

AUDIOTEK CX4

Audiotek CX4 2-Way Car Audio Passive Crossover Networks User Manual

Model: CX4 | Brand: AUDIOTEK

1. INTRODUCTION

The Audiotek CX4 is a high-performance 2-way passive crossover network designed for car audio systems. Its primary function is to separate the audio signal into distinct frequency ranges, directing high frequencies to tweeters and low frequencies to woofers. This ensures that each speaker driver receives only the frequencies it is designed to reproduce, resulting in clearer sound reproduction and improved overall audio quality in your vehicle. This manual provides essential information for the proper installation, operation, and maintenance of your Audiotek CX4 crossover networks.

2. PRODUCT FEATURES

- **2-Way Crossover Design:** Optimally separates audio signals for woofers and tweeters.
- **High Power Handling:** Supports up to 600 Watts Maximum Power.
- **Frequency Crossover Point:** 3.5 kHz, ensuring clear distinction between high and low frequencies.
- **Adjustable Tweeter Level:** Features a selectable tweeter attenuation of 0dB, -3dB, or -6dB for fine-tuning high-frequency output.
- **Durable Construction:** Housed in a robust steel casing with a transparent plexiglass base, allowing visibility of internal components.
- **Compact Design:** Small and compact form factor for flexible installation in various vehicle spaces.

3. SAFETY INFORMATION

Please read all instructions carefully before installation. Incorrect installation can lead to damage to the product, your vehicle's electrical system, or personal injury.

- Always disconnect the vehicle's battery negative terminal before starting any electrical work.
- Ensure all wiring connections are secure and properly insulated to prevent short circuits.
- Do not mount the crossover in locations where it may be exposed to moisture, excessive heat, or direct

sunlight.

- If you are unsure about any part of the installation process, consult a professional car audio installer.
- Use appropriate gauge wiring for all connections to handle the power output.

4. PACKAGE CONTENTS

- 2 x Audiotek CX4 2-Way Passive Crossover Networks

5. SETUP AND INSTALLATION

The Audiotek CX4 crossover networks are designed for straightforward integration into your car audio system. Follow these general steps for installation.

5.1. Mounting Location

Choose a dry, secure location within your vehicle that is protected from direct sunlight, extreme temperatures, and moisture. The compact size of the CX4 allows for flexible placement. Ensure there is adequate ventilation around the unit.

5.2. Wiring Connections

The CX4 features clearly labeled terminals for input, woofer output, and tweeter output. Refer to the diagram below for proper wiring.



Image 1: Close-up view of the Audiotek CX4 passive crossover network, showing the input, woofer, and tweeter terminals. The transparent plexiglass cover allows visibility of the internal components, including the red coils and yellow capacitor.

1. **Input (Eingang):** Connect the audio signal from your amplifier's full-range output to the "INPUT" terminals on the crossover. Ensure correct polarity (+ to + and - to -).
2. **Woofer Output (Tiefton):** Connect your woofer speaker to the "WOOFER" terminals. Maintain correct

polarity.

3. **Tweeter Output (Hochton):** Connect your tweeter speaker to the "TWEETER" terminals. Maintain correct polarity.

5.3. Tweeter Level Adjustment

The CX4 allows you to adjust the tweeter output level to match your system and listening preferences. There are three selectable settings:

- **0dB:** Standard tweeter output.
- **-3dB:** Slightly reduced tweeter output.
- **-6dB:** Further reduced tweeter output.

Select the desired setting by moving the jumper or switch located near the tweeter terminals. Experiment with these settings to achieve the best balance between your woofers and tweeters.



Image 2: Detailed view of the Audiotek CX4 crossover, highlighting the tweeter level adjustment jumpers (0dB, -3dB, -6dB) and the capacitor.

After all connections are made, double-check all wiring for correct polarity and secure connections before reconnecting the vehicle's battery.

6. OPERATION

The Audiotek CX4 is a passive crossover, meaning it does not require external power to operate. Once correctly

installed and wired, it will automatically filter the audio signal from your amplifier, sending the appropriate frequencies to your connected woofers and tweeters.

The crossover point of 3.5 kHz ensures that frequencies below this point are directed to the woofer, and frequencies above are directed to the tweeter. This optimized distribution of sound frequencies enhances the clarity and definition of your car audio system.

7. MAINTENANCE

The Audiotek CX4 crossover networks require minimal maintenance.

- Keep the unit clean and free from dust and debris. Use a soft, dry cloth for cleaning.
- Periodically check all wiring connections to ensure they remain secure and free from corrosion.
- Avoid exposing the unit to liquids or extreme temperatures.

8. TROUBLESHOOTING

If you experience issues with your Audiotek CX4 crossover networks, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No sound from speakers	Incorrect wiring; loose connections; amplifier issue; speaker malfunction.	Check all wiring connections for correct polarity and tightness. Verify amplifier and speakers are functioning correctly.
Distorted or unclear sound	Incorrect tweeter level setting; damaged speaker; amplifier clipping; incorrect wiring.	Adjust tweeter level (0dB, -3dB, -6dB). Inspect speakers for damage. Ensure amplifier gain is set correctly. Re-check wiring.
One speaker not working	Loose connection to that speaker; faulty speaker; faulty crossover channel.	Check connections to the non-working speaker. Test the speaker with a known good source. If problem persists, the crossover or speaker may be faulty.

If troubleshooting steps do not resolve the issue, please contact Audiotek customer support or a qualified car audio technician.

9. SPECIFICATIONS

Feature	Specification
Model	CX4
Type	2-Way Passive Crossover Network
Maximum Power Handling	600 Watts
Number of Channels	2
Frequency Crossover Point	3.5 kHz
Tweeter Attenuation	0dB, -3dB, -6dB selectable

Feature	Specification
Mounting Type	Surface Mount
Housing Material	Steel with transparent plexiglass base

10. WARRANTY AND SUPPORT

Audiotek products are manufactured to high-quality standards. For warranty information or technical support, please refer to the documentation provided with your purchase or visit the official Audiotek website. Keep your proof of purchase for any warranty claims.