Microphone round-up

Electrical signal sophistication starts here

**DPA 2028**

DPA’s 2028 Vocal Microphone is designed to provide the same natural sound as the brand’s 4018 VL handheld microphone, but at a much lower price point. Ideally suited to live performances, broadcast and pro AV applications, the microphone needs minimal EQ. The 2028 features a fixed-position capsule and a specially designed shock-mount and pop filter. Both the outer grille and the inner pop filter can be detached and rinsed, making this the perfect mic to withstand the wear-and-tear of live performance (and anti-viral cleansing).

The 2028 exhibits a supercardioid polar pattern, with DPA’s well-known uniform off-axis response. This gives the microphone a very high gain-before-feedback and makes it easier to handle bleed from other instruments in close proximity. It is available in three variants: a wired XLR with handle, and two wireless mic ‘head’ configurations that are compatible with most wireless microphone systems. This includes the SL1 adapter, compatible with Shure, Sony and Lectrosonics; and the SE2 adapter, compatible with Sennheiser. DPA’s design brief with the 2028 was to “deliver the full, natural sound of the artist’s voice and not what the microphone thinks the artist sounds like”.

- **Polar pattern:** supercardioid
- **Type:** condenser
- **Price:** £500/€450 ex-VAT

[www.dpamicrophones.com/2028](http://www.dpamicrophones.com/2028)

**AEA KU5A**

The supercardioid KU5A breaks new ground in ribbon technology, with an acutely focused directionality that rejects bleed from other instruments, room reflections, and loud ambience in the studio and on stage. The KU5A is the latest in AEA’s line of active, live-ready ribbon mics that includes the near-field N22 and far-field NB.

AEA have possibly taken inspiration from the form factor of the venerable RCA BK-5: this end-address vintage microphone was originally released in the mid-1950s, and RCA famously touted it as possessing “gun blast resistance”! The AEA KU5A features a supercardioid pattern, chosen for its great off-axis response, and AEA emphasise that this pattern, paired with the microphone’s body style, will minimise room tone and bleed — whether in a studio or live setting.

The KU5A “delivers the low-end heft and pronounced midrange one expects of AEA ribbons with moderate, manageable proximity effect”.

There’s an integrated high-pass filter to roll off low end in close range recording applications. Interior components are the most protected of any in the AEA line-up, and the KU5A is equipped with active electronics, making it a good fit for any preamp.

- **Polar pattern:** figure-8
- **Type:** ribbon
- **Price:** £958 inc VAT

[www.aearibbonmics.com](http://www.aearibbonmics.com)

**Schoeps CMC 1**

The CMC 1 is the renowned German manufacturer’s new, small Colette microphone amplifier — about one-third the size and 40% lighter than the well-known CMC 6. It is compatible with all components of the Colette system and can be used in place of the CMC 6 for all applications in which the size and weight of the microphone play a role. At Schoeps, “uncompromising miniaturisation” means that the electrical characteristics of the CMC 1 are equal to — even better than — those of the CMC 6.

“Schoeps haven’t just produced a physically smaller unit, CMC 1 draws a miserly 2mA from the Phantom supply, half as much as CMC6,” said BAFTA-winner Simon Clark in his **Resolution** V18.7 review of the unit. “If you are providing current from battery powered mobile equipment (and especially radio mic transmitters), this is very useful. The new circuitry even provides for an extra 4dB maximum SPL handling over CMC6.”

“Constructed to Schoeps’ usual high standard and compatible with all the existing modules in the Colette range, CMC 1 isn’t a revolution — but a very welcome evolution,” Clark concluded, “smaller and easier to conceal, superb build quality!” Customers who register their purchase with Schoeps can obtain a warranty extension to 10 years.

