Marek Design RS1

Here's a new brand microphone from a new German manufacturer that has taken a different approach to the multipattern valve mic challenge. JON THORNTON says he likes it a lot and enjoyed exploring its possibilities.

MAREK DESIGN'S RS1 is what I would term a 'boutique' microphone. I use the term loosely to describe microphones that are produced in small numbers, often to exacting standards, and which more often that not have some slightly unusual features or characteristics that make them stand out from the crowd. The moniker also usually implies that you tend to pay handsomely for the privilege, and the RS1 certainly satisfies all of these conditions (Euro5125 + VAT).

Supplied in a rather nice solid briefcase, the RS1 is a variable-pattern tube condenser microphone and you get the microphone, control unit, shockmount and associated cables packed neatly inside it. It's not a behemoth, but compact and rather weighty — no doubt in part due to the casing being machined out of a solid section of stainless steel. First impressions are of supremely high build quality, and this extends to the supplied spider type shockmount, whose locking nut seems to be engineered to Rolls Royce levels of smoothness and precision.

Squinting through the steel mesh surrounding the diaphragm assembly gives the first clue that this is a somewhat unusual design. You see, although a multipattern microphone, the RS1 is a single diaphragm design featuring a 1-inch diameter diaphragm. Rather than achieving different polar patterns by electrically combining the outputs of two diaphragms, the RS1 achieves this by mechanical manipulation of the diaphragm's chamber and back plate. This is accomplished by a rotating ring at the base of the microphone, which has click stops numbered from 1 to 6. Position 1 is an omnidirectional pattern, while position 6 is a fig-8 pattern, with a series of gradually tightening cardioid patterns in between. It's impossible to see the mechanical system that performs this task, but it's certainly easier and less stressful than poking a screwdriver through the mesh and turning a screw!

The second slightly unusual feature of the RS1 becomes apparent when you unpack the control unit. Given that the pattern selection is performed at the microphone itself, this unit should simply provide power to the mysteriously named 'M tube' that forms the heart of the microphone's electronics and provides a mic level balanced output. This it does, along with a useful 3-stage earth-lift switch. But the additional provision of a level control coupled with a 15dB attenuator switch on the control unit means that further investigation is necessary.

Internally, the RS1 is an all-tube design, with a transformerless output that doesn't rely on any solid-state electronics. Interestingly, the designers have opted to allow the amplifier stage of the microphone to do more than simply generate a mic level output, instead making it capable of generating signal levels of up to +33dBu. This means that for applications dealing with medium to high SPLs, the microphone is capable of driving directly into a line level input. Because the amplification is all achieved within the microphone itself (the control unit is simply an attenuator), this has potential benefits with regard to signal to noise. Of course, if you want to, you can attenuate the output and use your favourite preamplifier — this just gives you more options.

The RS1 was set up and powered up in preparation for testing on a range of sources — and a couple of things are worth pointing out before commenting on its sound. The first is that it seems to warm up very quickly compared with some other tube mics, both vintage and new designs. The second is that the design of the shockmount, although incredibly well engineered, does make placement difficult in some situations when odd angles are the order of the day.

First impressions on listening to the microphone are that the differing patterns have a very significant effect on the overall tonality of the microphone, no doubt because of the way in which it is achieved. This is confirmed by the accompanying manual, which although a fairly tortured English translation, does include the frequency response plots for each of the settings. These show significant (up to 10dB) peaks and troughs on some of the patterns. The omni pattern, for example, has the fairly unusual characteristic of a wide 10dB lift centred around 7kHz, with a gentle dip between 100Hz and 300Hz. Position 2 (wide cardioid), exhibits the same broad HF lift, but with a flatter mid-range response. Setting 3 provides the flattest response of all in the cardioid settings, and as the cardioid setting is tightened up, low frequency response gradually shelves off, coupled with a pronounced dip around 3kHz. By the time the fig-8 setting is reached, the response is pretty bumpy with a pronounced peak around 1kHz.

Although on paper these measurements look almost disconcerting, in practice it makes the microphone incredibly versatile. The omni pattern, for example, worked fantastically as a single overhead on a kit, getting just the right balance of room and direct sound while sharpening up the HF very naturally. Similarly, the fig-8 pattern produced some really gutsy sounds when used to mic up a bass cab, with plenty of definition and attack.

But it's on vocals where the flexibility of the microphone becomes apparent. Moving between the cardioid patterns enables the mic to be quickly and easily matched to the vocalist, dialling out shrillness on female vocals with the tighter patterns, or adding depth and clarity to male vocals in the wider settings. Whichever setting is used, the microphone takes EQ very well — you can dial in almost stupid amounts of HF shelving boost without it starting to sound brittle or harsh. Yet another variable is how you use the gain structure of the microphone. Using all the available range of the microphone's own preamp and running straight into a line input generally resulted in a sound that was somewhat sharper, almost clinical in some regards. Attenuating the microphone's output and using a Drawmer 1961 preamp took some of the harder edges off the sound, but seemed to lose some of the attack.

In summary, I really liked this microphone — but given the flexibility and variables available to the user, never really felt that I'd fully got to grips with the true extent of its abilities. It's a microphone that demands a lot of time to learn. For example, I was less than impressed with the results obtained with it on an electric guitar cab — certainly in comparison with a SE Gemini it sounded a little lacklustre. But given its performance on other sources, I'm happy to put this down to not knowing it well enough. It's not cheap, but given the flexibility in tonality it's definitely worth considering as an alternative to the interchangeable capsule approach from the likes of Korby and Blue. ■

PROS Superb build quality; tremendous flexibility in response and application; eliminates the need for a mic pre in some applications.

CONS Shockmount a little awkward to position sometimes; takes a lot of time to learn; frequency response on some of the pick-up patterns (omni/fig-8) might not be terrifically suitable in some applications.

Contact

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