Onyx Blackjack

The Mackie Onyx Blackjack is a 2x2 USB Recording Interface featuring our boutique Onyx preamps in a sleek, user-friendly design.

Blackjack is equipped with two combo jacks for XLR, TRS or TS connection, built-in DIs, phantom power and true analog hardware monitoring of inputs for zero-latency tracking in mono or stereo.

The USB connection provides bus-power to the Blackjack, eliminating the need for another cable run. Plus, it is Mac/PC friendly and ready for most major DAWs right out of the box. No DAW? No problem. Blackjack comes standard with Mackie’s Tracktion 3™ Music Production Software so you can get started recording right away.

Blackjack comes in a sleek, powder-coated all-metal chassis that literally smashes the competition. Furthermore, the convenient 25˚ desktop angle keeps cables out of the way while allowing full-view of all controls at all times.

FEATURES:

- Two boutique-quality Onyx mic preamps with class-leading fidelity and dynamic range
- High-headroom design with ultra-low noise and distortion
- Professional 24-bit recording/playback via 2x2 USB
- High-end Cirrus Logic® AD/DA converters with 114 dB dynamic range (A-weighted)
- True analog hardware monitoring of inputs, in mono or stereo, for easy zero-latency recording
- Compatible with most major DAWs
  - Pro Tools® 9
  - Logic®
  - SONAR™
  - Cubase®
  - Ableton® Live
  - Final Cut Pro®
  - ...and more
- Built-in DI on each input for direct connection of guitars, basses, etc.
- 48V phantom power for use with studio-quality condenser microphones
- USB bus-powered, eliminating need for separate power cable
- Separate studio monitor and headphone outs with independent level control
- Sleek, ergonomic “Built-Like-A-Tank” desktop design
- Includes Tracktion 3™ Music Production Software for Mac or PC

APPLICATIONS

Multitrack studio and field recording, video post-production, multimedia applications, broadcast, and many, many more.
BLACKJACK SPECIFICATIONS

**Noise Characteristics**

Equivalent Input Noise (EIN), mic input to USB record (A/D), 150 Ω source impedance, 22 Hz to 22 kHz:
60 dB (max) gain: –124.0 dBu
Equivalent Input Noise (EIN), mic input to USB record (A/D), 40 Ω source impedance, A-weighted:
60 dB (max) gain: –126.0 dBu
Direct Monitor Output Noise
Monitor and To Mon levels unity/max: –95.0 dBu, 22 Hz to 22 kHz
USB Record (A/D) Noise Floor/Dynamic Range
(From mic input/min gain, 1 kHz –60 dBFS):
–112.0 dBFS Noise, A-weighted, –101 dBu equivalent mic input noise at unity gain (11 dBu = 0 dBFS)
–110.0 dB Dynamic range, A-weighted, (relative to –2 dBFS/+9 dBu)
USB Playback (D/A) Noise Floor/Dynamic Range (Monitor Output, Monitor level unity/max, To Mon off/min; 1kHz –60 dBFS):
–97.0 dBu Noise, A-weighted, –107 dBFS equivalent digital noise, 106 dB Dynamic Range (relative to +9 dBu)

**Frequency Response**

Mic to Monitor Outputs (direct monitor analog-only path, stereo), unity gain:
15 Hz to 50 kHz +0 dB / –0.2 dB
Line to Monitor Outputs (direct monitor analog-only path, stereo), unity gain for 1/4” TRS input:
10 Hz to 25 kHz +0 dB / –1.0 dB
USB Through (Indirect monitor A/D+D/A), mic input to monitor output, unity gain (To Mon off/min):
44.1 kHz sample rate:
15 Hz to 21 kHz +0 dB / –0.2 dB
48 kHz sample rate:
15 Hz to 22 kHz +0 dB / –0.2 dB

