



LTO-5 Video Archiving Recorder

LTR-100HS



FOR-A's LTR-100HS 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, the LTR-100HS can be used as material/program exchange media server. Using a high quality MPEG-2 codec with HD/SD-SDI input/output and MXF (OP-1a) wrapper/un-wrapper, the MXF files on LTO-5 tape can be used directly by other NLE systems. The LTR-100HS enables you to build handy video "archive at ingest" solutions.

Redefine the Video Archive Workflow

- All-in one: SDI I/O, MPEG-2 Codec, LTO-5 Drive and LCD Display

Record on LTO Tape as a File in Real-time

- MPEG-2 video codec: Supported I-frame in SD 50/40/30Mbps with long GOP HD 4:2:2 50Mbps
- MXF file: OP-1a format

Locate and Play a File on LTO Tape without Waiting

- Jog and Shuttle operations are available for cached part

File I/O Enables Seamless Filebase Workflow

- Working as a FTP server for filebase I/O

Using LTO Tape as a File Exchange Media

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

Open Technologies for Long Term Archiving

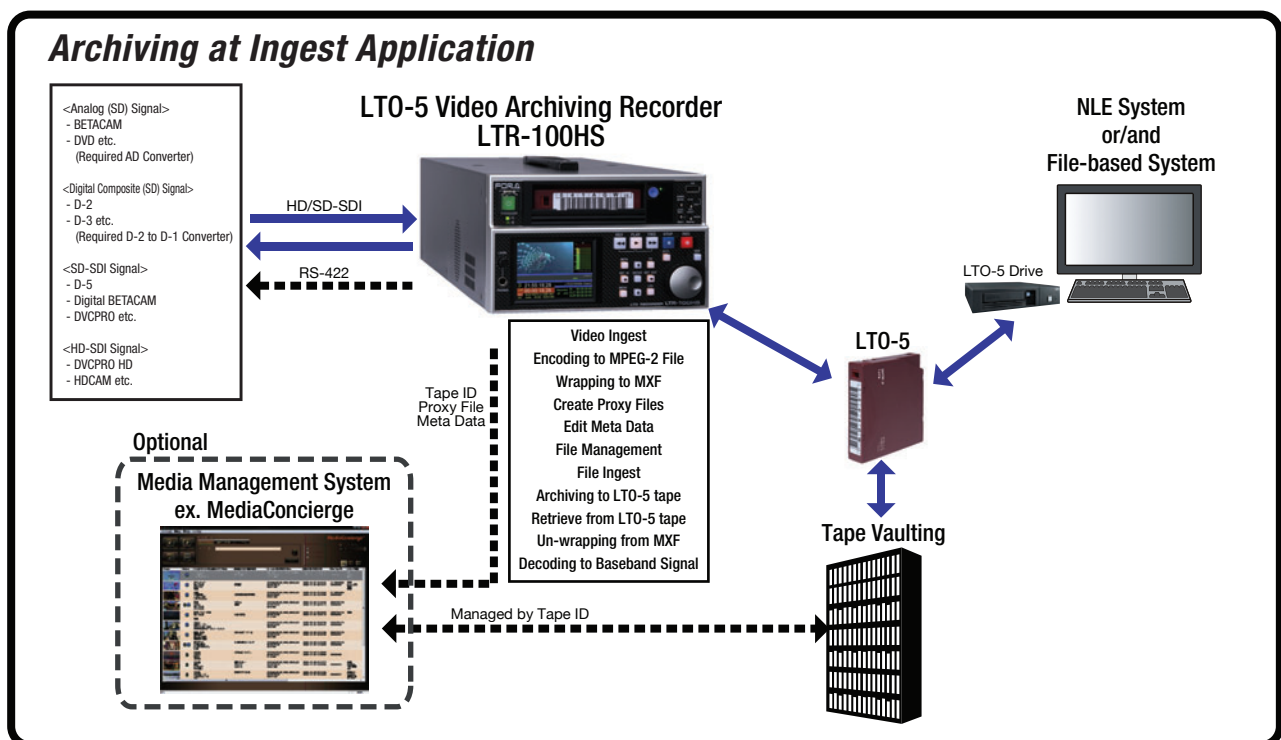
- MPEG-2, MXF OP-1a, LTO and LTFs: Open architectures

