# **SE ELECTRONICS REFLEXION FILTER**

PRODUCT REVIEWS

Everv so often a manufacturer comes up with some product that neatly fits in to niche that no-one bothered with or seen.

or other a particular else has either One of the

toughest practical issues for home or project style studios has been how to record a clear vocal take without resorting to a professionally set up (and priced) recording space. Often the space within an average house available for a studio is small or acoustically ill suited to tracking vocals with any appreciable dynamic without the filtering and attenuation (warping) of the sound due to the physical limitations of the space available. Building a separate space, just for vocals is often not an option, and ready made vocal partitions are bulky and often pricey to boot, putting them way down the list of small studio priorities. The resulting vocal recordings often require serious attention to remove or mask the unwanted room sound. Unfortunately, all too often this is a compromise situation due to the watermark type colouration of the home studio room sound. The good folk

at SE electronics have taken the time and trouble to provide a worthy solution to this dilemma, the Reflexion filter. Looking more like a machined piece of medical equipment than a pro audio gadget, this is one of the most sensible and timely pieces of kit that I have come across for quite some time. Comprising of a number of lavers of acoustically inert materials. it serves, essentially as the smallest vocal booth that I have ever seen, and I realised upon assembly that if this worked as the manufacturer claimed, it would indeed be a real godsend for many of the legions of home studio professionals and enthusiasts. Designed to fit on a stand. (albeit a solidly built one) it serves to create a very quiet area directly around a studio type condenser, alleviating much of the phase and tone issues associated with

the intrusion of unwanted local room sound off axis, rejecting most if not all sound excepting the direct source. Putting the Reflexion filter through its paces was one of the more fun things I have had to do in the course of reviewing gear this year.

## Makeup/Features

'The Reflexion Filter has 6 main layers. Firstly, a strong laver of punched Aluminium which allows sound waves to pass through it, diffused, to a laver of absorptive wool. The waves then hit a layer of Aluminium foil which helps dissipate energy and break up the lower frequency wave-forms, and from here they hit an air space kept open by rods passing through the various lavers. The air gap acts as an acoustic barrier. The sound waves then pass to a further layer of wool and then through an outer, punched, Aluminium wall which further serve to absorb then diffuse the remaining acoustic energy.' - Manufacturers' website. Essentially the reflexion filter works in two

## **BY ANGUS MCCREADY**

complementary ways, first, by insulating the mic from room reflections, and secondly by localising the sound source, effectively acoustically isolating it from the room

The build quality is very good here, with all fittings made of brushed or chromed steel, built with the same sturdiness as professional drum traps, i.e. built to last a little longer than the first few uses.

## Nitty Gritty

Designed as it is to deal with sensitive studio condenser it came as no surprise that this is where the Reflexion filter works best. I demoed this unit with five different mic's from a variety of manufacturers including AKG. Shure, Mann, Rode and Sennheiser, alas, I was unable to rustle up a Neuman for this review (the ones I would normally use were busy making money for their owner). The better the quality of mic, the better the effective rejection and dryness. From a vocalists or producers point of view, the choice to use a unit such as the Reflexion filter is a practical one. Two of the singers who tried it found the close range attenuation to be a little tricky when trying to sing without headphones, but all of the singers who tried it commented on how much easier is was to focus on the performance and the headphone mix when using it whilst wearing cans. I find that the kind of spaciousness (reverb) that can really set many singers off can be dialled into the cans mix gracefully, whereas pulling the rubbish out of a dodgy room sound . especially during the session to be a real mission. Having said this, the effective dryness of the Reflexion filter to be a very clean dryness - which is where the thought that has gone into the design of this unit becomes apparent. Even the sound of the more sensitive of the mic's used (an NT3) benefited immensely by its enclosure in the Reflexion filter. The attenuation of unwanted background noise was quite extreme in this case, making an otherwise messy and more or less effectively omni directional mic into the ideal distant mic. On acoustic instruments, through all save the Sennheiser, the sound was a great deal more focussed than I was used to, alleviating the need for the isolation partitions that I would normally use to reduce spill, resulting in a great recording. Even on guitar cabinets, using a dynamic, the sound was a definite improvement. In this

reviewers opinion, the Reflexion filter is one of the better tech finds this year.

#### Conclusions

Without doubt this is one of the handiest bits of kit that I have come across in quite some time and will undoubtedly find a good home in many a small studio and great value to boot. Worth a good long listen for anyone who is obliged to record outside of an acoustically treated studio space.



