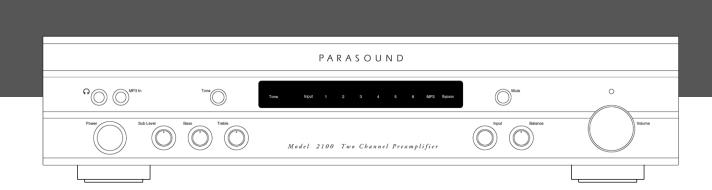
PARASOUND NEWCLASSIC



Model 2100

Preamplifier

OWNER'S GUIDE

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

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.

Thank You for Choosing Parasound

Your new Parasound® NewClassic Model 2100 stereo preamplifier is the pinnacle of analog audio technology and value engineering for a two channel music system. Additionally, the Model 2100 is an upgrade to any surround sound system for uncompromised stereo reproduction. We've endowed the Model 2100 with unique connections and control features which enable it to blend seamlessly into an existing surround sound system.

We are proud to offer you this exceptionally versatile audio component, knowing that it will bring you many years of enjoyment and dependability.

We thank you for selecting Parasound and we appreciate you taking the time to read these instructions. For updates and corrections to this manual, we invite you to check our web site, **www.parasound.com**

Enjoy.

The Parasound Staff

Keeping Records for Future Reference

Record the serial number located on the back panel or bottom side of your Model 2100 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 2100 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 2100's carton.

OWNERSHIP REFERENCE INFORMATION						
Parasound Model 2100 P	reamplifier Serial #:					
Parasound Dealer:						
Dealer Phone Number:	() -	Date of Purchase:	/	1		

You Should Know

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** or you can call **415-397-7100** between 8:30 am and 4:30 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.

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Unpacking Your Model 2100

Carefully remove your Model 2100 from its shipping carton and locate all the enclosed accessories:

- Remote control and two AAA batteries
- AC power cord
- Stereo 3.5mm cable for MP3 input
- Two trigger wires, one with 2.5 mm sub-mini plugs, one with a 2.5mm and a 3.5mm mini plug While you are unpacking your Model 2100, inspect it thoroughly for possible shipping damage and tell your Parasound dealer immediately if you find any. If possible, save and store both the inner and outer cartons and-most especially-the foam packing inserts, to protect the Model 2100 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. This would be a good time to make a copy of your sales receipt to store with the Model 2100's original packing.

Placement Guidelines

The Model 2100 will be easier to use and will last longer if you follow these simple guidelines:

- Place the Model 2100 on a shelf that will adequately support its weight.
- Unless you'll control the Model 2100 through a remote infrared sensor/repeater system, put it on a shelf where you can aim the remote control handset directly at the Model 2100. (If you use a remote repeater sensor, be sure the remote's signals can't reach the Model 2100's front panel IR sensor, otherwise the remote control will not function properly).

If you're installing the Model 2100 yourself, use input and output cables that are long enough to leave at least two feet of slack; that will enable you to pull the Model 2100 out of a cabinet to check or to change connections without inadvertently disconnecting cables. If you're putting the Model 2100 in a cabinet, it needs a space that's at least 22 inches wide so you'll be able to turn it around for access to its rear panel connections.

Ventilation Requirements

To reduce the chance of your Model 2100 overheating please follow these guidelines:

- Install your Model 2100 away from heat sources such as heating ducts, radiators, or heat-producing components.
- Always position the Model 2100 horizontally.
- We recommend that you do not place the Model 2100 directly above a power amplifier.
- Do not install the Model 2100 in an unventilated equipment cabinet or compartment. Pockets of stagnant hot air can build up even in cabinets with open front and back sides. A ventilation fan such as the Parasound Zbreeze is highly recommended to prevent "hot spots" in confined spaces.

