

Yamaha AG Mixers for Soma Instructors

What To Get	2
Microphones	3
Headphones	3
Recording	4
Yamaha AG Mixer Setup	5
AG Mixer Zoom connection	8
My Experiences with the Mixer	11
Using the Mixer with a PC	12

What To Get

You can get 6 channel AG06 or 3 channel AG03. 3 is enough for voice & music.



You should get a good quality microphone with an XLR cable to use with the mixer. I use the AUDIO-TECHNICA AT2020 as seen below:



And you need to make sure that you get an XLR cable, as seen below. It doesn't always come with every mic.



Microphones

The Audio-Technica AT2020 mic works really well with the mixer and you can get a powerful gain amplification on your voice. It is a cardioid condenser microphone which means it's extra sensitive and will pick up very delicate sounds (which is not always wanted if you don't want to hear the details of what goes on in your mouth). Important to know is that it uses Phantom Power, so the little red Phantom power switch on the first mic channel on the mixer needs to be turned on.

The Audio-Technica is one of the best quality mics for a more affordable price.

You can find also other XLR mics with really good quality.

For speaking from Audio-Technica, Rhode, AKG

<https://www.podcastinsights.com/best-xlr-microphones/>

Or if you want to sing, from Shure, Rhode or Sennheiser.

<https://musiciannerd.com/articles/best-xlr-microphone>

When choosing your mic another thing to pay attention to is the directionality,

There are 3 types of directionality that mics use:

1. Unidirectional
2. Bidirectional
3. Omnidirectional

Unidirectional is good for when you are using your mic just for you: guiding sessions or recording your voice.

Bidirectional is used often for podcasting where you may be interviewing a person on the other side.

Basic explanation of directionality:

<https://www.mediacollege.com/audio/microphones/directional-characteristics.html>

More detailed info on directionality patterns:

https://digilab.libs.uga.edu/scl/exhibits/show/steel_vintage_mics/mic_types_directionality

Omnidirectional is when you want to pick up sound from all over.

The Audio-Technica AT2020 mic I use is unidirectional. That means it will pick up the sound only from one direction. On my mic that direction is from the front side.

So I need to talk into that side.

Having a unidirectional mic will keep your sessions and recordings much more quiet. Especially because when using the Yamaha AG06 mixer, you will need to turn on original sound which does not suppress outside noises, so if you use an omnidirectional mic, you can pick up white noise.

Headphones

You will also need good headphones. The mixer has inputs for 3.5mm jack headphones or 6.3mm (quarter inch) jack headphones.

You can also use a headset.

*Always use cabled headphones connected with a cable to your mixer. Wireless headphones may create a delay.

Internet Compatability

I recommend this sound production setup for Zoom sessions especially if you have a high upload speed fiber-optic cabled internet. Most cities have that now, so if you have this possibility, get it. This will give you confidence that you're sending out your sound in the best quality. As for how the people on the other end receive it will depend on their own connection, but you can never control that.

It will still work well with slower DSL or Cable. I probably have the slowest DSL upload connection one can have with sometimes just 0.6 Mbps (Megabytes per second), and it has still sent out the music and my voice in great quality. Proof was in my Sunday Session. But you need to be aware that when you use this setup, you are turning on high fidelity sound and original sound which takes more bandwidth and there may be the odd time when it doesn't go through well. This is not because of the quality of sound coming from the mixer though. This is only a question of internet bandwidth and Zoom.

DSL and Cable internet upload speeds are much slower than fiber-optic. With DSL it also depends on how close you are to the central station. If you live in the country like me far from it all, the upload speed is below 1 Mbps. Fiber Optic upload is usually at least 45 Mbps, and up to 1000. Cable has often very fast download, but it's upload is not much faster than DSL.

Fiber-optic is also not vulnerable to the problems of DSL such as storm damage, or Cable with slower speeds during peak use times.

Check your internet upload speed here: <https://www.speedtest.net/>

Recording

With this equipment and a good audio production program like Logic Pro, GarageBand (or BandLab for PC), Audacity, etc, you can make really high quality sounding recordings for your breathwork meditations.

<https://rotorvideos.com/blog/guide-best-music-production-software>

The Yamaha AG mixers also come with a free version of the Cubase audio production software to try out. You would have to pay to use the full version though. You do not need to download it to use the mixer!

