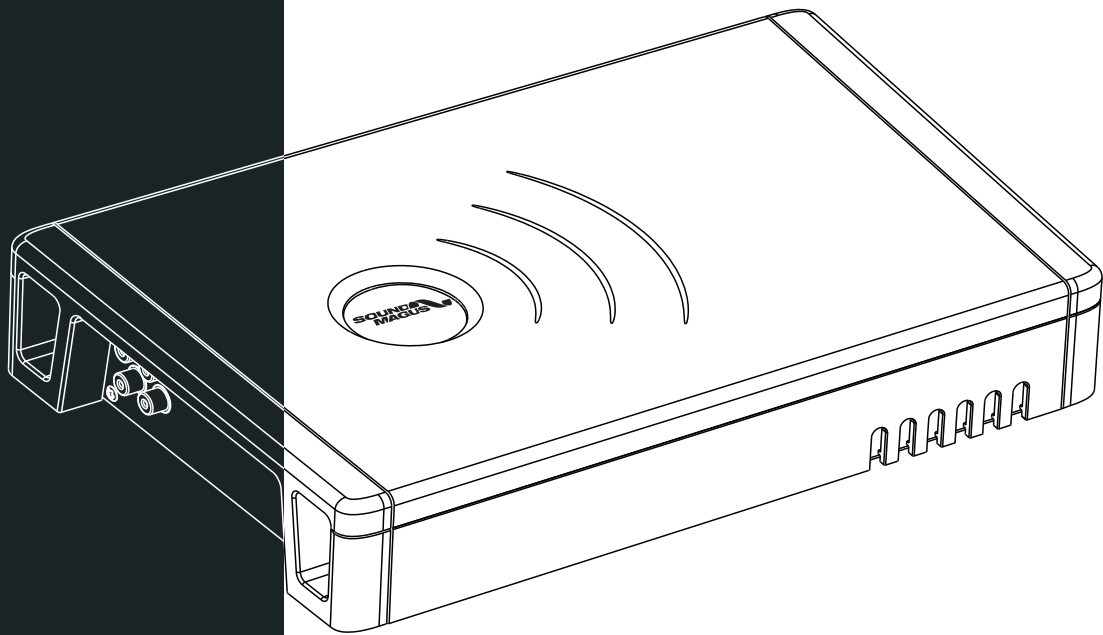


**SOUND  
MAGUS**



## **OWNER'S MANUAL**

**DSP DIGITAL POWER AMPLIFIERS**

**SE90.2 / SE150.2/SE90.4 / SE150.4  
SE800.1 / SE1500.1/SE2000.1 / SE3500.1**

**DSP**

## **INTRODUCTION**

Congratulations on your purchase of a SOUNDMAGUS state-of-the-art power amplifier with digital signal processing. At SOUNDMAGUS Mobile Audio we strive to provide some of the latest technology tools that make the quest for “the perfect tune” so much easier. Our goal was to develop technologically advanced amplifiers completely adjustable to the acoustics of each vehicle.

## **RECOMMENDATION**

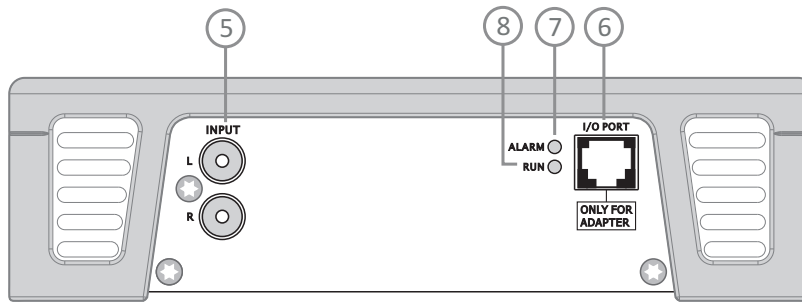
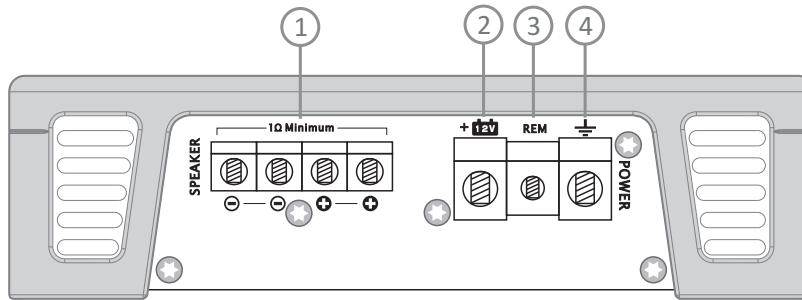
A power amplifier’s performance is only as good as its installation. Proper installation will maximize the system’s overall performance. It is recommended that you have our product installed by an authorized SOUNDMAGUS retailer. However, if you decide to install it by yourself, please carefully read through this manual and take your time to do a qualified installation.

