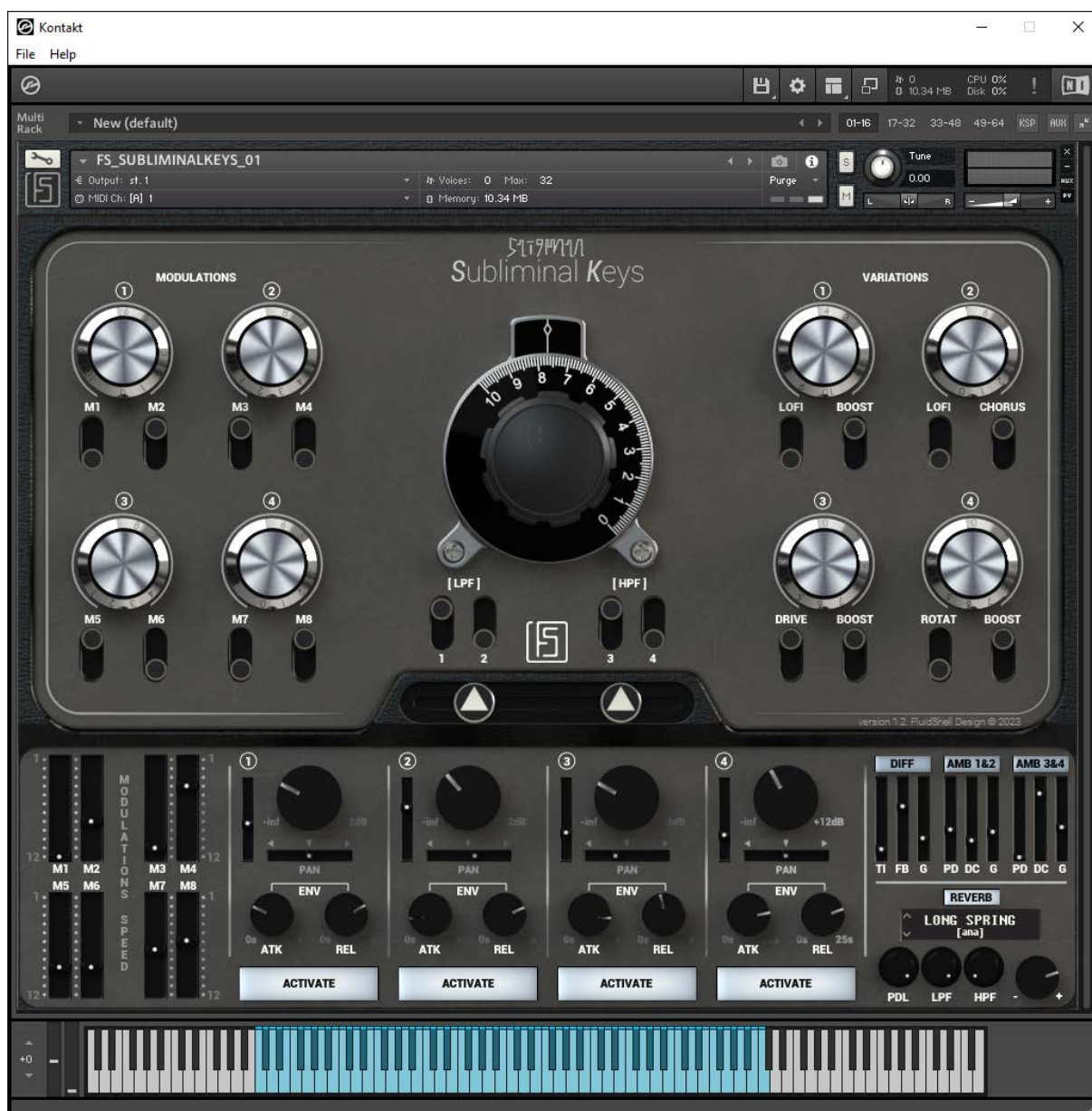


Subliminal Keys

User Manual [EN]



Welcome ! Thank you for purchasing SUBLIMINAL KEYS. We hope you will enjoy using this instrument and find it inspiring.

