

AUDIOCENTER

Dynamic Audio Solutions

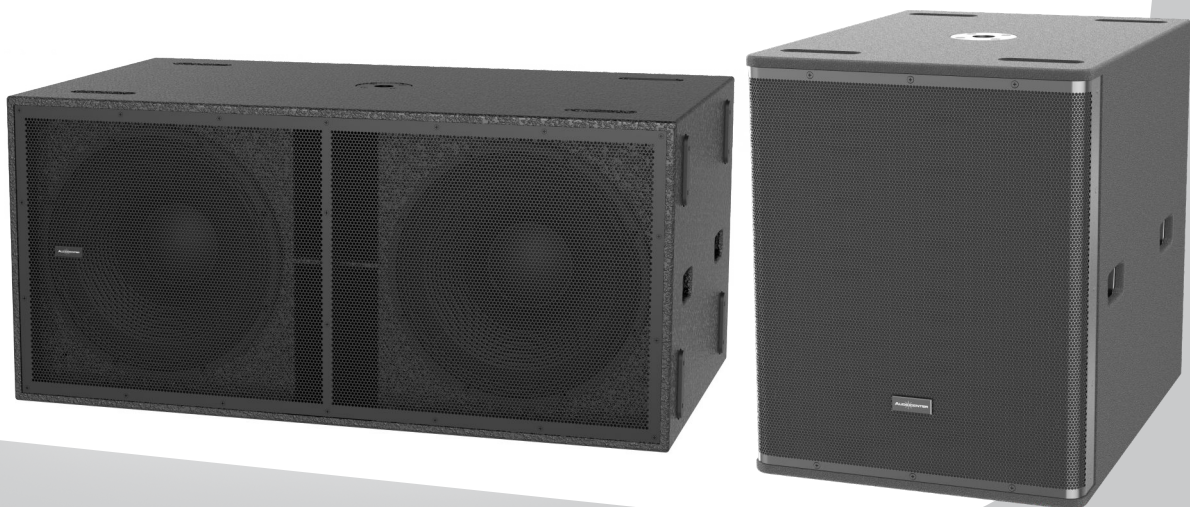
BrainCore™

Technology Inside

S SERIES

User's Manual

Active Subwoofer Speaker



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◆ Product Introduction

Thank you for purchasing S series active subwoofer from Audiocenter. They have integrated technologies of switch mode power supply, big power digital amplifier and DSP control, as well as speakers made of new materials. It is the result of years of R&D effort. We hope that you can use with pleasure, just as how we designed it. Please finish reading the manual before usage, to make sure the best performance of S series. Please keep the manual for future reference.

◆ Safety precautions

When you set up, install and use the S series, please follow the following safety measures strictly:

- There can be danger in any step during hanging installation. Everyone should pay attention to personal safety. All purchasers of Audiocenter should be professional people qualified to conduct the work related to such equipments.
- We strongly suggest the users pay full attention to local rules, regulations and laws. Installers have the responsibility to make sure the speaker installations are subject to local rules, regulations, and laws.
- If any danger or defect is detected, measures should be taken immediately to correct it.
- In touring application, please choose the installation hardware and occasion that can sustain the weight of the equipments.
- Please do not try to hang speakers over the design standard.
- When connecting the cables of the products, please use cable tie to fix the cables, to avoid actors, workers, and audience falling on the wire or brackets and affecting the speaker system.
- Please do not place the speakers near equipments sensitive to magnet fields, such as CRT displayer, TV or data saving materials.
- Please do not place the power cable near heating source. Do not over bend or damage the power cables. Do not place heavy things on it. Please do not place the cables that may be pressed or cause stumbling.
- Only the specified rated voltage should be used for this product. Please refer to the back panel of the product for the specified voltage.
- Only the supplied power cable or plug should be used. (If you need to use the product in a place different from the purchase place, please consult your local Audiocenter distributor.)
- Please check the power cable or plug regularly.
- Please make sure to connect to proper power socket with protection grounding connection. Wrong grounding may cause short circuits.
- The product inside does not include any component that can be repaired by users. In case of abnormal operation, please stop using immediately, and contact qualified Audiocenter maintenance worker to repair.
- Please do not use the product in the rain, or near water, or in humid environment, to avoid liquid spilling to any opening.
- When any of the following situations occurs, please cut the power immediately, and pull out the power plug from the socket, and ask qualified Audiocenter maintenance worker to repair.
 - Wear or damage of the power cable or plug.
 - Abnormal smell or smoking.
 - Some substance falls into the product.
 - Sound stops suddenly when using the product.
- If the product falls or damages, please turn off the power switch immediately. Pull out the power plug from the socket, and ask qualified Audiocenter maintenance worker to repair.
- When pulling out the power plug from the power socket or the product, please make sure to grab the plug instead of the power cable. Pulling the power cable directly may cause damage.
- If the product is not used for long time, or there is thunder storm, please pull out the the pulg from the socket.
- Please do not place the product in any uneven position. Otherwise, it may cause falling off suddenly.

