

# Recording sound - analogue and digital



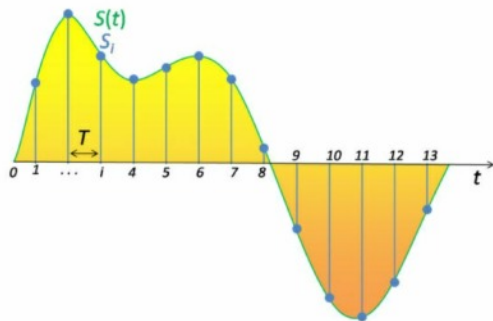
## Acoustic recording

Originally, records were recorded with no electronic equipment - the sound waves collected were etched onto a master record.

These records could be played using a horn to amplify the sound picked up from the disc.

## Analogue recording

When electronic recorders and amplifiers were introduced, the sound was handled electronically but the recording was still an image of the sound wave. This was either physical, as in 78 and vinyl records, or variation of magnetic intensity on tape



## Digital recording

Digital recording involves sampling the waveform very rapidly and saving the size of the waveform at the time of the sample as a number. These numbers are then saved digitally. To reproduce the sound, the waveform has to be regenerated from the saved numbers. Sampling rates are typically 44,100 times per second.

There are further methods of reducing the size of the digital files. For example, The MP3 lossy compression works by reducing (or approximating) the accuracy of certain parts of a continuous sound that are considered to be beyond the auditory resolution ability of most people.