

# PIN AMP 800<sup>™</sup> Owner's Manual:

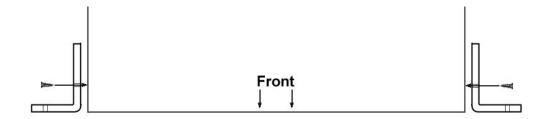
Ó 2009 PINNACLE LOUDSPEAKERS

We congratulate and thank you for choosing PINNACLE<sup>®</sup>. Our subwoofer products exemplify the best in modern audio technology, and are designed to produce remarkable amounts of deep bass. Please read this manual completely to ensure the best possible performance from your Home Theater or sound system.

# **PLACEMENT:**

Locate your PIN AMP 800<sup>TM</sup> in a cool dry location and allow sufficient space for adequate airflow through the bottom & side vents (if the unit overheats the thermal protection circuit may engage prematurely). If rack mounting, we do not recommended placing the PIN AMP 800 directly above another amplifier without leaving extra space to allow for adequate airflow. Do not place your PIN AMP 800 outdoors, or in any wet or excessively damp environment.

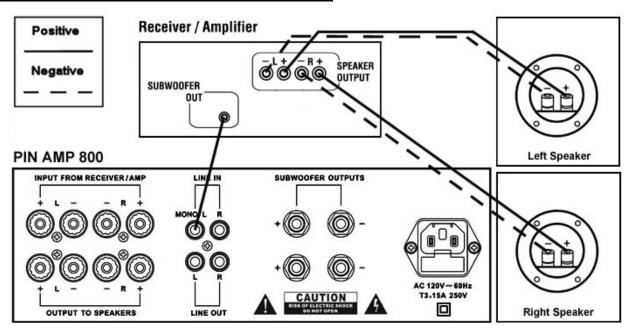
If you opt to rack-mount your PIN AMP 800 please attach the rack-mount brackets as indicated below. If needed, you may remove the rubber feet from the bottom of the unit.



#### **CONNECTIONS:**

Complete all wire connections in your Home Theater / sound system <u>before</u> powering up your receiver or PIN AMP 800. Be sure to observe proper polarity for all speaker & subwoofer wire connections (+ to +, - to -). To obtain the best performance, use only speaker wire of 12, 14, or 16 gauge (available from your dealer). Lightweight speaker wire (18, 20, 22 gauge, etc.) will result in degraded performance; 16 gauge wire may be used for short runs of about 8 feet or less.

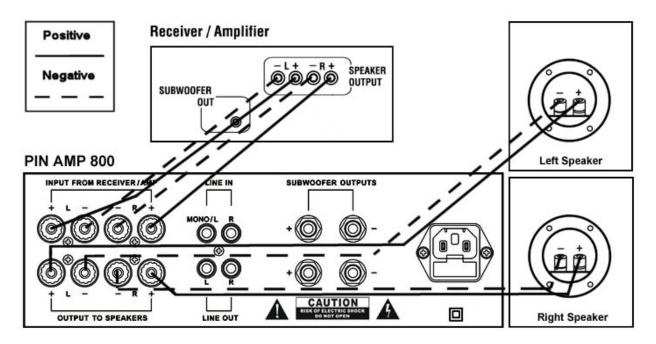
### **CONNECTION OPTION #1 - Using The Line Input(s)**:



To use the PIN AMP 800's LINE INPUT(s) your receiver must have a dedicated "subwoofer output" jack (sometimes called Sub Out, Low Pass or LFE), or pre-amp left & right channel outputs. If your receiver has these outputs you may connect your PIN AMP 800 using standard (coaxially shielded) RCA cable(s) (the same kind of audio cable used to connect your CD, tape deck, etc.). This method is generally the easiest to hook-up.

- If your receiver has a subwoofer output jack, simply connect your PIN AMP 800, using the Mono / L
  Line Input jack, to the subwoofer output jack on your receiver (refer to the Option #1 wiring diagram
  above).
- If your receiver has no subwoofer output jack but has pre-amp left & right channel outputs you can connect your PIN AMP 800 directly to your receiver's pre-amp outputs using the L & R line input jacks. If your receiver uses jumpers to connect its pre-amp outputs with its amp stage inputs, also connect the Line Outputs on the PIN AMP 800 to your receiver's amp stage inputs. Note: Do not connect the PIN AMP 800 to the tape loop outputs from your receiver as they will overdrive its circuitry!
- If you have a Dolby Digital or DTS receiver place the PIN AMP 800's Crossover Bypass switch in the ON position (this bypasses the Low Pass Filter in the PIN AMP 800). If you do not have a Dolby Digital or DTS receiver place the PIN AMP 800's Crossover Bypass switch in the OFF position (this activates the Low Pass Filter in the PIN AMP 800).
- Lastly, wire your left and right front speakers directly to your receiver's speaker outputs. Please refer
  to the Option #1 wiring diagram above for further clarification.

