



SECURE Selection guide

STEP 1

DETERMINING YOUR NOISE LEVEL

Is the noise level and frequency content known? (dB and Hz) If not, see the list of common noise sources on the next page. On some machines and power tools you can find the dB level in the user manual or stated on a label on the machine. If yes, follow the example below.

Example

If you use a chainsaw the dB level is 105 dB (A). Recommended level under the earcup should be around 75 dB (A). You need a hearing protector with an attenuation of around SNR 30 dB. ($105-75=30$). The suitable earmuff is a yellow coded earmuff. (Secure 2)

SNR
>26dB(A)

SNR
26-30dB(A)

SNR
>31dB(A)

STEP 2

IDENTIFY EARMUFF STYLE

Headband

For general purpose use.

Cap attachable

Make sure that the helmet you choose is approved in combination with selected earmuff.

Neckband

Can be worn with bump caps, sun protection hats or helmets without attachment slots

STEP 3

OTHER REQUIREMENTS

ACTIVE Level dependent (LD)

For when the noise is intermittent, when you move in and out of noisy areas and need to hear warning signals. The LD earmuff protects against impulsive or intermittent hazardous noise whilst allowing situational awareness.

RELAX AM/FM radio

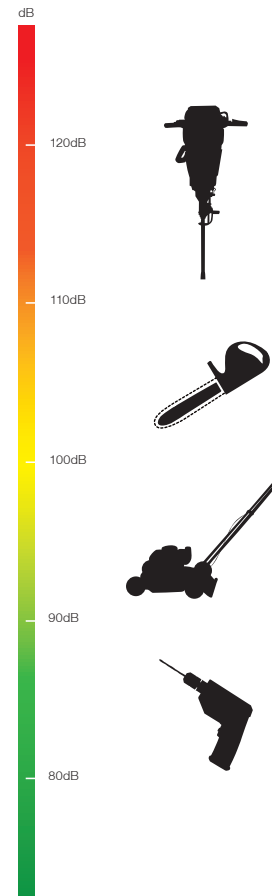
For when you are working with monotonous or stationary work tasks. Employees that wear radio earmuffs are more productive and motivated on the job.

When to consider selecting a lower protection level

- » The exposure time is shorter than 4 hours. The earmuffs protection level is based on noise exposure over an 8 hour working day. If the exposure is shorter you should consider selecting a lower protection level.
- » You need to hear important information (from colleagues, warning signals etc. Consider selecting a lower protection level or use a level dependent earmuff.
- » If you suffer from a hearing loss. With a hearing impairment you may already have difficulty understanding speech in noisy environment. If you select the highest attenuation for hearing protectors, you may find it even more difficult to communicate or hear warning alarms.

When to consider selecting a higher protection level

- » If the noise consists of mainly low frequency noise as the low frequency noise is more difficult to block out.
- » If you need to wear safety glasses, face masks etc. When combining hearing protection with safety glasses, face masks etc. ensure performance is not adversely effected.
- » If there are any other noise sources nearby.
- » If you are uncertain seek additional advice and guidance or select an earmuff with a slightly higher protection level.



COMMON NOISE SOURCES

Below are examples of different noise sources with its approximate sound pressure level in dB(A). These examples should only be seen as a guidance as large variations may occur. The distance and surroundings will also affect the noise level.

Noise source	dB (A)	Frequency
Electric hedge trimmer	90dB	Mid-High
Backhoe	85dB	Low
Log loader	80-95dB	Low
Printing press	87dB	Mid-High
Front end loader	90dB	Low
Paper folding machine	92dB	Mid-High
Table saw	92dB	Mid-High
Brushcutter	93dB	Mid-High
Weed trimmer	93dB	Mid-High
Air compressor	94dB	Mid-High
Welding, Cutting Equipment	94dB	Low
Angle grinder	95 - 107dB	Mid-High
Lawn mover	95dB	Mid-High
Concrete mixer	94dB	Low
Ground vibrating machinery	95dB	Low
Road grader	96dB	Mid-High
Tractor	96dB	Low
Bulldozer	96 dB	Low
Compressor unit (piston)	97dB	Low
Hammering in wood	97-103dB	Mid-High

Noise source	dB (A)	Frequency
Spray painting	98 -103dB	Mid-High
Chipping hammer	98-104dB	Low
Blast cabinets	101dB	Low
Electric furnace area	100dB	Low
Stud welder	101dB	Mid-High
Concrete breaker	102dB	Low
Power drill	102dB	Mid-High
Circular saw	102-104 dB	Mid-High
Rock drill	102-108dB	Mid-High
Drilling in metal	103dB	Mid-High
Punch press	105dB	Mid-High
Chainsaw	105dB	Mid-High
Earth scraper	107-111dB	Low
Concrete drill	108dB	Mid-High
Concrete cutting machine	109dB	Mid-High
Asphalt grinder	111-116dB	Low
Jackhammer, pneumatic	120dB	Mid-High
Rifle Cal. 22	155dB	Mid-High
Shotgun	158dB	Mid-High
Rifle Cal. 30.06	169dB	Mid-High