Behringer HD400

Behringer MicroHD HD400 Ultra-Compact 2-Channel Hum Destroyer User Manual

Model: HD400 | Brand: Behringer

INTRODUCTION

The Behringer MicroHD HD400 is an ultra-compact 2-channel hum destroyer designed to eliminate AC hum and noise from audio signals. This passive device effectively breaks ground loops while maintaining high sonic quality, automatically converting unbalanced signals to balanced without signal loss. It features two 1/4" TRS inputs and outputs, making it suitable for both mono and stereo applications. Its robust construction ensures durability and long-term reliability.

Key Features:

- Removes AC hum and noise from audio signals.
- Breaks ground loops safely without compromising audio quality.
- Automatically converts unbalanced to balanced signals.
- Equipped with two 1/4" TRS inputs and outputs for versatile connectivity.
- Features high-quality components and rugged construction for extended life.

WHAT'S IN THE BOX

- 1 x Behringer MicroHD HD400 Ultra-Compact 2-Channel Hum Destroyer

Please ensure all components are present upon unboxing. If any items are missing or damaged, contact your retailer or Behringer support.
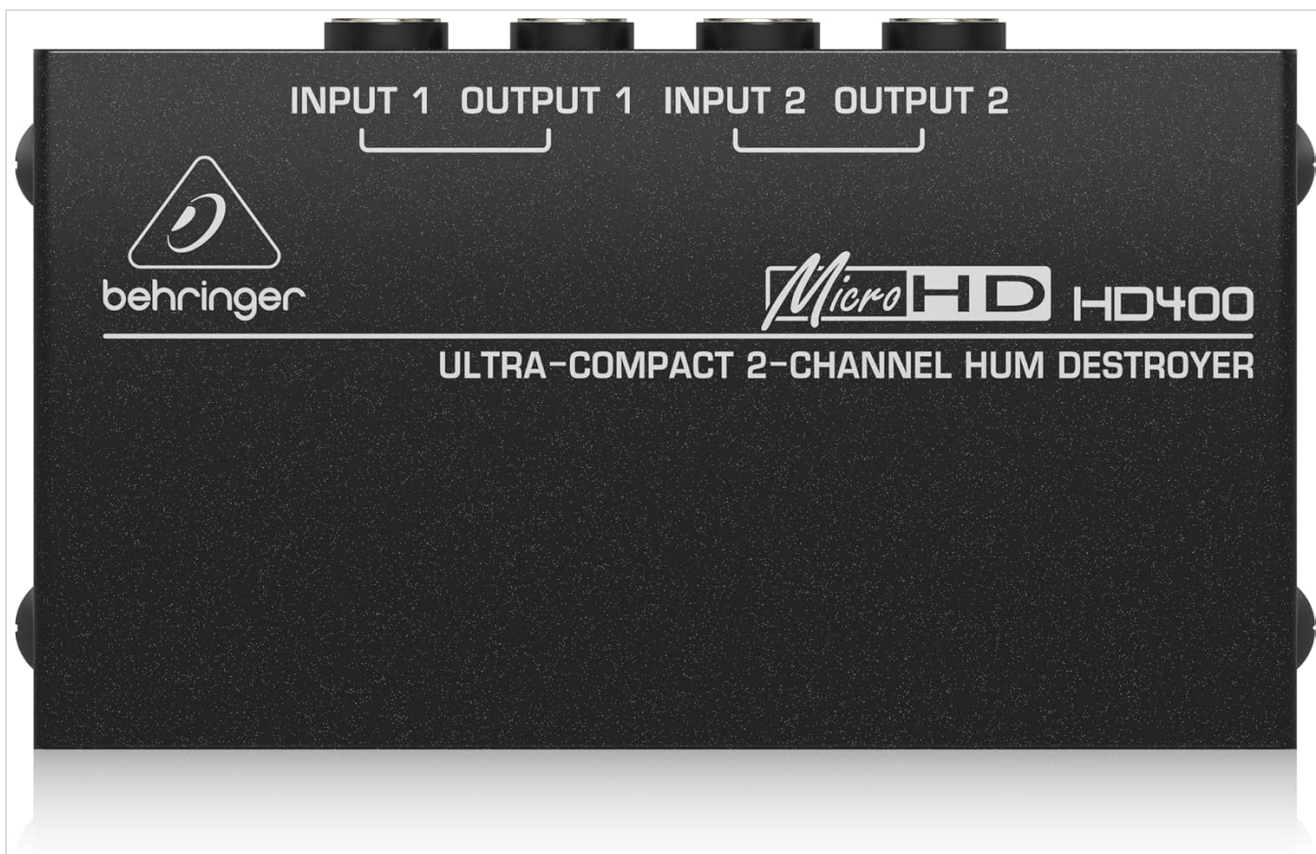
PRODUCT OVERVIEW

Figure 1: Front view of the Behringer MicroHD HD400, showing the Behringer logo, "MicroHD HD400 ULTRA-COMPACT 2-CHANNEL HUM DESTROYER" text, and the input/output labels for channels 1 and 2.

