

## SONTRONICS SIGMA

New ribbon microphones are coming as thick and fast as John Meyer's beard but the Sontronics design seems up to the task.

Text: Robin Gist



► I'm sure the old song *Tie a Yellow Ribbon Around The Old Oak Tree* is given a regular workout in Asian karaoke bars, but have the venerable microphone manufacturers of the East mastered the art of tying a two-micron thick aluminium metal ribbon between two magnets? Sontronics believes it has with the release of its first ribbon microphone called the Sigma.

What sets the Sigma apart from other ribbon mics (apart from the active Royer 122 and SF24) is its active design, which provides an electronically balanced output, higher output levels and impedance combined with a visually interesting and original mechanical design.

### MANY MAKERS CAN'T BE WONG

Sontronics is a reasonably new player on the already crowded microphone manufacturing arena. The brand was launched at the 2005 Winter NAMM show with a range of condenser microphones designed "from the ground up" and a marketing emphasis on added value and features. The products have apparently been well received so far with over 3000 sales internationally to date. The parent distributor company, Omnisonics, is based in Dorset in the UK where head honcho Trevor Coley fine-tunes the design and performance characteristics against industry standard models. Presumably, in the case of a ribbon mic, this might mean comparisons against old RCA BX77s, STC 4038s, Royer R121s or AEA R84s and R92s – quite a lineage to live up to!

### CUTTING-EDGE RETRO

The most noteworthy feature of this mic is its active design. This obviates traditional ribbon mic problems such as very low output impedance and low signal level, which require the use of specialist low-noise mic preamps with matching low input impedance. Also, unlike most other ribbons, you cannot harm the mic by 'accidentally' plugging phantom power into it – on the contrary, the mic needs it to work!

The Sigma also has an interesting retro look to it. The elongated rectangular-shaped case combined with an open

mesh grille make it look a bit like a well-styled, overgrown electric razor suitable for removing an industrial strength beard! The other visually striking aspect of the unit is its shockmount system. A large semi-circular metal bracket with rubber isolation mounts supports a cradle that attaches to the bottom of the mic. This mounting system provides substantial isolation from transferred noise (as it should) but what's great about it is that it doesn't project beyond the front plane of the mic, thus allowing it to be placed right up against speaker grilles if necessary. This might instinctively feel like the wrong thing to do to a ribbon, and care should still be taken not to place it in extreme SPL situations, however, the mic's ability to handle an SPL of 135dB ensures that you can reasonably safely put it in front of an amp – or something percussive – without fear of tearing the ultra-thin ribbon. Bear in mind, however, ribbons are very thin and fragile, and although the Sigma can handle a high SPL, I'd recommend you always use a pop filter in front of a ribbon mic for vocals and never blow directly into it.

### RIBBON WONDERLAND

During my time with the Sigma I've been able to try it out on a whole host of sound sources. Most notably a vocal recording on a remake of *Winter Wonderland* for a TV jingle. One of the most popular versions of this song was recorded by Perry Como many moons ago, so a mellow, crooning style of vocal sound was the order of the day. I placed a condenser in front of the vocalist and the Sigma to the side. When I played the two different vocal sounds back to the producer, he agreed the Sigma certainly delivered the warmth and mellow tone we were looking for. The final mix, however, included a touch of the condenser sound for clarity on small TV speakers, but the bulk of the sound was from the Sigma. I heard the ad on TV not too long after the session and felt the vocal sound was exactly right in terms of recreating a '50s-style aesthetic.

Other interesting Sigma sessions included recording a tuba and a didgeridoo. The tuba recording came up very well, with the airy 'blat' sound being nicely controlled by the

#### TECHNICAL DATA

Sensitivity: 12mV/Pa -38dB  
±1dB (0dB=1V/Pa 1000Hz)

Polar Pattern: Figure 8

Impedance: <=150Ω

Equivalent Noise Level:  
14dB(A-weighted)

Max SPL for 0.5%  
THD@1000Hz: 135dB

Power Source: Phantom  
power 48V±4V

Connector: 3-pin XLR

ribbon mic's natural top-end roll off and the rounder lower tones being slightly accentuated. The Sigma wasn't great on the didgeridoo as it lacked clarity on some of the 'bird call' aspects of the performance, but fortunately I had a condenser on it as well and eventually opted for the more detailed sound it provided.

### THE ROLE OF THE RIBBON

Ribbon mics are not generally known for their brightness – in fact, quite the opposite. But it's their natural high frequency roll off that can make them very useful. Paul McKercher recently wrote in one of his drum miking tutorials about using ribbon mics as drum overheads. This is a situation where there's a lot of high frequency information to be recorded and if you use condensers and then start adding top-end EQ, things can start to sound harsh pretty quickly. By using ribbons you begin with a less bright sound, but have the option of EQ'ing in a bit more if required without your cymbals sounding thin and brash. Using ribbons as room or distance mics can also work well. Ribbons also excel at brass recording and are commonly used in many classical and jazz recordings.

### THE SUM OF IT

Ribbon mics represent one of the major 'food groups' of microphones – along with dynamics and condensers – and having a 'balanced diet' (i.e. a selection from each group), will stand you in good stead. The Sigma, with its active design and high output levels, make it easy to use so there's no need for a 'dedicated' high gain mic preamp. A low-end filter on the mic would be useful for reducing proximity effect, but vocalists often make good use of this to boost the lower frequencies in their voices. The Sigma is certainly not the most detailed ribbon mic I've used, but for the price it's a well-built microphone that will add (dare I say it) 'warmth' to your recordings as well as giving you a very different tonal option to a condenser or a dynamic. ■



#### NEED TO KNOW

**Price**

£1330

**Contact**

Neotec Audio  
(02) 9516 4135  
info@neotec.com.au  
www.neotec.com.au

**Pros**

Active design.  
Warm sound.  
Handles high SPL.  
Cost effective.

**Cons**

No bass roll off.  
Not the most detailed ribbon microphone around.

**Summary**

A reasonably priced, mellow-sounding ribbon mic with an active design that makes it easy to use in both commercial and home studios. No need for that accompanying boutique high-gain, low-noise preamp here: 70+dB of preamp gain won't be required by this guy, except perhaps for recording the footfall of a mouse...