# PARASOUND®

200 Integrated	PARASOUND	
		Input Mute Volume
	Integrated Amplifier & DAC Pushta	Select

# 200 Integrated

# **Integrated Amplifier & DAC**

**Owner's Manual** 



### 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.

### **INTRODUCTION**

Congratulations on your purchase of this precision audio product and thank you for selecting Parasound. We are proud to offer you this versatile integrated amplifier, knowing that it will bring you many years of enjoyment and dependable operation. Please take a few moments to read the following instructions so you can enjoy all the benefits of your new 200 Integrated's advanced performance capabilities.

You can find details of the 200 Integrated's specifications and advanced technology at www.parasound.com.

Enjoy.

#### The Parasound Staff www.parasound.com

- Keep your Purchase Receipt/Dealer Invoice for future reference
- Keep the carton in the event it is needed in the future

Record the 5 digit serial number located on the bottom side of your 200 Integrated in the space below. Also note your Parasound dealer's name and telephone number. Your purchase receipt-dealer invoice is required to determine if your 200 Integrated is eligible for Parasound warranty service. We recommend that you make an extra copy of your original purchase receipt and store it inside the 200 Integrated's carton. If the 200 Integrated should require warranty repair you will need its original carton and foam packing inserts to ship it.

#### Please do not throw away the carton or foam packing inserts.

Parasound 200 Integrated Serial # _	
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 *unauthorized* dealers very carefully, as Parasound will not provide service under our warranty and you will need to depend entirely upon the unauthorized dealer for warranty service. A list of Authorized Parasound Dealers and detailed warranty information is available at *www.parasound.com* or you can call Parasound at **(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.

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#### **Unpacking Your 200 Integrated**

Carefully remove your 200 Integrated from its shipping carton and locate its AC power cord and these included accessories:

- USB A to USB B cable for music playback from a computer
- Remote control and two AA batteries
- 18 AWG power cord

While you are unpacking your 200 Integrated, inspect it thoroughly for evidence of 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 200 Integrated if you move it or have to ship it. This would be a good time to make a copy of your sales receipt for storage with the 200 Integrated's original packing.

#### **Placement Guidelines**

Install your 200 Integrated away from heat sources such as heat-producing audio components, heating ducts and radiators. Observe the following ventilation guidelines when installing the 200 Integrated in an equipment rack or any other enclosed space:

It is better to position your 200 Integrated under, rather than above, power amplifiers or other heat-producing components. Pockets of intense heat can still develop above and around any heat-producing equipment. You should also avoid installing the 200 Integrated in an unventilated equipment cabinet or small compartment because hot air created by the other components will not exhaust adequately and could result in overheating. A cabinet or enclosure whose front and back are open doesn't guarantee that air will circulate adequately. Allow a few inches of empty space on each side of the unit and try to avoid crowding or stacking the 200 Integrated tightly between other components.

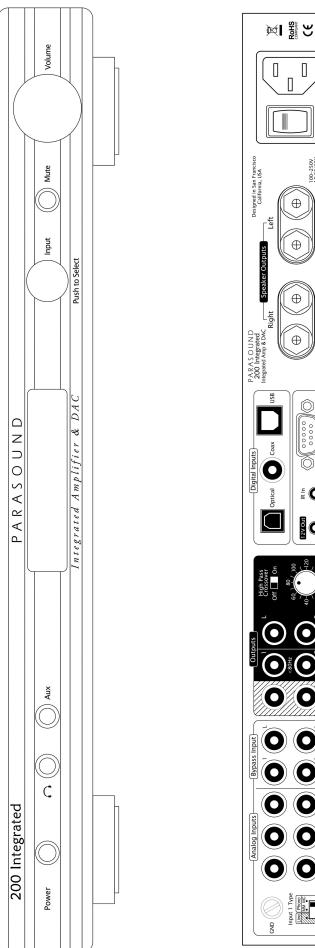
If you are installing the 200 Integrated yourself, use input and output cables that are long enough to leave at least two feet of slack; that will enable you to pull the 200 Integrated out of a cabinet to check or to change connections without inadvertently disconnecting cables.

