

**TN-400BT**

Analog Turntable with Bluetooth



**Analog turntable with Bluetooth® aptX® transmitter that streams music from LP Records wirelessly**

**■ Main Features**

- High-quality Bluetooth® aptX® wireless audio transmission
- Available in a selection of contemporary matt finishes or a natural walnut veneer
- 3-speed (including 78rpm) belt-drive mechanism with aluminum die-cast platter
- Newly-developed low-friction spindle for stable rotational speed
- Static-balanced S-shaped tone-arm with universal headshell
- Fitted audio-technica MM-type cartridge (AT95E)
- Built-in Phono EQ Amplifier with subsonic filter
- 16-bit/48kHz USB digital output for PC recording
- Gold-plated RCA Jacks for LINE/PHONO output



Brand	TEAC				
Model Name	TN-400BT-MR	TN-400BT-MW	TN-400BT-MS	TN-400BT-MT	TN-400BT-WA
Color	Matt Red	Matt White	Matt Silver	Matt Brown	Walnut
Announcement Date	Autumn 2016				
Product Dimensions (W x H x D) / NW	420 x 117 x 356 mm / 16.5" x 4.6" x 14.0" 4.9 kg / 10.8 lbs.				
Package Dimensions (W x H x D) / GW	555 x 220 x 430 mm / 21.9" x 8.7" x 16.9" 7.5 kg / 16.6 lbs.				
Qty. per Master Carton	1				

## Supplemental to New Product Information (SNPI)

### ■ Overview

The TN-400BT is an analog turntable that also allows users to listen to LP records wirelessly via Bluetooth® headphones & speakers. A die-cast aluminium platter provides accurate rotational speed while an S-shaped static-balanced aluminum tone-arm provides accurate tracking. The built-in Phono EQ amplifier enables the TN-400BT to be connected to a conventional hi-fi amplifier or a micro hi-fi, while a universal-type headshell allows users to change cartridges with ease.

A built-in Bluetooth® transmitter also lets users listen to LP records wirelessly with high-quality audio (thanks to the aptX® and AAC codecs). A USB output, meanwhile, enables users to digitally archive their records on a PC at 16-bit/48kHz resolution (equivalent to CD quality). For convenience, a quality Japanese-made moving magnet-type cartridge comes pre-installed, so users can quickly start enjoying their records without a lengthy set-up procedure.

- **Aluminum die-cast platter with 3-speed belt-drive**

A die-cast, high-inertia aluminum platter is driven by a high-torque DC motor via a durable rubber flat-belt, giving immensely stable playback at 33-1/3, 45 and 78 rpm speeds.



- **New low-resistance spindle**

A precisely-machined stainless steel spindle and durable brass bearing maintain accurate rotational speed, thanks to reduced friction.



- **New matt and natural walnut veneer finishes**

The TN-400BT is available in four matt finishes, as well as a natural walnut veneer finish.

- **Built-in Phono EQ amplifier**

The TN-400BT has an onboard Phono EQ amplifier that supports MM-type cartridges, allowing the deck to be connected to conventional amplifiers/micro systems that lack a dedicated turntable input. The Phono EQ amplifier employs a hi-fi quality NJM8080 op-amp chip (designed by JRC) which amplifies the tiny audio signal from the stylus with the minimum of distortion.

- **New subsonic filter for improved sound**

By filtering out the frequencies below 18Hz the TN-400BT prevents excess LF signal levels being sent to amplifiers, presenting an easier electrical load to any connected speakers. This filter is particularly effective when playing back warped vinyl records which would otherwise induce undesirable woofer movement (The subsonic filter is off when Phono EQ is THRU).

- **USB digital audio output**

The TN-400BT also incorporates an A/D Converter that delivers a 16-bit/48kHz resolution digital audio signal via a rear-mounted USB port. This allows records to be digital archived on a PC. Once converted, users can then easily transfer the recordings onto devices such as smartphones and car CD players

- **S-shaped static-balanced tone-arm**

The S-shaped, static-balanced aluminum tone-arm is equipped with a counterweight and anti-skating mechanism that allow an exact setting of balance as well as tracking pressure, ensuring accurate tracking during playback. A tone-arm lifter is also fitted for smooth lowering

## Supplemental to New Product Information (SNPI)

of the tone-arm onto records.

The tone-arm takes universal-type headshells so users can change cartridges with relative ease. In order to reduce signal losses between the tone-arm and the headshell, gold-plated contact points are employed, to help deliver an uncorrupted audio signal.

- **Bluetooth® wireless audio streaming with aptX® codec**

The TN-400BT's Bluetooth® wireless transmission system supports the higher quality aptX® and AAC codecs, as well as the conventional SBC codec. This means that even if users don't have a hi-fi system, then can still enjoy truly high-quality vinyl replay via Bluetooth®-equipped headphones or speakers.

Connecting the TN-400BT to Bluetooth® headphones or speakers is achieved very simply, at the touch of a button. A single-function pairing key and an associated LED indicator provide simple and clear confirmation of the connection status.

