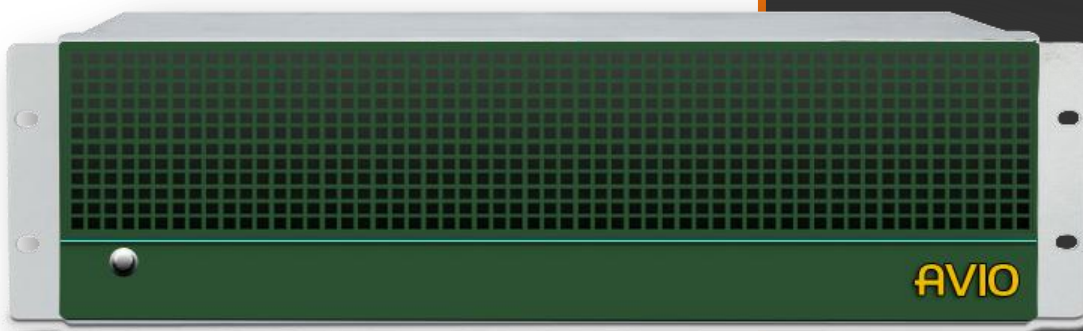


AVIO INGEST & PRODUCTION VIDEO SERVER



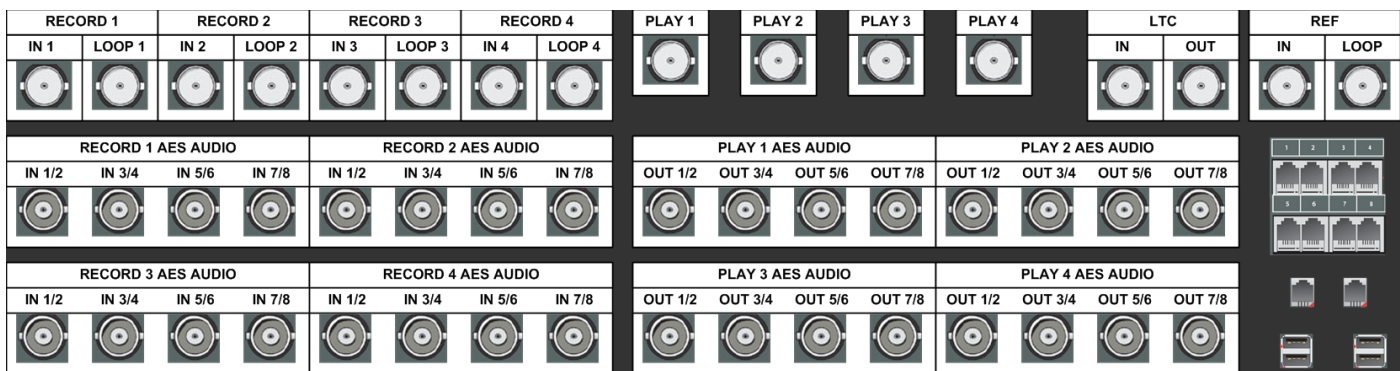
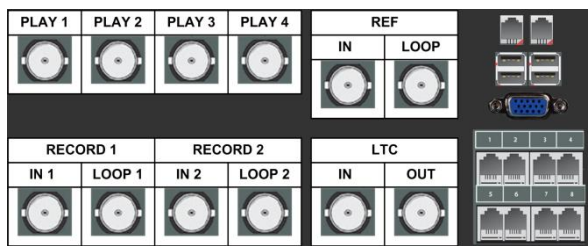
KEY

AVIO is a video server specifically designed for ingest and production purposes with excellent playout capabilities

