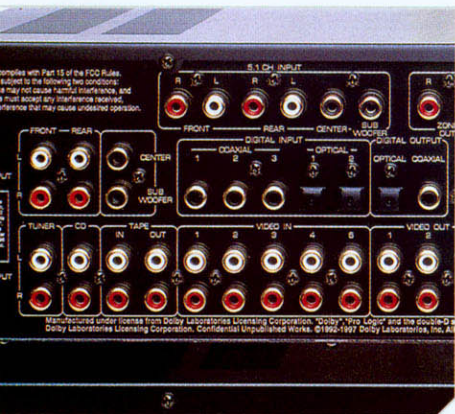




The processor acts as the control centre...



... while the RMB-1075 delivers the power



Extensive connectivity on the RSP-976 processor



Each of the five channels has a binding port

ROTEL RSP-976/ROTEL RMB-1075 ♦ £900/£800 ♦ 01908 317707 (GAMEPATH)
♦ www.rotel.com

Brothers in arms

SPECIALIST HI-FI MANUFACTURER ROTEL EXCELS AT PRODUCING GEAR THAT OFFERS OODLES OF 'BANG FOR THE BUCK' AND THIS HOME THEATRE PROCESSOR/AMPLIFIER IS NO EXCEPTION, SAYS STUART M. ROBINSON

Back in the December 2000 *HCC Special Edition* supplement, we encountered Rotel's flagship surround processor and power amplifier, the RSP-985 and RMB-1095. Both left a lasting impression – the 985, while not exactly on the cutting edge, provided engaging, powerful and thoroughly enjoyable processing, while the 1095 offered unrivalled amplification at its price point.

But let's face it, £3,450 for the pair may not be within everyone's reach, so Rotel has introduced two more affordable stablemates, the RSP-976 processor (£900) and the RMB-1075 power amplifier (£800). £1,700 is a far more viable proposition for many enthusiasts and, dare I say it, is likely to prove to be a far superior investment than a similarly priced receiver.

Unlike its bigger brother, the RSP-976 isn't THX certified (either Select or Ultra) but other than that, the two models are clearly very similar – they both have the same understated looks and legible, uncluttered facia. The 976 does however, make use of a front-panel display, a feature missing from the 985 and a welcome addition. The 976 is undoubtedly technophobe-friendly, an ethos extended to the no-nonsense instruction booklet which accompanies the unit, within which each aspect of operation is

fully detailed in a concise and straightforward manner.

A glance at the rear panel is enough to encourage more advanced users because, thankfully, there are no obvious in/out omissions. We have inputs for eight analogue sources, plus a 5.1 input for an SACD or DVD-Audio source, five S/P-DIF digital inputs (three of which are coaxial), two outputs and five analogue outputs, one set being dedicated to the operation of a second zone. Video connections are also plentiful, the 976 possessing five composite and S-video inputs with three outputs for each and two sets of component (or American-style RGB) inputs, plus an output.

You want more? How about a direct zone 2 IR sensor (or keypad) input, two IR outputs, an external remote jack which is Xantech compatible, two 12V triggers and an RJ-45 terminal for controlling the Rotel via third party software? You'll find them all on the rear of the 976.

So the front and the rear look good, but what about the internal design? Well, the Rotel isn't any great shakes – in fact it's something of a rats nest of cable bundles and strangely placed boards. Unlike the RSP-985, the 976 isn't based around a Sample Rate Systems 'DSP' board – I'm not entirely sure whose work it is but

RATINGS

ROTEL RMB-1075 POWER AMPLIFIER

Highs: A neutral, forceful and exciting delivery at home with almost any loudspeaker
Lows: None

Sound	★★★★★
Looks	★★★★★
Features	★★★★½
Overall	★★★★★

FEATURES

Connections: 5x banana-capable binding post pairs; 5x single-ended phono line level inputs; DB-25 terminal; 12V trigger input; 12V trigger output
Other features: THX-Ultra certified
Dimensions: 430(w) x 77(h) x 385(d)mm; Weight: 17kg



there are far too many surface-mounted capacitors for my liking.

