

# Using Zoom for Live-Streamed Lessons (PC version)

## Overview

The Zoom conferencing platform's native sound settings are optimized for spoken dialogue rather than the transmission of music. However, through some simple software adjustments and using affordable external audio equipment, Zoom can also be used to conduct effective live-streamed music lessons with high audio quality.

## Equipment

- 1) either a phone or webcam-capable laptop, with Zoom installed on this device
- 2) external microphone
- 3) (optional) headphones or earbuds

## Setup

### Hardware Setup

- 1) It is ideal to use an external microphone with your laptop or phone due to the superior frequency response of a dedicated microphone compared to an earbud/phone mouthpiece or computer's built-in microphone. There are many affordable options that can function as an external microphone for both phones and laptops:

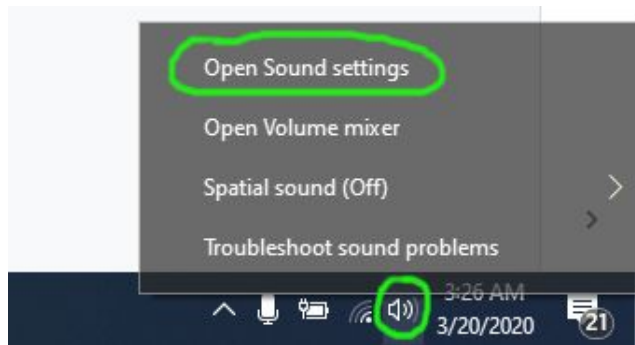
Mic options for laptops	Mic options for phones
Zoom H1n, H2n, H4n Pro, H5n, H6n portable audio recorders <sup>†</sup>	Zoom iQ6 (iPhone Lightning plug)
Tascam DR-05x, DR-07x, DR-40x portable audio recorders <sup>†</sup>	Zoom iQ7 (iPhone Lightning plug)
Rode NT-USB microphone	Shure MVL (2.5 mm headphone jack)
Audio-Technica AT2020USB+ microphone	
[for those with XLR mics or line inputs] Scarlett 2i2 USB interface	

<sup>†</sup>the portable audio recorders listed here have been confirmed to have an option (typically listed as "Audio I/F", where "I/F" stands for "interface") that will appear when the audio recorder is plugged into the computer via USB cable

