



# ProMedia® Subwoofer System



OWNERS MANUAL

## IMPORTANT SAFETY INSTRUCTIONS!



### CAUTION: RISK OF ELECTRIC SHOCK! DO NOT OPEN!



**CAUTION!** To reduce the risk of electric shock and fire, do not remove the cover or back plate of the device enclosure. There are no user serviceable parts inside. Refer servicing to a Klipsch authorized service center.



**CAUTION!** The international symbol of a lightning bolt inside a triangle is intended to alert the user to uninsulated "dangerous voltage" within the device enclosure. The international symbol of an exclamation point inside a triangle is intended to alert the user to the presence of important operating, maintenance and servicing information in the manual accompanying the device.



**WARNING!** To reduce the risk of fire or electrical shock, do not expose this equipment to rain or moisture.

1. Read Instructions – All safety and operating instructions should be read before operating the device.

2. Retain Instructions – The safety and operating instructions should be retained for future reference.

3. Heed Warnings – All warnings on the device and in the operating instructions should be adhered to.

4. Follow Instructions – All operating and safety instructions should be followed.

5. Attachments – Do not use attachments not recommended by the product manufacturer as they may cause hazards.

6. Water and Moisture – Do not use this product near water (for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like).

7. Ventilation – Slats and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such

as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

8. Heat – This product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

9. Power Sources – This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply in your home, consult with your product dealer or the local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

10. Polarization – This product may be 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 a 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 your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized 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, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

12. Overloading – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electrical shock.

13. Lightning and Periods of Non-Use – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and powerline surges.

14. Cleaning – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

15. 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.

16. Damage Requiring Service – Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- When the power-supply cord or plug is damaged,
- If liquid has been spilled, or objects have fallen into the product,
- If the product has been exposed to rain or water,
- If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and often will require extensive work by a qualified technician to restore the product to its normal operation,
- If the product has been dropped or damaged in any way, and
- If the product exhibits a distinct change in performance – this indicates a need for service.

17. Replacement parts – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or 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. Servicing – Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

If this unit is purchased outside of the U.S., please contact your local dealer or distributor for service center information. If purchased inside the U.S. and dealer service is not available, contact Klipsch Customer Service for a return authorization (RA) number before shipping. For further service information, contact:

KLIPSCH CUSTOMER SERVICE  
3502 WOODVIEW TRACE, SUITE 200  
INDIANAPOLIS, IN 46268-1104  
1-888-554-5665  
WWW.KLIPSCH.COM

## Welcome to the Klipsch ProMedia<sup>®</sup> SWS subwoofer system.

Your SWS subwoofer will add a new dimension to your enjoyment of your multimedia sound system. We have designed the SWS subwoofers to work with almost any type of speaker system, from stereo to 5.1 surround. In this manual, we will explain the three basic connection scenarios for your SWS subwoofer, based on the type of system you will be using it with, and how to operate it in each of them.

### IMPORTANT NOTE:

#### Before You Begin!

Do not plug in the SWS's power cord until all other wiring is completed. Make sure that all other parts of the system, including the computer, are turned off or disconnected from power while you are installing the SWS. Be especially careful not to connect or disconnect any signal cables while power is applied. Failure to observe this caution may result in loud hums, buzzes, or pops that will at the very least be startling and annoying and that in the extreme may damage your speakers.

## Signal Connections

The Klipsch ProMedia SWS subwoofer can be used with any ProMedia<sup>®</sup> or multimedia speaker system. It can also be used to supplement the bass output from a TV set or home audio system that has appropriate line-level output jacks, although the signal connections are different. Connections are also different when the SWS is used with Klipsch ProMedia speaker systems that have the SWS-Link subwoofer output jacks. Each type of signal connection is described and diagrammed separately later, followed by directions on connecting the volume-control module, attaching multiple SWS subwoofers, and placement and setup.

## SETUP

### Multimedia Speaker System (Figs. 1 & 2)

The SWS subwoofer allows pass through connection of as many as six channels from your computer's sound card to your multimedia speaker system, using standard stereo minijack connectors. The subwoofer picks up and reproduces low frequencies from the signals on all these channels as they pass through it on the way to the main speaker system.

On the subwoofer's back panel are three input/output minijack pairs: one green pair for left and right front channels (FRONT L/R), a second black pair for left and right surround channels (REAR L/R), and a third orange pair for center channel and subwoofer (CENTER/SUB). If you have a two-speaker system, you will use only the first pair. If you have a three-piece speaker system, you will use the first pair, and if you have a 4.1 system, you will use the second pair as well. If you have a 5.1-channel speaker system, you will use all three pairs.

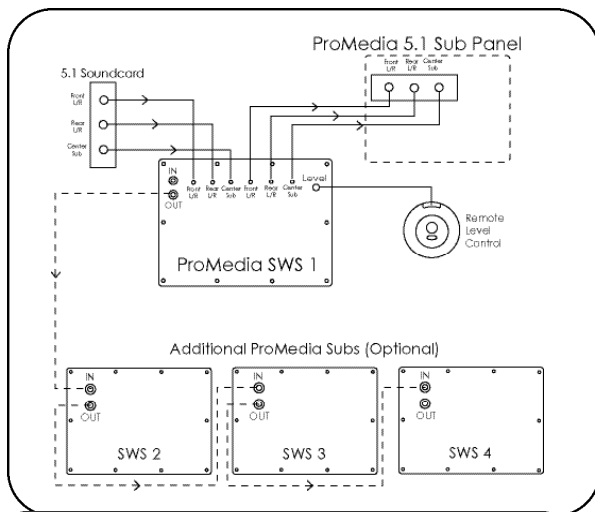


FIGURE 1

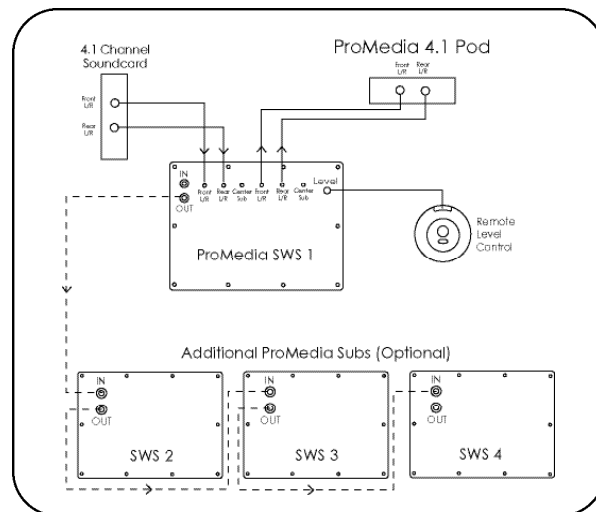


FIGURE 2

1. Unplug your multimedia speaker system from your computer's sound card or sound outputs, making careful note of which output jack is associated with each speaker connection. Usually the plugs and jacks will be color-coded GREEN for front left/right and BLACK for surrounds (rear), with the front jack directly above the surround jack on the back of the sound card. Placement and color coding of the jack used for center/subwoofer (center/bass) output, if any, varies from card to card; Klipsch uses ORANGE miniplugs and mini-jacks for this connection.

2. Plug the cables from your speaker system into the corresponding OUTPUT minijacks on the SWS subwoofer's back panel. The cable for the front left and right speakers plugs into the GREEN OUTPUT jack. The cable for surround speakers (if any) plugs into the BLACK OUTPUT jack. The cable for a center speaker and a separate bass module (if any) plugs into the ORANGE OUTPUT jack.

3. Use the cables supplied with the SWS to connect its INPUT minijacks to your computer's sound card. Attach the cable with a GREEN miniplug at each end to the front left/right sound card output and the SWS subwoofer's FRONT L/R INPUT. Plug the cable with BLACK miniplugs into the surround (rear) sound card output (if any) and the SWS subwoofer's REAR L/R INPUT. Plug the cable with ORANGE miniplugs into the center/subwoofer (center/bass) sound card output (if any) and the SWS subwoofer's CENTER/SUB INPUT. Your input connections to and output connections from the SWS should match. For example, if the REAR L/R output is connected, so should the REAR L/R input. But if the REAR L/R output is not connected, neither should the REAR L/R input.

### Klipsch ProMedia Speaker System with Subwoofer Outputs (Fig. 2)

The directions in this section apply to Klipsch ProMedia multimedia speaker systems which have the SWS-link subwoofer output jacks. For earlier ProMedia models, follow the instructions in the previous section.

On the SWS subwoofer's back panel is an RCA (phono) INPUT jack. Use an RCA audio interconnect cable (one is supplied with the SWS) to connect this input to the RCA SUBWOOFER OUTPUT (SWS-link) jack on your ProMedia speaker system. This is the only signal connection you need to make unless you are using multiple SWS subwoofers (see "Multiple Subwoofers").

### TV Set (Fig. 3)

An SWS subwoofer can add a solid bass foundation to the sound from a TV set's built-in speakers, if the TV has a line-level audio output jack. You will need to make a single connection to the RCA (phono) INPUT jack on the SWS subwoofer's back panel.

Most TV sets sold today have one (mono) or two (stereo) audio line output jacks on their back panels. A mono audio output will be a single RCA (phono) jack, usually with a black inner ring for identification. A stereo audio output will be two RCA jacks, one with a white (or occasionally

black) inner ring, the other with a red inner ring. (RCA jacks with yellow inner rings are for video.) Use an audio interconnect cable with RCA plugs at each end (one is supplied with the SWS) to connect one of these output jacks to the RCA INPUT jack on the SWS subwoofer's back panel.

Even if the TV's audio output is stereo, use only one of the two jacks; this will not impair performance. If the TV has one set of audio outputs labeled "Fixed" or "Fixed Level" and another labeled "Variable" or "Variable Level," make sure you use one of the variable-level jacks.

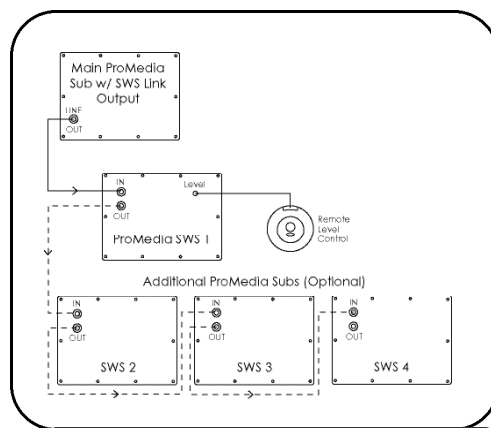


FIGURE 3

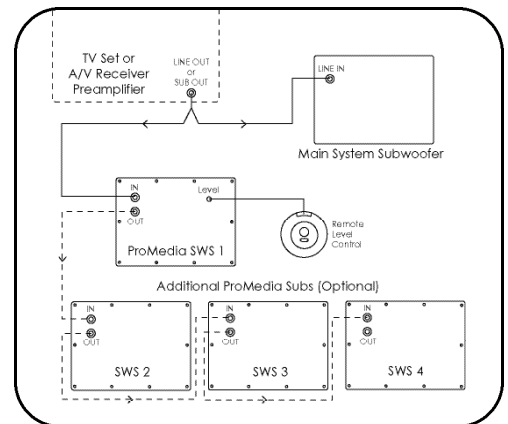


FIGURE 4

### Home Audio System (Fig. 4)

You can connect the SWS to any home audio system that has a subwoofer output or preamp outputs for its front left and right channels. Just use an audio interconnect cable with RCA plugs at each end (one is supplied with the SWS) to connect one of these output jacks to the RCA INPUT jack on the SWS subwoofer's back panel.

If the system has both subwoofer and preamp output jacks, use the subwoofer output. And if the subwoofer output is on an A/V receiver or amplifier, make sure you go into its bass-management setup menu and set Subwoofer to "On" or "Yes."

Caution: In actual use, stacking more than three units high is not recommended.



ProMedia® Subwoofer System

### Volume Control Connection (Fig. 5)

The SWS comes with an external remote volume-control module for adjusting subwoofer level. You can place it wherever is convenient. Just run the cable from it back to the SWS and plug it into the back-panel minijack labeled VOLUME.



In the passthrough configuration used with most multimedia speaker systems, the volume controls on the SWS and your main speakers are independent. That is, changing the volume on one does not affect the volume on the other. So if you change the volume setting on the main speakers, you must readjust the SWS volume control as well in order to maintain the same tonal balance. For this reason, it is usually more convenient to use the SWS volume control only to adjust the balance between it and the main speakers and not to use the volume control on the main speakers at all once you have completed initial setup. Instead, use the software volume control in your computer's operating system as the master volume control.

When the SWS is connected to a Klipsch ProMedia speaker with the SWS link output jack, to a TV set with variable-level audio output jacks, or to a home audio system, the volume-control module is used only to adjust the balance of bass from the SWS to higher sounds from the other speakers (see "Placement and Setup"). The volume control on your ProMedia speaker system, TV set, or audio system will function as a master volume control for the entire system.

### Multiple Subwoofers

It is easy to daisy-chain multiple SWS subwoofers for higher performance and output capability, using the SWS-link, loop-through RCA input and output jacks on the back of each SWS. Just connect the included audio interconnect cable with RCA (phono) plugs on each end from the RCA OUTPUT jack on the back of the first SWS to the RCA INPUT jack on the back of the second. To add another, connect the OUTPUT on the second subwoofer to the INPUT on the third, and so on. The volume-control module connected to the first SWS in the chain adjusts the level for all.

### Placement and Setup

Because the SWS reproduces only very low frequencies, you can place it almost anywhere with good results. In most cases, however, you will get best performance with it placed in a corner. If that's not practical, try to start out with it against a wall, since proximity to room boundaries strengthens low-frequency output. Bass response will vary according to the position of a subwoofer in the room, so you may want to experiment with different placements until you get the result you find most pleasing.

Once you have completed all signal connections and chosen an initial location for the SWS, you're ready to plug it into a wall outlet and restore power to the rest of the system. Then you can make your final adjustments.

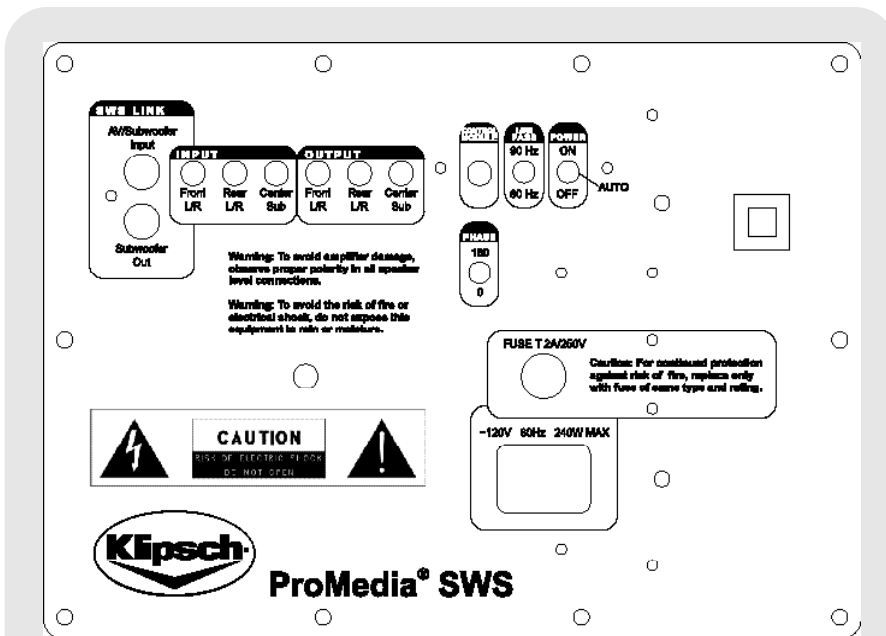


Figure 5

## ProMedia® Subwoofer System

### Power Switch Options (Fig.5)

On the SWS subwoofer's back panel is a power switch with three positions: OFF, ON, and AUTO-ON. If you select AUTO-ON, the SWS will turn itself on when it detects an audio signal at one of its inputs and off after a period has elapsed with no input signal. You probably will want to leave the switch set to AUTO-ON most of the time.

### Crossover-Frequency and Level Adjustment (Fig.5)

On the back of SWS is a switch labeled FREQUENCY, which adjusts the crossover frequency between 60 and 90 Hz. Only signals below the selected frequency will be reproduced by the SWS. You will need to adjust the FREQUENCY control and the SWS volume control to achieve a pleasing balance of bass to higher sounds.

### Phase Switch 0/180 (Fig.5)

This control is used to acoustically match the subwoofer's output to your main speakers. You want to select one of the two positions, either 0 or 108, in which your sub has more output at your listening position.

You're done! Enjoy your new Klipsch ProMedia SWS subwoofer.



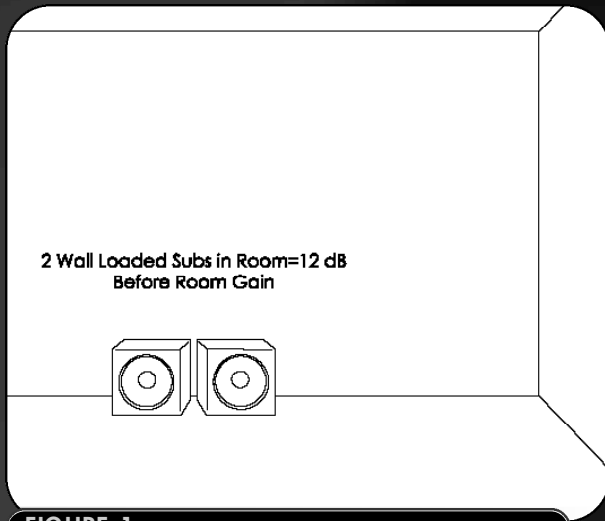


FIGURE 1

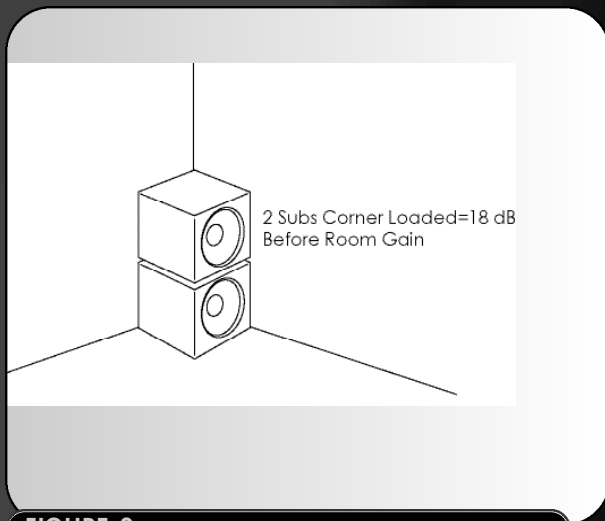


FIGURE 2

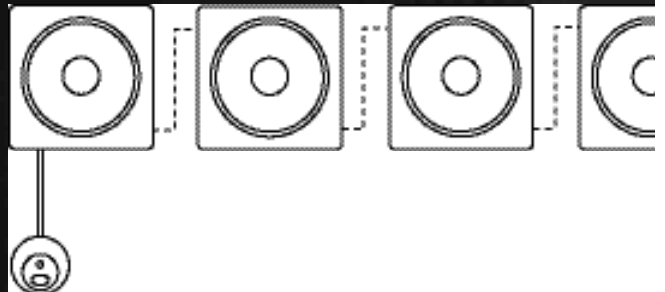
### More Fun with More Subs

Multiple subwoofers can be used to increase sound pressure over a single unit, and efficient use of room boundaries can additionally increase sound pressure.

Like any other type of engineering, the art and science of loudspeaker design often revolves around overcoming obstacles thrown up by nature. Every once in a while, however, physics turns out to be our friend. Subwoofers are a case in point.

At the frequencies where subwoofers operate, you can get fairly astonishing increases in maximum bass output by using multiple subwoofers, placing them against room boundaries (walls, floor), or both. At the very lowest frequencies, you even get some boost just from having the subwoofer in a room.

This last phenomenon is known as "room gain," and you actually get more of it in small rooms than in large ones. Below a frequency determined by the room volume, a speaker's output will be progressively reinforced at a rate close to that at which its response naturally rolls off below its lower limit. So a subwoofer that has flat response to 30 Hz outdoors would hold up strongly to below 20 Hz in a typical living room. In a typical bedroom or small office, the boost might begin at 40 or 50 Hz, which dovetails nicely with the capabilities of the smaller speakers and subwoofers that would tend to be used in such settings. Make the room even smaller — well, if you have been wondering how people get so much bass out of their cars, here is your answer! A freer lunch you will not find.





Room boundaries work a similar sort of magic, but uniformly over a fairly wide frequency range. Move dual subwoofers from the middle of a room to up against a wall, and they will play 12-dB louder than a single sub (Fig. 1). Slide the two subs into a corner for another 6-dB, yields +18dB (Fig. 2). What does that mean? A 1-dB (decibel) volume change is about the smallest we can recognize as a level change. To hear a really obvious difference, you need about a 3-dB change. And to get a subjective doubling you need about a 10-dB level boost. So the gain achieved by moving a subwoofer into a corner is a pretty big deal.

Which brings us to the glory of multiple subwoofers. Put a second subwoofer right next to your first one, operating at the same level, and you get about a 6-dB increase in total acoustic output. That's equivalent to increasing the amplifier power by four times! Double the number of subwoofers again, and you get another 6-dB increase (Fig. 3). That's equivalent to another quadrupling of amplifier power, or sixteen times the original. And so on. It's the ultimate scalable system.

Combining all these tricks can yield quite formidable bass from very compact subwoofers, right down to the very lowest audible frequencies. Over time, you can build the sonic equivalent of a much larger subwoofer just by daisy-chaining additional SWS subs into your system (Fig. 4). Not quite a free lunch, but certainly a very economical one.



**Warning**

Do not vertically stack more than three SWS units!

