REDGUM Audio

Home Theatre system

RGH900 series

RGH900p

RGH900-1

RGH900-2

Owner's manual

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Why REDGUM?

The river red gum is Australia's most widespread and recognised tree, and it produces a wood that is truly unique. It yields the second hardest timber in the world, and this strength saw its widespread use in the railway lines that sprang up to connect the rapidly expanding colonies of early 20th century Australia. Its resistance to termites also made it the natural choice for building foundations, and to this day it continues to support some of our most historic structures.

The river red gum can be found on most river banks in mainland Australia, where its roots tap into water stored in the sands and its leaves provide food for the indigenous wildlife. It presence is synonymous with the Australian outback, at once a symbol of life sustaining water and the struggle against a harsh climate. When conditions turn dry, the red gum will adapt by shedding huge branches from its trunk in an effort to conserve moisture. As anyone familiar with camping in the Australian bush will tell you... don't ever pitch your tent underneath a red gum tree!

A celebrated part of our culture, it has perhaps been made most famous through the landscape paintings of Hans Heysen and Ronald Bull.

And while it was in wide use throughout Australia's history, it was not until the invention of the carbide saw that it was possible to cut the wood accurately. And only then could the real beauty of this unique hardwood be unveiled.

When polished it reveals a deep red lustre, highlighted by an intertwining and tightly packed grain structure. Fine irregularities add to this beauty, and it is highly sought after as a decorative wood for these unique aesthetic properties. No two pieces of red gum will match exactly, and this is as it should be. Like our products, each piece is outstanding and unique.

Now that you've heard the story of the Australian river red gum, it's time to listen to your very own REDGUM. We've carefully selected and lovingly crafted each piece before coupling it to some of the finest audio engineering that money can buy. The results? *Stunning!*

Once heard on a REDGUM, such expectations cannot be unheard!

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Unpacking

There should be two cartons containing your new amplifier system. Carefully unpack each one and inspect each component.

In the first carton there should be:

- an Owner's Manual
- the On/Off key
- a REDGUM key ring
- 2 remote control handsets, 1 as spare
- six RCA cables (3 x twin cables)
- a power cord
- the Pre-amplifier.

In the second carton there should be:

- the Power Amplifier
- a power cord
- one 3.5mm 'power control' cable.

If there is any damage to the amplifier, contact your dealer immediately. It is a good idea to keep the shipping carton and packing materials, as they can be used to protect your amplifier whenever you need to move it again in the future.

Setting-up your amplifier

Your amplifier consists of two components, a pre-amplifier and a power amplifier. You need to connect these components together before you can use your amplifier.



Important Safety Note

Do not plug-in any equipment to mains power until all connections have been made between your pre- and power amplifier, and your amplifier and other equipment.

Connecting the RCA cables

Use the supplied RCA cables to connect the output sockets on the preamp to the input sockets on the power amp, as shown on the diagram below. When doing this be careful to ensure that the correct Left/Right channel connections are made (use the coloured rings to assist you in this).



Connecting the 'power control' cables

Connect the 3.5mm phone plug 'power control' cable from the remote switching 'out' socket on the pre-amplifier to the remote switching 'in' socket on the power amplifier, as shown on the diagram below.



Connecting the amplifier to mains power

Connect the two IEC power cords to the outlets on your pre- and power amplifier, but do not plug them in to mains power until you have connected your speakers and source components to your amplifier.

Connecting your amplifier to other components

For safety reasons, always ensure that your amplifier and other components are turned off and disconnected from mains power before making any connections. Failure to do so may result in an electrical shock and/or damage to your equipment.

Loudspeakers

The loudspeaker terminals at the rear of your power amplifier are colour coded red (+) and black (-). There are six pairs of output terminals, one for each channel of sound.

Follow the steps below to connect each pair of amplifiers outputs to the appropriate loudspeaker.

Loudspeaker connection procedure

Step	Action		
1	Connect the:		
	 Left amplifier terminals to the respective Left speaker terminals; and 		
	 Right amplifier terminals to the respective Right speaker terminals. 		
	Make sure when doing this that you maintain the correct + to + and - to - connections.		
2	Ensure that all connections points are clean, and that all connections are secure. Check that wiring terminations look neat and that no loose strands of wires are touching any other terminals. Failure to make neat connections may result in poor sound, or amplifier damage.		



