

# SE Electronics R1

Adding to your ribbon mic choices, SE has weighed in with a typically competitively priced quality performer. **JON THORNTON** takes the ribbon from his lair, shakes it loose and lets it fall...fortunately it will be repaired.

**SO WHAT'S GOING ON?** After trawling through a whole bundle of new ribbon mics for the last issue, it seems that the ribbon renaissance is in full flow, as SE Electronics' contender landed on my desk in a sea of bubble wrap. Taking this as an indication that I should exercise additional care in opening the package, the bubble wrap gave way to a compact hard-shell case containing the R1 microphone, an elastic suspension mount and that's about all. *[R1s now come in a black aluminium flightcase with a shockmount and 2m cable. Ed].*

The lack of any accompanying documentation had me scratching my head for a while, as I didn't know what might be lurking in the R1's matt grey body in terms of fancy electronics or output buffers. Deciding that prudence was the order of the day, phantom power was switched off from a channel of the console and the R1 was plumbed in for a guitar tracking session that had started to go just a little pear-shaped...

It turns out that the prudent approach was the correct one, as the R1 (UK£595 +VAT) is a classic ribbon design in every sense of the word.

At its heart is a 1.8 micron aluminium ribbon, matched to a simple passive output stage. Externally it's finished in the same battleship grey colour scheme as SE's large diaphragm condensers. A slatted grille lends a distinctly retro look to the microphone, and internally it seems that there's been some attention given to providing additional blast protection for the delicate ribbon assembly.

So, back to that session. A ribbon microphone wouldn't usually be my first choice for recording acoustic guitar — the low sensitivity and early HF roll-off often don't quite capture the

attack of the sound. However, the guitar in question was being played in Nashville Tuning, where the lower four strings are replaced with strings of a narrower gauge, and tuned an octave higher than usual. This is a great technique for getting rhythm sounds to really cut through a mix, particularly when doubled with a guitar in standard tuning.

Unfortunately, 'cutting' was the operative word in this case and not in a good way. Despite throwing all of my usual suspects at the problem, there was no getting away from an irritating, grating edge to the sound. Out of desperation more than anything, the R1 was brought in. Initially using the desk mic preamps (Audient), the results were a little underwhelming — not helped by the gain cranking needed as a result of the microphone's low-ish sensitivity and low output impedance (<300ohms). Swapping the desk pres for an Amek 9098 preamp made a big difference — similar amounts of gain needed, but with improved noise and a much more open sound.

But the biggest surprise was in the tonality — I was expecting something softer, but probably at the expense of transient detail, in fact the R1 softened the sound considerably while still managing to preserve a level of edge that was exactly what was needed. Part of this is because the R1's response seems to extend that bit higher than some ribbon microphones before gradually rolling off, and partly the fact that any proximity effect seems minimal.

Of course, there is always the temptation when a microphone solves such a pressing problem to brand it as a clear winner, but more investigation was needed. As such, the next port of call was on electric guitar via an Orange guitar cab — again quite a bright, ever so slightly harsh source. Positioned slightly off from the centre of the speaker, and about 15cm away, the R1 did its magic once more — a nicely gritty sound without any hint of harshness. It seemed to pull up the mid-range (about 2kHz) nicely, bringing out some presence in the guitar sound. There was plenty of authority to the lows and low mids as well, but without ever sounding overly boomy. For comparison, a Royer 122 was placed in the same position, and this sounded just that little bit harder, and in all honesty a touch fuller in the low mids than the R1. It's a subjective call, but in this particular case the

R1 won to my ears. Putting a little distance between the guitar cab and the microphones told a slightly different story though — at about 4 feet away both microphones were getting significant ambient pick-up in their rear lobes, but the R1 seemed to lack the focus on the direct sound that the Royer was still delivering, and started to thin out the lower octaves somewhat.

With pop-shield firmly in place, male vocals were next on the agenda — both spoken and sung. I've recently started to use Royer ribbons on occasion for recording voice-overs for certain male actors, and I was interested to hear the R1's performance in this application. The lack of a noticeable proximity bump means that, with care and a good popshield, you can

get the talent right onto the R1, giving an intimacy to the sound that counters the slightly attenuated HF response. The result is a voice that oozes depth and warmth. It's not a transparent sound, you always know that there's a microphone in the way (*Qué? Ed*), and the voice has all of the rough edges removed, but it's a very useable sound.

The final outing for the microphone was purely out of interest but as there was a drum kit set up and a willing drummer to bash it I tried the R1 as a single overhead — roughly three feet above the cymbals and slightly forward of the kick drum. In truth, I wasn't expecting much, as I've found other ribbons a little too dark to give the required definition in this type of position, but I was surprised. A nice, balanced sound, not overly bright but with a good sense of definition and attack to the cymbals and toms. Again, it was a touch thin in the 100–400Hz area, but that's not necessarily bad in this application.

The ribbon element in the R1 is that little bit thinner than most other ribbons out there, which probably accounts for this but this might also put off prospective purchasers, particularly if they are new to ribbons and have heard all the horror stories about their fragility. In an attempt to persuade people to make the leap, SE is offering to replace up to three ribbon elements damaged or broken free of charge. I should point out that this isn't a statement about the microphone's fragility — indeed UK distributor Sonic Distribution told me they haven't yet had to replace one — but it should serve to put a few minds at rest.

I really was pleasantly surprised by the R1's performance. I was expecting something much darker sounding and more akin to the multitude of low-cost ribbons currently appearing. It's priced closer to the Royers and Coles of this world than anything else, and it really does justify it. ■

## PROS

Smooth sounding microphone; good HF extension and detail; compares very well with ribbon models from a higher price bracket.

## CONS

Slightly less weighty sounding than some other options; can lack a little focus when at a distance from source.

## EXTRAS

The USB2200a from SE is a USB2 microphone based on the studio sE2200a capsule. It records via USB (record path 16-bit/48kHz, output path 24-bit/48kHz) directly to DAW. The mic includes low latency headphone monitoring (less than 1ms) with mix control to allow the user to set playback versus record path levels to monitor live takes, 10dB pad, bass cut and an 'analogue switch' that enables the user to use the mic via an XLR connector with 48V phantom power.



The USB2200a employs proprietary chips. One transforms the 5V power supplied via the USB cable to power the capsule after first removing noise and spikes from the current. A second chip includes the appropriate software drivers for plug-and-play use with any DAW.

## Contact

**SE ELECTRONICS, CHINA:**  
Website: [www.seelectronics.com](http://www.seelectronics.com)  
Sonic Distribution: +44 1582 470260