



PS 150 • PS 100

POWERED SUBWOOFER

INSTRUCTION MANUAL

Congratulations..... for purchasing a subwoofer by Ultimate.

When used with your current Audio/Home-Theatre system, a Ultimate subwoofer will deliver all the realism and excitement present in today's music and film digital soundtracks.

This subwoofer has been designed to give you many years of trouble-free listening enjoyment. Ultimate provides a 1 year parts and labour warranty on our subwoofer. Though easy to install, we recommend that you read carefully through this instruction manual, and to save your bill of sale in the unlikely event that your subwoofer requires servicing.

IMPORTANT SAFETY PRECAUTIONS



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



CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

1. **Read Instructions** - All the safety and operation instructions should be read before the subwoofer is operated.
2. **Retain Instructions** - The safety and operating instructions should be kept for future reference.
3. **Heed Warnings** - All warnings on the subwoofer and in these operating instructions should be followed.
4. **Follow Instructions** - All operating and other instructions should be followed.
5. **Water and Moisture** - The subwoofer should not be used near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool.
6. **Ventilation** - The subwoofer should be situated so that its location or position does not interfere with its proper ventilation. For example, the system should not be situated on a bed, sofa, rug or similar surface that may block airflow past the rear heatsinks; or placed in a built-in installation such as a bookcase or cabinet that may impede the flow of air past the heatsinks.
7. **Heat** - The subwoofer should be situated away from heat sources such as radiators, heaters, furnace outflow vents or other devices which produce heat.
8. **Power Sources** - The subwoofer should be connected to a power supply only of the type described in these operation instructions or as marked on the Component.
9. **Grounding or Polarization** - The subwoofer is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is an intentional safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact an electrician to replace the obsolete (unpolarized) outlet. Do not defeat the safety purpose of the polarized plug.
10. **Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked upon or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit the subwoofer. To prevent electric shock, do not use the subwoofer polarized plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.
11. **Nonuse Periods** - The power cord of the subwoofer should be unplugged from the outlet when left unused for a long period of time.
12. **Damage Requiring Service** - The subwoofer should be serviced only by qualified service personnel when:
 - A. subwoofer power supply cord or the plug has been damaged; or
 - B. Objects have fallen or liquid has spilled into the subwoofer; or
 - C. The subwoofer has been exposed to rain; or
 - D. The subwoofer does not appear to operate or exhibits a marked change in performance; or
 - E. The subwoofer has been dropped or damaged.
13. **Servicing** - The user should not attempt to service the subwoofer beyond those means described in this operating manual. All other servicing should be referred to an authorized Service Center.
14. **Cleaning** - Unplug the subwoofer from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
15. **Attachments** - Do not use attachments not recommended as they may cause hazards.
16. **Accessories** - Do not place the subwoofer on an unstable cart, stand, tripod, bracket, or table. The subwoofer may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by manufacturer, or sold with the product. Any mounting of the subwoofer should follow manufacturer's instructions, and should use a mounting accessory recommended by manufacturer. An subwoofer and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
17. **Lightning** - For added protection for the subwoofer during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet.
18. **Overloading** - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
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. **Servicing** - Do not attempt to service the subwoofer yourself as opening or removing covers may expose you to dangerous voltages or other hazards. Refer all servicing to qualified service personnel.
21. **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
22. **Wall or Ceiling Mounting** - The product should be mounted to a wall or ceiling only as recommended by manufacturer.
23. **Object and Liquid Entry** - Never push objects of any kind into this product through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

WARNING - To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

SAFETY INSTRUCTIONS

- We recommend that the subwoofer be unplugged from the wall during lightning storms, and when not used for an extended period of time.
- Do not use wherever there is a risk that the subwoofer may come into contact with water or excessive moisture such as near pools, bathtubs and wet basements.
- In the event of a malfunction, do not attempt to service the product yourself. Please contact your Ultimate dealer.

Before making connections to your receiver/processor, please make sure the subwoofer is unplugged from the wall and that your audio/video receiver or surround processor is in the off position.

STEP 1

SUBWOOFER PLACEMENT

Low frequency sound is generally non-directional. This allows for great flexibility when placing the subwoofer, as it is difficult for the ear to discern where the low frequency sound originates. Ideally, however, the subwoofer will be placed on the same plane as the main left/right speakers.

