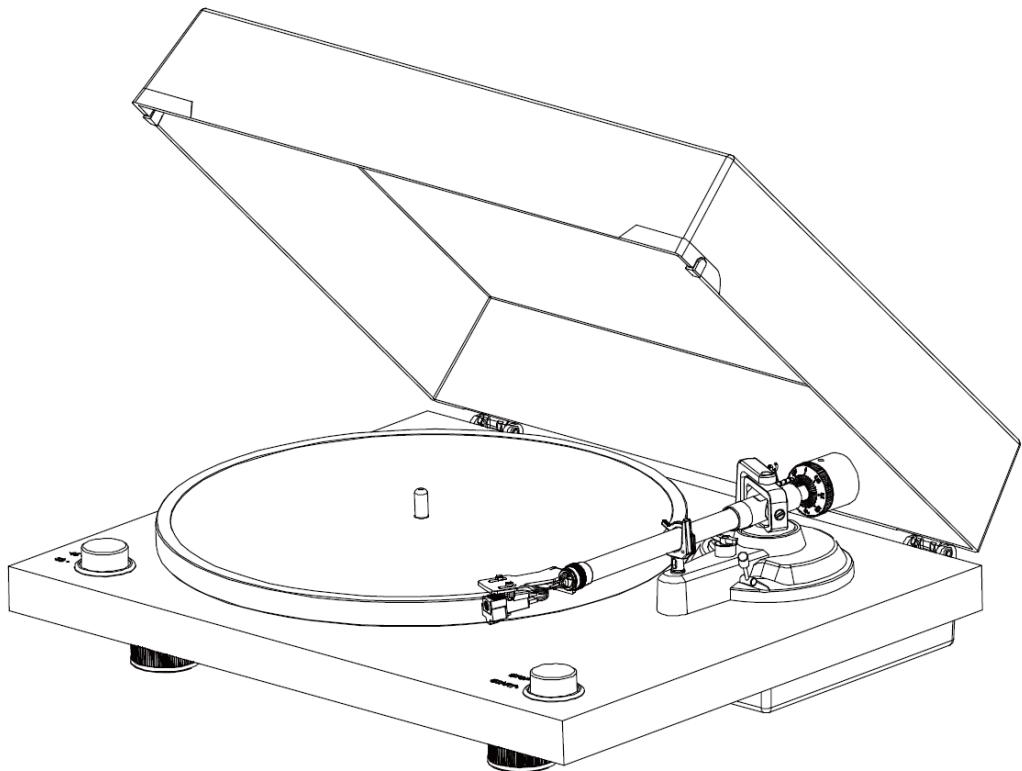




Belt Drive Turntable with AT-3600L Cartridge



P/N 600045

User's Manual

SAFETY WARNINGS AND GUIDELINES

Please read this entire manual before using this device, paying extra attention to these safety warnings and guidelines. Please keep this manual in a safe place for future reference.

- This device is intended for indoor use only.
- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately remove it from its power source and allow it to fully dry before reapplying power.
- Do not touch the device, the power cord, or any other connected cables with wet hands.
- Do not install this device on an unstable surface where it could fall and cause either personal injury or damage to the device and/or other equipment.
- Do not expose this device to excessive vibration or extreme force, shock, or fluctuations in temperature or humidity.
- Do not expose this device to excessively high temperatures. Do not place it in, on, or near a heat source, such as a fireplace, stove, radiator, etc. Do not leave it in direct sunlight.
- Do not place or install this device in an area where it can be exposed to excessive amounts of dust, humidity, oil, smoke, or combustible vapors.
- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.
- Before plugging the unit into a power outlet, ensure that the outlet provides the same type and level of power required by the device.
- Unplug this device from the power source when not in use.
- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.

- Ensure that power is turned off and disconnected before making any electrical connections.
- Clean using a soft, slightly moistened anti-static cloth only. Do not use chemical cleaners, solvents, or detergents.
- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.
- To prevent potential damage to the stylus, ensure that the cartridge protective cap is installed when the turntable is not in use.
- If the stylus accumulates dirt or dust, you can clean it using a commercially available cartridge cleaning brush. When brushing the stylus, always brush it from the rear to the front of the stylus. Never brush it from side to side.

FEATURES

- Belt drive turntable with selectable 33 1/3 and 45 RPM platter speeds
- Carbon fiber tonearm with Removable Headshell
- Preinstalled Audio-Technica® AT-3600L moving magnet cartridge
- Stereo RCA output with selectable phono level and line level output options
- USB output for direct recording to a computer
- Bluetooth® transmitter for wireless output to a Bluetooth speaker, headphones, etc.
- Ground Terminal for eliminating any potential hum
- Compatible with the popular Audacity® free, open source, easy-to-use, multi-track audio editor and recorder available for Windows®, Mac® OS X®, and GNU/Linux®

CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website www.monoprice.com or via email at support@monoprice.com. Check the website for support times and links.

PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

1x Turntable Base

1x Lid

1x AC Power Adapter

1x Counterweight

1x Anti-Skating Weight

1x Platter with Belt

1x 45 RPM Adapter

1x Slip Mat

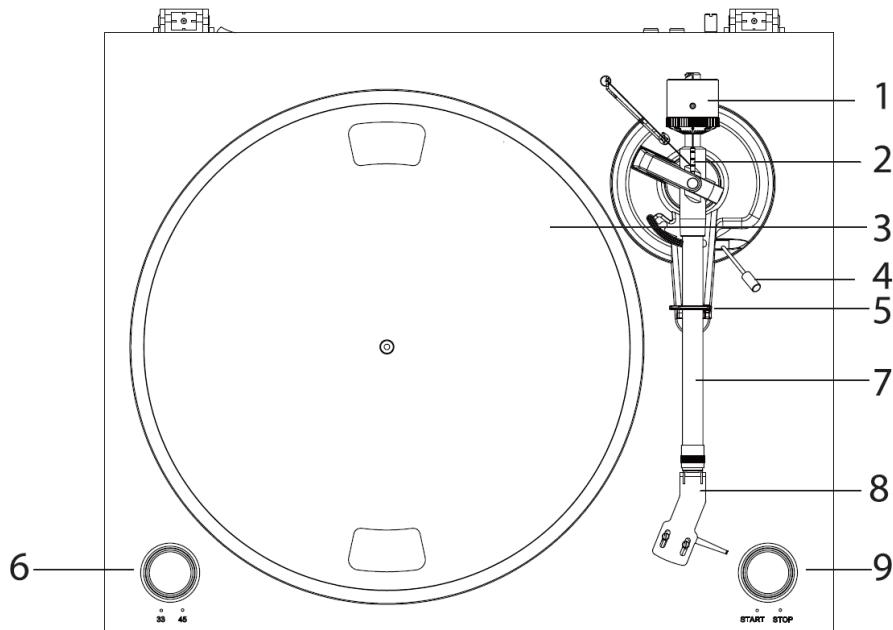
1x Cartridge Alignment Protractor

1x USB Cable (Type-A to Type-B)

1x User's Manual

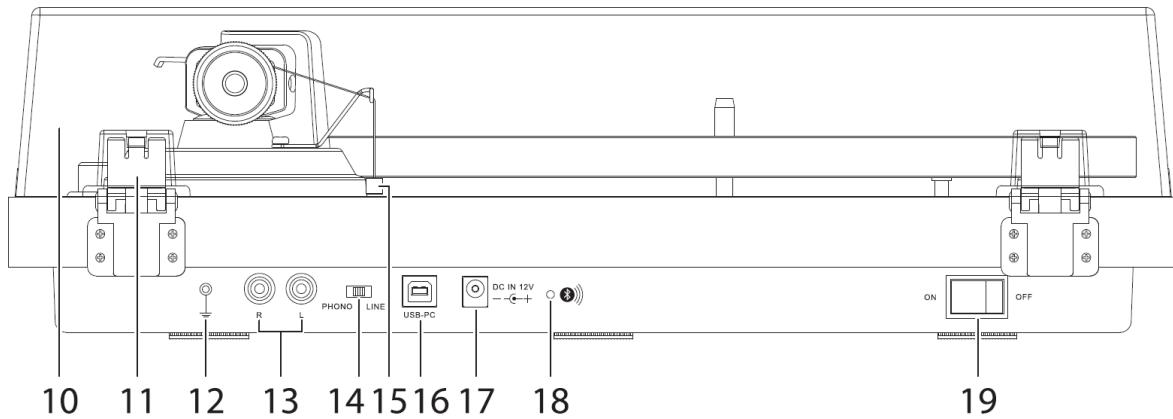
PRODUCT OVERVIEW

Top View



1. Counterweight
2. Anti-Skating Stub
3. Turntable Platter
4. Tonearm Lift Lever
5. Tonearm Rest
6. 33/45 RPM Selector
7. Carbon Fiber Tonearm
8. Removable Headshell (with installed AT-3600L cartridge)
9. Start/Stop Knob

Rear View



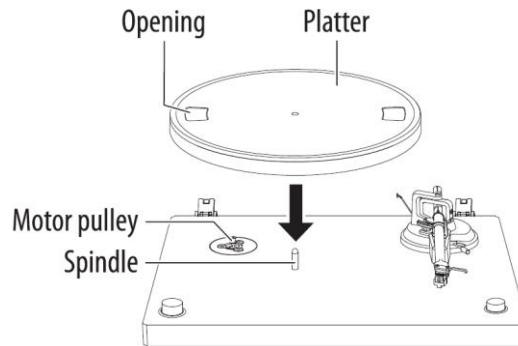
10. Lid
11. Lid Hinge
12. Ground Terminal
13. Stereo RCA Output Jacks
14. Phono/Line Output Switch
15. Anti-Skating Weight
16. USB-PC Output (USB Type-B)
17. DC IN Jack
18. Bluetooth® Indicator
19. Power Switch