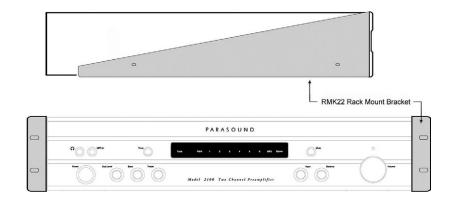
UNPACKING YOUR MODEL 2100 AND PLACEMENT GUIDLINES

Rack Mounting Your Parasound Model 2100

With its four feet removed, the Model 2100's front panel height occupies two rack spaces (3-1/2" or 88.2 mm; a single standard rack space occupies 1-3/4" vertical space.) For mounting in a standard 19" equipment rack, you must use the Parasound RMK22 rack mount kit (purchased separately). The RMK22 includes four bolts and eight plastic washers with raised "shoulders."

Slide one washer onto each mounting bolt with its raised shoulder pointing toward the panel hole.

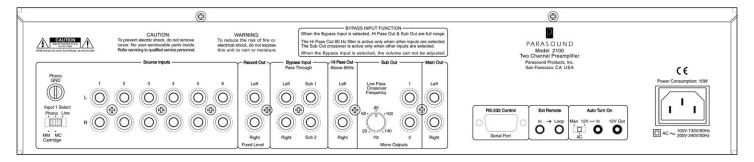
Carefully insert the bolt through the hole and slide the other washer on the bolt with its raised shoulder facing the rear side of the panel. The washers will sandwich the Model 2100 panel and the four mounting bolts to prevent metal-to-metal contact between the Model 2100 chassis, the equipment rack, and the other components mounted 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.

Making Connections

Always disconnect the AC cords to your Model 2100 and power amplifier(s) before making or changing any input, output or trigger wire connections. Inserting or removing an input or output cable while the Model 2100 or power amplifiers are turned on can result in a blast of sound that can damage your loudspeakers. Make sure there is no strain or tension on any cables that could cause them to pull loose. The Model 2100 has many different types of audio and control connections, some of which you may not be familiar with. Please read this section thoroughly before making any connections.



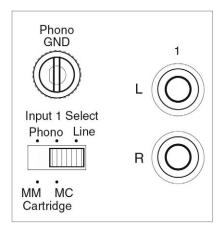
AUDIO INPUT CONNECTIONS

The Model 2100 is equipped with a total of 8 audio inputs:

- 6 pairs of line level input jacks; input 1 can be switched to MM or MC phono.
- An MP3 input jack on the front panel for connecting a portable MP3 player.
- Bypass Input jacks to connect a home theater surround sound receiver or controller.

RCA line level Input Jacks

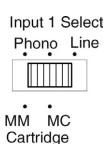
Source inputs 1–6 have the same input sensitivity and input impedance and they are compatible with any typical analog line level source. When using input 1 for a standard line level device (CD, Tape, DVD, tuner, etc.) set the adjacent Input 1 Select switch to Line.



Phono Input (Input 1)

The Model 2100 is equipped with a high quality phono preamplifier. If you wish to connect a turntable, set the Input 1 Select switch to MM (moving magnet) or MC (moving coil), depending on your cartridge. Select MM if you are not sure which type of phono cartridge you have because MM cartridges are more common.

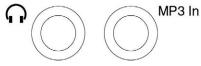
Note: If your turntable won't reach adequate volume, or if it plays too loud, you have selected the incorrect cartridge type. Don't forget to connect the ground wire from your turntable to the Phono Gnd (ground) terminal on the Model 2100.



CONNECTING YOUR MODEL 2100 continued

Front Panel MP3 Input

For your convenience there is an input for a portable MP3 player on the front panel. Connect the included cable with the 3.5mm stereo plugs between the MP3 player's headphone jack and the Model 2100's MP3 input jack. The MP3 input boosts the input



signal by 12dB so that its volume level will be similar to your other source components.

For the best results, set your MP3 player's volume to around 75% of maximum.

Note: If you connect a component other than an MP3 player to the MP3 Input jack, the volume level will probably be too high.

Bypass Input (Pass Through)—stereo system only

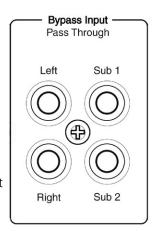
If your Model 2100 is not being combined into a surround system, you can skip this section and go directly to AUDIO OUTPUT CONNECTIONS.

Bypass Input (Pass Through)—in a surround sound system

The Bypass Input is used to incorporate the Model 2100 into a surround system which includes a surround sound receiver. It controls your stereo sources independent from your surround receiver to optimize the sound quality. In order to use the Bypass Input your surround sound receiver must have line level preamp output jacks.

