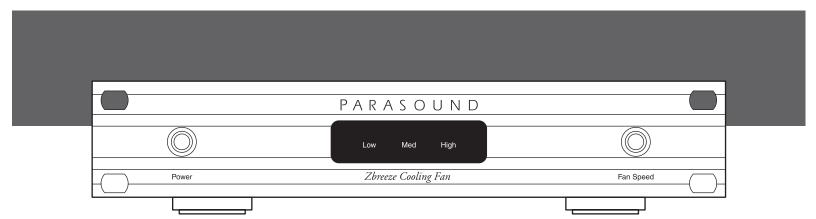
PARASOUND



ZbreezeLocal-area Cooling Fan



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

- **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.
- 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.
- 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.
- 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.
- 19. 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.
- 20. Wall or Ceiling Mounting Mount the product to a wall or ceiling only as recommended.
- 21. Heat The product should be situated away from heat sources such as radiators, heat registers and stoves.

TABLE OF CONTENTS

Introduction	2
Applications	2
115 – 230v AC Selector Switch	2
Rack Mounting	3
Rear Panel Connections and Settings	4
Front Panel Controls	6
If You Require Assistance	7
Warranty Repair	7
Specifications	8



Applications

The Zbreeze is designed to prevent stagnant hot air around nearby heat-producing components, drawing hot air away from a heat-producing component, and into the rack's general circulating air. It is not intended to exhaust hot air from an entire rack or compartment full of equipment and should not be employed as a substitute for general rack or cabinet forced air circulation.

Temperatures can increase to dangerous levels around closely-spaced components where local pockets of stagnant hot air are not exhausted by the overall air circulation in an equipment rack or compartment.

The Zbreeze provides extremely quiet localized cooling by drawing heat away from components that are installed directly above and below it. Three premium 92 mm ball-bearing whisper fans draw hot air into the Zbreeze through openings in its bottom. This hot air is pushed out in two directions, through openings in its top cover, to prevent the component above it from baking, and through openings in its rear panel into the general cabinet air circulation.

The Zbreeze is designed to run continuously while your system is turned on so it does not use a thermostat to switch it on and off. It prevents a local "hot spot" from forming rather than running at high speed to cool it down after it's already hot. Continuous operation enables the fans in the Zbreeze to run slower for quieter operation and longer life. You can select the fan speed which is adequate to keep the local area from overheating. It will run quietest on its low fan speed setting and least quiet on its high fan speed setting.

Multiple Zbreezes, installed at strategic locations in the equipment rack, will prolong equipment life and protect your investment.

You can also place the Zbreeze directly above a free-standing power amplifier to help dissipate its heat and keep it running cooler. Most power amplifiers get hotter if they are driving low impedance speaker loads and when they're playing for a long time at high levels. The Zbreeze can prevent the power amp's thermal protection circuits from shutting it down.

Please read this manual thoroughly before you begin installation.

Unpacking

Carefully unpack your Zbreeze and these accessories:

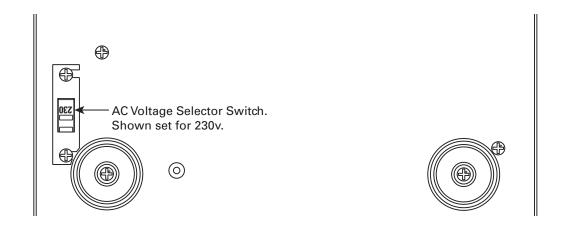
- · Detachable AC power cord
- Two trigger wires, one with 2.5 mm sub-mini plugs, one with a 2.5mm and a 3.5mm mini plug

Please inspect the unit now and contact your Parasound Dealer promptly if you see evidence of shipping damage. Save the carton and packing inserts in case you move or in the event you need to ship your amplifier for repair. Before you proceed, locate the serial number on the rear panel or underside of the unit and record it here for future reference:

OWNERSHIP REFERENCE INFORMATION									
Parasound Serial Number:									
Date of Purchase:		/	/						
Name of Dealer:									
Dealer Street Address:									
Dealer Phone:	()	-						

