

# LTO-6 MULTI CODEC ARCHIVING RECORDER **LTR-200HS6**

**Re-defining  
 Media Archive Workflows**



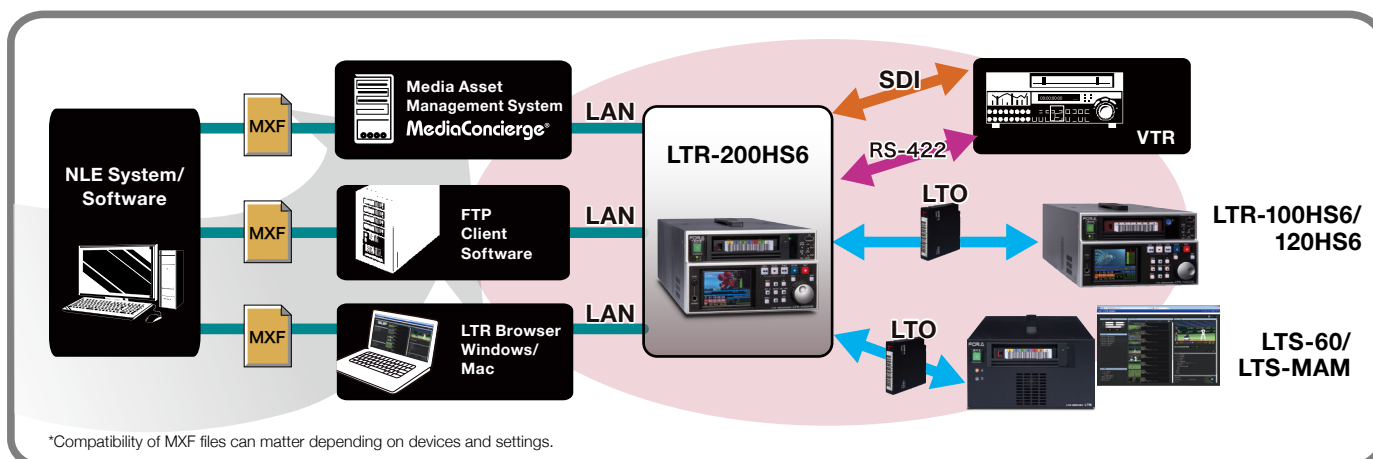
The LTR-200HS6 stand-alone video archiving recorder comes equipped with an LTO (Linear Tape Open)-6 drive and supports a wide range of video codecs. The massive Terabyte and LTFs file system recording capability of the unit allow it to be used as a material or program exchange platform. The LTR-200HS6 offers many useful features, including HD/SD-SDI input/output, broadcast quality codec, and MXF (OP-1a) wrapping and unwrapping. MXF/MOV files that are recorded on LTO can also be used with non-linear editing systems. Simply connect VTRs to the LTR-200HS6 to convert HD/SD-SDI signals to MXF/MOV files. The LTR-200HS6 offers the best solution for repurposing past baseband data in filebase systems.

## ■ Supported video codecs and formats

The unit supports AVC-Intra 100 Mbps, Avid DNxHD<sup>®</sup> 220 Mbps 10-bit compression, and Apple ProRes and allows you to archive your programs at higher quality.

Codec	HD/SD	File	Note
MPEG-2 HD 18/25/35/50	HD	MXF OP1a	SMPTE RDD-9
AVC-Intra 50/100	HD	MXF OP1a	
DVCPRO HD 100	HD	MXF OP1a	
Avid DNxHD <sup>®</sup> 145/220/220x	HD	MXF OP1a	
Apple ProRes	HD	QuickTime/MOV	Option

## ■ Workflow



\*Compatibility of MXF files can matter depending on devices and settings.

