

Multi-track technology for the 21st century

# BLACKBOX BBR1 RECORDER

Capture live multi-channel audio without a computer



24 TRACK • 24 BIT • 96kHz

The JoeCo **BLACKBOX RECORDER** is the first large-scale multi-channel recorder specifically designed for audio acquisition and capturing live performance. Developed to solve the inherent problems of working with computer-based systems in a live environment, it provides engineers with a computer-free, high-quality solution for live multi-channel audio capture.

Able to record or replay up to 24 channels of 24bit/96kHz audio, the **BlackBox BBR1 Recorder** is available in both analogue and digital variants, offering a choice of professional interfaces to any live mixing console. Units can be linked for recordings involving larger track counts.

Audio is recorded as mono broadcast WAV files to an external USB2 drive, or USB2 Flash drive. The implementation of JoeCo's iXML plug-in additionally enables PolyWAV files to be recorded. Using universally accepted file and disk formats on external storage solutions has many advantages when used in the field or on tour. It also eliminates the time normally required to load recordings into a workstation for subsequent mixing and re-purposing, which is a crucial factor in fast turnaround productions. Recorded files can be instantly imported into any Mac- or PC-based Digital Audio Workstation for editing, remixing and re-purposing.

The **BlackBox BBR1 Recorder** is designed to be supremely simple to use, requiring just the input and output connections, power and a USB drive before pressing the RECORD button. A full colour LCD screen and striking LED displays show all the information that's needed in order to know exactly what's happening. The recorder can be remotely controlled and monitored via JoeCoRemote for iPad. Recordings can be named using either JoeCoRemote or a standard computer keyboard. The unit is also equipped with a range of fail-safe features to keep recordings as secure as possible, including the ability to recover files should power fail during a recording.

The **BlackBox BBR1 Recorder** has a wide range of applications in Live Performance, Broadcast, Film & TV Sound and Post Production. An additional software add-on turns the recorder into a BlackBox Player, enabling synchronous or instant playback of audio material for various applications.

## Features:

- 24-channel record or playback @ up to 24bit/96kHz
- Multiple units can be linked together for large recordings
- Only 1 rack unit tall (435 x 44 x 170mm) and weighing just 2.1kg
- Unbalanced or Balanced analogue, AES/EBU and Lightpipe digital i/o options. (64-channel MADi and Dante versions also available - see separate flyers.)
- Records standard broadcast WAV files to an external USB2 drive, or USB Flash drive. Captured audio material can be used in any digital audio workstation for instant re-purposing without time consuming file transfers
- Simple to operate and understand
- Attaches to any live console to provide virtual sound checking
- Fail-safe features for secure audio capture
- Track, song and folder naming
- \* Allows the creation of headphone monitor mixes with level and pan on each track
- Remote control via QWERTY keyboard, MIDI, Sony 9-pin, JoeCoRemote
- Remote control and monitoring via JoeCoRemote for iPad (see separate flyer)

## Technical Specifications:

### General

Sample rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz.

Bit depths: 16 / 24bit

Disk interface: USB2 - easy to obtain

Disk format: FAT32 - compatible with both Mac and PC

File type: Standard mono Broadcast WAV files

Monitoring: 1 x 1/4" TRS jack socket, headphone mix / solo

Physical: 19" rack mounted 1U (425x44x150mm). Weight 2.1kg

Power: (9V-16V dc (<30W)). 2.1mm dc inlet. PSU supplied

### Audio i/o: Analogue inputs / outputs

Levels: -10dBu / +4dBu switchable

Max input / output level: +22dBu = 0dBFS

A-D / D-A conversion: 24bit, 96kHz 106dB S/N, 96dB THD+N (typical A-weighted)

### Control and Synchronisation

JoeCoRemote for iPad: App + hardware interface for remote control. Wireless or wired connectivity

MIDI: 1 x 5-pin DIN (open loop). MIDI time code (MMC) and MIDI Machine Control (MMC) protocol

LTC: 1 x 1/4" TRS jack socket. Frame rates supported: 30fps, 29.97 drop fps, 25fps, 24fps, 23.98fps

Machine control: 1 x 9-pin D, SONY PII protocol

Audio clock synchronisation: 2 x RCA sockets AES3 / SPDIF format, also used for communications to slave units

## BBR1U

Unbalanced i/o via 3 x 25way D-sub connectors (3 x 1/4" TRS multicore looms supplied - TASCAM analogue format). Designed to plug across the insert points on a standard analogue console: tip send, ring return

## BBR1B

Balanced i/o via 6 x 25way D-sub connectors. Lower row - inputs; Upper row - outputs. (TASCAM analogue format, cable looms not supplied)

## BBR1A

Lightpipe i/o via 3 x TOSLINK inputs and 3 x TOSLINK outputs (24 channels @ 48k, 12 channels @ 96k). Word clock input on BNC. Unbalanced analogue as BBR1U (cable looms not supplied)

## BBR1D

AES3 (2003) i/o via 3 x 25way D-sub connectors - upper row. (Yamaha format pin out standard). Word clock input on BNC. Unbalanced analogue as BBR1U (cable looms not supplied)



Loop through outputs available on ch 17-24 on 1/4" TRS jack sockets for connection to outboard equipment



No loop through outputs. Other connectors as BBR1U



Loop through outputs as BBR1U available on analogue i/o only. Other connectors as BBR1U



Loop through outputs as BBR1U available on analogue i/o only. Other connectors as BBR1U

JoeCo products are available from:

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