115v - 230v AC Voltage Selector Switch

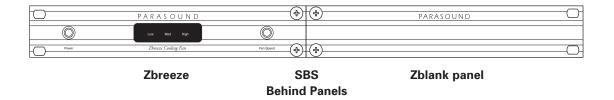
This switch is found on the chassis bottom. The 115V position of this switch is correct for North America; most other countries require setting it to 230V. Make sure the 115/230V switch is set for the correct AC line (mains) voltage before you connect the Zbreeze's power cord and before you install it.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



Rack Mounting

The Zbreeze must be mounted horizontally. It occupies only half the width of a single rack space in a standard 19" equipment rack.

For rack mounting, you can fasten it to another Parasound Z Custom model by using the Parasound SBS (Side-by-Side) mounting kit. You can also mount a single Zbreeze in the rack with the accessory Zblank panel. The SBS includes four rack mount bolts plus four pairs of plastic "shoulder washers." The washers are important because they insulate the Zbreeze front panel chassis) from the metal equipment rack and from the four mounting bolts. Locate these washers on both sides of the front panel before the mounting bolts are screwed into the rack rail.

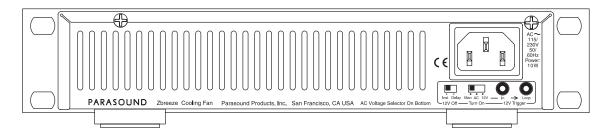


REAR PANEL CONNECTIONS AND CONTROLS

Connection Precautions

Disconnect the AC cord before making or changing any trigger wire connections.

Make sure there is no strain or tension on any wires that could cause them to pull loose.

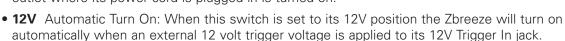


Mode Switches for Turn On and Turn Off

Turn On Switch

The Turn On switch has three positions that control how the Zbreeze is turned on.

- Man Manual Turn On: When this switch is set to its Man position the Zbreeze is switched on and off with its front panel Power button.
- AC Automatic Turn On: When this switch is set to its AC position the Zbreeze will turn on automatically when the AC outlet where its power cord is plugged in is turned on.



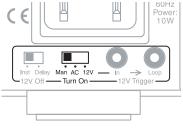
Note: The AC and 12V switch positions disable the front panel Power button so the Zbreeze turn on and off power is controlled only by the system controller. This way it can't inadvertently be switched off.

12V Off Switch

The 12V Off switch has two positions which control how the Zbreeze turns off while its turn on switch is set to 12V.

- **Inst** Instant Turn Off: When this switch is set to its Inst position the Zbreeze is switched off as soon as the trigger voltage at the 12V Trigger In jack is removed.
- Delay Delay Turn Off: When this switch is set to its Delay position the Zbreeze continues to operate for approximately 10 minutes after the trigger voltage at the 12V Trigger In jack

is removed. After a 10 minute delay it will turn itself off. This is an important feature because it allows equipment to cool guicker after power down.



ower 10W

- 12V Triage

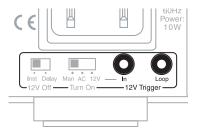
12v Trigger Input Jack

The Zbreeze 12V input uses a 2.5 mm sub-mini jack. To trigger the Zbreeze, plug one end of the provided cord into the In jack and the other end into the system controller's or preamp's 12V trigger output. Some components, including Parasound Surround Controllers, use 3.5 mm trigger output jacks, so we have also included a trigger wire with 2.5mm and a 3.5mm mini plugs. If the control component's trigger output is a + and - terminal, you can cut the 2.5 mm plug off one end of the included trigger wire and attach the bare wires to these terminals. The lead with the white stripe on it corresponds to the plug's tip and the unmarked lead corresponds to the sleeve of the plug.

Note: If the trigger voltage source is DC, the trigger plug tip must be + (positive) and its sleeve – (negative). The Zbreeze trigger current draw is a negligible 15 mA.

12v Trigger Loop Jack

The Loop jack is connected to the 12V Input jack to "loop" the 12 volt trigger to another device. It provides a convenient way to connect another component for 12V trigger operation.



