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TEAC TN-4D Review – Intro

Teac is consistently strengthening its position in the turntable market.

This is **the only TEAC turntable with a direct drive**, which has its objective value and is also a clear reference to many excellent Japanese designs, mainly from the 1980s. However, **the Teac TN-4D looks modern**, which is mainly determined by the slim support platform (made of MDF), raised on silver legs. Two color versions are available – black and walnut veneer – enlivened by silver accessories: not only the feet but also the characteristic switch, platter, and tonearm.



The TN-4D is a middle-class turntable, but it is also one of the newest TEAC models with some extra features. So let's dig in and find out what new TEAC has to offer!

TEAC TN-4D Specifications

Turntable Section

• Type: Direct Drive

Motor: Brushless DC Motor

Rotation Speeds: 33-⅓ rpm, 45 rpm

Wow-and-Flutters: 0.1%

S/N Ratio: 67dB or higher (A-weighted, 20kHz LPF)

Turntable (Platter): Aluminium Die-cast, Diameter 30cm

Tonearm Section

• Type: S-shaped, Static-balanced

• Effective Length: 223mm

Needle Pressure Range: 0g to 5.0g

Compatible Cartridge Weight: 4.0g to 13.0g, 14g to 23g (including Head-shell)

Headshell and Cartridge Sections

Type: MM-type (SUMIKO Oyster factory installed)

Output Voltage: 4.0mV (1kHz)

Needle Pressure: 1.5 to 2.5g (appropriate value: 2.3g)

• Weight: 5.3g

Head-shell weight: 10g (including nuts, screws, and wires)

Compatible Stylus: Styluses for SUMIKO Oyster

Analog Outputs

Connector: RCA Pin jack × 1 pair (PHONO/LINE switchable)

Output Voltage: PHONO 4.0mV (1kHz), LINE 224mV (-13dBV)

USB Output

Connector: USB B-type (DC 5V 100mA USB Bus power required)

Audio Format: PCM, 8k/11.025k/16k/22.5k/32k/44.1k/48kHz, 16bit

Other

Operating Power: AC 100 to 240V, 50/60Hz

• Power Consumption: 2W

Standby Power: 0.5W or less

Overall Dimensions: (W×H×D) 420 × 117 × 356 mm / 16.5" × 4.6" × 14.0"

Weight: Approx. 6.1kg / 13.5 lbs.

 Included Accessories Felt Mat, EP Adapter, Counter Weight, Head-shell (SUMIKO Oyster installed), Platter, Dust Cover, Hinges × 2, RCA Audio cable with GND terminal, AC Adapter (GPE036W-24015), Owner's Manual (including Warranty Card)

TEAC TN-4D Review – The Technology

The TEAC TN-4D's attractive, slender look initially whets the hunger for its inner values. What may be in this hi-fi turntable wonder weapon? The developers have included nearly everything that should pique the interest of any current hi-fi enthusiast.

turntable's foundation is a stable board constructed of high-density MDF. Above her, the diecast aluminum platter spins in slow circles. The platter is protected by a felt mat.

Depending on the customer's preferences, the turntable's appearance is enhanced with a multilayer piano black finish or a walnut veneer. TEAC has given the TN-4D resonance-damping metal feet with rubber soles to decouple them from the hi-fi rack or other locations.



The TN-4D has a brushless direct drive with feedback control and two speeds of 33.3 and 45 rpm, therefore there is no platter bearing. This policy is meant to prevent or reduce "cogging." "Cogging" is a jerking sensation that might occur with direct drive. The die-cast aluminum platter is then placed on the DC motor's axis. The TN-4D lacks an automated start/stop mechanism that lifts the tonearm at the end of a record to protect the cartridge. You must assist in this situation.



The TEAC TN-4D's S-shaped tonearm was designed by the renowned company SAEC, who also developed the turntable's "pivot point tonearm bearing." The TN-4D tonearm has a headshell with an SME connector at the tip. This is useful for anyone who enjoys listening to various cartridges. The Sumiko Oyster MM cartridge with spherical cut samples the record's signals and costs 99 euros when purchased separately. Since I'm already talking about the cartridge, this turntable incorporates an anti-skating system that can be fine-tuned with the knurled wheel. The tonearm can be manipulated just as sensitively and smoothly, and it can be lowered at any position on the LP.

TEAC TN 4-D Review – Back-side Connections

On the connection panel, we see a well-known (not only from Teac turntables) circuit with a built-in corrective preamplifier, which, however, can be bypassed by taking the signal directly from the cartridge terminals.

Next to the mode switch, there is also a digital USB port, which allows you to rip records to your computer's hard drive. So the TN-4D has not only a phono preamplifier but also a D/A converter that will convert the signal with a sampling frequency of up to 48 kHz and a resolution of 16 bits.



The inbuilt MM phono preamplifier is an important component of the turntable. Using the operational amplifier NJM8080 IC from New Japan Radio Corporation, the signals from the Sumiko Oyster are pushed to an output level comparable to that of a CD player. As a result, you may quickly connect this record player to standard high-level inputs, such as those found on an integrated amplifier or all-in-one device. If you already have a phono preamplifier, the one built into the TEAC TN-4D can be turned off.

If you're sad because you "only" have a network player with digital inputs, don't cry right immediately. The rescue is here! An A/D converter is also included with the TEAC TN-4D. And provides you with the music from the LP via a USB-B output with a resolution of 48 kHz and 16 bits. Alternatively, you can connect the turntable to a Windows PC or MAC and digitize your records. Which, in my opinion, is a sacrilege!