Note

We recommend using heavy gauge speaker cable for the best quality sound (the heavier, the better and with a 2mm minimum). (e.g. REDGUM ${\bf RGAEL}$ - 7AWG/10mm² high Damping Factor speaker cable)

Subwoofer

If you are using a subwoofer, there are two methods available to connect it to your amplifier. The correct method to use will depend on the input terminals available on your subwoofer.

Line level connection

If your subwoofer will accept a 'line level' input, use an RCA cable to connect the 'Subwoofer' output at the rear of your pre-amplifier to the

line level input on your subwoofer. Some subwoofers will have two line level inputs, one for the left channel and one for the right. As the signal going to the subwoofer is 'mono' it doesn't matter which input terminal you use, and you only need to connect one.

Hi level connection

If your subwoofer will only accept hi level inputs, connect the subwoofer output terminals at the rear of your power-amplifier to the hi level inputs on your subwoofer by following the 'Loudspeaker connection procedure' outlined above.

Disc players and other components

There are five input connections at the rear of your pre-amp labelled CD1, AV1, DVD, CD2 and AV2. Each of these inputs has a left and right channel jack, and these are colour coded white (left channel) and red (right channel).



Connect the output jacks of each of your components to the corresponding input jacks at the rear of the amplifier. When doing this, be careful to ensure that the correct left/right channel connections have been made. RCA connectors are colour coded to help you, so use the white plugs for the left channel and the red plug for the right channel. We recommend the use of high quality RCA interconnects wherever possible, for the best quality sound. (e.g. REDGUM's **RGAP 05 & RGAP 1**)

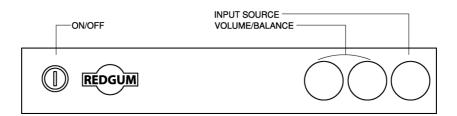
The amplifier inputs are all the same sensitivity, and will accept a signal from any line-level source (Media servers, Tuner, MP3, etc.). Therefore, any unused inputs may be used by other components. If you wish to connect a Turntable, you will need to purchase a separate Phono Preamplifier. REDGUM Audio produces a stand-alone Phono Preamplifier, **RGPH** models. If in any doubt, consult your dealer.

Record out

The Record Out/Tape Out sockets allow you to record a signal coming in through any of the input sockets (for example, your CD player). This signal is unprocessed, and fed directly from the input sockets to the Record Out sockets to allow the best quality "straight through" recording. Use RCA connectors to connect the Record Out sockets to your recording device.

How to use your REDGUM amplifier

At the front of your amplifier is an on/off switch, and three controls. Fully manual units have three rotary controls whereas remote controlled units have a fixed input control. These controls are used to turn the amplifier on and off, select the input source, and adjust the volume, thereby achieving the Dual Mono balance.



Turning the amplifier on and off

Your amplifier utilises either a key switch (or a rocker/toggle switch) as the on/off control.

For rocker/toggle switch versions, flick the switch on the front panel to turn the amplifier on and off.

For key switch versions, insert the key provided into the lock. When the key is vertical, the power is off. To turn on the power, rotate the key clockwise a quarter turn to the "3 o'clock" position.

Whenever power is first applied to this remote-controlled amplifier

When switched on at the power point, a beep will be heard after 2 seconds, once the MEPS (Minimum Energy Performance Standards) power supply has stabilised. This is followed by a rising 'whoop' sound; a number of beeps indicating its Firmware version; if set higher than ½ way, Left then Right volume controls are 'run down' till both set at ¼; a quick series of clicks from the Power-On Self-Test of all relays and indicating lights; concluded by a rising "ta-dah" tone, indicating that all is well. (See "Firmware" page at end of manual for complete listing.)

N.B. Remote Control models will only operate with *the key* in the *On* position, and then Power On/Off is via the remote control handset only. (If mislaid, check in Troubleshooting.) Toggling the Amp Power button returns unit to Standby.

Toggle Amp Power button to On; select Home Theatre mode via the Input button marked HT. Checking the colour of the light over the key switch, toggle the HT input between the modes blue for Stereo, and yellow for Home Theatre.



