

**Here are some handy tips from our staff and top audio journalist Malcolm Steward. To help with any basic questions you have about streaming music..**

*Should I move from playing CDs to ripping and streaming?*

It is your choice but we would say definitely yes, for many reasons not the least of which is being able to put all your CDs in the loft where they are not occupying acres of living space.

*Should I still keep my physical CD collection?*

That is certainly one way of safeguarding and 'backing-up' your digitized music collection but you can just as easily copy rips and downloads to a second hard disk located elsewhere and treat that as far more easily accommodated 'insurance'.

*Why not just use internet services like Spotify or Last.FM?*

Internet Radio can be a fantastic source of new music but its quality is variable. However, the best stations are very good if not truly 'audiophile' quality. And, you cannot retain what you hear, unless you make an analogue (tape) recording of the 'broadcast'. The quality of services such as Spotify and Last.FM's audio also leave much to be desired. They are certainly not premium grade and there is little you can do to improve the sound.

*Should I use a Streamer in my HiFi or a DAC connected to my PC?*

You should definitely use a streamer for the best results. The DAC and PC idea is popular in the USA where they really do not seem to have embraced the idea of distributed audio quite as well as we have in the UK.

Furthermore USB DAC technology is very much a 'moving feast' while the concept of NAS or computer storage using UPnP distribution is far better established and more stable.

*What are "HD files"? Will I hear a difference?*

HD files represent anything above 16-bit 44.1 kHz recordings – the standard at which CDs are produced. You will almost certainly hear a difference - likely a massive one with some recordings - through a quality streamer and a revealing hi-fi system.

*Will my music sound better than it did before?*

Because of the inefficient way CD players reproduce music the same music ripped and played through a streamer will often sound noticeably superior.

*Why is there such a huge variation in prices? Aren't all streaming devices the same?*

The functionality of many streamers is close to identical but as one highly respected manufacturer states "Streaming audio is simple, but streaming audio effectively is a much more complicated business than most people realise."

*Is wireless okay?*

Wireless audio - as opposed to control data - transmission under the ideal circumstances can work reasonably well for streaming up to CD-quality files but if you are chasing the finest performance or are using High-Resolution files a wired connection always provides a far better medium.

## *Where should I store my music?*

The best place to store music is on a computer or network storage device that is used solely for that purpose. Keeping music on a multi-purpose machine, like your laptop, is not a good idea. It is also less than ideal to use the music server for backing up your network files - letters, accounts, family photographs and the like or for other computing jobs, email and internet browsing.

## *What is a NAS?*

NAS stands for Network Attached Storage, a mini computer attached to your network that serves the music to your network streaming devices. A NAS is normally 'headless' and does not have, or need, a screen, mouse, or keyboard attached. You can hide it away in an under-the-stairs cupboard for example, from where it will serve up music to all the rooms in your house in which you have installed a streamer.

## *I am not a computer wizard - is this going to be too complicated for me?*

It all sounds a lot more technical than it is, but can be absolute child's play to set up. Anyway, getting your system up and running flawlessly is our job so you'll have very little to learn.

## *Summary*

The ideal way to add digitized music to your hi-fi is to plug in a network media player (such as a Naim NDX or member of the Qute family of products) into your hi-fi system and connect it via Cat5 or Cat6 cable to a NAS containing downloaded music files or those 'ripped' from your CDs.

Connecting the NAS through the network to another player in your kitchen or bedroom, say, will distribute the music on it to those devices simultaneously.

If you want absolutely the finest performance try to make sure that all your music components and NAS are on their own sub-network and separate from the rest of the traffic on your main network. This is easily done by running these devices off a second router - with a different IP address - connected to you main network router, so affording external access for rippers, Spotify and internet radio. (This requires a little networking know-how so please ask us about doing it: we will be happy to set it up for you.)

TIP SHEET 005

DEC 2012

SHOULD I STREAM MY MUSIC

CED & MALCOLM STEWARD