

OUTI 2



tinytool

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OUTI - tinytool

OUTI was created by Wilfried Thierry

Design by Thomas Chatard

This software was created with Cycling 74's Max/MSP

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This software has been created for live shows, it will allow you to record and playback four audio loops in real time, plus a granular recording and treatment. You'll be able to control loop points, playback speed, volume, to use VST plug-ins... All parameters can be assigned to a MIDI controller thanks to the MIDI learn function.

This manual will help you understand, step by step, the features of OUTI.

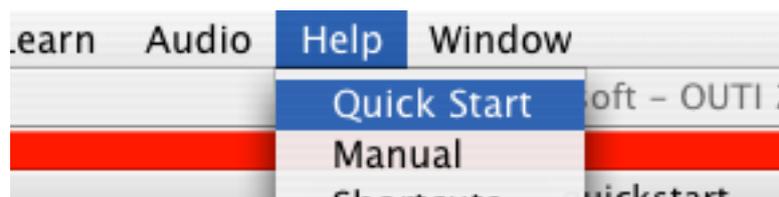
The first thing you have to do when you start the software is to turn on the audio engine. In order to do so, you just have to click on the speaker on the top right hand corner.



Now, you can start your first audio recording on the track #1. Just click on the Record button, record starts, click a second time to stop recording, playback starts automatically. You can try the different parameters to change the sound and try on the three other tracks.

Each track can be modified through a VST plug-in, just click on the plug button, a window opens to help you search for an FX. Once you've selected the plug-in, you can edit the VST by clicking on the open button. In order to hear the result, turn the dry/wet knob to get the desired effect amount.

This help is also available with illustrations in the menu Help>Quick Start.



Now you can try and create some loops using OUTI, we'll see in next chapters the different functions in details.

Audio Configuration

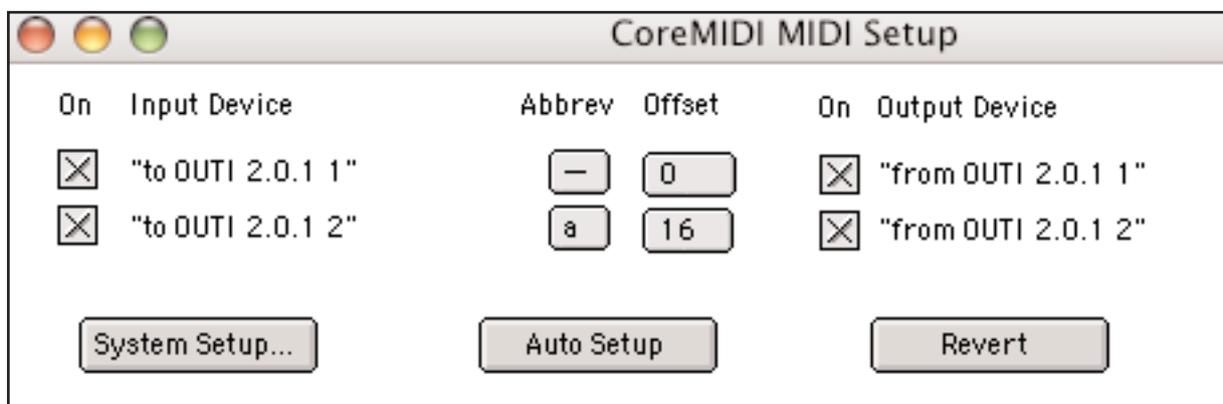
In this chapter, we will see how to configure your audio hardware. To do so, you must open the hardware configuration window, you'll find it in the menu Audio>Hardware Configuration. You'll open this window:

The screenshot shows the DSP Status window with the following configuration and performance data:

Category	Value	Additional Info
Audio	On	audio engine
Driver	CoreAudio Built-in Audio	selected sound card
Input Device	Built-in Audio	
Input Source	Internal microphone	
Output Destination	Headphones	
Playthrough Input	Off	
CPU Utilization	7. %	CPU load
Function Calls	142	
Signals Used	22	
Sampling Rate	44100 Hz	sampling rate
Input Channels	2	
Output Channels	2	
I/O Vector Size	512	
Signal Vector Size	64	
Max Scheduler in Overdrive	Off	
Scheduler in Audio Interrupt	Off	
Input Channel 1	1 input	
Input Channel 2	2 input	
Output Channel 1	1 output	
Output Channel 2	2 output	

MIDI Configuration

Now we can control our MIDI devices. OUTI is controlled by all devices connected to the application, on every MIDI channel. Then, MIDI setup window will be used mostly to control your inputs. Open it from the menu File>Midi Setup.



