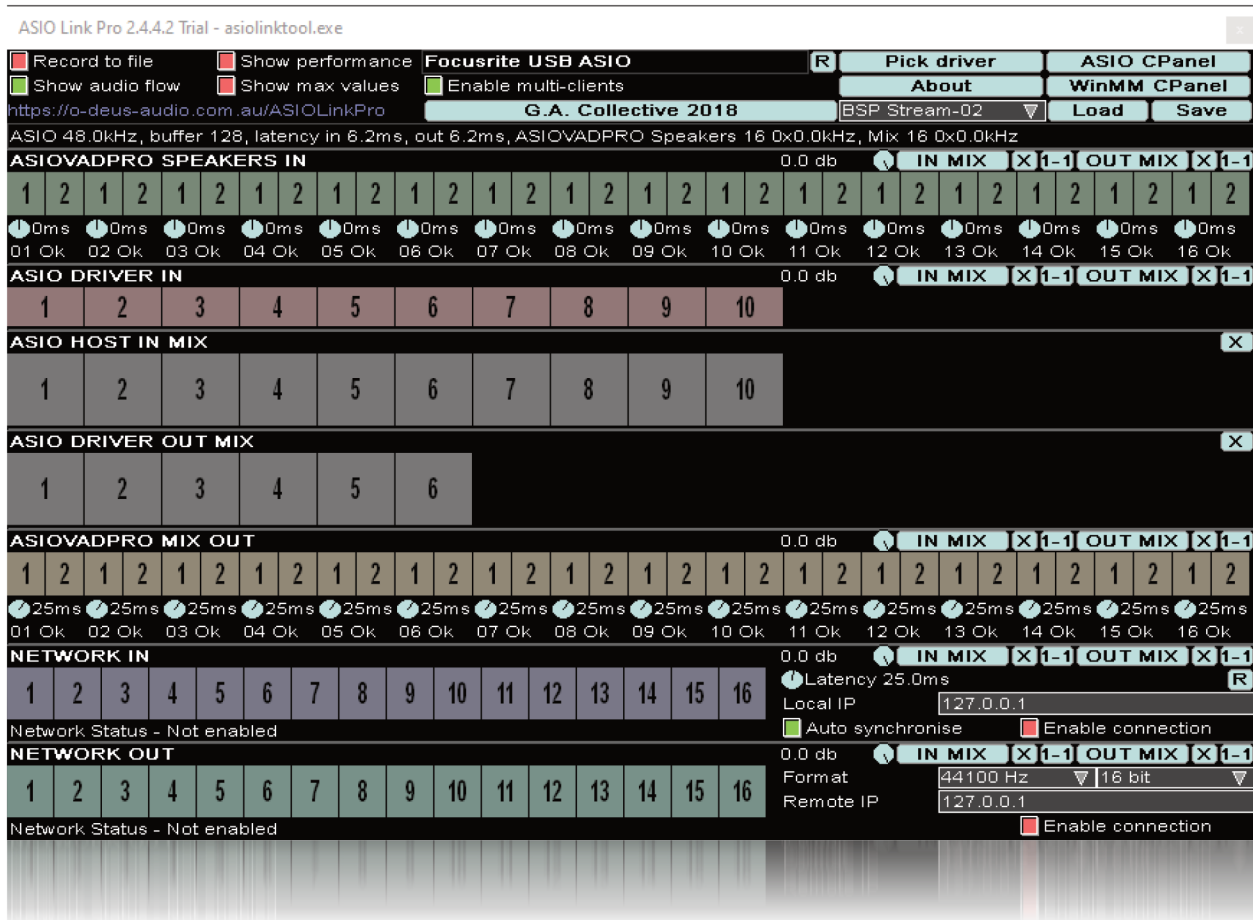


ASIO LINK PRO

The "Basic Definitive" Edition
Version 1.0 (d. October 14th, 2022)



Documentation by Brandon Sills, dated October 8th 2022

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Respects to the Developer

An offering in remembrance.

ASIO Link Pro was developed by one sole person, as far as I understand it (I have tried to research who specifically, to no avail).

They passed away in the 2010's to my knowledge.

My condolences to the family, and a nod of gratefulness for allowing this software to be made free after the fact.

Whomever this person was, to me, they were quite a genius.

Whomever they were to their family, I imagine the bar was pretty high, and that they were a bright pillar of light to their closest friends.

To a global community of audio nerds and musicians in the 21st century, they created something that has helped immensely, and will live on for years to come (I hope).

I hope the family knows, if they read this, that many of us want to thank you for multiple reasons.

May this documentation serve as a reminder that greatness is born and can stand the test of time, even in the afterlife. (meant respectfully here)

Thank you, on behalf of many users across the world.

Sort of Introductory Thing Goes Here:

Hello. My name is Brandon Sills, and this is what I hope to be the definitive edition of information for ASIO Link Pro, for most users.

For quite some time now, I've been trying my hardest to help people out with ASIO Link Pro via my Discord server, and also paying attention to the comments on YouTube (and sometimes responding to them).

I hit a roadblock mentally somewhere along the line and neglected my work, where I didn't have the energy or capacity to focus on it at all, even for a full half hour every week. Consider me "not excellent" in responding to comments when I'm focused on a lot of other stuff.

So, with that in mind, my apologies if any and all of this seems segmented.

After some time of not keeping up much, I decided to take on an ultimate task that would end up being hopefully the "definitive edition" of this whole thing.

I know the first 3 videos were not of the greatest quality, or barely of any help. However, to a degree, it did somehow help people.

I didn't realize that my videos or Discord server would end up on the PreSonus forums even. That makes me feel like I did truly accomplish something, and I owe it to everyone to make a significant update of sort to further help out, and perhaps make this the end-all be-all of this journey.

With all the knowledge contained within this bundle, and the video content, I do believe you will have more than enough information to know how to operate ASIO Link Pro, and get it working with desired results.

Bear in mind please, that I am coming at this from the standpoint of a musician with an audio interface, so my language and presentation here will cater to those people. I highly suggest if you do not have an audio interface, that you get one (suggestions are at end of document).

I also suggest strongly to not use ASIO4ALL or VoiceMeeter Banana, as they do not provide much additional bonuses to this process.

Again, I do apologize to everyone who did not receive a response. This is my way of making it up to you now.

Remember, your mental health is important.

Now, it's time to get into it!

Patience is a key element.

**If you take your time and absorb what is presented to you,
New knowledge can be impressive to oneself when applied.**

Do not jeopardize your capacity for wisdom by hunting for a quick solution.

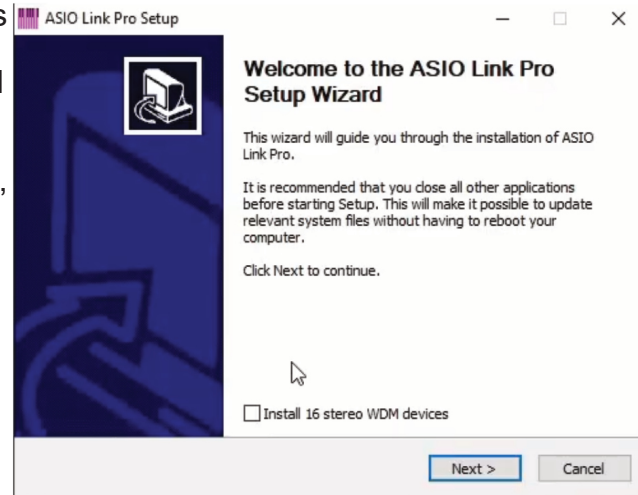
All good things come with time.

And all bad things can come instantly.

ASIO Link Pro Installation

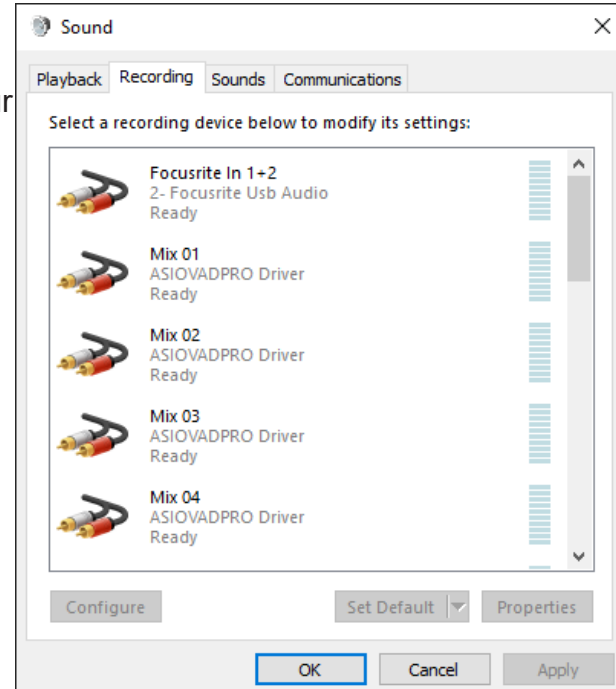
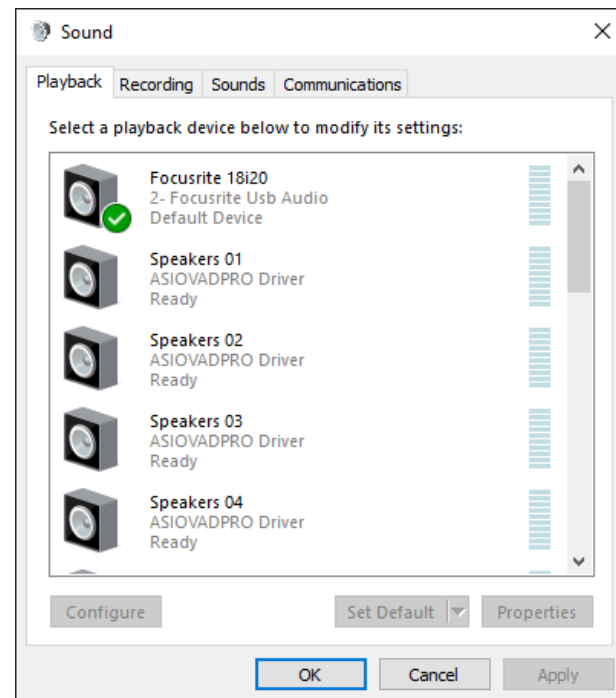
Installation of ASIO Link Pro is rather straight forward when it comes to it. This window will greet you when you launch the installer. When installing, you have the option to Install 16 WDM stereo WDM drivers, or not.

If you opt to not install them, your input and output arrays will total 4, each one numbered 1 through 8. If you opt to install them, you will have 16 stereo input and output arrays, each numbered 1 and 2 respectively. It's not vital to install the additional stereo WDM devices, but I would encourage it if you want to follow along with how I sort of do things.



After installing ASIO Link Pro (16 Stereo WDM checked), you can go into your Sound Control Panel (pictured right) and begin to right-click and disable all the drivers you do not need between Playback and Recording. I would suggest to count how many stereo inputs and outputs you need (average maybe 3 or 4), and start disabling from 16 up until you reach your desired amount of virtual I/O. Myself personally, I have 3 I/O left.



Do not forget to also right-click your audio interface, and set it as default for device and communications. Despite the fact that ALP will "hijack" when it's initialized (as I've found), I do this regardless. This does not affect your audio interface's performance, nor your computer's. If you run ASIO Link Pro Tool standalone outside your DAW, normally when you stop it, everything should revert back to your audio interface's driver.



ASIO Link Pro: Patcher, Patching, Patched

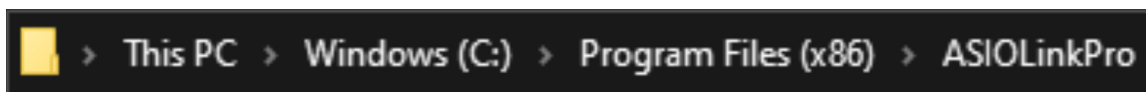
Use this page as a reference tool when patching the software after installation.

Provided in this bundle are two ZIP files containing two patchers. They are for the 32-bit and 64-bit versions of the software.

	AsioLinkProToolPatcher_x64	7/30/2022 12:22 PM	Compressed (zipped) Folder	30 KB
	AsioLinkProToolPatcher_x86	7/30/2022 12:21 PM	Compressed (zipped) Folder	30 KB

You can extract these however you want. They will eventually end up in the following destination:

This root folder is the location of the x86 version of the software. There is a folder for x64 in it as well.

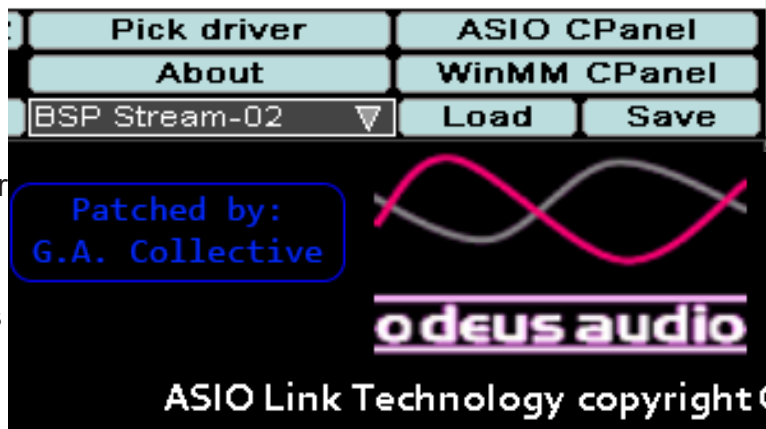


Put the x86 patcher in the root, and the x64 patcher in the x64 folder. When they're in place, right-click the patcher for x86 and run as an administrator. Do the same thing for the x64 copy.

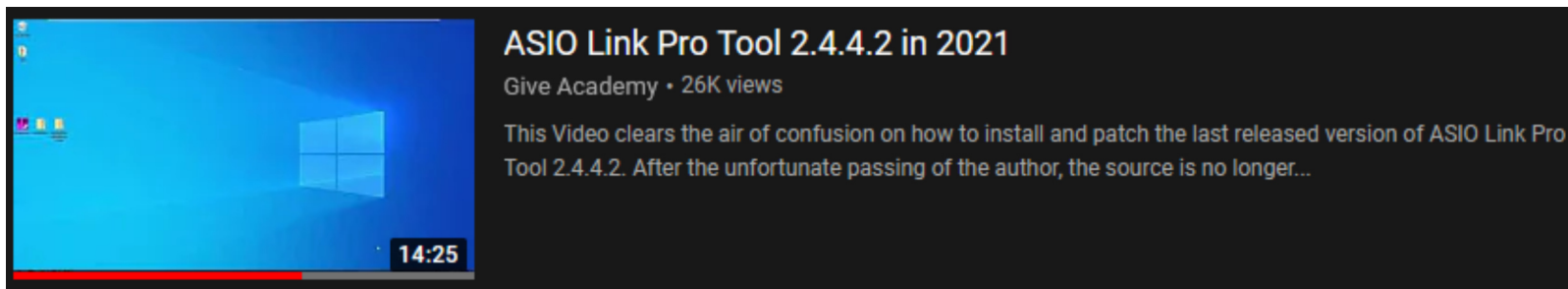
A command prompt / PowerShell window should open up and give some information on the process (not much, but some).

Once complete, you should look for the information pictured to the right, when you have ASIO Link Pro open. Click the button labeled "About" and you should see the patched information as pictured. If you don't see it, you may not have put the patcher in the appropriate location, or you did not right-click the file and run it as administrator.

If it still does not show as patched, completely uninstall ASIO Link Pro from your computer, delete any leftover files in the application folder, and reboot your computer, then redo the installation process, and patch x86 and x64 again as mentioned above.



This patch information is based on and provided by the following video (credit due as of this document):



Another fun and very helpful thing that you can do after installation, is to go to this menu and rename each of your newly created virtual WDM drivers.

You can access this by going to your Start Menu, click Settings, then System, then Sound. Click "Device Properties" which should be highlighted in blue.

Once there, you can do this not only for your output devices, but also your input devices. I highly recommend this, as it can help you organize everything, and help discern what your



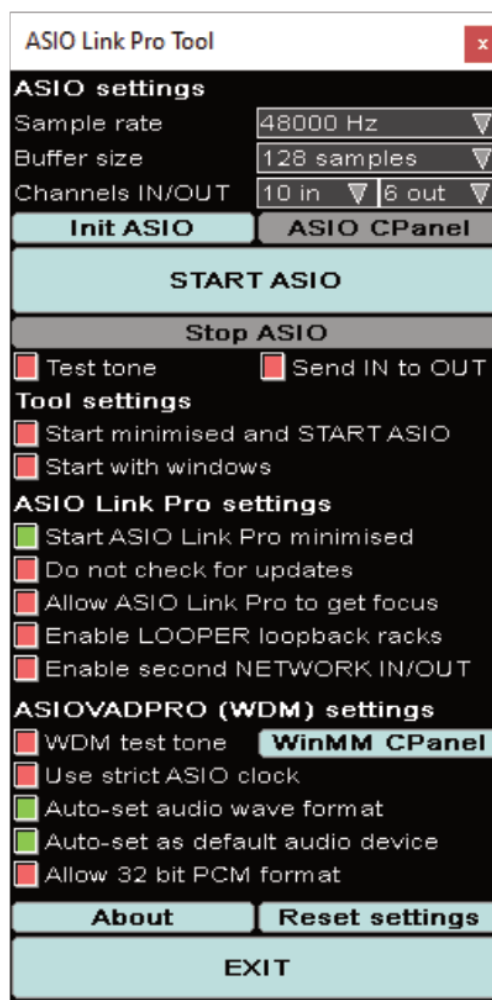
drivers are. Say you want to rename "Speakers 01" to "ALP Main Out" and "Mix 01" to "ALP Main Input" as an example, you can do that.