- **Function:** Mic amp
- **Type:** Colette condenser
- **Price:** £549 ex-VAT

[www.schoeps.de](http://www.schoeps.de)

**Neumann TLM 107**

The TLM 107 is a reference class microphone for vocals and instruments. Five polar patterns plus variable pad and low cut settings make the TLM 107 exceptionally flexible. And with a dynamic range of 131dB the TLM 107 should be able to capture anything from a slight whisper to massive drums without unwanted noise or distortion. Neumann developed this microphone for project and home studio users who “prefer to capture an uncoloured sound image, true to the original source”. As a member of the TLM series, the 107 operates with a transformerless circuit ensuring an open, transparent sound and a full, unrestricted transmission, even at high sound pressure levels.

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- **Polar pattern:** supercardioid
- **Type:** condenser
- **Price:** £958 inc VAT

[www.neumann.com](http://www.neumann.com)

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- **Price:** £958 inc VAT

[www.aearibbonmics.com](http://www.aearibbonmics.com)
**Antelope Audio**

**Edge Duo**

Edge Duo features a premier dual-membrane design with low-resonance body and a 6-micron gold-sputtered capsule. It records utilising two separate XLR output channels through the included Y-cable. In this manner, the on and off-axis response of each modelled microphone may be emulated via the bundled software with detail and accuracy. The Edge Duo boasts a library of 18 mic emulations with fully adjustable polar patterns. The dual-membrane, large-diaphragm modelling condenser microphone is capable of operation with any preamp via native plugins (VST, AU, AAX). Polar patterns may be switched between cardioid, figure-8, omni (and everything in between). The electronics designed by Antelope engineers are housed in a low-resonant body. 18 “legendary” microphone emulations, from ‘Berlin 47’, through ‘Tokyo 800T’ to ‘Sacramento 121R’ are included.

Antelope Audio’s Edge and Verge modelling microphones feature a proprietary modelling engine simulating studio classics with flexibility. Antelope say each modelled microphone is studied in “one of Europe’s finest facilities”, then transformed into a digital replica with full control over polar pattern and proximity effect. Several Antelope Audio converters, including the Discrete MP, Discrete 4 and Goliath (review Resolution V16.8) are bundled with the Edge.

**Polar pattern:** continuously variable  
**Type:** condenser  
**Price:** £835/€899 inc VAT

[www.antelopeaudio.com](http://www.antelopeaudio.com)

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**Audio-Technica**

**BP40**

Audio-Technica’s BP40 large diaphragm dynamic microphone is designed to deliver natural sound reproduction in a variety of applications including radio broadcast, recording and post-production. The microphone’s 37mm capsule features a patented “floating edge” design to optimise the surface of the membrane and maximise performance, while the humbucking coil prevents electromagnetic interference (EMI) generated by the video monitors, power supplies and so on found in modern broadcast and recording environments.

Enhancing its suitability for such applications, the BP40’s hypercardioid pickup pattern allows for great isolation of the sound source and excellent off-axis rejection. As such it’s a great choice for busy radio studios with multiple presenters; in terms of tone, the positioning of the BP40’s capsule has been designed to promote vocal clarity and presence, with an ability to cope with sibilants thanks to a multi-layered windscreen.

Voiced with a peak at 4kHz makes for excellent presence, even at a some distance. It has a 100Hz high-pass filter for rumble attenuation, and Audio-Technica specify a frequency response of 50Hz-16kHz. The BP40 has a sensitivity of 3.9mV/Pa (around 6dB more than a Shure SM58). The rugged, all-metal BP40 ships with an AT8483 mic clip, with the AT8484 suspension mount available as an option.

**Polar pattern:** hypercardioid  
**Type:** dynamic  
**Price:** £255 ex-VAT

[www.audio-technica.com](http://www.audio-technica.com)

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**RØDE**

**NTG5**

The NTG5 saw RØDE reimage the shotgun microphone in a number of ways. The body design was completely overhauled, with circular acoustic ports replacing the linear slots found in other shotgun mics. The revolutionary design delivers greater transparency, and a natural, uncoloured sound suitable for a wide variety of broadcast applications. It is also incredibly light at just 76g and relatively short, which is a huge plus for boom operators and sound recordists. Add to this a very flat frequency response, a tight polar pattern with excellent off-axis rejection, RF-bias circuitry, and a high-quality pistol grip and shock mount included in the kit, and you have a new standard in location recording microphones.

