



Welcome!!!

No-Fi is a tape loop studio software made to revolutionize your creativity with warm lo-fi sound and striking simplicity!

No-Fi is not a plugin and no other software is needed, it's standalone:

Simplicity here is paramount.

Plug, record and mix, just like the real hardware.

You have one mixer, five cassette recorders, one handy reverb and one delay. That's it!

The 1-2 and 3-4 input channels can be used with synthesizers, guitars, bass, microphones, electroacoustic instruments etc. and can load a VST/AU plugin such a guitar amp.

Or you can load a virtual VST instrument and play it with your midi keyboard.

The cassette tape loops can record up to 1 hour of sound each, or import your own loops from your computer.

Although the software is very easy to use, please take a few minutes to read this manual in order to learn all the software's functions and get immediately at work with your new tape studio.

Setting up your audio interface

At the bottom left of the No-Fi mixer window you will find a button called Audio Settings, press it and it will open a new window:

The blue I/O button at the top left turns ON and OFF the audio scheduler.

If you modify some settings you must restart the audio scheduler by turning off and on again this blue button.

If the button is yellow it means that you need to restart the audio scheduler.

By default this will be ON when you open the application.

Driver: select here the driver of your audio interface

Output device: select your audio interface OUT.

If you want to use a virtual audio interface select here the driver (eg. Blackhole 16ch)

Input Device: your audio interface IN

Sampling Rate: suggested 44.100

I/O and Signal Vector Sizes: these set the number of samples calculated at the I/O of your audio interface and inside the software (Signal Vector Size).

It would be best to keep I/O Size number at 64 or 128 samples if you plan to record external sounds.

If while running the software you do hear some glitches you can try to rise both I/O and Signal vector sizes.

Larger vector sizes may result in latency.

I/O MAPPINGS:

You have 2 stereo or mono INPUT Channels in the Mixer.

If you have an audio interface with 4 inputs and you want to record 2 stereo signals:
Set the Input 1-2 channel to STEREO, by default it will use the input 1 and 2 of your audio interface,
Set the Input 3-4 channel to STEREO, by default it will use the input 3 and 4 of your audio interface.

If you have an audio interface with 2 inputs and you want to record two mono signals:
Set Channel 1-2 and 3-4 to MONO (default) and remap Input 3-4 Channel to Input 2 of your audio interface with I/O MAPPINGS.

Remember that when a Input Channel is in MONO, only odd INs will be used (1,3 by default on audio interfaces with 4 or more inputs).

In general, I/O MAPPINGS window let you remap the INS and OUTS of No-FI with every available channel of your audio interface. Once you set these parameters, they will be stored in the software's preferences file.

The screenshot shows the 'I/O MAPPINGS' window. At the top, it displays 'CPU 7 %' with a progress indicator. Below this, there are three sections: 'Driver', 'Performance and Scheduler', and 'Input/Output Mapping'.

Driver Section:

- Driver: Core Audio
- Input Device: MacBook Pro Microp...
- Output Device: External Headphones

Performance and Scheduler Section:

- Sampling Rate: 44100
- I/O Vector Size: 64
- Signal Vector Size: 64
- Scheduler in Overdrive: X (disabled)
- CPU % Limit: 0

Input/Output Mapping Section:

Input Mapping		Output Mapping	
Ch Group		Ch Group	
1-16	1-16	1-16	1-16
1	1 Input 1	1	1 Output 1
2	1 Input 1	2	2 Output 2
3	Off	3	Off
4	Off	4	Off
5	Off	5	Off
6	Off	6	Off
7	Off	7	Off
8	Off	8	Off
9	Off	9	Off
10	Off	10	Off
11	Off	11	Off
12	Off	12	Off
13	Off	13	Off
14	Off	14	Off
15	Off	15	Off
16	Off	16	Off

At the bottom, there are two buttons: 'Audio Driver Setup' and 'Open I/O Mappings'.

Software Authorization

(THE DEMO RUNS FOR 10 MINUTES THEN IT MUST BE RESTARTED)

Press “Unlock Demo” at the bottom left of the No-Fi menu and a window will open.

After purchasing the software on the website you will receive in your PayPal’s account email the serial to unlock the software.

The process usually takes 24 to 48 hours.

Serials are manually generated, so please be patient.

FIRST: Input your PayPal’s account email address

NEXT: Input the serial code you have received, as it is with spaces.

To paste use mouse’s right click > paste

When your software is authorized the red bar will become fully white and you will see **SOFTWARE AUTHORIZED** instead of **SOFTWARE IN DEMO MODE**.

