

Behringer B2ProPk

Behringer B-2 Pro Dual-Diaphragm Condenser Microphone User Manual

Model: B2ProPk

1. INTRODUCTION

Thank you for choosing the Behringer B-2 Pro Dual-Diaphragm Condenser Microphone. This versatile microphone is designed for professional audio recording in various applications, including vocals, instruments, and ambient sound capture. Its robust construction and flexible features make it an excellent choice for home studios, project studios, and professional recording environments. This manual provides essential information for the proper setup, operation, and maintenance of your B-2 Pro microphone.

2. IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions thoroughly before using the product.
- Keep these instructions for future reference.
- Heed all warnings and follow all instructions.
- Do not use this apparatus near water or moisture.
- Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Use only attachments/accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- This microphone requires +48V phantom power to operate. Ensure your audio interface or mixer

provides phantom power and that it is enabled before connecting the microphone.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package. If any items are missing or damaged, please contact your retailer.

- Behringer B-2 Pro Dual-Diaphragm Condenser Microphone
- Custom Shockmount
- Windscreen
- Durable Aluminum Carrying Case
- Tripod Microphone Stand
- XLR Cable



Image: Behringer B-2 Pro microphone with its shockmount, windscreen, and XLR cable, as typically included in the package.

4. PRODUCT FEATURES

The B-2 Pro is engineered to deliver high-quality audio performance with exceptional versatility.

- **Dual-Diaphragm Design:** Enables selection of multiple polar patterns for diverse recording applications.
- **Selectable Polar Patterns:** Choose between Cardioid, Omnidirectional, and Figure-8 patterns to optimize sound capture for different sources and environments.
- **Switchable 10dB Pad:** Attenuates input signals by 10dB, allowing the microphone to handle very loud sound sources without distortion. Ideal for drums, guitar amplifiers, or brass instruments.
- **Low-Cut Filter:** Reduces unwanted low-frequency rumble or proximity effect, improving clarity in recordings.
- **Gold-Plated XLR Connector:** Ensures signal integrity and corrosion resistance.
- **Robust Construction:** Designed for durability and reliable performance in studio settings.

5. SETUP

1. **Unpack the Microphone:** Carefully remove the B-2 Pro microphone and its accessories from the aluminum carrying case.
2. **Assemble the Microphone Stand:** Extend the tripod legs of the included microphone stand for stability. Adjust the height as needed.
3. **Attach the Shockmount:** Screw the custom shockmount onto the top of the microphone stand. Ensure it is securely fastened.
4. **Mount the Microphone:** Gently insert the B-2 Pro microphone into the shockmount. The shockmount's elastic suspension helps isolate the microphone from vibrations and handling noise.
5. **Attach the Windscreen:** Place the foam windscreen over the microphone capsule to reduce plosives (harsh "p" and "b" sounds) and protect the microphone from dust.
6. **Connect the XLR Cable:** Connect one end of the supplied XLR cable to the microphone's XLR output. Connect the other end to an XLR input on your audio interface, mixer, or preamplifier.
7. **Enable Phantom Power:** The B-2 Pro is a condenser microphone and requires +48V phantom power to operate. Ensure that phantom power is enabled on your audio interface or mixer **before** connecting the microphone to prevent potential damage.




Image: Illustration of the B-2 Pro microphone setup, including stand, shockmount, and cable connection to an audio interface.

6. OPERATING THE B-2 PRO

6.1. Polar Pattern Selection

The B-2 Pro features a switch on the microphone body to select between three polar patterns. Adjust this switch according to your recording needs.

- **Cardioid:** This pattern picks up sound primarily from the front of the microphone, rejecting sound from the sides and rear. It is ideal for isolating a single sound source, such as a vocalist or an instrument, in a live or studio setting.
- **Omnidirectional:** This pattern picks up sound equally from all directions. It is suitable for capturing room ambiance, group vocals, or multiple instruments simultaneously.
- **Figure-8:** This pattern picks up sound equally from the front and rear of the microphone, while

rejecting sound from the sides. It is commonly used for recording two vocalists facing each other, or for capturing a specific instrument while minimizing room reflections from the sides.