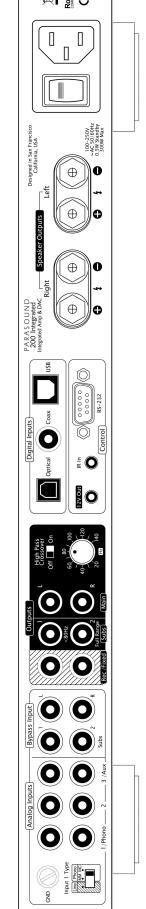
#### **Rack Mounting Your 200 Integrated**

A rack mount adapter model "RMK-11" is available for purchase separately. When rack mounting always leave at least one rack space (1U or  $1\frac{3}{4}$ ") empty above the 200 Integrated to allow for proper cooling.

### AC Power Cord

The power cord supplied with your 200 Integrated is an IEC type 18AWG AC cord. The AC ground potential can vary between your AC outlets and the result can be an audible 60Hz (or 50Hz) hum heard in your speakers. To help avoid this problem plug your 200 Integrated into the same AC wall outlet, power strip or line conditioner as you have plugged in your other audio components. The power cord might be different for units sold in other regions of the world.





# **Rear Panel Layout and Connections**

Always disconnect your 200 Integrated's AC cord (or turn off the master AC switch) <u>before</u> connecting or disconnecting cables. Inserting or removing an interconnect cable's plug while this unit is turned on can result in a burst of sound that can damage your loudspeakers. Make sure there is no strain or tension on any input cables, speaker wires, DC trigger wires or the AC cord that could cause them to pull loose.

# Analog Audio Input Connections

#### Input 1/Phono

Input 1 can be connected to either a turntable or a standard line level source. If you wish to connect a turntable, set the Input 1 Type 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. MM cartridges are more common than MC cartridges. If anything other than a turntable is connected to Input 1 you must set the adjacent Input Type selector switch to "Line". If your turntable has a built-in preamp that is not defeatable then you must also select "Line" for input 1. Connect the ground wire from your turntable to the Phono Gnd (ground) terminal on the 200 Integrated.

**Note:** If your turntable can't reach adequate volume, or if it plays too loud, you may have selected the incorrect cartridge type.

### Input 2

Input 2 is compatible with any typical analog line level source.

#### Input 3/Aux

Input 3 is compatible with any typical analog line level source but is shared with the Aux input on the front panel. The front panel Aux Input has priority over Input 3 on the rear panel. When a plug is inserted into the front panel Aux jack the rear panel Input 3 is automatically disconnected and you will not hear the source connected to the rear panel Input 3 jacks. Input 3 on the rear panel will be reconnected when the 3.5mm plug is removed from the front Aux jack.

### **Front Panel Aux Input**

For your convenience, the 200 Integrated includes this input jack on the front panel for a mobile phone or portable music player. Use any standard 3.5 mm stereo aux cable to connect your portable player or phone's headphone jack to the 200 Integrated. The front panel Aux Input circuit includes an additional gain stage that boosts the input signal by 12 dB so that the volume level remains consistent with your other audio sources. For the best result, set your portable player or phone's volume to at least 75% of its maximum level. If you connect a component other than a portable music player or phone to the Aux Input jack, the volume level will probably be too high and likely distorted.

**Note:** Whenever a plug is connected to the front panel Aux jack you will not be able to hear the source that is connected to Input 3 on the rear panel.