SETUP

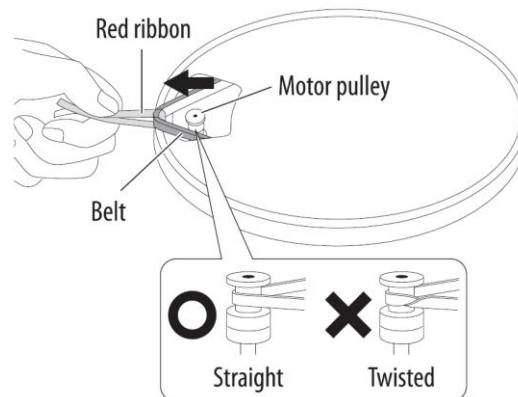
Turntable Platter and Belt Setup

Perform the following steps to install the **Platter** and connect the **Belt**. Note that for best results, place the turntable on a low resonance surface, such as wood or multiple layer ply board, to avoid structural vibrations during playback.

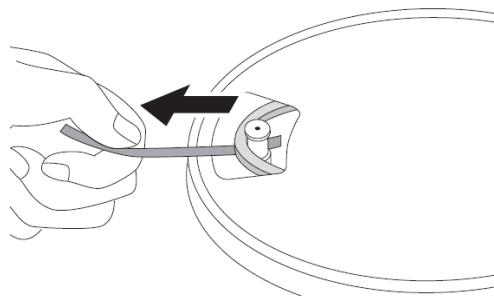
1. Install the **Lid** onto the **Turntable Body** by attaching it to the **Lid Hinges**.
2. Place the **Turntable Platter** on the **Spindle**. Ensure that it is fully seated on the **Spindle**.



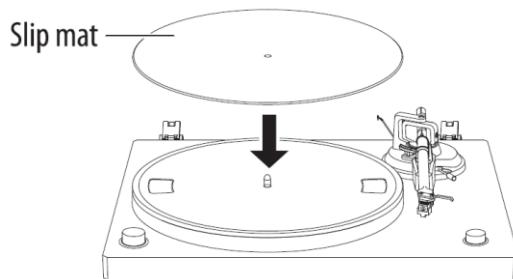
3. Align one of the openings on the **Platter** with the **Motor Pulley**. Pull the ends of the **Red Ribbon** that is attached to the **Belt** and place the **Belt** on the **Motor Pulley**. Be careful not to twist the **Belt**.



4. Remove the **Red Ribbon** from the **Belt**. Store it in a safe place for future use.



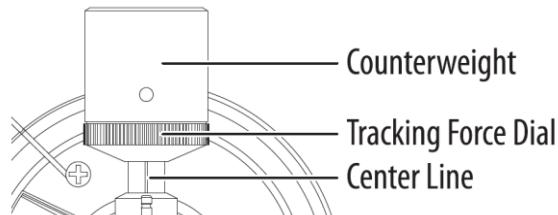
5. Place the **Slip Mat** on the **Platter**.



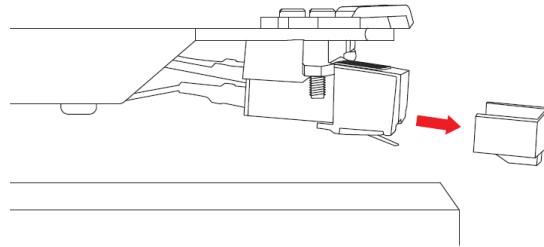
Tracking Force Adjustment

Perform the following steps to adjust the cartridge tracking force. Note that the included **Counterweight** is suitable for cartridges weighing between **3.0~6.0 grams**. The included Audio-Technica® AT-3600L cartridge weighs 5.0g.

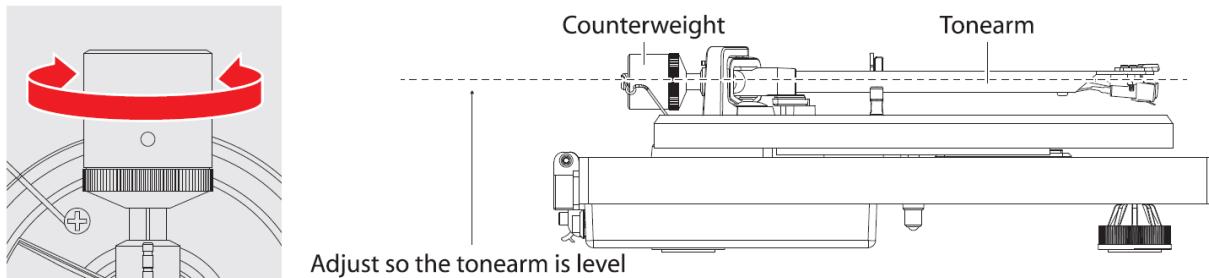
1. Gently push the supplied **Counterweight** onto the rear of the **Tonearm**, with the **Dial** facing the front of the **Turntable**.



