



# ROYER R-122V

## Vacuum Tube Ribbon-Velocity Studio Microphone

The R-122V is a vacuum tube, studio ribbon microphone utilizing the same patented, large-ribbon transducer assembly found in Royer R-121 and R-122 ribbon microphones. The R-122V is a compact, monaural, bi-directional microphone and is the first commercially available vacuum tube ribbon microphone. Achieving a new level of performance for ribbon microphones, the R-122V delivers unparalleled richness, depth and detail, especially in the midrange frequencies. Like its predecessors, the R-122V's ability to withstand high SPL levels make it well suited for applications that were previously considered off limits to ribbon microphones.

The R-122V's vacuum tube electronics utilize a standard mil spec 5840 vacuum tube and Royer's proprietary toroidal ribbon matching transformer (patent pending). A Jensen® 1:1 ratio output transformer provides an electrically isolated, fully-balanced output signal. The R-122V can drive virtually any preamplifier and long cable runs (from power supply to preamp) with ease. The active circuitry provides an optimum impedance match to the ribbon element at all times, preventing over-damping of the ribbon element and assuring consistent microphone performance.

The R-122V utilizes a pure (99.99%), low mass, 2.5-micron thick aluminum ribbon. The R-122V's unique, patented offset-ribbon transducer assembly incorporates rare earth Neodymium magnets in a specially designed flux frame, which forms a powerful magnetic field while reducing unwanted stray magnetic radiation. The smooth frequency response and phase linearity of the R-122V, coupled with its classic triode-connected vacuum tube circuitry, enable the R-122V to deliver a consistent sonic performance with stunning realism. Frequency response is excellent regardless of the angle of sound striking the ribbon, and off-axis coloration is negligible.

The R-122V's offset-ribbon design positions the ribbon element toward the front of the microphone body, which allows for high SPL handling on the front (logo) side and the option of a slightly brighter response when recording on the back side (3 feet and closer; phase reversed in this position).

### R-122V FEATURES

- Vacuum tube electronics provide high output capability, optimal impedance to the ribbon element and low output impedance
- Extremely low self-noise
- Operates from a dedicated power supply
- Slow ramp up filament supply assures long tube life
- High SPL capabilities for electric guitar and percussion instruments
- Absence of high-frequency peaks, "ringing" and phase shifts
- Ribbon element unaffected by impedance/load, heat or humidity
- Very low magnetic leakage

### RECOMMENDED APPLICATIONS

- Close and distant miking
- Strings - solo & sections
- Acoustic piano, harp
- Electric and acoustic guitar
- Vocals, commercial broadcast, voice over
- Brass, horn sections
- Drum overheads, room miking
- Percussion instruments



Actual size

# ROYER R-122V

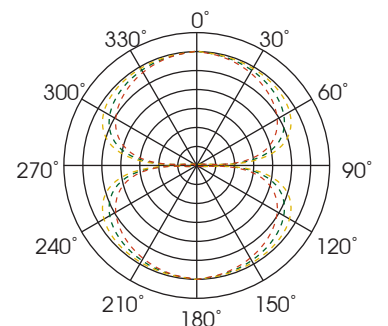
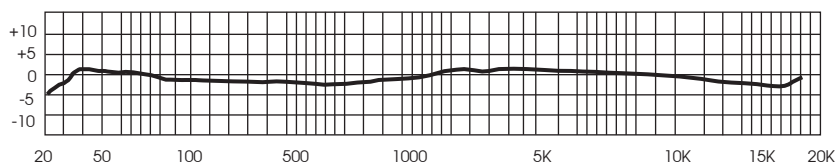
## Technical Specifications



<b>Acoustic Operating Principle</b>	Electrodynamic pressure gradient with vacuum tube electronics.
<b>Vacuum Tube</b>	JAN mil-spec 5840W pentode wired in triode configuration
<b>Polar Pattern</b>	Figure-8
<b>Generating Element</b>	2.5-micron aluminum ribbon
<b>Magnets</b>	Rare Earth Neodymium
<b>Frequency Response</b>	30 - 15,000 Hz $\pm 3$ dB
<b>Sensitivity</b>	-36 dB (re. 1v/pa $\pm 1$ dB)
<b>Self-Noise</b>	< 18 dB
<b>Output Impedance</b>	200 Ohms, balanced
<b>Rated Load Impedance</b>	1K-Ohm minimum
<b>Maximum SPL</b>	> 135 dB SPL @ 20 Hz
<b>Power Requirements</b>	Plate supply: 135 VDC @2ma, Filament supply: 6 VDC@ 150ma from dedicated power supply
<b>Dimensions</b>	206mm L X 25mm W (8 1/8" L X 1" W)
<b>Weight</b>	300 grams (10.9 oz)
<b>Finish</b>	Burnished Satin Nickel / Matte Black Chrome (optional)
<b>Accessories</b>	Protective wood case, RSM-1 shock mount, power supply, locking 25-foot microphone cable assembly
<b>Optional Accessories</b>	PS-101 pop-screen, WS-58 foam pop-filter
<b>Microphone Warranty</b>	Lifetime to original owner (repair or replace at Royer's option)
<b>Vacuum Tube Warranty</b>	Ten Years
<b>Ribbon Element Warranty</b>	First re-ribbon free to original owner within first year of purchase

Matched pairs are available at extra charge

## Frequency Response and Polar Pattern



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