

Online Lessons With Zoom

Mac System Requirements:

Versions - Mac OS X - 10.10 Or Higher.

Dual-core 2Ghz or higher (Intel i3/i5/i7 or AMD equivalent)

Ram - At Least 4 GB.

Bandwidth Requirements:

For 1:1 video calling:

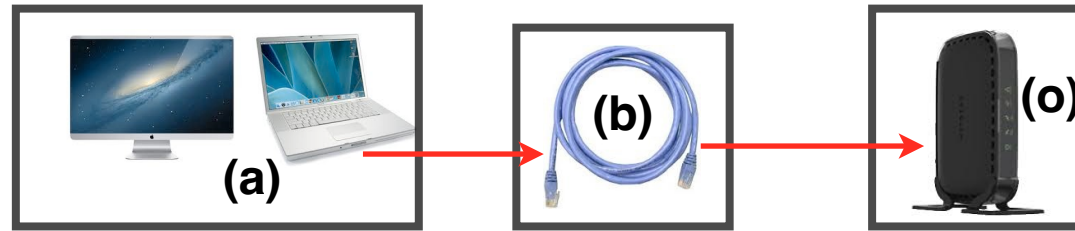
For high-quality video: 600kbps (up/down)

For 720p HD video: 1.2Mbps (up/down)

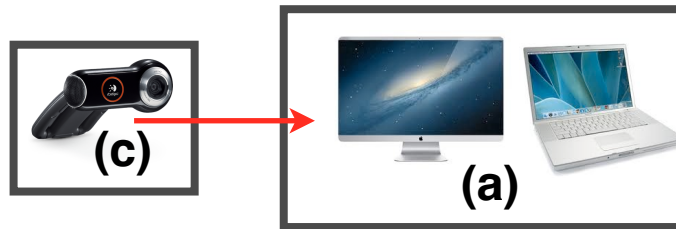
For 1080p HD video: 3.8Mbps/3.0Mbps (up/down)

Recommended Online Gear Setup

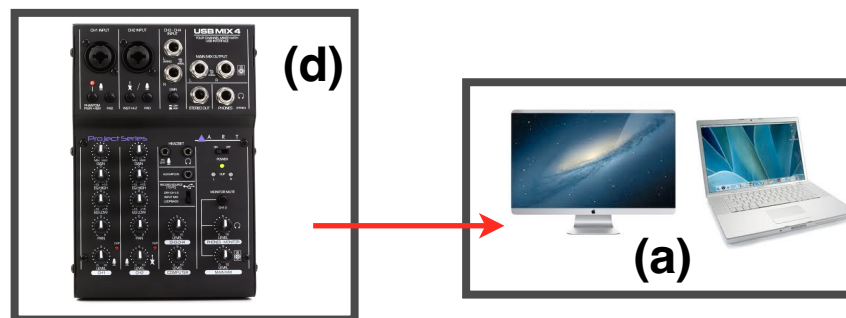
- 1) A hardline connection from your computer-(a) to your high-speed internet modem-(o) using a ethernet cable-(b).



- 2) A usb connection from an external webcam-(c) to your computer-(a).



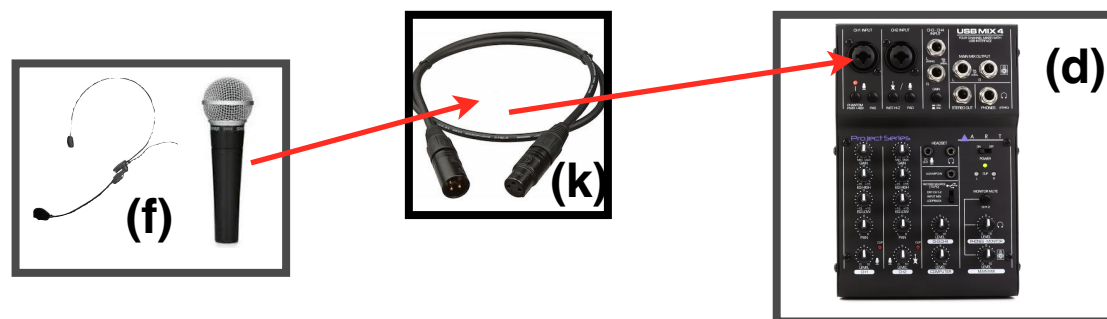
- 3) A audio connection from your mixer-(d) to your computer-(a) using the usb cable that comes with the mixer.