- If the product is not fixed safely, please do not place it in a position that may cause easy falling.
- Please do not block the air hole. The product has air hole at the back to avoid internal temperature too high. Bad ventilation may cause damage to the product or even fire.
- Please do not hang or install any other component to the handle of the speaker. It may cause damage or injure.
- Please do not press the back panel of the product to the wall. Otherwise, the plug may touch the wall and separate from the cable, and cause short circuits, malfunction, or even fire.
- Before connecting the product to other equipment, please turn off the power switch of all equipments. Before turning on or off the power switch of all equipments, please turn down the volume to the minimum.
- Please do not use the product in a very high or uncomfortable volume. Otherwise, it may cause permanent damage to your ear.
- In case of sound distortion, please do not use the product. To Continue using the product in such status may cause fire.
- Using mobile phones near the speaker may cause noise. In case of noise, please use the mobile phone far from the speaker.
- If you need service, please contact Audiocenter service center, agent, or distributor in your area.

⚠ In order to avoid to cause you or others body injury and loss on equipment or property, please make sure to follow above basic items.

Package accessories:

- Power cable
- User's manual
- Quality certificate

Introduction for similar product

Please check above items carefully. If any questions, please advise Audiocenter representative, dealers, distributors, or contact by email box: support@ac-pro.net.

Optional accessories:

- Flightcase

◆ **S series Technical Features**



S3118A

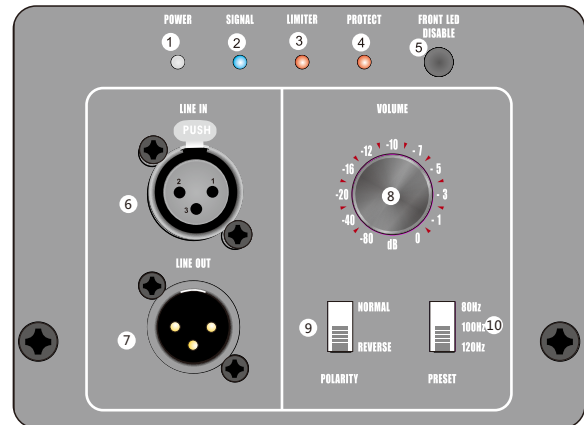
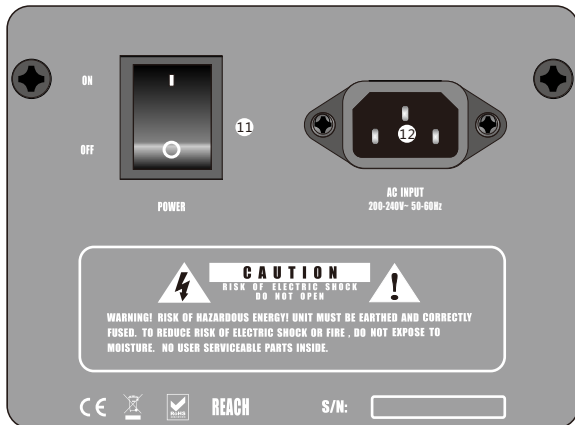