When the Bypass Input is selected the incoming signals at the Bypass Input Left & Right jacks are connected directly to the Main Out Left & Right jacks and the Hi Pass Out jacks.

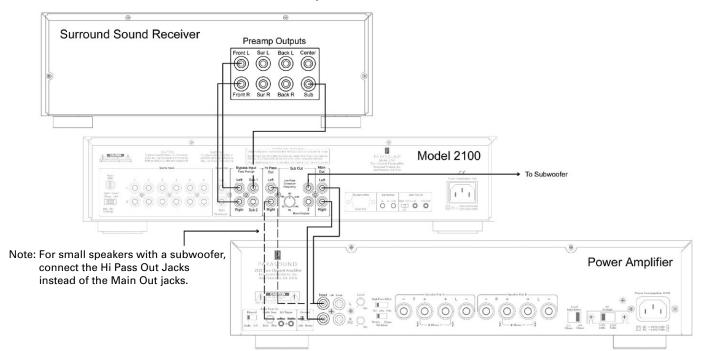
When the Bypass Input is selected the incoming signals at the Bypass Input Sub 1 & Sub 2 jacks are connected directly to the Sub Out 1 & 2 jacks.



Connecting the Bypass Input

Connect your surround sound receiver's Left, Right & Sub channel preamp output jacks to the Model 2100's Left, Right & Sub Bypass Input jacks. With a single subwoofer you can use either the Sub 1 or Sub 2 Bypass Input jack.

Note: Two Bypass Sub Input jacks are included in case you have two subwoofers and your surround receiver includes two Sub out jacks.



Selecting the Bypass Input

The Bypass Input can be selected by two different methods.

Manual: When the Model 2100 is turned on you can select the Bypass Input with the remote control or front panel Input selector knob.

Auto: The Bypass Input is automatically selected whenever the Model 2100 is turned off. This makes it easy to use your surround sound equipment even without turning the Model 2100 on.

Note: When the Bypass Input is selected the Model 2100 volume control, tone controls, internal crossovers and mute circuits are disabled. Volume and other functions are entirely controlled by your surround sound receiver.

Note: Important details about the Bypass Input

The Model 2100's Bypass function is a direct connection from its Bypass Input jacks to its Hi Pass, Main and Sub output jacks. None of the Model 2100's internal crossovers are active:

The Hi Pass Out jacks are full range; the 80Hz crossover is inactive.

The Sub Out jacks are full range; the Low Pass crossover is inactive.

This is done intentionally so the bass management built into your surround sound receiver functions normally when you are listening to surround sound. Please see the owner's manual for your surround sound system to setup the proper speaker levels, distance and bass management. If you have already calibrated your surround sound system, there is no need to recalibrate your system after adding the Model 2100. Don't forget that the volume control on the Model 2100 does not work when the Bypass Input is selected. Use the volume control on your surround sound equipment.

NOTE: DO NOT CONNECT A SOURCE COMPONENT SUCH AS A CD, DVD, TAPE DECK OR TUNER DIRECTLY TO THE MODEL 2100'S BYPASS INPUT. SINCE THERE IS NO VOLUME CONTROL WITH THIS INPUT THE SOUND LEVEL COULD BE EXTREMELY HIGH AND COULD DAMAGE YOUR SPEAKERS—**EVEN WHEN THE MODEL 2100 IS TURNED OFF.**

How to improve stereo sound in a surround sound system

Your 2-channel analog sources will give you clearer sound if you disconnect them from your surround sound receiver's analog input jacks and reconnect them to any pair of the Model 2100's Input 1-6 jacks. You can now select these analog sources and control their volume, balance and tone with the Model 2100.

For better stereo reproduction with your DVD player, connect its L & R analog output jacks to one pair of the Model 2100's Input 1-6 jacks. You'll now select the DVD player's stereo analog output and control its volume, balance and tone with the Model 2100.

