Configuring your Audio Headset

Quick Test of your Audio Headset
Attach your headset to your computer and run the System check at the site below. If you hear audio and hear your own voice through the earphones when speaking through your microphone, you are connected. You do not have to read any further.

http://www.vanderbilt.edu/centra

Introduction and Features
Centra is a significant addition to the communication tools that you currently have available to you in the OAK environment. With Centra, you, your classmates, and your instructor all meet online at the same time and log into the same class. Your instructor can share his desktop, specific applications running on his desktop, websites, and powerpoint presentations. Your instructor can highlight areas of the screen he wants you to focus on by having you follow his mouse movements, and by using a markup tool to draw on the screen. He may periodically ask you questions and you will answer yes or no by clicking the appropriate button in the interface. All of these features are described in the student guide your instructor will give you.

Perhaps the most interesting capability of Centra is the audio component. Through either a telephone conference call or through Voice over IP (VoIP) you will be able to hear your instructor and fellow students speak and you will be able to speak back to them. Your instructor will be able to narrate his Powerpoint presentation while you are watching that presentation in real time. If you have a question you will be able to raise your hand by clicking on the appropriate button in the interface and then ask the question directly through the audio communication feature.

Most likely your instructor will orally communicate through the system to you using VoIP. Communication that way is free, unlike a telephone conference call which can cost about a dime a minute per person online. In order to use VoIP you will need to acquire a headset with a microphone. These can be purchased online or at any office supply or electronics store. The cost varies between $15-$45 dollars depending on durability, features, comfort, and looks. The headset will have one or two earpieces and an attached microphone. We do not recommend using a standalone microphone as the sound will vary too much as you move back and forth in your chair. And, while you can use the speakers built into your system to listen to the class, the problem fixed speakers create is that when you talk through your microphone all of the class sounds will be picked up by the microphone and repeated. By using a headset, your head effectively blocks the incoming sound from going back out through the microphone. (NOTE: if you have a Bluetooth earpiece/microphone for your cell phone and you have a Bluetooth connector on your computer, it may be possible to configure your earpiece/microphone to work here, however, we do not recommend it as we have not fully tested that approach.)
The Headset Connectors
Probably the biggest problem we have noticed in using Centra, particularly the audio piece of Centra, is improper attachment and configuration of the headset. There are two types of headsets you can buy (dual miniplug or USB). They look almost identical but vary in the way they are connected to the computer. You may use either one provided you have the right connectors on your computer.

![Headset](image1)

*Fig. 1. Headset*

The first has dual miniplugs, one marked with a speaker icon and the other (usually pink) marked with a microphone icon. Check the location on your computer where you will plug in these miniplugs. Be VERY careful to plug the correct plug into the correct port. If you switch them around you will not be able to hear or speak. Some systems may have multiple plugs for the speakers or headphone component. Try the various connections until you hear sound through your earpiece. The miniplug system is the easiest to get running and we recommend it if your system has the miniplug ports or you do not have an available USB port.

![Miniplugs](image2)

*Fig. 2. Miniplugs*
The second type of headset is connected via USB. This may be the preferred connection method if you have USB connectors on the front of your machine. It will save you from crawling around on the floor trying to insert miniplugs into the back of your desktop. It also means you won’t have to disconnect your existing external speakers. In addition, by having a single wire instead of two, there is less to become entangled when you store your headset. USB system headsets, however, have to be installed through software. Most likely though, your system will automatically recognize the headset after about 20 seconds, the very first time you plug it in, and then the headset will install itself. After it is successfully installed you will be informed by a small textbox that your headset is "installed" and ready to use. However, in the event you computer does not recognize the headset, most USB headsets come with an installation CD that you may have to run.

![USB Connector](image)

**Fig 3. USB Connector**

Some headsets come with an additional microphone on/off switch and earpiece volume control knob. If yours does, make sure the headset is switched to on and the ear piece volume is turned up.
Configuring your Computer Through the Control Panel and Task Bar
You may have to tell your system to route all audio through the headset. Click Start, Control Panel, Sounds and Audio Devices. If the screen doesn’t look like the one below, be sure to switch to Classic View.

![Control Panel in Classic View](image)

*Fig. 5. Control Panel in Classic View*
Click on the Audio tab. It will show you the sound playback device and the sound recording device. The dropdown will give you the available choices.

![Sounds and Audio Devices Properties Window – Audio Tab](image)

Select the default device for both Sound playback and Sound recording to be your headset (you should see the choice in the dropdown but ONLY if you are using the USB connector or if you have multiple audio input devices). Then, click OK. If you are using a miniplug headset the defaults will probably work...
as is. If they do not, come back into the control panel and select other choices in the dropdowns until you hear sound through the earpiece.

If you do not hear any sound, or the sound level is too low, another place to look is to click the speaker icon in the task bar.

![Fig. 7. Speaker Icon on Taskbar](image)

Clicking on the speaker icon will bring up the Volume Control window. Make sure that BOTH Volume Control AND Wave volume are NOT checked as mute and make sure the slider bars are up high enough in both areas to hear adequately. Also make sure that Microphone column (if it is showing) isn’t checked as mute and its slider bar is up as well, as that adjusts the outbound volume of your microphone.

![Fig. 8. Volume Control Window](image)

If you don’t see the microphone slider and checkbox, go into the control panel and click Sounds and Audio Devices again. Then click the Voice tab in the Sounds and Audio Devices Properties Window and click the Volume button under Voice recording.
You can also run a preliminary test of your audio hardware here in Windows by clicking the Test hardware button. If you have anti spyware and antivirus control those programs may try to block the sound test from running, so you may be prompted to allow it. If you are using a USB connected headset, make sure the USB system is selected as your microphone, otherwise you won’t be able to test and use it here in Windows.

**Connecting to Centra**
Frankly though, the test in Centra is actually the preferred test so you may want to wait and test your audio there. You can go to the generic Centra site at any time to run an audio check. Simply go here:  

http://prod1.centra.com/

and bookmark this site. You will see a choice across the top called System Check (circled below). Click it.

It will display the minimum specifications you need for your system to run Centra. Click the Start button and click Continue button when prompted. When you get to the Audio Wizard, make sure that Headset with microphone is selected and that your hardware is properly connected. If your headset comes with a volume control knob you may have to adjust it up or down. If not, just use the audio slide bar in the Centra Audio Wizard. Clicking Next will bring you to the Microphone test. If it is working properly you will see your speech pattern bar as you talk and you will hear yourself, slightly delayed, through your headset.
NOTE: You MUST run this check EVERY time you are ready to log into a Centra session. This check will verify your system can function in the Centra environment, that your network connection is robust enough to handle the multimedia elements, particularly the two way audio, and that your headset is functioning properly. This will avoid delaying the start of class for your instructor and your classmates. If you log into class early, you can also run the audio check from inside your class by clicking on the Audio button at the top of the interface.

Once class begins, your instructor may ask you for an audio check. When prompted, hold the CTRL key down and speak clearly into the microphone. Do not lock your microphone on in your session as that will block others from speaking. When you are done speaking, release the CTRL key. Keep in mind that VoIP, unlike local telephone calls, may have a short several second time delay between transmission and reception so don’t expect a reply back instantaneously. Also, audio may on occasion “break up” or develop some static due to traffic on the Internet.