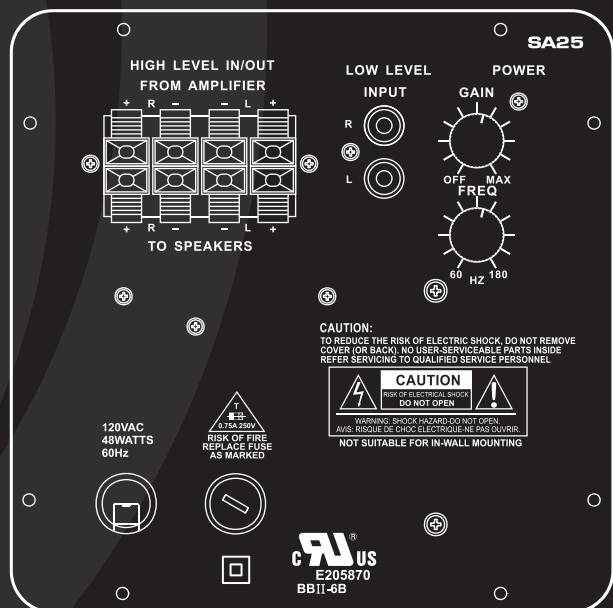




25W SUBWOOFER PLATE AMPLIFIER

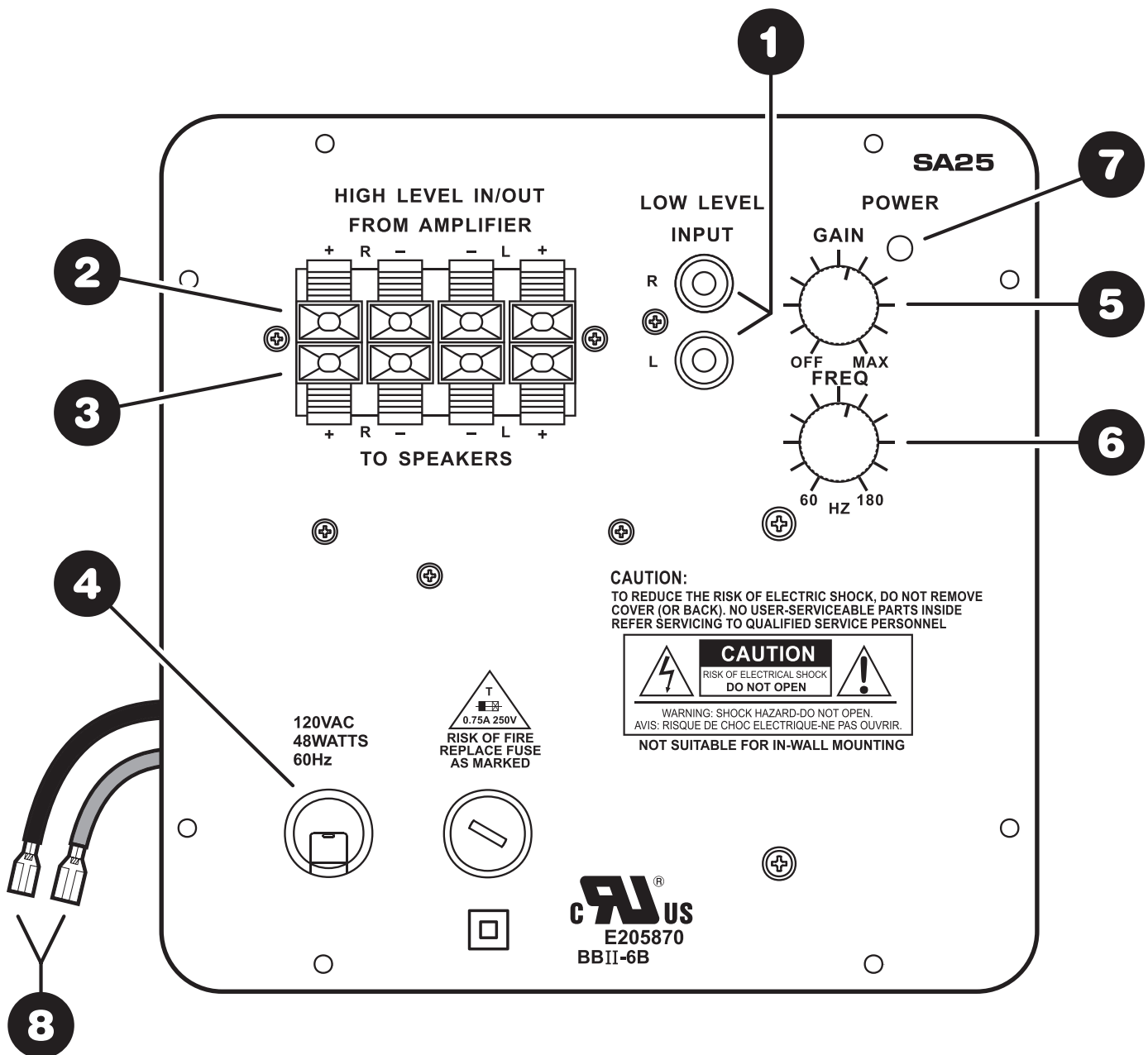
Model: SA25 User Manual



Thank you for purchasing the SA25 Subwoofer Plate Amplifier. It has been designed and built to provide years of high quality sound reproduction, and is ideal for use in compact subwoofers for home stereo, home theater, and multimedia audio systems. Engineering features of this amplifier include a choice of high or low level audio connections, selectable crossover frequency, and comprehensive internal protection against shorted speaker loads, thermal faults, and overload conditions.

FEATURES:

- Line-level and speaker-level inputs for connection to any system
- Full complement of protection circuits for high reliability
- Variable frequency 4th order low-pass crossover for a clean transition to main speakers
- Robust LM1875 IC-based Class AB topology
- Continuous-on feature eliminates turn-on thumps and delays



INPUT/OUTPUT CONNECTIONS

1.) Low-Level Inputs (Left/Right)

RCA style jacks that will accept standard line level inputs from a pre-amp level source. They will accept a stereo signal and internally combine it into mono. (**Note:** Both left and right input jacks must be connected to the source in order to drive the amplifier to full output).

2.) High-Level Inputs

Speaker level inputs using spring clip type jacks to permit connection with bare wire. Allows the user to connect the speaker level output of a full range amplifier to the input of the subwoofer amp using standard speaker wire. A mono signal is derived from the stereo input, which then feeds the subwoofer amplifier crossover input.

3.) High-Level Outputs

Speaker level passthrough outputs using spring clip type jacks to permit connection with bare wire. Used to connect from the subwoofer amp to pass signal from the full range amp on to the main L/R speakers. Signal is only present on this output if the high level input is also used. The signal to the L/R speakers is not filtered. The impedance "seen" by the full-range source amplifier will be that of the connected speakers only.

4.) Power input

This unit features a hardwired AC power cable and externally-accessible fuse. It is supplied with an 0.75 A, 250V fuse and USA type polarized 2-pin plug. This unit is not suitable for 230V applications.

