

Audio-Technica slip their largest condenser diaphragm into a side-address pencil package. Robbie Stamp checks out their high-end new design

## WHAT IS IT?

Large diaphragm side-address cardioid condenser microphone

## CONTACT

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## **HIGHLIGHTS**

Smooth frequency response across the whole audio range Massive dynamic range

with low noise floor 3 Versatility of the side-address pencil design

## **SPECS**

fixed-charge back plate, permanently polarised rectangular

Cardioid 100

141dB, 1kHz @ max SPL 149dB SPL, 1kHz @ 86dB, 1kHz @ 1Pa

Dimensions:

177 x 25mm

Weight: 197g

udio-Technica's second addition to their '50' microphone range is a hybrid of sorts: a unique

rectangular large diaphragm pickup is oriented to a side-address position in a pencil mic housing. This topology is perfect for close-up work in tight spots, but it relies on two essential qualities: high headroom/SPL handling and robust housing. The latter is achieved by way of a high-quality aluminium and brass casing, combining smart aesthetics with durable solidity. The former relies on an all discrete transformer coupled head amplifier that delivers a low impedance source (100) to the preamp.

The AT5045 comes in a hard shell case with the AT8481 isolation clamp, a stylish jaw style swivel design that grips the mic with rubber bushings. These clamps make precise set-ups easy and don't budge a millimetre once locked. This is great for reaching into awkward spots between drums or fine-tuning a stereo pattern.

I'm no fan of mic shootouts as experience has shown that context often trumps (subjective) quality. If you know

the source, the room and the preamp, odds are you're going to be able to tell a racehorse from a donkey without any need for reference. Right away the AT5045 proves itself a thoroughbred, as it ought to at this price. Before listening to how the mic translates a source. I tried a couple of tests to find the limits of self noise and SPL handling. The results were impressive with a noise floor sitting lower than I'm used to, while just inches from the speaker cab of a cranked amp the mic didn't audibly distort. So far so useful

The AT5045 is a high-end all-rounder. No matter what I tried it on the sound was clear and smooth, devoid of irksome artefacts or limiting 'characterful' response anomalies. The low-end is noticeably extended, aiding the sense of realism. I rarely like condensers on amps, but this is an exception and on a bass it definitely captures all the beef without sacrificing any top-end bite. Guitar amps quickly reveal the high frequency comb-filtering nastiness that lurks behind the brightness of many condenser mics, but there appears to be none lurking in the

AT5045, even with heavy-handed HF EQ. This is the mark of a high-quality diaphragm and head amp combination. The upper frequency response has no pronounced hump to impart that lively, instant sugar hit that can make condensers jump out in tracking and then drive you nuts at mixdown.

Acoustic sources translate beautifully. The cardioid pickup pattern is on the gentle side, allowing for a good tonal consistency in the forward 90°, making instrument movement less of an issue, while there is ample rejection to the rear. The proximity effect is less severe than in tighter patterns (proximity effect reduces towards omnidirectionality), and this makes balancing room against source simpler when picking out quiet sources. The low noise of the AT5045 comes into play, allowing plenty of room ambience to be kept in the picture without drowning a delicate instrument in hiss. They also make great room mics for the same reason. In stereo configurations (X-Y and ORTF) the AT5045s yielded great results and the smooth phase response meant set-up was simple and mono compatibility wasn't a problem.

The AT5045 is a serious investment prospect, priced to sit alongside Schoeps, Earthworks and Neumann. The innovative design brings to mind the Josephson e22, with which it also shares a simplicity: no high-pass or pad switching. If you can afford the AT5045 you'll most likely have quality preamps that will take care of this and have enough input headroom to match the mic's large dynamic range. There is nothing I wouldn't try this mic on, from vocals and string/horn sections to field recordings and overblown amps. Thanks to the high-quality design, a stereo pair will deliver a truly lifelike analogue of wherever it's placed. You only get one set of ears in this life, but if you can afford it I'd recommend the AT5045 as a good accompaniment.