Think of your "Mix" as virtual inputs that send sound into something, and "Speakers" as something where you send sound out from. This will be further expanded upon later in this document, and hopefully it makes more sense afterwards!

Getting Acquainted With ASIO Link Pro

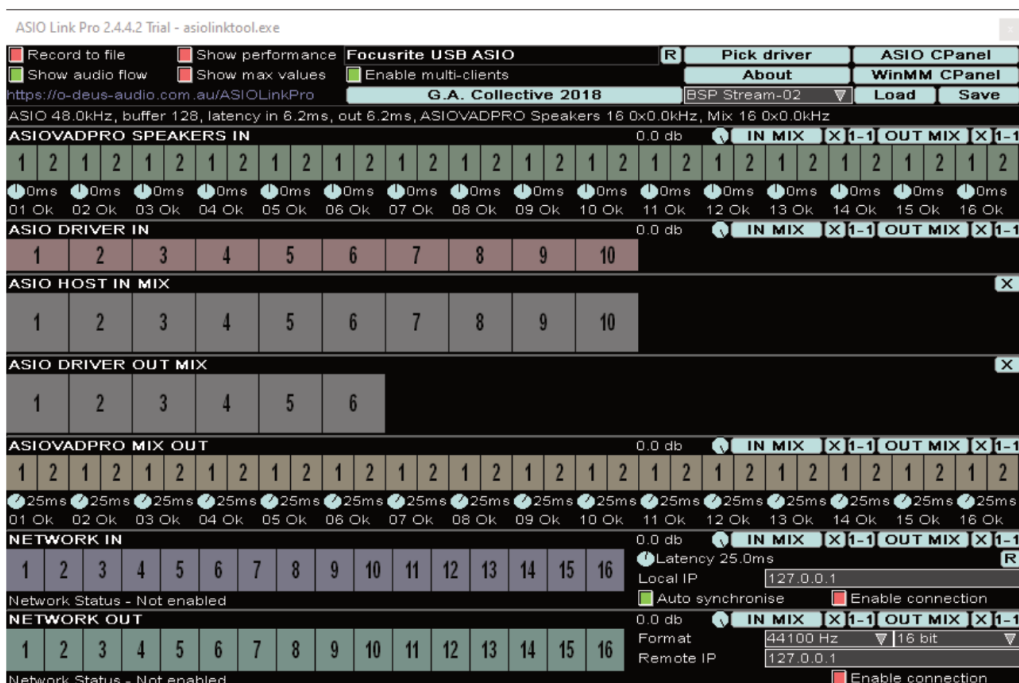
Once you run the ASIO Link Pro Tool (standalone), you will be greeted with this window. This is the main tool that you will be doing some basic setup in before you dive deeper into what ASIO Link Pro has to offer.

We will go over this tool on the next page, and what I would suggest you do in order to make sure things run smoothly during operation.



The ASIO Link Pro routing matrix looks as such. Across the following pages, I will present each individual row and what its purpose is, and what the "routing limitations" are in regards to them.

We will be focusing on the top five rows, as they are the only ones I personally found important and useful. I am unsure how to operate the last 2 rows and their associated parameters or functions.



ASIO Link Pro: Tool Setup

Upon launch of the ASIO Link Pro Tool, this is the window that you'll be greeted with. Consider it the obvious "Control Panel" front.

Depending on what audio interface you are using and whether or not you can adjust it's settings under the hood, one of two things should be done here for "Sample rate" and "Buffer size":

If you can adjust everything inside the interface, you can set this to "ASIO Preferred" which should just use your hardware settings. If you rather it function to specifics, you can set this manually as you see fit. In this example image, I run at 48 kHz and 128 samples. If I am in need of additional CPU for effects processing or mixing, I will bump this up to 256 or higher.

Lower buffer sizes means more CPU used. If you're recording vocals or guitar takes, and are not running effects like EQ, Compression or Reverb on any of your projects' channels, try to keep this as low as you can for lower latency. Bump it up to a minimum of 256 during the mixing stages, so you can have that additional room to process.

Channels IN/OUT is the next beast on the list. In this image example as well, you can see I have it set to 10 in and 6 out.

I have 8 physical inputs on my Focusrite Scarlett 18i20, and 2 loopback channels (digital). So I consider this in the equation as 10 inputs. Regarding the 6 out, this sounds like a lot, but you must consider this as set up for stereo to make sense here. If you set it to 1 out, you're only getting one output which will act as mono. If you set it to 2 out, you have the ability to route and monitor signals in stereo. I require at least 6 (3 stereo pairs, in theory here).

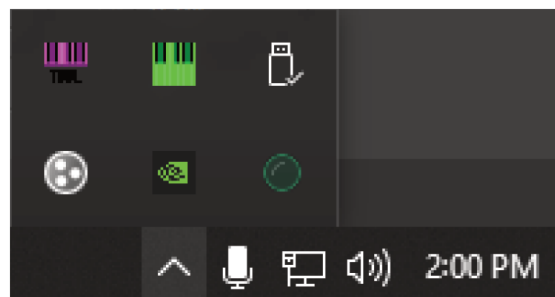
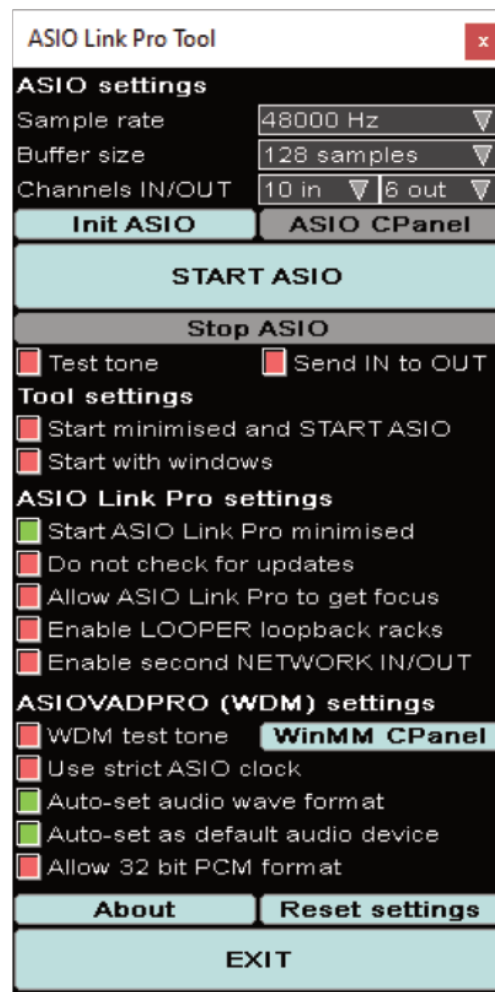
Further into this document, I promise this will make more sense as we go over more of the details in the "routing matrix" if we'll call it that.

You have Init ASIO (rarely have I used this feature) and ASIO Control Panel. Control Panel I think brings up your interfaces' settings to tweak from there, or get info in the event you want to link that information exact to the tool here.

The remainder of the settings, I didn't really touch, so consider that "basically set up for you" vanilla install.

Once all of that is in place, you're good to move onto the next thing. Click START ASIO to activate the routing matrix. It should pop up as a separate window. If it does not, go to this spot in your Windows tray.

The purple icon (first in line) is your ASIO Link Pro Tool. The green icon (second in line) is the routing matrix. Left-click the green icon if it does not automatically show up on your screen.

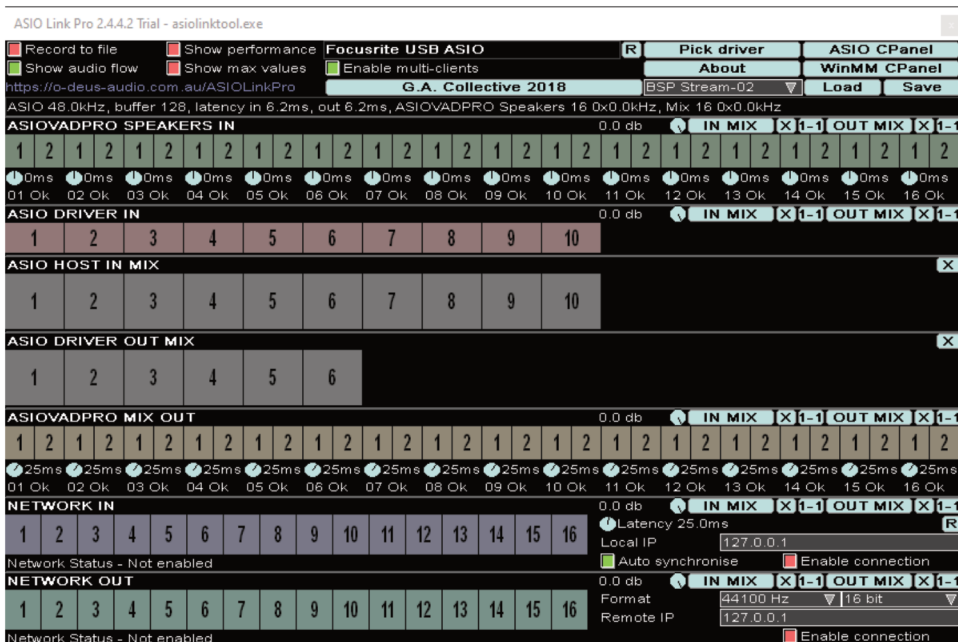


ASIO Link Pro: The Routing Matrix

This is the main reason why you're here with this documentation, because it looks confusing and somewhat intimidating. Let's dispel that!

The routing matrix is separated into 7 rows in different colors. We're going to focus solely on the first 5, because those are mainly what most people will end up using on a single computer. The last 2 probably relate to something you can do via Ethernet cable or Wi-Fi across multiple computers, but most people probably have one machine for audio and/or recording purposes, so the information herein will be confined to that approach.

TO LINK CONNECTIONS, LEFT-CLICK AND DRAG FROM DESTINATION TO SOURCE!



Our focus is primarily on the sections labeled ASIOVADPRO SPEAKERS IN, ASIO DRIVER IN, ASIO HOST IN MIX, ASIO DRIVER OUT MIX, and ASIOVADPRO MIX OUT, as well as the space at the top.

If you did not opt into the 16 WDM drivers upon install, the green and tan colored rows (ASIOVADPRO SPEAKERS IN and ASIOVADPRO MIX OUT) will instead appear as 4 arrays numbered 1 through 8. In this case, you would have 4 stereo ports each. Boxes 1 and 2 would be your stereo left and right signal, and you would not route anything from boxes marked 3 through 8. Aside that, what follows in this documentation applies the same, so you can still follow and achieve the expected results.

ASIO Link Pro “Toolbar”



This is more or less the “toolbar” for the routing matrix area. This is a screenshot from a previous installation, so ignore the space labeled “G.A. Collective 2018” unless you are using the older method for patching.

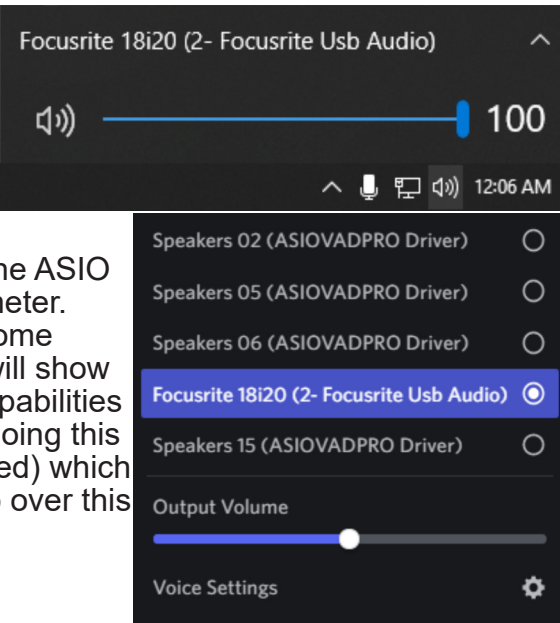
Here, this is the basic vanilla install settings I have. I suggest keeping this the same.

“Pick Driver” will bring up a window asking you to select a device that ALP will latch to. This should be your audio interface, as seen in the image. I haven't really clicked on ASIO CPanel or WinMM, as I didn't feel I needed to. Load and Save should be self-explanatory, in the sense of, you have your routing set up and want to recall it in the future for specific things like running audio into Streamlabs or OBS Studio, DAW to Discord, and so forth. Saving creates a file for one profile slot, so make sure you set up a folder on your drive to save them to, so you can recall them quickly at a later time if needed.



ASIOVADPRO SPEAKERS IN:

Consider this row the one you can route other applications into ALP. Depending on what you did in Sound Control Panel in regards to disabling/hiding devices, these will all correspond to their own. In this example, I have 16 pairs of stereo, although I only have 3 stereo pairs active. Active ones go from left to right. Same follows suit on the 5th row.



When selecting your computer's main audio device in the tray as one of the ASIO Link Pro drivers, the selected device will show up in this row as a green meter. You can only select one of these at a time in the Windows tray, but with some applications, you can set them up to go out through other drivers, which will show up in their own separate stereo pair, leading to some extensive routing capabilities in an environment such as OBS Studio or Streamlabs. Be careful when doing this however, as you can create a feedback loop (continuous or toggle/activated) which can be either annoying or painful enough to damage your ears. But I'll go over this further on, to help you prevent this from happening.



ASIO DRIVER IN:

This row relates to the amount of physical inputs on your audio interface. If your interface is the equivalent of a Focusrite Scarlett 2i2, you have 2 physical inputs. This should be reflected here by setting up your Channel In count to 2. If you have a 2i2 and it also has built in loopback, this should be set to either 4 in or 10 in, in order to access the loopback if you desire, although ASIO Link Pro technically already does this via the previous row to an extent. If you have more than 2 physical inputs, adjust accordingly. Here, I have 8 physical inputs and 2 loopback ports (9 is left and 10 is right, so they're both mono, but joined together create a stereo loopback).



ASIO HOST IN MIX:

This row relates to the digital inputs in your DAW or application that allows to route audio into it. In example, in Reaper, if you route your ASIO DRIVER IN ports to the corresponding numbers here, it's basically the same as if you were just using your interface alone. For me, I route 1 to 1 for microphone, 2 to 2 for my Roland Juno-Di, 3 and 4 respectively for my wet and dry/direct signals via the Neural DSP Quad Cortex. Additionally, I've used 7 and 8 for electric drum trigger pads in the past, triggering audio to MIDI for some projects.

You can however route ASIO DRIVER IN ports differently. I could route my Quad Cortex from 3 and 4 to 1 and 2, my microphone from 1 to 3 and my Roland Juno-Di from 2 to 4.

And as an added bonus (the technical loopback), you can route your stereo ASIOVADPRO SPEAKER IN ports to this row. Bear in mind, if you want a full stereo signal capture, route the left to 1 and right to 2. If you want it in mono, just route both into 1 or 2. Routing some stereo signals into a mono input may make the signal louder and introduce clipping or distortion, or it may introduce noticeable phase issues.



ASIO DRIVER OUT MIX:

This row corresponds to your DAW or standalone application’s “output” (which includes monitoring exclusively on box 1 and 2). Each box operates as a mono output source. 1+2 would be a stereo pair, 3+4 would be a stereo pair, and so forth.

In this image example, I have 6 out (as set in the ASIO Link Pro Tool window). This permits me to send any and all signals from ASIOVADPRO SPEAKERS IN, ASIO DRIVER IN or ASIO HOST IN MIX for monitoring, or auxiliary routing. If your SPEAKERS 01 driver is selected in your sound tray, automatically anything going on should route out through 1+2. We’ll go over this in terms of setup further down in the document.



ASIOVADPRO MIX OUT:

This row relates to your virtual outputs, marked by the ALP drivers as “MIX 01” and so forth. These are not affected by the ASIO Link Pro Tool Channel I/O setup, no matter how many inputs or outputs you set. This will either be an array of 4 virtual outputs, marked 1 through 8, or 16 virtual outputs marked 1+2. In this image provided, this is 16 stereo virtual outputs. Like SPEAKERS IN, active pairs go from left to right.

Consider each pair to be your virtual output of which you can route into other applications, such as Streamlabs, OBS Studio, Discord, Zoom, Skype, and so forth. If you are routing multiple sources, it’s best to make a note of what you’re wanting to route, and setting each application to it’s own stereo output. In gaming streams, I will route my audio hardware through the 1st pair, Discord through the 2nd pair, and the video game through the 3rd pair. This will be covered later in this documentation.



