Spectrum™ MediaDeck 7000

INTEGRATED MEDIA SYSTEM

The Spectrum™ MediaDeck 7000 integrated media server delivers the broadcast quality and mission-critical reliability of the industry-leading Spectrum transmission server in a convenient and cost-effective package.

With the MediaDeck 7000 server, even the smallest broadcast and programming operations can implement sophisticated file-based workflows in a broad range of video formats. The system packs up to four video channels, Gigabit Ethernet connectivity, and 3+1 RAID storage into a compact 1-RU chassis.

Leveraging the trusted Spectrum architecture, MediaDeck 7000 servers are immediately deployable with Harmonic applications for ingest, playout and delay serving, including Polaris™ playout management systems, as well as with hundreds of third-party automation and production applications. Pairing MediaDeck with the Spectrum ChannelPort integrated channel playout system enables a true channel-in-a-box solution that speeds the cost-effective deployment of new SD and HD television channels by integrating sophisticated graphics, branding and master control switching with clip playback.

Built for Broadcast

MediaDeck 7000 media systems are optimized to satisfy the demanding reliability and performance requirements of broadcast operations. Unlike systems that rely on PC computing platforms and operating systems such as Windows, MediaDeck 7000 leverages IT technologies but is purpose-built for broadcasters. For example, the OS resides in Flash memory, ensuring rapid boot up and eliminating the risks associated with system drive failures. As a result, MediaDeck 7000 users benefit from the price/performance gains driven by general IT technology enhancements without compromising mission-critical 24/7 operations.

MediaDeck 7000 servers are available with a choice of storage. Four 2-TB SATA drives come standard (approximately 225 hours at 50 Mbps), with 4-TB drives optional (approximately 450 hours at 50 Mbps). All HDD storage is protected with Spectrum's robust 3+1 modified RAID 4 (single parity) technology. For the most uncompromising production and playout environments, four high-performance 480-GB solid-state drive (SSD) storage (57 hours at 50 Mbps) is also available. Video I/O modules and redundant power supplies can be hot-swapped for uninterrupted operation.

Drop-in Compatibility

MediaDeck 7000 systems work out of the box with all applications supported by Spectrum, including automation, editors, archiving systems, Harmonic media applications and others. High-speed GbE connectivity enables asynchronous file transfer and support of FTP, SMB and the Apple® Filing Protocol, providing simple, standardized file movement techniques.

HIGHLIGHTS

- Cost-effective, easy-to-deploy ingest and playout solution for up to four SD or HD channels
- True channel-in-a-box functionality when paired with Spectrum ChannelPort integrated channel playout system

- Real-time reliability with hot-swappable drives, 3+1 RAID 4, redundant power supplies and flash-based system memory
- Compatible with Harmonic MediaGrid, Spectrum media systems and hundreds of third-party software applications

- Compact 1-RU chassis saves rack space and power
- Choice of storage: four 2- or 4-TB SATA, or 480-GB SSD, disk drives

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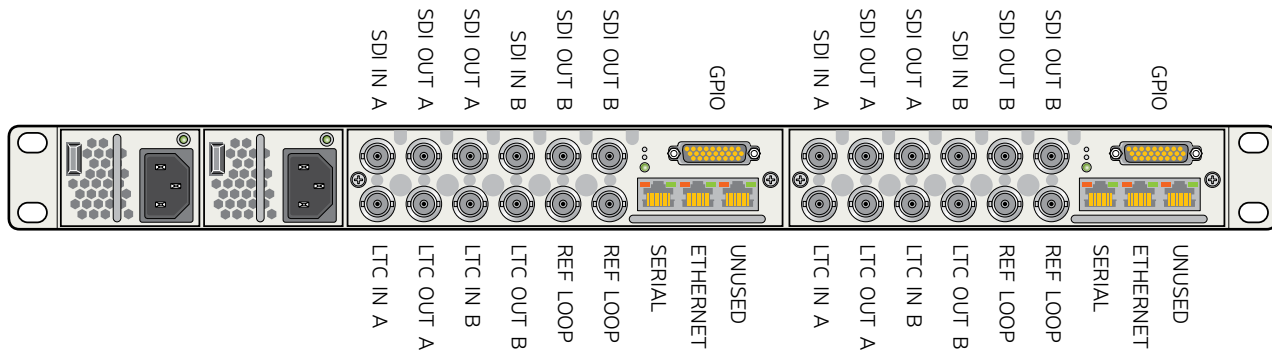
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Video Format Flexibility

Utilizing one or two ChannelPort or MediaPort 7000 modules for I/O, MediaDeck 7000 supports up to four channels and provides broad support for a wide range of production and playout formats — including AVC-Intra, ProRes and PitchBlue® — and file wrappers, including QuickTime, LXF, GXF and MXF. Playout channels can perform up-, down- and cross-conversion without channel-count or performance penalties, and play back any mix of SD and HD content on a single timeline. SD/HD simulcast is also available on every channel.

By delivering this high level of performance in a fully integrated system, MediaDeck 7000 establishes a new price-per-channel benchmark for professional media systems.

MEDIADECK 7000 REAR PANEL
(two MediaPort modules installed)

SPECIFICATIONS

VIDEO

Video Channels	Up to four bidirectional channels per chassis
Video I/O Modules	Up to two dual-channel MediaPort 7000 or ChannelPort modules per chassis , SD/HD simulcast outputs on every channel An H.264 proxy option enables simultaneous generation of both low- and high-resolution clips during recording
Storage	Four 2-TB SATA drives (standard), 6 TB usable (225 hours at 50 Mbps) Four 4-TB SATA drives (optional), 12 TB usable (450 hours at 50 Mbps) Four 480-GB SSD drives (optional), 1.4 TB usable (57 hours at 50 Mbps) Hot-swappable
Redundancy	3+1 modified RAID 4 (single parity)
Network	Up to two GbE ports (one per I/O module) Access to FTP, CIFS and AFP services Network failover supported on systems with dual I/O modules
Reference	Analog black with color burst optional for playout, unused for recording loop-through connector
Media Wrappers	QuickTime reference LXF, GXF and self-contained MXF OP-1a and OP-1b
Up, Down and Cross-Conversion	720p to 1080i, 1080i to 720p Standard with every HD-capable module No channel-count or performance penalties

AUDIO

Audio Channels	Up to 16 embedded audio channels per video channel
Audio Formats	Uncompressed: 16-, 24- and 32-bit PCM at 48 kHz Compressed: audio passthrough

POWER

Power Supply	Dual redundant, hot-swappable
Input Voltage	100-240 VAC
Line Frequency	50-60 Hz
Consumption (One Module)	
MediaPort 7000	266 W/2.31 A typical 325 W/2.83 A maximum
ChannelPort	305 W/2.65 A typical 363 W/3.16 A maximum

PHYSICAL

Dimensions (W x H x D)	17.5 in x 1.75 in x 30.25 in (1 RU)/ 44.4 cm x 4.4 cm x 76.84 cm
Weight	36 lbs/16.6 kg (one module) 40.5 lbs/18.4 kg (two modules)

ENVIRONMENTAL

Operational Temperature	+40º F to 104º F/+5º C to 40º C
Operational Relative Humidity	10-85% non-condensing
Safety	UL 60950-1 2nd Edition Information Technology Equipment — Safety, Part 1: General Requirements CSA C22.2
Electromagnetic Compliance	US: FCC 15 Class A Japan: VCCI Class A Australia, New Zealand, EU: CISPR 22 Class A Taiwan: CNS 13438 Class A Canada: ICES-003 Class A EU: EN 55022 Class A Korea: KN22 Class A