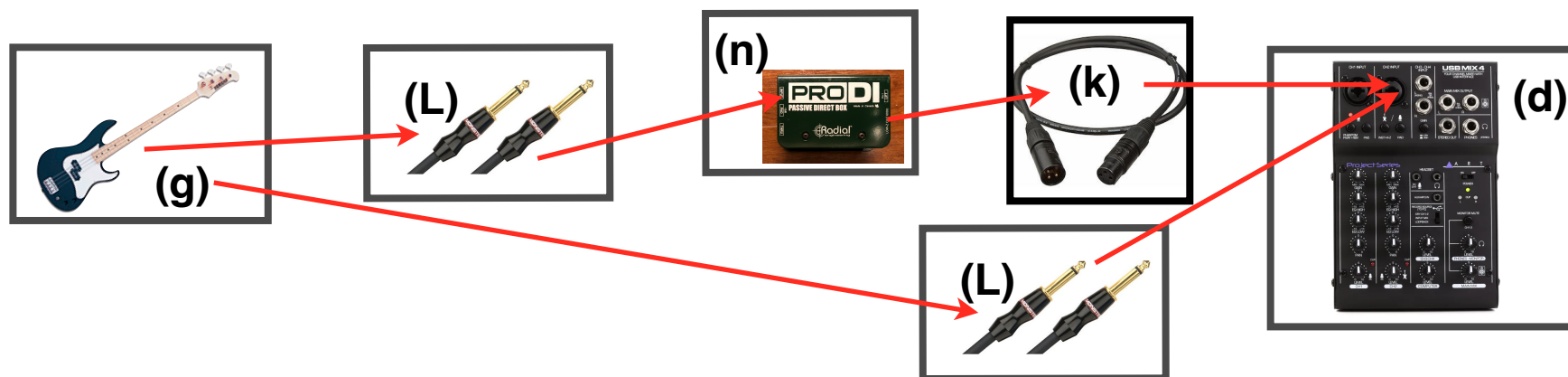
4) (Optional) - A connection from your computer-(a) to an External monitor-(e) with either a DVI, VGA, or a HDMI connection-(o).



5) Your voice microphone-(f) with a XLR connection-(k) plugged it into channel 1 of the mixer-(d) should be the only live mic you should use during the lessons. This will allow you to balance your voice volume with the other audio for you and the teacher. ***I recommend a regular vocal microphone on a stand.***

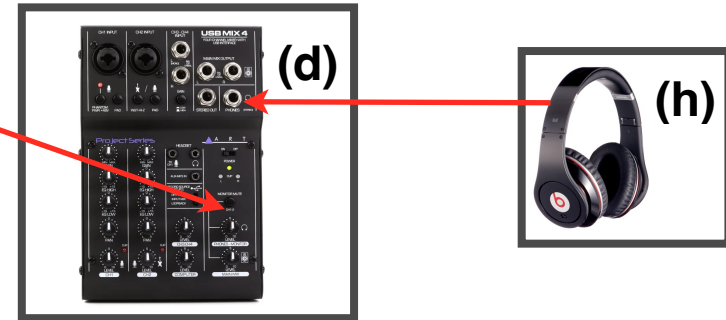


6) You should plug your bass-(g) into the input of channel 2 on your mixer with a standard 1/4 inch instrument cable-(L) or an XLR cable-(k) if you are using a direct box-(n).

