CD goes digital!



disc tray and prominent control knob,
Teac's CD-P800NT
could be seen as
the offspring of a
CD player and a tuner. Actually, as a
description that wouldn't be entirely
wide of the mark as the unit does
indeed play CDs and can receive
radio stations. The proviso is that

ith its front-loading

the radio stations in question must stream over the Internet. This is because the CD-P800NT is essentially a CD player built for the network and multimedia age. Internet radio ('vTuner') and CDs apart, that means iPod/iPhone streaming and music playback from DLNA media-servers (such as computers and NAS boxes) or front/rear USB port.

For all its retro stylings, the CD-

P800NT isn't stuck in the CD-driven 16bit past. It will also play 24bit WAV and FLAC files with sampling rates of up to 192kHz. Other codecs supported include MP2/3, AAC, WMA/WMA Lossless, Apple Lossless and even Ogg Vorbis. It will also play DSD files (.dsf) with sampling rates of 2.8MHz or 5.6MHz. That could be your ticket to hi-res nirvana courtesy of Blue Coast Records and labels of their ilk. The DAC chip buried in its neat innards, a Burr-Brown PCM1795, natively-supports DSD as well as hi-res PCM.

But does this mean the CD-P800NT can play SACDs with its optical disc drive? Alas no. At best, you'll get the 'plain' CD layer (if your disc is a hybrid one). The only discs this player can handle are 'standard' (Red Book) audio CDs, or CD-ROMs containing WAV and/or MP3 files. Any other content, including files featuring the codecs listed above, is ignored. You can only play such files via USB or network storage. Why should that be? Investigating further, I note that the unit's optical drive isn't a computer-type IDE or SATA CD-/ DVD-ROM drive; it's a Teac CD-5020 'loader unit'.

According to Teac's data-sheet,



The CD-P800NT looks very much like a CD player. Indeed, the transport is designed specifically for CD players as opposed to a SATA-type computer drive. Note too the linear power supply.

this proprietary module outputs decoded digital audio (rather than raw data) to the host unit - in this case the CD-P800NT - via S/PDIF or I2S. In other words, the loader's capabilities determines what can be played from optical media. Basically, the CD-5020 is - it would seem - a 'multimedia-enhanced' CD player without case, power supply, DAC or user interface. Had Teac's design instead specified a standard computer-type DVD optical drive, the disc facility could have been even more useful. With a little extra work the unit could have been able to play two-channel SACDs.

We shouldn't really complain, though. The CD-P800NT packs in a considerable amount of very useful functionality for a mere £400. It's not particularly easy to drive with the front panel controls, although basic operation is straightforward enough. You can also set up to 40 radio stations as favourites. However, getting them in the list in the first place could be easier - mainly because all operational feedback is packed into a single-line display! Teac's free 'AVR Remote' app (Android/iOS) can however be used to drive the unit instead.

PERFORMANCE

A few minor niggles there may be. But taking into account its modest price, the CD-P800NT cannot be faulted in terms of music-making ability. First, I sent out the vTuner in search of BBC Radio 3. According to the information available what we're listening to is a 320kbps stream. With a Roksan K2 integrated amp and Acoustic Energy AE109s, it certainly sounded convincing with the acclaimed Stravinsky Firebird/Simon Rattle/Berlin Philharmoniker Prom.

All of the work's intricacy, including the subtle string-harmony rendition, was there for the hearing - and within a natural soundscape too. Yet even as the performance approached its famous climax, congestion was never a problem. Indeed, the only real complaint that can be aimed at the CD-P800NT's presentation is that it errs towards the bright. This can however work well with electronic dance music, rich in hi-hats, cymbals and other percussive elements

A slight treble emphasis imparts attack and excitement to wonderful vintage electro like Afrika Bambaataa's Renegades of Funk (CD). The bass end of the spectrum is meanwhile



No Wi-Fi, but the worlds of Internet-radio and locally-stored music are opened up by the Ethernet port. Optical and coaxial outputs can feed an offboard DAC, while the unit accepts 24/192 PCM/WAV or FLAC.

firm and well-controlled, helping to propel the sophisticated white-funk of Level 42's Micro-Kid with fluidity and vibrancy. Driving an expensive external DAC (in this case, the North Star Excelsio as reviewed on page 45) delivered an improvement that is best described as subtle. Some minor musicalities were now discernible and the slightly bright edge was tamed, but it's surprising how close the two

Only with hi-res and DSD material did this tiny performance gap widen perceptibly. But that's not to say the CD-P800NT isn't less than excellent here; the sense of space from hi-res recordings like Henry Purcell's "Sweeter than Roses" as sung by Carolyn Sampson (24bit/44.1kHz FLAC) is palpable.

