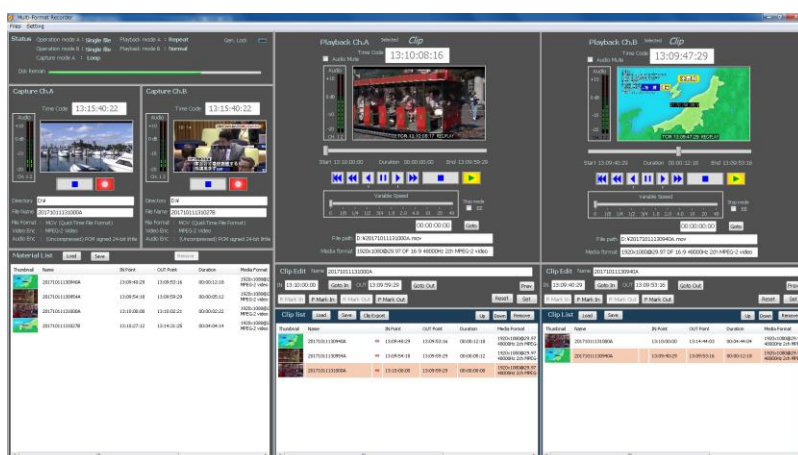# Multi-format Video Server

MFPR-4000

MFPR-4000 is the 2-IN / 2-OUT (2-RECORD / 2-PLAYBACK) video server. All channels work independently. As the recording and the playback can be operated simultaneously, it is suitable for instant replays for sports and many kinds of races. It accepts multiple of TV standards, encoding formats, and file formats. It can be connected an external editing machine and operated like a VTR. The endless loop recording is also possible.

RECORD-A&B   **PLAYBACK-A**   **PLAYBACK-B**

Features

- Capture with MXF OP1a HD422, MPEG2, MJPEG
- Playback multiple files like XDCAM, P2, AVCHD, MPEG2, and Motion JPEG.
- Controlling two channels recording and two channels playback independently.
- Simultaneous record and play.
- Endless loop recording.
- Clip edit function and playlist playback.
- Time-shift playback with minimum delay time of less than one second.
- The PC clock can be used as the time code.
- The YYYY MM DD HH MM SS can be assigned as a file name.
- Remote control by the Ethernet (UDP) or the RS-422 (OPTION).
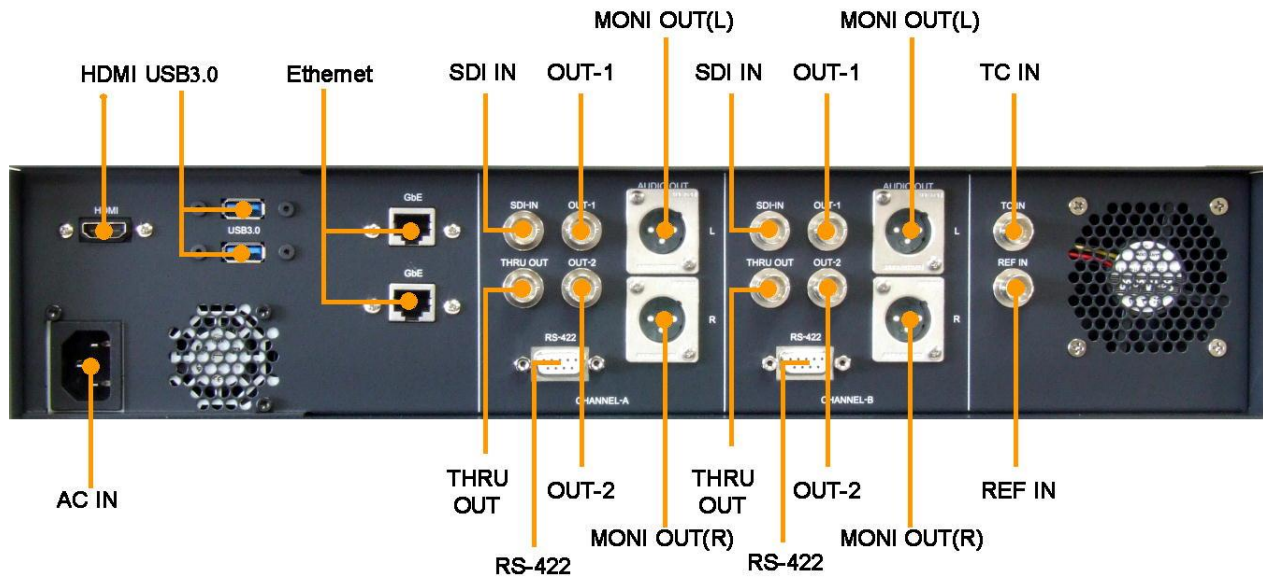- High speed file transfer by the Gigabit LAN and the USB3.0 interface.