S3218A

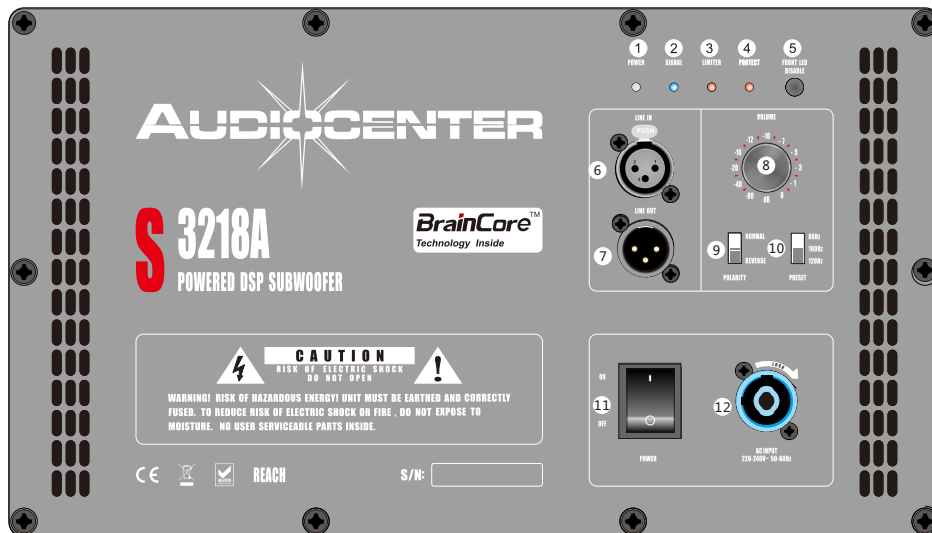
● **Features:**

1. Integrated with high-powered input, Switch mode power supply and DSP digital control technology.
2. With built-in DSP audio specialization technology, all functions such as EQ, phase correction, delay and limiter are intuitively designed for ease of usage.
3. Class D power amplifiers are utilized for high efficiency, light weight and compact circuit structure.
4. Strong protection are implemented with built-in DSP processing circuit to ensure system integrity to the components separately.
5. Advanced AD/DA converter, 48 KHz sampling frequency and 24 bit precision along with optimized DSP algorithm to ensure the crisp and clean sound output.

◆ Control panel and functions



S3118A



S3218A

- 1 Power Indicator:**
The indicator is on when speaker is connected to power.
- 2 SIGNAL Indicator:**
When detecting channel LINEIN has input signal, the LED is on.
- 3 LIMITER Indicator**
The LED turns on when output limiter is activated. If the output voltage of the amplifier exceeds the maximum value, output limiter will be activated , damping the output signal.
- 4 PROTECT Indicator**
The light turns on if the amplifier is detected to be overheated . And the amplifier enters into the protection status.

5 FRONT LED DISABLE switch

Switch on and the front panel LED indicator is on(operating mode: blue) ; Switch off when the front panel LED indicator is unneeded.

6 INPUT socket(LINE IN)

Balanced XLR input socket.(LINE IN)

7 OUTPUTS socket(LINE OUT)

Balanced XLR output socket. Balance the mixed output signal (able to mix and integrate the signals of all channels).

8 VOLUME control knob

VOLUME knob controls the gain input signal of all the channels. This control can adjust the sensitivity, so as to control the amount of semaphore send to the power amplifier and then to the speakers

9 The polarity of S series:

Polarity, also is called as phase, means that the input voltage is positive or negative in specific time. In most case the positive will drive the diaphragm of the speaker to move forward, and the negative will pull it back ward. When a specific frequency signal similar signal repeats, the polarity must be the same so that the input efficiency will be the highest , which is very important for subwoofer system. Wrong connection or usage will change the polarity and lower the system's efficiency.

10 Preset three low pass filter

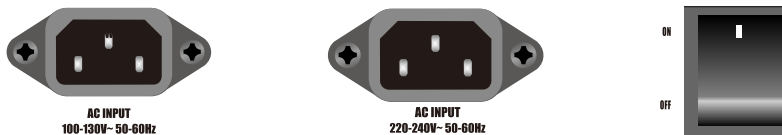
The low-pass filter cut off frequency specified in 120 Hz and 100 Hz and 80 Hz. The filter will cut frequency higher than the cut off frequency.

11 POWER switch

To turn on the power,pull the switch upwards to position (1); To turn off the power, pull the switch downwards to the position (0).

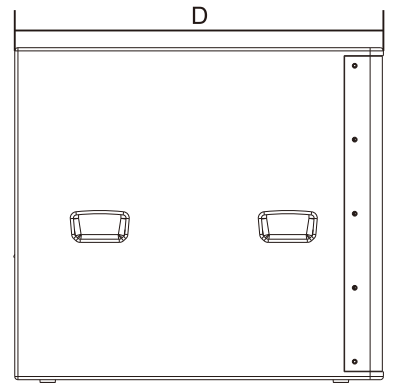
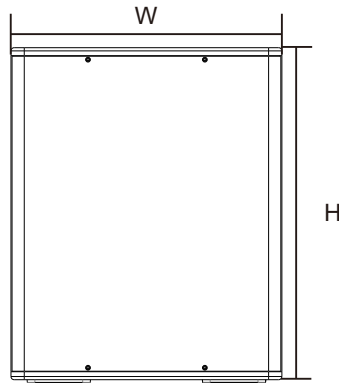
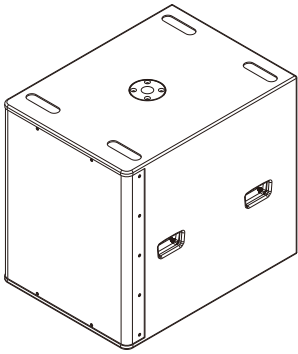
12 AC INPUT slot

Connect the power cable to the input slot first, and then connect to the AC power.

