

AUDIO TECHNICA ATM450

A bit on the side can be just what the doctor ordered.

Text: Greg Walker



► Audio recording is a strange business. When it comes to microphones, some people will tell you that to make a great recording you need this or that ridiculously expensive Germanic masterpiece, while others go about repeatedly pulling astonishing, character-laden sounds from what are, at first glance, totally crap mics. Meanwhile, most of us reside somewhere between these two extremes. We usually have a couple of decent quality microphones that we know and love and spend much of our time finding more and more ways to get the best out of them.

The Japanese company Audio-Technica has been in the audio game a long while and has also found its niche in this middle ground, producing mics of undeniably high quality for the somewhat budget-conscious user. I confess to having had an affair with a large diaphragm AT4033 for a couple of years, and to this day it's a mic I recommend to people looking for a reasonably cheap and versatile all-rounder. I've also used various other Audio-Technicas over the years and always found them to be good performers regardless of price, so I was keen to get my hands on the ATM450 side-address small diaphragm condenser and try out something a little different.

QUIET CONFIDENCE

Two things immediately caught my eye when I removed the ATM450 from its cardboard case; the first was its diminutive stature – 127mm in length and only 21mm in diameter, which puts it well and truly in the 'pencil' condenser category; the second was the mic's stylish design and build quality. The 450 has an air of quiet assurance about it with its dark grey brushed steel finish and fine black grille, through which the front and back of the internal capsule can be clearly seen.

The mic is a fixed cardioid design offering a published frequency response of 40Hz – 20kHz. The measurement graph of the 450 exhibits a pretty linear response up to around 6.5kHz where there's a gentle hump followed by a smaller dip at 14kHz and one last upward wiggle at around 18kHz – it's not dead flat in the top end, but then, no condenser microphone is, and this is where the majority of the perceived 'character' of any mic resides. And yet despite all that, as we all know, looking at a mic's published frequency response curve to get a 'vibe' on a mic's character is virtually pointless. So onto the testing...

SIDE ORDER

The major selling point of the 450's side-address design is its ability to get in close to sound sources where other, more traditional, end-address designs might struggle: between that tom and crash cymbal, or under a piano lid, for instance. Therefore, an important factor is the mic's ability to withstand loud environments, and to that end the ATM450 can theoretically cope with an ear-splitting SPL of 152dB. It's designed to be put in the firing line of snares, guitar cabs, horns – you name it. The addition of

a switchable –10dB attenuator further ensures the capsule won't distort on these sources or cause overload further down the chain. There's also an 18dB/octave roll-off switch which kicks in at around 80Hz, for filtering out the murk and rumble – both these 'pen' switches are found around the back of the mic and are easy to access and adjust.

Another likeable thing about the overall package is the ATM450's purpose-built mic clip, which sports individual swivelling and locking screws. It's built like a tank and rounds out the microphone nicely, along with the inclusion of a chunky removable foam wind-sock – something you don't see so much these days – that's a welcome tool for reducing wind and plosive side-effects. Being a true side-address microphone, Audio-Technica has also sensibly labelled the front side of the mic just below the capsule, which is a good idea to help avoid the potential embarrassment of recording your source 180° off-axis!

RECORDING DUTIES

I first used the ATM450 on some light percussion duties and found it very good in that role. Tambourines and shakers translated with a nice presence and shimmer. Next up was a female backing singer and, again, the ATM450 passed with flying colours; the voice had a nice combination of cut and body and sat easily in the mix. I must say, I like small diaphragm condensers in this role – the slightly smaller, focused sound provides a great foil to something a little larger on the main vocal. I also used the 450 for some lead vocal guides and liked it on certain voices in this role too, with the windsack providing plenty of 'P' and 'B' protection. (On a side note: the general rule of thumb is that quieter 'character' singers often sound great through small diaphragm mics while high-octane 'belters' tend to come out sounding a little harsh.)

For the next two or three weeks I used the ATM450 on almost anything and everything that happened to need recording, all the while waiting for it to fall short on some unsuitable application. In the end, I was quite surprised by its versatility – it was up to almost any task – even electric guitar cabs. It also performed extremely well on acoustic instruments such as steel string guitars, viola, ukelele and various percussion instruments. As for drums, unless I was recording a drum setup where space was a major issue (and the 450's low profile was a major asset), the ATM450 would more likely get a guernsey on hats or in one of the close overhead positions I sometimes use. It was pretty good on close-miked snare but I'd probably prefer the trusty Shure SM57 playing that role if I could squeeze one into position (while the ATM450's build quality is very solid, the capsule is rather exposed and I'm not sure how many full-blooded stick hits the little guy could cope with).

THE PENCIL CASE

Finally, for a bit more perspective I did a shootout with my go-to condenser pencil mic, the AKG C451 – an industry



standard many people know and trust. I found the results quite interesting and the differences between the two mics much less pronounced than I anticipated. Through a pair of Universal Audio 2108 preamps the overall tonal balance of the two mics was remarkably similar, with the AKG having a smidge of that undefinable 'Old German' character while the Audio-Technica was a tickle more 'modern' sounding. The AKG had a touch more bottom end and low/mid bloom while in the top end the Audio-Technica had an ever so slightly thinner presence. In general terms, though, these mics sound remarkably similar, which in my book is a definite thumbs-up for the Audio-Technica. It's also worth noting that the 450 is far less prone to breath-related blowouts – even without the windsock – something very few pencil condensers can boast. When you add in the –10 dB attenuation, roll-off switch and pro mic clip, it's clear this \$325 mic is punching well above its weight.

SMALL PACKAGE

With the ATM450, Audio-Technica has delivered a fully spec'ed mic at a very attractive price that's both multi-talented and good looking. The side-address design sets it apart and its combination of design smarts and old-fashioned useability prove that good things can come in small packages. ■



NEED TO KNOW

Price

\$325

Contact

Technical Audio Group
(02) 9519 0900
info@tag.com.au
www.tag.com.au

Pros

Small size & side-address style make it ideal for tight spaces.
Attenuation and bass roll-off switches.
Excellent accessories including windsock and pro clip.
Stylish looks.
Very affordable.

Cons

Somewhat exposed capsule might prove too fragile for 'loose goose' drummers.
Will only work as a vocal mic for softer 'character' singers.

Summary

The ATM450 is a very versatile and keenly priced small diaphragm mic with classy looks and a good feature set. The side address approach offers something a bit different and the overall sound quality makes this an extremely competitive release from Audio-Technica.