Main functions

- SD/HD multi-standard recording and playback.
- Up to 8 TB SSD internal storage capacities.
- Direct recording and playback to external drives.
- Playback while recording.
- Endless loop recording.
- Seamless playback of plural files.
- Slow, shuttle, JOG, search.
- UDP remote control via Ethernet.
- Remote control from the RS-422 controllers. (OPTION）
- Gen-lock to the external reference (BB, Tri-level)
- RP-188 Embedded Timecode in/out.

Applications

- Multi-format player for the linear editors. (News gathering).
- File base encoding and archiving of the VTR contents.
- Playlist playback of the MXF files from NAS servers.
- Simultaneous recording system by using the "LOOP recording" feature.
- Remote Surveillance System for science and disaster protection.
- Instant replay and sports slow motion by the "Play while recording" feature.

HDMI USB3.0 Ethernet SDI IN OUT-1 SDI IN OUT-1 TC IN

MONI OUT(L) MONI OUT(L)

AC IN THRU OUT OUT-2 THRU OUT OUT-2 REF IN

MONI OUT(R) MONI OUT(R)

RS-422 RS-422

Specifications

Video input		HD/SD-SDI x2 (Active-through out x2)
Video output		HD/SD-SDI x4 (2 channels each for CH-A and CH-B)
TV standard		525/29.97 NTSC, 625/25 PAL 1080i/50, 59.94, 1080p/23.98, 24, 25, 29.97, 720P/50, 59.94
File format and encoding (Data rate after compression)		(1) MOV MPEG2 (Data rate: Approx. 20 Mbps) (2) MOV MPEG2 (Data rate: Approx. 50 Mbps) (3) MOV Motion JPEG LP mode (Data rate: Approx. 50 Mbps) (4) MOV Motion JPEG HG mode (Data rate: Approx. 100 Mbps) (5) MXF OP1a HD422 (Data rate: Approx. 50 Mbps)
Playback file format		AVI, MOV, MP4, MXF, MPEG2-TS, WMV etc.
Playback video coding		MPEG2, AVC-INTRA, MPEG4, ProRes422, DN x HD, AVCHD, etc.
Up DOWN convert		Converted output in playback.
Digital audio input		Embedded Audio (MAX 8-Ch for each SDI)
Digital audio output		Embedded Audio (MAX 8-Ch for each SDI)
Analog audio output		Monitor out x4 (2 channels each for L/R) (XLR 3-pin Male connectors) Stereo 3.5mm Head Phone Jack (front panel)
External reference signal		BB or Tri-level sync.
Analog timecode input		BNC x1
Digital timecode in/out		RP-188 HD-SDI Embedded TC (LTC, VITC)
Storage	For data	SSD 500 GB (standard), Up to 8 TB (optional)
	For system	SSD 120 GB
Interface	Display	HDMI x1
	USB2.0	Front x2
	USB3.0	Front x1, Rear x2
	LAN	RJ45 x2 (Gigabit Ethernet)
	REMOTE	Ethernet UDP control protocol, RS-422 x2 (OPTION)
OS		Windows 10 IOT Enterprise
Power input		AC90-264V, 47～63Hz
Power consumption		Approx. 85 W
Environment		5～35℃, 5～85% (Non-condensing)
Dimension		19-inch rack mount 2U 430(W) x87.6(H) x 400(D)