



The Pathos Inpol² Integrated Amplifier

by Chris Thomas

At first glance the new Pathos Inpol² looks like a bit of a brute of an amplifier, with its sheer size and imposing glossy finish. But this is one of those cases where looks deceive absolutely, as this latest integrated offering from the Italian company turns out to be a rather modestly powered pussycat, concerned more with musical subtlety than sheer air movement. This is the first time that the Inpol circuitry (which carries a worldwide patent) has found itself in such a relatively low cost design. The other models that incorporate Inpol are the TT and the Inpower, both significantly more expensive and exotic designs. The principles of Inpol technology mean that this is a true hybrid design where the whole of the pre-amplifier section is pure valve design while the power amplification is provided by Mosfets which have a character of sound all to themselves. Unlike the excellent little Classic One that incorporates valves at the input stages only, the Inpol² utilises two ECC 82 tubes per channel at the pre stage and is fully balanced. Both sections have their own independent power supplies. Pathos of course have their own take on the separate power sections that drive both halves of the amplifier with the specific type of current that they require. The pre-amplifier section receives low current while the Mosfets are equipped with a switch mode supply to allow for low load impedance current delivery. Each independent supply can be seen glistening through the Inpol²'s grilled top. Power output is a modest 50 watts

per channel into 8 ohms but this, according to the requirements of Inpol is pure class A.

The notion of the valve/solid state hybrid is not new and is one of those design approaches that seems on the surface to make so much sense that you wonder why many more manufacturers are not doing it. Take a low level valve pre-amplifier stage, claimed to have better integrity when it comes to preserving the harmonic content of the music and use it to drive a solid



state power section to bring better grip, speed and sheer controlled drive to the party. My only real

question over this approach is one of rhythmic coherence and focus throughout the amplifier. It seems to me that valve amplifiers in general are slower than solid-state designs. This rather sweeping statement is based on listening experience rather than any solid scientific knowledge and I am told by those rather more familiar with top-end valve amplifiers than I that at the highest performance level, valve designs are in fact faster than their solid state counterparts. But my experience to date is the opposite in that I have never heard a valve amplifier that remotely approaches the speed of transient

response and recovery of something like a Spectral or Naim amplifier. And what has always concerned me about hybrid designs is that the slowest section, which will most likely be the valve part, will always ultimately dictate the overall speed of the amplifier and this internal struggle could compromise the performance when it comes to the sense of rhythmic cohesion and integrity throughout the bandwidth.

I wouldn't expect Pathos to agree with me of course and it certainly seems that the twin Inpol circuits that are employed in opposite phase to each other both remove the need for any negative feedback in the system and go some way toward eliminating this. The result is an amplifier that, while by no means the fastest and most overtly dynamic you will hear, certainly has tremendous top to bottom rhythmic resolution and 'shape' even under arduous conditions. But more of its musical nature later.

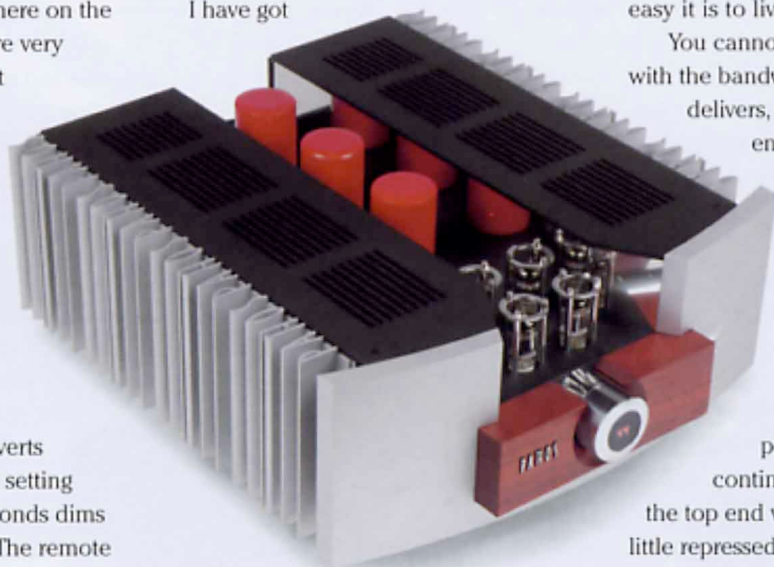
As I mentioned, the Inpol² is a physically big amplifier. Too big to sit anywhere but on the top shelf of most racks. It has five feet and Pathos have been clever enough to mount the four outer ones inward on its base which means that it will sit quite comfortably, though with a fair amount of overlap, atop a Naim Frain with its relatively small glass shelving. You'll need plenty of room around it for air circulation too as valves and class A operation means that it runs quite hot. It presents a very minimalist and ultra smooth face to the world but has plenty of input possibilities. Five single-

► ended RCA inputs and an additional tape-out socket are supplemented by a useful pair of XLR balanced inputs. Speaker connections can accommodate single or bi-wired leads. There is also a pair of RCA terminals that can be used to drive a sub-woofer.

Apart from the company name there is no writing anywhere on the fascia but the controls are very intuitive. A small discreet button is used to scroll through the inputs and the information is displayed on a compact but legible LCD readout in the centre of the large chromed volume control. Once the required input has been displayed the readout reverts back to the volume level setting and then, after a few seconds dims to a less obtrusive glow. The remote is excellent and replicates the input switching as well as the volume control. Everything about the visual style of the amplifier and the way it operates is ultra slick (check out the company name-shaped heat-sinks) which is why I personally find the relay noise it makes while changing input or especially level, disappointing. Internally the Inpol² uses the same volume control as the Logos. It is an optical device driving a set of relays connected to a network of laser-trimmed resistors and the result is that you can hear the loud clicking as the volume ramps up and down the relays. I have heard this sort of arrangement before of course but never quite as loudly and while this may not be quite such an issue during daytime level listening I found it really intrusive during late night sessions where the clacking of the relays could so easily break the mood. This is a personal thing obviously, but for me it was a real negative point of living with the Inpol² and I think that Pathos

really need to investigate ways of muting the rather cheap sounding mechanical clang that reverberates through the amplifier whenever the volume or input is adjusted.

