

# HI-FI CHOICE

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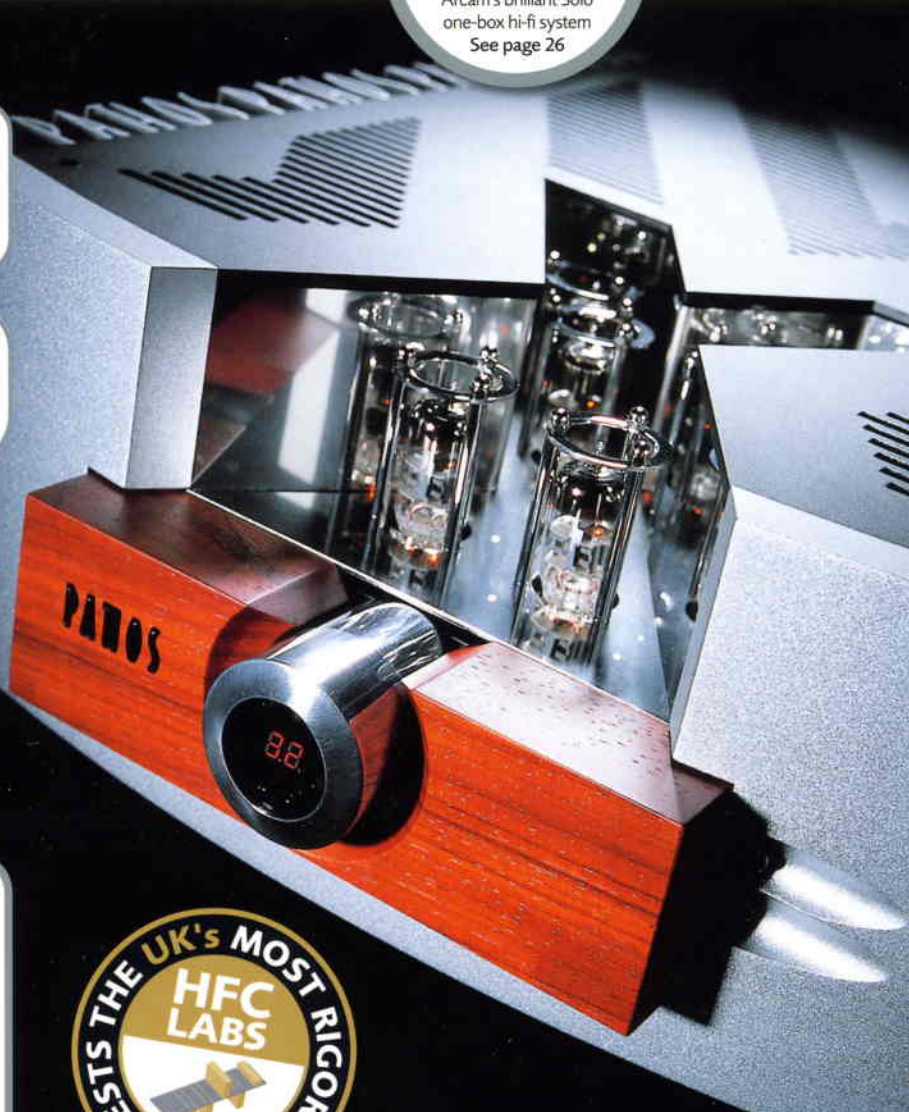
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Arcam's brilliant Solo one-box hi-fi system See page 26

**EXCLUSIVE TESTS**

# X-RATED AMP

Seductive Pathos is dressed to thrill – in stereo or surround



## WORLD'S FIRST REVIEW

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## DIGITAL DREAM

Best sounding universal player yet – see p48



## HOT CANS

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The world's best hi-fi – rated by our experts

## ULTIMATE GROUP TEST >> CD PLAYERS

FEATURING

- > Audio Analogue Paganini
- > Consonance Ref CD2.2
- > Cyrus CD8x
- > Myryad MXC6000
- > Primare CD31
- > Shanling CD-T100C



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# The eXorcist

*Pathos lays the ghost of cold, brittle multichannel amps to rest with the mellifluous Cinema-X*