## **FEATURES**

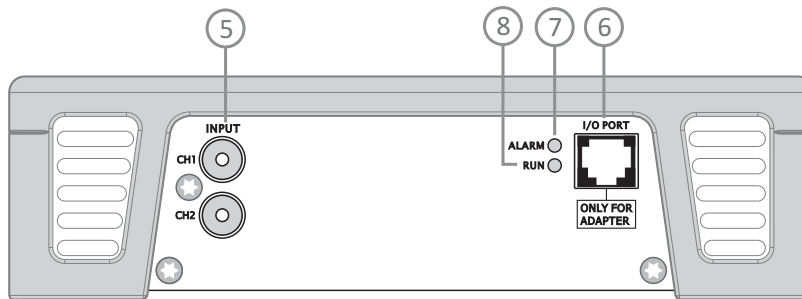
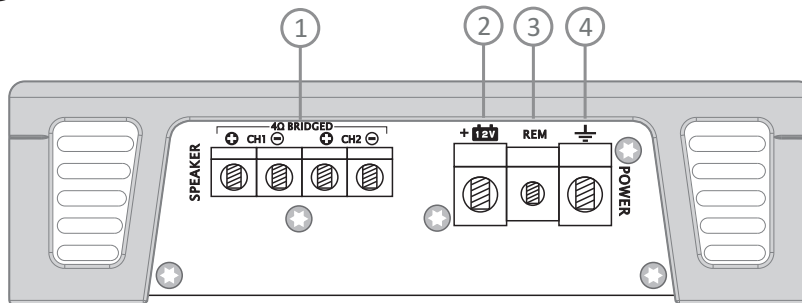
- ✓ Built-in Professional DSP circuit
- ✓ 4 Settings Memory Stored Function
- ✓ Special WIFI adapter to actualize the wireless communications with software
- ✓ Wireless remote controller to switch 4 settings in real-time
- ✓ Professional software with intuitive user interface, Supporting multiple operation systems like Windows XP/ vista / Win7, Android & Apple OS
- ✓ All settings can be saved and upload to software as a preset, convenient to offer long-distance aids to customers.
- ✓ All settings stored in the amps will be saved as presets for the next turn-on.
- ✓ Full range Crossover Slope 6dB - 48dB (HP/ BP/ LP)
- ✓ Delay Time (0-20ms / 0.02ms step) & Delay Time Trim set adjustable; 4 bands Customized EQ with adjustable Q factor; 27 bands fixed EQ with fixed Q factor
- ✓ Double side FR-4 PCB, High quality SMD components
- ✓ Power Supply Design: Full MOSFET DC-DC PWM Power Supply
- ✓ Overload, shortcircuit, thermal, low voltage protection