“Happily, the supplied suspension seemed to be able to cope with my simulation of a rookie boom-swinger shaking it like a pair of maracas,” joked Simon Clark in his Resolution V19.1 review. “Drawing a miserly 2mA from phantom power makes this microphone an ideal choice for powering from a radio transmitter which, with the advent of digital systems, is becoming the norm on-set now. RØDE have designed a really impressive, great sounding product in NTG5, especially considering the price point.”

**Polar pattern:** supercardioid shotgun  
**Type:** RF-bias condenser  
**Price:** £449 inc VAT

[www.rode.com](http://www.rode.com)

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**Sennheiser**

**MK Series**

Both MK 4 and MK 8 microphones are designed to be versatile. The MK microphones feature a low inherent self-noise and a maximum sound pressure level of 140dB. Despite their detailed sound, the MK mics are rugged tools. Their compact electronics, superior materials and zinc die-cast casing ensure that they are a good partner for tough recording environments.

The MK 4 is easy to handle and excellent value for money, making it an ideal choice for project studios and home recordists. It features a one-inch true condenser capsule based on the acoustics of the e 965 high-end vocal mic. The MK 4 is made in Germany, its transducer being manufactured in the same clean room as all high-end Sennheiser condenser capsules.

The MK 8 features five selectable polar patterns (omni-directional, wide cardioid, cardioid, supercardioid, figure-8) and is fitted with low cut/roll-off filters, as well as a three-position pad switch. MK 8 offers a defined bass, rounded-out mids and open treble. Professional users will appreciate its versatility — it can cater to any recording situation. The microphone has dual one-inch diaphragms precisely sputtered with 24-carat gold. The shock-mounted capsule is accommodated within a sturdy metal housing.

**Polar pattern:** variable  
**Type:** condenser  
**Price:** MK 4 £277; MK 8 £629 inc VAT

[www.sennheiser.com](http://www.sennheiser.com)
Mojave
MA-1000

Drawing inspiration from some of yesterday’s most revered microphones, Technical Grammy award-winning microphone designer David Royer created a thoroughly ‘modern’ tube microphone that features an original, NOS (new old-stock) 5840 tube, 251-style capsule, and custom designed transformer built by Coast Magnetics. The microphone is supplied in a substantial Peli-type case with foam cut outs. Also included is a supersized version of the patented Sling Shock suspension mount, which uses a system of damped springs and (non-elasticated) nylon cables instead of the usual rubberised parts and elastic cords.

Reviewed in Resolution V15.5, Jon Thornton said: “It has its own sound, albeit a sound that draws on some of the best characteristics of the ELAM 251 and other classic designs. You could easily A-B it against contemporary and vintage microphones costing many times more and expect it to come out at least equal, and the icing on the cake is that tune-ability with the variable pattern. It can do all these things because it’s completely honest about what it does and why — great design, attention to detail, careful choice of components and a desire to learn from and be influenced by the classics, not simply to copy them.”

Polar pattern: cardioid and omni
Type: condenser
Price: £2,195 inc VAT

www.mojaveaudio.com

Earthworks
SR314

Earthworks precision engineered their SR314 handheld condenser microphone to offer a fresh approach to miking vocals. The SR314’s tight cardioid polar pattern provides consistent frequency response to 90° off axis, with extreme attenuation of off-axis sound sources beyond 90° and maximum rejection at 180°. It captures open, rich-sounding vocals with minimal proximity effect and delivers articulate low end close-up that doesn’t thin out with distance. This allows singers to work the mic without dramatic changes in sound. The SR314’s 145dB SPL handling and an extended 20Hz–30kHz frequency response further enhance the versatility of this incredible mic, making it as useful for high-fidelity capture of instruments as it is for vocals.