The Last (and personally unimportant) Rows:

These last two rows, I believe relate to networking via hardwired LAN or through Wi-Fi (and maybe a VPN).

As I have never needed to dabble in this section, I am sure most people who use this software will not need to use it at all. So I am not going to attempt to figure this out or document it. If you happen to have a need for it, or figure out how to use it, please offer that information as you can, where you can, so others may benefit from it!

Routing Capabilities and Potential:

The screenshot displays the ASIO Link Pro routing interface. It features five main sections, each with a set of numbered channels (1-16) and a volume knob set to 0.0 db. The sections are: ASIOVADPRO SPEAKERS IN, ASIO DRIVER IN, ASIO HOST IN MIX, ASIO DRIVER OUT MIX, and ASIOVADPRO MIX OUT. Colored lines indicate routing paths: a green line connects ASIOVADPRO SPEAKERS IN channel 2 to ASIO HOST IN MIX channel 2 and ASIO DRIVER OUT MIX channel 3; a red line connects ASIO DRIVER IN channel 7 to ASIO HOST IN MIX channel 7 and ASIO DRIVER OUT MIX channel 6; and a yellow line connects ASIO HOST IN MIX channel 5 and ASIO DRIVER OUT MIX channel 5 to ASIOVADPRO MIX OUT channel 1. Each channel has a status indicator (e.g., '01 Ok', '02 Ok', etc.) and a '0ms' or '25ms' latency indicator.

In this image, you can see different lines, colored red, green and yellow, and they're all going into different destinations from different sources. This is where the power of ASIO Link Pro comes into play the most.

I have arranged each one to route from a source to a destination that accepts the source.

Green comes from ASIOVADPRO SPEAKERS IN, and can only route to ASIO HOST IN MIX or ASIO DRIVER OUT MIX.

Red comes from ASIO DRIVER IN, and can only route to ASIO HOST IN MIX or ASIO DRIVER OUT MIX.

Yellow comes from ASIO HOST IN MIX and ASIO DRIVER OUT MIX, and can only be routed to ASIOVADPRO MIX OUT.

Prime examples of these routings are as follows:

With ASIO DRIVER IN 1 to ASIO HOST IN MIX 1, I am routing my SM58 + Digitech Vocal 300 from the hardware to a virtual "line in" which would be how you can get a signal into your DAW, such as a mic, guitar, synth, or whatever. ASIO DRIVER IN 7 to ASIO DRIVER OUT MIX 6 bypasses the DAW approach and offers the physical input to go to a "physical output" which can be routed out after the fact (see yellow lines).

ASIOVADPRO SPEAKERS IN 1 to ASIO HOST IN MIX 2 is routing an application like Chrome or Firefox into a DAW or Application input (think Loopback technology). Suggested you route the 1+2 signal to separate ASIO HOST IN MIX ports for a stereo signal (record it as 2 separate mono channels and pan hard left/right). SPEAKERS IN 2 to DRIVER OUT MIX 3 is bypassing the DAW input to the "physical output" which you can monitor with.

ASIO DRIVER OUT MIX 1 to ASIOVADPRO MIX OUT 1 is taking your signal to the virtual output, allowing you to route it to another application. ASIO HOST IN MIX 5 to a separate MIX OUT 1, from what I remember, takes an input signal to the virtual output. I don't recall ever doing that kind of routing, but if you experiment with it and find it useful somewhere somehow, I'd call that a win honestly.

Hope this part here made sense. Now, left-click and drag from sources to destinations!

Also, a note! If your volume output is quiet, you're more than likely routing to just one of the outputs in the stereo pair (which can be dictated as hearing only on the left or right ear/speaker, or if transmitting through a mono source like Discord's voice chat, it will be "quiet"... to which I suggest routing full stereo pair. 1+2 is your best friend here, always.

If you continue to dig, you are striving for a goal that is possible.
If you are waiting for something to happen, someone else will discover it first.

The further down you go...
I guarantee you will find something...
That will help you immensely...

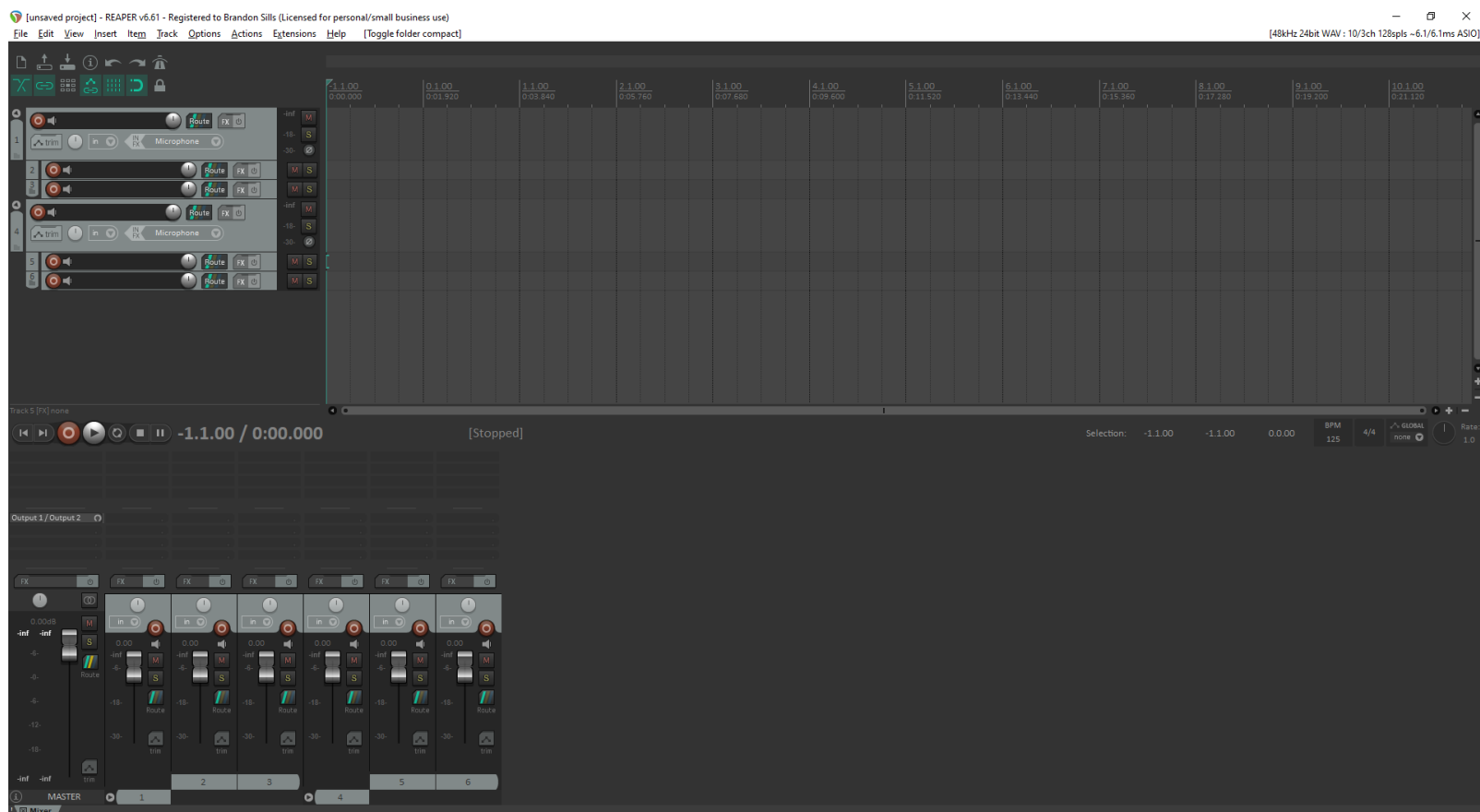
ASIO Link Pro and Reaper

Reaper is a Digital Audio Workstation platform that many in today's home studio recording world are highly familiar with. I myself started using this software around 2012, and created countless demos and fleshed out songs over the past 10 years inside of it. Technically free past the 60 days, I encourage anyone who uses this DAW to purchase a license as it helps support development for potentially strong and promising future updates.



A \$60 USD "individual license" at the beginning of a full version can last upwards of 6 to 10 years, approximately. It rids you of the nag screen and countdown, and again, helps support development.

Although this DAW is no longer my main, I still have a soft spot for it due to it's ability to break some of the technical limitations in every other DAW. And, it is also one of the easiest to set up ASIO Link Pro in, in no more than a few minutes.



Upon boot, everything may commonly be empty, if you set your preferences to do it like this. Double-click the empty space on the left, and you can create tracks for audio or MIDI, without dictating what it should be. It's actually pretty smooth like that. The fact that in Piano Roll, you can tell it to give you 5 notes per measure, or even up to 65536 notes per measure if you want to be that crazy. You can change the time signature from 4/4 to say 11/16, or break math and make a measure 8/33 or 127/19. You get the drift by now. It can break the standard math, compared to Cubase or Pro Tools. Perfect for some progressive tech death metal that says "screw the rules" harder than it can be said. But it also lends itself well to the standard 4/4 or 6/8 in rock, dubstep, synthwave, jazz. You name it. This DAW can handle the basics, and open the doors to well-past advanced. I admit, that stuff has spoiled me quite a bit.

So where does this all fit in with ASIO Link Pro? It doesn't. I'm just professing one of the soft spots in my marriage to music, in the form of this DAW.

But what I can tell you is we're about to get you set up with ASIO Link Pro for Reaper!

Next page!

Press CTRL+P or go to the toolbar, select Options, and go all the way to the bottom where it says Preferences. Once the Preferences window is open, you will want to navigate to Device. It will show this window here.

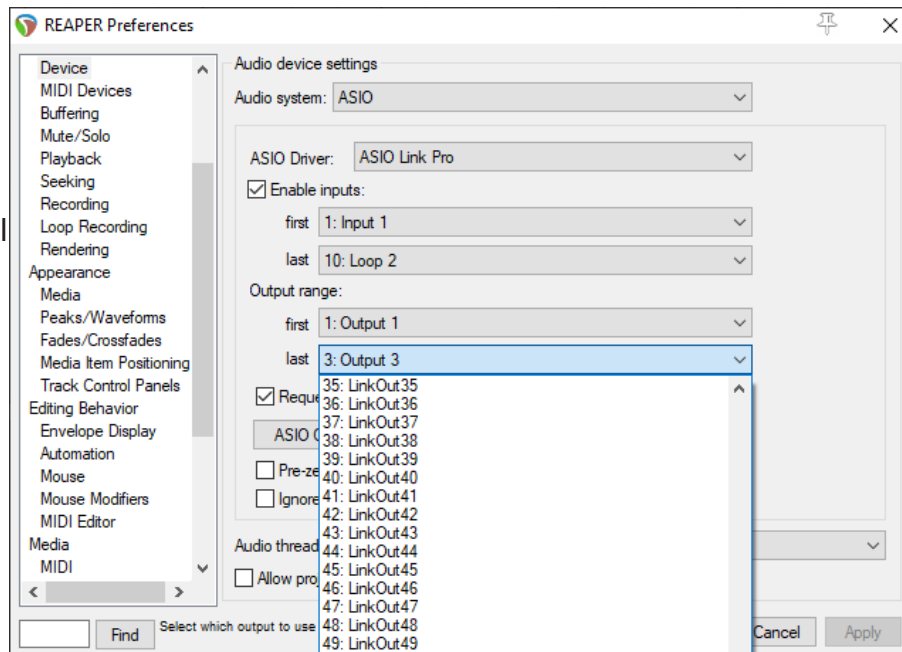
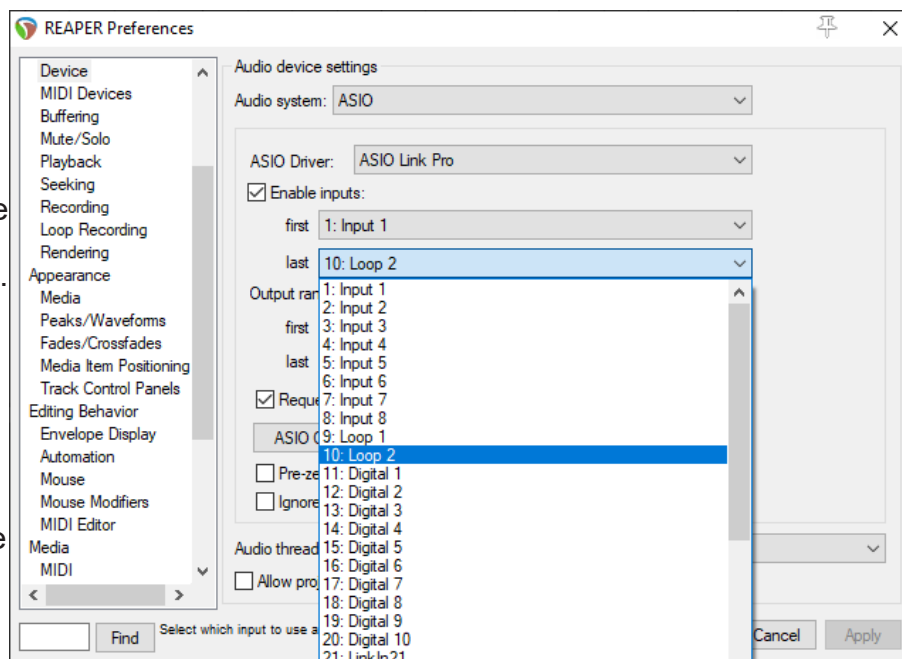
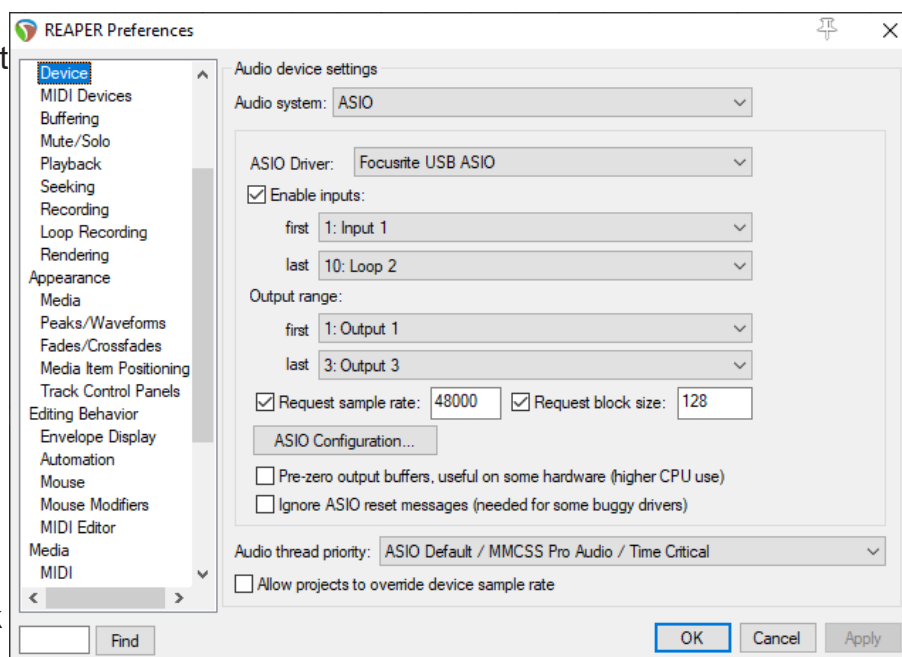
Select your audio system as ASIO. Then select your ASIO Driver as ASIO Link Pro. What is shown in the image will change from “Input 1” and “Loop 2” in the inputs, to “Input 1” through “LinkIn64” while the output will change from “Output 1” and “Output 3” to “Output 1” and “LinkOut64” (as far as the list is concerned, of which you have to manually set this).

Whatever amount of inputs are on your audio interface, consider setting your first input to Input 1, and your second input to match the other physical inputs. Additionally, if you have loopback capability, set it to Loop 2, like shown.

My outputs shown are 1 through 3. These correspond to my mono outputs on the back of my 18i20, for reamping purposes. When assigning this stuff in ASIO Link Pro, I would suggest you only need to set your range from Output 1 to Output 2. You may not really need the additional outputs, but if you have an idea for what you want to route, I am not here to stop you. Experiment with it as you see fit, BUT, if you do decide on more outputs for ALP, I encourage safety by using multiples of 2 in case you desire to transmit stereo.

Depending on your specifications as well, you might be operating at 44.1 kHz (44100 Sample Rate) or 48 kHz (48000). Whatever your interface supports, make sure it's either one. I suggest 48 kHz for more resolution if you're recording and mixing. Sample size goes in multiples: 16, 32, 64, 128, 256, 512, 1024, 2048, etc. typically. Some DAWs provide options for in between numbers like 192. This is not a bad thing. The lower the number though, the more CPU your machine will need to do certain things such as trigger high polyphonic voice counts on synthesizers, calculate a multi-band compressor on 10 channels, or run an effects suite like Neural DSP Archetype Gojira or Fortin NTS Suite (both of which are definitely CPU intensive). This is important to note. “Safety” for those who don't commonly tweak with this should be 256 sample block size. Enough CPU at the cost of additional latency (luckily of which ASIO Link Pro does not add on top to your audio interface, which is where the main latency issues would reside).

