

Audio-Technica AT3600L

Audio-Technica AT3600L Turntable Cartridge Instruction Manual

Model: AT3600L

INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Audio-Technica AT3600L Moving Magnet Turntable Cartridge. The AT3600L is designed for high-fidelity audio reproduction and is compatible with turntables utilizing a standard half-inch mount headshell. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your cartridge.

PRODUCT OVERVIEW

The Audio-Technica AT3600L is a moving magnet cartridge featuring a durable design and a conical bonded diamond stylus. It is engineered to deliver clear and resonant sound reproduction for your vinyl records.

Key Features:

- **Type:** Moving Magnet (MM)
- **Mounting:** Standard Half-inch mount (1/2" spacing)
- **Stylus:** 0.6mm Conical Bonded Diamond tip
- **Cantilever:** Carbon fibre round tube for accurate sound reproduction
- **Tracking Force:** Recommended range of 2.5 - 3.5 grams
- **Output Level:** 4.2mV @ 5cm/sec. @ 1Khz
- **Frequency Range:** 20 - 20Khz
- **Load Impedance:** 47K ohm
- **Channel Separation:** 20dB @ 1Khz & 15dB @ 10Khz
- **Dimensions:** Approximately 2cm (H) x 3cm (L) x 1.6cm (W)
- **Weight:** 5.7g

