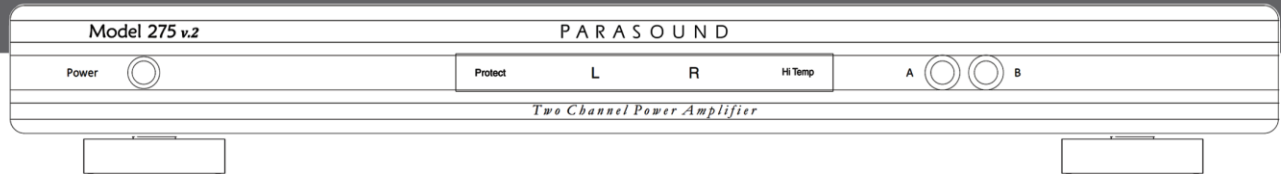


# PARASOUND

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## NEW CLASSIC



# Model 275 v.2

## Two Channel Amplifier

## OWNER'S GUIDE

## **Important Safety Instructions**

The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of “dangerous voltage” inside the product that may constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the product.

### **TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL**

1. **Read Instructions** — Read all the safety and operating instructions before operating this product.
2. **Retain Instructions** — Retain safety and operating instructions for future reference.
3. **Heed Warnings** — Adhere to all warnings on the product and in the operating instructions.
4. **Follow Instructions** — Follow all operating and use instructions.
5. **Cleaning** — Unplug this product from the wall outlet before cleaning. Use a damp cloth for cleaning. Clean the outside of the product only.
6. **Attachments** — Do not use attachments that are not recommended by the product manufacturer; they may be hazardous.
7. **Water and Moisture** — Do not use this product near water.
8. **Accessories** — Do not place this product on an unstable cart or stand. The product may fall, causing bodily injury and damage to the product. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart to overturn.
9. **Ventilation** — Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided.
10. **Power Sources** — Operate this product only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your dealer or local power company. This product is equipped with a three-prong grounding plug. This plug will only fit into a grounding power outlet. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding plug.
11. **Power Cord Protection** — Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.
12. **Lightning** — Unplug the unit from the wall outlet for added protection during a lightning storm and when it is left unattended and unused for long periods of time. This will prevent damage to the product due to lightning and power line surges.
13. **Overloading** — Do not overload wall outlets or extension cords. This can result in a fire or electric shock.
14. **Inserting Objects into Unit** — Never push objects of any kind into this product through any openings; they may touch dangerous voltage points or short out parts that could result in fire or electric shock.
15. **Servicing** — Do not attempt to repair or service this product yourself. Opening or removing covers may expose you to dangerous voltage and other hazards. Refer all servicing to qualified service personnel.
16. **Damage Requiring Service** — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions: **a)** If the power-supply cord or plug is damaged. **b)** If liquid has been spilled into the product. **c)** If the product has been exposed to rain or water. **d)** If the product does not operate normally by following the operating instructions. **e)** If the product has been dropped or damaged in any way. **f)** If the product exhibits a distinct change in performance.
17. **Replacement Parts** — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer. Unauthorized substitutions may result in fire, electric shock, and other hazards.
18. **Safety Check** — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
19. **Wall or Ceiling Mounting** — Mount the product to a wall or ceiling only as recommended.
20. **Heat** — The product should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

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# **INTRODUCTION**

## ***Thank You for Choosing Parasound***

Your new Parasound Model 275 v.2 power amplifier has been designed with proven class AB amplifier technology. The Model 275 v.2 is built to extremely strict quality and performance standards for which Parasound is renowned. We're proud to offer you this exceptional audio component that will bring you many years of enjoyment and dependability. We designed your new Model 275 v.2 Amplifier to perform at a higher level of sonic performance than you may have expected and we encourage you to read this entire manual to maximize your enjoyment. We wish you many years of listening enjoyment.

## ***-The Parasound Staff***

## ***Keeping Records for Future Reference***

Record the serial number located on the back panel or bottom of your Model 275 v.2 in the space below. Also note your Parasound Dealer's name and telephone number. Your purchase receipt/bill of sale is required to determine if your Model 275 v.2 is eligible for Parasound warranty service. We recommend that you make an extra copy of your original purchase receipt/bill of sale and store it inside the Model 275 v.2's carton.

