

# DPA 4090 and 4091

Just out of Denmark are a couple of microphones that some people would see as an answered prayer or a contradiction in terms — an inexpensive DPA stick microphone.

**JON THORNTON** aims to find out which.



**THE TWO MICS** being looked at here are both fixed pattern omnis, with the 4090 and 4091 differing chiefly in their sensitivity — the 4090 being a high sensitivity version (20mV/Pa) and the 4091 being less sensitive (6mV/Pa) but with a correspondingly higher SPL handling ability (each UK£295 + VAT).

At the sharp end, literally, as these microphones look like slightly stubby measurement microphones with a very tapered front end, both mics feature a permanently polarised capsule with a 5.4mm diaphragm. DPA aficionados might recognise the similarity here with the capsules employed in the highly rated 4060/4061 lavalier type mics, and it has to be said that these new models appear to have taken the underpinnings of these designs and packaged them in more rugged, XLR-interfaced and phantom powerable package. You can see the rationale here, not only is the whole thing potentially more rugged, but also it looks the part, particularly in certain quarters where the use of a lavalier might raise eyebrows...

The microphones ship in a tidy plastic case, and come complete with a foam windshield and a solid clip. Unusually in this price bracket (although not

for DPA), each mic is also accompanied by its own individualised frequency plot. Response is pretty close to linear from 20Hz to 20kHz, so much so that one of these could double as a reference or measurement mic in some applications. The accompanying brochure and press materials seem to position the 4090 and 4091 as instrument mics though, and so this was the application they were first put to work in.

First up was a double bass as part of a skiffle recording, and the 4090 sounded positively gorgeous in this application (*Skiffle? Ed*). Loads of body and fundamental tone to the instrument, coupled with plenty of definition and bite to the pluck sound. It also seemed very benign in terms of placement, with different approaches yielding instantly good, if different, balances to the instrument.

It was the same story on acoustic guitar, played strummed and picked — lots of body without ever sounding boomy or overblown, together with a great attack to the sound that made a 414 on its omni setting sound quite brittle in comparison. Used close in on an electric guitar amp, though, was a different story. Both the 4090 and the less sensitive 4091 didn't really do it for me in this application, seeming to round out the sound a little too much for my taste.

I know that this is very much horses for courses, and perhaps we've all become accustomed to the slightly pinched sound of an SM57 here, but there you go.

Moving on to drums, and the 4090 was first positioned as a single kit overhead. Again, in comparison with the 414, it seemed to instantly give a nicely defined sense of tone — particularly in the bottom couple of octaves, and good transient response to stick sound and cymbals. As part of the rationale for the 4091 with its reduced sensitivity is to enable it to deal with high SPLs without the need for a pad, I was keen to put it to the test inside the kick drum shell. It certainly dealt with the sound pressure well, with no hint of distortion, and again did a good job of capturing the tone and resonance of the drum — but I'm not a great fan of either an omni or a capacitor mic in this particular position, so it was quickly retired.

Moving further away, and set as a distant room mic for the kit, it gave a well balanced, if slightly 'rounded off' sound. Actually, in this application the sound was perfectly suited to the track, but compared with the 414 it seemed to roll off the HF in a much more pronounced manner, leading me to think that any critical application on the mid to far field probably wouldn't suit these mics as well.

In comparison with other microphones with similarly sized diaphragms they aren't excessively noisy, but you certainly notice the difference when compared to their big brother, the 4006, with its larger diaphragm. DPA's own specs put the equivalent noise figures at 23dB(A) for the 4090 and 26dB(A) for the 4091, which to my ears sounds a little on the pessimistic side, but it's certainly noticeable with quiet, distant sources.

If you are looking, then, for a cheap alternative to a pair of 4006s, the 4090/4091 probably isn't for you. If, though, you want a natural sounding, versatile omni for instrument miking in pretty much any music genre, they put forward a very compelling case. ■

**PROS** Price; natural, very open sound; sound great on stringed instruments.

**CONS** A little noisy for some distant miking applications.

**EXTRAS** DPA's 4006-TL builds on the characteristics and qualities of the original while being equipped with



a state-of-the-art, transformerless preamp and 48V phantom power. The transformerless design of the 4006-TL removes the risk of saturation at high levels of low frequencies, giving an extended low-frequency handling capability (10Hz to 20kHz +/-2dB).

## Contact

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