Note

Always make sure that the volume is turned down before turning on your amplifier, to protect your equipment.

Why do I hear sounds when turning my amplifier on and off?

Instead of a very intrusive relay in the speaker line to mask these noise, you can expect to hear sounds from your loudspeakers when turning your REDGUM amplifier on and off for a listening session. (N.B. These are different sounds to the first power-on "boot up" cycle with the Power-On Self Test. See "Firmware" page at end of manual.)

Usually, you will hear a slight 'pop' sound when turning on, and several low 'thunk' sounds when turning off the amplifier. These sounds are caused by electrical energy increasing and decreasing within the amplifier. They are a sign that your amplifier is operating normally, and are not a cause for concern.

More about 'thunks'

In greater detail, REDGUM amplifiers make audible 'thunks' when powered up and down, but usually only the latter ones are noticeable to people. A REDGUM amplifier has no need to mask this sound with a troublesome relay in the speaker line. In fact, customers can be reassured that this sound is a healthy sign that the amplifier is flexible enough to cope with such rapid changes in the power supply.

What actually causes the 'thunks' is best explained for the process during the powering down of a REDGUM Amplifolia Integrated (e.g. 60W, 120W or 200W), which has both channels run from a shared power supply. When the system is turned off, the first and weaker 'thunk' comes from both speakers together, as the power in the supply (which is common to both channels) "settles" below the voltage required for stable operation. The voltage available to the amplifier continues to fall till eventually the output stage of one of the channels goes into conduction, thus grabbing and dumping the remaining stored power into the speaker line of that channel. This dumping causes the remaining supply of power to collapse, causing the third and loudest 'thunk', but only through the channel where it was dumped.

As a result, the second channel is left with virtually no power to access from the shared supply. Since the separate output stages of the channels have reached their critical cut-off voltages sequentially, the second channel is deprived of the power required to produce a sound of the same proportions as the loud 'thunk' from the first channel. Because of component tolerances, the final 'thunk' sound is usually heard from the same channel.

This same process occurs in Home Theatre mode with any two of the six channels following this pattern of dumping the remaining stored power into the speaker line of those channels.

Input source selection

As a remote controlled unit, select your input only via the handset as the display control does not rotate.



Note

Always make sure that the volume is turned down before changing the input source, to protect your equipment.

5.1 decoding is done in the analogue domain direct from the 2 channel inputs, so stereo inputs are all that is required! The decoded signal then has the 5.1 channels 'reconstructed' in the REDGUM's 5.1 Home Theatre processor. The only complication occurs if the analogue signal out of the device has already been decoded. (To counteract this is as simple as setting your Video Disc Player to the default output of 2 channel PCM, thus all decoding will be accomplished perfectly.)

N.B. The RGH900p processor will not work if a digital decoder is placed in front of it, as the multi-channel information has already been removed from the signal path!!!

Volume and balance control

This REDGUM pre-amplifier has Dual Mono volume controls that are controlled remotely, but if required they can be adjusted manually.

The left rotary control affects the volume of the Left Front speaker and the middle rotary control affects the volume of the Right Front speaker. Adjusting either of these in Home Theatre mode automatically adjusts the balance between the Left and Right Rear speakers.

A Left-Right volume adjustment is done via the remote's Left-Right Arrow buttons till (e.g. in Stereo mode) the image appears central. *Except* for the "Bal" (Balance) and "Mute" buttons, all functions are as commonly used in remotes of all kinds.

N.B. The "**Mute**" button cuts the volume by approximately 15dB, i.e. it is a *partial rather than total Mute*. Pressing the "**Bal**" (Balance) button is the quick way to match the volume levels of both channels. This results by recalibrating the levels up to 200 times within 2 seconds to achieve +-0.1dB balance.

For greater detail about the basic functions of the Dual Mono Remote Control, please see the separate "*Firmware*" page (at end of manual).

N.B. Using the Dual Mono remote control handset, each amplifier can be personalised using REDGUM's own *Control Options* software (see *Technical Information Section* at end of manual). For example, these options provide choices of a Professional Fade, "Memory Select" of last-remembered volume level, and "Volume Control Movement" to help maintain the customer's intentionally set balance differential.