**Distortion (THD+N)**

Mic to monitor (direct monitor analog path, stereo), 1kHz, 22 Hz to 22 kHz bandwidth:
+4 dBu in, min/unity gain, +4 dBu out: <0.002%
Line to monitor (direct monitor analog path, stereo), 1kHz, 22 Hz to 22 kHz bandwidth:
+4 dBu in, unity gain, +4 dBu out: <0.002%
Hi-Z to monitor (direct monitor analog path, stereo), 1kHz, 22 Hz to 22 kHz bandwidth:
+0 dBu in, unity gain, +0 dBu out: <0.004%
Phones, 1 kHz, 22 Hz to 22 kHz bandwidth:
7mW into 600 Ω: <0.003%
Mic to USB Record (A/D), 1 kHz, 22 Hz to fs/2 bandwidth:
+4 dBu in, unity gain, –7 dBFS record: <0.002%
USB Playback to Monitor Out (D/A), 1 kHz, 22 Hz to 22 kHz bandwidth (To Mon off/min, Monitor unity/max):
–6 dBFS playback, +4 dBu out: <0.002%

**Attenuation and Crosstalk**

1 kHz, 20 Hz to 20 kHz bandwidth:
To Mon or Monitor knob off/min: <=–100 dB
1 kHz, 22 Hz to 22 kHz bandwidth:
Any channel to any other: <=–80 dB

**Common Mode Rejection Ratio (CMRR)**

Mic input, 150 Ω termination
1 kHz: >50 dB

**Maximum Levels**

Mic input, gain at min (0 dB): +10 dBu
Mic input, gain at max (60 dB): –50 dBu
Line input, gain at min (–15 dB): +25 dBu
Instrument input, gain at min (–15 dB): +8 dBu
Monitor Output at unity/max: +10 dBu
Phones at unity/max: 8mW into 600 Ω (1% THD+N)

**USB**

Format: USB 1.1
Sample rates available: 44.1 kHz, 48 kHz
Mackie Driver Buffer Sizes: 128, 256, 512, 1024
Resolution: 24-bit
Audio Class 1.0 compliant at 44.1 kHz / 48 kHz, 24-bit
A/D: 114 dB typical dynamic range, 24-bit, A-weighted, 10 Hz to 20 kHz BW
D/A: 114 dB typical dynamic range, 24-bit, A-weighted, 10 Hz to 20 kHz BW

**Meters**

Bi-color channel meters:
Red overload, +7 dBu (~4 dBFS)
Green signal present, –20 dBu (~31 dBFS)

**Input and Output Impedance**

Mic input: 3 kΩ balanced
Line input: 18 kΩ balanced
9 kΩ unbalanced
Hi-Z input: 1 MΩ balanced
Phones output: 25 Ω
Monitor outputs: 300 Ω balanced
150 Ω unbalanced
BLACKJACK SPECIFICATIONS CONTINUED...

**Phantom Power**
P48 specification compliant. 48VDC, 10mA max per mic

**AC Power Requirements**
USB Bus powered, high-power device (5V, up to 500mA)
Operating Temperature
- 0˚ - 40˚C
- 32˚ - 104˚F

**Physical Properties (packaged product)**
- Height: 4.94 in / 125.5 mm
- Depth: 6.38 in / 162.1 mm
- Width: 9.25 in / 235 mm
- Weight: 1.8 lb / 0.8 kg

**Physical Properties (product)**
- Height: 2.80 in / 71.2 mm
- Depth: 4.32 in / 109.6 mm
- Width: 6.57 in / 167 mm
- Weight: 1.5 lb / 0.7 kg

**Ordering Information**
Blackjack Premium 2X2 USB Recording Interface, US  P/N 2034521-00
BLACKJACK DIMENSIONS

NOTES:
1. WEIGHT APPROX. 1.5 lb [0.7 kg].
2. SHIPPING WEIGHT APPROX. 1.8 lb [0.8 kg].

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES DUAL IMMI DIMENSIONS FOR REF ONLY.
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