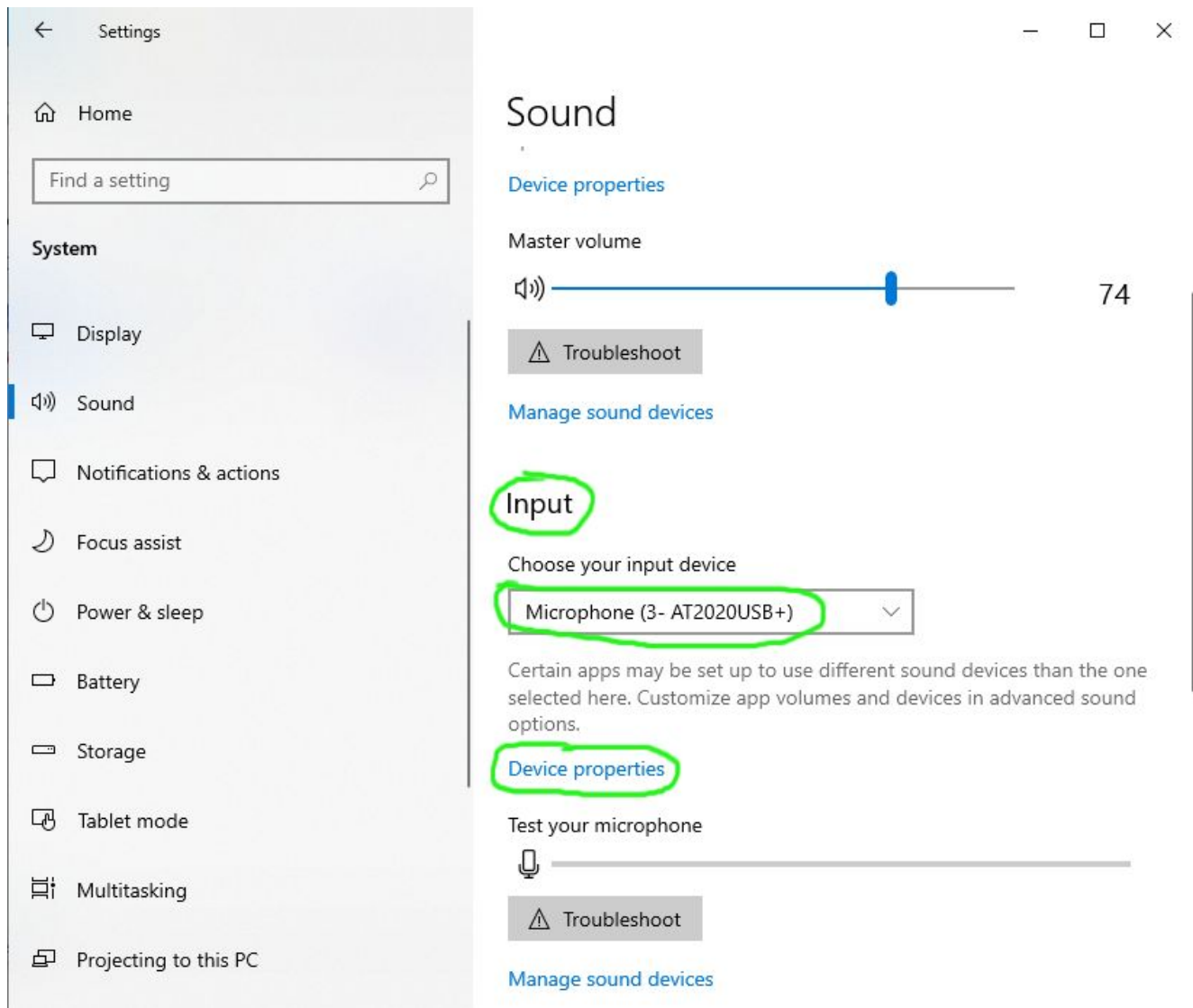
The instructions below are shown for a scenario when the Audio-Technica AT2020USB USB microphone is connected to the computer, but can be