Automatic Stereo Turntable System

AT-PL50

Installation and Operation

audio·technica®
Thank you for purchasing the AT-PL50. Audio-Technica has been a leading manufacturer of innovative stereo phonograph products for more than 40 years. We are pleased to provide this turntable, with its excellent performance and many convenient features, for your enjoyment.

The AT-PL50 stereo turntable system features:

- Fully automatic operation
- Two speeds: 33 1/3 rpm and 45 rpm
- Professional aluminum turntable platter
- Integral Audio-Technica Dual Magnet™ phono cartridge with replaceable diamond stylus
- Integral, switchable stereo phono pre-amplifier. Permits use of turntable with stereo amplifiers having either magnetic-phono inputs or “AUX” (high-level) inputs; also allows convenient use of turntable with most powered speakers
- Damped Lift/cueing mechanism with front-panel control
- Handsome removable dust cover

To assure maximum satisfaction from this product, please read the information and follow the instructions presented in this manual. Please keep the manual in an accessible location for future reference.

We suggest that you save all the packaging materials for possible future storage, moving or shipping.

CAUTION: To avoid stylus damage, make certain the included stylus guard is in place whenever the turntable is being installed, moved or cleaned.
Initial Setup

Figure 1 Inputs and pre-amp selector switch

Setting the Pre-amp Switch
For increased flexibility of use, this turntable has an internal stereo phono pre-amplifier. The Pre-amp Selector Switch is located under the turntable platter, in the rear-center (Fig. 1). If the system amplifier you are using has a PHONO input, set the Pre-amp Selector Switch to the “OFF” position. If your amplifier does not have a PHONO input, set the Pre-amp Selector Switch to the “ON” position and connect the turntable’s output cables to the AUX or other high-level input on the amplifier (described later).

Assembling the Turntable
1. Carefully place the turntable platter on the center spindle, making certain the platter is fully seated on the spindle.
2. While holding both ends of the red tape ribbon on the turntable belt, carefully pull the belt over the motor pulley (Fig. 2a). (If the belt drops off, remove the turntable platter and put the belt back on it, as described on page 6.)
3. Once the belt is seated in the pulley’s groove, carefully remove the ribbon. Make certain the belt is not twisted.
4. Place the turntable mat on top of the turntable platter (Fig. 2b).
5. If desired, the hinged dust cover may be removed. Hold both sides of the dust cover and pull upward gently and evenly to detach the cover from the turntable (Fig. 2c). Keep the cover in a safe, clean place.

Figure 2 Assembling the turntable
2a Drive belt

2b Record mat

2c Dust cover removal
Operation

1. Remove the stylus guard from the stylus assembly (Fig. 5).
2. Put a record on the turntable. If needed, use the 45 rpm adapter (Fig. 6).
3. Select the size of record: 12" or 7" (Fig. 7).
4. Select the speed: 33 1/3 rpm or 45 rpm (Fig. 8).
5. **Start:** Gently push the START button (Fig. 9a). The turntable will start and the tone arm automatically will move to the lead-in groove. When the record has finished playing, the tone arm automatically will return to the tone arm rest and the turntable will shut off.
6. **Stop:** To stop playing the record before it reaches the end, press the STOP button (Fig. 9b). The tone arm will lift and return to the tone arm rest, and the turntable will shut off.
7. **Pause:** To pause the record before it has completed playing, press the tone arm Lift button (Fig. 9c). Press the Lift button again to continue playing the record.

Connections

1. Connect the red RCA-type pin-plug to the right channel input and the white RCA-type pin-plug to the left channel input of the amplifier. (Fig. 3; see a. Also see Fig. 1, page 3.)
2. With the tone arm still fastened to the tone arm rest, slowly turn the turntable platter **clockwise** ten times, to make certain the automatic mechanism is fully cycled (Fig. 3; see b).
3. Remove the vinyl tie that holds the tone arm on its rest (Fig. 3; see c).
4. Connect the power cord plug to an AC outlet (Fig. 3; see d).

