

## HERTZ MLCX-2-TW3

# HERTZ Mille Legend Series MLCX-2-TW3 2-Way Crossover Set Instruction Manual

Model: MLCX-2-TW3

## 1. INTRODUCTION

This instruction manual provides comprehensive guidance for the installation, operation, and maintenance of your HERTZ Mille Legend Series MLCX-2-TW3 2-Way Crossover Set. Please read this manual thoroughly before attempting any installation or operation to ensure proper functionality and to maximize the performance of your audio system. Retain this manual for future reference.

## 2. PRODUCT OVERVIEW

The HERTZ MLCX-2-TW3 is a high-performance 2-way passive crossover designed for car audio systems. It facilitates the creation of a bi-amplified system, allowing separate amplification channels for the woofer and tweeter. This configuration enhances power delivery and optimizes the performance of the MLK 1650.3 Legend system components. The crossover features advanced controls for fine-tuning the frequency response to match various vehicle acoustics and speaker placements.



Figure 1: HERTZ MLCX-2-TW3 Crossover, top view with internal components.

## 3. KEY FEATURES

- **Bi-Amplification Capability:** Allows connection of two separate amplifier channels to drive woofer and tweeter independently, enhancing system power and performance.
- **Mid-Contour Control:** A two-position selector for managing the woofer cut-off frequency, enabling fine-tuning of the system's frequency response.
- **Hi-Contour Control:** A two-position selector for managing the tweeter cut-off frequency, allowing adjustment to suit different car acoustics and speaker placements.
- **Hi-Boost Control:** Selectable switch to improve the linearity of tweeter emission above 10kHz, particularly useful when tweeters are not positioned on-axis with the listener.
- **High-Quality Components:** Features bi-metallized 160V polyester film capacitors with ultra-low DF for sound transparency, air wound inductors with pure copper-wire for high saturation threshold and low losses, and high power rating wirewound resistors for stability.
- **Robust Construction:** Designed for durability and reliable performance in automotive environments.

## 4. SETUP AND INSTALLATION

---

Proper installation is crucial for optimal performance. It is recommended that installation be performed by a qualified professional. Ensure the vehicle's battery is disconnected before beginning any wiring.

### 4.1 Wiring Connections

The MLCX-2-TW3 crossover is designed to integrate into a bi-amplified system. This means separate amplifier channels will connect to the crossover for the woofer and tweeter sections.

- **Amplifier Input:** Connect the dedicated amplifier channels for the woofer and tweeter to the respective input terminals on the crossover.
- **Woofer Output:** Connect the woofer speaker to the designated woofer output terminals.
- **Tweeter Output:** Connect the tweeter speaker to the designated tweeter output terminals.

Ensure all connections are secure and properly insulated to prevent short circuits.



Figure 2: Crossover showing connection terminals.

## 4.2 Control Adjustments

The MLCX-2-TW3 features several controls to tailor the sound to your preference and vehicle's acoustics.

- **Mid-Contour:** This two-position selector adjusts the woofer's cut-off frequency. Experiment with both positions to find the setting that best integrates the woofer with the mid-range frequencies in your specific vehicle environment.
- **Hi-Contour:** Similar to Mid-Contour, this two-position selector adjusts the tweeter's cut-off frequency. Use this to fine-tune the high-frequency response, considering speaker placement and desired sound characteristics.
- **Hi-Boost:** Activate this switch if your tweeters are not directly aimed at the listening position (off-axis). It provides a boost above 10kHz to compensate for high-frequency roll-off, ensuring a more linear tweeter emission.

Adjust these controls incrementally and listen carefully to the changes in sound reproduction to achieve your preferred audio balance.



Figure 3: Crossover with visible adjustment switches.

## 5. OPERATING INSTRUCTIONS

Once installed and configured, the MLCX-2-TW3 operates passively, dividing the audio signal between the woofer and tweeter based on the selected crossover points. The primary operation involves setting the Mid-Contour, Hi-Contour, and Hi-Boost switches during the initial setup phase to achieve the desired sound profile. No further user interaction is typically required during normal operation.

- Ensure all audio components (head unit, amplifiers) are powered off before making any adjustments to the crossover switches.
- After making adjustments, power on your audio system and evaluate the sound. Repeat adjustments as necessary until optimal sound is achieved.

## 6. MAINTENANCE

The HERTZ MLCX-2-TW3 crossover is designed for long-term, maintenance-free operation. No specific user maintenance is required beyond ensuring clean and secure connections.

- Keep the crossover free from dust and moisture.
- Periodically check wiring connections for tightness and corrosion.
- Avoid exposing the unit to extreme temperatures or direct sunlight for extended periods.

## 7. TROUBLESHOOTING

If you experience issues with your MLCX-2-TW3 crossover, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
No sound from woofer or tweeter	Loose or incorrect wiring connection. Amplifier not powered on or faulty.	Check all wiring connections to the crossover and speakers. Verify amplifier power and functionality.
Distorted sound	Incorrect gain settings on amplifier. Damaged speaker. Crossover settings not optimal.	Adjust amplifier gain settings. Inspect speakers for damage. Re-evaluate Mid-Contour and Hi-Contour switch positions.
Imbalanced sound (e.g., too much treble)	Hi-Contour or Hi-Boost settings are too aggressive for the listening environment.	Adjust the Hi-Contour switch. If Hi-Boost is active, try deactivating it to see if the balance improves.

If problems persist after attempting these solutions, contact HERTZ customer support or a qualified car audio technician.

## 8. SPECIFICATIONS

Specification	Detail
Model	MLCX-2-TW3
Component Type	2-Way Passive Crossover
Power Handling (Peak)	300 W
Woofer Crossover	Lo-pass 6 dB/Oct.
Tweeter Crossover	Hi-pass 12 dB/Oct.
Cut-off Frequency	2.5 kHz (Mid/Hi-Cont. = ON)
Tweeter Level Adjustment	+2 / 0 / -2 dB
Dimensions (W x H x D)	7.67 x 4.68 x 1.61 inches (195 x 119 x 41 mm)
Weight	1.26 lbs (0.57 kg)
UPC	8018823113960

*Note: Specifications are subject to change without notice for product improvement.*



Figure 4: Product label with specifications and compliance information.

## 9. WARRANTY AND SUPPORT

### 9.1 Limited Warranty

This HERTZ product is covered by a limited warranty. Please refer to the warranty card included with your product or visit the official HERTZ website for detailed terms and conditions regarding warranty coverage, duration, and claims procedures. Keep your proof of purchase for warranty validation.

### 9.2 Compliance Information

This item complies with US Federal Motor Vehicle Safety Standard 218 (FMVSS 218) (DOT FMVSS No. 218 Certified).

### 9.3 Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact HERTZ customer support through their official website or authorized service centers. Provide your product model number (MLCX-2-TW3) and proof of purchase when seeking support.