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 **Black**Box **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 **Black**Box **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 **Black**Box **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 (425x44x150m). 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 ¼" TRS multicore looms supplied – TASCAM analogue format). Designed to plug across the insert points on a standard analogue console: tip send, ring return

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

BBR1B

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

No loop through outputs. Other connectors as BBR1U

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)

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

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

JoeCo products are available from: