

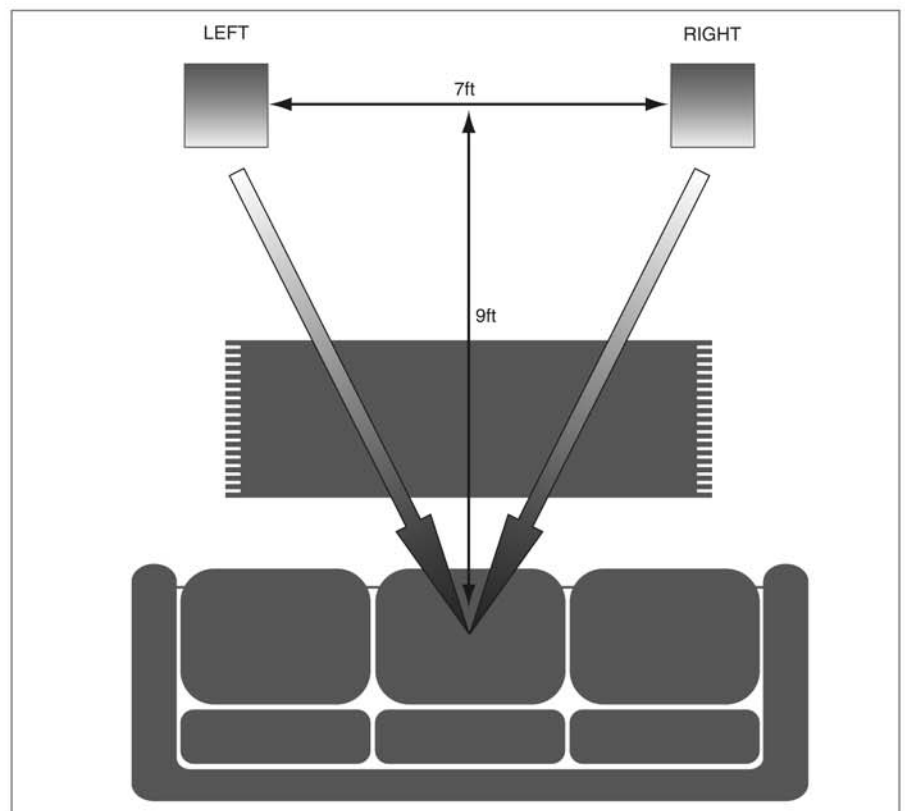
tips

My First Hi-Fi

Now you've bought the components for your first hi-fi system there are a few things you ought to think about if you're keen to get your money's worth from all that shiny new tackle.

Where to put your hi-fi

Let's start with the loudspeakers. Just as you wouldn't put a TV where you couldn't see the screen, it would be crazy to place your speakers so that your ears didn't have an uninterrupted 'view' of the sound they're producing. For the best stereo 'picture' the speakers should be in front of you (doh!) and equally spaced either side of a line drawn from where you sit to a point straight ahead of you. (Which is probably where your TV is right now.) A good starting point in a typical room would be to place the speakers around seven feet apart and to sit around nine or ten feet back from them. No rules in hi-fi are unbreakable, though, so if the system sounds best with the speakers further apart or a little closer to each other then that's fine.



Some speakers like their backs to be close to the wall, while others prefer a little breathing space behind them. Again, try both positions to see where they produce the best sound with the cleanest bass. If the bass sounds fat, muddled and boomy, move the speakers away from the wall. If it sounds thin and weak, move them closer to the wall. As for how far off the ground they should be, floor-standing models make life simple as they position themselves at the right height automatically. If you've chosen smaller 'bookshelf' speakers, your best bet is to place them on dedicated loudspeaker stands. As well as positioning the speakers at the correct height these will also hold them still: you don't want them rocking and rolling along with the music as that degrades the sound – they'll sound 'soft' and lose detail if they can move. And don't worry about the spikes on loudspeaker stands: they're vital for top performance and they won't ruin your carpet because they penetrate between the fibres to anchor the speaker to the floor below – unless, of course, you have a really cheap, nasty carpet! If you have a wooden floor that you don't want scratching, try placing a coin beneath the spikes.

A couple of warnings!

Before we move on to the system components, a couple of warnings. First, if you do place your speakers close to a TV be sure to check that they're magnetically shielded: if they're not, they'll mess up the picture on the TV and might even cause it permanent damage. Most modern loudspeakers, however, are TV-friendly but do check to be on the safe side! And take note that 'bookshelf' speakers is a misnomer: the name 'bookshelf' doesn't mean that they'll work their best when perched among your collection of encyclopedias! We'll come back to how best to connect your speakers to your system shortly, just as soon as we've found the best place to park your electronics.

So what is an amplifier?

The heart of any system is the amplifier. You are probably familiar with the other components that make up a hi-fi, such as CD players and Cassette decks, but may not be familiar with the role an amplifier plays, because all midi, mini and all-in-one systems have them built in. The amplifier is the heart of any system which takes the very small signal, or output from your components, and boosts it, so that it can be reproduced via your speakers. The amplifier controls the volume, which source unit you are listening to, or recording from in the case of tape decks, MD and CDR recorders, bass and treble gain (if you have tone controls) and if you have speaker switching, which speakers are in use.

Reverse of an amplifier?