CONTROLS/INDICATORS

5.) Power/Gain Knob ("Gain")

This control will match the amplifier's input sensitivity to the output of the pre-amp source. If the source output has a variable control, we recommend that the user spend a moment or two determining the best balance between the two controls. When a balance is found between low noise, linear level control, and sufficient level to drive the amp to the required output, the gain knob can be considered to be the "volume control" for the subwoofer system. To shut the subwoofer amplifier off, turn the control all the way to the left until it 'clicks'.

6.) Frequency Knob ("Freq")

This control is used to establish the highest frequency that the subwoofer will reproduce and has a range between 60 to 180 Hz with a slope of 24 dB per octave. If you are using the system for music and your main speakers have good bass capability, you could set the control to a fairly low value, often between 60 and 100 Hz. If the main speakers are smaller or do not have much bass output, set the control higher. Experiment with the amount of "overlap" that you will experience when all speakers are playing in the same range. This can be helpful when integrating the subwoofer with the rest of the system and with the room. **Note:** When using the amp with a LFE (Low Frequency Effects) output on a pre-amp or home theatre receiver the internal low pass filter circuitry should be bypassed by turning the frequency control to maximum (180 Hz). The home theater receiver should be used to control the low pass crossover frequency.

7.) Power LED

When the power switch is moved to the "on" position, the LED will illuminate green, and the amp will be in "On" mode. If the LED is not illuminated, check that the amplifier is plugged into a power source and that the "Gain" knob is not set to the "Off" position.

8.) Output Lead for Subwoofer Driver:

This rear mounted output lead connects the amplifier to the subwoofer driver. The output lead is roughly 20" long and is color coded. The red wire uses an insulated .250" quick disconnect and the black wire uses an insulated .205" quick disconnect. These connectors can be easily removed if your driver requires another size or type of connector. Be sure to observe proper polarity when connecting the amplifier to your subwoofer driver (red = positive, black = negative).

