







A Culture of Reliability®

Web Workshop VoIP Audio Best Practices

VoIP Audio Device Recommendations

When using VoIP for your Webinar, audio quality can vary based on your audio software/hardware manufacturer as well as your operating system.

Listed in order from best quality to poor quality.		
	USB* headset connected to your computer	Best
	Headphones and USB* microphone connected to your computer	
	Analog** headset connected to your computer	Good
	Headphones and analog microphone** connected to your computer	
	External speakers and	

	USB microphone	Fair
	External speakers and analog microphone	
	Laptop built-in microphone and speakers	Poor
	External speakers and USB Webcam microphone	




*USB Cable



** Analog Cable

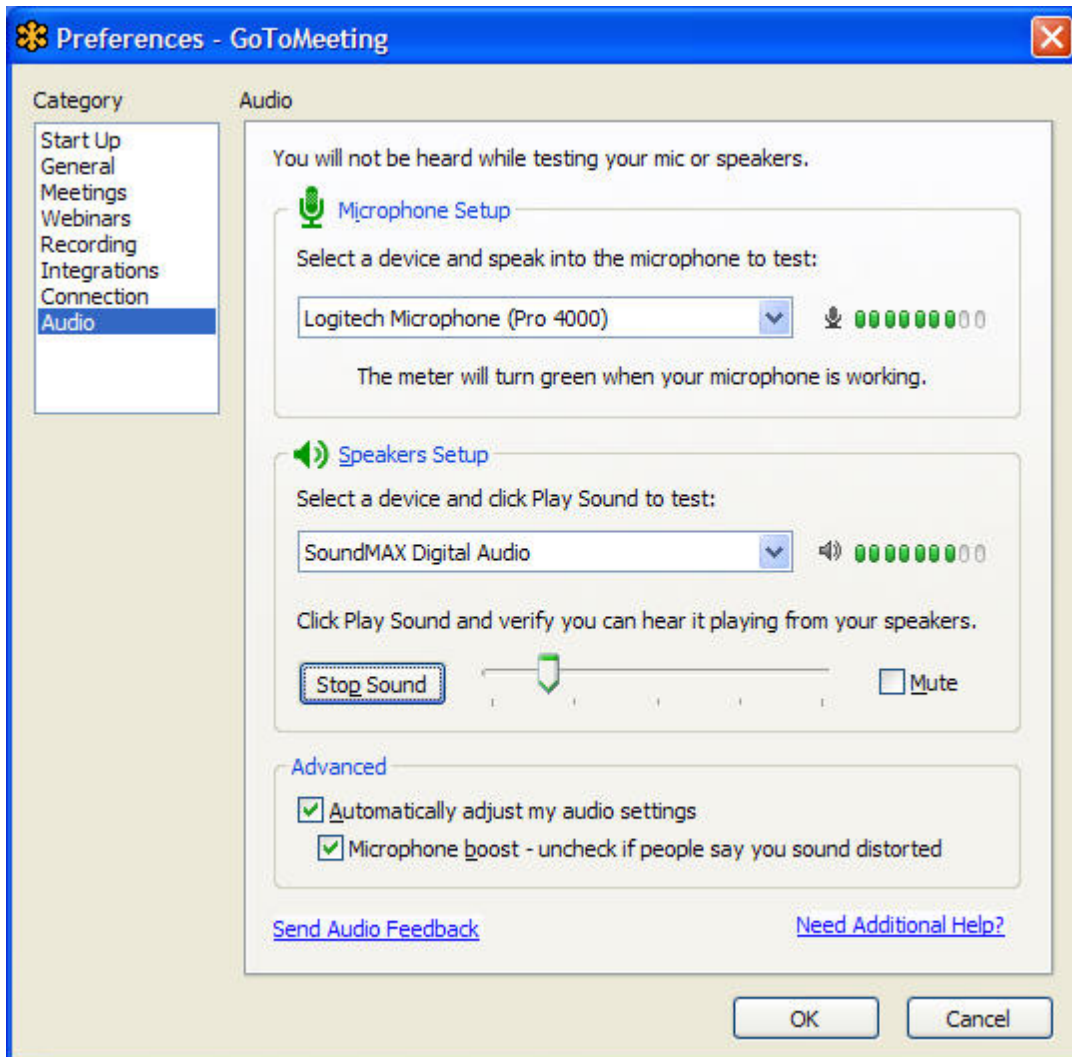
VoIP Audio Setup - PC

▶ To select and test your Mic & Speakers settings

1. Right-click the  system tray icon and select **Preferences**.
2. Select **Audio**.

- *Microphone Setup:* It is recommended that you test your microphone. To test, select your microphone and speak into your microphone; if it is connected correctly, the sound meter will light up green. If you select another device listed in the drop-down menu and repeat this test.
- *Speakers Setup:* It is recommended that you test your speakers. To test, select your speakers and click **Play Sound**; if connected correctly, you will see the sound meter light up green and hear sound. If you do not hear sound after clicking **Play Sound**, select another device listed in the drop-down menu and repeat this test.
- *Advanced:* GoToWebinar automatically adjusts audio levels. We recommend you keep this feature enabled. You can manually configure your audio settings through Windows Sounds and Audio Devices. If your voice is distorted, try un-checking "Microphone boost."

3. Click **OK**.



VoIP Audio Setup - Mac

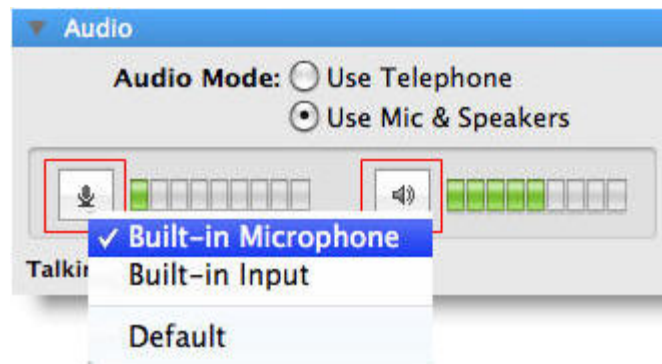
Mac users can select audio devices in-session only. GoToWebinar will automatically detect the input and output devices connected to your computer.

▶ To select and test your Mic & Speakers settings

1. You can test your audio devices through the Audio pane of the Control Panel. If your audio devices are connected correctly, you will see the sound meters in the Control Panel light up green.