2. Remove the **Cartridge Protective Cap**.

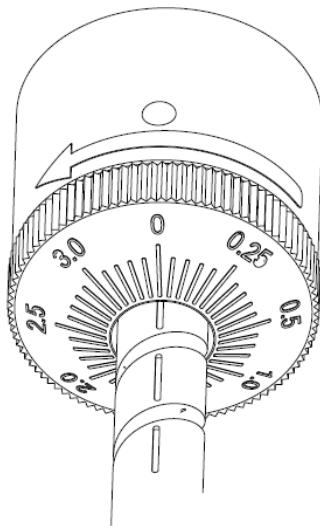


3. Remove the tie wrap and unlock the **Tonearm**.
4. Lower the **Tonearm Lift Lever** and position the **Tonearm** in the space between the **Tonearm Rest** and the **Platter**.
5. Carefully rotate the **Counterweight** until the **Tonearm** achieves a neutral, level balance. The **Tonearm** should return to this balanced position if it is moved up or down. Be extremely careful to not allow the stylus to touch the **Platter**, **Turntable Body**, or anything else.



6. Once the **Tonearm** is correctly balanced, return it to the **Tonearm Rest** and lock it in place.
7. Hold the **Counterweight** and gently rotate the **Tracking Force Dial** until the **0** is aligned with the black **Center Line** mark on the top of the **Tonearm**.
8. Unlock the **Tonearm** and verify that it is still in balance. If not, repeat steps 5-8 until the **Tonearm** is balanced and the **Tracking Force Dial** is at **0**.
9. Return the **Tonearm** to the **Tonearm Rest** and lock it in place.
10. Rotate the **Counterweight** counterclockwise (as seen from the front of the **Turntable**) to adjust the Tracking Force to the value recommended by the cartridge manufacturer. The Audio-Technica® AT-3600L that comes with the **Turntable** has a recommended tracking force of **3.5g ±0.5g**. The **Tracking Force Dial** adds 3.5g per full

turn, so rotate the **Counterweight** one full turn, until the **0** on the **Dial** is again in line with the **Center Line** on the top of the **Tonearm**.



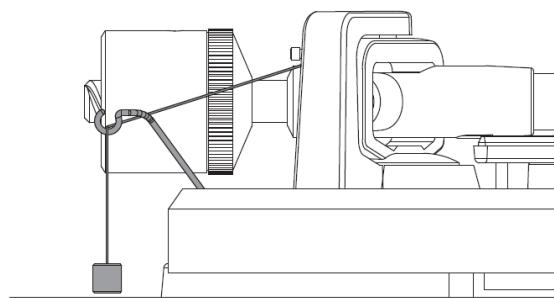
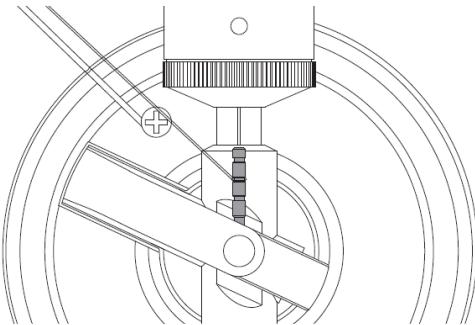
11. Place the **Cartridge Protective Cap** back on the cartridge to protect the stylus from damage.

Anti-Skating Force Adjustment

The **Anti-Skating Force** needs to be adjusted to correspond with the **Tracking Force**, as follows:

Tracking Force		Groove in the Anti-Skating Stub
0.51-1.02 g	5-10 mN	1st from the bearing ring
1.02-1.53 g	10-15 mN	2nd from the bearing ring
1.53-2.04 g	15-20 mN	3rd from the bearing ring
2.04g or more	20mN or more	4th from the bearing ring

Slip the loop on the thread attached to the **Anti-Skating Weight** over the **4th** groove on the **Anti-Skating Stub** to set the Anti-Skating Force to the proper value for the included AT-3600L cartridge, then feed the thread through the hook on the wire support.



Phono/Line Selection

If you have connected the **Stereo RCA Output Jacks** to an amplifier, set the **Phono/Line Output Switch** according to the type of input on your amplifier.

- If you have connected to a **Phono Level** input on your amplifier, set the **Phono/Line Output Switch** to the **PHONO** position.
- If you have connected to a **Line Level** input on your amplifier, set the **Phono/Line Output Switch** to the **LINE** position.

Note that **Phono Level** inputs are usually characterized by the presence of an adjacent **Signal Ground** connection, as shown in the image to the right.



Power Connection

Plug one end of the included **AC Power Adapter** into the **DC IN** jack on the rear of the **Turntable**, then plug the other end into a nearby AC power outlet. The **AC Power Adapter** can accept input power in the range 100 ~ 240 VAC, 50/60 Hz.

