

## Multi-track technology for the 21st century

# BLACKBOX PLAYER

Dedicated multi-channel playback device specifically designed to replay backing tracks and multiple surround stems for live shows and themed entertainment



**24 TRACK • 24 BIT • 96kHz**

The **BLACKBOX PLAYER** provides an innovative solution for live performance playback in a compact 1U rack-mounted package. Specifically designed to replay backing tracks or multiple surround stems for live shows and themed entertainment, it can replay 24 channels of high quality audio at up to 24bit/96kHz. The Player can be triggered using timecode, a footswitch or QWERTY keyboard, or it can be controlled via MIDI commands, giving the live engineer, installation sound designer, musical director or artist full control of the show at all times.

### Proven technology

The **BLACKBOX PLAYER** is based on the proven technology of the award-winning **BLACKBOX RECORDER**. Audio files can be stored on a standard USB2 drive, or Flash RAM drive. Simple playlists automatically cue up the next song ready for instantaneous replay and multiple playlists can be stored ready for different shows or performances. Integrated safety features, including a built-in automated fail-over mechanism, ensure that the BlackBox Player can meet the all-important "show must go on" criteria.

As well as its role in surround sound applications, multi-channel playback is also important because it allows the live engineer to compensate for the acoustics of the venue, or audience generated noise during the performance, by having full control over each individual output.

### Who is the **BLACKBOX PLAYER** designed for?

- solo artists and vocal groups using pre-recorded backing tracks
- bands requiring additional backing tracks (strings, horns, etc.)
- theatres, theme parks and cruise ships
- permanent installations requiring reliable playback, such as museums, galleries and houses of worship
- broadcast applications for timed multi-language or multi-station play-out
- playback applications that require timecode synchronisation

- Simultaneous playback of 24 tracks in up to 24bit/96kHz quality. No computer required at the performance.
- Files for playback can be loaded from any Digital Audio Workstation capable of creating Broadcast WAV files or recorded directly.
- Audio can be stored on USB2 hard drive or Flash drive.
- Simple naming convention ensures that the correct file is replayed through each output.
- Available output options include Unbalanced and Balanced analogue, as well as digital AES/EBU and Lightpipe.
- Intuitive front panel, keyboard or footswitch operation for total control during the performance.
- Can be controlled via MIDI.
- Set lists can be configured as simple XML format playlist files.
- Synchronous playback to SMPTE timecode (LTC and MTC).
- Multiple playlists can be stored for quick changes or alternative show formats.
- Separate foldback mixes can be configured using normal facilities on the console. An additional mix can be sent via the headphone output for the musical director.
- Can be configured to accept an incoming source of digital clock, or optionally word clock.
- Unique feature is the ability to automatically switch to a synchronous secondary system in the event of a failure. (Normally requires a costly external switching matrix.)

## Technical Specifications:

Model	BBP1U	BBP1B	BBP1A	BBP1D
Analogue i/o (switchable -10dBu / +4dBu)	Unbalanced	Balanced	Unbalanced	Unbalanced
Digital i/o	None	None	Lightpipe	AES / EBU
Sample rates				
44.1kHz	⊙	⊙	⊙	⊙
48kHz	⊙	⊙	⊙	⊙
88.2kHz	⊙	⊙	⊙ (12ch*)	⊙
96kHz	⊙	⊙	⊙ (12ch*)	⊙
i/o cables	Included	To order	To order	To order
<b>Output</b>	24 mono channels plus internally "mixed" headphone output			
<b>Audio connections:</b>				
Unbalanced	3 x 25way D-sub TASCAM analogue format			
Analogue	(Hot in, cold out for connection into insert points on console)			
Balanced Analogue	3 x 25way D-sub TASCAM analogue format inputs			
	3 x 25way D-sub TASCAM analogue format outputs			
AES/EBU:	3 x 25way D-sub YAMAHA digital format			
Lightpipe:	3 x TOSLINK*			
<b>Storage medium</b>	External USB2 storage device: <ul style="list-style-type: none"> <li>• USB2 drive</li> <li>• Flash RAM drive (thumb drive)</li> </ul>			
<b>Audio file format</b>	Standard mono Broadcast WAV files			
<b>Audio file naming convention</b>	sss-tt.songname-trackname.wav where: <ul style="list-style-type: none"> <li>sss is the song number (001-999)[determines which tracks play together as a Song]</li> <li>-tt. is the track number (01-24)[determines which output each track is replayed through]</li> <li>songname is the (optional) song name [free text up to 32 characters]</li> <li>-trackname is the (optional) track name [free text up to 24 characters]</li> <li>.wav is the file extension [mandatory]</li> </ul>			
<b>Playlist format</b>	Simple XML file structure for easy playlist editing			
<b>Pre-load time</b>	Typically < 3 seconds			
<b>Control</b>	Instant replay controlled by: <ul style="list-style-type: none"> <li>• Timecode (LTC or MTC),</li> <li>• Footswitch,</li> <li>• QWERTY keyboard,</li> <li>• MIDI control,</li> <li>• Real-time clock</li> </ul> Automatic pre-load of next song in playlist			
<b>MIDI controls</b>	MIDI open loop connection MIDI Start, Stop commands MIDI Song Select: for preloading specific Songs MIDI Program Change MIDI Show Control			
<b>Audio clocks</b>	Selectable between: <ul style="list-style-type: none"> <li>• Internal</li> <li>• AES/EBU or SPDIF clock</li> <li>• Word clock (available on BBP1A and BBP1D only)</li> </ul>			
<b>Timecode</b>	All standard frame rates supported			
<b>Auto fail-over</b>	Analogue fail-over automatically switches to synchronous secondary system in case of a replay problem.			
<b>Physical</b>	Size: 19" rack mounting x 1U (435 x 44 x 170mm) Weight: < 2.5kg DC input: 9-12V dc (PSU supplied) Power: < 25W			

\*BBP1A uses the SMUXII protocol on its lightpipe i/o at high sample rates. SMUXII only allows 4 channels of audio per lightpipe connection thereby reducing the overall channel count to 12 channels at 88.2kHz and 96kHz.

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**BLACKBOX PLAYER Distributed by:**

**JoeCo Limited. 135 Histon Road,  
Cottenham, Cambridge, CB24 8UQ, U.K.**