I have been listening to the Pathos, more or less exclusively for a couple of months now so I have got



to know it very well. I have used it with both the Naim CDS 3 and the Burmester 001 CD players and apart from models yet to be reviewed, the JMLabs Micro Utopia Be has been the main speaker of choice. Cabling was Nordost's superlative Valhalla. But a word of caution here regarding the mains cable. Pathos, like all good amplifier manufacturers supply a custom cable with the Inpol². This utilises a filter network close to the mains plug and although the Valhalla might sound a little bit better than this, it also introduces some rather odd RF effects, which I first noticed as an unwelcome squelching on the Tivoli radio in the kitchen. Without the supplied mains leads the amplifier also became quite sensitive to mobile phone interference. So the Pathos

mains lead is a must. As for warm-up I found that the Inpol² took about a half hour before it began to stretch its legs though I never heard it sound better than when the system had been running for the whole day. This was the best time to appreciate just what an excellent amplifier this is and how easy it is to live with.

You cannot fail to be impressed with the bandwidth that the Inpol² delivers, especially the sheer low-end extension which strikes the balance between weight and control just about perfectly. Move up through the mid and there is an undeniable sweet clarity, even a feeling of warmth to its performance and this continues right up through the top end which might seem a little repressed to those whose speakers are not up to conveying



the subtlety and true extension that this amplifier is capable of. If you have spent years listening to pure solid state designs the Inpol² may well seem to lack that ultimate sense of grip and control that you are used to but what it gains is a sense of harmonic freedom and flow. The music never sounds as if it is being squeezed out of the electronics and there seems very little leading edge compression to give it that feeling of artificial dynamism and speed. It seems more like the 'open tap' type of amplifier in that you cannot feel it ►

► exerting electronic control and shaping the sound. Instead there is a natural flow and integrity to the way it makes music that grows on you over a period. Pretty soon you learn to trust the amplifier implicitly and to respect the way it can deal with a wide range of musical challenges. That it always seems to have the time and room to do so is due in no small way to the amazing width and depth of its soundstage and the feeling of unwavering stability that it specialises in. The acoustic, be it natural or studio-created is laid wide open before you with exceptional focus and great presence. Add this to the superbly broad tonal palette it possesses and you have an amplifier which can sound very intimate, bringing you closer to the nature and timbre of the instrument than any integrated amplifier I have heard.

Down at note level it brings a sense of breadth and weight to stringed instruments that can be captivating. Alison Krauss And Union Station's new CD, *Lone Runs Both Ways* (RRCD 525) features some of the nicest studio recorded acoustic rhythm guitar that I have heard for a while. This album could have been made to showcase all that is good about the Inpol². The sheer range and harmonic expression of high-tension steel strings and vintage tone woods in the hands of very high quality players is really tremendous. There is no snatching and no exaggeration of the leading edge as the note or chord gets the room to expand tonally through its colourful sustain before decaying naturally. And the closely-miked lead vocal offers the perfect counterpoint musically and most certainly spatially. Where appropriate it projects across the room so she is almost singing in your ear while the distance between

her and the male backing vocals practically enable you to hear a three-part harmony in 3-D. But it never pulls the music apart. One of its strongest points is the top to bottom rhythmic coherence. It is not the fastest amplifier certainly and will perhaps not grab attention with its pure rhythmic impact but I never heard it



become remotely flustered regardless of what combinations of tempos it was being asked to deal with.

As I mentioned at the beginning, this amplifier is somewhat less powerful than its looks would suggest. The 50 watts of class A power and the nature of the way in which the Inpol² reacts to the volume control might leave you feeling a little short changed if you use inefficient speakers and/or you are a total headbanger who places pure level high on their list of requirements. Push the volume up and you get more of just that - sheer volume of the voluminous kind. You don't get that sense of drive and momentum - or maybe you just don't get the edge of distortion as the amplifier teeters on the brink. Instead it swells and gets bigger, stronger and more imposing. The Micro Utopias are of average efficiency so I found that I was pushing the Pathos high up its volume scale before I finally realised that high level listening is not what this amplifier is all about. It's not that it

doesn't go loud, just that you don't notice it (or get any real 'benefit') from it doing so. Don't get the impression that it has no strength. There is nothing lightweight about the sound at all at any level. It's just never less than refined, which rather undermines the obvious impression of drive.

In many ways this is the best integrated amplifier I have heard. It is certainly the easiest to live with over a long period as it is completely fatigue free, has such impeccable balance and no real musical weaknesses. I would avoid using it with matching electronics or cabling that is excessively smooth, or speakers that are very inefficient. It is obviously not cheap and anyone looking to spend this kind of money may still feel that they would naturally be better off with a separate pre/power combination. I doubt it. This is a serious piece of kit designed for serious listening and it has a musical focus that similarly priced separates often fail to match. I could live with it quite easily. ►+

TECHNICAL SPECIFICATIONS

Type:	Class A hybrid integrated amplifier
Valve Complement:	2x ECC82
Inputs:	5x line-level (RCA) 2x line-level (balanced XLR)
Input impedance:	100 kOhm
Power Output:	50 watts per channel
Dimensions (WxHxD):	430 x 185 x 520mm
Weight:	37 kg
Price:	£5650.00

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