WoodStepper Getting Started

Woodman's Immaculate Maple Syrup Studio

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www.woodmansimmaculatemaplesyrupstudio.be/woodstepper/WoodStepperHelp.pdf

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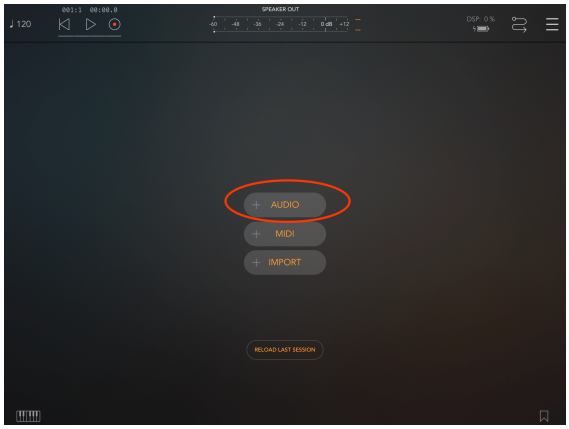
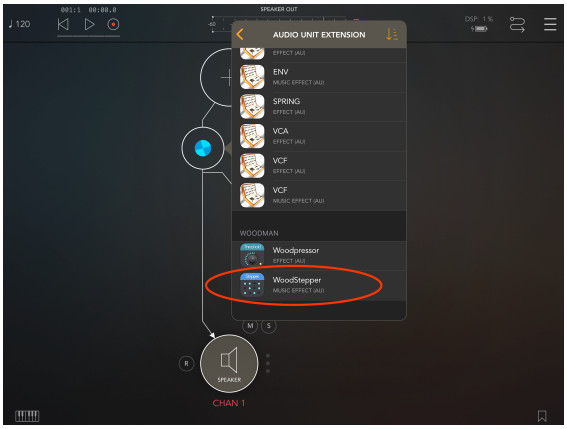
1. Basic VCO sequencer in AUM

Push the “add audio plugin” button in AUM



Choose Audio Units and select WoodStepper



Push “Source” (at the bottom)
Set “Mode” in the Source panel to “Oscillator”

Now press the WoodStepper “Start” button and you should hear a dull sequence of the same tone …

1.1 Create a melody by changing the Pitch

Now let’s make this a bit more interesting by changing the Pitch per step

Push “Pitch” at the bottom which makes the Pitch panel visible.

Push the “All Steps” button and then the “Random” checkbox.

Make sure the “Enable” button is on.

When the sequencer is running, you will now hear a different tone for each step.

Switching off “Random” again will keep the last value in each step and now you will hear an 8 steps returning pattern.

2. Setting a Step parameter

We ‘ll take again the pitch value as an example which we want to give a different value for each step (but not by using the random button).

There are 3 ways to set a step parameter.

2.1 Set a parameter when the sequencer is not running

Select the step you want to adjust by clicking the step led.

Switch off the “All Steps” button ! (unless you want the same value in all steps)

Rotate the Pitch rotary to the value you want. And that’s it !

If you want to hear the effect of your parameter change, press the “Play Step” button.

2.2 Swipe a rotary to set all the steps when the Sequencer is running.

Obviously press the “Start” button if not on already.

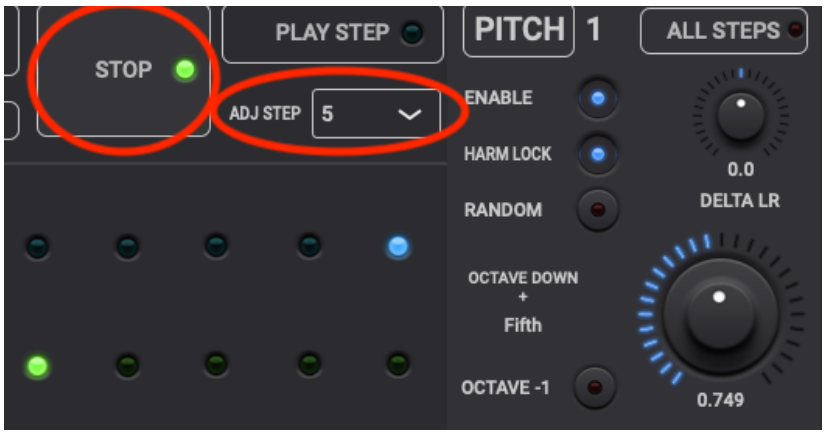
Make sure the “Adjust Step” popup is set to “Cur” (current step).