**PRODUCT** Pathos Cinema-X

**TYPE** Integrated multichannel amplifier

**PRICE** £4,750

**KEY FEATURES** Size (WxHxD): 42x19x52cm

• Weight: 33kg • Valve preamp stage, MOSFET power amp stage • Five channels, grouped in stereo mode • 5x110W or 2x450W • 5.1 input • Stereo inputs: One balanced (XLR), four RCA phono plus tape loop

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🌐 [www.pathosacoustics.com](http://www.pathosacoustics.com)

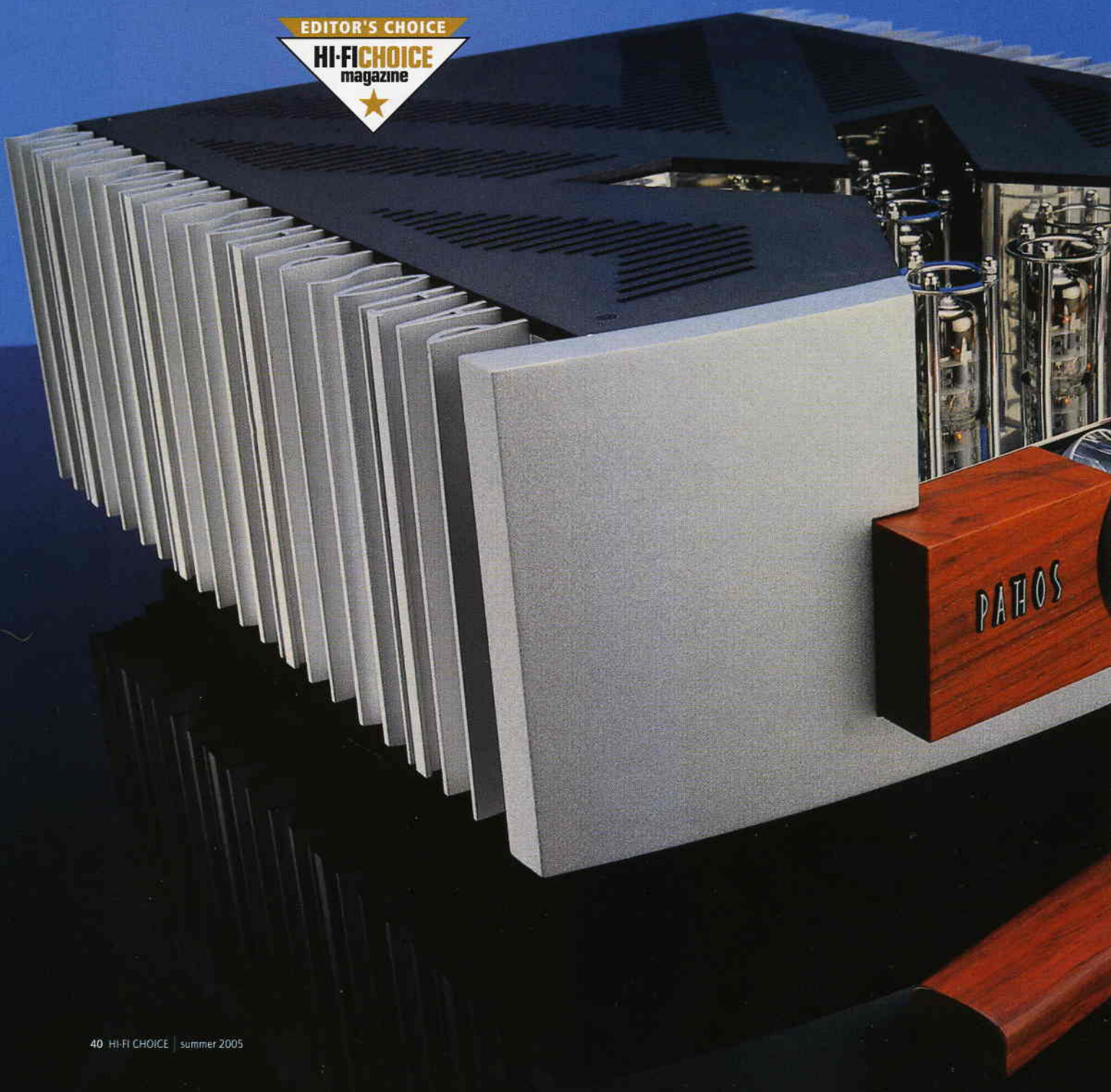
Let's start by getting the negatives out the way first, shall we? What kind of name is Cinema-X? It hardly engenders this fine amplifier to the hi-fi fraternity and, worse still, makes Pathos' ground-breaking slab of audio engineering sound like it's some kind of dodgy 1970s brit-pom. Okay, we can understand why it's an apt name – the Cinema-X can be used as an integrated multichannel amp (as well as

