VINYL 101



Proper Handling, Playback, and Storage of LPs

Guard against damage and preserve audio quality.

Introduction and Overview

Learn how to handle, play, and store records.



Figure 1. A record playing on a turntable.

DANGER: Electrical shock WARNING: Potential hazard CAUTION: Possible mistake NOTE: Helpful details

Figure 2. The icons used in this guide.

Background

LPs (long-playing records) have been a popular analog medium for preserving audio recordings since they were perfected in 1948. LPs are also known as vinyl, records or albums, and are prized for their sound quality which is described as warm, complex and superior.

LPs can cost anywhere from a few dollars to over \$100 depending upon their condition and collectability. Properly handling, playing, and storing LPs guards against damage, preserves their value, and ensures great sound quality for years to come.

Skills

No prior experience is needed, only the desire to enjoy this exceptional format.

A glossary is included at the end of this guide.

Location

The ideal spot is an air-conditioned, low-humidity and dust-free area near the turntable.

Time

It takes less than a minute to correctly handle and store the record. The time required to play the record of course depends upon the length of the recording.

Materials

- A functional turntable, pair of speakers, and a stereo
- A standard 12" long-playing record with an outer sleeve, jacket, and inner sleeve
- A shelf or crate for storage

How to Properly Handle a Record

Ensure an excellent listening experience every time.

Preventing damage begins with understanding how to correctly handle records.

Steps



Touch ONLY the lead-in groove on the outermost edge of the record. Grooves on tracks attract particles such as dust, skin oils, and pet hair. The needle can stumble if particles are present, resulting in a skip, pop, or other unpleasant noise which can also permanently damage the record.

1. Turn on your stereo, turntable, and speakers.



Improper use of audio equipment such as turntables, speakers, and stereos can result in electrical shock, injury, and even death. Consult product manuals for setup instructions.

- 2. Wash your hands and handle records in an airconditioned, low-humidity, and dust-free location.
- 3. Gently slide the jacket out of the plastic outer sleeve.



Suffocation can occur from improper use of outer sleeves. Read the manufacturer's instructions for a list of proper uses.

4. Gently slide the record out of the jacket.



Single albums usually have jackets made from a cardboard sleeve. Double albums have two cardboard sleeves joined in the middle, each containing a record. It is best to leave the other record in the jacket until you are ready to play it.

- 5. Remove and set any inserts aside. Leave the record inside the inner sleeve.
- 6. Turn so that the edge of the record is pointed toward your dominant hand.
- 7. Grasp the lead-in groove with your thumb and forefinger using your dominant hand.
- 8. Carefully pull the record out of the inner sleeve.
- 9. Grasp the lead-in groove using both hands and turn the record horizontal with side A facing upwards.
- 10. Carry the record to the turntable.



Figure 3. Remove from the jacket.



Figure 4. Touch only the lead-in groove.



Figure 5: A video of steps 3-9.

How to Properly Play a Record

Deliver flawless playback of your favorite records.



Figure 6. Place on the platter.



Figure 7. Carefully lower the tonearm.



Figure 8: A video of steps 2-11.

Playing a record correctly prevents damage and unpleasant noises. These general instructions apply to most turntables. Consult your manual for specifics.

Steps

- 1. Place the record on the platter, fitting the hole in the center label over the spindle.
- 2. Gently release the tonearm from the arm rest.
- 3. Move the tonearm toward the lead-in groove.



Most turntables will start rotating when the tonearm is moved. Consult your turntable manual for instructions.

4. Carefully lower the tone arm onto the lead-in groove while the record is rotating.



Some turntables include a play button which automatically releases the tonearm and lowers it onto the record.



Releasing the tonearm too quickly will cause the needle to drop directly onto the record, causing an unpleasant noise and potentially damaging the needle. Take care to only drop the needle on the lead-in groove and track bands.

- 5. Collect the inner sleeve, jacket, and outer sleeve and stack them vertically to reduce the risk of dust collecting and damaging your record.
- 6. Enjoy your record.
- 7. After the side has concluded, gently grasp the tonearm and move it toward the arm rest.



Some turntables have a cut feature which automatically returns the tonearm its original position.

- 8. Grasp the lead-in groove using both hands on either side of the record.
- 9. Lift upward to remove the record from the spindle.
- 10. Flip the record over. Touch only the lead-in groove.
- 11. Repeat Steps 1-4 to play the second side.
- 12. Repeat Steps 7-9 to remove the record.

How to Properly Store a Record

Ensure an excellent listening experience every time.

The best way to ensure the long life of a record is to always store it correctly, keeping contents secure.

Steps

- 1. Grasp the lead-in groove with your thumb and forefinger using your dominant hand.
- 2. Hold the inner sleeve with your other hand and gently slide the record into the inner sleeve.
- 3. Turn the inner sleeve so that the record is pointing upward. (Do not leave it pointing to the right or left.)
- 4. Slide the inner sleeve into the jacket from right to left.



Records easily attract dust, pet hair, and other particles. Paper inner sleeves should be replaced with plastic-lined sleeves as paper degrades over time and creates dust.



If the inner sleeve is pointed to the right, the record can roll out of the jacket. If the inner sleeve is pointed to the left, the record can fall onto the floor when removed from the jacket. Turning the inner sleeve upward keeps the record securely in place.

5. Slide the jacket into the outer sleeve from top to bottom so that both sides are sealed.



A plastic outer sleeve not only protects the cardboard jacket from dust particles, moisture, and degradation, it keeps everything together so that the record cannot fall out.



If you slide the jacket into the outer sleeve from left to right, the side is left open and the contents are not protected. If you slide the jacket into the outer sleeve from right to left, the spine is exposed to possible damage.

- 6. Store the record vertically on a shelf or in a crate.
- 7. Leave space between records.



Records can warp if stored lying flat. Packing records too tightly can also cause warping. A warped record will not play properly and can damage the turntable.

8. Store records in an air-conditioned, low-humidity, and dust-free location.



Records can easily melt and should never be stored in hot areas (such as cars, attics, and garages) for any length of time. Humidity can damage the jacket, inserts, and inner sleeve. Too much moisture can fuse paper into grooves, damaging the record and even resulting in mold.



Figure 9. Touch only the lead-in groove.



Figure 10. Slide from right to left. Turn upright.



Figure 11: A video of steps 1-5.

Glossary of Terms

Learn key words and their definitions.

Arm Rest The device upon which the tonearm rests when not in use

Groove The lines pressed into the record that contain sound recordings

Insert Extra paper items included with the record such as liner notes or booklets

Inner Sleeve A protective pouch into which an LP is placed

Jacket The cardboard packaging for an LP, often called the "album cover"

Lead-In Groove The blank groove on the outer edge of the record preceding the first track

LP Long-playing record, also called a record, album, or vinyl; A modern

record is 12" in diameter and plays at 33 1/2 revolutions per minute

Needle The tiny, pointed piece of diamond attached to the tone arm; The mechanism

which travels through the grooves to produce sound

Outer Sleeve The protective outer plastic pouch surrounding the jacket

Platter The disc in the center of the turntable upon which the record sits when played

Track An individual song or audio recording

Track Bands The blank areas between tracks which produce no sound

Side One half of the record containing audio recordings

Speakers Audio devices capable of producing sound

Stereo An audio device capable of playing radio, CDs, records, or other media

Spindle The vertical metal prong which sticks up out of the platter on a turntable

and holds the record in place

Tonearm The movable "stick" attached to the turntable which carries the needle

Turntable The audio equipment which plays LPs, also known as a record player

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