Parasound Model 275 v.2 Amplifier Serial #: \_\_\_\_\_ (5 digit number below the bar code)

Parasound Dealer: \_\_\_\_\_

Parasound Dealer Phone Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

## ***Important Warranty information***

**There is no Parasound warranty for this unit if it was not purchased from an Authorized Parasound Dealer.** Investigate warranty coverage statements made by an *unauthorized* dealer very carefully, as you will need to depend entirely upon your dealer, and NOT upon Parasound. Unauthorized dealers lack the capability to make repairs or arrange for repairs of Parasound equipment. A list of Authorized Parasound Dealers and detailed warranty information is available at **[www.parasound.com](http://www.parasound.com)** or you can call **415-397-7100** between 8:30 am and 4 pm Pacific time. A missing or altered serial number could indicate that this unit was re-sold by an unauthorized dealer or is stolen merchandise. If this unit is missing its serial number or the serial number has been altered, you should return it to your dealer immediately for a full refund.

# **Unpacking Your Model 275 v.2 & Placement Guidelines**

## **Unpacking Your Model 275 v.2**

Carefully remove your Model 275 v.2 from its shipping carton and locate the enclosed accessories:

- AC power cord
- Two 12V DC trigger wires with mono plugs, one with 3.5 mm (1/8") mini plugs, one with a 2.5mm sub-mini plug and a 3.5mm mini plug

While you are unpacking your Model 275 v.2, inspect it thoroughly for possible shipping damage and tell your Parasound dealer immediately if you find any evidence of shipping damage. This would be a good time to make a copy of your sales receipt to store with the Model 275 v.2's original packing.

**Note:** Please save and store both the inner and outer cartons and, most especially, the foam packing inserts to protect the Model 275 v.2 if you have to move it or ship it. You may wish to flatten the cardboard cartons to save room in storage after cutting the taped seams on the bottom flaps.

## **Placement Guidelines**

The Model 275 v.2 will be easier to use and will last longer if you follow these simple guidelines:

- Place the Model 275 v.2 on a surface that will adequately support its substantial weight.
- Use input and output cables that are long enough to leave some slack; that will enable you to pull the Model 275 v.2 out of a cabinet to check or to change connections without inadvertently disconnecting cables.
- The Model 275 v.2 should never be placed in a completely enclosed cabinet
- Place your Model 275 v.2 where you can route input and output signal cables as far as possible from any AC cords.
- Where signal cables must cross AC cords they should do so only at a 90° right angle.

## **Ventilation Requirements**

- Always position the Model 275 v.2 horizontally.
- The Model 275 v.2 should never be stacked immediately on top of another power amplifier.
- Do not install the Model 275 v.2 in an unventilated equipment cabinet or compartment. Pockets of stagnant hot air can build up even in a cabinet with an open front and back.

# **Rack Mounting Your Parasound Model 275 v.2**

The Model 275 v.2 front panel occupies only one rack space in a standard 19" equipment rack. For rack mounting, you'll need to use the Parasound RMK11 rack mounting kit (purchased separately). We recommend that you use the 8 insulated shoulder washers with the four mounting bolts which are included with the RMK11. Position these washers on both sides so they "sandwich" the front panel before the mounting bolts are screwed into the rack rail. This will eliminate metal-to-metal contact between the Model 275 v.2 chassis, the equipment rack, and the other components in the rack.

**Note:** Tighten each bolt just enough to keep the unit secure in the rack to avoid deforming the shoulder washers. Eliminating metal-to-metal contact reduces the likelihood of creating a ground loop that might introduce hum into your system.

A single standard rack space is 1-3/4" (44mm) high in a 19" wide equipment rack. This measurement standard was developed by the EIA (Electronic Industries Association) so manufacturers of electronic components and equipment racks could build products in standardized heights that would fit in a uniform space. Please call your Parasound dealer or Parasound Technical Services if you need additional advice about rack mounting the Model 275 v.2.

