How to connect UNO Synth to Ableton Live

By Bob Voith <u>bob@vcode.no</u> <u>http://www.proudprogrammer.no</u> Last updated May 22nd, 2019

This document describes how I connect my UNO Synth to *my* hardware, in order to get everything to work.

Let me also underscore that I love the UNO Synth and it's editor! It is just that it isn't so easy to get working in all aspects. What aspects you ask?

• Sound!

The sound from UNO Synth should of course come into Ableton so I can record it. Remember that the UNO Synth will only output it's sound via the it's output jack. The USB interface is only to connect the synth to the computer and send/receive MIDI signals. So, remember - no sound via USB!



• MIDI!

Of course I also want MIDI to and from the UNO Synth.

• Editor!

Finally I want the editor to be active so I can load presets and in other ways control the UNO Synth

Why this document? Because if you try connect the UNO Synth the way that feels intuitive (at least to me!), either the UNO Synth Editor won't connect correctly (you get "WAITING FOR UNO"... more on that later), or you get an unstable VST plug-in experience. Yes, this has both been reported to IK Multimedia directly and it has been reported in the official forum with the post "<u>Anybody else? Issues with UNO</u> <u>Synth Editor as VST in Live</u>". Others has also reported similar problems with other DAWs than Ableton Live.

To see an overview of my hardware and software, scroll to the bottom.

Ensure that the UNO Synth is disabled in Ableton (!)



I know ... this almost sounds crazy.

Normally you would want to have the *Track* turned ON for both input- and output UNO Synth. This would normally enable the UNO Synth to send and receive MIDI with Ableton.

However, this unfortunately also *blocks* the UNO Synth editor from properly connecting to the UNO Synth Editor. In other words, you will experience the "WAITING FOR UNO" message in the UNO Synth editor,

So - by not turning on the track button for the input- and output UNO Synth, Ableton won't *use* the MIDI-ports, meaning that the *standalone version* of the editor indeed can connect to the UNO Synth.

Connect the MIDI in- and out from UNO Synth to your Audio interface's MIDI ports

Since we have disabled the MIDI to and from UNO Synth in the previous steps, I must use the external MIDI-ports on the UNO Synth.



The UNO Synth's OUT port should be connected to your audio interface's MIDI IN port. This alone will enable the UNO Synth to *send* MIDI to Ableton later. If you also want your UNO Synth to *receive* MIDI, you need to connect the UNO Synth's MIDI IN port to your audio interface's MIDI OUT port. In my case this means that I connect the MIDI cables to my iConnectMIDI2+ ports.



As soon as you connect the UNO Synth to the audio interface, you will see that the MIDI insignal lamps on your audio interface blinks like crazy! Don't worry, this is MIDI control messages sent by the UNO Synth editor because the editor has the MIDI Sync set to INTERNAL in the first place.

In the standalone UNO Synth Editor – verify the MIDI ports

Launch the *standalone* version of the UNO Synth Editor (NOT the VST plugin in Ableton) and check it's settings;

MIDI SE	TTINGS	INFO							
MIDI IN	TERFACE	MIDI ROUTING							
MIDI INPUT	3 - UNO Synth [1] 🗸	MIDI SOFT THRU	OFF 🗸						
MIDI OUTPUT	3 - UNO Synth [0] 🗸	KNOB BEHAVIOR	ABSOLUTE 🗸						
MIDI CONTROLLER	~	MIDI SYNC							
MIDI CHANNELS									
INPUT CHANNEL	Any 🗸	SEND PC	ON V						
OUTPUT CHANNEL		RECEIVE PC	ON ~						
		MIDI INTERFACE	ON v						
CLOSE									

Since Ableton has disabled the UNO Synth MIDI ports in previous step, you should see (or select from the drop down boxes) the UNO Synth ports. Note that the ports may have different names on your computer. The first number in the names are the so-called *MIDI device number* given to UNO Synth by Windows when it is connected to USB. This means that you have get *another* name if you connect the UNO Synth to another USB port on your computer, or to an USB hub. Even the timing when you switch on the UNO Synth can alter the MIDI device number. Remember – this is default Windows behavior and outside IK Multimedia's control. However, they *could have* programmed the editor to detect the UNO Synth ports a little more automatic and prompted the user that changes has been discovered.

What if the MIDI names are red?

The red MIDI port names means that *some other audio software is using the ports right now*. This scenario would typically happen if you don't disable the UNO Synth in Ableton Live, and if you launch Ableton before the UNO Synth Editor. Ableton will then connect to the MIDI ports as part of the startup sequence, and thus *hold* the ports, and make them unavailable to other audio applications.

How to record the sound of the UNO Synth in Ableton Live

In order to make everything easier when you check the sound from the UNO Synth, I like to select a sound preset on the UNO Synth and click the HOLD-button on the synth. This way you hear sound as your selections in Ableto is correct. Another tip is to turn on the sequencer in UNO Synth to achieve the same result.

