

Abstract

Compressor Based Dynamic Bass Enhancement With EQ

A system for and method of enhancing the low frequency response of a loudspeaker for relatively low input level audio signals and protect the loudspeaker for relatively high input level audio signals is disclosed. The system comprises: a crossover network configured so separate an audio input signal into at least two frequency bands including a low frequency band; and a signal compressor responsive to the energy level of the low frequency portion of an input audio signal in the low frequency band and configured to provide amplification gain on the low frequency portion of the input signal when the energy level of the low frequency portion of the input signal is relatively low so as to enhance the low frequency response of the loudspeaker, and attenuation of the low frequency portion of the input signal when the energy level of the low frequency portion of the input signal is relatively high so as to protect the loudspeaker from being overdriven. The system is configurable so that it can be used to enhance the loudspeakers of audio and video play devices such as televisions and computers.

Fig. 1