SUBLIMINAL KEYS is a software synthesizer combining two forms of synthesis: sample playback and wavetables. It was designed as a generator of both melodic and noisy soundscapes for all your musical creations and sound illustration projects. Many Kontakt instruments offer this kind of combinations that are often associated with "Ambient" music. What makes our proposal different is that it is meant to be simple, without being completely "turnkey". SUBLIMINAL KEYS is not a bank of prefabricated samples. Its modulation capacities, its complex filtering network and its specifically adjusted processing make it a fully-fledged instrument. Once the desired sound has been obtained, SUBLIMINAL KEYS allows you to modify it in real time using a few controls chosen by you, via a MIDI controller or the automations of your sequencer. By assigning even the big central rotary controller to a potentiometer on your MIDI controller or to a modulation wheel, you can modify the presence of the 4 sources at will. It's not just a regular low pass filter, it's a set of filters that work in sync. Speaking of synchronization, you should know that the modulations of the SUBLIMINAL KEYS automatically follow the tempo of your sequencer. Now you know almost enough to start using it. But nothing prevents you from continuing to read this manual...

Architecture

SUBLIMINAL KEYS est includes 5 groups of functions.

1/ The SOURCES



This part of the interface gives access to the global functions of each Source: Gain, Panoramic (PAN), Envelope (ENV), Activation/Deactivation of the Source (Activate).

2/ MODULATIONS



This part of the interface lets you control everything related to the temporal changes of the Sources. The rotary knobs control the amount of modulation, the vertical switches determine whether the modulation is active or not, the vertical sliders below adjust the speed with which a modulation operates.

3/ VARIATIONS



These are the specific treatments for each source: reduction of the sampling quality, chorus, overdrive, boost, etc.

4/ FILTERING



This central portion of the interface is where the various combined filters operate. The central rotary allows you to modify the frequency. Each Source has a combination of filters and all are driven by this rotary. In addition to the combined filters, it is possible to activate a final filter separately for each Source: two LPFs for Sources 1 & 2, two HPFs for sources 3 & 4. The horizontal strip, containing two disks with white triangles, is used to determine the stereo width of the output.

By clicking on the “FS” logo, you will activate the ‘EASY MIX’ function. This function makes it possible to give more thickness to the instrument so that it takes more space in a composition. If you want to make adjustments that are either more precise or simply more in line with your tastes, it is advised not to activate it. ‘EASY MIX’ is active when the logo is brighter.

5/ REVERBS & DELAYS



These effects play an important role in the presence of SUBLIMINAL KEYS in a musical composition. The DIFFUSION effect is common to all Sources. AMBIENCE 1&2 is assigned to Sources 1&2, AMBIENCE 2&3 only applies to Sources 2&3. REVERB applies to all Sources after they are mixed. This reverb works with IR files specifically designed for the SUBLIMINAL KEYS.

Basic Concepts

SUBLIMINAL KEYS is an instrument with 4 simultaneous sources.

These 4 sources are capable of producing sounds that evolve over time thanks to modulations. Each source has classic controls:

- Source volume - Panoramic (PAN)
- Envelope (ENV), with attack and release parameters (ATK & REL)
- Activation/Deactivation of the source (ACTIVATE)
- Oscillator Parameter : sample speedrate or wavetable PWM (**μ Function**)

MODULATIONS can be used on top of these controls in order to make the sound fluctuate.

As a general rule, two parameters are used for each modulation: one of them controls the speed of the modulation, and the other its dosage. The parameters in SUBLIMINAL KEYS are grouped into MACROS, i.e. a single visible adjustment will modify a predefined number of grouped parameters. This choice was made so as to avoid cluttering the graphical interface.

For example, Modulation 1 at the top left of the interface is used to set the two modulations M1 and M2 that can be activated using the vertical switches below. The speed of M1 and M2 can be adjusted using the vertical sliders located below, on the left side. Please note that the values of the vertical sliders are reversed. Indeed, these are temporal subdivisions: 12 represents 12 x time base, while 1 is 1 x time base. 12 is therefore a “slow” period while 1 is a “fast” period. In addition to the MACROS that are used to drive Modulations, SUBLIMINAL KEYS uses other MACROS to adjust the behavior for each source. These macros are grouped at the top right in the VARIATIONS category.

