mediapower
ENABLE YOUR MEDIA WORKFLOWS

Playout made Cost-effective, Scalable, and Future-proof

AirGo™ BR

High-density and IP ready Ingest and Playout

As broadcasters and production outfits grow the number of channels and delivery methods for their subscribers, the need for a cost-effective solution for delivery of TV programs becomes more pronounced. The media workflow increases in complexity and makes investment in specialized or dedicated equipment more expensive.

AirGo BR is an innovative and cost-effective platform for broadcast customers to digitize and playback their content, either as a complement or replacement of their existing video servers. Built on an open IT-based platform, AirGo BR is powered by industry-proven Dalet BRIO, ensuring seamless integration not only with Dalet Solutions but also 3rd party systems, to provide a highly flexible and highly-scalable end-to-end solution. AirGo BR is designed to ingest and playout broadcast quality video in Proxy, SD, HD and UHD formats, and comes in a variety of input / output or local / central storage combinations and built-in redundancy.

Now, broadcasters can have high-density, highly-scalable, resilient, and cost-effective video ingest, playout, and streaming platform, provisioned with powerful user applications and tools with AirGo BR.

Key features

- Ingest and playout of multiple and mixed formats with dynamic conversion
- Wide choice of inputs and outputs (up to 12 simultaneous channels)
- Supports SD and HD, or a combination of both
- 2D & 3D graphics real-time render engine (optional)
- Streaming
- Wide codec support (including DNxHD, ProRes, AVC Intra, XDCAM HD, SR Master)
- Storage combination (local and/or direct connection to SAN)
- Backup Copier Agent
- Loop recording mode (aka FIFO)
- I/O live monitoring using a web browser
- Support 24/7/365

Key benefits

- Streamline your media workflows with a single system for production, ingest, & play-to-air
- Start with a suitable configuration today and scale as you grow
- Play files from legacy SeaChange (XOR Media), Harris NEXIO and Omneon servers

Flexible Codec Support

AirGo BR supports a very wide range of software codecs ensuring broad interoperability. Industry-standard wrappers such as QuickTime & MXF are supported, allowing seamless workflow integration with third-party NLEs and Dalet production tools. AirGo BR supports DV-based Codecs, AVCi, AVC LongG HD, Sony XAVC-Intra and Long GOP HD Playout Support, most of the MPEG2 family including intra and long-GOP (IMX and XDcam HD), H264 and even proprietary codecs such as ProRes, DNxHD and Sony SRMaster (SStP). All formats can be played out back-to-back seamlessly, including a mix of SD and HD, on the same timeline, with dynamic cross-, up- and down-conversion of the video signal, as well as aspect ratio modifications.

Innovative System Architecture

AirGo BR can work either with its own local storage, directly attached to a SAN, or in a hybrid configuration. And with AirGo BR having been designed for scalability, customers can readily choose from different redundancy, capacity, and storage connectivity options that suit their current needs and workflow complexities, while allowing them to add more AirGo BR units for increased capacity or for backup / DR configurations with ease.

Fully Integrated Graphics Engine

AirGo BR offers an optional embedded graphics engine, which makes design and playout of CGs, crawlers, tickers, lower thirds, logos, full frame graphics and complex 3D animations a breeze. A wide range of setup options offers unique flexibility and facilitates graphics production and playout.

Flexible 3rd Party Support

AirGo BR can be controlled using VDCP, BVW, or its API protocol making it simple to integrate with 3rd party MAM, NRCS, and Playout control or automation.

Ready to go and future-proof

AirGo BR also helps bridge the gap to highly anticipated IP delivery methods as it provides support not only for SDI but also IP ingest and streaming. AirGo BR's highly configurable and flexible design ensures future scalability and compatibility, allowing customers to start small and later grow their system when the need arises.