The TEAC TN-4D is easily assembled: it comes out of the box with the turntable and is ready to use in no time. A union nut secures the headshell with the pre-assembled Sumiko Oyster to the S-shaped tonearm. Then it's the turn of the counterweight, which is elegantly affixed to the end of the tonearm. On the underside, there is a spring ball. The counterweight, which has a groove in it, is pushed over this. It sits, fits, and has no air or wobbles. That's a good concept. With its knife bearing, the SAEC tonearm bearing is also useful. And it's also lightweight.

How does direct drive work? The speed deviation in the tested turntable was only +0.06%! Remarkably!

TEAC TN 4-D Review – The Cartridge

The set of adjustments is classic for a turntable of this class: in addition to anti-skating, we only set the pressure of the stylus on the record, you don't have to worry about anything else, the Teac TN-4D is factory equipped with a cartridge, so the manufacturer took care of the proper geometry.

Before we get to the cartridge, let's take a look at its mounting. A socket with a locking nut and a system of interchangeable heads have been prepared – this is also an area where Teac evokes the craftsmanship and character of the Japanese vinyl technique.

The headshell makes a good impression, and one could expect the Audio-Technica cartridge, which is a common accessory, and almost a certainty in a Japanese turntable of this class. But Teac surprises here too... because the TN-4D is equipped with a Sumiko cartridge, one of the most popular models – Oyster.

This is of course an MM cartridge with a housing slightly higher than the standard one, which Teac managed with a special drive design (and compensation "in the other direction" can be done, for example, with a different mat). The "Oyster" has only a basic, conical needle profile, but for those who want... we can replace it with an elliptical one, right away or when it wears out.

TEAC TN 4-D Review – Sound Test

The TN-4D presents itself as fully "Japanese" – both structurally and sonically. After all, it is not an expensive turntable, but you can discover a lot of attractions in its sound.



I begin testing the TEAC TN-4D with Youn Sun Nah's album "Lento." I'm astounded by how smoothly the turntable operates. In this way, he disproves the myth that only belt-driven turntables can do this. I enjoyed the sound of the guitar, as well as it's gripping and rather plastic playing style. Youn's voice, on the other hand, comes off as rather hissing and Sheavy to my ears at times. The bass in the background with its concentration is fantastic.



I change genres, and Daft Punk's "Get Lucky" comes on the turntable. The TEAC TN-4D transmits the throbbing dance bass into your living room in a somewhat slender yet deft manner, putting you in a happy mood. Despite the fact that this piece is from 2013, it transports me back a few days. Unfortunately, the Sumiko Oyster breaks the wheel for me, because there is too much intensity in the treble later in the song.

What could the reason be? I use the Schön template type 2 to ensure that the cartridge is properly adjusted. TEAC has done an excellent job here; everything is in place. Is there a problem with the phono amplifier? I plug in the Trigon Vanguard III. Nothing changes in Sumiko's tonality, thus I can't get any further here either.

As a result, I contacted TEAC sales. I quickly get a new cartridge. I'm looking forward to seeing how this works on the TN-4D. The S's are a little more reserved than before, but the tonal signature is still there. Will a different cartridge improve the turntable's performance? I need to know right now. So I dig in my storage for the Goldring 1012 GX.

I enjoy attaching the Goldring 1012 GX to the TEAC TN-4D headshell because of the tonearm's convenient, unscrewable headshell. When you don't have to bother with the entire turntable, assembling a cartridge becomes more enjoyable.

The Youn Sun Nah LP is back on the TN-4D turntable. There you have it! All the crackling and hissing have been washed away! This amazing singer breathes into my ear, clear and silky soft, as well as compassionately. I'm building momentum since the beat and timing are both correct. The direct drive is an excellent foundation for higher-quality cartridges.



So I keep listening to the LP "Via Del Campo" and Esther Fellner. The piano playing has lovely timbres and a nice, somewhat warm focus in the lower registers. Esther performs "Oh mon Dieu" for me. That voice is just wonderful now that the cartridge is in place. I'm delighted with her slightly dark tone in the swinging out of her voice. The bow stringing slides across the strings with such ease. I can hear the violin's nice timbres here as well. These are just as well graded as, say, the pan flute and accordion.

"Get Lucky" by Daft Punk may be restarted. It's a tremendous pleasure and bliss. It pumps and grooves. I appreciate it when the bass is clean and tight. The beat of this disco record transports me back to a younger, more nimble time. I can feel the horse galloping away from me right now.

"Jazz Variants" is performed by the O-Zone Percussion Group. Is this music from another world? In any case, the star is rising. I'm pleased by how virtuosic and light-footed the TEAC TN-4D and Goldring 1012 GX combo handled this piece. The turntable's smoothness during the very calm passages. But also what drive he gets when the very huge dynamics enter the picture. This friendly duo does it brilliantly.

The internal phono amplifier of the <u>TEAC TN-4D</u> is compared against the Trigon Vanguard III in the last round of testing. Okay, I admit it: that's an unfair comparison, because the Vanguard costs a good 60 euros more than the complete TEAC turntable, at 680 euros. There is, in fact, something more! It would be unfortunate if this were not the case. More nuance and more defined bass, for example. However, the inbuilt phono preamp gracefully exits the situation.

Following this experience, my hunt for a better phono amplifier would only begin in the 200euro range. After all, TEAC has put together a fantastic package with the TN-4D. Respect!

TEAC TN-4D Video Review



To Buy or Not?

With its exceptionally quiet direct drive, the **stylish and well-made TEAC TN-4D record player provides an ideal foundation for listening to records**. It inspires analog aficionados with its energy and momentum. TEAC provides a well-equipped sound bundle with the integrated MM phono preamplifier and A/D converter. At the same time, the TEAC TN-4D provides a firm foundation for superior cartridges, which it is pleased to demonstrate.

