Playing Audio Kit Synth One in iPad – Recording In Reaper PC
by Brewer Shettles

Tech specs for playing synth as an instrument in Apple IOS and recording in PC Win 10 Pro.

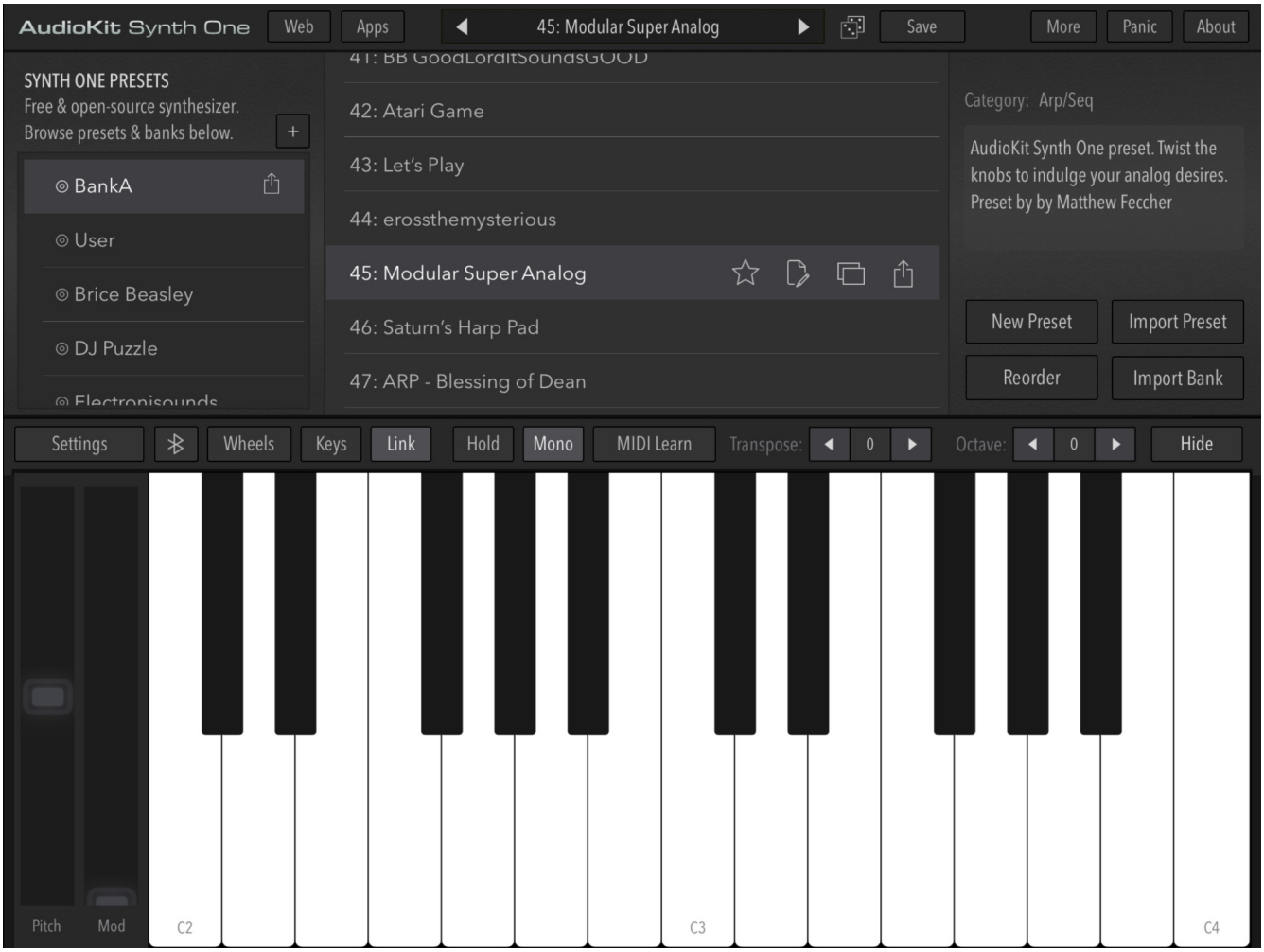
IOS – Plays Audio Kit Synth One. MSFT Win 10 PRO – Records Audio.
HD Crystal clear, no noise audio recordings of Audio Kit Synth One from iPad into Reaper!

