



SAM INGLIS

There was a time when no microphone catalogue was complete without a flagship stereo model. Typically, these mounted two capacitor capsules one above the other, either at a fixed 90-degree mutual angle or with a rotating mount that allowed this angle to be varied. Many also offered independent polar-pattern switching for each channel, enabling a wide variety of stereo configurations including Blumlein, Mid-Sides, and X-Y cardioids or hypercardioids.

Today, this sort of single-point stereo capacitor mic seems to have fallen out of fashion. There are lots of dedicated Mid-Sides mics on the market, but they are mainly intended for broadcast use; and although there are some excellent stereo ribbons around, these are limited to Blumlein recording, which isn't always what you want. Personally, I've long been a fan and enthusiastic user of multi-pattern stereo capacitor mics, so I was keen to try out the new V44S Gen2 from Vanguard Labs. As the name suggests, the V44S itself is not new, but the manufacturers encountered some production challenges during the pandemic which forced them to change suppliers, and took the opportunity to

Vanguard Audio V44S Gen2

Stereo Microphone

The glory days of the stereo microphone are long gone — or are they?

redesign some aspects of the mic, hence the 'Gen2'.

Box Fresh

Vanguard Labs' USP is to make their mics affordable by using capsules and other components from the Far East, but to ensure high quality by carrying out final assembly and testing in the US. Each V44S thus comes with an inspection sheet confirming that it has passed various visual and functional checks. This is reassuring, although the review mic still didn't come with a manual despite "manual insertion" being one of the completed QC tasks.

The V44S ships in its own attaché case, with rather pointless combination-locking catches. Contained within are an attractive wooden box that

houses the mic itself, a 5-pin cable, a very chunky shockmount and a splitter box. Although it's a transformerless, solid-state design, the V44S is even bigger than the classic AKG C24 valve mic, and weighs in at a hefty 680g. The mount has a threaded ring which screws onto the base of the mic; this holds the mic securely, but I found it rather fiddly and awkward to adjust. Since the mic is only supported at one end, it also tends to droop if used horizontally.

The splitter box presents the signals from the lower and upper capsules at the first two outputs, as you'd expect, and the mic needs to receive 48V phantom power on both; but there's also a third XLR that puts out a polarity-reversed signal from the upper capsule. As long as you can spare a third mixer channel, this provides >>

» a way to decode a Mid-Sides signal from the V44S without doing too much funky routing. And as well as a 5-pin XLR for the V44S itself, the splitter box has two further three-pin input connectors labelled Mid and Sides, allowing it to perform the same Sides splitting function with other mics if needed. It's nice that Vanguard have considered these circumstances, but why not go the whole hog and include a full-blown M-S decoding matrix?

Heady Wine

You'd struggle to ignore a mic this size at the best of times, but just to make the V44S completely unmissable, Vanguard Labs have polished the metalwork til it gleams, before finishing the body in "high gloss Pinot Noir". Incidentally, whereas most capacitor mics have a two-layer mesh grille to protect the capsule, the V44S has a surprisingly open single-layer basket. You'll want to be careful about dust and other potential contaminants getting in, and use a pop screen for close-up vocal work.

The capsules are conventional one-inch, dual-sided, true-capacitor designs, which can be switched independently between cardioid, figure-8 and omni polar patterns. This is done using miniature three-way toggles on the body of the mic, the position of which is not always easy to see from a distance. There are no pads or high-pass filters.

In some stereo mics, the upper or lower capsule rotates inside a fixed headbasket; in others, the upper capsule and its basket rotate together. Both types can be prone to mechanical failure, and Vanguard have developed a new system, which, they say, should prove more robust. This allows the upper half of the basket, capsule included, to be twisted in 15-degree steps to a maximum offset of 120 degrees. It certainly feels decisive and precise. However, the V44S does share one annoying feature with nearly every stereo mic I've ever used, which is that the logo indicating the front of the mic is aligned with the fixed capsule. In X-Y or Blumlein, of course, the 'front' is 45 degrees away from this point — but it's not obvious by looking whether that's 45 degrees to the left or right.

