

## SAMSON MD2 PRO

# Samson MD2 Pro Stereo Passive Direct Box

MODEL: MD2 PRO

Brand: SAMSON

## Introduction

The Samson MD2 Pro Stereo Passive Direct Box is designed to provide high-quality signal connection solutions for various live sound and recording applications. This unit combines two premium direct boxes within a single, rugged chassis. It is ideal for converting unbalanced stereo line-level or instrument signals from sources such as keyboards, electronic drum kits, and acoustic-electric guitars into balanced signals suitable for professional audio equipment.

The MD2 Pro features two Samson STLX Mu-Metal shielded transformers, engineered to deliver an extended, flat frequency response with minimal distortion and superior protection against hum and RF interference. Its balanced outputs ensure clean signals, less susceptible to noise over long cable runs. Additional features include a 3-position attenuation switch for each input, a Stereo/Mono sum switch, and Thru jacks for signal routing flexibility.

## Key Features

- All-metal, impact-resistant design for durability.
- Dual Samson STLX Mu-Metal shielded transformers for optimal audio integrity.
- Stereo/Mono sum switch for flexible signal combining.
- Dual 3-position (0dB/-10dB/-20dB) attenuation switches for input level control.
- Dual Ground Lift switches to eliminate hum and ground loop noise.
- Dual 1/4" Inputs and Thru jacks for versatile connectivity.
- Dual balanced XLR outputs for professional connections.
- Passive operation requires no phantom power or batteries.

## Product Overview



Figure 1: Top view of the Samson MD2 Pro Stereo Passive Direct Box.



Figure 2: Input side of the MD2 Pro, showing 1/4" Input and Thru jacks, and attenuation switches for Left and Right channels.



Figure 3: Output side of the MD2 Pro, featuring Stereo/Mono sum switch, Ground Lift switches, and balanced XLR outputs for Left and Right channels.

### Controls and Connectors:

- **INPUT (1/4" Jack):** Connect your instrument or line-level source here.
- **THRU (1/4" Jack):** Provides a direct, unprocessed output of the input signal, allowing you to connect to an amplifier or monitor without affecting the main signal path.
- **ATTENUATION SWITCH (0dB/-10dB/-20dB):** Adjusts the input signal level to prevent overloading the direct box or the connected mixer/preamp. Use -10dB for line-level signals and -20dB for speaker-level signals.
- **BALANCED OUTPUT (XLR):** Provides a balanced, low-impedance output signal for connection to a mixer or audio interface.
- **GROUND LIFT SWITCH:** Disconnects the ground connection between the input and output to eliminate hum caused by ground loops.
- **STEREO/MONO SUM SWITCH:** Combines the Left and Right input signals into a single mono output, useful when a stereo source needs to be sent to a mono input.

### Setup

1. **Connect Input Source:** Connect your instrument (e.g., guitar, bass, keyboard) or line-level audio source to the 1/4" INPUT jack(s) on the MD2 Pro. For stereo sources, use both Left and Right inputs.
2. **Connect to Amplifier/Monitor (Optional):** If you wish to monitor your sound locally, connect the 1/4" THRU jack(s) to your instrument amplifier or stage monitor.
3. **Connect to Mixer/Audio Interface:** Connect the XLR BALANCED OUTPUT(s) to the microphone input(s) of your mixer or audio interface using standard XLR cables.
4. **Set Attenuation:** Adjust the 3-position attenuation switch(es) based on your input signal level. Start at 0dB for most instrument-level signals. If the signal is too hot (causing distortion), switch to -10dB or -20dB.
5. **Set Stereo/Mono Sum:** For stereo sources, leave the switch in the STEREO position. If you need to combine the Left and Right signals into a single mono output (e.g., for a mono PA system input), switch to MONO.
6. **Address Ground Loops:** If you experience hum or buzzing, engage the GROUND LIFT switch(es) to break potential ground loops. Experiment with lifting the ground on one or both channels if necessary.

### Operating Instructions

The Samson MD2 Pro is a passive device, meaning it does not require external power for operation. Once

connected as described in the Setup section, its primary function is to convert unbalanced, high-impedance signals to balanced, low-impedance signals, making them suitable for long cable runs and professional mixer inputs.

- **Signal Conversion:** The internal transformers automatically convert the signal type and impedance.
- **Level Matching:** Use the attenuation switches to ensure the signal level sent to your mixer is appropriate, preventing clipping or distortion.
- **Ground Loop Elimination:** The Ground Lift switches are crucial for maintaining a clean signal, especially in complex setups with multiple grounded devices.
- **Stereo to Mono Summing:** The Stereo/Mono sum switch provides a convenient way to manage stereo sources for mono applications without requiring additional mixing equipment.

Video 1: An overview of the Samson MD2 Pro Stereo Passive Direct Box, demonstrating its features and applications.

## Maintenance

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- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid abrasive cleaners or solvents.
- **Storage:** Store the MD2 Pro in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** While built with a rugged, all-metal chassis, avoid dropping or subjecting the unit to severe impacts to prevent internal damage.
- **Cable Management:** Ensure all cables are properly connected and not under undue strain to prevent damage to the connectors.

## Troubleshooting

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- **No Sound:**
  - Check all cable connections to ensure they are secure.
  - Verify that the input source is active and producing a signal.
  - Ensure the attenuation switches are not set too high, potentially cutting off the signal.
  - Confirm the mixer or audio interface input is correctly configured and its gain is set appropriately.
- **Hum or Buzzing Noise:**
  - Engage the GROUND LIFT switch(es) to break ground loops. Try lifting one channel at a time if using both.
  - Ensure all audio cables are in good condition and properly shielded.
  - Check for nearby electrical interference sources (e.g., power supplies, fluorescent lights).
- **Distorted Sound:**
  - Adjust the attenuation switch(es) to a higher dB setting (-10dB or -20dB) to reduce the input signal level.
  - Lower the output level of your instrument or line-level source.
  - Check the input gain settings on your mixer or audio interface to ensure they are not overdriven.

## Specifications

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|---------------------------|---|
| <b>Model Number</b>       | MD2 PRO   |
| <b>Item Weight</b>        | 1.03 pounds   |
| <b>Product Dimensions</b> | 7 x 2 x 7 inches  |
| <b>Compatible Devices</b> | Keyboard, Electronic Drum Kit, Acoustic-Electric Guitar |
| <b>Connector Type</b>     | XLR, 1/4" Jack  |
| <b>Color</b>              | Black   |
| <b>Cable Type</b>         | XLR   |

## Warranty and Support

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For warranty information and technical support, please refer to the official Samson Technologies website or contact their customer service directly. Keep your purchase receipt as proof of purchase for any warranty claims.

Samson Technologies is dedicated to providing high-performance audio gear. For further assistance or to explore other products, visit [www.samsontech.com](http://www.samsontech.com).