Once it's set, just add a track, set it's input, make a chain or whatever, and the audio is ready to be received elsewhere via MIX 01, or whatever you may have renamed it.



This is what ALP will look like once it's initiated via the Reaper Preferences.

The screenshot displays the ASIO Link Pro 2.4.4.2 interface for Focusrite USB ASIO. The interface is organized into several sections:

- ASIOVADPRO SPEAKERS IN:** A 16-channel input section with individual level meters (all at 0ms) and status indicators (all 'Ok').
- ASIO DRIVER IN:** A 10-channel input section. Red arrows point from channels 1 and 2 to the ASIO HOST IN MIX section.
- ASIO HOST IN MIX:** A 10-channel section receiving input from channels 1 and 2 of the ASIO DRIVER IN.
- ASIO DRIVER OUT MIX:** A 3-channel section. Yellow arrows point from channels 1 and 2 to the ASIOVADPRO MIX OUT section.
- ASIOVADPRO MIX OUT:** A 16-channel output section with individual level meters (all at 25ms) and status indicators (all 'Ok').
- NETWORK IN:** A 16-channel section with a latency of 25.0ms. Network status is 'Not enabled'.
- NETWORK OUT:** A 16-channel section with a latency of 25.0ms. Network status is 'Not enabled'.

Additional controls include volume knobs for each section, 'IN MIX' and 'OUT MIX' buttons, and a 'Twitch Profile' dropdown menu.

Automatically, ASIO DRIVER IN routes port 1 and 2 into ASIO HOST IN MIX. For me, that means my microphone and synthesizer are mapped to inputs 1 and 2 in Reaper via ASIO Link Pro, like it was a standard audio interface.

The ASIO DRIVER OUT MIX is routed automatically as a stereo chain to ASIOVADPRO MIX OUT. This means, while effectively being able to monitor what you're doing, it's outputting that signal to MIX 01. This would be your "microphone" on Discord or Zoom, as an example.

Only make any adjustments you see fit. Route the rest of ASIO DRIVER IN to ASIO HOST IN MIX if you use more than a few inputs. You should be golden!

You may need to go to your OS tray and click the green icon to bring it up however, just FYI.

ASIO Link Pro and Cubase

In relation to ASIO Link Pro, Cubase is not entirely that difficult to set up. It takes a little bit of work, but not much more than the work to get Reaper up and running.

First thing's first. You'll want to enter Audio System by going to: Studio → Studio Setup, then select it in the list.

Choose your ASIO Driver as ASIO Link Pro. If "Release Driver" is checked, uncheck it. Check HW Sample Rate and Processing Precision. For me, I run at 48.000 kHz and 24-bit. All the other settings here are not entirely necessary at this time, unless you feel like you need it.



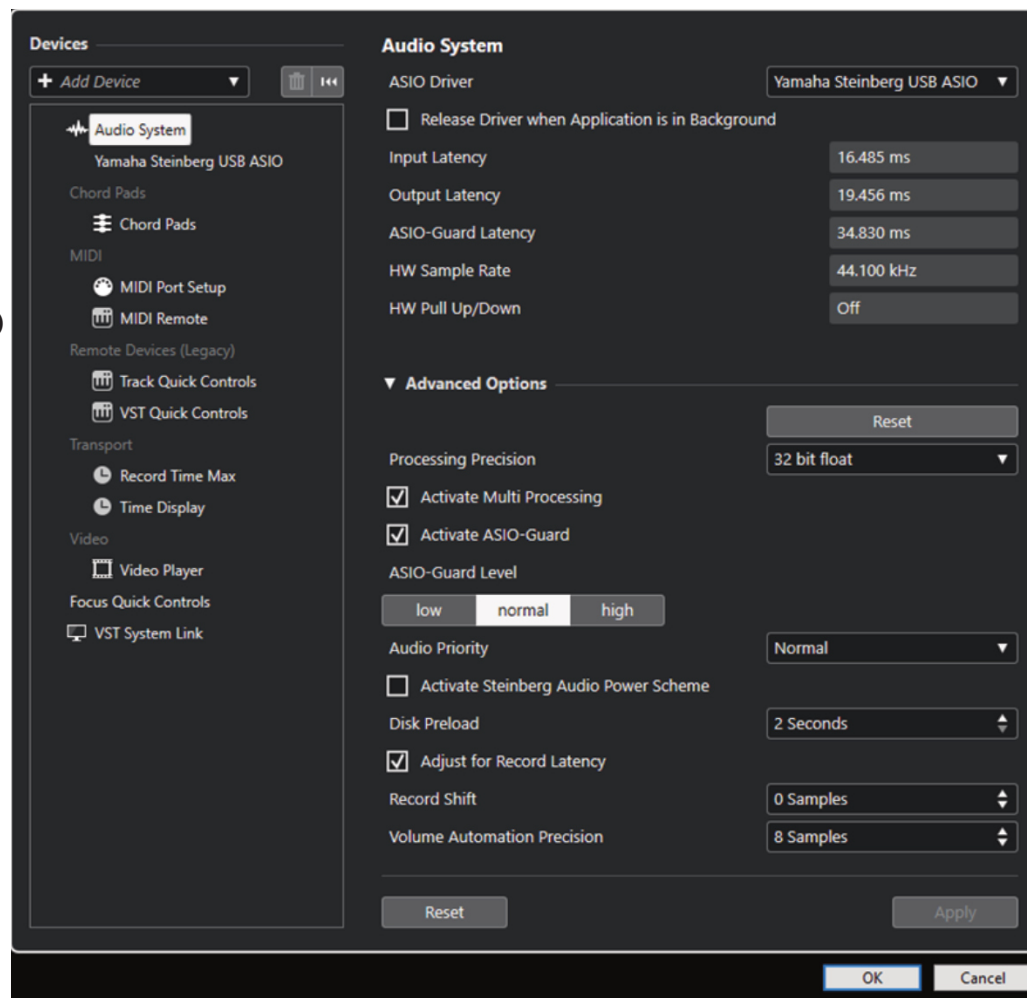
The next thing you'll want to do is open up "Audio Connections" (bottom image pictured). This is where things can take a minute.

Under the Inputs tab, create, rename or delete current buses as needed. Since your input signal should always be mono, unless you're recording a true stereo signal, make sure all buses are mono. When done, save this as a preset in case you need to recall it, if you switch between your ASIO device/driver (ASIO Link Pro to Focusrite USB, as an example here).

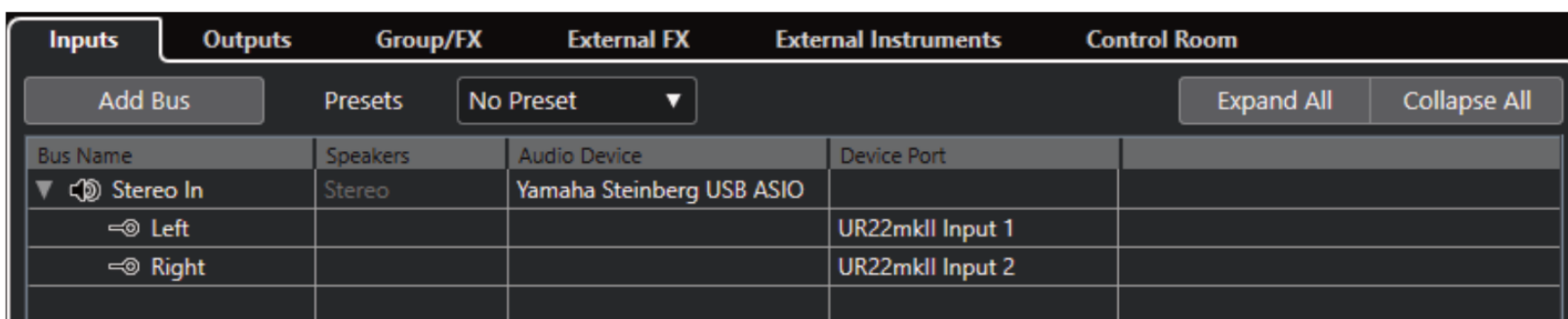
Once that is done, you want to go to the Outputs tab and do the same. You won't exactly need to save this as a preset. This may also already be handled with a main stereo output.

Once this is all set, ASIO Link Pro should have auto populated the ports, and all that's left is to route everything according to what you set up.

When you are setting up audio tracks, make sure you pick the



*** Images directly from Cubase Pro 12 Web Help



Bus Name	Speakers	Audio Device	Device Port
▼ Stereo In	Stereo	Yamaha Steinberg USB ASIO	
Left			UR22mkl Input 1
Right			UR22mkl Input 2

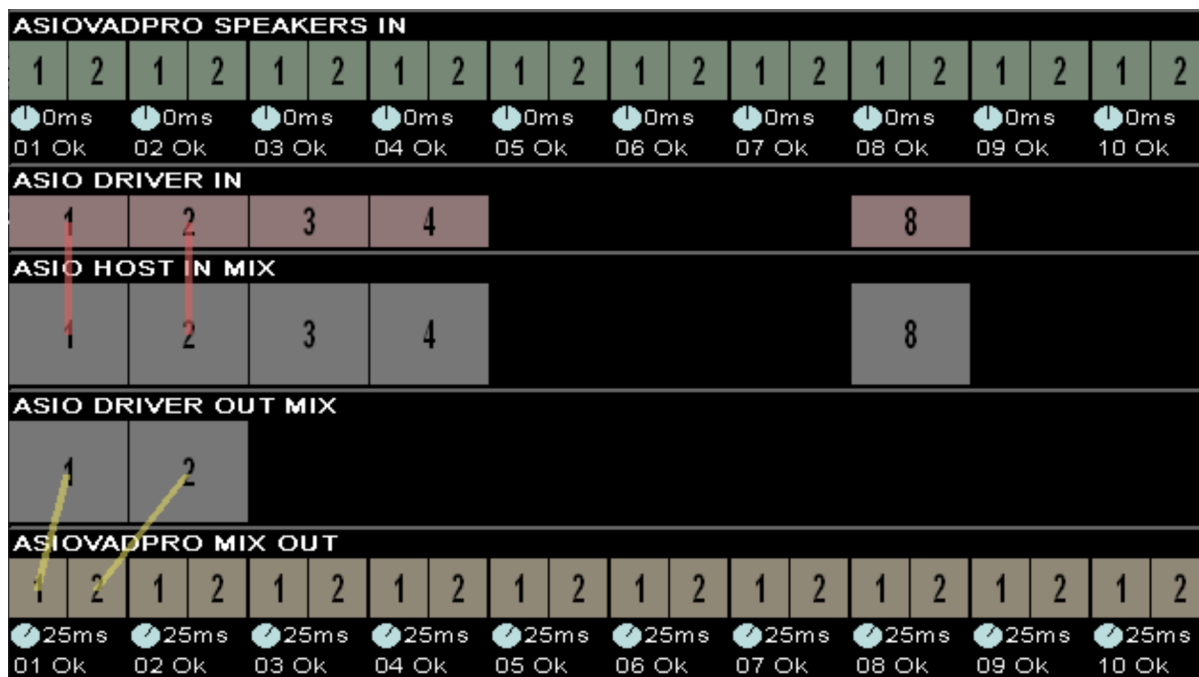
inputs you wish to use for that channel. If you are using a MIDI controller with 5-pin, you should have no issues connecting that to your VST2 or VST3 plugins, whether they are synthesizers, samplers, drum machines and so on. If you are using a USB MIDI controller, you may have little to no latency.

So, it does seem rather straightforward in regards to setting it up. The only thing that eats time is setting up the input buses in Audio Connections to best suit your needs, and saving it as a preset just in case. Make sure if you use your audio interface as a main device, you set up your input/output buses to suit your needs without ASIO Link Pro, and save that as a preset as well.

In the image provided below, this is a previous Cubase setup of mine. You will notice 5 through 7 are missing, along with 9 and 10. I wasn't using the first 3 missing at the time, and I had no need for loopback, so I opted out of those. This does not affect routing or signal performance. This also can be changed at any time if you need more or less. Whatever inputs you need, add them, then route the ports under ASIO DRIVER IN to ASIO HOST IN MIX, and you have your audio interface inputs mapped much like if you were using your interface only.

These were in sequential order, my Digitech Vocal 300, Roland Juno-Di, Neural DSP Quad Cortex (Wet and Dry), and a KAT Percussion KT3 trigger pad.

What your needs are will vary from mine, but I hope this was helpful!



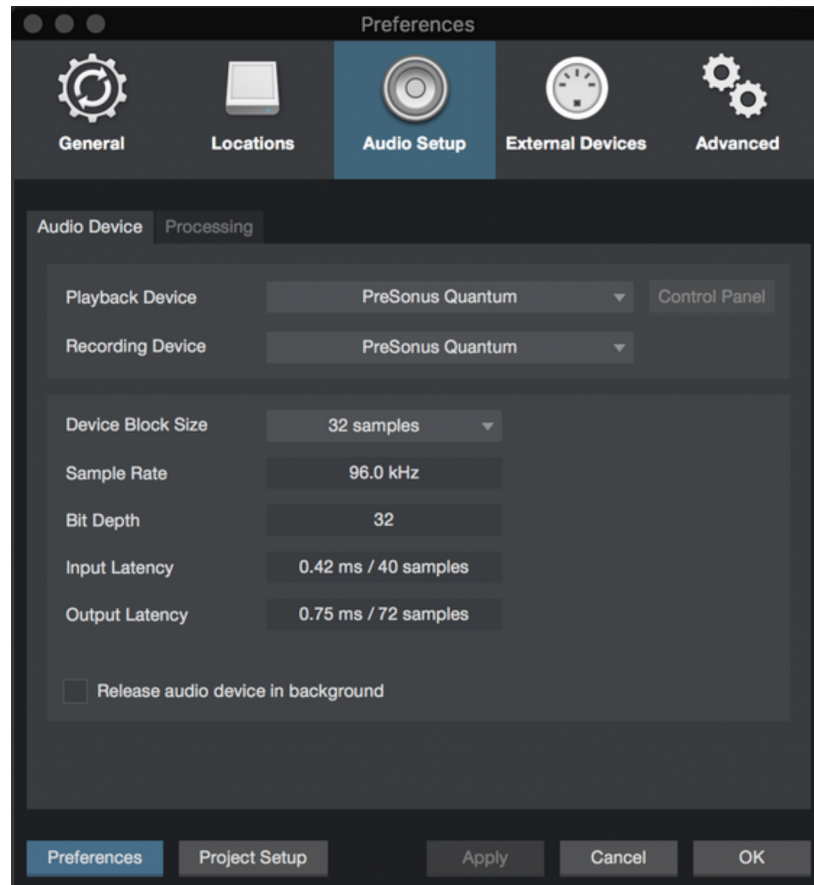
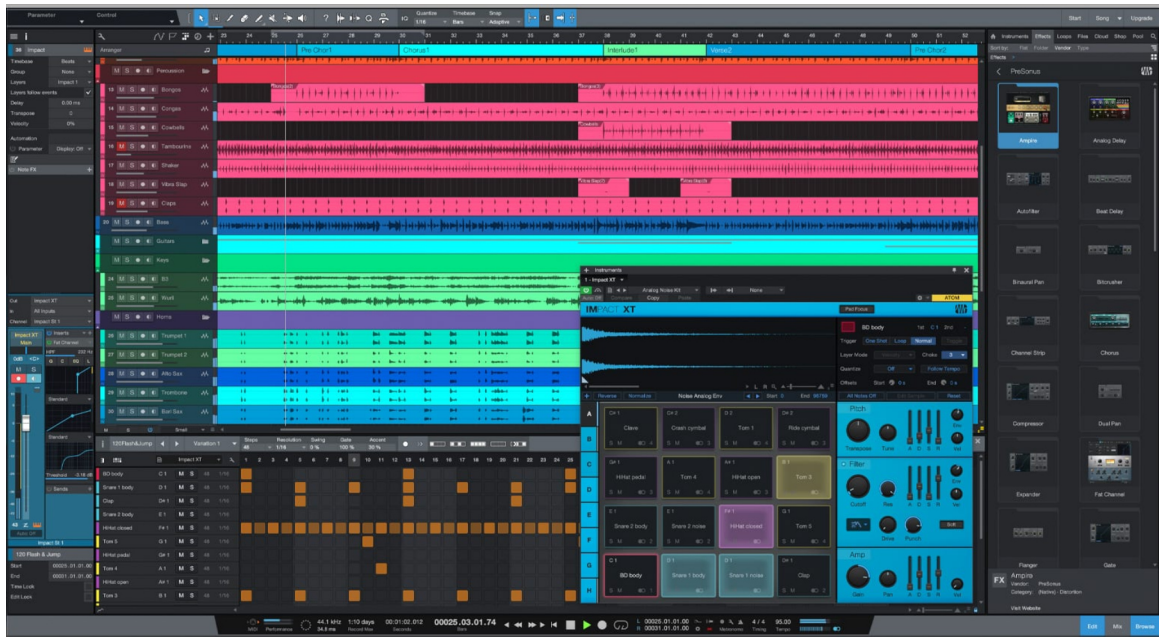
Note: This should work regardless of what version of Cubase you are using, as far as I understand it. I know some people who still use versions of Cubase predating the naming of Elements, Artist and Pro editions. The setup process should still be the same. If it does not work, you may need to upgrade your Cubase to the latest version, regardless of the tier you need. Compare editions via the Steinberg website to see what your needs are before you purchase!