stereo) and the sextet of valves are arranged in a pretty X-shape, but we still can't help thinking about gussets and wah-wah pedals...

This has to be one of the biggest and boldest multichannel statements yet reviewed by *Hi-Fi Choice*, in part because it's one of the least multichannel of multichannel products. There's no fancy digital signal processing in the Cinema-X, at all. Instead, you have five

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identical 110-watt solid-state MOSFET power amplifier boards fed by a valve preamplifier which is, in turn, driven by whatever DVD decoder you choose. There's no internal decoder whatsoever, although the individual channels can be adjusted for volume level in the installation stage. Given that this is likely to be partnered with a 'universal' DVD player, and given that all universal disc players have processors built in, this seems like an exercise in smart thinking on Pathos' account. There is no extensive video switching either... so yet another chance to ruin the sound of the system is left well alone.

There's just the one 5.1-channel analogue audio input (with a matching composite video input) into which your multichannel component of choice may be plugged. This is joined by a single balanced stereo input with

XLR connectors, two stereo inputs with accompanying composite video sockets, two RCA phono line-only/audio-only inputs, one tape loop and outputs for composite video, a subwoofer and up to five speakers. In a way, composite video is too limiting for videophiles, who prefer component video, perhaps S-Video or even new interfaces like HDMI. This means those who care about such things will likely by-pass the perfunctory video switching inside the Cinema-X, and this will help improve the amp's sonic potential significantly.

What's really clever, though, is what happens when you switch from 5.1 to one of the stereo inputs. The power amp stages are automatically grouped together for two-channel sound, no longer delivering a healthy 110 watts per channel, but an insane 450 watts – times two!

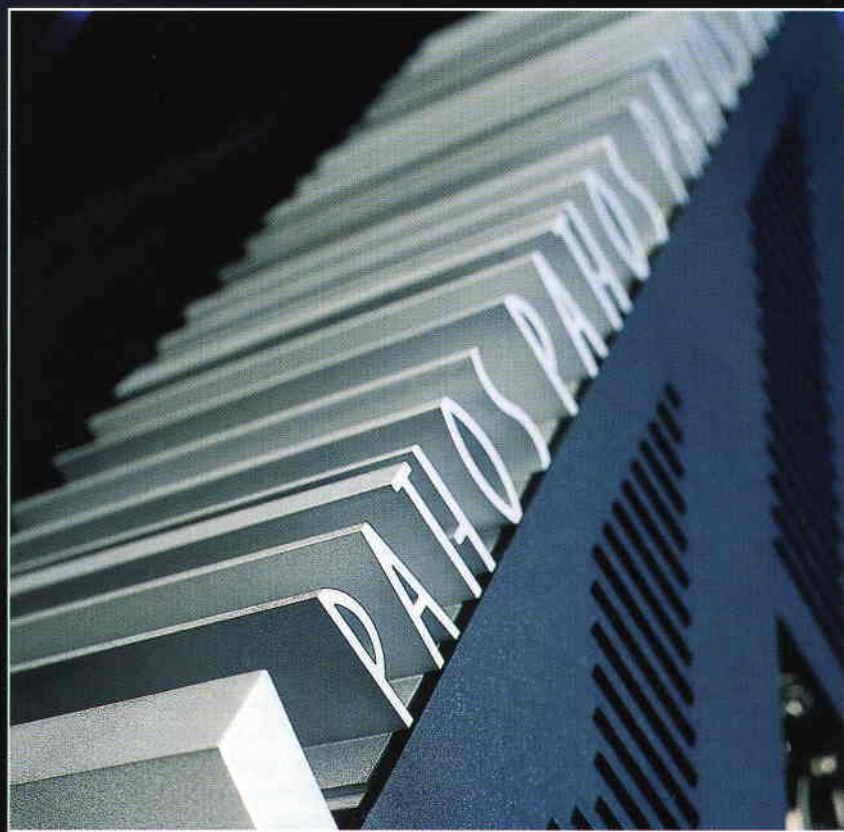
This is a valve/transistor hybrid design. Each channel of the preamp stage – including the subwoofer section – has its own ECC88 double triode valve, and this means the preamp operates entirely in Class A, while the power amp stages are solid state. Being Italian and stylish, Pathos doesn't just keep the fancy design on the inside; the Cinema-X makes the most bold design statement you'll ever see on a multichannel amplifier. The valves are entirely external, encased in chrome-plated

