

LTO-5 Video Archiving Recorder

LTR-120HS [AVC-Intra/DVCPRO model]



FOR-A's LTR-120HS is a video archiving recorder with the latest storage standard drive built in, LTO-5 (Linear Tape Open). With its over-whelming 1.5 TB of recording capacity and LTFs portable file system, the LTR-120HS can be used as material/program exchange media server. Using high quality AVC-Intra codec with HD-SDI input/output and MXF wrapper/un-wrapper, the MXF files on LTO-5 tape can be used easily by other NLE systems. The LTR-120HS enables you to build handy video "archive at ingest" solutions.

Re-Define the Video Archive Workflow

- Supporting any stage of Ingest – Delivery – Archive – Reuse cycle
- Bridging between baseband domain and filebase domain

Record on LTO Tape as a MXF File in Real-time

- Just push [●(Rec)]+[▶(Play)] to ingest your video material
- Create Proxy files while ingesting simultaneously

Locate and Play a MXF File on LTO Tape without Waiting

- Jog and Shuttle operations are available for cached part

Open Technologies for Long Term Archiving

- AVC-Intra, DVCPRO, MXF OP-1a, LTO and LTFs: Open architectures

Using LTO Tape as a Digital Program Package Carrier

- LTFs: A file system enables R/W files by PC as an ordinary external storage

File I/O Enables Seamless Filebase Workflow

- Working as a FTP server for filebase I/O
- Panasonic P2 compliant OP-Atom file I/O is available

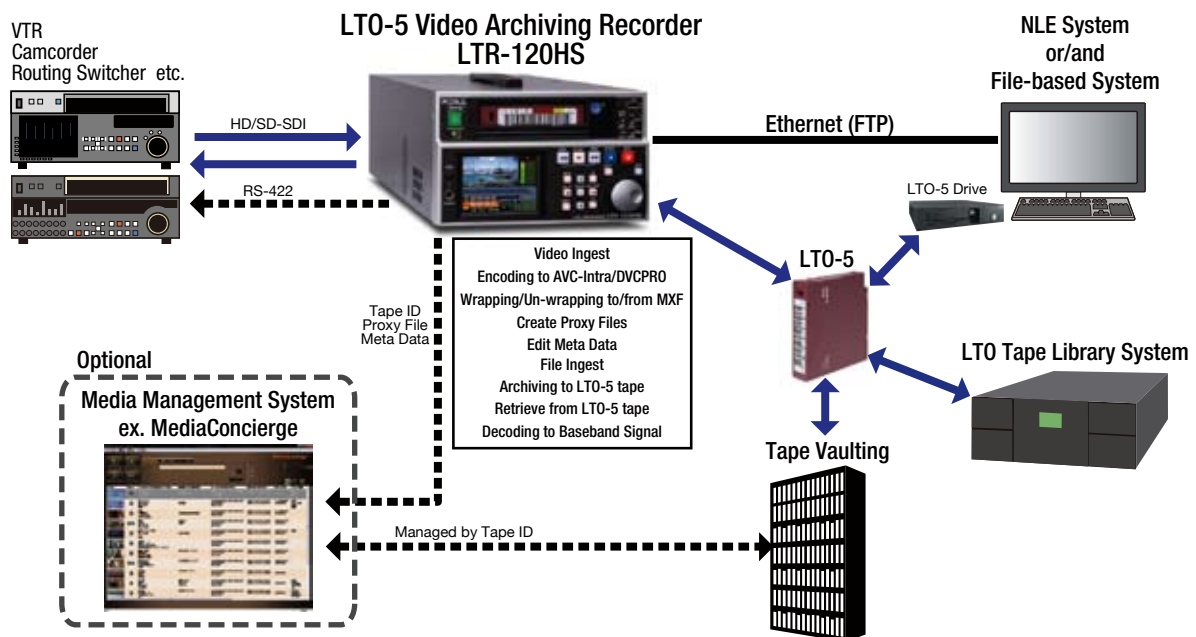
Space Saving Compact Chassis

- All-in one: All functions include the half-rack width 3 U height

Extensibility for Variety of Systems

- RS-422 (9-pin) for external VTR control
- Gigabit Ethernet interface for filebase I/O
- USB2.0 for a barcode reader or PC keyboard

