Balanced Design Concept

The design of Hi-Fi products is a combination of science and art. Scientific knowledge, for example, enables us to predict accurately a variety of factors: — power output into a specified load, distortion, slew rate etc. What it cannot do is accurately predict the quality of sound which will be achieved by a Hi-Fi product in a domestic Hi-Fi system. In the last analysis this is the most important factor, the raison d'etre of the Hi-Fi system, does it help you enjoy music in your home?

Unfortunately, in recent years this objective seems to have been forgotten and to have been replaced by the quest for ever improving specifications usually claimed to have been achieved by the latest wonder circuit featuring 'Super triple class AAA' or changes to the negative feedback loop which feeds this way and that. Such panaceas, in our view, tend to have a short life cycle and generally add little to our industry's overall understanding of music reproduction.

We however, have very strong views on many aspects of performance design such as high output current, limited bandwidth, large power supplies, direct signal paths, phono stage design, protection circuit distortion, belt driven turntables and the importance of high quality components etc. We look at specific product design, in terms of achieving a sensible balance of objectives. Not surprisingly, we call this approach **The Balanced Design Concept**. The Rotel approach is to ensure that within the resources available, each aspect of the technical design has been optimised to provide the most effective musical result.
Power Amplifiers

RB890  RB870BX  RB850 (Best Buy)

Three great power amplifiers. Each a culmination of science and art, each without a peer in its class. All the ideal “straight wire for gain” amplifiers that bring abundance of truly musical enjoyment. The rugged well-tuned power supplies, the high output current capabilities, the selected close-tolerance components, plus the special bridging circuit that triples the power output when two identical amplifiers connected. The RB890 and the RB870BX have metal-capped toroidal power transformers, while the RB850 has twin EI-type transformers. All assure a silk-smooth musicality on even the most demanding musical passages.

RB890 Specifications

Continuous Power Output
160 watts* per channel, min. RMS both channels driven into 8 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion
Bridged Power
450 watts (measured min. RMS driven into 8 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion)
Frequency Response
15 to 130,000Hz ±0.2dB
Signal-to-Noise Ratio (S/N, A)
120dB
Dimensions (overall)
445.6x112.7x385.5mm
Weight (net)
12.3kg

RB870BX Specifications

Continuous Power Output
100 watts* per channel, min. RMS both channels driven into 8 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion
Bridged Power
300 watts (measured min. RMS driven into 8 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion)
Frequency Response
4 to 100,000Hz, ±0.5dB
Signal-to-Noise Ratio (S/N, A)
110dB
Dimensions (overall)
445.6x112.7x335.5mm
Weight (net)
9.9kg

RB850 Specifications

Continuous Power Output
50 watts* per channel, min. RMS both channels driven into 8 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion
Bridged Power
150 watts (measured min. RMS driven into 8 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion)
Frequency Response
4 to 100,000Hz, ±0.5dB
Signal-to-Noise Ratio (S/N, A)
110dB
Dimensions (overall)
445.6x112.7x327.2mm
Weight (net)
8.5kg

Control Amplifiers

RC870BX  RC850 (Best Buy in combination with RB850)

Two control amplifiers. One to pair off perfectly with either RB890 or RB870BX, and one to match competently with RB850. RC870BX to satisfy demanding audiophiles, RC850 to offer astonishingly good musical performance at an easily affordable price. The elder comes with a oversized toroidal power transformer, has a direct CD input with its independent volume control, is equipped with full tape dubbing and video dubbing facilities, and incorporates no tone controls. The younger has a moving coil phonofr facility, full tape and video dubbing capabilities, and tone controls with a definitive tone off switch. Both are great fun for listening.
AM/FM Tuners

RT870
RT850A
RT830A

The Rotel high standard tuners. Exclusively designed to deliver unprecedentedly vivid, musical quality out of broadcasting performance. The specially selected stereo decoders, the well-built, dependable front-ends, the convenient electronic tuning and presetting (RT870/RT850A), the no-nonsense and useful controls. Even the power supplies are developed with a close care with lots of spare energy to get clear details out of music signals.

Each has been fough out and developed thoroughly to complement the Rotel renown amplifiers. While all the tuners sound outstandingly good in their own right, they perform spectacularly well together will all the other Rotel components — as they are so conceived as parts of the Rotel super performance system.

All three tuners are available in FM/MW/LW version (model numbers RT870L, RT850AL, RT830AL).