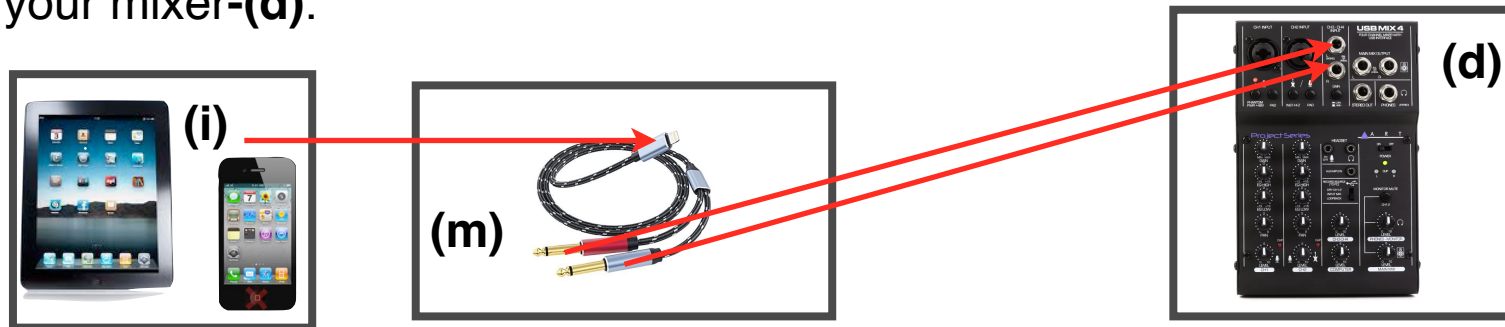


7) Your headphones-(h) should be used to listen to all of the audio during the lesson. Plug your headphones into the (1/4 inch) headphone jack on your mixer and adjust your headphone volume from the (Phones - Monitor) volume control on your mixer-(d).

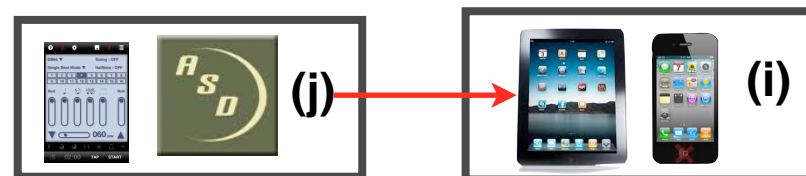
(Phones - Monitor Knob)



