Audio Technician

- 1. Define the following terms:
 - a. Loudspeaker
 - b. Audio mixer
 - c. Amplifier
 - d. Microphone
 - e. Impedance
 - f. Gain
 - a. Audio feedback
 - h. Frequency response
 - i. Equalizer
 - j. Balanced input/output
 - k. Unbalanced input/output
 - I. Monaural
 - m. Stereo
 - n. Cardioid
 - o. Hyper-cardioid
 - p. Unidirectional
 - q. Soundcheck
 - r. Phantom power
 - s. Decibel
- 2. Describe and give the primary uses of four different types of microphones.
- 3. Describe why the placement of microphones is important:
 - a. Relative to the people speaking/singing
 - **b.** Relative to the loudspeakers
- 4. Select an audio system that you will learn on and demonstrate the skills described in the next section of this honor. This audio system can be your local church/school sound system, a sound system used by your local conference for Pathfinder events or a system that the instructor has. It should consist of, at minimum: several microphones, a mixer, an amplifier, an auxiliary audio source and loudspeakers.
 - **a.** Be able to properly set up this sound system, keeping in mind the principles of microphone placement and running a sound check.
 - **b.** Be able to properly take down this sound system.
 - **c.** Draw a block diagram of how the sound system elements are connected to each other, showing the signal paths.
- 5. Discuss and demonstrate the following core audio mixing techniques on this system:
 - a. Volume
 - **b.** Panning (if you have a system that supports stereo)
 - c. Equalization
 - d. Dynamics





- 6. Describe and demonstrate how to deal with the following situations on this system:
 - a. Audio feedback
 - **b.** A dead line or mic
 - c. A mixer that has been played with by a non-audio technician
- 7. Demonstrate your proficiency by running a sound system on at least four different occasions for a worship service or other event.
- 8. Interview a person who serves as an audio technician. Discuss the following questions:
 - a. How did they get started in this field?
 - **b.** How do they see this work as a ministry?
 - c. What do they enjoy about what they do?
 - d. What do they not enjoy about what they do?
 - e. What are the aspects of the work they find challenging?
 - f. What do they do to keep up with the technology in the field?
- 9. Read Romans 10:17 and discuss with your group how they might relate to the function of the audio technician.

Skill Level 2

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