

**RE90L**  
**Ultra-Miniature Condenser**  
**Lavalier Microphone**



**Key Features:**

- **Ultra-Miniature Size for Inconspicuous Attachment**
- **Light Weight**
- **Omnidirectional Polar Pattern Provides Clean Sound and Uniform Response**
- **Complete Assortment of Clips**



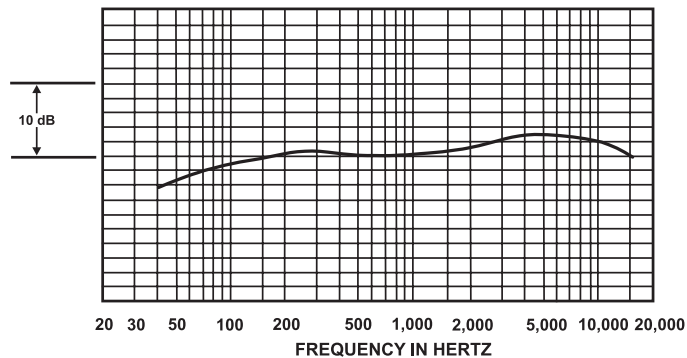
**General Description:**

The Electro-Voice® RE90L is an omnidirectional back-electret condenser lavalier microphone designed for the *Architectural Series Microphone* line. The RE90L is intended for sound reinforcement applications such as houses of worship, schools, or other venues where full-range, natural, well-balanced sound is required. The omnidirectional polar characteristics of the RE90L provide clean and accurate sonic quality and uniform output regardless of the microphone's position relative to the sound source. The RE90L is designed to attach to the talker's clothing using the supplied clips. The electronics housing features a side clip to facilitate attachment to a belt or pocket. In addition, the extremely compact size of the RE90L is ideal for performance or house of worship applications where the microphone must remain as inconspicuous as possible to the viewing audience.

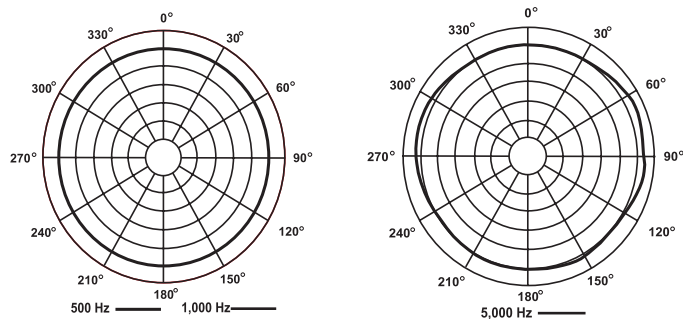
**Technical Specifications:**

Generation Element:	Condenser, back electret
Frequency Response:	50 Hz to 18,000 Hz (see chart)
Polar Pattern: (see chart)	Omnidirectional
Sensitivity, Open Circuit Voltage, 1 kHz:	12.6mV/Pascal
Maximum SPL at 1% THD:	130 dB SPL
Equivalent Noise:	<29 dB SPL "A" weighted
Dynamic Range:	>100 dB
Output Impedance, 1 kHz:	150 ohms
Power Requirements:	9 to 52 Volt Phantom Supply
Current Consumption:	1.0 mA typ.
Polarity:	A positive pressure on the diaphragm produces a positive voltage on output pin 2 (+)
Finish:	Nonreflecting Black
Dimensions:	Length = 93 mm (3.65") Body Diameter = 19 mm (0.75") Capsule Diameter = 4.9 mm (0.19")
Cable Length:	1.8m (6 ft) long
Net Weight:	33.5 g (1.2 oz.)
Shipping Weight:	235 g (8.3 oz.)
Accessories Furnished:	External Windscreen Universal Tie Clip Tie Tac Zippered Gig Bag
Optional Accessories:	Dual Microphone Clip

## Frequency Response:



## Polar Response:



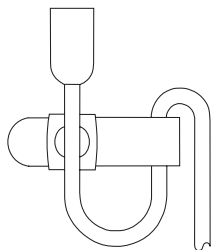
## Architects' and Engineer's Specifications

The microphone shall be an ultra-miniature, back-electret condenser with an omnidirectional polar pattern. The microphone shall have a frequency response from 50 to 18,000 Hz and a balanced output with a 150-Ohm nominal impedance. The open-circuit output voltage shall be 12.6 mV/pascal. The microphone capsule shall be black; the electronics housing made of black polycarbonate resin. The microphone shall be permanently connected to its electronics module with a 1.8 m ( 6 ft.) length of rugged, three conductor, shielded, miniature audio cable. The microphone shall be supplied with tie clasps and a storage pouch. The Electro-Voice RE90L is specified.

## Microphone Placement and Cord Looping

Typical microphone placement is shown in the illustration. For best results, the RE90L should be positioned as close to the mouth as possible. **It is important to loop the cable as shown to eliminate cable rustling noise.**

## Looping the Cable to Eliminate Cable Rustling Noise:



## Powering the RE90L

The RE90L is powered by an external 9- to 52- volt phantom power supply. The electronics circuitry is wrapped with an insulated copper foil for superior emi/rfi shielding. The module is enclosed in a high-strength poly-carbonate resin housing to form a package that is very light-weight and extremely durable for outstanding reliability and long life.

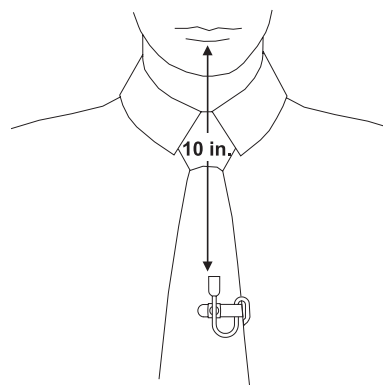
## Operation

To operate the RE90L use high-quality balanced cable with 3-pin XLR-type connectors to connect the electronics housing to the mixer input which is providing the phantom power. The connecting cable used should be standard two-conductor shielded type; the shield is used as ground return and must be properly connected to avoid electrical noise.

## Windscreen

Use the external windscreen to prevent wind and pop noise.

## Microphone Placement:



**EV Electro-Voice®**

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

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

© Telex Communications, Inc. 6/2007  
Part Number 535039 Rev D



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**

Specifications subject to change without notice.