This recommended analog connection between your DVD player and the Model 2100 is in addition to any existing digital connection between your DVD player's digital output and your surround sound receiver's digital input. Your surround sound receiver will continue to select the DVD player when you want to hear surround sound, exactly the same as it did before you brought the Model 2100 into your home theater.

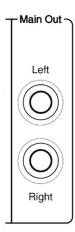


AUDIO OUTPUT CONNECTIONS

There are 4 pairs of output jacks labeled Main Out, Sub Out, Hi Pass Out and Record Out. All of the outputs are active simultaneously. Read through this section to determine which you should use for your setup.

Main Output Jacks

The Main Output Jacks are the primary outputs that connect to the inputs on your power amplifier(s). They are full range outputs with no filters or crossovers. Use these jacks if your speakers are full range and you aren't using a subwoofer.



Sub Out Jacks—no subwoofer in your system

If you don't use a subwoofer in your system, you can skip this section.

Sub Out Jacks—when Inputs 1-6 or the MP3 Input are selected

- A mono Sub output is created by the Model 2100.
- Sub 1 & 2 Out jacks carry the same mono signal.
- The crossover point of the Sub Out jacks is determined by the setting of the Low Pass Crossover Frequency knob.

For an independent stereo system, adjust to taste. When the Model 2100 is connected to a surround receiver, adjust the crossover frequency so it matches the bass management setting in your surround receiver's setup menu.

Note: 80Hz is the best place to start if you are not sure how to set the crossover frequency.

Note: If your subwoofer has a built-in non-defeatable crossover, set it to its highest frequency to avoid double filtering.

Low Pass 1 Crossover Frequency 80 60 100 20 140 Hz 2 Mono Outputs

Sub Out Jacks—when the Bypass Input is selected

- Sub Out 1 & 2 jacks carry independent L & R signals from the Bypass L & R Input jacks.
- There is no crossover.

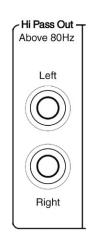
Hi Pass Output Jacks—no subwoofer in your system

If your speakers are full range, you can skip this section.

Hi Pass Output Jacks—"small" speakers + sub

The Hi Pass Output jacks are for use when your speakers are small (woofer drivers 6" or smaller) and you are using a subwoofer. The Hi Pass outputs do not carry bass below 80Hz. The crossover point is fixed.

The Hi Pass Outputs are full range when the Bypass Input is selected. In this case the high pass filter is not active so you will use the bass management in your surround sound receiver's setup menu.



Record Out

Left

Record Out Jacks

The Record Out jacks connect to your analog audio recorder's record/input jacks. When you select an Input 1–6 or MP3, the signal from the corresponding source component is available at the Record Out jacks whenever the Model 2100 is turned on. It is a fixed level signal that is unaffected by volume, balance and tone settings or audio mute.

Note: When you select the Bypass Input, there is no signal available at the Record Out jacks. The Model 2100 does not enable monitoring the quality of a recording as you are making it.

Connecting a Signal Processor to Your Model 2100

You can connect a signal processor such as an electronic crossover or equalizer between the Model 2100 and your power amplifier(s). The signal processor's input should be rated to accept the Model 2100's maximum output voltage without overloading. You can also adjust the gain controls of your power amplifier(s) and signal processor for the lowest noise level.

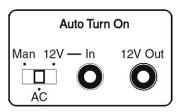


The headphone jack accepts a 1/8" (3.5 mm) mini plug. The Main audio out is muted when the headphone plug inserts into this jack, but the output to the Fixed–Rec jacks remains live.

Note: Please lower the volume level on the Model 2100 **before** unplugging your headphones to avoid an unexpected loud blast of sound that could damage your speakers.

TRIGGERING OTHER COMPONENTS ON/OFF 12V Trigger Out

There is one 12 volt trigger output and one input. The output can be used to turn on power amplifiers and other equipment that are equipped with automatic turn-on inputs. Connect the Model 2100's 12V output jack to the triggered component's trigger input jack using the provided trigger wire with the 2.5 mm sub-mini plugs.



Note: Most Parasound Power Amplifiers are equipped with a 2.5 mm "sub-mini" 12V trigger input jack. The trigger voltage source is DC and the trigger plug tip is + (positive) and its sleeve – (negative). The trigger output has a maximum current capacity of 150 mA. Parasound power amplifier trigger inputs require a mere 15 mA.

