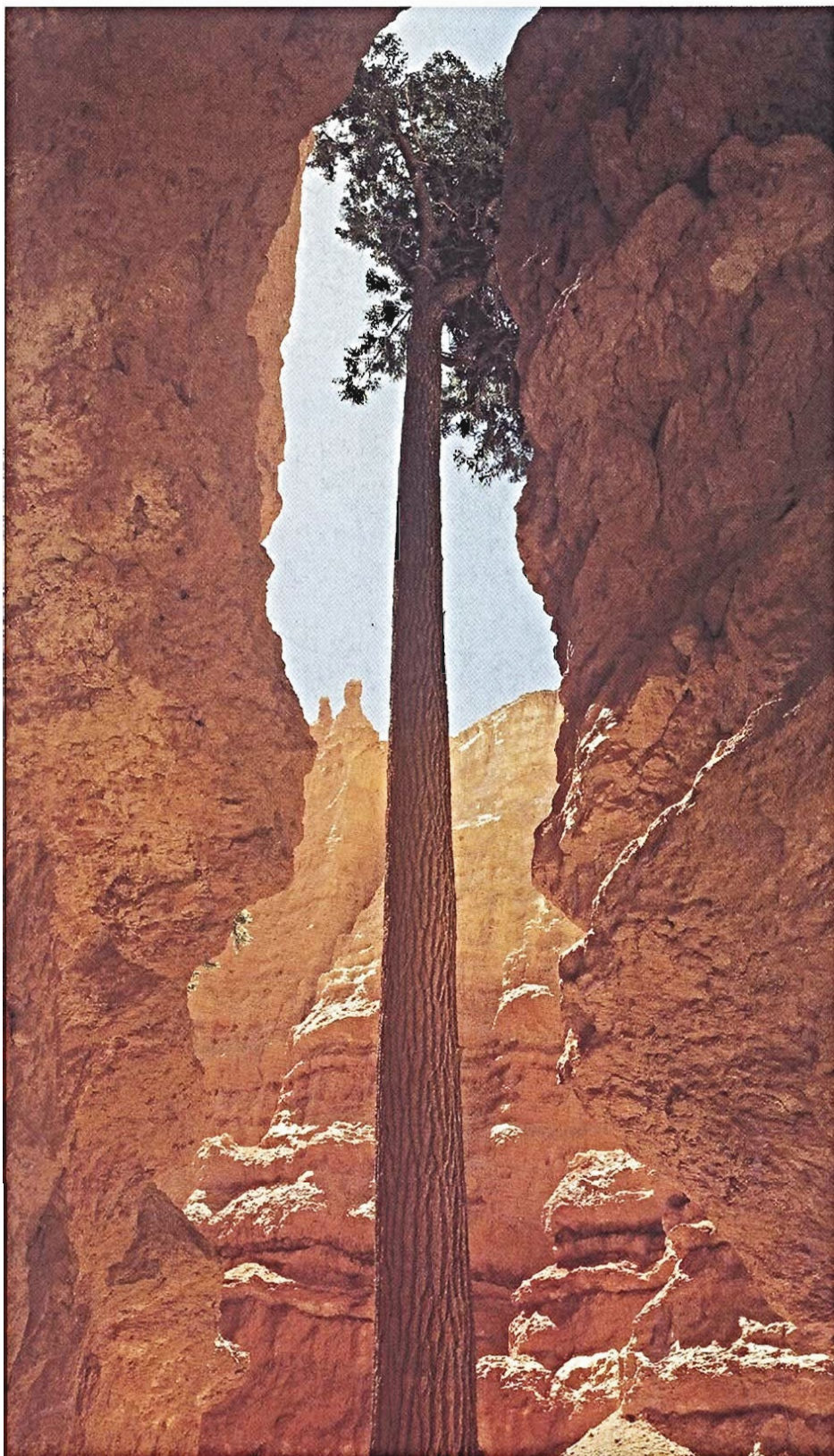


ROTEL *hiFi*



High End Series

Nearly always, designers operate within limits, especially of time and money. Deadlines and budgets constrain their whole approach and the problem they must solve is how to create good products within these constraints. However skillful they are, the result has to be a compromise.

But just sometimes a company decides to build a line of products from which compromise is completely eliminated. The designer has no constraints, 'merely' a challenge: to create the very best.

This is what Rotel has done with its new High End Series. For years we have been known throughout the world of audio for our ability to design and manufacture equipment that offers superlative sound quality and reliability at remarkably low prices.

That is still our fundamental strategy. It is based on the view that truly excellent sound is perfectly achievable, even from designs produced within quite severe cost constraints. Time and again over the years we have proved that to be true.

But at Rotel we have never claimed that the absolute ultimate in sound quality, the very best achievable reproduction, could be created within such tight cost constraints. Great value for money is clearly what many people want. But it must, somewhere, involve compromise.

Now, with the High End Series we have created a set of audio components intended for those music lovers whose requirement is utterly clear. They want the best, without compromise.

The seven units that make up the High End Series – power amplifiers, CD player, active controller, passive controller, phono equalizer and tuner – produce a level of sound quality that quite simply cannot be bettered with any currently available technology. They reproduce music with such depth, power and accuracy that the effect is almost uncanny: not so much reproduction, more a total recreation of the original sound.

One of the secrets of achieving this level of sound quality is simplicity, attained by excluding all elements that do not lie at the heart of the process. In the RH Series, anything that may adversely affect sound quality is eliminated, such as power meters, speaker switches, filters, and so on.

Components are selected on the basis of their capacity to produce the best possible sound, irrespective of cost. And if components of sufficient quality are not available, we have them exclusively designed and developed for our use.