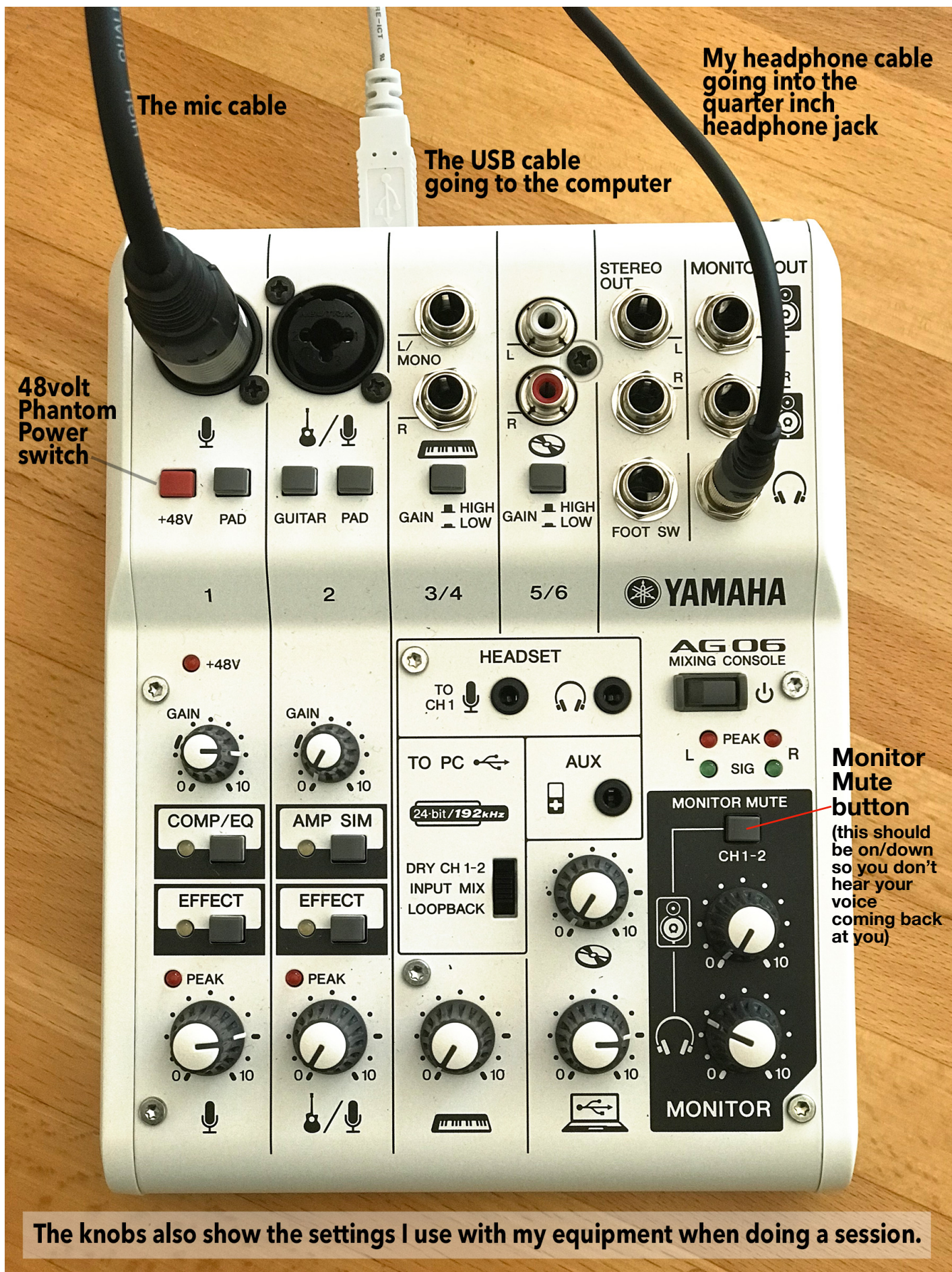
More info:

https://usa.yamaha.com/products/music_production/interfaces/ag_series/index.html#product-tabs

Yamaha AG Mixer Setup

1. Plug your mixer into your computer using the white USB cable.
2. Plug in your XLR cable mic into the top left input and if you have a mic with phantom power, then press down the red 48v button.
3. Plug in your headphones.
I use the headphone jack, but you can also plug in a headset or 1/8 inch jack headphones into the headset jacks in the middle of the mixer.





