

MACKIE SRM450 V2

Navy blue is the new black over at Mackie, but that's not the only thing that's made them 5kgs lighter.

Text: Mark Woods



▶ I'm slowly coming to accept the fact that good PA sound no longer emanates exclusively from big black wooden boxes. Plastic is where it's at for sound reinforcement these days. Even at the top end of the speaker cabinet market there are some great sounding new flown PAs, with neat plastic arrays and strange looking subs. At the other end of the spectrum there are still the typically bad sounding, cheap moulded boxes swaying on three-legged stands at pub gigs and in-store promotions. But that will never change.

Sometimes sound quality just isn't the top priority. This seems a crazy notion to me – as I'm sure it does to the majority of AT's discerning readership – but unfortunately, in the real world, cost and convenience often win out over audio quality. For companies like Mackie, however, whose powered speakers are right in the thick of this highly competitive market, the fine line between sound quality and cost seems well balanced. Although not as cheap as some of its competitors, the SRM450v2s reviewed here provide reasonable sound quality in a convenient and lightweight package.

BACK IN BLUE

The original Mackie SRM450 powered speakers may indeed be the most popular plastic speaker boxes in the world. Mackie certainly claims they are – although this hasn't bred complacency back at HQ, apparently. The new SRM450v2 model sees several improvements over the original. Weighing in at only 18kgs – about 5kgs lighter than the previous model – the 450v2 has a new bass amp, new speakers and a new polypropylene enclosure (which is as strong as concrete, according to the manual). For good measure these enclosures are now also midnight blue, instead of black. The new lighter 450v2's can be carried relatively easily in one hand, but with handles now on both sides, it's easy for one person to hoist them onto the dreaded push-up stands (using two hands). There's also a handle on the top, for lifting them from above if necessary (or for anyone with three hands). Alternatively, the SRM450v2's have little feet on the bottom which allows them to be positioned on a flat surface rather than slotted

onto stands via the standard socket. The cabinets also feature an asymmetrical rear profile that allows them to be positioned as foldback wedges if you so desire. The 450v2's also offer integrated mounting points so they can be flown horizontally or vertically – they're nothing if not flexible.

INTERNALS

So what's in them? Well, the specs are most impressive and boast of a very high quality design. The 450v2s are a two-way, bi-amped design featuring two in-built amplifiers. The first of these allocates 100 watts (of conventional Class A/B power) to the titanium compression driver while a new 300W Class-D amplifier drives the neodymium long-throw 12-inch low-frequency transducer. Hidden inside each cabinet is an electronic crossover, phase alignment, preset internal EQ, a built-in limiter, thermal protection circuitry with auto-reset, low line-voltage shutdown and a sliding scale high-pass filter that cuts bass response as power increases beyond a certain level.

The control panel on the rear of the boxes has a power socket, main power switch and a switch for timed turn-off – which cuts the amps when no input signal has been detected for three minutes. There's a female XLR socket for incoming signal and a male XLR 'link' socket for daisy-chaining speakers. A level control knob adjusts the input gain, starting from 'off' and extending out to 40dB when rotated fully clockwise. There are lights for 'signal present', peak level, thermal overload and power on. There's also a blue LED on the front of the boxes to indicate the power is on (or is it to simply indicate that you have powered boxes?). Either way, I found this particular LED quite annoying after a while and wanted to turn it off to get it out of my eyes. (Unfortunately, the only way to do this is to shut the speakers down completely.) Finally, an EQ contour button provides 3dB of boost at both 100Hz and 12kHz, while a low-cut filter button rolls off frequencies below 75Hz.

SO HOW DO THEY SOUND?

Set up on stands as a vocal PA, the Mackie SRM450v2 speakers sound very good and would be well suited to

many live situations. They're quite powerful cabinets, and sound well balanced at moderate listening levels. Eventually, however, they reach a point at high volumes where the horn gets fairly hard and slightly fuzzy. The bass speaker loses clarity at around the same level and I'd have to say I wouldn't like to mix a whole band through them. They're much better suited to things like solo acts or duos with acoustics guitars, which don't require the same level of sound reinforcement.

Central to the sound of the SRM450v2's is an internal preset EQ that provides a scooped midrange and some added low end. It certainly makes the cabinets *sound* like they've been EQ'd, but importantly, it also allows them to be run without EQ and still sound good. Many small acts don't carry EQs to sculpt their PA sound these days. Mackie has obviously recognised this and chosen instead to do it for them.

The wide-throw horn of the SRM450v2 is bright but grainy. At high volumes it wants to feedback before the bass speaker but it's certainly not unpleasant sounding until it gets too loud. The dispersion provided by the cabinet's multi-cell horn aperture and high frequency wave-guide is wide (90°) and even.

The biggest problem with the sound of the 450v2 – in common with *all* small boxes – is the lack of *real* bass. Mackie's promotional material would inevitably have you believe the bass from these cabinets is great, with specs suggesting the boxes are only 3dB down at 55Hz. They do have *some* bass of course, and at low level it's acceptable, but there's no real *power* down low, and if you try to access more, they quickly get muddy and unpleasant. Still, it's one of audio's holy grails: the vocal-PA-sized speaker enclosure with enough deep bass to fill a room. We're still searching...

I also tried the Mackies with a sub, which left the 12-inch two-way system to work in its comfort zone, and doing this cured the bass problem straight away. Of course, the system

was no longer as 'convenient' (either to carry or setup), but if you want to use them for bands or loud music you'll need a sub.

The best use for the SRM450v2s I found was as foldback speakers. I took a pair along to a show and set one up on stage amongst the club's JBL 'Lord Nelson' wedges. Run from a spare send on the monitor desk it was very easy to rig, although again the blue light kept catching my eye. The Mackie's were clear, medium-loud and didn't feedback unduly. The lack of bass power didn't matter for on-stage use, and the frequency response was similar to the JBLs, with the critical exception that they worked without EQ. At high volumes, however, they couldn't quite keep up with the JBLs and began to distort, but admittedly this was at full rock levels, which not everybody needs.

Halfway through this particular night a DJ turned up; he was going to finish the night after the bands had played and asked if I had a floor monitor for him to cue his tunes. Normally I'd have looked at him and suggested he use his headphones, but quick as a flash I grabbed the other Mackie from the car and in no time at all he had his monitor. After the show I quizzed him about the sound quality and he had nothing but praise for the Mackie's performance.

IN THE STUDIO?

The manual for the 450s (which is helpful despite the lame jokes) suggests the speakers can also be used as *studio* monitors. I suppose you could get used to them if you *really* had to, but they don't really have the detail required for recording and I quickly got sick of them when setup in my control room. They're also noisy, with noticeable buzz and hiss present even when there's nothing plugged into them, and this can't be reduced by lowering the gain. Plastic fantastic they may be but they're really only useful in a variety of live situations. ■

“ They're quite powerful cabinets, and sound well balanced at moderate listening levels. ”

NEED TO KNOW

Price
\$1799 each.

Contact
Music Link
(03) 9765 6530
atdept@musiclink.com.au
www.musiclink.com.au

Pros
Lightweight.
Plug'n'play simplicity.
Flexible placement options.
Good sound dispersion.

Cons
Need a sub for full range applications.
Sound quality limited for some applications.
Blue light on front of box can be distracting.

Summary
Mackie does two-way active speaker cabinets well, and the SRM450v2 is no exception. It's an improvement on the popular original: it's lighter, clearer (at most volumes) and versatile in its setup options. If you want to rock out with them, you need to add a sub to the equation, but for all other scenarios they should work well.