# <u>Bypass Input</u>

The 200 Integrated's Bypass input makes it suitable for both high quality stereo reproduction and powering the L and R channels in a surround sound system. This unique feature benefits your system in several ways. It will improve the performance of your left and right speakers in a surround sound system because the power amp built into the 200 Integrated is superior to most surround sound receiver's amp. This will also relieve your AV receiver of the burden of driving the left and right speakers so that more power is available to drive the center and surround channels. This feature also enables your subwoofer(s) to operate with stereo sources and the sub channel(s) in your surround sound system.

The Bypass input jacks may also be used to integrate the 200 Integrated with additional audio sources that have their own volume control. The most common example is a music streaming device such as a Sonos<sup>®</sup> Connect<sup>®</sup>, a separate house audio controller, bluetooth adapter or network audio player.

The Bypass input works by passing the incoming Left and Right signals directly to the power amp stage bypassing the preamp and volume control. The incoming L, R and Sub channels are also routed directly to the L, R and Sub Main preamp output jacks.

None of the 200 Integrated controls have any effect on the bypassed signals. The 200 Integrated is thus transparent to the Left, Right and Subwoofer(s) outputs from your surround sound processor or receiver and passes them on to the internal or external power amp(s) and subwoofer(s). In order to use the 200 Integrated Bypass function your surround sound receiver must have line level preamp output jacks. You can't use Zone 2 output jacks for surround sound integration.

All controls are excluded from the bypass signal path.

- Adjusting the 200 Integrated Volume will not change the volume level of the Bypass input.
- The Bass and Treble Tone controls do not function; frequency response is flat, regardless of how these controls are adjusted.
- The Left/Right Balance control does not function; channel balance is equal, regardless of how this control is adjusted.
- The Subwoofer Level and on/off control does not function.
- Speaker and Main Preamp Outputs are full range, regardless of the crossover settings.
- Both Subwoofer Outputs are full range.

The exclusions above are intentional so your surround sound receiver bass management menu settings and volume control function normally when you are listening to surround sound with the Left, Right and Sub channels routed through the 200 Integrated. Please see the owner's manual for your surround sound receiver or processor to set the proper speaker levels, distance and bass management. Don't forget that the volume control on the 200 Integrated does not work when the Bypass Input is selected. Use the volume control on your surround sound AVR or processor.

#### Connecting an AVR to the Bypass Input

Connect your surround sound receiver's Left, Right & Sub(s) preamp output jacks to the 200 Integrated's Left, Right & Sub(s) Bypass Input jacks. Two Bypass Subwoofer Input jacks are included in case you have two Subwoofers and your surround receiver includes two Subwoofer out jacks. With a single Subwoofer you can use either the Sub 1 or Sub 2 Input jacks.

The 200 Integrated Bypass Inputs should not be connected directly to any source component with a fixed output level. Examples are CD players, most Blu-ray/DVD players, cable/sat set-top boxes or tuners. Since there is no volume control with the Bypass input the full voltage output from the source will go directly to the power amplifier. The sound level could be extremely high and could damage your speakers.

# Digital Inputs (OPT, COAX, USB)

The 200 Integrated's built in DAC (Digital to Analog Converter) uses a high resolution 192kHz Burr-Brown DAC IC. Since the 200 Integrated's DAC is superior to the DAC in most source components, they will sound better if you connect them via their digital output rather than their conventional analog line output.

#### Using the digital output on a TV, Blu-ray/DVD player or gaming console

If you connect a TV, Blu-ray player, DVD player, cable TV box, satellite receiver, video streaming device or gaming console to your 200 Integrated you must go to that device's audio setup menu and select stereo PCM (2.0) output. The 200 Integrated's DAC accepts only two-channel stereo PCM. It does not accept Dolby Digital or DTS formats.

#### **Opt (Optical)**

The optical input is a high speed Toslink receiver with a 25MHz bandwidth. It accepts standard PCM sampling rates up to 192kHz-24 bit.

**Optical Cable Note**: 192 kHz sampling rates will only play reliably with a short optical cable. Be careful when handling the optical cable. It has limited flexibility and if you bend it at a sharp angle you'll impair its ability to transfer the optical signal from your source to the 200 Integrated.