ASIO Link Pro and Studio One



In this section, we're going to go over how to get ASIO Link Pro working in Studio One. Some of you who do use Studio One may still be using a version older than 5, but this should still apply as far as I understand it.

*** Image from GearNews via Google Search



This will take a step or two more than it does in Reaper or Cubase, so please bear with the process here.

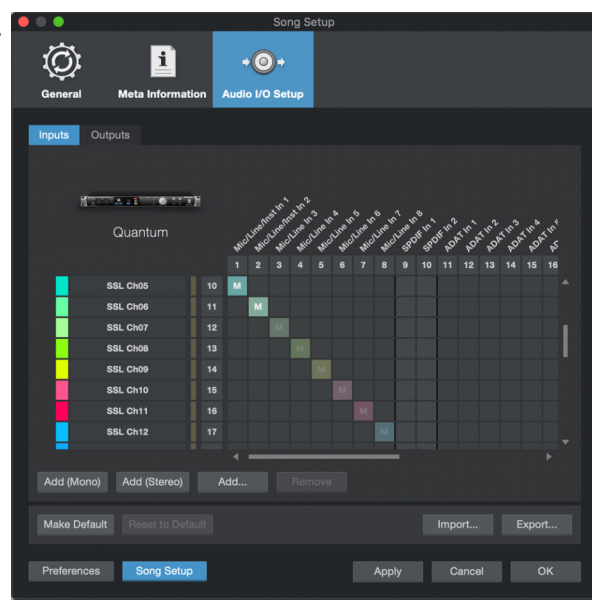
Open up your Preferences and go to Audio Setup. Choose your Playback/Recording device as ASIO Link (because it doesn't say ASIO Link Pro in full, for some reason). This should latch onto the virtualization.

If you are using ASIO Preferred from the ALP control panel / tool, you should be able to set up the block size and sample rate as you need. Otherwise, your defaults should be fine.

Next, we'll be opening the routing matrix for Studio One (continued on next page).

*** Image from Studio One 5 Online Manual (Mac OS, looks the same on Windows)

To get to this window, go to your toolbar, select Song, then Song Setup. Here you can create your routing, based on the ASIO Link Pro driver, just the same as your audio interface.



The top labels are the available physical and digital inputs for your interface, and may also reflect based on ASIO Link Pro's setup (LinkIn1 through LinkIn64, or whatever it might say).

The labels on the left side (top to bottom) are your current available input buses you can map.

The boxes marked with an "M" in the main matrix are mono inputs. If you have a stereo bus, it should have two boxes marked "S" covering two slots. Make sure your boxes are mono for all inputs, including loopback. Also if you wish, you can set up an additional bus for loopback in stereo. All about them options.

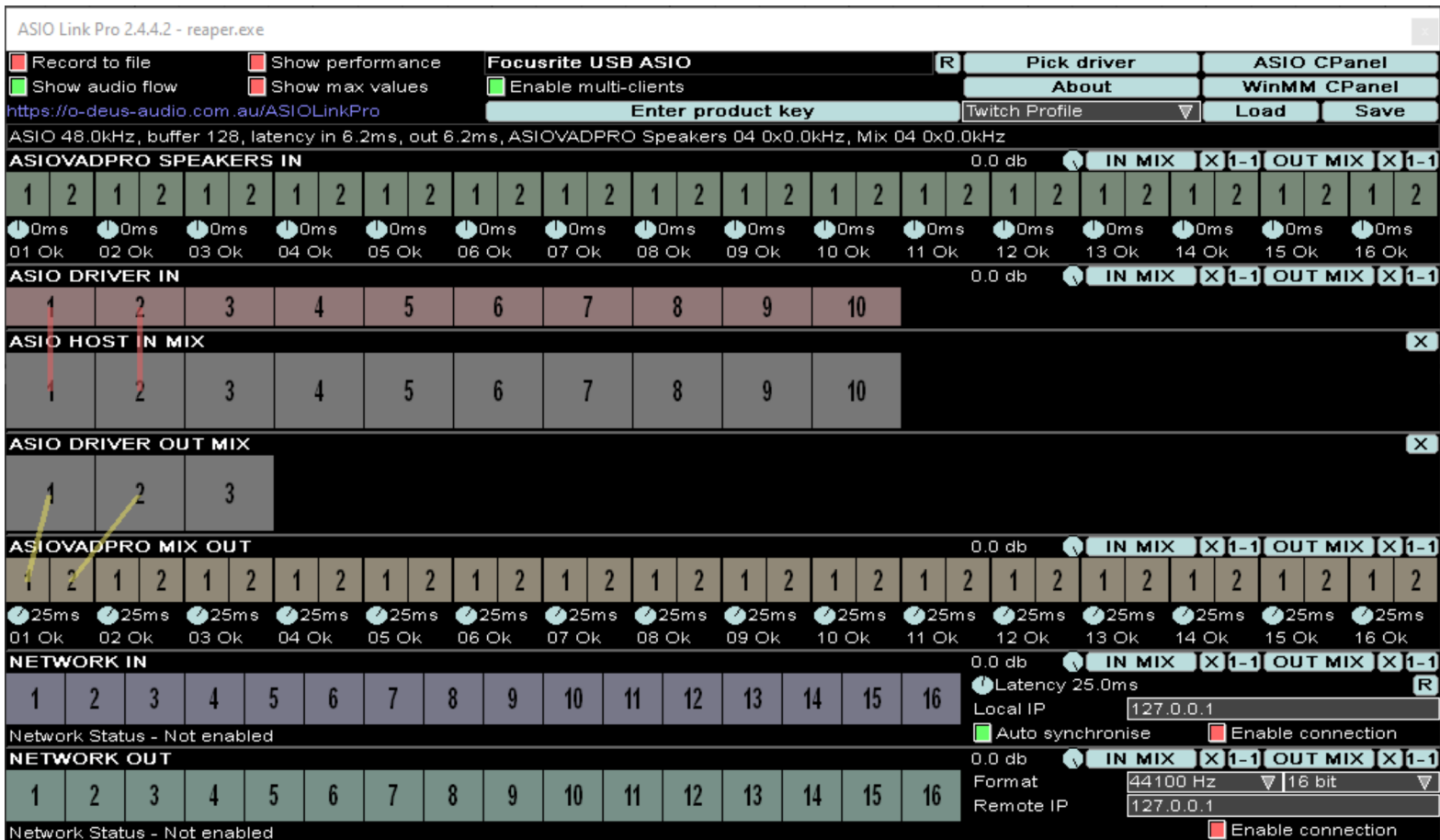
When you're done setting it up, click export to save that routing configuration to a file you can recall later as needed. Also do this for your main ASIO interface.

After this, you should be able to select your inputs on the main strip as seen on the right ("Input 1" or "None").



Despite cloning the image from my Reaper setup pictured below, this is exactly what my Studio One routing would look like, similar to my own personal setup. You can route/adjust according to how you set everything up for yourself.

Unsure at time of writing, Studio One might close the driver if you focus off the application, to open it for other applications to use it. If it doesn't, you should be okay and not require any further tweaks to the Studio One system.



ASIO Link Pro and Ableton

*** Images from Ableton website

Ableton is a DAW of which I'm not very familiar with. I even went as far as to sell my license of Ableton in the past few years, because I was not feeling the work flow for standard recording or sound design. However, that's not to say that it is a bad DAW. Actually, far from it. I may even return to it one day, but until then, let's get you set up!

Pictured below are two images which we'll be focusing on for setting up ASIO Link Pro.

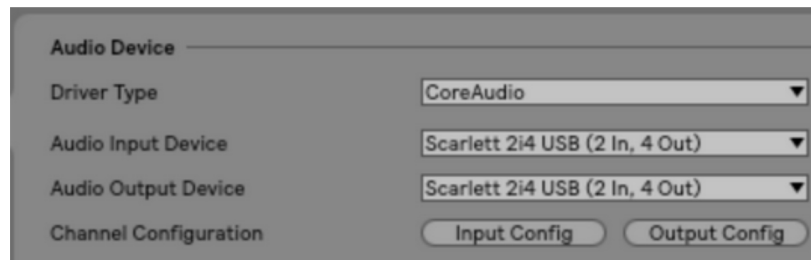
The first one can be found by opening your preferences and clicking "Audio".

Here, you will select your driver type as ASIO Link Pro, which should change your Audio I/O windows below it to match the driver's information. After this, you will want to open up both Input and Output Config, sequentially.

Both will look like the 2nd image below.

It is here that you want to select any and all mono and/or stereo inputs you intend to use. Once you have them selected (the orange-ish color), you want to check the same for your Output Config (bearing in mind, only checking Output Config to make sure you have a main stereo output on it at the minimum).

Once that is done, you can run all the appropriate routings in ASIO Link Pro to match physical and virtual inputs from your interface, and be solid to do as you please, whether it is a vocal chain or synthesizer plugins.



My apologies if this is a rather short section, but I do believe this information to be solid enough to enable ASIO Link Pro in Ableton and route with it. More or less, it looks like it's about as easy to set up as it is in Reaper even, which at the time of writing, I did not anticipate or think about.

If however this data does not help you get it going, please feel free to contact me by email through my website, and I will take a look at the information provided and append that to this document, while also responding as appropriately possible to your submission.

ASIO Link Pro and Bitwig Studio

Bitwig Studio is a DAW I have started looking at recently, due to some of its capabilities that are built-in... especially the modular stuff.

But, I have no personal experience with the DAW, not even a trial. So this screen cap from a Google search should do with explaining things. And, assuming that this is virtually similar to Ableton and other DAWs that let you select what driver you want to use, the following information should be very much in line.

Go to your Settings tab, select Audio.

Set Driver Model to ASIO (or ASIO Link Pro if it reads as such), and I/O should be ASIO Link Pro related (ASIO Link, ASIO Link Pro by name).

Sample Rate/Buffer Size should be native to your audio interface or settings in ASIO Link Pro Tool if you changed it from Preferred.

Set up your input buses as you see fit. For every mono source, add a mono bus, and the same for every stereo source, a stereo bus.

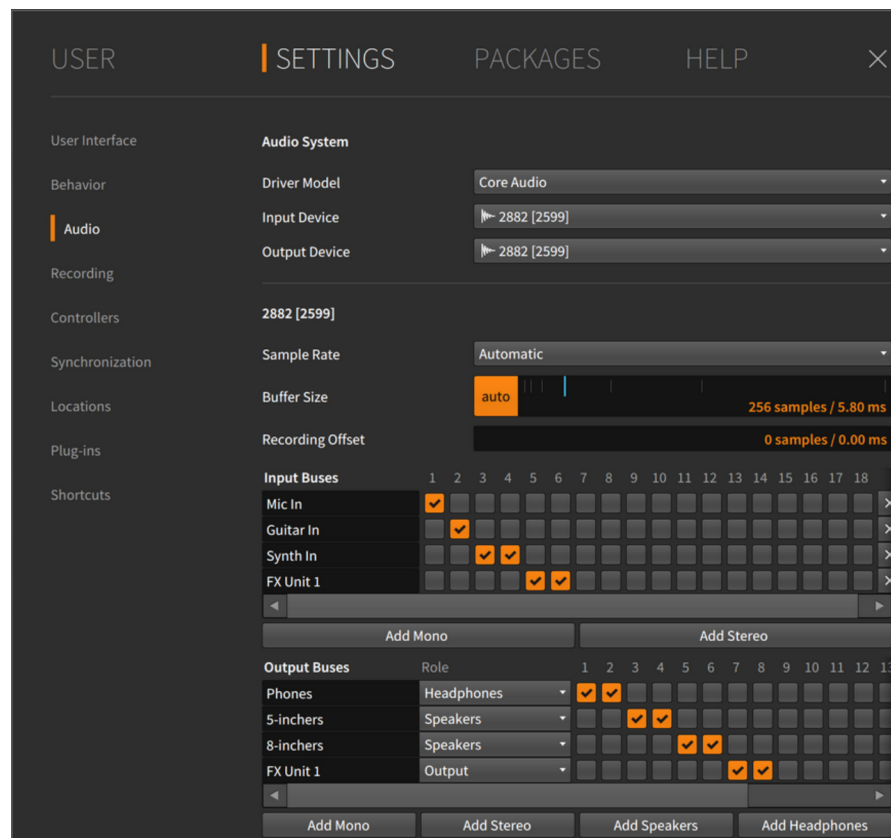
The same goes with output buses.

After doing this, I assume Bitwig bakes this into system preferences, and ASIO Link Pro should update to reflect your I/O matrix based on the buses you set up.

Remember here that Input Buses are the ASIO DRIVER IN ports (in red), while the Output Buses are ASIOVADPROMIX OUT buses (in tan/cream). Route your reds to ASIO HOST IN MIX ports to match your interface and feed their signals in.

I know this section is rather short as well, especially due to my lack of experience with BWS. It does appear to be very similar in nature to Ableton's process of setting up, so I'm banking on hope that this does work just as similar.

I do plan in the future to get my hands on this DAW and give it a thorough scrub, so if this requires an update after that, this section will be updated accordingly and announced on the Discord server.



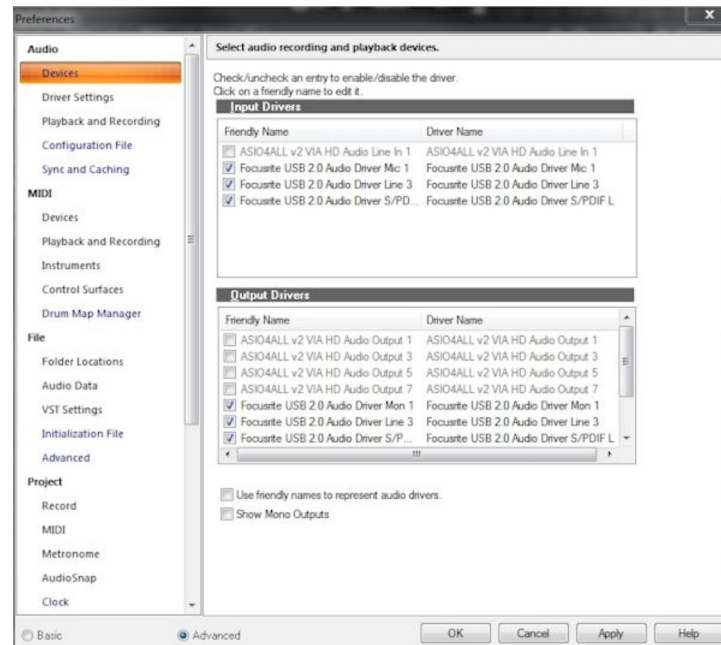
ASIO Link Pro and Cakewalk

Cakewalk by Bandlab (often referred to me as Cakewalk Sonar), is a free DAW option some may gravitate towards. After Gibson acquired it and treated it poorly (let it die, basically), Bandlab picked it up and now we have it again!

This DAW's environment was my "jam" from 1998 until the 2010's, from Cakewalk Pro Audio 9 up to Cakewalk Sonar Producer Edition version 6. To me, it was a GREAT platform, however some things changed and I needed an option that suited my needs.

THAT aside, let's get to the reason why you're reading this section.

Cakewalk has a specific way of setting up an audio interface for "input" and "output" and ASIO Link Pro is no exception here. When you normally use your interface, you will have a window that looks similar to that on the right (image taken via a Google search).



Setting up ASIO Link Pro is a different beast than just setting up your audio interface itself.

Select ASIO Link Pro as your main driver for playback and recording. Once that is done, you want to come to this window (pictured) and begin the setup (this will take a minute). From what I remember, when you begin picking your I/O drivers, ASIO Link Pro will "close" and "re-open" for everything you enable and disable. To make this relatively easier, make sure you do the steps outlined in renaming your devices (if your version of the Windows OS supplies the option to do so). Enable all that you know you will need for input (treat it like your audio interface inputs). Do the same for your outputs.

Once this is done, you should have all of those options available when you set up an audio or MIDI instrument track (VST2, VST3). All your audio should be going out on the main master bus as normal.

As I have not used this DAW in ages, this is the best amount of information I can supply here in regards to setup. I remember trying and it took roughly 4-10 minutes to set everything up and ensure it worked, against the odd amount of software crashes I had to deal with for some extremely weird reason. Assuming it was "bad parts" in my old Ryzen 5 2600 build, or Cakewalk sort of hates virtualization? This, I cannot answer as everything about it at the time still eludes me.

I do hope however, the information provided does help in some way, regarding setting this up. In the near future, I should dig into this more and actually open the DAW, and just deep dive, which should be reasonable enough for Cakewalk users. I just haven't opened it in ages because I don't personally have a real need anymore, except maybe open some WRK files from 1999-2007 and port the data.