Input selection

We've seen how to select our sound card in the hardware configuration window. But OUTI gives you access up to eight audio inputs from your card (depending on how much inputs it has).

You must know that tracks in OUTI are stereo, but real time inputs are mono, which means that you can only record one mono input or one of the two stereo channels at a time.

In order to choose the input from which you wish to record, just select it thanks to the input selector.



You'll notice that above each button there's a led, it indicates you the actual selected input. On the screenshot above, input 1 is selected.

Buffer size

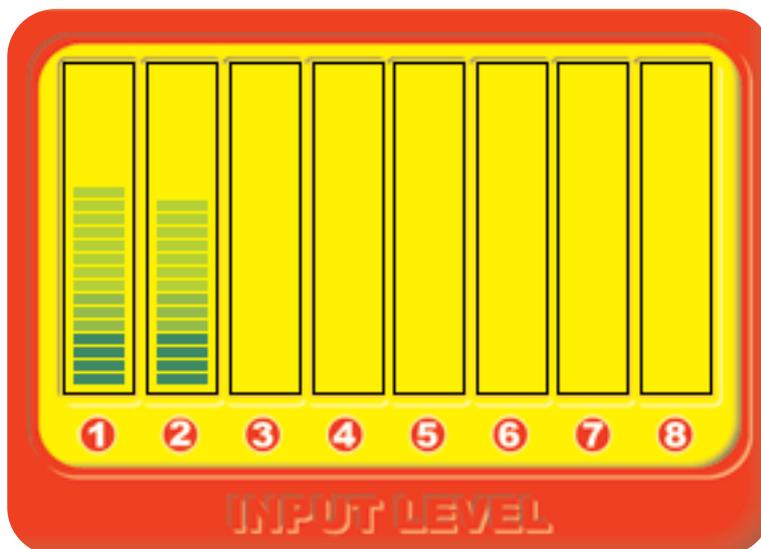
In order to work on low performances computers, we've let the user the ability to choose the recordings maximum length on tracks. Select the length by changing the value in the buffer size window (default value : 20 seconds).



Input Levels

Thanks to the Input Level window, you'll may check your sound card input sound level, to help you see if your signal is too high or too low.

In order to display the eight VU-meters, corresponding to the eight inputs, you just have to select it in the menu Audio>input Level.



The different recording modes

In OUTI, there are two main recording modes: the tempo mode and the manual mode, that you can select in the upper part of the software.



In the example above, tempo mode is selected (default position). To select manual mode, click on the circle, it will become plain which means you are in manual mode.

Tempo Mode

Tempo mode allows tempo synchronised playback (the tempo of the project is displayed on top-right hand corner). Loop length will be set according to the tempo and time signature you've chosen.



Manual Mode

Manual mode sets the end point of the loop according to the length you've recorded. Be careful, it won't set automatically when using a sample loaded via the read a file button !

Loop 1 Sync

This function adjusts the loop end point of track 2, 3 & 4 to the same length as track#1.

Start recording

Now we are ready to start our recording. You just have to click on the Record button, record starts. When you press once more, record stops and playback starts automatically.



