



# Audio-Technica BP28

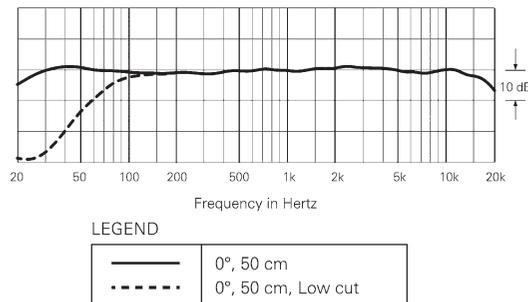
He's a big man with a gun: **SIMON CLARK** locks and loads

**F**ear not, *Resolution* hasn't been taken over by the NRA. The gun in question is the latest interference tube model offered by Audio-Technica. You have to admire the dogged determination of the design team at Audio-Technica. When I was asked to look at this new product, I checked their website and found they already produce seven rifle mics. As an aside, I would advise anyone travelling with a Carnet or other equipment list against using the colloquial term for these mics, the correct term is interference tube microphone and it would have saved me a lot of embarrassing explanations at a Middle Eastern airport if I had used it. So what, I wondered, could be different about this new offering?

It turns out to be obvious the moment you set eyes on the BP28, or its longer sibling, the BP28L. Almost every mic of this type is 19mm in diameter, but this is a larger diaphragm example and measures a hefty 28mm. As I suspected, the thinking behind this primarily is to produce a unit with lower self-noise, and they have achieved that with a spec of 8dBA weighted. To give you an idea of how this compares to other interference tubes, the Neumanns I use on location measure 12dB whilst the "industry workhorse" MKH416 comes in at 13dB. The team at Audio-Technica claim that as a side-effect they are able to get a smoother frequency response with this design. I cannot comment on their reasoning but, the BP28 response graph certainly looks relatively smooth and, more importantly, listening tests reveal it to be agreeably uncoloured within the limitations of this type — more on that later.

## Boom swinger beware

Apart from its diameter, the BP28 is conventional in appearance with the longitudinal vents necessary for this type on two sides of the front tube. Unusually there is a legend on the body advising the user which the top of the mic is. Other than positioning the vents in the horizontal plane I cannot figure out why this mark is there, and I believe both the BP28 models behave identically if the 'up' mark faces down. Two switches, one a pad and the other a Low Cut complete the physical features. This is, unsurprisingly, a heavy beast. OK, 223g for the shorter model and 313g for BP28L do not seem like much, and you may think this specification unimportant if you have never tried to hold a



mic above your head on the end of a 5m boom for any length of time. If you are a boom swinger (we call them 1st AS now) believe me, you are very aware that this weighs more than the equivalent 19mm model. The weight distribution is good however, with the back end heaviest. This is essential for a mic which is to be aimed by rotating the boom in your grip.

Reviewing an interference tube mic is different to doing it for any other type. Ask yourself, what is the point of this form of transducer? In film and TV, they are used to attenuate unwanted background noise and theoretically, to sound good when the frame size pushes them further away from the source than we would like (This only works in non-reverberant spaces). In theatres they are chosen because of the large distances from stage to proscenium arch or auditorium where they tend to be positioned. Because of this, the thing us users' value most is a technical specification known as 'suckiness'. I don't know the SI unit this is measured in, but we favour models with "lots of suck" or those that are "really sucky".

## Behaves well off-axis

To explain, the off-axis response is almost more important than that in the sweet spot because we want sources off axis to attenuate as much as possible, but without colouration or comb filtering as the mic is panned past them on set. If used, as they often are in TV, as the M of an MS rig, then variations in off axis tonality can make for an inconsistent, wandering stereo image. The trouble with a system which relies on destructive interference to reject off axis signals is that it tends to comb filter by its very nature. The BP28 behaves beautifully in this regard, with sources reducing drastically as they leave the sweet spot but their tonal quality remaining pleasingly unchanged.



/ Simon Clark on location

I did say the response was smooth but the eagle-eyed *Resolution* reader will have undoubtedly spotted the lift between 2,000Hz and 12,000Hz on the longer model. This is merely the conventional curve for a microphone designed to be many metres away from the wanted source. Whisper close to the end of such a mic and the result will sound bright to put it mildly.

Even with just the supplied conventional mic clip, handling noise was insignificant when mounted on a boom pole. My unscientific test with a radio turned very low at one end of a dubbing theatre and the BP28 about 16m away produced a very clear result which sounded much closer than it actually was, with no discernible added system noise. A second radio was introduced at 90° to the mic and approximately 4 metres away at similar level but with different programme material. The original source was clearly audible above the massively attenuated but uncoloured second radio.

An audio sniper rifle, indeed. **i**

## resolution/VERDICT

**PROS** Low self noise, uncoloured off axis response, build quality, high SPL handling.

**CONS** Weight, size.

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