Using your unique Dual Mono remote control



Amp Power Toggles Power On/Off from StandBy

(N.B. Key must be in the ON/"3 o'clock" position)
(Retrieves last used input from memory, then adjusts its Volume & Balance to those stored values.)

For Home Theatre mode:

Toggles between Home Theatre mode (yellow light above key) & Stereo mode (blue light above key).

When in Stereo mode:

CD1	Input 1 (sets volume & Balance to previous level used)
AV1	Input 2 (sets volume & Balance to previous level used)
DVD	Input 3 (sets volume & Balance to previous level used)
CD2	Input 4 (sets volume & Balance to previous level used)
AV2	Input 5 (sets volume & Balance to previous level used)

Up arrow Volume Up **Down arrow** Volume Down

Left arrow Moves Image Balance towards Left **Right arrow** Moves Image Balance towards Right

Bal To match volume levels of both channels, achieving a balance by raising the lower, & lowering the higher, volume controls.

(Within 2 seconds, checks & recalibrates up to 200 times to achieve 0.1dB balance between channels.

Magic When held down, flashes red Mute light & beeps continuously indicating remote control battery level is sufficient.

Mute Red light indicates volume cut by approximately 15dB. i.e. is a partial rather than total Mute

N.B. For finer control of your Menu Options (e.g. setting Professional Fade), please see the separate Menu Options Technical Information Section.

Adjusting the relative loudness of different audio channels

There are four rotary controls at the rear of your pre-amplifier. These allow you to individually control the loudness of the rear, centre and subwoofer channels in relation to each another and the front speakers.

These volume levels are pre-set in the factory to the industry standard for 5.1 channel surround sound. However, each listening space is unique and people have different tastes when it comes to surround sound. You may wish to experiment with these controls to find the sound that suits you best.

The levels will return to their factory setting when all of the rotary controls have been moved back to the 12 o'clock position.

Achieving the best sound from your system

This section is provided to offer some general assistance to those seeking to get the very best performance from their system. You will be surprised by just how much improvement can be had be experimenting with a few simple factors. The following advice is based on our own years of trial and error, and we hope that checking through it makes a positive difference to the sound of your system.

Where to put your speakers

Deciding on the best placement for speakers is a very individual thing, as each of us have our own listening preferences. Try moving your speakers around while watching a DVD or listening to music until you find the result which suits you best, and make sure you check the manufacturer's recommendations for placement. The following are some general tips on where to place your speakers.

Front Speakers

Front speakers should be placed at an equal sideways distance from your television for the best stereo imaging. Try experimenting with the speakers from one to two metres to the side of your television to start with. Your front speakers will also benefit from being kept away from walls (at least 30cm) and out of corners (which can muffle the bass). You should also try angling the speakers towards your listening position, as this can further improve stereo imaging.

Centre channel speaker

Your centre speaker should be placed either on top of your television, or beneath it.

Rear speakers

Rear speakers should be placed alongside and slightly to the rear of the listening position, but not behind it. It is also important to elevate them so that they are well above your head when you are seated. They should be pointed directly at the listening position, but not angled up or down. This will create a diffuse and enveloping sound field like that in cinemas, and dubbing theatres where movie soundtracks are mixed. Be aware, however, that some speakers are designed to be attached to walls, or placed differently. Check your manufacturer's user manual for assistance.

Subwoofer

Don't place your subwoofer right in the corner of the room, as this can result in bass which sounds 'boomy' and unclear. Apart from this general advice it is difficult to tell where a subwoofer will sound best in any particular room. Consult the manufacturer's user manual for assistance.

Your listening room

Strange as this may sound, the room itself will have a profound affect on how your audio system responds. In fact, many experts consider the room to be as important to the sound as any other component in your system!

Did you ever notice how it's difficult to talk in some restaurants because you can't hear each other over all the other conversations going on around you? Yet another similarly sized restaurant is perfectly suited to intimate romantic murmuring. The difference lies in the surfaces around you. Here is a simple test – go into your bathroom and clap your hands; then clap them again in a room with carpet, curtains and other soft furnishings. Notice the difference? In a room with many hard reflective surfaces sound waves bounce around a lot before dying out. Not even the most expensive stereo in the world is capable of sounding good in such a challenging acoustic environment.

