



## NEW HIGH END PS 3 "ALL VALVE" Phono Stage ALL VALVE POWER SUPPLY MM or MC/MM

*Designed by David Shaw  
Tested and Finished in Leicester UK*

### Awarded 5 Globes Hi-Fi World 11/08!

Following on from our acclaimed PS1 phono stage which won "5 Globes" in Hi Fi World (03/2008) for its excellent sound quality, we have pushed the boundaries of valve technology even further with our new PS3 model.

To do this we have used all our expertise and experience to create a "no expense spared" phono stage which addresses all the weaknesses of more conventional designs but still retaining our "All Valve" philosophy. And amazing value!

#### **So what's special about the PS3?**

Special amplification needs a special power supply. We start with a large, oversized power transformer and a full wave valve EZ80 rectifier followed by two large chokes for ultra-smooth power. This is then regulated by a low resistance 5687 valve controlled by an ECC83 for the very accurate voltage necessary for exceptional purity and performance.

The pre-amp unit uses the "cascode effect" of using two valves together in a special way to obtain high gain with low noise this gives exceptional definition and sound staging whilst keeping the vivid colour and warmth that our PS1 phono stage is famous for. With two inputs and a moving coil option using our own "hand wound" moving coil transformers.

The output is handled by the venerable 6SN7. Introduced in 1941, probably the most luxurious sounding hi fi valve ever, with so many old and new versions to try if you so desire!

#### **Main Features:**

- Better definition using "Double Cascode" circuit which has the delicious, liquid sound of triode valves, whilst solving many of the technical problems of high gain
- Uses four of the excellent ECC88 valves
- Uses the amazing 6SN7 as output valve, (probably the best sounding hi fi valve, ever!)
- Specially developed "All valve" power supply
- Smooth Valve rectified using EZ80

- Valve regulated using ECC83 and 5687
- Two high value chokes for ultra smooth DC power. These are expensive and heavy, but we think the relaxed smooth sound is well worth the effort.
- Two box construction for minimum noise
- 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
- Only full sized components are used
- Easily upgraded, e.g. Jensen capacitors

#### **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 sound far better than you would expect. When playing old mono discs the mono switch will eliminate much noise (why listen to stereo noise on a mono recording?)

Now you can 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. 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, from **TWO** turntables!

## Specifications and Features

- Built in volume control, will drive most power amps
- Max output 50 volts for massive headroom.
- Two turntable inputs 1xMM 1xMC/MM
- Signal to noise ratio -88db MM unweighted
- Stereo/mono switch for better S/N and distortion from mono and worn stereo records
- Valve rectified power supply
- Valve regulated power supply
- Twin Choke for exceptional smoothing
- Separate Power supply for lower noise
- Comprehensive manual supplied with tube change info
- All hand wired point to point
- No printed circuit board to 'colour' sound
- Japanese Blue ALPS volume pot.
- All Triode valves
- 4x ECC88 1x 6SN7 (pre-amp)
- 1x EZ80 1x ECC83 1x 5687 (power supply)
- Sensitivity: 3mv for 1.26v output (0.3mv MC)@
- Gain MM 53db MC 72db
- Load: imp: 47k MM, 100 ohms MC
- Output source impedance 50 ohms
- RIAA Freq response 20hz-20khz +0 – 0.5db
- NO feedback used, Passive RIAA
- Low noise oversized 2w metal film 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 1.5A fuse
- Size both units: 148mm W, 165mm H, 342mm D (allow for connections). Only minimal ventilation required.
- Weight PSU 7kg Pre-amplifier 4kg
- For Shipping 45cm x 48cm x 29cm 14kg (gross packed)
- C E compliant. Conforms to ROHS and WEEE

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

### What we do:

Designed and developed by David Shaw 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 PS 3 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 you 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.

(Price correct at 01.02.2009 but subject to change due to the volatile state of currencies, shipping, copper, steel & labour beyond our control. Ask if in doubt)

### Upgrades

**Get the best out of the PS3. We would recommend an upgrade to premium valves. Either our specially selected USA military grade (6922) JJs. Also our New Old Stock 6SN7 types open up the musical detail.**

#### ***Around £100 fitted and tested***

**We would also recommend using the excellent JENSEN hand made copper foil in paper and oil coupling capacitors. We cannot praise these too highly. The effect is like removing a thin film of dust from a picture, the sound becomes more natural, spacious and detailed, also smoother and less harsh. Various types: Aluminium, Copper, Silver ask for details.**

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