# AC Mains Voltage

**NOTE: Before you plug this amplifier into an AC mains outlet:**

## 115v - 230v AC Voltage Selector Switch

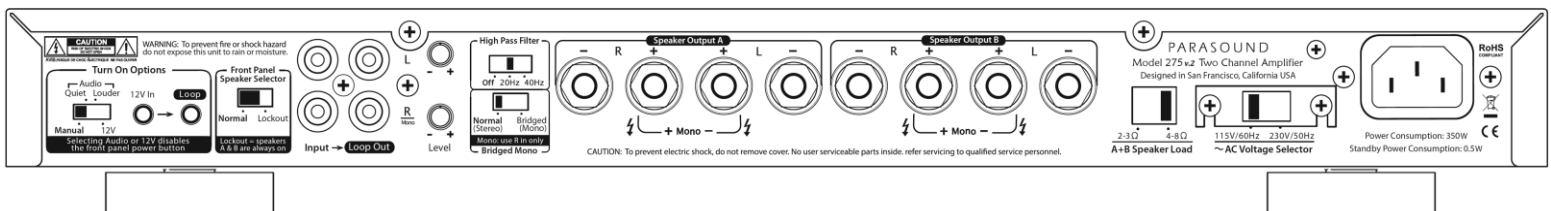
This switch is found on the chassis rear panel. The 115V position of this switch is correct for North America; most other regions require setting it to 230V. Make sure the 115/230V switch is set for the correct AC line (mains) voltage before you connect the Model 275 v.2's power cord and before you install it. The unit may be seriously damaged if this switch is set incorrectly.

## AC Voltage Warranty Exclusion

Amplifiers set for 115V which are damaged by 220V-240V are not covered under the Parasound Limited Warranty.

# Rear Panel Connections and Controls

**Always disconnect the AC cord to your Model 275 v.2 before making or changing any input, output or trigger wire connections.** Inserting or removing an input or output cable while the Model 275 v.2 is turned on can result in a blast of sound that can damage your loudspeakers and your hearing. Make sure there is no strain or tension on any cables that could cause them to pull loose.



## R (Right) and L (Left) Audio Input Jacks

Connect the shielded audio cables from your preamplifier or system controller's output jacks to the Model 275 v.2's L and R audio Input jacks. Use only the R channel Input jack for bridged mono operation.

## Audio Loop Out Jacks

The jacks replicate the audio input signals to facilitate connections of other power amplifiers to the same preamplifier or system controller. Loop connection of multiple power amplifiers is called a "daisy chain." These Loop Out jacks also provide a convenient way to connect a powered subwoofer.

## R (Right) and L (Left) Level Knobs

To increase the listening level for each channel turn its Level knob clockwise. To decrease the listening level turn it counter-clockwise. The 275 has a total gain of 28 dB so that its volume levels are compatible with other channels in your theater if they are driven by a THX-certified amplifier, up to the point where the THX-certified amplifier might play a bit louder because of its higher power output.

**Note:** You may wish to experiment with different gain settings on your preamp or surround controller and on the Model 275 v.2 to find a combination of gain settings where your system's background noise is lowest. Sound professionals call these adjustments "gain staging."

**Note:** Only the R channel Level knob is used for bridged mono operation.

## Front Panel Speaker Selector Lockout Switch

When this switch is set to Normal, the front panel A and B buttons determine whether speaker output terminals A and B are live. When this switch is set to Lockout, the front panel A and B buttons are disabled and speakers A and B will always be on. This can be particularly useful for a professional audio installer who never intends for the client to use the front panel buttons.

## Bridged Mono Switch

Bridged operation configures the Left and Right channels to function as a single higher powered amplifier channel to drive a single speaker. This is how two Model 275 v.2 amps are used as monoblocks to power a pair of speakers. It's also effective for powering a single passive subwoofer. Please note that in bridged mono operation the minimum speaker impedance is 8 Ohms (if the load switch is set to 4-8Ω). With the Speaker Load switch set to the 2-3Ω position it is possible to drive two 8Ω speakers or a single 4Ω speaker. For more information please see the section on Bridged Mono Operation in this manual.

**Note:** The Model 275 v.2 power should always be turned off before moving this switch.

**Note:** If two speakers are attached for normal stereo operation the sound will be faint and very distorted if you accidentally leave the Bridged Mono switch in its Mono position.

## High Pass Filter Switch

The High Pass Filter can improve the sound in many installations. It's called a "high pass" filter because depending on the switch position it permits signals higher than 20 Hz or 40 Hz to pass, while preventing signals below these frequencies from passing.

