## **Key Features:**

- 5/8" diameter self biased condenser capsule offers the warmth of a larger capsule design without sacrificing off-axis performance or transient response
- Low-frequency roll-off switch enables tailoring of low-frequency response to meet application requirements
- Supercardioid polar pattern for superior feedback rejection and acoustic isolation
- Modern high-speed electronic design for extremely low distortion, and outstanding transient response
- High current differential output stage can drive long microphone cables without loss of performance
- Warm Grip handle for more comfortable feel
- Multistage pop filter eliminates breath pop noises

### **General Description:**

The RE510 is a professional quality hand-held condenser microphone that was designed especially for vocalists. The RE510 features a 5/8" diameter capsule, advanced electronic design, and best of all, a sound that will enhance any vocal performance.

The high frequency response of the RE510 has been designed to provide just the right amount of definition and "air" without the stridency so common in other condenser vocal microphones.

The low frequency response of the RE510 in combination with the low frequency selector switch provides versatility that was designed to be truly useful. With the low frequency selector switch in the rolled off position, the low end of the RE510 is tailored to compensate for proximity effect and provides full, clean sound without muddiness. When increased low-end is desired, placing the low frequency selector switch in the flat position adds just enough warmth to be noticeable, but not overbearing.

The wide bandwidth, high SPL handling capability, and low frequency selector switch of the RE510 also make it a versatile instrument microphone for most any application.

The low frequency selector switch is securely located beneath the ball screen and can't be changed inadvertently.



Generation Element: Frequency Response: 40 Hz to 20,000 Hz (see chart)  Polar Pattern: Supercardioid (see chart)  3.2mV/Pascal  Clipping Level, 1 kHz: Clipping Level, 1 kHz: 146 dB SPL (1% THD)  Self Noise: 22 dB SPL "A" weighted (0 dB=20 micropascals)  Dynamic Range (Maximum SPL to A Weighted Noise Level): Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm)  Accessories Included: Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen 379-2 Red Windscreen Net Weight: 9.2 oz. (260 grams)		
Polar Pattern: Supercardioid (see chart)  Sensitivity, Open Circuit Voltage, 1 kHz: Clipping Level, 1 kHz: +2 dBV  Maximum SPL, 1 kHz: 146 dB SPL (1% THD)  Self Noise: 22 dB SPL "A" weighted (0 dB=20 micropascals)  Dynamic Range (Maximum SPL to A Weighted Noise Level): Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Generation Element:	Self-Biased condenser
Sensitivity, Open Circuit Voltage, 1 kHz:  Clipping Level, 1 kHz: +2 dBV  Maximum SPL, 1 kHz: 146 dB SPL (1% THD)  Self Noise: 22 dB SPL "A" weighted (0 dB=20 micropascals)  Dynamic Range (Maximum SPL to A Weighted Noise Level):  Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 328 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 379-1 Black Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Frequency Response:	40 Hz to 20,000 Hz (see chart)
Voltage, 1 kHz:  Clipping Level, 1 kHz: +2 dBV  Maximum SPL, 1 kHz: 146 dB SPL (1% THD)  Self Noise: 22 dB SPL "A" weighted (0 dB=20 micropascals)  Dynamic Range (Maximum SPL to A Weighted Noise Level):  Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 379-1 Black Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Polar Pattern:	Supercardioid (see chart)
Maximum SPL, 1 kHz: 146 dB SPL (1% THD)  Self Noise: 22 dB SPL "A" weighted (0 dB=20 micropascals)  Dynamic Range (Maximum SPL to A Weighted Noise Level):  Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	2	
Self Noise:    22 dB SPL "A" weighted (0 dB=20 micropascals)	Clipping Level, 1 kHz:	+2 dBV
micropascals)  Dynamic Range (Maximum SPL to A Weighted Noise Level):  Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Maximum SPL, 1 kHz:	146 dB SPL (1% THD)
(Maximum SPL to A Weighted Noise Level):  Signal-to-Noise Ratio: 72 dB (@ 94 dB SPL)  Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Self Noise:	
Output Impedance, 1 kHz: 250 ohms  Power Requirements: Phantom Supply Requirement: 24 to 48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	(Maximum SPL to A	124 dB
Power Requirements:  Phantom Supply Requirement: 24 to 48 VDC  Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions:  Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Signal-to-Noise Ratio:	72 dB (@ 94 dB SPL)
48 VDC  Polarity: Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Output Impedance, 1 kHz:	250 ohms
produces positive voltage on pin 2 relative to pin 3  Dimensions: Length = 7.15" (182 mm) Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Power Requirements:	
Diameter = 2.0" (51 mm) Shank = 1.0" (25 mm)  Accessories Included: 326 Stand Adapter (Black) Soft Zippered "Gig" Bag  Optional Accessories: 378 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Polarity:	produces positive voltage on pin 2
Soft Zippered "Gig" Bag  Optional Accessories: 323S Stand Adapter 376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Dimensions:	Diameter = 2.0" (51 mm)
376 Charcoal Windscreen 379-1 Black Windscreen 379-2 Red Windscreen	Accessories Included:	
Net Weight: 9.2 oz. (260 grams)	Optional Accessories:	376 Charcoal Windscreen 379-1 Black Windscreen
	Net Weight:	9.2 oz. (260 grams)

