

# icon Audio

Award winning Valve Amplifiers

Awarded 5 Globes  
Hi-Fi World 03/08!

**PS 1 MKII**

**"ALL VALVE"**

**Phono Stage**

**MM or MM/MC**

**With Separate PSU**



*Designed by David Shaw*

*Tested and Finished in Leicester UK*

## A "High-end" All Valve

Our amplifiers have an enviable reputation following reviews. Introduced in 2005 it has proved to be one of our best sellers, having sold out very quickly, and now back in stock.

**So popular in fact, that at the time of writing (09/2009) not one had been returned under our "30 day guarantee of satisfaction" policy!**

**It is well known that for many reasons, valves can sound much better than transistors, this is especially so with vinyl reproduction. Chiefly because:**

- The massive overload of valves prevents distortion on highly modulated or scratched & worn LPs therefore minimising noise.
- The "warm" sound of valves is particularly suited to the reproduction of analogue music from vinyl.
- The huge 40db RIAA difference between 20hz and 20khz is easier for valves than transistors.
- Our "passive" design uses no "feedback"
- Our simple design uses "audiophile" components.
- We use "hard wired" "point to point" wiring with no printed circuit board.

But beware! There are several "so called" "valve phono pre-amps" that are only part valve or only use valves as an output stage.

It is essential that that these tiny precious few millivolts of signal go straight in to the valve without any resistor or coupling capacitor in the way to add sonic impurities.

### The PS1 story from David Shaw Icons founder:

"Like many people I have accumulated a sizable collection of vinyl much of which was acquired second-hand. Many of these are excellent recordings but in less than perfect condition. After trying several very good phono stages over the years I was unable to find one that would satisfy my needs. I wanted maximum musical detail, but without emphasising the imperfections through wear, clicks scratches etc. So I could listen through the vinyl medium, not to it!

It is well known that valve circuits are much more tolerant to overload, they recover quicker and distort less than transistors. Therefore it follows that valves

will deal with the massive transient spikes present in imperfect LPs better than transistors.

The original design was built purely for our own use, as we were not convinced that the world needed another phono stage! But visitors in Leicester and to the various hi fi shows we have exhibited at pressed us to go into production. Being "moving coil" fans we also produced our own custom wound 10x step up transformers. These are an ideal sonic match for most MC pickups (except very low output types). We designed the PS1 to have a higher than normal output, this makes it possible to connect directly with power amplifiers and passive pre-amps. This gives a performance of exceptional purity.

We decided to use easily available valves to be "future proof". This leaves the possibility for customers to try old stock or exotic types should they wish.

### **New Upgraded PS1 MKII:**

We have tweaked the power supply. And also made about ten small improvements to the circuit and wiring.

Most types of phono preamps use an RIAA equalisation using feedback. We think that this approach is nowhere near as good as a "passive" network which sounds "sweeter" and easier to listen to, and again is less prone to emphasising noise.

We also made a conscious decision not to give a choice of matching impedances and gain. Our experience of other units with the "dip" switches etc is that they add unnecessary paths for this most delicate of tiny signals, which can cause problems later as the contacts corrode or get dirty, spoiling sonic purity. The PS1 has plenty of gain, which may be balanced by the volume control. Impedance matching is not critical in most cases (we can build to your specification if necessary).

### **The result:**

You are immediately aware of the lack of "grittiness" and top end harshness that some designs exhibit. The sound is much more fluid and musical. The available detail is extraordinary! On good discs the background is "inky black" silent. Discs with some wear are still very listenable, When playing old mono

discs the mono switch will eliminate much noise (why listen to stereo noise on a mono recording?) Almost immediately you will hear the true magic of vinyl!"

### **Moving Magnet or Moving Coil?**

Moving magnet types are generally cheaper, and have the advantages of a high output of about 5 millivolts and a replaceable stylus.

Moving coil pickups have around 0.5 millivolts output and non-replaceable stylus. These are generally more expensive.

