What is Active Noise Reduction (ANR)?
NoiseBuster ANR Safety Earmuff uses a microphone inside the ear cup (1) to listen to noise coming into the ear (2). Using electronics (3), the system takes that information and uses it to create a noise wave that is identical to, but directly opposite of, the one coming into the ear. The “anti-noise” wave is output through a speaker (4), also located in the ear cup. When the two waves (the noise wave and the anti-noise wave) meet, the noise is significantly reduced (5).

ANR Protection
ANR is the most effective defense against low-frequency noise. Low-frequency noise consists of powerful sound waves that can travel great distances and cannot be absorbed by conventional passive materials. Noises generated by engines, blowers, motors, fans, vacuums, pumps, generators and other similar devices are typically dominated by low frequencies—frequencies that cannot be stopped by passive earmuffs.

In addition to the detrimental effect it has on hearing, low-frequency noise creates another, perhaps even more serious effect. Because low-frequency noise masks speech, it is difficult for a person to hear and comprehend speech and warning signals when exposed to such noise.
Active Noise Reduction Safety Earmuff

Features
• Industrial grade, professional hearing protector
• On/off switch and power indicator
• Stereo input 3.5 mm audio jack
• Up to 65 hours of use on a single AA battery
• Adjustable Velcro headband
• Resistant to water and moisture, contaminants, mechanical shock and vibration

Includes
• NoiseBuster ANR Safety Earmuff
• One AA battery
• 3.5 mm audio interface cable
• Velcro headband
• Warranty - 6 months
• User manual

Specifications
• Storage temperature: -40C to +85C
• Operating temperature: 0C to +55C
• Audio cable length: 50cm (20 inches)
• Power: One AA battery

Active Noise Reduction
ANR performance range: Between 20Hz and 800Hz
ANR attenuation: Up to 20dB

Attenuation Data
NoiseBuster PA4100: ANSI S3.19-1974, testing by Dr. Kevin Michael & Associates, State College, Pennsylvania, USA

<table>
<thead>
<tr>
<th>Frequency, Hz</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>3150</th>
<th>4000</th>
<th>6300</th>
<th>8000</th>
<th>NRR</th>
<th>CSA</th>
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</thead>
<tbody>
<tr>
<td>Mean Value, dB</td>
<td>16.2</td>
<td>22.7</td>
<td>28.6</td>
<td>35.9</td>
<td>33.2</td>
<td>36.0</td>
<td>41.8</td>
<td>43.4</td>
<td>43.8</td>
<td></td>
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<tr>
<td>Std. Deviation</td>
<td>2.9</td>
<td>3.0</td>
<td>3.1</td>
<td>3.6</td>
<td>2.7</td>
<td>4.3</td>
<td>5.0</td>
<td>4.3</td>
<td>4.9</td>
<td></td>
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</tbody>
</table>

Active Noise Reduction Attenuation
- Additional low frequency Noise Reduction Between 20 & 800 Hz
- Up to 20 dB

Active Noise Reduction (ANR) is the most effective defense against low-frequency noise.

Product Packaging Details
Model/Part No: PA4100
UPC: 768235286018
Product weight: 16 oz. (with battery inserted)
Individual Package dimensions: 9” x 8.5” x 4.5”
Individual Package weight: 1 lb., 8oz.

Master carton: 8 units
Master carton dimension: 18” x 18” x 10”
Master carton cube: 1.88 cubic feet
Master carton weight: 14.5 lb.

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