

KODAK ENTERS VIDEO RECORDER/PLAYER MARKET

USING SUPER 8 MOVIE FILM
INSTEAD OF MAGNETIC TAPE

BY AUBREY HARRIS

THE video recorder/player has been in the news fairly often during the past few years; and with good reason, since quite a few big-name companies are involved in its development. Now, there is yet another entry. This time it is Eastman-Kodak Company. The recording medium is, quite logically for them, Super 8mm color film.

The Kodak Videoplayer system is by far the lowest cost recording system yet announced. This is because the camera used can be a simple, inexpensive Instamatic movie camera as opposed to regular color TV cameras (required for color videotape systems) priced in the range of \$5000.

Kodak's system operates as follows. Super 8 is exposed in a movie camera, in the same manner as it normally would be for projector showing. Once exposed, the film is sent off for processing and, on its return from the lab is fitted into a plastic cartridge, reel and all. The cartridge is then placed in the Videoplayer which automatically threads and starts playing the film. From here, the Videoplayer is connected through its built-in r-f modulator to the antenna terminals of a conventional TV receiver to display the picture.

The Videoplayer has certain unique features. First is that the film is moved continuously as opposed to the intermittent 24 frame/second motion of a standard projector. Continuous motion is less damaging to the film and sprocket holes than is intermittent motion.

The video information is generated by a flying-spot scanner and photomultiplier tube system. In a flying-spot scanner, a plain unmodulated TV raster generated by a cathode ray tube is optically focused onto and projected through the film frame. On the other side of the film are an opti-

cal beam splitter and photomultiplier tubes. An advantage of this kind of scanner is that there are no image registration problems.

Special steps have been taken to produce a 60 field/second TV waveform from the 24 frame/second film rate. The method used is known as "Two-Three" scanning where one frame is scanned twice by the TV raster, while the next film frame is scanned three times.

The player unit will reproduce sound recorded on a magnetic stripe on the Super 8 film. The sound also passes through the modulator, emerging from the audio section of the TV receiver. Magnetic sound recording can be accomplished in the camera or in a sound-recording projector. It cannot be accomplished in the Videoplayer.

The cost of the Videoplayer is estimated to be in the neighborhood of \$900, with availability sometime in 1974. This is a comparable figure for many of the presently available ½" color VTR's.

Another of the advantages of Kodak's system is that the medium can readily be edited and spliced using existing equipment, and copies can be made easily in the labs. There is also complete interchangeability between all Super 8 projectors, films, and the Videoplayer cartridges. Furthermore, the films are not "standard-conscious." This last is in contrast to video tapes and EVR films which must be played only on the standard on which they were recorded.

Kodak's Videoplayer also has a few disadvantages. There is the delay for processing between taking pictures and viewing them. A one-hour film, after processing, costs \$100-\$120, whereas a one-hour ½" videotape costs only \$20-\$30 and is reusable whereas the Super 8 film is not. ♦