



# ElectroVoice Re20 Broadcast Dynamic Microphone Specification & DataSheet

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**Electro-Voice®**

**ElectroVoice Re20 Broadcast Dynamic Microphone**



## Key Features

- Favorite of broadcast show hosts and voice-over studios
- Ideal for instrument recording, especially kick drums and acoustic guitars
- Studio condenser response yet no powering required and immune to overloading
- Large Acoustalloy diaphragm and low-mass aluminum voice coil
- Dual-ported, Continuously Variable-D® with minimal proximity effect
- Steel case and hum-bucking coil provide exceptional magnetic shielding

## General Description

The Electro-Voice RE20 is a professional-quality dynamic cardioid microphone created especially for recording, broadcast, and sound-reinforcement applications requiring essentially flat response over a very wide frequency range. The wide frequency response, coupled with excellent transient response, make the RE20 easily comparable to the finest condenser cardioid microphones and an easily operated “bass tilt down” switch corrects spectrum balance for use in long-reach situations or other applications where bass attenuation is needed.

A true cardioid microphone, the RE20 offers the greatest rejection at 180° off-axis – directly to the rear of the microphone. Pattern control is so consistent that the frequency response is nearly independent of the angular location of the sound source, creating virtually no off-axis coloration, yet providing the greatest possible rejection of unwanted sounds. An integral blast and wind filter covers each acoustic opening on the RE20. In recording sessions or on stage, singers can “close talk” the microphone, singing with their lips almost touching the grille screen with no worry of “P-pops” or excessive sibilance. Part of the filter also shock mounts the internal microphone element, reducing the transfer of vibrations from external sources. The exceptional performance of the RE20 is achieved by using a large Acous-alloy diaphragm in combination with an exceptionally low-mass aluminum voice coil. Using this diaphragm assembly, the RE20 is capable of reproducing extremely high sound pressure levels with no fear of the overload and distortion often experienced with phantom-powered condensers. The RE20 will also continue to function flawlessly in high humidity and elevated temperatures that would seriously degrade competitive condenser microphones. A massive steel housing and effective hum-bucking coil assure the

RE20's resistance to magnetically induced hum and noise. This means the RE20 can be used successfully in situations where other microphones would experience unacceptable levels of hum and buzz.

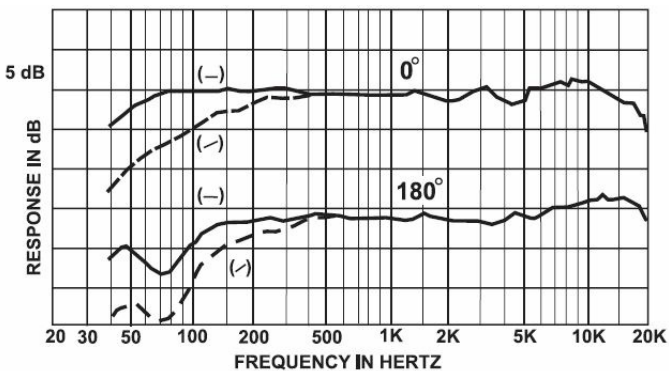
## Technical Specifications

<b>Element Type:</b>	Dynamic
<b>Frequency Response:</b>	45 Hz – 18,000 Hz
<b>Polar Pattern:</b>	Cardioid
<b>Impedance:</b>	150 ohms balanced
<b>Sensitivity, Open Circuit Voltage, 1 kHz:</b>	1.5 mV/pascal
<b>Hum Pickup Level, typical (60 Hz/1 millioer sted field):</b>	-130 dBm
<b>Polarity:</b>	Pin 2 will be positively referenced to Pin 3 with positive pressur e on the diaphragm
<b>Case Material:</b>	Steel
<b>Finish:</b>	Fawn beige
<b>Dimensions:</b>	Length = 8.53" (216.7 mm) Widest Diameter = 2.14" (54.4 mm) Body Diameter = 1.94" (49.2 mm)
<b>Net Weight:</b>	1 lb, 10 oz (737 g)
<b>Shipping Weight:</b>	3 lb, 4 oz (1474 g)