Right, now that's out of the way, let's change moods and take a quick look at the RR-969's remote control. It's a superb pre-programmed/learning design, boasting operation and aesthetics which put many rival controllers to shame, including the one supplied with the RSP-985. It has a lovely textured feel, backlighting, macro capabilities and true DVD (or VCR) transport buttons, menu and navigation keys.

The only negatives are that the power button is a little close to the volume up button, the source and listening mode keys are beneath a sliding panel and more importantly, increasing or decreasing the system volume is painfully slow, but that's the fault of the 976 processor not the remote. I have no qualms about the RMB-1075 amplifier - it's another exceptional design from Rotel. The first impression is that it's a featherweight compared to the hulking 1095, but on close inspection its design is flawless. A large centrally positioned toroidal transformer feeds five individual amplification circuits which, aided by a total capacitance of 80,000µF and 20 15A output transistors, can deliver 120W into each channel simultaneously given an 8Ω load. The presence of a THX-Ultra badge on the front of the unit also helps to inspire confidence.

The RMB-1075 actually has a feature missing from its more expensive sibling, namely the provision of a 12V trigger which, if you have a similarly equipped processor such as the 976, enables another level of system automation. Otherwise the rear panel terminals are fairly standard - five sets of chunky banana-capable binding posts, five single-ended phonos and a DB-25 multichannel input. Unfortunately, these aren't balanced inputs, but then let's remind ourselves that Rotel has tried to produce an affordable high-performance amplifier that will appeal to the masses. If your aspirations are a little loftier, there's always the 1095.

SIMPLE SETUP

Installing and configuring the RSP-976 is nothing out of the ordinary - time alignment (in milliseconds) for the centre, left and right surrounds, bass management and output level adjustment, all aided by clear onscreen menus. Only one unspecified crossover is available, my guess would be at 100Hz, and it's engaged whenever a channel is specified as 'Small'. However, the usual flexibility constraints apply, namely the inability to select 'Large' for any channel if the front L/R pair are 'Small', with or without a subwoofer. The good news is that the calibration noise also extends to the subwoofer,

so no fumbling around looking for a calibration disc. The bad news is that it's only available when a surround mode is already engaged.

There are a number of additional options. Each input has its own submenu where any one of the available digital inputs can be assigned, along with a custom input label, default processing mode and even the digital output used should one wish to pass signals to a MiniDisc or CD recorder. A potentially natty feature is the ability to adjust the subwoofer output level according to mode, so one can apply a subtle boost to Dolby Digital and DTS modes and a cut for purist stereo music listening. Unfortunately, the 'Dolby' setting affects both Dolby Digital and Pro-Logic - if you're running full-range loudspeakers, the subwoofer should be active in the former mode (for the LFE information), but defeated or attenuated in the latter (to prevent bass doubling). Therefore, to obtain correct 5.1 playback levels, one is unfortunately presented with far too much bass in Pro-Logic mode. However, it turns out that the calibration menu, if entered when individual processing modes are engaged, can store independent sets of parameters, so at least some compensation is on-hand. The implications are difficult to explain and the system difficult to use, but the idea is, at least in theory, a good one. ▶▶

RATINGS

ROTEL RSP-976 SURROUND PROCESSOR

Highs: A sonic tour de force with a superb remote

Lows: Some strange areas of operation

Sound	★★★★★
Looks	★★★★
Ease of Use	★★★★
Features	★★★★
Overall	★★★★

FEATURES

Sound formats supported: Dolby Digital, Dolby Pro-Logic (Dolby Surround), DTS, PCM via S/P-DIF (maximum sample-rate supported 96kHz)