- **Beautifully detailed**

The TN-400BT brings elegance to the process of playing a record. The machined aluminum operation knobs ooze quality while the aluminum feet, attached to high-density MDF chassis via shock-absorbing rubber, provide a high resistance to feedback.

- **MM-type Cartridge from audio-technica**

The deck comes with an excellent, all-purpose MM cartridge, employing a lightweight aluminum cantilever, that helps deliver an accurate, highly musical standard of playback.

### Specifications of the Cartridge

Model of Cartridge	audio-technica AT95E
Type of Cartridge	MM-type (VM-type)
Frequency Response	20 Hz to 20,000 Hz
Output Voltage	3.5mV (1kHz, 5cm/sec.)
Channel Separation	20 dB (1kHz)
Output Balance	2.0 dB (1kHz)
Needle Pressure	1.5 g to 2.5 g (appropriate value: 2.0 g)
Coil Impedance	2.8k ohms (1kHz)
DC Resistance	410 ohms
Loading Resistance	47k ohms
Loading Capacity	100 to 200 pF
Coil Inductance	400m H (1kHz)
Static Compliance	20 x 10 <sup>-6</sup> cm/dyne
Dynamic Compliance	6.5 x 10 <sup>-6</sup> cm/dyne (100Hz)
Needle Shape	Joint-oval 0.3 x 0.7 mil
Cantilever	Aluminum Pipe
Vertical Tracking Degree	20 degrees
Overall Dimensions	17.0 x 17.2 x 30.5 mm (W x H x D)
Weight	5.7 g

## Supplemental to New Product Information (SNPI)

### ■ Features at-a-glance

- Robust high-density MDF plinth provides both vibration isolation and elegance
- Available in a selection of contemporary matt finishes, or a natural walnut veneer
- 3-speed belt-drive mechanism with aluminum die-cast platter (33-1/3, 45, 78 rpm)
- Newly-developed low-resistance spindle for stable rotational speed
- Static-balanced S-shaped tone-arm with universal-type headshell
- Pre-installed MM-type AT95E cartridge from audio-technica
- Built-in Phono EQ Amplifier with subsonic filter (off when THRU)
- Built-in TI A/D Converter allows 16-bit/48kHz USB digital output for PC recording
- High-quality Bluetooth® aptX® wireless audio transmission
- Floating-construction using decoupled feet provides high feedback resistance
- Machined aluminium operation knobs and feet
- Gold-plated RCA jacks (for LINE/PHONO output) and tone-arm contacts
- GND terminal on rear panel
- RCA audio cable with GND wiring included

### ■ Specifications

#### Turntable section

Type	Belt Drive
Motor	DC Motor
Rotation Speeds	33-1/3, 45, 78 rpm
Deviation of Speed	+/-2%
Wow-and-Flutters	0.2%
Signal-to-Noise Ratio	more than 67 dB (A-weighted) 60 dB (unweighted, 20kHz, LPF)
Turntable (Platter)	
Material	Aluminum Die-cast
Diameter	30 cm

#### Tone-arm section

Type	S-shaped, Static-balanced
Effective Length	223 mm
Needle Pressure Range	0 to 5 g
Compatible Cartridge Weight	4 to 8 g 14 to 18 g (including Head-shell)

#### Head-shell and Cartridge sections

Type	MM-type (VM-type)
Output Voltage	3.5 mV (1kHz, 5cm/sec.)
Needle Pressure	2.0 g (+/-0.5 g)
Cartridge Weight	5.7 g (+/-0.5 g)
Head-shell Weight	10 g (including nuts, screws, and wires)
Needle Life	approx. 300 hours (depends on conditions)

## Supplemental to New Product Information (SNPI)

### Analog Output section

Connectors	RCA jack x 1 pair (Gold-plated)
Output Voltage	
PHONO	3.5 mV (+/-3dB)
LINE	155 mV (-16dB)

### Digital Output section

Connectors	USB B-type (Full-speed, Plug-in Power required)
Audio Format	PCM 16-bit/48kHz
Required USB Bus Power	5V 500 mA

### General

Operation Power	
AC Adapter Input	AC 100-240V, 50/60Hz
AC Adapter Output	DC 12V 500mA
Power Consumption	1.5 Watts or less
Standby Power	0.5 Watts or less
Overall Dimensions (W x H x D)	420 x 117x 356 mm / 16.5" x 4.6" x 14.0"
Weight (Net)	4.9 kg / 10.8 lbs.
Operating Temperature	+5°C to +35°C
Included Accessories	Felt Mat x 1 EP Adapter x 1 Counter Weight x 1 Headshell x 1 (audio-technica AT95E installed) Platter x 1 Dust Cover x 1 Dust Cover Hinges x 2 RCA Audio Cable with GND wiring x 1 AC Adapter (GPE053A-V120050-Z) x 1 Owner's Manual (including Warranty Card)