

tips

Compact Discs

Ever wondered how CDs work? Why does one player cost 10 times more than another, when they seem to do the same thing? Well, understanding CD players is not as difficult as you might think.

In the good old days when vinyl records were king, people accepted that the record player determined the ultimate quality of the sounds that would emerge from a hi-fi. Put in a good signal at the start of the system and you stood a good chance of something decent coming out the far end; feed in rubbish and the amplifier and speakers could do nothing to improve matters. Despite what some pundits will tell you, that still holds true in the digital era. The better your CD player, the better your system will sound.

Ignore the so-called experts who maintain that because CD players are digital they all sound much the same. Listening to a couple of different players will show you that this isn't so. There are many factors that shape a player's sound including the quality of the disc playing mechanism, the circuits that control it, the Digital to Analogue converter circuitry, the audio stages, the power supply stages and, not surprisingly, the player's mechanical integrity. You can't readily assess all of these on the shop floor but a demonstration will tell you whether a player is working satisfactorily or not. If the bass is all over the place and the treble sounds hard and edgy it's a fair bet that you're listening to a player that's not especially well sorted. Remember also that, with a few notable exceptions, you get what you pay for. Most cheap players are far less musically persuasive than their more expensive counterparts.

CD players come in two main formats. The most popular is the integrated, stand alone type; a single case that contains all the requisite bits - plug it into your system and you're in business. Then there's what's called the two-box player: one box contains the transport- the mechanism and electronics that control, spin and read the disc - and the other contains the DAC, the unit that converts the digital data into analogue signals ready for feeding to your amplifier. The two-box player is usually the more expensive option favoured by audiophiles who want to mix and match components to achieve a particular sound balance

The third type of player is the multi-disc machine. These are great in terms of convenience: you can load up to six discs - more in some machines - press the play button and have uninterrupted music for hours without any user intervention. The downside is that they don't offer the same level of sound quality that single-disc players commonly attain.

The convenience aspect of CD machinery is certainly appealing but be wary of players that come laden with every conceivable feature and gismo. Remember that they all have to be paid for - often by using less capable audio circuitry - and the chances are that you'll never use ninety percent of the facilities on offer. Even the most minimalist audiophile players will allow you to access genuinely useful facilities such as programming out tracks you really can't bear to hear or playing your favourite ditty repeatedly until your family goes to live somewhere else!

One myth that definitely needs dispelling is that Compact Discs themselves are indestructible. They're not and they need as much caring for as vinyl records. A scratch on a CD can render it unplayable. Dirt and fingerprints can cause jumps and unexpected, alarming noises to emerge from your speakers. The Compact Disc player's transport contains error correction circuitry that should handle minor disc blemishes but it's not infallible. Protect your discs by not handling the playing surface and returning them to their cases when you've finished playing them.