison bend, the Auto Unison Bend button must be turned on.

Legato

The legato technique is to connect two notes smoothly. There are two ways. One is to place the sound keys on top of each other with the tone selection keyswitch (C1~G♯1) pressed. The other is to place two notes on top of each other with the sustain pedal on instead of the keyswitch. The effect is the same in both cases, but there is a slight difference because of the effect of the sustain pedal.

（1）
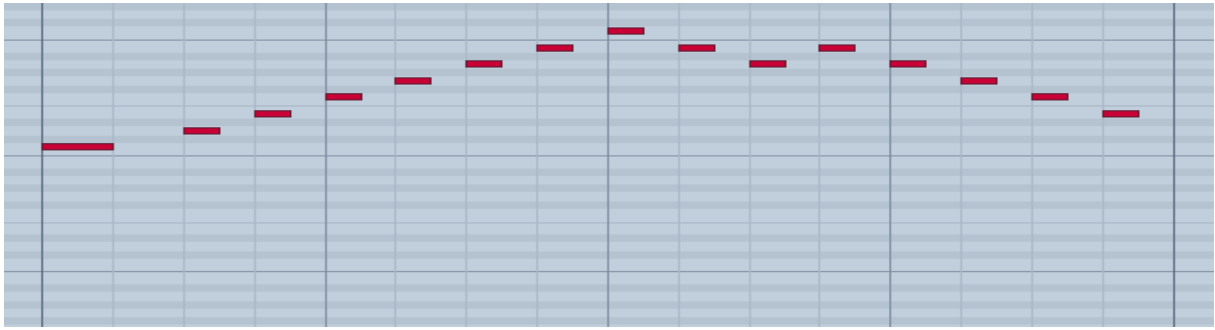
（2）
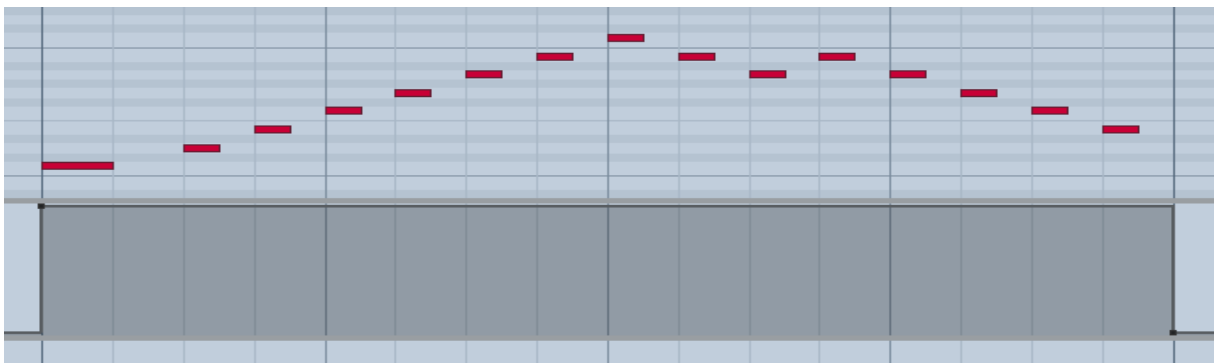
Neither of the two above is legato. However, in (2), the sustain pedal is turned on, so the notes sound normally connected. And the notes do not overlap like on a piano, when the next note is played, the previous note stops.

