

Electro-Voice

BROADCAST MICROPHONES



Studio Production



RE20

Since its debut in 1968, the RE20 is easily the single, most-heard radio host's microphone of all time, delivering a vocal tone that has become synonymous with the sound of the modern FM radio personality. A true industry standard and firm favorite of broadcasters and sound engineers worldwide for its smooth and linear characteristics on voice, the RE20's reputation is that of a "must-have" mic for any studio. Central to RE20's popularity is Electro-Voice's exclusive Variable-D™ technology for minimizing proximity effect tonal shifts, allowing the host to move freely around the mic without ever sounding "off-mic".

- The classic sound of the FM radio personality
- Variable-D™ minimizes proximity effect
- True cardioid with no coloration at 180° off-axis
- Extensive internal pop filtering
- Humbucking coil
- Bass roll-off switch (bass tilt 4.5dB @ 400Hz - 100Hz)

RE27N/D

Due to its high-performance dynamic neodymium power plant and extensive filtering options, the RE27N/D offers flavors and performance challenging those of the highest-end studio condensers available. Deploying the same Variable-D™ technology as the RE20, the RE27N/D delivers exceptional depth, clarity, and resolution, while the radio personality works freely around the mic.

- Variable-D[™] minimizes proximity effect
- Dynamic neodymium element brings 6 dB more sensitivity than RE20
- · Extensive internal pop filtering
- Humbucking coil
- Three selectable shaping filters:
 6 dB from 250 Hz -100 Hz
- 12 dB from 1 kHz -100 Hz
- 3 dB high frequency roll-off



RE320

Drawing from characteristics found in the RE20 and RE27N/D, the RE320 is a true hybrid, built to handle a wide variety of tasks very well. Powered by a modified RE27N/D engine design, the Variable-D™ RE320 deploys a high resolution diaphragm, delivering exceptional transient response and robust tonal balance. Extending its use in modern radio productions, RE320's filtering switch options create two distinctly different sonic signatures: one with a flat and linear articulation, and the other with a low-mid dip, extended low frequency sensitivity, and enhanced energy between 3.5kHz - 5kHz.

- Variable-D™ minimizes proximity effect
- Extensive internal pop filtering
- Humbucking coil
- Two selectable shaping filters:
 Essentially flat from 45 Hz
- 18 kHz
- 30 Hz 18 kHz with low-mid dip @ 380 Hz, and added energy between 3.5 kHz - 5 kHz

Field Production



635 Group

For decades, the classic 635 group of live interview microphones have been the most popular ENG mics in the world. Delivering the great sound and rugged durability industry professionals have come to expect from Electro-Voice, the elegant 635 models continue being the top choice of news crews and engineering managers. From the industry standard 635A in fawn beige, and its semi-gloss black sibling 635A/B, to its neodymium-based high-output 635N/D-B version, this classic group of day-in/day-out performers have cemented their place in field reporting history.

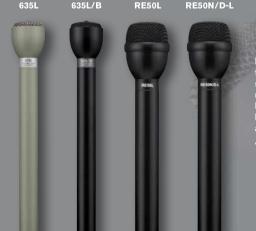
- Omnidirectional polar pattern
- Dynamic element with intern shock inhibitor
- Incredibly robust and durable
- Linear frequency response
- Four-stage pop and dust filter
- High-output neodymium mag net in 635N/D-B

RE50 Group

The RE50-B is a go-to standard for news crews needing all of its robust performance features. Because its omnidirectional element uniformly captures near-field dialog while remaining unaffected by far-field ambience, the RE50B's ease-of-use and audio intelligibility are second to none. Its robust handle size not only provides the interviewer more to hold on to, but also serves as further isolation from handling noise. The RE50N/D-B delivers all of the extraordinary performance of the RE50-B, with the added benefit of a higher-output neodymium element for cameras and recording devices requiring its higher output.

- Omnidirectional polar pattern
- Dynamic element
- Extremely low handling noise via Dyna-Damp™ "mic-in-amic" shock-mount system
- Linear frequency response
- Four-stage pop filter controls wind and P-pop noise
- Withstands high humidity temperature extremes and corrosive salt air





Extended-length models. Interviewing styles vary, as do the preferences of various reporters assigned to a camera and sound crew. Many times, a reporter or producer may prefer a microphone with a longer reach in order to keep the reporter's hand out of the shot. The 635 and RE50 models are available in longer-handled versions for those whom prefer the added reach and ease of use.