NOTES ABOUT HUM:

While the SA25 has been designed to minimize the possibility of hum in the subwoofer system, it is still possible that a hum will occur in rare circumstances. Its safety grounding can create a path for small amounts of 60 Hz energy to travel through the line-level audio system. While not dangerous, this energy can cause difficulty with the subwoofer auto signal sensing circuit, and at the very least will interfere with the quiet enjoyment of your system. The first course of action should be trying to make sure that all of the audio components are connected to either the same electrical outlet, or at least into the same circuit branch. Next, cable TV systems are notoriously the culprit, so be sure to try disconnecting all coaxial feeds that are connected to the system. If this solves the problem, install a coaxial line isolator and reconnect the system. In the very worst case, a line-level audio isolator/transformer connected to the line-in of the subwoofer amplifier will usually solve the problem.

SPECIFICATIONS:

Rated Power Output:	15 watts RMS into 8 ohms @ 0.1% THD 25 watts RMS into 4 ohms @ 0.2% THD
Signal to Noise Ratio:	90 dB A-weighted
Input Impedance:	10.4K ohms
Low Pass Adjustment:	60 Hz – 180 Hz
Dimensions:	6-5/16" W x 6-5/16" H x 2-9/16" D
Enclosure Cutout:	5-1/4" x 5-1/4"
Power Requirements:	120 VAC, 60 Hz, 48W
Stand-By Power Rating:	N/A
Weight:	2.50 lbs.

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions – All the safety and operating instructions should be read before this product is operated.

Keep these instructions – The safety and operating instructions should be retained for future reference.

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. The unit should be connected to an earth grounded AC electrical socket. Do not defeat the safety purpose of the polarized or grounding plug. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. Refer servicing to qualified personnel. To reduce the risk of fire and shock do not expose unit to rain or moisture. Clean only with dry cloth. Unplug the unit during lightning storms or when unused for long periods of time.

The unit should be operated in a well ventilated area. Minimum clearance is 2 inches from the ventilation openings. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Protect the power cord from being walked on or pinched, particularly at the plugs, convenience receptacles, and at the point where they exit the unit. Only use attachments/accessories specified by the manufacturer.



Note: Unit is set at the factory for 115V operation. Unit may not be adjusted or modified for 230V operation.

WARRANTY COVERAGE

Dayton Audio products are warranted to be free of all defects in material and workmanship for 5 YEARS from the date of purchase from an authorized Dayton Audio dealer. This warranty and all rights provided are limited to the original owner and are non-transferable. Dayton Audio's responsibility is limited to replacement or repair as set forth in this warranty statement.

Should a product require warranty service during this period, Dayton Audio will repair or replace without charge, any part or product proving defective in material or workmanship. All warranty repairs and service must be performed by an authorized Dayton Audio technician or service facility. The use of non-authorized repair services renders this warranty null and void, and any charges relating to non-authorized repair are the responsibility of the product owner.

All expenses related to replacing or repairing a defective part or product under this warranty shall be assumed by Dayton Audio. Dayton Audio reserves the right to replace defective product with a new or factory reconditioned unit.

WARRANTY EXCLUSIONS

1. This warranty does not cover product failure or damage resulting from misuse, abuse, neglect, accidents, alterations, standard environmental deterioration, natural disasters, or improper use and/or installation.
2. This warranty does not cover cosmetic damage due to misuse or neglect. This includes paint damage, scratches, cracks or other superficial marks related to improper use.
3. Failures arising from attempted servicing of a non-authorized Dayton Audio repair facility or technician are excluded from this warranty.

LIMITATION OF DAMAGES

In no event shall Dayton Audio be liable for consequential damages for breach of this warranty including installation charges, excessive shipping expenses, property loss or other incidental loss. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to the buyer.

HOW TO OBTAIN WARRANTY SERVICE

To obtain services under this warranty, the buyer shall contact Dayton Audio's authorized service provider, Parts Express, at 1-800-338-0531 x 780 to obtain a return authorization number (RA#).

The buyer must carefully pack the warranted product along with a copy of the original purchase receipt, the return authorization number (RA#), and a description to the repair facility listed below. Shipping for warranty service is dependent upon the return policy where the Dayton Audio product was purchased.

Parts Express

Attn: Dayton Audio Warranty Repairs RA# (please write your RA# here)

705 Pleasant Valley Drive

Springboro, Ohio 45066

NOTICE TO BUYER

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



daytonaudio.com
tel + 937.743.8248
info@daytonaudio.com

705 Pleasant Valley Dr.
Springboro, OH 45066
USA

