**Non-obvious controls:**

* Try all the different tabs at the top of the simulation. The tabs are designed to help teachers scaffold lessons or make lessons age appropriate by using only some tabs.
* You can **Pause** the sim and then use **Step** to incrementally analyze.
* The window size is not variable for this sim.
* There is a bug that we have not solved with selecting **Audio** on one tab and then trying to use the **Audio** on a different tab. When you change tabs, you may have to check, uncheck, and then check again.
* If you are doing a lecture demonstration, set your screen resolution to 1024x768 so the simulation will fill the screen and be seen easily.

**Important modeling notes / simplifications:**

* The volume observed by the **Listener** varies with distance except on the **2 Source** Tab
* On the 2 Source tab:
  + The **Audio** gives the sound that the listener would hear. To see how the speakers would sound, use the simulation [**Wave Interference**](http://phet.colorado.edu/simulations/sims.php?sim=Wave_Interference)**, Sound** tab.
  + The nodal lines are easier to observe at high frequency
  + The sound volume is not dependant on distance on this tab
* On the **Listening with Varying Air Pressure** tab, the color of the air gets more dark as the pressure decreases. So black represents a vacuum.

**Insights into student use / thinking:**

* The **Help!** button on each tab will enable students to explore features that they might not discover on their own. For example, on the **Measure** tab, the blue lines and ruler are movable and can be used to help identify waves.

**Suggestions for sim use:**

* For tips on using PhET sims with your students see: [**Guidelines for Inquiry Contributions**](http://phet.colorado.edu/teacher_ideas/contribution-guidelines.php)and [**Using PhET Sims**](http://phet.colorado.edu/teacher_ideas/classroom-use.php)
* The simulations have been used successfully with homework, lectures, in-class activities, or lab activities. Use them for introduction to concepts, learning new concepts, reinforcement of concepts, as visual aids for interactive demonstrations, or with in-class clicker questions. To read more, see [**Teaching Physics using PhET Simulations**](http://phet.colorado.edu/phet-dist/publications/Teaching_physics_using_PhET_TPT.pdf)
* For activities and lesson plans written by the PhET team and other teachers, see: [**Teacher Ideas & Activities**](http://phet.colorado.edu/teacher_ideas/index.php)