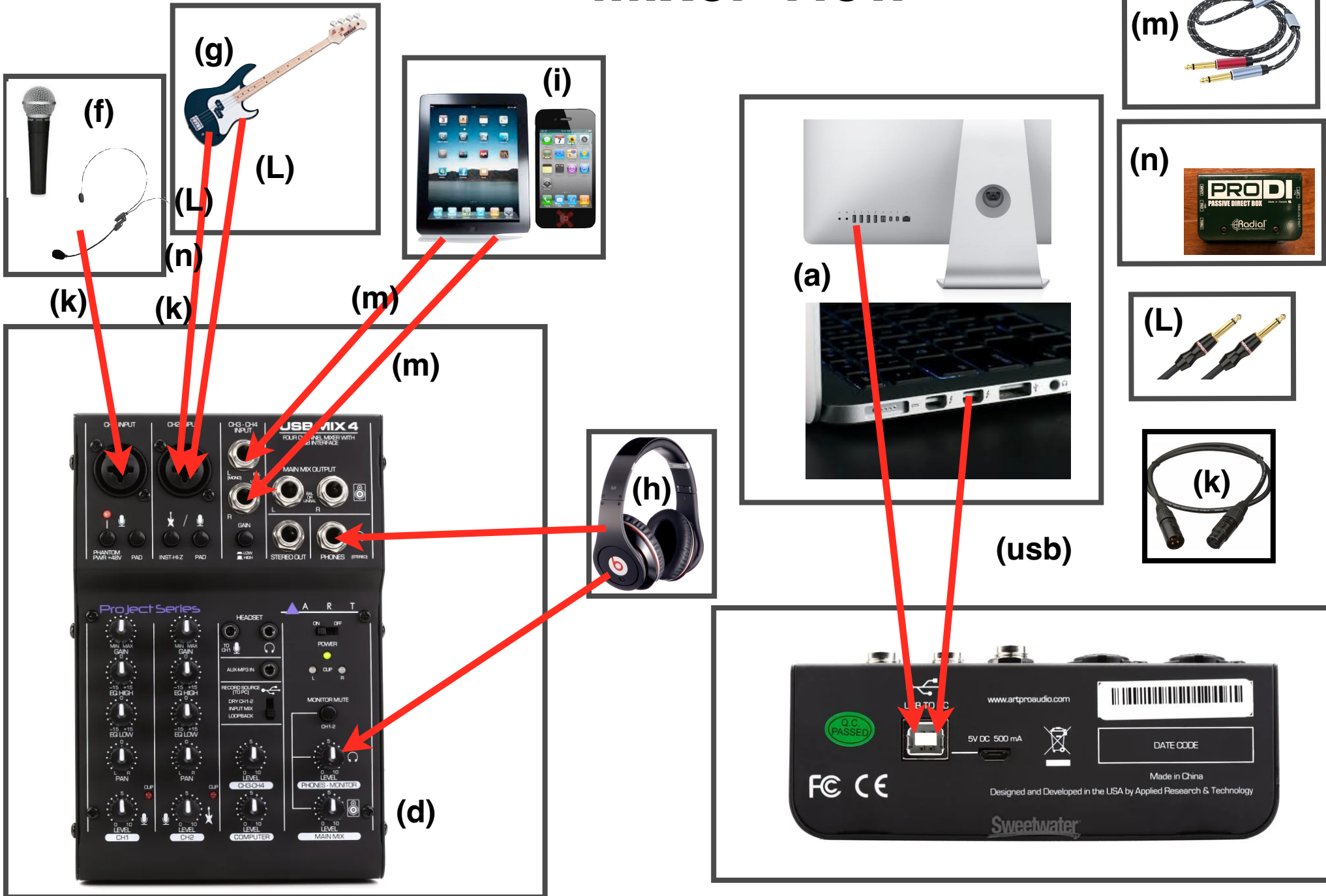
8) You should connect from your audio playback device-(i) using what ever audio connection is needed from your phone or tablet split to 2 mono 1/4" cables-(m) into the line in 3/4 L/R input channels of your mixer-(d).



9) I recommend using a separate audio playback device-(i) that can run apps such as the **Amazing Slow Downer-(j)** - <http://www.ronimusic.com> and the **Dr. Betotte metronome app** - <https://itunes.apple.com/us/app/dr.betotte-tc/id290528338?mt=8>-(j)



