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HEAR
TOMORROW

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Hearing Protection for Beginners

What's it all about?

Hearing is one of the most sensitive human senses, which is vulnerable to damage from loud sounds including music. The outcome can be Tinnitus, a constant perceived ringing in the ears, and even permanent hearing loss. Usually the frequencies damaged and subsequently lost are the mid and high frequencies in our hearing, which are important for listening to speech and music.

Noise or Music Induced Hearing Loss is quite common with musicians, DJs and nightclub goers and is now more of a concern with young people than ever before.

**“43 million people aged between 12 and 35 already
suffer from hearing loss”**

source: World Health Organisation

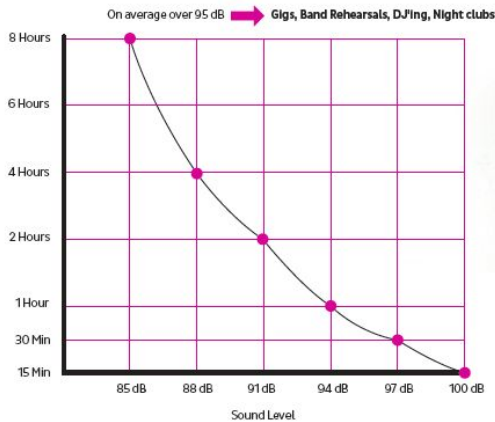
**Half of this is due to exposure from unsafe sound levels from personal audio
devices or amplified music**

Sound is an important aspect of people's lives and if you enjoy listening or making music then looking after your hearing should be a top priority.

It's not about wearing foam earplugs that block out the clarity of the music, it should be about using high fidelity earplugs that just turn it down - coupled with being aware of exposure times and the potential dangers. Even at volumes of 100 dB(A), which is commonplace at nightclubs and music bars, your safe exposure time is approximately just 15 minutes!

Sound is measured logarithmically in decibels (dB). For every 3dB(A) increase in volume you should half your safe exposure time. E.g 85dB = 8 hours safe exposure, 88dB = 4 hours safe exposure, 91dB = 2 hours safe exposure etc etc.

DO YOU KNOW YOUR SAFE MUSIC EXPOSURE TIMES WITHOUT EARPLUGS?



**PLAY SAFE NOW
HEAR TOMORROW
WITH HIGH FIDELITY
HEARING PROTECTION**



For all affordable hearing protection and in-ear monitoring solutions contact

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Types of Hearing Protection

Key word to remember is **Attenuation**: Loss in intensity. The 'turning down' of sound.

Ear Defenders



Pros: Good isolation and attenuation. Easily worn in an industrial setting.

Cons: Big and bulky to wear. Unfashionable to be worn socially. Bad for listening to music or hearing people speak in noisy environments. Loss charity in mid and high frequencies.

Cost: from £3.

Foam



Pros: Cheap. Fit everyone. Reasonably comfortable. Good attenuation up to 30dB(A) if properly fitted.

Cons: An auditory block so **no good for listening to music** or hearing people speak in noisy environments. Loss of sound clarity in mid and high frequencies. Cannot guarantee proper application or fit in the ear canal so specific attenuation difficult to clarify.

Cost: 14p.

Universal Fit - High Fidelity Attenuating



Pros: Affordable. Universal fit. Reasonable frequency response and clarity for listening to music. Some have handy neck cords. Good entry level, ready to go attenuating hearing protection.

Cons: Limited choice of attenuation levels. Cannot guarantee proper application or fit in the ear canal so specific attenuation difficult to rely on.

Cost: Cheapest start at £10. Best £12.99.

Custom Moulded



Pros: Bespoke fitting to your ear canal so perfect fit and seal. Guaranteed specific attenuation is assured. A range of attenuating high fidelity filters available, some with near flat frequency response, for different musical or environmental situations. High fidelity sound quality. Best for listening to music. Fashionable colours and neck cords available as an option.

Cons: More expensive than universal fit earplugs. New ear impressions required every 4 years as ears change shape as you grow older.

Cost: Best start at £139.

Best Hearing Protection for music lovers and makers?

Universal Fit Attenuating or Custom Moulded

So..... what are IEMS?

In-Ear Monitors (IEMs) - universal fit or custom moulded.



Basically, these are high spec earphones used by musicians or DJs to hear their specific 'monitor mix' on stage and control their sound levels accordingly.

Pros: Best way to have control of your sound levels on stage. Better high fidelity sound quality. Custom moulded provide best level of isolation to the ear so that the sound quality and level can be accurately controlled. A range of audio specifications.

Cons: Price for custom moulded high end spec. Some singers find it hard to work with IEMs. Require a very good Sound/Monitor Engineer to be utilised properly.

Cost: Good quality universal fit start at £149, Custom Moulded £299.

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Director of Education

ACS Custom Ltd (hearing protection and IEM specialists)

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