Might seem complicated. Read this through. Be patient.

iPad Advantage (IOS): Where Audio Kit Synth One lives and breathes!!!!
PC Advantage (Win 10 Pro): Easier to multi track – mix – add Plugins – Master

Matthew Fecher (@analogMatthew) | Twitter
Audio Kit Synth One
https://audiokitpro.com/synth/

Update 1/31/19: Synth One is now available for iPhone! Read More
Update 12/20/18: Synth One now featured in every Apple Retail Store in USA!



I LOVE SYNTH ONE SOUND AND EFFECTS – BRILLIANT!!!!!!!!!
Studeomux (Zerodebug) allows audio to transfer from iPad to PC. Latency. Not an issue.

REASON LATENCY NOT AN ISSUE
I adjust and sync audio to drums after recording audio tracks in Reaper from the iPad.

EXAMPLE: LIQUID FUSION – FIRE IN THE NIGHT
https://youtu.be/9QTuwTdeRKo

For critical timing, -ie bass to drums, I quantize by hand, each bass note to each drum beat. If a synth audio sounds "live," I listen down as the song plays, and cut audio to exact drums when it makes the most impact.

Audio Kit Synth One
- (19) Electro Clash Bass – Preset by: DJPuzzle
- Quantized by hand nearly every note, aligning each bass note to each drum beat
- (07) BB Dandelion – Preset by: Brice Beasley – left mostly alone as Track has "live feel"
- (47) Blessing of Dean – Preset by Electronisounds
- Listened down. Cut and aligned sections when music started to drift out of sync.

POINTS TO CONSIDER
Length of USB cable from Yamaha UD-BT01 adapter to keyboard. Might be best with 4 foot cables vs 6 foot cables. Studeomux latency with audio recorded in PC is under 200ms.

POWER FOR IPAD
- Make sure your IPad is fully charged

FUTURE TO DO:
Need to see if my Apple USB 3 Lightning Camera Adapter will work with a USB2-USB2 cable going from it to the PC, and a second Lightning-USB2 cable going to a charger to power all. Need to find a USB2-USB2 data cable that will work going from the Lightning camera connector to the PC.

WARNING
If you have an external interface unit that you connect to your PC, disconnect ADDA interface after use. Reason: In NYC, CON ED is known to have fluctuating voltage problems that happen early morning, especially during storms. Con Ed varying voltages can severely damage critical circuit boards rendering them useless. Remember, when done pull the plug!! My experience only.
Using quality surge protectors helps too. The higher the joule number the better the surge protection.

IPAD
Again, make sure your IPad is charged. Using: iPad Pro 2nd generation: 12" screen with an A10X Fusion chip with 64-bit architecture and an Embedded M10 co processor. Powerful iPad.

CONNECTING KEYS TO IPAD WIRELESS MIDI + YAMAHA UD-BT01

Nektar Impact GX 49 – midi controller. Yamaha UD-BTOI USB wireless Bluetooth midi adapter connects keys to iPad. Bought gear @ Sweetwater – Mason Boisvert – No hassle. Great sales and service. A++++

Playing Audio Synth One with Virtual Keys in the iPad greatly reduces latency with audio recorded in Reaper in the PC when you line up audio to drums. Using the Yamaha UD-BT01 wirelessly, you don’t notice latency (200ms) when recording layering audio through Studeomux in the PC without drums. High quality Audio Kit Synth One tracks blending together are amazing.

Again, using wireless midi controller is fine if no drums are in the music. The CME Midi Keyboard has 7 ms latency. Might be the way to go.

