

**O W N E R ' S
M A N U A L**

PSW303

PSW404

PSW505

**POWERED
SUBWOOFERS**

polkaudio
the speaker specialists®



**CAUTION: TO REDUCE 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 symbol, within an equilateral triangle, is intended to alert the user to 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.



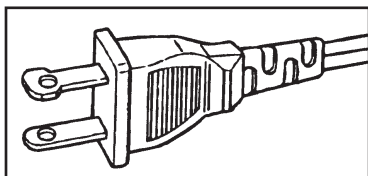
The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.**

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE
BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**

**ATTENTION: POUR ÉVITER LES CHOCs ÉLECTRIQUES,
INTRODUIRE LA LAME LA PLUS LARGE DE LA
FICHE DANS LA BORNE CORRESPONDANTE DE LA
PRISE ET POUSSER JUSQU'AU FOND.**



IMPORTANT SAFETY INSTRUCTIONS READ BEFORE OPERATING EQUIPMENT

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **WARNING:** To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and objects filled with liquids, such as vases, should not be placed on this apparatus.
16. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle.
17. The mains plug of the power supply cord shall remain readily operable.

GETTING STARTED

Please inspect your loudspeaker carefully. Notify your Polk dealer if you notice any damage or missing items. Keep the carton and packing material. It will do the best job of protecting your speaker if it needs to be transported.

Note to PSW505 owners only: Your PSW505 system includes a detachable power cord that's packaged separately from the cabinet. Insert female end into receptacle on amplifier plate and insert polarized AC plug into wall outlet (or power strip) as per safety instructions on inside cover of this manual.

PLACEMENT (FIGURES 1, 2 & 3)

Your PSW Series subwoofer offers many placement options—in an entertainment center, behind furniture, or next to a sofa or chair. It can be placed anywhere in the room, but you will get the best performance from it when it is on the same side of the room as the front speakers. Placing it near a wall or in a corner will increase bass loudness. Allow at least 6 inches (15cm) of space between the subwoofer driver and a wall or obstruction (**Figure 1**). The subwoofer should only be placed on its base (**Figure 2**). It may lie on its side, but NEVER LAY THE SUBWOOFER ON THE AMPLIFIER END—THIS WILL DAMAGE THE AMPLIFIER (**Figure 3**).

Your powered subwoofer is magnetically shielded for placement near video monitors. Allow at least 18" (45cm) of space between your subwoofer and any television. If you notice video distortion or discoloration, immediately move the subwoofer away from the TV and call Polk Audio Customer Service 800-377-7655 (US & Can), 410-358-3600, 9am-6pm EST, Monday through Friday, or email: polkcs@polkaudio.com.

You'll find an informative article on "Subwoofer Positioning and Adjustment" in the set up section at: <http://www.polkaudio.com/home/faqad/>

CONNECTING THE SUBWOOFER TO THE SYSTEM—GENERAL

If you elect to use the speaker level inputs, use two-conductor 16 gauge or thicker speaker wires. See your Polk dealer for wire recommendations.

Note that one of the speaker input terminals on the rear of the speaker is marked red (+) and the other black (-). Make certain that you connect the wire from the red (+) terminal of your amplifier to the red (+) terminal on your speaker, and the wire from the black (-) terminal of the amplifier to the black (-) terminal on your speaker. Most wire has some indication (such as color coding, ribbing, or writing) on one of the two conductors to help maintain consistency. If your subwoofer doesn't seem to produce much bass, it is most likely that one of the speaker wires is connected backwards. Double check all connections for correct polarity.

Strip 1/2" (12mm) of insulation from each of the two conductors on both ends to expose the bare wire. Twist the exposed wire of each conductor to form two un-frayed strands. Connect two conductors to the receiver or amp (refer to the owner's manual supplied with your electronics for assistance with proper hookup). Connect the two conductors on the other end of the wire to the speaker terminals. Repeat for the other channel.

