

Review: Teac NT-505-X – Network player/DAC

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Review: Teac NT-505-X - Network player/DAC- it looks fantastic and is excellently processed and also there is good-sounding digital technology

The Teac brand (<https://eu.teac-audio.com/>) has been familiar and sympathetic to me since my youth. The Teac A-300 cassette deck and a Dual turntable and Wega receiver formed one of my first “real” stereo systems in the early 1980s. I would come across the brand name more often: for example, during my training as an audio engineer, where I learned analog editing with a razor blade (yes, really!) on the X-2000 R tape machine – or when testing the Reference 600 series and the Compact system CR-H500 tuned by Ingo Hansen.

Here and now, I can focus on the Teac NT-505-X (price: 1,999 euros). The rather prosaic type designation hides a combination of the streamer, digital preamp, and DAC.

In a slight digression, I then dedicate myself to the similarly soberly named component “Teac CG-10M” (price: 1,799 euros); this is an external clock that the Teac NT-505-X (or other compatible devices) should provide an extra clean work cycle – but first to our actual test subject.



Teac NT-505-X: technology, connection, usability

The Teac NT-505-X can no longer be located in the entry-level class with its price of just under 2,000 euros. Streamers of acceptable quality with additional digital inputs are now available for a three-digit price.

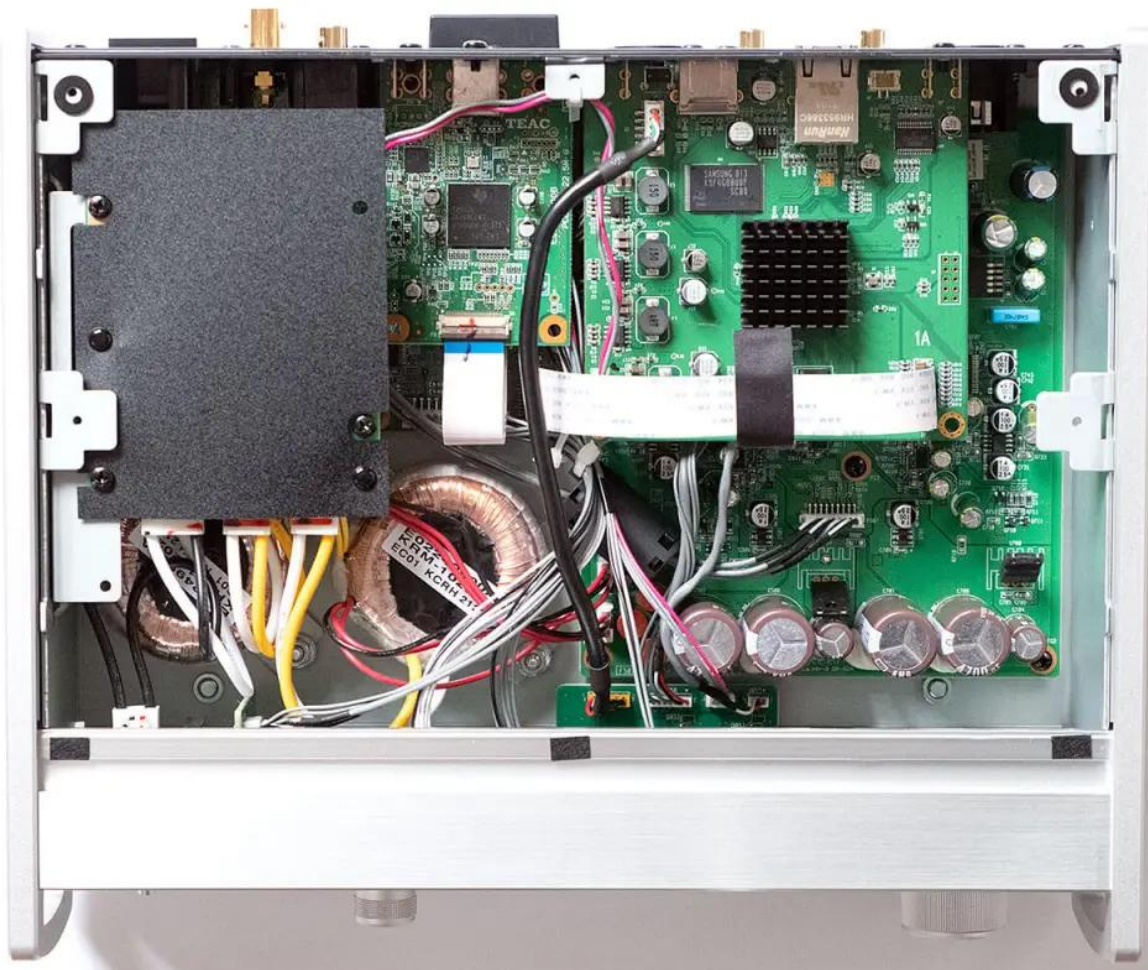
The look of the Teac device, which cleverly plays with retro elements and, at the same time, excellent precision, already suggests a sure promise of quality. An impression that is reinforced as