generalized for any external microphone.

## Software Setup

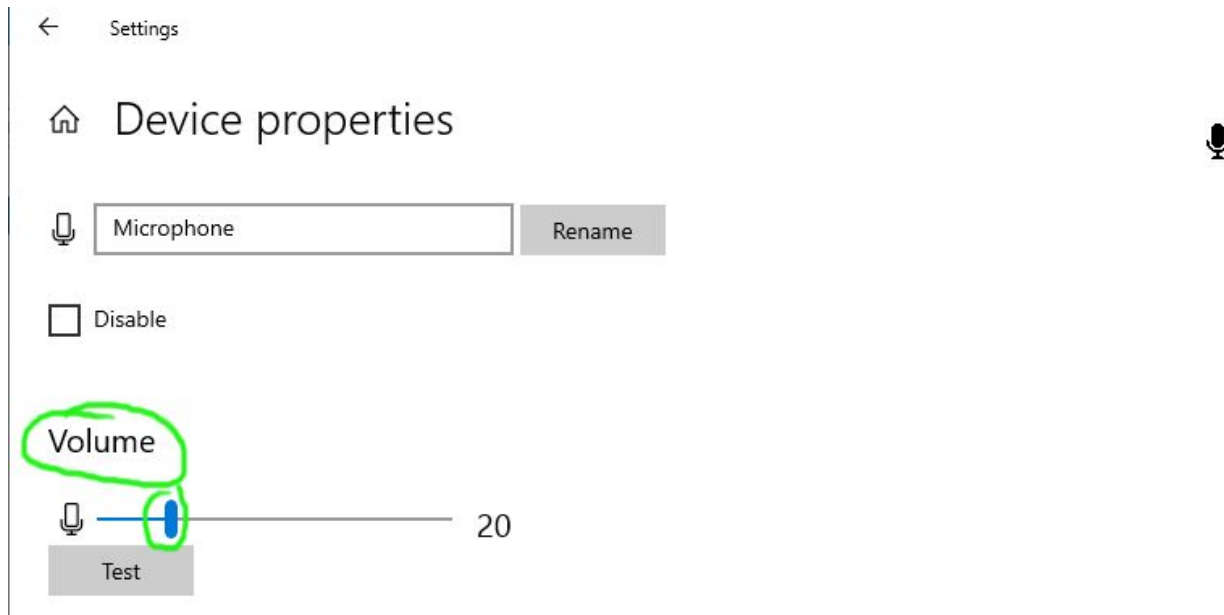
1) Open your computer's sound settings (right-click on the volume icon):