guards. These are arranged in an X-shape – hence the name – and this is surrounded by the black top cover of the electronics. Cleverly, the walls of the top cover are chrome plated too, meaning that looking from the front, the Cinema-X looks like it has dozens of valves, in a sort of *Enter The Dragon*/circus mirror effect. Add in the big centre volume control with LED readout built in, the wooden front panel and the heatsinks that read 'PATHOS' and the whole package isn't one for shrinking violets.

Of course, design can go too far. The beautiful wood and metal remote control has just four press-studs with no markings, and the minimalist fascia controls are just as oblique. Okay, the manual describes their use and familiarity soon makes it easy to understand, but that familiarity takes time – some writing on the product would be nice! Also, the sheer size and weight of the amp, and those almost impossible to hold heatsinks, mean you should be very careful during installation.

Once installed, of course, the amp is a complete doddle to use. You can set up individual channel levels, or remove channels if needed, indicated by the six LEDs inside the volume control. Then, when powering up after set-up is done, that centre LED block shows you a big red 'P' when warming up for the ▶

**“From the front, the Cinema-X looks like it has dozens of valves, in a sort of *Enter The Dragon*/circus mirror effect.”**





# Q & A

Gianni Borinato, co-founder, designer and chief of R&D at Pathos Acoustics, discusses the hybrid nature of Cinema-X and what goes into a good amp design, multichannel and stereo



## HFC: Why choose a hybrid system?

**GB:** We have always developed hybrid circuits, believing that the vacuum tube is the best component to amplify the audio signal in terms of voltage, while solid-state components are better able to supply high current to the load. Thus, it seems obvious to design hybrid circuits. However, some hybrid circuits that have been designed seem to sum the respective drawbacks of the two worlds. Our challenge at Pathos is to try to sum the respective advantages.

## What makes Pathos' hybrid design unique?

We acknowledge that there are excellent all-tube and excellent all solid-state amplifiers on the market. However, like every designer, we have our beliefs and we stick to them. Tube amps deliver low current at a very high impedance, so that they need an output transformer to be able to drive the speakers. This is an extremely critical component that has a heavy influence on the sound. OTL (output transformerless) technology resolves this issue – however, we think a tube is not the best component to drive current directly to the load.

On the other hand, solid-state components represent an ideal driver of the load. However, these are normally subject to some distortion of the odd harmonics, something to which the human ear is quite sensitive.

Pathos was founded on the solid basis of a technological innovation, the INPOL circuit, which has been designed to overcome the above mentioned limitations. With this technology – which is implemented in the Pathos TT, InPower and Inpol<sup>2</sup> amps – the tubes amplify the signal while the solid-state electronics only provides current to adequately drive the speakers.