Ensure you have connected the UNO Synth's OUT port to one of your audio interface's INPUT ports.



The port above should be connected to your audio interface's audio ports



Remember to switch the button from LINE to INST and control the gain so the audible sound doesn't distort or clip the sound from the UNO Synth.



In Ableton Live you should now be able to select the port from the audio interface, by selecting "Ext. in" and the ports receiving signals. Remember to set "Monitor" to "In" to hear sound immediately. You might of course also record-arm the track and then Monitor can be either set to "In" or "Auto" to hear the sound.

When you are ready to record, arm the track and record the sound!

Verify that you can launch both Ableton Live and the UNO Synth Editor at the same time! Since Ableton Live has disabled MIDI from the UNO Synth, it shouldn't hold the MIDI ports. You should therefore be able to launch the UNO Synth Editor

and it should be able to connect to the UNO Synth too. This way you can load UNO Synth presets and tweak your synth via the editor without problems!

Verify that you can play the UNO Synth and see the changes in the editor. Twisting a knob on the synth should be mirrored instantly in the editor.

Receive some MIDI in Ableton Live!

Coming here you should be able to hear and record the sounds from UNO Synth on Audio Tracks in Ableton Live. Now it is time to receive some MIDI too!

Choose a MIDI track in Ableton Live, and choose your audio interface in the *MIDI From*. In my case that is the "iConnectMIDI2+". The channel receiving the sound is in my case "1". This can be changed in the UNO Editor's MIDI settings.



To record the MIDI, arm the track and record away!

Send some MIDI to the UNO Synth!

If you have connected both MIDI ports on the synth to your audio interface card, you should also be able to send MIDI to the UNO Synth.



The trick now is to use any MIDI input in a clip on a MIDI track

Then choose your audio interface in the *MIDI To* field.

Play the track and you should be able to hear your MIDI clip play in the UNO Synth.

And now, you have fantastic control over the sound by twisting knobs on the synth, and tweaking other synth-parameters in the standalone UNO Synth Editor!

Unleash the power of routing in Ableton with your newly connected

UNO Synth!

Another super set of plugins in my sphere, is the Captain Plugins (<u>https://mixedinkey.com/captain-plugins/</u>) from Mixed In Key. Now connect for example the Captain Play (a simple plugin enabling you to play correct notes or chords in a selected scale).

MIDI > UNO	Sound from UNO	4 Captain Play						
MIDI out			Captain Play/4-Captain Play					
•			CAPTAIN PLAY					
	2	3	KEY SCALE			PLAY SINGLE NOTES		¢
0	-	-	E < > Minor < >					
•								
MIDI From 4-Captain Play V	Audio From Ext. In	MIDI om All s	AUDIO VST OUTPUT					E4
Captain Play 🔻	II 1/2 Scarlet	All Channels 🔻	Audio is muted and Captain is					1 1 1
Monitor		Monitor	outputting MIDI potes only					
MIDI To	Audio To	Audio To	outputting with notes only.					ļ
iConnectMIDI2+▼ I Ch. 1 ▼	Master v	Master v	VST Output Tutorial					
	Sends	Sends						
	A (/B)	·A· (/B)		C4 Octave	1 2 3	4 5 6	7 8	
:	0.00							
	(Ť) - 12	(Ť) - 12		C3 Octave	Q W	ERTY	/ U U I I	
2	3 - 24	4 - 24		C2 Octave	A S	DFG	н ј і	ĸ
S	- 36 S	- 36 S				┯┹┯┹┯┹	┯┹╤┹┑	
0	• 48 • 60	• 48 • 60		C1 Octave	z x	с и в	N M	, ,
	-0	0						

In the screen shot above you see how I have 3 tracks.

- 1) The first MIDI track renamed to "MIDI -> UNO", is the track that sends MIDI to my UNO Synth. Note how I have specified to receive *MIDI From* the Captain Play plugin!
- 2) The second track, named "Sound from UNO", is the audio track receiving the sound from UNO.
- 3) The third track, named "Captain Play" is the plugin with the keyboard like user interface at the right.

Remember to fiddle with the *Monitor* setting on the track. By setting track 2 to "In" you should be able to hear the sound. As you see from the screen shot above, I have record-armed track one, meaning that the Monitor set to Auto will enable that track to receive the incoming MIDI from track 3.

My current hardware and software

Computer: Microsoft Surface Book 2, with 16 GB RAM and 512 GB SSD. Operating System: Windows 10.0.17763 x64 Ableton Live 10.0.6 UNO Synth firmware 1.1.3 UNO Synth Editor 1.1.0 (9E06)

Main Audio Interface: Focusrite Scarlett 2i2. This does not have any in or out MIDI connections, so therefore I also have

Additional MIDI interface: iConnectMIDI2+. Hardware version 3.0 and firmware version 2.0. The iConnectivity's Auracle software is version 1.4.1 - 62.