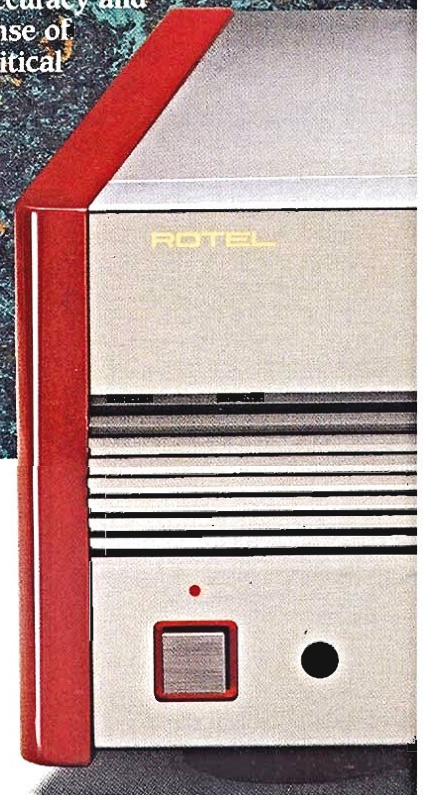
In systems that are limited by cost constraints, a typical compromise will be that the design is not totally symmetrical. The result will be that as volume levels increase, the reproduction of the sound will not be totally linear, and the system will sound strained.

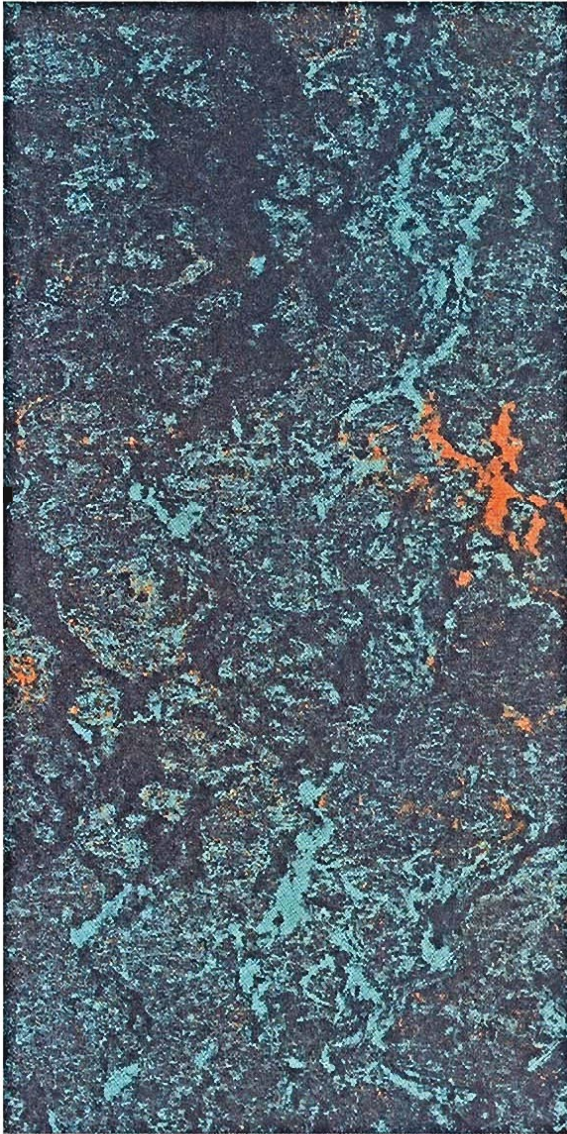
Only a fully symmetrical design, as featured in the RH Series, can give the accuracy and effortlessness at high volume levels that all true audiophiles look for. This sense of ease, combined with great power, is a key aim of the whole RH Series. It is critical in retaining the delicacy and beauty, as well as the depth and power, of great music.

The RH Series is Rotel's ultimate, definitive statement on what can be achieved with today's audio technology – with no compromise.

NO COMPROMISE

CD Player RHCD10





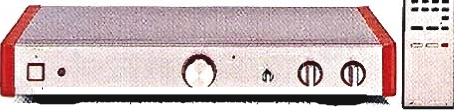
Power Amplifier RHB10



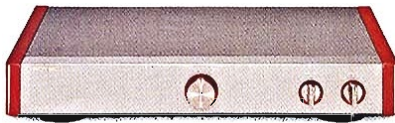
Power Amplifier RHB05



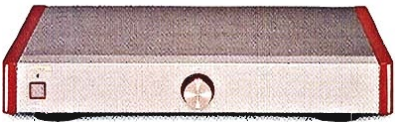
Active Controller RHA10



Passive Controller RHC10



Phono Equalizer RHQ10



FM Tuner RHT10



RHCD10

This machine is the unit that completes the RH Series. We have spared no effort and consumed many hours of design and listening tests to create our finest CD player yet.

The RHCD10 uses a precision 20 bit chip for the digital to analog conversion in each channel. This was chosen for sound reasons only. All of the components were selected expressly for the highest possible performance in all sections of the design. Twin power transformers provide the separate power supplies for the analog and digital sections. The digital section includes five sub-regulation stages to ensure stable power to critical circuits and the analog section includes six.

We employ an 8 × oversampling digital filter followed by a 3rd order Bessel analog filter. The audio board is completely symmetrical for maximum time integrity. This ensures that the signals create a stable sound stage and all movement in the music is being faithfully recreated from the disc, not due to anomalies in the circuitry. A circuit with different trace lengths would compromise the timing of the signals that make a stereo signal.

We have equipped this machine with absolutely first class facilities for the output section. The analog output stage is made with discrete output devices instead of the more common IC chip. This stage is constructed with high speed, wide frequency response transistors used in a non negative feedback topology (non NFB) and biased Class A. The open loop bandwidth of this stage approaches 400kHz and allows the RHCD10 to recreate the music on your discs with ease and musicality.

For the digital outputs we have BNC and RCA digital connectors as standard equipment and an AT&T ST connector is an option. Thus the RHCD10 is state of the art now and may be purchased with assurance that it will be upgradeable in the future, not immediately obsolete due to changes in technology.

Because we have used 20 bit DAC's this machine is endowed with a signal to noise ratio that is greater than the CD you

place on its tray! The music plays against a background of silence. From the loudest peak to the quietest pianissimo, all the musical notes will float free of distracting noise or hum. This has to be experienced to be truly appreciated.

