

# Sontronics SIGMA



Sontronics' new active ribbon microphone promises the ribbon sound and condenser convenience. Huw Price powers up.

#### KEY FEATURES

- **Response:** 20Hz–20kHz
- **Sensitivity:** 12mV/Pa -38dB ±1dB (0dB=1V/Pa 1,000Hz)
- **Polar pattern:** figure-8
- **Impedance:** <=150Ω
- **Equivalent noise level:** 14dB (A-weighted)
- **Max SPL for 0.5% THD@1,000Hz:** 135dB
- **Power source:** phantom power 48v
- **Connector:** 3-pin XLR

#### MEASURING UP

The only other active mono ribbon mic we're aware of is the Royer R122 (£1,056, Funky Junk), so the Sigma looks like a real bargain. It's certainly more refined and practical than the Nady RSM-2 (£349) and it undercuts Coles' 4038 (£599).

#### SIGMA

Manufacturer **Sontronics**  
 Price **£429**  
 Contact **Sonic8 08701 657456**  
 Web **www.sontronics.com**

Ribbon microphones work on the same principles as any other type of mic, converting sound waves into electricity. They're actually much simpler to manufacture than either the moving-coil or condenser varieties, which in the case of the former are cheap and reliable, but can sound very coloured. Condenser microphones are very sensitive and offer higher fidelity, but it's costly and difficult to make a really good one. Ribbon microphones offer sound quality that rivals or can better the condenser competition for many applications, but they also have their drawbacks.

Many vintage ribbons have very low output impedance (around 30–50Ω), which makes them tricky to match with modern preamps. Their low output levels also mean that you have to use high-gain microphone preamps with very low noise floors, while those microscopically thin aluminium ribbons have to be treated with kid gloves.

The obvious solution to the low output issue is to employ an active design – much like a condenser microphone, where a preamplifier stage is built-in to the microphone itself. Believe it or not, the very first active ribbon microphone was developed in

the late 1920s. It was called the RCA PB17 and it had an electromagnet and three 864 valves. You can bet that sounded warm!

Ribbon mics fell out of favour during the 1960s and little development work was done until Royer revisited the active principle with the R122 and SF24 Blumlein stereo mic. Unfortunately, both these mics are very costly, but the new Sontronics Sigma puts active ribbon microphones within anyone's reach.

## A WELL MADE AND DECENT-SOUNDING RIBBON MICROPHONE THAT'S BOTH PRACTICAL AND AFFORDABLE.

#### In total isolation

Like the company's condenser mics, the Sigma is made in China and the build quality is of a high standard. Arguably its most striking feature is the superb shockmount, which does a superb job of isolating the microphone from transferred noise and doesn't protrude from the front. Many engineers like to use ribbon mics for recording electric guitar, and this arrangement enables you to get the Sigma right up against the grille cloth.

An active ribbon model provides designers with the potential to incorporate a bass rolloff switch to reduce proximity effect, but Sontronics has missed that particular boat. Many engineers have become used to

treating their Royer ribbon mics like Shure SM57s, and the Sigma is capable of taking the same punishment.

#### Ribbons and all that jazz

The Sigma's designers were determined to re-create the velvety smoothness of jazz-era American recordings, with that characteristic treble rolloff. Consequently, some users may find the Sigma a touch treble-shy. This will depend on the application, because it sounds superb on electric guitar and it'll certainly capture those big-band brass tones, but piano, strings and the like might benefit from one of the brighter-sounding designs.

On the other hand, it's a very capable vocal microphone, even if you're recording a quiet singer. What's more, it does a fine job of smoothing out harsh singers.

#### Take the right capsule

Designing condensers with specific tones is common these days, perhaps because manufacturers have such large product ranges. When a mere handful of manufacturers made only one or two large-capsule condensers they were designed to capture the most uncoloured sound possible.

Ribbon mics are appreciated for their 'being-there' quality, so it's an odd concept to 'design-in' a sonic signature – particularly when that involves rolling off the top end. Thankfully, you can reverse the Sigma's rolloff with EQ because the output level's so high you're not just boosting mic amp hiss.

The Sigma is not the most transparent-sounding ribbon mic, but it does produce a very pleasing tone and it's easily the most practical ribbon mic in this price range. **MTM**

#### SUMMARY

##### WHY BUY

- Great looks
- High output
- Easy preamp matching
- Superb shockmount
- Flightcase included

##### WALK ON BY

- A bit treble-shy
- Less transparent than some
- No bass cut

#### VERDICT

The Sigma is a well made and decent-sounding ribbon microphone that's both practical and affordable.



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