AUTO TURN ON

12V Trigger In

The 12V trigger input can be used to turn the Model 2100 power on automatically. In this case the Model 2100 would be turned on and off by another device such as a home automation system.

Note: When the Auto Turn On switch is set to 12V or AC the front panel Power button and remote control On and Off buttons are disabled.

AC Power Trigger

The Model 2100 will turn on automatically when its AC power source is switched on. To use AC auto turn on first set the Auto Turn On switch to its AC position.

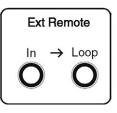
Note: When the Auto Turn On switch is set to 12V or AC the front panel Power button and remote control On and Off buttons are disabled.

(12)

CONNECTING YOUR MODEL 2100 continued

External Remote Input

Your Model 2100 is compatible with most popular infrared repeater systems for remote control operation from another room or when the Model 2100 is installed in a cabinet where its remote handset signals cannot reach its front panel remote control sensor. The External Remote Input connector is a standard 1/8" (3.5 mm) "mini" jack. The center conductor (plug tip) is for + and the outer conductor (plug sleeve) is for – . Your Authorized Parasound dealer or custom installer can recommend a compatible IR repeater system.



RS-232 Serial Port

This 9-pin female DB9 connector is a full-duplex serial port. This permits the Model 2100 to communicate in two directions with home automation and control systems such as Crestron, AMX, Control4, Niles and Elan. When the Model 2100 is connected to such a device, it can be

controlled and its status monitored from keypads or touch-screen panels throughout your house. The capabilities of such connections, and the programming and interfacing needed will depend on the automation system you select; consult your Parasound dealer or custom installer for more information regarding interfacing an external control system to your Model 2100.

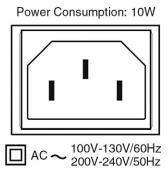


The complete RS-232 protocol and code table can be found on page 17 of this manual and at: **www.parasound.com**.

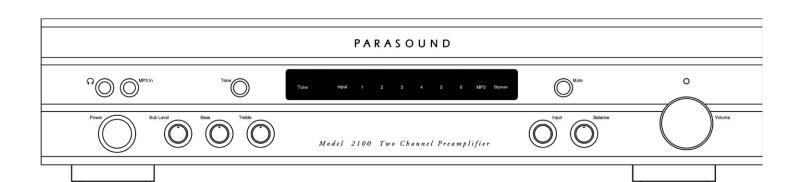
Note: The Model 2100 volume setting cannot be monitored from the RS-232 port because it is an analog control.

AC Power

The IEC standard AC cord supplied with your Model 2100 is an audiophile-grade component. Please connect it directly to an AC wall outlet that is always "live." If possible, plug your Model 2100 into the same AC outlet that your accompanying audio components (particularly your source components and power amplifiers) are plugged into. If different AC outlets are used the ground potential may be higher or lower between the outlets, resulting in audible hum.



Before turning the Model 2100 on, recheck all your connections and turn down the volume control to avoid any unpleasant "blasts" that could damage your speakers.



FRONT PANEL CONTROLS

Power Button

A soft red glow surrounds the Power button when the Model 2100 is turned off. Push the Power button once to turn on and the red glow will extinguish. When the Model 2100 is turned on, the Input indicator and the selected input will illuminate green. The Mute LED will light up during a 4–5 second delay after turn on. After the circuits stabilize the muting will disengage.

Push the Power button again to turn it off.

Note: The front panel Power button and remote control On and Off buttons are disabled when the rear panel Auto Turn On switch is set to 12V or AC.

Sub Level Knob

The Sub Level control knob adjusts the subwoofer level. The sub level can be adjusted between –10 and +10 dB, relative to the L and R channels. When the control knob is in the 12 o'clock position the sub level is boosted by 0 dB.

Bass and Treble Knobs

The Bass and Treble knobs adjust tone. Very slight tone adjustments can restore warmth, richness, clarity and airiness that might be missing on certain recordings or because of room acoustics. Larger tone adjustments will obscure musical detail, and even risk overloading your speakers. Tone adjustments are audible only when the Tone indicator in the front panel display is lit.

