

Ashly XR-1001

Ashly XR-1001 Crossover Instruction Manual

MODEL: XR-1001

Premium Stereo 2-Way / Mono 3-Way Crossover

1. Product Overview

The Ashly XR-1001 is a high-performance electronic crossover designed for professional audio applications. It offers flexible configuration as a stereo 2-way or mono 3-way crossover, providing precise frequency division for optimal sound system performance. Its robust 1U metal chassis ensures durability and easy integration into standard equipment racks.



Figure 1: Front view of the Ashly XR-1001 Crossover.

Key Features:

- 24dB/Octave Slopes for steep and accurate frequency separation.
- Variable Filter Response allows tuning for Linkwitz-Riley or other filter types.
- Output Mute Switches for individual band control.
- Balanced Inputs and Outputs (XLR and 1/4 inch) for professional connectivity.
- 2Hz Third Order High Pass Filters to protect low-frequency drivers.
- Recessed switch on the front panel with LED indicator for normal or divide-by-ten frequency selection.

2. Setup

2.1 Unpacking and Inspection

Carefully remove the XR-1001 from its packaging. Inspect the unit for any signs of damage that may have occurred during shipping. Retain the original packaging for future transport or storage.

2.2 Power Connection

Connect the supplied AC power cord to the IEC inlet on the rear panel of the unit and then to a suitable AC power outlet. Ensure the power switch is in the OFF position before connecting. The unit operates on 100-240V AC, 50/60Hz.

2.3 Audio Connections

The XR-1001 features balanced XLR and 1/4 inch TRS connections for both inputs and outputs. Proper cabling is essential for optimal performance and noise rejection.



Figure 2: Rear panel showing input and output connections.

- **Inputs:** Connect your audio source (e.g., mixer output) to the INPUT jacks using either XLR or 1/4 inch TRS cables. The inputs are active balanced.
- **Outputs:** Connect the LOW, HIGH, and MID (if in mono 3-way mode) outputs to the inputs of your power amplifiers. Outputs are active servo balanced.
- **Mono 3-Way Input:** For mono 3-way operation, use the designated mono 3-way input.

2.4 Rack Mounting

The XR-1001 is designed for standard 19-inch rack mounting and occupies 1U of rack space. Ensure adequate ventilation around the unit to prevent overheating.

3. Operating Instructions

The front panel of the XR-1001 provides all necessary controls for configuring and adjusting the crossover. Familiarize yourself with these controls before operation.



Figure 3: Front panel controls for each channel.

3.1 Power On/Off

Press the POWER switch on the rear panel to turn the unit on or off. The blue LED on the front panel will illuminate when power is on.

3.2 Mode Selection (Stereo 2-Way / Mono 3-Way)

A recessed switch on the front panel (labeled 'Mode') allows selection between Stereo 2-Way and Mono 3-Way operation. Use a small, non-conductive tool to toggle this switch. An LED indicator will show the selected mode.

- **Stereo 2-Way:** Divides the audio signal into two frequency bands (Low and High) for each stereo channel.
- **Mono 3-Way:** Divides a mono audio signal into three frequency bands (Low, Mid, and High).

3.3 Input Level Control

Adjust the INPUT LEVEL knob for each channel to match the input signal from your source. Aim for the signal

present LED to illuminate consistently without clipping (red LED).

3.4 Crossover Frequency Adjustment

The FREQUENCY knobs determine the crossover points between the frequency bands. The range switch (Normal/Divide by 10) allows for fine-tuning across a wide spectrum.

- **Normal:** Standard frequency range.
- **Divide by 10:** Divides the selected frequency by 10, allowing for lower crossover points, particularly useful for subwoofer integration.

3.5 Output Level Control

Each output band (Low, Mid, High) has an independent OUTPUT LEVEL control. Use these to balance the levels of each frequency band to your power amplifiers and speakers.

3.6 Output Mute Switches

Individual MUTE switches are provided for each output band, allowing you to temporarily silence specific frequency ranges for system setup or troubleshooting.

3.7 Response Control

The RESPONSE control allows you to vary the filter characteristics, enabling you to achieve different sonic results, including Linkwitz-Riley alignment.

3.8 2Hz Third Order High Pass Filters

The integrated 2Hz third-order high-pass filters protect your low-frequency drivers from extreme sub-sonic information, improving system stability and longevity.

4. Maintenance

The Ashly XR-1001 is designed for reliable operation with minimal maintenance. Follow these guidelines to ensure its longevity:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid abrasive cleaners, solvents, or liquids that could damage the finish or internal components.
- **Ventilation:** Ensure that the ventilation slots are not obstructed. Proper airflow is crucial to prevent overheating.
- **Environment:** Operate the unit in a dry, dust-free environment with stable temperature and humidity.
- **Cable Management:** Periodically check all audio and power cables for secure connections and signs of wear.

5. Troubleshooting

If you encounter issues with your XR-1001, refer to the following common troubleshooting steps:

- **No Power:**
 - Check if the power cord is securely connected to both the unit and the AC outlet.
 - Verify that the AC outlet is live.
 - Ensure the power switch on the rear panel is in the ON position.
- **No Audio Output:**
 - Confirm that the audio source is active and sending a signal to the XR-1001 inputs.
 - Check all input and output cable connections.

- Ensure that the individual output MUTE switches are disengaged (not muted).
- Verify that the INPUT LEVEL and OUTPUT LEVEL controls are not set to minimum.
- Check the power amplifiers and speakers connected to the outputs.

- **Distorted Audio:**

- Reduce the INPUT LEVEL if the clip LED is frequently illuminating.
- Ensure that the output levels are not overdriving the inputs of your power amplifiers.
- Check for faulty cables or connections.

- **Incorrect Crossover Points:**

- Verify the position of the frequency range switch (Normal/Divide by 10).
- Adjust the FREQUENCY knobs to the desired crossover points.

If the problem persists after performing these checks, contact Ashly customer support or a qualified service technician.

6. Specifications

Feature	Specification
Brand	Ashly
Model Name	XR 1001
Model Number	XR-1001
Item Dimensions (L x W x H)	24 x 14.25 x 2.6 inches
Item Weight	7 Pounds
Filter Slopes	24 dB/Octave
High Pass Filters	2Hz Third Order
Connections	XLR and 1/4 Inch
Chassis	1U Metal

7. Warranty and Support

For warranty information, technical support, or service inquiries, please refer to the official Ashly website or contact your authorized Ashly dealer. Keep your purchase receipt as proof of purchase for warranty claims.

Official Ashly Website: www.ashly.com