

FS SERIES POWERED SUBWOOFERS

FS15 | FS12



OWNER'S **MANUAL**

INTRODUCTION



Introduction

OSD - The Best Value in Sound

Thanks for joining the OSD owners club.

The FS 12/15 subwoofers combine all the essentials for great performance. A powerful amplifier that allows for high SPL and low distortion, combined with rigid, long-throw, large voice coil woofers for deep extension and control.

To enjoy your subwoofer to its full extent, please read this manual first. We will make suggestions on how to extract the maximum performance for your application and setup.

For those of you with previous experience or knowledge of how to set up subwoofers, the quickstart guide may be sufficient to get you up and running.

For those who wish to learn a little more, reading the complete manual will help.

If you have any questions about your FS subwoofer, please contact us directly.

www.osdaudio.com

email: support@osdaudio.com

Phone: 888-779-4968



WARNING

- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PRE-VENT BLADE EXPOSURE.
- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- TO PREVENT ELECTRICAL SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, FULLY INSERT.



This lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the use to the presence of un-insulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

This lighting flash with arrowhead symbol, within an equilateral triangle, is intended to alert the use to the presence of un-insulated dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying appliance.

IMPORTANT SAFTEY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- 3 Read all warnings.
- 4 Follow all Instruction.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturers instructions.
- 8. Do not install near 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 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. If the provided plugs 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 form the appliance.
- 11. Only use attachments or accessories specified by the manufacturer.
- 12. Unplug the apparatus during lightning storms or when unused for long periods of time.
- 13. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in anyway, 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.

QUICK START GUIDE



Quick Start

Unboxing your subwoofer.

Open the box and carefully remove all staples, then remove the subwoofer.

If you notice defects on any elements during the unpacking process, contact the company you purchased it from.

Suggestion:

Open the outer carton, fold flaps down, carefully roll the box until it is upside down, remove outer carton by pulling upwards. Repeat for the inner carton and then remove plastic bag. Make sure you have the power cord.

Positioning

Suggestion:

Before positioning the subwoofer at its final location, study the rear panel – perhaps even take a picture of it. When the subwoofer is in its final location you may not be able to read the input and control labels. Any final adjustments will need to be by feel alone. Also, if your power and connection cables are long enough, connect them before moving the subwoofer into the final position.

If you know the ideal position for your subwoofer, move it to that position. If you are unsure, read the section in the manual on Connections, Settings, and Positioning.

Connections

Before connecting your subwoofer, make sure all equipment is switched off. Do not connect the subwoofer power cable before completing all connections.

If, for your system, you know the best way to connect your subwoofer, make those connections now. If you are unsure or would like to see our recommendations, read the Connections, Settings, and Positioning section of the manual.

Suggestion:

Make sure all connections are tight. The subwoofer will vibrate strongly, and loose connections may become unplugged.

Settings

If you know the Volume, Crossover and Phase settings you want to use for your system, make those adjustments now. If you are unsure, read the section in the manual called Connections, Settings and Positioning.

Power

Finally, plug in your subwoofer and turn the power on.



Inside the box:

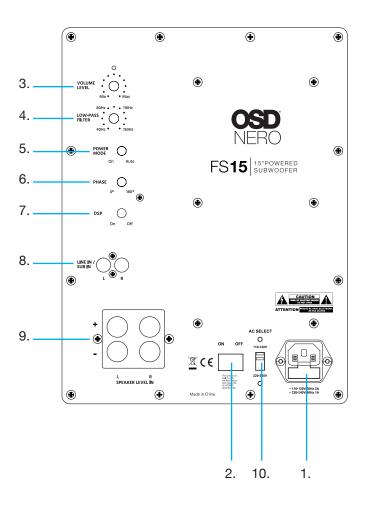


Connections

Rear Panel:

- 1. Power Socket
- 2. On/Off Switch
- **3. Volume Level** adjust this to match the level of your main speakers.
- **4. Low-Pass Filter** adjust the Low-Pass Filter to blend your main speakers with the subwoofer.
- **5. Power Mode** Select On for permanently powering the subwoofer when the main power switch is on. Select Auto to allow the subwoofer to turn on when a signal is sensed and off when no signal is sensed (30-minute delay).
- **6. Phase** Switches the phase of the subwoofer 180 degrees to help synchronize the driver's motion with the main speakers, if necessary.