April 2010

media alliance

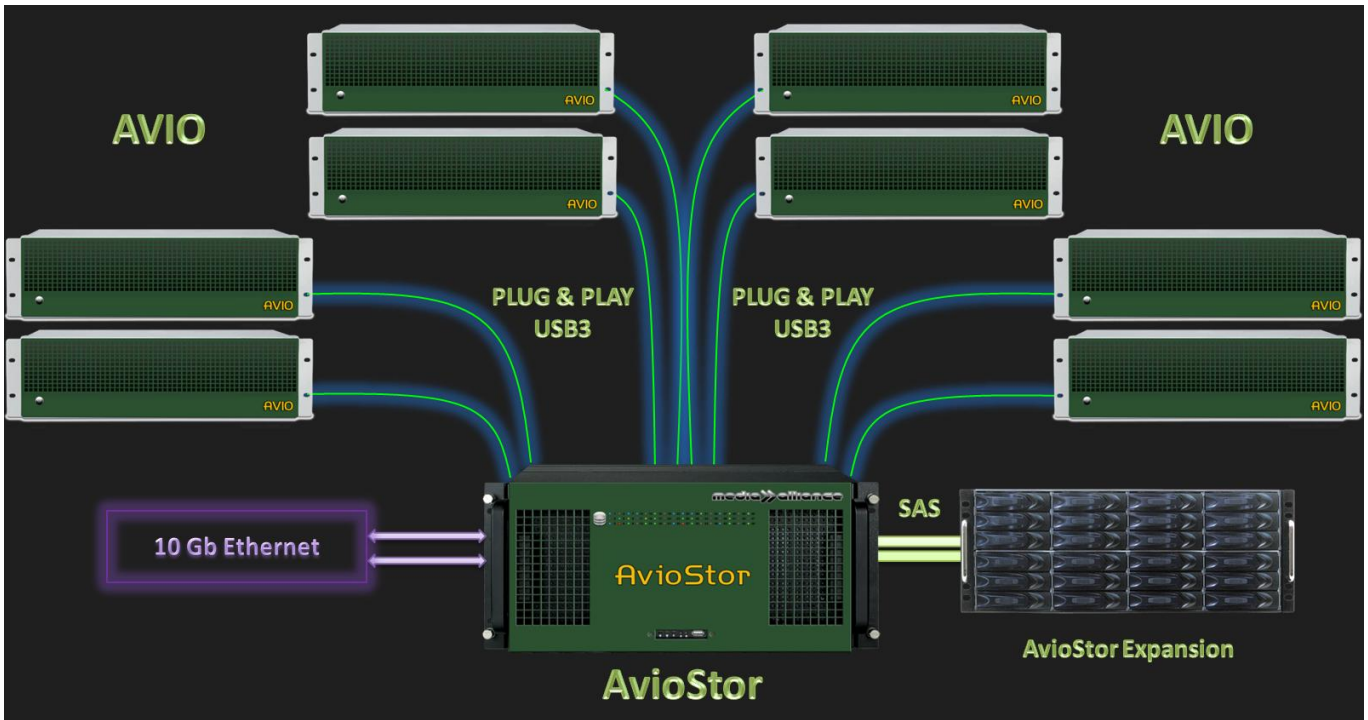
AVIO is a Video Server based on **Windows 7 64 bit Embedded Operating System** with **Solid State Disks (SSD)** and **SAS disks** for data (or **SATA disks** for entry level model). It takes only a while to bootstrap and it is immediately ready for Ingestion and/or even Playout. Front Panel has just power on button and optional 10" TFT Display. AVIO is available in 2U and 3U version, offering different expansion and I/O channels capabilities. Depending on 2U or 3U model, rear panel has just BNC for Video/Audio as well as Network plug and RS-422 port; back panel is similar to traditional VTR. Below you can see 2u and 3U rear panel:



Optional Interface includes 8 Gb FC to expand storage individually or to a SAN, alternatively a 10Gb card is also available. AVIO includes USB 2.0 for common devices and optional USB3 for Plug&Play connection to proprietary Storage.



