

Neumann Miniature Clip Microphone System

Electret Instrument Microphone

Neumann's first ever pre-polarised mic is designed to reach the parts where their other models won't go!



BOB THOMAS

Founded in Berlin, Germany in 1928, Neumann built their considerable reputation on valve-based capacitor microphone technology. The company's first product, the CMV3 'Bottle', was the world's first commercially successful capacitor microphone, and Neumann continued to blaze a path in that product category, producing iconic microphones that formed the bedrock of the post-war recording and broadcast industries. Although Neumann began manufacturing solid-state microphones in 1965, the company continued to focus on producing externally polarised 'true capacitor' capsules, resisting the siren call of the electret approach – until now.

The Neumann Miniature Clip Microphone System (MCM henceforth)

comes equipped with the company's new KK14 cardioid capsule, and marks Neumann's first venture into the electret capacitor market. Given its form factor and range of mounting accessories, the MCM would appear to have been developed by Neumann in order to target the premium end of the instrument-mounted miniature microphone market – a niche that has expanded considerably since the launch in 2009 of the original DPA 4099 and which, since then, has been dominated by that microphone and its 2018 successor, the DPA 4099 Core.

Forms Follow Functions

As with living organisms that occupy similar ecological niches, microphones intended for similar uses are the products of convergent evolution, so it is no surprise that Neumann's MCM echoes the original

DPA 4099's combination of capsule, gooseneck, output cable and detachable phantom-powered preamp, allied to a selection of instrument mounts and output options.

However, unlike the myriad imitations that have been 'inspired by' Neumann's classic valve microphones, the MCM brings something new to the party by separating the capsule, gooseneck and cable into their constituent parts. The capsule housing unscrews from the gooseneck, the gooseneck unplugs from the output cable which, in turn, unplugs from the MCM100 preamp (or 'output stage' in Neumann-speak) that comes as standard with every MCM. With a nod to Sennheiser (who have owned Neumann since 1991), the output cable supplied as standard with every instrument-specific MCM terminates in a mini-TRS jack plug with locking collar



that not only connects to the MCM100, but also offers convenient direct connection to Sennheiser's EW and XSW ranges of wireless transmitters. Optional output cables terminating in Lemo, microdot and 4-pin mini-XLR connectors are available as accessories. Although this modularity adds expense to the initial MCM purchase, it does come into its own further on down the road by adding the ability to replace just the damaged or broken part, rather than forcing the user to buy an entire new microphone and cable, as is the case with the DPA 4099. This arrangement undoubtedly will increase the attraction of the MCM to PA and hire companies, for whom having to replace damaged microphones is a fact of life.

The male and female connectors that make up the gooseneck/output cable joint are a bit of an innovation in that they are

designed both to hold together securely, and to pull apart to avoid damage to an instrument (or the cable) if, for example, the performer trips over the cable or walks off without unplugging it. An ingenious plastic clip is supplied that locks the connectors together should a secure connection be preferred.

Mount Up

Over the years, DPA have written the book on mounts that attach microphones to the strings of violin-family instruments, and this means that the MCM string-mounted clips for both cello and double bass will seem familiar to those who have used their DPA equivalents. However, the MCM body mounts for violin, viola, cello, double bass and acoustic guitar (the same mount as for a cello) are of an ingenious original design and are robust, spring-loaded affairs that clip firmly onto the instruments in question. Supplied with the guitar mount that came as part of the MCM guitar system is a universal clip mount. Designed for use with any instrument that it will clip onto, this mount fastened securely both to the bell of my bombarde (the very loud Breton lovechild of a bagpipe chanter and a trumpet) and to the rim of my Irish bodhran frame drum. A drum-specific clip is also available, which looks as though it can probably be persuaded to fit onto a banjo — a big plus in my book!

The MC9 acoustic guitar mount arrived with no instructions and with a 'reducer' already fitted to it. The reducer is a neat, and not obviously separate, attachment that clips onto the guitar mount and reduces its throat depth from a minimum/maximum depth of 85/132mm to 52/99mm. The 132mm maximum is capable of coping with all the acoustic and acoustic bass guitars that I own or have come across, whilst the 52mm minimum handled my ukuleles, dulcimers and autoharps with aplomb. Once I'd discovered how to remove and refit the reducer, fitting the mount was simply a matter of compressing the spring by the appropriate amount with my first two fingers and thumb, using three small protruding 'ledges' provided on the mount for purchase. The spring is quite strong, so a bit of effort is required if you need to compress it by more than about a third of its maximum depth.

Operationally, the guitar mount assembly is very well thought-out. The reducer — once you know that it exists and work out how to clip it in and out — is a great idea that allows one clip to

handle many instruments. The one down side for me personally is the fact that the protrusions on the mount body intended to give your fingertips and thumb individual points of purchase are, for my large hands at least, woefully inadequate in size, especially in the case of my right hand, as I play with my nails. Consequently, I'd recommend always using two hands when fitting this mount to a guitar.

With the mount, gooseneck and microphone in place on an acoustic guitar (an OM-sized Gurian CRH), I discovered that the small clip which holds the gooseneck in place is angled at 45 degrees to the top of the instrument that it is mounted on. Usefully, that compact clip can be rotated 45 degrees either side of the mount's centre line, making the identification of an initial mic positioning slightly easier.

The gooseneck itself is quite stiff, which bodes well for its longevity, but does restrict the radius of the curves that it can be bent into. Should you want to have the cable come off the guitar parallel to its side, that stiffness means that you will have to dedicate approximately 10 percent of its 150mm length to create the curve that will allow you to position the connector block accordingly.