(Continued)





Rear Panel Continued:

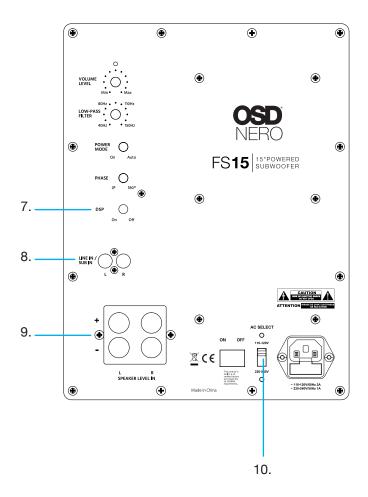
7. DSP – The Off position gives maximum SPL levels and the On position gives maximum bass extension:



DSP On



- 8. Line Level Inputs/Outputs
- 9. Speaker Level Input/Outputs
- **10. Voltage Selector 110v/230v** –make sure this is set according to your voltage.





Connections, Settings, And Positioning

AC Power Connection

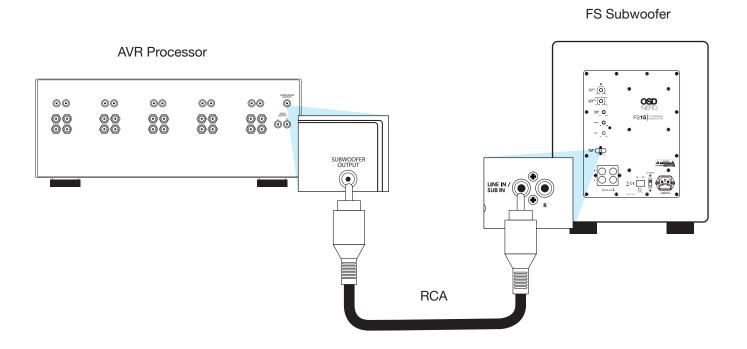
Connect the power cord to the subwoofer and an AC outlet. We recommend a 15-amp outlet to ensure the maximum current needed is available. Insufficient current will lead to less volume and more distortion.

Line-Level Connection – Single-Subwoofer Channel

The usual way to connect your subwoofer is with a single RCA interconnect cable going from the LFE or SUB1 Output on your AV receiver, processor, or preamplifier to the LFE Input on the sub. This allows your AVR/Processor/Preamp to take care of the bass management and send the sub the correct level and frequencies of bass to the sub and main speakers.

Suggestion:

If you are using the bass management in your AVR, set the volume level on the sub to the '2 o'clock' position and the Low-Pass Filter to its highest position. This will allow, if required, for fine-tuning to your personal taste after the AVR calibration.







Line-Level Connection – Stereo Amp or Preamplifier

Both Left and Right inputs on your Sub can be used in a two-channel stereo application with a stereo amp or preamplifier that has Left and Right line-level outputs.

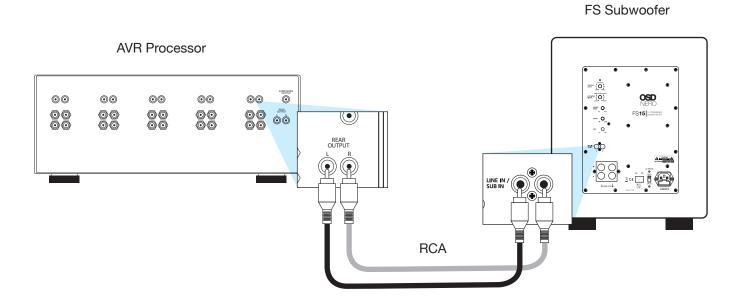
Connect the left and right outputs of your amplifier to the left and right line level inputs of the Sub.

When using a pre-amp and power amp, you can connect the sub to the pre-amp line outs and then, using the line outs on the sub, connect to the power amp.

When connecting this way, the subwoofer will simply add bass extension to the existing speakers. Take care in setting the Low-Pass filter to the correct frequency to match your main speakers.

Suggestion:

For example - If your main speaker's frequency response is stated as -3dB at 60Hz, try both the 50Hz and the 60Hz settings to see which sounds best.