Protected within its steel exoskeleton is a studio-grade, small-diaphragm, condenser capsule coupled with a Class A amplifier circuit that leverages Earthworks’ patented, proprietary technologies to deliver one of the fastest mics on the planet. The SR314’s extended, flat frequency response and excellent coherence time with fast impulse response sets the Earthworks SR314 apart from other handheld vocal mics in its class. The SR314 doesn’t just deliver studio quality on stage. It is a vocal microphones that aims to seamlessly transition between those two worlds without compromising anything in terms of performance.

Polar pattern: cardioid
Type: condenser
Price: $699 USD / £699 inc VAT

www.earthworksaudio.com
British mic brand Sontronics celebrated its 15th birthday by announcing a new product to widen their range yet further: the £99 Podcast Pro, developed and hand-built in Sontronics’ UK HQ. Available in red or black, the Sontronics Podcast Pro is a dynamic microphone that’s been designed specifically with podcast, broadcast, radio, gaming and voiceover applications in mind.

The Podcast Pro has a tightly focused supercardioid pickup pattern, giving excellent clarity and depth with superb side rejection. Its three layers of internal protection and integrated fine-mesh pop filter provide superb control of extraneous noise or rumble and also help control unwanted sibilance or plosives. Easy to set up and position, and compatible with any desktop or floor-standing mic stand, the Podcast Pro’s XLR connection allows you to plug straight into your interface, soundcard, mixer, laptop or Xbox. The Sontronics Podcast Pro is supplied with its angled yoke mount and the microphone is covered by Sontronics’ unique Lifetime Warranty.

**Polar pattern:** supercardioid  
**Type:** dynamic  
**Price:** £99/$149 inc VAT

www.sontronics.com

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**TELEFUNKEN Alchemy series**

Designed, hand-built, and tested to strict quality standards in Connecticut, the Alchemy Microphone Series is TELEFUNKEN Elektroakustik’s next generation of large diaphragm tube condensers. These microphone models feature unique sonic profiles developed from the ground up, utilising a combination of vintage microphone elements and modern reliability. The bold voicings of the Alchemy Microphone Series are the TF29 Copperhead, TF39 Copperhead Deluxe, TF47, and TF51.

The Alchemy Microphone Series is an evolution and refinement to past TELEFUNKEN models, benefitting from over a decade of in-house microphone design and production. Features include a custom designed headgrille for transparency and openness, hand-plugged circuit boards, and premium selected tubes and transformers. All systems ship in a compact, protective case for easy transport and storage. Included are two modern mount options, microphone dust cover, high-flex 7-meter cable, and an American-assembled power supply. Each microphone is individually tested and listened to. All critical components are quality controlled in-house before assembly, including capsule frequency sweeps, vacuum tube burn-in and noise grading. These high standards lead to extremely tight tolerances from microphone to microphone.

**Polar pattern:** cardioid  
**Type:** condenser  
**Price:** (TF29); £1,275 inc VAT

www.telefunken-elektroakustik.com

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**Aston Stealth**

Winner of ‘Best Microphone’ at the NAMM TEC Awards, Aston Stealth is the only British manufactured microphone ever to achieve this. Stealth has 4 switchable voices and is equipped with an auto-detect function which senses 48V phantom power, and automatically switches the mic to active mode. A built-in, high quality, Class A Mic Preamp dispenses with the need for an external gain lifting device in active mode. Stealth also features a sorbothane internal shock mount system.

Stealth was developed in partnership with more than 90 engineers, producers and artists on the Aston 33 development panel, who participated in a series of blind listening tests designed to create the best possible sound. The resulting four voice settings, Vocal I, Vocal 2, Guitar and Dark, offer a variety of sounds. “The ‘G’ setting is a real eye opener. If you’re after a tight, punchy, almost slightly compressed guitar sound from a miked cab, this is pretty much plug and play,” said reviewer Jon Thornton (Resolution V18.2). “Switching to sung female vocals, the V2 setting sounds balanced rather than hard, with a sense of space that wouldn’t disgrace a decent LDC… It certainly isn’t the first time a manufacturer has claimed their offering is four microphones in one — but Stealth is probably the closest I’ve heard to fulfilling such a claim.”

