

# One For All

**Icon Audio's new PS2 budget moving magnet phono amp takes an all-valve approach to vinyl amplification. Paul Rigby tries the tube wonder that's as cheap as chips...**

Have a problem with today's throw-away culture, because it has broken down the relationship we have with our technology. You know the drill – these days if something breaks, you chuck it out! But the handmade nature of Icon Audio products harks back to a bygone age where resources were valued and preserved, where design was uncomplicated and wholly mechanical. Of course, the products that they make, by their very type, simply aren't suited to high volume production line manufacture; valve amplifiers are not exactly packed with surface mount integrated circuits!

The new PS2 exists to fill a gap that Icon Audio's customers have found. As the two-box PS1 is about to rise in price due to rising material costs, there is a real need for a good quality, budget valve phono amp – hence this lower cost, one-box configuration. As Icon audio boss David Shaw confirmed, the PS2 cuts costs because, "we use a simplified power supply and a lot of jiggery pokery to try and get the transformer in there so it won't cause too much of a problem with noise. It uses the same circuits as the PS1. I used Mullard valves (ECC83) or the American equivalent – the 12AX7. They're the same, however.

These valves are also used in the PS1 and the power supply is designed sympathetically but simplified so the performance is not degraded to any extent. The construction is all metal – I used to work in the plastics industry for a time and I know that plastics degrade relatively quickly. So I use solid aluminium for the chassis and a solid steel bottom."

It's a small niggle but, spanning 270x140x700mm and weighing in at 2.5kg, the chassis design encourages you to use it from left to right on your hi-fi shelf instead of, like the MB 845 monoblocks, front to back. That is, the logo and power switch are positioned along one long edge with the input/output phono sockets, ground connector and fixed power cable along the other. As such, it's an inefficient user of space. Of course, in reality, you can position the phono any way you wish but usage and connections may be more problematic when used in 'front to back' mode...

The unidentified (why?) toggle switch on the 'rear' is an earth lift. Unless you use a wall wart power supply ("...which are cheap and generally sound awful"), you have to earth your component. The earth lift cuts hum if a hum loop exists.

Shaw is adamant that going down the valve route with a phono amp

is the right way. He believes that the right valves will be far more sympathetic to a typical RIAA curve contained within a piece of vinyl than a solid state amp will provide, meaning less focus on pops, clicks and surface noise. "The signal that is picked up by the cartridge is raw," said Shaw. "When it comes off the disc and goes into the preamp and it's not equalised, the valve has to deal with a tremendous range of sounds and frequencies. Transistors don't have a very good headroom. Valves, however, have an infinite margin.

"With the PS1 and now the PS2, this simple circuit, as basically created by engineers in the 1950s, declared that 'this is how we can get good hi-fi even in a moderately priced system' everything falls into place to make it work so well. You fiddle around with that at your peril", Shaw says. Okay, so what does this simple circuit sound like, then?

## SOUND QUALITY

The PS 2 might be a moving magnet device but, if you care to plug another Icon Audio device, the MCTX1 moving coil transformer, step-up (£299), into the PS2, it will enable the PS2 to play moving coil cartridges. The MCTX1 is a simple device with connecting RCAs and





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a bypass button. So I afforded a brief series of sonic tests in this configuration first, before getting to the meat of the moving magnet tests. Running head-to-head with the cooking A.N.T. Kora (£495) and playing the Pixies' 'Where Is My Mind?' ('Surfer Rosa', Mo-Fi), the PS2 offered higher gain than the Kora at the same volume. The Kora provides a lower bass thump with slightly more impressive attendant rhythmic flow but the PS2 has the edge in upper bass and treble with more insightful examination of both acoustic and vocal output.

Similarly, With Kate Bush's 'Mrs. Bartolozzi' ('Aerial', EMI), the Kora presented superior bass welly, although the PS2 could be argued to

offer a more characterful bass output. The piano accompaniment offered more midrange exhilaration via the PS2 and a deeper organic flavour with more emotional emphasis than

the Kora.

Quickly moving onto the 12" promo of Autechre's 'Cichlisuite' (Warp), the Kora's greater lower frequency command told a more



## SECOND OPINION

There is a pleasing simplicity to the design of the PS2 that seems reflected in its approach to sound. It struck me as one of those pieces of equipment that doesn't try to impress, but quietly gets on with the job – and in this case, a job well done. For example, the unaccompanied male voices of the Capella Antiqua hung beautifully poised in the space in front of my loudspeakers, with the decay of the echo at the end of a phrase floating off into a very dark and silent background. Presented with more upbeat material, the PS2 demonstrated a good grasp of the complex rhythms and breaks used by Dave Brubeck. The precision of the stereo image was very good and the tonal balance seemed quite natural. It managed to be generous to any odd bits of surface noise of this 1966 pressing without lacking any sense of space around the high hats or the swish of Joe Morello's brushes.

