

# AirBox

- ▶ Compatible with a vast variety of compression types: MPEG2, HDV, DV, AVC/H.264, WMV/VC-1, MPEG1, etc.
- ▶ Supports a multitude of media containers: MPEG system, program, transport streams, AVI, raw DV, MXF, QuickTime, GXF, etc.
- ▶ Mixed playlist of all compressions and containers in a single playlist
- ▶ **Totally unlimited on-air playlist editing**
- ▶ Advanced time-based scheduling with automated conflict resolving
- ▶ **Output video scaling for picture-in-picture and info channel look with live video and graphics**
- ▶ Simultaneous video scaling of both live input and playlist output
- ▶ **Mixing of different video standards in a single playlist (clips with different resolution, frame-rate and etc.)**
- ▶ Playback of clips still being captured
- ▶ **Content trimming and editing**
- ▶ Time-delay playback capable of commercial removal or sensorship
- ▶ **High reliability and seamless playlist playback or streaming**
- ▶ Unlimited metadata support for text-rich graphics insertion
- ▶ **Flexible playlist logging**
- ▶ Live Show Clipboard for on-the-fly event and live stream insertion
- ▶ **Live MPEG2 and H.264 streaming sources supported (optional)**
- ▶ DVB ASI or UDP streaming output with MPEG2 or H.264 Transport Stream (optional)
- ▶ **Redundant playlist (optional)**
- ▶ Switcher and GPI control (optional)
- ▶ **On-air subtitling (optional)**
- ▶ Multi-language audio playback (optional)
- ▶ **Automatic audio routing and remapping based on audio language, type and other metadata** **NEW**
- ▶ **Dolby Digital audio media playback and output (optional)\*\*** **NEW**
- ▶ **Automatic Loudness Control (optional)** **NEW**
- ▶ Remote playlist control through VDCP, GPI, DTMF, LTC, API, etc. (optional)
- ▶ **DTMF cue tone generator for various outputs**
- ▶ HD and HDV playback (optional)
- ▶ **Excellent price/performance**
- ▶ Powerful dynamic playlist engine available for OEMs through a simple SDK

DVB®

Blackmagicdesign

DELTA CAST

SurCode for **DOLBY**  
DIGITAL |



✦ AirBox provides automated content playout for satellite channels, cable head-ends, over-the-air broadcasters and corporate TV users. It is designed to be extremely robust, in order to meet the highest reliability demands of on-air playout. Due to its unique modular architecture it is also suitable for webcasters, hotel Pay TV channels, corporate presentations, video wall sourcing and other program distribution systems. At a fraction of the price of any digital videotape player, a single AirBox server offers the same visual quality at its single or multi-channel SDI outputs, multi-language audio, graphics and subtitle insertion, last-minute playlist changes and clip editing.

✦ AirBox supports MPEG1/2/H.264, HDV and DV streams from virtually every known production platform providing AVI, MPEG, WMV, Quick Time or MXF content. Files from third-party servers such as Leitch or Seachange are natively supported.

✦ For live productions, any changes to the playlist during on-air session are possible! There are no queued or locked clips. Every clip in the playlist, except the one which is currently playing, can be trimmed, edited or repositioned. Moreover, playlist order can be changed on-the-fly with commands like skip to next or jump. Such order changes are performed seamlessly without stopping current playout session. Live productions are facilitated by the powerful Live Show Clipboard which allows insertion and/or execution of various events or live streams.

✦ For automated playout AirBox allows fixed-time scheduling for weeks ahead. Resulting gaps or time overlaps are automatically resolved in order to ensure continuous operation even when conflicting timed events are present. Special facilities ensure uninterrupted operation if content files or even entire schedules are missing or misplaced.

✦ For budget-minded operations, AirBox provides excellent storage savings through the MPEG2 Main Profile at Main Level IBP streams. At 8 Mbit/sec, 24 hours of full-motion, full-resolution content fits in less than 90 GB storage.

✦ Playout sessions are being logged for monitoring and control purposes. The log can be later used for extracting actual playout sequence with exact timings or identifying user intervention into the playout session. The logging and recovery options allow completely unattended remote operation.



## AIRBOX SPECIFICATIONS

### Video

<b>Compression*</b>	MPEG2, DV, HDV, WMV/VC-1, MPEG1, MPEG4 AVC/H.264, DVC Pro, JPEG 2000, AVC-Intra, Apple ProRes 422
<b>Format*</b>	PAL / NTSC / 1080i HD / 720p HD
<b>Bitrate*</b>	1 - 15 Mbit/sec in MPEG2 MP@ML 10 - 50 Mbit/sec in MPEG2 422P@ML 1 - 80 Mbit/sec in MPEG2 MP@HL 25 Mbit/sec with HDV and DV up to 80Mbit/s MPEG2 HD HP@HL up to 40Mbit/s AVC/H.264 Baseline/Main up to 80Mbit/s AVC/H.264 Main/High class 50 and 100 AVC-Intra
<b>Color sampling*</b>	4:2:0 - MPEG2 Main Profile (incl. HDV) 4:2:2 - MPEG2 4:2:2 Profile 4:2:0 / 4:1:1 - DV 25 Mbit/sec 4:2:0 - WMV and AVC 4:2:2 - Apple ProRes 4:2:0 - AVC - Intra