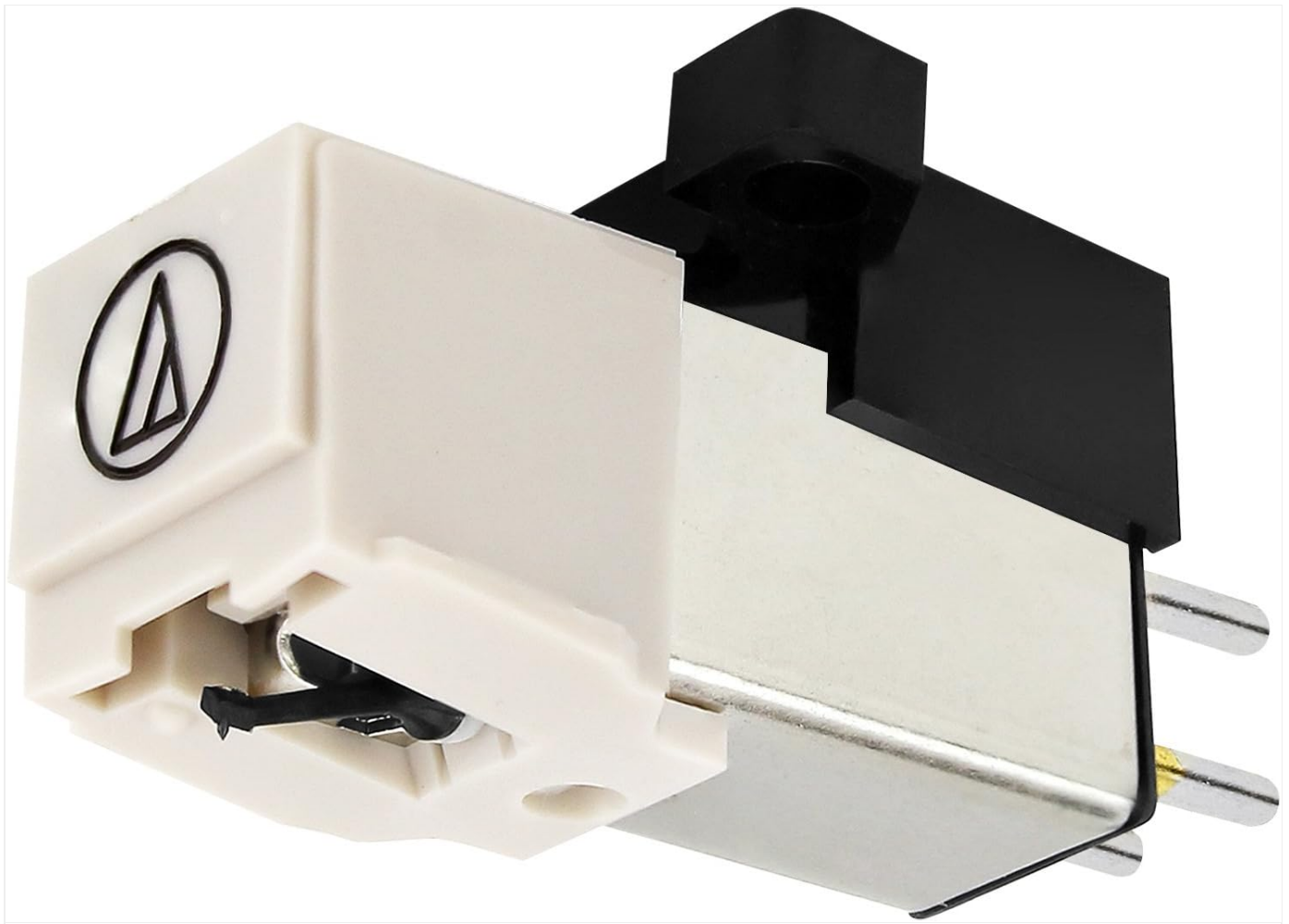


Figure 1: Front view of the Audio-Technica AT3600L cartridge, showing the stylus assembly.

SETUP AND INSTALLATION

Proper installation is crucial for optimal sound quality and to prevent damage to your records or equipment. The AT3600L is designed for turntables with a removable headshell and a standard half-inch mount.

1. Preparation:

- Ensure your turntable is powered off and unplugged from the mains.
- Carefully remove the existing cartridge or headshell from the tonearm.
- Place the new AT3600L cartridge on a clean, stable surface.

2. Wiring Connections:

The AT3600L has four pins at the rear for connection to the tonearm wires. These wires are typically color-coded:

- Red (R+): Right channel hot
- Green (R-): Right channel ground
- White (L+): Left channel hot
- Blue (L-): Left channel ground

Carefully connect the corresponding wires from your tonearm to the pins on the cartridge. Use tweezers if necessary to avoid bending the pins or damaging the wires. Ensure connections are firm but do not apply excessive force.





Figure 2: Rear view of the AT3600L cartridge, highlighting the four connection pins for tonearm wires.

3. Mounting to Headshell:

Align the two mounting holes on the cartridge with the screw holes on your headshell. Secure the cartridge using the two screws provided with your headshell or turntable. Do not overtighten the screws; they should be snug enough to hold the cartridge firmly in place without stripping the threads.



Figure 3: The AT3600L cartridge with its protective stylus cover, ready for mounting onto a headshell.

4. Alignment and Tracking Force:

After mounting, it is essential to properly align the cartridge and set the tracking force. Refer to your turntable's instruction manual for specific guidance on:

- **Cartridge Alignment:** Use an alignment protractor to ensure the stylus tracks correctly across the record groove.
- **Tracking Force:** Set the tracking force to the recommended range of 2.5 - 3.5 grams. A tracking force scale is recommended for accuracy. Incorrect tracking force can cause premature stylus wear or damage to records.
- **Anti-Skate:** Adjust the anti-skate setting on your tonearm to match the tracking force.

OPERATING INSTRUCTIONS

Once installed and properly adjusted, your Audio-Technica AT3600L cartridge is ready for use. Ensure your turntable is

connected to a phono preamplifier or an amplifier with a dedicated phono input (MM type).