When it comes to your listening room the same principles apply. Wooden floorboards, polished concrete and slate tiles are all highly reflective surfaces. In a room without curtains or other wall furnishings the sound may be overly 'bright' or aggressive.

Similarly, it is possible for a room to be too 'damped' or absorptive. Where there are no reflective surfaces at all the sound may seem 'dead' or lacking in energy.

Luckily for us, most household rooms are a combination of the two. And, generally speaking, a combination of the two will bring about the best results.

Too many hard surfaces?

If your room is sounding too 'bright', try placing a large rug on the floor between your listening position and the speakers. Or hang some soft furnishings from the walls.

Too many soft surfaces?

If your room is too damped, try removing some of the soft furnishings from the walls, or rugs from the floor.

Managing the bass

Sometimes, low frequency waves can also bounce around and cause problems in a listening environment. This may be the result of the shape of the room, or the materials it is constructed from. Large pieces of furniture in a room can often help to break up these 'standing waves'.

While few of us will feel the need to redesign a room to improve its sonic properties, sometimes a small change, like placing a rug on the floor, can make a big improvement to the sound.

Other helpful hints

Corrosion and sound system terminals

Atmospheric corrosion can build up on speaker cable and interconnect terminals over time. Should this occur, removing and re-inserting wires and cables will clean and improve the contact and hence the quality of signal transmission. Always remember to turn off all equipment before connecting or disconnecting any wires or cables.

Placement of components in your sound system

Lots of fresh air is important to the health of your electronics. The louder you play your music, the more important it is to ensure that components receive adequate ventilation. Amplifiers, in particular, will generate a lot of heat. Placing the amplifier at the top of the stack, and ensuring adequate ventilation, will help to ensure that heat can be dissipated as it should.

Troubleshooting

The following troubleshooting guide is designed to assist you in identifying and rectifying any problems you may experience with your speakers.

Symptom	Likely cause	Recommended action
No sound	The amplifier is not turned on, or is not connected to the power outlet	Check that the amplifier is plugged into the power outlet, and turned on
The sound of a particular input source is not heard	Improper connections	Make sure that the external component is connected correctly
Stereo image is vague/bass response is lacking	Speakers out of phase	Check that the correct + to + and - to - connections have been made between the amplifier and your speakers
Buzzing or crackling sound when connecting wires	Equipment is turned on	Turn off all equipment before making any cable connections
Distortion at low volumes	Speaker wires are touching each other, or another terminal, and shorting the signal	Ensure that all cable connections are clean with no loose wires
	Amplifier is damaged	Check/repair amplifier
Distortion at high volumes	Amplifier is overloaded	Turn down the volume to avoid damage to your speakers and amplifier

If the problem cannot be resolved by any of these recommended actions you should make certain that the problem lies with the amplifier, as malfunction within other components may also be the cause of the symptoms. You can do this by borrowing a CD player and speakers that you are certain are working, and replace your normal components with these to test the amplifier in isolation. If the problem persists, please see your local REDGUM Audio dealer.

StandBy Power Consumption

Should I leave my amplifier powered on all the time, or is it better to turn it off at the power point after each listening session? There is no technical basis to insist on either action. But from a power consumption point of view, it is worth noting that since 2008, all REDGUM amplifiers have used a StandBy power system incorporating a highly efficient miniature power supply that powers a microprocessor using 'nanowatt' technology. In the worst case scenario (when voltage variations are at their greatest), it uses 0.25W. More typically, the StandBy power is 0.1W. To achieve StandBy, toggle Amp Power button on remote control. For manual units only, turn key to Off position.

Lost Keys

Lost keys can be replaced, as information is kept on file at the REDGUM factory about every product we manufacture. If you provide us with the Serial Number of your product (look under the amplifier, on the carton, or on the final test report issued with the product), we can provide you with another key. Just contact the factory with the details and a replacement key will be sent posted next business day.

(Email <u>lostkey@redgumaudio.com</u>)

Remote lost, mislaid or not working

Until the remote handset (or a new battery) is found, your amplifier can still be operated. For detailed instructions, see page 1 of the **Dual Mono Remote Control** *Technical Information Section* at the end of the manual.