USING PUSH-TAB TERMINALS - PSW303 (FIGURE 4)

Push the plastic tab of one connector to open up the hole. Insert the bare wire into the hole, and release the plastic tab. Repeat this step for the other terminal.

Make sure that none of the bare wire ends (left & right) touch. Such contact could result in an electrical short and cause your receiver or amplifier to turn off or malfunction.

USING BINDING POST CONNECTIONS - PSW404 AND PSW505 (FIGURE 5)

Unscrew binding post hex nuts several turns. Make sure that none of the bare wire ends touch. Such contact could result in an electrical short and cause your amplifier or receiver to turn off or malfunction.

RECOMMENDED HOOK-UP METHOD FOR "SATELLITE" SYSTEMS SUCH AS POLK RM SERIES SPEAKERS (FIGURES 6 & 7)

- Connect the left and right front speaker outputs of your receiver or amplifier to the speaker level inputs of the powered subwoofer using speaker wire.
- Then, connect the left and right front satellite speakers using speaker wire from the speaker level outputs from the powered subwoofer.
- If it is more convenient, parallel wire the subwoofer and front satellites from your receiver (**Figure 7**).
- Connect the Center Channel Speaker directly to the center channel output from your receiver.
- Connect the Rear Surround Satellites directly to the rear or surround channel outputs from your receiver.

RECEIVER SET-UP / BASS MANAGEMENT

All surround receivers allow you to “customize” their performance depending on the size of your speakers. Refer to the owner's manual of your receiver or surround processor to learn how this is done. To get the best performance from small “satellite/subwoofer” type systems, use the following settings with the above hook-up method:

Front speakers – set to “large”

Center speaker – set to “normal” or “small”

Surround speakers – set to “small”

Subwoofer – set to “OFF” or “none.” (We know. Doesn’t make sense, right? Your system obviously has a subwoofer. But really truly, this is the correct setting for the recommended hook-up method. By setting the front left and right speakers to “Large” and routing them through the subwoofer as instructed above, you deliver a full range signal to the subwoofer’s low pass filter. The low pass filter directs low frequencies and to the subwoofer. Full range signal is passed to the front speakers, for perfect sub/sat blending.)

HOOK-UP METHOD #2 (FIGURE 8)

This method can be used with electronics that include a “SUB OUT” feature (**Figure 8**). It is not recommended for use with compact sub/sat systems. Connect a single RCA cable from the “SUB OUT” of your electronics to the LFE input of the subwoofer. This input bypasses the subwoofer’s variable low pass filter and relies on the filter built into your electronics. If your “SUB OUT” is an unfiltered signal (check your owner’s manual), use either left or right “Line Level Input,” to use the low pass crossover in the subwoofer. When using method #2, it is necessary to adjust the settings of your electronics as follows: Front speakers = large or small depending on their output capabilities; Subwoofer = “ON.”

HOOK-UP METHOD #3 (FIGURE 9)

This method is for use with electronics featuring “PRE OUT” jacks—and may be used as a secondary hook up method for use with compact satellite speakers such as Polk RM Series. Connect the left and right preamp output from your electronics to the left and right LINE LEVEL input of the subwoofer. This may require use of RCA “Y” cables (not supplied) to hookup both the subwoofer and your power amplifier. When using method #3, it is necessary to adjust the settings on your preamp/processor as follows: Front speakers = LARGE; Subwoofer = “OFF” or “NO.”

AC POWER CONNECTION AND AUTO ON/OFF (FIGURES 10, 11 & 12)

These PSW series subwoofers feature auto on/off circuitry, marked “auto” on the power switch, that automatically turns your subwoofer on when it senses a program signal. When no signal is present, the circuit turns the subwoofer off after a few minutes. If you are concerned about the brief delay between when the music starts and when the subwoofer turns on, simply leave your subwoofer in the “on” position. When the power switch is set to “OFF” (PSW303 or PSW404) or “STANDBY” (PSW505) it consumes a low amount of power. If this is a concern, you may want to leave your PSW system unplugged during extended periods of non use, such as during a vacation.

