

# Sennheiser SKM 5000N

The SKM 5000N combines Sennheiser's wireless transmission pedigree with Neumann's ability to make beautiful microphones. Trevor Cronin's prayers have been answered.

Some time back I had the pleasure of appraising Neumann's superb-sounding KMS105 live vocal condenser microphone. This item has very quickly become a favourite in the industry and it's certainly a mic that I find myself turning to again and again.

Which brings me to an experience that I'd like to tell you about. Recently I was touring with a new Zomba Records signing, a young lady called Haley Aitkin. I really wanted to use the KMS105 for her vocal, however, a cable



mic was out of the question due to all the sexy dancing, so it had to be a radio mic. In the rehearsal room we were using a

Shure Beta 57a, which worked really well for us, but I was fascinated to hear what the Neumann mic could do for her sound. So I dropped by my local pro audio supplier and was shown a neat little device that turns any microphone into a radio microphone – a Sennheiser evolution Series SKP 100 plug-in UHF transmitter. 'Ah fantastic', I thought, 'I can plug one of these into a KMS105 and away we go... problem solved'. Unfortunately, the model that works with condenser mics (the SKP 500) was not in stock... bummer.

Plan B: I'd use the Shure Beta 57a and the Sennheiser plug-in device. I went back to the rehearsal room, turned it on and it worked extremely well. We did a couple of high-profile gigs and a cable music channel tour and the hybrid system rocked! It was a good test of the robustness and reliability of Sennheiser's radio technology, and it performed admirably, live to air in 40-degree heat!

## Rod Matherson, Kylie Minogue's Monitor Engineer, on using the Sennheiser SKM 5000N

Kylie Minogue has been using the new SKM 5000N wireless microphone system on her latest tour. So I thought I'd get the thoughts of her monitor engineer Rod Matherson about the system in use.

**Trevor Cronin:** What do you think of the sound of the microphone Rod?

**Rod Matherson:** I think it sounds fantastic – really, really flat, really smooth, really nice.

**TC:** Even compared to another 'standard' like the Shure Beta 87?

**RM:** I think so. We use Beta 87s on the backing singers and you appreciate them and think of them as a standard. But then when you replace that mic with the Neumann, it's a bit unnerving because it's so smooth and linear.

It has the same sort of rejection as the Beta 87, in terms of its hypercardioid pickup pattern, but it is just so flat and linear and the bottom-end is just smooth... it hasn't got any presence peaks in it. Saying that, it's probably got a bit of a kick at 10k – a bit like the 87 – which adds a little bit of sizzle, but that's quite workable.

**TC:** I know Kylie uses in-ear monitors, but have you used the mic with conventional wedge monitors as well?

**RM:** I've largely used it for Kylie's in-ear monitors. I haven't used it with wedges going full-throttle, so I can't give you an appraisal in terms of feedback rejection. We had it in a few wedges, but only at a low level for the dancers

to hear. That said, it came out sounding really flat and smooth. I didn't have any grief with it at all.

**TC:** I've noticed that the mic is susceptible to a bit of handling noise. Would you concur?

**RM:** You're right. It didn't bother us because Kylie is naturally quite careful with the mic – she hangs onto it, sings into it and that's it. John Farnham [a high-profile Australian artist] was going to use it, tried it out and said it sounded fantastic, but the problem was the handling noise – Farnham throws the mic around a lot.

**TC:** And what do you think of the system's battery setup?

**RM:** Typical Sennheiser in a way – very clever but bordering on the over-engineered! Although, you can change the pack really quickly – it's worth having a spare pack sitting there just in case.

**TC:** Have you been using the rechargeable battery pack?

**RM:** We sometimes use it for rehearsal, but I'm not yet willing to trust it on a gig. I'm sure it's absolutely fine, but I'm bit of a fan of the old alkaline battery – you know where you stand and you know they'll hang in there for the duration of the show – rechargeable batteries still don't give me that 100% assurance.

**TC:** There's a ridge on the body of the transmitter by the battery pack, that didn't worry Kylie at all?

**RM:** No, no, it's actually an advantage I think. She likes the way her hand grips it better.

**TC:** I was impressed by the pop filter, but struggled to understand why it's so hard to take out and clean.

**RM:** You can't practically pull the pop filter cap off to clean it. Sennheiser says you can, but you need the right tool and you have to split it and pull the ring out. So it's bit of a pain. I've told them they need to make it easier. I mean, the pop filter [with its stainless steel mesh] is great but I'd like it to be easier to clean.

**TC:** Apart from the sound, was there anything else that attracted you to this system?

**RM:** One factor was the size of the transmitter. The 5000 Series radio mic bodies are a better size for Kylie than the Shure units, which can look quite large. Meanwhile, the fact that the design of the mic fits in so well with the futuristic space-age theme of her show was just a bonus.

**TC:** Any final comments?

**RM:** The mic is a gem. We're going back out on tour in the UK and the US to do some festivals and we'll be using it for all our shows. We don't have a Sennheiser sponsorship but their support has been tremendous.

Job done, and I hadn't given my initial KMS105 conundrum any further thought... until a couple of weeks later, out of the blue, the new SKM 5000N 'SennMann' radio system arrived at my door! This unit is the answer to my prayers. It's a beautiful marriage of two well-respected German microphone manufacturers – Neumann and Sennheiser. The Neumann head is called a KK105S and the transmitter is an optimised version of Sennheiser's SKM 5000 (hence the 'N' suffix). I quickly plugged it in and, wow, I was presented with the clearest 'Check One, Two' I have ever heard from a radio mic.

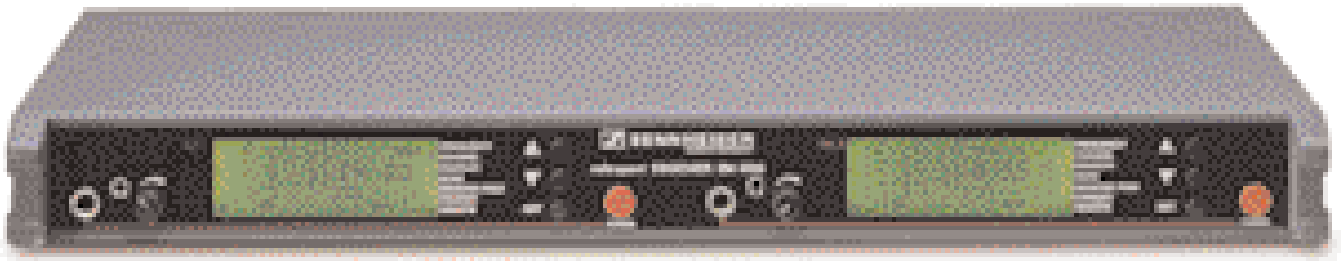
### The details

The Neumann KK105S head is virtually a clone of all the active electronics inside the Neumann KMS105 handheld microphone. I'm pleased to say that both mics sound all-but indistinguishable to my ears. [If you would like to read more of Trevor's thoughts on the performance of the KMS105 then please email me at [chris@alchemedia.com.au](mailto:chris@alchemedia.com.au) – CH.]

As mentioned, the Sennheiser SKM 5000N handheld transmitter is a customised version of the SKM 5000, optimised for the Neumann KK105S capsule. It's packaged in a plastic carry box, which also contains a screwdriver and a mic clip. The transmitter is constructed from high-impact plastic and is very lightweight. The capsule screw-mounts to the transmitter. Before you attach it you should first adjust the bass roll-off filter and the sensitivity – the switches will be inaccessible once the

an LCD – with an associated push-button controller – provides access to a variety of functions via a menu system. So let's run through some of those features. The front panel has a headphone socket with a volume knob; noise reduction comes care of Sennheiser's own 'Hi Dyne Plus' system, while a remote indication of the transmitter's battery charge status is a particularly useful addition. The radio system has diversity reception of 32 frequency memories, ranging from 430 to 960MHz. Around the back you'll find the power fuse and IEC connector, with a handy cable-keep device that helps to avoid accidental disconnection. Then there's a data interface for connecting the unit to a computer, for PC control with 'S-MCD' software (which was not available at the time of the review). Audio output is via a standard XLR connector and there's an associated volume control pot.

The SKM 5000N is a great joint venture from two of the world's best microphone/wireless manufacturers and a highly recommended system for the light-handed vocalists out there. I say, 'light-handed' because the microphone doesn't take too kindly to being manhandled – the handling noise may be too much for those used to giving their mics a pounding on stage [read the accompanying interview with Rod Matherson for more]. But this is a wireless microphone system that you'll want to treat well, because it will reward you in spades. Certainly, a growing number of the biggest pop acts around have already turned to the SKM 5000N in the short time it's been on the market – including Kylie Minogue and



head is screwed on. As a starting point I would recommend setting the sensitivity to 'No. 1' to avoid distortion or transmitter clipping with loud singers.

There are 16 frequency channels available, selectable via a supplied screwdriver on a pot situated underneath the battery holder. The standard battery holder is a well-conceived, quick-release system and contains two AA-size batteries – this supplies 4.5 hours of power. Also available is the 'Accupack', which uses rechargeable NiMH batteries – this gives an extended six hours of charge and is better for the environment too! Both packs have an on-board charge meter and the power switch is out of harms way at the end of the unit.

A variety of receivers will work with the 5000 transmitter. For the purposes of this review, I was supplied with the EM 3532 radio receiver – a steel-cased 1RU dual-channel receiver. It came with a pair of small antennae, while an extensive range of antenna products are available to suit your setup.

The receiver has a truckload of professional features and

Jamiroquai, among others. So if you're working with the best, or you're aiming to *be* the best, then you owe it to yourself to test out what's probably the best-sounding radio microphone on the market.



### Manufacturer Info

• Sennheiser

Web: [www.sennheiser.com](http://www.sennheiser.com)

See our Contact Directory for local contact details

### Price Guide

• KK105S: S\$976 (available in black or nickel finish)

SKM5000N: S\$4,244

B5000 standard Battery pack: S\$396

BA5000 Rechargeable battery pack: S\$425

EM3031 Single channel 1RU receiver: S\$3,570

EM3032 Dual channel 1RU receiver: S\$6,158

EM3532 Dual Channel 1RU Rx with computer interface S\$8,142