



VIDEO DISC

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Video Disc

- The production process of a video disc is more or less comparable with that used for conventional gramophone record.
- First a master recording is made. It consists of a glass plate with a photosensitive layer deposited on one side.
- The coded signal of the information to be stored modulates the beam of a 1mm laser which writes the information in the surface of the disc. Cutting is done on real time basis; that it requires 42 only as much as the program lasts and recording takes place at the disc's rotational speed of 30 r.p.s for NTSC and 25 r.p.s respectively for PAL and SECAM.



Video Disc

- In principle, every normal type of TV signal source can be connected to the cutting devices. In practice however, 50 mm magnetic recording tape is used as a program carrier.
- Exposure to the laser beam is followed by a development process which leaves a pattern of pits on the master from which, via a galvanic process; stampers are made which are used for disc production in a way similar to processing of gramophone records.
- After processing, an extremely thin metal coating, not more than 0.04 μm thick is deposited on the information side which is then sealed with a protective layer, as shown in fig.



Video disc mastering and replication

