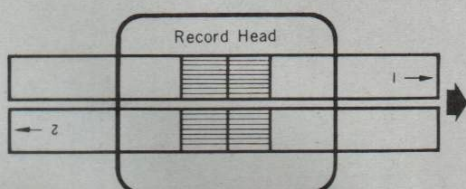


Reel-to Reel Multi-Track System

Source: TEAC 4010SL - Instruction Manual - Document #50021840 - circa 1972

Tracks

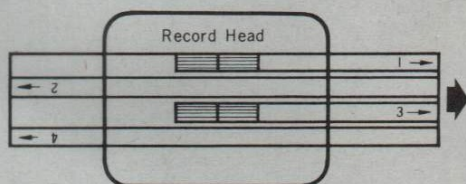
Sound recordings are made in a strip on the magnetic surface of a recording tape. This magnetized strip is called the "Track". The full tape width divided by two is called a "2" track recording, and the full tape width divided into quarters is called a "4" track recording.



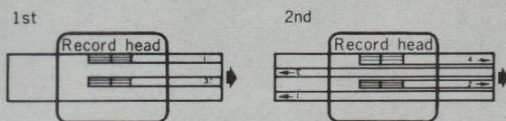
2 Track recording (Monaural)

"2" track recording

2 track recording is mainly employed in radio stations and professional recording studios for stereo recording, in this case both tracks are recorded simultaneously and in the same direction. 2 track recording in the home is usually done one track at a time and is played back monaurally.

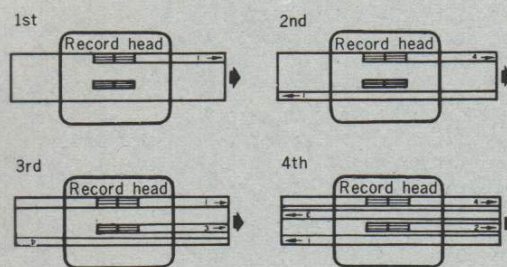


4 Track recording (Stereophonic)



"4" track recording (Stereophonic)

In this mode two tracks are recorded simultaneously, on the first pass of the tape, tracks #1 and #3 are recorded. The left and right reels are then interchanged and tracks #2 and #4 are recorded. The left channel sound will be on tracks #1 and #4 and the right channel sound will be on tracks #2 and #3. Four track recording in stereo will provide the best possible stereophonic reproduction and is the most widely used recording method today.



4 Track recording (Monaural)

"4" track recording (Monaural)

In this mode, each of the four tracks is recorded individually. At the end of the tape the reels are interchanged between left and right and the next track is recorded. The order in which the tracks are recorded is #1, #4, #3 and lastly #2.

Note: With tape threaded on the machine the tracks are numbered 1 through 4, from the top to the bottom, viewed from the base side of the tape.

Four track recording gives maximum playback time, however, the benefits of stereo reproduction are lost.

Playback compatibility

A four track stereo tape deck can play back both 4 track and 2 track tapes and from the point of compatibility has the widest possible range of utilization. When playing a 2 track stereo tape on a 4 track recorder, track #1 will be completely covered by the head, track #2 however will be slightly off alignment but stereo can still be enjoyed by compensating for the slight loss of #2 track volume with the volume of balance controls. On the other hand a four track tape cannot be played back on a two track (Monaural) recorder as both tracks #1 and #2 will be reproduced together resulting in mixed unintelligible sound.