Figure 2: Side view of the Behringer MicroHD HD400, illustrating the 1/4" TRS input and output jacks for both channels. The labels "INPUT 1", "OUTPUT 1", "INPUT 2", and "OUTPUT 2" are clearly visible above their respective jacks.

Figure 3: Angled view of the Behringer MicroHD HD400, showcasing its compact size and robust metal casing. The top panel displays the product name and branding, while the side reveals the input/output jacks.

Setup

The Behringer MicroHD HD400 is a passive device, meaning it does not require external power. Its setup involves integrating it into your audio signal chain to eliminate ground loop hum and noise.

Connection Steps:

1. **Identify the Source of Hum:** Determine which part of your audio setup is introducing the hum. This is typically a ground loop issue between two connected devices.

2. **Connect Input:** Take the 1/4" TRS output cable from the device that is feeding the signal (e.g., mixer, instrument, loop station) and connect it to the "INPUT 1" or "INPUT 2" jack on the HD400. For stereo signals, use both "INPUT 1" and "INPUT 2".

3. **Connect Output:** Connect a 1/4" TRS cable from the corresponding "OUTPUT 1" or "OUTPUT 2" jack on the HD400 to the input of the next device in your audio chain (e.g., amplifier, PA system, recording interface). For stereo, use both "OUTPUT 1" and "OUTPUT 2".

4. **Verify Connections:** Ensure all cables are securely connected. The HD400 will automatically isolate the ground loop and convert unbalanced signals to balanced if necessary.

The compact size and passive nature of the HD400 allow for flexible placement within your setup, such as on a pedalboard or near the problematic audio connection.

Operating Instructions

The Behringer MicroHD HD400 is a plug-and-play device with no user-adjustable controls. Once correctly integrated into your audio signal path, it operates automatically to eliminate hum and noise.

- No power supply is required for operation.
- The device functions as a passive ground loop isolator and signal balancer.
- Ensure proper cable connections as described in the "Setup" section for optimal performance.

The HD400 is designed for transparent operation, meaning it should not color or degrade your audio signal while effectively removing unwanted noise.

MAINTENANCE

The Behringer MicroHD HD400 requires minimal maintenance due to its passive design and robust construction.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid using abrasive cleaners, solvents, or waxes, as these can damage the finish.
- **Storage:** When not in use for extended periods, store the unit in a dry, dust-free environment.
- **Handling:** While rugged, avoid dropping the unit or subjecting it to excessive force, which could damage internal components or connectors.
- **Environmental Conditions:** Do not expose the unit to extreme temperatures, humidity, or direct sunlight.

TROUBLESHOOTING

If you experience issues with your Behringer MicroHD HD400, refer to the following troubleshooting steps:

- **Persistent Hum/Noise:**
  - Ensure the HD400 is correctly inserted into the signal path between the two devices causing the ground loop.
  - Check all cable connections for looseness or damage. Try different cables if possible.
  - Verify that the hum is indeed a ground loop issue. The HD400 is designed for ground loop isolation, not other types of noise (e.g., RF interference, faulty equipment).
  - If using multiple devices, try isolating them one by one to pinpoint the exact source of the ground loop.

- **No Audio Signal:**
  - Confirm that the input and output cables are connected to the correct jacks on the HD400 (e.g., Input 1 to Output 1, not Input 1 to Output 2).
  - Check the integrity of all audio cables.
  - Bypass the HD400 temporarily to see if the audio signal returns. If it does, the issue might be with the HD400 unit itself or its connections.

- **Signal Degradation (Loss of Highs/Lows):**
  - The HD400 is designed to be transparent. If you notice significant signal degradation, ensure you are using high-quality 1/4" TRS cables.
  - Verify that the input signal level is appropriate. While passive, extremely low or high impedance mismatches could theoretically affect performance, though this is rare for a ground loop isolator.

If these steps do not resolve the issue, contact Behringer customer support or a qualified technician.

Specifications

Brand	Behringer
Model Number	HD400
Item Weight	7.8 ounces (approx. 221 grams)
Product Dimensions (D x W x H)	4.08" x 2.25" x 1.26" (approx. 10.36 cm x 5.72 cm x 3.20 cm)
Number of Channels	2
Connectivity Technology	TRS (1/4" jacks)
Color	Silver
Power Requirement	Passive (No external power required)

Warranty and Support

Specific warranty details for the Behringer MicroHD HD400 are not provided in this manual. For information regarding warranty coverage, terms, and conditions, please refer to the warranty card included with your product or visit the official Behringer website.

For technical support, service, or further inquiries, please contact Behringer customer service through their official website or the contact information provided in your product packaging.