VANGUARD

Audio Labs

VANGUARD V44S

Stereo Multi-Pattern FET Condenser Microphone

Thank you for choosing the VANGUARD V44S gen2 Microphone!

From day one at Vanguard Audio Labs, we have always sought ways to improve our products and we always will…that is part of our mission. As a result, on the NEW gen2 Vanguard microphones, we have upgraded nearly all of the key signal path components to audiophile-grade parts, sourced from American parts manufacturers. These upgrades have netted us a lower signal-to-noise ratio (even though we already had a superb reputation for low noise mics), and vastly improved sound staging. In addition, we also made physical design improvements in several areas, including a redesigned rock-solid rotating mechanism for the V44S (allowing the user to precisely set the angle of the two capsules) and widening the available rotation range to 120º. All cable, microphone, and splitter box connectors are now made by Neutrik™. We also gave the finish a beautiful upgrade. In short, we feel the new V44S gen2 microphone is a true world-class mic.

Enjoy!

Your **VANGUARD V44S** 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, 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 V44S FOR THE FIRST TIME!

OVERVIEW

The Vanguard V44S is a stereo large-diaphragm multi-pattern FET condenser microphone. Lovingly crafted by experts over 2 years, it is designed to be a versatile, reliable, professional tool in the vein of highly-sought-after vintage stereo condensers of yesteryear. With a pair of

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coincident twin custom-voiced multi-pattern capsules, you can utilize X/Y, Mid-Side, Blumlein, and other less conventional stereo microphone techniques in a single microphone. With our proprietary detented heavy-duty rotation mechanism, versatile splitter box, premium cryogenically-treated FET circuitry, and a VLSM shockmount, the V44S is the first and last stereo microphone you'll ever need to reach for.

PERFORMANCE

The **VANGUARD V44S** was conceived and commissioned to establish a new performance standard at an until now unachievable price point. While being visually stunning, the V44S'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 V44S 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 captured. Both matched custom-voiced capsules are independently switchable between cardioid, omnidirectional, and figure-8 pickup patterns to enable several different stereo recording techniques.

DESIGN

The **VANGUARD V44S** is very different from other mics in its price range. It is designed and precision-built in limited quantities to "no-compromise" standards.

We started with twin 34mm edge-terminated, gold-sputtered Mylar 3µm dual-capsule assemblies and custom-voiced them with a proprietary hand-tuning process, placing each capsule in an open-weave headbasket for a natural sound with low internal reflections. The top headbasket rotates up to 120°, with detents every 15° for repeatability of settings. The headbasket uses a proprietary punched-steel and ball bearing design that is reliable and durable.

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 stainless steel 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 V44S's serial number is laser-engraved on the lower rear of the microphone.

The V44S was designed by a team of experts with more than 65 years of experience and vetted by world-famous engineers and producers.

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QUALITY

The V44S 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 V44S was designed to be robust and reliable. Wherever possible, over-specced components were utilized. The deep-cycle cryogenic treatment improves the lifespan, efficiency, and performance of critical electronic components. Stainless steel, brass, 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 V44S, 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.

The V44S also comes with a splitter box with a unique set of inputs and outputs for easy location recording operation. An additional phase-reversed top-capsule output allows for live Mid-Side operation. We also added two additional standard XLR inputs so you can use this functionality with any pair of mono microphones.

When not in use, your V44S 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 locking carrying case with the V44S keeps your microphone, cables, and power supply in one place.

USAGE

The VANGUARD V44S excels in a multitude of recording situations. It is a superior choice for acoustic guitar, strings, drum overheads, room mic'ing, and the delicate nuances of piano, choral, and orchestral recording - essentially any acoustic instrument. There's even a good use for vocals! Tested in a diversity of situations, acoustic environments, styles, and genres, we found that the V44S was often the top option, despite being matched against microphones several

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times its cost. Through our extensive testing, research, and listening, we've found a few particular uses we would like to share with you.

ACOUSTIC GUITAR

The V44S is superb for adding width and detail to your acoustic guitar tracks. We tested the V44S on a variety of acoustic guitars from several price ranges. We found that even when tracking overly-bright and mid-rangey guitars, the V44S brought out the very best in each instrument. Using an X/Y pattern, vary the distance and angle of the two capsules to pick up both the body of the guitar and the fretting hand.

DRUMS - ROOM AND OVERHEAD

As an overhead, experiment with X/Y, Mid-Side, and Blumlein operation for various styles. The coincident capsules allow for virtually perfect phase alignment.