Native playout of legacy files

AirGo not only boasts of a wide list of encoding and decoding compression and file formats. AirGo also supports file import and native file playback (no conversion required) of existing legacy SeaChange and XOR Media BMC and BML files, as well as Harris NEXIO, and Omneon MPEG2 OP1a MOV and MXF files.
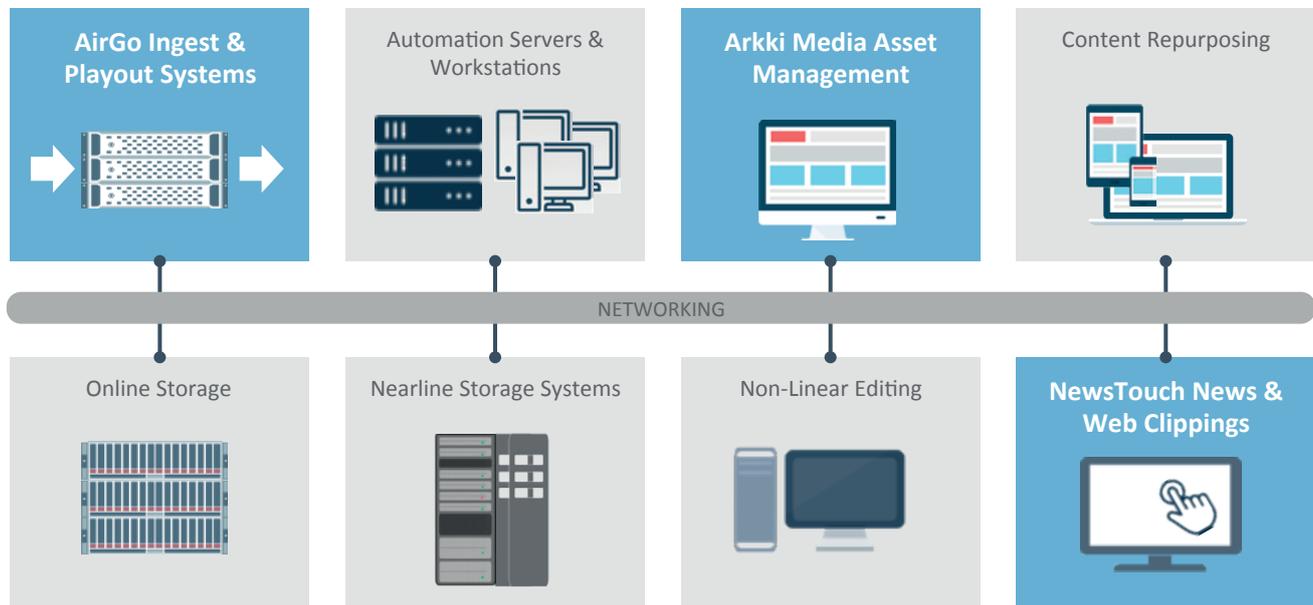
AirGo BR Codec and Wrapper Support

Codecs	SD (PAL, NTSC)
	    DV25, DV50, DVCPro25, DVCPro50
	    D10 IMX 30-40-50
	    MPEG-2@ML - 4:2:0 I-Frame 2-15 Mb/s - 4:2:2 Long GOP 10-50 Mb/s
	
	HD (720p50, 720p59.94, 1080i25, 1080i29,97, 1080psf23,98, 1080p23,98)
	    DVCProHD
	    XDCAM HD - 4:2:0 (18-25-35 Mb/s) - 4:2:2 (50 Mb/s)
	    Avid DNxHD® 120/145 (8-bit), 185/220 (8-bit), 185x/220x (10-bit)
	    Apple ProRes 422LT-422-422HQ
	    AVC-Intra Class 50/100
	    Sony XAVC Intra and Long GOP
	    Panasonic AVC-LongG (playback only)
	    MPEG-4 SStP SQ/Lite
	    MPEG-2@HL - 4:2:0 I-Frame 5-80 Mb/s - 4:2:2 Long GOP 5-300 Mb/s H264/AAC
	    Uncompressed
	
	UHD - Check availability
	    Apple ProRes 422LT-422-422HQ Sony XAVC (playback only)

Wrappers	MXF Op1a, MXF Op Atom QuickTime Reference, QuickTime Self-Contained MP4, AVI, MPG, WMV
Proxy	MP4 H264/AAC - Configurable profile/level/GOP size/bitrate/resolution WMV, DALET MPEG-2 Proxy

AirGo BR General Specifications

Video specifications
SD SDI: SMPTE 259M, ITU-R601, 525/625 line component, 10- bit
HD-SDI : SMPTE 292M, 10-bit
75 Ohms BNC
ITU-R BT.601 (data and electrical)

Dynamic conversions (playback)
Up/Down conversion : PAL ↔1080i50, PAL ↔ 720p50, NTSC↔1080i59.95, NTSC↔720p59.95
Cross conversion : 720p50 ↔ 1080i50, 720p59.94 ↔ 1080i59.94
Aspect ratio conversion : AFD and WSS support for aspect ratio conversion (per channel)

Special modes
Instant Replay and slow motion
Video + key
3D Graphics engine (Overlay or separate Fill and Key) Loop recording with extraction and time delay
Ingest Once Write Many
VTR recorders
Print-to-Tape
Multichannel Player as backup automation tool

Video playback
Any supported format can be played seamlessly back-to-back

Audio
Record and play up to 16 tracks

Embedded audio tracks
16 tracks embedded per channel SDI (8AES-EBU)
Supports SDI embedded audio compliant with SMPTE 272M (SD) and SMPTE 299M (HD).