For each step you will see the current values in the buttons and rotaries.

Grab and hold a rotary and move it to different values : each step will get the value the rotary has when the step is the current one.

Setting a parameter this way is often not very precise especially when the sequencer is running fast.

2.3 Adjust a specific step when the sequencer is running.



Set the “Adjust Step” popup to the step number you want to adjust.

You will see that the rotaries now only display the value of that selected step also when the sequencer is playing one of the other steps.

Changing the rotary or other buttons now only adjust the value of the selected step.

3. Using a keyboard to set the VCO note (frequency)

For any DAW/Host configuration you first have to enable the midi in for the Sequencer Oscillator Source :

- Set the midi channel to the keyboard midi out channel or to “All”.
- Set the “Armed” button on : this button is also visible in the Main WoodStepper panel (“Sampling Armed”)

When keyboard notes are received, you will see the Note popup and Frequency rotary change when the Source panel is visible or you will see the received note in the Main control panel.

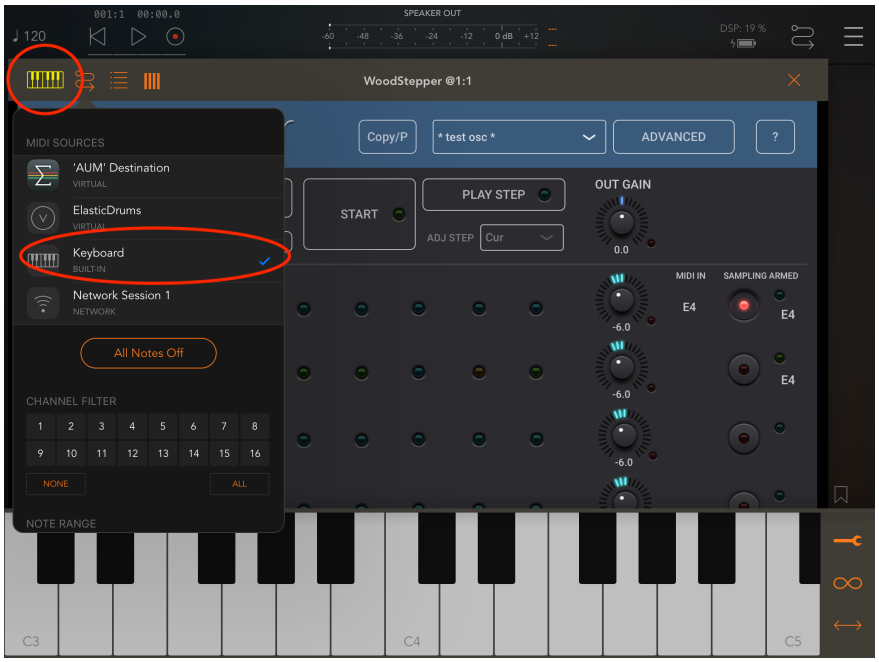
3.1 Using a DAW internal keyboard or midi source

WoodStepper can either receive midi from an external source and/or from the DAW itself.

In this case go to the Advanced Settings and enable the button “DAW midi”.

3.2 Hooking up the AUM internal keyboard.

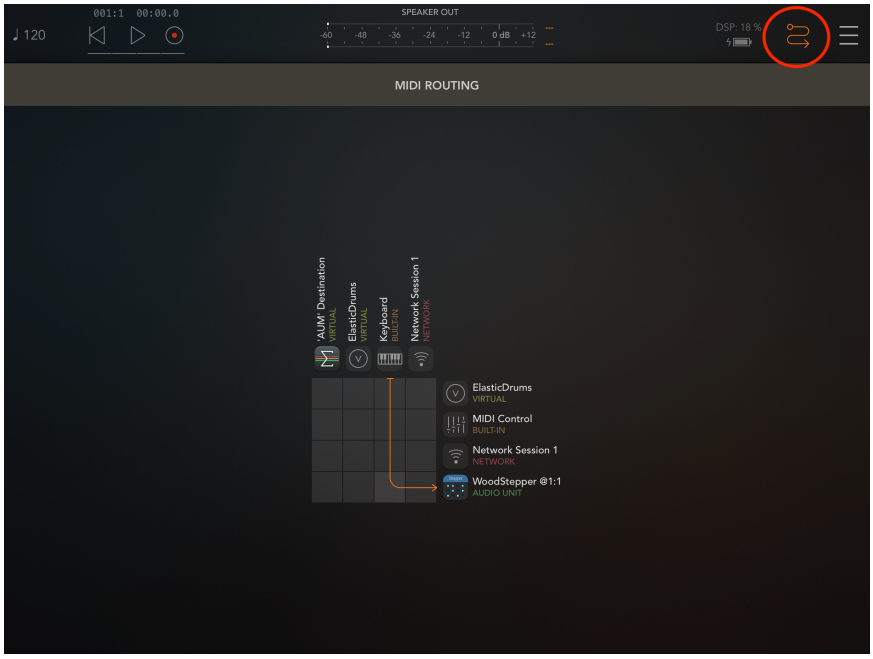
Select the keyboard in AUM which will automatically sets the keyboard as a midi source.



Set the keyboard destination to WoodStepper :

- either select the settings when the keyboard is visible :

- or select the AUM midi routing button and make the connection from keyboard to WoodStepper:



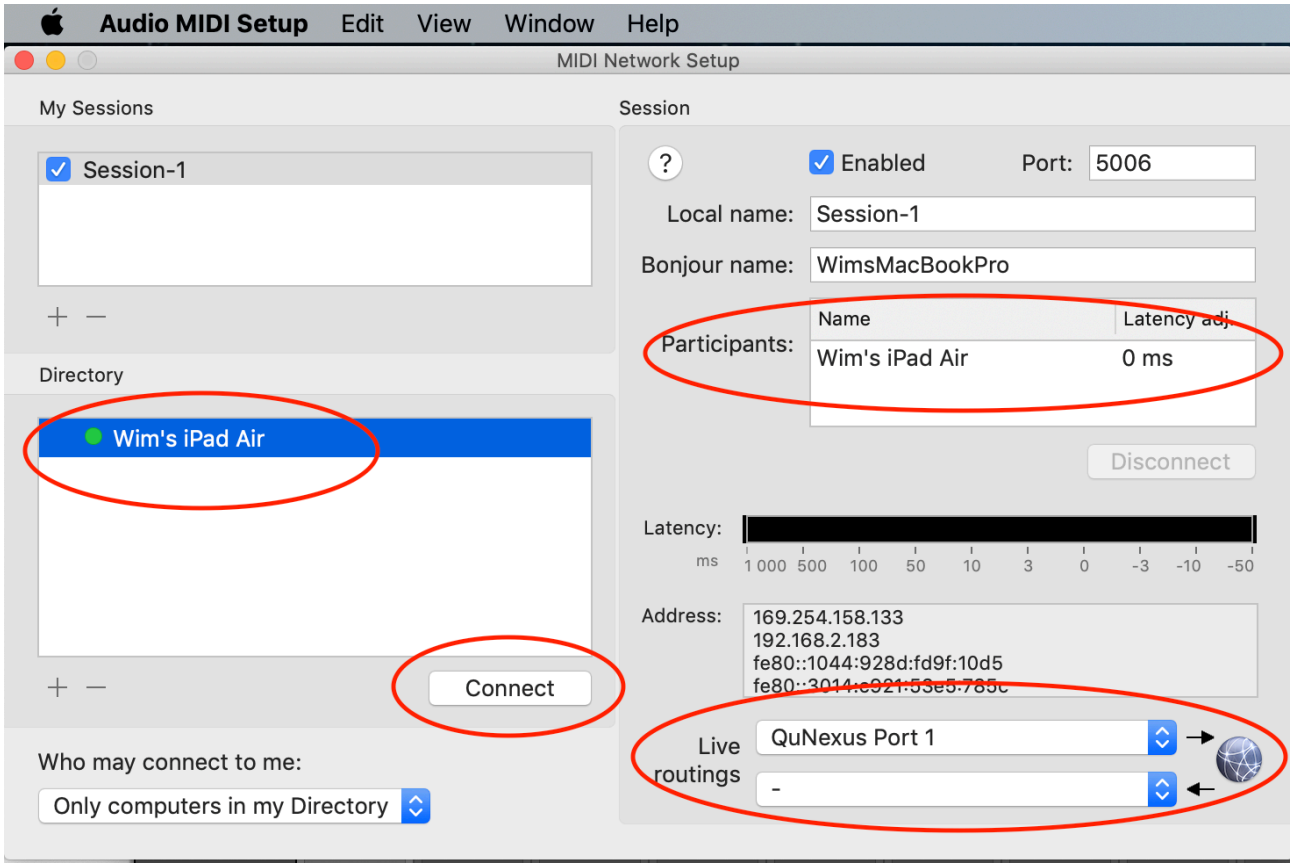
3.3 Hooking up an external keyboard connected to a Mac.

