

Record Your Album With Just One Mic? *Shure!* (See Page 66)

RECORDING

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Vanguard Audio Labs V4 and V44S

Two variations of a great-sounding microphone design that sound as classy as they look

REVIEW BY PAUL VNUK JR.

Vanguard Audio Labs is a California-based manufacturer of studio microphones. The company is run by Derek Bargaehr and microphone designer Ken Avant.

We have been reviewing and admiring Ken's designs for over a decade, first with his previous company, Avant Electronics, and now with Vanguard Audio Labs. Respected industry professional George Petersen (former editor of *Mix* and current editor of *Front Of House*) came to us back in 2016 with a request to review Vanguard's V13 large-diaphragm tube condenser in *RECORDING...* and when George says, "You need to check out this mic," we listen. You can read George's thoughts in our October 2016 issue.

More recently, in May 2018, I looked at the V1 microphone system. This system is built around the V1 pencil condenser microphone and sold singly or in pairs, with multiple capsule choices, including a multipattern large-diaphragm lollipop-style head.

The hallmark of Vanguard Audio Labs is microphones with an impeccable fit and finish, great sound, and highly affordable price tags. I mentioned it in my previous review, but the company motto bears repeating: "Crafting great affordable tools so you can make great music."



Output Impedance:	200Ω
Max SPL:	appx. 135dB (145dB w/ Pad - on V4)
Frequency Response:	20Hz-20000Hz
Equivalent Noise Level:	≤14dBA
S/N Ratio:	≥80dBA (ref. 1Pa)

Two versions - same microphone

This issue we take a look at the third and fourth microphone offerings in the line: the V4 FET condenser and the V44S FET stereo condenser. Both models are actually the same mic; the V44S stereo mic came first and is literally two independent V4 microphones—dual circuit boards and all—inside a single body with a pair of adjustable independently rotating microphone heads.

Like all Vanguard microphones, the V4 and V44S are US designed and overseas manufactured, with final assembly and QC at the company headquarters in Upland, CA. They share the Vanguard family look with a classy high-gloss Pinot Noir finish, polished nickel head baskets and trim, and feature the prominent Vanguard winged logo badge. Like the V13 and V1, their metalwork is a mix of brass, aircraft grade aluminum, steel and zinc.

Both the V4 and V44S make use of the exact same 4" long x 1.82" diameter body. The single-capsule V4 stands 7.25" tall, while

REVIEW

Vanguard Audio Labs V4 and V44S

the V44S features a stacked dual-head design with a punched steel rotation mechanism and stands 9.41" high.

Cryogenic JFET

Internally each mic is built upon a low-noise, JFET circuit that is cryogenically treated and sports a transformerless, electronically balanced output. Each one uses a 34mm dual-membrane capsule with a 3µm thick, 26.4mm diameter gold-sputtered Mylar diaphragm.

The capsules are housed in a open-weave headbasket with minimal screening, which according to Vanguard offers "low internal reflections and 'open-air' voicing."

Each mic comes in a kit that includes an aluminum briefcase, a wooden storage box, a microfiber storage bag/cleaning cloth, and a VLSM Heavy-Duty Shockmount. This is one of the nicest, most heavy-duty shockmounts I have seen in a long time. It is beyond robust, weighty, and features an open front design. It also uses a standard threading size, so it can fit a selection of other manufacturers' microphones as well.

Additionally the V44S package comes with a heavy-duty multipin cable and a special stereo breakout box that we will look at below, and a foam windscreen.

The mono V4

While both microphones are essentially the same mic, the V4 does offer one feature that the V44S does not. On its back side is a dual-function, 3-position toggle switch. The left side engages a 120Hz highpass filter, while the right side engages a -10dB pad. This control is either/or; you can use one or the other but not both at the same time.

The stereo V44S

As mentioned, the V44S is two complete V4 microphones in a single body with a stacked-capsule design. The top capsule is attached to a stepped, 7-position rotating disc. Each click is marked by degrees from 0 to 90° (in 15-degree detented increments). As you

rotate the top capsule you alter the width of the perceived stereo field, and the preset clicks make sure both capsules are always in phase with each other.

The V44S is not only two mics in one, it's actually two multipattern mics in one. This means there is a matching 3-position pattern selection switch on both sides of the mic body. This allows you to use the V44S in XY and Blumlein stereo techniques, as well as being able to do Mid/Side miking with a single microphone by setting one to cardioid and the other to figure-8. You can also use non-traditional pattern combinations and simply see what works.

V44S Breakout box

Rather than just a breakout cable like many stereo mics use, the V44S includes a breakout box. It takes the multipin tap from each mic and splits it out to individual XLR outputs for both the top and bottom capsules. Additionally on the output side is a second top-capsule output with its phase reversed. This serves two purposes: first, it allows for on-mic M/S decoding right to your DAW, and second, it can solve possible phase issues if your preamp does not offer a phase/polarity flip.

The input side also offers the option of regular XLR inputs labeled Mid and Side, allowing you to use this box as a M/S encoder/decoder with other mics as well.

Sound

Vanguard microphones all strive for their own sonic signature rather than being clones of any past microphone. They bill the V4/V44S sound as "classic FET" and it is. This means it has a nice gentle, non-harsh top end, a very open yet present mid capture, and fully extended but non-exaggerated low end.

Its proximity effect is on the tamer side, unless you select figure-8 where it fills out nicely, and its off-axis rejection is smooth and neutral rather than sharp. This is important on the V44S; the stereo perception stays even and smooth regardless of position, rather than having a center volume drop and level jumps on the sides.

Omni is very open and airy, and using the V44S wide in dual-omni mode makes for a very diffuse and open room mic.

If I had to put the V4/V44S into a sonic FET family, I might say it leans more toward the AKG C 414 then it does the Neumann U 47 fet.

In Use

The smooth yet open natural V4 sound will do well on most any source, especially those of an acoustic nature like acoustic guitar, violin, mandolin, piano and percussion. It's also well suited to vocals. It might not be my first choice on guitar cabinets or up-close drum duties like snare, toms, or kick. However, it is a stellar drum overhead microphone and equally great at room miking tasks.

These are the two uses that I especially enjoyed the V44S on. It's so nice to put up a single stereo mic above or in front of a drum kit, dial in your width, and never have to worry about phase. It works well for stereo acoustic guitar recording for the same reasons.

Lastly, the V44S can be used as a single mono mic as well—just pick a capsule and go. It also works great set horizontally on singing guitar players. This allows you to adjust the nulls of each capsule to reject the opposing source, yet again the off-axis capture is quite neutral so the bleed and image still remain smooth and natural... and again perfectly in phase.

With its flexible polar pattern assignment and easily adjustable capsule angles, the V44S is a whole locker full of recording solutions in one mic.

Wrap up

Vanguard is on a roll. I like that they are taking their time and only have four mics in the line in three years. Apparently they spent two solid years perfecting the V4 models, and it shows. Lastly, the V4 comes in at a respectable \$399 street, with the stereo V44S at \$649. In other words: great quality that will not break the bank. ➤

Price: V4, \$399; V44S, \$649

More from:

Vanguard Audio Labs,
www.vanguardaudiolabs.com