Discrete AES/EBU audio tracks
8 tracks per channel (4 AES-EBU) on each of the 4 outputs Pool of 16 tracks (8 AES-EBU) for the 4 inputs
Audio specifications
Input : 48 kHz, 16-bit, 20-bit or 24-bits digital audio PCM Audio clock genlocked to video reference in accordance with SMPTE 272M and AES11-1997

Compressed audio types:
Any video clip with supported audio format can be played seamlessly back-to-back Dolby-E pass-through.

Reference Genlock
Analog blackburst reference (tri-level or bi-level), SDI input as reference or free running mode.
External termination with LOOP connector Sub-pixel adjustment at 0.9 ns/step with respect to genlock in SD Sub-pixel adjustment at 0.7 ns/step with respect to genlock in HD Flywheel on genlock.
Connector : BNC, 75 Ohms with loop through

Timecode
LTC SMPTE 12M for external "house" timecode Connector : Mini-XLR
LTC and VITC reader/writer per channel
HANC timecode support

Video Preview
Customizable text overlay per channel
Local VGA Preview for each channel
Streaming multiviewer for remote preview in a web browser

Control
BVW, VDCP over serial /IP (REQ, some optional commands) FIMS Capture V1.1 - RESTful implementation Administration API - RESTful
Private API - DCOM
Redundancy
Dual hot swappable power supplies
RAID1 for system drives, RAID50 or RAID6 for data drives Hot spare drives
Dual 10Gb or Quad 1 Gb Eth network attachment
Dual FC attachment

Monitoring
SNMP and WMI

Connectivity
Four 100/1000Base-T Ethernet ports or Two 10Gb Ethernet One USB 3.0 front, two USB 3.0 rear
One 15-pin SVGA
Multi-serial ports board (optional)

File transfer protocols
CIFS, FTP

Dimensions
Width: 44.55 cm (17.54 in.) Height: 2 RU 8.9 cm (3.5 in.) Depth: 74.93 cm (29.5 in.) Weight : 28 kg (60 lbs) maximum

Power requirements
Dual redundant Power supply, 750W hot-swap 50-60 Hz, 100-240 VAC

Environmental characteristics
Operating temperature :+10°C to +35°C
Non-operating temperature(not in use): -30°C to +60°C

MediaPower MediaSuite Offerings

AirGo Ingest & Playout Systems	Automation Servers & Workstations	Arkki Media Asset Management	Content Repurposing

NETWORKING

Online Storage	Nearline Storage Systems	Non-Linear Editing	NewsTouch News & Web Clippings

About MediaPower

MediaPower enables media workflows by providing products and solutions for media content production and delivery across multiple platforms. Founded in 1993, MediaPower started as an integrator of certified networking and storage solutions for the media industry such as SeaChange, DDN, NetApp, and Dalet. It has built a long-standing expertise in designing and implementing turnkey solutions and IT-based workflows in the broadcast and media industry.

Today, MediaPower also has its very own line of innovative media technology offerings such as NewsTouch, a touch-based solution for press, video, and web presentations; Arkki, the first all-in-one Media Asset Management System-in-a-box; and AirGo, a highly integrated and cost effective play-to-air package that includes multi-format video server, automation, master control, and graphics.

Having started in Italy & France, MediaPower now has established offices in Europe, Asia, and the US, with global presence in over 30 countries through its expansive and continually growing channels network.

While MediaPower's main markets are broadcast television, IPTV, internet TV, post-production, and Archiving, the company also provides storage solutions and specialized software applications for the automotive, air space, military, and health industries.

Also, as a key differentiator in the area of systems integration, MediaPower through its own Services organization, offers integration services to media companies and support services to broadcast and media technology providers worldwide, while delivering a unique support system to entire solutions by centralizing all support calls for any solution component into its own 24x7x365 support center.