

American Bass ABX 3.1A

American Bass ABX 3.1A 3-Way Electronic Crossover with Remote Bass Knob

User Manual

1. INTRODUCTION

Thank you for choosing the American Bass ABX 3.1A 3-Way Electronic Crossover. This device is designed to enhance your car audio system by precisely separating audio frequencies, allowing each amplifier and speaker to operate within its optimal range. The included remote bass knob provides convenient control over subwoofer levels.

This manual provides detailed instructions for installation, operation, and maintenance to ensure optimal performance and longevity of your unit.

2. SAFETY INFORMATION

- Always disconnect the vehicle's battery negative terminal before installation to prevent electrical shorts.
- Ensure all wiring is properly insulated and secured to prevent damage and interference.
- Mount the crossover in a dry, well-ventilated location away from direct heat or moisture.
- Use appropriate gauge wiring for power and ground connections.
- Consult a professional car audio installer if you are unsure about any part of the installation process.

3. PACKAGE CONTENTS

The American Bass ABX 3.1A package includes the following items:

- 1x American Bass ABX 3.1A 3-Way Electronic Crossover
- 1x Remote Bass Knob

4. PRODUCT OVERVIEW

The ABX 3.1A features a robust design with clearly labeled input and output terminals for easy integration into your car audio system. It provides precise control over front high-pass, rear high-pass, and subwoofer low-pass frequencies.

4.1. Input Connections



Image: Front, Rear, and Subwoofer RCA input connections on the American Bass ABX 3.1A electronic crossover. Each input has left (L) and right (R) channels.

- **FRONT IN (L/R):** Connects to the front channel RCA outputs of your head unit.
- **REAR IN (L/R):** Connects to the rear channel RCA outputs of your head unit.
- **SUB IN (L/R):** Connects to the subwoofer channel RCA outputs of your head unit.

4.2. Output and Power Connections



Image: Subwoofer, Rear, and Front RCA output connections, along with the remote bass level port and power terminals (GND, REM, PWR) on the American Bass ABX 3.1A electronic crossover.

- **SUB OUT (L/R):** Connects to the subwoofer amplifier's RCA inputs.
- **REAR OUT (L/R):** Connects to the rear channel amplifier's RCA inputs.
- **FRONT OUT (L/R):** Connects to the front channel amplifier's RCA inputs.
- **REMOTE SUB LEVEL:** Port for connecting the included remote bass knob.
- **GND (Ground):** Connects to a solid chassis ground point in the vehicle.
- **REM (Remote):** Connects to the remote turn-on lead from your head unit or ignition.
- **PWR (Power):** Connects to a fused 12V constant power source from the vehicle's battery.

4.3. Remote Bass Knob



Image: The remote bass knob for the American Bass ABX 3.1A, featuring a rotary control for bass level adjustment and a power indicator LED.

The remote bass knob allows for convenient, on-the-fly adjustment of the subwoofer output level from the driver's seat. It connects to the 'REMOTE SUB LEVEL' port on the crossover unit.

5. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance. Follow these general steps:

1. **Mounting:** Choose a secure, dry, and accessible location for the crossover unit. Ensure adequate ventilation.

2. **Power Wiring:**

- Connect the **PWR** terminal to a fused 12V constant power source.
- Connect the **GND** terminal to a clean, solid chassis ground point.
- Connect the **REM** terminal to the remote turn-on lead from your head unit.

3. **RCA Input Connections:**

- Connect the head unit's front RCA outputs to the crossover's **FRONT IN**.
- Connect the head unit's rear RCA outputs to the crossover's **REAR IN**.
- Connect the head unit's subwoofer RCA outputs to the crossover's **SUB IN**.

4. **RCA Output Connections:**

- Connect the crossover's **FRONT OUT** to your front channel amplifier's inputs.
- Connect the crossover's **REAR OUT** to your rear channel amplifier's inputs.
- Connect the crossover's **SUB OUT** to your subwoofer amplifier's inputs.

