



Audio Labs

VANGUARD V4

Multi-Pattern FET Condenser Microphone

Thank you for choosing the VANGUARD V4 Microphone!

Your **VANGUARD V4** microphone is carefully packed at our workshop. The padded pinewood mic box and aluminum carrying case are designed to protect the microphone during shipping and storage. In addition, before any microphone is released, the final assembly and testing is performed here in sunny Southern California to make sure the mic is ready for you to reliably enjoy in professional recording situations.

TO AVOID DAMAGE TO YOUR MICROPHONE, PLEASE READ THIS ENTIRE MANUAL BEFORE PLUGGING IN THE V4 FOR THE FIRST TIME!

OVERVIEW

The Vanguard V4 is a large-diaphragm multi-pattern FET condenser microphone lovingly crafted by experts over the course of 2 years. It is designed to be a versatile & reliable professional tool in the vein of highly-sought-after vintage "workhorse" microphones of yesteryear. With a custom-voiced 3-micron capsule with 3 selectable polar patterns, selectable pad/rolloff, premium transformerless cryogenically-treated FET circuitry, and our heavy-duty VLSM shockmount, the V4 will be one of your favorite utility microphones.

PERFORMANCE

The **VANGUARD V4** was conceived and commissioned to establish a new performance standard at a very affordable price point. While being visually stunning, the V4's audio performance will inspire confidence from any artist, engineer or producer, with a sonic signature that is rich, yet natural, with no high-frequency hype or distortion. We designed the V4 with the character of yesteryear's iconic vintage microphones in mind, while also utilizing the latest technology to ensure that every nuance and detail of the performance is faithfully recorded. The custom-voiced capsule is switchable between cardioid, omnidirectional, and figure-8 pickup patterns and the pad and rolloff allows the V4 to accurately capture virtually any source material.

DESIGN

The **VANGUARD V4** is very different from other mics in its price range. It is designed and precision-built in limited quantities to “no-compromise” standards.

The V4 is a response to demand for a “mono” version of our V44S stereo microphone. While it utilizes largely the same circuitry, we also included a pad and rolloff switch on the rear of the V4 microphone to make it even more useful.

We started with a 34mm edge-terminated, gold-sputtered Mylar 3µm dual-capsule assembly and custom-voiced it with a proprietary hand-tuning process, placing the capsule in an open-weave headbasket for a natural sound with low internal reflections.

We then created a transformerless solid-state circuit that matches the unique musical properties of our capsules and loaded it with premium-grade, over-spec components sourced from manufacturers around the world. We cryogenically treated critical components in the signal & power paths, including an ultra-high-grade FET.

Aesthetically, the precision-machined brass body is coated with our signature Pinot Noir finish with a deep, lustrous gloss. We accented the color with polished nickel trim and a precision-cast Vanguard badge. Your V4's serial number is laser-engraved on the lower rear of the microphone.

The V4 was designed by a team of experts with more than 65 years of experience and vetted by world-famous engineers and producers.

QUALITY

The V4 was designed in the USA, and undergoes final assembly in sunny Southern California. We perform 100% quality control - every single microphone undergoes a series of stringent audio and visual tests here in Southern California before being hand-packed.

Every part of the V4 was designed to be robust and reliable. Wherever possible, over-specified components were utilized. The deep-cycle cryogenic treatment improves the lifespan, efficiency, and performance of critical electronic components. Brass, steel, aluminum, and zinc are part of the heavy-duty construction. Every Vanguard microphone is confidently backed by our FIVE-YEAR WARRANTY.

ACCESSORIES

When you buy a V4, you also get a VLSM Heavy-Duty Shockmount. We wanted to rethink the standard “spider-style” shockmount of old, and designed the VLSM with a few nifty features. First is the open front, which allows you to position the microphone as close to the source as necessary. Second, we install aerospace-grade suspension rings that won't break, sag, crack, or stretch over time.

When not in use, your V4 should be stored in its padded pinewood box. We also include a microfiber sleeve so you can practice safe storage even when the mic stays on the stand in between sessions.

The black aluminum carrying case with the V4 keeps your microphone and shockmount in one place.

