



Traks

VSTi multitrack performance player with time-stretching and pitch shifting

Operation manual

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rev	date	description

1 INTRODUCTION

This is a multitrack performance player. Load this instrument in your host, load single tracks in this vst and play at any tempo or pitch.

All parameters are accessible from a single screen.

You can define loops and samples and play together. Add a snare hit to a loop.

The vst has 12 outputs. Single output for each track plus two send outputs.

On www.sknote.it we maintain active a forum. Please, feel free to contribute! Patches, sound examples, comments, will be very appreciated.

Disclaimer: We are not english people. This is the best english we can write. Please, be good ! ;-)

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2 INSTALLATION

This synth is a VSTi plugin software.
It requires a VST Host application to work.

Simply copy the software (dll) in your plugins directory.

The synth needs .wav files to generate sound. Files for the same performance (i.e. different mics) must be in the same directory.

Wav files must be mono, 16 bit, 44.1 KHz. This limit will be removed in the next release.

3 TIME STRETCHING

The software is based on a time-stretching and pitch-shifting engine. You can

- Change tempo without affecting pitch
- Tune the loop without affect tempo

The following picture shows the graphical interface of the synth.

The screenshot displays the Sknote Traks software interface. At the top, a directory path is shown: `C:\DC\tabl\short\tabla1\20\`. Below this are ten tracks, with Track 1 containing files like `ambient tabla1.w`. The main area features a waveform display and a piano roll. A table below the piano roll lists notes with their start and end times and descriptions.

note	on	type	start	end	description
51	<input type="checkbox"/>	lp	0	0	-----
52	<input type="checkbox"/>	lp	0	0	-----
53	<input type="checkbox"/>	lp	0	0	-----
54	<input checked="" type="checkbox"/>	lp	920700	12366100	Loop 1 - Short tabla
55	<input checked="" type="checkbox"/>	sm	6235800	6240800	Sample 1 - Hit
56	<input checked="" type="checkbox"/>	sm	6247200	6250200	Sample 2 - Slow
57	<input type="checkbox"/>	lp	0	0	-----
58	<input type="checkbox"/>	lp	0	0	-----
59	<input type="checkbox"/>	lp	0	0	-----
60	<input type="checkbox"/>	lp	0	0	-----

The interface also includes a piano roll at the bottom, an internal mixer with volume sliders for 10 tracks, and various editing controls like `pitch`, `original tempo`, `song tempo`, `Quantize`, `Rnd Timing`, `Rnd Velocity`, `sound`, and `Velocity`.

How to start

Choose a performance. You need from 1 to 10 wav files.

Put the files in the same directory.

Example:

C:\Wavs\Drums_Perf_1\Room.wav
C:\Wavs\Drums_Perf_1\Kick.wav
C:\Wavs\Drums_Perf_1\Snare.wav
C:\Wavs\Drums_Perf_1\Hi-hat.wav
C:\Wavs\Drums_Perf_1\Toms.wav
C:\Wavs\Drums_Perf_1\Overhead.wav

Each file must be:

- wav file
- mono
- 16 bit
- 44.1 kHz

Refer to previous picture.

3.1 Drop a file (like “Room”) in “directory” field

The vst strips the path: C:\Wavs\Drums_Perf_1

3.2 Drop the same file in track1 field. (in track1 put the most “neutral” file, i.e., “room”)

The vst strips the filename: “Room.wav”.

3.3 Drop other files from the same directory in other tracks

Switch “Track 1” to “Track 10” on/off to unmute/mute.

The controls under the filename are:

“R”: reverse phase. Useful to correct phase errors from mics.

“D”: Delay the track (samples). Useful to compensate small phase errors among phases.

You need to reload the wave (press “reload”) when changing this.

3.4 Press “Reload”

The vst starts analyzing the file

You can see the waveform appearing step by step in the graph

If the graph doesn't appear, directory plus filename is wrong.

You can see the whole waveform in the upper part and a fixed zoom in the lower-bigger part. Scroll the waveform with horizontal slider.

Upper part: one window shows which part is zoomed in the lower part. A line on top shows current note extension

Lower part: one line shows current note extension.

Vertical numbered white lines are beats automatically detected. You cannot move them.

3.5 Scroll note list.

For each note you can see:

- On/off switch
- Note type. “lp” is a loop. Played direct from disk. No length limit, use it for loops. “sm” is a sample. Loaded in ram. Use it for single shots.
- Loop start. The sample number from which starts playing.
- Loop end. The sample number to which stops playing.
- Comments. To describe note with text.

3.6 Keyboard editor

Press a key. That note becomes the “current editing” note. The graphical display shows limits for the current editing note.

Scroll note list to current edit note.

Switch on the note.

Select “Lp”

Scroll waveform graph. Click on desired note end sample (if “snap to beat” is selected, the cursor snaps to the nearest beat). Press “Get loop end”. It appears in note list.

Scroll waveform. Click on desired note end sample. Press “Get loop start”. The loop is defined.

The display over the keyboards shows:

small squares: loops

small lines: samples

3.7 Internal mixer

If internal mixer is off, each track is sent to host mixer at max output level. Keep off to mix by host mixer.

If internal mixer is on, each track is sent through individual level control. For each track two send level controls are available. They send to output 11 e 12, through two general send controls. When internal mixer is on, you should set levels in host mixer to the same level for each output.

3.8 Play loops

Set the original tempo for the file!

Send and hold a note by sequencer or controller. If the note is on and defined, the vst starts playing the loop.

If “Follow tempo” is on, the vst follows host tempo.

Switch on if you want the drums follow song tempo.

Switch off if you want the song follow the drums feeling through a tempo track of the drums, like is provided with some commercial performances CD/DVD.

Use “sound” slider to achieve the best sound quality, depending on sound type (drums or percussions).

3.9 Tune

You can adjust “Pitch” without affecting tempo.

3.10 More controls

Quantization can be set to 1/8, 1/16, 1/24, 1/32 of beat. You can choose the amount of quantization by horizontal slider.

Random time variation can be set. Useful to change how a loop sounds when repeated.

Velocity controls how note on velocity affects sample output level. Switch off if using multisamples for different velocities.

Random velocity is to be implemented.

Have fun!