#### Coax (Coaxial)

The Coax (also called S/PDIF) input connector is an RCA jack. The Coax input accepts standard PCM sampling rates up to 192 kHz-24 bit.

**Coaxial Cable Note:** The 200 Integrated's Coax input works best with a true 75 ohm cable which typically has "75 ohm", "RG6" or "RG59" printed on the cable. Using an ordinary audio cable can make the signal unstable, resulting in high levels of jitter and even audio dropouts. Most digital coaxial cables with RCA plugs look like typical analog audio cables, but their electrical characteristics are not always the same.

#### USB

The USB input is used to connect your 200 Integrated to your PC or Mac computer. This allows high quality playback of any music that is stored on your computer and streaming music services accessed via the internet. The USB input accepts sampling rates up to 96 kHz-24 bit. The 200 Integrated uses the USB 1.1 audio standard which typically allows the use of USB cables up to 12' (4 m). The USB connection is plug and play with Windows and Mac computers and therefore doesn't require the installation of any drivers.

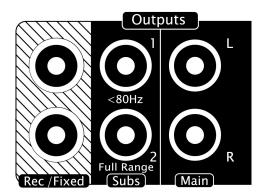
### L & R Speaker Outputs

The speaker binding posts accept a wide variety of speaker wire and connectors, including spade connectors, banana connectors, and bare wire as large as 10 gauge. The speaker outputs are affected by the setting of the high-pass crossover.

### L & R Main (Preamp) Outputs

These preamp outputs may be used to connect an external power amplifier. They are variable because their output level is determined by the volume control setting. The Main preamp outputs are affected by the setting of the high-pass crossover.

### Sub <80Hz Output (Subwoofer #1)



This is a subwoofer output with an 80Hz low-pass crossover. If you use this output you should turn off your subwoofer's built in crossover in order to avoid inadequate output level caused by "double filtering." If your subwoofer's crossover cannot be switched off, then you should use the 200 Integrated's Full Range Sub output (Subwoofer #2).

### Sub Full Range Output (Subwoofer #2)

This is a summed L+R full range signal. The most common use of this jack is for a subwoofer. Since this output is full range, you will need to use the low-pass crossover built into your subwoofer. This mono output can also be useful for bathrooms, hallways or outdoors where a single full-range mono speaker is often preferable to stereo speakers.

### L & R Rec / Fixed Outputs

These outputs are not affected by the setting of the volume control. The bass, treble, balance and crossover controls also do not affect this output. These could be used in rooms with passive (in-wall) volume controls or for making recordings.

#### Headphone Jack

The headphone jack on the front panel accepts a 1/8" (3.5 mm) stereo plug. The Speaker, Main (preamp) and Subwoofer outputs are automatically muted when you plug in headphones. The Rec/Fixed outputs are not muted when headphones are plugged in.

# 12 Volt, IR and RS-232 Connections

#### **12 Volt Output Jack**

The 12V Out is used to turn an external power amp or other accessories on and off automatically. If your external power amplifier is equipped with a 12 volt trigger input, connect a 1/8" (3.5mm) mono trigger cable between the 200 Integrated's 12V Out jack and the power amplifier's 12 volt trigger input. When the 200 Integrated is powered on, 12 volts will be present at the 12V output jack and your amp will turn on automatically. When the 200 Integrated is powered off your amp will automatically turn off.

#### **IR Input Jack**

Your 200 Integrated is compatible with most infrared repeater systems for operation from another room or when the 200 Integrated is installed in a cabinet where its remote handset commands cannot reach its front panel IR receiver. The IR Input connector is a standard 1/8" (3.5 mm) mono "mini" jack. The center conductor (plug tip) is for the signal and the outer conductor (plug sleeve) is for ground. Your Authorized Parasound dealer or custom installer can recommend a compatible IR repeater system.

