



# ROYER SF-24

## Active Stereo Coincident Ribbon-Velocity Studio Microphone

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The Royer SF-24 active stereo coincident ribbon microphone is the only microphone of its kind available, combining high audio performance with outstanding stereo separation and imaging. It is a modern ribbon design with no audible diffraction effects or cavity resonance. The SF-24's active electronics produce an output comparable to studio condenser microphones, while providing an optimum load to both ribbon elements at all times. The very low output impedance of the SF-24 allows it to operate with any microphone preamplifier of nominal gain and impedance characteristics and makes it suitable for use with long cable runs.

The Royer SF-24 is actually two matched ribbon microphones placed one above the other, each aimed at 45 degrees from center. The frequency response is excellent regardless of the angle of sound striking the ribbons, and off-axis coloration is negligible. When held vertically, connector down, the upper microphone is the left channel and the lower microphone is the right channel. The SF-24's extension cable comes with an adapter which splits into two separate left and right XLR connectors, labeled "upper" and "lower".

The SF-24's two 1.8 micron ribbons are of pure (99.99%) aluminum and due to their low mass, they provide superb transient response. The SF-24 transducers incorporate cross-field motor assemblies (patent pending) which are comprised of four powerful Neodymium magnets and Permendur iron pole-pieces. The cross-field design assures the shortest front-to-rear ribbon path length for optimum high-frequency response.

The case is ingot iron and forms part of the magnetic return circuit, an effective system with low leakage flux which accounts for the high sensitivity in a trim package.

### SF-24 FEATURES

- True stereophonic recording from one microphone
- Operates from standard 48-volt simplex power
- Active electronics provide high output capability
- Extremely low self noise
- Ribbon element not affected by load presented to microphone element unaffected by heat or humidity
- Equal sensitivity from front and back of elements
- Consistent frequency response regardless of distance to sound source
- Very low magnetic leakage

### RECOMMENDED APPLICATIONS

- Stereo & distance miking
- Choir, Orchestra, String Sections
- Overhead drums & Percussion instruments
- Room miking, distance & ambience miking
- Brass Instruments - Horn Sections
- Woodwinds, flute & other reed instruments
- Stereo Acoustic Piano, Harp
- Acoustic Guitar, Mandolin, stringed instruments



Reduced size

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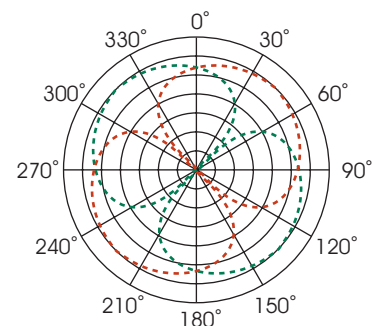
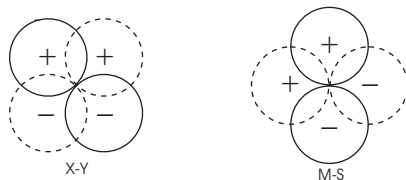
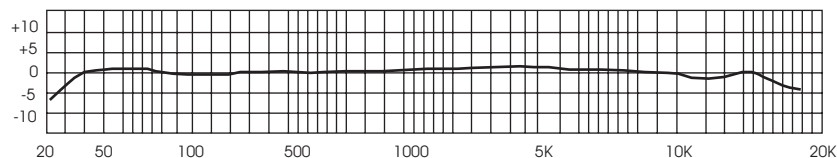
## Technical Specifications



<b>Acoustic Operating Principle</b>	Electrodynamic pressure gradient with active electronics.
<b>Polar Pattern</b>	Symmetrical figure-8
<b>Generating Element</b>	1.8-micron aluminum ribbon
<b>Magnets</b>	Rare Earth Neodymium
<b>Frequency Response</b>	30-15000 HZ ±3dB
<b>Sensitivity</b>	> -38dB (re. 1v/pa ±1dB)
<b>Self-Noise</b>	< 18 dB
<b>Output Impedance</b>	< 200 Ohms
<b>Output Connector</b>	Male XLR 5-Pin (Stereo)
<b>Rated Load Impedance</b>	> 1K-Ohm
<b>Maximum SPL</b>	130dB
<b>Power Requirements</b>	48-Volt Phantom Only
<b>Supply Current</b>	4 mA per channel
<b>Dimensions</b>	10 5/8" X 1.5" wide (base) X 1" wide (top) (270mm X 39mm X 25mm)
<b>Weight</b>	18.7 OZ. (531 grams)
<b>Finish</b>	Optical Black, 18K Gold (special orders only)
<b>Accessories</b>	25' Cable (XLR5 to 2 standard 3-pin XLR male), shock mount, protective case, mic sock
<b>Optional Accessories</b>	Wind screen, 50 or 100 foot extension cables,
<b>Warranty</b>	Lifetime to original owner. (Repair or replace at Royer's option) Ribbons not included in warranty.



## Frequency Response and Polar Pattern



--- Lower Microphone  
 ..... Upper Microphone

**Royer Labs™®**

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