Note (PSW505 owners only): Your PSW505 has a detachable power cord.

SUBWOOFER ADJUSTMENTS (FIGURES 10, 11 & 12)

Your Powered Subwoofer offers a range of setting options. We recommend the following settings as starting points, but the settings that are best for you depend upon your speaker placement, electronics and personal taste. After you’ve become familiar with what the settings do, experiment with alternate options to find the method that works best for your system setup. You’ll find an informative article on “Subwoofer Positioning and Adjustment” in the set up section at: <http://www.polkaudio.com/home/faqad/>

“MAKING ADJUSTMENTS” OR “FINE TUNING” (FIGURES 10, 11 & 12)

- For RM System adjustments please refer to their owners manuals.
- Volume—Adjust by ear using a wide variety of CDs and video sources. Adjust for deep, powerful bass without “boominess.”
- Low Pass—This control adjusts the frequency range over which the subwoofer operates. When using smaller main speakers, the upper range of the control will probably yield the best results. With larger speakers, the lower end of the control range will probably sound best, but always let your ear be the final judge. If male vocals sound “thin,” turn this control up until the voice sounds rich but not boomy. If male vocals sound too “thick” or “chesty,” turn this control down until the voice sounds natural. NOTE: This control does not operate when the subwoofer is connected with Method #2 (LFE Input).
- Phase Switch—Have someone switch between the two settings while you sit in your favorite listening position. Use music with good bass and a deep male vocal. When you hear the best balance of deep bass and natural lower octaves of the male voice, you have achieved optimum phase tuning.

Q: "Why does my system hum?"

A: "Because it doesn't know the words."

This is what passes for humor in the audio business. Here's the real answer: If you have any electrical (50/60Hz) hum in your system you're going to hear it clearly as soon as you hook up your subwoofer. Most hum problems are caused by "ground loops." That is, the electrical grounds of the components in your system are not at the same electrical potential. A very common ground loop source is cable TV. Disconnect the coaxial cable from your TV and/or VCR. If the hum goes away, the cable is the ground loop villain. In that case you need a 75 ohm ground loop isolator. This device attaches to your coaxial cable where it plugs into your VCR (or television). They're simple to install and usually solve the hum problem. Find 75 ohm ground loop isolators at your audio dealer, Radio Shack stores, or online at <http://shop.polkaudio.com>.

Ground loops and hum can also be the result of faulty electrical wiring in your home. Consult a licensed electrician to evaluate and, if necessary, repair the AC wiring in your home. Light dimmers also tend to introduce noise into audio systems. Remove them.

If none of our suggestions work for you, contact Polk Audio Customer Service 800-377-7655 (US & Canada), 410-358-3600, 9am-6pm EST, Monday through Friday, or email: polkcs@polkaudio.com.

TECHNICAL ASSISTANCE OR SERVICE

If, after following these hook up directions, you experience difficulty, please double-check all wire connections. Should you isolate the problem to the speaker, contact the authorized Polk Audio dealer where you made your purchase, or call Polk Audio's friendly Customer Service Department at 1-800-377-7655 (calls from US or CAN only), 410-358-3600 9am to 6pm EST, Monday through Friday. You may also contact us via email: polkcs@polkaudio.com.

For more detailed hook up information and manual updates, visit:

<http://www.polkaudio.com/home/products/subwoofers/psw303>

or

<http://www.polkaudio.com/home/faqad/>

For recommended accessories (including speaker stands, brackets, accessories and exclusive Polk Audio logowear), visit our Webstore:

<http://shop.polkaudio.com>

Figure 1
18" - 24"
(46cm - 61cm)

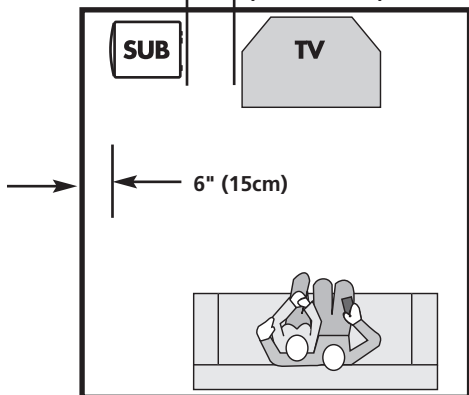


Figure 2

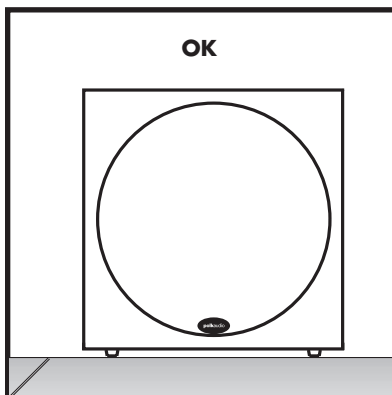


Figure 3

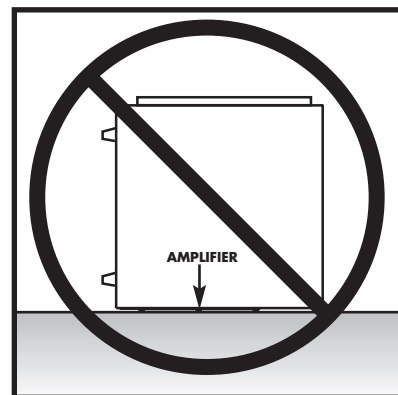


Figure 4

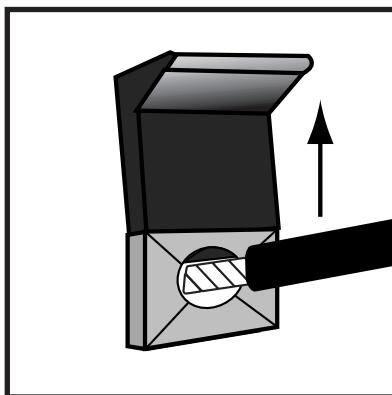
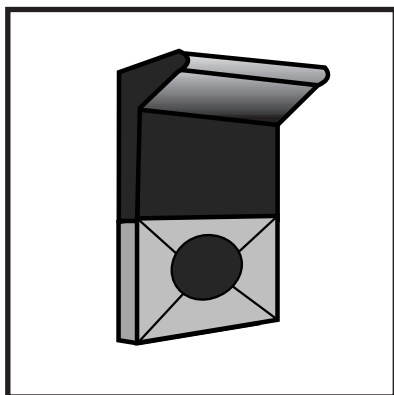
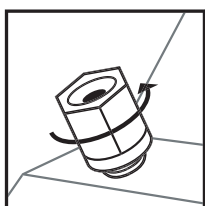
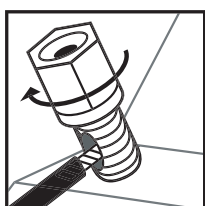


Figure 5

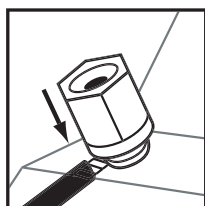
USING BINDING POST CONNECTIONS



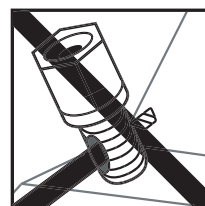
Loosen hex nut



Insert speaker wire through hole



Tighten hex nut



Do not insert insulated section of speaker wire

To use Banana Plugs (US only):

Unscrew the binding post lug nuts completely to expose the binding post plugs (plastic plugs inserted into the binding posts). Carefully pry out the binding post plugs to expose banana plug holes. Screw the lug nuts back on the binding posts and insert banana plugs. (This is for US owners only.)

Figure 6

RECOMMENDED HOOKUP
This method is the best choice when using small satellite systems such as the Polk RM Series.