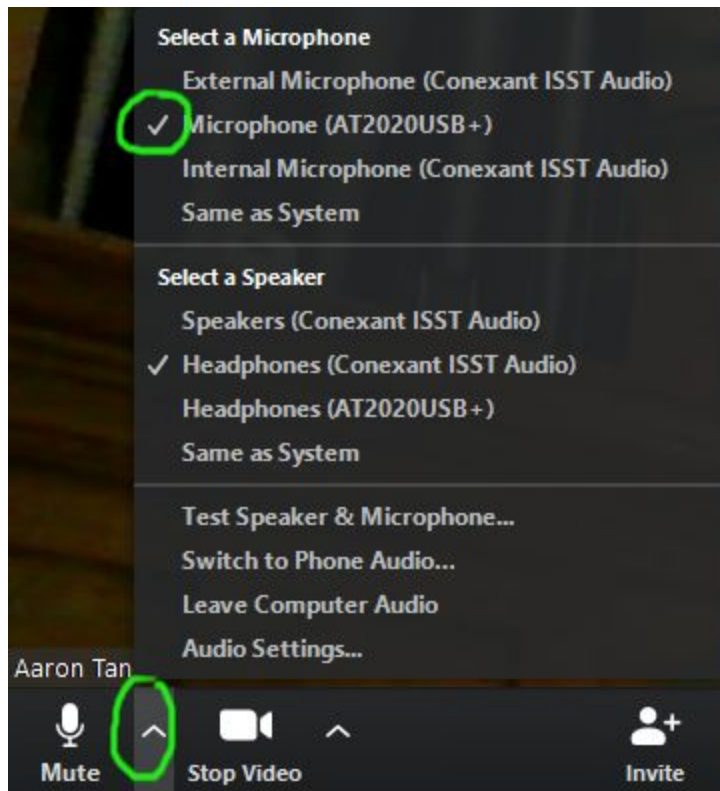
2) On the Sound window that appears, search for the **Input** section, and select the external microphone (e.g. AT2020USB) as the input device you want to inspect. Click “**Device properties**” below.



