

How to get, store and stream music

Our step-by-step guide to procuring and playing your tunes in the internet age



1 The hi-fi system

A Roksan Kandy K2 stereo amp and ATC SCM 11 speakers promise much – what makes it a 21st century hi-fi is the Marantz NA7004 AirPlay-enabled network music player.

2 The laptop

Let's face it, the handy compact PC with a large hard drive and an iTunes library stuffed with music was always going to be an attractive proposition as a music source, wasn't it?

3 The AirPlay portable

Yes, it's an iPad, but your iPhone will do just as well. All very Apple-centric, but fancy streaming the songs on your phone – wirelessly to this hi-fi? The Marantz has AirPlay, so you can...

1. Buy it Where should I get my music in the first place?

We're not about to preach to you: this is the 21st Century, and you're all big enough to understand the legalities of digital music ownership. So let's clear up the basics first: if you own the CD, you're fine to make a 'back up' copy of it on to your own hard disk for music distribution to your own hi-fi system. And here, you can ensure maximum quality by opting for a lossless, or even entirely uncompressed, copy (often called a 'rip') of your discs in your music software program's set-up options.

Music of Planet Earth

But ripping CDs is only the tip of the iceberg with digital music ownership. Once you've gone online, there's a huge range of legally available choice out there. First, you can try internet radio stations. They're variable in quality, with many stations offering

low-bitrate music streaming (i.e. live listening over the net, rather than downloading the tunes to your computer's hard drive. That said, there's plenty of fun to be had in exploring the music of Planet Earth.

For more convenience, plus some sophisticated listening-preference tweaking, try

For convenience, plus some sophisticated listening-preference tweaks, try streaming service Last.fm

online music-streaming service Last.fm. Again, it delivers only comparatively low-quality streams, but it cuts out DJ-related blather altogether. There are other online music streaming services as well, with Napster and Spotify leading the way. Spotify Premium won a gong

in our Awards 2010, and with good reason: for £10 a month, it offers unlimited listening to a huge range of music in decent 320kbps quality.

Possibly the most exciting option for audiophiles is the dedicated online services offered by hi-fi specialists B&W, Linn and Naim. Offering

music in up to 24-bit quality (CD runs at 16-bit), they offer the best-quality online services available – but usually at a cost, and only if you're prepared to download the music to your hard-drive. Streaming files of this quality is too demanding for many a broadband supply – for now.



3. Stream it What kit should play my vast music collection?

Once you've got your music collection sorted, the next step is getting it from your hard drive - PC, NAS device or music server - to the rest of your system. The simple option is to use your computer's audio outputs to make a direct connection to your hi-fi. If the PC has a digital connection, try using an external DAC (digital-to-analogue converter): this will improve your computer's sonic performance.

From PC to hi-fi streamer

But if analogue sockets are all you've got, the sound quality will depend on the 'soundcard' fitted to your computer - and in most off-the-shelf specifications, that's pretty basic. It can be upgraded, though, and we suggest you do that if you can't use an outboard DAC. Another solution is to divorce your computer from your hi-fi

altogether. You'll need some form of network music player - also called a streamer. You can buy streamers specified purely as sources, to add to your hi-fi - such as the Marantz NA7004 (1) - or opt for a self-contained solution

Rubbish in, rubbish out: even high-end streaming kit can be undone by low-quality digital music files

with amplification included, such as the Naim UnitiQute (2). Some manufacturers offer the option to 'serve' music to several 'client' rooms around your house, independently (i.e. one room can listen to different music from another). Sonos (3) leads the way here (and has made it commendably affordable)

- while others have created a modular architecture of central music server plus a series of client components (take a bow, Naim):

The golden rule of 'rubbish in, rubbish out' is as relevant in the digital age as it was in



1



2



3

YOUR CURRENT SYSTEM

Cyrus 6XP amp (£950)
and ATC SCM11
speakers (£960)



Our 2010 amplifier of the year, with the ATC speakers, has simply wonderful all-round sound quality. The Marantz NA7004 can play music from networked drives,

YOUR STREAMING SOLUTION

Marantz NA7004 (£700),
Apple iPad (£439) and Cyrus
6XPd upgrade board (£400)



accessing streaming services such as Last.fm and Napster, and supports every form of radio technology imaginable. It's also an Apple AirPlay client. Its digital audio output can be

connected directly into the Cyrus amp's DAC board once you've done the upgrade: all you need then is the world's sexiest remote control. That'll be the iPad, then.