

# Headphone Monitoring

*Listening to WHAT you are recording – WHILE you are recording it!*

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This feature has lots of different common names; headphone monitoring, audio duplexing, etc., however they all have the same meaning. That is that they allow you to listen to what your computer is recording WHILE it's being recorded. In short, the amplified version of testimony that your external microphone is feeding into your computer for your audio-sync can be listened to (monitored) at the same time the audio is being recorded. Many reporters have mentioned to me that while doing video-taped depositions they have been given headphones by the videographers to accomplish this task, but in most cases they could actually do these themselves with their own equipment.

In order to accomplish the task of headphone monitoring, two technological features must be in place at the same time. First, your hardware must be compatible and second, the driver that Windows uses to control the feature must actually allow the action. Unfortunately there is no master list that I can give you to see if your computer will work with this feature, and sound card/laptop manufacturers don't note this in their feature lists, so we've gotta do it the old fashioned way. Also, please keep in mind that just because a friend of yours has the same brand (or model) computer that you do, and they can work this feature, does not mean that you can too. The sound cards in laptops can shift and change between manufacturers and models just as quickly as the sun rises and sets, and because the drivers that control those laptops can be updated at random, it really is just trial and error. The steps to control this feature are different for users of Windows XP and Windows 7, so we'll start with Windows XP.

Before following these steps, be sure the microphone you are using is plugged into your computer, as well as a pair of headphones. If you are using a USB Microphone, please keep in mind that ALL versions of Windows treat USB Microphones as additional sound cards. That means that you should apply these instructions to your USB Microphone (AKA USB Sound Card) and not your internal sound card's settings. The steps are the same; however the verbiage will be different on your screen.

# Windows XP

1. In Windows XP, open your Control Panel (Start → Settings → Control Panel)
2. Find an icon labeled “Sound and Audio Devices” and double click it
  - a. If you don’t see the icon it means you are probably viewing the control panel in a category view. Look at the top of the left column for a text link that reads “Switch to Classic View”. After clicking that text link the icon should appear
3. On the new window that appears, find the tab labeled “Audio” and left click it once
4. Notice there are several drop down boxes, each separated into categories. We are focused on the first drop down box that controls the “Sound Playback”, and should be labeled appropriately
5. Click the large button labeled “Volume” located directly below the first drop down box on that window
6. The new window that opens is called the VOLUME CONTROL PANEL and can also be accessed by creating a shortcut on your desktop to SNDVOL32.EXE. If your computer can use this feature, creating this shortcut would be VERY handy
7. In this VOLUME CONTROL PANEL you should see several slider bars representing the different volume playback levels you can adjust. What we are looking for here is a slider labeled MICROPHONE. If you already have this tab on your screen, congrats, your computer is capable of headphone monitoring and you can skip forward to step 11. If not, don’t worry yet, by default Windows is not set to show this tab, so it might just be hiding – keep reading.
8. In the upper left corner of the VOLUME CONTROL PANEL left click the OPTIONS text link and then on PROPERTIES on the menu that drops down
9. On the next screen that appears, take notice of the check boxes in the middle of the screen. These check boxes control which slider bars are displayed on the VOLUME CONTROL PANEL – if it isn’t checked, it doesn’t appear.
10. Look through the list to see if you can find a check box that reads MICROPHONE. If you find it, check it and click OK because your computer CAN monitor your recording. If you cannot find it, your computer is not able compatible with the headphone monitoring feature. You can read the paragraph AFTER the Windows 7 instructions to find out what you can do from here.
11. Focus your attention to the slider labeled MICROPHONE on the VOLUME CONTROL PANEL. The slider controls the playback volume of what your microphone is currently hearing – which is of course what you want to be listening to. This slider has NO impact on your actual recording, just how loud the LIVE monitoring of the microphone is played back in your ear, so feel free to adjust it to your liking.
12. Note that by default the MUTE box below the slider is checked, for good reason. Unchecking that box unleashes the live feed from your microphone, and if you do not have headphones plugged in the feedback between the microphone and speakers might be loud enough to deafen you. Please be sure to UNCHECK the mute box when you want to activate the monitoring and CHECK the mute box when you are done. This is when that shortcut mentioned in step 6 can come in handy! You can MUTE and UNMUTE at will without impacting your recording or fear of messing up your transcript.

