

Micro Clock MkIII | User Manual

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INTRODUCTION

The Micro Clock MkIII is a significant redesign of its predecessor, the Micro Clock MkII. Core technological improvements include lower-jitter crystal oscillators, higher-quality galvanic transformer isolation in the signal path, dedicated output drivers with better isolation, higher-precision signal division, and much heavier noise filtration throughout the circuit. All of this results in a more robust, lower-jitter clock signal than the Micro Clock MkII, with even more desirable harmonics in the clock's spectral band that impart an undeniable musical quality to the conversion process. The feature set has expanded to include an LED frequency display, six BNC outputs capable of up to 384kHz, AES and RCA S/PDIF outputs capable of up to 192kHz, and an optical S/PDIF output capable of up to 96kHz.

The Micro Clock MkIII is the culmination of almost 10 years of research involving jitter-reducing, harmonic-enhancing design techniques not found in any other master word clocks on the market. It not only can sync all of your digital audio gear together, but can significantly improve the sound quality as well. It may be the most significant single upgrade you can make to your digital audio setup. Get ready to hear what you've been missing!

FEATURES

- Ultra-low jitter, harmonically-enhanced word clock signal generation
- Dimmable frequency display
- 8 selectable sample rates (44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz, and 384kHz)
- 6 BNC outputs with dedicated output drivers for maximum isolation
- RCA S/PDIF output
- Optical S/PDIF output
- AES output
- 1U removable rack ears

SPECIFICATIONS

Jitter: 1.92pS RMS (BNC outputs)

Outputs: 6 BNC, 1 XLR AES, 1 RCA S/PDIF, 1 Optical S/PDIF (recommended max. cable length = 1m)

- BNC: 75Ω, 5V unterminated
- RCA S/PDIF: 75 Ω, unbalanced
- AES XLR: 110 Ω, balanced

Clock Frequencies

- BNC (kHz) - 44.1, 48, 88.2, 96, 176.4, 192, 352.8, 384
- RCA S/PDIF & AES (kHz) - 44.1, 48, 88.2, 96, 176.4, 192
- Optical S/PDIF (kHz) - 44.1, 48, 88.2, 96

Power: 9VDC (6W power consumption)

Power connector: 2.1mm barrel connector with 5.5mm outer diameter (center pin positive)

Weight: 2.2lbs

Dimensions: 6.5"L x 6"W x 1.75"H (without 1U rack ears installed)

Shipping weight: 4lbs

Shipping dimensions: 13"L x 11"W x 5"H

PACKAGE CONTENTS

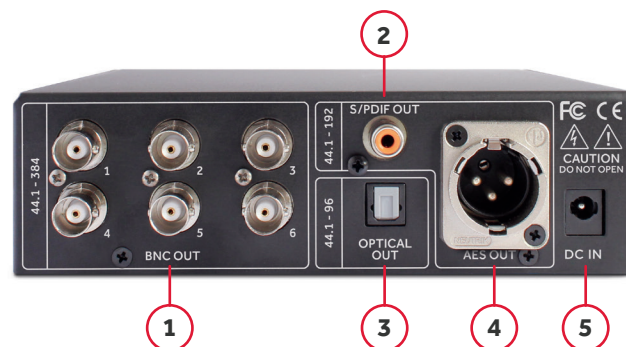
- Micro Clock MkIII
- Power Supply
- 1U Rack Ears & Hardware

FRONT



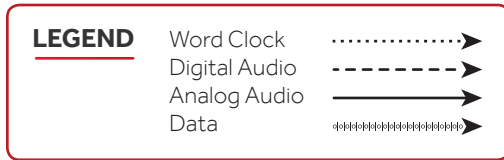
1. **POWER:** engage to turn unit on, disengage to turn unit off
2. **DISPLAY CONTRAST (●):** engage to dim display, disengage to brighten display
3. **FREQUENCY (kHz):** rotate to cycle through output frequencies as indicated on the display

BACK

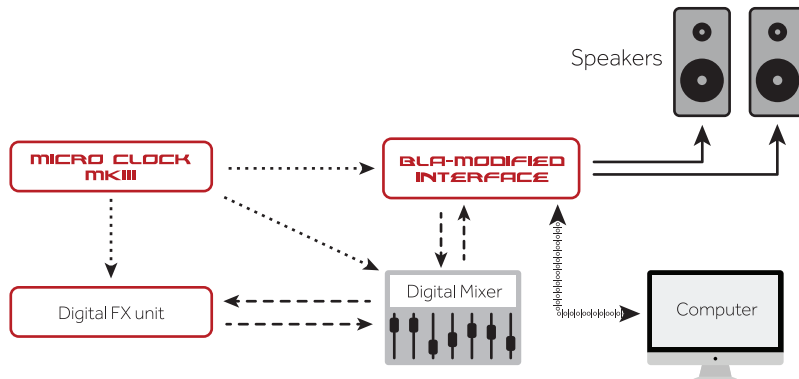


1. **BNC Out:** 5V, 75Ω output; termination is optional (44.1kHz – 394kHz)
2. **S/PDIF Out:** unbalanced RCA output (44.1kHz – 192kHz)
3. **Optical Out:** optical S/PDIF output; does not support ADAT (44.1kHz – 96kHz)
4. **AES Out:** balanced XLR output (44.1kHz – 192kHz)
5. **DC In:** 9VDC center pin positive, input jack (only use a BLA-specified power supply)