BASIC OPERATION

1. Place the **Power Switch** in the **ON** position.
2. Remove the **Cartridge Protective Cap**.
3. If you intend to play a 45 RPM record, place the **45 RPM Adapter** on the **Spindle**.
4. Place a record on the **Slip Mat**, ensuring that it is firmly seated on the **Spindle** or **45 RPM Adapter**.
5. Set the **33/45 RPM Selector** to the **33** or **45** position, depending on the type of record being played.
6. Turn the **Start/Stop Knob** to the **Start** position. The **Platter** will start spinning.
7. Unlock the clip at the top of the **Tonearm Rest**, then set the **Tonearm Lift Lever** to the up position.
8. Position the **Tonearm** over the desired location/groove on the record.
9. Carefully move the **Tonearm Lift Lever** to the down position to lower the stylus onto the record.
10. When you are finished, move the **Tonearm Lift Lever** to the up position, then move the **Tonearm** to the **Tonearm Rest** and clip it into place. Turn the **Start/Stop Knob** to the **Stop** position.

BLUETOOTH PAIRING

The **Turntable** features a built-in Bluetooth® transmitter to wirelessly play audio on a Bluetooth speaker, headphones, or other playback device. Perform the following steps to pair the turntable with your device.

1. Power on your Bluetooth playback device and put it into Bluetooth pairing mode.
2. With the **Turntable** powered off, place the **Power Switch** in the **ON** position. The Bluetooth transmitter in the **Turntable** will begin searching for nearby Bluetooth playback devices and the **Bluetooth Indicator** will begin flashing twice per second, indicating that pairing with the nearest Bluetooth playback device is in progress.

3. Once pairing is complete, the **Bluetooth Indicator** will stop flashing and will illuminate steadily.
4. If after 2 minutes the **Turtable** cannot find a device to pair with, the Bluetooth transmitter will become inactive and the **Bluetooth Indicator** will turn off. If you want to connect again, turn the **Turtable** off, then turn it back on again.
5. To disconnect the pairing, turn off the **Turtable** or the paired Bluetooth device.

Bluetooth Indicator	Bluetooth Status
Flashing	Auto searching and pairing
Solid	Paired successfully
Off	Bluetooth transmitter inactive

RECORDING TO A COMPUTER

This **Turtable** features a USB output, which allows you to connect to a computer to record the tracks. It is fully compatible with the popular Audacity® free, open source, easy-to-use, multi-track audio editor and recorder for Windows®, Mac® OS X®, and GNU/Linux®.

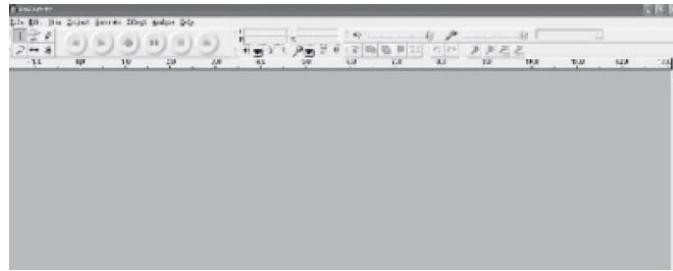
Preparation

1. If you have not already done so, go to <https://www.audacity.com/download/>, then download and install the appropriate version for your computer's operating system.
2. Plug one end of the included **USB Cable** into the **USB-PC Output** jack on the **Turtable**, then plug the other end into an available USB port on your computer.

Recording

Note that the following screens and instructions will vary, depending on your operating system and the version of Audacity in use.

1. Launch the Audacity program.

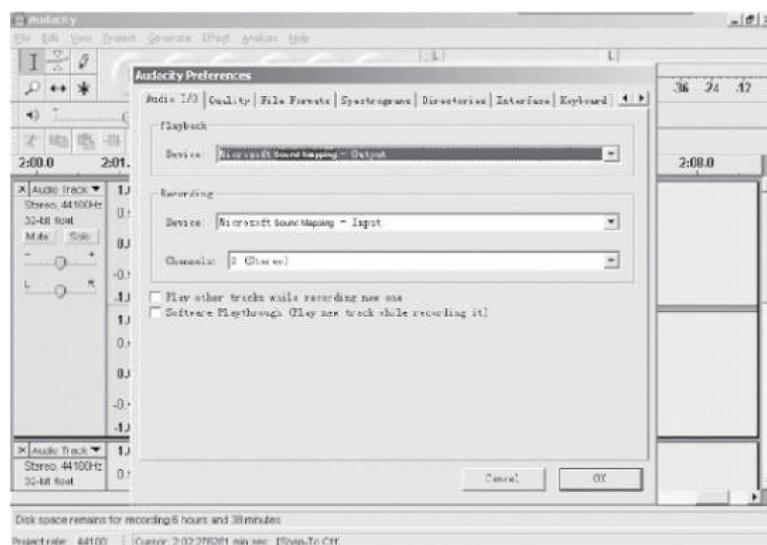


2. Click **Edit** on the menu bar, then scroll down and click the **Preferences...** option.

Alternatively, press **CTRL+P** to display the Preferences screen.



