SafeBass...

SafeBass_{tm} Technology – LTB Audio Systems True 5.1 Surround Sound Headphones are equipped with an exclusive patented safe resonance technology that protects the listener from the damaging effects that can accompany weighted Sound Pressure Levels (S.P.L.).

LTB Audio Systems 5.1 Surround Sound headphones are designed with 4 x 15mm speakers for center and surround audio and 2 x 40mm speakers for Front/Rear audio. Our unique output circuitry limits Maximum Sound Pressure Levels (S.P.L.) to less than >90dB. LTB has developed patented SafeBass technology to create optimal Bass response by distributing Bass audio through Right-Front and Left-Front channels. This exclusive circuit technology limits Decibel ranges to no more than 99dB for safe, long term listening.



OSHA Regulation 1910.95 - Occupational noise exposure

As seen in the OSHA Noise Exposure table below, the louder the sound, the less time it takes for damage to occur. OSHA limits noise exposure levels in the work environment to about 90dB for an 8-hour period, but permits exposure to higher levels for short periods. Many experts believe that the OSHA numbers are too high for hearing safety. EU countries have very strict laws about noise exposure. For example, U.K. employers must take action at two levels of noise exposure: 85dB and 90dB. At 85dB, employers must offer hearing protection and hearing education to employees. At 90dB or higher, employees MUST wear earplugs, and the employer MUST try to reduce the ambient noise level.

Permissible Noise Exposure	
Duration per Day (hours)	Sound Level (dBA)
8	90
4	95
2	100
1	105
1/2	110
1/4 or less	115
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Level	Everyday Noise
60 dB	Everyday conversation, ringing telephone.
70 dB	Restaurant.
80 dB	Heavy city traffic, alarm clock at 2 feet, factory noise, vacuum cleaner, garbage disposal.
90 dB	Subway trains, motorcycle, workshop tools, lawn mower.
100 dB	Chain saw, pneumatic drill.
110 dB	Dance club.
120 dB	Rock concert speaker sound, sandblasting, thunderclap.
130 dB	Jet take off, gunfire.



"With SafeBassTM it's a safe bet!"