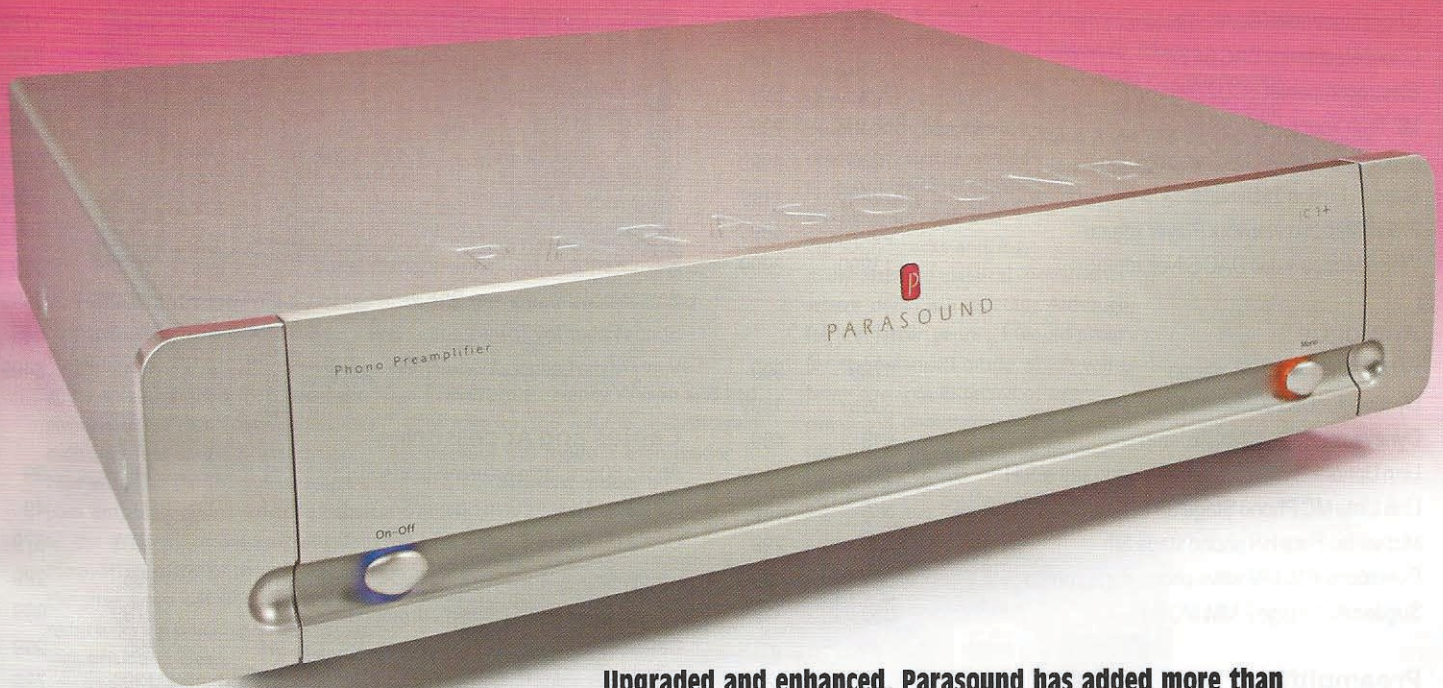


# Phono power



**Upgraded and enhanced, Parasound has added more than 'go-faster' stripes onto its new phono amplifier. Paul Rigby reviews the JC 3+**

**L**onely boy? You betcha. This John Curl-designed phono amp is nothing if not a stickler for isolation. Everything is separated out to avoid components talking to each other, out of turn. This dual mono design has each channel contained in its own aluminium housing. More partitions, this time of the steel variety, are used to isolate the power supply. The latter also features 47% larger power-supply filter capacitors, an upgrade from the previous JC 3 model. This has been done to add more reserve current to lessen the strain upon the phono amp as a whole. The transformer is 82% larger too that, says the company, should improve bass performance.