soon as you unpack it: That's what I call material quality and clean workmanship! The device, which has a footprint that corresponds almost exactly to a DIN A4 page, comes in a full metal housing made of very accurately crafted metal panels, each additionally stabilized by eight-millimeter thick aluminum side plates.



The three device feet also deserve their mention. It is a spike-washer principle, not rigid feet screwed to the housing. The tips of the tapered feet are positioned to “hang” from the underside of the chassis and swing freely when the unit is lifted. The three-point support ensures the device remains stable even if one rack level is not 100% vertical.



Even under the hood, Teac is no slouch. Not only are current converter chips used (ESS/Sabre ES9038 Q2M), but the entire structure, including the converter architecture, is kept in dual mono. The two 32-bit converter chips – one per stereo channel – enable a PCM resolution of up to 32-bit/768 kHz and DSD512. After the converters, the audio signals are processed fully symmetrically up to the output terminal. Not bad. Two integrated clocks – for 44.1 kHz and 48 kHz and their multiples – are on board, and there is also a 10 MHz input for connecting an external clock. This will be reported later. We’re still not done: incoming PCM and DSD signals can be upsampled up to 32 bit/384 kHz (PCM) and 24.5 MHz (DSD) if desired – and the user can also choose between seven different PCM digital filters.

Playback can be via several digital inputs (USB-B, S/PDIF optical and coaxial on the rear, combo socket optical/coaxial on the front), streaming is allowed via Ethernet, Bluetooth is also on board – and there’s a USB port for connection on the front of storage media. On the output side, the Teac NT-505-X offers an XLR and RCA double.



I have to complain a bit about the usability: Firstly, the display of the device is already complex to read from a distance of two meters. Secondly, I don’t find the arrangement of the buttons on the remote control intuitive. The individual, sometimes very different, functions “squat” too closely together for my taste. A somewhat more generous distribution of the functions over the total surface of the remote control (there would have been enough space) or working with colors could have had a positive effect. Thirdly, when configuring the device, the submenus are quite “impatient”: If you don’t modify the corresponding parameter quickly enough via the remote control or button on the device, the Teac jumps up a menu level again by itself.

However, starting up the streaming section is simple: Plug in the network cable – the network player gets an IP address. A few seconds later, it is visible as a playback device in a UPnP-compatible app. I’ve preferred the stable and functional connect app here for several years, but the undock app I usually use to control my Ruark streaming radio also works. If you like, you can also download the free “HR Streamer” app from Teac – in the end, there is no real difference

technically; you have to decide what you like best regarding look and user design. For the listening test, I mainly streamed via Qobuz and my CD player CEC



Teac NT-505-X: listening test and comparisons

What was immediately noticeable: Although my CEC CD5 also comes with an ESS Saber chipset (an ES9018K2M is at work here), the Teac NT-505-X sounds significantly different. Let's start with the tonality, which with digital sources often comes close to a journalistic egg dance. We all know the frequency plots that you occasionally see in the trade press – and with digital sources, they usually show a line that could not be more horizontal and dent-free. Nevertheless, everyone will be able to confirm that DACs or digital sources can also sound tonally different.

For example, my lively, lively CEC CD5 should be mentioned, which illuminates the bass range pleasantly deep and prominently and can also make the trebles sparkle, or an MFE Tube DAC SE (3,990 euros), which pushes the bass range forward very powerfully and with relish. But there are also representatives of the guild whose tonality is not particularly noticeable at first, such as the Merason Frerot (999 euros) or the Perreaux Audiant DP 32(2,900 euros) come to mind. Clearly: Our current test subject, the Teac NT-505-X, belongs to the latter group. All frequencies are “there,” but no (over) emphasis, dips, peaks, or preferences are recognizable. Although “silky” can be found repeatedly in my listening notes, this does not mean a softened high tone but an excellent resolution. More on that in a moment.

