• 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

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.

### Technical specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Element:</td>
<td>Self-Biased condenser</td>
</tr>
<tr>
<td>Frequency Response:</td>
<td>40 Hz to 20,000 Hz</td>
</tr>
<tr>
<td>Polar Pattern:</td>
<td>Supercardioid</td>
</tr>
<tr>
<td>Sensitivity, Open Circuit Voltage, 1 kHz:</td>
<td>3.2mV/Pascal</td>
</tr>
<tr>
<td>Clipping Level, 1 kHz:</td>
<td>+2 dBV</td>
</tr>
<tr>
<td>Maximum SPL, 1 kHz:</td>
<td>146 dB SPL (1% THD)</td>
</tr>
<tr>
<td>Self Noise:</td>
<td>22 dB SPL “A” weighted (0 dB=20 micropascals)</td>
</tr>
<tr>
<td>Dynamic Range (Maximum SPL to A Weighted Noise Level):</td>
<td>124 dB</td>
</tr>
<tr>
<td>Signal-to-Noise Ratio:</td>
<td>72 dB (@ 94 dB SPL)</td>
</tr>
<tr>
<td>Output Impedance, 1 kHz:</td>
<td>250 ohms</td>
</tr>
<tr>
<td>Power Requirements:</td>
<td>Phantom Supply Requirement:</td>
</tr>
<tr>
<td></td>
<td>24 to 48 VDC</td>
</tr>
<tr>
<td>Polarity:</td>
<td>Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3</td>
</tr>
</tbody>
</table>
System overview

Frequency Response:

Polar Response:

Low Frequency Selector Switch Location:

Dimensions:

Microphone Use and Placement:
Miking techniques are a matter of personal preference. These are guidelines to assist in the placement of the microphone to gain optimal performance.

Usage | Optimal Placement
--- | ---
Vocals | Zero to six inches from the windscreen and on axis with the microphone.
Spoken Word | Five to ten inches from the windscreen, and on axis with the microphone.

Standard Placement and Use Guidelines:
1. Always point the microphone at the desired source of sound, and away from any unwanted sources.
2. 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 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.

Ordering information

RE510
Condenser Vocal Microphone, Super Cardioid, switchable for instrument
Order number RE510
Accessories

323S
Mic clamp for 1" diameter mics (e.g. 267a, 367s, 767a, RE510)
Order number 323S

376
Windscreen pop filter for RE16, RE50, N/D967, 767a, 367s, 267a, RE410 and RE510, gray
Order number 376

379-1
Windscreen pop filter for RE16, RE50, N/D967, 767a, 367s, 267a, RE410 and RE510, black
Order number 379-1

379-2
Windscreen pop filter for RE16, RE50, N/D967, 767a, 367s, 267a, RE410 and RE510, red
Order number 379-2