Connections: Inputs: 8x analogue phono pairs; 5.1 channel phono array; 2x Toslink optical & 3x coaxial electrical digital; 5x composite video; 5x S-video; 2x component/RGB video
Outputs: Main: 5x analogue phono; Zone 2 pair; 4x analogue record/output pairs; Toslink optical & coaxial electrical digital output; 4x composite video; 4x S-video; component/RGB video; Zone 2 IR input; Xantech compatible control input; 2x 12V trigger outputs; RJ-45 computer control terminal
Dimensions: 440(w) x 121(h) x 303(d)mm
Weight: 6.9kg

TECHNICAL ANALYSIS

ROTEL RMB-1075 POWER AMPLIFIER

Manufacturers rated output:
120W per channel
Max output at onset of clipping:
129.2W RMS @ 2.79% THD
Fidelity firewall output:
109.1W @ 0.04% THD
Frequency response:
20Hz-20kHz +/-1dB

Our figures correlate pretty closely with the manufacturer in this case. The frequency response is constant too

◀◀ There's also another menu for zone 2 operation, within which the source and output level can be selected. So, all in all, the 976 is remarkably flexible and shows potential, but Rotel's designers need to think a little harder about some areas of design.

While listening to the RSP-976, it's easy to forget just how competitively priced it is for the performance level attained, especially in the multichannel modes. When one forgets about the below-par internal construction and concentrates on the noises the Rotel makes, it would be easy to believe that this was a processor with a £2,000 price tag.

DYNAMIC IMPACT

The dynamics of soundtracks are worthy of particular note – from the floor-shaking rumble of the opening *Toy Story 2* logo, to the delicate twittering bird that circles the rear of the room when Buzz first attempts to rescue Woody, all soundtrack elements are delivered both clearly and precisely. The placement of individual soundtrack elements also deserves special mention; listening to the same disc, I noticed that dialogue either off-screen or placed half-left or half-right blended seamlessly with onscreen action, rather than hopping from one distinct location to another. If a tightly integrated and convincing soundstage is your thing, then the Rotel won't disappoint.

Ideally, I'd like to see some sort of re-equalisation circuit included to tame bright soundtracks (especially as the front-panel tone controls only affect the front L/R channels), but otherwise the Rotel is surprisingly even-handed across all frequencies. Bass is deep and forceful,

while high frequencies never become excessive or sibilant.

Although it does outperform most of the receivers you'll come across these days, musically the 976 is nothing to write home about. It can be a little aggressive in the upper midrange and has a tendency to flatten dynamics, but they're sins I'm willing to forgive. There are four 'DSP' modes on hand, but I have the impression that they're really only included as a curious sideshow – none have adjustable parameters or even a fancy name to catch the imagination.

STAR OF THE SHOW

The RSP-976 may be a bargain, but the true star of this pairing is the Rotel amplifier. When you compare the RMB-1075 to an £800-£1,500 receiver, it's instantly apparent how many design compromises are made when processing and amplification is crammed into one box. The 1075 oozes confidence and controls all aspects of soundtrack reproduction with a vice-like grip no matter what the playback volume. It falls a tad short of the RMB-1095 in terms of sheer forcefulness, but that really only becomes a factor if you have a terribly difficult load. I paired the 1075 with both large and small loudspeakers and, aside from minor misgivings about the Rotel's lower midrange control with a set of B&W Nautilus 804s, the 1075 never failed to deliver.

Reviewers tend to use that tired old cliché about amplifiers not breaking into a sweat, but it's actually true in this case. After a long day of experimentation, the unit was only just warm to the touch, an indication that even I hadn't managed to get to the bottom of what the 1075 has to offer.

So the Rotel combination has a number of missing features – Surround EX, Pro-Logic II and DTS 6.1 Discrete, to name but three minority formats. However, one cannot escape the exceptional value and performance provided by both processor and amplifier. If your budget will only stretch to one component, then the RMB-1075 is an obvious choice. It'll wipe the floor with any receiver-based amplification and be ready and waiting for the day when a processor comes into your life. If that processor turns out to be the RSP-976, then be prepared for an exciting, involving and action-packed home theatre experience ■