

tips

Loudspeakers

For many years in the UK the two-way “standmount” loudspeaker, a compact box with one driver handling the treble and one covering the bass and midrange frequencies, has been the nation’s sweetheart. It’s still a popular choice but nowadays its dominance is coming under threat from relatively inexpensive floor-standing designs.

Many of today’s ‘standmount’ models prove conclusively that bigger isn’t necessarily better. However, there’s one area where nearly all of them are found wanting - conveying the might and scale of bass instruments. The laws of physics rule out any possibility of a small two-way delivering trouser-flapping bass. This is where the new generation of affordable floor-standers comes into the picture

All else being equal, if you give a smallish bass driver more room in which to do its stuff it should be able to muster more low frequency muscle. Be warned, though, that while deep bass imparts a welcome sense of scale and authority to music it can also be troublesome stuff. Too much low frequency power, or bass that’s not kept in check by the speaker or the rest of the system, can muddle vital midrange information - which is where most of music’s interesting stuff resides - and make music appear sluggish and undynamic.

If your system seems to suffer from this affliction, there are two possible solutions: loudspeaker stands - more of which later - and positioning. You can adjust the balance of any loudspeaker to some extent simply by altering its position in the room. To begin optimising the set-up, place your speakers in the classic isosceles triangle arrangement. (This works whether your speakers are designed to stand close to or some distance away from the walls of the room.) Position both speakers at the same distance from your listening seat, with the gap between them being less than the distance from the speakers to the seat. So, if the speakers are twelve feet away from your chair, they should be less than twelve feet apart. The height of the speakers is also important. The general rule is to arrange them so that the high frequency drivers (tweeters) are level with your ears when you are sitting in your “listening seat”. Parking standmount speakers on the floor (or fixing them at ceiling height) is a definite no-no.

Now you’re ready to start fine-tuning. If your system sounds a little lightweight, try moving the speakers closer to the rear wall. Conversely, if the system sounds fat and bloated, moving the speakers further into the room will help. If your speakers have reflex ports - small cabinet openings used to tune the bass driver’s response - you can try restricting the air-flow through these by inserting a wad of foam or even a rolled up sock. It sounds implausible but this simple dodge can prevent wallowing bass. Whatever you do, though, do not stick any speakers in the corner of the room - that’s a guaranteed recipe for disaster. You should also ensure that each speaker is in a similar immediate environment. Avoid placing one speaker along an empty section of wall while the other stands close to a fluffy sofa: this will disturb the balance of the sound and the stereo image.

Playing with the stands under “standmount” speakers is also worthwhile. Mass loading them by filling their uprights with sand or lead-shot, for example, usually adds muscle to the speaker’s bass, while adjusting the floor-spikes to perfection will help keep those low frequencies fast and taut. Even changing the way the speakers attach to the stand can make an appreciable difference: the simple trick of placing some pointy cones between the stand and the base of the speaker can work wonders for a system’s performance, improving its portrayal of musical timing and replacing muddle with clarity. Some speakers, however, prefer being attached to the stand with Blu-Tack rather than spikes or cones. Trial and error will tell you which method works best for you.

If you have a small room in which there’s no floor-space for stands, you can use dedicated wall brackets to support your speakers, they are far preferable to bookshelves or window ledges. If you place a “standmount” loudspeaker on a shelf full of books you’ll not get the best from it for reasons involving dispersion, diffraction, reflection and other arcane technicalities beyond the scope of this leaflet.

The key to understanding speakers and how they can be tuned for best performance relies on accepting one obvious fact. Speakers do not operate in isolation: they interact with the rest of the system and they interact with the room in which they’re used. Speakers can only do what the amplifier tells them to do, and they can’t improve the quality of the signal coming into them. So, if you have a rosy CD player and a poor amplifier, buying speakers that are more revealing will make your system sound worse! That is why it is vital to get the rest of your system sorted before you start thinking about new speakers. Then think about your room. Those coffin-sized speakers might look tasty but are they going to work effectively in your confined living space? And while you might dream of bathing in gut-wrenching bass, will you enjoy it when your plasterboard walls start resounding sympathetically? Be realistic when you are choosing speakers and tell the salesperson what sort of room you have. And don’t exaggerate! A small, musically rewarding speaker often makes a better long-term partner than a huge model with a higher impress-your-pals factor.

Also see: Stands, Cables and leads, Amplifiers and My first hi-fi.