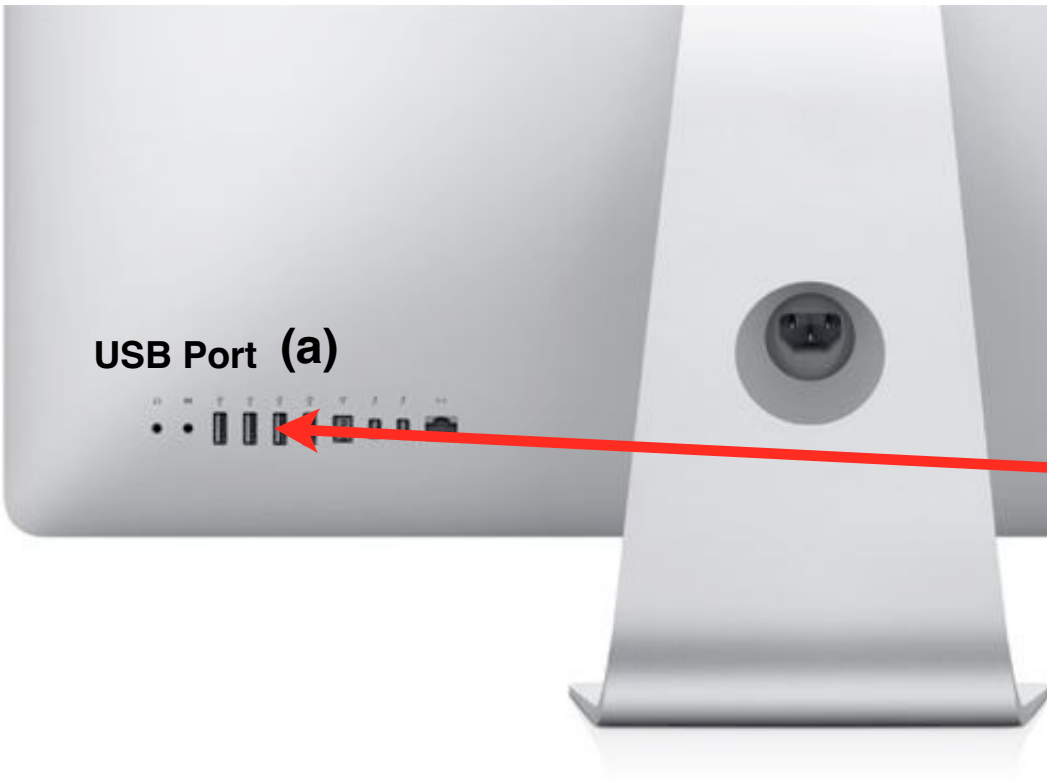
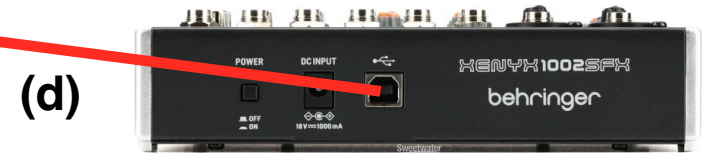
Mac Audio Hook Diagram For Zoom Mixer View



Mac Audio Hook Up Diagram For Zoom Computer View



USB Connection From The Mixer-(d)
To The USB Port Of The Computer-(a)