# Windows Vista/7

1. In Windows Vista/7, open your Control Panel (Windows Flag → Control Panel)
2. Find an icon labeled "Sound" and click it
  - a. If you don't see the icon it means you are probably viewing the control panel in a category view. Look at the top right of the window for a text link that reads "View By:" – which probably has CATEGORY selected. Left click the word CATEGORY and choose SMALL ICONS from the list that drops down. After clicking that link the SOUNDS icon should appear.
3. The new window that opens is called the SOUND PANEL and can also be accessed by creating a shortcut on your desktop to SNDVOL32.EXE. If your computer can use this feature, creating this shortcut would be VERY handy to have.
  - a. This window shows all the sound devices in the system (grouped by categories (tabs) at the tops of the screen). A green checkbox will appear next to the device that is set as the "default" device for that action
4. On the first tab, labeled PLAYBACK, double click the icon that reads SPEAKERS.
  - a. Some computers separate and display each playback device as a different icon (IE Speakers, Headphones, HDMI Output, etc.) but the option we are looking for only appears in the devices MAIN output method, IE the speakers. Just ignore the rest for now, except if you use a USB Microphone, in which case you want to select THAT devices main playback method instead.
5. On the new window that appears, labeled Speaker Properties, click on the tab at the top that is labeled LEVELS.
6. You should be presented with at least one horizontal slider bar that controls the main playback volume for your computer. If your computer/device supports the headphone monitoring feature, you will also see an additional slider labeled MICROPHONE. If you don't see it, your computer is not able compatible with the headphone monitoring feature. You can read the paragraph AFTER these instructions to find out what you can do from here.
7. Focus your attention to the slider labeled MICROPHONE. The slider controls the playback volume of what your microphone is currently hearing – which is of course what you want to be listening to. This slider has NO impact on your actual recording, just how loud the LIVE monitoring of the microphone is played back in your ear, so feel free to adjust it to your liking.
8. Note the speaker icon to the right of this slider bar, which probably has a red cross or "x" through it. This is the MUTE control for Windows 7 users. Clicking the icon (removing the red cross or "x") unleashes the live feed from your microphone, and if you do not have headphones plugged in the feedback between the microphone and speakers might be loud enough to deafen you. Please be sure to MUTE when you want to activate the monitoring and UNMUTE when you are done. This is when that shortcut mentioned in step 3 can come in handy! You can MUTE and UNMUTE at will without impacting your recording or fear of messing up your transcript.

If your computer or device does not give you the “Microphone” slider bar option using any of the steps above, there is one thing you can do before beginning to get upset. As I mentioned at the start of this article, there are 2 features that have to be in place for this option to work. It is possible that your hardware is capable of using this feature, but the device driver (software) is not. You can try updating your sound card’s device driver to see if the feature works. To do this you should begin by visiting your laptop manufacturer’s website to check and see if they have an updated driver. You will probably need to know your laptop’s model number before continuing. You could also try using the Windows Update feature built into Windows to see if Microsoft has certified and released an updated driver. When you run Windows Update just be sure to check the HARDWARE tab for additional updates as device driver updates are not typically installed with your normal Windows Updates.

Now, as I also mentioned before all these instructions, all USB microphones are seen by computers as USB Sound Cards, which means they contain the POSSIBILITY of allowing you to use the headphone monitoring feature. Again, this feature isn’t something that sound card and microphone manufacturers directly advertise however there are a few companies out there that understand what is important to the court reporting industry and they will test their microphones for these features. So, if your laptop’s sound card is not capable of headphone monitoring you can just purchase one of the following USB Microphones, which WILL allow you to monitor your recording, and they also have the added benefit of doing away with batteries as well.

- Martel High-Gain USB Microphone – Retail \$299
- Sound Pro’s Mono Omni Directional USB Mic – Retail \$59
- Sound Pro’s Black Edition Pro USB Mic – Retail \$99