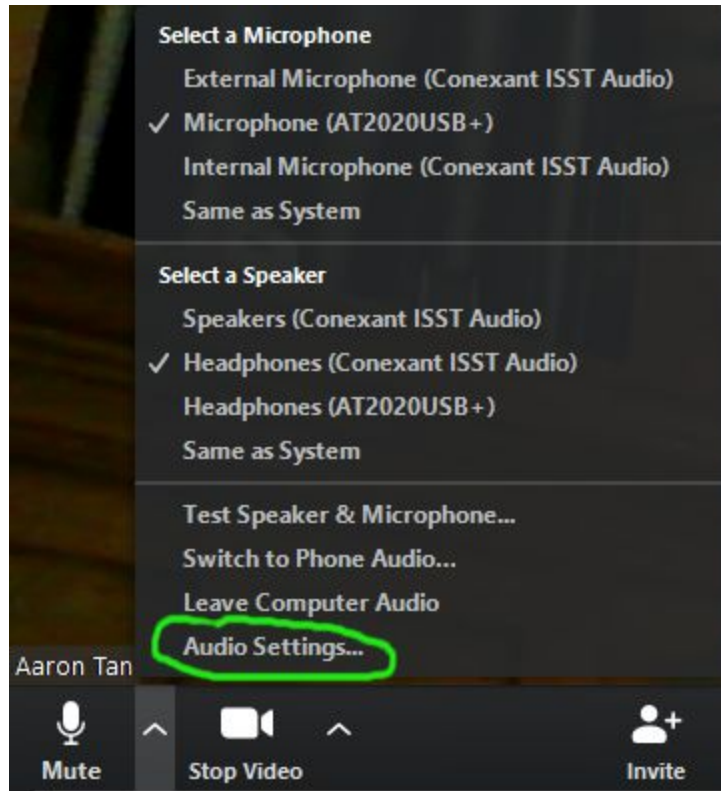
3) In the “Device properties” window, adjust the blue **Volume** bar of the microphone to a fairly low level (e.g. 20 to 40).



- 4) Start a new meeting in Zoom. You may select the “Join with Computer Audio” that pops up.
- 5) On the bottom left corner of the Zoom window, click the arrow next to the microphone symbol:  
And make sure that the external microphone (e.g. AT2020USB) is selected:



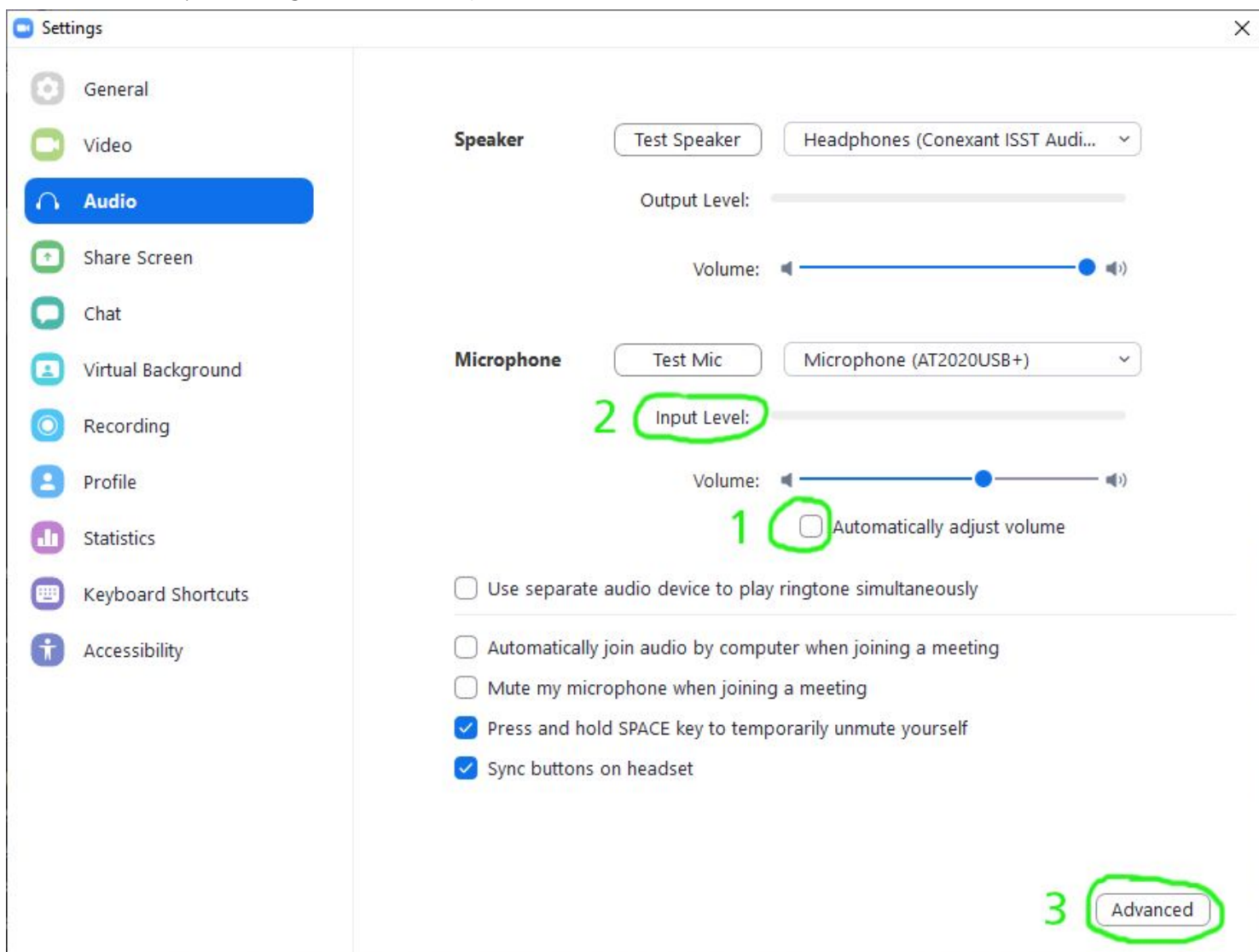
6) Next, select **Audio Settings...** on the same menu:



