



IMAGE SERVER 7000

Six Channels of Video and Graphics

Next-Generation Economics

360 Systems' new Image Server 7000 extends the video server family to six video channels, with up to 600 hours of RAID-protected storage. It also sets a new standard for versatility, playing most MPEG-2 and DV file types, plus TARGA graphics with key-and-fill. Best of all, the 7000 introduces a new era for broadcasters, with high performance *and* attractive pricing.

The Image Server 7000

360 Systems' new Image Server 7000 represents a major advance in the value video servers bring to broadcasting. As standard equipment, the "7000" includes a wide range of production tools and I/O standards that are extra-cost on earlier servers. New tools include fast FTP file exchange with editing and graphics workstations, and Advanced Playlisting tools—which are so complete that they may be all you need to get to air.

Multi-Format File Support

The Image Server 7000 is able to record two MPEG-2 files at once, and accepts composite and SDI video for compatibility with existing plants.

But the 7000's greatest value is its network file-exchange capability. Unique among servers, the 7000 can directly import and play a majority of MPEG-2 and DV-25 file types. Using fast, file-based transfers, it speeds work-flow from production to air, saving time and expense.

The 7000 employs real-time software-based file conversion, so that future file types may be accommodated with a simple CD-ROM upgrade. Of course, all Image Servers support the industry-wide MXF file standard, simplifying file exchange with other products.

Because the 7000 works equally well with traditional baseband video and new IP file standards, it's a cost-effective bridge to building a digital facility.

Advanced Network Capability

For fast, world-wide sharing of program content, the Image Server 7000 uses Gigabit Ethernet. Now, broadband connections can move news, promos and spots across the room—or across the country—using simple FTP transfers. With Image Servers, content at distant locations can be easily shared between multiple users.

Next-Generation Tools for Acquisition, Production and Play-to-Air

The Image Server 7000 includes many production tools as standard equipment: its full-featured Graphic User Interface can control all video channels at once; VTR-style buttons and time code displays give it a familiar look and feel; and keyboard shortcuts like J-K-L keys speed up trimming and playlisting operations. Transport controls include record, play, off-speed play, jog, looping, and head/tail trimming. And remote-GUI options provide secure control of the 7000 from any remote location.

New Advanced Playlisting tools provide fast drag-and-drop list building, on-the-fly editing, Pause, Skip, Hold, Next and Jump functions, and even embedded GPI output commands within a playlist for control of video switchers and character generators. And a detailed 'As-Run' log can be exported to confirm playout of all scheduled content.

To make the transition to DTV easier, the Image Server 7000 not only provides composite and SDI video, but also +4 analog and AES/EBU as standard equipment. Embedded audio is available as an option. Four audio channels are provided for each video channel—for a total of 24. A full set of XLR connectors makes the 7000 a drop-in upgrade, easy to design into new facilities. The 7000's unique Bit-for-Bit® architecture protects the integrity of audio data, for full compatibility with Dolby-E® or AC-3 surround encoding.

Let the Image Server 7000 Make Your Operations More Profitable

360 Systems' Image Server 7000 is a full-featured server, which makes better economic sense for broadcasters of every size. At about \$4,500 per channel, the 7000 achieves a far better cost-per-channel than ever before. Compare its features, performance and price, and see how it can improve your work-flow, save time, and bringing better profitability to your operations.

Video and Graphics Clip-Store

The Image Server 7000 goes beyond being just a video server—it also imports and plays video and graphics from Photoshop, After Effects, and NLEs like Final Cut Pro, Avid, Premiere, Vegas or Liquid. Simple FTP file transfers move files into the 7000 at high-speed, and preserve their original quality. The 7000's versatility also lets it work as a 6-channel clip server that can play video, graphics and animations—including a key. Unlike most servers, it can play different video formats at the same time, making it a versatile choice for news, sports and production.

Reliable Storage at an Affordable Price

The 7000's design uses a new breed of high-reliability Serial ATA drives designed expressly for 24/7 server applications. It's another way 360 Systems' new engineering delivers a far lower cost-per-hour for storage. The 7000's internal drive array can be configured for up to 600 hours of program content, for as little as \$50 per hour—a small fraction the cost of fibre-channel or SCSI storage.

A high level of security for stored programs is achieved with an advanced RAID-5 hardware controller, which spreads parity information across all drives. Even if a drive should fail, data is protected; and equally important, the Image Server 7000 stays on-air. Of course, all drives are hot-swappable, and have easy front access.

On-Air Coast-to-Coast with Leading Automation Systems

360 Systems' Image Servers are on-air with every major automation system, so pick your favorite with confidence that our serial interface will work as you expect.