At the rear are the usual inputs and outputs (both sets of RCAs are supplied by Vampire), a pair of Neutrik balanced outputs, two cartridge select toggle switches and two impedance adjustment rotating knobs, a switch to turn off the front fascia illumination (a great idea) and a rocker power switch plus an IEC socket that enables a power cable

upgrade if you wish.

On the front is a power button. Oh, and one final addition that I must mention, the fascia also includes a mono switch! Hurrah!

Spanning 437 x 350 x 105mm and weighing in at 8.6kg, the JC 3+ can be yours in black or silver.

## SOUND QUALITY

I began the sound test in unbalanced mode with Nancy Wilson's 'Reach Out For Me', from the LP, 'Today – My Way', which is a busy track packed with orchestral strings, a subtle electric guitar and bass, numerous secondary percussion, drums and more.

I like to test solid state phono amps against my Icon Audio PS3 valve reference because it often illuminates the amp's inherent personality and how far along the sliding scale the designer has moved towards a valve-like sound...or not.

In the Parasound's case, the latter is certainly the case. This is a solid state sound and no mistake. Although my first task, as our tests showed, was to rush for the volume knob as

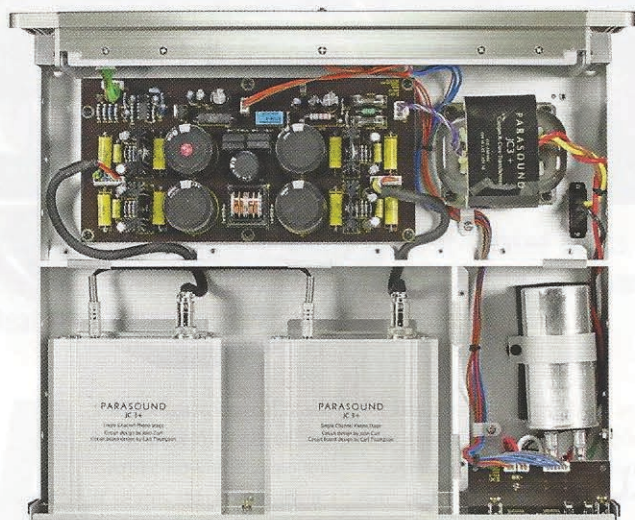
gain was relatively high.

In general terms, the soundstage was tight and honed, which meant that Wilson's delivery was crisp, precise and accurate. Her vocal was 'in your face' as she pushed her emotions square between the eyes.

Because of this approach, the Parasound also emphasised the bass and secondary percussion such as tambourine, and it spotlighted glockenspiel strikes, giving the overall track added drive and pace.

Turning to Joy Division's 'Exercise One' from the album 'Still', this dynamic track offered powerful lower frequencies from both drums and bass guitar which the Parasound was all over like a rash, offering a dominant, forceful and exciting performance. Vocals were nothing less than haunting, while the low noise design offered a clean and open presentation.

Moving to Popol Vuh's film soundtrack for Werner Herzog's horror film 'Nosferatu', a piece of music where the central piano is orbited by a gamut of stringed instruments. With some phono



Internal aluminium and steel screens are used to minimise crosstalk, hum and noise.

amps, this piece is rather bass light, giving a somewhat floaty, sometimes indistinct feel to the presentation. Not with the Parasound, its slight bass emphasis added valuable balance to the majority of the instruments. Meanwhile, many of those, including the sitar, were detailed and precise in nature. String plucking, in particular, was brisk and clean.

This is a powerful musical suite that benefits from the Parasound's inherent guts and oomph, adding to the soundtrack's epic qualities.

Turning to the balanced sockets,

I reverted to Nancy Wilson and had to leap for the volume control again because this mode is even louder than unbalanced mode!

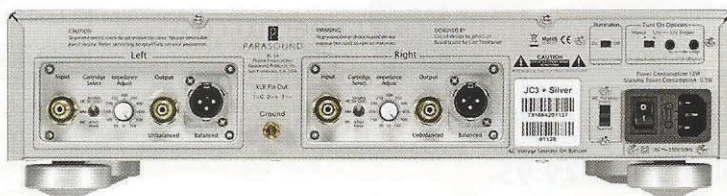
Reduced to acceptable levels, the sound output exhibited an enhanced clarity with a broadening of the soundstage and extra transparency within the upper midrange.