# CONTROLS & FUNCTIONS

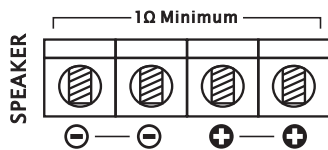
SE800.1/SE1500.1/SE2000.1/SE3500.1



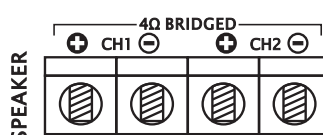
SE90.2/SE150.2



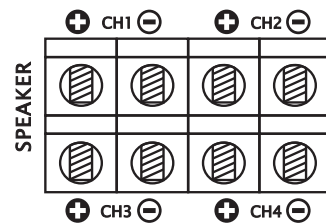
## 1. SPEAKERS



SE800.1/SE1500.1  
SE2000.1/SE3500.1



SE90.2/SE150.2

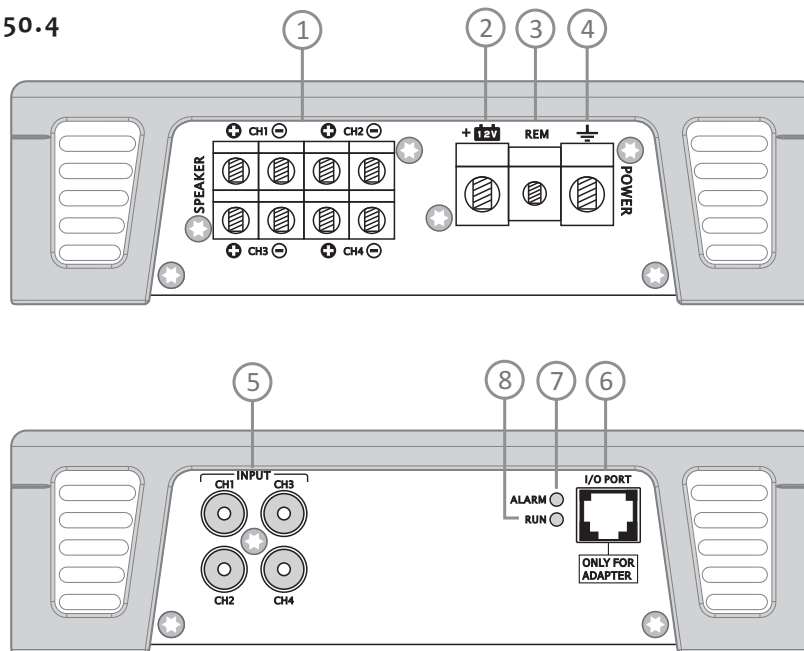


SE90.4/SE150.4

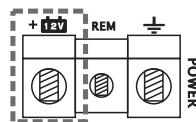
Connect speakers/subwoofers to these terminals. Be sure to check wire for proper polarity. Never connect the speaker cables to chassis ground.

# CONTROLS & FUNCTIONS

SE90.4/SE150.4

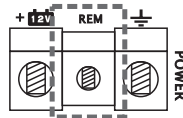


## 2. +12 Volt Power



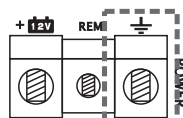
Connect this terminal through a FUSE or CIRCUIT BREAKER to the positive terminal of the vehicle battery or the positive terminal of an isolated audio system battery.

## 3. Remote Turn On



This terminal turns on the amplifier when (+)12 volt is applied to it . Connect it to the remote turn on lead of the head unit or signal source.


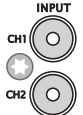
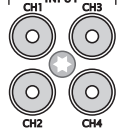
## 4. GND



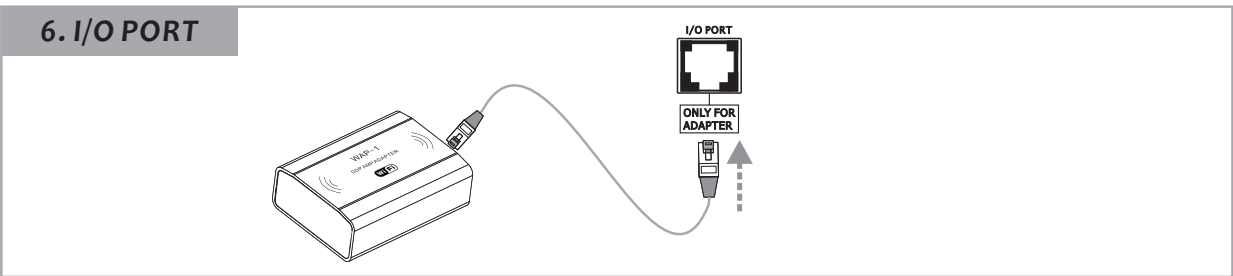
Connect this cable directly to the frame of the vehicle. Make sure the metal frame has been stripped of all paint down to the bare metal. Use the shortest distance possible. It is always a good idea to replace the factory ground at this time with a larger cable equal to the new amplifier power cable or larger.

**CAUTION:** Do not connect this terminal directly to the vehicle battery ground terminal or any other factory ground points.

# CONTROLS & FUNCTIONS

5. RCA Input Jacks		
 <p>SE800.1/SE1500.1 SE2000.1/SE3500.1</p>	 <p>SE90.2/SE150.2</p>	 <p>SE90.4/SE150.4</p>

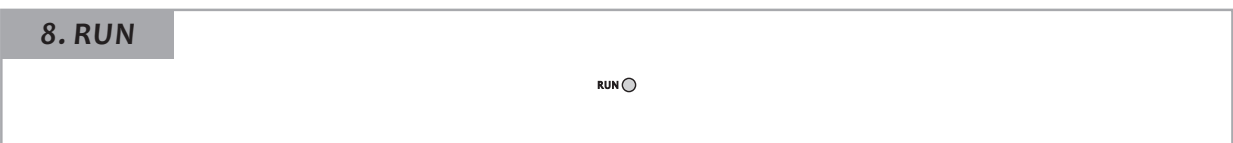
These RCA input jacks are for use with source units that have RCA outputs. A source unit with a minimum level of 200mV is required for proper operation. The use of high quality twisted pair cables is recommended to decrease the possibility of radiated noise entering the system.