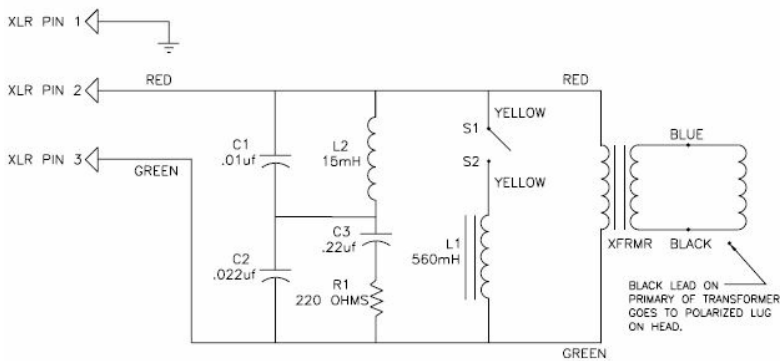
<b>Accessories Included:</b>	81715 stand clamp
<b>Optional Accessories:</b>	309A shock-mounted stand adapter for use with a floor stand or recording boom

By exploiting the strength of its steel housing and employing a mechanical nesting concept, EV designers have created an exceptionally rugged microphone with superior handling noise rejection ideally suited for professional uses.

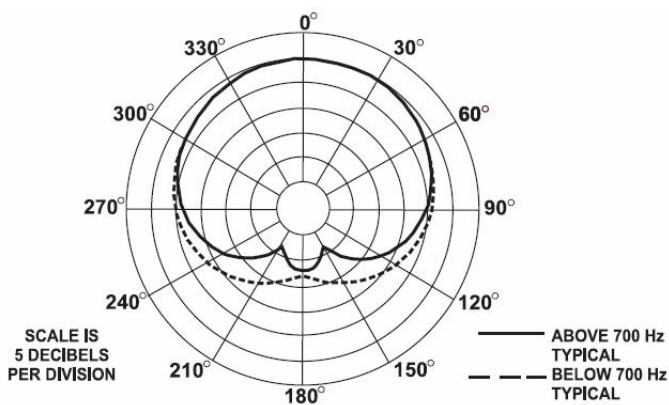
### Frequency Response



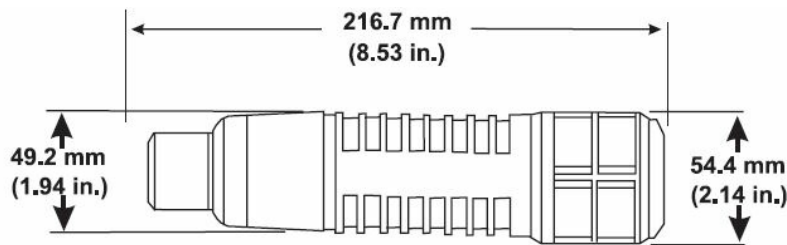
### Wiring Diagram



### Polar Response



### Dimension Drawing



## General Description (cont')

The bass-boosting proximity effect common to most directional microphones when used close to the sound source, is eliminated in the RE20. This is accomplished via the application of the EV-exclusive Variable-D® technology. By controlling the effect of microphone proximity, the RE20 can be located very close to sound sources without a loss in clarity or definition making the RE20 ideal for tight vocals and challenging instruments. It can be used inside bass drums, and on acoustic guitars, and is found in voice booths and broadcasting studios everywhere.

## Architects' and Engineers' Specifications

The microphone shall be a cardioid type with an integral blast filter protecting all acoustic openings. The blast filter shall also serve as a shock mount for the internal microphone element. The microphone shall have a wide-range uniform frequency response from 45-18,000 Hz. An integral passive network shall be provided so that when the filter switch is in the "on" position, a low-frequency response shall tilt down 4.5 dB from 400-100 Hz. With the switch in the "off" position, the microphone shall be essentially "flat" from 80-6,000 Hz, with a broad 2.5 dB rise in response from 6,000-14,000 Hz, and nominally down 3 dB at 18,000 Hz. Response below 80 Hz shall be nominally down 3 dB at 45 Hz. Output level shall be 1.5mV/Pascal. Nominal impedance of 150 ohms. Response at any angular position away from the major axis shall be essentially similar to the response on the major axis but attenuated uniformly at all frequencies by an amount appropriate to that angular position. Attenuation at frequencies from 45-10,000 Hz (refer to major axis signal value) shall exceed 15 dB at 180° from the major axis in any plane. Attenuation above 10,000 Hz shall exceed 13 dB. Polar characteristics shall be sufficiently uniform in all planes so that it is, effectively, a cardioid of revolution. There shall be a shield to prevent dust and iron particles from reaching the diaphragm. The case shall be made of steel. The microphone shall have a maximum diameter of 54.4 mm (2.14 in.), a body diameter of 49.2 mm (1.94 in.), and a length of 216.7 mm (8.53 in.). The finish shall be a non-reflecting fawn beige. A stand adapter shall be supplied. The Electro-Voice RE20 is specified.

