

Multi-track technology for the 21st century

# BLACKBOX BBR64-MADI RECORDER

Capture live multi-channel audio for Performance, Broadcast, Film & TV Sound applications



64 channels in one rack unit



The JoeCo **BLACKBOX BBR64-MADI RECORDER** is based on the award-winning, tried and tested BlackBox Recorder design. However, rather than being limited to recording 24 channels of audio, the **BBR64-MADI** is designed to record and replay up to 64 channels of MADI data.

Developed to solve the inherent problems of working with computer-based systems in a live performance environment, the BlackBox Recorder provides engineers with a computer-free, high-quality solution for multi-channel live audio capture. The BlackBox **BBR64-MADI** Recorder can capture the full 64 channels of MADI data at standard sample rates directly to Broadcast WAV files on an external USB2 drive, and yet only occupies one unit of rack space! Double sample rate MADI recording (up to 96kHz) is also accommodated.

The recorder sports both coaxial and optical MADI connections for interfacing with any MADI equipped console or other equipment. Additionally, the **BBR64-MADI** caters for 56-channel legacy MADI and can record a further 8 channels of analogue (balanced line in) for capturing the audience reaction or general ambience.

The **BBR64-MADI** will lock to the received MADI data stream, as well as locking to or generating word clock. The MADI input can be echoed direct to the output to ease system integration. The headphone output can monitor the internal mix or PFL individual/pairs of channels, which are also sent to the hi-resolution meters.

The 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 the recording engineer needs in order to know what's happening. The recorder can also be remotely controlled and monitored via JoeCoRemote for iPad.

The **BBR64-MADI** includes numerous safety features, inherited from the original BlackBox Recorder, to keep your recording as secure as possible. Safe'n'Sound Record Recovery will recover files even if the power fails in the middle of a recording.

An additional software add-on turns the **BBR64-MADI** Recorder into a BlackBox Player, enabling synchronous or instant playback of audio material for various applications.

## Features:

- 64-channel record or playback at 44.1kHz and 48kHz.
- Only 1 rack unit tall (435 x 44 x 170mm) and weighing just 2.1kg.
- Records standard broadcast WAV files to an external USB2 drive. Captured audio material can be imported into any digital workstation for instant re-purposing. No file transfer necessary.
- Simple to operate and understand.
- Simple to see what's going on to disk.
- Headphone monitoring of internal mix, or PFL monitoring of individual/pairs of channels. Hi-res metering.
- Safe'n'Sound Record Recovery protects your files in case of power failure.
- Files can be time-stamped with respect to incoming timecode.
- Track, Song and Folder naming.
- Remote control via QWERTY keyboard, MIDI, Sony 9-pin, JoeCoRemote.
- Multiple units can be stacked for larger track counts.
- Optional Player software add-on for synchronous or instant audio playback.

## Technical Specifications:

### General

Sample rates:	44.1kHz, 48kHz, (88.2kHz, 96kHz at reduced track count)
Bit depths:	16 / 24bit
Disk interface:	USB2 - easy to obtain
Disk Format:	FAT32 - compatible with both Mac and PC
File format:	Broadcast Wave (B WAV), mono or multichannel WAV - universally readable
External drive:	1 off USB2 (480Mbit/sec); BBR64-MADI writes 9.5Mbytes/sec for 64ch@48k = 33.4Gbytes/hour Supports USB2 RAID arrays
Monitoring:	Headphone output of internal mix or mono/dual mono PFL with hi-res metering.
Physical:	Size: 19" rack mounting x 1U (435 x 44 x 170mm) Weight: < 2.1kg DC input: 9-12V dc (PSU supplied) Power: < 25W

### Audio i/o

Record / playback:	<ul style="list-style-type: none"><li>• 64ch record or playback @ 44.1kHz and 48kHz</li><li>• Supports both coaxial and optical variants of MADI data</li><li>• Supports 56ch MADI (and passes through the DiGiCo ch57 mic amp control data as well)</li><li>• 88.2kHz and 96kHz (double sample rate, SMUX &amp; normal) recording also supported (but at half the track count)</li></ul>
Inputs:	Coaxial and optical (SC) MADI support, Word clock, 8ch balanced analogue line inputs
Outputs:	Coaxial and optical (SC) MADI support, word clock output, headphones

### Control and Synchronisation

Audio clock synchronisation:	Lock to incoming MADI audio stream or separate word clock. Can also generate word clock
Control:	QWERTY keyboard, MIDI, Sony 9-pin, GPI contact closure, JoeCoRemote

## BBR64-MADI Rear Panel



JoeCo products are available from:

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