#### **RS-232 Control Port**

This DB9 serial port permits the 200 Integrated to be controlled by home automation and control systems such as Crestron<sup>®</sup>, AMX<sup>®</sup>, Control4<sup>®</sup>, Savant<sup>®</sup> and Elan<sup>®</sup>. When the 200 Integrated is connected to such a device, it can be controlled from keypads or touch-screen panels throughout your house. The RS-232 port is a 2-way signal for both control and status feedback. 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 200 Integrated. The complete 200 Integrated RS-232 protocol can be found at: www.parasound.com.

# High Pass Crossover

The 200 Integrated High Pass Crossover allows you to block low frequencies from going to your Left and Right speakers. This can be particularly useful if you are using small speakers (typically with woofers that are 6.5"/165 mm or smaller) and you have a subwoofer. The most common settings are between 50 Hz and 80 Hz. If you are not using a subwoofer you will get better results by turning the 200 Integrated High Pass Crossover off or setting it at 40 Hz or lower. If you want your L and R speakers to operate full range with no frequencies blocked set the High Pass Crossover switch to the Off position. Both the Speaker outputs and the Main (preamp) outputs are affected by the High Pass Crossover setting.

# Subwoofer Setup

For proper subwoofer operation you must first pick the subwoofer output most appropriate for your system and adjust your subwoofers built in crossover as needed. After picking the correct crossover you must setup the subwoofer level.

#### <80Hz Subwoofer #1 Output (Low Pass)

If you are connecting your subwoofer to the 200 Integrated's "<80Hz" Sub output then you should turn off the crossover built into your subwoofer. Using both the sub's and 200 Integrated's crossovers will result in low output caused by "double-filtering." Most powered subwoofers have a switch that's typically labelled "Bypass", "LFE" or simply "Crossover Off." If your subwoofer's crossover cannot be switched off, set it to its highest frequency or use the Full Range Subwoofer output (sub #2).

#### Full Range Subwoofer #2 Output

If you are connecting your subwoofer to the 200 Integrated's "Full Range" Sub output then you must leave your subwoofer's crossover engaged.

#### Subwoofer Level Setup

To set the proper subwoofer level, start with the 200 Integrated's subwoofer level control set to its flat (0 dB) position and play a variety of music. Adjust the level control <u>on your subwoofer</u> until the bass level sounds balanced in your system. Now, whenever you want to fine tune your subwoofer level you can simply use the 200 Integrated's front panel or remote-control sub level control instead of walking over to your sub and reaching behind it to adjust its level control.

#### **Using Stereo Subwoofers**

If you have two subwoofers and want them to operate in stereo you can connect them to the Left and Right Main preamp output jacks instead of to the Sub output jacks which are mono. In this case you must set the High Pass Crossover switch to Off. With this configuration the 200 Integrated's subwoofer level control and subwoofer on/off by remote do not function.

# Front Panel Controls

#### Volume Knob

Rotate the Volume knob right or left to increase or decrease the volume level. The range is from 0 to 100. A setting of 100 corresponds to a preamp gain of 12dB. A setting of 76 is "unity gain" where the Main preamp output voltage is the same as the input voltage.

#### **Mute Button**

Press to mute the audio. Pressing a second time will unmute the audio. The mute is also turned off automatically if you increase or decrease the volume or if you power the unit off and back on again.

#### Input / Multifunction Select Knob

The Input knob on the front panel controls several different functions. The default function of the knob is input selection. Each time the knob is pressed inward the function that the knob controls will change. The knob functions rotate through in this order with each press:



#### Input

The default function (no press) of this knob is input selection. Rotating it cycles through all of the inputs. Stop at the input you wish to hear.

#### **Bass/Treble**

After pressing the knob once, rotate it to increase or decrease the bass. Press the knob again and rotate it to control the treble. Bass and Treble are adjusted in 1dB increments over a +/- 8dB range.