WI - FI adapter. Connection amplifier and adapter wap - set crossover and function. Once set up completed, WI - FI adapter can be pulled out, latest settings will be saved in the amplifier.



The red LED will light up and will be flashing if there is a fault presented to the amplifier. Please disconnect the amplifier and resolve the fault before reconnecting the amplifier.



This LED will light up when amplifier works properly.

## PREINSTALLATION

- Please prepare sufficiently to layout your car space before installation. We recommend to have the installation done by an Autho rized SOUNDMAGUS Dealer.
- Please use good insulated power cable to endure longterm above 40A electronical current. The +12 Volt power cable must be connected with a fuse in line near 20cm of battery+ terminal. Required current, power cable and proper external fuse listed as following:

MODEL	SE800. 1	SE1500. 1	SE2000. 1	SE3500. 1	SE90. 2	SE150. 2	SE90. 4	SE150. 4
CABLE	4 #	2 - 4 #	0 - 4 #	0 - 2 #	8 #	4 - 8 #	4 - 8 #	4 - 6 #
FUSE	80 A	120 A	200 A	300 A	30 A	40 A	40 A	60 A

- Please use car audio RCA cables, otherwise it may be disturbed. Keep these cables as short as possible. To avoid disturbances from your car electronics, please don` t close the existing car cables when you install the RCA cables.
- Don't expose any cables out of car. Please take care insulated cables to avoid damaging when cables pass through metal, rubber and plastic etc. Don't install all cables too tight.
- The ground wire should be connected directly with the chassis of your vehicle which should be metal to metal ground point connection.
- The amplifier must be mounted securely at a solid, dry and low vibration surface in the trunk or passenger area. Fix the amplifier in an open air area to insure proper heat dissipation.

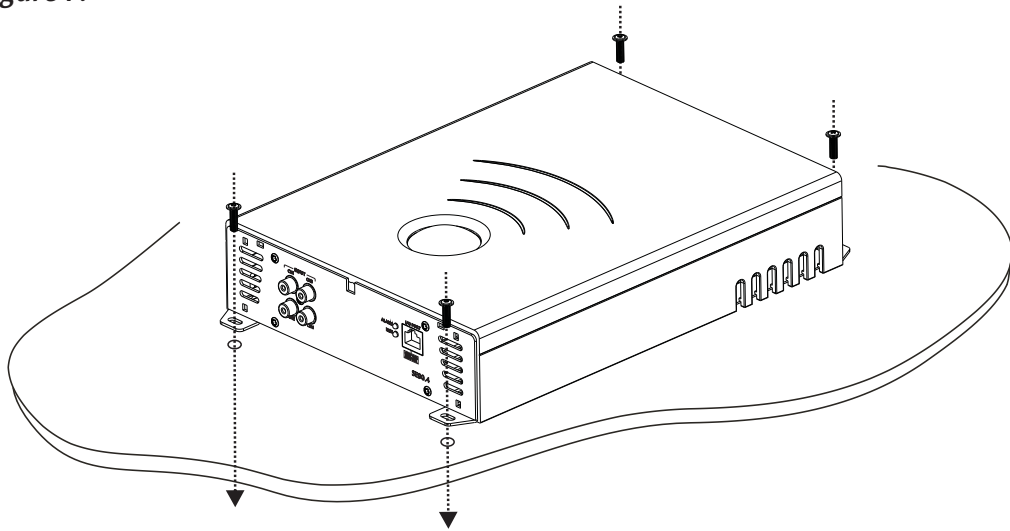
# AMPLIFIERS INSTALLATION

Be sure to carefully read and understand the instructions before attempting to install the Amplifier.