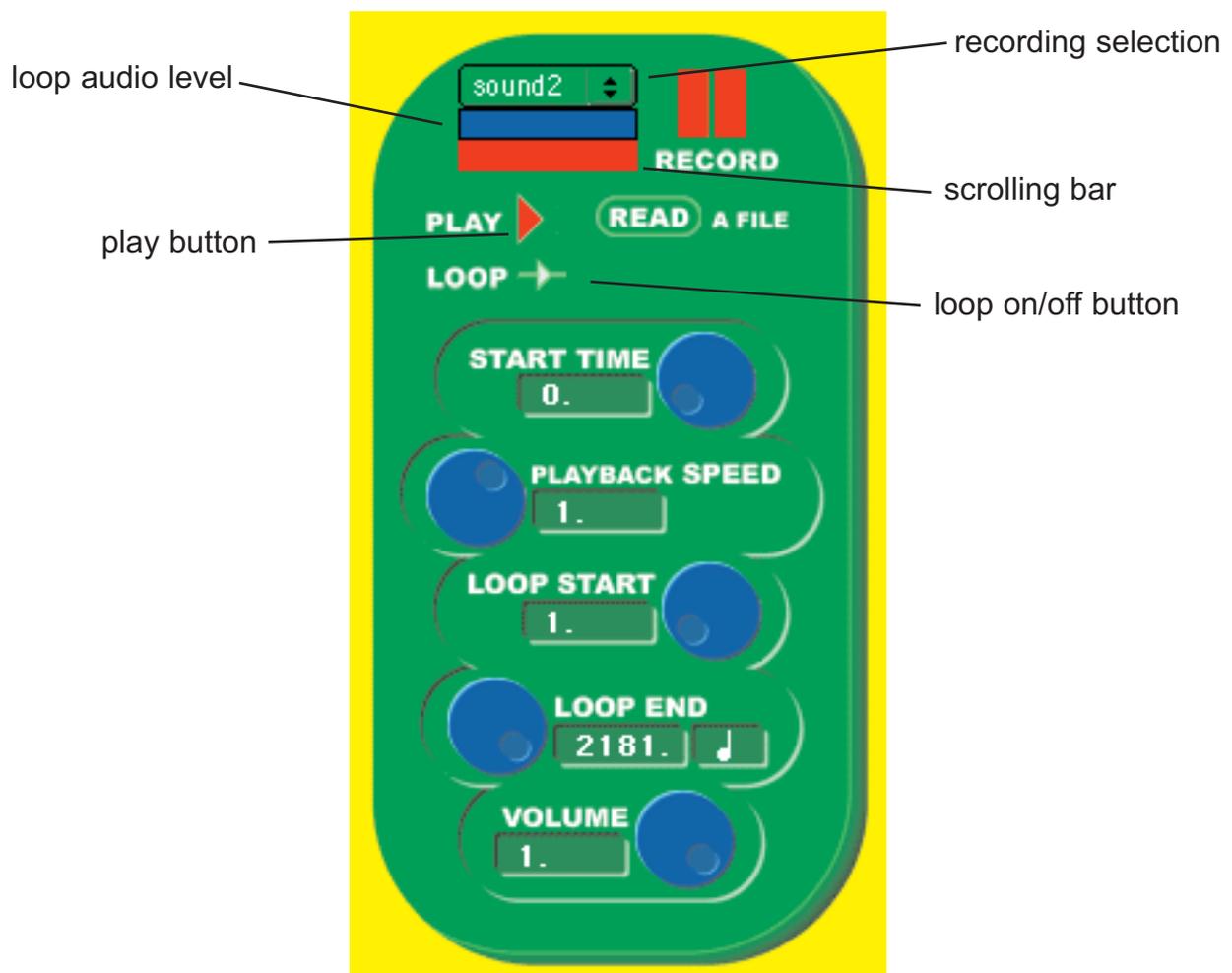
Instead of the mouse you can use MIDI, keyboard or expression pedal to start/stop recordings.

Via MIDI, you just have to use the MIDI learn window.

If you connect an expression pedal to your MIDI device, it can control your recordings. If you press once records starts on track#1, on second pressure it stops and playback starts, on next pressure record starts on track#2...

Using keyboard, you select the track using the w, x, c, v keys and start.stop record with the space bar.

To start playback, just click on the play button and playback will start at the point defined by the start time parameter. You can also use the keys a, z, e, r to start playback.



At any time you can control the playback progression thanks to the scrolling bar, but also the amplitude level of your loop.

By clicking on the loop on/off button, you'll stop or start loop playback.

Loop playback in tempo mode

In tempo mode, the loop length depends on general tempo, but you keep control on the loop start point.

In order to make your loop shorter or longer, you can change the coef. value which is represented by a note beside the loop end point parameter. You can change the following values :

- 1/8 time
- 1/4 time
- 1/2 time
- 1 time
- 2 times
- 4 times



Playback in manual mode

In manual mode, you keep total control of the loop start and loop end points.

