



# ROYER SF-12

## Stereo Coincident Ribbon-Velocity Microphone

The Royer SF-12 stereo coincident ribbon microphone combines high quality audio performance with outstanding stereo separation and imaging. It is a modern ribbon design with no audible diffraction effects or cavity resonance.

The SF-12 is actually two matched ribbon microphones placed one above the other and fixed at a 90° angle. This arrangement allows for Blumlein and M-S recording with one microphone, as well as excellent monaural compatibility when summing the two ribbon elements to mono. The frequency response is excellent regardless of the angle of sound striking the ribbons and off-axis coloration is negligible. The SF-12's extension cable comes with an adapter which splits into separate left and right XLR connectors, labeled "upper" and "lower."

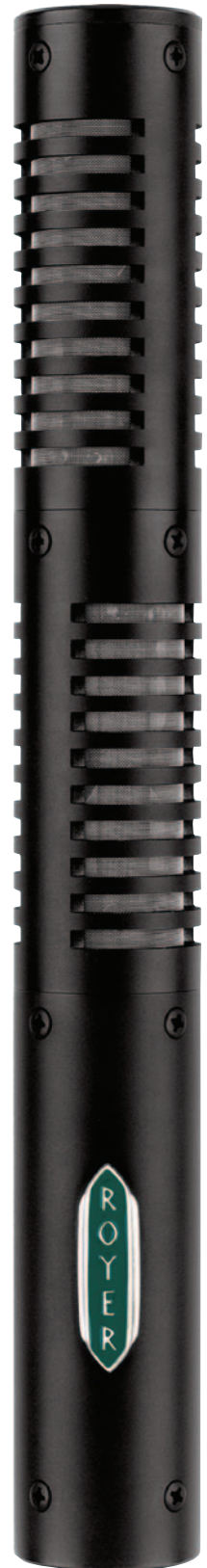
The SF-12's two 1.8-micron ribbons are of pure (99.99%) aluminum and provide superb transient response due to their low mass. Each of the SF-12's two ribbon transducers incorporate "cross-field" motor assemblies (patent pending) which are comprised of four powerful Neodymium magnets and Permendur iron pole-pieces. This cross-field design delivers excellent high frequency response due to the extremely short path between the front and rear sides of the ribbon elements. The microphone's case is ingot iron and forms part of the magnetic return circuit, an effective system with low leakage flux which accounts for the relatively high sensitivity in a trim package.

### SF-12 FEATURES

- True stereophonic (Blumlein and M-S) recording from one microphone
- No internal active electronics to overload or produce distortion up to maximum SPL rating.
- Extremely low residual noise
- Ribbon elements unaffected by heat or humidity
- Absence of high frequency peaks, "ringing" and phase shifts
- Equal sensitivity from front and back of elements
- Very low magnetic leakage
- High efficiency toroid matching transformers
- Gold plated XLR contacts

### RECOMMENDED APPLICATIONS

- Stereo & distance miking
- Choir, orchestra, string sections
- Drum overheads, room miking
- Percussion instruments
- Brass instruments, horn sections
- Woodwind instruments
- Stereo acoustic piano, harp
- Acoustic guitar, mandolin, stringed instruments



Actual Size

# ROYER SF-12

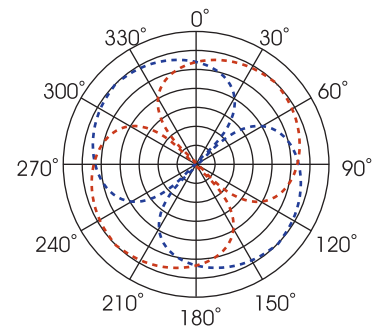
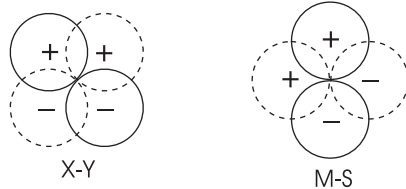
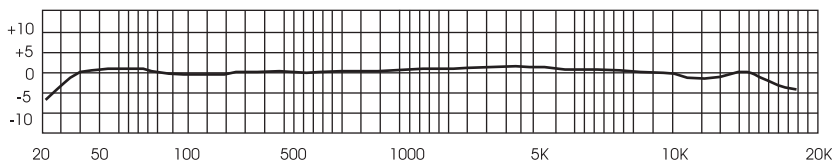
## Technical Specifications



<b>Acoustic Operating Principle</b>	Electrodynamic pressure gradient
<b>Polar Pattern</b>	Crossed figure-8's
<b>Generating Element</b>	1.8-micron aluminum ribbon
<b>Magnets</b>	Rare Earth Neodymium
<b>Frequency Response</b>	40 - 15,000 Hz $\pm 2$ dB
<b>Sensitivity</b>	-50 dB (re. 1v/pa)
<b>Output Impedance</b>	300 Ohms @ 1K (nominal)
<b>Rated Load Impedance</b>	1500 Ohms
<b>Maximum SPL</b>	130 dB @ 50 Hz
<b>Output Connector</b>	Male XLR 5-pin (stereo)
<b>Dimensions</b>	206mm L X 25mm W (8" L X 1" W)
<b>Weight</b>	369 grams (13 oz )
<b>Finish</b>	Matte Black Chrome/Dull Satin Nickel (optional)
<b>Accessories</b>	Protective wood case, 18' Cable (XLR5 to 2 standard 3 pin XLR male), mic sock
<b>Optional Accessories</b>	Suspension shock mount, windscreen
<b>Microphone Warranty</b>	Lifetime to original owner (repair or replace at Royer's option)
<b>Ribbon Element Warranty</b>	One Year



## Frequency Response and Polar Pattern



--- Upper Element  
 --- Lower Element

**Royer Labs**  
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