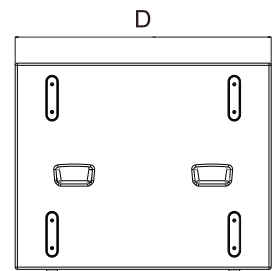
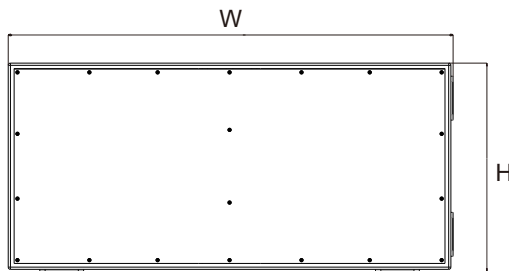
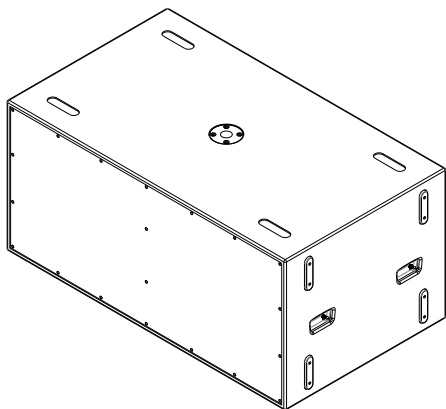


⚠ Note: S series employs a universal power supply, supporting AC power input voltage range at 100-240V ac(50/60Hz)100V-130V(50/60Hz)/220V-240V(50/60Hz)Please choose the right power cable.

◆ Dimension of S series



S3118A SIZE: 510x632x695mm(WxHxD)



S3218A SIZE: 1206x565x694mm(WxHxD)

◆ S series parameters

SPECIFICATIONS		S3118A	S3218A
Frequency Response (-10dB anechoic chamber)		30Hz-140Hz	26Hz-135Hz
Maximum Calculated SPL/1M	Continuous	128dB	134dB
	Program	131dB	137dB
	Peak	134dB	140dB
Drivers	HF	/	/
	LF	Customized Audiocenter femite driver, 4"voice coil	
Crossover and Slope		Controlled by DSP	
Signal Input/Output Connector		Female XLR input ;Male XLR output	
Power Input/Output Connector		IEC connector	Power connector
Working Voltage		100-130V~ or 220-240V~ (+-10%,50-60Hz)	

DSP	
Processor	48KHz signal sampling frequency, 24bit precision
Presets	80Hz,100Hz,120Hz

AMPLIFIER		
Amplifier	Class D	
Power(Peak)	2000W 4000W	
Frequency Response (1W 8Ω 2ch)	20Hz-20kHz(±0.5dB)	
Intermodulation Distortion (20Hz-20KHz, half power)	<0.05%	
Total Harmonic Distortion(20Hz-20KHz, Rated power 8Ω)	<0.05%	
Cooling Cooling with fans ,air convection		
Protection	DC protection	√
	Short circuit protection	√
	Overheat protection	√
	Output overload protection	√
	Soft startup protection	√
	Overvoltage protection	√
	Undervoltage protection	√

CABINET	
Cabinet	CNC made of excellent wood
Cabinet Color	Black is standard and default color. Consult with Audiocenter sales team for other customized colors
Optional Accessories	Flightcase
Dimensions(W×H×D)	510x632x695mm 1206x565x694mm
Net Weight	39.0Kg 68.0kg
Technical Support and After-sales Service	Global application support team

◆ Trouble Shooting

Symptom	Possible reasons	Solution
Power LED not light	Cable not connected correctly	Connect the cable correctly
No sound	Cable not connected correctly. Or too small gain.	Connect with input socket correctly. Adjust speaker output gain input bigger.
Feedback in the sound	Microphone is toward to speaker Sound is too high. Wrong preset used.	Keep speakers out of the microphone response area. Lower the output gain,.
Sound Discrepancy from different speakers	Different gain for different speakers Different presets for different speakers Subwoofers are out phase	Put the same gain for different speakers. Use the same presets for different speakers. Make the subs in phase
Sound distortion	Input volume is too big Output volume too big	Reduce the input volume of the equipments Reduce the output gain of the speakers, make the Limiter LED lighted a bit If the sound still distorted while the volume is set to minimum, make the MIC/LINE switch to be LINE.
Microphone volume is too small	MIC/LINE switch is set at LINE	Set the MIC/LINE at MIC
Not enough SPL while full range speakers used together with subs	Subs might be out of phase	Adjust the phase of subs
The light signal is on, there is a signal output, but the speaker does not sound	Maybe the volume knob is set to the minimum, Closing the volume	Slightly increase the volume knob

★ **Please consult distributor if there are still problems**



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