

# Rotel RA-02 integrated amplifier

Compact integrated design now offers remote control



PRICE	£350
SUPPLIER	B&W Loudspeakers
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**If confirmation** were needed that silver is the new black, then Rotel is just the latest to launch a range available in both of hi-fi's primary colours. Distinguished by a 'S' suffix, the silver-clad version of its RA-02 amplifier costs, performs and sounds just like the black version, though some will undoubtedly claim otherwise! This model is the notional replacement for its RA-931MkII although, at £350, the RA-02 is pitched at a higher price bracket.

Foremost among the revisions is full remote control of Volume (including a mute function) and input selection via the RR-AT92 handset. In addition, all possible speaker configurations (A or B or A+B) are now connected via high-current relays, and future power amp upgrades are now facilitated by a buffered pre-amplifier output. Blue LEDs also add a fresh splash of colour to the matte silver fascia. Nevertheless, it's the implementation of remote control that has bitten hardest into the cost of the RA-02, for the same performance — minus remote — is offered by the RA-01 amplifier at £250.

Both amplifiers utilise the Sanyo-based power amp circuit that graced the RA-931MkII, but feature a revised line-level stage. The adherence



Also available in black 'n' blue!

to Rotel's philosophy of a symmetrical circuit layout and copper busbars for PSU and output stage linkages is also retained. Four line-level, a m-m phono and a tape input are provided along with defeatable bass/treble tone controls, balance and a headphone socket. The RA-02 is also equipped with 12V trigger sensors for custom-install applications. With this little lot tucked under its slimline belt, the RA-02 is evidently more flexible, and future-proofed, than its sleek aesthetics might suggest.

Neither has the sonic prowess of the RA-931 MkII been diluted by the wash of IR facilities, for the RA-02 still possesses that combination of dynamics and sweetness, especially through the treble, that marked out its predecessor. Vocal intonation and in-room 'presence' is very realistic as Ryan Adams' *Wild Flowers* clearly demonstrated. The RA-02 allows strong vocals to lead but not dominate the performance, as the 'thrumm' of acoustic guitar, strings and vibes maintains its equally powerful resonance.

With sensitive, moderate-load speakers like the Audio Note EII's used for this test, the RA-02 offers a firmly controlled bass that's neither too dry nor overly colourful, but simply unobtrusively powerful. The mid and treble octaves are equally free and transparent sounding, but are arguably sweeter and more colourful than its bass. As if to reinforce the point that the RA-02 is a more evolved amplifier design, it does avoid the occasional sharpness of the original RA-931MkI, trading bite for an altogether more relaxed perspective through the top end.

Of course, it's worth remembering that although the sonic performance of the RA-02 is in the top drawer of 'budget' amplifiers, it's certainly competing with more powerful models than the 'equivalent' RA-01. Given that the performance of both the RA-01 and RA-02 is similar, if not indistinguishable, then the value of the latter hinges on the remote control. Either way, you are guaranteed the satisfaction of owning the latest

model from a lineage that stretches back to the dawn of modern, specialist audio. And that's a pedigree that cannot be over-estimated.

WORDS PAUL MILLER

## TECHNOLOGY

This amp is not only more flexible than the RA-931MkII, but also that bit more capable. The latter achieved 2 x 50W/8 ohm while the RA-02 musters some 2 x 55W/8ohm, increasing under dynamic conditions to 90W, 150W, 195W (9.9A) and 160W (12.6A) into 8, 4, 2 and 1 ohm loads respectively. Like the RA-931MkII, however, the RA-02 restricts its output into very low impedance loads through VI-limiting rather than hard clip, allowing distortion to rise with increasing output. As a result, the 'sound' of the RA-02 will be moderated by the difficulty of the speaker load, regardless of perceived volume.

Into a non-reactive 8 ohm load, distortion is very consistent at ~0.012% across its 50W range and increases gently at HF (~0.055% at 20kHz) as the effect of its negative feedback is diminished. Once again, the 'character' of the amplifier is revealed in the unusual and extended *even-order* harmonics that dominate its spectrum. In much the same way, the amplifier's output impedance increases from 0.04 ohm through bass and midrange frequencies to 0.085 ohm at HF, although this is not sufficient to significantly modify the overall amp/speaker response. Other parameters, including channel balance (0.15dB), S/N ratio (83dB ref odBW) and overall gain (+42dB) are all par for the course at this price level.

For graphical downloads depicting the RA-02's response, output impedance, distortion and dynamic output, plus a full QC Suite report, *HFN* readers are invited to visit [www.milleraudioresearch.com](http://www.milleraudioresearch.com).