



SHURE KSM27 : July 2002

SHURE KSM27

Shure KSM27 Cardioid Capacitor Microphone

Reviews : Microphone

Published in SOS July 2002

 [Print article](#) : [Close window](#)

Photos: Mike Cameron

on test microphone

Shure KSM27

Cardioid Capacitor Microphone

A versatile, entry-level large-diaphragm condenser mic with a particularly well balanced performance.

Paul White

A few years back, all the big-name mics came at big-name prices, but the influx of ever-cheaper Chinese-made studio mics has forced the manufacturers to change their marketing strategy, at least as far as the project studio market is concerned. Although the cheap imports offer exceptional value and work outrageously well for their price, most still perform noticeably less well than the best mics from the established names, either sounding less tonally smooth and/or being a little noisier than the mics they purport to emulate. This has given companies like AKG, Audio Technica, Neumann, Sennheiser and Shure the opportunity to introduce their own lower-cost models to fill the gap between the entry-level imports and their own classic models, which most would admit are priced beyond the reach of the average project studio owner.

Shure's new KSM27 fits that profile exactly. It is a fixed-pattern cardioid model featuring a one-inch diaphragm capsule protected by a three-stage mesh windshield and perched on top of a shorter-than-average body. Switches are provided for two settings of low cut (flat, 6dB/octave at 115Hz, or 18dB/octave at 80Hz) and for bringing in a 15dB pad. An additional subsonic filter is incorporated into the preamp circuit to attenuate anything below 17Hz, though the response is remarkably flat down to 20Hz.

One unusual aspect of the capsule is the use of a very thin 2.5µm gold-layered mylar diaphragm, and an internal shockmounting system is employed to reduce mechanical noise, in addition to the included elastic suspension mount. Rather than rely on the traditional locking ring system, the mic screws directly into the shockmount. The shockmount bracket can be tightened simply by hand and works well enough provided it is done up tightly. Sadly, no hard case is provided to protect the mic when not in use.

To maintain signal purity, a Class-A transformerless preamp circuit is employed, the main benefit of Class A being that crossover distortion is eliminated by using the same device to handle both positive and negative voltage excursions, rather than having the signal being split between two devices as in Class B or AB. Operation can be from any phantom power source in the range 11 to 52 Volts, though for maximum sensitivity 48V (±4V) operation is specified.

Having no transformer helps produce a more accurate transient response, though the way transformers affect high frequencies is part of what makes them sound 'musical', so it would be wrong to equate transformers with 'bad'. In order to make the mic as versatile as possible, it has been given an extended low-end response (filters switched out), yielding a useful response extending from 20Hz to 20kHz, with a presence lift of around 5dB at 7kHz and another gentle hump between 10 and 15kHz.

The sensitivity and signal-to-noise figures of the mic are a fairly typical -37dBV/Pa and 81dB respectively, while the



Shure KSM27 £382

pros

- Excellent tonal balance combining low-end weight and high-end detail.
- Good-quality shockmount included.
- Good build quality.

cons

- No hard case supplied.

summary

A genuine step up from the 'me too' budget capacitor mics, but still very affordable.



self noise is definitely better than average at 14dB (EIN, A-weighted). Using the attenuator, the maximum SPL varies slightly depending on what impedance the mic is running into, but it is quoted as not worse than 133dB (148dB pad in), which means you're unlikely to upset it by being too loud.




The mic is secured to its suspension mount via a screw ring at the base.

Studio Test

I checked the KSM27 using my SPL Channel One mic preamp, which I've always felt shows up the differences between mics better than most. For comparison, I picked the Rode NT1 and SuperLux CMH8B at the lower-price end of the market, with an Audio Technica 4033A and a Beyer MC740 representing the higher ground. Being a project studio owner myself, I didn't have anything really esoteric to put the KSM27 up against.

All the mics sounded very different to each other when used to record vocals in a similar situation, the Rode sounding the warmest and the Beyer MC740 sounding extremely detailed, but slightly thin by comparison. In fact the KSM27 was the only mic of the ones I checked that seemed to combine a very uncoloured, extended top end with the warmth and musicality of the Rode NT1 (still my favourite 'cheapo' mic!). The presence peak lends it clarity, and can exaggerate sibilance in certain performers, but the overall impression is that of listening 'through' the mic to the sound source on the other side, and that's what I feel a good mic should do. I felt all the other mics added more in the way of apparent coloration or flavour to the sound than the KSM27, but at the same time the KSM27 couldn't be accused of sounding in any way tame. I felt it had an extremely good tonal balance and found it to work just as well on instruments as it did on voice, especially acoustic guitar and hand percussion, including small jangly bells.



Summing up, the performance of the KSM27 is closer to that of a high-end model than its UK price might lead you to believe and the standard of engineering is excellent. The combination of warmth and transparency makes the KSM27 useful for situations in which you have to deal with different vocalists and instruments on each session, while the extended bass end means you can use it to record almost anything. If you were stranded on a desert island with nothing but a recording studio and a very long mains lead, this would be a good mic to have with you! 

The KSM27 has a three-position low-cut filter switch and a selectable 15dB pad.
information
£381.88 including VAT.

Published in SOS July 2002

Sound On Sound Ltd is registered in England and Wales. Company number: 3015516. VAT number: GB 638 5307 26.
Registered office: Media House, Trafalgar Way, Bar Hill, Cambridge, CB23 8SQ, United Kingdom.
Email: Contact SOS | Telephone: +44 (0)1954 789888 | Fax: +44 (0)1954 789895

All contents copyright © SOS Publications Group and/or its licensors, 1985-2009. All rights reserved. The contents of this article are subject to worldwide copyright protection and reproduction in whole or part, whether mechanical or electronic, is expressly forbidden without the prior written consent of the Publishers. Great care has been taken to ensure accuracy in the preparation of this article but neither Sound On Sound Limited nor the publishers can be held responsible for its contents. The views expressed are those of the contributors and not necessarily those of the publishers.

Web site designed & maintained by PB Associates | SOS | Relative Media