**Polar pattern:** cardioid  
**Type:** dynamic  
**Price:** £229 inc VAT

www.astonmics.com

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**Sontronics Podcast Pro**

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**DPA**

**4097**

Available in both wireless or wired configurations, DPA’s 4097 CORE Supercardioid Choir Microphone provides the same sonic qualities as the brand’s CORE 4099 Instrument Microphone, just with a higher sensitivity. It features DPA’s flat off-axis supercardioid pattern and very high-gain-before-feedback, with the intention of delivering the most natural sound possible from all angles. This makes it simple for sound engineers to use multiple mics on a choir — spot mics may be blended without having to fight the artefacts created from uneven mic pattern pick-up.

The 4097 also features CORE by DPA amplifier technology, which enables it to deliver a clear sound with lower distortion and an expanded dynamic range. Furthermore, the 4097 includes three shock mounts to ensure rumble caused by movement onstage is damped effectively. Configured with a MicroDot connector and a DPA adapter for wired or wireless operation — allowing for great flexibility on stage when there are multiple uses of the same space. The microphone is sleek, discreet and elegant, so that it doesn’t draw attention away from the performers even when it is at its longest stand extension (253 cm).

**Polar pattern:** Supercardioid  
**Type:** condenser  
**Price:** €900/£790 ex-VAT

[www.dpamicrophones.com/4097](http://www.dpamicrophones.com/4097)

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**Royer**

**R10**

Royer Labs is well known for making world-class ribbon microphones, with pricing to match. The R-10 is Royer’s first lower-priced ribbon microphone, but Royer says no corners were cut with the R-10. The R-10 is recommended for electric guitars, brass, drums and all acoustic instruments.

Like all Royer mics, the R-10 is hand-built in Royer’s Burbank, California facility. It features the same patented direct-corrugated ribbon element found in Royer’s R-121, and has a David Royer custom-designed transformer that gives great headroom. The R-10 has an internally shock-mounted ribbon transducer to help protect against vibrations and shocks to the ribbon. It has a 3-layer wind screen system that greatly reduces potential for stretched ribbons from wind. The wind screen system also cuts down on bass build-up when close-miking electric guitars and other instruments.

Royer say the design allows the microphone to handle SPLs of 160dB at 1kHz, and maintain full sonic integrity at extreme levels. The offset ribbon also makes the back-side pickup of the microphone slightly brighter, which is useful for vocals and acoustic instruments. The R-10 ships in an aluminium carrying case and includes an adjustable swivel mount and a protective windshield. The R-10 is also available in matched stereo pairs.

**Polar pattern:** figure-8  
**Type:** ribbon  
**Price:** £470 inc VAT

[www.royerlabs.com](http://www.royerlabs.com)

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**Shure**

**TwinPlex**

Shure’s new line of premium subminiature omnidirectional lavalier and headset microphones are designed to stand up to the toughest conditions. Developed with input from leading audio professionals, TwinPlex supports the diverse needs of theatre, broadcast, film and television. The TwinPlex is an easy-to-conceal package, ideal for quick costume changes or discreetly placed under clothes with no impact on sound quality.

The TwinPlex range consists of four lavaliers (TL45, TL46, TL47, TL48) and an ultra-light, fully-adjustable headset microphone (TH53) in multiple colours with extensive accessories and options. The dual-diaphragm omnidirectional design delivers off-axis consistency and low self-noise, creating lifelike vocal clarity and warmth. Just as much thought has gone into the cable, which is a common point of failure for microphones in this category. To simulate years of intense use, the ultra-thin, TwinPlex cable was flexed, stretched, and pulled to the absolute limit in internal tests. Available in 1.1mm and 1.6mm options, the paintable cables are immune to kinks and memory effects, resulting in never-before-seen flex performance due to an innovative spiral construction with redundant shielding.

**Polar pattern:** omni  
**Type:** Dual-Diaphragm, Pre-polarised Condenser  
**Price SHURE TL46:** £350 ex-VAT