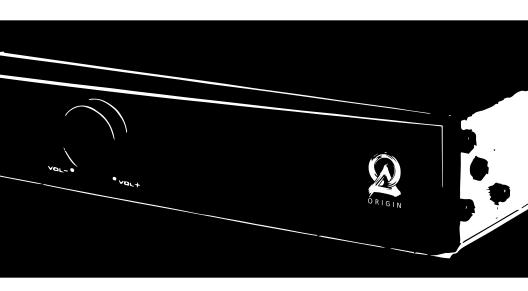


# **Installation Manual**



SUBA150 Subwoofer Amplifier



#### Introduction

Congratulations and thank you for purchasing the SUBA150 class D amplifier. This amplifier is designed as a stand alone compact amplifier that allows custom home installation to have a powerful high efficiency amplifications while fitting in small places. The SUBA150 comes with a set of standard ears that allow the user to install it in a standard single rack mount. Whether you are looking to power a subwoofer or a tactile transducer, the SUBA150 is guaranteed to deliver.

The SUBA150 is powered by a switching regulated power supply PWM. It delivers a steady and regulated output, delivering a linear amplification to your load. Only through linear amplification do you get the chance to deliver accuracy in amplifications.

The amplifier possesses an efficient switching power supply with stability at 8 and 4 ohms. These amplifiers will deliver clean accurate sound with massive damping factor.

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### **Getting Started**

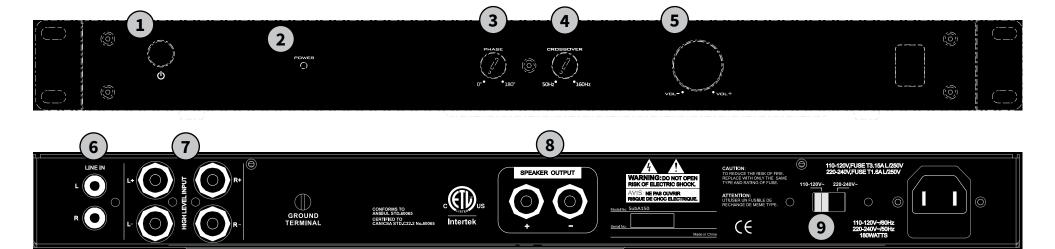
### **Specifications**

#### **WARNING**

PLEASE READ THIS MANUAL BEFORE ATTEMPTING INSTALLATION

- 1. Audio sensing setting
- 2. Red = Amplifier is in auto mode Green = Amplifier sensing signal: amplifier is on
- 3. Set with an SPL meter. See page 5
- 4. Set based on your application. See page 4
- 5. RCA input from a processor LFE
- 6. Set based on your input level and power rating of your load
- 7. High level input. 100 WRMS limit from receiver output
- 8. Amplified output to your subwoofer or your tactile
- 9. YOU MUST SET TO YOUR LOCAL POWER GRID LEVEL. NORMALLY SHIPPED @ 110VAC

| Frequency Response                    | 28Hz 175Hz  |  |
|---------------------------------------|---|--|
| Power Line Voltage                    | 110-120C~60Hz / 180 WATTS   |  |
| Dimensions (HxWxD)                    | 2" X 9" X 9"  |  |
| Weight                                | 4.5 Lbs   |  |
| Finish                                | Black   |  |
| Input Sensitivity For<br>Full Output  | 240mVrms from left input with volume control at 0dB, 90mVrms with volume control fully clockwise.               |  |
| Input Impedance                       | 8.2 kilo-Ohm Line-level inputs, 32-Ohm<br>Speaker-level inputs  |  |
| Internal System Gain                  | 42dB from left input jack to speaker with the Bass Level control at 0dB, 54dB with the control fully clockwise. |  |
| Output Power into 4 ohm load 280 WRMS |   |  |
| Output Power into 8 ohm load 140 WRMS |   |  |





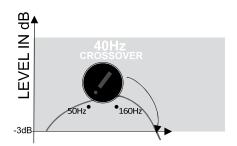
### **Crossover Setting**

**SUBA150 Phase Setting** 

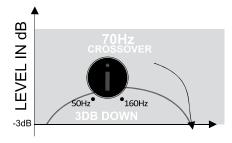
Listed below are crossover settings in clock-like images. Each setting shows the frequency response, 3dB down (half level)and system recommendation for each setting.

#### **Driving A Subwoofer**

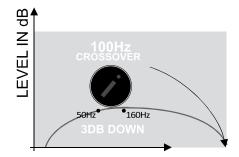
If you are using the SubA150 to drive a subwoofer, then you will need to set the crossover below 100Hz. If you have a large subwoofer such as 12" or 15" or even 18", then you will have a great response with the crossover set to 12 o'clock setting or minimum setting. For use with a 10" or 8" subwoofer, you will find 12 o'clock and 2 o'clock setting to be the best range.