Tone Button

Press the Tone button once to engage the bass and treble tone control circuits. Press a second time to turn them off.

Tone is on when the Tone indicator in the front panel display is lit. The Tone button lets you hear the difference between sound without tone adjustments ("flat") and sound with the tone adjustments you made.

Note: You'll hear the clearest sound when Tone is turned off and the audio signal path bypasses the tone circuits.

Mute Button

Pressing the Mute button once will mute the signal at all of the Out jacks except the Record Out. The red Mute light will flash on the front panel while mute is engaged. Press the Mute button a second time to cancel mute.

Input Knob

Rotating the Input selector will cycle through all 8 inputs. The front panel display indicates which input is selected.

Balance Knob

Adjusting left and right channel balance is helpful to compensate for speaker placement, room acoustics or if your power amplifier's gain isn't identical for both channels.

Volume Knob

Your Model 2100 uses a high quality potentiometer to adjust the master volume level. Adjust your power amplifier gain controls (if it has them) so that your Model 2100 master volume knob's indicator is between 11 o'clock and 1 o'clock for your most typical listening level. This is its "sweet spot" where the control's left/right channel tracking is closest and its distortion is lowest.

Note: The Model 2100 has a gain of 12 dB, which is suitable for most brands of power amplifiers and is an ideal match for all Parasound power amplifiers.



REMOTE CONTROL FUNCTIONS

The Model 2100 remote control has a maximum range of approximately 20–25 feet (6–7.5 meters). Use only AAA alkaline batteries in the handset and insert them according to the + and – polarity markings in the battery compartment.

On and Off Buttons

These have the same function as the Power button on the front panel. These separate buttons enable programming unambiguous "hard" off and on commands into a system controller or to create a macro sequence for a learning-type remote control.

Note: The On and Off buttons are disabled when the rear panel Auto Turn On switch is set to 12V or AC.

Mute Button

Pressing the Mute button once mutes the signal at all of the Out jacks except the Record Out. The red Mute light will flash on the front panel while mute is engaged. Press the Mute button a second time to cancel mute.

Volume ▲ and ▼ Buttons

These buttons control the rotation of the front panel motorized Level control to increase and decrease listening volume levels.

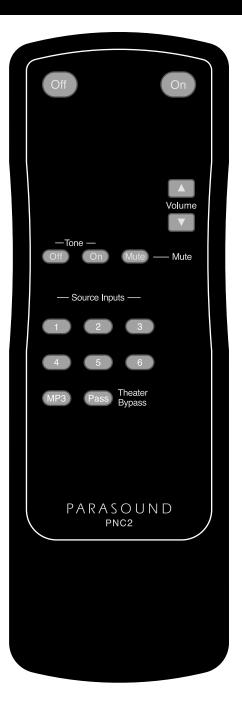
Tone On and Off Buttons

Press the Tone On and Off buttons to engage or disengage the bass and treble tone control circuits. The remote lets you hear whether "flat" or adjusted tone sounds better at your favorite listening position.

Note: The remote control cannot make the Bass and Treble adjustments; these adjustments must be made with the Model 2100's front panel Bass and Treble knobs.

Source Input Buttons

Press the Input button of the source that you wish to hear.



"BURNING-IN" YOUR MODEL 2100

Like many other great high end preamplifiers, your Model 2100 should operate for at least 72 hours with music playing after it is first turned on before it will sound its best. Any volume level is ok. This gives various internal components and wiring a chance to "form" their optimum electron pathways so they can pass complex musical information with greater definition, smoothness and transparency. Although your Model 2100 will sound spectacular when you first turn it on, you will come to appreciate it even more as your listening hours accumulate. You'll discover additional musical details you may not have known were present.

Before turning the Model 2100 on, recheck all your connections and turn down the volume control to avoid any unpleasant "blasts" of sound that could damage your speakers.

Why is there no sound from the speakers?

- Is the AC power live? You should see a faint red glow around the Power button when the unit is turned off, but plugged into a live AC power source.
- Check that input and output cables are secure at both ends.
- Make sure your Model 2100 is switched to the correct input.