- The Flat setting of this switch disconnects the filter and the 275 v.2's frequency response is full range (flat).
- The 20 Hz setting filters out frequencies below 20 Hz at 18 dB per octave. Your speakers have greater dynamic range and far less distortion when they don't receive frequencies which are lower than they are capable of reproducing. The 275 v.2 operates more efficiently when it's not called upon to amplify very low frequencies so you'll have more power in the range the speaker is capable of reproducing. Because the 20 Hz filter also has a steep 18 dB per octave slope, it is essentially a sub-sonic filter, and you probably won't notice any loss of low bass unless you're using very large speakers.
- The 40 Hz switch position filters bass below 40 Hz at 18 dB per octave. This is ideal when the 275 v.2 is driving in-wall or in-ceiling speakers because most of them have little useful bass output below 40 Hz. You'll enjoy much cleaner sound and higher undistorted volume levels. Not having to amplify bass that's inaudible with your speakers is another way the 275 v.2 will run cooler.

**Note:** Most wall mounted speaker volume controls use stepped autoformers whose highly reactive loads occasionally cause amplifier distress and malfunction. The 20 Hz or 40 Hz filter settings enable the 275 v.2 to drive them with ease.

## **Speaker Connections**

### **Speaker Terminals**

There are separate speaker terminals for two pairs of speakers, labeled Speaker Pair A and Speaker Pair B. The speaker terminals accept speaker wires with banana plugs, spade connectors or bare wire.

### **Correct Speaker Polarity is Important**

Polarity refers to + and – connections. Speaker wires are coded with color, printing or a ridge on the insulation on one of the leads so you know which lead was connected to the + and – terminals at the other end. This coding will help you keep the + and - polarity consistent for all channels. If some of the speakers are wired with incorrect polarity you will significantly affect sound quality.

### **Speaker Wire Length and Gauge (thickness)**

When selecting speaker wire, follow these guidelines:

- Keep the length of your speaker wire as short as possible.
- Use the thickest wire practical. For lengths greater than 50 feet, use speaker wire with an AWG (gauge) of 14 or lower. The smaller the AWG number, the thicker the wire.
- Do not use speaker wire that is thinner than 16 AWG.
- Keep wire lengths for both channels as close to equal as possible.

## **Bridged Mono Operation**

Bridged operation configures the Left and Right channels to function as a single higher powered amplifier channel to drive a single speaker. This is how two Model 275 v.2 amps are used as monoblocks to power a pair of speakers. It's also effective for powering a single passive subwoofer.

Careful attention must be paid to the total impedance of all speakers wired to the unit when it is set for bridged mono operation. When set to mono the Model 275 v.2 uses its R channel to amplify only the positive half of the audio signal and its L channel to amplify only the negative half of the audio signal. In effect, each channel “sees” only half of the speaker’s rated impedance, so that a single 8 ohm speaker is actually a 4 ohm load when the amp is bridged to mono. A 4 ohm speaker is a 2 ohm load in bridged mono. This is why bridged mono power output can be much higher than the sum of the L and R channel outputs for stereo operation. When the Speaker Load switch is set to the 4-8Ω position the speaker impedance must be 8 ohms for bridged mono operation. This switch must be set to its 2-3Ω position if the speaker impedance is less than 8 ohms.

### **Setting Up the Model 275 v.2 for Bridged Mono Operation:**

1. Turn the unit off and remove the AC cord.
2. Connect the single RCA cable from the preamp or audio controller to the R channel Input jack.
3. Set the Bridged Mono switch to the Bridged (Mono) position.
4. Set the Speaker Load switch to the correct position (see instructions on next page).
5. Connect the positive + lead of the speaker wire to the red R+ channel terminal of speaker pair A.
6. Connect the - negative lead of the speaker wire to the red L+ channel terminal of speaker pair A.
7. Do not connect the L- and R- speaker terminals.
8. If you have a second mono speaker repeat steps 4 - 6 with the speaker pair B terminals.
9. Reconnect the AC cord.

**Note:** Stereo sound will be faint and distorted if you accidentally leave the Bridging switch in its Mono position and a stereo pair of speakers are attached.

**Note:** The Model 275 v.2 will create more heat when it drives a bridged mono speaker or multiple speaker pairs. Lower impedance speakers will make it run even hotter. Heat buildup greatly reduces the life of the amplifier and nearby components. Please pay attention to the instructions for setting the Speaker Load switch to avoid overheating.



## How to set the Speaker Load switch when the Model 275 v.2 is configured for Bridged Mono operation:

### Single 8 Ohm Speaker

In this case the Speaker Load switch should be set to 4-8Ω.

