LSA 'Standard' integrated amplifier

THE LSA STANDARD INTEGRATED AMPLIFIER IS A RARE BREED, WRITES **STEPHEN DAWSON**. NOT ONLY DOES IT PERFORM WELL, BUT IT'S AFFORDABLE, TOO.

Home theatre has done a strange thing to the former dominant form of home entertainment: the stereo. Where once there was a rich, wide range, intensively populated with a multitude of models, stereo has now diverged.

There are still a lot of models at the bottom end, spurred by the requirement for iPod and other MP3 playback. At the top end there also exists the most amazing equipment. It is the middle that has been largely wiped out.

The LSA Electronics 'Standard' integrated amplifier is in that 'top end' category, but down towards the bottom of the top end, price-wise.

And in a peculiar way, it constitutes excellent value for money.

ITS WEIGHT IN GOLD...

An 'integrated' amplifier is one that contains both a stereo power amplifier (the part that drives the loudspeakers), and a preamplifier, which has the primary role of controlling the signal. It can boost it to a level suitable for the power amp, but it is more concerned with switching between several inputs and providing a volume control.

So what is a 'Standard' integrated amplifier? In this case, it is simply LSA Electronics' model name. There is also a more expensive 'Signature' model, and an even more expensive 'Statement' model. All three are quite similar, but with the two higher models receiving progressively upgraded parts.

Not that you'd think that this receiver needs it.

Sometimes in suggesting how to

DETAILS

Product: LSA Electronics Standard integrated amplifier

Manufacturer: LSA Electronics

Distributor: Oceanic Distribution

Contact: 1300 556 303 www.oceanicdistribution.com

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choose amplifiers, I recommend that in the absence of any other knowledge, the weight of an amplifier can be a reasonable (albeit imperfect) proxy for quality. On that criterion, this is one superb amplifier. It weighs some 38kg, and measures an imposing 235mm tall, 430mm wide and 480mm deep.

Inside it packs electronics to deliver a rated 150W into 8Ω loads for each of its two channels. In theory, if you halve the impedance of the load, an amplifier should double its power output. In practice, very few do, largely because their power supplies can't deliver the necessary current. In fact, most home theatre receivers actually indicate that you shouldn't use speakers rated at less than 6Ω impedance.

But this amplifier comes with a 'Quality Control Inspection' sheet with the serial number recorded and nine handwritten entries. One of these indicates that the power output of this particular amplifier was tested at 150W into 8Ω, and 300W into 4Ω: a proper doubling.

That explains the size and weight of this unit. It has two enormous toroidal transformers (these use a donut-shaped iron core, delivering higher efficiency and less stray magnetic field than the cheaper square core transformers), and plenty of voltage smoothing capacitors. It uses individual power transformers for the output, bolted to the large heat sinks that constitute both sides of the amplifier.

The amplifier also incorporates vacuum tubes (one for each channel) to provide a 'hybrid' valve/transistor quality to its sound. The design is traditional Class A/B.

CONNECTIONS AND CONTROLS

This is an entirely analogue amplifier, conforming to the standards of high end audio accepted over the last generation. So there is no audio processing at all, whether by equalisation or bass and treble controls. The amp is designed to increase an analogue input signal to a level suitable for driving a large range of loudspeakers, and nothing else.

Consequently the controls are minimal. On the front there is a volume knob, a standby/on push button, and an input button. The remote control looks like a bar of aluminium and it has only four buttons: volume up, volume down, input and standby/on.

The input key in both cases cycles through the four line level inputs available on the back. One of those (labelled 'CD') uses balanced XLR sockets which allows greater rejection of noise that can be generated in the connecting cable by stray electric and magnetic fields.

Also on the back is an earthing point and a pair of RCA sockets for connecting a turntable. The built-in phono preamplifier has a specified sensitivity of 4mV, so it is suitable for use with moving magnet and high output moving coil cartridges. The preamp is apparently completely isolated electrically within the unit from all the other parts, to the point that the preamp has its outputs on the back of the unit. To use it you have to connect these outputs to one of the sets of line inputs (jumpers are provided, but LSA recommends that you use high quality interconnect cables).

Also on the back are four large, heavily built binding posts for connecting speaker cable. The posts support banana plugs, spade lugs or bare wire. The holes drilled through the post accommodate reasonably, but not enormously, thick cable.

SWITCHING ON

There wasn't much to setting up this amplifier. Just connect the sources, wire up the speakers and flick the one control not yet mentioned – a big hard-wired power switch on the back – and you're ready. The only hard part was actually lugging the thing to the table on which it was to be installed.

The amplifier takes about fifteen seconds to get operational after being brought back to life after being in standby mode. The first hit of the 'standby/on' key was marked by a brief dimming of room lights as the amplifier's mighty power supply sucked in power to charge itself up.

I stuck with line level sources, using two channel SACD and CDs. It soon became apparent that this amplifier was suitable for use with any loudspeakers. It had available more than enough control for even my nominally 3Ω main loudspeakers. These deliver sound all the way down to 20Hz, so control is important, and this amplifier kept them beautifully tight, even at extremely high levels.

There was so much power on tap that not once was there any sense of approaching anywhere near the amplifier's limits, regardless of the genre.

The simple fact is this amplifier simply did what it was supposed to: make loudspeakers deliver the music to the best of their abilities. No amplifier can do more than that.

Despite hours of continuous high volume use, the heat sinks remained cool to the touch. Overheating is unlikely to ever be a problem with this amplifier.

Controlling volume with the remote was a bit trickier than most home theatre receivers because the motor-driven analogue volume potentiometer isn't locked into the discrete steps of a digital volume control. Nonetheless, it didn't take long to master the quick stabs on the buttons needed to make reasonably precise adjustments.

CONCLUSION

I must make one remark about value for money. Nearly six thousand dollars is a lot of money for a stereo amplifier but, as I mentioned, choices are limited.

Yet this amplifier is in one respect exceptional value for money for Australians. In these days of the Internet, one gets used to seeing the dollar cost of electronics sold in Australia being roughly double their cost in US dollars when sold in that country. But this amplifier sells for $US4,999 over there. It is $A5,999 here. CHA

SPECIFICATIONS

Finish:	Silver, black accents
Rated power:	(RMS, 8Ω): ≥ 150W per channel (RMS, 4Ω): ≥ 300W per channel
Total harmonic distortion:	≤ 0.1% (1KHz)
Recommended loading impedance:	4-8Ω/2Ω stable
Frequency response:	20Hz-32KHz (±1dB)
Signal-to-noise ratio:	≥ 90dB
Channel separation:	≥ 60dB (1KHz)
Input impedance:	47KΩ
Input sensitivity (analogue):	≥ 200mv
Input sensitivity (phono):	≥ 4mv
Overload signal level:	≥2V
Inputs:	1 balanced, 3 single-end, 1 phono
Dimensions:	235mm x 430mm x 480mm
Weight:	38kgs

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