1. **Record Placement:** Place your vinyl record carefully on the turntable platter.
2. **Stylus Guard Removal:** Gently remove the clear plastic stylus guard from the cartridge. Always remove and replace the guard with care to avoid damaging the stylus.
3. **Tonearm Operation:** Use the tonearm lift lever to raise the tonearm. Position the tonearm over the desired starting groove of the record.
4. **Lowering the Stylus:** Slowly lower the tonearm using the lift lever. The stylus will gently descend onto the record groove, and playback will begin. Avoid dropping the tonearm or stylus onto the record, as this can cause damage.
5. **Ending Playback:** At the end of a record side, or when you wish to stop playback, use the tonearm lift lever to raise the tonearm. Return the tonearm to its rest and replace the stylus guard.

Important: Always replace the stylus guard when the turntable is not in use or when moving the turntable to protect the delicate stylus from accidental damage.

MAINTENANCE

Regular maintenance ensures optimal performance and extends the life of your cartridge and records.

- **Stylus Cleaning:**
Clean the stylus regularly to remove dust and debris. Use a soft stylus brush, brushing gently from the back of the stylus towards the front (in the direction of play). Never brush from front to back or side to side, as this can damage the cantilever.
- **Record Cleaning:**
Ensure your records are clean before playing. Dust and dirt on records can transfer to the stylus, degrading sound quality and accelerating wear.
- **Stylus Replacement:**
The stylus is a consumable part and will wear out over time. A worn stylus can damage your records and degrade sound quality. Replace the stylus (Audio-Technica ATN3600L) after approximately 300-500 hours of playback, or sooner if you notice a significant drop in sound quality or increased record wear. The stylus is user-replaceable by gently pulling the old stylus assembly forward and down, and then pushing the new one up and back into place until it clicks.

TROUBLESHOOTING

If you experience issues with your AT3600L cartridge, consult the following common problems and solutions:

Problem	Possible Cause	Solution
No sound or weak sound from one channel	Loose or incorrect wiring connection	Check and re-secure all four tonearm wire connections to the cartridge pins.
	Damaged tonearm wire	Inspect tonearm wires for damage.
	Faulty cartridge or stylus	Test with a known good stylus or cartridge.
Distorted or muffled sound	Dirty stylus	Clean the stylus.
	Incorrect tracking force	Verify tracking force is within 2.5 - 3.5 grams.
	Worn stylus	Replace the stylus if worn.
	Improper cartridge alignment	Re-align the cartridge using a protractor.

Problem	Possible Cause	Solution
Skipping or jumping	Incorrect tracking force Improper anti-skate setting Damaged record Turntable not level	Adjust tracking force. Adjust anti-skate to match tracking force. Inspect record for scratches or debris. Ensure turntable is on a level surface.
Humming or buzzing noise	Grounding issue Interference from other electronics	Ensure the turntable's ground wire is properly connected to your amplifier's ground terminal. Move turntable away from power supplies, motors, or other electronic devices.

SPECIFICATIONS

Feature	Detail
Cartridge Type	Moving Magnet (MM)
Mounting	Half-inch mount
Stylus Type	0.6mm Conical Bonded Diamond
Cantilever	Carbon fibre round tube
Tracking Force	2.5 - 3.5 grams (recommended)
Output Level	4.2mV @ 5cm/sec. @ 1Khz
Frequency Response	20 - 20,000 Hz
Load Impedance	47K ohm
Channel Balance	1.5 dB
Channel Separation	20dB @ 1Khz & 15dB @ 10Khz
Dimensions (H x L x W)	Approx. 2cm x 3cm x 1.6cm
Weight	5.7g
Model Number	AT3600L (also referred to as AT3600)

WARRANTY AND SUPPORT

Audio-Technica products are manufactured to high standards and are backed by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Audio-Technica website.

For technical support, replacement parts (such as the ATN3600L stylus), or service inquiries, please contact your local Audio-Technica distributor or customer service center. Contact information can typically be found on the Audio-Technica website or in your product packaging.

Return Policy: This product is subject to a return policy, typically allowing for returns or replacements within 30 days of purchase, provided the item is in its original condition. Please consult your retailer's specific return policy for details.