### Single 4 or 6 Ohm Speaker

In this case the Speaker Load switch must be set to 2-3Ω.

### Two 8 Ohm Speakers

In this case the Speaker Load switch must be set to 2-3Ω. Connect the + wire of the first speaker to the Speaker Output A red R channel positive terminal and connect the speaker's - wire to the red L channel positive terminal. Connect the second speaker similarly to the Speaker Output B red R and L positive terminals.

**Note:** Never connect two 4 ohm speakers for bridged mono operation. This results in a 1 ohm load on each channel which could cause the amp to overheat and shut down.

## Bi-Amping Using Two Model 275 v.2 Amplifiers

If your speakers have separate input terminals for their Low and High frequencies there is usually a greater sonic advantage using two Model 275 v.2 amplifiers to "bi-amp" your speakers rather than bridge them as monoblocks. When bi-amping the Bridged Mono switch must be set to its Normal (Stereo) position.

When set up for bi-amping you will use one channel of one 275 v.2 to power the high frequency drivers and the second channel of the same amp to power the low frequency drivers. Since both channels of the amp need the same audio signal you will need to connect the Loop Out jack of one channel to the input of the second. If you connected your preamp to the 275 v.2's L channel Input jack to then you'll need a short RCA cable to connect the 275 v.2's L channel Loop Out jack to its R channel Input jack.

## A + B Speaker Load Switch

The Speaker Load switch gives the Model 275 the flexibility to drive very low impedance loads. Such situations can occur when the Model 275 is asked to drive multiple pairs of speakers.

For a single pair of 4 ohm or 8 ohm speakers the Speaker Load switch may be set to its 4-8Ω position. The Speaker Load switch must be set to 2-3Ω whenever the load will be lower than 4 ohms. Speaker loads below a 4 ohm impedance can cause the Model 275 v.2 to rapidly overheat and cause audible distortion.

### These are examples that require the 2-3 Ω setting:

1. Driving two pairs of speakers whose impedances are unknown.
2. Driving two pairs of speakers whose impedances are each lower than 8 ohms. For example, two pairs of 4 ohm speakers driven simultaneously = 2 ohm load.
3. Driving three pairs of 8 ohms speakers simultaneously = 2.66 ohm load.
4. Driving a single 4 ohm speaker in Bridged Mono operation = 2 ohm load
5. Driving two 8 ohm speakers in Bridged Mono operation = 2 ohm load

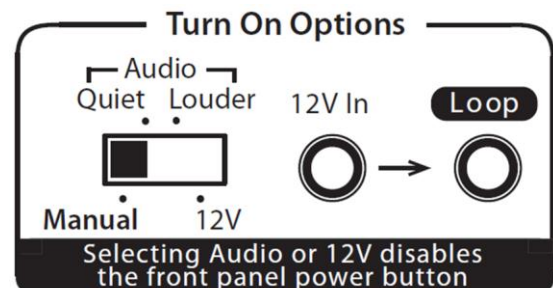
**Note:** For the coolest possible operating temperature we recommend setting the Speaker Load switch to 2-3 ohms even if you are using a single pair of 8 ohm speakers.

# Turn On Options Switch

For convenience, there are three ways the Model 275 v.2 can be turned on and off:

- **Manually**, by pressing the Power button on the front panel.
- **Automatically by Audio**, when an audio signal is present at the audio Input jacks.
- **Automatically by 12V**, when a suitable trigger voltage is applied to the 12V input jack.

**Note:** When either automatic turn on option is selected the front panel Power button is disabled so that power on/off is determined solely by the triggering preamp, receiver or active audio signal. Pushing the Power button will not turn the amp on or off.



## Manual Position

When the Turn On Options switch is in its Manual position the Model 275 v.2 must be turned on and off manually by pressing the Power button on its front panel every time you wish to use your audio system.

## Audio Position (Automatic on/off)

When the Turn On Options switch is set to one of the two Audio positions, the Model 275 v.2 will be turned on only when an audio signal is present at the L or R Input jacks. After the audio signals cease the Model 275 v.2 will remain on for about 8-10 minutes before shutting off. This prevents unintended turn-off during pauses in your music or movies.