Connecting Amplified Speakers

The AT-PL50 includes a cable adapter to permit connection of the turntable output to amplified speakers or similar devices. When using the cable adapter, always set the turntable’s Pre-amp Selector Switch (Fig. 1) to the “ON” position, to select AUX/high-level output.

RCA-to-1/8" (3.5 mm) Cable Adapter: Connect the turntable’s red and white RCA-type plugs to the cable adapter’s red and black RCA-type jacks (Fig. 4). The 1/8" (3.5 mm) stereo mini-jack on the cable adapter accepts stereo mini-plugs (the “tip” is Left, the “ring” is Right and the “sleeve” is Ground/ Common).

NOTE: If connection is desired to a mono amplifier/speaker, make certain to use a stereo-to-mono adapter, available from your dealer or an electronic parts store. Inserting a mono plug in the stereo jack will disable one of the stereo channels. Other adapter cable configurations will be available from dealers and parts stores for connecting to devices needing different terminations.
Replacing the Stylus

Caution: When the tone arm reaches the end of the record, it will lift and return to the tone arm rest automatically. When this happens, do not interfere with the tone arm’s motion, or damage to the mechanism may occur.

If the tone arm does not return automatically to the tone arm rest after the record has finished playing, simply press the STOP button to complete operation.

Manual Operation
1. Remove the stylus guard from the stylus assembly (Fig. 5).
2. Put a record on the turntable. If needed, use the 45 rpm adapter (Fig. 6).
3. Select the size of record: 12” or 7” (Fig. 7).
4. Select the speed: 33⅓ rpm or 45 rpm (Fig. 8).
5. Press the Lift button IN to raise the tone arm (Fig. 9c).
6. Gently move the tone arm so the stylus is over the point on the record where play is desired to begin.
7. Press the Lift button again to gently lower the tone arm and play record.

Replacing the Stylus

While holding the head of the tone arm, rotate the front of the stylus assembly in a forward and down motion to remove it (Fig. 10). (As you remove the old assembly, note its position and “feel,” to aid in properly installing the new one.)

Install the new stylus assembly as shown in Figures 11a/11b, being careful not to touch the actual stylus. Make certain that the projection at the back of the assembly is fully seated in the cartridge body first (Fig. 11a), and that the assembly “clicks” up into place, with no gap between its top edge and the front of the black plastic tone arm head (Fig. 11b). Replace the stylus after 400 hours of use.

To maintain original performance, insist upon a genuine Audio-Technica brand replacement stylus. Look for the Audio-Technica trademark (®) on the front of the stylus assembly and on the packaging.
**Troubleshooting**

**Turntable does not operate**

1. Make certain the turntable’s AC cord is plugged into an AC outlet, and that the AC outlet is “live.”

2. Check the drive belt to make certain it is on correctly. (See Figure 12.)
   A) Remove the record mat from the turntable platter (Fig. 12a). Place the mat in the cardboard packaging sleeve for safekeeping. Through an opening in the turntable platter, visually inspect to see if the drive belt is around the motor pulley (Fig. 12b).
   B) If the drive belt is not around the motor pulley: Lift and remove the turntable. Place a thumb into each of the left and right openings on the turntable platter; and, using the fingers to press down on the turntable housing’s surface, pull the platter **straight up** (Fig. 12c). Avoid pressing on the tone arm.
   C) With the turntable platter bottom side up, place the belt along the outside wall of the turntable platter’s drive rim, making certain that the belt is smooth and flat all the way around (Fig. 12d).
   D) Put the turntable back on the center spindle, make certain it is fully seated, and align one of its openings over the motor pulley position.
   E) Through the opening, carefully hook the turntable belt with a finger or with the original red ribbon (**never** use a sharp object) and pull the belt over the motor pulley (Fig. 12e). Make certain the belt is not twisted between the pulley and the platter’s drive rim.
   F) Put the record mat back on the platter.
   G) While holding the tone arm in its rest position, slowly turn the platter by hand clockwise at least 10 rotations to clear the mechanism’s automatic cycle (See Fig. 3 on page 4).
**Troubleshooting, continued**

**Turntable operates, but no sound at all**
1. The stylus guard is still in place.
2. The tone arm Lift button is pressed in.
3. Amplifier controls set incorrectly: wrong input selected, tape monitor on, speakers switched off, etc.
4. Check the stylus on phono cartridge for correct placement. Refer to the instructions for replacing the stylus on page 5.