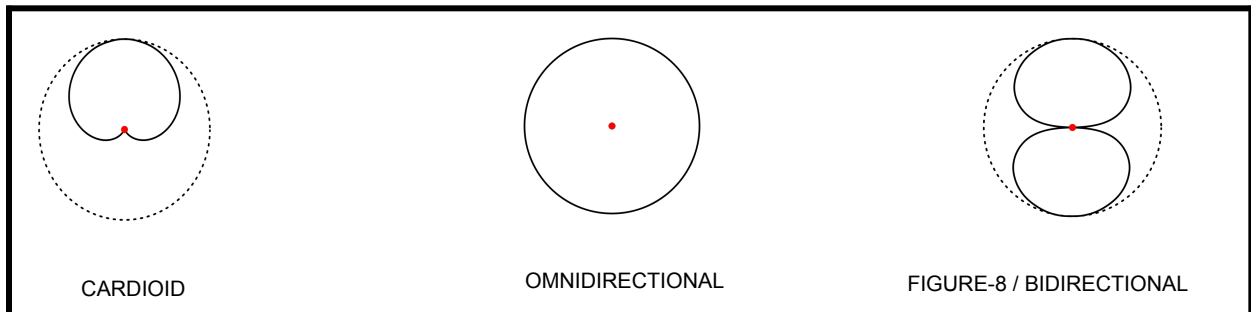
USAGE

The VANGUARD V4 excels in a multitude of recording situations. It is a superior choice for vocals, acoustic guitar, strings, drum overheads, room mic'ing, and the delicate nuances of piano, choral, and orchestral recording - essentially any acoustic instrument. Tested in a diversity of situations, acoustic environments, styles, and genres, we found that the V4 was often the top option, despite being matched against microphones several times its cost. Through our extensive testing, research, and listening, we've found a few particular uses we would like to share with you.

POLAR PATTERNS

The V4 capsule is independently switchable between three polar patterns - cardioid, omnidirectional, and figure-8/bidirectional.

PATTERNS



Cardioid

The Cardioid setting provides optimum pickup performance from the front, less from the sides, and the least from the back of the microphone. It is primarily used to allow precise focusing on a close-miked solo voice or instrument. This pattern allows the minimal amount of room sound to get into the signal path if working close up.

Cardioid microphones also exhibit "proximity effect". This is a boost in low frequency response at close range. For example, a singer that is 1 inch away from the mic will have a much deeper tone than one 6 inches away. Keep this in mind, and experiment with microphone distance to use it to your advantage.

Omnidirectional

The Omnidirectional setting will allow sound to be picked up equally from all sides of the microphone. It tends to have a more natural low frequency response, as well as a generally smoother response across the entire frequency spectrum. It also can exhibit some directional characteristics at higher frequencies. This setting allows the most room sound to be present with the recorded signal.

Figure-8 (also known as “Bidirectional”)

This pattern allows equal response on both the front and rear sides of the microphone capsule assembly, with excellent rejection of sound from the sides of the microphone. The Figure-8 pattern is used most commonly in stereo miking techniques such as Mid-Side and Blumlein, which both involve at least one figure-8 microphone. Figure-8's can also be used as room mics, to record two sources with a single microphone (e.g., two vocalists on opposite sides of the microphone).

HOW TO SET UP YOUR V4 MICROPHONE FOR USE

1) Set up your audio cables.

- The V4 takes a standard 3-pin XLR cable. Plug the male end into the XLR jack on your preamp, and run the female end to the mic stand for your V4 microphone. *Make sure to leave enough slack and route the cable safely so it won't be a tripping hazard. You may need to reposition your mic stand so you have enough cable length.*
- The V4 requires phantom power to operate. *Do not apply phantom power until all cables are routed and plugged in at both sides*

2) Set up the V4 microphone.

- *It's always best to set up your V4 microphone last, and take it down first, whenever setting up or putting away your gear. During other stages of setup, the microphone might accidentally be bumped or knocked over.*
- Remove the VL5M Shockmount from the aluminum carrying case. Thread it onto the microphone stand until tight, and then position the shockmount.
- Remove the V4 microphone from its wood storage box and storage bag. Hold the microphone carefully and thread the base of the V4 microphone into the threaded locking nut of the VL5M shockmount until tight. *Don't over-tighten - you might need to re-adjust the microphone's angle.*
- Plug the female end of the XLR cable into the bottom of the V4 microphone, taking care to align the cable correctly before plugging it in. *You can look at the bottom of the microphone and see the slotted insert on the side of the XLR jack, and correctly align the slotted insert of the XLR cable with it. Phantom power should always be off when plugging and unplugging the V4 microphone. Incorrect alignment of the cable when phantom power is on may result in electric shock or damage to your V4 microphone.*
- Position your V4 microphone as desired towards your sound source. *If you are using the V4 microphone on vocals, it is important to use a high quality Pop Filter to protect the capsule against breath moisture, as well as plosive blasts like “P”, “K”, “T”, etc. Failure to use a pop filter may result in damage to your microphone.*

3) Turn on the phantom power on your mixer, preamp, interface, or other device.

