# **OPTIMIZING ZOOM SETTINGS FOR MUSIC SESSIONS**

Updated December 18, 2020 for Zoom Version 5.4.6 (59296.1207)

Note: the following instructions are for PC users running Windows 10. Apple users will have some differences in layout, but the same settings apply.

### 1. <u>Make sure Zoom is up to date</u>

- a. To check your version, launch Zoom, click the **Settings** icon in the upper right corner, and click on **"Statistics"** on the left menu.
- b. To update, click your account icon in the upper right corner and Select "Check for Updates".

c. Once you are up to date, you should see this:



### 2. Adjust Audio Settings

- a. Click on the 🗱 Settings icon below your account icon and Select "Audio".
- **b.** Make sure that both volume sliders are blue all the way to the right (maxed out). You can change the speaker/headphone volume anytime using your Windows/Mac volume controls.
- **c.** Uncheck "**Automatically adjust microphone volume**". You do NOT want Zoom adjusting your mic volume during a call.
- **d.** Set "**Suppress background noise**" to "**Low**". You do NOT want Zoom thinking your instrument is background noise and suppressing it.
- e. Check "Show In-Meeting Option to Turn On Original Sound". This one is extremely important if you want both voice and instrument to be heard clearly by others.
- f. If you are using headphones (highly recommended) make sure **"Disable echo cancellation"** is checked. If you are NOT using headphones, checking this box will result in extremely annoying echo for everyone else on the call, so don't check it.
- g. Make sure "High fidelity music mode" is checked.
- h. Click the "Advanced" button at the bottom of the menu

🖸 Setti	🖸 Settings					
Θ	General	Speaker				
0	Video	Test Speaker Focusrite USB (Focusrite USB Audio) ~				
$\bigcirc$	Audio	Output Level: Volume:				
•	Share Screen	Use separate audio device to play ringtone simultaneously				
0	Chat	Microphone				
	Background & Filters	Test Mic Focusrite USB (Focusrite USB Audio) ~				
0	Recording	Volume:				
8	Profile	Automatically adjust microphone volume				
	Statistics	Suppress background noise Learn more Auto				
•	Feedback	<ul> <li>Low (faint background noises)</li> <li>Medium (computer fan, pen taps)</li> </ul>				
	Keyboard Shortcuts	O High (typing, dog barks)				
t	Accessibility	Music and Professional Audio Show in-meeting option to "Turn On Original Sound"				
		When original sound is enabled				
		Disable echo cancellation ⑦				
		Advanced				

### 3. In the Advanced menu:

- **a.** If the settings look the same as below, leave them alone.
- **b.** If you turned off Echo Cancellation on the previous menu, then the Echo Cancelation selection will have no effect.
- **c.** If you previously left Echo Cancellation on, do NOT select "Aggressive", this will cause your sound to drop out in a very music-unfriendly way.

🖸 Settin	ngs		×
Θ	General	< Back	
0	Video	Signal processing by Windows audio device drivers Auto 💙 🕐	
$\bigcirc$	Audio	Echo cancellation Auto ~	
•	Share Screen		
0	Chat		
	Background & Filters		
$\bigcirc$	Recording		
8	Profile		
	Statistics		
Θ	Feedback		
	Keyboard Shortcuts		
Ð	Accessibility		

## Notes about room acoustics, noise suppression and echo cancellation:

By making adjustments for music, you are bypassing several features that make Zoom an effective speech-only collaboration platform. Normal Zoom calls have to overcome a wide range of acoustical challenges such as noisy work environments, high ambient background noise due to HVAC, street noise, etc. When you adjust Zoom for music, background noise is not filtered out, so your voice and instrument can be heard well by others. But everything else in your environment can be heard better too, so it's helpful if you find a private, quiet space, turn off fans, washing machines, TVs, cell phones, etc.

By turning off echo cancellation, you are opening up an acoustic feedback circuit that requires the use of closed-back, over-ear headphones so that speaker noise does not go back into your microphone and create an echo for others on the call. Note that <u>you</u> will not hear the echo, but everyone else on the call will. Also note that you may want to revert some of these changes if you use the same computer for non-music related activities like work conferences, etc.

#### 4. <u>Test your Audio before every scheduled Zoom session:</u>

This is important to make sure your sound is optimized before it's your turn to play.

- **a.** Back on the Settings/Audio page, Click on "**Test Speaker**" to see if your speakers are set to a good volume and adjust as needed.
- b. Click on "Test Mic" and speak into your computer or outboard microphone. This will record a few seconds and play on your speakers or headphones. If you can't hear yourself at sufficient volume, we won't be able to hear you either. Assuming you are also playing an instrument, click on "Test Mic" again, play the instrument and make sure you can hear that too. Do this regardless of whether your voice and instrument are using one microphone or you have a microphone and a separate plugged-in instrument.
- **c.** If you have problem with audio testing, try to resolve it outside of the Zoom session. If you have problems, request help folks running Zoom sessions are willing to help and will schedule a time with you.

🖸 Setti	Settings					
Θ	General	If you cannot hear the test sound, select a different speaker.				
0	Video	Test Speaker Focusrite USB (Focusrite USB Audio)				
$\bigcirc$	Audio	Output Level: Volume:				
•	Share Screen	Use separate audio device to play ringtone simultaneously				
0	Chat	Microphone				
	Background & Filters	Test Mic Focusrite USB (Focusrite USB Audio) ~				
$\bigcirc$	Recording	Volume:				
8	Profile	Automatically adjust microphone volume				
	Statistics	Suppress background noise Learn more Auto				
◙	Feedback	<ul> <li>Low (faint background noises)</li> <li>Medium (computer fan, pen taps)</li> </ul>				
	Keyboard Shortcuts	O High (typing, dog barks)				
Ĵ	Accessibility	Music and Professional Audio  Show in-meeting option to "Turn On Original Sound"  (?)				
		When original sound is enabled				
		✓ Disable echo cancellation ⑦				
		✓ High fidelity music mode ⑦				
		Advanced				

### 5. <u>At the start of the Zoom session:</u>

While this setting is confusing, it is important and needs to be confirmed for each session.

a. If you see "Turn on Original Sound" in the upper left corner, it means that Original Sound is OFF.



- **b.** If you see **"Turn Off Original Sound"** in the upper left corner, it indicates the Original Sound is ON
- **c.** Click so that it turns blue or as indicated below. Mac users may not have the blue color, just the text.



<u>Phoenixville Area Acoustic Jam Group</u> is the Meetup.com web page organized by Jim DiGuiseppe and the non-profit Steel City Blues Society.

<u>Phoenixville Jammers</u> is the Facebook page run by Brian Eric Huff CTS-D, CTS-I, a professional technology consultant, Berklee College of Music graduate ('78), lifelong musician and singer/songwriter.

Peter Brander is a lifelong musician and technology specialist/project manager.