



Peluso

# P12

Peluso has had a pop at re-creating the sound of the famous AKG C12. **Huw Price** assess the results.

## P12

Manufacturer **Peluso**

Price **£999**

Contact **KMR Audio 020 8445 2446**

Web **www.pelusomicrophonelab.com**

The Peluso P12 is based on a Chinese-made, nine-pattern valve microphone called the Alctron HST-11A. In the West this mic goes by many aliases – these include Carvin CTM100, Apex 460, Nady TCM-1150, Harper Diabate HDV-1 and many others.

The crucial difference here is that Peluso, unlike many other microphone manufacturers, is totally forthcoming about this. However, it's important to stress that the P12 merely uses the Chinese metalwork. All of the crucial components, including the capsule, valve and output transformer, are significantly upgraded.

### Build quality

Peluso capsules are assembled and tuned in Peluso's own lab using German Mylar diaphragms. The edge-terminated CEK-12 capsule in the P12 is based on the AKG CK12 capsule found in the legendary C12, C12a and Telefunken ELA M250 and M251 mics.

### Key Features

- Type: condenser pressure gradient with 34mm edge-terminated capsule
- Frequency range: 20Hz–24kHz
- Polar patterns: 9, switchable from omni- to bi-directional
- Sensitivity: 11mV/pa
- Impedance: 200 ohms
- SPL: 136dB
- Equivalent noise: 15dB (A-weighted)
- Tube type: 6072A-M
- Size: 45mm x 240mm
- Weight: 750g

Here's a point worth noting: you can easily spot the difference from regular Neumann-inspired Alctron capsules, because there isn't a wire connected to the centre of the diaphragm.

The Alctron HST-11A circuit was designed for a 12AT7 valve, but most of the re-badged versions have 12AX7s. This is because they're cheaper and more readily available, but cheap Chinese 12AX7s are often noisy, while the extra gain of a 12AX7 can overload the output transformer when the mic is used with loud sources.

The C12's preamp was designed around a lower-gain 6072A, and Peluso uses specially selected 6072As for the P12. The cathode follower stage of the stock circuit has been removed and the Peluso circuit is a virtual re-creation of the original AKG C12's, with a copy of the original AKG T14 output transformer made by Tamura.

The P12 certainly looks the part, with a nickel-plated capsule grille and base, plus a lovely velvet-lined wood box that sits in a recess inside the metal flightcase. The custom power supply has been treated to a vintage-style hammered metal finish and the kit ships with a suspension mount that inspires rather more confidence than the stock version.

### Vintage vibes

We are fortunate enough to have used vintage AKG valve condenser microphones on many occasions, so the P12 sounded very familiar immediately. The sonic characteristics we were hoping for were a bright and tinsely treble, smooth but present mids and a full but not overblown bottom end. We're happy to say that the Peluso P12 didn't disappoint in any of these areas.

Vocals displayed a breathy presence and plenty of cut for retaining clarity with dense arrangements. Finger-picked acoustic guitar sizzled and sparkled, all the while maintaining a woody warmth and a sense of enhanced realism. For this application we were able to control the proximity effect and bring in just the right quantity of room ambience by setting the polar pattern switch between cardioid and omni.

During the time we had the P12, it was also used on electric guitar and percussion. For the former we found the figure-8 setting particularly useful for balancing direct and ambient sounds and smoothing over any nasty edges. All three settings are fairly consistent in tone and level, although it's fair to say

### Measuring Up

Peluso and KMR supply the CEK-12 capsule and T-14 transformer used in the Peluso P12 for upgrading Alctron HST-11A-based mics. The mods are well-documented modifications and for a total outlay of around £450 you can end up with an outstanding mic. However, the P12's preamp circuit makes it closer to an AKG C12 and the other features easily justify the price differential.

The AKG C12 VR (£5,581) is not quite the period-correct reissue that vintage mic enthusiasts so desire. Alternatives include the Telefunken USA C-12 (£7,319) and Telefunken's own Alctron upgrade, the M16 MkII (£1,463).



that cardioid is the warmest, omni is the clearest and figure-8 is the softest.

Engineering message boards are ablaze with information about how to modify Alctron HST-11As, so it would be disingenuous not to mention it. In fact, this reviewer recently modded one using a Peluso CEK-12 capsule and a Tamura T14 transformer. The cathode follower was removed and a 6072A valve installed in the process. Sonically, that mic and the P12 are virtually indistinguishable, but the P12 does boast a superior signal-to-noise ratio.

### Light and dark

Many of the classic valve Neumann microphones are renowned for their warm, fat and slightly dark sonic characteristics. By contrast, vintage valve AKG microphones are generally brighter and more cutting in character. So, it quite easily could be argued that they're actually better suited to modern music production.

C12-type mics are, however, relatively uncommon. So, considering the several thousands of pounds you'd have to splash out to acquire an AKG original – or even a reproduction – the Peluso P12 is undeniably a wonderful alternative – and what's more, it's a fabulous mic in its own right. **MTM**

### MTM Verdict

#### WHY BUY

- + Warm and present sound
- + Relatively low noise floor
- + Fantastic vintage looks
- + Competitive price

#### WALK ON BY

- Cannon connectors

*An impressively faithful re-creation of a classic valve microphone, with nine polar patterns and genuine all-round capabilities.*