AVIO Storage, called AvioStor, can support up to about 90 TB of capacity, further expandable and it is configurable with both SAS and SATA Enterprise Disks. One of the most powerful features of AvioStor is its USB3 interface, which allows Plug&Play connection with multiple AVIO Servers. In other term, AvioStor is an intelligent media storage acting also as Plug&Play USB3 media hub allowing connecting up to 8 AVIO for a total of 32 Ingest Channels and 32 Confidence Channels in Standard Definition. A diagram is provided below to better understand the architecture:



The Administrative User Interface is like in the next picture and it offers functions normally used by an administrator and it is accessible directly from a client PC. On the other side it is not possible to access directly AVIO Video Server, thus preventing any wrong configuration or unauthorized access to low level parameters; Virus infection is not an issue with such a restricted access.



Some functions are:

GSRECORDER is a sample application that enable "on the fly" recording from remote PC of any input channel. This is a remote application that can be installed on the remote PC that provides capability for instant recording with AVIO server.

STORNODE is the recording server with streaming preview.

AIRNODE permits to define parameters of each channel: supports already SD, HDV and HD. It also fully supports: MXF, D10/IMX, DV25/50/100, DVCPRO25/50/100, MPEG2 (I-Frame, IPB), MPEG2-TS, XDCAM, AVC-Intra, PRORES, etc..

AVIO just acts as slave unit accepting recording or playing commands from the remote PC controller through API or even N/VDCP. Of course the server provides also information about the state of the server and I/O ports. Each Ingestion or Playout port is individuated precisely by a TCPIP PORT; this allows great scalability to the system for expansion to virtually unlimited number of channels for ingestion, confidence and playout.

Complete features supported by AVIO server are the following (some are optional):

- Up to four multi-rate HD/SD SDI video inputs or two video + key
- Four multi-rate HD/SD SDI video outputs or two video + key
- 16-in/32-out unbalanced AES/EBU audio channels
- 16 embedded audio I/O channels per SDI stream
- RP188 and VBI support
- Support for bi-directional I/O
- Analog black burst reference input (tri-level or bi-level)
- On-server HD to SD down converter
- **On-server 2D/3D Animated CG**
- Automatic video relay bypass and watchdog support
- Auto-detection of input video resolutions
- Zero frame delay with onboard live video mixer
- LTC/VITC support

Finally the server is able to generate concurrently both High Quality and frame accurate PROXY format (MPEG4 H.264), while supporting (optionally) editing while ingesting for both High Quality and Proxy. Another feature is the capability to generate a stream that can be used, for example, for low res confidence output.

MODEL	I/O	(models with bi-directional channels are also available)
AV-SD-20	2 SD Ingest Channels. SD, HDV supported	
AV-SD-12	1 SD ingest Channel, 2 Confidence or Playout Channel. SD, HDV supported	
AV-SD-24	2 SD ingest Channels, 4 Confidence or Playout Channel	
AV-SD-44	4 SD ingest Channels, 4 Confidence or Playout Channel. SD, HDV supported	
AV-HD-20	2 HD Ingest Channels. SD, HDV, HD supported	
AV-HD-12	1 HD ingest Channel, 2 Confidence or Playout Channel. SD, HDV, HD supported	
AV-HD-22	2 HD ingest Channels, 2 Confidence or Playout Channel. SD, HDV, HD supported	

For general information about the products described in this data sheet, visit: <http://www.media-alliance.it>

Copyright ©2010 Media-Alliance. All Rights Reserved.

Other names and brands may be claimed as the property of others. Information regarding third party products is provided solely for educational purposes. Media-Alliance is not responsible for the performance or support of third party products and does not make any representations or warranties whatsoever regarding quality, reliability, functionality, or compatibility of these devices or products. Media-Alliance reserves the right to alter product offerings and specifications at any time without prior notice. This publication could include technical inaccuracies or typographical errors. References herein to Media-Alliance products and services do not imply that Media-Alliance intends to make them available in other countries. Media-Alliance provides this publication "as is" without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose