OSD AUDIO SMP300 | SUBWOOFER AMPLIFIER

OWNERS MANUAL

Revised: 6/11/2020

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 un-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point 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.

IMPORTANT SAFETY INSTRUCTIONS

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

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

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

4. Follow all instructions – All operating and use instructions should be followed.

5. Do not use this apparatus near water – The appliance should not be used near water or moisture – for example, in a wet basement or near a swimming pool, and the like.

6. Clean only with a dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufactures 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 plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is 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 the plugs, convenience receptacles, and at 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 or rack is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug the apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified 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 has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

16. The main plug or appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

17. Do not block any ventilation openings. Leave an open space around the equipment. Never place equipment on a bed, sofa, rug, or any other similar surface. Do not place equipment close to drapes/curtains/walls or in a bookcase, built-in cabinet or any other similar place that may cause poor ventilation.

18. Equipment should be connected to the main socket outlet with protective ground connection.

19. The user should not attempt to service the equipment beyond those means described in the operating instructions.

20. Voltage selector: Used to adjust the input rating (120 Vac/60 Hz and 230 Vac/50 Hz), insert the main power plug into the socket-outlet with voltage within the setting of the selector. The current ratings of the main fuse links are different for different input rating (see marking for details), and the fitted main fuse link is related to the input rating as setting of the selector during factory assembly line work, please ask a qualified personnel to help you replace the main fuse link before you adjust the voltage selector. The product can be supplied by two different main voltages (120 Vac and 230 Vac) that can be selected by adjusting the voltage selector on rear panel. The voltage selector must be set to match the current main voltage and always checked before inserting the main plug into a socket outlet.

21. WARNING: This class 1 apparatus shall be connected to a main socket outlet with a protective ground connection.
CAUTION: Only make connections when the amplifier power is off.

PLACEMENT

Congratulations on your purchase of an OSD Audio Amplifier. Please take a few moments to read the entire manual and be sure to retain this document for future reference. Please read and observe all safety instructions.

WARNING: To reduce the risk of fire or electric shock, do not expose this amplifier to rain or moisture. The amplifier shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on or near the amplifier

DO:

- Place the amplifier with feet resting firmly on a solid flat level surface.
- Place the amplifier in a well vented area to provide proper cooling. In areas that lack proper ventilation, such as tight cabinets or racks, it may be necessary to install an equipment fan to create air flow.

DON'T:

- Do not block ventilation holes on the top or bottom of the amplifier. Never place on carpeting or other similar material.
- Do not place amplifier in any position other than horizontal with the feet down. Never place on the side or resting on the back where the terminals are located.
- Do not place the amplifier near heat sources or in an area that could be exposed to moisture or excessive humidity.

YOU SHOULD KNOW

- The power supply in this unit may cause a hum that can be heard in other components if they are placed too closely to the amplifier.

INSTALLATION

Please use Diagram 1. to familiarize yourself the amplifiers rear panel.

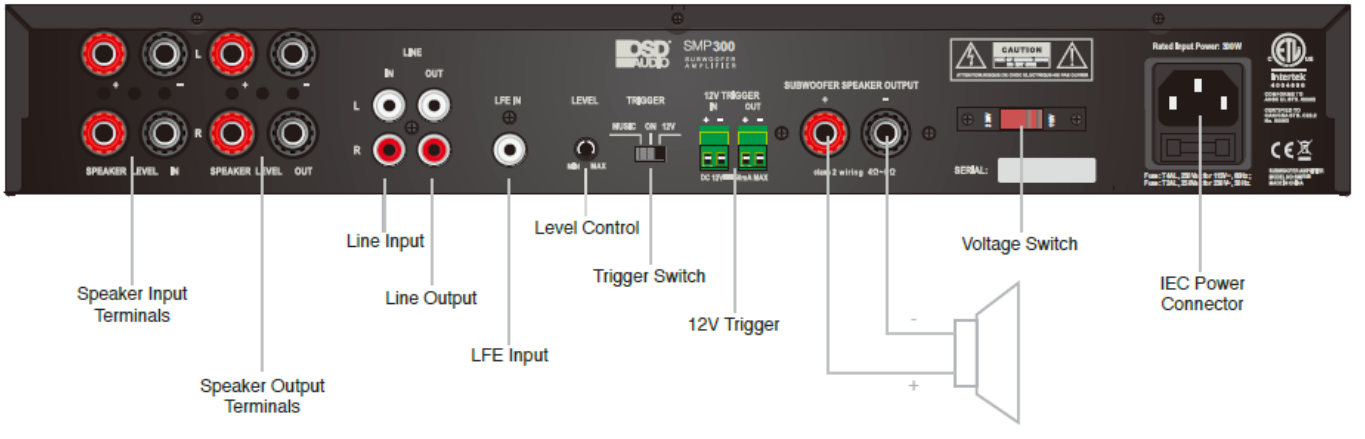

Diagram 1
Amplifier Rear Panel

INSTALLATION

1. Connecting the Subwoofer to the Amplifier

CAUTION: Only make connections when the amplifier power is off.