In each SUBLIMINAL KEYS instrument, sources have been selected to fulfill at least one role in the soundscape. This is why you will always find 4 sources with identical VARIATIONS from one SUBLIMINAL KEYS instrument to another. Since VARIATIONS are macro-based, their use is very simple. For example, for source 3, there are two vertical switches: LO-FI and CHORUS. When the LO-FI switch is in the upper position, the variation is active and can be measured using the large rotary adjustment knob.

For instance, turning the rotary adjustment to the left will increase the variation. If you now activate the CHORUS, it will intensify when the knob is pushed to the right. If both VARIATIONS are active at the same time, the knob controls both at the same time.

In depth

Some VARIATIONS are fixed. This is the case with BOOST. This variation is a little special because it acts on the volume of the source, but also on its thickness. This VARIATION was designed specifically to highlight the designated source, and must be used in conjunction with the source volume control. This choice was made to avoid saturating the instrument.

Let's take a closer look at the VARIATIONS of the other sources. Source 1 has two vertical switches: LO-FI and BOOST.

Unlike the LO-FI of source 2, this variation is used to measure the amount of noise present in source 1. Once the variation is active, it is possible to obtain more or less noise since the sound degradation of track 1 is predefined. For the second VARIATION, source 1 is provided with a BOOST.

Similar to Sources 3 and 4, BOOST is a preset "thickening" of the sound and should be used with the Source 1 volume control. Source 3 is slightly more complex. Although BOOST works exactly as described above, the DRIVE variation reacts to the rotary knob normally. It is a distortion of the sound (more like an overdrive).

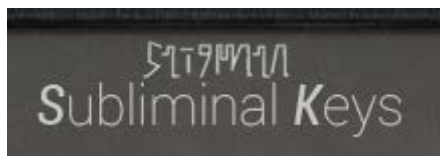
Nothing too strange so far. Except that source 3 is equipped with a variation that is always active: a combined filtering (Lowpass + Highpass) whose VARIATION knob permanently controls the frequency range.

Source 4 is more simple: it comes with a BOOST as described above, and a rotary speaker effect whose speed and depth are controlled by the adjustment knob.

Right in the middle...

The "play" functions are installed in the center for easy access. Let's start with a hidden function. Don't worry, it's the only one. Clicking on the "SUBLIMINAL KEYS" logo activates the Sustain. Some MIDI keyboards and pad controllers do not have a "sustain" function or a pedal. This function makes it possible to sustain the notes played as long as it is activated.

When sustain is active, the SUBLIMINAL KEYS logo lights up slightly.



Sustain not active (default)



Sustain active

You can strike a chord and activate the sustain, or activate it first and play the notes as your composition evolves. The previous notes will remain sustained. Attention, SUBLIMINAL KEYS can require a lot of resources (especially CPU). It is therefore not recommended to maintain too many notes at the same time. Remember that the SUBLIMINAL KEYS architecture consists of 4 Sources. You don't have to activate all four of them at the same time. By activating the necessary source(s) first, you can both save resources and avoid cluttering the output. Using the Sustain function while enabling Sources one by one will allow you to improve the sound definition. The activation of a source is not a "mute" function. It is comparable to a radio: when you turn on the radio, you do not hear the sounds that were emitted previously but only the ones that reach the antenna after the device is turned on. Activating a Source works the same way.

Below the SUBLIMINAL KEYS logo is the main Filter control.

As described above, SUBLIMINAL KEYS uses a network of simple and complex filters to modify the sound of the instrument in real time.

This is a technique often appreciated by musicians using a modular synthesizer system. Unlike most synthesizers with a fixed architecture, a modular synthesizer allows you to connect an almost unlimited number of modules to each other, including filters. Although this is worth a try and gives access to different-sounding output, it quickly becomes quite expensive, especially since you have to multiply the number of modules by the number of notes when you want to play several notes at the same time.

SUBLIMINAL KEYS uses this complex filtering principle.