You can hear this pleasant balance well on tracks with sophisticated voicing, where the individual sound sources are cleverly distributed across the frequency bands, for example, on The Notwist's “Oh Sweet Fire” (Album: Vertigo Days). There's quite a concertante bass here that plays dotted figures. The middle band “belongs” to the singing voice, which has plenty of reverberation



and has been post-processed with effects. In the upper mids, we find wobbling vintage synthesizers wobbling and swaying in pitch – and at the top, a pretty wild hissing of antique drum machines. At



the very bottom, a reasonably powerful, fat bass drum “mumbles.” With my CEC CD5, my focus is clearly on the rhythm section, while with the Teac NT-505-X, no frequency range comes into focus more than the other. Now what is “better”? A matter of taste. In any case, it looks more neutral and balanced over the Teac – and therefore more relaxed.

color and texture

The more I dealt with the Teac NT-505-X, the clearer it became to me: Its main talents are resolution and richness of tones. For example, in the aforementioned Notwist song, he unravels the drum machines’ various shades of noise and sibilance with great precision. He traces the vintage synthesizers’ sometimes extremely finely chiseled pitch and formant fluctuations in great detail. What particularly appeals to me about the NT-505-X at this point: This acceptable resolution and this wealth of tonal colors are not just limited to a specific frequency range but are there over the entire keyboard.

With the track “The Lord Has Come Back Today” by the *Pixies* (album: *Doggerel*), a lot can be discovered about the Teac NT-505-X: In the intro, there would be a duo of an acoustic rhythm guitar and an E-Guitar wedged through Leslie, chorus, and reverb, contributing melancholy harmonies. The sound could also be a keyboard/synthesizer, but it’s a guitar, as you can hear relatively quickly over the NT-505-X. Both instruments share a frequency band but are perfectly and quickly distinguishable.



Let’s continue with Frank Black’s voice: With the last word of the first verse (“invited”), Black not only keeps the tone but is artificially lengthened by the excessive use of a reverb device. Here, the fine details and the slow decay of the reverberation can also be followed very well. After the intro, the tempo picks up, drums and bass join in, and the song changes from a campfire to an actual Pixies number. The drummer plays virtuoso rolls over the hanging and floor toms, and each tom is easy to identify in its mood and timbre, right down to the “woodiness.” The same applies to crash-

and-ride cymbals, whose overtone spectra the Teac NT-505-X effortlessly (without hissing or unpleasant over-presence) and yet full of a wide range of tones can be heard. I like it.

dynamism and space

Let's come to a difficult chapter for me as an editor. The Teac NT-505-X is not recognizable regarding dynamic properties and stereophonic stage. This is because the seven different digital filter settings had surprisingly little effect on the tonal character but all the more on the mixture of spatial representation and coarse and refined dynamics. Therefore, as an exception, I have to bring these parameters, which are somewhat different in and of themselves, together in one chapter.

In the factory setting, the NT-505-X is pleasantly alert in terms of gross dynamics and can distribute load changes quickly and powerfully, even if (significantly more expensive) D/A converters such as an MFE Tube DAC or a Perreux Audiant DP32 show that more is possible. The NT-505-X is well positioned regarding good dynamics: Even at low listening levels, volume gradations are reproduced. In addition, the three-dimensionality appears realistic but rather a touch more compact than I know from my somewhat more expansive CEC CD5. That means: In the factory setting, the NT-505-X does not build up a cinemascope broadside but rather a concise, harmonious space in which the individual actors can be easily located.



And now comes the big “but”: If you experiment with the digital filters and listen closely, you will find that the parameters mentioned, fine and coarse dynamics, as well as the way the room is represented, shift subtly but audibly, and often at the same time. Sure: the NT-505-X doesn't bring any drastic changes when stepping through the digital filters that contradict its essential character. But depending on the filter setting, the coarse dynamics and the rapid load changes recede somewhat into the background. At the same time, instruments in the stereophonic space are placed more precisely – or the music seems rhythmically more lively, more impulsive. Still, the stage is a little less deep or minimal at the edges less clearly illuminated. As I said: There are no words in between, but you can hear the differences. It is similar to the upsampling option, whereby

the gradations here become even finer (to the point of being inaudible); in the end, it's all about the last contours, which are sometimes sharper and softer.