**CONCLUSION**

Although not for valve fans, or even those looking for an extra touch of solid state snap, the Parasound provides a musical output with bite and a resolution that is turned up to a high level, ideal for dynamic rock and big soundtracks and, for many, jazz and classical movements where detail is important. Although, for the latter genres, I would press for the balanced mode which will bring rewards in terms of extra detail and complexity. In all then, an impressive design with all its own sound.

**SYSTEM USED**

- Origin Live Sovereign turntable
- Origin Live Enterprise 12" arm
- Miyajima Takumi
- Icon Audio PS3 phonostage
- Aesthetix Calypso pre-amp
- Icon Audio MB 845 Mk.II monoblocks
- Quad ESL-57 speakers with One Thing mods
- Vertex AQ & Atlas cabling



The rear panel carries unbalanced (phono socket) inputs, and both unbalanced and balanced (XLR) outputs.

**MEASURED PERFORMANCE**

Frequency response measured flat across the audio band, our analysis shows, meaning RIAA equalisation was very accurate. Phono stages have a lot of gain at low frequencies, causing loudspeaker cone flap – and the JC3+ has no warp filter, nor gain roll-off to lessen this; it runs at full gain to below 4Hz so warped records played by heavy arms that don't warp ride will be a problem.

The JC3+ overloads at 9.5V out, typical for silicon chips. With high gain values of x330 for MM and x1700 for MC, input overload computes to 29mV and 5.6mV respectively and that's exactly what was measured. Gain for MM is on the high side – the usual value is x100, a high value x200 – and this makes input overload low, if just adequate for high output MMs that can deliver up to 30mV. MC gain is high too and purposed for high quality, low output MCs; overload will not be a problem.

The basic equivalent input noise value (IEC A weighted) for MC was exactly 0.1µV on the Right channel, a

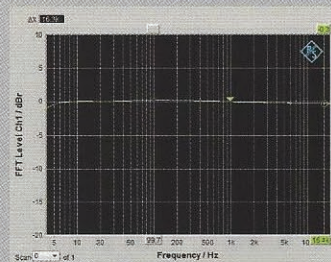
very low figure just 2dB worse than an input transformer (0.08µV) and around what is expected from a low noise transistor operated properly in low noise circuitry.

The Left channel had some 100Hz and 200Hz power supply breakthrough however, worsening the result a little. It was very small – I am talking minuscule levels here – but it should not ideally be there at the price; earthing or screening needs attention.

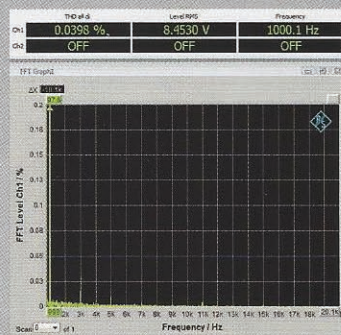
The Parasound JC 3+ measured well all round. It isn't perfect, due to one channel being noisier than the other, but absolute noise levels were very low all the same. A switchable warp filter or LF gain reduction would have been useful at the price. **NK**

|                           |                    |
|---------------------------|--------------------|
| <b>Frequency response</b> | <b>4Hz-20kHz</b>   |
| <b>Separation</b>         | <b>87dB</b>        |
| <b>Noise</b>              | <b>dB</b>          |
| <b>Distortion</b>         | <b>0.03%</b>       |
| <b>Gain (MM, MC)</b>      | <b>x330, x1700</b> |
| <b>Overload (MM, MC)</b>  | <b>5mV, 29mV</b>   |

**FREQUENCY RESPONSE**



**DISTORTION**



**PARASOUND**  
**JC 3+**  
**£3,300**



**OUTSTANDING - amongst the best**

**VERDICT**

Providing pace, punch and panache, the Parasound packs plenty of power!

**FOR**

- midrange precision
- bass drive
- clean soundstage
- balanced output

**AGAINST**

- no warp filter

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