Download and run Yamaha Sound Control to connect midi. Connect your keyboard by USB to the Yamaha UD-BT01 Bluetooth adapter. Open the Yamaha Sound Control App. Look for the Setting Wheel (upper right of box). Hit it. Tap Bluetooth Midi Device. Bluetooth Midi Devices "UD-BT01" on the left and "Not Connected" on the right. Tapping "Not Connected" changes the status to "Connected."

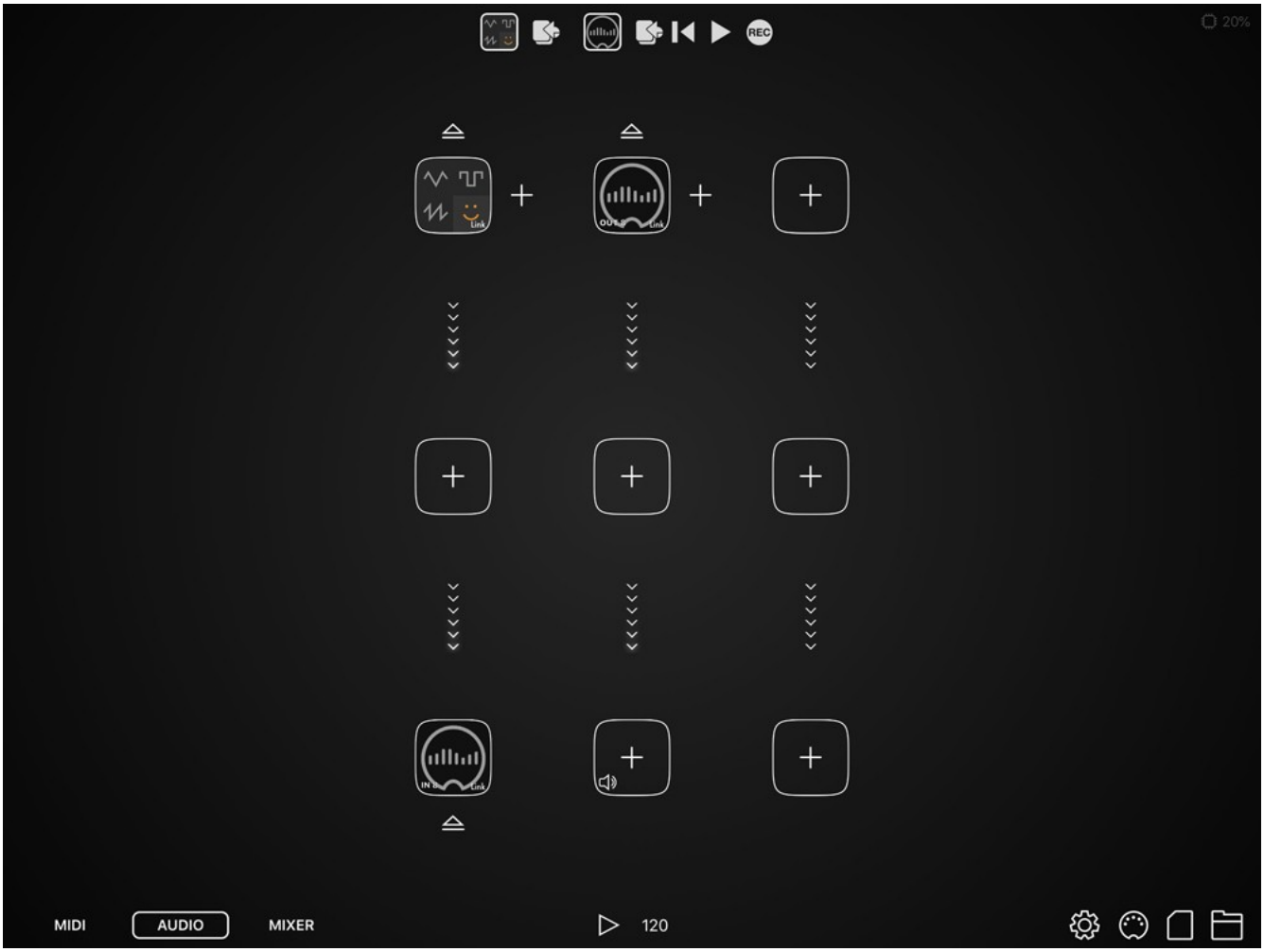
AUDIOBUS 3.0

Touch the iPad screen or the home button. Find Audiobus 3.0 and launch the app. Create a folder Midi on the iPad home screen. Add Audiobus 3.0, Studeomux, and Yamaha Sound control.

Launch Audiobus 3.0. Left button = Input = Add Audio Kit Synth One. Open it to see if it works. Then hit the Audiobus 3.0 icon. A vertical list opens. Tap the Left arrow to go back to Audiobus3.0. Right Output (Speaker) = Tap button and Add Studeomux. Tap Studeomux. It will ask you,"Load Last session?" Choose No. Right side vertical icons. Tap Audiobus 3.0 icon. Tap Left arrow. Returns to Audiobus 3.0.

If Studeomux says "Restart", remove it by pressing the "UP" arrow to the right. Re-enter the Studeomux icon. Studeomux icon ought to be solid. Next Upper Row = Left Input = Add Studeomux again. Next Row Right Output = Speaker (happens naturally). Leave alone.