Bottom line honestly is, this may take quite the minute to set up, and it might cause some issues (crashes, audio glitches/distortions). But if anything, if it's your main ride-or-die DAW, it should work without any issues at all.

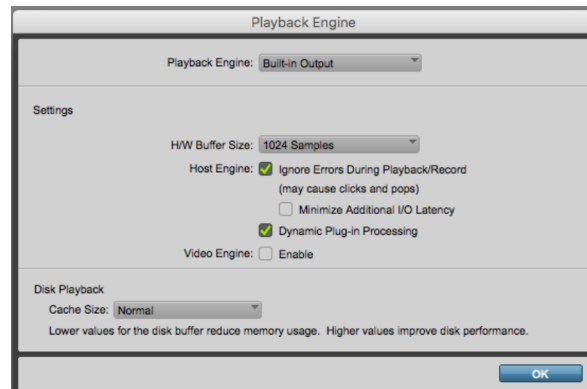
This is, from memory, my personal experience with what this section is covering (in hopes).

ASIO Link Pro and Pro Tools

Setting up Pro Tools for ASIO Link Pro was one of the “longest” setups I ever did with ASIO Link Pro, and [insert many expletives here] was it rather annoying to figure it all out. But, here we are.

Go into Playback Engine and select ASIO Link Pro as the P.E.

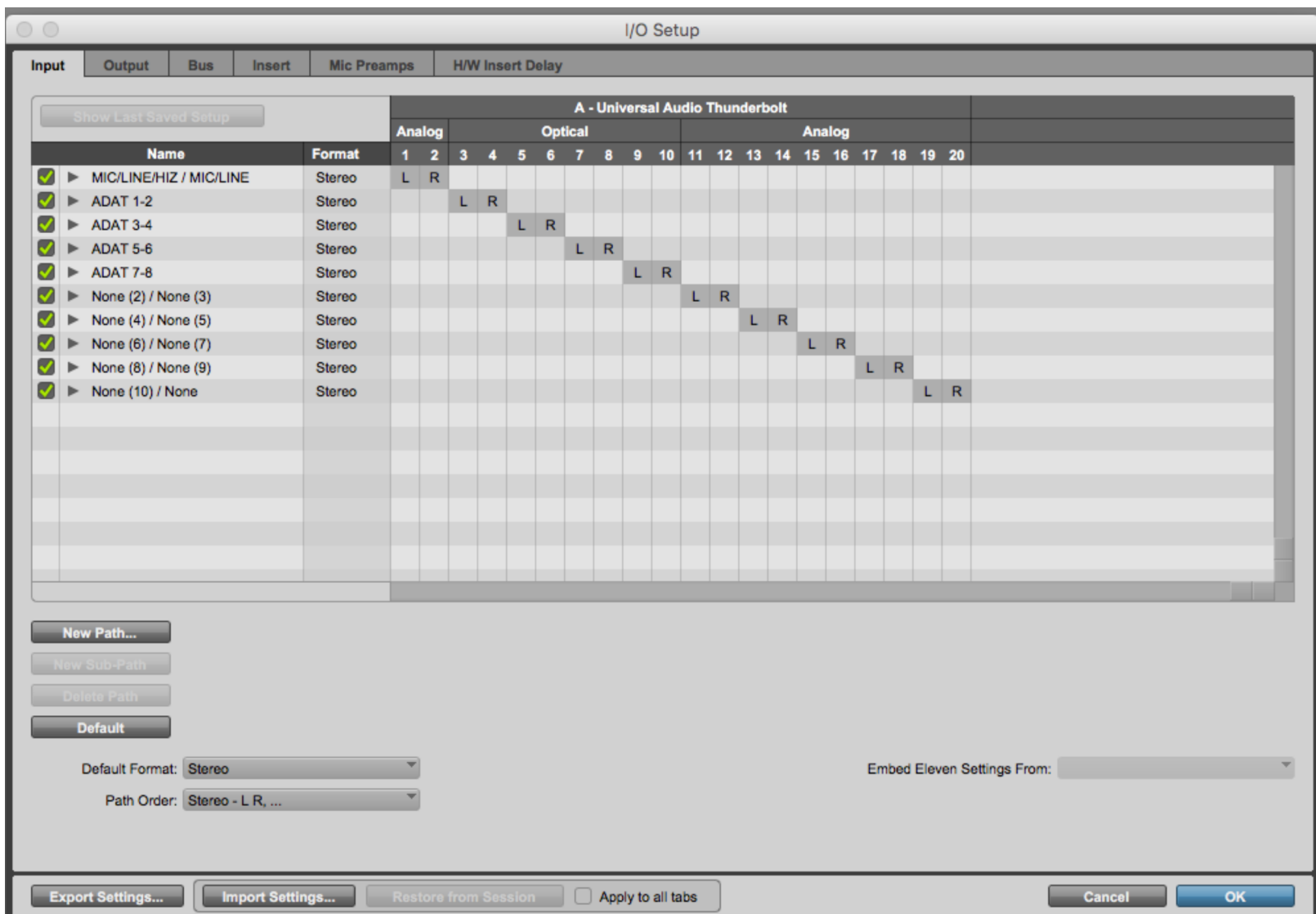
Adjust the H/W Buffer Size if it does not latch to your interface/ALP settings (you may have to do this often along with a PT re-start if you are swapping to/from any sample amounts, i.e. 64 to 256, 512 to 128, etc.) and the boxes that are checked in the image on the right (Google search credit), keep those checked. Don't enable video engine unless you're maybe scoring to it. Cache size normal unless you need otherwise.



The matrix in the image down below (also Google search credit), this is where we're going to be doing a lot of setup. If you're very familiar with setting up your I/O and bus/insert/preamp in Pro Tools, this should be a breeze. But make sure when you set it up, save the routing setup for future use if you have different settings with your interface.

Make sure all your mono inputs are mono, stereo are stereo, and only create however many you actually need for I/O. Name them accordingly because you're going to obviously want to keep track of what you're sending in or out. Make sure to do the same within your bus/insert tabs.

This is the best support I can offer, as I recently have sworn off Pro Tools for multiple reasons.



ASIO Link Pro and FL Studio

FL Studio is a DAW that I remember using before it was a full-fledged DAW in its current right, when it was Fruityloops. I still to a degree use it, when I want to experiment outside the box of my constant DAW paralysis.

However, here's the good news (and with it, also some bad news).

You CAN use ASIO Link Pro.

Make sure that "auto close" is not enabled (orange dot). This will shut ASIO Link Pro down if you shift focus to an app outside of FL Studio.

The big thing about this that I also notice, and this is my gripe on this approach, and why I would probably also suggest using FL Studio ASIO as a means to routing your audio to OBS or Streamlabs: if you set up one of your channels in the FL mixer to receive audio from a specific input of your interface while using ASIO Link Pro, the driver shuts down to create or delete the physical/virtual input for that channel every time you select something for that channel. It does not affect your project, but it can be slightly or significantly annoying.

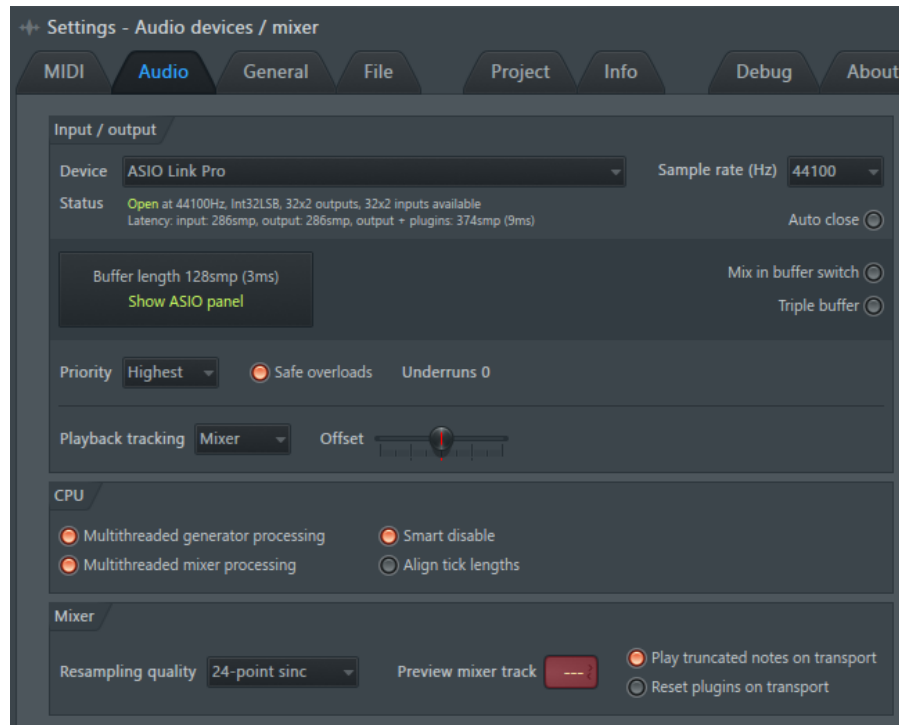
As a good example of this:

When you boot FL Studio with ASIO Link Pro as the driver, all of your inputs are not automatically mapped out. This could perhaps be fixed by creating a template, but I am unsure if that will hold when executed. This would be a welcome feature for Image-Line to fix honestly, in my personal opinion, similar to how you can set it up in Ableton, Reaper or Cubase. "Set it and forget it" is a good approach.

When you start setting up all your inputs per channel in the mixer, you might as well just set all of them up first. Then, once the last input is set up, open the routing matrix and set everything up as you need. If it can be saved as a template and work from there on out, then I'd call that a bit of a win. If you do not need your inputs, I would highly recommend using the FL Studio ASIO driver to route into OBS or Streamlabs.

As far as Discord goes, you can still set it up to receive audio in voice chat, or use the OBS Studio technique mentioned further down in this documentation for Discord live streaming.

As I have not used FL Studio as regularly since somewhere between 2012-2014, most of this knowledge has slipped over time, so I cannot guarantee this as solid information. I am offering this to you as what I know and/or have learned to the best of ability.



ASIO Link Pro and Discord Voice Chat

Everyone knows about Discord, right? Gamers used it to communicate with friends while playing Call of Duty or Final Fantasy 14 Online. But when the COVID-19 pandemic hit and everyone was put into lockdown to help prevent the spread or at least try to contain it, the only options we had were Facebook and Instagram Messenger, Zoom, Skype and so on. Discord was starting to build itself to be more geared towards communities, without excluding gamers. It has since (to me, at least) been one hell of a successful platform, so much that I try really hard not to check Facebook anymore, if I can help it.

But, that aside... let's get to the meat of this section. How to route ASIO Link Pro into your Discord's voice chat.

Discord voice chat can be pretty quiet or pretty active, depending on the community you're participating in. Whether it's 10 close friends or 500,000 complete strangers. Many people across the world utilize it to quench their social thirst or even end up having future working partnerships.

In this case, we're going to get you routed in to a standard voice chat, with some key notes to remember.

1. If you are in a voice chat that requires push-to-talk, this will not work unless you can toggle it on and off.
2. If you are in a social setting, do not be a total dick and just start shredding out.
3. If you do sit around and noodle, please mute your mic or turn on Krisp or built-in noise suppression.
4. If you have a lot of background noise, please mute your mic or turn on any/all noise suppression.

This information is based on knowing Discord enough to navigate.

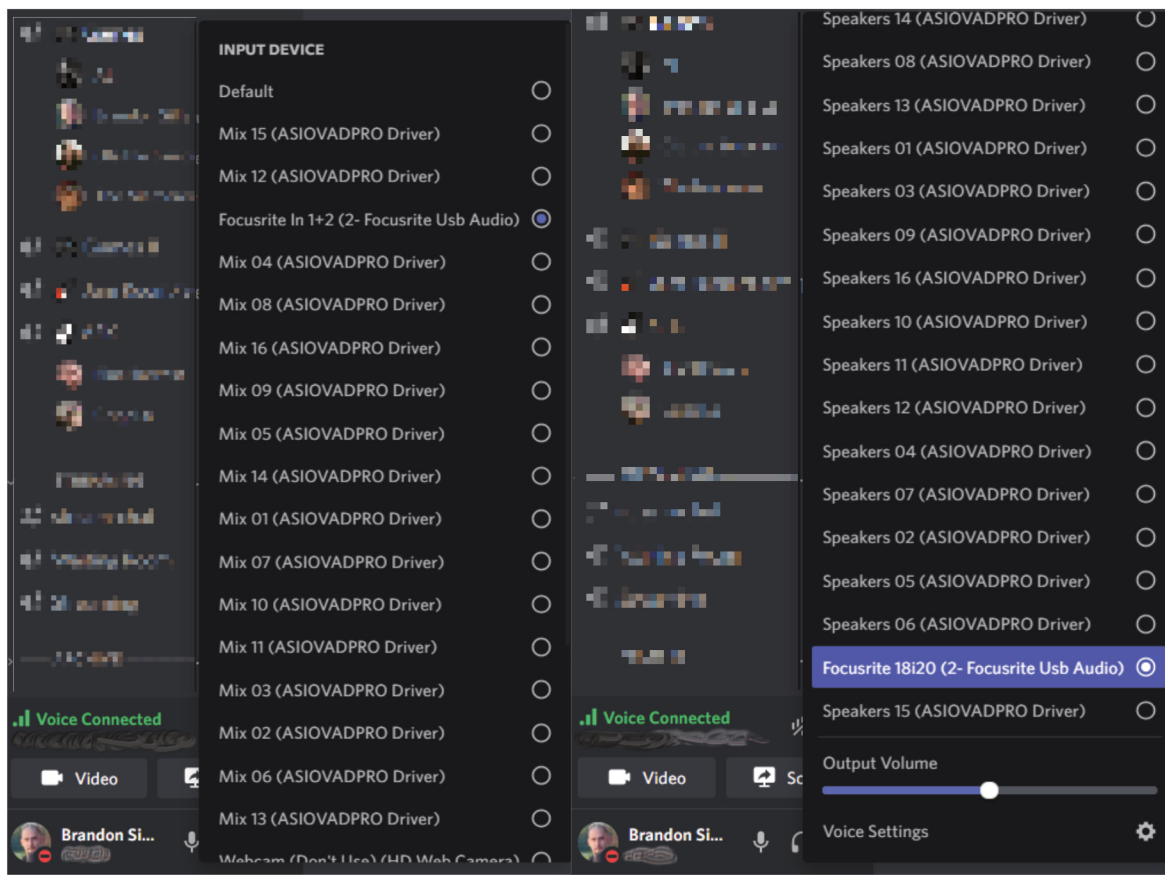
Open up User Settings (cog wheel in lower left) and navigate to Voice & Video under App Settings. You do not need to focus on the input or output device here, there's a trick for this later.

Input mode should be Voice Activity, not Push to Talk. Turn off "Automatic Input Sensitivity" (so you can adjust the sensitivity manually as needed). Next, scroll down to the Advanced section of this same page. Turn off noise suppression. Go further down and turn off Echo Cancellation, Noise Reduction and Automatic Gain Control.

Next, go to Audio Subsystem and choose "Experimental" (this will come in handy in the next Discord section).

Exit and join a Voice channel. Next, right-click the microphone icon and choose "Mix 01" (main stereo output). You do not need to right-click the headphones and select a "SPEAKERS" driver. However, if you cannot hear others and they are lighting up, right-click and select your physical audio interface, not an ASIO Link Pro driver.

With the routings in place, you can run an effects chain from your DAW on your mic to gate out background noise, compress to tighten things up, and even add a pitch shifter if you wanted to. You can route Guitar Rig or Neural DSP plugins into Voice chat. You can run an Arturia synthesizer into Voice chat. All through the DAW's main stereo output ("MIX 01") and not have to do much else.



ASIO Link Pro and Discord Streaming

Bear with me on this section, as there's a lot of information that I have had to "wiggle room" with and also at times sort of "argue" against while figuring out and testing things with some live feedback.

This **DOES** work for me as of October 2022. With the same setup and steps, it should also work for you. I will detail more about my setup with this at the end of this section.

Discord Streaming is something everyone does when they're sharing screens or video games they're playing in voice chat. But did you know you can also pipe your DAW this way and get true stereo sound instead of that mono input through standard voice chat?

Here's how to do it. Make sure your DAW is using ASIO Link Pro as the main audio driver. You do not need to open the ASIO Link Pro Tool for this, as the routing matrix is automatically initiated.

You will be using OBS Studio for this process, which looks like this (as of the latest update).

Set up an Audio Input Capture source, go into its properties to change the source to MIX01 or any other MIXxx you may have (or whatever you may have renamed them to). MIX01 should be fine if you're not doing anything else.

