

Supplemental to New Product Information (SNPI)

TN-4D

Analog Turntable



**Employing a new ultra-stable, direct-drive motor,
a classically designed turntable with knife-edge tonearm bearings**

■ Features at-a-glance

- Direct-drive analog turntable
- Crystal-locked speed stability, thanks to a new brushless DC motor with feedback control
- Die-cast aluminium platter
- Knife-edge, pivot-point tonearm bearings, designed by high-end tonearm manufacturer SAEC
- Multi-layer Piano Black or natural Walnut veneer finish
- Built-in PHONO EQ amplifier for high-quality sound (PHONO/LINE switchable)
- Digital recording capability on a PC via USB digital audio output
- 2-speed drive for 33-1/3 and 45 rpm
- Gold-plated output connectors to resist oxidation
- Acclaimed Oyster MM cartridge by SUMIKO



Brand	TEAC	TEAC
Model Name	TN-4D-O/B	TN-4D-O/WA
Series name	Analog Turntable	Analog Turntable
Color	Piano Black	Walnut Veneer
EAN Code	4907034222643	4907034222667
Product W x H x D / NW	420 x 117 x 356 mm / 6.1 kg	420 x 117 x 356 mm / 6.1 kg
Package W x H x D / GW	525 x 240 x 438 mm/ 8.3kg	525 x 240 x 438mm/ 8.3kg

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■ Product overview

The TN-4D is a direct-drive, analog turntable with an elegant, low-profile design, made possible by the use of a newly-developed brushless DC servo motor.

Our new brushless DC motor (with feedback control system) achieves crystal-locked speed stability and smoother rotation while also eliminating cogging*. This low-profile motor allowed us to design a plinth that's extraordinarily sleek and stylish compared to that of most other direct drive turntables. The new tonearm employs knife-edge, pivot-point bearings, developed in collaboration with SAEC Corporation, a world-famous, high-end tonearm manufacturer. The result is an insightful, high-resolution sound quality that tonearms with conventional bearings can't match. Partnering it is a carefully designed PHONO EQ amplifier that allows you to directly connect the turntable to the line-level inputs of your existing hi-fi system. A high quality NJM8080 op-amp, specially designed for hi-fi applications by New Japan Radio Corporation, is employed to convey the finest of musical detail. Additionally, a USB port on the back panel allows you to digitally archive your vinyl collection via your PC/Mac.

To extract the music from your vinyl, the TN-4D comes with a highly-regarded Oyster MM cartridge from SUMIKO – a legendary American cartridge manufacturer. Noted for its innate musicality, the cartridge comes pre-installed on the headshell at the factory, allowing near 'plug and play' operation. The S-shaped tonearm meanwhile allows for quick cartridge/headshell swaps, so users can alter the sound quality by experimenting with different cartridges, if the desire takes them.

The TN-4D is an analog turntable that achieves highly accurate rotational speeds and is very distinctive, for a direct-drive design, thanks to its sleek and stylish aesthetics.

What is Cogging?

Cogging is a phenomenon in which the periodic attraction of the armature and rotor inside the motor is dependent on the rotation angle, resulting in a fine pulsing. For example, if you turn the axle of a motor with your fingers, you'll feel the rotation occurring in steps. This phenomenon is known as cogging. In order to eliminate cogging on a direct-drive turntable, a motor needs to have large numbers of poles, along with complex circuits and a mechanism to achieve smooth rotation. As a result, most turntable direct-drive units are relatively large, which is why the resulting turntables are so bulky.

● New motor, developed exclusively for direct-drive turntables

The TN-4D uses a sleek, brushless DC motor, offering crystal-locked speed accuracy, regulated by a computer-controlled feedback circuit and achieving low wow-and-flutter levels for a direct drive turntable, especially one with such a stylish, low-profile design.

● Die-cast aluminium platter

In conjunction with the newly-developed motor, the high inertia, die-cast aluminium platter helps to achieve better speed stability.



Supplemental to New Product Information (SNPI)

- **Knife-edge, pivot-point tonearm bearings**

In collaboration with SAEC Corporation, a world-famous, high-end tonearm manufacturer, the TN-4D's tonearm employs a knife-edge, pivot-point bearing. Unlike the case for tonearms with conventional bearings, any fine vertical movements encountered by this tonearm actually help in delivering a more dynamic sound with excellent resolution. The S-shaped tonearm also employs a universal headshell fitting, allowing users to quickly and easily swap cartridges/headshells, and supports a wide range of cartridge weights (from 14 - 23g / 0.5 - 0.8 oz.)