# **CONNECTION OPTION #2 - Using The Binding Post Inputs:**

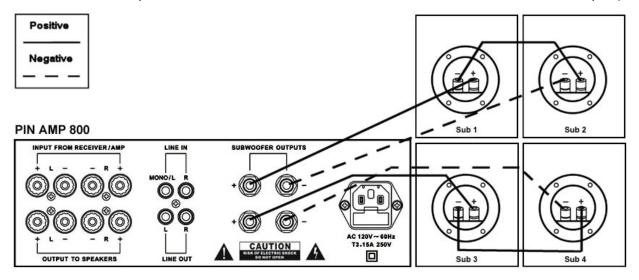


There are two reasons to use this connection option. The first is if your receiver has no subwoofer output jack! The second is if your system would benefit from having the bass filtered out of the main speakers (if you have a Dolby Digital or DTS receiver you can achieve the same results electronically simply by configuring your main speakers as SMALL and connecting your PIN AMP 800 using an RCA cable - see Connection Option #1). If you have large main speakers that are capable of reproducing a great deal of bass on their own then this connection option may not be advantageous to you. If however you have small main speakers then this method deserves consideration. Since this connection method filters out the low bass from the main speakers it provides the beneficial effects of increasing their power handling and improving their clarity.

If you choose to use this connection option, simply run speaker wire from your receiver's speaker outputs to the PIN AMP 800 inputs marked "Input from Receiver / Amp". Then, wire your left and right front speakers to the PIN AMP 800 outputs marked "Output to Speakers". Please refer to the Option #2 wiring diagram above for further clarification. Place the Crossover Bypass Switch on the PIN AMP 800 in the OFF position (this activates the Low Pass Filter).

### **Subwoofer Connections:**

- For One Subwoofer: Wire your Subwoofer to the top Subwoofer Output binding posts on the PIN AMP 800; be sure to observe proper polarity (+ to +, to -).
- For Two Subwoofers: Wire one Subwoofer to the top Subwoofer Output binding posts on the PIN AMP 800, the other to the bottom set of Subwoofer Output binding posts; be sure to observe proper polarity (+ to +, to -). In this case, do not use subwoofers with impedance ratings less than 4 Ohms.
- For Four Subwoofers: Wire four Subwoofers to the PIN AMP 800 in a series / parallel fashion as
  depicted below (top Subwoofer Output+ to Sub 1+, Sub 1- to Sub 2+, Sub 2- to top Subwoofer Output-,
  bottom Subwoofer Output+ to Sub 3+, Sub 3- to Sub 4+, Sub 4- to bottom Subwoofer Output-).



#### **POWER-UP AND TONE CONTROL ADJUSTMENTS:**

- Plug your PIN AMP 800 into any ordinary wall outlet. Since your PIN AMP 800 can require up to 800 Watts of power, do not plug the PIN AMP 800 into any outlet that cannot deliver 800 Watts (like those on the back of other electronic equipment such as your receiver).
- With the VOLUME control at minimum (maximum counter-clockwise position), plug in the PIN AMP 800's power cord and turn its power switch to the ON position. The Auto-on circuitry will automatically turn the unit on (LED turns green) when it receives an audio signal. It will also automatically turn the unit off (LED turns red) after a few moments without any audio signals. If for any reason you do not want your PIN AMP 800 on, simply turn the power switch to the off position.
- Please ensure that your receiver's loudness control is off and that the bass tone control is in its middle (no boost) position. Now play some music with ample bass content. (The following setup routine is best accomplished with one person seated in a normal listening position directing another to adjust the controls for the best sound.)

