Question #333

The photograph below contains two (identical) *Large Advent* loudspeakers connected to an audio system seen to the right of the speakers. A wave generator and amplifier (seen in the photograph) are used to activate the speakers with a 100 Hertz sine wave, which can be heard by clicking your mouse on the photograph. The microphone picking up the sound from the speakers is seen directly in front of the speakers; the photograph is taken from a point in the lecture hall behind the microphone. Use this video to set the sound level for your speaker system when you view the answer videos next week.



Now suppose that the wires of (ONLY) one of the speakers are reversed, by reversing a toggle switch in the small gray box on the top of the electronics on the cart seen in the photograph. The question here is how that will affect the sound picked up by the microphone in the photograph above.

When the wires for one of the speakers are reversed, the sound picked up by the microphone will:

- (a) become considerably louder.
- (b) become slightly louder.
- (c) remain about the same.
- (d) become slightly softer.
- (e) become considerably softer.

Click here for Answer #333 after January 26, 2009.

Question of the Week

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For questions and comments regarding the *Question of the Week* contact <u>Dr. Richard E. Berg</u> by e-mail or using phone number or regular mail address given on the <u>Lecture-Demonstration Home Page</u>.