



**TSS**  
MULTI FORMAT VIDEO SERVER

THE RELIABLE CORE  
OF YOUR BROADCAST

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Independent HD & SD Channels  
Simultaneous Record and Playout  
Flexible File Format Support



*Flexibility, Reliability, Simplicity...*  
*Economics That Make Sense.*

# TSS

## ***MULTI FORMAT VIDEO SERVER***

For over 10 years, the Image Server and MAXX series of video servers brought reliability and affordability to broadcasters in many markets. The TSS line of video servers continues this philosophy and includes a suite of key features that meet the needs of today's broadcast environments.

### **Standard Features:**

- Multi-channel record and playout
- H.264 and MPEG codecs
- HD & SD file compatibility
- Automatic Up/Down/Cross conversion
- Manual and scheduled Playback and Record
- Remote control from PC's via Ethernet



# SIMPLE FLEXIBLE RELIABLE FEATURE-RICH

At 360 Systems we listen to our customers. Support for file based work flows, broadcast in HD and SD formats, and additional playout options such as scheduling and graphics were high on the list. The new TSS line from 360 Systems offers all of this and more in a compact, reliable, affordable package.

# SIMPLE **RECORD** & **PLAYOUT**

We understand the video server is a core element of any broadcast facility. Choosing a system that will be in service for years is an important decision. Great care was taken in developing the TSS server line to ensure it provides a total solution to meet the requirements of day-to-day broadcasting.

- Multi-channel record and playout
- Independently configure each output for 720p, 1080i, or SD
- Mixed file formats and resolutions within a playlist are automatically up/down/cross converted to match the output configuration
- Standard codec and file formats include H.264 or MPEG-2 in .mxf, .mp4, or .mpg containers
- Perform jog and shuttle for rapid movement within a clip
- Smooth slow motion playout
- Manual and scheduled Playback and Record
- Graphics overlay capabilities
- Configurable for 29.97/59.94 or 25/50 fps operation
- High quality 10 bit video and 24 bit audio support
- Up to 16 channels of embedded audio per video channel



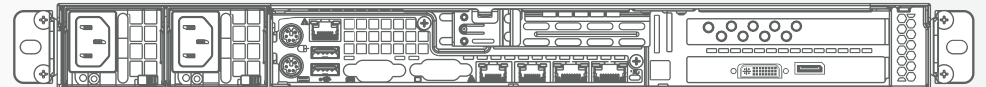
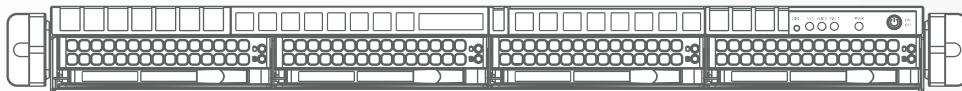


# FLEXIBLE CONNECTIVITY

- HDSDI, SDSDI and 3G compatibility
- Dual Gigabit and 10G Ethernet
- Remote access and control from PC's via 360 Systems Remote Workstation software
- Serial port control for each channel via VDCP or Odetics / BVW protocols for use with automation or remote controls\*
- Independent GPI inputs and outputs (12 each) for external triggering or control\*

\* With optional CXP-5 module

The TSS Video Server product line uses industry standard file formats, supporting interoperability with NLE's and Content Distribution Systems.



# RELIABLE **HARDWARE** PERFORMANCE

With over 40 years of experience building quality audio and video equipment for the broadcast industry, 360 Systems understands the importance of quality hardware. Server grade components, built in redundancy and a dependable operating system make the TSS series a robust and reliable video server.

- Redundant cooling and power
- Up to 8TB of RAID 5 protected storage
- Dual Xeon processors running 12 Cores
- Server grade mainboard and video card
- Dependable Linux OS

# FEATURE-RICH **SOFTWARE** INTERFACE

Simplicity is key. Users require powerful features with intuitive and accessible controls. This premise has been designed into our graphic user interface to provide ease of use and rapid operation.