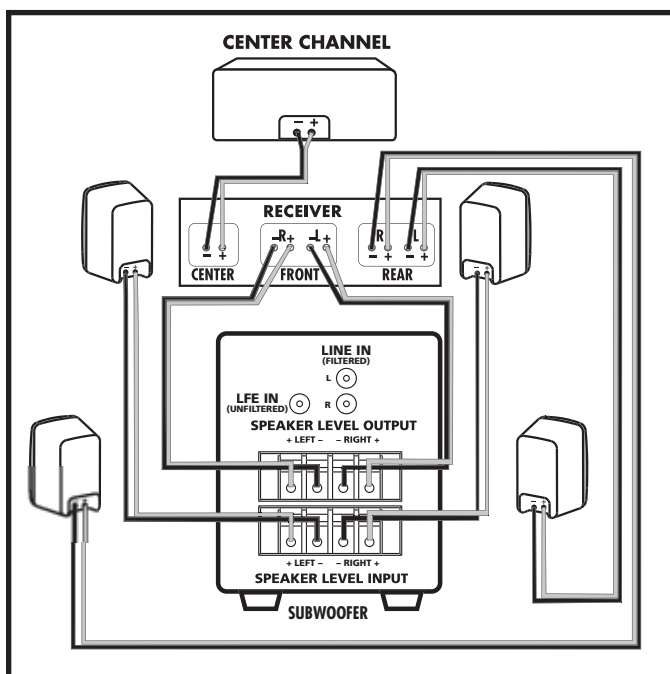


Figure 7

PARALLEL WIRE
HOOKUP

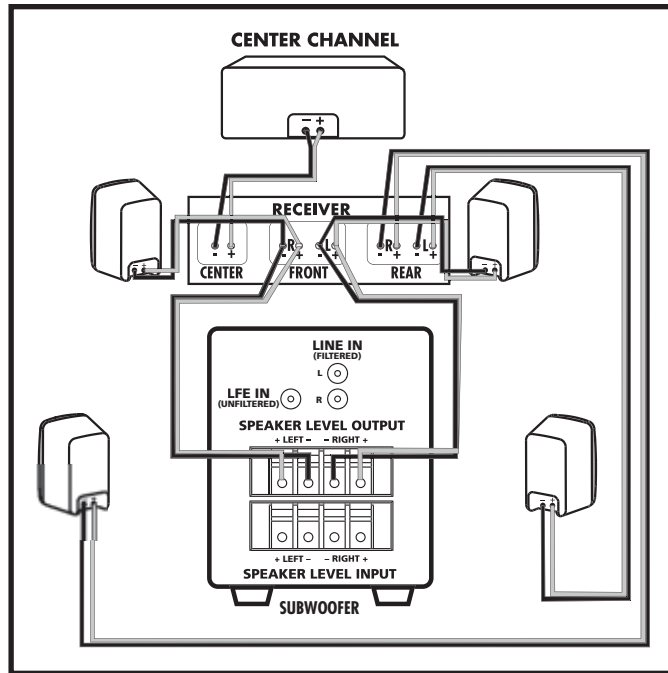


Figure 8

**SUB OUT
HOOKUP**
This method is for
use with electronics
that include a
"SUB OUT" feature

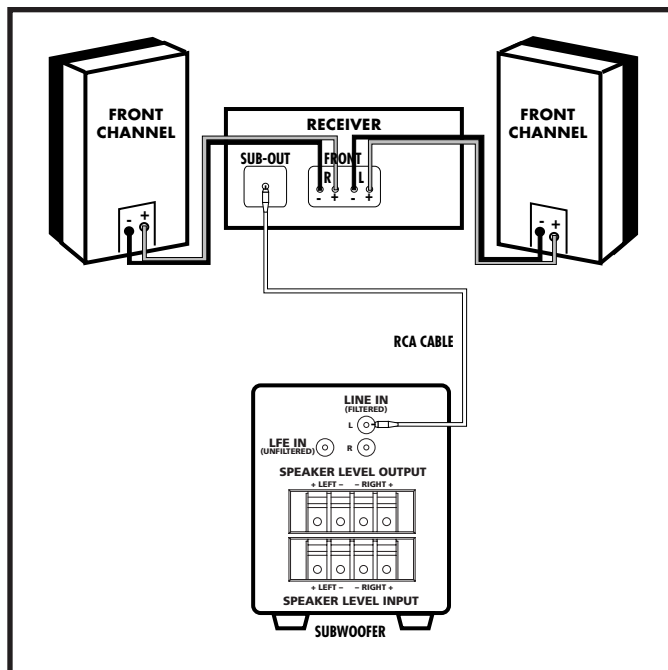


Figure 9

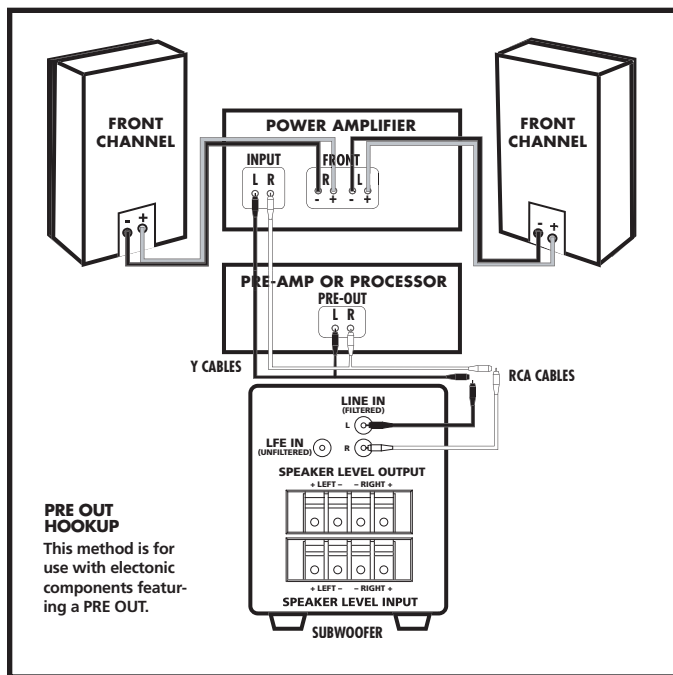


