



AirSpeed 5000

Versatility and value



The Avid® AirSpeed® 5000 server addresses a wide range of applications for broadcasters of any size. Designed for broadcast and production applications with regular feed, live acquisition, production, or play to air playback needs, AirSpeed 5000 excels as a standalone device or coupled with an Avid ISIS® shared media network and Interplay® Production asset management, allowing incoming material to be used immediately by all contributors. AirSpeed 5000 models pack two or four channels of AVC-Intra record and play plus DNxHD playback, or four channels of SD record and playback in a small form factor with modest per-channel power and cooling demand. AirSpeed 5000 integrates easily with your existing, applications, control, and automation systems.

End-to-end production workflow in your format

The AirSpeed 5000 Base configuration delivers DV25/50 and IMX 30/50 support. AVC-Intra 2 and 4 channel models support MPEG-2 HD and DNxHD playback. AVC-Intra models use Panasonic—sourced hardware codecs for the faithful, full-spec implementations. Full DNxHD 85/100, 120/145, and 185/220 record/play can be added to all models, and optional simultaneous H.264 proxy creation per channel supports easy and fast LAN/WAN-based workflows with Interplay Production.

High availability

8TB or 4TB of usable storage means ample capacity for programming, commercial, and interstitial content. RAID 50 media protection provides an optimal balance of performance and availability in combination with redundant OS drives, power supplies, network connections, and system fans. Grouping up to six systems in an AirSpeed Studio configuration provides redundancy and flexibility for even greater playout confidence, along with the option for failover channels with a playback control or transmission automation system.

Faster production

The AirSpeed 5000 server can directly exchange files between P2 decks, 3rd party servers and editing systems. With Avid Media Composer®, editors and ISIS® shared storage, the FrameChase™ feature virtually eliminates the time between acquisition and editing, letting connected editors access material seconds after the transfer begins. A single click sends finished clips to playback, and AirSpeed 5000 fast media replay provides immediate turnaround for live or breaking news events.

Play to air flexibility

The AirSpeed 5000 server was designed with workflow speed and playback flexibility in mind. Clips that don't match the preferred playback format are automatically up, down, or cross converted, and channel output switching between HD and SD eliminates the need to dedicate channels to one format. Included high quality slow motion playback is the perfect solution for key sports highlights under the most demanding broadcast conditions.

Fits your budget

With full-featured two or four channel versions and direct operation with Avid and other editors, AirSpeed 5000 gives you the confidence of a professional broadcast server that can fit budgets. Fully tested and qualified workflow solutions range from standalone operation with Avid Media Composer editors to workflow enabled solutions with Interplay | Production, Media Composer editing, ISIS shared storage, support, training, and on-site professional services to ensure smooth implementation. When ready, add the Avid Interplay | Production, iNEWS®, and iNEWS | Command, systems for central asset management, complete news content management, and assisted playback automation.

Automated capture and playback

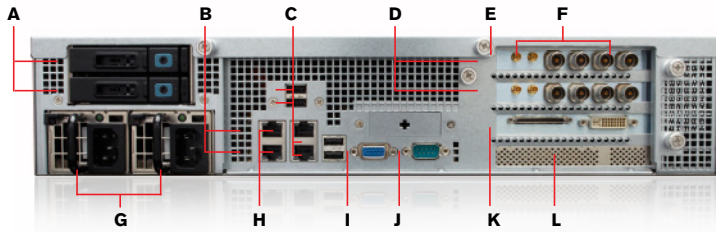
Full integration with the Interplay | Capture ingest control system delivers reliable feed scheduling and recording, and the included IsoSync application which allows one-button, frame-synchronized multi camera capture into Avid ISIS shared storage for fast editing and turnaround. For events spanning days or weeks, AirSpeed 5000 seamlessly handles recording, eliminating the need to manage ingest scheduling. When it's time to go to air, multi-channel playlists can be built in the AirSpeed 5000 Remote Console for automated playback., and the iNEWS Command playback control application provides cost effective play to air under automated, assisted, or manual control. AirSpeed servers also interface easily with automation systems through an available API, industry standard VDCP, and Sony BVW 75 Protocol support for external timecode, and GPI/O.

Safe, extended access

The Remote Console application provides the ability to monitor, control, cue, play, record, change clip in/out points, create sub clips, create and edit playlists, and manage clip inventory for all AirSpeed servers from any CPU. Clips are easily identified with reference frames and all media is accessible to feed room operations and connected editing clients. Administrators can grant selective user access control to help protect the integrity of on-air operations.