The midi will be sent from source “Network Session 1”.

When WoodStepper “DAW midi” is still on, you have to make a connection from this source to WoodStepper just as you did for the internal keyboard.

However when “DAW midi” is off, WoodStepper bypasses the Host (AUM) to receive midi directly from external sources and then the connections shown in AUM don’t matter.

On the Mac start the application “Audio Midi Setup” and connect your iPad.
Also send the connected keyboard (QuNexus port 1) midi to the “world”.



4. Start Sampling

Make sure you have some audio source coming into WoodStepper.

The source can be audio on a track, an instrument (generator) or live audio from your Audio Interface.

You can check this by setting the WoodStepper “Dry-Wet” rotary to low(er) values : when the sequencer is stopped, you should/can hear only the incoming audio. You may have to start the Transport in your DAW or record enable a track.

Now select the Source panel in WoodStepper and set the Mode to “Sampled Track”

Switch on the “Armed” button (red led on).

Now lower the “Threshold” rotary until the incoming audio level gets above the threshold which will start the sampling.

You will see the sampled data in the graphics display.

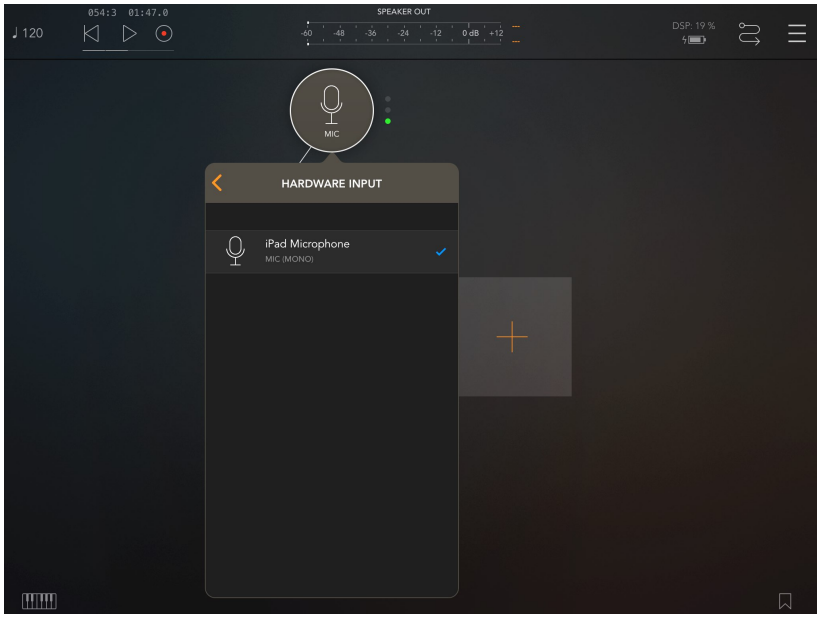
The sampling time (length) is determined by the step time so if you want longer samples change this sequencer’s timing.

As long as the “Armed” button is still on, resampling can occur when the audio level first goes down (below the Threshold - Hysteresis) and then goes above the Threshold again.

Remark : keep the Sustain rotary at 100 (or zero which is mapped to 100). This sustain control is meant for playing live when you want a sampling loop to slowly decrease/disappear.

4.1 Sampling the Mic input in AUM

Choose the iPad Mic from “Hardware Input”



Following the steps described above you should see in WoodStepper :

Starting the sequencer will play the sample on each step.

Follow the steps described in 2. to adjust the Pitch for each step to bring in some variation.

5.0 Envelope

Reduce the “Release End” rotary from 100% to a lower value (50 .. 60 .. 70 …) to get a snappier sound as now not the whole step will produce audio out.