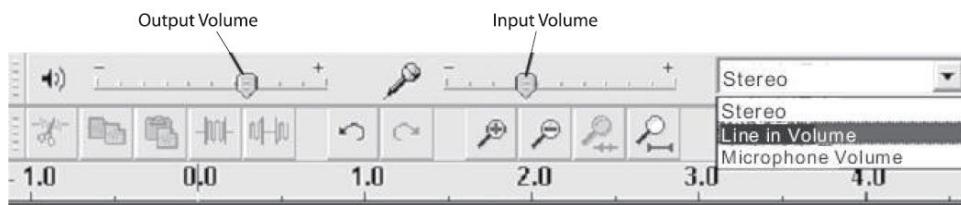
3. Set the Preferences, as desired.



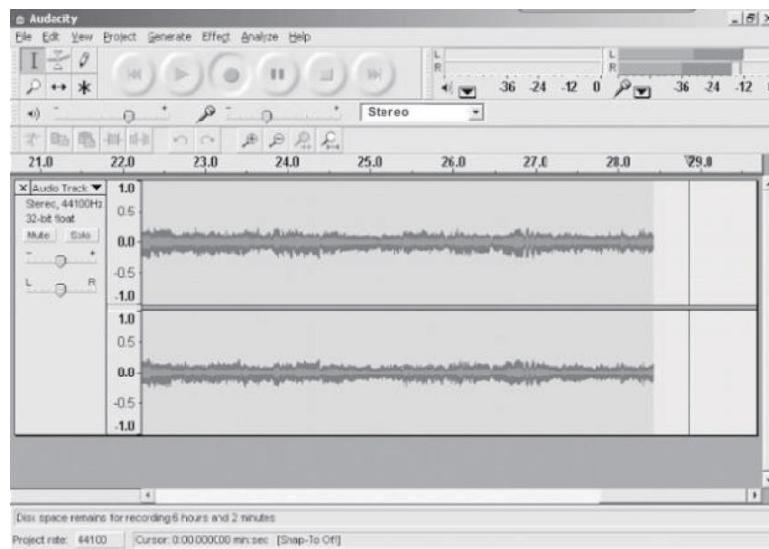
4. Open your computer's audio settings and ensure that **SSS USB Audio Device** is selected as the **Default Device** for Sound recording.



5. Adjust the **Output Volume** and **Input Volume** levels, as desired.



6. Click the ● button to begin recording. The two empty tracks will be displayed.
7. Start playback of a record on the **Turntable**. The audio waveforms will appear in the tracks display. If waveforms are not displayed, increase the **Line In** volume level.



8. When you're done recording, click the ■ button to stop recording.

9. To save your recording to a file on your computer, click the **File** entry on the menu bar, then select the **Export >** option and choose a file format. You will be asked to enter a filename for your saved recording.

Notes:

- The latest Windows® and Mac® OS X® versions of Audacity® now include the LAME mp3 encoder built in. GNU/Linux® users will need to download the LAME encoder and add it to the Audacity library.
- The above instructions are a general guide. Please refer to Audacity's specific instructions for the version you are using.
- Remember that Audacity is also an audio editor. After saving your file, you can edit out any leading or trailing silence to produce a clean track suitable for playback with other tracks.

CLEANING AND MAINTENANCE

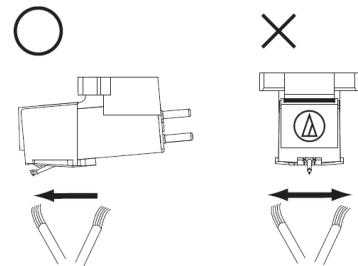
Always power off and unplug the **Turntable** from its power source before performing any maintenance.

Turntable Body

- Ensure that the **Cartridge Protective Cap** is installed on the cartridge before cleaning the **Turntable Body** to prevent damage to the stylus.
- Remove dust with a slightly damp static cloth to prevent any static accumulation. Commercially available anti-static cleaning agents can be used, but use sparingly to prevent damage to the rubber parts.
- If the **Turntable** will go unused for a long period of time, remove the **Belt** to prevent uneven stretching.

Stylus

Use a commercially available stylus brush and cleaning fluid to clean accumulate dirt and grime from the stylus. Always brush the stylus from back to front. Never brush it from side to side or front to back.