There are two output terminals on the back of the amplifier, one positive and one negative. (Diagram 1). 3 way binding post output terminals allow for a variety of ways to connect a subwoofer to the amplifier, including stripped wire, spade connectors, etc. Subwoofer must be connected with a minimum of 14-gauge speaker wire. Be sure all connections are secure.

2. Connecting the Audio Inputs

CAUTION: To avoid possible damage to the Amplifier or Subwoofer, only make connections when the amplifier is turned off.

LFE (Low Frequency Effects) Input - If your preamplifier or receiver has a Sub output or LFE output you can connect it to the LFE input. Be aware that using the LFE input bypasses the SMP300's low frequency (low pass) crossover.

Line Level Inputs (Left & Right) - The line outputs from a preamplifier or receiver can be connected to the line level inputs of the SMP300 amplifier with RCA cables. If the line level signal is also required by other equipment, you can connect the line level outs to another device. (See the Line Level Outputs section below.)

Speaker Level Inputs (Left & Right) - These inputs can be used if your receiver does not have a subwoofer output or a set of amplifier line level output jacks. Be sure to observe proper polarity, connect the left and right pair of main speaker output wires from your amplifier or receiver to the speaker level input terminals of the SMP300 amplifier. Then connect a left and right pair of speaker wires from the SMP300 amplifiers speaker level output to your main speaker terminals. (See Speaker Level Output Section below)

3. Connecting the Audio Outputs (optional)

Line Level Outputs (Left & Right) - Sources connected to the line level inputs can be forwarded to other receivers or amplifiers line level inputs. By doing this you can pass-on the audio signal for use by another component. Connect RCA cables to the line level output sections of the SMP300 and the line level inputs of a receiver or amplifier.

Speaker Level Outputs (Left & Right) - Connect a left and right pair of speaker wires from the SMP300 speaker output terminals to your main speakers. The main speakers will still be powered by your systems receiver or amplifier.

4. Dual Voltage Switch

(See Diagram 2) For use in the U.S., The SMP300 comes preset from the factory at 115V. For use in other countries, the voltage switch may need to be changed to 230V. (Please note that a plug adapter or alternate power cord may be required.)

Diagram 2
Voltage Switch

OPERATION

Please use diagrams 1 & 3 to familiarize yourself with the front and rear panels of the SMP300.

CAUTION: Please read all of the following instructions to prevent causing damage to your system.

FRONT PANEL CONTROLS

• Power Switch
The switch marked “power” on the front panel of the amplifier will turn off all amplifier circuitry including Auto Sense circuitry.

• Volume Controls
Use this to match the output level of the subwoofer to that of the main speakers in the system. We recommend that you play a variety of material before selecting a setting. Start with the control turned completely counterclockwise (off) and slowly turn it up. **NOTE:** Turning the volume up slowly will prevent possible damage to the woofer from the system being run too “hot”. Very little movement of the knob is needed.

CAUTION: If a popping sound (clipping) is audible through the subwoofer, it is being overdriven, reduce the volume on the SMP300, or speaker damage may occur! (See Volume Limit Control for proper adjustment of volume settings to avoid distortion damage.)

• Low Pass Filter
Use this control to adjust the upper frequency limit of the subwoofer. The purpose is to control the overlap of the subwoofers upper frequencies and the main speakers lower frequencies. If adjusted properly this will provide seamless blending of the subwoofer and the main speakers.

• Phase Control
This control allows you to match the arrival times of the sound waves from the subwoofer and the main speakers to your listening area. While the system is playing flip the switch to the 180˚ setting and back to 0˚ until the bass sounds louder or less boomy. Depending on the subwoofers placement and room acoustics, this control may have little or no effect.

Diagram 3
Amplifier Front Panel

REAR PANEL CONTROL

• Volume Limit Control
(See diagram 1) Use this control to adjust the maximum volume setting for your subwoofer system. With the level control and the front panel volume turned all the way down (counterclockwise), turn the subwoofer on and with audio playing through the system adjust the maximum volume level desired. Setting a max volume level will ensure that no clipping or damage will occur even when the front panel volume control is turned all the way up.