CRISPIN CORP.	SUNDANCE DIGITAL
DTG/AIRO	LEIGHTRONIX
FLORICAL	HARRIS AUTOMATION
NVERZION	PARKERVISION
ROSS SWITCHERS	DNF CONTROLS

The 7000 also supports Odetics and P2 protocols, and works with popular desk-top controllers for transport-control and instant replay functions.

Ordering Information, Image Server 7000

V7000 – NTSC or PAL
MPEG-2, 120 hours RAID-5, hot-swap storage,
dual power supplies

Storage Options

250 hours, RAID-5, hot-swap
400 hours, RAID-5, hot-swap
650 hours, RAID-5, hot-swap

Embedded Audio Option

Four channels embedded audio per video stream.

Spares Option

Drives
Hot-swap power supply
Cooling fan

Legendary Quality and Reliability

360 Systems brings 34 years of experience to the design of advanced digital equipment for broadcasting and entertainment. With the Image Server 7000, the tradition gets better. To learn more about the Image Server 7000, call us directly, and discuss the 7000's advantages for your next-generation facility.

DV & Graphics Option

Provides network import, storage and playout of DV-25 video and TARGA graphics. 6 channels



Image Server 7000 Rear Panel

Technical Specifications

Video	
Inputs	Two
Outputs	Six
Analog video I/O	Composite, 75 ohm, BNC
Digital video I/O	SDI, SMPTE 259M, 75 ohm BNC
Video standards	525/60 NTSC; 625/50 PAL (Model Dependent)
MPEG recording formats	4:2:2 Profile @ Main Level; Main Profile @ Main Level
DV Playback Format	Optional. Playback of 25Mb/sec DV files imported via Ethernet
Graphics playback format	Optional. Playback of TARGA files with key & fill imported via Ethernet.
Frame format	I-frame or long-GOP
Video sync reference	Recording: external black burst. Playback: Internal genlock or crystal

Audio	
Digital Inputs/Outputs	2 stereo pairs (4 channels) per video input or output
Digital audio format	AES/EBU, 110-ohm, XLR-3 connector breakout box
Dynamic range (digital)	144 dB (24-bit word size)
Audio format	48k sample rate, 16, 20/24-bit word size
Coding	Linear PCM
Bit-for-Bit® data handling	Transparent to Dolby®-E, Dolby AC-3
Analog Inputs/Outputs	2/4 mono channels per video input or output
Analog audio format	Balanced, +4 dBu, XLR-3 connector breakout box
Frequency response	10 Hz – 20 kHz \pm 1 dB
Harmonic distortion	<.002% THD+N at full scale –1 dB
Dynamic range	112 dB (24-bit word size)

Time Code	
LTC in/out	External time code, > 10k ohms BNC connector; output Z = 5 ohms
VITC line number, NTSC	Field 1: Lines 14, 16; Field 2: Lines 277, 279
VITC line number, PAL	Field 1: Lines 19, 21; Field 2: Lines 332, 334
Time code window burn	Displays time code window on composite output #1 (optional)

Control Inputs	
Automation control, EIA-422	VDCP; 6 ports, 9-pin female "D" connector
Other serial control, EIA-422	P2 / Odetics protocol, 9-pin female "D" connector
GPI control inputs/outputs	6 optically isolated inputs, 6 open-collector outputs, 25-pin female "D"

Video Networking	
File interchange formats	MXF OP-1a, OP-1b; MPEG-2 program streams & elementary streams; DV stream; TARGA graphics import
Network port, File transfer protocol	(2) Gigabit Ethernet, FTP

Disk Storage	
Storage time (max)	600 hours at 12 Mb/Sec
Capacity	2 TB to 4.8 TB
Data redundancy	Hardware-generated RAID-5 utilizing 8/12 drives
Drive arrangement	Located within enclosure, front access. Hot swappable.
CD-ROM drive	Internal, loadable from front. (For operating system upgrades.)

Miscellaneous	
Closed Captions	Records and plays CC data per EIA-608B
Nielsen™ data	AMOL-2 VBI data
Front panel indicators	5 LEDs indicate Power-on, Genlock, Fan alarm, Drive alarm, System alarm
Cooling/Operating Temperature	Redundant fans. Ambient operating temperature 10° to 30° C
Power	Redundant hot-pluggable power supplies. 100 – 250 VAC, 3 amp max

Physical	
Mechanical	5¼" x 19" x 27" (133 x 483 x 685 mm) H-W-D
Mounting	Rack mount (3U), adjustable rear supports
Agency approvals	UL, C-UL, FCC Class A, CE upon delivery

Specifications are subject to change without notice.

Please click [here](#) if you would like to receive additional information or be contacted by one of our representatives. [Please click here for our Sales Contacts page.](#)

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