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REVIEW

BY PAUL VNUK JR.

Soyuz SU-017 Tube Microphone

From the heartland of Russia comes a classy new mic

The SU-017 is a brand new microphone by Russian mic manufacturer Soyuz, whose products are distributed here in the States by MV Pro Audio. The word "Soyuz" (written in Cyrillic letters on the mic's badge) means "Union;" it was the first word in the full Russian name for the Soviet Union.

Nowadays the most common use of the word in the USA is in reference to the Soyuz spacecraft, which dates back to the 1960s and is still in use today for missions that service the International Space Station, including a role as a highly reliable emergency escape vehicle. The Soyuz is, according to Wikipedia, "widely considered the world's safest, most cost-effective human spaceflight system." Old-school technology built with care, doing solid service over the course of many decades. That's not a bad analogy for Soyuz mics, which are built with top-notch quality and old-school building techniques reminiscent of the golden age of mic design.

The Soyuz headquarters and factory is located in the city of Tula, which has a long history in manufacturing craftsmanship. Tula is most famous for its metalwork, which is quite evident in these microphones. Each mic is made in Tula by hand with locally sourced parts and materials, with the exception of the tubes, which are sourced from a Russian military facility.

There are currently two models in the Soyuz line: the SU-011 small-diaphragm FET-based pencil condenser, and the SU-017 large-diaphragm tube condenser mic under review today.

The SU-017

The SU-017 is a large-diaphragm tube microphone that stylistically would be considered a "bottle" mic with a removable, all-brass lollipop style capsule. The included capsule features a cardioid pattern and is a dual-backplate design, inspired by the Neumann K 67, that uses two 34mm membranes, one of which is gold-sputtered. Soyuz will also have omni and figure-8 options in the future, and it is worth noting that these capsules can be used on the SU-011 FET microphone as well.

Looking at the body, you can see that it has an antique look reminiscent of what my Lithuanian great-grandmother would refer to as "the old country". The mic is made entirely of brass with a white enameled midsection. Its 2 lb. body is dense and heavy with an impeccable fit and finish. The brass is micro-titanium coated, so it will always retain its polish and shine. It will require only a simple wipe with a cloth (provided by Soyuz) to keep fingerprints and smudges at bay.

The Golden Ratio

In conversation with the Soyuz folks at NAMM, I found out that the look and dimensions of the mic were inspired by a balance of art and science. The body of the mic measures 5.9" with an additional 3" added by the capsule. The brass domes on the top and bottom of the body were inspired by the domes found in old Russian churches. While they look machined from a solid brass sphere split in half, they're individually lathed. The body cylinder in the center dimensionally adheres to the Golden Ratio (1 to 1.618), as does the size and distance of the capsule.

Soyuz explained that the reason for this is all about reducing resonances and how they travel through the mic. I can tell you that they succeeded in every way. Tapping this mic gives off only a muted 'thunk', vs. the hollow metallic 'ping' so prevalent on many of today's microphones.

Inside and out

The inside of the SU-017 is just as impressive as the outside for two primary reasons. First, unlike most modern import microphones, which use a pair of single, long and often cheap metal braces to hold and house the electronics, in this mic the bracing is made up of pure brass posts which screw into a round horizontal center section where all of the circuitry is anchored. The last time I saw an internal mic design even close to this style was when I reviewed Neumann's reissue of the U47fet back in our February 2015 issue.

The second impressive internal feature of the microphone is its minimal circuit design.



This is all point-to-point wiring done by hand, and there really is no circuit board to speak of. It features a custom Russian hand-wound transformer and the aforementioned tube, a 6G1P glass triode.

Like other tube mics, this one comes as part of a kit that includes a power supply and multipin cable. The power supply is Russian-made and toroidal transformer-based, sporting a high-quality enamel finish similar to the mic's. The kit also includes a custom-designed screw-in shockmount, and the mic lives in a wooden box made from hardwood from the forests of Siberia.

The mic has a 20 Hz to 20 kHz frequency response, a 16mV/PA sensitivity, a 270 ohm impedance, and a self-noise of 20 dBA. The frequency plot included with my review mic shows it to be fairly flat across the lows and mids, with upper peaks at 5 kHz and 13 kHz and a gentle low-end bump between 40 and 50 Hz.

In use

Taking the mic for a spin as soon as it arrived, I started with a simple and quick 3-song singer/songwriter demo session that I already had scheduled. The sources for the demo session were a Breedlove acoustic/electric guitar and one male and one female vocalist. While the mic was used for all vocal tracking, I only tracked the acoustic guitar on the Soyuz for one of the three

songs, choosing to use the direct pickup output of the guitar on the other two for the sake of saving time (since these demos were going to be fleshed out later). Later, when I mixed the songs down, the guitarist lamented that he wished I had stuck with the Soyuz for the whole session. His exclamation was that the SU-017 paired with the Breedlove acoustic guitar was "money!"

The sound of the SU-017 trends towards a rich classic tonal quality, with a wonderfully even midrange and just a hint of forward push on the upper mids and top end. Compared to the two U47-inspired mics I have in my studio, the Pearlman TM-47 (reviewed September 2014) and an Australian BeesNeez T-1 Tribute mic, I would say that the Soyuz is definitely in the same sonic ball park, but in a more focused way.

At the top end, the SU-017 is clear and open, but in no way is it peaky or harsh. The big difference between these mics in their lows and mids. The T-1 is the thickest, with the most pronounced proximity effect of the group, with the TM-47 coming in close behind. In contrast, the proximity effect on the SU-017 is very minimal and controlled, and the tone stays consistent across the board until you get to about an inch off the capsule. Its not bass-shy, just more solid and controlled than the other two mics.

Overall I would say that the SU-017 hints at vintage flavor, but never succumbs to it.

This is a mic that sounds controlled, full, and focused up close on acoustic guitar and voice, but also makes a nice focused drum overhead thanks to its controlled low end. I wish I had a pair for recording stereo drum overheads.

If you are looking for a gritty, vibey, old-school vintage mic, this one may not be for you. On the other hand, if you want a full, focused microphone capable of capturing any source with an open yet controlled top end, look no further. All in all it's a very hi-fi sounding mic.

Conclusions

The SU-017 is a mic that takes full advantage of vintage craftsmanship, high-end materials and design principles, but is not another vintage clone. The SU-017 is just plain sonically impressive, especially because it is quite a feat for a mic to "do its own thing" in this day and age with hundreds of mic choices.

A mic of this quality comes with a healthy \$3500 street price tag, but this is a mic that can easily be a flagship in your arsenal. It will capture most sources with flying colors and should last a lifetime and beyond. ➤

Price: \$3499.99

More from: Soyuz Microphones,
www.soyuzmicrophones.com