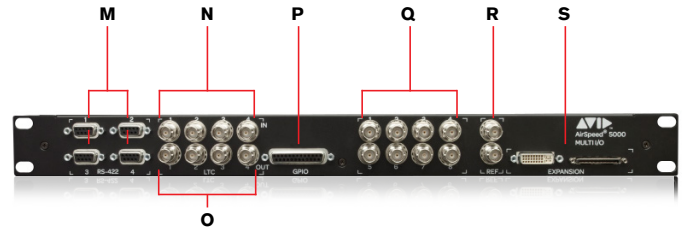
For more information visit avid.com/airspeed5000

AirSpeed 5000



- A. System drives
- B. Intel 82574L Gigabit network connection
- C. USB ports
- D. Video I/O cards
- E. Monitor
- F. Video
- G. Power connectors
- H. Intel Pro 1000 1 Gb ethernet ports
- I. Video port
- J. Serial port (not used)
- K. Multi I/O expansion card
- L. RAID controller

AirSpeed Multi I/O



- M. RS-422 ports
- N. LTC in ports
- O. LTC out ports
- P. GPIO port
- Q. Not used
- R. Genlock (reference)
- S. Multi I/O expansion ports

Specifications

VIDEO CHANNELS

All models:

- 4 bi-directional channels (1 input, 1 main output, 1 auxiliary output per channel)
- PAL, NTSC, 1080i 50/60, 720p 50/60 (SMPTE 259M, SMPTE 292M, SMPTE 295M, SMPTE 296M)
- base model supports upconvert to HD on "input" and output as standard

VIDEO COMPRESSION

Base Model

(also AVC-Intra models)

- 4 channels
- DV 25 (4:1:1 and 4:2:0) record or play
- DV 50 (4:2:2) record or play
- IMX 30 and 50 record or play

AVC-Intra Model

(+ all SD formats)

- 4 channels
- AVC-Intra 50, 100 record or play
- DNxHD 120/145 play
- MPEG-2 HD (HDV 25Mbps, MPEG-2 HD 17.5, 35, and 50 Mbps) play

2 channels

- DNxHD 185/220 play

Options

- DNxHD for Base System option enables
- 4 channels DNxHD 120/145 record or play
- 2 channels DNxHD 185/ 220 record or play
- 4 channels MPEG-2 HD (HDV 25Mbps, MPEG-2 HD 17.5, 35, and 50 Mbps) play

DNxHD for MPEG-2 HD or AVC-Intra System option enables

- 4 channels DNxHD 120/145 record
- 2 channels DNxHD 185/ 220 record (MPEG-2 HD and AVC-Intra models play DNxHD as a standard feature)

H.264 Low Res Proxy option enables

- Real-time simultaneous h.264 800Kbps proxy creation for each record channel

Note: All supported formats can be seamlessly played back-to-back

AUDIO

Channels/Pairs

- SD (record or play): Up to 4 pair embedded audio per video channel
- HD (record or play): Up to 8 pair embedded audio per video channel

Sampling

- 48 KHz, 16, or 24 bit precision

Compressed Audio Preservation

- Pass-through of AC-3 and Dolby E audio

Low Res Proxy Audio

- Up to 8 pair proxy audio creation per record channel
- MPEG1 Layer 2 audio compression

CONTROL AND SYNCHRONIZATION

External control

- VDCP
- Native Network API (AMS API)
- Sony BVW 75 protocol

Manual Control

- Record, play, trimming, and configuration through UI
- IsoSync synchronized cue, record and stop up to 12 channels across multiple servers through UI
- GPIO (Record, Play, Stop, Recue)

Timecode

- LTC SMPTE 12M one input and output per video channel
- VITC SMPTE 266 with Input and Output

Line Selections

- Ancillary timecode

Reference

- Analog black burst (NTSC or PAL) or tri-level reference, with loop-through input/output

Closed Caption and Ancillary Data

- All Closed Caption lines are preserved (DV, IMX)
- All HD ancillary data preserved per SMPTE 436

STORAGE

- 4 channel: ten 1 TB drives (8 TB useable), RAID 50 protection
- 2 channel: five 1 TB drives (4 TB useable) RAID 5 protection

VIDEO OUTPUT ASPECT RATIO CONVERSION (ARC) –UP/DOWN/CROSS CONVERSION

- SD ↔ 1080i, SD ↔ 720p, 720p ↔ 1080i, SD 4:3 ↔ SD 16:9
- Supports crop, anamorphic, pillarbox, letterbox outputs with dynamic conversion based on AFD

REDUNDANCY

- Redundant network connections
- Hot-swap redundant power supplies
- Hot-swap media drives
- Hot-swap mirrored boot drives
- N+1 system fans

FILE INGEST/EXCHANGE

- FTP transfer of MXF OP1a files in or out

PHYSICAL

Dimensions and Weight

Server Chassis

- Rack Units: 2
- inches: 19.00 (w) x 3.5 (h) x 29.5 (d)
- mm: 483 (w) x 89 (h) x 749 (d)
- pounds: 62; kilograms: 28.1

Multi I/O Expansion Panel

- Rack Units: 1
- inches: 19.00 (w) x 1.75 (h) x 4 (d)
- mm: 483 (w) x 45 (h) x 102 (d)
- pounds: 4.4; kilograms: 2.0

Power

- Dual/Redundant hot-swap power supplies
- 90 to 240 VAC, 50/60 Hz
- 362W typical; 720W maximum

Environmental

- Operating Temperature: 0°C to 40°C
- Operating Humidity: 5% to 95% (at 38°C) non-condensing
- Non Operating Temperature: -20°C to 60°C
- 1235 BTU/Hr typical; 2593 BTU/Hr maximum

Acoustics

- 63.5 db at 1 meter typical
- 78 db at 1 meter maximum (at 40°C)

AVID ADVANTAGE SUPPORT

- One year ExpertPlus with Hardware included to optimize system availability

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