

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. If the power cord becomes frayed, stop using immediately.
11. Use only attachments/accessories specified by the manufacturer
12. Use only with a cart, stand, tripod, bracket or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases, shall be placed on the apparatus.
16. The DC Input on the product is used as the disconnect device, so the disconnected device shall remain readily operable when reconnected.
17. Any changes or modifications not expressly approved in this manual could void your authority to operate this apparatus.



The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock

to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.



The Black Lion Audio Revolution EXP complies with all applicable / RoHS / WEEE European Union directives.

Do not attempt to service this unit yourself, as it will void your warranty. Please check your unit carefully upon receipt and return to place of purchase immediately if there are any problems with the product. After that, the standard Black Lion Audio 3 YEAR warranty will apply to defects in materials and workmanship.

U.S.A.

Should your Black Lion Audio product require service, please contact the Black Lion Audio Service Department: <https://www.blacklionaudio.com/contact>. **You must obtain an RA # (Return Authorization number) from us before shipping a unit back to us. This RA # must be clearly written on the outside of the box.**

Please safely pack the units...It is best to use the original packing materials. Black Lion Audio cannot be responsible for any damages incurred in shipping to us due to poor packaging. PLEASE PACK CAREFULLY and FULLY INSURE THE SHIPMENT.

INTERNATIONAL

For service or warranty assistance, please contact the Black Lion Audio distributor in your country through the dealer from whom you purchased this product.

LIMITED 3 YEAR WARRANTY

Black Lion Audio's Revolution EXP is warranted by Black Lion Audio to be free from defects in materials and workmanship for the period of THREE (3) YEARS to the original purchaser. In the event of such defects, the product will be repaired without charge or, at our option, replaced with a new one if delivered to Black Lion Audio prepaid, together with a copy of the sales slip or other proof of purchase date. The warranty excludes problems due to normal wear, abuse, shipping damage or failure to use the product in accordance with the specifications.

All parts and labor are covered under this Limited Warranty. However, if it is determined by Black Lion Audio that the device was damaged or made defective through abuse, we reserve the right to charge the customer for the cost of the repair.

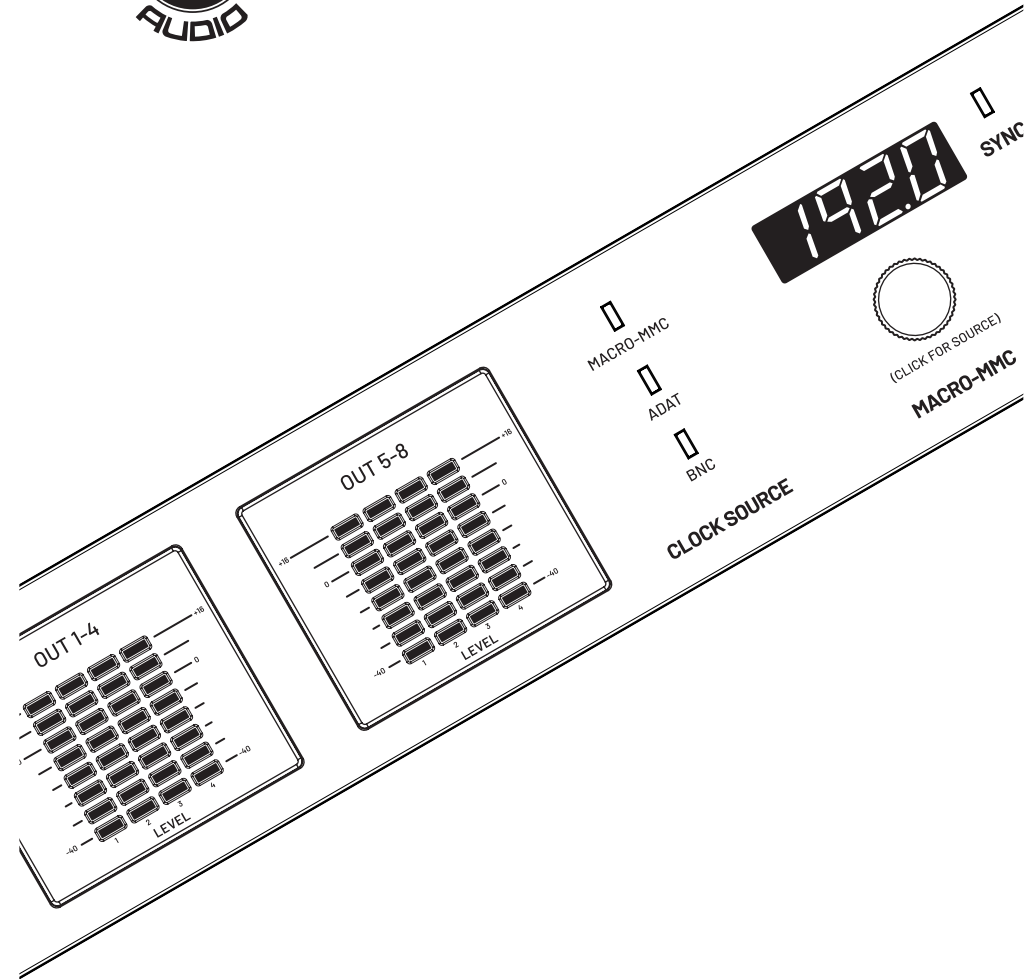
Black Lion Audio shall not be liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation or commercial loss or any other damages, whether incidental, consequential or otherwise. This warranty gives you specific legal rights, and you may have other rights, which will vary from state to state.