## Specifications

Video Formats	HD: 1080/59.94i, 1080/50i, 720/59.94p, 720/50p (select at menu) SD: 525/60, 625/50 (select at menu) (optional)
Removable Storage Device*	LTO-6 (File system: IBM LTF5)
Supported MXF Format	OP-1a (SMPTE RDD-9) HD: MPEG-2 Long GOP - 50 Mbps (CBR/4:2:2/422P@ML) Audio: 24-bit, 8 ch - 35 Mbps (VBR/4:2:0/MP@HL) Audio: 16-bit, 4 ch - 25 Mbps (CBR/4:2:0/MP@H14) Audio: 16-bit, 4 ch - 18 Mbps (VBR/4:2:0/MP@HL) Audio: 16-bit, 4 ch OP-1a HD: - AVC-Intra 100 (10-bit, 4:2:2) Audio: 24-bit, 8ch - AVC-Intra 50 (10-bit, 4:2:0) Audio: 24-bit, 8ch - DVCPRO HD (8-bit, 4:2:2) Audio: 24-bit, 8ch - Avid DNxHD® 220x (10-bit, 4:2:2) Audio: 24-bit, 8ch - Avid DNxHD® 220 (8-bit, 4:2:2) Audio: 24-bit, 8ch - Avid DNxHD® 145 (8-bit, 4:2:2) Audio: 24-bit, 8ch QuickTime/MOV HD: - Apple ProRes (Option)
Video Input	HD-SDI: 1.5 Gbps 75Ω BNC x 1
Video Output	HD-SDI: 1.5 Gbps, 75Ω BNC x 4 (Output 3 and 4 support timecode display)
Genlock Input	HD: BB: NTSC: 0.429 Vp-p/PAL: 0.45 Vp-p or Tri-level sync: 0.6 Vp-p, 75Ω BNC x 1, loop-through (Terminate with 75Ω terminator, if unused)
Audio Input	The maximum number of output channels varies by MXF format and bitrate. Max. 8 ch (4 stereo pairs) (Group 1 and 2) 48 kHz, synchronous only HD: 1.0 Vp-p, unbalanced, 75Ω, BNC x 2 (2 stereo pairs), 48 kHz, SD: 1.0 Vp-p, unbalanced, 75Ω, BNC x 2 (2 stereo pairs), 48 kHz
Embedded AES/EBU	
Audio Output	The maximum number of output channels varies by MXF format and bitrate. Max. 8 ch (4 stereo pairs) (Group 1 and 2) 48 kHz, synchronous only HD: 1.0 Vp-p, unbalanced, 75Ω, BNC x 2 (2 stereo pairs), 48 kHz, SD: 1.0 Vp-p, unbalanced, 75Ω, BNC x 2 (2 stereo pairs), 48 kHz
Embedded AES/EBU	
Time Code Input	Embedded: Ancillary timecode, LTC: 1.0 Vp-p, unbalanced, 75Ω, BNC x 1
Time Code Output	Embedded: Ancillary timecode, LTC: 1.5 Vp-p, unbalanced, 75Ω, BNC x 1
Recording Time	Minimum / file: 1 second, Maximum / file: 24 hours
Internal Storage	3 TB HDD
Interfaces	RS-422: 9-pin D-sub (female) x 1 (inch screws) (for external VTR control on recording) USB: Front: 2.0 Series A connector x 1 Rear: 3.0 Series A connector x 2 LAN: LAN1/2: 1000BASE-T/100BASE-TX, RJ-45 x 2 To External Drive: Mini-SAS x 1 GPI/ALARM: 15-pin D-sub (female) x 1 -ALARM: Power, Fan alarm (relay contact), GPI: 3-input/3-output (contact input, open collector output) MAINTENANCE: 15-pin mini D-sub (female) (VGA) x 1 (maintenance only)
Proxy File	Create with MXF file, H.264/MP4 1Mbps or Windows Media Video 1.5Mbps
File Input/Output	Work as FTP server. Unable to access LTO at once by multiple users.
Temperature / Humidity	10°C to 40°C / 20% to 80% (no condensation)
Power / Consumption	100 VAC to 240 VAC ± 10%, 50/60 Hz 160 VA (158 W) at 100 VAC to 120 VAC, 176 VA (144 W) at 220 VAC to 240 VAC
Dimensions / Weight	212 (W) x 130 (H) x 533.5 (D) mm EIA 3 RU half size / 10 kg
Consumables (if used 24 hours a day at room temperature)	Cooling fan: Replace every 3 years. Power: Replace every 5 years. Battery: Replace every 5 years. Hard disk drive: Replace every 5 years.
Accessories	Operation manual(CD-ROM), AC Cord (cable retaining clip included), Tutorial Manual, Control software (Installed)
Options	USB keyboard, USB barcode scanner, 1 year warranty, LTR Browser, LTR-PRS (ProRes supporting Plug-in)

\* Unable to use LTO WORM

## LTO Basic Performance

	LTO-5	LTO-6
Cartridge Size	105 (W) x 22 (H) x 102 (D) mm	
Capacity	Max. 1.5 TB (data area: 1425 GB / 1327 GiB)	Max. 2.5TB (data area: 2408GB / 2242GiB)
Recording capacity		
MPEG-2 50Mbps MXF	Max. 52 hours	Max. 80 hours
AVC-Intra 100 MXF	Max. 25 hours	Max. 40 hours
DNxHD 220x MXF	Max. 11 hours	Max. 18 hours
	These recording capacities are the theoretical value excepted of ancillary data and proxy files. These might decrease depending on the condition of tape head and tape.	
Response	File body seek time: within three minutes	

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