

ClipRecorder Application Note

Post
Production



1. Overview

In a typical digital post-production workflow the ClipRecorder is used as digital I/O either at the beginning or the end of the production-chain.

2. Digitalization

Normally the video content is being delivered either on tape or on film. To get the material into the post-production workflow, the content has to be stored file-based. This process has to be completely lossless, transparent and frame-accurate.

Those requirements can be fulfilled by using a DVC ClipRecorder.

2.1. Master-Slave Configuration

The input device (i.e. VTR) is connected to the ClipRecorder via HD-SDI and RS422. The ClipRecorder acts as master-device and controls the VTR frame accurately. The material is then ingested on the ClipRecorder and saved file-based either on the internal storage or directly into the post-production network. The files are completely uncompressed and therefore this process is lossless, which is vital.

2.2. Slave-Slave Configuration

The input device (i.e. VTR, Film-Scanner,..) and the target device (ClipRecorder) are both being controlled by an edit-controller. So the input devices as well as the ClipRecorder are acting as slave devices.

3. Accessing the files

The stored files on the ClipRecorder can be accessed directly over dual-Gig-Ethernet. So editing directly on the ClipRecorder is one possible option. An alternative workflow would be a copying process onto the next process steps storage device.

If a SAN exists, the ClipRecorder can also directly save the files there. Then no local ClipRecorder storage is required.

4. Post-Production

Depending on the soft-/hardware involved in the post-production process you will select the appropriate file-format in which the content is saved from the ClipRecorder. In a typical post-production process (i.e. coming from film) the most common format is 10b RGB-DPX (the input will then be achieved via dual-link-HD-SDI). For film-restoration TIF is very common. In a broadcast environment normally some files supporting 10b YCrCb color-space are chosen (i.e. MOV, AVI, YUV-stills,...). All those file-types are natively supported by the ClipRecorder, which saves you a lot of time because no file export/import or file-conversion has to be accomplished. This also avoids quality loss or possible errors involved in additional steps.

5. Intermediate Playback - Digital Dailies

At any time of your digital post-production workflow you can use the ClipRecorder for checking your digital dailies. Play your content back either directly from your SAN or from the local ClipRecorder storage. No import or file conversion is needed! The ClipRecorder will play back your files instantly.

6. Layback - Output

Laying back digital material to tape or outputting it via a film-printer is basically the reverse workflow of digitizing the content into your workflow. The content is outputted frame-accurately onto tape using a VTR or on film using a film-printer. Again both configurations master-slave (the ClipRecorder controls the output device via RS422) or slave-slave (both the ClipRecorder and the output device are being controlled via RS422 using a edit-controller) are possible.

7. Location / Control of the ClipRecorder

The ClipRecorder can be placed anywhere in your facility as there are multiple ways to control it. Several control mechanisms are supplied off the shelf:

- RS422 using any external controller
- JAVA-based GUI using TCP/IP
- Browser based using TCP/IP
- Shuttle-Controller (supplied with the ClipRecorder) using USB
- local GUI (using VGA or DVI)

As the ClipRecorder is an open, Windows based solution, even Remote-Desktop or VNC can be used.