AC Inlet

Set the AC line (mains) voltage before you connect the Zbreeze's power cord and before you install it.

Note: The AC source should be constant (unswitched) if the Zbreeze is operated manually. If the AC source is switched, then the Zbreeze should be operated with the Turn On switch set for AC.

Operating the Zbreeze

The Zbreeze is a local-area cooling fan which is designed to prevent hot spots from developing. It runs continuously whenever your equipment is on, at whichever speed you have selected.

The Zbreeze should be located above your component that generates the most heat. The Zbreeze will draw in the heated air from above this component and force it out the top cover and rear panel. This air circulation will prevent either the heat producing component or the component(s) above it from overheating.

If you can provide some space between the Zbreeze and the the components above and below it, you will increase its efficiency and reduce the acoustical noise. In an equipment rack this would result in leaving one rack space empty above and/or below each Zbreeze.

FRONT PANEL CONTROLS AND INDICATORS



Power Button

Press the Power button once to turn the Zbreeze on, press it again to turn it off.

Note: The Power button is inoperative when the rear panel Turn On switch is set to 12V or AC.

Fan Speed Button

The Fan Speed Button selects Low, Medium, and High fan speeds. Fan speed is indicated in the adjacent display window as Low, Med, High.

Note: The default fan speed is Medium.

Maintaining Your Zbreeze

Your Parasound Zbreeze requires no periodic maintenance other than an occasional smile of appreciation for the job it does to protect your components. It has no user-serviceable parts inside. To avoid the risk of electric shock, do not remove its top cover. The exterior can be cleaned with a soft cloth pre-moistened only with a few drops of water or glass cleaner.

Are You Having Difficulty?

Front panel power button does not work

- Move the rear panel Turn On switch to its Man (Manual) position.

Unit does not turn off immediately when using a 12v trigger

- Move the rear panel 12V Off switch to the Inst (Instant) position.

Unit does not move enough air

- Increase the space between Zbreeze and components below and above it.

Equipment rack or cabinet overheats

- Zbreeze is for local cooling only. You will need a larger fan for general air circulation. We recommend Active Thermal Management products: http://www.activethermal.com/CoolSolutions.htm

Warranty Repair Information

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 Zbreeze 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, likely to have been damaged in transit.
- 3. Unit has inadequate packing, unit 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 shipping address is not the same as Parasound's office address.

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 or Parasound Authorized Reseller.
- 2. You are not the original owner. The Parasound warranty is not transferable.
- 3. Unit's serial number was removed, modified, or defaced.
- 4. Unit shows evidence of abuse and/or misuse.
- 5. Unit was modified in any way.
- 6. A prior repair was attempted by an unauthorized repair station.

8

PARASOUND ZBREEZE SPECIFICATIONS

Air Flow

25 CFM, fan speed low

50 CFM, fan speed medium

75 CFM, fan speed high

Acoustical Noise

20 dB, fan speed low

35 dB, fan speed medium

50 dB, fan speed high

Fans, per fan (three total)

92mm Diameter

Double Ball Bearings

Brushless DC Axial Motors

AC Power Requirement

110 - 120 V / 220 -240 V, 50 - 60 Hz

1.5 watts standby; 8 watts maximum fan speed

Dimensions

9½" Wide

10" Deep with connectors

2" High with feet, 134" panel only

241 x 254 x 50mm, 44.1mm panel only

Net Weight

3.6 lbs / 1.7 Kg

Rack Mount Accessory

May be Purchased Separately

SBS: Bracket and bolts to attach any two Z Custom units side-by-side in a standard 19" equipment rack.

Zblank: $9\frac{1}{2}$ " x $1\frac{3}{4}$ " blank panel, required to mount a single Zbreeze unit; Zblank kit includes one SBS.

Specifications and features subject to change or improvement without notice.

Notes:			

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. 950 Battery Street, San Francisco, CA 94111 Customer Service 415-397-7100 / Technical Dept. 415-675-7272 / Fax 415-397-0144 www.parasound.com