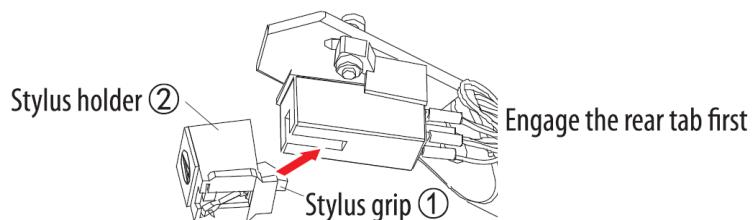
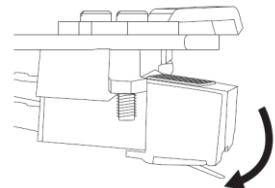
Replacing the Stylus

After about 300~500 hours of use, the stylus can wear out and cause distorted sound. A worn stylus can also damage any records on which it is used. Replace the stylus with the type specified for your cartridge. For the stock Audio-Technica® AT-3600L cartridge, the proper replacement stylus is the ATN3600L, shown here.

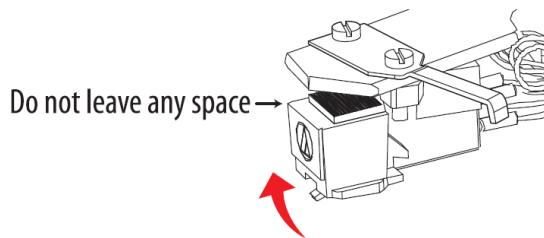


Perform the following steps to replace the stylus.

1. Remove the **Cartridge Protective Cap**.
2. Remove the **Stylus Holder** by pulling down in the direction of the arrow in the diagram to the right.
3. Grasp both sides of the **Stylus Holder** and insert the **Stylus Grip** on the new stylus into the **Rear Tab** of the cartridge, as shown in the image below.



4. Push up on the **Stylus Holder** in the direction of the arrow in the image below until it clicks and locks into place.



Replacing the Cartridge

While cartridges themselves cannot wear out with use, you may wish to replace the cartridge with an upgraded moving magnet cartridge. Perform the following steps to replace the cartridge.

1. Ensure that the **Cartridge Protective Cap** is installed to prevent damage to the stylus during replacement. Ensure that the **Tonearm** is locked onto the **Tonearm Rest**.
2. Carefully remove the wire leads from the original cartridge.
3. Loosen the two screws on the **Removable Headshell** that are holding the cartridge in place, then remove the cartridge.
4. Ensure that the **Cartridge Protective Cap** is installed on the new cartridge.
5. Attached the new cartridge to the **Removable Headshell** and loosely tighten the screws. Do not completely tighten the screws yet.
6. Attach the wire leads to the new cartridge, as shown in the table below.

Wire	Terminal
White	Left channel positive (L+)
Blue	Left channel negative (L-)
Red	Right channel positive (R+)
Green	Right channel negative (R-)

7. Place the included paper **Cartridge Alignment Protractor** over the spindle.
8. Unlock the **Tonearm** from the **Tonearm Rest**. Carefully lift the **Tonearm** and place the stylus (with the **Cartridge Protective Cap** still in place) on the **Cartridge Alignment Protractor** at the points marked **130mm** and **250mm**. Carefully adjust the cartridge in the **Removeable Headshell** until it is perfectly parallel to the reference lines at both points. Check and recheck several times until perfect alignment is achieved.
9. Once perfect alignment is achieved, fully tighten the screws on the **Removeable Headshell** to secure the cartridge in this position.
10. Perform a final alignment check on the **Cartridge Alignment Protractor** to ensure that the cartridge was not moved out of alignment when the screws were tightened.

TROUBLESHOOTING

Following are a series of potential causes for some problems that might be encountered while using this **Turntable**.

1. There is no power.
 - The **Turntable** might not be connected to a power source. Ensure the **AC Power Adapter** is plugged into the **Turntable** and a nearby AC power outlet.
 - The power outlet may not have power. Try plugging a different device, such as a lamp, into the power outlet to ensure that it has power.
2. The **Platter** won't turn, although the **Turntable** is powered on and the **Start/Stop Knob** is in the **Start** position.
 - The **Turntable** might not be connected to a power source. Ensure the **AC Power Adapter** is plugged into the **Turntable** and a nearby AC power outlet.
 - The power outlet may not have power. Try plugging a different device, such as a lamp, into the power outlet to ensure that it has power.

- The **Belt** might have slipped off the **Motor Pulley**. Remove the **Slip Mat** and rotate the **Platter** until the **Motor Pulley** can be seen through one of the holes in the **Platter**. Ensure that the **Belt** is properly installed.

3. There is no signal from one or both channels.

- The Phono input may not be selected on the amplifier. Check the input selection.
- The amplifier may not be powered on. Check the amplifier to ensure it is powered on.
- The amplifier or speakers may be muted. Check the mute status.
- The speakers may not be selected. Check the speaker selection setting on the amplifier.
- There is no connection to the speakers. Check the speaker wire connections at the amplifier and at each speaker.
- There is no connection between the **Turtable** and the amplifier. Check to ensure the **Turtable** is connected to the amplifier.
- The cable connecting the **Turtable** to the amplifier may be faulty. Try replacing the cable with a new one of the same type.
- The cartridge may not be properly connected. Check the wire leads on the rear of the cartridge to ensure they are properly seated.