- *NOTE: You won't hear any sound for several seconds as the microphone voltages stabilize.*

FEATURES

CAPSULE & ELECTRONICS

- Custom-voiced, edge-terminated 34mm dual-capsule assembly with 3-micron gold-sputtered Mylar diaphragms
- 3 selectable polar patterns (switchable at microphone)
- Electronically-balanced solid-state circuitry loaded with premium-grade components
- Ultra-low-noise JFET design
- Deep-cycle cryogenic treatment of critical signal & power path components
- Selectable -10dB pad or 100Hz rolloff

CONSTRUCTION

- Heavy-duty brass, aluminum, steel, and zinc metal construction
- Open-weave headbasket for low internal reflections, “open-air” voicing
- Each V4 comes with its own laser-engraved serial number
- Over-spec componentry
- Deep-gloss Pinot Noir finish
- Polished nickel trim
- Precision-cast Vanguard badge
- Final Assembly and 100% Quality Control in California, USA
- 5-Year Warranty

STANDARD ITEMS SUPPLIED

- V4 FET Condenser Microphone
- VLSM Large Shockmount with aerospace-grade suspension rings (with 2 replacement bands)
- Padded Pinewood Microphone Storage Box
- Microfiber Storage Bag
- Locking Aluminum Carrying Case

SPECIFICATIONS

Capsule Type:	34mm / 3-micron Gold sputtered Mylar-True Condenser (DUAL CAPSULE)
Polar Pattern/s:	Cardioid, Figure-8, Omnidirectional
Frequency Range:	20Hz-20,000 Hz
Output Impedance:	200 Ohms / electronically coupled
Maximum SPL :	135dB (1% THD @1000Hz)
Equivalent noise level :	<=14dBA (A-weighted)
S/N Ratio:	>=80dB (Ref. 1Pa A-weighted)
Output Connector:	Male XLR 3 pin, gold-plated
Included Accessories:	Padded Wooden Box, Shockmount, Metal case, Microfiber Bag
JFET Type:	Proprietary Select Premium Grade, Ultra-Low-Noise and Ultra-Low-Capacitance
Power Requirement:	Phantom Power (48V ideal)
Finish:	Polished Nickel trim / Pinot Noir Body
Warranty:	5 Years

CARE AND PRECAUTIONS

- When not in use, please store your V4 microphone in the provided padded wooden microphone case. We recommend keeping the plastic sleeve that the microphone is shipped in along with the silica gel desiccant packet and keeping it on the microphone when not in use to prevent debris or moisture build-up on the capsule. The provided microfiber storage bag can also be used for this.
- When using for close-mic'd vocals, it is important to use a high-quality Pop Filter to protect the capsule against breath moisture, as well as plosive blasts like "P", "K", "T", etc. Failure to use a Pop Filter may result in damage to your microphone.
- Always protect your V4 from any hard jolts, drops, and vibrations. Although it is ruggedly constructed, it is a professional tool and should be treated with respect. Always handle with care.
- For best performance, stability, & longevity, do not expose the microphone to any moisture or smoke.
- **DO NOT** open the V4 microphone while plugged in. Any attempt to open the V4 microphone will void your warranty.

- Don't use this product in or near water, during a lightning storm, etc. It is intended as a professional microphone only.

The VANGUARD V4 complies with all applicable CE / RoHS / WEEE European Union directives.



SERVICE & WARRANTY

LIMITED 5 YEAR WARRANTY

VANGUARD microphones purchased in the U.S.A. are warranted by Vanguard Audio Labs to be free from defects in materials and workmanship for the period of 5 YEARS to the original purchaser. In the event of such defects, the Vanguard Audio Labs product will be repaired without charge or, at our option, replaced with a new one if delivered to Vanguard Audio Labs prepaid, together with the sales slip or other proof of purchase date. The warranty excludes problems due to normal wear, abuse, shipping damage or failure to use the product in accordance with the specifications. This warranty does not apply if the product has been damaged by accident or misuse, or as a result of repair or modification by other than a Vanguard Audio Labs customer service facility authorized to service this product.

All parts except tubes (90 days) are covered under this Limited 5 Year Warranty.

Vanguard Audio Labs shall not be liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation or commercial loss or any other damages, whether incidental, consequential or otherwise. This warranty gives you specific legal rights, and you may have other rights, which will vary from state to state.

Specifications and prices are subject to change without notice or obligation.

Do not attempt to service this unit yourself, as it will void your warranty. Please check your unit carefully upon receipt and return to place of purchase immediately if there are any problems with the product. After that, the standard VANGUARD AUDIO LABS 5-YEAR WARRANTY will apply to defects in materials and workmanship.

(U.S.A) Should your VANGUARD microphone require service, please contact the VANGUARD AUDIO LABS Service Department. (909) 920-5600 -or- e-mail service@vanguardaudiolabs.com

To claim warranty in USA, microphones and accessories must be delivered in their entirety to VANGUARD AUDIO LABS freight prepaid, IN PROPER/SAFE PACKAGING. All returns must have prior authorization before shipping. Please contact VANGUARD AUDIO LABS for a Return Authorization Number (RA). A sales slip or other proof of purchase must be included.