Troubleshooting if this does not work, check the following:

- 1) the serial is correctly pasted
- 2) the email is your PayPal’s account email
- 3) you have installed the software in the system HD using the installer

AUTHORIZATION PROCESS (please read carefully)

Step 1) Go to www.giorgiosancristoforo.net and pay for the software with Paypal

Step 2) In 24/48 hrs you will receive an email with your serial number (changes my apply during holydays)

Step 3) Enter your email address (the one you have used for your papyal transaction)

Enter Email

Step 4) Enter your serial number (to paste press CTRL + CLICK > Paste)

Enter Serial Number

SOFTWARE IN DEMO MODE

In DEMO mode this software will stop after 10 minutes

0 min10 min

Mille main interface & architecture

No-Fi main window is a Mixer.

You have 2 Stereo or MONO (Default) Input Channels, 5 cassette tape returns channel, a delay (aux send₁) and a delay (aux send₂), plus a control room LR out.

THE INPUT CHANNELS:



At the left of the mixer you have two INs for real musical instruments or VST virtual instruments.

By default these are in mono, but you can switch them to STEREO using the button under the PAN/BALANCE knob.

The VST Button can load either a VST effect (such as a GUITAR AMP SIM) or a VST virtual instrument.

BY DEFAULT THE PLUGINS ARE IN BYPASS; REMEMBER TO TURN THEM ON IF YOU'RE USING THEM.

The VST button will open a window, here you can load your effect or instrument.

VST, VST3 and AUDIO UNITS are accepted.

Locate your Plugins folder on your computer, on OSX they are here:

Machintosh HD/Library/Audio/Plug-ins

We tested some popular Guitar Amps such as Neural DSP and Amplitube and they work well.

We suggest on Macs to try first to load the plugin located in the Components (Audio Units) folder.

The MIDI red dropdown menu is used to select your MIDI keyboard in case you have loaded a VSTi. Please remember to plug and turn on your midi keyboard BEFORE starting No-Fi.

BUSSES

At the top of each mixer channel (and efx return) there is a BUS assignment panel:

TA, TB, TC, TD, TE and CR: these are TAPE A IN, TAPE B IN, TAPE C IN, TAPE D IN, TAPE E IN and CONTROL ROOM (Your Audio Interface OUT LR).

By default INPUT 1-2 and 3-4 are routed to Tape A.

The output of all the TAPE channels are by default routed to CR (Control Room).

Needless to say, in order to HEAR a channel, this must be routed to CR (Control Room).



The Tape Return Channels A,B,C,D,E have a simple EQ (LOW-HIGH) and 2 AUX Sends. Aux 1 is routed to the DELAY, Aux 2 to the REVERB. The DELAY and REVERB Returns can be routed to the tapes in case you want to record the efx.



REMINDER: The 5 tape recorders are the only audio recorders you have, so for example you might record 4 tapes A,B,C and D and then bounce the final mix to Tape E (and then export it as a 24 bit non compressed audio file).

As it would happen with real tape recorders, tape noise will be summed.

Let's n

First: TAPE

Turn u

Next: t

(set by

Now p

First: set INPUT 1-2 to MONO (default), and route the bus of the channel to TAPE A: TA (already set by default)
Turn up the channel 1-2 VOLUME to maximum.

Next: turn TAPE A Channel volume to maximum and set channel bus to CR (set by default).

Now press the TAPE A red button at the bottom of the TAPE A Channel



A window with the TAPE A recorder will popup.

Now we must select our Tape TYPE and AGE, NOISE and SATURATION.

THESE PARAMETER MUST BE SET BEFORE RECORDING

- **TYPE** Simulates Ferric, Chrome and Ferro/Chrome tape eqs and noise.
- **AGE**: an old tape has irregular volume. You can adjust the AGE of the tape here
- **NOISE**: changes according to the TYPE of the cassette, here you can select the quantity of background noise. REMEMBER it will never be zero.

It's a tape!

- **SATURATION**: if you want tape distortion, set the value here. From subtle to total destruction.

Just like the real hardware you will hear the effects of these setting only when playing back the tape.

If you're not satisfied with them, change these settings and record again. A good idea would be to make a simple quick recording test before the real recording.

Now you can press **RECORD**.

You have up to 1 hour of recording space. Once you press **STOP** or **PLAY**, the tape will loop between the start and the end of the recording. Pressing **PLAY** immediately after **RECORD**, is like working with a classic loop. The loop will immediately start.

DURING PLAYBACK you can change several parameters of the tape player:

- **AZIMUTH:** This sets the head alignment error.
A wrong alignment will result in a slight phase difference between the channels L-R.
- **CATCH:** % Probability setting. Select how often the captstan catches the tape. The result is a momentary pitch change.
- **WOW:** This sets the quantity of the WOW. WOW is a slow irregular playback speed due to wrong motor calibration.
WOW can create eery, uncanny listening experience.
- **FLUTTER:** This sets the quantity of FLUTTER. FLUTTER is similar to WOW but it is a much faster irregular playback speed.
- **SPEED:** Playback speed, you can slow down dramatically or cranck up the speed of the playback up to 2x.