As a room mic, try setting both capsules to omnidirectional and rotating the top capsule to the 90º position. This allows for a more truly omnidirectional operation at higher frequencies, as the 2nd capsule picks up high frequencies where the "nulled" sides of the first capsule might not.

An additional room microphone trick if you prefer a variety of options in the mix: set the top capsule to the 0º position. Set each capsule to a different polar pattern (for instance, omnidirectional for the top capsule, cardioid for the bottom capsule). You'll be able to use either track during mixing, or a combination of both.

VOCALS

One unique trick for songs or passages with a variety of vocal dynamics is to use a V44S with two different gain settings. By setting one capsule to a lower gain than the other, you can easily capture both quiet and loud phrases by the artist during the same take, without clipping. You can then quickly comp together a vocal track from the two tracks that sound identical.

Rotate the top capsule to the 0º mark. Position the singer so they are 6-12 inches from the microphone, singing directly in between the two capsules. **IMPORTANT - for any vocals recorded within 12 inches of the microphone, it is imperative that you use a professional-grade pop filter to protect the capsules of the V44S.**

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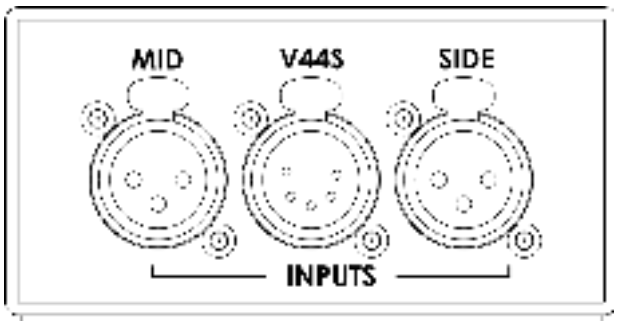
POLAR PATTERNS

Each V44S capsule is independently switchable between three polar patterns - cardioid, omnidirectional, and figure-8/bidirectional. The combination of different patterns and capsule angles allows you to use a variety of conventional and unconventional stereo techniques.

USING THE SPLITTER BOX

The V44S splitter box was designed with mobile recording situations in mind. There are a few extra inputs and outputs on the splitter box that may come in handy.

Inputs

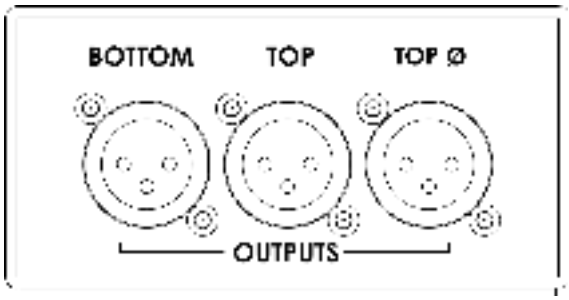


V44S - This 5-pin XLR connector connectors the V44S microphone to the splitter box. It routes to all three outputs.

MID - you can use two mono microphones with the splitter box for Mid-Side recording in mobile recording situations. This 3-pin XLR connector routes to the "BOTTOM" output.

SIDE - you can use two mono microphones with the splitter box for Mid-Side recording in mobile recording situations. This 3-pin XLR connector routes to the "TOP" and "TOP Ø" outputs.

Outputs



BOTTOM - This 3-pin XLR connector routes to the bottom capsule of the V44S microphone - or the "MID" input in the case of using two mono microphones.

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TOP - This 3-pin XLR connector routes to the top capsule of the V44S microphone - or the "SIDE" input in the case of using two mono microphones.

TOP Ø - This 3-pin XLR connector routes to the top capsule of the V44S microphone - or the "SIDE" input in the case of using two mono microphones. **This connector is phase-reversed and transformer-isolated.** This output is specifically for Mid-Side recording in mobile or live situations where a phase-reversed input is not available on your mixer or DAW. Instead, you can use this output and a 3rd XLR cable to have all the necessary tracks for Mid-Side stereo.