Receivers

RX875
RX855
RX850A

The Rotel receivers are unique. Unlike many receivers available on today's market which give good values only in convenience, the Rotel receivers offer one of the best values not only in terms of convenience/versatility, but also of listening pleasure comfortably suited to audiophiles. Acting as a single unit that contains both amplifier and tuner, each receiver allows the user a wide variety of musical sources without undue complexity. The amplifiers and the tuners utilized inside the Rotel receivers are all identical to the circuits taken from the highly acclaimed separate components. The RX850A is a brilliant example — it basically combines the RA820A amplifier and the RT850A tuner in one attractive box, standing out as one unusual product of optimum cost performance in total aspects of fully useful features, superb sound quality, appealing face and very affordable price.
Cassette Decks

**RD835**  
**RD845**  
**RD855**  
**RD865**

All four Rotel cassette decks are carefully designed to match compatibly with the other Rotel components. Very good sound quality. Reliable mechanisms. Useful controls and buttons. Solid high performance.

The RD835 and the RD845 employ power assisted soft-touch cassette control operations, are equipped with Dolby B and Dolby B/C noise reduction systems respectively, and have a MPX filter switch for a better recording. The RD855 and the RD865 incorporate two-motor electronic full logic cassette controls, have automatic tape selections for metal, special (chrome) and normal tapes, and are equipped with Dolby B/C and B/C/HX Pro noise reduction systems respectively. For the level display, the RD855 utilizes a LED-array system and the RD865 a fluorescent indicators with a 4-digit digital tape counter. Each model comes enclosed in an extruded aluminum front panel and a rigid metal chassis. All for better musical performances.

(Dolby and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.)

**Tuner-Preamplifier with Remote Control**

**RTC850**

A super combination of the RT850A tuner and the RC850 control amplifier, plus a full remote control facility. The truly fine sound quality and the convenience of the wireless remote control operation blended in one neat package. All you need is choose from one of the three outstanding Rotel power amplifiers to drive the RTC850 for perfectly balanced high performance.

The built-in remote control system permits the remote operations for function selection, tuner presets recall, up/down tuning, volume level adjustment, power on/off, audio muting, and cassette controlling when either the RD855 or the RD865 cassette deck is connected. The remote control handset included. The RTC850 also comes equipped with the the random tuner presetting, the tone controls with the definitive tone on/off switch, the motor-driven volume control with a LED indicator, etc. And the usual straightforward Rotel's emotionally involving musical enjoyment.
Integrated Amplifiers

RA870BX (Best Buy)
RA840BX3 (Best Buy)
RA820BX3 (Best Buy)
RA820A
RA810A (Best Buy)

The super line up of Rotel integrated amplifiers. Why are they so good? Theoretically excellent laboratory measurements do not really tell you how good sound quality is. Moreover, "watts per channel" will not fully disclose how loud an amplifier will go, nor indicates whether an amplifier will get the best out of your speakers; and "total harmonic distortion" by any means will not describe all the subtle effects an amplifier may have on the music signal.

Rotel have concentrated painstakingly on all the other factors known to influence sound quality, and have been developing the highly acclaimed amplifiers which stand out in satisfying musical entertainment. The latest family of the Rotel amplifiers emphasize dramatically improved CD performance, yet maintain the usual outstanding phono quality, with new versatile useful features such as the direct CD switch (RA870BX) and video doubling (RA870BX/RA840BX3/RA820BX3).

Each of the integrated amplifier is carefully designed to give emotionally moving listening results in your home. Each is made individually to fit your personal needs, and whichever one you have chosen, it brings a joy to your heart.

---

### RA870BX Specifications

- **Continuous Power Output**: 80 watts * per channel, min.
- **DIN Power Output**: 150 watts per channel 1% THD, 4 ohms
- **Frequency Response**: 20 to 20,000 Hz, ±0.2 dB
- **Signal-to-Noise Ratio**: 40 dB (Phono, MC), 80 dB (Phono, MM)
- **Dimensions (overall)**: 444 W x 112 H x 153 D mm
- **Weight (net)**: 7.2 kg

### RA820BX3 Specifications

- **Continuous Power Output**: 30 watts * per channel, min.
- **DIN Power Output**: 50 watts per channel 1% THD
- **Frequency Response**: 20 to 20,000 Hz, ±0.2 dB
- **Signal-to-Noise Ratio**: 80 dB (Phono, MC), 80 dB (Phono, MM)
- **Dimensions (overall)**: 444 W x 86 H x 203 D mm
- **Weight (net)**: 6 kg