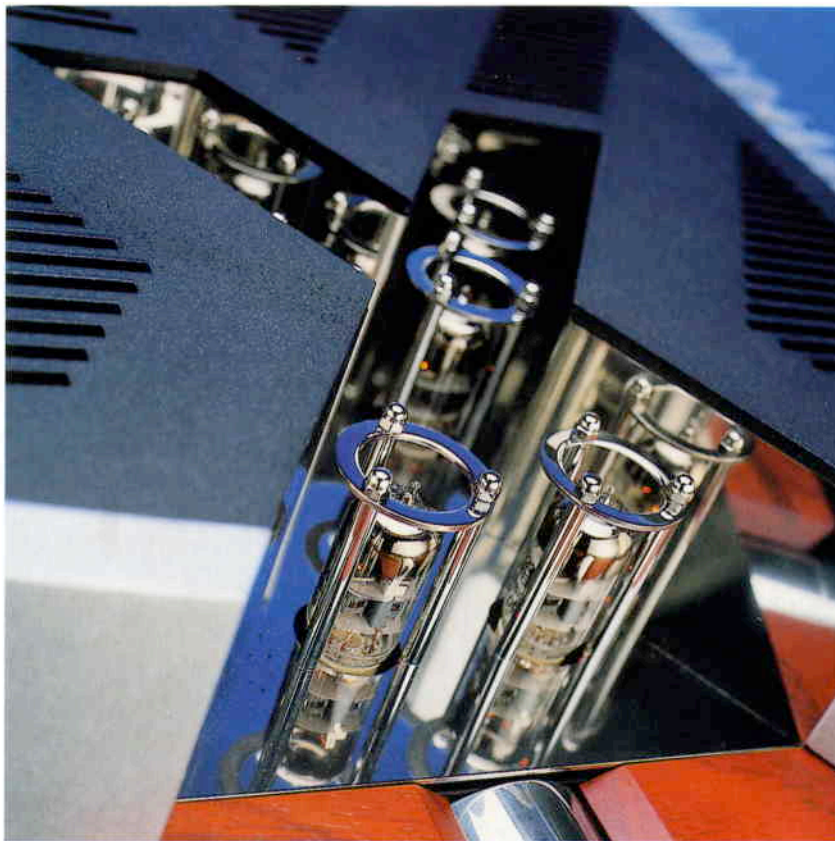
As with every solution, INPOL is not free from drawbacks: a high intrinsic cost (huge inductors, selection of components...) and some limitations in the output power, since the circuit is pure Class A and therefore develops high heat. So we later designed another group of power amplifiers – which are implemented in the Pathos Classic One, Logos, and Cinema-X – where we make use of MOSFET power stages in Class A/AB so that we can achieve high power at reasonable costs.

## Is multichannel a problem for hybrid designs?

There are not too many problems, besides the usual issues of microphony and diaphony.

## Why have you avoided the use of DSP?

The Cinema-X has been conceived as a no-compromise audio machine that provides the audio enthusiasts the flexibility to watch movies without scaring the sound and without needing another piece of equipment in their living rooms. With this purpose in mind, we did not feel the need to include digital signal processing.



## “The idea of switching from 110 to 450 watts may put the willies up some... but the extra power means more grip and headroom.”

❑ first 15 seconds, the volume level when raising or lowering the gain, the input when running through source selection and two little dashes when in muted mode. The great thing is, though, you don't need to actively switch between multichannel and stereo modes – as you rack through the sources, so it changes from two to six-channels automatically.

## SOUND QUALITY

The idea of switching from 110 to 450 watts may put the willies up some listeners, expecting blown drive units every time stereo is selected. Don't worry, there's no dramatic increase in volume level. The extra power comes across as more grip and headroom and – unless you choose to experiment with how long it takes to turn your speakers into a smoking ruin – the two channel mode is just as well behaved as the multichannel.

But it's still a big sound. Big in 110 watts mode, bigger still when there are 450 watts up your speaker terminals. There is a sense of scale that is almost alpine; an orchestra is pulled wide of the speaker boxes, and the speakers themselves seem to have been given a size upgrade. There is considerable depth and even some genuine height to the sound, too. The combination of depth, width and height makes the sound seem huge, perhaps

too huge: a solo voice can sometimes seem as if it's about five metres tall and four metres wide!