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HOW TO SET UP YOUR V44S MICROPHONE FOR USE

1) Set up the splitter box.
   - Remove the splitter from the aluminum carrying case. Set it at a reasonable distance, taking into account the length of your cable runs.
2) Set up your audio cables.
   - Remove the 5-pin XLR cable from the aluminum carrying case. Plug the male end into the V44S jack on the INPUT side of the splitter box, and run the female end to the mic stand for your V44S 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 splitter box and/or mic stand so you have enough cable length.*
   - Plug the XLR cables from your mixer, interface, preamp, or other input device into the corresponding OUTPUT jacks of the splitter box. The V44S requires phantom power to operate. *Do not apply phantom power until all cables are routed and plugged in at both sides*
3) Set up the V44S microphone.
   - *It's always best to set up your V44S 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 VLSM Shockmount from the aluminum carrying case. Thread it onto the microphone stand until tight, and then position the shockmount.
   - Remove the V44S microphone from its wood storage box. Hold the microphone carefully and thread the base of the V44S microphone into the threaded locking nut of the VLSM shockmount until tight. *Don't over-tighten - you might need to re-adjust the microphone's angle.*
   - Plug the female end of the 5-pin cable into the bottom of the V44S 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 5-pin jack, and correctly align the slotted insert of the 5-pin cable with it. Phantom power should always be off when plugging and unplugging the V44S microphone. Incorrect alignment of the cable may result in electric shock or damage to your V44S microphone.*
   - Position your V44S microphone as desired towards your sound source. *If you are using the V44S microphone on vocals, it is important to use a high quality Pop Filter to protect the*

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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.

4) 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

- Twin matched custom-voiced, edge-terminated 34mm dual-capsule assembly with 3-micron gold-sputtered Mylar diaphragms
- 3 independently switchable polar patterns per capsule (selectable 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
- 120° rotatable top capsule with 15° detents
- Versatile splitter box for mobile & live recording conditions

CONSTRUCTION

- Heavy-duty stainless steel, brass, aluminum, and zinc metal construction
- Robust punched-steel capsule rotation mechanism
- Open-weave headbasket for low internal reflections, "open-air" voicing
- Each V44S 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

- V44S Stereo FET Condenser Microphone
- V44S Splitter Box
- VLSM Large Shockmount with aerospace-grade suspension rings (with 2 replacement bands)
- Padded Pinewood Microphone Storage Box
- Microfiber Storage Bag

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- Locking Aluminum Carrying Case
- 5-Pin Microphone Cable

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SPECIFICATIONS

Capsule Type:	**34mm / 3-micron Gold sputtered Mylar-True Condenser (DUAL CAPSULE)**
Polar Pattern/s:	**3 patterns per capsule, independently selectable at microphone**
Frequency Range:	**20Hz-20,000 Hz**
Output Impedance:	**200 Ohms / electronically coupled**
Maximum SPL :	**135dB (1% THD @1000Hz)**
Equivalent noise level :	**≤12dBA (A-weighted)**
S/N Ratio:	**≥82dB (Ref. 1Pa A-weighted)**
Output Connector:	**Male Neutrik XLR 5 pin, gold-plated**
Included Accessories:	**Padded Wooden Box, Shockmount, Metal case, Splitter Box,, 5-Pin Cable, 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 V44S microphone in the provided padded wooden microphone case. We recommend keeping the plastic sleeve that the microphone is shipped in, and keeping it on the microphone when not in use to prevent debris 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 V44S 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 V44S microphone while plugged in.
- **DO NOT** open the V44S splitter box while plugged in. Don't use this product in or near water, during a lightning storm, etc. It is intended as a professional microphone only.

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- **HOW TO SET YOUR CARRYING CASE LOCKS**:
  - Open the V44S case. Remove the red plastic securing the 3 rotating number wheels.
  - Push the square opening mechanism for the first lock TOWARDS THE HANDLE of the case. Set your desired 3-digit combination. Release the square so it returns to its normal (middle position).
  - Repeat this process for the second lock. Close the case and test your new combinations.

The VANGUARD V44S complies with all applicable CE / RoHS / WEEE European Union directives.



IMPORTANT SAFETY INFORMATION



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO AVOID FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPARATUS TO WATER, RAIN OR MOISTURE.

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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 anyone 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. The standard VANGUARD AUDIO LABS 5-YEAR WARRANTY will apply to defects in materials and workmanship.

(USA) Should your VANGUARD microphone require service, please contact the VANGUARD AUDIO LABS Service Department. (909) 920-5600 *or* email **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 receipt or other proof of purchase must be included.

(OUTSIDE USA) Should your VANGUARD microphone require service, contact the distributor in your territory by visiting **vanguardaudiolabs.com/find-a-dealer**. In the event your location is no longer served by a distributor, please contact the VANGUARD AUDIO LABS Service Department. +1 909 920-5600 *or* email **service@vanguardaudiolabs.com.**

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