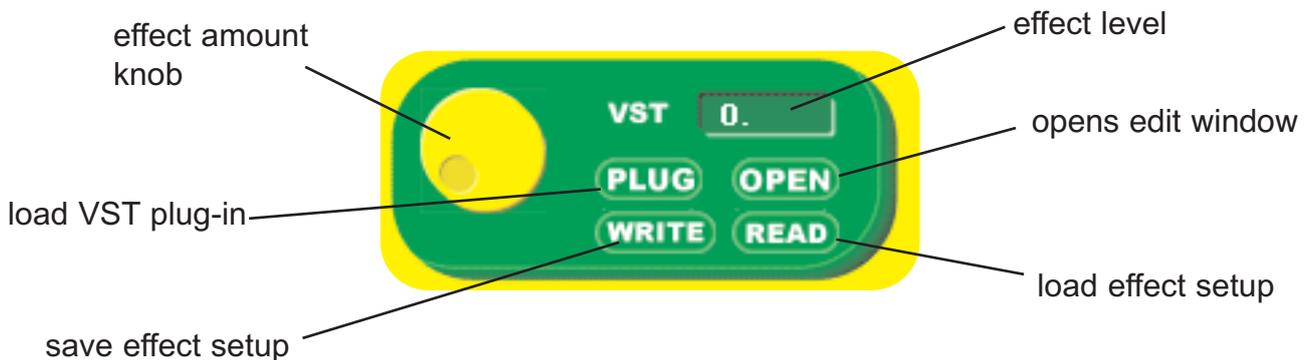
Cutup function

The cutup button starts a function that cuts randomly the sound on track#1. It reorganizes the sound structure according to the master tempo.



Using VST plug-ins

each track can be modified through a VST effect. You just have to load a plug-in by clicking on the plug button in the VST section. Then you can access the effect setup by clicking on the open button. The yellow knob helps you choose the effect amount, 0 stands for dry sound (without effect) and 1 is a fully wet sound (like in insert mode). And you can save and load your effect settings.



Master VST

Finally, a master effect can be applied to the whole sound. It works as the other effects.



The Vst amount can be controlled via MIDI for each track and master, thanks to the MIDI learn window.

Granular sampling

GranOUTI is a new instrument that uses granular sampling, this sampling method is different to the one used for track 1 to 4 and sounds quite different, providing you more possibilities.

In granular playback, a sample is divided into several little parts called 'grains', these grains size is calculated in milliseconds (Ms). While playing back, the sampler will reorganize these 'grains' around a specific point and on a specific length (duration).

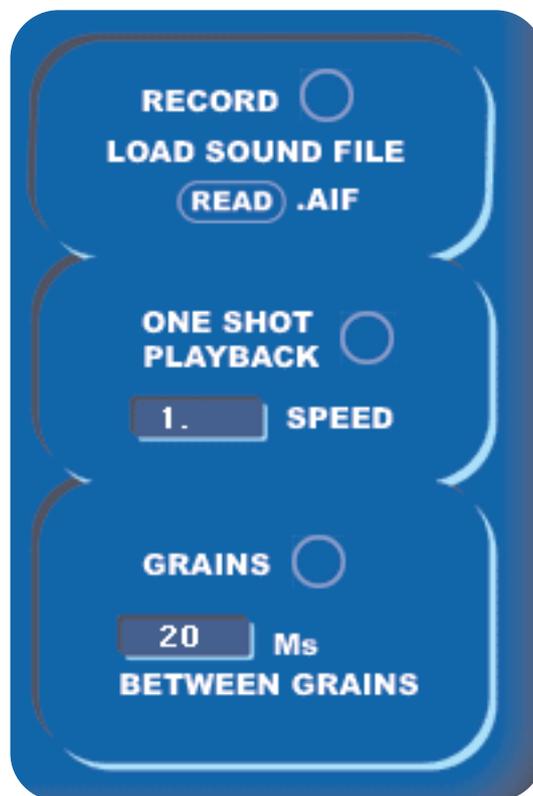
That is the way granular sampling helps you get soft soundscapes, but the simplest is for you try it out. The next chapter will help you use it.