This warranty is not transferable.



Revolution EXP

8x8 AD/DA Converter and Word Clock with ADAT



Quick Start Guide

LET'S GET STARTED!

Introduction

Thanks! We appreciate that you've chosen the Revolution EXP for your studio needs. We know you have a lot of options out there and we're thankful that you've chosen Black Lion Audio.

Use the Revolution EXP to add eight inputs and outputs to your audio interface, dramatically expanding your studio's channel count and creative potential!

Clocking

To use Revolution EXP as a primary clock:

1. Connect the external device you wish to clock via the Macro MMC Clock Out or ADAT Out. We recommend using the BNC connection for best results.
2. Press the Macro-MMC control repeatedly until the Macro-MMC indicator lights.
3. Rotate the Macro-MMC control to set the desired sample rate.

To sync Revolution EXP to an existing clock:

1. Connect the external device you wish to sync the Revolution EXP to via the BNC Word Clock In or ADAT In. We recommend using the BNC Word Clock connection for best results.
2. Press the Macro-MMC control repeatedly until the ADAT or BNC indicator lights.
3. Revolution EXP will sync to your external clock automatically.

When using ADAT as a clock source, please note that the sample rate must be set manually. Note that the Sync light will **not** light when syncing via ADAT due to limitations of the ADAT protocol.

Adding Inputs to your audio interface

1. Power the Revolution EXP off.
2. Connect your line-level devices to the TRS 1/4" inputs on the rear of the Revolution EXP.
3. Connect the ADAT Out 1 of your Revolution EXP to the ADAT In of your audio interface using a TOSLINK cable.
4. Power the Revolution EXP on.
5. Use the Macro-MMC control to set the desired sampling rate. The rate chosen, displayed on the front of the Revolution EXP, must match the sampling rate of your audio interface and current DAW

6. Send a signal from one of your connected audio devices and check that the meter on the Revolution EXP is receiving signal.
7. You may need to configure the ADAT Input routing of your audio interface or software before signals from the Revolution EXP can be recorded in your DAW. The steps to do so will vary by manufacturer; please consult with your audio interface manufacturer or DAW developer for assistance.

Adding Outputs to your audio interface

1. Power the Revolution EXP off.
2. Connect your line-level devices to the TRS 1/4" outputs on the rear of the Revolution EXP.
3. Connect the ADAT In 1 of your Revolution EXP to the ADAT Out of your audio interface using a TOSLINK cable.
4. Power the Revolution EXP on.
5. Revolution EXP will sync to your external clock automatically.