Convenience features include indexing, variable mute, absolute phase inversion, a dimmer for the display, programming, random play and two different selectable digital filter responses. Most of these functions are available from the included remote control.

The exterior elegance is matched by the interior sophistication and technical competence. This is the CD player that truly completes the Rotel RH Series.





SPECIFICATIONS

Frequency Response 5-20,000Hz \pm 0.5dB
 Dynamic Range > 100dB
 Separation > 120dB Full bandwidth
 > 130dB 1kHz
 Signal-to-Noise Ratio > 115dB (A wrd.)
 Total Harmonic Distortion < 0.003%
 Linearity (w/o dither) \pm 1.0dB, at -90dB
 (with dither) \pm 0.5dB, at -90dB
 Analog Output Impedance 100 Ohms
 Analog Output Level 2.0 Volts

Digital Filter 8 x Oversampling
 Digital to Analog Converters 20 Bit Precision
 DACs
 Digital Output Impedance 75 Ohms (BNC,
 RCA coax)
 Digital Output Level 0.5 Volts peak to peak
 Dimensions (overall) 470(W) x 151(H) x
 344(D)mm 18-1/2" x 5-31/32" x 13-1/2"
 Weight (net) 10.7kg/23.5 lbs



AT&T ST connector <optional>



The RHB10 power amplifier's job is to take the music signal from the other components of the RH Series and provide the energy to drive loudspeakers. It must do this with supreme accuracy, as it provides so much power – a minimum of 200W power channel RMS, both channels driven into 8 ohms, from 20Hz to 20kHz. Output into 4 ohms is virtually doubled, and into 2 ohms is increased still further. The RHB10's enormous current capability ensures it will satisfactorily drive any high performance loudspeaker system.

With so much amplification, even the slightest discernible flaw would be noticeable. That is why the RHB10 has an insignificant maximum total harmonic distortion of only 0.03%, way below the level of audibility, no matter how sensitive the listener.

It might be thought that such a large amount of power would give the subjective impression of an of an enormously loud sound. It is true that extremely powerful amplification set-ups do often sound to be extremely loud – but, almost paradoxically, that is frequently a sign that something is wrong.

The quality of the sound in the RH Series is so pure, effortless and distortion-free that it is easy to listen at high

volume levels and be seduced into thinking it is not especially loud – until it is compared with any other source. This is always the hallmark of a truly top quality sound system. In creating the RH Series, Rotel's designers never forgot the overriding purpose of the system, which is to make the music being reproduced sound as wonderful as when it was played originally.

This feature was clearly perceived by one of the UK's leading audio publications, *What Hi Fi?*, which said: "The same effortless precision is apparent with the second disc. The RH Series presents sound in such a way that you get the true feeling of intricate musical elements being carefully and meticulously arranged to produce the best effect. This sophisticated approach is in contrast to some ... contemporaries – many muscular amplifiers have an iron-fisted approach which makes them sound clumsy and unconvincing with, for example, those subtle musical nuances which prefer velvet gloves."

One reason the RHB10 achieves this is

its symmetrical design. In its output stages, using the well established Darlington quadruple parallel, fully complementary push-pull circuit, the configuration is completely symmetrical and mirrored top, bottom, left and right. The extraordinary balance and linearity that this gives at all power levels is a major contributing factor to the system's capability.

The pre-driver stages also comprise a fully complementary push-pull differential amplifier which feeds two emitter-follower stage. Distortion resulting from any variation in input signal impedance is minimized and an extraordinarily high signal to noise ratio of 130dB is achieved. Perfect stability is assured by eliminating thermal variation from center-point voltage and DC drift.

In the RHB10/05 Class A amplification is used at low power levels (which typically is much of the time) to maximise the linearity of reproduction, while for very high-level signals Class B amplification is used to combine extremely low distortion with efficient heat dissipation.

To eliminate static and dynamic interfer-



RHB10



RHB05

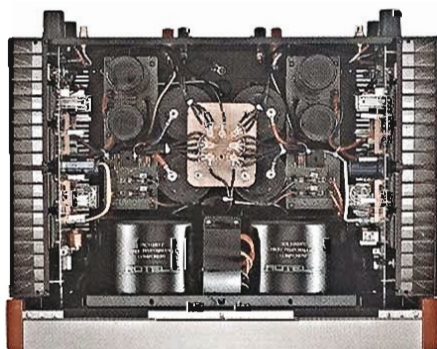
ence and achieve the highest possible levels of channel separation, the amplifier is built as two identical mono power amplifiers on a single chassis with massive individual 1kVA (RHB10)/550 VA (RHB05) toroidal mains power transformers. These have been specially designed for their sound quality characteristics and have large power reserves and minimal magnetic flux leakage. Separate regulated supply lines feed the pre-driver, output and non-signal circuits such as the protection relays and indicators. Both the output and pre-driver stages are independently regulated through separate filter capacitors (RHB10) and rectifiers, which eliminates interference between the output and input stages.

Electronics protection circuitry is provided that is specially designed to ensure the minimum effect on sound quality. This prevents pop noises caused by surge currents at power on/off, overloading, overheating and damage from shorting of speaker terminals. Large heat sink vanes form the slides of the unit, and this use of

natural air convection for cooling eliminates the need for a fan, which would induce both mechanical and electrical noise.

Throughout the RHB10/05, the quality of components used reflects the "No compromise" philosophy of the whole RH Series. Precision Vishay resistors with tolerances down to 0.01% are used in the signal path and the negative feedback loop, as they are in other members of the RH Series. The Vishay resistors are chosen for their total neutrality and exceptionally low noise characteristics – resistors are often a prime source of noise in audio systems.

Heavy stranded 6N (99.9999%) pure stress-free copper cables are used from the output stages to the speaker terminals. High grade glass fiber printed circuit boards have double thickness copper tracks for high power handling. All components are selected not only because of their technical specifications but on the basis of lengthy subjective testing, to ensure they contribute correctly to the sound quality.



RHB10



RHB05

SPECIFICATIONS RHB10

< > ...RHB05

Continuous Power Output 200 watts* < 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

Continuous Power Output 330 watts* < 160 watts* > per channel, Min. RMS, both channels driven into 4 ohms from 20 to 20,000Hz with no more than 0.03% total harmonic distortion

Total Harmonic Distortion (20-20,000Hz) No more than 0.03% (continuous rated power output)

Intermodulation Output (60Hz:7kHz=4:1) No more than 0.03% (continuous rated power output)

Speaker impedance 4-8 ohms
Peak Current (0.1 ohms 10μsec, 1 pulse)

150A < 100A >

Slew Rate ± 40V/μsec

Damping Factor 550 (20 to 20,000Hz 8 ohms)

Input Sensitivity/Impedance 0.775V/30 kohms

Frequency Response 10-130,000Hz, +0dB, -1dB

Signal-to-Noise Ratio (IHF A Network) 130dB < 120dB >

Crosstalk (20-20kHz) 100dB < 90dB >

Power Requirement 120V/60Hz, 220V/50Hz, 240V/50Hz

Power Consumption 550 watts < 400 watts >

Dimensions (overall)

470(W) × 195(H) × 375(D)mm

18-1/2" × 7-11/16" × 14-25/32"

< 470(W) × 80(H) × 365(D)mm >

< 18-1/2" × 3" × 14-3/8" >

Weight (net) 28.5kg/62.7lbs < 13.5kg/29.7 lbs. >

*Measured pursuant to the Federal Trade Commission's Trade Regulation Rule on Power Claims for Amplifiers (applicable to the U.S.A. only).

The RH Series features both the Active Controller, the RHA10, and the Passive Controller, the RHC10, enabling you to select the system that is best suited to your particular requirements. Both units provide a superlative level of sound quality.

For those who want the convenience of remote control, and the option of siting their controller some distance away from the power amplifier, the Active Controller is the ideal choice. The RHA10 is a pre-amplifier that provides a high current, low impedance signals to the power amplifier and can be used with long lengths of interconnect cables without any significant degradation in sound quality.

The RHA10 features the totally symmetrical, push-pull circuit topology used in other members of the RH Series. The complete symmetry of the design is important in eliminating all phase differences between the two audio channels. Such is the subtlety of the information contained in the best recordings, even the slightest of phase differences between the

channels can adversely affect sound. The result can be a "wall-paper" quality to the sound, which lacks any sense of depth. In contrast, the RH Series creates a three dimensional sound stage, capturing the true character of the original performance.

The Active Controller features the same top quality components used throughout the RH Series, such as the Vishay resistors, the toroidal power transformer, and a precision attenuator. In particular, the attenuator lies at the heart of both the Active and Passive Controllers. The attenuator is a component of extraordinarily high quality, even by the critical standards of the RH Series. It controls the volume output of the whole system and as it is directly in the signal path, the quality and accuracy of this attenuator is critical to the overall performance of the system. That is why it has to be a component of such exceptional quality.

The attenuator uses a conductive plastic material that has the minimum of resistance variation. Mechanically it is a four gang device that handles both right and left

channels, providing extremely accurate channel balance.

Components of this quality cannot be bought off the shelf and the attenuator is built exclusively for Rotel by a company that specialises in making attenuators for the professional recording industry. It has been chosen not only because it is extraordinarily silent in operation, but also because it is tonally neutral.

The level of quality represented by the attenuator extends to the other elements. The input and recording output selectors are rotary switches normally found in high precision industrial instruments. Gold plated contacts ensure negligible influence to the sound quality and provide long term reliability and durability.

The single high grade glass fiber printed circuit board is double sided, with specially formulated extra thick copper tracks on the bottom and copper shielding on the top. Rotel's use of top quality copper tracks on printed circuit boards is a good illustration of how sound quality has been the ultimate criterion for the design of the RH Series. In many top quality audio sys-

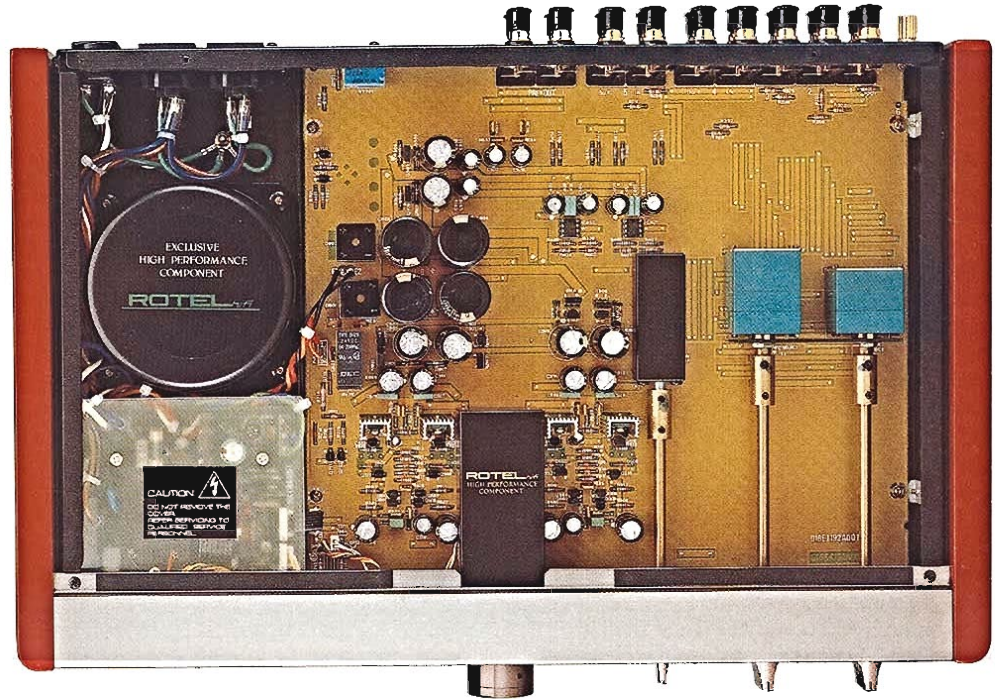


tems, there is a trend towards using exotic, expensive cabling instead of printed circuit boards. While developing the RH Series, Rotel's designers tested this approach. However, after substantial research, they decided that the use of top quality cooper tracks on a printed circuit board produced a more neutral, uncolored sound.

Many people find a remote control device extremely useful, and this is one specific benefit of the Active Controller. The remote control unit not only makes it possible to adjust volume control, it also can be used to switch the controller on and off (if it is left in standby model). A further facility is provided by the fact that two other units, such as the Power Amplifier and a CD player, can be attached to the Active Controller so that they are also switched on and off with the Controller. However, such is the quality of the sound provided by the RH Series, Rotel has decided not to use electronic switching of input sources, as this could degrade the sound quality. The remote control unit also features a mute control, and various controls for the RH Series Tuner: 16 preset, automatic and manual tuning, and memory store.

Although five signals can be fed into the Active Controller, only one is connected at any particular time, making it impossible for the other inputs to adversely affect sound quality. In most systems, which are not so perfectionist in their design as the RH Series, the ground plane of all inputs would be connected, which can degrade sound quality. In the RH Series, only the ground plane of the active input is connected. The Active Controller features a record output switch with five positions, plus a separate control for switching the record output off.

The RHA10 also features a tape buffer amplifier, which eliminates any possibility that a tape recorder might degrade the output signal being listened to while a recording is being made.



SPECIFICATIONS

Total Harmonic Distortion (20Hz-20kHz, rated output) No more than 0.004%

(20Hz-20kHz, 10V output) No more than 0.004%

Intermodulation Distortion (60Hz : 7kHz - 4 : 1) No more than 0.004%

Input (1-5) Sensitivity/Impedance 140mV/13 kohms

REC OUT Impedance 100 ohms

Output Sensitivity/Impedance 0.775V/100 ohms

Frequency response 4Hz-1kHz +0dB, -1dB

Signal-to-Noise Ratio (IHF A Network) 100dB

Power Supply AC 120V/60Hz, 230V/50Hz

Power Consumption 12W (2.4 W during standby)

Dimensions 470(W) x 76(H) x 532(D)mm
18-1/2" x 3" x 13 1/16"

Weight 7.7kg/16.90 lbs



Purity implies simplicity, the exclusion of all inessentials, and this is exactly what the RHC10 passive controller provides. It is intended for the audio enthusiast whose sole aim is the best possible sound quality and who does not require remote control, or need long interconnect cables.

A passive controller dispenses with everything that can affect sound quality: not only all filters, tone and loudness controls, or graphic equalizers, but even the mains power supply. It is thus a non-powered controller for high level input sources such as CD players, tuner and tape decks. All these provide a line level signal, which can be passed onto the power amplifier without the need for further boosting, making it unnecessary for the controller to be powered.

Passive controllers have become feasible because many audio enthusiasts nowadays no longer have a turntable/phono cartridge as part of their system. It is the phono equalization process, in which the preamplifier boosts the very low level signal typically produced by high quality

phono cartridges, that requires the preamplifier to be powered. If you are happy to operate with only line level input sources, the RHC10 linked to the RHB10 will provide you with a complete amplification system of unparalleled quality.

Thus, the RHC10 reduces to the absolute minimum the number of elements that can affect the sound quality. The result is a superb level of control with an unparalleled purity and lack of coloration.

However, since it is a passive device and thus has no power of its own, it must be very carefully balanced between the power amplifier and the input sources fed into it. Also, because the Passive Controller has no power source of its own, if the interconnect cables extend beyond about three metres, they can start to affect sound quality, causing losses in high frequencies and dynamics. Interconnects should therefore be kept as short as possible.

The RHC10 provides the basic features of an audio controller: the control of

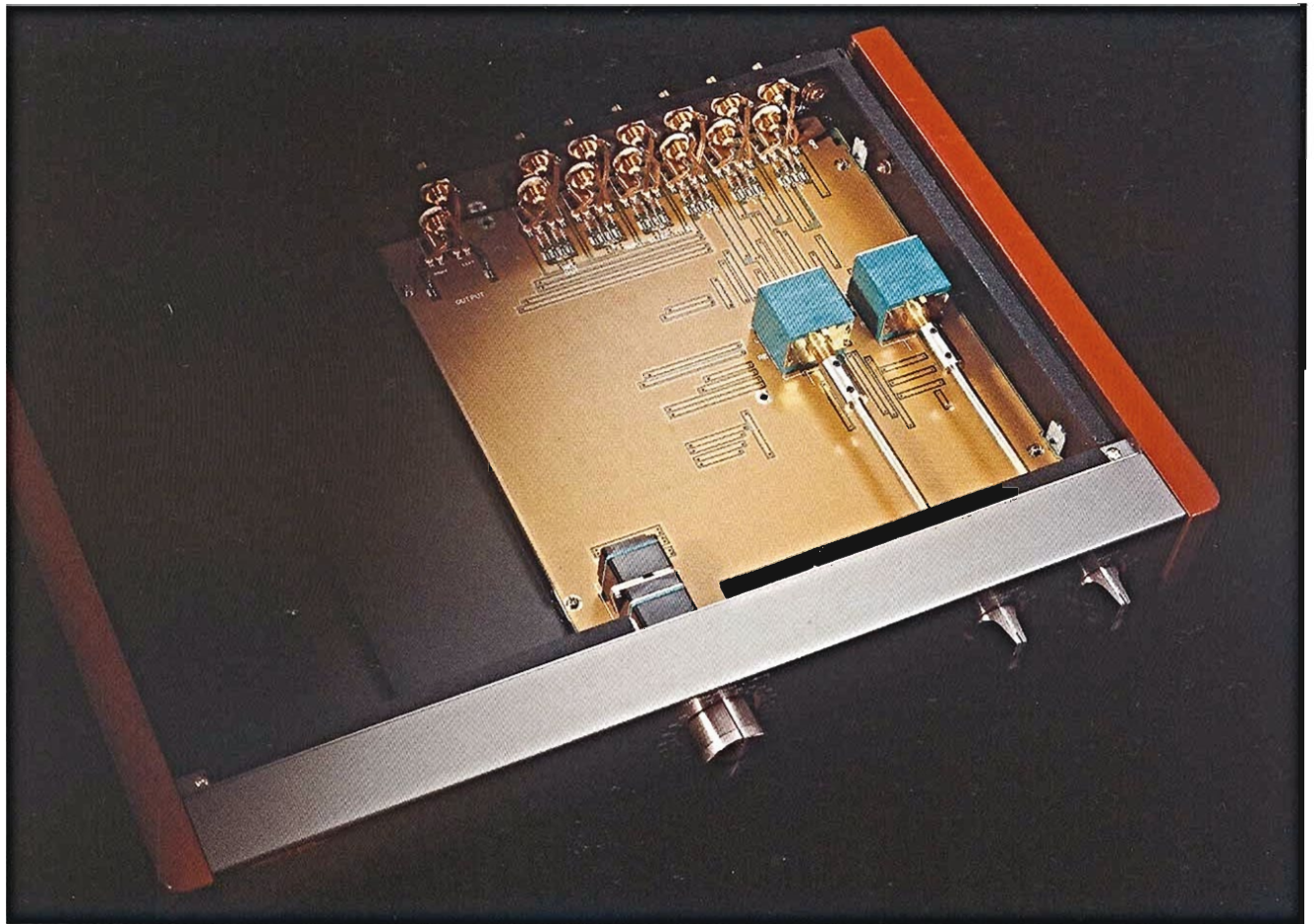
volume, and the facility for accepting multiple sources and selecting input and output. It features five pairs of inputs which are fed directly to the source selector switch and then via a variable attenuator, which acts as the volume control, to the output sockets for direct connection to the RHB10 power amplifier.

The role of the attenuator in the Passive Controller, which is the same unit as that used in the Active Controller, is absolutely critical because it acts as a volume control by simply reducing the level of the input signal from its maximum.

Both RH Series controllers aim for total anonymity: they must form a completely transparent link between a musical source and the power amplifier. By providing that anonymity, the attenuator is a crucial component of the whole RH Series.

Apart from the attenuator and source selector switch, the only other switch on the RHC10 is a recording output selector switch. This makes it possible to independently route the chosen input source to an alternative pair of output sockets. This





enables the user to record one source while listening to another. The input source selector has five positions, while the recording selector is numbered from one to four plus an Off position.

As in the Active Controller extra thick gold-plating is also used for the input and output connectors, as well as the ground terminal post, and durable teflon material is used for insulation material. RCA type jacks developed exclusively by Rotel provide solid connections with the minimum effect on sound quality.

SPECIFICATIONS

Input (1-5) Impedance 10 kohms
Main Out Impedance Source impedance
Crosstalk (20-20kHz) 80dB
Channel Separation (20-20kHz) 75dB
Inputs 5 (five) unbalanced
Outputs 2 (two) unbalanced output (Rec Out & Main Out)
Dimensions (overall) 470(W) x 76(H) x 332(D)mm 18-1/2" x 3" x 13-1/16"
Weight 5.0kg/12.1 lbs





Receiving Perfection

FM Tuner

RHT10

FM broadcasts can provide an extremely high quality signal source nowadays, giving listeners access to musical material that may be difficult to obtain in any other way, and even unique in the case of live concert broadcasts. To provide real listening pleasure a tuner must not only be capable of fine reproduction of the received signal, but also great stereo stability, very low noise, and maximum rejection of unwanted spurious signals.

The RHT10 is the finest tuner Rotel has yet built, which means it is the leader of a very distinguished line. Every aspect of design and production has been examined and where possible, improved. The power supply has been upgraded and new, top quality components have been incorporated. The symmetrical printed circuit board layout gives precise imaging and depth in the soundstage.

The RHT10 has several innovative features that play an important part in creating its state of the art capabilities. One is a stereo decoder built from discrete components, in contrast to the more conventional approach of using a stereo decoder integrated circuit (IC). The vast majority of tuner manufacturers use stereo decoder

ICs, bought from another company. Adopting this approach means that the producer of the tuner is constrained by the quality of the decoder IC, and often they involve a compromise.

One problem concerns power supply. With demanding musical passages the level of current required within the IC can reach very high levels, exceeding the IC's capacity, and the result can be a collapse in the sound stage. There is little that a producer of a tuner can do about this. However, by developing its own custom built stereo decoder from high quality discrete components, such as transistors and operational amplifiers, Rotel has been able to optimise the power supply for each element and thereby ensure that this does not occur. Thus, the discrete approach has given Rotel complete control over the sound quality of the tuner.

Another important feature of the RHT10 is the fact that separate circuitry, including IF buffer, ceramic filter and signal decoder components, is used to supply the data to the tuner's display. This eliminates any possible adverse effects on the received signal, and therefore the final sound.

High quality components are used throughout the RHT10 such as Vishay resistors in the audio signal path and negative feedback loops, and exceptionally fast ICs in a buffer amplifier at the output stage. These ICs not only provide low impedance drive, they also create an extremely transparent sound quality with excellent imaging and depth.

To provide the best possible performance under all conditions, the RHT10 has a High Blend facility, for use if there is background noise due to reception difficulties, for instance. By feeding a component of the high frequency signal from one of the stereo channels into the other, High Blend cancels out the noise. However, this should only be used when needed, as it incurs a slight narrowing of the stereo image. A wide/narrow bandwidth selector can also help improve sound under difficult conditions.

Other controls featured in the RHT10 include mute on/off, mono/stereo, automatic and manual tuning, and 16 presets. The display shows the station number and frequency, and a signal strength meter is provided.



SPECIFICATIONS

FM TUNER SECTION

Usable Sensitivity 10.8dBf/0.95 μ V (75 ohms)

50dB Quieting Sensitivity:

Mono 14.8dBf/1.5 μ V (75 ohms)

Stereo 37.2dBf/20 μ V (75 ohms)

Signal-to-Noise Ratio (at 65dBf):

Mono 87dB

Stereo 82dB

Harmonic Distortion (at 65dBf): 1kHz 0.05% (mono) 0.1% (stereo)

Frequency Response 30 to 15,000Hz, \pm 0.5dB

Capture Ratio 1.0dB

Alternate Channel Selectivity:

Wide/Narrow 60dB/80dB

Adjacent Channel Selectivity 15dB (Narrow)

Spurious Response Ratio 100dB

Image Response Ratio 80dB

IF Response Ratio 100dB

AM Suppression Ratio 60dB

Stereo Separation: 100Hz/1kHz/10kHz

45dB/50dB/40dB

Subcarrier Product Ratio 60dB

SCA Rejection Ratio 70dB

Output Level 1.5V

Antenna Input 75 ohms unbalanced

MISCELLANEOUS

Power Requirement 120V/60Hz, 220V/50Hz, 240V/50Hz (depending on destinations)

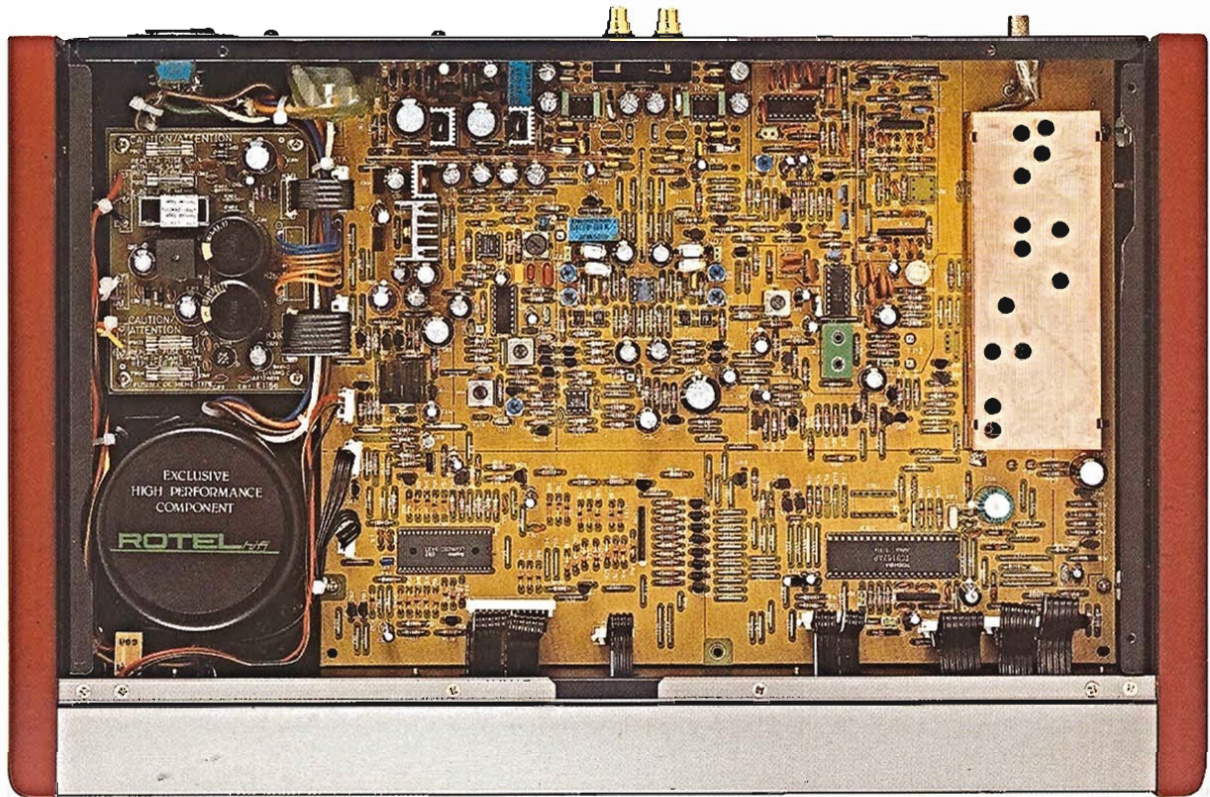
Power Consumption 12 watts

Dimensions (overall) 470(W) \times 76(H) \times 332(D)mm

18-1/2" \times 3" \times 13-1/16"

Weight (net) 5.5 kg/12 lbs

*Specifications and design subject to possible modification without notice.



Some audiophiles maintain that the best possible recorded sounds is still provided by top quality vinyl discs, played on superlative turntable/pickup cartridge systems. The RHQ10 phono equalizer is for them.

The RHQ10 has been designed to work with the best turntable/cartridge systems available and specifically to help reproduce just those qualities that some audio enthusiasts swear are best captured by vinyl discs — the emotional quality, warmth, atmosphere, and dynamics of the original musical performance.

The unit's only control, apart from an on/off switch, is a simple volume control at the center of the front panel. This is the same very high quality attenuator used in the Active and Passive controllers, with its minimal resistance variation and four gang construction, providing extremely accurate channel balance.

From input to output, the RHQ10 uses the same top quality solid state components and has the fully symmetrical circuit topology as featured in the RHB10 power amplifier.

The RHQ10 is the first Rotel product for many years to use a special three-layered approach to equalization. The first process is a gain stage from the input cartridge signal, using a fully complementary push-pull circuit, which is extremely effective in maintaining an accurate frequency response. The second stage consists of equalization for high frequency content, which is carried out by a passive pole low-pass filter. The third process is a further gain stage, which uses active equalization for the low frequency requirement. An extremely accurate RIAA curve is ensured. Final output is via a single-ended, fully complementary push-pull circuit with Class A operation, eliminating any crossover and switching distortions.