- Intuitive Graphic User Interface
- Drag and Drop file management
- Remote control from PC's via Ethernet
- Manual and automated playout
- Playback and Record scheduling

# TECHNICAL SPECIFICATIONS

## VIDEO

Video Input	HD-BNC (mini BNC) independently configurable for SDDSI, HDSDI or 3G
Video Output	HD-BNC (mini BNC) independently configurable for SDDSI, HDSDI or 3G (HD-SDI, SMPTE 292M and SD-SDI, SMPTE 259M)
Simultaneous video streams	Model dependent
Video format	1080i at 29.97 or 25 fps; 720p at 59.94 or 50 fps, 525/60 NTSC; 625/50 PAL
HD / SD Scaling	Up, Down, and Cross conversion of any file format to selected output
Encoding / Decoding format	H.264 or MPEG2
File Types	.mxf, .mpg, .mp4
Jog / Shuttle	Zero to 128X, forward/reverse
Slow Motion Play with audio	Zero to +/-2X, forward/reverse
Onboard Graphics Overlay	Logo insertion
Genlock Input	Blackburst or tri-level
Ancillary Data	Yes
Closed Captions	HD - 608 / 708 in VANC SD - Line 21 in VBI

## STORAGE

Disk Storage System	4 TB standard (optional 8TB)
Storage time	60 hrs. HD, 400 hrs. SD w/ 4TB, up to 140 hrs. HD, 900 hrs. SD with 8TB*

## AUDIO

Standard Audio Input/Output	Embedded Audio (up to 16 channels)
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## CONNECTIVITY

Networking	Gigabit and 10G Ethernet
Serial Control Ports	VDCP or Odetics per channel
GPI Control	12 Inputs and 12 Outputs

## SYSTEM DETAILS

Fault Monitoring LEDs	Front Panel LEDs, power, system, network
Fault Monitoring Output	GPI, Email
Powersupply	Dual Redundant 460W
Cooling	Redundant fans
Chassis	1-RU

## SCHEDULING FEATURES

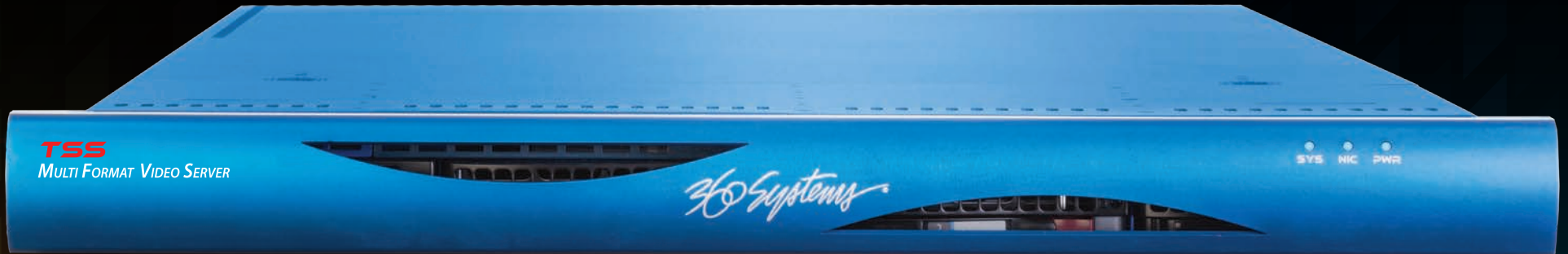
Live feed	Channel 1 input available to layout under schedule control
Record Scheduling	Yes
Playback Scheduling	Yes

\* Hours are estimated. Actual time will vary depending on file format.



# **TSS**

## **MULTI FORMAT VIDEO SERVER**



For more information on 360 Systems' TSS line of Multi Format Video Servers, please visit our website or call us direct.

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[www.360Systems.com](http://www.360Systems.com)  
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