

# SE ELECTRONICS SE2200A

✧ THE WINNER OF THE 2003 FM READERS AWARD FOR BEST MICROPHONE GETS AN EARLY MAKEOVER. "IS IT JUST A NEW OUTFIT?" ASKS DAN DUFFELL...

**£149**

## INFO

**SE Electronics  
SE2200a**

Large diaphragm condenser mic

### Main features

Solid state condenser mic

Shock mount

Flight case

48V phantom power required

Free try at home before you buy policy. Call them and SE will send you one.

### SPECIFICATIONS

#### Diaphragm

Large (1") gold-plated

#### Polar Pattern

Fixed Cardioid

#### Frequency response

20Hz to 20kHz

#### Sensitivity

16mV/Pa

#### Impedance

200 Ohm

#### Equivalent Noise Level

17dB

#### THD

<0.5% (at 125dB SPL)

#### Dynamic range

108dB

#### Dimensions

50 x 190mm

#### Weight

0.6kg

#### Contact

01525 840400

#### Website

[www.se-sonic-distribution.com](http://www.se-sonic-distribution.com)

IT'S BEEN A mere nine months since we looked at the plain old SE2200 large diaphragm condenser mic in FM 138. Back in those heady days of last summer we bestowed a Value award upon it, despite our man Marc Cooper having a few small reservations. It was clearly a good decision about a great product because you lot also voted it Best Microphone in the 2003 reader awards. So what, we ask ourselves, has changed enough to warrant the addition of the little 'a' suffix and a new review? Well the answer seems to be... well almost everything, as it goes!

## On the stand

The SE2200a still comes in a sturdy, foam-lined flight case, but this one is a kind of light grey colour with chrome edging (rather than black) and is a different shape. And it seems reasonably well built – I'm 12 stone, and it did withstand my standing on it, although it did flex a little (which made me hang on to some nearby furniture a little nervously... but I digress, this is not about my fear of heights). It's a resilient and comfy enough cocoon for the delicate disc of gold plate that is the 2200a diaphragm.

The mic itself has changed colour too. It was black but now it's a rather more fetching and contemporary 'champagne' colour. And if you really want to get all trainspottery about graphic design, Studio Electronics have changed their logo to an equally contemporary red square.

The casing of the mic looks the same but according to SE it has actually been redesigned to reduce any unhelpful body resonance issues. That metal cylinder with a removable body provides access to the electronics and removal of two very small screws that provide access to the capsule. At the base of the body is an integrated

threaded metal shaft for attachment to the shock mount, which also houses the gold coloured pins of the standard XLR socket.

The capsule itself is protected by a sturdy metal grille that covers the circumference of the body and the end of the mic. The two plastic 'sliding' switches (for -10dB pad and 100Hz cut) have also been changed and are now replaced by much sturdier and less fiddly metal pin 'rocker' switches. We like these new switches because they are not only more practical but add nicely to the retro styling.

At this point perhaps we should reveal that Studio Electronics as a company have actually built themselves a completely new factory. So the simple truth is that literally everything about all SE products has probably changed at least a little bit and it really does show in the all-round improvement of manufacturing quality.

Almost every aspect of the design has been tweaked a little in some way and steadily improved, but one thing that has not been redesigned is the capsule. It's still a 1" vacuum gold-plated diaphragm in a brass mount. However, SE are so confident that they have improved the actual quality control for the capsule and the rest of the mic (from an already impressively low failure rate of something like 0.5%), that they have increased the full replacement warranty to two years.



✧ "SE are so confident of their improvements to the quality control for the mic that they have increased the full replacement warranty to two years" ✧

## THE MOUNT POLICE

If you are a regular FM reader you may have spotted that actually causing a product to break during a review is a rare thing these days (even though we genuinely do try!). Not only did Marc Cooper manage to break the original shock mount for the SE2200, he managed to break the replacement too, which indicates a bit of a design or manufacturing problem.

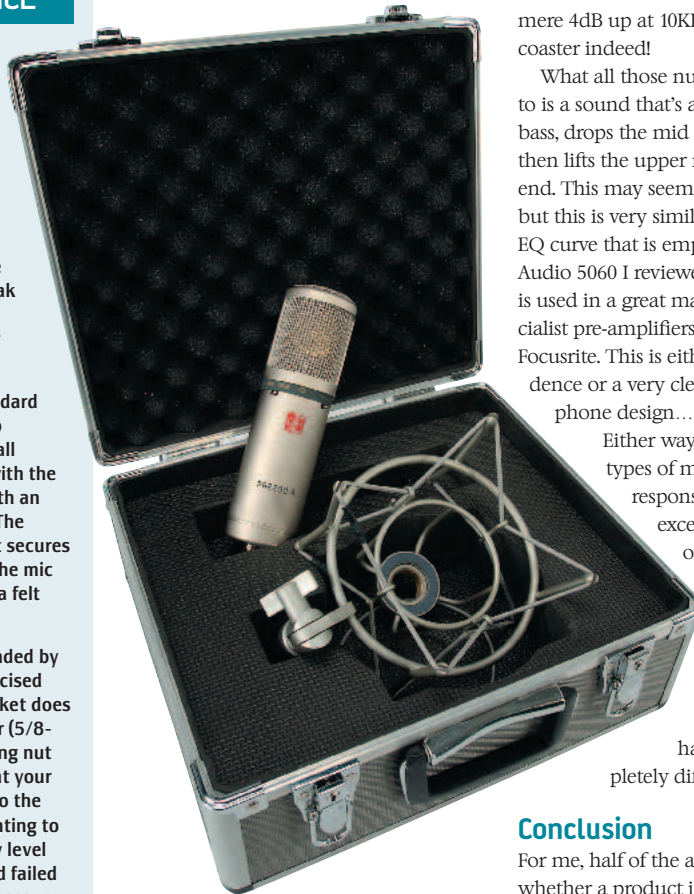
He also found a poor standard of finishing with some sharp edges in evidence. This has all been resolutely addressed with the new 2200a, and it comes with an absolute beast of a mount. The threaded mounting ring that secures the mic to the cradle holds the mic very firmly in place and has a felt damping ring.