PHONO PLUGS



PHONO SOCKETS



OPTICAL PLUG



OPTICAL SOCKETS



COAXIAL PLUG




COAXIAL SOCKETS

Most front end sources connect to your amplifier using phono (or RCA) leads, usually terminated with a pair of red and white terminals. A simple rule to remember is that the red connector always connects to the right input on the amp and white to the left. It's worth mentioning at this stage that some high quality interconnects are directional, which means that they work better in one direction than another. These leads have arrows on them which should point towards the amplifier.

Recording formats have two pairs of leads – one for playback and the other for recording. The output of the source always goes to the input on the amp, and the input on the source goes to the output on the amp. Some recorders are labeled up simply "Play" (Output) and "Record" (Input), but the same rules apply.

If you really luck out, you will get both an amplifier and a recorder labeled up play and record, in which case, just match like to like!

The other thing to note with amplifiers is that if you wish to use a turntable, you will require a dedicated turntable input socket, labeled "Phono". Turntables work at a different level to all other "line level" inputs (approximately 10 times lower than other sources), so, for example, you cannot plug a turntable into a CD input or vice versa. If the amp that you have does not have a turntable input, you will need a separate "Phono stage" which will boost the output signal of your record player, so that the sound can be reproduced through any line level input. Phono stages are available in two types; internal (A circuit board which is fixed inside your amp by a qualified professional) and external, (A plug in box, which fixes between your turntable and amplifier, usually battery or mains powered), and some turntables even have them built in! One final point to remember about turntables is that they usually need to be earthed. In these cases, the extra wire attached to the output cables should be connected to the terminal on the amp marked "GND". Let's get the obvious considerations out of the way first. CD players, amplifiers and the like are mains powered so it's always a good idea to site your system close to a wall socket. Mains extension leads are a bad idea both from a sound quality point of view and for safety reasons. And never plug your hi-fi components into one of those nasty three-into-one multi-way adapter plugs: they're not good for sound quality. If you're short on wall sockets talk to your local electrician about having a couple more fitted.



Where to park your electronics...

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Electronics generate heat so ventilation is a decidedly good – and necessary – thing, as is a position away from other sources of heat such as radiators, fires and places in the room that enjoy sunlight beaming down on them all day. And, of course, keep amplifiers and the like away from soft furnishings – carpets and curtains. Finally, before you commit to what looks like a suitable position, make sure that you can squirt the remote control at the system without twisting yourself into a state that only a chiropractor can rescue you from.


While a regular shelf, shelving unit or occasional table might provide an adequate home for your system nothing truly comes close to a dedicated support rack. These are available in a variety of styles and colours today – unlike the bad old days when they were all black, industrial looking and aesthetically monstrous! As well as offering stable support, which ensures the best performance, and suitable ventilation for the components, these also help by providing something to hide all the cables behind. It might seem odd to say that these supports enhance the system's performance but they do.

Where to park your electronics continued...

Electronics are sensitive to vibration – especially CD players – and dedicated supports help prevent structure and air-borne bad vibes from adversely influencing the hi-fi. For that reason also it's worth trying to avoid placing your system components too close to your speakers.

CD's

What about your CDs? Should you clean those as well? Well, there are plenty of potions and polishes out there that claim to keep your discs sounding as good as new and avoid the 'jumps' and spurious noises that can result from dirty discs. If you're sensible you'll never need to buy them: prevention is better – and cheaper – than a cure. If you leave your discs lying on the floor out of their cases they will get scratched and dirty, so don't do it. Keep your CDs off the carpet and tucked away in their cases when they're not being played – and don't touch the playing surface with your fingers – and you should never have any reason to think about cleaning them.



Radio and Vinyl

And what of other sources such as radio and vinyl? Getting the most from these is, like most things in hi-fi, mostly plain common sense. If you have a tuner and it's connected to a poor aerial (or none at all), it isn't going to thrill you with its performance. So, if you're a radio fan you need to call a local aerial company and have them stick a decent 'twig' on your roof (or in your loft) to give your tuner a good signal to work with.

Vinyl fans need to take special care where they place their record deck because these devices are notoriously sensitive to external vibration. So, get yourself a dedicated equipment support and set it up so it's stable and level. If you don't know how to fit a cartridge and adjust it for correct alignment, get advice or help from the shop! Apart from sounding less than wonderful, a misaligned tone-arm and cartridge can trash your cherished LPs in a matter of moments. As with CDs, there shouldn't be any need for you to clean your records. The best way to keep records clean is to play them – the stylus digs deeper into the grooves than any cleaning brush – and return them to their sleeves the second you've finished playing them. Having said that, it does no harm to brush the dust off an LP before you play it. If you have old records that are seriously dirty, check out the hi-fi magazines to see if anyone in your area offers a professional cleaning service: it's often the only way to rescue those perfectly playable gems you found at the car boot sale or tucked away in a relative's loft.

Tips!

When you've attended to all the above your system should be getting close to its optimum performance but be warned that you can never expect the best from it when it's 'cold'. If you're inviting your friends around to wow them with the sound of your hi-fi, make sure you leave it playing for an hour or two before they arrive. Some manufacturers of high-end gear even recommend that you don't switch your hi-fi off at all unless you're going away on holiday – though not those who make valve-powered equipment. Always check with the manufacturer before you adopt that approach. With most systems, however, that hour or two warm-up before you settle down for a serious listening session will do the trick.

The final tip we'd offer is this: if your system's amplifier has tone controls fitted, use them sparingly and with caution. Hi-fi tone controls are there to make small adjustments to the tonal balance of the sound – they're not designed to give you a few more decibels of sound output when the party is reaching its climax! If you want to drive the neighbours to distraction at your next rave, put your hi-fi in a cupboard and hire a PA system!