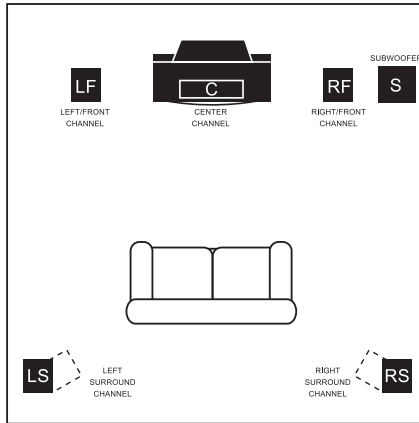


Diagram 1

PLACEMENT TIP:

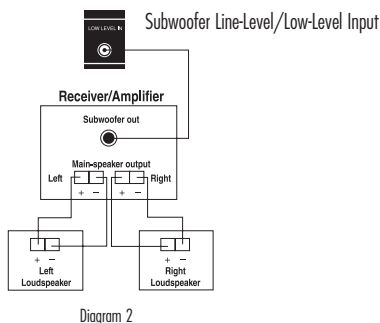
Bass output varies with position. For more bass output, place the subwoofer near a wall boundary. Placing the subwoofer closer to a corner of the room will increase the bass output considerably.

STEP 2

CONNECTING THE SUBWOOFER

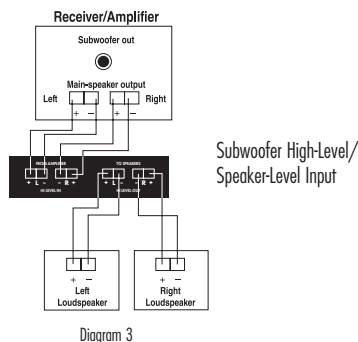
A) Line Level Connection (known as "Low-Level"):

Connect the audio/video receiver or processor's subwoofer output, to the Ultimate Subwoofer's input.



B) Speaker Level Connection (known as "High-Level"):

Connect the audio/video receiver's Left/Right main channel outputs to the Ultimate L/R Speaker Level Inputs. Make sure to connect "+" (Red) to "+" (Red), and "-" (Black) to "-" (Black). (Optionally, you may connect your Left/Right speakers as shown below).



HIGH-LEVEL CONNECTION TIP:

When using small satellite speakers, connecting the Ultimate subwoofer with the Speaker Level inputs and then connecting L/R satellites to the "Speaker out" will automatically limit the low frequency sent to the small speakers with the high-pass filter built into the Ultimate subwoofer. This is helpful to small speakers, in that they will then not be required to reproduce frequencies that may be beyond their operating range.

You may now plug your subwoofer's power cord to the A/C wall outlet.
You are now ready to use your new Ultimate subwoofer.

STEP 3

POWERING UP

A) On/Auto/Off Switch:

Your subwoofer has an On/Off switch. Once connected to your receiver and plugged into the wall outlet, the Ultimate subwoofer will need to be turned on and can be left in the "auto" position so that once it senses a signal coming from your receiver, it will automatically turn on and will turn off into Standby mode after it does not sense a signal for 5 minutes.

B) Setting the Volume and Crossover Frequency.



Diagram 4

FREQUENCY:

The Crossover Frequency control determines the frequency below which the subwoofer will play. This frequency is manually controlled and is continuously variable between 60-150Hz. You can experiment with which position works best with your main speakers by turning this control until the sound of the low frequency coming from the subwoofer is nicely blended with the sound of your main speakers.

FREQUENCY SETTING TIP:

When using small speakers (speakers with a 6" or less main woofer) set this control toward the "150" position. When using larger speakers (speakers with an 8" or more main woofer) set the control closer to the "60" position.

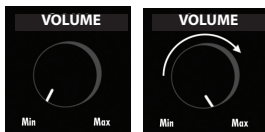


Diagram 5

GAIN:

When setting the volume control at the subwoofer, begin with your main speakers playing at a normal listening level and the volume control at the subwoofer completely in the off position (counterclockwise position). Then, begin to turn up the volume at the subwoofer slowly (clockwise) until the desired bass response is achieved. Bass output will then be regulated by your A/V receiver's volume control.

GAIN SETTING TIP:

Have one person sit at the regular listening position, and a second person turn up the volume at the subwoofer until the desired bass output is achieved at the listening position. Remember most natural sounding bass results when bass reproduction is balanced with the main speakers.

PHASE:

The phase control will fine tune the bass performance. Have one person sit in the listening position and a second person toggle the switch between Normal and Reverse to achieve the desired bass output.

Ultimate

Specifications

	PS 100	PS 150	
Amplifier:	100 Watts	150 Watts	
Woofers:	8" Natural Hybrid Driver	10" Natural Hybrid Driver	
Frequency Response:	45Hz - 180Hz	35Hz - 150Hz	<ul style="list-style-type: none">• Low Level Inputs• Loudspeaker Level Inputs• Adjustable Volume• Phase
Crossover Frequency:	60Hz - 180Hz	50Hz - 150Hz	
Dimensions (HxWxD):	300 x 276 x 300mm	540 x 350 x 470mm	
Weight:	18 lbs	22.5 lbs	

At Ultimate we continuously strive to update and improve our products.
As such the specifications indicated above are subject to change without notice.



21000 TransCanada
Baie D'Urfé, QC, Canada, H9X 4B7
Tel.: (514) 457-2555 • Fax: (514)457-5507
WWW.ULTIMATE-SOUND.COM

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