The cradle itself is suspended by two easily replaceable elasticised cords. The actual stand bracket does now have a supplied adaptor (5/8-inch to 3/8-inch) and the wing nut holds it extremely securely at your chosen angle. In deference to the breakage issue (and not wanting to miss out on the fun) I did my level best to break this mount and failed miserably, which is always reassuring to know!

## In use

The SE2200a is one of those products that makes you think twice and then three times about what you expect to hear when you look at its price tag. I tried it with a very broad range of stuff from vocals (male and female) to acoustic guitar, piano and various types of percussion and it delivered clean, crisp results every time. It has an open, lively and most pleasing tone and performs very well right across the frequency spectrum, and it should serve you very well, regardless of the scale and sophistication of your studio.

That said, it's not 100% flat right across the board, but then you wouldn't expect that at the price. The relatively low Equivalent Noise Level and high maximum SPL also mean that not only does the SE2200a tolerate very loud sound sources but it captures more detail than most humans can actually hear (without clouding it with self-generated noise), delivering a better dynamic range than 16-bit digital audio recording can translate. The 100Hz cut switch works, but still only seems to roll off about 6dB (compared



✘ The rather fetching flight case can even cope with being stomped on by journalists

to my mixer's 18dB) and for my personal taste is set a little high – around 70-80Hz being more to my liking.

## Numbers game

It's worth mentioning that the SE2200a returns a somewhat different frequency response with its two level settings. Switched to 0dB the frequency response graph states that it's within a single dB of flat from 40Hz (the graph runs from 40Hz to 10kHz) right up to about 1kHz (with a gentle hammock-like 1dB dip between 100Hz and 400Hz), and then lifts a mere 2dB in a straight slope between 1kHz and 2kHz before maintaining a 2dB plateau from 2kHz up to 10kHz. This seems about right and is impressive.

Switch it over to -10dB, though, and things shift quite dramatically. The graph says that set to -10dB it's about 2dB up from 40Hz to about 100Hz, between 100Hz and 200Hz it steadily drops to being down 1dB, stays level from 200Hz to 350Hz then drops steadily to 5dB down at around 850Hz, before climbing steadily and quite steeply up to about 7dB at around

4kHz (a rise of 12dB), stays level at up to 7dB to about 7.5kHz then drops to a mere 4dB up at 10kHz. Quite a roller coaster indeed!

What all those numbers boil down to is a sound that's a little heavy on the bass, drops the mid range a bit and then lifts the upper reaches of the top end. This may seem alarming on paper but this is very similar to the optional EQ curve that is employed by the TL Audio 5060 I reviewed in issue 149, and is used in a great many high-class specialist pre-amplifiers by the likes of Focusrite. This is either a bizarre coincidence or a very clever bit of microphone design... you decide.

Either way, on a great many types of material this response pattern sounds excellent and adds a bit of depth to the low end, removes clutter from the mid and adds liveliness to the top. In many ways, it's a bit like having two completely different mics in one.

## Conclusion

For me, half of the art of determining whether a product is what I'm after is simply deciding whether it delivers the kind of sonic performance and character that I like. The SE2200a performs extremely well and has sacks-full of character. From there it's a case of deciding whether I can get the same level of performance from a cheaper product, or whether I could get considerably better results by spending a little more. Again, no way. There are products out there that compete (plenty in fact), but the SE2200a is not bettered by any cheaper products and performs better than many with higher price tags. A resounding winner that has been much improved, then. **FM**



## ALTERNATIVELY

**Samson C03** (£79 plus £29 for a shock mount, FM142, 8/9/9/8/7) Great price, good performance, multi-polar pattern, -10dB pad and Low Frequency cut. [www.soundtech.co.uk](http://www.soundtech.co.uk)

**Yamaha MXL990** (£89, 8/9/8/6/9, FM146) An excellent sounding mic that performs far better than the price implies. But with not cut switch or -10dB pad. [www.mxlmicro.com](http://www.mxlmicro.com)

**Octava MK219** (£99) An excellent mic with its own character, a fixed polar pattern, -10dB cut and Low Frequency cut switches. [www.oktava.net](http://www.oktava.net)

**AKG C1000S** £125 FM86 An electret that performs like a condenser. A classic vocal mic with a dual pattern adaptor, Low Frequency cut switch and another characterful sound. [www.akg.com](http://www.akg.com)

**Rode NT1A** (£159) Stunning dynamic range, very low noise, fixed polar pattern and a great sound. [www.rodemicrophones.com](http://www.rodemicrophones.com)