Recording

To start GranOUTI, select in the menu bar Audio>GranOUTI.

To start recording, simply click on the record button, when you click once more, granular playback starts at the point selected with the scrub. You can stop or start again playback with the grain button.

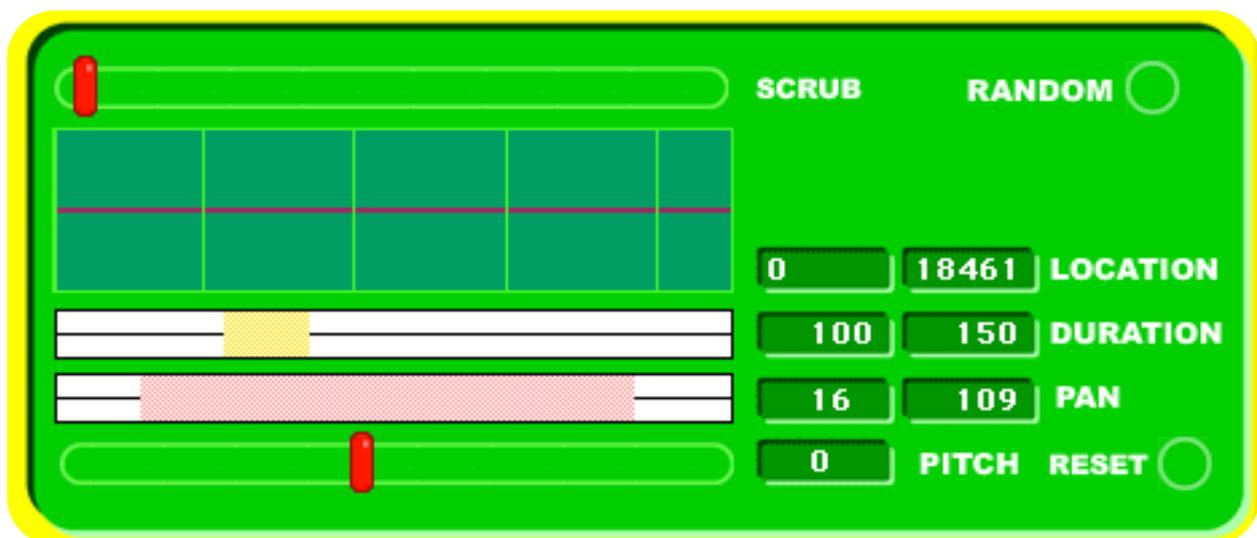
The One Shot Playback button lets you play the sample in a linear way.



Playback

When granular playback is activated, you have access to all the parameters that are on the right.

Before we start with these ones, you can see that the grains size can be changed (default value: 20 Ms). Just try and trust your ears.



Scrub is here to determine the point around which the granular playback will be done, you can move the slider manually but also randomly by clicking on the random button, it will now change according to the master tempo.

The Duration parameter determines the length around the playback point to be read.

Pan determines a range of panoramic movements.

And Pitch transposes your record on seven octaves, reset button goes back to no transposition.

General parameters

As on any other track, you have access to the volume settings that you'll be able to control via MIDI.

GranOUTI is also provided with a VST section that can host a virtual effect. It is controlled the same way as the plug-ins on tracks 1 to 4.

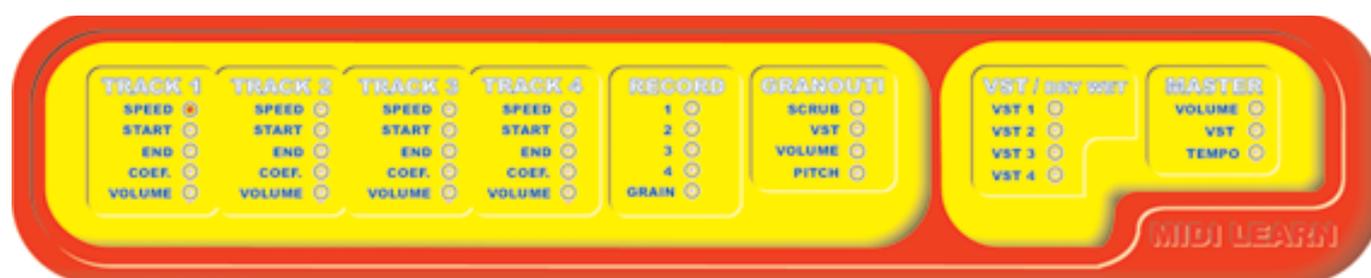
The One Shot Playback will allow you to listen to your recording without any granular treatment and at a speed defined by the speed parameter.

