

Electro-Voice RE320

Electro-Voice RE320 Large Diaphragm Dynamic Vocal Microphone User Manual

Model: RE320

1. INTRODUCTION

The Electro-Voice RE320 is a professional-grade large diaphragm dynamic microphone engineered for recording and sound reinforcement applications. It is designed to deliver exceptional detail, dynamic content, and natural tonal performance with extremely low noise. The RE320 is suitable for capturing vocals and a wide array of electric and acoustic instrument sources.

This manual provides essential information for the proper setup, operation, and maintenance of your RE320 microphone to ensure optimal performance and longevity.





Figure 1: Front view of the Electro-Voice RE320 Large Diaphragm Dynamic Vocal Microphone. This image shows the microphone's robust black casing and grille design.

2. SETUP

Proper setup is crucial for achieving the best audio quality from your RE320 microphone.

2.1 Unpacking and Inspection

Carefully remove the microphone from its packaging. Inspect the microphone for any signs of damage. Retain all packaging materials for future storage or transport.

2.2 Mounting the Microphone

The RE320 requires a microphone stand and a compatible microphone clip or shock mount (not included with all packages). Attach the microphone clip or shock mount securely to a microphone stand. Insert the RE320 into the clip or shock mount, ensuring it is firmly held.



Figure 2: The RE320 microphone attached to a stand with an XLR cable connected. This illustrates the typical setup for use.

2.3 Connecting to Audio Equipment

The RE320 features an XLR connector for balanced audio output. Connect one end of a standard XLR cable to the microphone's output and the other end to a microphone preamplifier, audio interface, or mixer.

- **XLR Connectivity:** Use a high-quality XLR (3-pin) cable for optimal signal integrity.
- **Preamplifier Requirement:** Dynamic microphones like the RE320 typically require a significant amount of gain from a preamplifier. Ensure your audio interface or mixer has sufficient clean gain. In some cases, an inline preamplifier (e.g., a Cloudlifter or Fethead) may be beneficial to boost the signal before it reaches your main preamp, especially if you experience low signal levels or noise at high gain settings.

3. OPERATING THE RE320

The RE320 is equipped with a unique Dual Personality switch, allowing it to adapt to different sound sources.

3.1 Dual Personality Switch

Located on the microphone body, this switch provides two distinct frequency response curves:

- **Position 1 (Default/Voice/Instrument):** This setting delivers a lively, natural tonal response suitable for vocals, electric guitars, acoustic instruments, and general sound reinforcement. It provides the RE320's characteristic clear and balanced sound.



Figure 3: A person speaking into the RE320 microphone, demonstrating its use for vocal applications.

- **Position 2 (Kick Drum):** This setting activates an "insta-kick" curve, specifically designed to enhance the low-frequency response and transient attack for kick drums. It provides a pre-equalized sound optimized for percussive bass instruments.



Figure 4: The RE320 microphone positioned inside a kick drum, illustrating its specialized application for bass percussion.

3.2 Microphone Placement

Experiment with microphone placement relative to the sound source to achieve the desired tone and minimize unwanted room reflections. The RE320's Variable-D pattern control helps minimize positional and off-axis tonal shifts, offering consistent sound even with slight movements.



Figure 5: The RE320 microphone positioned in front of a guitar amplifier, demonstrating its versatility for instrument recording.

4. MAINTENANCE

To maintain the performance and appearance of your RE320 microphone, follow these guidelines:

- **Cleaning:** Use a soft, dry cloth to wipe the microphone body. Avoid using liquid cleaners or solvents, as they may damage the finish or internal components.
- **Storage:** When not in use, store the microphone in its original packaging or a protective case to prevent dust accumulation and physical damage.
- **Environmental Conditions:** Avoid exposing the microphone to extreme temperatures, high humidity, or direct sunlight for extended periods.
- **Pop Filter:** The integrated pop filter helps reduce plosive sounds. If external pop filters are used, ensure they do not obstruct the microphone's acoustic properties.

5. TROUBLESHOOTING

If you encounter issues with your RE320 microphone, refer to the following common troubleshooting steps:

- **Low Signal Output:**
 - Ensure your preamplifier gain is set appropriately. Dynamic microphones require more gain.

than condenser microphones.

- Consider using an inline preamplifier (e.g., Cloudlifter, Fethead) if your existing preamp cannot provide sufficient clean gain.
- Verify all XLR cable connections are secure and the cable is not faulty.

- **Hum or Buzzing Noise:**

- Check all cable connections for proper seating.
- Ensure the XLR cable is balanced and in good condition.
- Move the microphone and cables away from power sources, fluorescent lights, or other electronic devices that may cause electromagnetic interference. The RE320 features an integrated humbucking coil to minimize such interference.

- **No Sound:**

- Confirm the microphone is correctly connected to an active input on your audio interface or mixer.
- Check the input gain and master volume levels on your audio equipment.
- Test with a different XLR cable to rule out cable failure.

- **Distorted Sound:**

- Reduce the input gain on your preamplifier or mixer to prevent clipping.
- Ensure the microphone is not overloaded by excessively loud sound sources.

If problems persist after attempting these steps, contact Electro-Voice customer support for further assistance.

6. SPECIFICATIONS

Detailed technical specifications for the Electro-Voice RE320 microphone:

Feature	Specification
Brand	Electro-Voice
Model Name	RE320
Item Model Number	RE320
Microphone Form Factor	Microphone Only
Connectivity Technology	XLR
Connector Type	XLR
Polar Pattern	Unidirectional
Frequency Response	18000 Hz (Upper limit, typical dynamic mic range is broader)
Impedance	150 Ohm
Signal-to-Noise Ratio	70 dB

Feature	Specification
Item Weight	1 pounds
Product Dimensions (L x W x H)	1 x 1 x 9 inches
Material	Metal
Color	Black
Special Feature	Variable-D, humbucking coil, integrated pop filter
Recommended Uses For Product	Singing, Vocal, Instrument Recording
Manufacturer	Electro-Voice

7. WARRANTY AND SUPPORT

For information regarding the product warranty, please refer to the warranty card included with your purchase or visit the official Electro-Voice website. For technical support, service, or additional inquiries, please contact Electro-Voice customer service through their official channels.

Official Website: www.electrovoice.com