The mic cable

The USB cable
going to the computer

My headphone cable
going into the
quarter inch
headphone jack

48volt
Phantom
Power
switch

Monitor
Mute
button
(this should
be on/down
so you don't
hear your
voice
coming back
at you)

The knobs also show the settings I use with my equipment when doing a session.

4. Now you can set the gain for your mic.
5. Follow the steps in the manual, or the video below for the rest of the setup.

Setting up the mixer

You do not need to download anything in order to use the mixer.
Although if you use Windows, you may need a driver depending on your system.

Yamaha offers a free download of their DSP Controller software app if you want to edit the compressor, EQ, high-pass filter, reverb, and amp simulator parameters.
But this app is not a necessity, the mixer will also work without it.

Here is the setup info for the mixer when used for webcasting such as on zoom:
https://uk.yamaha.com/en/products/music_production/interfaces/ag_series/guide/index.html#product-tabs

There is also a link at the top of the page for music production setup.
If you need this in another language or country, you can go to

This is the best video showing you how to initially set up the Yamaha AG06:

Yamaha AG06 Audio Mixer | Setup, Demo, & Review
<https://youtu.be/sqB-o4PEQAU>

If you want to use the DSP Controller app, this explains it:
Yamaha AG03 Mixer - DSP Expert Mode
<https://youtu.be/ljlOnvMkxVs>

AG Mixer Zoom connection

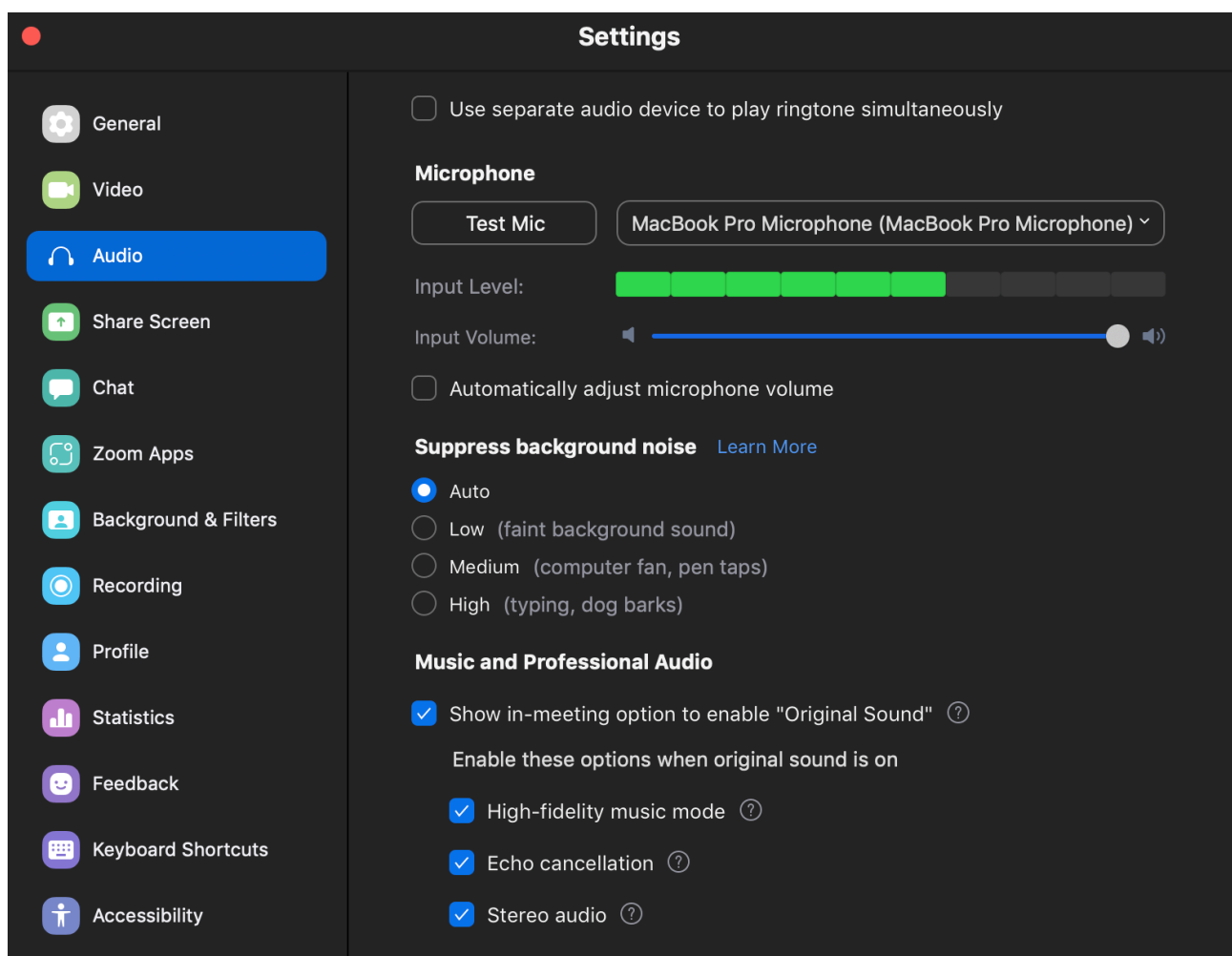
First adjust your settings in Zoom.
You need to turn on “Original Sound”.

