

# MXL R77 Ribbon Microphone

## Is this mic's sonic performance as brilliant as its polished gold and chrome exterior?

Paul White

**M**XL's new R77 is an eye-catching, chrome and gold-coloured ribbon microphone, whose retro styling and shiny metalwork make it look like something that could be handed out at an imaginary Audio Oscars ceremony!

The R77 weighs in at 860g, measures 65 x 180mm, and is a passive design that's based around a 1.8-micron aluminium ribbon transducer. A swivel mount is built into the mic, and this has a US thread but no adaptor — so European users will need to get hold of the usual thread-adaptor. The mic is packed in a velvet-lined wooden box and a short table stand is also included.

MXL's manual explains that poor-quality cables can compromise the sound of a microphone, then goes on to recommend Mogami cable. This may not be surprising, as both companies are part of the same

empire! But the point is well made, because 'cheapo' cables really can affect tonal quality as well as reliability, and thankfully you get a nice 25-foot Mogami XLR cable in the box, along with the manual and a cleaning cloth. A limited-edition R77L model is also available, which comes fitted with a Swedish-made Lundahl audio transformer, but it is the 'basic' model that I looked at for the purpose of this review.

MXL recommend the R77 for both vocal and instrument recordings, but a more general guide might be to suggest that ribbon mics are ideal for any situation where the high end needs to be made smoother sounding.

### The Ribbon

Ribbon mics tend to have a limited frequency response when compared to condenser mics, and this is a key factor in their creamy, smooth sound, with many models showing significant roll-off by 12kHz or even lower. The R77 has a somewhat more extended upper reach than most, with a quoted 20Hz to 18kHz response, although it is more conventional in its relatively low sensitivity (-55 dB where 0dB=1V/Pa), so will need to be used with a low-noise preamp (I'd recommend one with an input impedance of 1.5kΩ or greater). The maximum SPL for 0.1 percent THD is quoted as better than 135dB at 1kHz, so there should be few applications where the mic's suitability will be limited because of any inability to handle loud sounds.

Being a ribbon mic, the capsule has the expected figure-of-eight polar response with almost total rejection of sounds approaching from 90 degrees off-axis. The MXL logo indicates the side where the output is 'in phase' (that is, positive pressure on the diaphragm results in a positive excursion of the electrical output), while sounds coming in from the rear will produce signals of the opposite polarity. The microphone does not require a power supply (in fact, as with most ribbons, there's a risk of damage from phantom power, in the event of faulty cables, for example).

Although some companies offer a limited free ribbon-replacement service, MXL state that damage to the ribbon is not covered by their warranty, so there will be a charge for a replacement ribbon, should it be required, though ribbons are field replaceable. While

ribbon mics have become more robust in recent years, they're still the most fragile of all the common microphone types, and dropping them often results in a broken ribbon. You have to handle them carefully, and protect them from strong gusts of air (always use a pop filter), or environments that might contain iron or steel fragments that could be drawn into the capsule by the powerful magnets.

### Practicalities

This mic is an impressive-looking piece of hardware, with a seriously high 'bling factor', but the large basket actually makes a lot of sense, as it keeps the area around the capsule clear of obstructions that could affect the sound. Two knurled, brass knobs secure the swivel mount, and these bear on rubber bushes, which keep the mount secure without the need to tighten excessively. A balanced XLR socket exits the mic from underneath, but unless you use an angled XLR plug (the included cable has straight plugs), this will foul the swivel mount if you try to sit the mic upright in its cradle. There are no pad or filter switches to worry about, so all you have to do is plug in the mic (after ensuring that any phantom power is switched off), set your preamp gain and start recording. I was curious about the sound of the R77, as I'm used to ribbon mics with a more restricted frequency

### SOUND ON SOUND

#### MXL R77 \$400

##### pros

- Distinctive styling.
- Warm, musical sound with a smooth high end.
- High-quality mic cable and wooden storage box included.

##### cons

- As with most other ribbon mics, you have to take a little more care not to drop it or subject it to phantom power.

##### summary

MXL's R77 is a solid performer at a realistic price, so unless you're set on buying the cheapest ribbon mic you can find, it should go on your list of ribbon models to check out. It makes everything sound warm and cuddly with a smooth top end, and in a way that EQ never quite seems to match. It also looks pretty 'pimped'.



response, and was particularly interested to discover whether the top end would still exhibit the characteristic ribbon smoothness. I needn't have worried.

## On Test

Tests on vocals revealed a smooth, warm sound, in keeping with what I'd typically expect from a ribbon mic — so that additional top end I mentioned earlier doesn't get in the way at all. Indeed, when used on vocals I often felt the need to add a few dB at around 10kHz, which added a welcome presence while retaining the smoothness: it's good to know that the mic responds well to EQ when required. I was also pleased that I didn't need to crank up the preamp gain too much to achieve a healthy recording level. This wouldn't be the mic to choose for breathy, ultra-modern vocals, but for a more vintage sound, or where you want your backing vocals to sit behind a conventionally miked lead vocal, the R77 could be just the ticket.

Switching to electric guitar also revealed a smoothing of the high end, which in this instance helped to iron out some of the

amplifier's gritty edge, without losing the essential bite and punch. If you work with electric guitar, this mic is very flattering, whether the sound is clean, bluesy or downright dirty. It may not be the ideal choice for a metal fizz-fest, but for a range of more traditional guitar tones it works very well.

## Final Impression

Given its affordable mid-market price, the MXL R77 gives a solid performance, and delivers exactly what you'd expect from a traditional ribbon design. Its figure-of-eight polar pattern is useful because the dead zone, 90 degrees off-axis, can be aimed towards potential sources of spill to keep it to a minimum, while the sensitive rear of the mic can always be screened off to keep the mic's focus toward the front if necessary. Like most ribbons, this isn't a magic-bullet solution to every recording situation, but if you're dealing with anything that needs the high end smoothing out — whether vocals, electric guitar, violin or drums — the MXL R77 produces a warm, solid and sweet-sounding result. Competition is hotting up in the

## Alternatives

We compared a range of ribbon microphones back in *SOS* November and December 2007 ([www.soundonsound.com/sos/nov07/articles/ribbonmics1.htm](http://www.soundonsound.com/sos/nov07/articles/ribbonmics1.htm) and [www.soundonsound.com/sos/dec07/articles/ribbonmicspt2.htm](http://www.soundonsound.com/sos/dec07/articles/ribbonmicspt2.htm)), and there have been several new models since then. Of the current crop, the SE R1 is a similar-sounding alternative in the same price range, and you may also want to try the Sontronics Sigma, or the slightly more costly Coles 4038. There are also some much cheaper models around, including the MXL R144, the Superlux R102 and the Golden Age Project R1.

ribbon-mic market, with more low-cost models finding their way to market every few weeks, but the R77 turns in a decent performance, its looks are unmistakable, and the cost is very sensible. It's definitely one you should consider if you don't yet have a ribbon mic in your collection. **SOS**

## information

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