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11

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Peluso P-414

A classic FET mic is brought back to life, with classic looks and styling

REVIEW BY PAUL VNUK JR.

John Peluso is one of the premier capsule gurus in our industry. For the past 17 years, his company Peluso Microphone Lab has been producing modern versions of some of the most classic microphones of the past.

Peluso was one of the first companies to ignite the trend of classic mic recreations. They develop their designs and carry out all production of electronics, microphone assembly, and testing at their Virginia facility, while using overseas partners to affordably craft their bodies and cases.

The firm is also one of the few that strive to have their mics not only sonically reminiscent of the originals, but visually as well.

We looked at the Peluso P-87 large-diaphragm condenser back in July of 2016, the P-84 small-diaphragm condenser in October of 2016, and the P-67 valve condenser in May of 2017.

All of Peluso's model names more than hint at the classic microphone each one is inspired by, and this month we are looking at his latest release: the P-414. This is John's take on the classic AKG C 414.

While there are numerous 47, 87, and 251 copies and inspirations on the market, the C 414 has a bare handful of them. This is interesting, only because next to the Neumann U 87, the C 414 is the most used solid-state FET condenser microphone of all time. I'm guessing that this is because AKG still offers a C 414 in its line by way of the C 414 XLS and XLII. Most will argue, however, that the current XLS and XLII models are significant departures from the older classic 1970s AKG C 414 EB, which has been out of production for decades. It is exactly that model that is the inspiration for Peluso's latest P-414 offering.

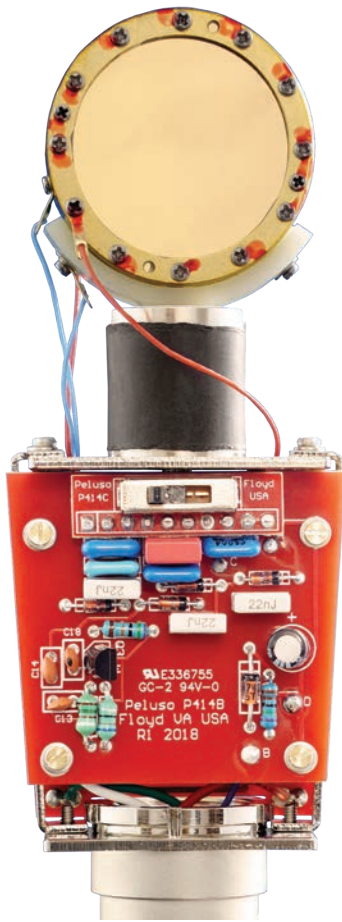


It's got the look

As I mentioned above, one thing I have always appreciated about Peluso microphones is that they usually take the extra step to offer bodies that come close to the shape, dimensions and overall look of the originals. The P-414 is no exception, and that is impressive, as it is one of the few classic microphones to not be housed in an easily duplicatable tubular body.

The rectangular P-414 comes in a brushed-nickel finish over a brass body, and at 490g it has a nice solid weight to it.

The P-414 is not a 1:1 copy, presumably for patent reasons, and measures 2" at its widest point, 4 3/4" tall and 1 1/2" deep. For comparison, the original EB was 1 3/4" x 4 1/8" x 1 1/2" respectively. Looking at the mics side-by-side, it's also easy to see that the shaft for the XLR connector of the P-414 is 3" long, while the EB's is 1 1/4". The longer connector stem on the Peluso allows for easy setup with standard shock mounts.



Frequency Range: 20Hz-20Khz
Sensitivity: 12 mV/Pa
Impedance: 200 ohms
SPL: 162dB w/ 20dB pad
Equivalent Noise: 12dBA

Patterns, pads, and filters

Although laid out in a different running order, the P-414 includes all the controls and settings found on the AKG. On the front side is a 4-position selector switch for choosing one of the microphone's four available polar patterns: hypercardioid, cardioid, figure-8, and omni.

On the rear of the microphone are two additional sets of switches. On the left is a choice of a -10 or -20dB pad, and on the right is a choice of two highpass filter options of 75Hz and 150Hz.

The brass ring

When the original was released by AKG in the early 1970s, it was very much a solid-state variant of the tube-based C 12 and was an outgrowth of the second-generation C 12A. It even used the same rectangular body that would eventually evolve into the original C 414 and then the C 414 EB. There were two differing C414 EB models—

REVIEW

Peluso P-414

the original, which still made use of remaining brass-ring-equipped C12 capsules, and a second version which used a nylon outer ring. For the P-414, John has of course chosen to model the original brass variant.

The P-414 uses a 34mm dual-diaphragm, edge-terminated, CK12 style capsule, and for electronics, like the original it features a custom transformer-balanced output stage. It comes as part of a kit that includes a velvet storage pouch, windscreen, and a shock mount, all in a compact aluminum briefcase.

Sound

The sound of the P-414 offers a balanced, neutral tonality with largely flat lows and mids and a gentle yet clear top-end push centering around 10kHz. This neutral fullness gives the P-414 its classic, unobtrusive FET nature. Although its high end is restrained, the P-414 offers a great open clarity that pairs nicely with its smooth midrange.

This is a mic that flat-out works on darn near any source, and is a workhorse mic of the highest order. This is no surprise when you consider what it is modeled after! It sounds stellar on vocals (especially female), acoustic guitar, piano, and its high end is a perfect fit for drum overhead duties and up-close cymbal work. The latter is where the pair of mics I was sent for review spent most of their time in my studio.

P vs. EB

Of course the big question with any homage, clone, or inspired-by microphone, is: how close is it to the original? This is often a dicey question with equally dicey results. This is because many older classic mics are in varying states of decay, have been altered or repaired, and often it's difficult to tell if a given mic has been worked on.

Nonetheless, with the help of my friend singer/guitarist Caleb Widmer, I decided to compare the Peluso P-414 to a current-production AKG C414 XLS, and a vintage C414 EB that Wade Goeke of Chandler Limited was kind enough to loan me. Note that Wade's EB is a nylon-ring variant.



These mics are small, so it was relatively easy to set them up in a triangular "star pattern." I had Caleb do two passes of guitar, one with a vintage-restored Martin00-40h from 1930 and one with a Gibson J45. This was followed by a pass of vocals. You can hear the results for yourself on RECORDING's YouTube channel, but to summarize here: All three microphones clearly come from the same family, and "clearly" is a great word to describe their differences.

The biggest difference of the trio is in their upper register. The high end was closest between the P-414 and the newer XLS, but the XLS had a bit more of a forceful upper mid thrust coupled with it. In contrast, the EB was the most relaxed of the group, with the most top-end rounding of the three. The P-414 and the EB sounded the most similarly weighted in the lows and mids, and both lacked the presence boost of the XLS.

All of the above is in the 10–15% range and falls very much in line with what we know to be true of the evolution of the 414. Historically the nylon-capsuled EB is known to lose some of the original brass ring EB's sparkle, and this is true here.

Conclusion

Based on the above, I would call the P-414 a resounding success! It sounds great, and might be my favorite model that Peluso has made so far. A pair of these mics would be a great addition to any mic locker, and will find uses on darn near everything. ➤



Price: \$849
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