#### Balance

Press the knob again and rotate it to shift the balance to the left or right. This can be helpful to compensate for speaker placement or room acoustics. The maximum adjustment is 15dB to the Left or Right.

#### Sub Level

Press the knob again and rotate it to adjust the level of the Subwoofer outputs. The maximum adjustment is +/- 15dB.

# **Remote Control**

### Off & On

These buttons turn the power on and off.

#### Set

The Set button is used in conjunction with other buttons for setting up some features. These features include setting the turn on volume, Mem (favorite) volume, renaming the inputs and adjusting the input level offsets. See page 14 and 15 for instructions on how to use these features.

### Remote Backlight Button ightarrow

Pressing this button backlights the buttons with a soft blue glow. The backlight will time-out after approximately 8 seconds or you can press the button a second time to turn the backlighting off immediately.

#### Dim

Press this button to select one of the display's two brightness levels.

### Sub On/Off

Press this button to turn both subwoofer outputs on or off.

### **Balance Left & Right**

Use these buttons to shift the balance to the left or right. This can be helpful to compensate for speaker placement or room acoustics. The maximum adjustment is 15dB.

#### Volume ▲ and ▼

The volume up and down buttons increase and decrease the volume level.

#### Mute

Press to mute the audio. Pressing a second time will unmute the audio. The mute is also turned off automatically if you increase or decrease the volume or if you power the unit off and back on again.

#### Vol Mem (Volume Memory)

This button recalls the volume setting you have memorized. This is a convenient way to jump to your favorite volume setting. This Volume memory is different than the turn on volume setting. See page 14.

#### **Tone Flat**

This button resets the Treble and Bass settings to zero (flat). The subwoofer and balance levels will <u>not</u> be changed.

#### **Input Buttons**

These buttons select the input you wish to hear.

#### **Bypass**

This button selects the Bypass input. See page 8 for more details.

#### Input Name ◀ and ►

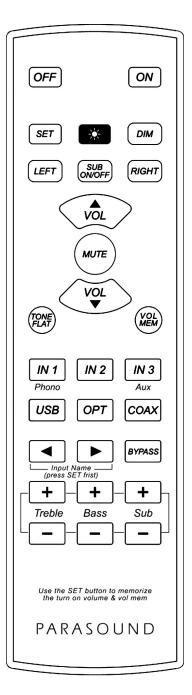
Press the "Set" button and then these buttons to change the name of the current input. See page 15.

#### Bass & Treble +/-

Raise or lower the amount of bass and treble with these buttons.

#### Sub +/-

Raise or lower both subwoofer #1 and #2 output levels simultaneously with these buttons.



# Turn On Volume & Favorite Volume

#### Turn On Volume

You may wish your 200 Integrated to come on to the same volume setting every time it is turned on. This can be particularly useful if you sometimes listen at high volume levels and you want to avoid a blast of sound the next time you turn it on. Or you may have a preferred listening level. To program the Turn On Volume setting follow these steps:

#### Setting the Turn On Volume:

- 1) Adjust the volume to the level you wish to program
- 2) Press the "Set" button
- 3) Press the remote control's power "On" button

Now every time the 200 Integrated is turned on the volume will automatically be set to the level you have programmed.

#### Cancel the Turn On Volume Feature (Use Last Volume)

You may wish to cancel the "Turn On Volume" feature. In this case, when the 200 Integrated turns on the volume will be at the same level as when it was turned off. Follow these steps to have the 200 Integrated turn on to the level it was last used at:

#### Cancel the Turn On Volume Feature:

- 1) Press the "Set" button
- 2) Press the remote control's power "Off" button

Now when the 200 Integrated turns on the volume will be set to where it was last used.

#### Memorizing a Favorite Volume Level (Vol Mem Button)

For your convenience, you can also memorize your favorite listening level. Once memorized you can easily jump to this listening level by pressing the "Vol Mem" button on the remote control.