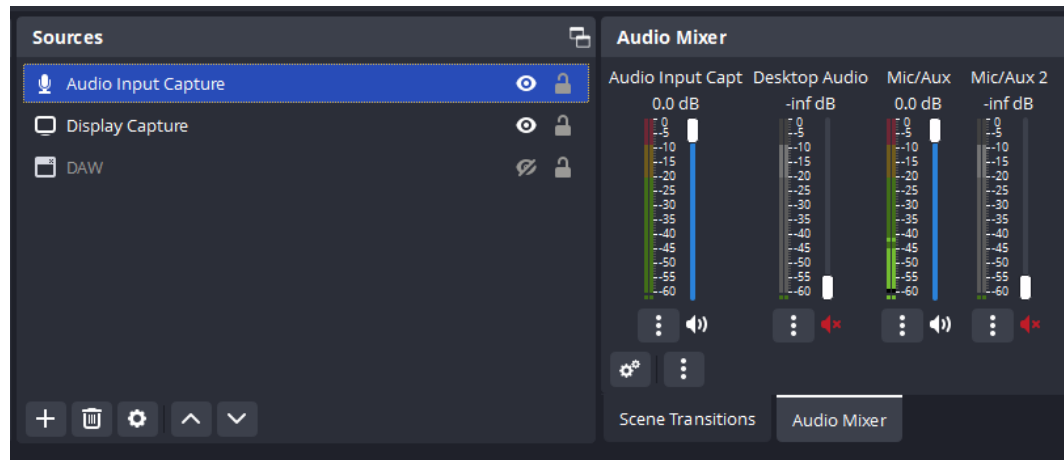
Afterwards, go into Advanced Audio Properties, and set your Audio Input Capture source to "Monitor and Output" (do not downmix it to mono, and don't worry about the track checkboxes to the right).

Once this is set up, you may need to set up at least one filter for the source, such as a gain control, which I'm using personally to help reduce the amount of signal delay I hear from the ASIO Link Pro monitored source. It isn't a latency thing, but you can notice the added signal can mud things up and sound weird. This can be fixed on the listener's side by increasing the volume to which they hear your stream, or you can increase the gain control until the "effect" is noticeable and bothersome, then roll it off just a touch. I'm still figuring out how to clean this up some more, but it does work.

The next thing that makes this work, is whatever you want to share on your screen, set that up in the source (such as your DAW's screen or the entire monitor itself). Then send that out as a Windowed Projector (like a preview), and it will be this window that you use to stream to Discord. When users jump on your stream, they should hear whatever you are doing in your DAW (running a synthesizer VST or guitar effects, etc.) and in full stereo.

The other aspect of this is the settings on your Discord should not matter too much. The audio subsystem can be any of them as far as I understand it. You don't need to change your mic input to MIX01 or any other ASIO Link driver. If you're using a Focusrite, you can keep it that, same as the "speaker/output" driver.

For me, I have my 18i20 routed however needed in ALP matrix, going out to OBS Studio on Audio Input Capture, with a gain filter (and a couple other things as experiment), and for the main test, I did this with Reaper using the Arturia Prophet-VS plugin. 5 people confirmed this worked at the time as of this writing.



ASIO Link Pro and Zoom Meetings

Zoom has been one of the many choices for focus groups or appointments during the COVID-19 pandemic and lockdown. Some even use it to conduct music lessons online, but have had some questions as far as how to route in and out with ASIO Link Pro.

Good news, everyone! (Futurama reference, yes!)

When you have ASIO Link Pro open in your DAW of choice (and it is set up) OR if you are using the standalone tool and matrix, this can be very simple!

Your DAW audio automatically routes out to MIX 01 by default (as seen under Select a Microphone), so if you're using a MIDI controller or a guitar amp sim VST/AAX/AU, that sound would automatically go out from your plugin. With listening/monitoring your call, if you want to record the conversation for archival purposes or reference, set your Zoom output to Speakers XX, and route that in the matrix to an empty set of ASIO DRIVER IN ports (or just one if the call is mono).

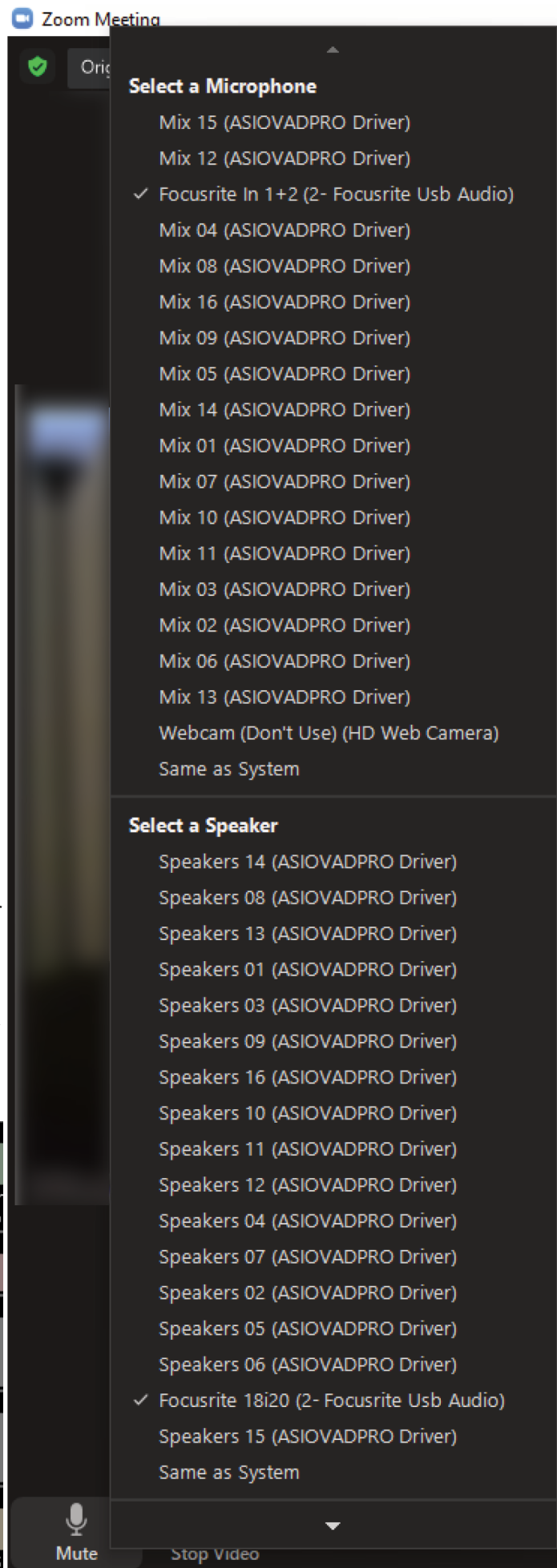
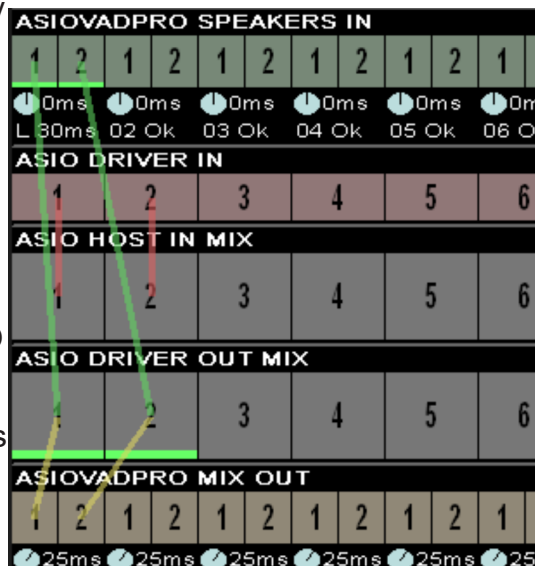
As I don't have personal needs to record Zoom audio, I select my main interface driver (Focusrite 18i20), which does not impede on ASIO Link Pro's operation. You might however require left-clicking the speaker icon in the tray (lower right) and setting that to your main interface's driver if you select the driver under the Speaker section.

The image down below is an example of "default routing" which may lead to your friends or clients on Zoom hearing themselves feedback'ing, if you set your Zoom to MIX 01 and SPEAKERS 01. It would be sort of an infinite loop of sorts. If you want to send your signal and record your Zoom call, set your Zoom to Speakers 02, set the green lines to the next pair of 1+2, route them into a free ASIO DRIVER IN or ASIO HOST IN MIX port (or two if call is stereo), set up a channel in mono or stereo in DAW to take the signal on, and press record. To monitor the call, send a pair of green lines from the same 1+2 ports on top to the boxes marked 3 and 4 at ASIO DRIVER OUT MIX, then left-click your speaker icon in the system tray and set to SPEAKER 02.

You might even be able to monitor the call just selecting your interface in the system tray as well. I cannot guarantee that though.

I have only done this once or twice before, and believe to the best of my knowledge that this should be sufficient enough information to get you going with Zoom and ASIO Link Pro.

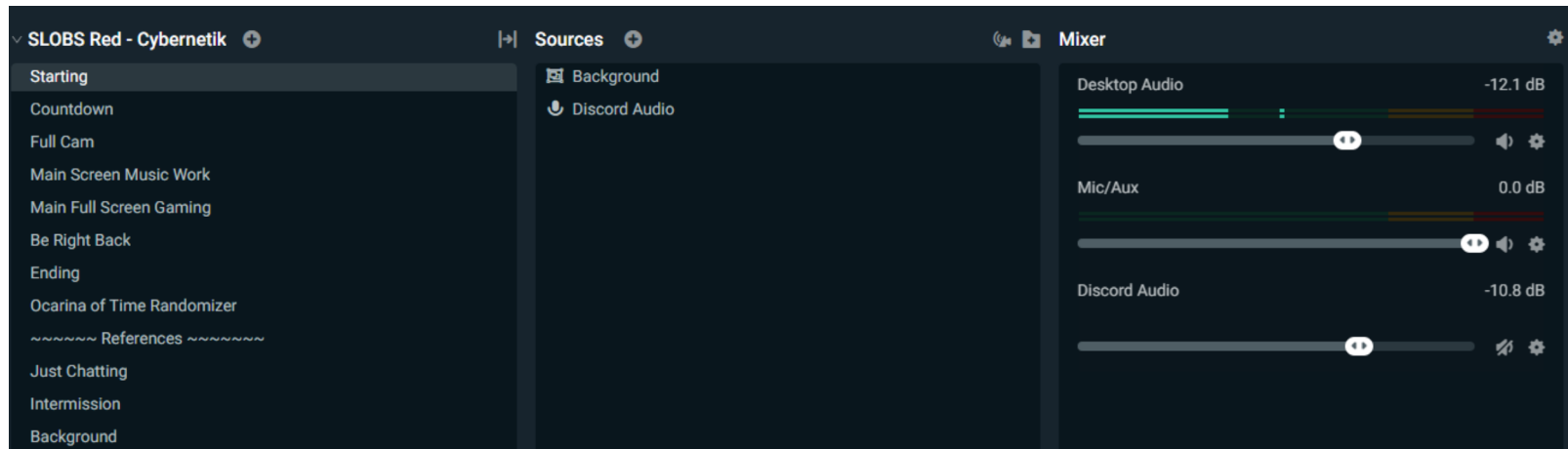
If you need additional ports for routing, set them in the ASIO Link Pro Tool!



Streamlabs + OBS Studio and ASIO Link Pro

Ready to click “go live” and start, continue, or ruin your career on Twitch or YouTube? No problem! This section should get you going in no time!

Let’s start with Streamlabs first, as everything for it is built-in, compared to the modular ability of OBS Studio. The rules for this apply equally to both platforms.



Under the sources section, press the + button to bring up the Add Source menu. This will present you with many options. For ALP here, you have a couple of options (for SpeakersXX or MixXX, 01-16).

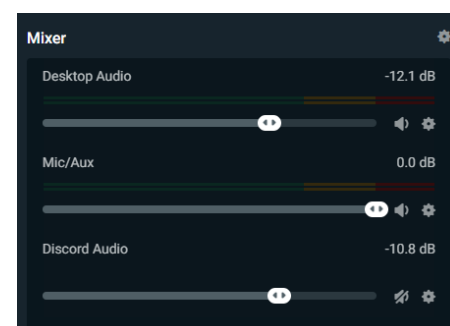
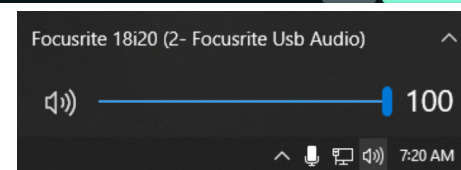
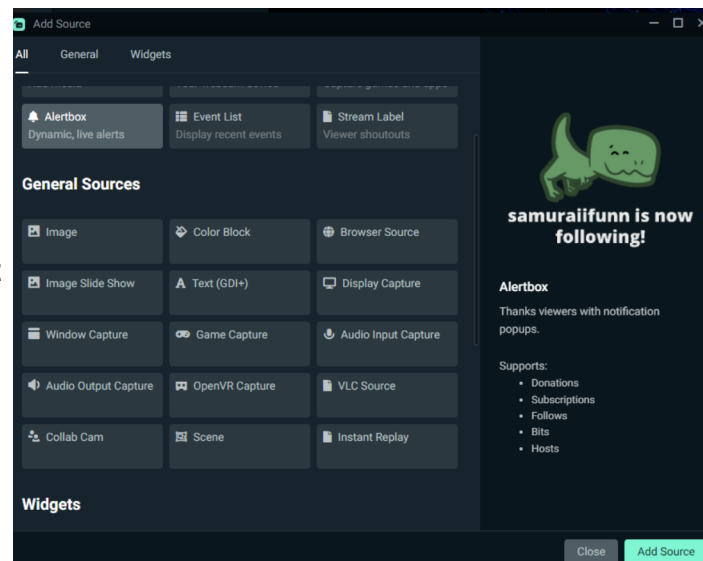
Audio Input Capture (AIC) is the option you want to pick if you want to wrap your audio from your DAW.

Audio Output Capture (AOC) is the option you would want to pick if you’re trying to wrap something like Discord or Chrome/Firefox/Edge/Opera into Streamlabs. Something like if you’re chatting with fans in VC (voice/video chat), or if you’re making a reaction video to YouTube content. Just stating facts and observations, no shade.

In this case, you can run one AIC source each for, say, Discord, YouTube and Reaper. An effective “routing method” to have all 3 handy would be to run your Desktop audio (middle image) on Speaker 03, Discord on Speaker 02, and Reaper on Speaker 01. Route their stereo pair in the matrix from ASIOVADPRO SPEAKERS IN to a pair in ASIO DRIVER OUT MIX. Driver Out 1+2 is the main stereo monitoring for ALP, 3+4, 5+6 and so on do not really offer monitoring unless you change your Windows output to that Speakers driver, if I’m understanding. If you want to monitor everything on one lane, you may crowd the bus and end up clipping or distorting the signal. This is where something else can come into play... Mixer Advanced Properties in Streamlabs.

Make sure to name your AIC + AOC sources something you’ll remember. This will come in handy for the advanced properties of the Mixer tab here.

Next page to finish Streamlabs off!



The advanced properties tab of the Mixer can be found by the cogwheel in the upper right of the widget/area for the mixer. The cogwheels next to the audio sources bring up a context menu for individual sources of which you may need to look into (filters, etc.)

Each source will show as named. In this instance, I automated my setup through the application settings.

The device will relate to the source. For desktop audio, my 18i20 should be reading audio from web browsers or even Discord if I have it set to that.

Using device timestamps is not important as far as I know, but probably doesn't hurt to have it enabled.

Sync offset, I assume you adjust this if you have delay in your audio and video. Best way to test for this is to record to local disk if you can, and see how things function. Adjust accordingly.

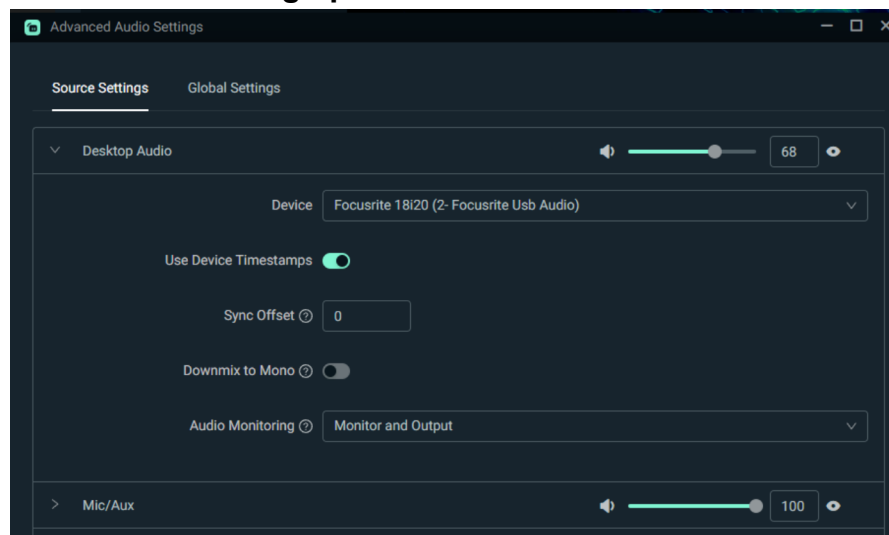
Downmix to Mono is best suited for a microphone that is being read on a stereo input. The 18i20 in example reads inputs 1 and 2 on the front (may also do the same for 2i2 and other similar smaller interfaces). To this extent, you SHOULD downmix to mono for your microphone. If a signal is full stereo, do not downmix, especially if it's your DAW. It will share your audio, but your audience will hear all the stereo phase issues while you're hearing the stereo field completely. This is something you want to avoid unless you're flipping stereo to mono in your DAW exclusively, to show what happens or show a problem when mixing.