6. Send a signal from your audio interface to its ADAT Outputs and check that the meter on the Revolution EXP is receiving signal.
7. You may need to configure the ADAT Output routing of your audio interface or software before signals from your DAW can reach Revolution EXP. The steps to do so will vary by manufacturer; please consult with your audio interface manufacturer or DAW developer for assistance.

Using multiple ADAT Ports

The number of digital audio channels that can be transmitted or received by the ADAT I/O is dependent upon the selected sampling rate. Higher sampling rates consume more bandwidth, reducing channel count. That's why the Revolution EXP offers dual ADAT Ins and Outs!

When using ADAT I/O 1:

- **44.1 kHz:** 8-in, 8-out
- **48 kHz:** 8-in, 8-out
- **88.2 kHz:** 4-in, 4-out
- **96 kHz:** 4-in, 4-out
- **176.4 kHz:** 2-in, 2-out
- **192 kHz:** 2-in, 2-out

When using ADAT I/O 1 and 2:

- **44.1 kHz:** 8-in, 8-out
- **48 kHz:** 8-in, 8-out
- **88.2 kHz:** 8-in, 8-out
- **96 kHz:** 8-in, 8-out
- **176.4 kHz:** 4-in, 4-out
- **192 kHz:** 4-in, 4-out

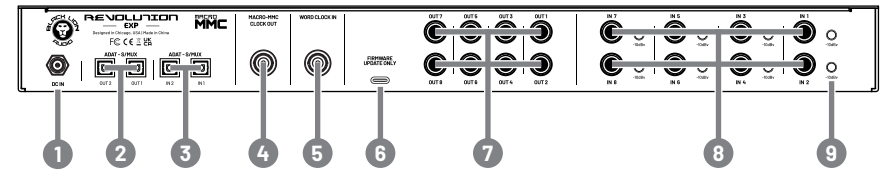
GETTING TO KNOW THE REVOLUTION EXP.

Front Panel



1. **Input Meters:** This meters the analog input levels.
2. **Input Meters:** This meters the analog output levels.
3. **Clock Source:** These lights indicate the clock source used by Revolution EXP when lit.
 - **Macro-MMC** is the Revolution EXP's internal clock.
 - **ADAT** indicates sync over an ADAT connection.
 - **BNC** indicates word clock sync over the BNC Word Clock In jack.
4. **Macro-MMC Control:** Turn this knob to select the sample rate. Options include 44.1, 48, 88.2, 96, 176.4, and 192 kHz. Press the knob in to cycle through available clock sources.
5. **Display:** Displays the current operating sample rate.
6. **Power Switch:** Turns the unit off or on.

Rear Panel



1. **Power Connector:** Connect the included power supply here.
2. **ADAT Outputs:** Sends up to eight channels of digital audio to an ADAT-compatible device.
3. **ADAT Inputs:** Receives up to eight channels of digital audio from an ADAT-compatible device.
4. **Word Clock Output:** Connect your other devices here to use the Revolution EXP as your primary clock.
5. **Word Clock Input:** Connect your other devices here to sync Revolution EXP to your primary clock.
6. **USB-C:** Connect your computer here. Only for firmware updates.
7. **TRS Analog Outputs:** Outputs for connecting line-level equipment.
8. **TRS Analog Inputs:** Inputs for connecting line-level equipment.
9. **Pad:** Toggle between +4 dB (pro-level devices) and -10 dB (consumer-level devices).

Suggested uses

Here's just some of the exciting potential use cases for your new Revolution EXP:

- Set up four sets of stereo sends and returns for external reverbs, EOs, and other processors.
- Create four sets of stereo headphone sends for monitoring applications.
- Route four mono stems and two stereo stems to an analog summing mixer via your Revolution EXP's analog outputs, and use two stereo inputs to return from the summing mixer.
- Add eight mono speakers via the Revolution EXP outputs and create a 5.1.2 spatial audio mix environment.