#### Memorizing a Favorite Volume Level:

- 1) Adjust the volume to the level you wish to be memorized
- 2) Press the "Set" button
- 3) Press the "Vol Mem" button

You can now jump to your favorite listening level by pressing the Vol Mem button at any time. This is different than the "Turn On Volume" you may have already set.

# Factory Reset

Performing a factory reset will erase all user settings. This includes input names, turn on volume memory, favorite volume memory, input level offsets, tone control settings and balance setting.

#### Factory Reset Procedure:

- 1) Unplug the AC power cord
- 2) Press and hold the front panel Power button
- 3) Plug back in the AC power cord [display will indicate user memory has been reset]
- 4) Release the front panel Power button

# **Renaming Inputs**

The factory default input names are Input 1, Input 2, Input 3/Aux, USB, Optical, Coax and Bypass. To make it easier to remember which source is connected to what input you may wish to rename the inputs. Any of the inputs can be renamed to be one of the names in the following list.

BLUESOUND BLUETOOTH	LAPTOP MAC	SONOS TUNER
BLU-RAY	MP3 PLAYER	TV
CD PLAYER	NETWORK	TABLET
CABLE	PC	TAPE
DVD	PHONO	VIDEO
DAC	PHONE	VINYL
DISC	SACD	WIRELESS
GAME	SAT	
INTERNET	SERVER	

#### **Renaming Procedure:**

- 1) Select the input you wish to change
- 2) Press the "Set" button
- 3) Press the "Input Name ◀ and ►" buttons to cycle through the available names
- 4) When you have found the name you want press "Set" again to memorize it

Repeat steps 1 through 4 for the other inputs.

# Input Level Offset

This feature allows you to increase or decrease each input's volume level individually to compensate for varying output levels among different sources. If you notice a sound level change when switching from one input to another, you can raise or lower the corresponding input level offset over a range of +/-8 dB. After each input level offset is adjusted, your sources should all play at about the same volume level.

#### **Offset Setting Procedure:**

- 1) Select the input you wish to adjust
- 2) Press the "Set" button
- 3) Press the volume up or volume down buttons [the display will show current setting]
- 4) After selecting the desired offset press "Set" again to memorize it

Repeat steps 1 through 4 for the other inputs as needed.



#### When the unit turns on the volume always jumps to the same setting

- The "Turn On Volume" feature has been activated. See page 14 on instructions on how to turn off this feature. This can only be done using the remote control or by doing a factory reset.

#### There is no sound from input 3

- Input 3 is shared with the front panel Aux Input. When a plug is inserted into the front panel Aux jack the rear panel Input 3 is disconnected. To use both the Input 3 and the Aux Input you must unplug the front panel Aux cable when not using it.

#### When I use the Bypass Input the sound is very loud and cannot be turned down

- The Bypass input should never be connected directly to a source component (CD, DVD player etc.). The source connected must have its own volume control and that will be used to adjust the volume level. See page 8 for more information.

#### The Phono input sounds distorted

- Make sure you have set the phono selector switch to the correct cartridge type.
- If your turntable has a built-in preamp that is not defeatable then you must select "Line" for input 1.
- Is the turntable's tracking force adjusted correctly for its cartridge?

#### The USB input is not playing audio from my Computer

- Look in the sounds options of your computer and select "PARASOUND" as the output.
- Ensure the USB cable is connected between the 200 Integrated and your computer.
- Ensure the USB input is selected.
- Turn up the volume controls on your computer.
- Ensure your computer is only set to play stereo PCM (2.0) audio. Not Dolby Digital or DTS.
- Turn off the 200 Integrated and restart your computer and try again.

#### There is no sound when using the digital output from a TV, Blu-ray Player or Game Console

 If you connect a TV, Blu-ray player, DVD player, cable TV box, satellite receiver, video streaming device or gaming console to your 200 Integrated you must go to that device's audio setup menu and select stereo PCM (2.0) output. The 200 Integrated's DAC accepts only two-channel stereo PCM. It does not accept Dolby Digital or DTS formats.