Despite these disadvantages MC pickups generally sound better. Record masters are cut with an MC cutter. Using a MC pickup on playback has better sonic characteristics and a more linear in response. MM pickups have a small design problem with high frequency resonance with can emphasise surface noise/wear etc and have a more "gritty" sound. That is why the majority of "high-end" pickups are MC.

However high output MC pickups in our opinion offer little advantage with the drawbacks of both types!

MC pickups need around 10X extra gain compared with MM. This can be achieved with a transistor circuit but in our opinion never realises the full potential that moving coil can offer, due to the reasons listed above. A good quality transformer is the best solution. Icon use high quality British custom wound toroidal type with mu metal screening. They are quiet, have a very flat frequency response, and offer a very smooth detailed sound.

These may be fitted at the time of order or retro fitted as budgets allow. Either way they are £200.00.

The front panel switching then allows you to choose either option.

### **Specifications and Features**

- Built in volume control, will drive most power amps
- Stereo/mono switch for better S/N and distortion from mono and worn stereo records
- Choke regulated power supply
- Separate Power supply for lower noise
- Comprehensive manual supplied
- All hand wired point to point
- No printed circuit board to 'colour' sound
- Japanese Blue ALPS volume pot.
- All Triode valves
- 2x ECC83 1x ECC81
- Sensitivity: 3mv for 1.26v output (0.3mv MC)
- Gain MM 53db MC 72db
- Load: imp: 47k MM, 100 ohms MC
- Source impedance 50 ohms
- Signal to noise level -75db (MM unweighted)
- RIAA Freq response 20hz-20khz +0 - 1db
- NO feedback used, Passive RIAA
- High quality 2w metal film, & wire-wound resistors
- Blue LED mains indicator
- Polypropylene audio capacitors
- Silver TEFLON audio cable
- DC supply for valve heaters
- Heater circuit floated to minimise heater-cathode noise
- Polished stainless steel chassis
- 6mm solid alloy front & rear plates
- Gold plated Input terminals
- 230/240volts (also 120v), 50watts 1.0A anti-surge fuse
- C E certified. Conforms to ROHS and WEEE

88mmW, 310mmD (350), 134mmH , 3kg Pre-amp (figures in brackets allow for rear connections)

- 165mmD, 82mmW 80mmH 4kg power supply unit
- Shipping size/weight 42cm x 38cm x 30cm 9.6kg

(Specifications subject to change, errors & omissions excepted 16/07/10)

### **What we do:**

Designed and developed by David Shaw and Barrie Roberts in Leicester. Each pre-amp is carefully checked & tweaked plus any custom modifications added as required before undergoing rigorous tests in all its important static & dynamic parameters. Finally each pre-amp is run for at least 24 hours to allow the valves to "bed in" in order to ensure you get the performance we promise.

### **What you get:**

With the phono stage amplifier, you get a comprehensive manual to tell you everything you need to know, including how to check the performance & how to change valves. We even offer a free valve check facility for the future.

The unit is well packed so shipping in the UK or world-wide is no problem.

### **How to buy:**

**You can buy direct from us or through your dealer. Contact us by email or phone to discuss availability, upgrades, payment etc. You can then pay by credit/debit card or cheque. Your amplifier will normally be dispatched within 7 days by next day service (UK), or you could collect and save the shipping cost.**

### **Our 30 Day Guarantee of Satisfaction.**

If upon testing the amplifier on your own system you are not happy with the amplifier for any reason, Icon Audio will refund the purchase price. (UK customers only, excludes carriage cost conditions apply).

### **Conditions**

The unit must be returned in new condition in original box and packaging within 30 days of purchase, together with accessories and instructions. The customer is responsible for return carriage and insurance.

### **Valve and Capacitor Upgrades**

To get the best out of the PS1 we would recommend an upgrade to premium valves. Our specially selected British Mullard, military grade CV4024 and JJ ECC83 opens up the musical detail giving an even more detailed 'open' sound stage and lower noise.

### **Only £50 fitted and tested**

We can also do a very worthwhile upgrade using the excellent Jensen "Copper foil in paper and oil" capacitors. Simply put they have a more "luxurious, textured" sound

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