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VOL. THIRTY-THREE
NUMBER FOUR

FEBRUARY 2020
USA \$5.99
CANADA \$5.99





Roswell Pro Audio Mini K87 Condenser Microphone

A small but mighty new condenser microphone with a smooth, open sound and a great price tag!

REVIEW BY PAUL VNUK JR.

The Mini K87 is the latest microphone offering from Roswell Pro Audio. It gets its name from its diminutive size and joins the previously released Mini K47 in the Roswell lineup.

We were introduced to the Mini K47 and Roswell Pro Audio in our September 2015 issue. Roswell Pro Audio is run by microphone expert Matthew McGlynn who also oversees the website Recording Hacks (recordinghacks.com), the largest database of microphone info on the world wide web. Matt also runs Microphone-Parts (microphone-parts.com), one of the most respected microphone modding sites. Essentially, Roswell Pro Audio distills Matt's extensive knowledge of microphones, parts, and circuit designs into a line of mics that are well built, sound great and are competitively priced.



Mini

The Mini K87 shares the same 5.91"x 1.73" body as the Mini K47. The body is made of thick steel with a dark gray sparkle finish, and a triple-mesh brushed nickel grille. Internally similar to the Mini K47, it's an electronically balanced/transformerless design that uses audiophile grade components throughout. The mic is of overseas origin but is built to Matt's strict specifications and modifications. Matt even did the PCB layout for the circuit. Each mic is rigorously tested and burned in here in the US.

Each mic comes in a set with a Cut-away™ elastic shock mount, microfiber bag, and a small aluminum briefcase.

K87

While the number 87 might lead one to think that this new microphone is a small-scale U 87 clone, it's not. Just as the Mini K47 gets its name from its use of a K47-style capsule, so too the Mini K87 makes use of a K87 capsule.

According to Matt, "The Roswell K87

capsule designation is my own. It's a large diaphragm capsule based on the K67 design. It differs from most K67 capsules in that it has a much flatter frequency response.

The voicing of the Roswell K87 capsule allows us to achieve a much smoother response in the Mini K87, and retain more air than would be possible with a typical K67 capsule."

Yes, K67/87 capsules originate in Neumann U 67 and U 87 microphones, but that does not make every microphone with a K87 capsule a U 87, or even a clone.

The K67/K87 capsule used here is a 34mm center-terminated capsule with an ultra-thin gold-plated mylar diaphragm. It's a single pattern cardioid mic.

According to its frequency graph, the Mini K87 has a slight 1dB rise from 100Hz down to 20Hz, a flat midsection, and a 1-2dB peak at 4kHz followed by a second smaller 10kHz peak.

Generally speaking, the sound of the Mini K87 is neutral and smooth, with excellent low end capture balanced with a gently clean and open top end. This mic is in no way bright, spitty, sibilant, or strident. It's honest and open, but it's beautiful and glassy smooth.

To best get a handle on the sound of the Mini K87, I found it easiest to make side-by-side comparisons with the Mini K47, a pair of which I use often.

Frequency Range:.....20Hz - 16kHz
Sensitivity:.....14 mV/Pa
Impedance:.....112 ohm
S/N Ratio:.....82 dBA
Equivalent noise:.....12 dBA

Drums

My most common use of the Mini K47 is on drum overheads. I like them because they're small, easy to place, and best of all they sound great. In my Mini K47 review, I described them on overhead duties as offering super tight imaging that captured the kit with a good balance of weight, punch, and openness. In contrast, the stereo pair of Mini K87 mics sounded wider, airier, and more open compared to the tighter Mini K47. On drums, I would choose the Mini K47 when I want the image of the kit, especially the snare and cymbals, to thrust forward in a mix with close mics used as reinforcement. By contrast, the kit through the Mini K87 sits back in the mix with a natural un-hyped sound that blends nicely around tighter close-miked kit pieces.

Acoustic Guitar

The Mini K87 captures acoustic instruments such as acoustic guitar with a great balance of clarity and richness. Again, the word 'un-hyped' comes to mind and is contrasted by the Mini K47 that thrusts the strums forward and has a stronger low end.

Electric Guitar

This is the one area where the Mini K47 edges out the Mini K87 if you're going for an aggressive, forward rock tone. On the other hand, the Mini K87 works nicely a few inches to a few feet back from the amp cabinet. It grabs a full, balanced picture of the amp, well suited to clean jazz, blues, and pop/country styles and whereas I usually use the Mini K47 on its own on guitar cabinets, the Mini K87 pairs well with a forward dynamic mic like the ubiquitous Shure SM57.

Vocals

On vocals, again the Mini K47 is more forward and punchy, displays less proximity effect, and comes across as slightly brighter. The Mini K87 is just as clear-sounding but gentler in tone, with a nice proximity effect that would be very well suited for spoken word, voiceover work, and podcasting. On male and female singers, the Mini K87 plays no favorites and would be a perfect choice for most musical styles where the voice is supported by the instrumentation rather than

needing to force its way through (which is when you'd reach for the Mini K47).

Conclusions

For the past four years, the Mini K47 has been one of my most recommended microphones for anyone that wants a great, classic-sounding mic at a great price. The Mini K87 forces me to rethink that a bit—it is, by design, more versatile overall and a touch more laid back. Which one is right for you? Both are clean and pure sounding with a quiet noise floor. If you want forward color, pick the Mini K47. If you want neutral with a touch of richness, go with the Mini K87. The best part is still the mini-price of the new Roswell Mini K87—at \$399 street, I might recommend a Mini K87 pair, or a Mini K47/87 combo, possibly before I'd consider a single \$800 - \$900 mic. Seriously, these mics sound that good. ➤

Price: \$399 /
Mini K87 Matched Pair \$899
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