#### I can hear a hum or buzzing noise from my speakers

- Cable TV is the most common source of hum or buzzing noise in a system. If you have a cable TV box connected to your audio system temporarily remove the incoming cable signal from the cable box. If the hum goes away the problem is with the cable TV ground. You will need a cable TV "ground loop isolator" which is an inexpensive device that attaches between your incoming cable and the cable box.
- Light dimmers can cause noise in your audio system. Try turning lights that are controlled by dimmers all the way off. If the hum goes away the problem is electrical noise the dimmers introduce into your home's AC power.
- Ground loops are also a common cause of hum and buzzing noise. Finding a ground loop is a process of elimination. Unplug your source components and subwoofer(s) one at a time. When the hum goes away you've identified the source of the ground loop. Ensure all AV components are plugged in the same outlet or power strip. You might be able to stop the hum by attaching a wire from the chassis of the offending component to the chassis or ground screw of your 200 Integrated.

## Maintaining Your 200 Integrated

Your 200 Integrated 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 window cleaner. Never use any solvents or abrasives.

## Are You Having Difficulty?

### 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 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 200 Integrated 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. 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.

### 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 replacement 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.

Do not ship to Parasound by the USPS (US Postal Service) - we will not accept delivery. We will also refuse delivery of units whose cartons show evidence of damage caused by inadequate packing.

# **Specifications and Details**

**Power Output** - Both channels driven (0.05% THD, 20 Hz - 20 kHz) 110 watts x 2 @ 4Ω or 8Ω (RMS)

**Power Output** - Both channels driven (1% THD, 20Hz - 20kHz) 125 watts x 2 @ 4Ω or 8Ω (RMS)

Frequency Response: 20Hz - 20kHz, +0 / -0.05dB 10Hz - 80kHz, +0 / -3dB

**Total Harmonic Distortion** (20Hz - 20kHz): < 0.05 %, (110 watts, 8Ω)

Interchannel Crosstalk: -75dB at 20kHz -85dB at 1kHz

### Preamp Output:

250mv = 1V output Total gain = 12dB (volume set to 100) Unity gain = Volume set to 76 Maximum output = 3.5V

### Phono Stage Gain / Input Impedance:

MM: 40 dB / 47 kΩ MC: 50 dB / 100Ω

Phono Stage Input Capacitance: 150pF

Line Level Input Impedance: 24k Ohms

Preamp Output Impedance: 470 Ohms

*S/N Ratio – Line Inputs:* > 100dB, input shorted, IHF A-weighted

S/N Ratio – Digital Inputs: > 110dB, input shorted, IHF A-weighted

DAC IC: Burr-Brown PCM1798

DAC Maximum Sampling Rates (PCM only): USB: 96kHz - 24 bit Optical: 192kHz - 24 bit Coax: 192kHz - 24 bit

DC Trigger Output: 12Vdc, 50mA

### AC Power Requirement:

Standby: 0.5 watts Idling: 15 watts (no music playing) Typical: 50 watts (music playing) Maximum: 300 watts 100-250 VAC 50/60 Hz (automatic)

### Dimensions:

Width: 17.25" (438 mm) Depth: 14.75" (375 mm) Depth: 16.75" (425 mm) with cables connected Height, with feet: 2.5" (63.5 mm) Height, without feet: 1.75" (44.5 mm), 1U Rack mounting requires RMK-11(sold separately)

### Weight:

Net: 11.5 lbs (5.2 kg) Shipping: 17.5 lbs (7.9 kg)

Specifications and features subject to change or improvement without notice.

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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.









Parasound Products, Inc. 2250 McKinnon Ave, San Francisco, CA 94124 Customer Service & Tech Support: 415-397-7100 www.parasound.com