Audio Track: We hear the sound, and it is easier to record than the picture. It is merely striped across the top of the tape longitudinally, with some room separating it from the video marks.

Synchronization is something we can't strictly see and which we can't exactly define. It is essentially the correct relationship of the picture, however, and it has to do with the lines we put on the screen earlier on. Have you ever pulled a thread only to find it has begun to unravel the fabric, left to right, right to left, or both? If so, you won't have trouble visualizing how synchronization helps to draw the picture on the television screen.

The television picture is drawn by a beam of electrons at a phosphor. The screen where it is hit will be bright with a brightness proportional to the beam's strength.

Remember that a field comprises 262½ or so lines. The beam, to accomplish this, must traverse the screen 262½ times horizontally. A clocking mechanism takes care of this. The simultaneous crossing and dropping leaves the resulting lines to be slotted very slightly.

During its sweep from left to right across the screen, the beam is "on"-going in the opposite direction it is "off". The pattern is noted in figure 3 by solid ("on") and dashed ("off") lines.

In order to keep line 1 from being overlapped by 3, 5, 7, etc., the beam must also drop a small distance vertically as it crosses the screen horizontally. Another clocking mechanism takes care of this. The simultaneous crossing and dropping leaves the resulting lines to be slotted very slightly.

Correlated Points:
1. The three types of information recorded on videotape:
   1) video (pictures) (Audio (sound)
   2) sync (synchronization) are fixed there by electromagnetic "heads". These heads actually contact the diode, or oxide, coated side of the tape as it passes. As a result, the heads can become fouled with oxide, necessitating their cleansing with a solution from such a source.
   2. The second heads head to build up a modulated magnetism from repeated recording and playback. (An electromagnetism is supposed to remain, only that created by the flow of current through it, but this is not achieved in the magnetic head.) Nickel-based heads have a head's ability to record or read back electrical signals faithfully. A simple demagnetizing process corrects this problem.
3. Aside from the two items of "prevention maintenance" above, none is required except the occasional cleaning of the camera lenses.