What could cause the remote to fail to operate?

- Weak or dead batteries. Replace; information about battery recycling: www.Earth911.org.
- Insure that the front panel IR receiver is not obscured or exposed to direct sunlight or to an LCD or a plasma TV screen.

I can hear a background hum from the speakers

- Move audio cables and AC cords away from each other (while power is off).
- Try to route audio cables and AC cords perpendicular to each other (while power is off).
- Make sure insulating shoulder washers are used if unit is rack mounted.
- Reverse the direction of the other components' AC plugs, one-by-one (while power is off).
- Insure that the power amps and the Model 2100 are plugged into the same AC outlet.
- The turntable ground wire must be attached to the GND terminal.

The Sound is distorted and weak

- Make sure the gain of the power amp is not set too low.
- Are you trying to use the Model 2100 with a turntable? Make sure you have set the phono selector switch to the correct cartridge type.
- Make sure the stereo power amp's stereo/mono switch is set to stereo.

MAINTAINING YOUR MODEL 2100

Your Model 2100 requires no periodic maintenance and has no user-serviceable parts inside. To avoid risk of electric shock do not remove the top cover. To keep it clean use only a soft cloth moistened with a few drops of clear water or Windex. Never use any solvents or abrasives. The remote control handset batteries should be removed whenever it will be unused for an extended period. Remove the battery cover annually to inspect and remove leaking batteries.



Warranty Repair

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, toll-free at 1-866-770-8324, Monday - Friday, 8am – 4pm Pacific time. We can suggest other diagnostic tests you can easily perform.

If we determine that your Model 2100 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.

Units 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 is likely to have been damaged in transit.
- 3. Unit has inadequate packing materials and is likely to have been damaged in transit.
- 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.

Note: The Parasound Technical Department shipping address is not the same as Parasound's office address. The Parasound office does not accept packages.

Warranty Repair

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.

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.

Protocol Specs		Pin Connections		
Baud Rate:	9600 bps	TxD:	Pin 2	
Data Bit:	8 bits	RxD:	Pin 3	
Stop Bit:	1 bit	Gnd:	Pin 5	
Parity:	None			
Flow Control:	No			

Basic RS-232 Control:

ASCII (not decimal) and hexadecimal examples are shown below. The commas in the Hex example are merely for your ease of reading and are not required in transmission. All strings must have a space between each number or letter (except two digit numbers). In the Hex examples the space is already represented with code "20." The end of each string must have a carriage return after the last number with no space in-between, this is represented by "<CR>" in the ASCII examples and "0D" in the Hex examples.

Command	String ASCII	String Hexadecimal
Power On	W 1 1 2 <cr></cr>	57,20,31,20,31,20,32,0D
Power Off	W 1 1 1 < CR >	57,20,31,20,31,20,31,0D
Power Toggle	W 1 1 3 <cr></cr>	57,20,31,20,31,20,33,0D
Volume Up	W 1 9 1 <cr></cr>	57,20,31,20,39,20,31,0D
Volume Down	W 1 9 2 <cr></cr>	57,20,31,20,39,20,32,0D
Mute On	W 1 10 2 <cr></cr>	57,20,31,20,31,30,20,32,0D
Mute Off	W 1 10 1 <cr></cr>	57,20,31,20,31,30,20,31,0D
Mute Toggle	W 1 10 3 <cr></cr>	57,20,31,20,31,30,20,33,0D
Input 1	W 1 2 6 <cr></cr>	57,20,31,20,32,20,36,0D
Input 2	W 1 2 7 <cr></cr>	57,20,31,20,32,20,37,0D
Input 3	W 1 2 8 <cr></cr>	57,20,31,20,32,20,38,0D
Input 4	W 1 2 9 <cr></cr>	57,20,31,20,32,20,39,0D
Input 5	W 1 2 10 <cr></cr>	57,20,31,20,32,20,31,30,0D
Input 6	W 1 2 11 <cr></cr>	57,20,31,20,32,20,31,31,0D
Input MP3	W 1 2 12 <cr></cr>	57,20,31,20,32,20,31,32,0D
Input Bypass	W 1 2 13 <cr></cr>	57,20,31,20,32,20,31,33,0D
Next Input	W 1 2 4 <cr></cr>	57,20,31,20,32,20,34,0D
Previous Input	W 1 2 5 <cr></cr>	57,20,31,20,32,20,35,0D
Tone On	W 1 3 1 <cr></cr>	57,20,31,20, 33,20,31,0D
Tone Off	W 1 3 2 <cr></cr>	57,20,31,20, 33,20,32,0D
Tone Toggle	W 1 3 3 <cr></cr>	57,20,31,20, 33,20,33,0D

