

Beat Tone

Beat tones occur when two tones that are closely matched in frequency are mixed together and rapidly alternate between reinforcing and canceling each other. Beat tones have a pulsating or fluttering quality. In the case of audio CDs, with their 44.1 kHz sampling rate, there is a 1:(1.1 × 2) relationship between 20 kHz and the sampling rate.

Decibel

Decibel, abbr. *dB*, is a unit of a logarithmic scale, with 1 dB being the average threshold of audibility for the human ear. 10 dB represents a subjective doubling or halving of loudness; however, it is a tenfold change in energy level.

Dynamic Range

Dynamic range is the difference between the loudest sound and the quietest sound a medium can reproduce.

Hertz

Hertz, abbr. *Hz*, is the number of oscillations a tone goes through per second. The higher the number of oscillations per second the higher the pitch of the tone will be.

Kilohertz, kHz

Kilohertz, abbr. *kHz*, means one thousand Hertz or one thousand oscillations per second.

Megahertz, MHz

Megahertz, abbr. *MHz*, means one million Hertz or one million oscillations per second.

Octave

An octave is a repeating series of musical notes, A through G. The note A in each successive octave is twice the frequency of the A in the previous octave. This relationship holds true for all the notes in an octave.