- Adjust the VOLUME level on the PIN AMP 800 so that the output level of the subwoofer(s) is satisfactory (relative to your front speakers). If either of your front speakers or subwoofer(s) are not functioning properly, please refer to the Troubleshooting section toward the end of this manual.
- Adjust the PHASE switch on the PIN AMP 800 to determine which position sounds the most natural.
   The difference should be most audible in the mid-bass. If you cannot detect a difference, leave the PHASE switch in the 0° (in-phase) position.
- If you have placed the PIN AMP 800 Crossover Bypass switch in the OFF position adjust the FREQUENCY ADJUST knob and determine what position sounds best. This feature controls the output level of the mid and upper bass frequencies. Please note that if you have put your Crossover Bypass switch in the ON position, due to the low pass filter already in your receiver, the PIN AMP 800's frequency adjust control is unnecessary, will have no effect, and its position can therefore be ignored.
- The best VOLUME level, PHASE switch and FREQUENCY ADJUST positions will mostly be
  determined by your room acoustics and the mid and upper bass frequency response characteristics of
  your front speakers. The source material will also play a significant role as its bass level may vary
  considerably.
- After your initial adjustments you may want to go back and "tweak" these controls. Their effects are
  acoustically interrelated. Re-adjusting them may be necessary to obtain optimal performance.
  Generally, once you are satisfied with your PIN AMP 800's settings, you can use your receiver's tone,
  equalizer, volume and subwoofer output level controls to optimize your whole system's performance.

#### **VERY IMPORTANT!**

- If you have a Dolby Pro-Logic Home Theater system, make sure that your receiver's center channel mode is in the <u>NORMAL</u> position. This will ensure that all low bass information is sent to your subwoofer(s).
- configured your receiver's Bass Management System so that all of your speakers are properly categorized as either <a href="SMALL">SMALL</a> or <a href="LARGE">LARGE</a> (please note your receiver's terminology may differ). This will ensure that all appropriate low bass information is sent to your subwoofer(s). As a general rule, a speaker with an 8" or greater diameter woofer may be considered <a href="LARGE">LARGE</a>. Conversely, a speaker with a woofer less than 8" in diameter may be considered <a href="SMALL">SMALL</a>. Please note that the bass output of a dual woofer speaker could be comparable to that of a larger single woofer speaker. Example: A dual 6.5" woofer system would generally be considered <a href="LARGE">LARGE</a> since its woofer area approximates that of a single 10" woofer system.

- With high volume levels of certain types of signals, the subwoofer(s) may be audibly strained.
   If you hear the subwoofer(s) "breaking-up" or distorting, turn your receiver's volume level down.
- If you have any problems or questions please contact your PINNACLE® dealer for further assistance.

## **TROUBLESHOOTING:**

No Sound only from Subwoofer(s) - Please note that the PIN AMP 800 has a thermal protection feature which will shut it off if it gets too hot; it will turn itself back on when it has cooled sufficiently. Otherwise: Check PIN AMP 800 power / volume settings and all connections. Ensure that the center channel mode on the receiver is in the NORMAL or SMALL position. If you have connected the PIN AMP 800 via RCA cable and if your receiver has a subwoofer on/off or variable subwoofer output level control, ensure that the subwoofer option is turned on and that the output level is at maximum. Make sure the RCA cable is connected to the receiver's subwoofer output and not the subwoofer input jack that some receivers have. If the problem persists, refer to the TO OBTAIN SERVICE section of your warranty at the end of this manual.

<u>No Sound only from Left and Right Front Speakers</u> - Check all connections. Ensure that your receiver's speaker channel A or B is switched on. Note: You must connect your speakers to your <u>receiver's</u> speaker outputs if you connected the subwoofer(s) via the LINE INPUT(s).

<u>Too Much Bass</u> - Check: PIN AMP 800 volume / phase / frequency controls; receiver bass / loudness controls; program material; move subwoofer(s) further out of corner or away from wall.

Too Little Bass - Check: PIN AMP 800 volume / frequency / phase control positions; all speaker wire phase (+ to +, - to -); receiver tone controls; program material; ensure that the center channel mode on the receiver is in the NORMAL or SMALL position. If your receiver has a variable subwoofer output level control, ensure that the output level is at maximum. Try moving the subwoofer(s) further into a corner or towards the wall. If you have connected the PIN AMP 800 via a single RCA cable you may want to try using a cable splitter (Radio Shack part #42-2535). This will allow you to use both line inputs which will increase the input signal strength to the subwoofer(s).

Rattling Noise: Tighten the binding posts on the PIN AMP 800 & subwoofer(s).