You can use the settings I show below.

Echo cancellation is necessary if you are using loopback or else your participants will hear their voice echo back to them.

If you use input mix, you do not need to use echo cancellation in the Zoom settings.

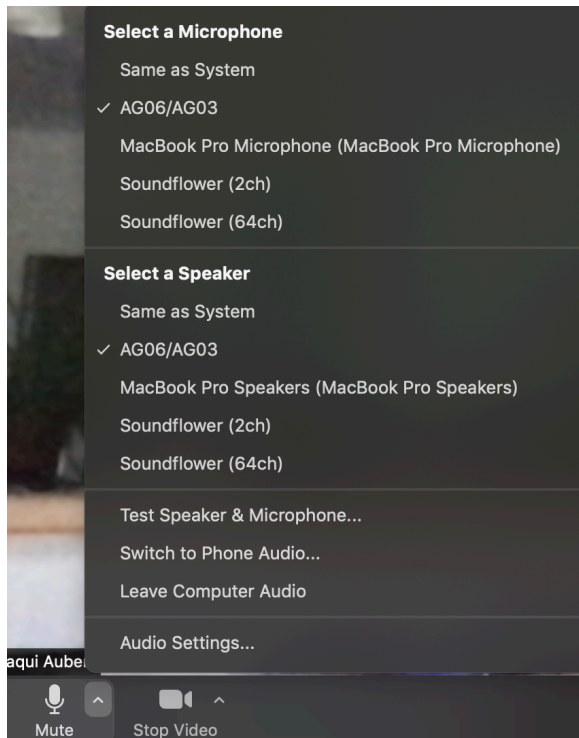
Stereo audio is optional. It takes more bandwidth, but if you have a fast upload speed, then turn it on. I am still not sure if it works though. I have never heard it work. I have to do more testing.



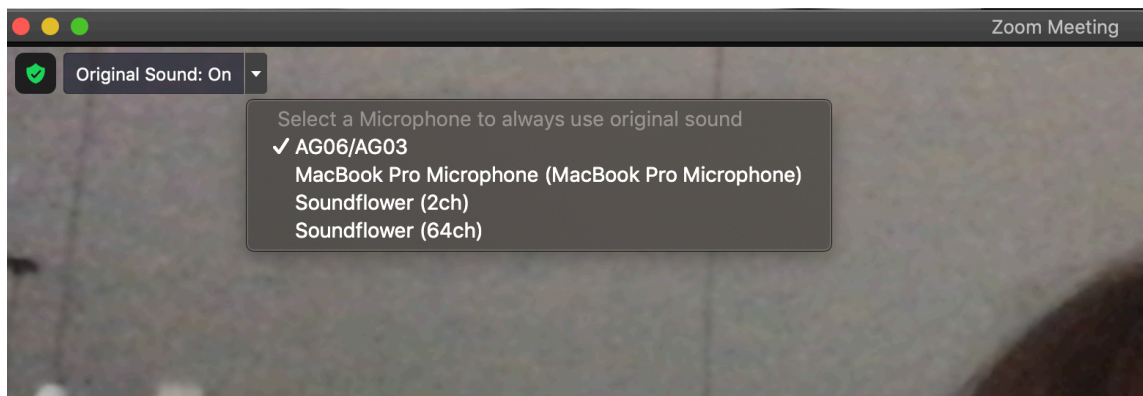
Now once your mixer is properly connected to your computer, open your computer sound settings and make sure your computer is using AG06/AG03 for input and output.

