

Teac TN-300

TEAC TN-300 Analog Turntable User Manual

Model: TN-300

1. INTRODUCTION

This manual provides essential instructions for the proper setup, operation, and maintenance of your TEAC TN-300 Analog Turntable. Please read this manual thoroughly before using the product to ensure safe and correct usage. Keep this manual for future reference.

The TEAC TN-300 is a manual belt-drive turntable designed for high-fidelity audio playback from vinyl records. It features a built-in Phono Equalizer (pre-amplifier) and a USB digital output for transferring music to a computer.

2. PACKAGE CONTENTS

Before proceeding with setup, ensure all components are present:

- TEAC TN-300 Turntable Unit
- Platter
- Rubber Sheet (Turntable Mat)
- Dust Cover
- Hinges (x2)
- Counter Weight
- Head-shell (with pre-installed audio-technica AT95E MM type phonograph cartridge)
- EP Adapter (for 45 RPM records with large center holes)
- RCA Audio Cable
- AC Adapter (GPE053A-120050-Z)
- Owner's Manual (including Warranty Card)

3. SETUP

3.1 Unpacking and Placement

Carefully remove all components from the packaging. Place the turntable on a stable, level surface away from direct sunlight, heat sources, and excessive vibration. Ensure adequate ventilation around the unit.

3.2 Platter and Belt Installation

1. Place the platter onto the center spindle.
2. Locate the drive belt, typically found around the inner rim of the platter or separately in the packaging.
3. Carefully stretch the drive belt around the motor pulley, which is a small brass or plastic cylinder located near the spindle. Ensure the belt is not twisted.
4. Place the rubber sheet (turntable mat) on top of the platter.

3.3 Tonearm and Cartridge Setup

The audio-technica AT95E cartridge is pre-installed on the head-shell. Attach the head-shell to the tonearm by inserting it into the tonearm tube and tightening the locking ring.

3.4 Counterweight Adjustment

The counterweight balances the tonearm and sets the tracking force for the stylus.

1. Slide the counterweight onto the rear of the tonearm.
2. With the anti-skating dial set to '0', carefully balance the tonearm so it floats horizontally. Use the tonearm lift lever to assist.
3. Once balanced, hold the counterweight steady and rotate only the numbered ring to '0'.
4. Rotate the entire counterweight (including the numbered ring) to the recommended tracking force for the AT95E cartridge, which is typically 2.0 grams.

3.5 Anti-Skating Adjustment

Anti-skating compensates for the inward force on the tonearm. Set the anti-skating dial to the same value as the tracking force (e.g., 2.0).

3.6 Dust Cover Installation

Insert the hinges into the slots on the rear of the turntable unit, then attach the dust cover to the hinges.

3.7 Connecting to Audio System

The TN-300 has a built-in phono pre-amplifier. Use the RCA audio cable to connect the turntable to your amplifier or receiver.

- **PHONO EQ (LINE/PHONO) Switch:**
 - Set to **LINE** if connecting to an amplifier's line-level input (e.g., AUX, CD, TAPE). The built-in pre-amplifier will be active.
 - Set to **PHONO** if connecting to an amplifier's dedicated PHONO input. The built-in pre-amplifier will be bypassed.



Image: Rear panel connections of the TEAC TN-300, including RCA outputs, USB port, and power input.

3.8 Connecting to PC (USB)

To digitize your vinyl collection, connect the turntable's USB output to your computer using a USB cable (Type B). You will need audio recording software on your computer to capture the audio.

3.9 Power Connection

Connect the AC adapter to the DC IN 12V port on the turntable and then plug it into a wall outlet.



Image: The TEAC TN-300 Analog Turntable, showcasing its cherry wood plinth and silver components.

4. OPERATION

4.1 Powering On/Off

The turntable is powered on when the AC adapter is connected and the power switch (if present, typically on the rear or underside) is in the ON position. Some models may enter standby mode when not in use.

4.2 Playing a Record

1. Place a record on the platter. If playing a 45 RPM single with a large center hole, use the EP adapter.
2. Select the correct speed (33 or 45 RPM) using the speed selector switch on the turntable.
3. Unlock the tonearm clamp.
4. Raise the tonearm using the tonearm lift lever.
5. Manually position the tonearm over the desired starting groove of the record.
6. Lower the tonearm gently using the tonearm lift lever. The stylus will descend onto the record and playback will begin.
7. To stop playback, raise the tonearm, return it to the tonearm rest, and secure it with the clamp.



Image: Detail of the tonearm assembly, showing the counterweight and anti-skating mechanism.

4.3 Using the USB Digital Output

When connected to a computer via USB, the turntable acts as an audio input device. Use your preferred audio recording software (e.g., Audacity) to record the audio playing from your vinyl records. Ensure the turntable is selected as the input device in your software settings.

5. MAINTENANCE

5.1 Cleaning the Stylus

Regularly clean the stylus to ensure optimal sound quality and prevent damage to your records. Use a soft brush designed for stylus cleaning, brushing gently from back to front.

5.2 Cleaning Records

Keep your records clean to minimize dust and static. Use a carbon fiber brush or a record cleaning solution and cloth before each play.

5.3 Cleaning the Turntable Unit

Wipe the turntable plinth and dust cover with a soft, dry cloth. For stubborn marks, a slightly damp cloth can be used, followed by a dry cloth. Avoid abrasive cleaners or solvents.

5.4 Belt Replacement

The drive belt may stretch or degrade over time, leading to inconsistent speed. If you notice speed fluctuations, consider replacing the drive belt with an official TEAC replacement part.

6. TROUBLESHOOTING

If you encounter issues with your TEAC TN-300, refer to the following common problems and solutions:

- **No Sound:**

- Check all audio cable connections.
- Ensure the PHONO EQ switch is set correctly (LINE for line input, PHONO for phono input).
- Verify your amplifier/receiver input selection.
- Confirm the stylus is properly seated and not damaged.

- **Distorted Sound:**

- Check tracking force and anti-skating settings. Incorrect settings can cause distortion.
- Clean the stylus and record.
- Ensure the PHONO EQ switch is not set to PHONO if connected to a line input, as this can cause over-amplification.

- **Incorrect Playback Speed:**

- Verify the speed selector switch (33/45 RPM) matches the record being played.
- Check the drive belt for proper placement and tension. A worn or stretched belt may need replacement.
- Some units may have fine-tuning speed adjustment screws on the underside. Consult the original manual for specific instructions if needed.

- **Humming Noise:**

- Ensure the turntable is properly grounded to your amplifier/receiver if a ground wire is present (though the TN-300 typically grounds through the RCA cables).
- Move the turntable away from other electronic devices that may cause interference.

For further assistance, please refer to the complete owner's manual or contact TEAC customer support.

7. SPECIFICATIONS

Feature	Specification
Model Name	TN-300
Product Dimensions	13.4 x 16.5 x 7.1 inches
Item Weight	11 pounds
Drive System	Manual Belt-drive
Rotational Speeds	33 1/3, 45 RPM
Cartridge Type	MM type (audio-technica AT95E)
Built-in Pre-amplifier	Yes (LINE/PHONO switchable)
Digital Output	USB
Material	Plastic, Wood
Color	Cherry

8. WARRANTY AND SUPPORT

Your TEAC TN-300 Analog Turntable is covered by a manufacturer's warranty. Please refer to the warranty card included in your package for details regarding coverage period and terms. Retain your proof of purchase for warranty claims.

For technical support, service, or inquiries about replacement parts, please visit the official TEAC website or contact their customer service department. Contact information can typically be found on the TEAC website or in the original packaging materials.