**Note:** When the Turn On Options switch is set to Audio the Model 275 v.2 will turn itself on immediately when you connect its AC cord, even without any audio signal present. This is normal and another reason why all connections and settings should be made before connecting its AC cord.

**Quieter:** This is the more sensitive setting and the amp will turn on automatically with a very low level audio signal corresponding to about 1mV. In most cases this will be the preferred setting. If for some reason the amp never turns off you may have some noise in your system that is false triggering the automatic turn on circuit. In this case you should use the Louder setting.

**Note:** If you need the Model 275 v.2 to turn on at an even lower volume level, simply turn down its L and R Level controls. Try setting the level controls at 12 o'clock and see if the volume level is low enough when the amp turns on.

**Louder:** This is the less sensitive setting and the amp will turn on automatically with a slightly higher level audio signal corresponding to about 6mV. You should first try the Quieter setting. If for some reason the amp never turns off when set to Quieter then you can use the Louder setting.

**Note:** If the Model 275 v.2 is driving only passive subwoofer(s), surround or rear channels you will achieve more consistent automatic turn on by using the 12V DC trigger. At the beginning of most films the sub and surround levels are often lower than the minimum level required by the Audio sensing circuit.

## 12V Position (Automatic on/off)

When the Turn On Options switch is set to its 12V position, the Model 275 v.2 is turned on and off only with an external +9 V to +12 V voltage from your preamp or AV Receiver. When the external voltage ceases the Model 275 v.2 will turn off within a few seconds. The 12V switch position disables the front panel Power button.

## 12 Volt Input Jacks

The Model 275 v.2 12V input uses a 3.5mm jack (mono). To use the 12V trigger, insert the trigger wire plug into this jack and the plug at the wire's other end into the AV receiver or preamp's 12V output jack. We have included a 3.5mm to 3.5mm trigger wire as well as a 3.5mm to 2.5mm trigger wire.

**Note:** If the controller's trigger output is a + and – terminal, you can cut the 3.5mm plug off one end of the included trigger wire and attach the bare wires to these terminals. The trigger plug tip is + (positive) and its sleeve – (negative).

## 12V Loop Out Jack

The Trigger Out jack lets you loop or “daisy-chain” the incoming trigger voltage to an additional Model 275 v.2 or another component(s).

## Triggering multiple devices

The total load on your preamp's trigger output(s) is the sum of the trigger current drawn by each of the components you've looped together. The Model 275 v.2 trigger circuit draws a negligible 15 mA. Check the maximum capacity of your AV receiver, processor or home controller's trigger outputs so you do not overload them by connecting too many power amplifiers. Typical ratings are 50mA to 100mA.

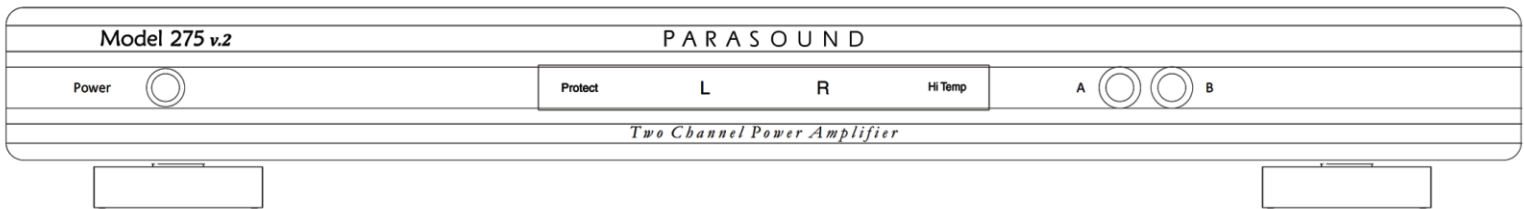
## 3.5mm and 2.5mm trigger jacks

Some other Parasound power amplifiers and preamplifiers might have 2.5mm “sub-mini” trigger jacks. To use the Model 275 v.2 with products that use a 2.5mm jack we have included a trigger wire with a 3.5mm plug at one end and a 2.5mm plug at the other end.

## AC Power Cord

Model 275 v.2 is supplied with a high quality IEC standard AC cord. Please connect it directly to an AC wall outlet or power conditioner that is always “live.” If possible, plug your Model 275 v.2 into the same AC outlet that your preamplifier is plugged into. If different AC outlets are used for the Model 275 v.2 and the preamplifier the ground potential between the two outlets might be higher or lower, resulting in audible hum.

