

# Shure KSM44A & KSM42

Shure's new KSM44A is a comprehensively updated version of its original KSM44 and it has a brand new stablemate in the shape of the fixed pattern KSM42. JON THORNTON listens in.

Shure's KSM44A and KSM42 microphones underline the company's move into the 'premium' area of large diaphragm studio capacitor microphones, with price points of UK£982 (inc VAT) for the KSM44A and UK£790 (inc VAT) for the KSM42. This sits them comfortably alongside the KSM ribbons that came out of Shure's acquisition of Crowley and Tripp, and draws a very clear line in the sand as to where the perceived competition is.

Both microphones ship in nice, solid lockable cases and the KSM44A is supplied with a fixed clip and suspension mount (and a 3/8-inch thread adaptor; a nice touch from an American company!) The KSM42 ships with a suspension mount only but this suspension mount has its own neat feature. The front quadrant of the suspension is open, which allows the supplied pop-shield to attach magnetically to the basket — a neat and versatile solution for vocals.

Externally, the two microphones differ in terms of finish with the KSM44A's body a silver colour while the KSM42's is dark grey. Internally, both microphones employ Shure's new 'Prethos' preamplifier technology. This is a Class-A, discrete transformerless design that claims to offer significant improvements in self-noise, an absence of any crossover distortion, and reductions in harmonic and intermodulation distortions. Published specs confirm that the self-noise claim is certainly true — the KSM44A in cardioid mode is quoted as having an equivalent noise of 4dB SPL(A).

Other similarities include the use of a 1-inch 2.5micron gold sputtered mylar dual diaphragm. While the KSM44A uses this dual diaphragm to provide selectable polar patterns (cardioid, fig-8 and omni), the technical specs seem to suggest that the fixed pattern KSM42 also uses a dual diaphragm arrangement, with one diaphragm 'active' and the other 'passive'. The ostensible reason for this is to allow a wide sweet spot coupled with good rear-rejection and a minimisation of proximity effect — what isn't clear is whether this is simply the same capsule for both with only one side connected, or a completely different design for the KSM42.

In addition to the selectable polar-pattern, the KSM44A also features a 15dB pad and a two-position HPF. This usefully changes the slope and the turnover frequency giving either 6dB/octave @ 115Hz for a gentle aid to combat proximity effect, or a more

aggressive 18dB/octave @ 80Hz for dealing with AC rumble, stand noise, etc.

Plugging in and powering up the KSM44A to start with confirms that this is a spookily quiet microphone — in nearly every application you'll probably find issues further up the signal chain or in low level acoustic noise before the self-noise becomes a problem. Allied to this is an output that is also very hot — sensitivity for the KSM44A is 31mV/Pa, requiring significantly less gain than the KSM42 whose sensitivity is a more pedestrian 14mV/Pa. Initial tests with spoken voice and sung (male) vocals on the fixed-

pattern KSM42 show that it sounds pretty good out of the box in this application. Good clarity and weight and a sense that the upper octaves are ever so slightly voiced but not sharply so. Proximity effect is there, but it's slight compared with other large-diaphragm designs and seems to have quite a wide effect in frequency terms. The effect here is like a very gentle shelving boost around 200Hz or so, helping to bring out the fundamental in a voice, rather than a very 'peaky' effect.

There's a wide sweet spot too — moving off axis up to 90 degrees results in a very gentle, progressive roll-off of high frequencies, but it's actually still very natural sounding even that far off-

axis. This is at the expense, though, of the off-axis response a little further around — hit about 120 degrees and there's an objectionable sounding squawkiness that eventually disappears as you move to the rear of the microphone. The KSM44A exhibits broadly similar characteristics when set to the cardioid pattern, although there's the hint of slightly more weight in the low mid range, and a proximity bump that doesn't seem quite as smooth sounding or wide-ranging as its stablemate.

As a comparator I chose the venerable U87, and with male and female vocals both Shure contenders sounded a little bit more forward at high frequencies, while still maintaining the warmth in the low mids that I associate with the U87. On balance it's a very useable sound that needed very little corrective EQ, and on male vocals particularly I actually preferred the cheaper KSM42 over the multi-pattern KSM44A.

Both microphones feature a high degree of inherent pop suppression via the use of a three-stage protection grille. While this works to a degree, and certainly working distances of about 15cm or so only result in plusive overloads very occasionally, any closer and



you will want to supplement this with a traditional pop-shield. It makes me wonder why Shure didn't elect to ship that rather wonderful magnetic pop-shield/suspension mount with the KSM44A.

Moving on to acoustic guitar and both microphones turned in very good performances, although the tables were turned here as I felt that generally the KSM44A had the edge, with a heightened sense of weight to the low octaves and more definition to picked strings. That very wide sweet spot with both microphones also allows you to get in much closer than you normally might with a cardioid pattern — and might explain why I seemed to get the best results from miking at the bridge end of the sound hole angled up the neck rather than the other way round. Switching the KSM44A to omni smooths the response slightly and gives a more open sound. What's interesting here is that even with reasonably close miking the difference between omni and cardioids patterns isn't as pronounced as it is with some other microphones — the U87 included.

With both of these microphones, Shure has really raised its game in this sector. They're well built, terrifically quiet, and have a sound that's modern and authoritative without ever being brash. They're pitched at a price point that has some serious competition from the big Europeans. This time said European manufacturers could really have a fight on their hands... ■

## PROS

Well built; extremely quiet; KSM42 sounds great on vocals out of the box; neat integrated shock mount/pop-shield; wide sweet spot; very subtle proximity effect.

## CONS

Slight squawkiness off-axis from cardioid patterns; would have been nice to have the pop-shield assembly with the KSM44A.

## Contact

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