### Audio

<b>Compression</b>	MPEG audio Layer 1 or 2, AAC audio, Uncompressed PCM, Windows Media Audio, Dolby Digital (AC3)
<b>Bitrate (MPEG audio)</b>	64-384 Kbit/sec
<b>Sampling</b>	48 kHz

### Media File Formats

<b>MPEG2</b>	MPG or M2P - Program Streams M2T or TS - Transport Stream (SPTS and MPTS) OpenDML AVI and WAV (mono and stereo) QuickTime, MXF, GXF
<b>DV</b>	OpenDML Type 1 and Type 2 AVI, QuickTime, Raw DV, MXF, GXF
<b>HDV</b>	MPG or M2T / TS - Transport Stream QuickTime, MXF, GXF
<b>H.264 / AVC / MPEG4 part 10</b>	TS - Transport Stream (SPTS and MPTS)
<b>Windows Media Video / VC-1</b>	WMV
<b>MPEG1</b>	MPG - System Stream

### Other Applicable Modules

<b>PRO Option</b>	GPI, Switcher and TitleBox control, Live MPEG2, Stream input, Output video scaling <sup>†</sup> , DTMF Reader, DTMF Generator
<b>Multi-track Audio</b>	Up to 8 stereo audio outputs simultaneously <sup>†</sup>
<b>VTR control</b>	Tape-based playout from up to 2 VTRs
<b>AirBox Backup</b>	Redundant playout module on separate PC
<b>Multy Backup Manager</b>	m+n redundant channels
<b>HD/HDV</b>	MPEG2 HD and HDV playout
<b>Streaming</b>	DVB (ASI or UDP) MPEG2/H.264 streaming
<b>QCBox</b>	Quality Control Measurement Module
<b>Multi AirBox Manager</b>	Remote control of multiple AirBox servers
<b>VDCP (slave)</b>	VDCP automation control interface support
<b>TitleBox</b>	On-air graphics insertion
<b>Subtitling</b>	On-air automated burn-in or DVB subtitling
<b>SafeBox</b>	Automated content replication and removal
<b>DataBox</b>	Powerful content database
<b>ListBox</b>	Hardware-independent scheduler
<b>AlarmBox</b>	Monitoring and management module
<b>SurCode for Dolby Digital</b>	Dolby Digital audio media playback and output <sup>†</sup>

### PlayBox Technology Worldwide

General Sales Contact : [sales@playbox.tv](mailto:sales@playbox.tv)

#### PlayBox Technology Limited - UK

Tel. +44 1707 66 44 44, Fax +44 1707 66 11 55  
e-mail: [sales.uk@playbox.tv](mailto:sales.uk@playbox.tv)

#### PlayBox Technology Limited - Bulgaria

Tel. +359 2 970 30 50, Fax +359 2 971 77 00  
e-mail: [sales.bg@playbox.tv](mailto:sales.bg@playbox.tv)

#### PlayBox Technology Adria

Tel./Fax +381 11 311 72 86  
e-mail: [sales.adria@playbox.tv](mailto:sales.adria@playbox.tv)

#### PlayBox Technology Albania

Tel. +355 44 80 45 52, Fax +355 44 80 45 53  
e-mail: [sales.albania@playbox.tv](mailto:sales.albania@playbox.tv)

#### PlayBox Technology Asia Pacific

Tel. +603 7954 3400 ,Fax: +603 7954 3343  
e-mail: [sales.asia@playbox.tv](mailto:sales.asia@playbox.tv)

#### PlayBox Technology India

Tel. +91 11 43743333, Fax +91 11 41651607  
e-mail: [sales.india@playbox.tv](mailto:sales.india@playbox.tv)

#### Mumbai Branch

Tel. +91 22 40166465/66, Fax +91 22 40166467  
e-mail: [sales.india@playbox.tv](mailto:sales.india@playbox.tv)

#### PlayBox Technology Romania SRL

Tel. +4 031 106 5115, Fax +4 031 106 5116  
e-mail: [sales.ro@playbox.tv](mailto:sales.ro@playbox.tv)

#### PlayBox Technology Turkey

Tel. +90 216 3379402 , Fax +90 216 3379407  
e-mail: [sales.tr@playbox.tv](mailto:sales.tr@playbox.tv)

#### PlayBox Technology USA East Coast

Tel. +1 404 424 9283  
e-mail: [sales.usa@playbox.tv](mailto:sales.usa@playbox.tv)

#### West Coast

Tel. +1 818 847 7402  
e-mail: [sales.usa@playbox.tv](mailto:sales.usa@playbox.tv)

#### PlayBox Technology Germany Representative

Tel. +49 201958609309  
e-mail: [sales.germany@playbox.tv](mailto:sales.germany@playbox.tv)

Specifications are subject to change without prior notice. PlayBox is trademark of DMT Ltd. Other mentioned trademarks are property of their respective holders.

\*\* SurCode for Dolby Digital is manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.