GranOUTI still works even when the window is closed, it will also respond to the MIDI control (if you assign them via the MIDI learn).

In order to make MIDI control simpler, OUTI is provided with a MIDI learn section that will allow you to assign any MIDI controller to the different parameters.

Select MIDI learn>MIDI learn in the menu bar to open it.

OUTI works with ALL control change (CC) data that are send on ALL MIDI channel ! That's why somme factory preset sending same controler number on different MIDI channels won't work with OUTI. So check you send different controler number to the different parameters you want to control !



In order to assign a controller you have to click on the corresponding button to turn the knob and to click once more on the button.

If you assign the same controller number to two different parameters, it will control both of them.

You can save your MIDI configuration by clicking on save in the MIDI learn menu.

To load a saved preset, choose open in the same menu, select the file and then click on load.

Recording your performance

You can record a live performance in OUTI in an .aiff audio file; it will be a stereo, 44.100 Hz, 16 bit file.

To record, you first must specify a file name and a location by clicking on the open file for recording button.

Then, you just have to click on the record button to start recording and to click once more to stop it.



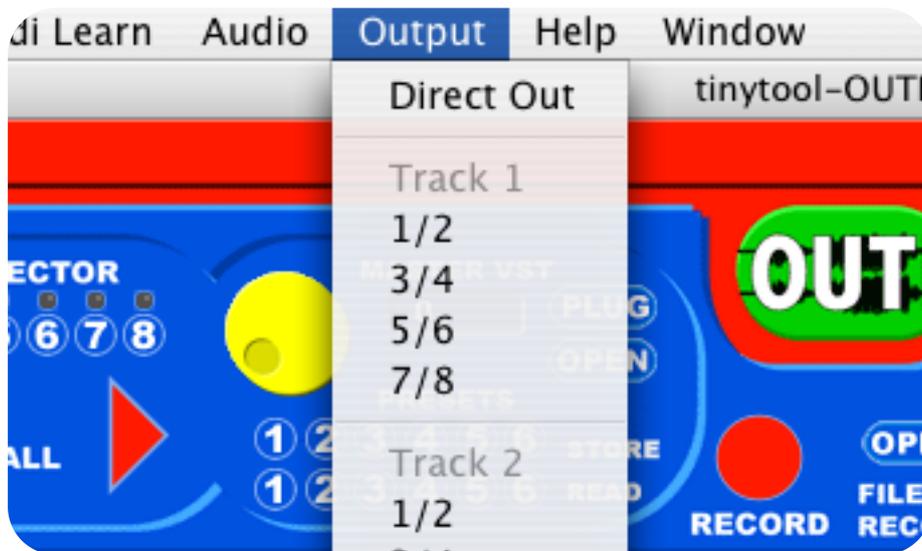
Saving and loading your settings

OUTI is provided with 6 settings save spaces. To save your settings, click on a number from 1 to 6. Now you can call your settings back by clicking on a number on the read line.



In the menu bar, click on file, here you can save, open or clear your preset settings.

As default setting, the audio signal is routed to the master output, but you can send it to separated outputs. In order to do so, select direct out in the Output menu, then you can route your signal to different outputs.



These settings will also be helpful in Rewire mode, that you can activate in the Hardware configuration window.

First of all, we'd like to thank you using OUTI, this software was first created for a live performance in Le Chabada (live stage in Angers, France) and didn't stop changing to become the one your using now. But it could not have become this without the help and feedbacks of users. That's why we'd be happy to have a word from you, anything you want, even a simple word. So if you'd like to visit our forum... Do not hesitate.

Moreover, the developement of our freewares takes us a lot of time, so if you'd like to help us, you can donate via paypal, you'll find details on our internet site.

And... Sorry if the english version is approximative, we've tried our best to translate it by ourselves.

See you soon

Wilfried et Thomas

<http://www.tinytool.org>