

Bass plays an extremely important part in music. It is used to colour orchestral music and add drama. In dance and rock music it is used to increase the heartbeat and therefore sense of excitement of the listener. It excites us because of its links with nature but is extremely difficult to reproduce.

Bass Meant

Thunder, huge waves crashing against rocks, the roar of a gale through trees, the eruption of a volcano are examples of natural occurrences that produce lots of bass. Just like the colour red in the light spectrum, bass in the audio spectrum carries suggestions of danger and warning. These emotional triggers are prevalent in all forms of entertainment as they cause excitement and thrills in the audience.

In a car, physical space and a noisy environment make it particularly hard to generate meaningful bass tones without specialised equipment and a lot of effort and cost in terms of vehicle design. We have therefore, come to accept that the thin and weedy sound that emanates from your factory installed entertainment system is the best we can hope for. But much more is possible and the benefits to listening pleasure are always worth the extra effort.

When it comes to car audio, we normally speak of bass in terms of audible frequencies below 80 Hertz otherwise known as sub bass. Such frequencies require specially designed speakers and amplifiers as described in our product features elsewhere in this publication.

In musical terms just a few acoustic instruments produce sub bass frequencies. These include some brass instruments, double bass, timpani and piano and very few others. In electronic or amplified music, the bass guitar and bass synthesizer are the most common sub frequency generators and are much more heavily used. Composers of orchestral works tend to use bass very sparingly to boost its impact and maintain its dramatic effect and this can leave many lovers of such music feeling it isn't worth all the effort. This could not be further from the truth. An orchestral work with its bass content removed will sound flat and lifeless. You may be able to appreciate a virtuoso violin performance but the accompaniment will be lacking all the drama the composer worked so hard to add.

For rock, pop and dance music, bass is used a lot more to provide driving energy to the music to make you tap your feet or even dance which is why traditionally, listeners of these genres have been much keener in their efforts to reinforce bass content in their cars. However, adding bass to small speakers will only result in distortion that will destroy listening pleasure and eventually, the speakers!

Most subwoofers will reproduce frequencies beyond sub bass. Some reaching as high as 200Hz at which point we reach the lower tones generated by all

in a manner of acoustic instruments. This can help listeners to tune a system to suit their tastes but bass needs to be expertly balanced so that it doesn't overpower or detract from what is happening at higher frequencies. Fortunately, FOUR MASTERS are at hand to help advise and balance your system to your tastes.

Find out more about how bass can dramatically affect your listening pleasure and how to introduce some into your car by contacting a FOUR MASTER.