5. **Remote Bass Knob:** Connect the remote bass knob to the **REMOTE SUB LEVEL** port using the provided cable. Mount the knob in an easily accessible location.

6. **Initial Power-Up:** Reconnect the vehicle's battery. Turn on your head unit and check for proper operation.

6. OPERATING INSTRUCTIONS

The ABX 3.1A allows for precise frequency tuning to optimize your audio system's sound. Adjustments are typically made using small rotary controls on the unit itself.

- **Front High Pass (x1):** Adjusts the high-pass frequency for the front channels from 35Hz to 400Hz. This filters out low frequencies from your front speakers.
- **Front High Pass (x20):** When engaged, this multiplies the front high-pass frequency range by 20, allowing adjustment from 700Hz to 8KHz for specialized applications.
- **Rear High Pass (x1):** Adjusts the high-pass frequency for the rear channels from 35Hz to 400Hz, filtering low frequencies from your rear speakers.
- **Sub Low Pass:** Adjusts the low-pass frequency for the subwoofer channel from 45Hz to 250Hz. This filters out high frequencies, ensuring only bass is sent to your subwoofer.
- **Remote Bass Knob:** Use this knob to increase or decrease the subwoofer output level as desired.

Note: Start with all frequency controls at their lowest settings and gradually increase them while listening to your audio to find the optimal balance for your system and preferences.

7. MAINTENANCE

The American Bass ABX 3.1A is designed for reliable operation with minimal maintenance. Follow these guidelines:

- **Cleaning:** Periodically wipe the unit with a soft, dry cloth to remove dust. Do not use harsh chemicals or abrasive cleaners.
- **Connections:** Occasionally check all power, ground, remote, and RCA connections to ensure they are secure and free from corrosion. Loose connections can lead to poor performance or damage.
- **Environment:** Ensure the unit remains in a dry, stable environment. Avoid extreme temperatures or excessive vibration.

8. TROUBLESHOOTING

If you experience issues with your ABX 3.1A, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power/Unit does not turn on	Loose power/ground/remote wire; Blown fuse; Faulty remote turn-on signal.	Check all power connections. Verify fuse integrity. Ensure remote wire receives 12V when head unit is on.
No sound output	Loose RCA connections; Incorrect input/output routing; Amplifier issues.	Verify all RCA cables are securely connected. Confirm correct input/output channels. Check amplifier power and settings.
Distorted sound	Gain settings too high; Improper crossover frequency settings; Poor quality RCA cables.	Adjust amplifier gain settings. Re-evaluate crossover frequency settings. Use high-quality shielded RCA cables.
Engine noise/Whining sound	Ground loop; Poor power/ground connection; RCA cables routed too close to power cables.	Ensure ground connection is solid. Reroute RCA cables away from power cables. Consider a ground loop isolator if necessary.

If the problem persists after attempting these solutions, contact American Bass customer support or a qualified installer.

9. SPECIFICATIONS

Feature	Specification
Supply Voltage	11-15V DC
Input Current	0.3A Max
Distortion (THD)	0.01%
Frequency Response	10Hz - 50KHz (-3dB)
S/N Ratio (A Weighted)	More than 95dB
Separation	60dB
Front High Pass (x1)	35-400Hz
Front High Pass (x20)	700-8KHz
Rear High Pass (x1)	35-400Hz
Sub Low Pass	45-250Hz
Input Impedance	More than 10K Ohms
Output Impedance	Less than 1K Ohms
Output Voltage Level	8 max volts
Product Dimensions	13 x 8.5 x 3 inches
Item Weight	2.31 pounds

10. WARRANTY INFORMATION

American Bass products are manufactured to high-quality standards. This product is covered by a limited warranty against defects in materials and workmanship. The duration and terms of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims.

For specific warranty details, please refer to the warranty card included with your product or contact American Bass customer support.

11. SUPPORT

For technical assistance, troubleshooting beyond this manual, or general inquiries, please contact American Bass customer support through their official website or the retailer from whom you purchased the product.

Please have your product model number (ABX 3.1A) and proof of purchase ready when contacting support.

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question