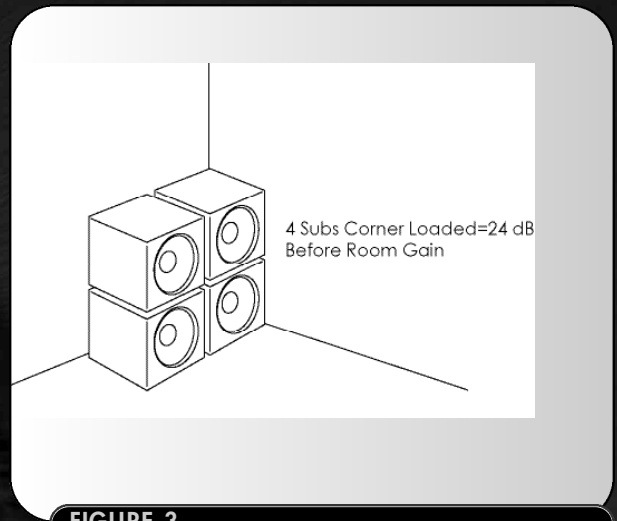


FIGURE 3

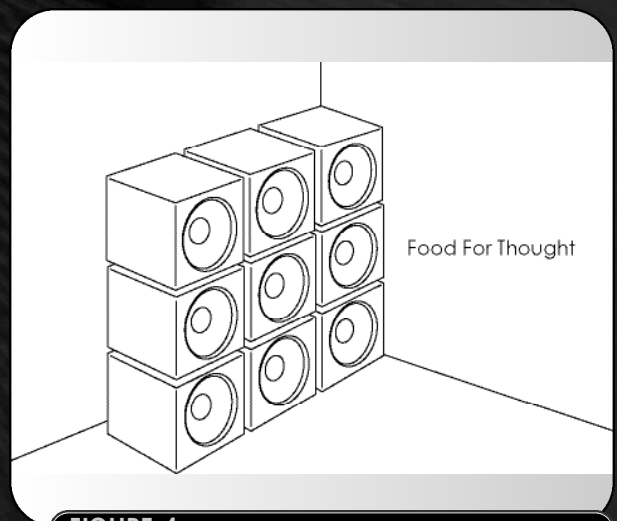


FIGURE 4



## WARRANTY

### U.S. AND CANADA

KLIPSCH, LLC ("KLIPSCH") warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below) for a period of one (1) year from the date of purchase. During the warranty period, KLIPSCH will repair or replace (at KLIPSCH's option) this product or any defective parts. Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented or included to obtain warranty service.

This warranty does not cover damage due to misuse, abuse, negligence, acts of God, accident, commercial use or modification of, or to any part of this product. This warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than KLIPSCH or someone authorized by KLIPSCH to do warranty work. Any unauthorized repairs will void this warranty. This warranty does not cover product sold AS IS or WITH ALL FAULTS. This warranty is invalid if the factory applied serial number or date stamp has been altered or removed from this product.

**This Warranty is only valid for the original purchaser and will automatically terminate prior to expiration if this product is sold or otherwise transferred to another party.**

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER. KLIPSCH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

Some states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to every customer. This warranty gives you specific legal rights, and you may have other rights which vary from State to State.

### TO OBTAIN WARRANTY SERVICE, PLEASE FOLLOW THESE DIRECTIONS:

1. If you purchased this product from a retail store, please return this product to such store in its original packaging along with proof of purchase.
2. If you purchased this product from a computer manufacturer, please contact that manufacturer.
3. For purchases made through [www.klipsch.com](http://www.klipsch.com), please call KLIPSCH Customer Service at 1-888-554-5665. Product may only be returned to KLIPSCH after a Return Authorization number has been obtained from KLIPSCH.

Returned product must be shipped, freight prepaid to KLIPSCH in either its original packaging or packaging affording an equal degree of protection, along with proof of purchase.

### OUTSIDE THE U.S. AND CANADA

The warranty on this product if it is sold to a consumer outside of the United States or Canada shall comply with applicable law and shall be the sole responsibility of the distributor that supplied this product. To obtain any applicable warranty service, please contact the dealer from which you purchased this product, or the distributor that supplied this product.



# Klipsch



# ProMedia® Subwoofer System



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## NOW REGISTER ONLINE AT WWW.KLIPSCH.COM!

*For multiple speaker purchases, please fill out only one warranty card.*

Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Work Phone: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Would you like to receive the latest product updates and news via e-mail?  Yes  No

Model: ProMedia® SWS

Where did you purchase your Klipsch products from?

Retail Store  On-line at [www.klipsch.com](http://www.klipsch.com)  Computer Manufacturer

How did you hear about Klipsch?

Audio/Home Theater Magazine  Gaming Magazine  Computer Magazine  Radio

Newspaper  Television  Trade Show  Friend  Retail Dealer  Direct Mail

Have you purchased Klipsch products before?  Yes  No

If yes, what products?

Product Name(s): \_\_\_\_\_

When do you hope to purchase additional loudspeakers?

6 mos. – 1 yr.  1–2 yrs.

How likely are you to consider Klipsch products for your upcoming purchases?

Very likely  Somewhat likely  Doubtful

If doubtful, why?

Don't carry product I'm looking for  Too expensive  Klipsch dealer too far away  Other

Please tell us about you!

Married  Single  Student  Male  Female

Age:  Under 15  15-17  18-24  25-35  36-45  46-55  55-64  65+

Annual Household Income:

Under \$25,000  \$25-35,000  \$35-50,000  \$50-75,000  \$75-100,000  \$100,000+



# ProMedia® Subwoofer System



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Place  
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SURRENDER TO THE SYSTEM

Make sure you return your warranty card so that we may keep you up-to-date on new Klipsch products and promotions. As always, if you have any questions, contact your local authorized Klipsch dealer or Klipsch Customer Service at 1-888-554-5665

### FOR YOUR RECORDS:

Model: ProMedia® SWS

Date Purchased:



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