Audiobus 3.0 – Audio Kit Synth One with Studeomux



PC PRE-CHECK
- PC SERVICES – Right click start – Left click Task Manager – Expand services tab
- Left column under Name (click Name to align services)
- Look for Apple Mobile Device Service and see if it's running
- Make sure Apple Mobile Device Services is running (Start-Stop-Start again)

ITUNES PRE-CHECK
- In iTunes, Click iPad icon – Check use WIFI Sync

CONNECT IPAD TO PC
- Use the lightning to USB cable that came with your iPad charger.
- iTunes will launch.
- Minimize iTunes.
- Make sure no music is playing on iTunes.

PC Studeomux SERVER PREPARATION
- Download and install – https://zerodebug.com/studiomux#block-2
- Add Studeomux Server to your PC
- Create folder C:\VST 64bit
- Right click Studeomux Server
- Install 64 bit and point to folder C:\VST 64bit
- Studeomux FX VSTi will load every time Reaper opens

REAPER
- Launch Reaper in your PC.
- Add Track. Look for FX
- Developer – Zerodebug
- Look for Studeomux Generator
- Reaper VSTi
- Look for Studeomux Generator

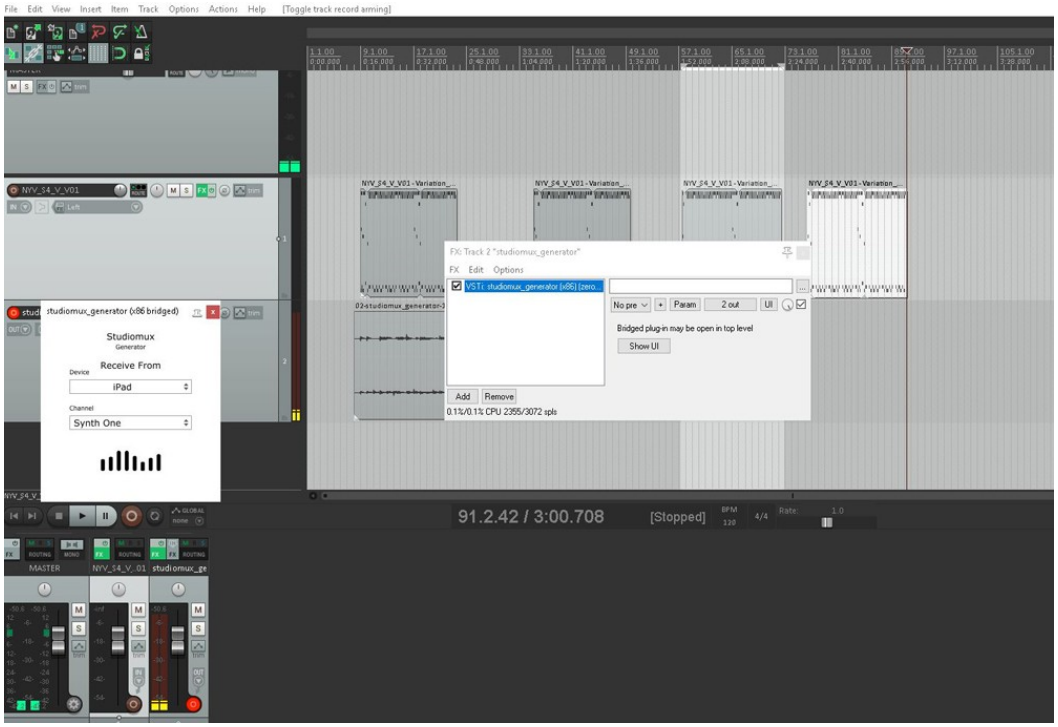
- FX Studeomux Generator Panel
- Receive from Device: Device = No Device Connected, Channel = Connect Device First

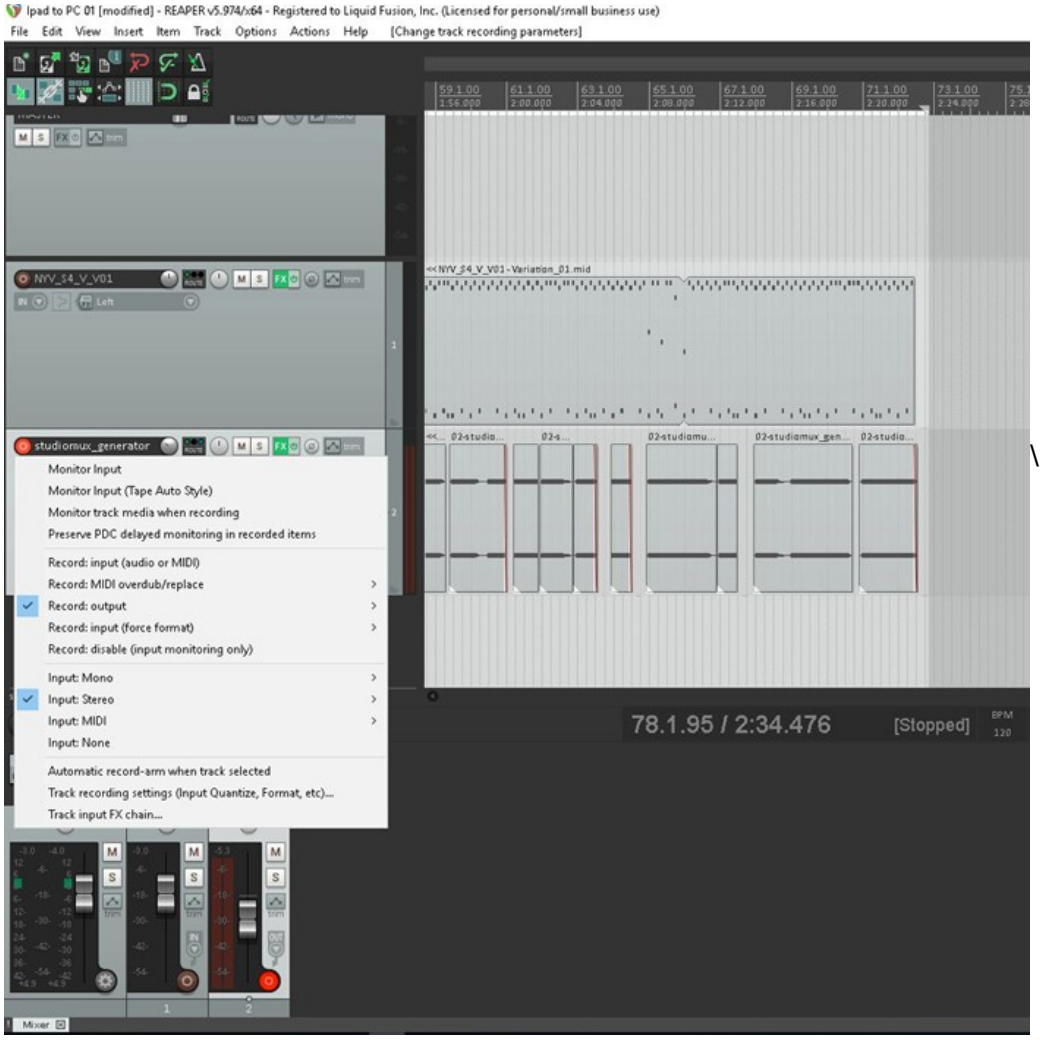
- Launch Studeomux console (Pin it to taskbar):
- Left click Start - # hashtag – Z – Left click Zerodebug folder
- Right click Studeomux Consul – more (expand) click Pin to Taskbar
- Right click – left click properties – compatibility
- Set run this program as an administrator. Click OK.
- Launch (left click) Studeomux console from taskbar
- OK – Yes

