

Royer R-121 Ribbon Microphone Two Mics In One!

At distances of two feet and closer, the back of the R-121 is brighter than the front side. The difference in the sound is somewhat like blending 10% of a condenser mic in with your ribbon mic signal. This can be extremely useful when you record acoustic guitars, vocals, and other sound sources that you may want to hear a little more top end on.



Using The Back-Side

To record on the back-side of an R-121, turn the microphone around (logo side facing away from the instrument or vocalist), and either flip the phase switch on your mic pre or use a phase reversing cable to reverse phase. The R-121's pattern is figure-8 so the front side is in-phase and the rear side is out-of-phase. Flipping phase at your mic pre or with a phase reverse cable will make the back-side of the R-121 the in-phase side, giving you in-phase recordings from the back side.

Vocals

When recording vocals, position a pop filter at least three inches from the mic, have the singer start at 6 to 8 inches from the mic, and make your position changes from that starting point. For a large, very warm response, have the singer move in closer on the mic until the proximity effect becomes noticeable. For a good starting point with acoustic guitar, try positioning the mic 8 to 12 inches off the 12th fret.



How It Works

The technical explanation for the difference between the front and back side response of an R-121 is its Offset Ribbon design (patent pending).

All ribbon mics begin developing a gentle proximity effect at a distance of about 6 feet. While adding to the overall warmth of ribbon mics, this proximity effect does not become readily apparent until you're within a few inches of the microphone. All ribbon microphones before the R-121 had their ribbon elements positioned directly in the center of the ribbon transducer, meaning the proximity buildup would be identical on both sides of the mic. But with the R-121's Offset Ribbon design, the ribbon element is positioned slightly forward of the center of its surrounding magnets, part of what enables an R-121 to handle louder sound sources than conventional ribbon mics. Because of the offset design, the proximity buildup is reduced on the back side, giving it a brighter, somewhat more condenser like response than the front side when recording at distances of 2-3 feet and closer. Sound sources that are further than three feet from the R-121 will record exactly the same on the back side as on the front side.

** Important note!!!* Remember that the front (logo) side of the R-121 was designed to handle high SPL's. The back-side was not designed for high SPL abuse, so don't throw extremely high SPL's (like close up guitar cabinets) directly at the R-121's back side. Loud vocalists or aggressive acoustic work will present no problem to either side of an R-121.