• Each model has an overall length of 9.5" and offers identical sonic performance to the regular-sized version.



Accessories, Techs, and Specs



Requisite Accessories:



Designed specifically as a studio suspension mounting system for the RE20, RE27N/D, and RE320, the optional 309A is a robust solution for eliminating mechanical vibrations from transferring into the microphone. Its dual pivoting mechanisms allow for horizontal adjustment of the microphone angle, as well as adjustability at the point where the mount joins the microphone boom arm allowing the user to swing the microphone into position.



Although the RE20, RE27N/D, and RE320 contain extensive internal pop filtering, there may be times when additional protection from plosives is required. The optional WSPL-2 is designed to effortlessly slip onto the microphone to further attenuate wind blasts.

Replacement Clips:

Model SAPL-2 for the RE20, RE27N/D, and RE320 Model 311 for the 635A, 635A/B, 635N/D-B, 635L, and 635L/B Model 323S for the RE50-B, RE50N/D-B, RE50L, and RE50N/D-L

Variable-D™: The Basics

A fundamental principal of acoustical behavior is that the volume and perceived frequency content of a sound is influenced by the distance between the source and the point of perception. When near to the source, a listener will hear a sound's full low-frequencies, defined midrange and articulate high end. But as distance increases, low-frequency content will fall off dramatically, with a corresponding "thinning-out" of the overall sound. Because microphones serve as the point of perception at the front-end of the audio signal chain, this phenomenon greatly influences how microphones are used and perform.

Normal directional microphones (cardioid, supercardioid and hypercardioid) generate increased bottom-end when used close-up. This is typically called the "proximity effect." While some vocalists like this effect and use it to enhance their performance, it is attainable only in close-up situations where the microphone capsule is within a couple of inches of the performer's mouth. When the distance between the microphone and the source is extended, the sound quality changes dramatically, losing a substantial amount of the low-frequency content— thus changing the tone of the performance drastically.

Electro-Voice's exclusive Variable-D™ eliminates this disadvantage. On the rear side of the diaphragm there are perforated pipes (interference ducts) with precise sonic slots at set distances. The ducts provide maximum damping that is completely uncolored and undistorted at 180° off-axis, ensuring the same frequency response as if the source was nearly on-axis. This characteristic is particularly beneficial when the performer (announcer, vocalist or instrumentalist) moves around while addressing the microphone. And, this same attribute is why radio announcers and DJs have chosen Electro-Voice Variable-D™ microphones for decades.

	RE20v	RE27N/D	RE320	RE50B RE50L △	RE50N/D-B RE50N/D-L†	635A & 635 A/B 635L & 635L/B ‡	635N/D-B
Mic Type	Vocal/Instrument	Vocal/Instrument	Vocal/Instrument	Handheld	Handheld	Handheld	Handheld
Element	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic	Dynamic
Polar Pattern	Cardioid	Cardioid	Cardioid	Omni	Omni	Omni	Omni
Frequency Response	45 – 18,000 Hz	45 – 20,000 Hz	45 - 18,000 Hz (flat) 30 - 18,000 (alt filter)	80 – 13,000 Hz	80 – 13,000 Hz	80 –1 3,000 Hz	80 – 13,000 Hz
Impedance	150 Ω	150 Ω	150 Ω	150 Ω	150 Ω	150 Ω	150 Ω
Open Circuit Voltage	1.5 mV/Pascal	2.5 mV/Pascal	2.5 mV/Pascal	1.6 mv/Pascal	2.2 mV/Pascal	1.4 mV/Pascal	2.8 mV/Pascal
Power Requirements	Passive	Passive	Passive	Passive	Passive	Passive	Passive
Connector Type	Three-pin XLR	Three-pin XLR	Three-pin XLR	Three-pin XLR	Three-pin XLR	Three-pin XLR	Three-pin XLR
Case Material	Steel	Steel	Metal	Aluminum	Aluminum	Steel	Steel
Finish	Fawn Beige	Satin Nickel	Semi-gloss black	Semi-gloss black	Semi-gloss black	Fawn Beige or Semi-gloss black	Semi-gloss black
Overall Length	9.53" (216.7 mm)	9.53" (216.7 mm)	9.53" (216.7 mm)	7.75" (197mm) 9.52 (242mm) ^A	7.75" (197mm) 9.52" (242mm) †	5.94" (151 mm) 9.55" (243 mm) ‡	5.84" (148mm)