（3）
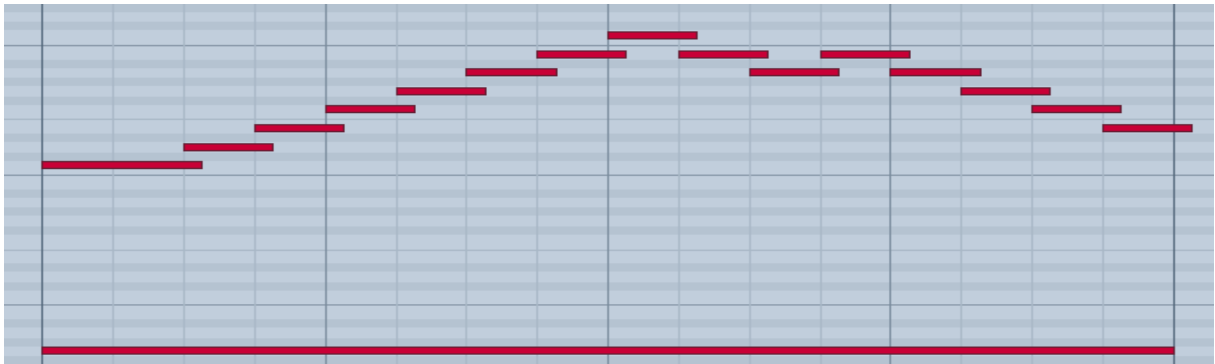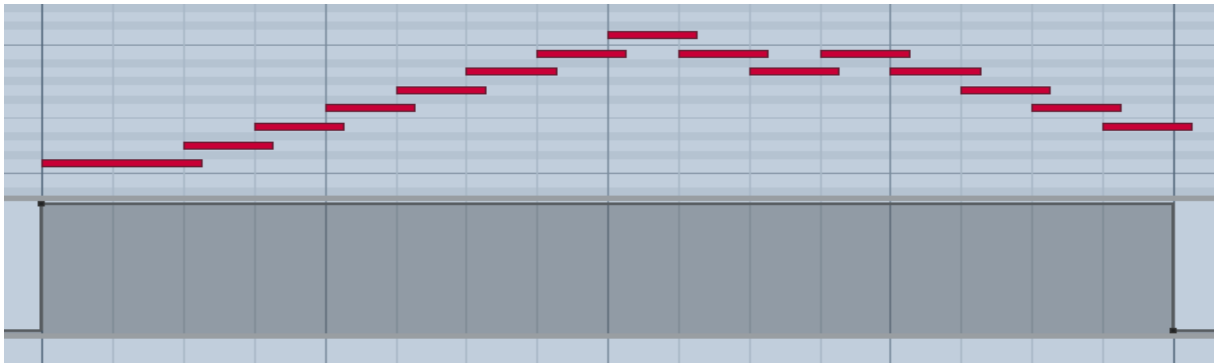
In the example (3), the sustain pedal or keyswitch is on, so the notes are placed on top of each other, resulting in a legato.

Arpeggios are not assumed on the KMG7V, as legato is a priority. If you want to play while overlapping notes like a piano, turn on the sustain pedal and note that the notes will not overlap in the opposite direction.

Brushing

KMG7V has a simple brushing performance. It is placed at F6~A♯6 of Octave Power Chord Mute (C♯1).

F6はダウン、F#6はアップ	G6はダウン、G#6はアップ	A6はダウン、A#6はアップ
Low position	Middle position	High position
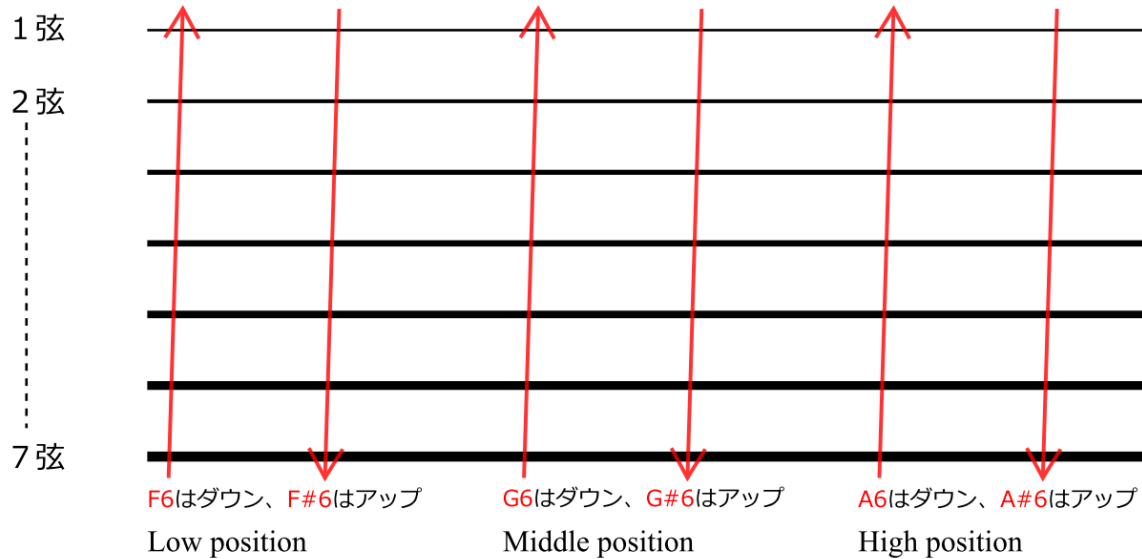
Details are shown in the figure above.