Space Saving Compact Chassis

- All functions include the half-rack width 3RU height

Extensibility for Variety of Systems

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



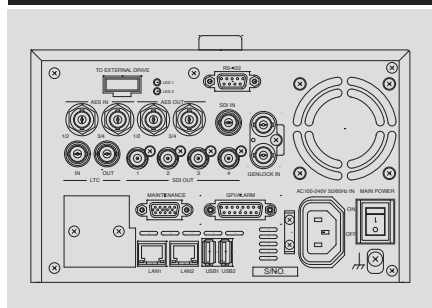
Specifications

| | | |
|--------------------------|--|--|
| 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 (SMPTE RDD-9) HD MPEG-2 Long GOP - 50Mbps (CBR/4:2:2/422P@ML) - 35Mbps (VBR/4:2:0/MP@HL) - 25Mbps (CBR/4:2:0/MP@H14) - 18Mbps (VBR/4:2:0/MP@HL) | SD MPEG-2 1GOP (I-frame only) - 50/40/30Mbps (4:2:2/422P@ML) |
| Video Input | HD-SDI: 1.485/1.001Gbps, 75Ω, 1 input, BNC | SD-SDI: 270Mbps, 75Ω, 1 input, BNC |
| Reference Input | BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p or Tri-level sync: 0.6Vp-p, 75Ω or loopthrough, 1 input, BNC | BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p 75Ω or loopthrough, 1 input, BNC |
| Video Output | HD-SDI: 1.485/1.001Gbps 75Ω, 4 output, BNC (Output 3 and 4 support timecode display) | SD-SDI: 270Mbps, 75Ω, 4 output, BNC (Output 3 and 4 support timecode display) |
| Audio Input | Embedded audio: max. 8 channels (48kHz) AES: 75Ω, 2 inputs (4 channels), BNC (48kHz) | Embedded audio: max. 8 channels (48kHz) AES: 75Ω, 2 inputs (4 channels), BNC (48kHz) |
| Audio Output | Embedded audio: max. 8 channels (48kHz) AES: 75Ω, 2 outputs (4 channels), BNC (48kHz) | Embedded audio: max. 8 channels (48kHz) AES: 75Ω, 2 outputs (4 channels), BNC (48kHz) |
| Time Code Input | ANC timecode, LTC: 1 input, BNC | |
| Time Code Output | ANC timecode, LTC: 1 output, BNC | |
| Internal Storage | 2TB HDD | |
| Interfaces | Ethernet: 100Base-TX/1000Base-T, 2 ports, RJ-45 USB: 2.0 (High Speed) Series A connector, 3 ports (front x 1, rear x 2) (for keyboard and barcode scanner) RS-422: 1 port, 9-pin D-sub (female) (for external VTR control on encoding) GPI/ALARM: 1 port, 15-pin D-sub (female) ALARM: Power, Fan alarm (contact output) / GPI: 3 inputs, 3 outputs (contact input, open collector output) To External Drive: 1 port, mini-SAS connector (for external LTO-5 drive) | |
| Maintenance Interface | VGA: 1 port, 15-pin mini D-sub (female) | |
| Temperature / Humidity | 10°C - 40°C / 20% - 80% (no condensation) | |
| Power / Consumption | 100VAC - 240VAC, 50/60Hz / Approx. 90VA at 100VAC (88W), Approx. 97VA at 200VAC (81W) | |
| Dimensions / Weight | 212 (W) x 130 (H) x 533.5 (D) mm EIA3RU half size / Approx. 10kg | |
| 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