Figure 10 - PSW303 Controls

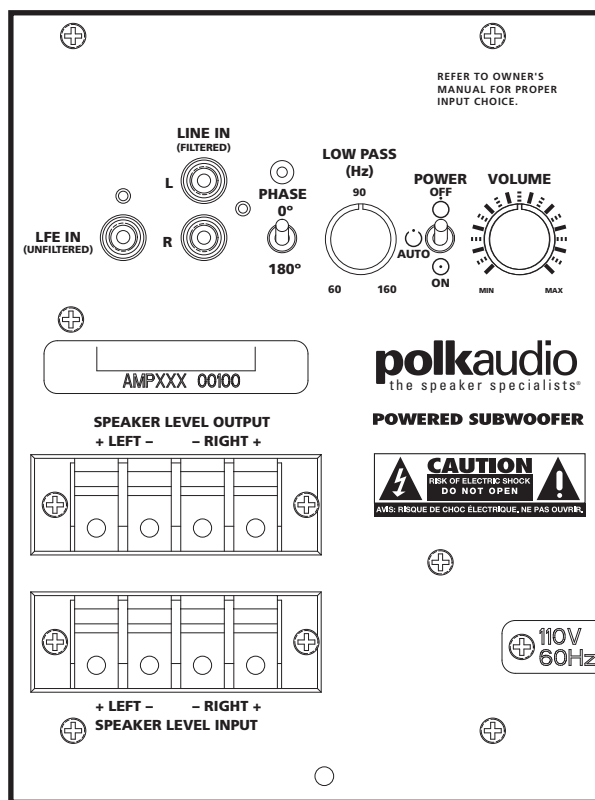


Figure 11 - PSW404 Controls

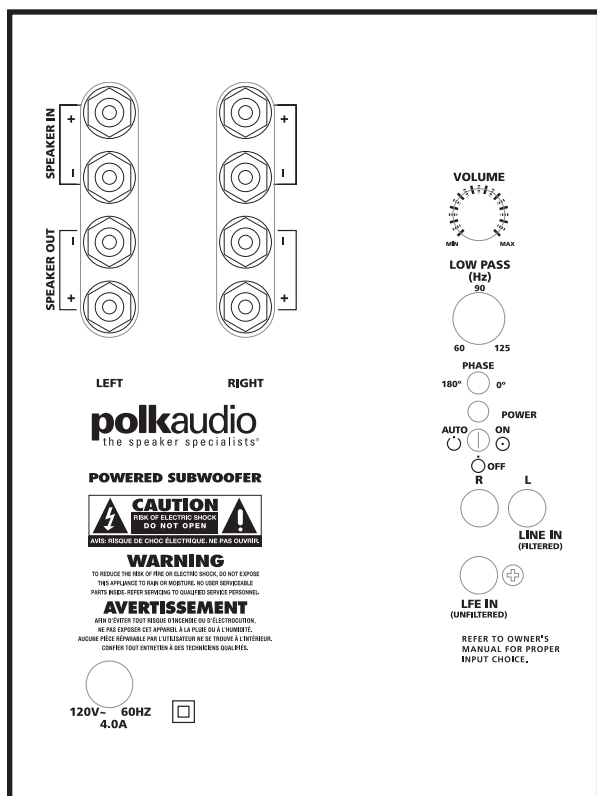
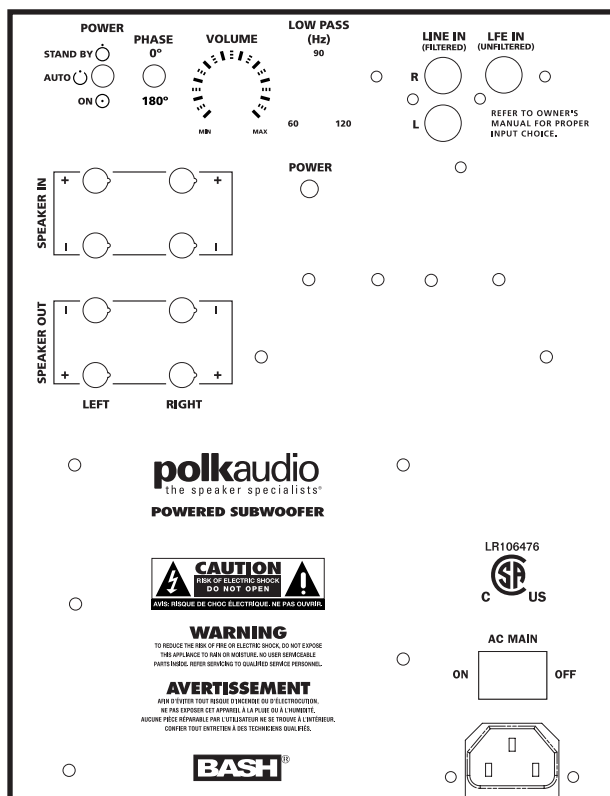


Figure 12 - PSW505 Controls



SPECIFICATIONS

PSW303 POWERED SUBWOOFER

Overall Frequency Response	28Hz - 200Hz	
-3dB Frequency Response	35Hz - 160Hz	
Driver Complement	8" (20.3cm) long throw, magnetically shielded	
Power Amplifier:	100 Watts continuous, 260 Watts dynamic	
Size & Weight	Dimensions (H x W x D)	Weight
	12 $\frac{3}{8}$ " x 11 $\frac{1}{4}$ " x 17"	30 lbs
	31.4cm x 28.6cm x 43.2cm	14 kg
Shipping Weight	32 lbs. total (15 kg)	

