Reviews | Audio-Technica AT4021 & AT4022 mics

SPECS

20Hz - 20kHz Polar pattern: Cardioid (AT4021), omnidirectional

250 Ohms

80Hz, 12dB/octave

14dB SPL (AT4021), 13dB SPL (AT4022)

Max SPL: 14 dB SPL, 1kHz at 1% T.H.D, 156dB SPL, with 10dB pad (nominal)

power 48V DC, 3.0 mA typical

Three-pin XLR

AT8405a stand clamp for 5/8"-27 threaded stands, windscreen, protective carrying case

Weight:

AT4021 119g

AT4022

124g

Dimensions 144 x 21mm



Audio-Technica AT4021 & AT4022 from £289

Little microphones for big jobs. Trevor Curwen checks out two small Audio-Technica diaphragm condensers

WHAT IS IT?

Two small diaphragm condenser mics for the studio, one cardioid, the other omnidirectional

CONTACT

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HIGHLIGHTS

- Good build quality
- 2 High SPL handling
- 3 Natural sound quality

PRICING

£289

AT4022 £309

here is always a place for a small diaphragm condenser in the modern studio, and not just because they're good to

get in close where larger mics struggle. New to Audio-Technica's 40 Series, with the same body shape but different polar patterns, are the AT4021, offering a cardioid response, and the AT4022, providing an omnidirectional performance. Both are electret mics with a fixed charged back plate and need 48V Phantom power to operate.

Each comes in an easily storable foam-lined vinyl case that firmly holds a mic clip and a foam windshield. Both are well put together and impeccably finished in a dark matt charcoal colour, looking identical apart from the extra grille around the barrel of the AT4021 permitting sound entry from all around.

Inset into the mic's bodies are the type of small switches that you need a small tool like a jeweller's screwdriver to operate - fiddly but with absolutely no chance of being accidentally reset. One is the hi-pass filter rolling off low frequencies below 80Hz at 12dB/octave while the other operates a 10dB pad.

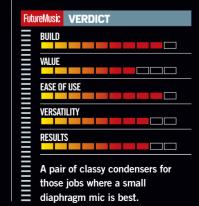
One paper, looking at the supplied frequency response plots, both mics offer a fairly flat response throughout most of the range but with a slight upward slope in the graph with a few small peaks in the top end above 2kHz. Both are designed to take high sound pressures too, with a maximum level of 156dB with the pad switch engaged.

Put to work recording a variety of instruments, both mics captured

transient detail impressively well. Exhibiting a very similar sonic character, both yielded a very natural and well-balanced sound with no obvious colouration to speak of bar a subtle enhancement of the higher frequencies, resulting in a useful degree of clarity and air in the top end. The airiness was more apparent in the AT4022, as might be expected from an omni response, and the mic also exhibited slightly more in the bottom end. Both mics turned in creditable results on acoustic guitar and on a more obscure pair of stringed instruments – an autoharp and a Weissenborn acoustic lap guitar where the thin body and elongated profile of the mics got them into positions that would have been difficult with a large diaphragm condenser - something that would likely have obstructed the player.

The cardioid AT4021 worked perfectly on hi-hat while both had no problems dealing with a variety of hand held percussion, and we are in little doubt that, matched in pairs, either would have done a decent job in the drum overhead role. These mics could earn their keep in a pro studio that has a well-stocked mic cupboard but either one could be a useful addition to a home studio, depending on whether you want the more focussed sound of the cardioid AT4021 or the relatively more open sound of the AT4022.

All mics face stiff competition these days and it has to be said that there are several less expensive alternatives to these two. Nevertheless, with these 40 Series mics you are getting quality gear for your money – Audio-Technica rate their 40 Series so highly that they give them a lifetime warranty. These mics will provide accurate and natural sound and take high sound pressure levels without flinching. You can rely on either or both of these to do a decent job for you in the studio. FI



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