

Formats

Recorded music / sound comes in four broad categories: grooved cylinders / discs, magnetic tapes, optical discs and digital files.

- **Grooved cylinders / discs**

The earliest recording formats were wax cylinders.

The 20th century saw the rise of 78rpm discs (initially shellac, later plastic), 33rpm LPs, and 45rpm singles.

- **Magnetic tapes**

These include reel to reel, compact cassettes, 8-track cartridges.

- **Optical discs**

CDs, Minidiscs, Laser discs.

- **Digital files**

USB sticks, MP3, WAV and various file formats.

Problems

- For most of the formats, playback can damage the recording – the needle can damage the groove of a record, a tape reading head can demagnetise the tape, and the reading laser can have an effect on optical discs. The effects may only be small, but repeated plays will increase the damage, therefore it is essential that the needle or tape head is maintained as well.
- For digital files, the main problem is keeping the file format up to date.

Storage

- For all of the physical formats, it is important to keep them away from direct sunlight, heat and damp conditions.
- LPs should be stored upright.
- Develop a system for storing your collection (e.g. alphabetically), so that you know where to find a record without unnecessary handling of other items.



Cleaning

- Always clean vinyl in a circular direction, moving with the grooves. The best liquid to use is water for dirty / slightly mouldy records. For records which are dusty, a commercial record cleaning solution can be used.
- It is important to keep the labels dry. Use a cloth which won't leave any fibres behind. Once the record is cleaned, it won't need regular cleaning – just use an anti-static brush before you play the record.
- For CDs, clean with water, moving from the centre to the outside of the disc. Many solvents can harm the disc.

Handling

- When handling LPs, never touch the playing area with bare hands as the oils in your fingers can attract dust.
- For CDs it is better to hold them by the edge. The layer of metal containing the data is closer to the label side than the 'playing' side, so scratches to the label are more likely to cause the CD to become unreadable.