Having said all that, the MCM guitar mount is a particularly neat design and, since the rubberised portion that contacts the top of the guitar can move (to my eyes) about 15 degrees or so off the horizontal on either side, it does adapt successfully to the top profile of the instrument it is fitted >>

Neumann Miniature Clip Microphone System

£549

PROS

- Warm, smooth sonic character.
- Good resistance to feedback and rejection of ambient sound.
- Innovative mounting clip, designed for one-handed operation.
- Mounts available to fit most orchestral and popular acoustic instruments.
- Modular construction will help reduce maintenance costs.

CONS

- If you've got big hands (as I do) fitting a mount to an instrument may be a two-handed operation.

SUMMARY

A very impressive debutante, Neumann's first ever electret microphone offers strong competition in the premium on-instrument live microphone sector.

» to, provided that that instrument is more than 52mm and less than 132mm deep at the point of attachment. Incidentally, in a neat coincidence, I discovered that the clip that holds the Neumann gooseneck also fits the DPA equivalent, which could prove useful for some users.

Electret Exposition

Neumann are very obviously extremely proud of their newly developed KK14 cardioid electret capsule, and with good cause, although their marketing does go a little bit overboard for my taste by claiming that the KK14 “overcomes the former limitations of the electret principles” without actually explaining what these former limitations were, and just how former they are. Marketing aside, the KK14 is a microphone capsule of great structural elegance, whose aesthetic is that of a typical Neumann. Its cylindrical body consists of two segments that screw together: a short, solid base whose upper surface appears to be shaped to guide sound through the side vents of the longer hollow section that the base screws into, and whose upper section carries the electret element and its accompanying preamplification in the last few millimetres of its length. The capsule assembly is mounted on a plastic bracket that is shockmounted to the end of the gooseneck. A foam windscreen is supplied as standard.

Power to the MCM comes courtesy of the included MCM100 power supply, which is itself powered by 48V phantom power. A small metal belt clip is supplied with the MCM100, and this can easily be removed simply by unclipping it. As mentioned earlier, the cable from the gooseneck that plugs into the MCM100 terminates in a locking 3.5mm TRS mini-jack that can be connected directly to certain Sennheiser wireless transmitters, and optional cables are available with other common wireless transmitter connector terminations.

In Use

Other than my problem with one-handed fitting of the MC9 guitar clip, positioning

■ MCM mounting options include spring-loaded body mounts for a variety of stringed instruments.

and adjusting the clip itself was simple and quick. Its compact profile and adjustability means that it can be located almost anywhere you choose on the side of an acoustic guitar, bouzouki, banjo, ukulele and more, allowing you to easily determine the best capsule position for your particular instrument.

Out of the box, the sturdy MCM gooseneck is relatively stiff, but a few good twists and it becomes more supple, which allowed me to recreate some of the more convoluted shapes that I use to position on-instrument microphone goosenecks exactly where I want them. However, I wasn't entirely convinced by the MC9's three-location positioning clip, as there is a significant amount of play at each location, which can allow the capsule to move laterally by approximately 1cm when the gooseneck is fully extended.

Whilst I'm not one for marketing hyperbole, given the quality of sound that the MCM is capable of producing, I have decided to give Neumann's marketing department a pass this time round. To my ears, the MCM has a smooth, warm and well-balanced overall delivery that also carries the level of detail and definition that you'd expect from a Neumann microphone. Although it is described as a cardioid, rather than (as you might expect) a hypercardioid microphone, the MCM proved to be impressively resistant to feedback, and exhibited good rejection of ambient sound during my rehearsal-room and studio-based testing. Given my years of experience with other on-instrument microphones, I would be entirely confident of the MCM's ability to deliver those same high levels of performance in a live environment.

In Conclusion

It takes a certain chutzpah to come into a market segment in which a major competitor is so firmly established, and Neumann have certainly shown plenty of that quality in launching a single microphone with a suite of mounts that cover most orchestral instruments and the vast majority of popular acoustic



instruments, at a price that parks their metaphorical tank slap in the middle of DPA's proverbial lawn.

Acoustic instrumentalists looking for an on-instrument microphone will certainly find the Neumann an attractive prospect, especially if their personal tonal taste tends towards its warm, smooth sound. Neumann's innovation in separating the MCM into its constituent parts — capsule, gooseneck and microphone cable — should prove of interest to hire companies who deliver high-SPL acoustic instrument events, where microphone wear and tear is an inevitable fact of life and modularity saves money. Speaking of money, the Neumann MCM system is well priced for the market that it aims to compete in and offers a very similar price/performance ratio to its major competitor.

Personally, I found a lot to like in the Neumann MCM system and will definitely be adding at least one (and a couple of the additional mounts) to my microphone collection. The MCM won't replace my DPA 4099 and 4060, but I'm sure that its warm, smooth sound will — depending on the particular instrument and musical context — provide alternative sonic characteristics for me to explore. If you're in the market for a premier-quality microphone to mount on your chosen instrument, you really should add the Neumann MCM system to your shortlist of possible purchases. ■■■

ALTERNATIVES

The similarly-priced **DPA Core 4099** is the current market leader, and it has a huge user base. If you'd like to explore the concept, but don't want to invest anything like the MCM/DPA ticket price, the **Audio-Technica AT8418**, **Audix ADX 20 i-p**, **Behringer CB100** and **t.bone Ovid** are each worth checking out.

£ Complete instrument kits from £549, KK14 capsule £249. Prices include VAT.
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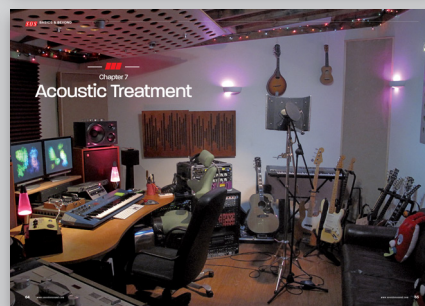
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