

Online Learning Resources

Audio Set Up Tips for Zoom

Microphones are not able to discern between noise and sounds of interests. It is best to set up your recording or video chat equipment in a quiet environment while keeping the microphone as close as practical to the sound source.

General microphone set up for high strings and woodwinds

- Set microphone at your height, either standing or sitting.
- Set the microphone an arm's length away from you and aim it at your instrument.

Low Strings

- Set your microphone at about the height of the bridge approximately 1-2 feet away.

Brass

- Trumpet, trombone: aim the microphone at the instrument from 3-4 feet distance placed higher than your playing position.
- French horn can be miked from front or the side, between the bell and valves.
- Avoid placing a microphone directly in front of the bell of your wind instrument.

Piano

- If using only one microphone, place it around middle C about 3 feet away from the instrument.
- For a good balance of speech and piano, a microphone stand can be placed on the treble side of the keyboard by the lid stick (the open side of the lid, if open). With an upright piano, the stand could be on either side of the keyboard. The goal is to aim the microphone at the middle of the keyboard and a bit toward the player.

Harp

- Aim your microphone at the soundboard placing it 2-3 feet away, about half the height of the instrument.

Percussion

- Place the microphone above and in front of your instrument(s) 2-3 feet away.

Speech

- The microphone should be placed directly in front of you, preferably 1-2 feet away. For singing, make sure to move the microphone 2-3 feet away from you.
- Using a windscreen (foam insert) or pop filter will minimize plosive sounds like "p" and air conditioning noise blowing across the microphone.
- If you need to use the microphone for playing the instrument and speech alike, be aware of the microphone position when you are switching from one to another.

High Fidelity Music Mode in Zoom

The new High Fidelity Music Mode was included in the latest update (Version 5.2.2*) and is now available to everyone. This update is available for all versions of Zoom, both institutional and individual.

First, update your software on your desktop or laptop --> <https://zoom.us/download>. The update will be the very first “Download” button you see for “Zoom Client for Meetings” (Version 5.2.2).

Notes about the High Fidelity Music Mode

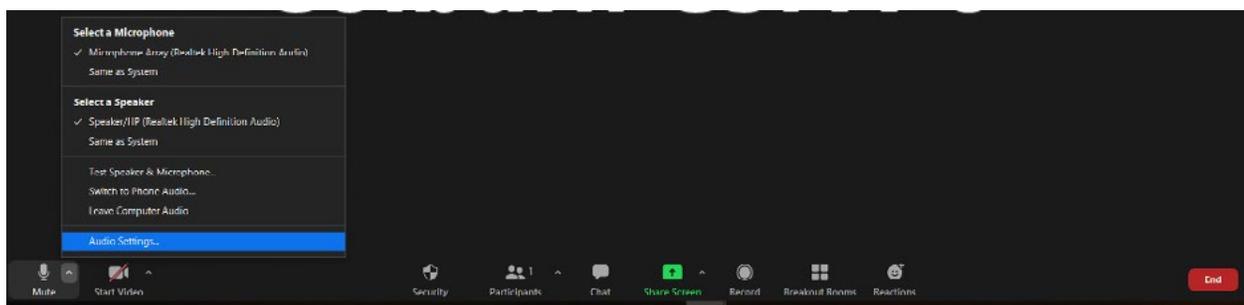
The Zoom feature is a big improvement if you have a good internet connection, a computer, and ideally an external mic and are willing to use headphones (with open backs recommended). Even without an external mic, it sounds better than before the update—and even using the internal speakers on the computer, it is clearer and without distortion.

Please understand that sound is still contingent on other factors. External equipment is needed to make this mode work best. The teachers need the Zoom settings to hear what the student is playing, but for the best signal possible, the student needs the external microphone and Ethernet.

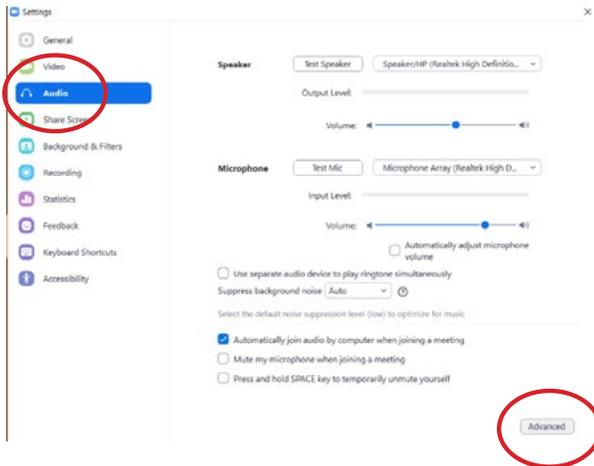
Whenever listening, teachers and students should wear headphones to eliminate hearing yourself echo back over the other person’s sound system—the student can take off the headphones while playing but should be wearing them whenever the teacher demonstrates.

To enable High Fidelity Music Mode

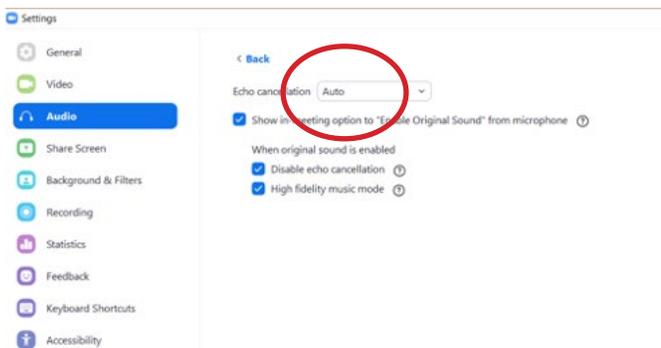
Download the latest software update for Zoom <https://zoom.us/download>. While you are in a Zoom meeting, click on the arrow next to the microphone to open Audio Settings.



