

## CD, Vinyl & Cassette Tape

### CD – Pro's

- Quality of Audio stored onto a CD is typically higher than that of a Vinyl record. The standard audio format for CD is 16bit, 44.1khz. (The bit rate determines how often a snapshot/sample is taken of the audio, therefore the higher the bitrate, the better quality of the audio representation). The higher bitrate also provides a better signal to noise ratio
- No degradation of audio when CD's are copied or played back
- CD's are significantly cheaper and quicker to reproduce. Nowadays nearly all computers have CD duplication drives allowing everyone from record labels to audio consumers to create audio disks.
- 'Compact' and easily transported/Stored
- Larger storage capacity than Vinyl or Cassette tape.
- User can skip between tracks on the CD

### CD – Con's

- Some people argue that audio playback on a CD isn't as 'warm' as Vinyl

### Vinyl – Pro's

- Some argue Vinyl produces a warmer sound during playback. This is typically down to personal preference however
- Vinyl's are often produced as collectable versions of albums/singles
- Favoured by some DJ's

### Vinyl – Con's

- Expensive to produce
- Degrades each time it is copied or played back
- Vinyl players are expensive and require upkeep (stylus/needles)
- Vinyl records are prone to scratching and damage
- Records are prone to rumble (30hz) and often require an EQ on the record player to return the low frequencies back to correct level
- Sound quality deteriorates towards centre of record
- Vinyl player needs a flat surface to work

### Cassette Tape

- Maximum length of 120 minutes
- Sound quality is not as good as CD but an improvement on Vinyl
- Reduced high frequency response

- Cassette tapes are prone to hiss
- Tape is magnetic & coated with iron oxide
- Capstan/Pinch roller – controls the speed of tape
- Cassette players need to be cleaned regularly
- Tapes are prone to 'print through'. (An echo can be heard before the track starts to play)