

Southern Exposure

Good things come from small (but robust) packages, as Martin Pipe discovers with the Exposure XM5 integrated amplifier.

Based in West Sussex, Exposure made a name for itself in the 1980s with its well-engineered pre-power amp combos. Minimalist in nature and solid-state in design, these British-through-and-through audiophile contenders were seen as punchy yet more affordable alternatives to the Naim products that were then in vogue. Exposure continues to indulge those in the market for separate pre-amps and power-amps but the south-coast firm does a good line of integrations too.

Here, I'm examining the half-width (admittedly, it is quite deep!) XM5. It will cater for sources both

past and present; there are two line inputs for tuners and tape (no 'loop' though!) while its built-in phono stage will accommodate MM cartridges. One of the line inputs is fixed-level (i.e. the volume control has no effect), being intended for integration of the XM5 into AV systems. With digital sources the XM5 generously gives you asynchronous USB capability (realised with XMOS interface circuitry), plus two optical and two coaxial S/PDIF inputs. The latter employ high-quality locking BNC connectors; Exposure's chief designer Tony Brady told me they are "75 ohms and a much better match than RCA (phono) – Exposure CD players use BNC as well". If you

don't have an Exposure CD player, though, you'll probably need an adaptor.

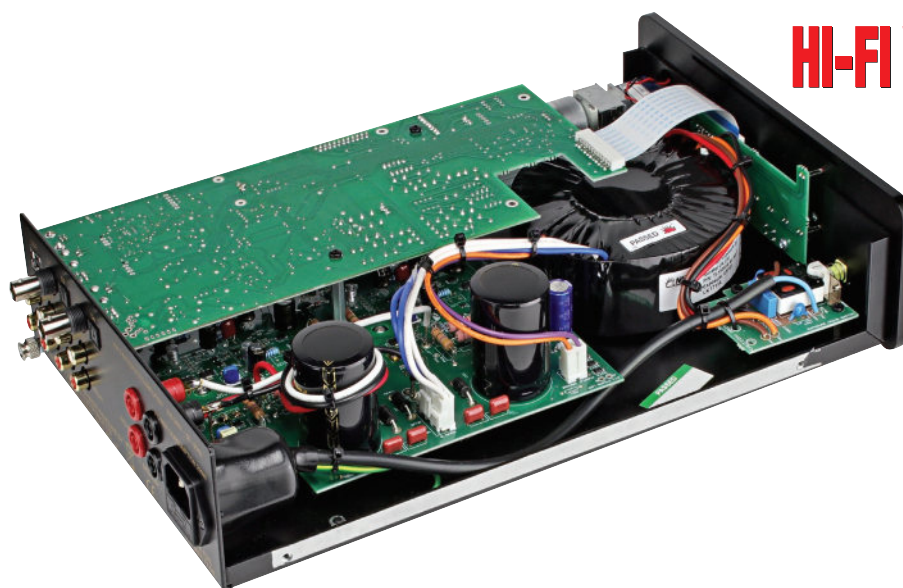
The internal DAC is, Tony explained, basically a "cut-down 2010S2 DSD DAC". Press that USB port into service (the XMOS drivers for Windows PCs are supplied on CD-ROM) and with the appropriate software (I used the free Foobar2000, appropriately-configured) one can enjoy DSD files. The Wolfson WM8742 DAC chip at the heart of Exposure's digital goodness can handle DSD natively, as well as PCM-derived content as dense as 24bit/192kHz. Unfortunately, only DSD64 content can be played; in practical terms, this meant I could



play my Alan Parsons 'I, Robot' tracks – but not Robert Len's DSD128-encoded 'Hope'. Competing products will support this, and sometimes DSD256 too. The XM5 has no Bluetooth wireless link for smartphone playback.

And outputs? Exposure has specified recessed speaker terminals, that accept standard banana plugs only – no bare wire here! You also get line-level phono outputs, the signals from which are processed by the volume control, for an external power amp – handy if you want to bi-amp your speakers. Note, however, that the XM5 is 'speakers-only'; it lacks a headphone socket. That aside, the it is flexible – and easy to use in a 'no-nonsense' sort of way. The only user controls are power, source selection (a pair of buttons sequence through the inputs, the active one being indicated by a LED) and volume. A high-quality ALPS pot is used for the latter. It's motorised – a rather cheap-looking handset will change volume or source, as well as operate Exposure CD players. It also engages a relay-driven 'mute' function.

