

Rotel RCD-971

Compact Disc player

John Borwick

The Rotel brand, with headquarters in Japan, has built up a reputation for high class sound quality but without the high prices that such audiophile aspirations normally demand. External appearances are therefore on the plain side and frivolous extras are avoided. The innards, however, are put together with close attention to the dictates of genuine hi-fi using components sourced, and selected by 'golden ears', from round the world. The current 900 Series of hi-fi separates imported to the UK by Gamepath runs to 20 items of which three are CD players. A more elaborate model, the RCD-991, is available, which provides adjustable dither and balanced outputs.

Made in China the RCD-971 heads the UK trio, with an ambitious technical specification despite weighing a mere 5.3kg (11.7 lb) and measuring 440 by 316 by just 72mm high including the round shock-absorber feet. At its heart are dual 20-bit Burr-Brown PCM-63P D/A converters, which act in differential mode to cancel out conversion errors, and a Pacific Microsonics PDM100 HDCD (High Definition Compatible Digital) eight-times oversampling digital filter. This means that the RCD-971 can extract the extra dynamic range and fine detail present in HDCD-encoded discs, which are being manufactured by an increasing number of specialist labels. In addition, there is a claimed improvement in the quality from standard CDs.

The large Rotel-manufactured toroidal mains transformer has separate secondary windings to provide independent IC-stabilized power supplies for the analogue and digital stages and is placed in the front left-hand corner as far as possible from sensitive circuitry. A single L-shaped pc board carries all the components except for those associated with the display and play modes selection which are mounted on two small boards just behind the U-section aluminium front panel.

Centre-stage on the fascia are the disc drawer and vibration-proof linear motor transport, which makes sense from the stability point of view but, at least in my review sample, the drawer was somewhat trigger-happy. Any heavy-handedness when loading a disc, or the slightest touch on the front, caused the drawer to shoot inwards trapping the half-inserted disc or fingers in the process. The display is on the



right, giving clear indications of track number, elapsed time, play mode and a 4 x 4 calendar chart of up to 16 tracks. The main operating keys are set below the display in the order Open/Close, Play, Stop, Pause and Track Skip.

Less frequently used controls are on the left and comprise Fast Search, Repeat (current track or all tracks), Programme (up to 20 tracks), Review (of programmed track numbers), Random Play, Scan (first 10 seconds of all tracks), Time (switching from track elapsed time to track or total time remaining). There is also an HDCD indicator LED which lights when the machine identifies and starts to play an HDCD encoded disc. A neat remote control unit gives access to all the above functions and adds a numbered key pad for direct selection of track numbers for Play or Program purposes, plus a Clear button to remove individual tracks from a Program sequence.

The rear panel carries a 1.5m captive mains cable, a pair of gold-plated phono sockets for analogue output and a gold-plated coaxial digital outlet providing an unprocessed digital data signal for sending to an external D/A converter or digital recorder. The convenience of digital-to-digital recording is well understood, but I doubt if many outboard D/A converters would produce much improvement over that built-into this CD player. There is no provision for listening on headphones.

Performance

Many things about this CD player made an immediately persuasive impression. There was a ready response to track selection and other commands, practically zero mechanical noise during play and a rugged refusal to be upset by footsteps, etc. Above all, the sound quality had an appealing openness

and immediacy with sharp attack and excellent presence. Resolution of low level signals was exemplary and the loudest, heavily scored passages still retained plenty of definition. Bass had solidity but in no way obscured the detail, simply contributing to the overall feeling of an unusually extended bandwidth.

These virtues seemed to work with all types of music from solo piano and voice through chamber music, choral groups and full orchestra. With test results matching the superior technical specification in every particular, I was soon ready to give the Rotel RCD-971 my stamp of approval as the equal of any player at the price.

There remained the need to evaluate this unit's HDCD capability for which I would have liked to run three sorts of test: (a) comparing the sound quality from HDCD encoded discs with the same material in normal CD form, both played on the RCD-971; (b) comparing the RCD-971 with a standard non-HDCD ready deck as reproducers of HDCD discs; (c) comparing the two decks as reproducers of normal CDs. I was frustrated so far as the first test was concerned because the handful of HDCD discs I could muster, mostly on the Reference Recordings label, had no ordinary CD equivalent that I could locate.

The second type of test, however, revealed the wider dynamics and splendid resolution of the new

discs. Stravinsky's *Firebird Suite*, *Rite of Spring* and *Song of the Nightingale* with the Minnesota Orchestra conducted by Eiji Oue (Reference Recordings ⊕ RR-70CD) provided good ammunition. The recording engineers had gone all out for realism, so that the quiet opening of *Firebird* was at a level that tempted me to set the volume at a higher than usual position. However, particularly with the RCD-971, this meant that the orchestral climaxes reached window-rattling sound pressure levels. After I had established the optimum setting, the impact of such wide dynamics was very impressive. Mind you, my quiet countryside location helped and first-class amplification and speakers are essential. Like the other technological marvels in the pipeline, DVD-Audio and Super Audio CD for example, HDCD cannot really make its full impact with mid-fi equipment or in a less than ideal listening environment. The effect was relatively muted on a standard CD deck with both the quietest and loudest passages a shade less crystal clear.

Another HDCD disc that impressed me with its crisp resolution featured Vivaldi Concertos 'for diverse instruments' played by the Philharmonia Baroque Orchestra conducted by Nicholas McGegan (Reference Recordings ⊕ RR-77CD). This disc was reviewed by NA in our September 1997 issue and, though he was listening on a non-HDCD player, he concluded, 'The disc is superbly recorded, allowing us to revel in every sonorous detail of solo and continuo playing alike'. With the advantage of HDCD decoding, I found the instrumental timbre and ambience more than usually lifelike.

Playing conventional CDs on the two decks did produce a slight preference for the RCD-971, certainly enough to confirm my earlier decision that this is a CD player to be accorded a warm welcome and a strong recommendation ☺

Specification

Frequency response ± 0.5dB 20Hz-20kHz

Total harmonic distortion plus noise 0.0035%

Phase linearity ± 0.5 degree

Signal-to-noise ratio 107dB

Dimensions 440W x 72H x 316D mm

Weight 5.4kg

Manufacturer The Rotel Company Limited, Tokyo, Japan

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UK retail price £400