Thermal cut-off

For your convenience, there are *no* replaceable fuses in any REDGUM amplifiers. Rather than the typical 'one shot' thermal fuses widely used, the only internal overload device in your amplifier is a thermal sensor. It will shut down the amplifier if the heat sink reaches the hot-to-touch temperature of approx 60°C (140°F). This would usually only happen if the speaker leads remain 'shorted' for a period of time.

Whether manual or remote controlled units, the warning of such an event is given by the behaviour of the blue power-on indicator light - down through the SignWave heat sink base.

Below any critical temperature – Once the temperature has risen to 35°C (95°F), the amplifier activates its "soft start" fan circuit. This gradually increases the speed till the temperature has built to a level definitely requiring a fan's assistance. (This method counters the abrupt noise of a fan circuit "kicking in" once a critical temperature is reached, whilst aiming at top speed immediately.)

Near thermal cut-off: The amplifier's blue power-on indicator light will start to flash at 50°C (122°F), indicating the temperature is rising. Starting slowly, the frequency of flashes increases as the temperature approaches thermal cut-off as set at 60°C (140°F) approx.

After thermal cut-off: The cause of the shut down is verified by a repeating sequence of **4 flashes/beeps** combined, followed by no light/sound for 4 seconds.

Should this occur, once your amplifier has returned to normal operating temperature, operation can be resumed by a simple restart - manual units via the key/power switch; remote controlled units via the handset.

If the repeating sequence has a total of **5 flashes/beeps** combined, there is a technical problem with the thermal sensor as it now cannot reset itself. Contact your local REDGUM dealer for a service call.

Circuit breaker rocker switch

Additional protection for your equipment is built into all REDGUM amplifiers in the form of a Circuit Breaker. Found on the rear panel of the chassis, it is a red **rocker switch** with **RESET** and **OFF** positions.

In the (unlikely) event of a power overload or an internal malfunction, the Circuit Breaker on the rear will activate ('trip'). The switch will automatically rock to the OFF position, and a red light will be seen inside the rocker.

In the case of a power overload, rocking the switch to the RESET position will turn on your amplifier again. Once reset, the red light will turn off and if a manual unit, you will hear a 'thunk' sound as the amplifier powers up. If remote controlled, the full "boot up" cycle of sounds and actions will start (see section - Turning the amplifier on and off)

However, in the event of an internal malfunction, resetting the switch will not be possible. When the switch is rocked to the RESET position, it will instantly flick back to the OFF position, and the red light will stay 'on'. Should this occur, the amplifier will need professional service.

If in any doubt whatsoever, please consult your local REDGUM dealer.

Not enough volume?

If you have pressed the Up/Down Volume buttons on your remote handset, but the resultant change in volume does not match previous adjustments, consider whether the amplifier's volume is already set to "**Mute**".

A quick visual check of the Input Selector display (right hand control) will indicate your current setting. If the "Mute" is On, a very bright red LED will be seen at the bottom centre of the display. If the "Mute" is Off, no light is visible in this position.

REDGUM has chosen a *partial rather than total Mute* as a matter of convenience. This allows the listener/viewer to quickly attain background music levels whilst talking, or hear the sound clues of a TV programme returning without needing to watch a silent screen throughout an ad break.

N.B. The "Mute" button cuts the volume by approximately 15dB.

Is my Remote battery working?

If you suspect that the battery in your remote control is due for replacement, a quick test using the "**Magic**" button on your handset will give you an indication of its condition. Your amplifier *must* be powered on, but need not be running for the test.

Hold the "Magic" button down while looking at the Input Selector display. With a healthy battery, the "Mute" indicator (the very bright red LED at the bottom centre) should flash and click continuously as long as the button is held down. If this is not the result, replace the battery.

