



# wizards from OZ?

## ARX SIXGATE SIX CHANNEL GATE AND DI-6S DI BOX

"It's Australian for pro audio" is how ARX define themselves - and as the only other Antipodean audio company I've ever heard of is Fairlight, I'm not in a position to argue. Though not that well-known here in the land of the whingeing Poms, ARX has been established down under since 1983 with a growing range of products aimed at the studio, sound installation/reinforcement and broadcast markets. ARX was originally formed by a trio of sound engineers who couldn't find certain products to meet their needs and so decided to make their own. Indeed, another ARX marketing war cry is "we only build equipment that we'd like to use". So while the ARX range now takes in signal processors, amplifiers and speaker systems, the company pride themselves on what they call innovative problem-solving products, an ethos which is exemplified by the two items on test here.

### Mine's A Six-Pack

I'd be failing in my duty if I didn't point out that the first of these, the Sixgate is not exactly new.

In fact, it first appeared in 1987, since when it has been one of ARX's most successful products (particularly after its original bronze-and-cream colour scheme was changed to a more sombre black and blue). Nevertheless, it's still worth taking a quick look at here - repackaged now in ARX's standard and rather more eyeball-pleasing silver-grey livery - simply because it remains a relatively unusual configuration.

The logic behind the Sixgate comes from live audio applications. ARX asked the simple question 'What do most people use gates for?' - and the simple answer came back 'Drums, drums and more drums'. Add up a snare, kick drum, hi-hat and three toms and what do you get? A requirement for six

noise gates, which ARX have duly squeezed into a single unit of rack space. Along with drums, the Sixgate has also found a niche in non-musical applications too, such as control of conference mics.

The unit is very much no-frills. All channels have the same front panel controls - a knob each for Release, Depth and Threshold, a red and green status LED to indicate whether the gate is open or closed and a hardwired in/out bypass switch. The Threshold control ranges from -50dB to +10dB, while release times can be varied between 100ms and 2 seconds. Depth (0dB to -40dB) controls the 'height' of the gate - in other words, how much signal and/or unwanted noise is actually held back when the gate is closed. This can be useful when, say, gating live vocals because by allowing a certain level of background sound to 'leak' through the gates when they're shut, voices don't sound like they come out of nowhere when the gate opens, nor do you get the effect of the gate 'slamming' suddenly shut.

Attack times are determined automatically according to the incoming signal, using circuitry based on a proprietary opto-isolated design that tracks the incoming signal to determine optimum gate response. I scoured the literature in vain to find some indication of the range of attack times on offer. While some engineers may bemoan the lack of a dedicated attack control, it's something I can live with simply because it makes setting up so much easier.

A six-pack's worth of connections can be found round the back with each channel featuring balanced/unbalanced in/out connections on TRS jacks, plus key inputs on jacks so you can control the operation of the gate via an external signal.

A couple of handy audio six-packs from the other side of the globe

ARX SIXGATE & DI-6s



“Placing the DI6s in my recording room meant that its mixing functions could be used to create monitor mixes without intervention from the control room.”

The DI6s functions as six active DI units, plus a six-into-one line mixer, a one-to-six splitter and a headphone amp for good measure. If you need a lesson on just why DI boxes are an essential element in every studio, then let me remind you that DI boxes earn their keep by matching unbalanced, low-level, high-impedance outputs like guitars and basses to the balanced input levels of mixing desks and other pro-audio equipment. Each of the DI6s' channels features two high-impedance jack sockets on the front panel. The first of these is an input, pure and simple. The second is a looped output that allows you to pass the incoming signal directly on to, say, an instrument amplifier. As well as being useful for live work, this splitter facility could prove handy in a control-room recording environment when you need to feed a signal to the desk, but want to use the musician's amp either for monitoring purposes or for miking up the cab. The rotary control for each input offers gain from unity to a healthy +15dB, with a clip LED to show when you're in danger of overcooking. Direct outputs on the back panel are on balanced XLRs, and each channel has an audio earth/ground switch with associated On indication LED. Personally, I think these controls might have been better situated on the front panel, particularly if you're working in a live situation where you're likely to need more frequent access to them than in a fixed studio location. As a mixer, the DI6s boasts the luxury of a balanced XLR output and an unbalanced quarter-inch jack, turning the DI6s into a six-channel mono mixer when required. When using it in mixer mode, each channel's level control also controls the level in the mix. In a live application, this

can be useful for monitoring onstage via the Mix outputs, while sending individual sends down to the main mixing console at the same time. On the far right of the front panel, you'll find the control for the master output of the mixer.

And that's your lot, cobber. In operation, the DI6s does exactly what you'd expect in terms of handling incoming and outgoing signals. (Incidentally, the impedance figures on these are 2.2Mohm incoming and 300 Ohm balanced outgoing.) While the figures on the specification sheet are nothing out of the ordinary - Signal-to-Noise ratio 96dB, frequency response 20Hz to 20kHz (+/- 0.5dB), and distortion at less than 0.004 percent, 1 kHz, +4dB - the DI6s is impressively quiet.

Overall, the DI6s certainly proved its usefulness during its sojourn in my studio, where I have a pressing need to DI electric and electro-acoustic guitars plus a rather mean and moody bass guitar. Placing the DI6s in the recording room meant that its mixing functions could be easily used to create monitor mixes without needing intervention from the control room - a fact which was certainly appreciated by my mean and moody bass player.

I could certainly appreciate how a DI6s could prove a very useful extension to a pub-size PA set-up for a small band. Dipping deep into the tombola of cliches, once you've convinced yourself you have a use for a DI6s, you may indeed wonder how you ever did without it.

**Summary**

As we round the final bend, I have to confess an interest - an ARX compressor has been doing sterling service in my rack for a couple of years now, so I was already favourably predisposed towards these units in terms of user-friendliness, build quality and integrity of design. Neither of them disappointed. In both cases, they fulfil their allotted task extremely well - the real question is whether or not you have a use for the job they do.

As I said at the beginning, ARX have been a bit under-represented here Up Above. With their new distribution organisation now in place in the UK, hopefully we'll be seeing a lot more of ARX gear. I'll certainly raise a tinny to that.

**ARX SIXGATE**

**pros**

- Easy to use
- Well built
- There's six of 'em!

**cons**

- Some may want more control

**summary**

Whether you're dealing with drums or not, the Sixgate is a compact solution to gating in bulk

**ARX DI-6s**

**pros**

- More versatile than might first be apparent
- Balanced connections and all-round pro specs
- There's six of 'em!

**cons**

- Switches at the back

**summary**

A box that you'll discover solves more than just DI'ing problems