Click Audio on the left side menu, then click on the “Advanced” button on the bottom right-hand corner.



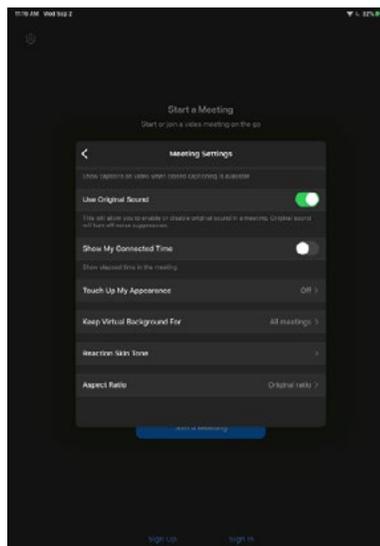
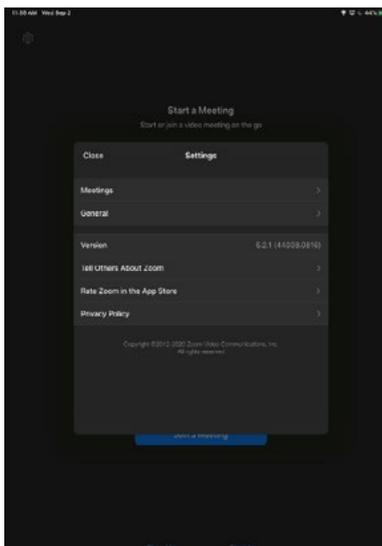
In Advanced Settings, from the drop down menu, change Echo cancellation to “Auto.” Then, check the three boxes marked “Enable Original Sound,” “Disable echo cancellation,” and “High fidelity music mode.”



For easy to follow how-to video tutorials on scheduling meetings, creating breakout rooms, etc., visit <https://support.zoom.us/hc/en-us/articles/206618765-Zoom-Video-Tutorials>.

Because the High Fidelity Music Mode is not available for iPads or other mobile devices, please use the original sound.

- When using an iPad or other mobile device, access Zoom settings:
- choose “Meetings” and then
- scroll to “Use Original Sound” and turn it on.



Guidelines to Improve Wireless Internet Connection

- Avoid keeping your wireless router tucked away in a closet or hidden behind furniture.
- Stay as close as possible to the wireless router. If you are experiencing connection issues, try doing a test from the same room where the router is located.
- Keep your iPad or other mobile devices away from large metal objects (i.e. metal music stands).
- Avoid streaming movies, games, or downloading heavy files while on a session.
- If everything fails, power cycle (turn off and on again) your wireless router and or modem.
- If it's not possible to move closer to your wireless router, consider using a "range extender":
 - For large homes: [Range Extender](#)
 - Budget-friendly: [Range Extender](#)
- Additionally, you can use a powerline adapter: they use the interior electrical wiring to send network packets from the router directly to the computer. You just plug them into the wall sockets and then connect Ethernet cables on each side. This is useful if students cannot plug an ethernet cable from the router to their device. They use the interior electrical wiring to send network packets from the router directly to the computer. You just plug them into the wall sockets and then connect Ethernet cables on each side. A pair of them cost approximately \$60.
 - [Buy them here](#)

Adapters to allow a wired internet connection and audio interface with iPad and iPhone

[Lightning to USB 3 Camera Adapter](#)

Price: \$39

[USB-C Digital AV Multiport Adapter](#)

Price: \$69

[Apple USB Ethernet Adapter](#)

Price: \$29

[How to connect an Android to a wired internet connection](#)

Recommended Microphones

Colburn's AV recording arts and technological solutions team recommends three microphones for you to explore in order to enhance your private lesson experience. Please find the list below with the price and a direct link for each product.

[The Blue Snowball Microphone](#)

Price: Between \$49.99 and \$69.99

Strengths—Super easy to use and inexpensive.

[The Shure MV88+ Video Kit](#)

Price: \$249

Strengths—Works with mobile devices and computers.

Option Three: [Entrance Mixerface Mobile Mixer + Recorder](#)

Price: \$199+

Strengths—Produces the highest quality sound, but you will also need to purchase microphone cables, headphones, and a microphone for recording.

Using CEntrance Mixerface R4 interface

1. Connect the left USB port to your computer or mobile device.
2. Right USB port should be connected to USB power supply.
3. Plug in the microphone into Input 1 socket.
4. Use the tool included in the box or paperclip to turn on the 48v switch to “On” position, this will power the microphone.
5. Hold the Power button on the right to turn on the interface.
6. Set the Gain 1 knob between “12” and “3 o’clock,” use less gain if the red peak light comes on. red peak light comes on.
7. Set Channel 1/USB knob at “12 o’clock.” If you want to hear more of yourself, turn the knob counterclockwise, if you want to hear more of the other party on Zoom or other applications, turn the knob clockwise. Use the Monitor knob to adjust your headphone level.



Less expensive recording set up

[Gaming Camera for Streaming - Razer Kiyo Webcam](#)

Price: \$99.99

[Blue Yeti Microphone](#)

Price: \$129.99

[Tripod Stand](#)

Price: \$99.95



Other Schools Computer Guidelines/Recommendations

[Peabody \(Technology Requirements\)](#)

[Peabody Guide for Using Zoom in “Music Mode”](#)

[Peabody Zoom for Students and Families](#)

[UCLA Microphone Guide](#)

Additional Resources:

[Zoom FAQ's](#)

[11 Ways to Upgrade Your Wi-Fi and Make Your Internet Faster](#)

Please note that software is subject to updates and proper usage. Equipment/materials referenced herein are not required but serve as suggestions. All equipment/materials are subject to price changes and availability.