Specifications

RGH900p

5.1 Home Theatre Pre-Amplifier/Proprietary Processor, Dual Mono remote-controlled

Signal Output: 0 - 700 mV

Harmonic Distortion: less than 0.01% (below Clipping) Intermodulation Distortion: less than 0.01% (below Clipping)

Signal to noise: greater than 90dB

Input Impedance: 10k ohms (matches 600 ohms - 50k ohms)

Frequency Response: 0 Hz (DC)- 4MHz)
Audio Inputs: 6 stereo inputs

Level Outputs: Separate for L rear, R rear, Centre & Subwoofer Cabinet Finish: Separate for L rear, R rear, Centre & Subwoofer solid Red Gum wood fascia, powder-coated 1.6 mm

steel chassis (black finish)

Dimensions: 420mm (W) x 360mm (D) x 145mm (H)

Shipping weight: 5.5 kg ca (8.16 kg cubic)

RGH900-1

5.1 Home Theatre Power Amplifier

Power Output: 6 x 150 Watt RMS (8 ohm) (285 RMS IHF Pulse x 6)

170+170 Watt RMS in Stereo mode

Harmonic Distortion: less than .009% (below Clipping) Intermodulation Distortion: less than .005% (below Clipping)

Signal to noise: greater than 100dB

Input Impedance: 10k ohms (matches 600 ohms - 50k ohms)

Slew Rate: greater than 65Volt / microsecond

Damping Factor: greater than 800

Frequency Response: 0.8 Hz to 80kHz (-3dB points)
Peak Current: greater than 150 amps

Audio Inputs: 6 stereo outputs

Suggested Speakers: Fronts: RGS Manna or Lucens; Rears: RGS Manna cabinet Finish: Fronts: RGS Manna or Lucens; Rears: RGS Manna or Lucens; RGS Manna

steel chassis (black finish)

Dimensions: 420mm (W) x 360mm (D) x 145mm (H)

Shipping weight: 16kg (11 kg cubic)

RGH900-2

Signature Series 5.1 Home Theatre Power Amplifier

Power Output: 6 x 250 Watt RMS (8 ohm) (285 RMS IHF Pulse x 6)

300+300 Watt RMS in Stereo mode less than .009% (below Clipping)

Harmonic Distortion: less than .009% (below Clipping) Intermodulation Distortion: less than .005% (below Clipping)

Signal to noise: greater than 100dB

Input Impedance: 10k ohms (matches 600 ohms - 50k ohms)

Slew Rate: greater than 65Volt / microsecond

Damping Factor: greater than 800

Frequency Response: 0.8 Hz to 80kHz (-3dB points)
Peak Current: greater than 150 amps

Audio Inputs: 6 stereo outputs

Suggested Speakers: Fronts: RGS Lucens or Regnans; Rears: RGS Manna cabinet Finish: Fronts: RGS Lucens or Regnans; Rears: RGS Manna solid Red Gum wood fascia, powder-coated 1.6 mm

steel chassis (black finish)

Dimensions: 420mm (W) x 360mm (D) x 145mm (H)

Shipping weight: 22kg (11kg cubic)

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Warranty

REDGUM amplifiers are warranted to be free of defects in material and workmanship, subject to the following conditions, for SEVEN (7) years from the date of purchase by the original owner. Warranty claims must be accompanied by proof of purchase, including date.

This warranty is subject to the following conditions and limitations:-

This warranty is void and inapplicable if the amplifier has:

not been used in accordance with the instructions contained in the manual:

been subject to misuse or abuse, one example of which would be damage consistent with speaker terminals being hooked to another electrical source;

been modified, repaired or tampered with by anyone not specifically authorised in writing to do so by REDGUM or its agents;

been damaged by accident, intent, neglect or transportation.

N.B. As per industry standard, fuses, lamps (LEDs) or batteries are not covered under warranty.

Should the product be faulty, the owner is liable for the cost of freight to the nearest REDGUM repair agent, or the factory. Should the product be found to be without fault, the owner will be liable for the return freight also.

Warranty Registration

Complete for warranty registration:

Name

Address

City

Zip/Post Code

Country

Date of purchase

Place of purchase

Model No.

Serial Number (if any)

Scan and/or email the details (including Serial Number) to <u>warranty@redgumaudio.com</u>.

(Not necessary for factory direct purchases.)

If you are not the original owner of this REDGUM product, feel free to send your unit's details to owners@redgumaudio.com so that you can be placed on the REDGUM Owner's Register. We welcome your feedback and would be happy to include you on our REDGUM Updates email list.

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