

LASE CRX 3003K

LASE CRX 3003K 3-Way Passive Crossover Instruction Manual

Model: CRX 3003K

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your LASE CRX 3003K 3-Way Passive Crossover. This device is designed to accurately divide audio signals into distinct frequency bands for optimal performance with multi-speaker systems. Please read this manual thoroughly before use to ensure safe and efficient operation.

2. PRODUCT OVERVIEW

The LASE CRX 3003K is a high-quality 3-way passive crossover network engineered to handle up to 600 Watts of power. It features precise crossover frequencies at 375 Hz and 3000 Hz, making it suitable for systems requiring dedicated low, mid, and high-frequency drivers. The unit supports both 4 Ohm and 8 Ohm impedance configurations, offering flexibility for various speaker setups.

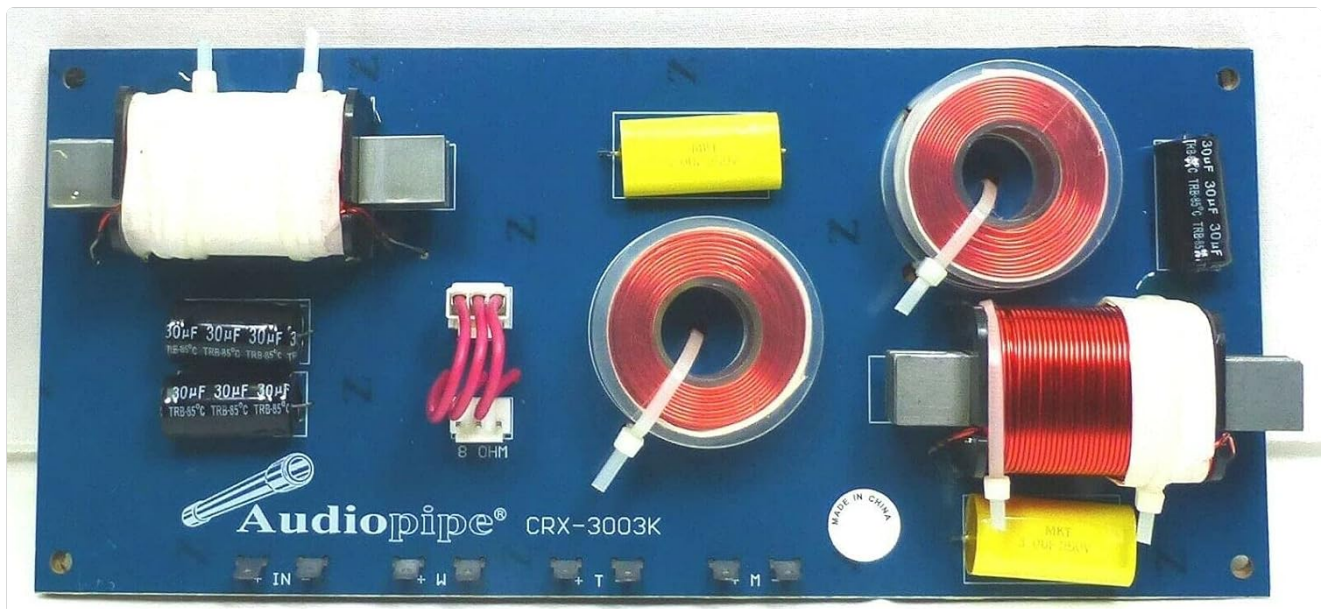


Figure 1: Top view of the LASE CRX 3003K 3-Way Passive Crossover board, showing inductors, capacitors, and connection terminals.

3. FEATURES

- **3-Way Design:** Divides audio into low (woofer), mid (midrange), and high (tweeter) frequency bands.
- **High Power Handling:** Supports a maximum power of 600 Watts.
- **Dual Impedance Support:** Compatible with both 4 Ohm and 8 Ohm speaker systems.
- **Optimized Crossover Frequencies:** Features crossover points at 375 Hz and 3000 Hz for clear sound separation.
- **Compact Dimensions:** L - 9.75" x W - 4.5" x H - 2" (247.65mm x 114.3mm x 50.8mm).
- **Durable Construction:** Built with quality components for reliable performance.