Please Note: "<CR>" stands for Carriage Return and the Hex Code is "0D". A space in Hex is "20", a space in ASCII is just a blank space (as shown above).



Feedback Information:

Unsolicited feedback is sent anytime that the MODEL 2100 is controlled by IR remote, Front Panel or by RS232. Even if the MODEL 2100 is turned off it should send full feedback. Full unsolicited feedback will be automatic and in this format:

*G1 S3 M1 T0<CR>

* = Start of transmission

<CR> = End of transmission

G0 = Power Off, G1 = Power On

S1 = Input 1, S2 = Input 2, S3 = Input 3, S4 = Input 4, S5 = Input 5, S6 = Input 6

S7 = Input MP3, S8 = Input Bypass

M0 = Mute Off, M1 = Mute On

T0 = Tone Off, T1 = Tone On

Volume Feedback *V0<CR> and *V1<CR>

Because the volume control is a motor driven type there is no exact feedback of the current volume setting. When the volume is turned up or down from the remote or RS232, feedback will be transmitted confirming the volume was increased or decreased. This will be represented by a "*V0<CR>" for volume decrease and "*V1<CR>" for volume increase.

You can request the status of the MODEL 2100 by issuing the following commands:

Request	String ASCII	String Hexadecimal	Response From 2100
Current Input	R 1 2 <cr< td=""><td>52,20,31,20,32,0D</td><td>*S1<cr></cr></td></cr<>	52,20,31,20,32,0D	*S1 <cr></cr>
			*S2 <cr></cr>
			*S4 <cr></cr>
			*S5 <cr></cr>
			*S6 <cr></cr>
			*S7 <cr></cr>
			*S8 <cr></cr>
Power Status	R 1 1 <cr></cr>	52,20,31,20,31,0D	*G0 <cr></cr>
			*G1 <cr></cr>
Mute Status	R 1 10 <cr></cr>	52,20,31,20,31,30,0D	*M0 <cr></cr>
			*M1 <cr></cr>
Tone Status	R 1 4 <cr></cr>	52,20,31,20,34,0D	*T0 <cr></cr>
			*T1 <cr></cr>
Full Status	R 1 13 <cr></cr>	52,20,31,20,31,33,0D	*G1 S2 M0 T0 <cr></cr>

Audio Specifications

Frequency Response

10 Hz - 100 kHz, +0/-3 dB

THD Distortion

< 0.008% at 20 Hz

S/N Ratio

- > 105 dB, input shorted, IHF A-weighted
- > 95 dB, input shorted, unweighted

Crosstalk

> 75 dB at 20 kHz

Input Impedance

30k ohms

Output Impedance

< 60 ohms

Input Sensitivity

250 mV for 1 V output Total Gain: 12 db

Maximum Output: 6.5 V

AC Power Requirement

110-250 V, 50 - 60 Hz

Voltage is automatically selected

5 watts standby; 10 watts when turned on

General Information

Dimensions

Width: 17.25" (437 mm) Depth: 14.5" (369 mm)

Height, with feet: 4.25" (108 mm) Height, without feet: 3.5" (89 mm)

Weight: Net: 13 lbs. (5.9 kg) Shipping: 20 lbs. (9.1 kg)

Rack Mount Accessory

RMK22 (May be purchased separately)

otes:				

Note: Specifications and features subject to change or improvement without notice.

We invite you to visit www.parasound.com for the most up-to-date information on your unit and to find out about other Parasound products. Learn why Parasound has been a quality and value favorite of magazine reviewers, sound professionals and listeners like you since we were founded in 1981.









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