- **Precision anti-skating and stylus-pressure adjustment**

As you might expect, the tonearm is equipped with a counterweight, for precise stylus-pressure adjustment, and an anti-skating mechanism.

- **Built-in PHONO EQ amplifier supporting MM cartridges**

The TN-4D comes with a built-in PHONO EQ amplifier that allows you to directly connect the turntable to the line-level inputs of your existing hi-fi system. The NJM8080 IC from New Japan Radio Corporation is employed for op-amp duties, bringing up the level of the tiny signals received via the cartridge up to LINE level strength without any loss of quality.

- **USB digital output**

A USB port on the back panel delivers CD-quality digital audio to your PC/Mac, allowing you to record/archive your vinyl in a high quality, digital audio format. Once you have archived your vinyl to digital, it's a simple matter to listen to them while out and about, via a smartphone/portable audio player, or in your car (by burning them onto a CD-R or transferring them to a memory card/stick). And to ensure pristine signal transfer, gold-plated PHONO/LINE output terminals are employed to prevent analog audio signals from losing quality as a result of oxidation.

- **2-speed turntable for 33-1/3 and 45 rpm**

The TN-4D supports 33-1/3 and 45 rpm for LP and EP records. Our insistence on quality engineering can even be seen in the construction of the rotary control for start-up/speed selection, formed of machined aluminium.

- **Insulating feet with excellent shock absorption**

The insulating feet comprise a machined aluminium shell topped with a rubber cushion that is fixed to the high-density MDF plinth. Thanks to their excellent shock absorption characteristics the TN-4D is very resistant to acoustic feedback.

- **Pre-installed Oyster cartridge by SUMIKO**

The TN-4D comes with a well-regarded Oyster MM cartridge from SUMIKO – a legendary American cartridge manufacturer. Regardless of the type of music, the Oyster cartridge delivers a powerful but insightful performance.



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■ Key Features

- Direct-drive analog turntable
- Crystal-locked speed stability, thanks to a new brushless DC motor with feedback control
- Die-cast aluminium platter
- Knife-edge, pivot-point tonearm base, designed by high-end tonearm manufacturer SAEC
- Multi-layer piano black or natural walnut veneer finish
- Built-in PHONO EQ amplifier for high-quality sound (PHONO/LINE switchable)
- Audiophile-grade NJM8080 op-amp used in PHONO EQ stage
- Digital recording on PC/Mac via USB digital audio output
- 2-speed drive offering 33-1/3 and 45 rpm
- Gold-plated oxidation-resistant output connectors
- Oyster MM cartridge by SUMIKO
- Shock-absorbing insulating feet
- GND terminal
- RoHS compliant

■ Specifications

Turntable section

Type Direct Drive

Motor Brush-less DC Motor

Rotation Speeds 33-1/3 rpm, 45 rpm

Wow-and-Flutters 0.1%

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

Turntable (Platter) Aluminium, 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 1.5g to 2.5g (appropriate value: 2.3g)

Weight 5.3g

Headshell Weight 10g (including nuts, screws, and wires)

Compatible Stylus Styluses for SUMIKO Oyster

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Analog Outputs

Connector	RCA Pin jack x 1 pair (PHONO/LINE switchable)
Output Voltage	
PHONO	4.0mV (1kHz)
LINE	224mV (-13dBV)

USB Output

Connector	USB B (DC 5V 100mA USB Bus power required)
Audio Format	PCM, 8k/11.025k/16k/22.05k/32k/44.1k/48kHz, 16-bit

General

Operating Power	AC 100 to 240V, 50/60Hz
Power Consumption	2W
Standby Power	0.5W or less
Dimensions (W x H x D)	420 x 117 x 356 mm / 16.5" x 4.6" x 14.0" (incl. protrusions)
Weight	Approx. 6.1kg / 13.5 lbs.
Included Accessories	Felt Mat, EP Adapter, Counter Weight, Headshell (SUMIKO Oyster installed), Platter, Dust Cover, Hinges x 2, RCA Audio Cable with GND Terminal, AC Adapter (GPE036W-24015), Owner's Manual (incl. Warranty Card)

■ Rear Panel