**Turntable operates, but no sound, or sound not loud enough**
1. If the turntable is connected to an AUX (high-level) input: The Pre-amp Selector Switch may be set to the “OFF” position (phono-input level).
2. The input gain of the amplified speaker or similar device may be too low.
3. The stylus assembly may not be fully seated in the cartridge body. (See Fig. 11 on page 5.)

**Sound is very distorted**
1. Turntable connected to an amplifier’s PHONO input: If the pre-amp switch is set to the “ON” position (AUX high-level output), a phono input will be overloaded.

**Turntable moves slightly up and down**
1. Usually this is a normal condition and not a problem. If this causes the turntable to be unable to trace the record, please contact your dealer or our service department. Make very certain the surface upon which the turntable is resting is not picking up vibrations from the floor or walls, or from direct speaker sound.

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**Specifications**

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<tr>
<th>Type</th>
<th>Belt drive turntable, fully automatic</th>
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<tbody>
<tr>
<td>Platter</td>
<td>Aluminum</td>
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<tr>
<td>Motor</td>
<td>DC servo-controlled</td>
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<td>Speeds</td>
<td>33 1/3 / 45 rpm</td>
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<td>Wow and flutter</td>
<td>0.25% WRMS</td>
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<td>Signal-to-noise ratio</td>
<td>45 dB</td>
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<td>Cartridge</td>
<td>Integral Dual Magnet™ stereo cartridge with diamond stylus</td>
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<td>Output level</td>
<td>Preamp “Off” 2.5 mV nominal at 1 KHz, 5 cm/sec</td>
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<td></td>
<td>Preamp “On” 200 mV nominal at 1 KHz, 5 cm/sec</td>
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<td>Phono preamp gain</td>
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<td>Power</td>
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<tr>
<td>Dimensions</td>
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<td></td>
<td>360 mm W x 97 mm H x 357 mm D</td>
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<td>5.3 lbs. (2.4 kg)</td>
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<td>stereo adapter cable; 45 rpm adapter</td>
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<tr>
<td>Replacement stylus</td>
<td>ATN3600L</td>
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**Tips For Better Performance**

- When opening or closing the turntable cover, handle it gently, moving it either at the center or equally from both sides.
- Do not touch the stylus tip with your fingers; avoid bumping the stylus on the turntable mat or a record’s edge.
- Clean the stylus tip frequently, using a soft brush with a **back-to-front motion only**.
- If you use a stylus cleaning fluid, use it **very sparingly**.
- Wipe the dust cover and turntable housing gently with a soft cloth. Use only a small amount of mild detergent solution to clean the turntable and dust cover.
- Never apply harsh chemicals or solvents to any part of the turntable system.
- Prior to moving the turntable, always unplug it from the AC outlet and fasten the tone arm on the tone arm rest with the vinyl twist-tie.
One-Year Limited Warranty

Audio-Technica brand products purchased in the U.S.A. are warranted for one year from date of purchase by Audio-Technica U.S., Inc. (A.T.U.S.) to be free of defects in materials and workmanship. In event of such defect, product will be repaired promptly without charge or, at our option, replaced with a new product of equal or superior value if delivered to A.T.U.S. or an Authorized Service Center, prepaid, together with the sales slip or other proof of purchase date. Prior approval from A.T.U.S. is required for return. This warranty excludes defects due to normal wear, abuse, shipping damage, or failure to use product in accordance with instructions. This warranty is void in the event of unauthorized repair or modification, or removal or defacing of the product labeling.

For return approval and shipping information, contact the Service Dept., Audio-Technica U.S., Inc., 1221 Commerce Drive, Stow, Ohio 44224.

Except to the extent precluded by applicable state law, A.T.U.S. will have no liability for any consequential, incidental, or special damages; any warranty of merchantability or fitness for particular purpose expires when this warranty expires.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Outside the U.S.A., please contact your local dealer for warranty details.