Image: Visual representation of the three selectable polar patterns: Cardioid, Omnidirectional, and Figure-8, showing their sound pickup characteristics.

6.2. 10dB Pad Switch

The B-2 Pro includes a switchable 10dB pad. When engaged, this pad reduces the microphone's output level by 10 decibels.

- **Engage the Pad:** Use the 10dB pad when recording very loud sound sources, such as drums, loud guitar amplifiers, or brass instruments, to prevent input clipping at your audio interface or mixer.
- **Disengage the Pad:** For quieter sources like vocals or acoustic guitars, disengage the pad to ensure a healthy signal level.

6.3. Low-Cut Filter Switch

The low-cut filter (also known as a high-pass filter) reduces low-frequency content below a certain point.

- **Engage the Filter:** Use the low-cut filter to reduce unwanted rumble, handling noise, or proximity effect (an increase in bass response when a microphone is close to the sound source). This can improve clarity, especially for vocals and acoustic instruments.
- **Disengage the Filter:** For sources where full low-frequency response is desired, such as bass instruments or kick drums, disengage the filter.

6.4. Microphone Placement

Proper microphone placement is crucial for optimal sound quality. Experiment with distance and angle to achieve the desired tone.

- **Vocals:** Start with the microphone 6-12 inches from the vocalist, slightly off-axis to reduce plosives. Use the cardioid pattern.
- **Acoustic Guitar:** Aim the microphone towards the 12th fret at a distance of 6-18 inches. Cardioid pattern is generally preferred.
- **Room Ambiance:** Use the omnidirectional pattern and place the microphone in the center of the room or at a distance that captures the desired room sound.
- **Two Vocalists:** Use the Figure-8 pattern with vocalists positioned on opposite sides of the microphone.

7. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the microphone body. Do not use liquid cleaners or solvents, as they may damage the finish or internal components.
- **Storage:** When not in use, store the B-2 Pro microphone in its aluminum carrying case to protect it from dust, moisture, and physical damage. Avoid extreme temperatures and humidity.
- **Handling:** Always handle the microphone with care. Avoid dropping it or subjecting it to strong impacts.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No sound output	No phantom power (+48V) Faulty XLR cable Incorrect input selection on interface/mixer Microphone not connected	Ensure +48V phantom power is enabled on your audio device. Test with a different XLR cable. Verify the correct input channel is selected and gain is adjusted. Ensure the XLR cable is securely connected to both the microphone and the audio device.
Distorted sound	Input signal too hot (clipping) 10dB pad not engaged for loud sources	Reduce the gain on your audio interface/mixer. Engage the 10dB pad switch on the microphone if recording loud sources. Increase distance from the sound source.
Hum or noise	Ground loop issue Interference from other electronic devices Faulty cable	Ensure all audio equipment is plugged into the same power outlet or power conditioner. Move the microphone and cables away from power supplies, monitors, or other electronic devices. Test with a different XLR cable.

9. SPECIFICATIONS

Brand	Behringer
Model Number	B2ProPk
Type	Condenser Microphone
Polar Patterns	Cardioid, Omnidirectional, Figure-8 (Switchable)
Switchable Pad	-10 dB
Low-Cut Filter	Yes
Connectivity Technology	XLR
Power Requirement	+48V Phantom Power
Item Weight	1 Pounds (0.45 kg)
Compatible Devices	Audio Interfaces, Mixers, Preamplifiers with XLR input
Supported Software	Any DAW with microphone input
Operating System Compatibility	Windows, macOS
Maximum Sample Rate	192 KHz

Note: Specifications are subject to change without notice.

10. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Behringer website or contact your local Behringer distributor. Keep your purchase receipt as proof of purchase for any warranty claims.

Behringer Official Website: www.behringer.com

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