It is a compliment to the PS2 that it found itself playing through the AMR AM-777 amplifier, costing over six times its price, and at no time did it seem out of its depth, unable to deliver the goods. The performance is very convincing, and can certainly hold its own in more expensive company. As an introduction to the delights of thermionic phono stages, at a reasonable price, I can think of nothing against it. Ideally I wish the mono/stereo switch had been kept from the PS1, but apart from that minor niggle, I find the PS2 to be something of an audiophile bargain. If you want a straightforward, good sounding, affordable phono stage, then look no further. TB



its musicality is joyous. You are encouraged to pump up the volume.

Despite the A.N.T.'s admirable efforts in detail retrieval the PS2 had the edge in conveying the emotion with the Bush vocal, adding consistency and etchings of emotion to her output plus greater depth and nuance. Bass may have lacked a little depth but, instead, it felt more 'true' in how it was conveyed to the ear. The PS2 certainly provided more body and structure. Finally, via the Autechre vinyl, despite the Kora's remarkable clarity, the PS2 offered more pizzazz and a greater sense of life while the upper frequencies were pushed to new heights.

authoritative story than the PS2 but the complex synth orchestrations were better informed by the PS2, with extra layers of texture.

Overall, the Kora was slightly smoother than the PS2 but the former was a touch too tame in my system while the PS2 brought my reference hi-fi to life, adding transparency and detail. Interestingly, when comparing the jury-rigged, MC-modified, PS2 to my reference, two box PS3 (£1,500) in MC mode, the PS2 made a good fist of it. Yes, the PS3 wipes the floor with the PS2 in terms of control and presentation of lower frequencies, but the PS2 provides a natural, organic midrange with resonant organic instruments that competes well with the PS3.

Running the PS2 as a moving magnet box with the MM version of the A.N.T. Kora (£325), the latter once again exhibited a high degree of bass drive, even at low volumes but did display a touch of midrange recess. The PS2 however, provided clean, airy mid and upper frequencies, via the Pixies track with a slightly slimmer bass track. Nevertheless,

## CONCLUSION

Fitting neatly into the Icon Audio range, Icon Audio's new PS2 is a successful blend of quality components combined in a cut price wrapper to provide a one-box valve phono amp for those who want a valve-based solution but whose disposable income has to be spread thinly among a variety of responsibilities. The PS2 is a valve amp for the people – long live the valve revolution.

## REFERENCE SYSTEM

Avid Acutus turntable  
SME IV tonearm  
Benz Glider cartridge  
Icon PS3 phono stage  
A.N.T. Kora 3T SE MM phono stage  
Aesthetix Calypso preamplifier  
Icon MB845 power amplifiers  
One Thing Quad ESL-57 speakers

## MEASURED PERFORMANCE

The PS2 is purposed for moving magnet cartridges, so there is no input transformer to raise cost. It offers very high gain of x300 (50dB), meaning it will suit insensitive modern integrated amplifiers with a low 400mV input sensitivity, unlike preamps with x100 gain, the most common value. Being valve it can swing 20V out so overload isn't an issue as 30mV from a cartridge – about the maximum possible – will give 9V output. That would overload most transistor (chip) based preamps.

Unlike all other phono stage manufacturers, who use a small degree of treble lift in the 75µS characteristic to add detail, Icon have rolled down treble a little, especially above 10kHz. As this perfectly balances the rising midband and treble of modern MM cartridges like inexpensive Ortofons (2M Red and Blue, etc), the net result is accurate from LP. All the same, the PS2 will still sound warmer than all rivals, even if it is more accurate. It will sound warm with older cartridges like M97 xe however.

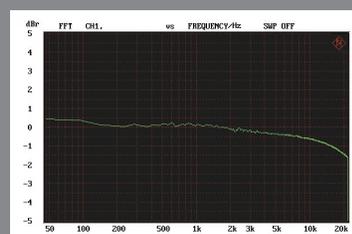
Hiss was on the high side at 0.7µV,

this being +6dB higher than transistor preamps, but as cartridge hiss swamps preamp hiss in any case the impact is less than imagined. Valve MM phono stages usually have a very slight hiss.

The PS2 measures well and should provide a balanced and attractive sound from MM cartridges. NK

Frequency response	5Hz-12kHz
Separation	74dB
Noise	dB
Distortion	0.2%
Gain	x300 (50dB)
Output	20V

## FREQUENCY RESPONSE



## VERDICT

Sparkling performer that injects excitement and vigour into vinyl playback, yet very smooth with it. An excellent budget phono stage.

ICON AUDIO PS 2 £450

Icon Audio

+44 (0)1162 440593

www.iconaudio.co.uk

## FOR

- musicality
- upper frequency detail
- characterful bass

## AGAINST

- deep bass
- design niggles