4. SETUP AND INSTALLATION

4.1. Impedance Selection (4 Ohm / 8 Ohm)

The CRX 3003K crossover is designed to work with both 4 Ohm and 8 Ohm speaker configurations. The impedance is selected via a jumper on the circuit board. Ensure the jumper is correctly positioned to match the impedance of your speaker system for optimal performance and to prevent damage.



Figure 2: Close-up view of the impedance selection jumper. Position the jumper to either the 4 Ohm or 8 Ohm setting based on your speaker's impedance.

4.2. Wiring Connections

Connect your amplifier output and speaker drivers to the appropriate terminals on the crossover board. Observe correct polarity (+ and -) for all connections to ensure proper phase alignment and sound reproduction.

IN (+ / -): Connect these terminals to the output of your audio amplifier.

W (+ / -): Connect these terminals to your woofer (low-frequency driver).

M (+ / -): Connect these terminals to your midrange speaker (mid-frequency driver).

T (+ / -): Connect these terminals to your tweeter (high-frequency driver).

Note: Always ensure your amplifier is turned off before making or changing any connections to prevent electrical shock or damage to your equipment.

5. OPERATING PRINCIPLES

Once connected, the LASE CRX 3003K crossover passively filters the full-range audio signal from your amplifier. It directs frequencies below 375 Hz to the woofer, frequencies between 375 Hz and 3000 Hz to the midrange speaker, and frequencies above 3000 Hz to the tweeter. This division ensures that each speaker driver receives only the frequencies it is designed to reproduce efficiently, leading to clearer sound, reduced distortion, and improved overall system performance.

6. MAINTENANCE

The LASE CRX 3003K is a passive component and requires minimal maintenance. Keep the unit in a dry, dust-free environment. Avoid exposing it to extreme temperatures, direct sunlight, or moisture. Periodically inspect connections to ensure they remain secure. Do not attempt to open or modify the unit, as this may void any potential warranty and could lead to damage.

7. TROUBLESHOOTING

- **No Sound from a Speaker:**
 - Check all wiring connections for proper polarity and secure contact.
 - Verify the speaker driver itself is functioning correctly by testing it with another known good source (if safe to do so).
- **Distorted Sound:**
 - Ensure the impedance jumper setting on the crossover matches your speaker's impedance.
 - Confirm that the total power handling of your speakers and amplifier is within the limits of the crossover (600 Watts max).
 - Check for loose connections or damaged wiring.
- **Unbalanced Sound:**
 - Double-check all positive and negative connections for correct polarity. Incorrect polarity can cause phase issues.

If problems persist, consult a qualified audio technician.

8. SPECIFICATIONS

Feature	Specification
Product Type	3-Way Passive Crossover
Max. Power Handling	600 Watts
Impedance	4 or 8 Ohm (selectable)
Crossover Frequencies	375 Hz / 3000 Hz
Dimensions (L x W x H)	9.75" x 4.5" x 2" (247.65mm x 114.3mm x 50.8mm)
Manufacturer	LASE

9. SAFETY INFORMATION

- Always disconnect power from your amplifier before making or changing any connections.
- Ensure proper ventilation around the crossover to prevent overheating.
- Do not expose the unit to water or excessive moisture.
- Keep out of reach of children.
- Use appropriate gauge wiring for your audio system to ensure safe and efficient power transfer.

10. WARRANTY AND SUPPORT

Specific warranty details for the LASE CRX 3003K 3-Way Passive Crossover are not provided within the product information. For warranty claims, technical support, or service inquiries, please contact the manufacturer, LASE, or your authorized dealer directly. Retain your proof of purchase for any warranty-related requests.