The headphone amp is good to see, but not necessarily good to hear. Although it's got plenty of drive there's a lack of finesse. Even Sony's warm and smooth MDR-IRs biased towards stridency. I doubt much of the (limited) budget was allocated to the headphone stage.

CONCLUSION

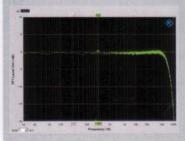
Flaws it may have but they're minor. The CD-P800NT allows you to enjoy your existing CD collection while sampling the 21stcentury joys of hi-res playback, Internet radio and streaming from home servers or USB. And all for such a modest outlay! You even get an upgrade path, in the form of digital audio outputs.



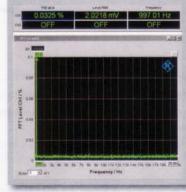
MEASURED PERFORMANCE

The CD player produced conventional results, with flat frequency response to 21kHz, without peaking or roll-off, plus low distortion of 0.21% and a dynamic range of 101dB - all typical values expected from 16bit CD where quantisation noise dominated parameters.

FREQUENCY RESPONSE 192k



DISTORTION, 24bit -60dB



CD will sound basically well balanced tonally.

Teac's DAC managed well with 24bit code, distortion dropping to a low 0.03% at -60dB, a very good result. Low distortion and noise together ensured a healthy EIAJ dynamic range value of 116dB was achieved, not up with the best (>120dB) but still a lot better than most. Frequency response extended to 60kHz from 192kHz sample rate FLAC files, read from a memory stick in the rear socket (the handbook says 192kHz WAV will not play from this socket, I note). Also, although DSD files are played, the DSD layer of SACD discs is not played, only the CD layer, so the CD-800NT is not an SACD player.

Teac's CD-P800NT measured well all round; it houses a good quality DAC that exploits high resolution PCM well so sound quality should be good. NK

Frequency response (-1dB) 192kHz SR 4Hz-60kHz Distortion (24bit) OdB 0.002 -60dB 0.03 Separation (1kHz) 111dB Noise (IEC A) -115dB Dynamic range (24bit, EIAJ) 116dB Output 2V

TEAC CD-P800NT £400







OUTSTANDING - amongst the best

VERDICT

A budget bargain. Does much, and sounds good.

FOR

- wide range of listening options
- Hi-res and many audio codecs, inc. DSD, supported

AGAINST

- optical drive accepts CD media only
- single-line display

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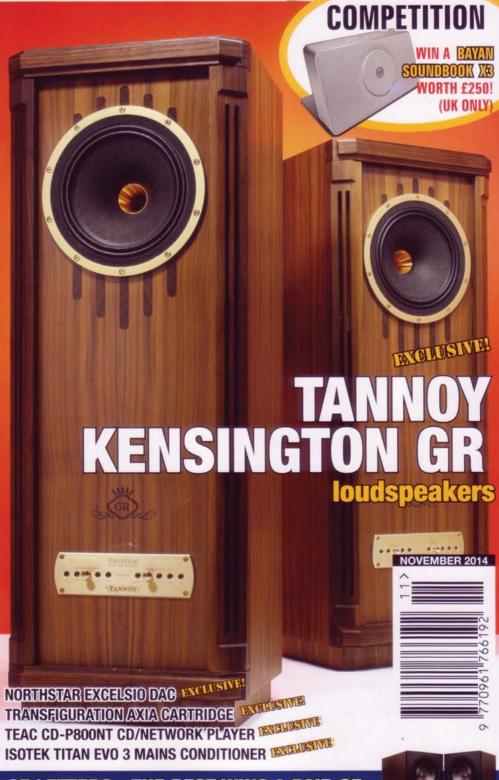
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