- **U.S.A. and Canada only. For customer orders, contact Customer Service at:** 800/392-3497 Fax: 800/955-6831
- **Europe, Africa, and the Middle East only. For customer orders, contact Customer Service at:** + 49 9421-706 0 Fax: + 49 9421-706 265
- **Other International locations. For customer orders, Contact Customer Service at:** + 1 952 884-4051 Fax: + 1 952 887-9212
- **For warranty repair or service information, contact the Service Repair department at:** 800/685-2606
- **For technical assistance, contact Technical Support at:** 866/78AUDIO Specifications are subject to change without notice.

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- [www.electrovoice.com](http://www.electrovoice.com)

## FREQUENTLY ASKED QUESTIONS

What is the ElectroVoice RE20 Broadcast Dynamic Microphone?

The ElectroVoice RE20 is a high-quality dynamic microphone designed for broadcast and recording applications, known for its versatility and ability to capture clear and natural sound.

What distinguishes the RE20 microphone in its class?

The RE20 microphone is highly regarded for its exceptional build quality, low self-noise, and its suitability for a wide range of audio recording and broadcasting tasks.

Is the RE20 a dynamic microphone?

Yes, the ElectroVoice RE20 is a dynamic microphone, which means it does not require phantom power and is ideal for capturing high sound pressure levels.

What is the primary use of the RE20 microphone?

The RE20 is commonly used in broadcast studios, radio stations, podcasting, voiceovers, musical instrument recording, and other audio production applications.

Does the RE20 require phantom power?

No, the RE20 is a dynamic microphone and does not require phantom power for operation.

What is the included polar pattern of the RE20 microphone?

The RE20 typically features a cardioid polar pattern, which is ideal for capturing sound from a single direction while rejecting background noise.

What is the frequency response range of the RE20?

The RE20 is known for its relatively flat frequency response 20Hz making it suitable for a wide range of audio sources.

Does the RE20 come with a built-in shock mount or pop filter?

Some versions of the RE20 may include a built-in shock mount, but a pop filter is typically not included. Additional accessories may be required for specific applications.

Are there any included accessories with the RE20 microphone, such as a carrying case?

The package contents may vary, but some RE20 microphones come with a carrying case or protective pouch. Check the product listing for details.

Is the RE20 compatible with standard microphone stands and boom arms?

Yes, the RE20 features a standard microphone mount, making it compatible with most microphone stands and boom arms.

What is the warranty period for the RE20 microphone?

Warranty periods for the RE20 microphone may vary, but they often range from 1 year to several years.

Can I use the RE20 with recording software on my computer?

Yes, you can use the RE20 with recording software on your computer by connecting it to an appropriate audio interface or mixer.

Is the RE20 suitable for live performances?

While it's primarily designed for studio and broadcast applications, some users may choose to use the RE20 for live performances, especially in situations where a clear and controlled sound is essential.

Are there any known compatibility issues with specific audio interfaces or recording software?

The RE20 is generally compatible with a wide range of audio interfaces and recording software, but it's advisable to check the product specifications and consult with the manufacturer for any specific compatibility concerns.

How should I care for and maintain the RE20 microphone?

Proper care includes protecting it from physical damage, keeping it clean, and storing it in a suitable carrying case when not in use. Refer to the user manual for detailed maintenance instructions.

Where can I purchase the ElectroVoice RE20 Broadcast Dynamic Microphone?

You can typically purchase the ElectroVoice RE20 Broadcast Dynamic Microphone from authorized audio equipment retailers, music stores, or reputable online marketplaces to ensure you receive a genuine product.

**DOWNLOAD THE PDF LINK: [ElectroVoice Re20 Broadcast Dynamic Microphone Specification & DataSheet](#)**

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