

# ClipRecorder Application Note

Broadcast



## 1. Overview

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In a typical broadcast environment the ClipRecorder is used as digital I/O for digitizing content or as digital playout server.

## 2. Digitalization

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Normally the video content is being delivered on tape. To get the material into a digital broadcast environment, 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 broadcast 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. Ingesting content

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### 3.1. File-based input

The playback files can be put on the ClipRecorder using dual-Gig-Ethernet, USB, IEEE or Fibre. There's no need for any import or file conversion which will save time and preserve the quality of the original delivered material. For supported file types (video and audio) please refer to our specs data-sheet.

### 3.2. Tape-based input

The input device (VTR) is being controlled frame-accurately from the ClipRecorder via RS422 and the video-content directly saved on the ClipRecorders internal storage using HD-SDI as input. The files are saved completely uncompressed and therefore transparent to preserve the quality of the original material.

## 4. Accessing the files

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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.

## 5. Playout

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The ClipRecorder can play back files either from its local storage or directly (if existing) from a central storage. As it is supporting all RS422 protocols the integration with any kind of playout automation system is seamless.

## 6. Location / Control of the ClipRecorder

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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.