TROUBLESHOOTING

The SMP300 Subwoofer Amplifier is designed to function trouble free. Most problems occur because of operating errors. If you have a problem, please check the troubleshooting list first. If the problem persists, contact tech support at 1-562-697-2600 or e-mail us at Support@osdaudio.com.

Problem	Possible Causes and Solutions
No sound is heard	a. Audio to the amplifier is not connected properly. Check this and other system component manuals to ensure proper connection. b. The cable is bad. Use another cable that you know is good. c. Loose or frayed wires. Check for secure clean connections on all speaker wire terminals. d. Volume Limit Control is set too low. See Volume Limit Control for adjustment procedure.
A hum or buzzing sound is heard	a. The sound may be caused by a ground loop in the system. Try to eliminate this by reversing the AC plugs of other components in the system. b. Try plugging the SMP300 into another outlet. c. Other causes may include faulty cables.
The Amplifier will not turn on	a. There may be AC power problems. Check the AC circuit and plugs. Make sure power switch is turned on. b. Audio cable to the amplifier is not connected properly. Check this and other system component manuals to ensure proper connection. c. The cable is bad. Use another cable that you know is good. d. Loose or frayed wires. Check for secure clean connections on all speaker wire terminals.
The Protection Circuit cuts in momentarily and then returns to normal	The circuitry in the amplifier has detected that the amplifier is in danger of overheating. Normally, this would happen infrequently and momentarily. If this persists, the amplifier may need more adequate ventilation.
Protection Circuit cuts in and does not return to normal	There may be a fault in the wiring with the speaker or the amplifier. Turn the power switch off then on again. If the amplifier immediately returns to protection mode, turn it off and check all of the wiring including connections at the amplifier, subwoofer and any connections made to the terminals on a wall plate.

WARRANTY & REPAIR

All OSD AUDIO electronics have (2) year Limited Warranty against defects in materials and workmanship. Proof of purchase must accompany all claims. During the warranty period OSD AUDIO will replace any defective part and correct any defect in workmanship without charge for either parts or labor

OSD AUDIO may replace returned electronics with a product of equal value and performance. In such cases, some modifications to the mounting may be necessary and are not OSD AUDIO's responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by OSD AUDIO. The unit must be returned to OSD AUDIO at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damaged resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by OSD Audio

OSD AUDIO sells products only through authorized dealers and distributors to ensure that customers obtain proper support and service. Any OSD AUDIO product purchased from an unauthorized dealer or other source, including retailers, mail order dealers and online sellers will not be honored or serviced under existing OSD AUDIO warranty policy. Any sale of product by an unauthorized source or other manner not authorized by OSD AUDIO shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, you must email customer service at RMA@audiogeargroup.com for a Returned Merchandise Authorization (RMA) number then the unit must be shipped to OSD AUDIO at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the product(s) in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

This Warranty Does Not Cover: Damage caused by abuse, accident, misuse, negligence, or improper operation (installation) • Any products that have been altered or modified • Any product whose identifying number of decal, serial #, etc. has been altered, defaced or removed • Normal wear and maintenance.

Features:

- A compact and powerful digital subwoofer amplifier for home theater applications
- Efficient Class D digital technology runs cool under demanding loads
- Rated at 500W peak power and 250W continuous RMS (4-ohms)
- Includes front-panel variable low-pass filter for balanced and accurate bass
- Additional front panel controls include phase and volume
- Multiple input options for older and newer receivers and pre-amps
- Auto sensing feature turns off amp when signal is undetected
- Dual voltage switchable (120V/230V)

Specifications:

- Amplifier Type: Subwoofer
- Amplifier Class: Digital Class D
- Channels: 1
- Power Output: 500 Watts @ 4 Ohm
- Power Output: 150W RMS @ 8-ohm w/ 300W Peak
- Power Output: 250W RMS @ 4-ohm w/ 500W Peak
- Frequency Response: 20Hz-160Hz +/-1dB THD: 1%
- Variable Crossover: 35Hz-180Hz
- Variable Phase Switch: 0 to 180 Degrees
- Impedance: 8 Ohm and 4 Ohm Stable
- Signal to Noise Ratio: 95 dB
- 12V Trigger Mode
- Inputs: Speaker (High) Level / Signal (Low) Level RCA
- Rack Mountable: 1U Rack Space Style / Mounts Included
- Dimensions (L x H x D): 16.25" x 3" x 9.25"
- Weight: 7 lbs.
- Warranty: 2 Years