

Micro Clock MkIII XB | User Manual

TABLE OF CONTENTS

- Introduction3
- Features3
- Specifications.....3
- Package Contents.....4
- Front.....4
- Back4
- Connection Diagrams.....5
- Repair6
- Warranty6
- Disclaimer.....6
- Copyright.....7

INTRODUCTION

The Micro Clock MkIII XB is the most accurate word clock we've developed to date. With only 0.6pS RMS of jitter at the BNC outputs, it has less than one third of the jitter of the standard Micro Clock MkIII! It boasts incredibly accurate crystal oscillators and superior quality galvanic isolation, both of which contribute to the extraordinarily low jitter measurement.

The Micro Clock MkIII XB's small form factor and its ability to drive up to 1,000 feet of coaxial cable make it not only the perfect solution for improving the conversion quality of an audio interface, but also for re-clocking digital mixing consoles at live shows or houses of worship, and as the master word clock in large post-production or broadcast facilities. It can easily sync all of your digital gear together, even if it's located in different rooms, or different buildings!

We spent the better part of a year field-testing the Micro Clock MkIII XB prior to its release, and got a lot of positive feedback on the impact it made in a wide variety of setups. We hope to continue this trend by making it available to the public. Thanks for your purchase and for your continued support of Black Lion Audio!

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
- Full & 1/2 rack removable rack ears
- Locking frequency selector knob

SPECIFICATIONS

Jitter: 0.6pS RMS (BNC outputs)

Outputs: 6 BNC, 1 XLR AES, 1 RCA S/PDIF, 1 Optical S/PDIF (recommended max. cable length = 1,000ft of high quality, 75Ω coaxial cable)

- BNC: 75 Ω, 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 rack ears installed)

Shipping weight: 4lbs

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

PACKAGE CONTENTS

- Micro Clock MkIII XB
- Power Supply
- Full & 1/2 Rack Ears with Hardware

FRONT



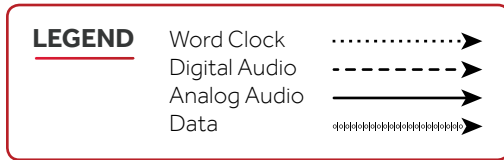
1. **POWER:** engage to turn unit on, disengage to turn unit off
2. **DISPLAY CONTRAST (I):** engage to dim display, disengage to brighten display
3. **FREQUENCY (kHz):** rotate three clicks at a moderate speed to unlock and cycle through output frequencies as indicated on the display

BACK

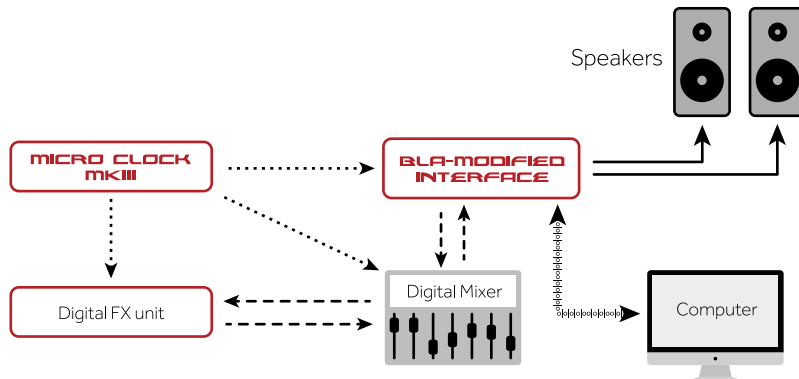


1. **BNC Out:** 5V, 75Ω output; termination is optional (44.1kHz – 384kHz)
2. **S/PDIF Out:** unbalanced RCA output (44.1kHz – 192kHz)
3. **Optical Out:** optical S/PDIF output; does not support ADAT (44.1kHz – 96kHz)
4. **AES Out:** balanced XLR output (44.1kHz – 192kHz)
5. **DC In:** 9VDC center pin positive, input jack (only use a BLA-specified power supply)

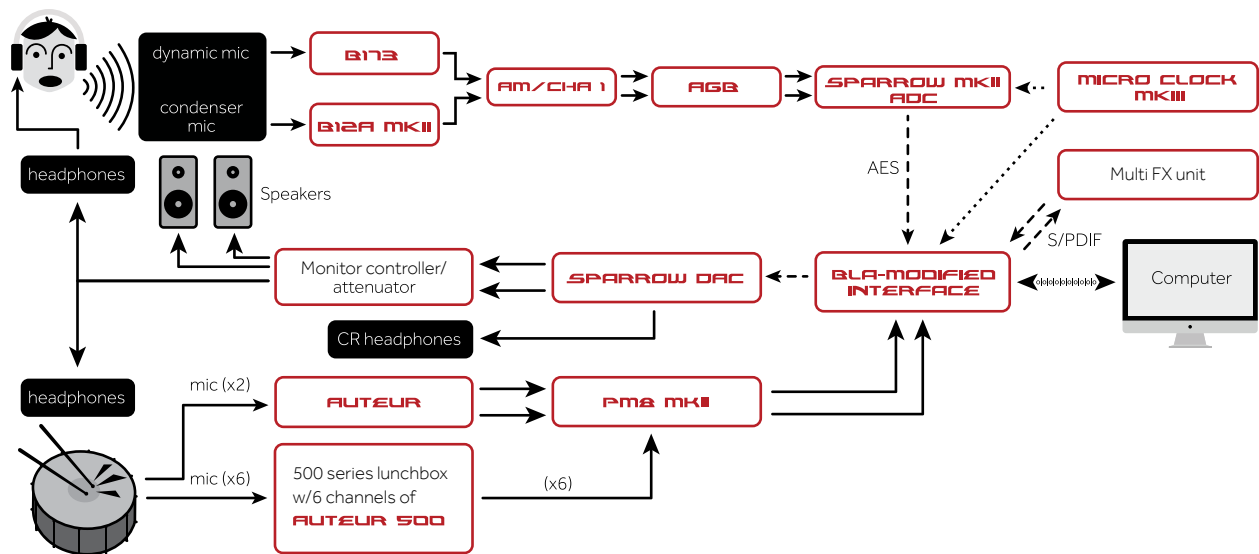
CONNECTION DIAGRAMS



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 three-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!

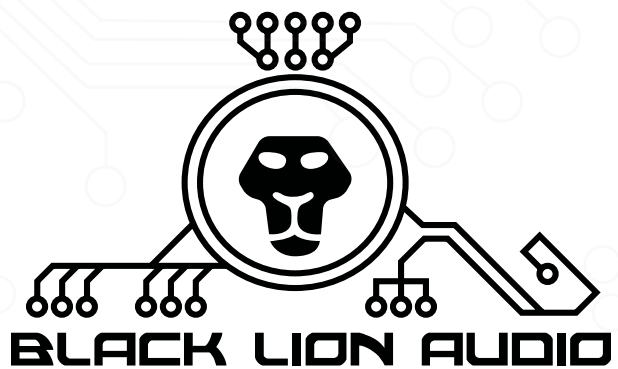
Grounding: For your safety, do not defeat the grounding connection. Use the device only when it is properly grounded.

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.



1801 W. BELLE PLAINE AVE., SUITE 105
CHICAGO, IL 60613
INFO@BLACKLIONAUDIO.COM

BLACKLIONAUDIO.COM

Copyright © 2016 Black Lion Audio, Inc. All rights reserved. This manual and any associated artwork, product designs, and design concepts are subject to copyright protection. No part of this document may be reproduced in any form without prior written permission of Black Lion Audio, Inc.