

HISTORY AND SCIENCE OF SOUND RECORDING

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Since we've have been able to communicate using speech we were be able to hear our own voice reproduced in the natural way threw echoes. Pocibility of capturing and storing Sound waves that travel to and bounce back from hard reflective surfaces is a surprisingly recent invention Thomas Edison started it all with his invention of the phonograph in 1877. If we could travel back in time imagine how difficult it would be to explain to somebody from the late 19 century what sound recording was.

We could offset it like the sound equivalent of how the camera invented just a couple of decades earlier can store image.

When Thomas Edison publicated his displayed phonograph it was to huge acclaim and world famous. Interestingly Edison didn't imagine that one of the principal applications of his invention would be for the reproduction of music. Rotating cilinder later developed into the flat disc on Emile Berliner's gramophone that was patented in 1887.

Most Production techniques for Shellac records made the gramophone a common object. The development of electricity helped in recording music as a sound wave.

The Ampeg's company started making magnetic tape recorders in 1940 and became the standard of sound recording and playback medium from the 1950 through to the turn of century. The technology of making magnetic tape opened up sound recording for the whole new generation of artists and professional technicians, engineers, producers.

The Beetles had a big influence on a way that recording technology had been developing. To make an overdub they had to copy one tape to another adding the new material. The rhythm track or instruments were usually on track one and vocals were on track two. These two tracks were then mixed down to mono for the final master. The complexity of the album envolved huge engineering challenges and Jeff Hendrick got world deserved Grammy for his work as engineer of the album. It is hard to believe that it was recorded on four tracks.

Digital technology came along and gave possibility to have an unlimited number of track. Almost all of the great engineers and producers spent years learning the craft places like Capital Records in Los Angeles, Record plant in New-York and Abbey Road studios in London and now can give us great songs which we listen to.

Having learnt all the material concerning the history and science of sound I realized basic principals of sound recording that helped me to record an album "Clinical Birth" by myself.