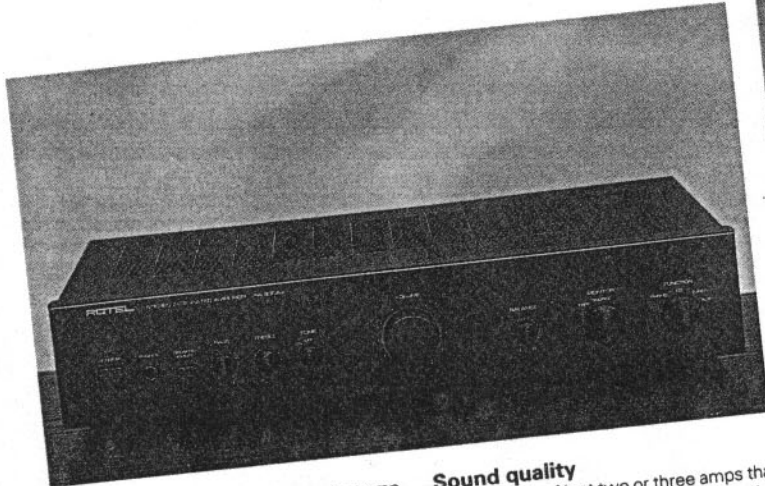


The Critic's Choice

AMPLIFIERS

Rotel RA-930AX



If you had an award-winning budget amp on your books and the time came to update the range, would you junk a successful design? Of course not and neither has Rotel. So when the popular RA-820AX had run its course it simply re-arranged the fascia and tinkered with the circuit layout before re-launching it as the RA-930AX!

The style of this amp compliments Rotel's other 900 Series separates with its centralised volume control and new, luxurious finish. Yet like the RA-820AX it caters for MM disc, CD, tuner, aux and tape inputs with both switchable tone controls and a second set of speaker outlets. Nothing ostentatious, then, but perfectly adequate for the keen listener.

Inside there is the same series-feedback RIAA stage with its Signetics op-amp and traditional Sanyo-based power amp. However the layout of the PCB is now wholly symmetrical, a change known to improve upon the breadth and depth of stereo soundstaging, while star-earthing and Rhoderstein signal-path resistors complete the evolution. All this with an increase of just £10 since we reviewed the RA-820AX in issue 80. Not bad, huh?

Lab report

By way of recompense the power output has edged up from 47W to 53W (8ohm) and 69W to 77W (4ohm) though the headroom and peak current are quite unchanged. Stereo separation, channel balance and the low 0.006ohm output impedance have all taken a turn for the better while the DC offset is still too high!

Rotel has obviously changed the feedback operating about the power amp, for the overall sensitivity is reduced while distortion has increased from 0.0013 to 0.007 per cent at two-thirds output - just compare the 3D plot with that in issue 80. The distortion is identical, by the way.

Sound quality

This was one of just two or three amps that gave us the distinct impression of playing louder than usual, despite the outputs of all contenders being matched at precisely the same level. Both vinyl and CD inputs were similarly influenced, pulling up low-level detail from a deathly silent background - detail that was often masked elsewhere.

This prompted a slight split in opinion. Some were mildly aggravated by the immediacy and 'loudness' of its presentation yet were bound to acknowledge its biting clarity and insight. Larger than life, the panel suggested - a truly surrealistic performance! Ordinarily, of course, they would have reduced the volume a notch or two.

Meanwhile the remainder of the panel were captivated by the clean, even-handed and thoroughly involving sound. The sort of sound that enhanced the femininity of Julia Fordham's voice while exposing percussive and string detail from both pop and classical discs with exquisite clarity. Notes grew and faded with realistic presence, a trait, along with the sheer vibrancy and tension of the music, that prompted one listener to correctly identify this as a Rotel amp. Not once, I might add, but in two consecutive blind listening sessions.

Conclusion

'A real scorcher' was the overwhelming response of the *Choice* listening panel. But so it should have been. After all these were the same people that voted its predecessor - the RA-820AX - a Best Buy exactly two years ago! In common with this classic, the RA-930AX bundles across a wealth of busy, intriguing musical detail with bags of enthusiasm.

Indeed, it was voted second only to the Lecson for its ability to invoke powerful, emotive music. This, plus its technical competence and reliability, maintains the family tradition for Best Buys.

TEST RESULTS

	20Hz	1kHz	20kHz
Maximum Continuous Power Output	47.5W	52.5W	50.4W
8ohms	47.5W	52.5W	50.4W
4ohms	66.5W	76.7W	74.9W
Dynamic Headroom (IHF)+1.36dB (72.0W)			
Peak Current (5msec, 1% THD)+12.5A			
Output Impedance 0.0058ohm			
Damping Factor 1391.3			
	CD/Aux	MM	
Stereo Separation (1kHz)	81.8dB	80.5dB	
(20kHz)	56.8dB	54.5dB	
Channel Balance (1kHz, -20dBV)	0.21dB	0.27dB	
(-60dBV)	0.31dB	0.42dB	
Total Harmonic Dist. (0dBW)	-82.3dB	-85.7dB	
(2/3 power)	-83.3dB	-83.4dB	
CCIR Intermod. Dist. (0dBW)	-87.8dB	-76.7dB	
(2/3 power)	-90.7dB	-77.5dB	
A-wid Noise (0dBW)	-86.3dB	-79.8dB	
(2/3 power)	-98.1dB	-80.7dB	
Residual noise (unwid)	-72.0dBV	-72.0dBV	
Input Sensitivity (for 0dBW)	27.6mV	450µV	
(for full output)	201.6mV	3.29mV	
Disc Overload (1kHz)		181.1mV	
(20kHz)		1660mV	
(50kHz)		3175mV	
Tape Output/Impedance	11.2V (disc) / 2.0kohm		
Input loading	30kohm / 125pF	47kohm / 180pF	
DC offset, left/right	+75.5mV / +78.5mV		
Retail Price			£160