Connecting Multiple Subwoofers

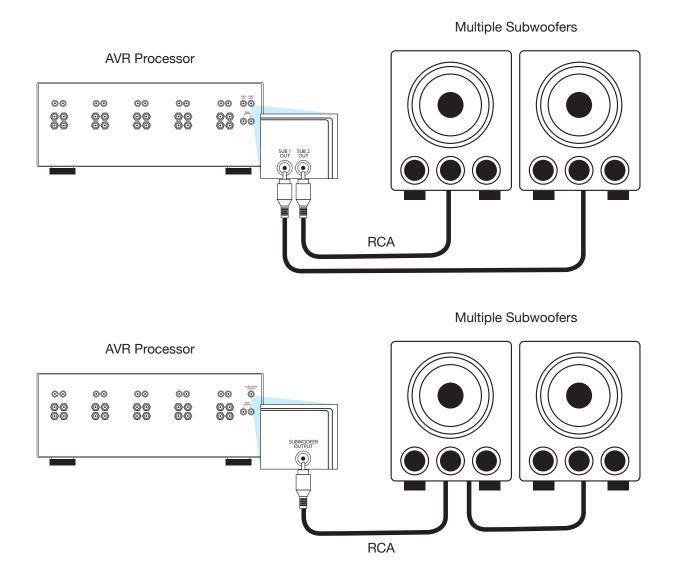
Room acoustics are the biggest challenge to reproducing great bass at home.

As you can see from the graphs shown earlier, our FS subs can reach down to 16Hz and have a very flat-frequency response. However, those measurements exclude any effects that your room may have on the response. In some cases, the dimensions of your room will cause the frequency response to be uneven in different parts of the room. Moving the subwoofer around the room may help this, and, if possible, should be tried. Ultimately, the best approach will be to add additional subwoofers, as this will create a more even response.

Some AV Receivers and Surround Processors have more than one subwoofer output. You can use the different subwoofer outputs to connect additional subs. It is okay to use a Y-adaptor from the sub-out to connect multiple subwoofers, or you can use the line-out on the subwoofer to 'daisy-chain' two subs together.

Suggestion:

It is not necessary to use identical subs, sometimes it is even better to use different ones.



OSD NERO

DETAILED INSTRUCTIONS

Speaker Level Connection

In a two-channel system, many audiophiles do not want to restrict their main speaker's frequency response. All that is needed is the additional, missing bass. The best way to connect your subwoofer or subwoofers is to use the speaker-level inputs. Our recommendation is to simply connect the subwoofer to your speaker's terminals (this will not affect the signal going to the main speaker and will not add any resistance to the amplifier) with the same speaker wire already being used. Since bass at these low frequencies is mono, it is okay to add just one sub to one of the main speakers. You will hear all of the bass. Perfectionists may want to add one subwoofer to each of the main speakers, and even align to the speakers to match the phase. This requires some experimentation but once achieved yields great results.

In a multi-channel or home theater system, it is possible to add subwoofers to any or all channels. In the speaker set-up section of the AVR, simply choose 'Large' as the speaker option and ensure that no cross-over frequency has been selected. All speakers will then receive full-range sound, and the subwoofers connected to each speaker will receive the bass frequencies.

Specifications

Spec	FS 15	FS 12
Description:	15-inch subwoofer speaker,	12-inch subwoofer speaker
Design:	Front Firing 15" Woofer and Triple Ports	Front Firing 12" Woofer and Dual Ports
Woofer:	15-inch Paper Cone Reinforced Driver	12-Inch Paper Cone Reinforced Driver
Rated Power Supply:	800 Watts RMS/1600 Watts Peak	600 Watts RMS/1200 Watts Peak
Frequency Response Range-Bass:	13Hz to 200Hz @ -minus 10dB down	16Hz to 200Hz @ - minus 10dB down
Frequency Response Range-Bass:	15Hz to 200Hz @ -minus 3dB down	18Hz to 200Hz @ - minus 3dB down
Low-pass high-end adjustment range:	40-200Hz	40Hz to 200Hz
Impedance:	8-Ohms	4-Ohms
Sensitivity:	90dB @1W/1M	90dB @1W/1M
Power Supply:	100V to 240Volt CE Certified	100V to 240Volt CE Certified
Input sensitivity and impedance:	0.5V /20K	0.5V /20K
Electrical DSP:	built-in, independent On/Off switch control	built-in, independent On/Off switch control
Overall dimensions (W×H×D):	480×600×660 mm / 18.9"x23.6"x26"	400×485×540 mm / 15.75"x19"x21.25"
Weight:	40kg / 88lbs	28kg / 61.79lbs.

WARRANTY



Warranty Info

All OSD NERO electronics products have a (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 speakers with a product of equal value and performance. In such cases, some modification 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 over dealers and on-line 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 unit(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.



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