# Front Panel Operation



## **Power Button**

Press the Power button once to turn the Model 275 v.2 on. Press it again to turn it off. When the unit is powered on the L and R indicators should illuminate green. The Power button is inoperative when the Turn On Options switch is set to Audio or 12V.

## **A and B Speaker Select Buttons**

These buttons turn on the speaker pairs connected to the corresponding Speaker Pair A and B terminals. They will also select two single mono speakers connected to the corresponding Speaker Pair A and B terminals.

**Note:** The front panel buttons are inoperative when the Front Panel Speaker Selector switch is set to Lockout.

## **Protect Indicator**

The Protect indicator will illuminate red and the unit will stop playing if the amp experiences an external fault condition. This prevents possible damage to the unit from continued operation. Examples of external fault conditions are short circuited speaker wires, excessive heat and trying to drive too many speakers at high levels.

If Protect illuminates you need to locate and correct the fault; for example, remove the short circuit, let the unit cool down, check the load impedance and the setting of the Speaker Load switch or lower the volume level. To reset the protection circuit you need to turn the unit off. If the amp is being turned on by a 12V trigger or audio sensing trigger then the easiest thing may be to simply unplug the unit from the AC outlet for about 10 seconds and then plug it back in.

## **Hi-Temp Indicator**

Hi-Temp will illuminate red when the Model 275 v.2 exceeds its maximum safe operating temperature. If this happens the unit will activate its protection circuit and stop playing. It will remain in this protection mode until the temperature drops and the unit is turned off to reset its protection circuit. If Hi-Temp appears it's likely the unit has been over-driven by too high a listening level or is attempting to drive a speaker load impedance that is too low. It's also probable the unit has not been provided with sufficient ventilation. These conditions must be corrected before turning it on again to resume operation.

## **L and R Channel Status Indicators**

L and R will illuminate green when the Model 275 v.2 power is on and it is operating normally. The L indicator will not light if a fault is only in the left channel; the R indicator will not light if a fault is only in the right channel. Neither L or R indicators will illuminate if there is a general fault or if the temperature is too high.

# **Problems and Remedies**

## ***Unit Will Not Turn On***

- Check the setting of the Turn On Options switch. (The front panel Power button will be disabled if the switch is set to Audio or 12V). First try the Manual position and see if the unit will turn on by pressing the front panel Power button.
- If using Audio Turn on, try increasing the sensitivity of the audio trigger by setting the Turn On Option switch to the “Quieter” position.
- If using Audio Turn on and you need the Model 275 v.2 to turn on at an even lower volume level, simply turn down its L and R Level controls. Try setting the level controls at 12 o'clock and see if the volume level is low enough when the amp turns on.
- Check that the AC power is live.

## ***No Sound From the Speakers (but amp turns on)***

- Ensure that the front panel speaker buttons for A and B are turned on (button pressed in).
- Try turning up the Level controls for the Left and Right channel.
- Check that input cables and speaker wires are secure at both ends (turn amp off first).
- Make sure the preamp is switched to the correct input.
- Is the Protect light illuminated? Check for excessive temperature, short-circuited speaker wires, very low impedance speaker load, and inadequate ventilation.

## ***Background Hum or Hiss***

- If you have cable or satellite TV, try disconnecting the incoming TV or satellite cable; if the hum is eliminated you will need a “cable TV ground isolator” or contact your TV service provider for assistance.
- Make sure insulating shoulder washers are used if unit is rack mounted.
- Make sure all equipment is plugged in to the same AC outlet to eliminate ground loops.
- Try turning down the input Level controls.
- Move audio cables and AC cords away from each other.
- Try different routes for the audio cables and AC cords.

## ***The Amp is Overheating or the Hi-Temp Indicator is Illuminated***

- Increase ventilation around the Model 275 v.2.
- Check speakers for faults.
- Change the Speaker Load switch to the 2-3Ω setting.
- Remove any nearby external sources of heat such as other audio equipment or heaters.

# **Are You Having Difficulty?**

## ***Repair or Service***

Call your Parasound dealer first. If the dealer can't help you with your problem we encourage you to call Parasound's Technical Service Department at **415 397 7100**, Monday - Friday, 8am - 4pm Pacific Time. We can suggest other diagnostic tests you can easily perform.

