

Conventional Approach to Tonal Balance in Loudspeakers and Recordings

The aim of most conventional loudspeakers is to produce a virtually flat frequency response in the direct sound with no room reflections taken into account. When such loudspeakers are played in a real listening environment, however, the result will be a boominess in the bass and a weak treble. In order to compensate for these tonal deficiencies in conventional loudspeakers, many recordings are attenuated in the bass and/or boosted in the treble.

Scientific Approach towards Perfection in Tonal Balance

The full reproduction of musical sounds demands that the frequency response of the transfer from the original sound to the listener is flat—involving microphones, disc cutting and playback equipment, amplifiers and loudspeakers. To enable this quality of reproduction to be achieved the OA-51 is designed to have a virtually flat frequency response when listened to in a normal domestic environment.

An increasing number of today's highest quality recordings also comply with this requirement for a flat frequency response. Such recordings, when played through the OA-51, will be reproduced with remarkable fidelity.

The Benefit of Tone Controls

Until that day when recordings with a flat frequency response are the norm, the effect of auditioning some of the standard recordings of today through the OA-51, or any other loudspeaker that does not have the tonal deficiencies of conventional loudspeakers, will be a tonal balance which tends towards bass lightness and treble emphasis.

The normal way of compensating for tonal imbalance in reproduction is by use of the amplifier's tone controls. (It is hardly practical to change loudspeakers to suit the tonal characteristics of different recordings!) Tone controls in most amplifiers cannot quite compensate, however, for the tonal imbalance found in some recordings. To permit the listener a fuller degree of compensation for deficient recorded balance, Stig Carlsson has designed a tone control unit intended for connection to the amplifier's tape monitor.

This tone control unit will, at moderate cost, provide the listener with complete control over tonal balance.