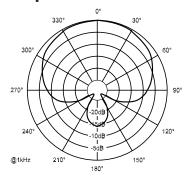


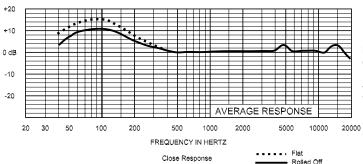
#### **Frequency Response:**

# +20 +10 0 dB -10 -20 30 50 100 200 500 1000 2000 5000 10000 20000 FREQUENCY IN HERTZ

Rolled Off

## **Polar Response:**





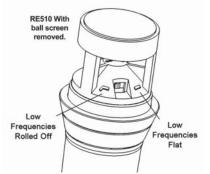
#### **Microphone Use and Placement**

Please note that micing techniques are a matter of personal preference. These are merely guidelines to assist in the placement of the microphone to gain optimal performance.

	= :
<u>Usage</u>	Optimal Placement
Vocals	Zero to six inches from the windscreen, and on axis with the microphone.
<sup>∞</sup> Spoken Word	Five to ten inches from the windscreen, and on axis with the microphone.

Low Frequency Selector Switch

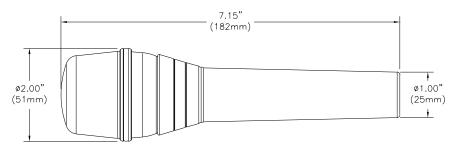
Location:



#### **Standard Placement & Use Guidelines**

- 1. Always point the microphone at the desired source of sound, and away from any unwanted sources.
- The microphone should be located close to the sound source to minimize interference from other potential sound sources.
- 3. Use the 3-to-1 rule when using multiple microphones. Place each microphone three times farther from other microphones as from the desired sound source.
- 4. Minimize over-handling of the microphone to reduce unwanted mechanical noise.
- 5. Working close to the microphone will increase the bass tone and also provide increased gain-before-feedback.

## **Dimension Drawing:**



RE510 Part Number: 301259-000



12000 Portland Avenue South, Burnsville, MN 55337 Phone:952/884-4051, Fax:952/884-0043

www.electrovoice.com

© Telex Communications, Inc. 6/2007 Part Number 38110-130 Rev E



U.S.A. and Canada only. For customer orders, contact Customer Service at: 800/392-3497 Fax: 800/955-6831

Europe, Africa, and 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: + 1 952 736-4212

For warranty repair or service information, contact the Service Repair department at: 800/553-5992 or 402/467-5321

For technical assistance, contact Technical Support at: 800/392-3497 or 952/736-4656