8K Recorder with 120-Hz Frame Rate

For 8K program production at a 120-Hz frame rate

Outline

We are conducting research on 8K Super Hi-Vision (8K) compression recorders for 8K program production at a 120-Hz frame rate. This exhibit displays a compression recorder that can input/output an 8K signal over a single optical cable and record the data in a removable memory package.

Features

- **High-speed compression recording method maintaining high image quality**
  This recorder compresses each frame at a rate of 1/6 whilst maintaining its image quality. Parallel signal processing of even-numbered frames and odd-numbered frames enables high-speed compression at 120 frames per second in real time.

- **High-speed memory package capable of recording 120-Hz 8K signal**
  We have developed a memory package that can record 120-Hz 8K signal. The writing efficiency has been significantly improved by doubling the number of parallel writing processes in the memory package and reducing the waiting time for writing data. The recording speed is doubled in comparison with conventional recorders.

- **Compliance with the Interface for UHDTV Production Systems (ARIB STD-B58)**
  We have developed a processing unit for the recorder that is compliant with the interface for UHDTV production systems capable of input/output of 8K signals over a single optical cable.

Future plans

With the goal of putting the 120-Hz 8K compression recorder into practical use, we are improving the compression recording method and increasing the speed and capacity of the memory package to enable longer recordings with higher quality.

- The development of 8K recorders is being conducted in cooperation with Tokyo Electron Device, Ltd.