Each Source is equipped with several filters with a fixed resonance and an adjustable frequency.

The dimmer in the middle allows you to act on the frequency of each filter simultaneously.

The four vertical switches allow additional filters to be activated.

A pair of Low Pass Filters (LPF) for Sources 1 & 2 and a pair of High Pass Filters (HPF) for Sources 3 & 4 will change the tonal balance of the overall output. Think of it as a mixing tool.

The best way to understand its purpose is to try it out!

The last control in the middle of the interface is the Stereo processor. This progressive setting allows you to go from a Mono sound to a very wide sound.



The output sound of the SUBLIMINAL KEYS is reduced to Mono.

"Normal" setting.

Maximum: The output sound is overly wide.

This parameter, together with the effects of the spatial processors (DIFF, AMB1, AMB2 and REVERB) makes for an incredibly large background. This is precisely what the next section is about...

Dimensional processing

This is probably the subject of a fierce debate between opponents of effects integrated into instruments and aficionados of the genre. You will have the freedom to decide as you wish.

Yet the SUBLIMINAL KEYS has an advanced spatial effects section specifically selected for it. First in the order of things is the DIFFUSER or (DIFF).

It is a very long delay, very "lush", very specific also to musical genres such as ambient.

Three settings are available:

TI : Time period between two repetitions

FB : Feedback

G : Gain, effect output volume

The second spatial processing is the dual processor AMBI 1&2 / AMBI 3&4

These are relatively short "plate" reverberations (Plate reverb) that allow for better placement of the two pairs of sources 1-2 and 3-4 in space.

By playing with the available parameters, it is possible to have a set that is both complex and intelligible. Or not.

PD : PreDelay, amount of time before the reverb hits its maximum depth

DC : Decay, duration of the reverberated sound

G : Gain, effect output volume

Last effect, and not least: the REVERB.

Common to all sources, arriving after all the previous treatments, it is a convolution reverb using one of the 7 IRs specifically designed for the SUBLIMINAL KEYS, e.g. 7 atmospheres particularly suited to the instrument:

- *SHORT SPRING*, slightly tweaked spring reverb
- *LONG SPRING*, giant spring reverb
- *EXT PLATE* extended EMT140-like Mid-Side Plate reverb
- *SHORT ROOM*, a Mid-Side short room reverb
- *LONG ROOM*, a bigger room, Mid/Side
- *M/S MID SPACE*, une un-natural Mid-Side mid-sized reverb
- *M/S LRG SPACE*, a much bigger Mid-Side reverb

There are also three simple controls, in addition to the reverb type: PDL: PreDelay, the time before the reverb builds up LPF: LowPass filter, reduces the amount of treble in the reverb sound HPF: HighPass filter, reduces the amount of bass in the reverb sound A Reverb Output Volume control is present. You will notice that it has a maximum value at 0dB in order to avoid saturating the sound of the instrument. So you can push it all the way without too much fear.

Special Considerations

SUBLIMINAL KEYS is an instrument designed with experimentation in mind. The many accessible modulations, those using randomness, the chosen treatments : all this makes it possible to obtain sounds between complex pads and special noises. In some cases it is possible that "glitches" or noises appear.

This is completely normal and intentional. Mod cycles can create clicks, as can envelopes and moving loop points in a sample.

Despite extensive testing on several computers with different configurations, it is not possible to certify that SUBLIMINAL KEYS will work smoothly on all existing machines, PC and MAC. In fact, it is even very likely that it can sometimes get stuck. Yes, SUBLIMINAL KEYS can be greedy: some processing like DIFF and convolution REVERB are quite CPU-intensive. This is why each effect can be bypassed.

Also remember that when you press a note on your keyboard, it can trigger 4 depending on the number of active Sources. A "small" 3-note chord will play up to 12 if all sources are active. Depending on the computing power of your machine, you can limit the number of voices in Kontakt's options, or even use SUBLIMINAL KEYS in monophony (a single note) and the 4 Sources will still play their role.

Simply put: if you set long attack times on the envelopes, do not hesitate to greatly increase the buffer of your audio interface. This will not solve all the problems, but it can help.

We hope you will enjoy using this instrument!