PSW404 POWERED SUBWOOFER

Overall Frequency Response	25Hz - 200Hz	
-3dB Frequency Response	32Hz - 160Hz	
Driver Complement	10" (25.4cm) long throw, magnetically shielded	
Power Amplifier:	200 Watts continuous, 375 Watts dynamic	
Size & Weight	Dimensions (H x W x D)	Weight
	14 $\frac{3}{8}$ " x 13 $\frac{3}{8}$ " x 18"	46 lbs
	36.5cm x 34.7cm x 45.7cm	21 kg
Shipping Weight	50 lbs. total (23 kg)	

PSW505 POWERED SUBWOOFER

Overall Frequency Response	23Hz - 160Hz	
-3dB Frequency Response	28Hz - 125Hz	
Driver Complement	12" (30.5cm) long throw, magnetically shielded	
Power Amplifier:	300 Watts continuous, 460 Watts dynamic	
Size & Weight	Dimensions (H x W x D)	Weight
	16 $\frac{1}{4}$ " x 15 $\frac{1}{4}$ " x 17 $\frac{1}{2}$ "	43 lbs
	41.3cm x 38.7cm x 44.5cm	19 kg
Shipping Weight	48 lbs. total (21 kg)	

Note: Specifications are subject to change without notice.

POLK AUDIO LIMITED WARRANTY

Polk Audio, Inc., warrants to the original retail purchaser only. This warranty will terminate automatically prior to its stated expiration if the original retail purchaser sells or transfers the Product to any other party.

Polk Audio, Inc., warrants, to the original retail purchaser only, that the LOUDSPEAKER(S), PASSIVE CROSSEVER COMPONENT(S) and ENCLOSURE on this Polk Audio Loudspeaker Product will be free from defects in material and workmanship for a period of five (5) years from the date of original retail purchase from a Polk Audio Authorized Dealer.

Furthermore, Polk Audio, Inc., warrants, to the original retail purchaser only, that any AMPLIFIER OR OTHER ELECTRONIC COMPONENT that may be included in this Polk Audio Loudspeaker Product will be free from defects in material and workmanship for a period of three (3) years from the date of original retail purchase from a Polk Audio Authorized Dealer.

To allow Polk Audio to offer the best possible warranty service, please fill out the Product Registration Card(s) and send it to the Factory at the address provided on the Product Registration Card(s) within ten (10) days of the date of original purchase.

Defective Products must be shipped, together with proof of purchase, prepaid insured to the Polk Audio Authorized Dealer from whom you purchased the Product, or to the Factory at 2550 Britannia Boulevard, Suite D, San Diego, California 92154. Products must be shipped in the original shipping container or its equivalent; in any case the risk of loss or damage in transit is to be borne by you. If upon examination at the Factory or Polk Audio Authorized Dealer it is determined that the unit was defective in materials or workmanship at any time during this Warranty period, Polk Audio or the Polk Audio Authorized Dealer will, at its option, repair or replace this Product at no additional charge, except as set forth below. All replaced parts and Products become the property of Polk Audio. Products replaced or repaired under this warranty will be returned to you, within a reasonable time, freight prepaid.

This warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, cosmetic appearance of cabinetry not directly attributable to defect in materials or workmanship, or service, repair, or modification of the Product which has not been authorized or approved by Polk Audio. This warranty shall terminate if the Serial number on the Product has been removed, tampered with or defaced.

This warranty is in lieu of all other expressed Warranties. If this Product is defective in materials or workmanship as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Polk Audio, Inc. be liable to you for any incidental or consequential damages arising out of the use or inability to use the Product, even if Polk Audio, Inc. or a Polk Audio Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply to you.

All implied warranties on this Product are limited to the duration of this expressed Warranty. Some states do not allow limitation on how long an implied Warranty lasts, so the above limitations may not apply to you. This Warranty gives you specific legal rights, and you also may have other rights which vary from state to state.

This Warranty applies only to Products purchased in the United States of America, its possessions, and U.S. and NATO armed forces exchanges and audio clubs.

The Warranty terms and conditions applicable to Products purchased in other countries are available from the Polk Audio Authorized Distributors in such countries.



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RM3035-2