The equalization technique used is another example of Rotel's no compromise approach that runs throughout the RH Series. If this approach is used in designs that are constrained by cost factors, the results is invariably excess noise. Because the RHQ10 was designed without cost constraints, it is possible for the very best components to be used, in sufficient

numbers. The results are a much sweeter high frequency performance than alternative types of equalization can offer, a sense of effortlessness, and extremely low subjective noise levels.

Does this type of painstaking attention to detail really pay off? Does it actually make a significant difference? The only true test is to listen for yourself. But it is surely significant that one of the most experienced and demanding audio journalists has described the RHQ10 as the finest equalizer he has ever come across in more than 20 years.

The RHQ10 will work with either moving coil or moving magnet cartridges, and features an ingenious method for selecting gain and impedance for both types. This is designed to minimize any adverse effect upon the sound quality that can be caused by mechanical switching.

Two pairs of output sockets are fitted to the RHQ10, a "Fixed 1" and a "Variable/Fixed 2". The first pair is for connection to a passive controller or preamplifier, and bypasses the volume control. The output is compatible with both the





RHA10 active preamplifier and the RHC10 passive controller.

The second can be used in one of two ways: either for connection directly to a power amplifier, when the RHQ10's attenuator will control the volume; or for connection to a passive controller or preamplifier when using a moving coil cartridge whose output is well below the normal 0.3mV sensitivity. In this case, the RHQ10's attenuator will again be bypassed.

The power supply in the RHQ10 is a high quality toroidal transformer that provides a high voltage and current supply with a substantial reserve margin. Each of the circuit stages is independently regulated for stability and interference elimination. The ground plane throughout is designed for low impedance and uses

high quality copper bus-bars.

Like the passive controller, the phono equalizer features a double sided, glass fiber printed circuit board and gold-plated circuit board and gold-plated jacks. Close tolerance 0.01% and 0.1% metal film resistors are used in the signal path, equalization and negative feedback loop. All capacitors are of top quality and selected for their excellent sound characteristics.

SPECIFICATIONS

Input (Sensitivity/Impedance) MM: 2.5mV/47 kohms 100pF MC: 0.3mV/100 ohms
RIAA (Accuracy) 20-20,000Hz, ± 0.1 dB
Output Level Fixed 1:0.775V/100 ohms (Rated at 0.3mV input)
Variable/Fixed 2:0.775V/100 ohms (Rated at 0.1mV Input)
Total Harmonic Distortion (20-20kHz) 0.005%
Signal-to-Noise Ratio (IHF A Network) MM: 90dB MC: 75dB
Overload (THD 0.5%, 1kHz) MM: 30dB MC: 30dB
Crosstalk (20-20kHz) 80dB
Power Requirement 120V/60Hz, 220V/50Hz, 240V/50Hz
Power Consumption 18 watts
Dimensions (overall) 470 (W) \times 76(H) \times 332(D) mm 18-1/2" \times 3" \times 13-1/16"
Weight (Net) 6.8kg/14.96 lbs.



FOR SOUND REASONS

Different aspects of the High End Series provide different characteristics to the subjective sound quality. For instance, the circuit topology gives the system its capability to reach phenomenal output levels without any feeling of stress or strain. The exceptionally high quality of the components used throughout contributes particularly to extremely fine, stable imaging and depth. This results in the impression of 'air' around all the instruments and players.

The actual subjective noise level — as well as the measured noise level — is very, very low. Many amplifiers have low measurable noise levels but when used to listen to music, their subjective noise level is much higher. In the Rotel High End Series, the subjective level is so low, silence becomes "blackness". With appropriate music, where the sound decays into the blackness, this can create just as dramatic effect as very high volume output.

This brochure has described the features of the Rotel High End Series, and in the process has attempted to convey something of the subjective effects that its superlative sound quality creates.

But ultimately, when it comes to the finest available reproduction of music, words can only go so far. The human ear is the most exquisitely sensitive instrument for assessing sound quality. The only way you can come to know the extraordinary sound that the High End Line creates is to listen to it.

Interconnects

RHCC10

Speaker Cables

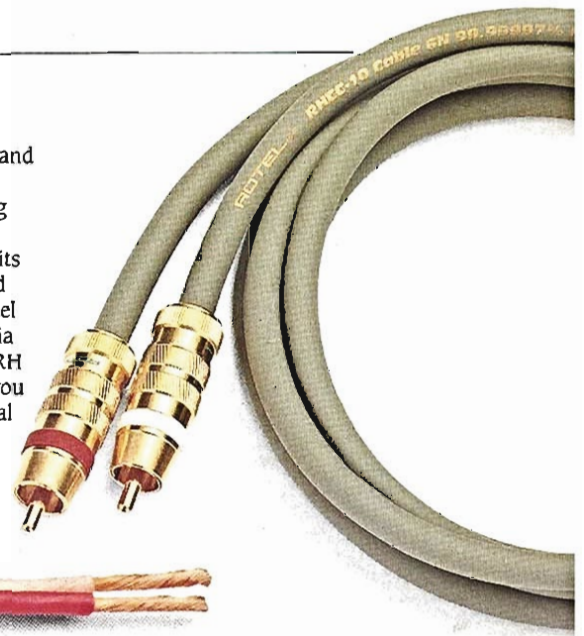
RHSC10

Nothing in the RH Series has been designed in isolation. That philosophy has extended even to the interconnects and loudspeaker cable, with extremely high quality products being used throughout development to ensure optimum performance.

These are heavy stranded 6N (99.9999%) pure stress-free copper cables. Nobody would claim cabling of this quality is cheap — even those for whom money is no object might take a deep breath before buying many yards — but there is no doubt about the effect it has on sound quality. The most sceptical of listeners can be

astonished by the difference it makes, and the most discriminating judges of fine sound all know that top quality cabling produces major improvements.

If you want your RH Series to reach its absolute peak performance, you should certainly consider it, which is why Rotel is making this cable available to you via its dealers. You can thus audition the RH Series at your dealer's, knowing that you are hearing the RH Series as its original designers did — to perfection.



ROTEL *hi-fi*

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