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equipment

Brauner VM1 Microphone Klaus Heyne Edition

by Russ Long

hat do you get when you combine the exquisite Brauner VM1 tube microphone with one of the world's top microphone customizer/modifiers? The answer is the amazing new Brauner VM1 Klaus Heyne Edition (VM1 KHE).

I'm sure the sensation that overcame me when I first lifted the Klaus Heyne edition VM1 microphone (serial number 001) from its padded flight case was similar to the feeling that overcame King Arthur as he lifted Excalibur from the stone that magically held it for so long. I was in awe.

I have been a fan of the original VM1 for some time, after being introduced to its sonic thumbprint by Nashville Engineer Steve Bishir a couple of years ago. Now, the stellar microphone has taken a step up the sonic staircase with Klaus Heyne's modification.

At a Glance

Applications:

Studio recording

Key Features:

Klaus Heyne-modified Brauner VM1; cardioid and variable polar patterns

Price:

\$8,800

Contact:

Brauner Microphones/Transamerica Audio Group at 805-375-1425; www.transaudiogroup.com; or circle **Reader Service 173.** For readers not familiar with Klaus Heyne's background, he has been active in upgrading and customizing high-quality condenser microphones for nearly 20 years. His clients have included artists (Neil Young, Bryan Adams, Barbra Streisand), producers/engineers (Tommy LiPuma, Narada Michael Walden, Bill Schnee, Shawn Murphy) and studios/film companies (A&M/Cello, Conway, LucasFilm, Disney).

Three years ago, Klaus met Dirk Brauner and Brad Lunde of Transamerica Audio (the U.S. distributor of Brauner products) at an AES show. They discovered they all shared a passion for advancing the art of great microphones. Using the Brauner VM1 as the platform, they believed it was possible to build a microphone that would challenge the rare and most-revered German vintage microphones.

Agreeing collectively to take a stab at it, design and prototype work began in earnest in Germany (at Brauner) and in the U.S. (at Heyne's German Masterworks in Oregon). Eight months later, the first prototype was delivered to scoring guru Steve Kempster (who uses five Brauner VM1's) working at Todd AO in LA. The word was that the microphone was on the right track. The trick was producing them in quantity at Brauner's farmhouse/factory.

Two years later, I find myself the first engineer/reviewer to hear the results of the designers' goal of providing a readily available and lower cost alternative to the rare and expensive "super" mics whose prices continue to escalate. In my opinion, they have achieved their goal.



Features

The 2-inch by 8.75-inch Brauner VM1 KHE ships in a rugged case that includes the power supply, shockmount, pop filter and all cabling. The VM1 KHE's power supply is cased in the same box as the original VM1 supply. The only difference is that the VM1's pad switch has been redesigned as a pattern switch (there is no pad on the VM1 KHE).

The pattern switch can be set to cardioid mode or variable mode. An indicator light glows green in variable mode and red in cardioid mode. In cardioid, the power supply removes the rear capsule half (which is idle in cardioid) from the circuit.

This is similar to switching an ELAM251 or U47 to cardioid. This mode of operation is claimed to avoid the loss of clarity and reduction in noise floor encountered when a microphone with remote pattern control is set to cardioid.

According to Brauner, the result is an increase in the microphone's output and a decrease in the noise floor to the point that the VM1 KHE is the "quietest tube microphone ever manufactured." In variable mode, the continually variable polar pattern knob determines the mic's polar pattern.

The VM1 KHE has been designed to eliminate phase shift, which results when circuitry is designed to achieve equalization, rolloff and pad switch functions, or dial in specific gain. Brauner says that phase shift accounts for the midfrequency grit found in many modern condenser microphones. In the VM1 KHE, the designers say that nearly all frequency equalization is achieved through the judicious fine-tuning of the capsule's parameters.

Phase shift is also the unavoidable result of double-backplate capsule designs. The

original VM1 design reduced acoustical phase shift by porting between backplates. In the VM1 KHE, phase shift has been reduced more through bigger porting.

The already-simple VM1 circuitry for impedance conversion (capsule-to-microphone amp) and impedance matching (microphone amp to mixing board) was further reduced by Heyne's design, according to Brauner. The designers believe that a simple circuit results in a purer signal, and the VM1 KHE is said to have the most direct path between the capsule and front end of any condenser mic ever manufactured. Heyne also upgraded all of the microphone's electronic components and internal wiring.

In use

Pretty impressive-sounding design, but how does this \$8,800 microphone sound? In a word, using the VM1 KHE is delightful. This beautifully crafted microphone not only looks fantastic, it sounds fantastic as well.

On acoustic guitar, it sounded rich and full, with a warm and well-defined bottom end. I found the microphone did a great job capturing electric guitar, lap steel and percussion with a high degree of accuracy and dimension.

On vocals, the microphone is brilliant. The extremely transparent microphone delivered clarity and detail that rivals any microphone I've encountered.

I experimented with simultaneously recording acoustic guitar and vocals with a single VM1 KHE; again, the results were impressive. The microphone continued to have a full and defined bottom end, even at a distance of several feet. Without much difficulty, I was able to position the microphone to

Product Points

Brauner VM1 KHE Microphone

Plus

- Sound quality
- Minimal phase artifacts
- Super quiet
- Build quality

Minus

• Price

The Score

If the \$8,800 VM1 Klaus Heyne Edition microphone is within the budget, buy it. Sonically, you can't go wrong.

capture the perfect guitar-vocal blend.

My only complaint about the VM1 KHE is the price. Because it is a state-of-the-art microphone, building it is pricey. At \$8,800, with a street price of about \$7,800, it is out of my price range (or so my wife tells me). It is, however, expensive to craft a superior piece of equipment. Compared to the prices some vintage mics are fetching — a vintage 251 or C 12 frequently break the \$10,000 barrier — the VM1 KHE could be considered a bargain.

Summary

Via e-mail, Klaus Heyne explained, "I aim to give my microphones sensuality." With the VM1 KHE he, along with Dirk Brauner, has surely succeeded. The Brauner VM1 Klaus Heyne Edition is one of the finest microphones I have ever heard.

Russ Long, a Nashville-based producer/engineer, owns The White House and The Carport recording studios. He is a regular contributor to **Pro Audio Review.**