There is a good, natural sense of dynamic scale, too. It's not the most obviously dynamic amplifier ever made and the American penchant for microdynamics – the dynamic envelope of a single note – is an element that's largely underplayed. But instead, dynamic shading is entirely right-sounding. Often, those amplifiers that concentrate on the tiny changes in dynamics of an individual instrument miss out on the bigger picture. Here, the Pathos concentrates on the whole sound, perhaps at the expense of some of the smaller things, but this gives a great feeling of an overall performance on a natural scale.

A more pressing criticism is in the rhythm department, but whether this is a deal breaker depends on your perception of the importance of 'timing'. Those who can hear the timing changes in an alarm clock will find the Cinema-X hard to stomach, but those who aren't so obsessed by the pace of the sound will find the amplifier perfectly acceptable. In short, if your last amplifier was a Naim, your next one will not be a Pathos. But, those who rejected the rhythmic sound of many Brit-fi amps for being too forward and almost fascistically controlling the beat, will grow to love the Cinema-X for its big, easy and dynamic performance.



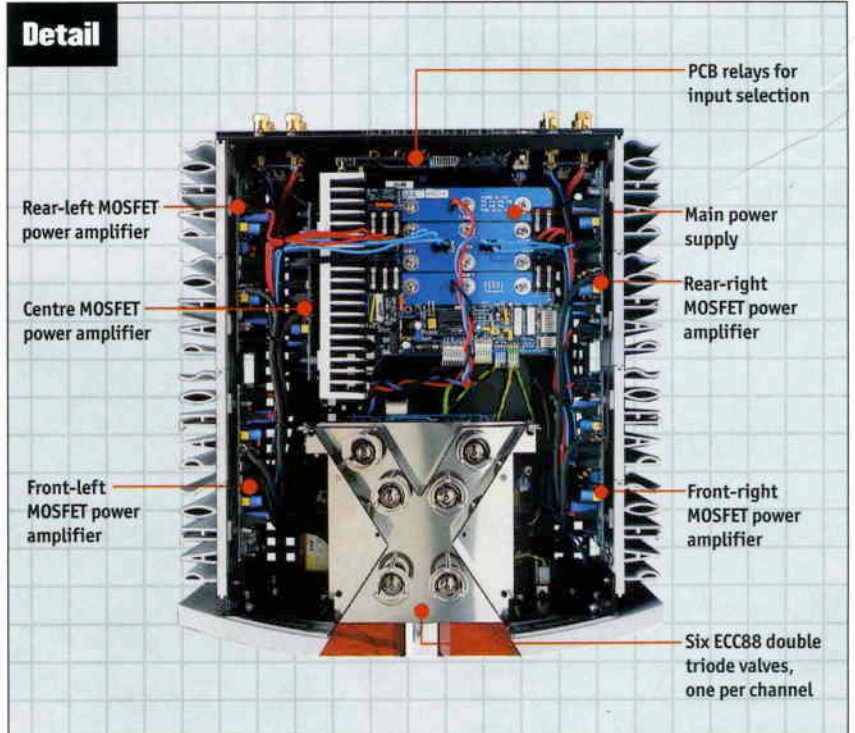
# Pathos Cinema-X integrated multichannel amplifier [Review]



There is a common sound to Italian amplifiers, it seems. They are almost unilaterally warm and slightly romantic sounding. Perhaps they're not as snappy and rhythmic as some, but the sheer beauty of the sound wins many over. There are precious few amplifiers that sound this smooth, relaxed and... well, *creamy*, especially the sort of amplifiers that can pump out nigh on half a kilowatt. You can almost imagine this amplifier crooning out *O Sole Mio* on a balmy night in Venice, even when you are playing Schoenberg. Of course, if the words 'rose tinted' are simply not in your vocabulary, move on. But, those who like some warmth to their sound will warm to the Cinema-X... and there's a secret bonus for five-channel listeners.