Now to the master clock: Teac CG-10M

Speaking of fine-tuning: The separate clock mentioned at the beginning is also available. The Teac CG-10M costs 1,799 euros, slightly less than the NT-505-X. The question may be asked: is it worth it? Well – it depends. Regarding the processing quality and the “look and feel,” I can refer to what was said about the NT-505-X with a clear conscience: The same case is used here. But what about the excellent gain?



So: If you mainly listen to the *Pixies* and similar, you can save yourself the use of the Teac CG-10M. The same applies to music not produced by audiophiles – here, using (any) external clock would be “throwing pearls to the pigs” for me. On the other hand, Teac’s external clock can, of course, improve the sound. To put it bluntly: the finer, the purer, the quieter and gentler the music you intend to listen to, the more the CG-10M can get out of your audio data.

Here *Ludwig van Beethoven’s* Moonlight Sonata (op. 27, no. 14) comes to mind, I chose the Deutsche Grammophon recording by Daniel Barenboim, which, despite its age (the release year 1987), sounds excellent). It certainly sounds highly high-Fidel, even with the internal clock of the NT-505-X. But by switching on the Teac CG-10M, the piece gets a noticeable plus in emotion: the lighting up and fading away of the melody lines, which are almost at the limit of audibility, appear finer, and the major and minor contrasts are even more apparent and purer. This also applies to the repercussions in the recording room, even the pianist’s almost spooky “presence” in the

listening room: After this exquisite pleasure, the around 1,800 euros for the clock suddenly seem pretty realistic. Of course, it doesn't pass as "pocket money."



Conclusion

I'm impressed by this compact and elegant device. Not only because it looks fantastic and is excellently processed but because under the hood of the Teac NT-505-X, there is good-sounding digital technology, which makes a successful technology transfer from the much more expensive Esoteric devices noticeable.

On the plus side, there is a wonderfully smooth, detailed sound that is never stressful or annoying, which is particularly pleasing with its rich tone color and detail. In addition, the various digital filter and upsampling options leave plenty of room for fine-tuning the sound, especially in dynamic and spatial terms. At best, one could complain about the less intuitive remote control or the display, which is difficult to read from a few meters away. In terms of sound, on the other hand, the Teac NT-505-X can hardly be patched up in this price range. And in combination with the external master clock Teac CG-10M, you can get even more out of audiophile, high-quality recordings.

Profile Teac NT-505-X:

- Fully balanced tonality. Individual consideration of bass, midrange, and treble is unnecessary here or would only lead to empty phrases. The sound is pleasantly stress-free.
- Not only given the price class above-average acceptable resolution and such a wealth of tonal colors. Both extend over the entire frequency range and ensure exceptionally long-term, relaxed listening in which every detail is transmitted.

- With excellent fine dynamics, this component can fully retain its level of detail even at low listening volumes. Rough dynamics are also convincing, but the dynamic properties, as well as the stage image, are also dependent on the choice of the digital filter.
- With the standard filter, the stereo stage is relatively compact yet very coherent and realistic. The alternative filter settings offer a trade-off between dynamics and location of the sound sources or the perceived depth of the room – so you can tune to taste. Trying out different upsampling options results in the finest tweak possibilities for the outline sharpness of the sound image.
- Excellent workmanship a great, independent look.

Facts:

Teac NT-505-X

- Concept: network player with DAC
- Price: 1,999 euros
- Colors: silver, black
- Digital inputs: Rear: USB-B, S/PDIF optical and coaxial, Ethernet (LAN), Bluetooth, clock input (BNC); Front: combo socket optical/coaxial, USB-A
- Outputs: rear: 2 x line out (XLR, cinch); Front: headphone output (3.5 mm jack)
- Dimensions & Weight: 29 x 8.45 x 24.87 cm (WxHxD), 4.1 kg
- Power consumption: 20 watts (0.4 watts on standby)
- Guarantee: 2 years
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Teac CG-10M

- Concept: master clock generator 10 MHz
- Price: 1,799 euros
- Colors: silver, black
- Outputs: 4 x BNC
- Frequency accuracy: +/- 0.1ppm
- Dimensions & Weight: 29 x 8.45 x 24.87 cm (WxHxD), 4.6 kg
- Power consumption: 20.8 watts
- Guarantee: 2 years