Internally, we find a busy design that is basically in two halves – analogue and digital. At the bottom lurks the amplifier proper, together with power supply circuitry and the phono stage. The Class AB power amp, which is rated at 60 watts per channel (1kHz, 8 ohms) employs



Exposure's neat but busy internal construction. The XM5's amplifier section is on the bottom, while the digital electronics occupy the top board. Both rely on the 200VA toroidal transformer that dominates the rear of the unit. In terms of running temperatures, the XM5 gave me no cause for concern.

Toshiba output transistors. That integrated MM-only phono stage is a basic one that has little in common with the sophisticated MC/MM XM3 announced by Exposure at the same time. Exposure included it to accommodate the resurgence of interest in vinyl – or, in its own words, "bring the good old days of vinyl bang up-to-date". The stage is of similar capability to what you'd find in a pre-CD integrated. Mounted above the amp section is the digital board, which contains the DAC and control circuitry. Audiophile-grade components are evident in the signal stages of both boards. Elsewhere in the 5kg XM5 are the motorised volume control, and the linear power supply's 200VA toroidal transformer. The XM5 may be well-packed, but it's well-built and runs surprisingly cool.

SOUND QUALITY

Sources included a USB-interfaced Windows 7 PC, Cambridge CXN streamer, a Rega Planar 3/RB300/Bias record-playing system and Humax FVP-500T set-top box, my speakers being Quadral Aurum Wotan VIII

floorstanders. My PC runs the free Foobar2000 audio player, but the USB installation instructions (a single-page PDF on the CD-ROM) don't explain how this – and competing software – can be configured for best results. Indeed, there's nothing about DSD-over-PCM; follow the instructions, and you'll be listening to everything via PCM.

As a result your computer, rather than the XM5, will be doing the DSD decoding – there's no front-panel means of confirming digital-audio mode (sampling rate, resolution), and so you're working 'in the dark!' Luckily, I have plenty of experience working with Foobar2000 – and was able to check correct DSD operation merely through listening, and the simple fact that incompatible (DSD128 and above) tracks are rejected by correctly-configured player software. If you're in any doubt, though, your dealer should be able to help. Serious listening can then begin - after the recommended 48-hour 'burning-in' period.

As it is DSD playback is certainly worthwhile, and the aforementioned DSD64 transfer of I, Robot was imbued with presence and warmth. The XM5 certainly didn't miss a trick when it comes to Alan Parsons' famous attention to detail, in terms of production and the playing of his



This motorised ALPS volume control is just one of the numerous audiophile-grade components that helps the XM5 work its musical magic. Note too the high-grade printed circuit board – which is made of fibre-glass, rather than the bonded-paper of cheaper products



musicians.

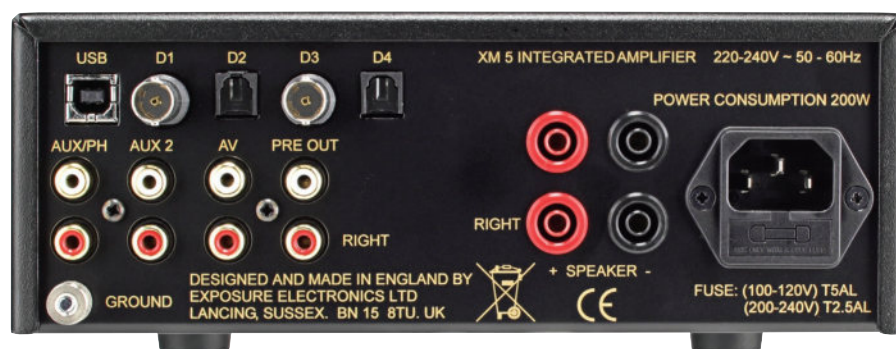
I then switched to a PCM hi-res performance of Grieg's familiar Concerto for Piano and Orchestra in A minor (Symphonieorchester des Bayerischen Rundfunks/Alice Sarah Ott/ Esa-Pekka Salonen, DG, 24/96). I immediately got the young pianist's interpretation of this work, such is the degree of communication available. Imaging is superb, and between my speakers I could appreciate the acoustic of the recording venue (Munich's Herkulessaal). The dynamic swings of the orchestra easily fell within the XM5's grasp, no hardness being evident even during the dramatic third movement. Tonally speaking, presentation is full-bodied yet natural. On first hearing, it sounds a little bright - but what you're hearing is genuine upper-register musical detail, as opposed to the falsehood of an imaginary treble control.

But what about 16-bit material - such as the atmospheric title track of London Grammar's *If You Wait?* Hannah Reid's emotionally-charged singing voice is here sublime, listening being rewarded with a genuine sense of intimacy. Such compelling 'presence' joins forces with a tonal presentation that ensures the accompanying strings actually sound like strings, and not caricatures thereof. Reproduction of the bassline in *Hey Now*, from the same album, is simply superb - the XM5 goes satisfyingly-deep without losing control. In this respect, it gets subjectively close to my reference Arcam A49 - a considerably more expensive machine.