Archiving at Ingest Application



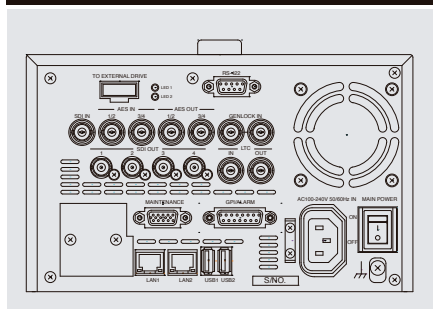
Specifications

Standard	HD: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p	SD: 525/60, 625/50
Removable Storage Device	LTO-5 (File system: IBM LTF5)	
Supported MXF Format	OP-1a - AVC-Intra 100 (10-bit, 4:2:2) - AVC-Intra 50 (10-bit, 4:2:0) - DVCPRO HD (8-bit, 4:2:2)	- DVCPRO50 (8-bit, 4:2:2) - DVCPRO (8-bit, 4:1:1)
Video Input	HD-SDI: 1.5 Gbps, 75Ω, BNC x 1	SD-SDI: 270 Mbps, 75Ω, BNC x 1
Reference Input	BB: NTSC: 0.429 Vp-p/PAL: 0.45 Vp-p or Tri-level sync: 0.6 Vp-p, 75Ω, BNC x 1, loophthrough (Terminate with 75Ω terminator, if not used)	BB: NTSC: 0.429 Vp-p/PAL: 0.45 Vp-p, 75Ω, BNC x 1, loophthrough (Terminate with 75Ω terminator, if not used)
Video Output	HD-SDI: 1.5 Gbps 75Ω, BNC x 4 (Output 3 and 4 support timecode display)	SD-SDI: 270 Mbps, 75Ω, BNC x 4 (Output 3 and 4 support timecode display)
Audio Input	Embedded audio: 48 kHz, max. 8 channels AES: 75Ω, 48 kHz, BNC x 2 (4 channels)	Embedded audio: 48 kHz, max. 8 channels AES: 75Ω, 48 kHz, BNC x 2 (4 channels)
Audio Output	Embedded audio: 48 kHz, max. 8 channels AES: 75Ω, 48 kHz, BNC x 2 (4 channels)	Embedded audio: max. 8 channels (48 kHz) AES: 75Ω, 48 kHz, BNC x 2 (4 channels)
Time Code Input	ANC timecode, LTC: BNC x 1	
Time Code Output	ANC timecode, LTC: BNC x 1	
Internal Storage	2 TB HDD	
Interfaces	Ethernet: 100 Base-TX/1000 Base-T, RJ-45 x 2 USB: 2.0 (High Speed) Series A connector x 3 (front x 1, rear x 2) (for keyboard and barcode scanner) RS-422: 9-pin D-sub (female) x 1 (for external VTR control on encoding) GPI/ALARM: 15-pin D-sub (female) x 1 ALARM: Power, Fan alarm (contact output) / GPI: 3 inputs, 3 outputs (contact input, open collector output) To External Drive: mini-SAS connector x 1 (for external LTO-5 drive)	
Maintenance Interface	VGA: 15-pin mini D-sub (female) x 1	
Temperature / Humidity	10°C - 40°C / 20% - 80% (no condensation)	
Power / Consumption	100 VAC - 240 VAC, 50/60 Hz / Approx. 90 VA at 100 VAC (88 W), Approx. 97 VA at 200 VAC (81 W)	
Dimensions / Weight	212 (W) x 130 (H) x 533.5 (D) mm EIA 3 RU half size / Approx. 10 kg	
Accessories	Operation manual, AC Cord, Control software (Installed)	
Options	Single or dual mount rack brackets, USB keyboard, USB barcode scanner, LTO cleaning tape, 1 year warranty	

LTO-5 Basic Performance

Cartridge Size	105 (W) x 22 (H) x 102 (D) mm
Capacity	Approx. 1.5 TB (data area: 1425 GB / 1327 GiB)
Recording capacity	(without ancillary data other than timecode)
AVC-Intra 100 (HD)	Approx. 25 Hours (w/o proxy files)
AVC-Intra 50 (HD)	Approx. 47.5 Hours (w/o proxy files)
DVCPRO (SD)	Approx. 50 Hours (w/o proxy files)
Response	File system information acquisition time: under one minute in typical case File body seek time: within three minutes

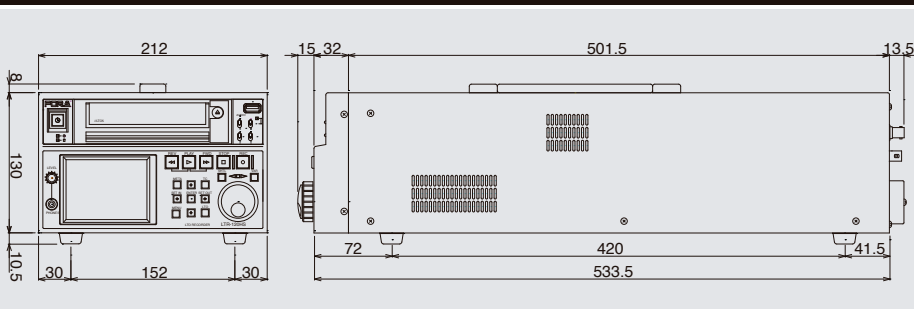
Rear Panel



LTO is a trademark of HP, IBM and Quantum.

AVC-Intra and DVCPRO are trademarks of Panasonic Corporation.

External Dimensions



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