

Stream Box: tips for best performance

We are asked many times, what is good base for a perfect working audiophile system, which offers best sound quality, shows cover art and has very good connectivity. PLEASE NOTE: Our system is fully compatible to **UPnP standards** and therefore an OPEN system. So there will be many combinations, which will work fine.

Following Stream Box tips ONLY include system suggestions, that have proved to work perfectly!

⇒ ROUTER

You can use either wireless (**WLAN**) or wired (**LAN**) connection, but by principle LAN connections are more reliable than WLAN. If wireless is your choice, use at least Wifi „G“ or mixed “G/N”routers and channels 1 to 11. If you face speed problems on specific channels, switch to another.

⇒ UPnP/DLNA-SERVER

Twonky media server or **Asset UPnP** will give perfect results. Many DLNA servers can be enabled for transcoding of the original signal to another file format. This changes the integrity of original signal and requires a lot of processing power in NAS systems. Transcoding may lead to drop-outs in playback, so please make sure **transcoding is not enabled!**

⇒ NAS (NETWORK ATTACHED STORAGE)

Main CPU of network attached storage device should have **at least 1GHz** for playback of HD music without dropouts (QNAP-NAS consistently have reliable quality with Twonky pre-installed)

⇒ AUDIO PLAYBACK AND RIPPING FORMATS

HD music files (24 bit/88,2 - 192kHz) have audio quality like in the recording studio and are available from diverse online sources. Second best are uncompressed file formats created from CD source. **WAV** is a 1:1 copy of CD's audio with best sound quality, but **no tag information or album art will be displayed**. Lossless audio formats like **FLAC & ALAC** offer the same audio quality as WAV, but need only 60% of hard-disk space and show album art plus track/artist information.

PLEASE NOTE: FLAC offers 8 levels of lossless compression, **levels 4 to 8 give best results**. With compression levels 1 to 3 you will get **NO** playback, because of excessively high data rates (please use WAV instead)! Please also make sure that album cover art graphic is smaller than 800kbyte, bigger files will not be displayed! **ALAC** does need Twonky or Asset UPnP as server for playback. **Please avoid lossy compressed file formats**, like **MP3** or **AAC**, if you are forced to use these, select highest bit rate (**320 kbit/sec**) to get playback quality near CD. All suggested ripping formats (except WAV) are able to display cover art and metadata, if these information is available from online data base (CDDb, Gracenote,...), when ripping.

⇒ CD RIPPING SOFTWARE

We strongly recommend to use high quality ripping programs and the best available audio formats to store music onto computer or network. There are many different programs for download, which can be used as ripping and playback software (**iTunes**, **Windows media player**, **foobar2000**, **EAC**...). If you want to be sure to get a bit-perfect copy, please activate **“Ripping Security”** in foobar2000, dBpoweramp or Exact Audio Copy (EAC).

⇒ HOME RECORDINGS FROM ANALOGUE SOURCES

If you record your own files from vinyl or analogue tape, you are able to transfer the original quality by using 24bit depth and higher sampling rate (96 to 192kHz). High quality recording software needs not to be expensive, we recommend **Audacity** combined with high quality audio interface like **Phono Box USB V**.