### RA810A Specifications

- **Continuous Power Output**: 20 watts * per channel, min.
- **DIN Power Output**: 32 watts per channel 1% THD
- **Frequency Response**: 20 to 15,000 Hz, ±0.2 dB
- **Signal-to-Noise Ratio**: 80 dB (Phono, MC), 93 dB (CD)
- **Dimensions (overall)**: 444 W x 86 H x 203 D mm
- **Weight (net)**: 6 kg
Compact Disc Players

RCD820BX2
RCD820B

These high performance compact disc players offer the latest in CD technology — 16 bit 4 times oversampling system. Featuring twin digital/analogue converters, which simultaneously convert both right and left digital signals, single beam high precision laser tracking and a fully programmable music track selection system. All the basic needed to extract very high quality music reproduction from the exciting compact discs now available. The RCD820BX2 has all the features of the RCD820B, plus an additional regulated high quality power supply with an independent transformer to give clean power rails to the D/A converters and an exclusive Rotel's twin two stage analogue filter circuitry. Effectively removing the digital hash from the audio circuits, resulting in a much cleaner audio signal with significant benefits of greater definition, resolution and musical enjoyment.

Both models come with attractive remote control handsets for a convenient remote operations. Very fine products on their own right, they fully complement Rotel's other super performance components.

Turntable RP845 — NOT AVAILABLE IN THE UK

Following the fabulous and highly acclaimed RP850 and RP830 turntables, Rotel proudly present the newest turntable with the same outstanding ability to deliver sheer musical performance at a realistic price. A high standard finished wood cabinet supported by a heavy metal bottom chassis, a tonearm stem fixed independently on a thick center metal plate, a close tolerance smooth center spindle, specially designec highly effective insulator feet, a super damped Norsorex mat, the heavy aluminum diecast platter, an attractive smoked dust cover with the insulated hinges etc. Plus a high quality, high rigid tonearm with special radial bearings for both horizontal and vertical planes. An end result is the usual Rotel's outrageously musical enjoyment. Naturally, perfectly compatible with all the other Rotel high performance components.

RP845 Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tonearm System</td>
<td>Static balanced straight pipe arm. direct reading style gauge. anti-skate control.</td>
</tr>
<tr>
<td>Output Power</td>
<td>-</td>
</tr>
<tr>
<td>Signal-to-Noise Ratio</td>
<td>70dB (D/B)</td>
</tr>
<tr>
<td>Dimensions (overall)</td>
<td>435W x 190H x 365D mm</td>
</tr>
<tr>
<td>Weight (net)</td>
<td>7.4kg</td>
</tr>
</tbody>
</table>

RL850II Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Design</td>
<td>Anti-vibe baffle enclosure</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>20Hz to 20kHz</td>
</tr>
<tr>
<td>Impedance</td>
<td>8 ohms normal</td>
</tr>
<tr>
<td>Power Rating</td>
<td>20W RMS (50 watts)</td>
</tr>
<tr>
<td>Dimensions (overall)</td>
<td>440W x 250H x 240D mm</td>
</tr>
<tr>
<td>Weight (net)</td>
<td>7.3kg</td>
</tr>
</tbody>
</table>

* Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Claims for Amplifiers (applicable to the U.S.A. only).
* Specifications and design subject to possible modification without notice. * ROTEL is a registered trademark of THE ROTEL CO., LTD.

Speaker System RL850II

In all respects, the RL850II two-way speaker system competes with the most elaborate and expensive systems at a fraction of their cost. The carefully chosen frequency balance, unrestricted range, pinpoint stereo imaging, exceptional detail, all combine to achieve an unusually high musical performance. This UK designed and manufactured loudspeaker incorporates a high quality 200mm bass unit, 25mm soft dome tweeter, 4-element crossover, internal wiring with excellent Supra cable and the cabinet has a high quality Black Ash finish. Awarded “Best Buy” in HiFi Choice for the past 5 years, the RL850 is also a key element in The What HI? System award won by Rotel for the past three years.

THE ROTEL CO., LTD.
1-36-8 OHOKAYAMA, MEGURO-KU, TOKYO 152, JAPAN
ROTEL ELECTRONICS CO., LTD.
ROTEL BLDG., 3F, NO35, FU SHING N. ROAD, TAIBEI, TAIWAN, R.O.C
ROTEL U.K.
25 HEATHFIELD, STACEY BUSHES, MILTON KEYNES, BUCKINGHAMSHIRE, ENGLAND
ROTEL OF AMERICA
P.O. BOX 853, BUFFALO N.Y. 14240, U.S.A.
ROTEL OF CANADA
1755 PLUMMER ST. UNIT 20, PICKERING, ONTARIO, L1W3S1, CANADA