

<u>ViEVV</u>

BY PAUL VNUK JR.

# Royer Labs R-101 Ribbon Microphone

New price point, new sonic signature
—same great Royer quality

About 12 years ago Royer Labs ignited the ribbon microphone revolution with its R-121 microphone. Now in 2010, that same model, side-by-side with a Shure SM57, is possibly the *de facto* standard of modern rock'n'roll guitar recording.

Royer only released a total of seven ribbon mics over the past decade, and most of those were variations on the R-121 and SF-12 themes (passive and phantom-powered, mono and stereo, solid state and tube-based), so the not previously announced release of the R-101 was an exciting surprise.

#### The R-101

The R-101 is a mono, passive ribbon mic with a figure-8 polar pattern, and like all Royer R-Series mics uses Royer's patented offset-ribbon technology. So far this sounds very much like the R-121 again, doesn't it? Well, yes and no.

While on the inside the R-101 uses the same rare earth Neodymium magnets and 2.5-micron aluminum ribbon as its big brother, the difference lies in its body, in terms of internal bracing, grille design, and said body's point of origin. With the R-101 Royer has joined the growing trend of importing overseas parts and blending them with American-made components in US assembly.

Now, before you write off this mic as a "Shanghai Royer", keep in mind that while the body is fabricated offshore to Royer's design specs, the internal components like magnets, ribbon, and transformer are the same as those used in the R-121 and the rest of the Royer line.

### Body talk

The new body is a big departure for Royer Labs... literally. At 7.9" tall and a diameter of 1.4" it is almost twice as big as a standard R-121, and at 17 oz. it weighs twice as much. It is finished in a classic matte black, and while it has the telltale Royer look, it is missing the little "wings" found on the R-121 and its active cousin the R-122.

The grille of the R-101 is triple layered, which helps to protect from big blasts of air (the bane of any ribbon microphone),

and it lessens the mic's proximity effect. This is a ribbon you can get right up on.

Another first for the R-101 is that it comes as part of a complete, integrated kit with its own custom screw-on shock mount, a velvet mic condom, and a hard-shell carrying case.

#### The numbers

The factory-supplied specifications of the R-101 include a frequency response of 30 Hz-15 kHz, a -48 dB sensitivity, an output impedance of 300 Ohms @ 1 kHz (nominal) and a max SPL of 135 dB at 30 Hz.

The frequency response of the R-101 is fairly smooth and flat with a slight rolloff below 50 Hz. It has slight presence peaks around 100 Hz and 2.5 kHz with a dropoff between 7.5 kHz and 12 kHz. From 12 kHz on the mic is again flat before falling off around 18 kHz.

### In use

Soon after receiving a pair of R-101s for review I had them set up as overheads above a 1966 Slingerland 4-piece drum kit for an indie rock session. I drove them with both a Millennia Media HV-3 preamp and a Chandler TG-2 for these sessions, and like all ribbon mics, the R-101 needs a good clean preamp capable of driving its low levels.

After having tracked the drum kit for a few weeks with a pair of Telefunken AR-51s (reviewed November 2010), the sound of the R-101 did take a bit of getting used to. Gone was the sparkly, airy distance of those condensers, replaced by a smokey, smooth, even sound that held the cymbals nicely in place and gave the track an instant classic vibe that worked perfectly for that night's tracking. Wowl

The R-101 was also very nice on the outside of the loosely tuned 20" kick drum, about 16" away. It really grabbed the rubbery boom nicely.

#### Amped up

Of course comparisons with the venerable R-121 are inescapable, and since the 121 rules the guitar amp world, that was my next step on the R-101 journey.

Starting out side-by-side on a clean, tremolo-infected Roland JC-120, both microphones sounded excellent and at times were difficult to tell apart, as they do share stylistic similarities. I ended up using both in the mix, panned hard right and left.

Listening extra closely, I found the R-101 to have a slightly more forward and pushy top end around 10–12 kHz, and a rounder low-mid response, while the R-121 was a bit more natural across the spectrum. Results were similar on both a cranked-up vintage Marshall JCM800 and screaming Fender Twin.

All in all I found the R-101 every bit as useful as my trusted R-121 on guitar cab, and they pair equally as well with mics like the Shure SM57 and SM7 and Sennheiser MD421 for a thick wall of guitar tone.

#### Acoustic instruments and vocals

On acoustic guitar I would recommend turning the microphone around as its back side is slightly brighter than its front (just like that on the R-121), and as such it captures the sound of strummed guitar with smoothness for a nice classic folk vibe, without the excessive jangle of many modern large-diaphragm condenser mics.

The R-101 is also a good choice for flutes, clarinets and high-end wooden recorders

like a Moek; again its signature is full and naturally clear, but not shrill or piercing.

Lastly I pulled out the R-101 for male vocal duties, and was again impressed. The singer had a modern crooner style and the smooth ribbon sound, with the slight brightness peak, sat nicely in the song even before mixing began.

# Comparing silk and silk

I remarked to my Editor as I finished this review that I enjoyed working with the R-101, both on its own merits and as a way to remind myself of how wonderful it is to have my tried and true, and occasionally overlooked, R-121 in my locker. In comparing and contrasting the two subtly different sounds I remembered why the R-121 has been my go-to ribbon for so many years!

Between the two, I would give the edge to the R-121's naturalness for overheads or as a room mic, but for flutes, kick drum, and especially voice, the R-101's high presence makes it a better choice in those areas. On acoustic guitar as well as guitar cabs, it's a taste-driven, case-by-case tossup; they both rock on said sources.

While I use the words 'high' and 'presence' when comparing the R101 with its sibling, keep in mind that these are still ribbon mics, Royer ribbon mics to be precise. They have a silky hi-fi sound, and neither one is as bright or airy as a good

high-quality condenser, nor are they as forward and punchy as a typical dynamic microphone. And they are *definitely* in a different class compared to many of the dark, swampy low-cost import ribbons.

# Wrapping it up

With the cost savings from the offshoreproduced body, at \$799 street this makes the R-101 Royer's most affordable microphone yet. Also be aware that the R-101 is not a poor man's 121. Both mics do their own thing and will happily live side-by-side in a mic locker without jealousy or prejudice.

Whether you are in the market for your first ribbon, stepping up from a budget model, or just looking for a new flavor, this mic will not disappoint. There are ribbons and there are Royers... and the R-101 is a Royer through and through.

Price: \$895

More from: Royer Labs, www.royerlabs.com.

Paul Vnuk Jr. (vnuk@recordingmag.com) is a recording engineer, musician, producer, and sound designer, living and working in the Milwaukee area. His latest project is Continental Drift, a cinematic world-music sample library for Sony Creative Software. Learn more about Paul's sonic exploits at www.majale.com.

