



Tech Guide for Online Lessons

Home Internet Service Bandwidth

- Ideal internet speed for online lessons is 100MB download and 5MB upload, any less than that gets bad results.
- Not sure what your internet speed is? Run an [Internet Speed Test](#) to find upload speed, download speed, and latency. Try an ethernet connection for more speed. Latency is the lag rate and often affects how well sound and video appear to be in sync.
- If your internet speed is good (get off other devices to improve, see below) but you have more than 30 sec latency, unplug and plug back in your router to get latency below 30 seconds.

Technology Requirements

A computer or tablet, with zoom.us software installed (not phone!)

A relatively cheap microphone plugged in to your device, options below (all come with a stand)

USB Mic Recommendations for Computer:

- [Samson Condensor Mic](#) \$40
- [Blue Snowball](#) \$50
- [Fifine USB mic](#) \$45

Mic Recommendation for IOS tablet (also works with computer)

[Shure MV5 mic with USB & lightning](#) 99\$

ZOOM SETTINGS FOR LESSONS

General settings, only need to set before the first time:

- go to settings, then audio, then advanced
- Set "Suppress Persistent Background Noise" to "Disable"
- Set "Suppress Intermittent Background Noise" to "Disable"
- Click "Show in-meeting option to 'Enable Original Sound'

Then during lesson:

Toggle top left to "Enable Original Sound"

Need to see a tutorial on this?

Royal Academy of Music has a [YouTube Tutorial](#) for these settings

During the lesson tech recommendations:

- The fewer devices that are actively online in your house while we are in session, the better!
- Make sure that no one is playing Xbox or streaming Netflix during the lesson. You may have to shut down anything that is competing for bandwidth, i.e. other computers.
- Close other applications and browser windows for the lesson to increase your computer processing speed.
- Hook up an external speaker to your computer to make your teacher's sound clearer and more beautiful

Still experiencing lag and sync issues? Some things to try:

- 1) Well before your lessons, turn your router off (unplug) for 30 seconds and back on. Check latency 10 min later, it should be better now.
- 2) During the lesson, turn your wifi off at the computer level, and then back on - this allows the video and audio coming in to be more in sync.
- 3) Last resort: You can also "stop your video" during the session and go with sound only temporarily.



Room & Camera Set up for Online Lessons

Visibility is key!

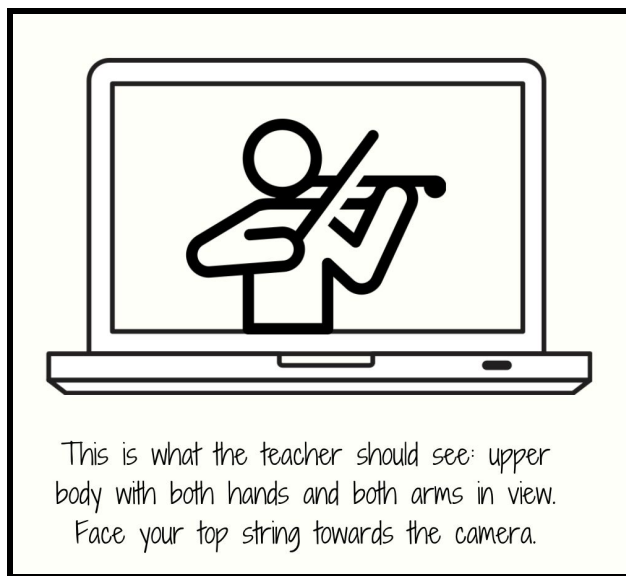
Set up with plenty of room to play and be tuned, ready to go 5 minutes before the lesson starts.

Once the optimal configuration is found, if at all possible, leave most physical “set up” in place in between the lessons.

Follow these set up guidelines:

- Your stand should be in front of you.
- Your computer/tablet on a table, desk or wide window ledge, with mic (and speaker if you want) plugged in.
- Tablets should be vertical in space, not slanted (you may have to get creative...this is why laptops are the best).
- An additional manhasset stand with a towel can serve as a table (make sure it is stable).
- Computer should be slightly to your right (think 2 o'clock for an angle).
- Light (natural or artificial) must be shining on your face, not coming from behind you and shining on your back. Make sure there are no windows directly behind you.
- Make sure both arms and hands plus your head can be seen in the camera view.

Here is the view that the computer camera should have of you:



During the lesson:

Enter full screen mode (top right), then either “pin” your teacher to see only them, hit or the rubric’s cube top right to see the both of you side by side.