Audio Monitoring provides you 3 options: Monitor Off, Monitor Only (mute output), and Monitor + Output. In most cases, if your audience cannot hear what you're doing, it is best to Monitor + Output. Normally, your audience should be able to hear everything, so it should not be a real issue. But if it is, setting to Monitor + Output effectively combats this issue with a caveat: you may hear your signal echo or double. This is dependent on what you're doing, and if you get a signal echo or double, tweaking with these settings until you get rid of it comes with another set of potential issues: you may get rid of the echo but you'll also kill the sound for the audience. This is something that is a bit of "delicate balance" and "inconvenience at times" but it's worth diving into it and figuring your settings that fit you and your deal the best.

Note: For Streamlabs, I don't tinker with the settings to stream into Discord. My settings should normally be where they need to be for Twitch or YouTube, however some things can still get a little messed up. By creating your routing configuration for your stream and making notes on a pad, save your routing as a profile in ALP and load it when you're gonna go live. Adjust everything you plan to route before going live and ensuring that all settings are solid and signals are reading in the mixer meters.

If your signal echoes or doubles, route your software to a non-monitored stereo pair in ALP, and send that out, then set it up for monitoring and output in the software based on the stereo pair. Speakers 02, 03 and 04 would probably be optimal if you want to send the signals without direct monitoring AND software monitoring.

Hope this makes sense? If so, sweet!



With OBS Studio, the approach is virtually similar to that of the Streamlabs setup.

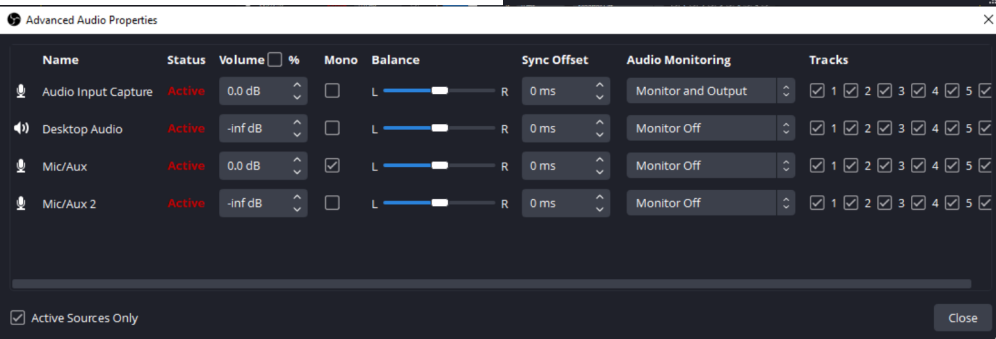
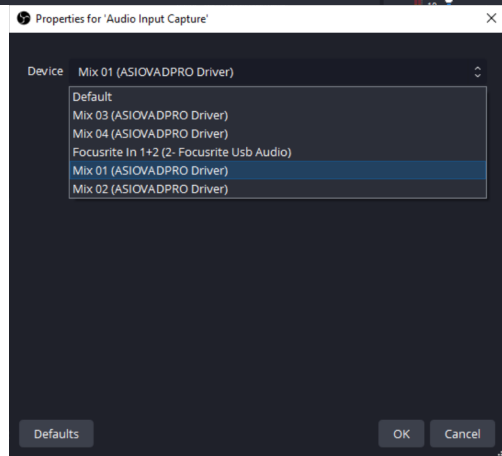
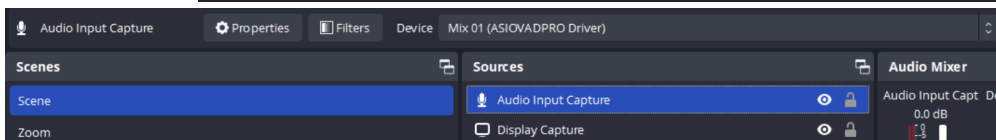
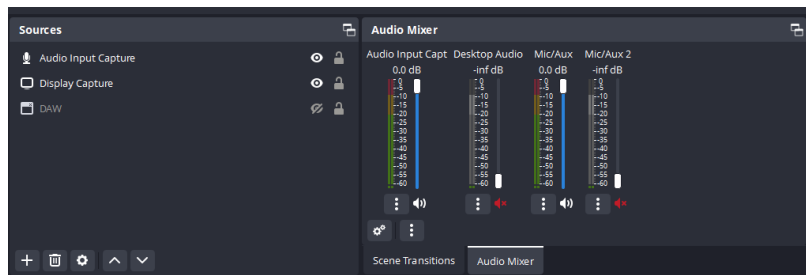
Setting up an AIC or AOC in OBS is roughly similar, and naming the source is a good idea (compared to how I didn't in these images provided).

You have multiple options here as well in how you can choose your "source audio" and whether or not you want to access properties or filters (for gain, gate, VST) etc.

In this case, with OBS, set up an AIC in your scene(s), and apply the appropriate audio driver to the OBS source itself (could be MIX 01 or MIX 02 if AIC, SPEAKERS 01 or SPEAKERS 02 if AOC)

With all sources set up, you can go into the Advanced Audio Properties of the mixer and see that you can't exactly pick the audio drivers here, but you have options for volume adjustment, mono downmixing, panning, sync offset, audio monitoring, and "tracks" which I have no idea what they do honestly. Focus on if your source is mono/stereo and if you need to offset any, and mainly whether you're monitoring + outputting, or muting output or whatever option works best per source.

Make sure you name these sources when you add them so you can keep track! This can come in handy when diving into the AAP window here.



Hopefully, this information was helpful between Streamlabs and OBS Studio!

They both basically function the same, but OBS is a bit more "modular" on what kind of sources you can add, mainly through URL additions vs. widget additions that Streamlabs provides internally.

The “Basic Enough” FAQ:

Q: Are you the maker of this software?

A: No. The individual who made the software is deceased, sadly. May we thank him, and may he R.I.P.

Q: How did you discover ASIO Link Pro?

A: I discovered it while searching for various options. VoiceMeeter Banana, Synchronous Audio Router and the likes were my first foray into audio virtualization on Windows. Considering I am working with a Focusrite Scarlett 18i20 3rd Gen interface, which has driver support, I needed something to route my DAW audio for Twitch, YouTube and local disk recording/streaming. I have rarely ever had any problems since, except for the occasional forgetfulness in what my routings and setups were.

Credit to Jonny McBee of The Browning for a couple of pointers that led me down this rabbit hole around 2018.

Q: What were your intentions of helping people using ALP?

A: I know a lot of musicians with an interface that is ASIO compatible, so I wanted to help them with a solution that might work for them. I didn't realize there would also be dozens of people who don't have ASIO compatible interfaces wanting to use this software as a solution for their virtualization, but I found that out along the journey.

Q: Why does the patcher not work?

A: Please refer to the troubleshooting section of this document.

Q: The patcher files disappeared. Are these viruses?

A: If you are running anti-virus software, disable it in order to get the files into your storage medium. From there, you should be able to run them and get it working. They are not viruses, but Windows Security may see the file(s) as such.

Q: Are you planning on doing any more videos on this in the future?

A: I'm not going to rule anything out. I may work bit and piece to improve upon the videos I did awhile back, which would be smart, as those videos do help, but I feel I can do better. They will remain up however.

Q: Which DAWs are you proficient with regarding ASIO Link Pro?

A: Cubase, Reaper, Studio One.

Q: Can I use multiple audio drivers with this software?

A: With all the tech on the market, and the evolution of software on the PC side, you'd think so. The answer however is no. You can have multiple instances of ALP open, but you can only use one driver at a time. So, if you have 1 instance or even 6 instances for some weird reason, you can only use say Focusrite USB ASIO, Focusrite Thunderbolt ASIO, or whatever your interface is. I do believe Mac has Loopback, which can wire multiple drivers together in some way. I could be wrong there, but if not, that is beating Windows' capabilities by a massive margin.

Q: Can I run this with ASIO4ALL?

A: As far as I understand, yes. But I am not versed with ASIO4ALL personally, and it won't exactly help you lower the latency between the computer and audio interface. Some older interfaces do not have supported ASIO drivers, and ASIO4ALL is often the only option to work with them as far as I know. So do not expect me to provide any ASIO4ALL information here. My apologies.

Q: What about other DAWs?

A: Setting up in Cakewalk Sonar, Pro Tools and even FL Studio for me was a complete hassle. Pro Tools requires setting up additional I/O and that can take some time. Cakewalk Sonar requires you to enable multiple ports in the driver settings, and last I remember, it constantly reboots the tool with each newly enabled port. FL Studio at the time kept auto-closing the driver when not in focus, but with recently learned things, there is some wiggle room to teach you a bit about it from my perspective. Ableton is easier than Pro Tools and Cakewalk Sonar. Unsure about Bitwig, but might be the same level as Ableton. This will all be covered appropriately in due time someday (gift me Bitwig, and I'll do a video on it.)

Q: Can I use this with VoiceMeeter Banana?

A: ASIO Link Pro basically does the same thing, but from my personal experience, VM Banana has randomly had a glitch in its matrix (“driver bork” perhaps) that makes the I/O sound like it’s being bit crushed or some sort of The Matrix glitch style sound effect, which is possibly related to a de-sync of the sample block and/or frequency clock or something driver related. It is best to avoid this by using one or the other exclusively, while accepting that the technology isn’t perfect by any means, and that there are still flaws that can come about. This can also potentially include ASIO Link Pro, but I have encountered hardly any problems with it.

Q: Can this work with Windows Audio Drivers?

A: I use an audio interface with supported ASIO drivers, and I suggest the same. I have provided some suggestions for audio interfaces further in this document. With Windows drivers, you are dealing with significant latency (between 50ms to 2000ms roughly, depending on buffer sizes and/or CPU cores and clock speed, which may not be enough sometimes). The drawback as well is you don’t have the appropriate line-in ports if you are doing stuff like plugging in a hardware synthesizer or guitar to teach basics or theory to students on Zoom effectively, so to speak. TL;DR, yes it probably can, but I highly recommend getting an audio interface.

Q: Is there an update to the software version or the patchers?

A: There is (or was) a member on my Discord server who found info on newer drivers, touting more stability and security. If you are that person, please contact me about this with all necessary info on downloading and installing it. There are also updates regarding the patcher stuff as of August 2021 and that data is also included within this document (files also included in separate folder).

Q: My ASIO Link Pro window doesn’t look like yours. How do I fix that?

A: Please reference the installation part of this document for more information.

Q: How do I make this work in Discord?

A: There are a couple of sections inside this document that cover this.

Q: This looks very confusing. How do I use it?

A: There are various parts of this bundle that will give you all the information you need to know on operating it from a fresh install, to routing between various applications. Many tips that will help you basically master this thing, while also helping to prevent you from blowing your ears out from accidental feedback from a routing configuration, which can happen! So, please make sure you give your full undivided attention to everything!

Q: Do you have a Discord server?

A: Yes, it is in the description of the video. Please make sure you read the rules. The ASIO Link Pro category still exists, but there is only the repository (files/information) and a discussion channel for ASIO Link Pro.

Q: Can I contact you in a DM about this on Discord?

A: My goal with all of this documentation and the video(s) themselves is to prevent you from needing to contact me for additional assistance with ASIO Link Pro. If you do join the Discord server, please make sure to assign yourself the appropriate role for ALP in the #roles channel, then read the entirety of #category-announcement in the ASIO Link Pro category. Do not place ASIO Link Pro related questions or commentary in #general as stated in the channel description.

Q: Your announcement says the category is going read-only mode?

A: Yes. Most of what normally would be fielded there is going to be answered here in documentation or in the video(s). However, everything will be made available in #alp-repository upon release, or as release time comes up, so nobody will be left high and dry here.

Q: My question isn’t listed here.

A: Then let’s hope that everything in this document or in the video(s) answers everything to the best of abilities here, because once this is out, I do not plan to update the documentation.

Troubleshooting / Additional FAQ:

I have boxes with an X in them. How do I fix this?

I am honestly unsure. I have heard about this a few times from others when setting up. I assume the best way to get around this might be to uninstall, reboot, reinstall, and see if it happens again. If it does, are you using an audio interface, or are you using WASAPI drivers (built-in Windows/motherboard sound) or are you trying to run this with another application such as VoiceMeeter Banana or ASIO4ALL, and are those even set up for ALP to accept their ports?

Is there no way to route YouTube and Desktop audio separately from Reaper's output?

Due to the way Windows audio works, YouTube and Desktop are both shared on the same driver regardless of what your device is chosen as, whether it's your Focusrite USB driver or ASIO Link Pro driver. However, there may be some alternative or additional solutions that have been developed recently in late 2010's or early 2020's to merit the possibility of addressing such an issue. Until then, I believe you're stuck with YouTube and Desktop audio driving on a one-lane road for awhile until Microsoft or a 3rd party developer can break that code (to my knowledge).

For this, I set my "Windows Audio" driver to "Focusrite 18i20" while Reaper runs ASIO Link Pro. This means I can listen to stuff on YouTube or my Desktop apps, and if I want to "loopback" them into Reaper (or any other DAW for that matter), I run input 9 and 10 from the routing matrix to independent virtual inputs (probably 9 and 10 as well in the input lanes) so I can record mono or stereo signals from YouTube or whatever else.

I'm having issues trying to send my voice through ALP to Discord. I only have a laptop microphone and I want to speak over what I'm sending via Ableton.

This is something having an audio interface can fix, as far as I understand your comment. I believe you'd have to use ASIO4ALL to create a virtual ASIO driver that could tether to ASIO Link Pro, to bypass the audio interface requirement that I often these days am suggesting. To be clear, I do not know ASIO4ALL personally, so I cannot be of help on that front.

At the end of the day, again, I highly suggest an audio interface, as mentioned frequently throughout this document.

How do I remove X amount of the virtual connections from my driver list?

Start Menu, Settings, System, Sound, scroll down to Sound Control Panel and click.

The window that pops up, you will "disable" the drivers in Playback and Recording tabs.

I suggest starting from Speakers 16 and Mix 16, and work your way upwards until you have the desired amount of drivers. For me, on this latest installation, I stopped at Speakers 04 and Mix 04. I really only need 3 of them personally, but allow yourself 1 or 2 as wiggle room. You may only need 2 of these at base minimum, but in the "wiggle room" circumstance, give yourself 3 or 4 of these.

The disabled drivers will not show up when switching inputs/outputs in Discord, Zoom or Streamlabs/OBS Studio, which cleans up the list nicely. I suggest renaming the remaining drivers as you see fit to keep track. Remember, Speakers is audio from another application outside a DAW, Mix is audio to send from an application virtually.

Audio Interface Suggestions:

Focusrite 2i2 3rd Gen



Focusrite 18i20 3rd Gen



Focusrite Clarett 4Pre



PreSonus Studio 24c



MOTU M4 4x4



Part of my suggestions relate in ways.

USB-C if your computer has a port for it, or can take a PCI card to add a USB-C port. If not, using USB 3.0 or higher (Type C from interface to Type A on the computer).

The more cores and clock speed on your CPU, the more likely you won't run into latency issues or glitches and dropouts from lower latency (sample block size) on your interface.

If you use a 2i2 3rd Gen and get "self monitoring" issues when trying to run plugins on a DAW, additional inputs (to avoid input 1 and 2) so you don't end up hearing them, plus technically to a degree, future-proofing if you get more devices that you want plugged in at all times. Otherwise, hearing yourself might be an issue... but it might also be a feature you can physically turn off on the hardware.

As far as I know and remember, these interfaces have signed ASIO drivers from the manufacturer's website, which means they should work flawlessly with ASIO Link Pro.

If you are looking at interfaces and thinking of buying one specifically, go to the manufacturer's website and see if they provide drivers for that interface (or any in the "family" i.e. Scarlett, Clarett, Studio, etc.) or at least "control software" to access internal options. If the answer is "yes" then they support the device with ASIO drivers and should be considered an option.

Thank you for your time!

If you have any questions regarding anything in this document, please leave them in the comments of the “Live Launch” stream video (VOD available typically within 24 hours after stream)

If asking in #asio-link-pro on my Discord, please do not tag me or my admins or mods. I will try to respond as soon as I can, so please be patient.

Also do not forget to read #category-announcement completely, because as of July 22nd, 2022, I have opted to stop responding to DM’s regarding ASIO Link Pro, which is stated in the announcement.

This also includes DM’ing my admins or moderators, as they themselves are not invested into the software or possibly not even knowledgeable with it. They are there to ensure the community I want to build is kept in balance.

BIG NOTE: Version 1.0 is indeed the initial release. With more questions or other various things related to ALP, the more that can be crammed into updates to the document and released accordingly. Updates will be announced on my YouTube channel if any are made to the document, so please like and subscribe, hit the bell. You’ll be able to know if and when those updates come along!