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7) In the **Audio Settings** window that appears:

- 1 Uncheck “Automatically adjust volume”
- 2 Play/sing your loudest sound, and make sure that the interactive Input Level monitor bar does not saturate all the way to the right. If it does, adjust the blue dot on the Volume bar leftwards to lower the mic level.

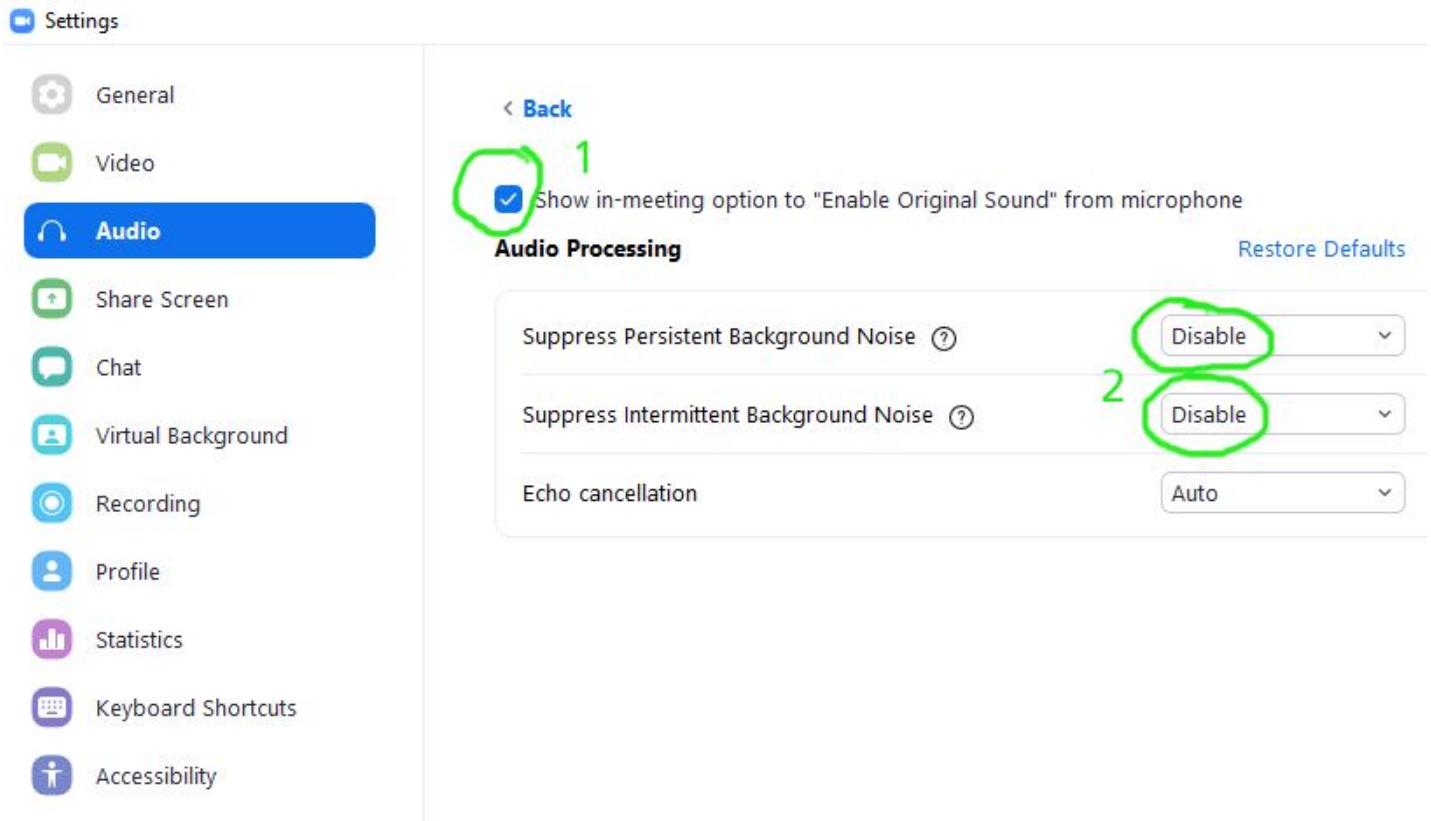


3 Finally, click the “Advanced” button on the bottom right corner.

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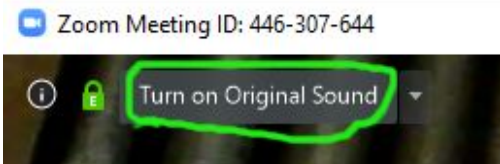
8) In the Advanced window below:

- 1 Check the option “**Show in-meeting option to “Enable Original Sound”...**”
- 2 Select **Disable** both for “Suppress Persistent Background Noise” and “Suppress Intermittent Background Noise”

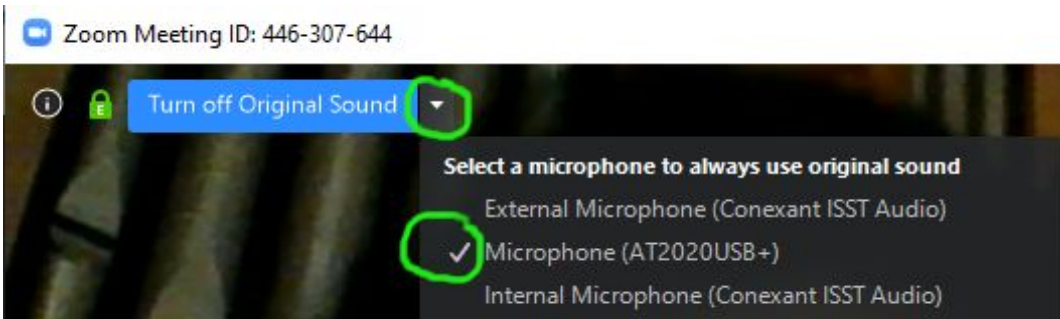


9) Exit the Audio settings window and go back to the main Zoom window (with webcam).

On the top left corner, click the option to **Turn on Original Sound**.



Once you have clicked “Turn on Original Sound”, it will then read “Turn off Original Sound”. Click the little arrow to the right of this to verify that the external microphone you are using (e.g. AT2020USB) is checked off:



Suggestions for or feedback on this guide are always welcome. Last updated March 27, 2020.