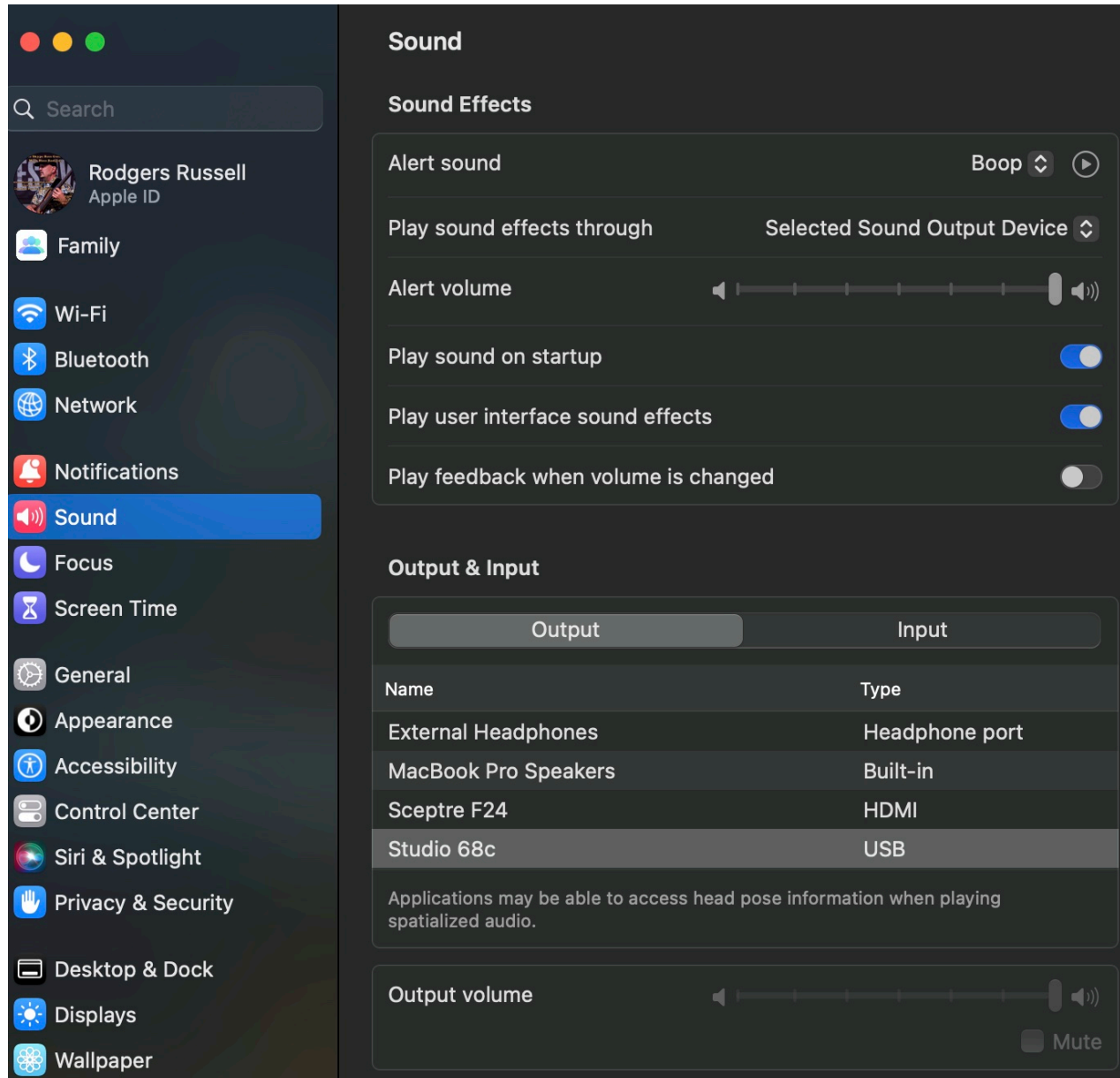
USB Connection From The Mixer-(d)
To The USB Port Of The Computer-(a)