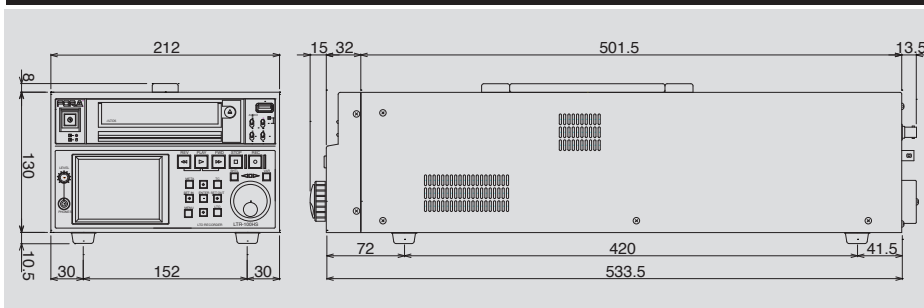
| | |
|-----------------------------|---|
| Cartridge Size | 105 (W) x 22 (H) x 102 (D) mm |
| Capacity | Approx. 1.5TB (data area: 1425GB / 1327GiB) |
| Recording capacity | (without ancillary data other than timecode) |
| MPEG-2 422@HL (50Mbps, HD) | Approx. 52 Hours |
| MPEG-2 MP@HL (35Mbps, HD) | Approx. 82 Hours |
| MPEG-2 422P@ML (50Mbps, SD) | Approx. 50 Hours |
| Response | File system information acquisition time: under one minute in typical case File body seek time: within three minutes |
| Approx. Durability | Read: tens of thousands of times / Write: 300 times |

Rear Panel



LTO is a trademark of HP, IBM and Quantum.

External Dimensions



FOR-A COMPANY LIMITED

Head Office : 3-8-1 Ebisu, Shibuya-ku, Tokyo 150-0013, Japan

FOR-A Corporation of America Corporate Office : 11155 Knott Ave., Suite G&H, Cypress, CA 90630, USA

FOR-A Corporation of America East Coast Office : 2 Executive Drive, Suite 670, Fort Lee Executive Park, Fort Lee NJ 07024, USA

FOR-A Corporation of America Distribution & Service Center : 2400 N.E. Waldo Road, Gainesville, FL 32609, USA

FOR-A Latin America & the Caribbean : 5200 Blue lagoon Drive, Suite 760, Miami, FL 33126, USA

FOR-A Corporation of Canada : 346A Queen Street West, Toronto, Ontario M5V 2A2, CANADA

FOR-A UK Limited : UNIT C71, Barwell Business Park, Leatherhead Road, Chessington Surrey, KT9 2NY, UK

FOR-A Italia S.r.l. : Via Volturmo, 37, 20047, Brughiero MB, ITALY

FOR-A Corporation of Korea : 801 Dangsang Bld., 53-1 Dangsang-dong, Youngdeungpo-gu, Seoul 150-800, KOREA

FOR-A China Limited : 708B Huateng Building, No. 302, 3 District, Jinsong, Chaoyang, Beijing 100021, CHINA

ISO 9001 and 14001 certified (Sakura R&D)

Homepage: <http://www.for-a.com/>

Tel : +81 (0)3-3446-3936 Fax : +81 (0)3-3446-1470

Tel: +1 714-894-3311 Fax: +1 714-894-5399

Tel: +1 201-944-1120 Fax: +1 201-944-1132

Tel: +1 352-371-1505 Fax: +1 352-378-5320

Tel: +1-305-931-1700 Fax: +1-305-264-7890

Tel: +1 416-977-0343 Fax: +1 416-977-0657

Tel: +44 (0)20-8391-7979 Fax: +44 (0)20-8391-7978

Tel: +39 039-881-086/103 Fax: +39 039-878-140

Tel: +82 (0)2-2637-0761 Fax: +82 (0)2-2637-0760

Tel: +86-(0)10-8721-6023 Fax: +86-(0)10-8721-6033