

RADIAL TRIM-TWO

Designed to simplify the use of laptops in live settings by providing a 'ready access' volume control for on-the-fly adjustments, this looks like a handy gadget on paper, but what's it like in the flesh? Over to **Alistair McGhee**...

DI BOX

Sometimes a new product is really new and sometimes it's a refinement or an extension of an existing line. Both are new but the second group tends to generate a little less hullabaloo. Radial's Trim-Two is definitely in that slightly less glamorous category as Radial already has a spectrum of DIs that cover just about every imaginable situation.

The Trim-Two is delivered in Radial's classic and hugely effective wraparound book-style casing and would stop a bullet for you without batting an eyelid. But don't try it at home. The grey livery is a little dull, it has to be said, but it's a DI not a fashion item. In the world of DIs the transformer is king and so I have Radials with Jensen transformers and Cable Factory DIs with Lundahl transformers. Radial designates products that feature Jensen transformers with a J – hence the JDI – however not all Radials have Jensen transformers. I have a Radial PRO AV2 and the AV2 comes with Eclipse transformers, which Radial started using when Jensen supply couldn't keep up with demand. Eclipse and Jensen are now both part of the Radial family and Radial has invested in boosting Jensen's output. In any case the PRO AV2 is very definitely in the Trim-Two's genealogy, or at least at first sight.

They are both stereo devices; they both offer inputs on quarter inch jack, phonos and mini jack; they both have Eclipse transformers; they both have ground lift on the output and they both have a way of altering the gain at the input. So what is new?

YOU'RE IN CONTROL

Well, while the PRO AV2 has a fixed 15dB pad option at the input the new Trim-Two has a continuously variable pot. Now you



can set the input levels exactly where you need them. Also, the Trim-Two has a mono option to turn your stereo source into a mono output and finally – and most importantly – the Trim-Two is a unity gain device (give or take the inevitable insertion losses of life!) This is a function of the choice of transformers used in each device. The PRO AV2 features 12:1 transformers in mu-metal cans and inserting it into your circuit will reduce your signal level by about 20dB. The Faraday screening provided by the mu-metal enclosures is required because we might be dealing with small signal levels.

The transformers in the PRO AV2 are designed to handle signal levels from -30dB up to negative ten or zero level at a push and they are described as 'input' transformers. The Trim-Two on the other hand is designed to deal with higher signal levels from the get-go. The transformers are not enclosed and with a 1:1 ratio the Trim-Two expects higher signal levels and is capable of accepting a whopping +15 dB at the input. The Trim-Two features 'output' transformers.

If your rig is stuffed with kit producing

full fat audio output – keyboards, drum machines or tablets and laptops – then the Trim-Two is the way to go. If you might want to chuck a guitar into the mix then the PRO AV2 will be a better choice.

And so on to the trim function of the Trim-Two. Having a pot to alter the signal gain works with higher output devices as these usually have buffered outputs. This is important because changing the gain with a pot also changes the impedance – not a problem with a buffered output, but with instrument levels the change in impedance can result in a significant change in tone.

The final feature to consider is the mono switch – the instruction manual shows a recessed switch that requires a screwdriver to operate. I was looking forward to niggling about this inconvenience. Sadly Radial has beaten me to it and the production Trim-Two has the same standard switch for mono as it does for ground lift. Nice to see a product where real world factors are taken into account in design. Having a mono switch is jolly handy when you need to save channels but at the risk of being picky I'd rather have a sliding

Key Features

- Two Eclipse transformers to isolate and balance the signal
- 'Ultra linear' response from 30Hz to 20kHz
- Capable of handling up to +15dB signal levels
- Easy access front panel volume control
- Choice of RCA, ¼in and 3.5mm connectors

RRP: \$175

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switch. Sorry Radial, it's just because I think it's clearer from a distance that the mono function is engaged and it is less likely to be bumped. I have no reservations about the gain trim feature – the pot is positive in action, clearly labelled and isn't going to be easily nudged. And the flexibility of setting the levels at the input means you can get your active gain structure just right to minimise noise.

IN USE

I plugged everything to hand into the Trim-Two, from keyboards, laptops and sound cards through SQN mixers, ShortCuts and anything else lying around. Everything was interfaced without a problem. I don't think there's a secret to Radial's success – they make really good products for people happy to pay a little more for exactly the right tool. And the Trim-Two is another chip off the Radial block.

The Reviewer

Alistair McGhee began audio life in Hi-Fi before joining the BBC as an audio engineer. After 10 years in radio and TV, he moved to production. When BBC Choice started, he pioneered personal digital production in television. Most recently, Alistair was assistant editor, BBC Radio Wales and has been helping the UN with broadcast operations in Juba.