Please use this setting if connecting to a tactile transducer, large subwoofer and large front speakers.



Please use this setting if connecting to a tactile transducer, a large subwoofer and small front speakers.



Please use this setting if connecting to a small subwoofer and small speakers.

If you are using the SubA150 to power a subwoofer, you will need to set the time of arrival of your subwoofer frequencies with that of your tower speakers. To do that with high accuracy, you will need to have an SPL meter. There are many suppliers with such device. RadioShack has one that works just fine. To set the phase, you will need to send a continuous tone signal through the front speakers and the subwoofer at the same time, rotate the phase to zero setting and place the meter in the listening position. While the system is playing white noise or 50-Hz tone, have someone read the meter. Then, rotate the phase knob until the meter reads the highest reading. This will conclude the setting. Document the position of your optimum phase and save it for future references.

### **Important Safety Instructions**

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 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.

- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- 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.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 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.
- The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device shall remain readily operable.
- This apparatus has been designed with Class-II construction and must be connected to a mains socket outlet with a protective earthing connection (the third grounding prong).

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 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.



### **Troubleshooting**

| Symptom               | Possible cause  | Remedy  |
|-----------------------|---|---|
| Sound is out          | Amplifier(s) is not connected to AC                                 | Check out amplifier's power cord is well connected to live AC outlet  |
|                       | The subwoofer speaker(s) is not connected to amplifier(s) correctly | Check all the speaker wires are connected to amplifier's speaker terminals  |
|                       | Amplifier's fuse may blow out                                       | Turn the amplifier's power off first, and check the fuse is still in good condition; If fuse is broken and you have no spare one, find your dealer for the replacement) |
|                       | Amplifier does not receive audio signal from source                 | Make sure the audio cable(s) is connected and the cable is good   |
| Bad sound performance | Bad audio cable   | Check out all the audio cables to make sure the cables are good and connecting are good as well   |
|                       | The subwoofer speaker is bad  | Replace the bad subwoofer with a good one, to verify if speaker itself is the cause   |
|                       | The polarity of speaker wire is reversed                            | Check the polarity (+ / -) are right, and correct them if they are wrongly connected  |
|                       | Improper setting of crossover, or has chosen the wrong mode         | Try different crossover mode or setting for the best result   |



#### **Technical Assistance**

If you have any questions or concerns about installing or using this product, you can reach us through one of the following methods:

Phone: (844) 674-4461

Hours of operation: 8:00am - 5:00pm (Pacific Time), Mon - Fri

Email: techsupport@originacoustics.com

If you are having technical trouble, please include the model number and briefly explain what steps you took to resolve the problem in your email, or be prepared to answer these questions over the phone. If you are considering returning the product, it's required that you contact Origin Acoustics prior to any return attempts. This way we can determine if the issue can be resolved without returning the product, or if needed we can provide instructions and support for the return process.

## **Warranty**

#### **Two-Year Warranty**

Origin Acoustics warrants to the original retail purchaser only that this Origin Acoustics product will be free from defects in materials and workmanship, provided the speaker was purchased from an Origin Acoustics authorized dealer.

If the product is determined to be defective, it will be repaired or replaced at Origin Acoustics' discretion. If the product must be replaced yet it is no longer manufactured, it will be replaced with a model of equal to or greater value that is the most similar to the original. If this is the case, installing the replacement model may require mounting modifications; Origin Acoustics will not be responsible for any such related costs.

#### **Requirements and Warranty Coverage**

This warranty may not be valid if the product was purchased through an unauthorized dealer. This warranty only applies to the individual that made the original purchase, and it cannot be applied to other purchases. The purchaser must be prepared to provide proof of purchase (receipt). This warranty will not be valid if the identifying number or serial number has been removed, defaced, or altered.

This warranty does not cover the following:

- Accidental damage
- Damage caused by abuse or misuse
- Damage caused by attempted repairs/modifications by anyone other than Origin Acoustics or an authorized dealer
- Damage caused by improper installation
- Normal wear, maintenance, and environmental issues
- Damage caused by voltage inputs in excess of the rated maximum of the unit
- Damage inflicted during the return shipment

#### **Return Process**

Before making any return attempts, it is required that you first contact Origin Acoustics. Return product to Origin Acoustics or your dealer, either in person or by mail. It's preferable if the product is returned in the original packaging. If this isn't possible, the customer is responsible for insuring the shipment for the full value of the product.

This warranty is in lieu of all other expressed or implied warranties. Some states do not allow limitations on implied warranties, so this may not apply depending on the customer's location. (For more information, see Magnuson-Moss Warranty Act.)