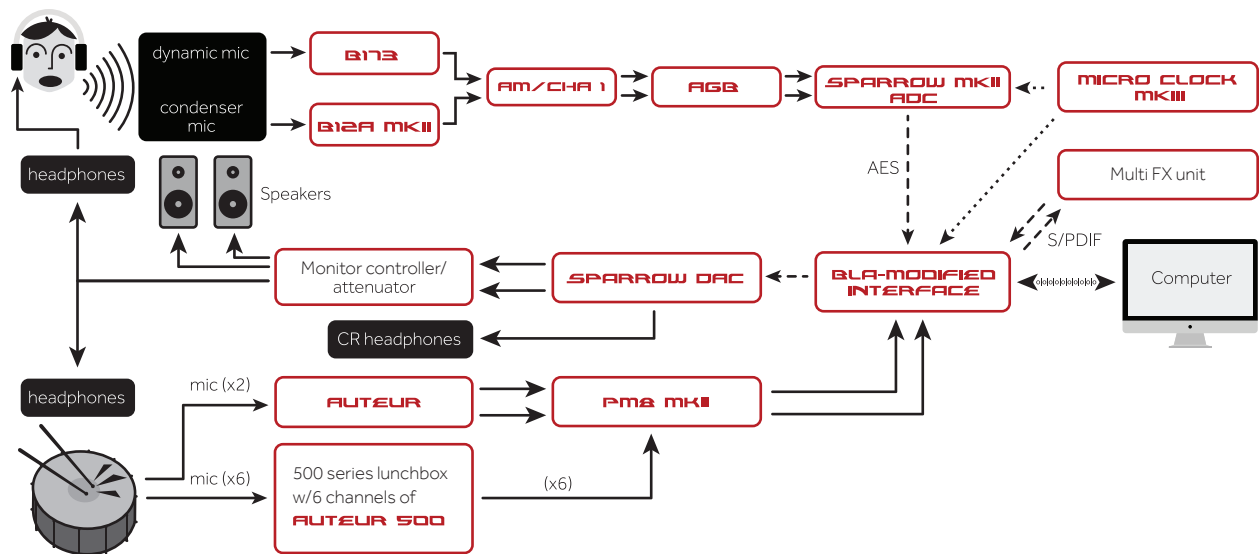
CONNECTION DIAGRAMS



MIXING



TRACKING



REPAIR

To reduce the risk of fire or electric shock, the user should not attempt to repair the device in the event of a failure. Repairs should be referred to qualified service personnel only. Please contact Black Lion Audio if you need assistance.

WARRANTY

We extend a two-year warranty on defects in materials and workmanship for all Black Lion Audio products from the date of purchase. This does not cover user error, wear, tear, or abuse. Should your B.L.A. product experience any problems or failures during the warranty period, immediately contact us, and we will gladly correct the issue at no charge (excluding shipping).

DISCLAIMER

For your safety, please read the following!

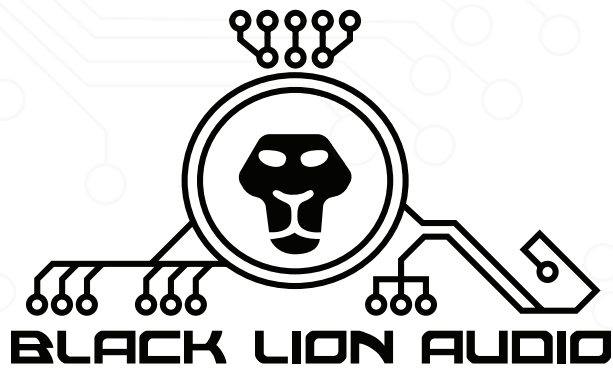
Grounding: For your safety, do not defeat the grounding connection. Use the device only when it is properly grounded.

Liquids, water, and moisture: The device should not be used near water, or when it is wet. Care should be taken so that it remains dry. Be sure to keep the device away from rain or other moisture.

Power: The device should be connected to a power supply only of the type described in the user manual and/or as marked on the rear panel.

Power cables: Power supply cables should not be routed under carpets, or where they are likely to be walked on or pinched by items placed upon or against them. Do not use power supply cables that have become worn or frayed.

Multiple-input voltage: The device may require the use of a different power supply, power plug, cable, or both, depending on the available power connection in your area.



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