Mackie EM-91C

Mackie EM-91C Large-Diaphragm Condenser Microphone User Manual

Your comprehensive guide to setting up, operating, and maintaining your Mackie EM-91C microphone.

1. Product Overview

The Mackie EM-91C is a large-diaphragm condenser microphone designed for immaculate sound reproduction and reliable performance in studio environments. It is suitable for capturing vocals, stringed instruments, and room ambiance with warmth and brilliance. Its robust "built-like-a-tank" construction ensures durability.



Image: Front view of the Mackie EM-91C Large-Diaphragm Condenser Microphone.



Image: The Mackie EM-91C microphone set up with an audio interface, headphones, and a laptop, demonstrating a typical recording environment.

2. What's in the Box

Your Mackie EM-91C package includes the following components:

- Mackie EM-91C Large-Diaphragm Condenser Microphone
- Shockmount
- XLR Cable



Image: All components included in the Mackie EM-91C package: the microphone, its shockmount, and an XLR cable.

3. Setup

Follow these steps to set up your Mackie EM-91C microphone:

1. **Attach the Shockmount:** Securely attach the included shockmount to a microphone stand. The shockmount helps to isolate the microphone from vibrations and handling noise.
2. **Mount the Microphone:** Carefully place the EM-91C microphone into the shockmount. Ensure it is firmly seated.
3. **Connect the XLR Cable:** Connect one end of the provided XLR cable to the XLR output at the bottom of the microphone. Connect the other end of the XLR cable to an audio mixer or audio interface that provides phantom power. The EM-91C is a condenser microphone and requires +48V phantom power to operate.
4. **Connect to Device:** Connect your audio mixer or interface to your recording device (e.g., computer, digital recorder) as per its instructions.



Image: The Mackie EM-91C microphone securely mounted within its shockmount, ready for attachment to a stand.



Image: A close-up view of the bottom of the Mackie EM-91C microphone, highlighting its XLR connection port.

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Video: A product overview video demonstrating the Mackie EM-91C microphone and its features.

4. Operating Instructions

The EM-91C features a cardioid polar pattern, which means it is most sensitive to sound coming from the front and rejects sound from the sides and rear. This is ideal for isolating the desired sound source and minimizing background noise.

- **Microphone Placement:** For vocals or instruments, position the microphone directly in front of the sound source. Experiment with distance to achieve the desired tone and presence. Closer proximity generally results in a warmer sound (proximity effect).
- **Gain Staging:** Adjust the gain on your audio mixer or interface to achieve an optimal recording level. Aim for levels that are strong enough to be clear but do not clip or distort.
- **Pop Filter Usage:** While the EM-91C is designed to minimize plosives, using an external pop filter is recommended for vocal recordings to further reduce harsh "P" and "B" sounds.

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Video: An overview of the Mackie EleMent series microphones, highlighting their features and applications.

5. Maintenance

To ensure the longevity and optimal performance of your EM-91C microphone:

- **Cleaning:** Use a soft, dry cloth to wipe down the microphone body. Avoid using liquid cleaners or solvents, as they can damage the finish or internal components.
- **Storage:** When not in use, store the microphone in a protective case or bag to prevent dust accumulation and physical damage.
- **Handling:** Always handle the microphone carefully. Avoid dropping it or subjecting it to strong impacts, which can affect its delicate internal capsule.

6. Troubleshooting

If you encounter issues with your Mackie EM-91C, consider the following common troubleshooting steps:

- **No Sound:**
  - Ensure phantom power (+48V) is enabled on your audio mixer or interface. Condenser microphones require this power to operate.
  - Check all XLR cable connections to ensure they are secure and properly seated.
  - Verify that the input gain on your mixer/interface is set appropriately.
- **Distorted Sound:**
  - Reduce the input gain on your audio mixer or interface. Overloading the microphone's input can cause distortion.
  - Ensure the microphone is not too close to the sound source, especially for loud sounds.
- **Excessive Noise/Hum:**
  - Check your XLR cable for damage or poor shielding. Try a different cable if possible.
  - Ensure all audio equipment is properly grounded.
  - Minimize electronic interference from other devices by keeping them away from the microphone and cables.

7. Specifications

Feature	Detail
Brand	Mackie
Model Name	EM-91C
Microphone Form Factor	Large Diaphragm
Polar Pattern	Unidirectional (Cardioid)
Connectivity Technology	XLR
Compatible Devices	Audio Mixer
Audio Sensitivity	78 dB
Signal-to-Noise Ratio	78 dB
Item Weight	7.4 ounces (0.21 Kilograms)
Product Dimensions	10.45 x 8.3 x 3.9 inches
Power Source	Corded Electric (requires phantom power)
Included Components	Shockmount, Cable
Country of Origin	China
Date First Available	January 16, 2020

8. Warranty and Support

For detailed warranty information and additional support, please refer to the official resources:

- **Official User Manual (PDF):** Download PDF Manual
- **Mackie Brand Store:** Visit the Official Mackie Store on Amazon
- **Protection Plans:** Extended protection plans are available for purchase to cover your product beyond the standard warranty. Options include 3-Year Protection Plan, 4-Year Protection Plan, and Complete Protect (monthly subscription).