With vinyl, you get similar levels of communication - the clavichord and orgasmic vocal of Space's *Carry On, Turn Me on* (Pye LP), and the rhythm guitar and energetic percussion of Freeez's *Southern Freeez* (Beggars' Banquet 12in. single) being cases in point. But the low-end is alas not prominent, likely due to the warp filter. It was detailed and taut - I could easily follow the synth bass of the first, and the bass-guitar of the second - but LP was somewhat lacking in the 'punch' that the amplifier is capable of.

CONCLUSION

I thoroughly enjoyed my time with the XM5. In feature terms, it's rather basic - number of inputs apart - but it's capable of a remarkably musically-engaging performance - and a flexible one too. Try one for...size!



Plenty of connectivity, given the limited rear-panel real-estate. BNC sockets (D1, D3) accept S/PDIF digital for more accurate termination. Loudspeaker sockets accept 4mm plugs alone.

MEASURED PERFORMANCE

The Exposure XM5 produced 72 Watts into 8 Ohms and 121 Watts into 4 Ohms, more than enough for very high volume. The power supply has good regulation; it offers a lot of 'push'. Distortion was low at all frequencies and levels, just 0.02% at 10kHz and less at 1kHz - a fine Class A/B amp.

The internal MM phono stage had a high sensitivity of 3mV so will accept all MMs and high output MCs purposed for MM inputs. Overload was very high at 70mV - more than enough for all cartridges. It reached down to 25Hz (-1dB) before rolling down to -10dB at 5Hz to suppress LP warps.

Frequency response of the main amplifier via the Aux input has been curtailed, rolling off above 26kHz (-1dB) to give an easy sound.

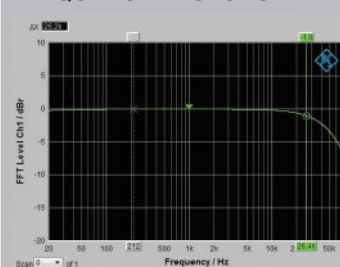
The digital (S/PDIF) input gave a respectable 111dB dynamic range (24bit) - 117dB is common nowadays

in such a product. Distortion with hi-res (24bit) was low at 0.06%, and with CD the usual 0.2% due to 16bit quantisation noise. This input also has curtailed frequency response, output rolling down above 20kHz. The optical input accepted 176.4kHz sample rate maximum from a QED glass optical cable; the electrical (BNC socket) input accepted 192kHz.

The USB input had slightly less dynamic range than S/PDIF which is unusual nowadays, measuring 107dB due to a small amount of noise. Distortion was low at 0.06% at -60dB with 24bit and 0.2% with CD. Again, frequency response was curtailed, reaching 23kHz (-1dB) due to the main amplifier's low limit.

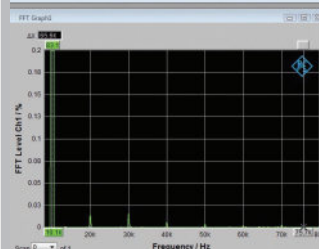
The XM5 is a carefully tailored amplifier that has been designed to give a big, smooth sound through all inputs. It measured well in all areas, and whilst not giving class leading digital figures it will still sound less bright than most rivals and likely very relaxed - as well as punchy. **NK**

FREQUENCY RESPONSE



DISTORTION

THD @ 0dB	THD @ 10dB	THD @ 20dB
0.0238 %	2.8126 V	10.000 kHz
OFF	OFF	OFF



Power (8 Ohms)	72W
Frequency response (-1dB)	7Hz-26kHz
Distortion (10k, 1W, 4 Ohms)	0.02%
Sensitivity	400mV
Noise	-104dB
PHONO	
Frequency response	25Hz- 20kHz
Distortion	0.02%
Separation	82dB
Noise	-77dB
Sensitivity	3mV
Overload	70mV
DIGITAL (S/PDIF/USB)	
Frequency response	7Hz- 26kHz
Distortion (24bit, -60dB)	0.06%
Separation	90dB
Dynamic range (S/PDIF/USB)	111/107dB
Noise	-109dB

EXPOSURE XM5 £1,236



OUTSTANDING - amongst the best

VALUE - keenly priced

VERDICT

The XM5 punches way above its weight (and pricetag) with a performance that will do justice to decent sources, new and old alike.

FOR

- input versatility
- detailed, smooth sound
- small size

AGAINST

- no headphone socket
- DSD64 only via USB
- vinyl lacks bass depth

Exposure
www.exposurehifi.com