If we determine that your Model 275 v.2 should be returned to Parasound or an Authorized Parasound Warranty Center for inspection and possible servicing, we will provide the location of a warranty center near you or shipping instructions for the unit's return to Parasound.

## ***Before You Return Any Unit to Parasound for Service***

Before you send your unit to Parasound, you will need to obtain a specific Return Authorization (RA) number and shipping instructions from Parasound's Technical Department. The RA number must be clearly marked on the outer carton. Use the original factory packing materials and arrange adequate insurance to cover its value. You must include a copy of your purchase receipt, since this document establishes the validity of this unit's warranty. Warranty repairs are only performed by Parasound or Parasound Authorized warranty centers when your purchase receipt is from a Parasound Authorized Dealer or Parasound Authorized Reseller.

## **Shipments Will Be Refused by Parasound Under the Following Conditions:**

1. Unit was sent without the Parasound-assigned RA number marked on the carton.
2. Unit was sent in an unsuitable shipping carton and packing inserts and is likely to have been damaged in transit.
3. Unit has inadequate packing materials and is likely to have been damaged in transit. Wrapping the Model 275 v.2 with bubble wrap will not protect it during shipment.
4. Unit was shipped collect for shipping charges. We do not accept collect shipments.
5. Unit was shipped via the US Postal Service.
6. Unit was sent to an address other than the address instructed by our Technical Department.

## ***Warranty Repair***

Please read your accompanying Parasound Limited Warranty carefully to understand the applicable rights and limitations. This section provides instructions for obtaining repairs, both for units covered under the Parasound Limited Warranty and for units or situations which are outside the Warranty. The complete warranty can be found at [www.parasound.com](http://www.parasound.com).

## **Unit is not eligible for repair under the terms of the Parasound warranty if:**

1. Unit was not purchased from a Parasound Authorized Dealer.
2. You do not have the original bill of sale or sales receipt from a Parasound Authorized Dealer.
3. You are not the original owner. The Parasound warranty is not transferable.
4. Unit's serial number was removed, modified, or defaced.
5. Unit shows evidence of abuse and/or misuse.
6. Unit was modified in any way.
7. A prior repair was attempted by an unauthorized repair station.

# Specifications

**Power Output** – (RMS power, 20 Hz – 20 kHz)

**All Channels Driven**

90 watts x 2, 8Ω  
150 watts x 2, 4Ω  
150 watts x 2, 2Ω (Load switch set to 2-3Ω)

**Bridged Mono**

200 watts x 1, 8Ω  
200 watts x 1, 4Ω (Load switch set to 2-3Ω)

**Current Capacity**

20 amps peak per channel

**Frequency Response**

20 Hz - 50 kHz, +0/-3 dB, 1 watt

**Dynamic Headroom** - 1.3 dB

**Total Harmonic Distortion**

0.35% at full rated output  
0.025% at average listening levels

**IM Distortion** - 0.05 %

**Transient IM Distortion** - Not measurable

**S/N Ratio**

110 dB at rated output, IHF A-weighted  
103 dB at rated output, unweighted  
93 dB at 2.828 V output, IHF A-weighted  
84 dB at 2.828 V output, unweighted

**Input Impedance** - 33 k Ω

**Input Sensitivity**

800 mV for full rated output (28dB)

**Inter-Channel Crosstalk**

80 dB @1 kHz, 72 dB @10 kHz, 65 dB @ 20kHz

**Damping Factor** - Over 150 at 20Hz

**12V Trigger Turn On** - DC 9 – 12V, 15 mA

**Audio Turn On**

Quieter: 1 mV  
Louder: 6 mV

**AC Power Requirement**

110 - 120 V / 220 -240 V, 50 - 60 Hz  
0.5 watts standby  
25 watts Idle (no audio)  
350 watts full output

**Dimensions**

17<sup>1</sup>/<sub>4</sub>" Wide  
16" Deep, with cables connected  
2<sup>1</sup>/<sub>2</sub>" High with feet, 1<sup>3</sup>/<sub>4</sub>" panel only (1U)  
(437 x 406 x 63mm, 44.1 mm panel only)

**Net Weight** - 20 lbs (9.1 kg)

**Rack Mount Accessory**

May be Purchased Separately: RMK11

Specifications and features subject to change or improvement without notice.

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# PARASOUND

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