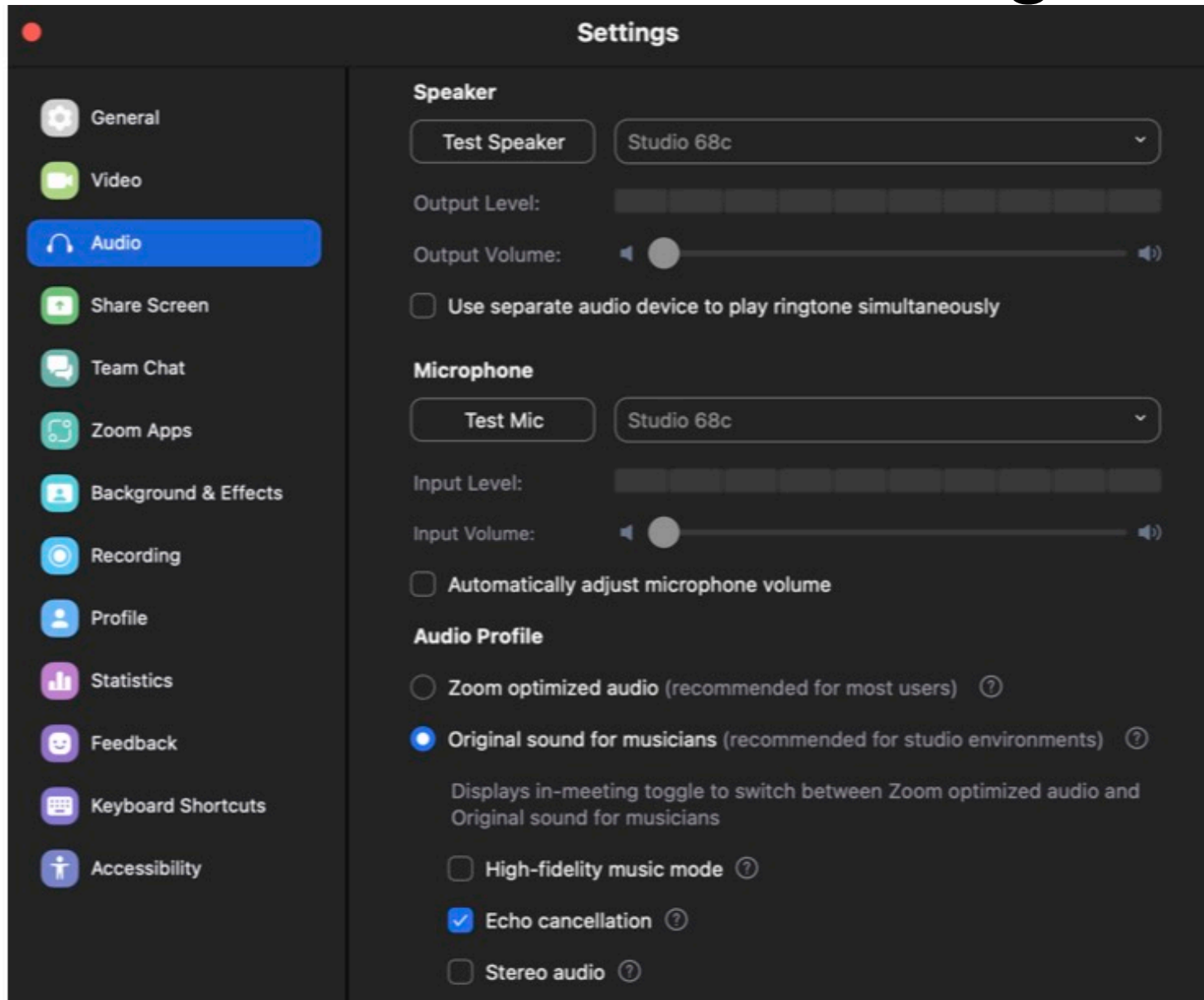
Recommended For A Better Lesson Experience

- 1) Your External webcam-(c) should be mounted away and up on a stand pointing at a downward angle towards you. The camera in your computer will work, but has a limited field of view.**
- 2) Using an external monitor-(e) although optional will allow you to view pdf files and other materials while also being able view the instructor. You will need to make sure you have the necessary adapter to connect from your computer, usually it will be a HDMI connector.**
- 3) For the fastest internet possible, it is best to use a hard line connection using a ethernet cable from your modem to your computer. (*Wifi Usually Does Not Work As Well*).**
- 4) Use a USB Hub if your computer does not have enough or the right kind connection ports.**
- 5) Store lesson videos and curriculum on a separate hard drive to save space in your computer which will help it run better.**

This Is What Your Output Audio Settings Should Look Like In Your Computer System Preferences



This Is What Your Audio Settings Should Look Like In Your Zoom Settings



Recommended Audio Gear For Lessons

1) ART USBMix4 Mixer with USB Interface

\$106.00 At Sweetwater

<https://www.sweetwater.com/store/detail/USBMIX4--art-usbmix4-mixer-with-usb>

2) What ever stereo audio connection is
needed from your phone or tablet to split 2 mono 1/4" cables
Can Order on Amazon

3) Radial ProDI 1-channel Passive Instrument Direct Box

\$130.00

<https://www.sweetwater.com/store/detail/ProDI--radial-prodi-1-channel-passive-instrument-direct-box>