RECORDING SETTINGS define the kind of tape you are using and how old it is

PLAYBACK SETTINGS define the wear of the tape player.

An old Walkman with an old noisy cassette is very easy to simulate with these controls.

You can use the mouse on the waveform window to set new loop points.

IMPORT OR LOAD?

Let's say you don't need to record live sound, but you want to use audio files that you already have on your computer.

What you need to do is to use **IMPORT**.

Just like for live recording, remember to set the **TAPE A** channel volume to maximum and route the channel bus to **CR**.

Now press **IMPORT** on the tape recorder.

A popup window will open. Chose the audio file you want to **IMPORT** and press **OPEN** in the window.

The recorder will go in **RECORD** automatically and it will "copy" on tape your audio file.

This is done to stamp the tape character to your loop, i.e the **RECORDING SETTINGS**. Once the file has ended the recorder will stop and it will be ready for playback.

Just like for the live recording, you may need to experiment a bit with the **RECORDING SETTINGS** to find your ideal tape type, age, noise and saturation.

Usually tape simulations do not need make this stamping process, they act just like any plugin. However, some characteristics of tape recording can't be just mixed with the sound. The background noise, eq and age of the tape are not efxs you can just "add", because when you slow down or speed up the tape, the noise, the eq and the volume irregularities and the saturation MUST react accordingly. The noise usually is just a noise mixed over the sound, it's not IN THE sound. This little process adds a lot of realism to our simulation.

When you have RECORDED or IMPORTED a sound you may want to EXPORT the audio file.
SOUNDS ARE NOT STORED IN PRESETS!!!!

First press TRIM, this will cut the buffered audio to the loop size (you have 1 hour of buffer per tape). Then press EXPORT. Now you noisy tape will be exported in AIFF or WAV 24 Bit.

Use LOAD to load a stamped TAPE file, i.e. a RECORDED or IMPORTED sound which has been previously EXPORTED.

DO NOT USE LOAD WITH A SOUND WHICH WASN'T EXPORTED FIRST.

The would result in a perfect audio file with irregular playback (PLAYBACK SETTINGS).
NO tape saturation, eq, type, noise, age etc... USE LOAD ONLY WITH EXPORTED TAPE FILES.

**When you want to make a new recording or import a new file,
first press ERASE to set again the buffer to 1 hour.**

Because the playback settings are the settings of the PLAY function, WOW, FLUTTER, SPEED and AZIMUTH will be not EXPORTED to a TAPE audio file.

These qualities of the sound can instead be recorded when you BOUNCE the TAPES to a TAPE.

TO BOUNCE TAPES A and B to tape C, simply act as a live recording.

SET the volumes of TAPE A, B and C to maximum.

SET the output BUS of TAPE A and B to TC

SET the output BUS of TAPE C to CR

SET the RECORDING SETTINGS ON TAPE C

SET the PLAYBACK SETTINGS ON TAPE A and B

PRESS RECORD on TAPE C

PRESS PLAY on TAPE A and B.

PRESS STOP on TAPE C, A, B.

Then if your satisfied, trim the TAPE C loop and press EXPORT to save it to a file.



TAPE A and B are routed to TC
TAPE C is routed to CR

Here we added reverb and delay to TAPE A and B, so because we want to bounce also these efx, we route the AUX1 and 2 returns to TC in order to record the sound of the reverb and delay on TAPE C.

MIDI AND KEYBOARD MAPPING

You can assign MIDI CC to the dials and controls of No-Fi or assign your computer keyboard to buttons.

In the lower window's menu press MIDI MAP, now click on one dial and move a dial on your controller, it will be automatically mapped.

To exit from MIDI or KEYBOARD MAPPING press ESC on your keyboard.

Remember to **SAVE** the mapping before quitting the program.

The MIDI MAP is not saved in the user presets.

KEYBOARD MAP works in a similar way but with computer keyboard instead of MIDI CCs (good for buttons).



STORING AND LOADING PRESETS

Simply press **WRITE PRESET** at the top of the main interface and your patch will be stored into a json file
To load a preset, simply press **READ PRESET** and load the json file you have saved.

TAPE RECORDINGS ARE NOT STORED IN PRESETS, ONLY THE MIXER AND THE TAPE CONTROLS ARE STORED.

REMEMBER TO EXPORT YOUR TAPES BEFORE QUITTING THE PROGRAM



VST PLUGINS ARE NOT STORED AS WELL.