

AKG C414 B-XLS and B-XL II

Times change, and even time-honoured classic microphones must adapt to meet changing economic climates and end-user demands. Such is the case with the venerable AKG C414.

JON THORNTON looks at the recently launched new versions.

HILE ANY CHANGE to the familiar and dependable will always cause a slight intake of breath in some quarters, it's worth pointing out that the 414 as we know it today has already gone through several evolutionary changes of design since its introduction as the C414 Comb in 1971. This latest incarnation, though, is perhaps the single biggest jump in the microphone's history, encompassing changes to the diaphragm, housing and electronics — in effect it is a brand new microphone.

The most obvious changes come in the exterior. Gone is the slightly stern, black and chiselled appearance of the former model (Something that always appealed to me along with 'that' grille. Ed), to be replaced with a metal casting that has softer edges, and is finished in a dark grey rather than black. Overall dimensions are slightly bigger too, although it does manage to just about retain the characteristic trapezoid shape of the grille assembly. Like its predecessor, the new 414 is based on a dual diaphragm, with switchable polar patterns. An additional cardioid pattern ups the total available to five from four — three variations on cardioid, an omni and a fig-8.

Rather than the slightly fiddly mechanical switches employed in the past, selection now is achieved with a solid state 'increment/decrement' type of affair, and a series of green LEDs across the front of the microphone indicate the currently selected pattern. The final trick here is that the LED changes colour from green to red when the electronics are within 2dB of an overload condition — a very useful heads up.

The same type of switching arrangement is employed on the rear of the microphone to access the pad (O to -18dB in 6dB steps), and the high pass filter (40 or 80Hz with a 12dB/octave slope, or 160Hz with a gentler 6dB/octave slope). All switch positions are 'remembered' by the microphone when it is powered down — useful if the microphone is hung somewhere in a location where access is limited. While the use of solid state switching will undoubtedly raise eyebrows with traditionalists, on balance I like it a lot. They are much easier to see and read than the old switches, and I've had to disassemble and reassemble 414s more often than I care to remember to fix a pad switch that has been pushed over a little too far, and as a result kills the output of the microphone entirely. The other advantage is that switching polar pattern doesn't create the usual almighty 'pop' on the audio output, just an almost imperceptible click.

Internally, the diaphragm has also undergone some changes — the most obvious being the adoption of a four-point elastic suspension for the diaphragm assembly as seen on AKG's SolidTube. The diaphragm itself is still a dual 1-inch gold-sputtered mylar diaphragm, although the housing also seems to have changed slightly with a black plastic ring encapsulating it. Whether or not this means that the construction and tensioning arrangements have been modified is unclear. What I can testify to though, by





virtue of the wholly unscientific tapping on the top of the microphone test, is that the capsule suspension works extremely well in suppressing low frequency mechanical vibration. Further inspection of the internals shows some rather densely populated double-sided PCBs, with surface mount technology being used extensively in the electronics.

The new 414 is currently available in two variants, the 414 B-XLS (UK£680 + VAT) and the 414B-XL II (UK£723 + VAT). The latter is differentiated physically from the former by a gold coloured, rather than silver, front grille, and like the older TL II, has been tweaked to give a mild presence boost around 5-6kHz, with a corresponding dip centred around 1.5kHz. It's worth pointing out that neither microphone uses a transformer in the output stage — both are strictly transformerless. Both variants ship in a compact hard shell case, and in the case of the review microphones this case also accommodates a suspension mount, foam windshield and external pop shield.

There was only ever going to be one microphone to compare these microphones to, and that is an 'old' 414 B-ULS. AKG claims that the new model maintains the sonic character of the old one — which to me has

always meant a neutral, fairly flat and restrained sound that is pretty much devoid of 'hype'. Testing new against old on male vocals with the cardioid pattern selected suggests that the sound has moved towards one that is altogether sharper in character, with a little more exaggeration of the high-mids. It's not an unpleasant sound, but did begin to sound a little grating on some voices. The XL II variant, unsurprisingly, emphasised this effect even more, but actually sounded a lot more convincing and smoother than the XLS. Close in on an acoustic (nylon strung) guitar, again the XL II sounded better to my ears, and in this application seemed to capture a little more harmonic detail than either the new XLS or the old ULS. Off-axis response on both microphones in cardioid and fig-8 patterns was fairly smooth, with excellent rear/side rejection

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In omnidirectional mode, though, the XL II, and to a lesser extent the XLS, showed some strange

characteristics to sound sources that are sideways on to the diaphragms. Here, a noticeable jump in response in the mid-range was evident. My suspicion here is that tuning the diaphragms for a slightly more 'forward' sound has been at the expense of the smoothness of the omni response.

Despite these reservations, it's clear that AKG has made great strides with the new 414. The new features work extremely well — particularly the switches, and a remote control option for these will be available soon (in-line with signal cable). It is a more modern sound, is none the worse for it, and should sell as well as its predecessor. But I suspect that the 'old' 414 may continue to be just as desirable.

PROS

A step forward with a more 'modern' sound; solid-state switching very good; extra polar pattern and additional pad/LPF settings very useful; quieter than the 'older' model.

CONS

Curvy looks might not be to everyone's taste; the sound is a little more forward than the 'older' model; omni response seems a little lumpy.

Contact

AKG, AUSTRIA Website: www.akg.com