- Check Track FX – FX Studeomux Generator Panel:
- Device = IPad Name Channel = 1.
- Check Drop down list for CH 8 = Synth One.

- If only Ch 1, unplug the lightning cable from the iPad and reinsert in iPad.
- Check Track FX – FX Studeomux Generator Panel:

- Device = IPad Name Channel = 1.
- Check Drop down list for CH 8 = Synth One
- Choose Ch 8 Synth One.
- This is CH 8 in the Studeomux app in the iPad.


File Edit View Insert Item Track Options Actions Help [Toggle track record arming]
NYV_S4_V_V01
studiomux_generator (x86 bridged)
Studiomux
Generator
Receive From
Device
iPad
Channel
Synth One
FX: Track 2 "studiomux_generator"
FX Edit Options
VSTi: studiomux_generator (x86) (zero...
Bridged plug-in may be open in top level
Show UI
Add
Remove
0.1%/0.1% CPU 2355/3072 spls
91.2.42 / 3:00.708
[Stopped]
MASTER


Ipad to PC 01 [modified] - REAPER v5.974/x64 - Registered to Liquid Fusion, Inc. (Licensed for personal/small business use)
File Edit View Insert Item Track Options Actions Help [Change track recording parameters]
NYV_S4_V_V01
<< NYV_S4_V_V01 - Variation_01.mid
studiomux_generator
Monitor Input
Monitor Input (Tape Auto Style)
Monitor track media when recording
Preserve PDC delayed monitoring in recorded items
Record: input (audio or MIDI)
Record: MIDI overdub/replace
Record: output
Record: input (force format)
Record: disable (input monitoring only)
Input: Mono
Input: Stereo
Input: MIDI
Input: None
Automatic record-arm when track selected
Track recording settings (Input Quantize, Format, etc)...
Track input FX chain...
78.1.95 / 2:34.476
[Stopped]
Mixer

Reaper – Options – Preferences – Audio – Midi Devices – Enable iPad connections
- Not needed for recording audio. Might need to be enabled to record midi tracks.
- Master – CTL ALT M brings up the upper left Master box in Reaper

TRACK WITH Studeomux FX – Check Record Red Light ON. Monitor Input = check.
- Record Output to stereo. Input = stereo mix – Ch1/Ch2
- Trk 1 – Midi Drums and
- Trk 2 – VSTi FX Studeomux Gen = Synth One Audio!!!

Bottom Line= Recorded HD Audio in Reaper / PC from playing Synth One in iPad
- Making Apple & Windows work well together simultaneously
- IOS plays Audio Kit Synth One and MSFT Win 10 PRO Records Audio

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