

**Lab Worksheet – Digital Audio > Conversion Between Air Pressure Amplitude and Decibels-Sound Pressure Level<sup>1</sup>**

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**Objective:**

To be able to convert decibels-sound pressure level (dB\_SPL) to pressure amplitude and vice versa.

1. Convert 160 dB\_SPL (damage-to-eardrum level) to air pressure amplitude in  $\text{N/m}^2$ . Show your work.

2. Convert 20  $\text{N/m}^2$  (approximately the air pressure level of very loud music) to dB\_SPL. Show your work.

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<sup>1</sup> This material is based on work supported by the National Science Foundation under Grant No. DUE-0127280. This worksheet was written by Dr. Jennifer Burg (burg@wfu.edu).