Then launch your Zoom.

Make sure both mic and speaker are on AG06/AG03



Make sure “original sound” at the top left of the screen is “on” and when you click the little arrow the AG06/AG03 should be checked



Make sure any music programs that you use are also using the AG06/AG03 for their output.

You do not need to use the Zoom screen or audio sharing in order to play your music.

So you do not need to be a host.

You can now test your sound by doing a short Zoom recording. You can use this recording test on Zoom to find your volume settings, or you can do it live with someone listening.

When you use the mixer, you will not have to turn down the music low like with the regular Zoom audio share. The volume level you hear in your recording is, as far as I know, the same as what participants hear. But the quality of the sound may not be as good for the participants as in your own recording because that will depend on their personal internet connection.

You will probably want to turn the music level down just for yourself - (the music as you hear it in your headphones with the headphone knob in the black box "MONITOR" section).

You will also need to press down the "MONITOR MUTE" button so that you do not hear your voice coming back at you in your headphones.

1. Test yourself talking with no music.
2. Test with the "COMP/EQ" button off and also on to see which is best.
3. You can also test how it sounds when you turn on the "EFFECT" button for your mic to add echo to your voice.
4. Put the "TO PC" button on loopback, and test playing music from your computer.
5. Test talking over the music.

If you're using another device than your computer to play your music connected to the "aux" input, you do not need the "loopback" setting. You can use "input mix". If you use the "aux" input, you will need to control the volume of the music on that device.

My Experiences with the Mixer

I have had the mixer now for 8 months and I always use it for sessions. Even though I have a really low internet upload speed using DSL, I have never had a problem running the music through smoothly with very few internet hiccups.

I have found that the music is smoother when I turn off my video during the actual session. That works easily with 1-on-1 clients, especially when you know they will have their eyes closed during the session.

I have also used the mixer for my Soma Sunday session and my session for the Soma Mind-Body-Soul Workshop. For those I did not turn off my video and the sound was still good.

(Although, if anyone saw my Soma Mind-Body-Soul Workshop session, you may have noticed there was a soft buzzing sound throughout - THAT WAS NOT BECAUSE OF THE MIXER. It was because I had plugged in my USB ring light into the same multi-outlet-extension cord where my computer was plugged in. That was probably a personal situation, but I do suggest if you use a USB ring light that you plug it into a different outlet than your computer.)

When I did my Sunday Session, I shared a video with sound while using the mixer. It did not work smoothly unless I used the regular Zoom sound sharing, so I used the advanced video share and turned off my Zoom mic and video. This needs further testing. It may also be personal, so do your own testing.

What is really important to me is to be able to do sessions and know there is no time lag between the music, counts and what I say. I can count or breathe live and know it is always in tempo. Because I have a personal style of doing breathwork meditations with a sort of rhythmical guidance, this is also important for me.

Other than that I love using the mixer for sessions and also to record. My clients all love the echo effect that I turn on when doing the meditations. And when I record the Zoom sessions on my computer, the sound quality is really good, and then I can share that replay with the clients.

I am not recommending to anyone to get this mixer though. It is very personal depending on what you want and how you do your sessions, and there are pros and cons. I am just giving the info that I know. I have not necessarily found that the quality of the music is better for the client because I use the mixer (but that can also be because of my internet speed). So, it really boils down to whether you want to get rid of the time lag, add effect on the voice, play music or give a session without being a host, use it for recording or live sessions, or adding an instrument to the second channel on the AG06.

Using the Mixer with a PC

Soma Instructor Josef Steiner uses the Yamaha AG06 with his PC and Windows.

He uses 2 computers. One for Zoom and one for playing the music through “input mix”. His basic setup will also work for one computer though.

This video can also be helpful for people setting up with a Mac computer.

He did a video on his set-up.

Here is the link:

<https://youtu.be/FgMyvGh4HDc>