So “Release End” controls (in % of the step length) when the audio will be cut off.
If you would set it to zero, nothing or only a very short clicking will be heard.

This is different on a synth where the release amount (in %) determines the time for the sound to reach zero **after** the key has been released.

Increase the “Attack” rotary when you want softer sounds.

Remark : in this panel you can also set the step gain which can be used to disable the step sound (set to -60dB) without affecting the timing.

6.0 Make some “tsjoop” sounds with the Filter

First select the VCO as audio source as described in 1.

Set the Oscillator type to “Triangle” or “Square” or “Saw”.

Open the Filter panel and set :

- The “All Steps” button to on.

- Filtertype to “Moog 4p Lowpass”
- Freq 1 to +- 500Hz
- Freq 2 to +- 3000Hz
- Resonance to +- 3.0
- Attack to +- 10.0
- Sustain to +- 20.0
- Release to +- 2.0

The Filter cutoff frequency changes from Freq1 to Freq2 when the Filter envelope goes from 0 to max so longer Sustain values will keep the cutoff more at Freq2. Longer Attack and Release values will cause longer transition times.

7.0 WoodStepper for Guitarists

Apart from the VCO based sequencer patterns which can provide you with a backbeat, you will probably want to use WoodStepper as a sampler / looper.

So follow the steps described in 4. but connect your guitar to the audio interface so you can use that as audio source.

7.1 Using WoodStepper as a looper.

Set the WoodStepper Source to “Sampled Track”.

In a normal looper the loop time is determined by the time between pressing the start and the stop sampling button(s).
In WoodStepper the loop time is the step time and is obviously set before you start sampling.
So you probably want to set the sequencer timing a bit higher than the default 1/4 bar.

When no other effect is enabled (Pitch, Filter, …) each step will just play the loop as if there is only 1 looper. But of course you can now start to add some variation per step by setting the Pitch and or any of the other effects.

7.2 Live recording of the loop/samples

In this case and when the sequencer or other instruments are running, you may want the new samples to become active (heard) in sync with the bar. When switching on the “First Step” button the new samples will be heard when the sequencer reaches Step 1 again (which normally is also the beginning of a bar).

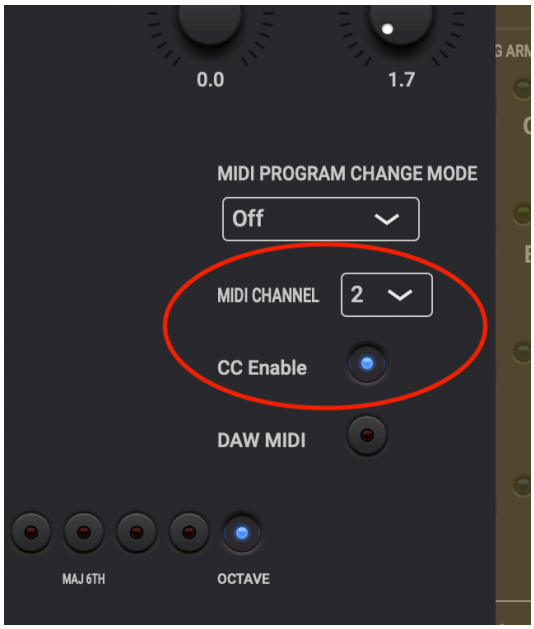
When playing live another setting you may want to use is the “Sustain” (in seconds !) . When the value is not zero or 100s, the sampled audio will decrease in level to reach zero after the time set. You then have to re-sample to make the audio active again (or set the Sustain to zero or 100).

When playing live, you also may want to control the sampling “Armed” button(s) and the sequencer on/off button(s) to a hardware midi pedal.

7.3 Connect an external midi pedal to control the sampling.

In the manual you find the CC’s to use. For example the sequencer 1 sampling “Armed” button is controlled by sending CC 110 (which will toggle the button each time it is received).

To enable the CC’s go to the Advanced panel, switch on “CC Enable” and set the midi channel on which your external midi pedal is transmitting.



7.4 Using WoodStepper as a pitch (down) shifter.

Set the Source Mode to “Track Audio”.

In this mode audio is constantly fed into the step effects but is not recorded and saved in a preset.

Set Pitch values in some or all steps as described in section 1. and 2.

When the sequencer is running and you start playing, you will hear instantaneous pitch shifting or everything you play.