The published specifications for the V44S are, alas, a little sketchy. There are no polar pattern or frequency response charts, no sensitivity measurement, and although self-noise is quoted as 14dBA

and maximum SPL as 135dB, it's not stated which pattern the noise was measured in, or what level of distortion is reached at 135dB SPL. In practice, it seemed to be about 10dB hotter than my old AKG C414 EBs, which would suggest a sensitivity of around 20mV/Pa.

Matching Up

I began by trying informally to check the matching between the two capsules. Hugh Robjohns has described a relatively simple way of doing this, which involves setting the mutual angle to zero, hard-panning the two outputs and recording someone walking all the way round the mic whilst talking into it. If the capsules are matched, the recorded voice will remain dead centre on playback; if not, it will appear to wander or spread across the stereo image. The review mic performed very well in all three polar patterns.

Many old-school stereo mics are equalised for diffuse-field recording, for use as a main pair in distant recording of orchestras and the like. For example, if you look at the frequency response for the Neumann USM69, you'll see that it isn't a 'stereo U87', even though it uses the same capsule: there's a prominent peak at 10kHz in most polar patterns. I asked Vanguard Labs whether they had taken a similar approach with the V44S and they told me that they had tuned the mic by ear rather than according to measurements or theoretical principles. In practice, this does seem to have produced something of a lift from 10kHz upwards, but not so much as to unbalance the sound when used close-up.

I frequently use single-point stereo mics as drum overheads. They are easier to set up than spaced pairs, and often easier to work with at mixdown, even though they may come across as less impressive in isolation. I was very taken with the V44S in this role: it produced a seriously chunky sound with lots of midrange heft, and a low end that was weighty without being exaggerated. Such high-frequency lift as was audible didn't make the sound subjectively bright, and in comparison, my 414s came across as being much more sparkly and tizzy on the cymbals. In fact, although the capsules in the V44S are edge-terminated, the mic as a whole struck me as having much more of a 'German' than an 'Austrian' sound, and Vanguard confirmed that the

capsules are internally patterned after the classic Neumann K67.

Another context where I'll often wheel out a stereo mic is for recording singing guitarists. By setting both halves of the mic to figure-8 and positioning it carefully, you can often get good separation on the vocal and guitar without the time-of-arrival differences and consequent comb filtering that arises from positioning two mics independently. Again, the V44S did a sterling job, capturing an authoritative vocal sound and a really nice guitar tone with just the right amount of bite. It was also clear that the nulls to the sides of the figure-8 pattern are deep and true.

Looks Aren't Everything

I usually prefer my studio equipment to look functional rather than flashy, so I confess I was initially dubious about the Vanguard V44S. That scepticism quickly vanished when I set it up, and before the first day was out, I was a confirmed fan. I think this is a really nicely judged design that captures the spirit of classic stereo mics, even though it isn't a clone of any particular vintage model. Feature-wise, the only thing I really missed was a hypercardioid polar pattern: X-Y cardioids don't always deliver a very wide stereo image, though the ability to push the mutual angle to 120 degrees does help. Sound-wise, though, I think the V44S is spot-on, and it shines both in conventional stereo miking applications and less obvious dual-mono roles.

It also faces surprisingly little competition. As I mentioned earlier, stereo capacitor mics seem to be out of favour right now, and the most obvious alternative I know of is the Avantone CK40. This is outwardly similar and quite a bit more affordable, though I can't say how it compares in quality terms. Antelope's Edge Quadro is considerably more expensive, but does offer the additional flexibility of mic modelling, while if you have the budget, Neumann still make the USM69. For the rest of us, though, the V44S is a pretty compelling option! **///**

summary

A big, bold, larger-than-life stereo mic with a sound to match!

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