4. A strong hum can be heard.

- There is no ground connection or there is a ground loop. Ensure that the **Ground Terminal** is connected to a ground connection on the amplifier or a nearby AC power outlet.
- The **Turtable** is too close to the speakers and is getting feedback. Try moving the **Turtable** or speakers, or reduce volume.

5. There is a distorted or inconsistent sound from one or both channels.
 - The **Turntable** is connected to the wrong input on the amplifier. Check the connections and ensure you have the proper input selected.
 - The stylus may be damaged or worn out. Try replacing the stylus.
 - The **Belt** may be overstretched or dirty. Remove the **Slip Mat** from the **Platter**, then disconnect the **Belt** from the **Motor Pulley**. Remove the **Platter**, then inspect the condition of the **Belt**. Clean or replace the **Belt** as needed.
 - The **Platter** bearing may be dirty, damaged, or lacking lubrication. Remove the **Slip Mat** from the **Platter**, then disconnect the **Belt** from the **Motor Pulley**. Spin the **Platter** manually to ensure that it spins freely, without any binding.
 - The stylus is dirty. Inspect the stylus and clean as necessary.
 - The **Phono/Line Output Switch** may be improperly set. Check the connection to the amplifier. If connected to a **Phono Level** input (usually labeled Phono), set the switch to the **PHONO** position. If connected to a **Line Level** input (labeled CD, AUX, LINE IN, etc.), set the switch to the **LINE** position.
 - The amplifier may be set to use the wrong cartridge type. The Phono inputs on some amplifiers have a switch to select a Moving Magnet (MM) or Moving Coil (MC) type cartridge. Check your amplifier and set the switch to the proper position for the cartridge type installed on the **Turntable**. The cartridge that comes with the **Turntable** is a Moving Magnet (MM) type.
6. The Bluetooth® transmitter in the **Turntable** cannot connect to a Bluetooth speaker, headphones, or other playback device.
 - The **Turntable** may not be in Bluetooth® pairing mode. Perform the steps in the *BLUETOOTH PAIRING* section above.
 - Your Bluetooth playback device may not be in Bluetooth pairing mode. Perform the steps in the *BLUETOOTH PAIRING* section above.

- The Bluetooth transmitter in the **Turntable** may have gone inactive because it didn't pair within 2 minutes. Perform the steps in the *BLUETOOTH PAIRING* section above.

7. The stylus isn't touching the record.

- The screw adjustment on the **Tonearm Rest** may have loosened during transport. Gently turn this screw clockwise to move the stylus into contact with the record.
- You may have replaced the stock **Slip Mat** with a thinner version. The default screw position is based on the thickness of the stock **Slip Mat**. If replaced with a thinner mat, gently turn the screw clockwise to move the stylus into contact with the record.

8. The stylus is scratching the record.

- You may have replaced the stock **Slip Mat** with a thicker version. The default screw position is based on the thickness of the stock **Slip Mat**. If replaced with a thicker mat, gently turn the screw counterclockwise to reduce the contact force of the stylus on the record.

TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website www.monoprice.com or through email by sending a message to tech@monoprice.com. Check the website for support times and links.

To download the latest drivers, firmware, manuals, etc., go to www.monoprice.com and type the P/N into the search bar. If available, support files are linked at the bottom of the product page.

SPECIFICATIONS

Turntable

P/N	600045
Nominal Platter Speeds	33 1/3 or 45 RPM
Speed Variance	±1.5%
Wow and Flutter	≤ 0.15%
Signal-to-Noise Ratio	55dB
Tracking Force Range	0 ~ 4.0 g
Tonearm Material	Carbon fiber
Effective Tonearm Length	8.60" (218.5 mm)
Overhang	0.73" (18.5 mm)
Input Power	12 VDC, 500mA
AC Adapter Input Power	100 ~ 240 VAC, 50/60 Hz, <200mA
Maximum Power Consumption	5 watts
Dimensions	16.5" x 14.2" x 4.9" (420 x 360 x 125 mm)
Weight	9.7 lbs. (4.4 kg)

Cartridge

Cartridge Model	Audio-Technica® AT-3600L
Replacement Stylus	ATN3600L
Cartridge Type	Moving Magnet (MM)
Stylus Shape	Conical
Recommended Tracking Force	3.5g \pm 0.5g
Frequency Response	20Hz ~ 20kHz
Recommended Load Resistance	47k Ω
Channel Balance	< 2.5dB
Channel Separation	> 18dB
Output Voltage	2.5mV
Weight	0.18 oz. (5 g)

REGULATORY COMPLIANCE

Notice for FCC



This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radio Notice for FCC

Caution

This FCC Part 15 radio device operates on a non-interference basis with other devices operating at this frequency. Any changes or modification to said product not expressly approved by Monoprice, including the use of non-approved antennas, could void the user's authority to operate this device.

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