2. If the meters for Mic or Speakers do not light up green when you or others are speaking, click on the icons in the Audio pane of the Control Panel. A drop-down menu will appear when you click on either icon.

- *Microphone:* To test, speak into your microphone; if it is connected correctly, the sound meter will light up green. If the green meter does not light up, select another device listed in the drop-down menu and repeat this test.
- *Speakers:* It is recommended that you test your speakers. To test, select each device from the drop-down menu until you will see the sound meter light up green and hear others speaking in the conference. If the green meter does not light up, select another device listed in the drop-down menu and repeat this test.



Optimize VoIP Audio Quality

Avoiding Call Echo

- A USB headset is recommended (see [VoIP Audio Device Recommendations](#)).
- Built-in or external speakers can cause echo. We recommend reducing the speaker volume to a low level.
- Webcams with microphones can pick up additional noise and cause echo. Using a Webcam for your audio is not recommended.
- Laptops with built-in microphones: Built-in microphones can pick up noise and cause echo. Using a built-in microphone for your audio is not recommended. If you know how to turn off your laptop's built-in microphone, turn it off for your presentation (check your laptop's owner manual).
- Echo from an attendee: If you suspect echo from an attendee, check who is talking at the bottom of the Audio pane and mute that attendee or ask the attendee to lower his or her speaker volume.
- Reduce background noise (see next section).
- See also VoIP Organizer Tips and Best Practices in this section.

Avoiding Background Noise

- A Webinar is best presented from a quiet location.
- If using a microphone, move the microphone closer to your voice and away from competing sounds (ie: computer fans).
- Avoid moving or touching the microphone during your presentation.
- A good quality headset is recommended. Webcams and built-in microphones can pick up noise and are not recommended.

Dropped Words, Delay, Robotic Sound

Dropped words, delay or robotic sound is often due to poor network performance, lack of memory or high CPU usage.

- Close all applications you are not using for your presentation.
- A dial-up internet connection can cause poor performance. For optimum performance when using VoIP, we recommend a broadband internet connection. (See [System Requirements](#).)