Chop

Chops are placed on F6~E7 in the solo (G1). F6, G6, and A6 are chops reaching the 3rd string near the 7th, 12th, and 15th frets. F♯6, G♯6, and A♯6 are chops reaching the 2nd string in the same way. C7, D7, and E7 are chops reaching the 1st string. When Auto Chop is turned on, the chop is automatically entered at a velocity of 101-110 when reaching the 7th fret or higher than the 3rd string.

What's new in version 1.1.0

A new **Chord Mode** button has been placed next to the SoLock button on the main screen. Press this button or enter G-1 on the keyboard with velocity 63 or lower to enter chord mode. To return to normal mode, press the button again or enter G-1 with velocity 64 or higher.

In chord mode, the screen looks like the one above.
The current chord is displayed in a large white frame on the right. At first, "No" is displayed because nothing is selected.

Chord Mode

The chord mode has three main input types on the keyboard.
First is the fret or chord type selection key. use B-1 to B0.
Next is the key to enter the chord, using C1 through D3. The chord must be at least 3 notes and must be in basic form.
Finally, from E3 to A5 are located the keys that are actually played, corresponding to the guitar strokes.
The keys are divided into playing stops, playing chords, and playing each string.

Fret selection key

Select fret and chord types from B-1 to B0.
B-1 is the same as in normal mode and fixes that selection. It can be released by pressing it again.

The five, **C0**, **C♯0**, **D0**, **D♯0**, and **E0**, are set at the 0, 2, 5, 8, and 11 frets, starting from the lowest, so that the lowest of the suppressed frets will be played near that fret. However, if B-1 is not pressed simultaneously and fixed, the fret will be selected automatically according to the chord progression, so the fret cannot be near the 0th fret all the time. If you want the fretboard to play near the 0th fret all the time, press B-1 and C0 at the same time to lock the fret selection.

F0, **G0**, **A0**, and **B0** select chords from chord shapes. SSG7V uses four basic chord shapes. Each can be selected as chord type 1, 2, 3, or 4. However, if you select a chord based on shape alone, the fret may suddenly move significantly. Please operate to your satisfaction while watching the screen.

Chord entry key

With **C1 to D3**, you can enter chords.
Chords include major and minor, augmented and diminished, sus4, 6th, 7th, 9th, -5, -9, +9, etc., using C as an example.
Three or more notes must be pressed simultaneously to be correctly recognized. It must be the basic form, and the inverted form will be recognized as any other chord.

Performance Key

E3 to A5 and actually play the notes.
In this mode, the notes are not played, but rather in the form of strokes with keyboard input for the selected chord.

E3 and **B4** are keys that stop the ringing sound.

F3 and **F♯3** are strokes that emphasize the bass strings. When velocity is increased, all strings are played, when velocity is decreased, only the low strings are played. F3 is the downstroke and F♯3 is the upstroke.

G3 and **G♯3** are strokes that emphasize the higher strings. When velocity is increased, only the fourth to first strings are played, when velocity is decreased, only the low strings are played.   G3 is the downstroke and G♯3 is the upstroke.

A3 and **A♯3** are strokes that emphasize the middle strings. When velocity is increased, all strings are played, when velocity is decreased, only the middle strings are played. A3 is the downstroke and A♯3 is the upstroke.

B3 plays the lowest string of the chord at that time.

C4 and **C♯4** are played on all strings regardless of velocity, and velocity is only the strength of the note.

D4 and **D♯4** are bridge mutes for the lowest strings.

F4 to **A♯4** is the same as F3 to A♯3, divided into low, high, and midrange. However, the sound is muted. It can be used for Funk Strumming, for example.

C5 to **A5** can play each of the strings of the chord selected at that time. C5 is the 6th string and A5 is the 1st string. This can be used for free arpeggios, etc.

The stroke becomes slower and slower as the modulation wheel value is increased.

When the root of a chord ascends or descends by a semitone, the chord tries to move a semitone as far as possible in the same type.

FAQ

Noise in the sound.

↓

SSG7V does not use samples and requires CPU power. If your PC is not up to the task, there will be noise in the sound. If lowering the Sound Quality slider does not fix it, we are sorry, but it is probably not available on your PC.

I selected a chord, but there are strings that do not sound.

↓

Chord type 1 uses 6 strings, type 2 uses 4 strings, type 3 and 4 use 5 strings, and there is a form where 6 and 5 strings are not used. When this happens, that string will not sound even if you try to play it.

SSG7V was produced by Studio Major7th in 2022.