This warmth is not that uncommon among stereo hi-fi amplifiers, but is almost unheard of in multichannel. Even high-quality multichannel audio is almost pathologically connected to clean, sharp, solid-state impact, and for some hi-fi aficionados this sound is simply too sterile. There's worse to come from home cinema, as most amplifiers in this category sound untenably brittle to those who like the classic sound of valves. The Cinema-X is an extraordinary alternative – a refreshingly mellifluous integrated multichannel amplifier.

Not much has been made of the detail so far, but again it falls into the 'big, but natural' camp. There is a touch of veiling that stops the instruments from taking on holographic qualities, but this matters less when the Pathos



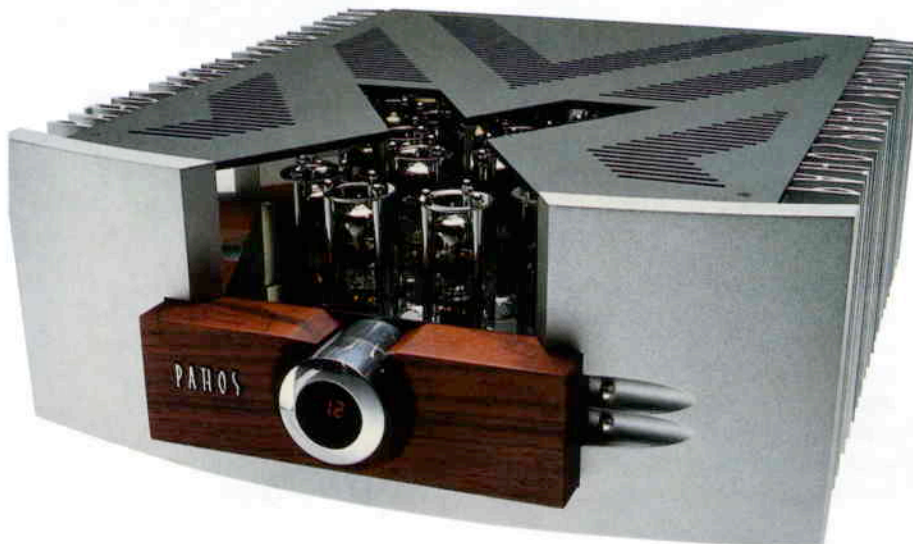
delivers the sort of image size that is big enough to give your room the TARDIS treatment – it expands the performance beyond the limits of the walls of your room and makes things sound wonderful, if not strictly neutral in tone.

## VIDEO PERFORMANCE

There really isn't much video processing on tap, with only a handful of composite video inputs. These drag down the quality of video signals to a lowest common denominator, something that the audio never does. But in the end it doesn't really matter – it's best to overlook the video switching altogether if you want to optimise this amp's audio quality. With video signals connected, the sound seems to be that bit more grainy and diffuse. Pop 'em out of the equation and the sound tightens up and seems more extended and grain-free, especially in the treble. Leave the amp to pure audio, then, and route any video signals elsewhere.

We are prejudiced against pretty audio, especially in England. Unless it looks like it was built with hammers and a cold chisel, we think too much money has been spent on the looks and not enough on the audio circuit. But the Pathos Cinema-X is strikingly beautiful – and has a big, elegant sound to match. Some will think its character too rich and opulent, while others will bask in its generous, ear-hugging majesty. Most of all, though, anyone who fancies having their multichannel music and movies delivered with lashings of Italian romance should park their ears here. **HFC**

Alan Sircom



**VERDICT**

**SOUND >> 89%**

>> SUB RATINGS  
STEREO 87% MULTICHANNEL 91%

**FEATURES >> 70%**

**BUILD >> 92%**

**VALUE >> 85%**

**PRO**  
A beautiful looking product with a sound to match, one of the most ear-pleasing ways to unite stereo and multichannel amplification in a single box.

**CON**  
Rose-tinted sound doesn't major on fine detail. Too esoteric and minimalist for mainstream home cinema.

**CONCLUSION**  
A fine solution for the multichannel-meets-stereo system. With pretty looks and an equally pretty sound, this big hybrid amp is not the quickest, the cleanest or the most detailed, yet its big, mellifluous sound is marvellously entertaining.

**HI-FI CHOICE**  
OVERALL SCORE >> **87%**