<u>Hum</u>: Check for faulty RCA connecting cable. Try to separate RCA cables from power cords (they can induce hum into the system). If that doesn't work we recommend you turn off your PIN AMP 800 when it is not in use. This is most easily accomplished by connecting its powercord to a switched power outlet.

# PIN AMP 800<sup>TM</sup> SPECIFICATIONS:

### Features:

Anti-Clipping Circuit For High Level Undistorted Bass

Dual Subwoofer outputs enable driving multiple separate subwoofers at the same time

Standard component size for shelf placement or 2U rack-mountable with included Hardware

High current, 2 Ohm stable, discrete amplifier design

Auto On/Off circuit with LED indicator

5-Way Gold plated binding posts for a high quality and secure connection

Includes High Quality Gold Plated Interconnect Cable

Dual Line Level Inputs, with unfiltered Outputs, enable daisy-chaining multiple amplifiers

Phase Switch

Satellite Speaker Crossover: First Order @ 80 Hz

Speaker Level Inputs & Outputs Variable Crossover 50-150 Hz Crossover Bypass Switch

Volume Control

High Quality Detachable IEC powercord

Designed in the USA

2 Year Transferable Limited Warranty

Variable Subwoofer Low Pass Filter: 50-150 Hz (3rd Order)

System Power: 400 Watts RMS, 800 Watts Peak

Dimensions: 16 7/8" Wide x 3 7/8" High x 14 3/4" Deep (including feet & front & rear features)

19 7/8" Wide with rack-mount brackets attached

Finish: Black Powder Coated Steel

Weight: 18 lbs.

Power Requirements: AC 120 V, 60 Hz, 800 Watts Maximum

#### **LIMITED WARRANTY:**

#### What Is Covered

Your Pinnacle<sup>®</sup> PIN AMP 800 features a limited warranty as follows. Your PIN AMP 800 is covered by this warranty for a period of two (2) years from the date of original purchase. The warranty covers all necessary parts and labor to return the amplifier to proper working order. Housing surfaces, and other exterior parts subject to normal wear and tear are not covered except where an inherent structural defect becomes evident.

Parts replacement and labor will be performed at the discretion of Pinnacle Loudspeakers and will be provided free of charge unless (in the opinion of our service department, service representatives, or engineering department) the system has failed due to abuse or negligent operation.

#### What Is Not Covered

This warranty will be void and no free services performed if we or any party acting as our agent determines that the system has been connected to an impedance load less than 2 Ohms or had any of its elements removed or tampered with in any way whatsoever. Furthermore, if your PIN AMP 800 is not found to be defective a service charge will be levied. In either case the minimum charge will be \$30.00. An additional charge will be applicable for same day service where possible and this charge will always be in effect even if the actual parts and labor are covered by this warranty. Pinnacle Loudspeakers reserves the right to make the final determination of whether or not the system has been damaged by abuse or negligent operation.

#### **To Obtain Service**

To obtain service under this warranty, either contact your Pinnacle® dealer or us directly at (516) 576-9052 or service@pinnaclespeakers.com. If you ship your PIN AMP 800 you are responsible for packing and shipping insurance. The freight must be prepaid. We will, however, pay return freight charges on any returned PIN AMP 800 that qualifies for in-warranty service. Sorry, we cannot accept any collect freight charges. You must include a note, attached to the unit, with your name, phone number or email address, and return shipping address (no Post Office boxes), indicating the nature of the problem you are experiencing. For warranty service you must also include a copy of your dated sales receipt. YOU MUST FIRST CONTACT US FOR THE CUSTOMER SERVICE SHIPPING ADDRESS IN YOUR AREA IF YOUR DEALER IS NOT EQUIPPED FOR THIS SERVICE. Please be sure to pack any items you ship us carefully since we cannot be held responsible for damages incurred during shipping.

This warranty may be transferred to a subsequent owner.

SAVE YOUR ORIGINAL SHIPPING CARTON AND PACKING MATERIALS, AS WELL AS THIS WARRANTY AND YOUR SALES RECEIPT. YOU WILL NEED THEM TO OBTAIN SERVICE UNDER THE PROVISIONS OF THIS LIMITED WARRANTY.



Speakers of the House Since 1976<sup>™</sup>

1 Fairchild Court Suite 140 Plainview, NY 11803

Tel. (516) 576 9052, Fax. (516) 576 0826 pinnacle@pinnaclespeakers.com http://www.pinnaclespeakers.com

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