## 1. Installation steps

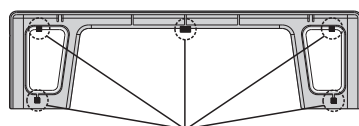
- 1) Choosing a flat and ventilated place to install amplifier.
- 2) Using attached screws to fix the amplifier to the chosen place. (As shown in figure 1)

Figure 1 :

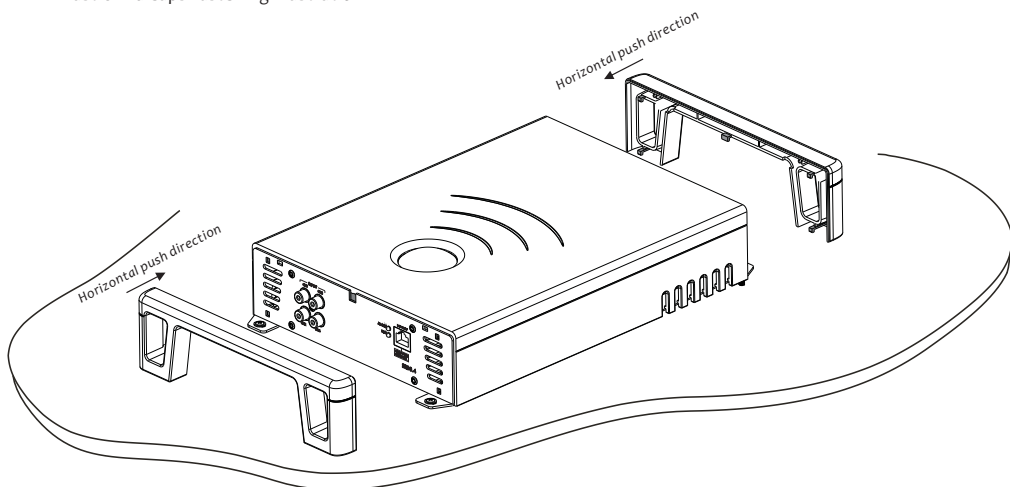


- 3) Each plastic end cap has 5 buckles that match 5 buckle holes on the amplifier. Hold two ends of the plastic end cap and push it towards the amps horizontally. (As shown in figure 2)

Figure 2 :



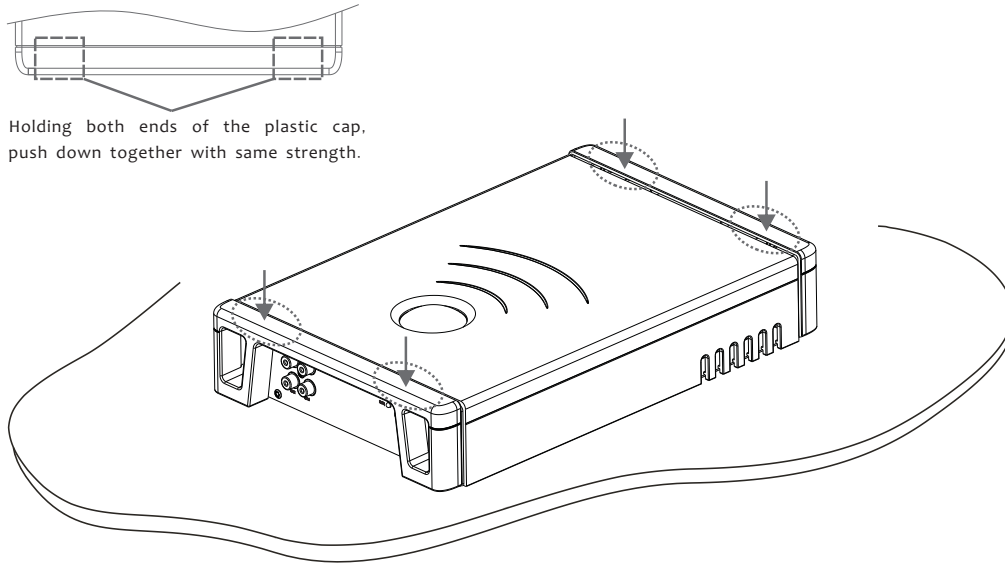
Plastic End Caps Fastening Illustration





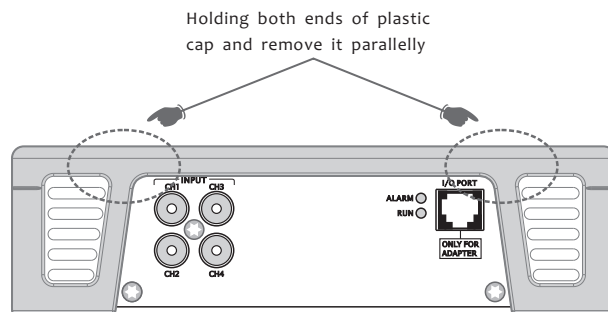
4) After The Plastic Cap Is Stick To The Amp, Holding Two Ends Of The Plastic Caps( As Shown In Figure 3 ) And Push them down to the same horizontal level ( As Shown In The Figure 3).

**Figure 3:**



5) Plastic cap installation completed.

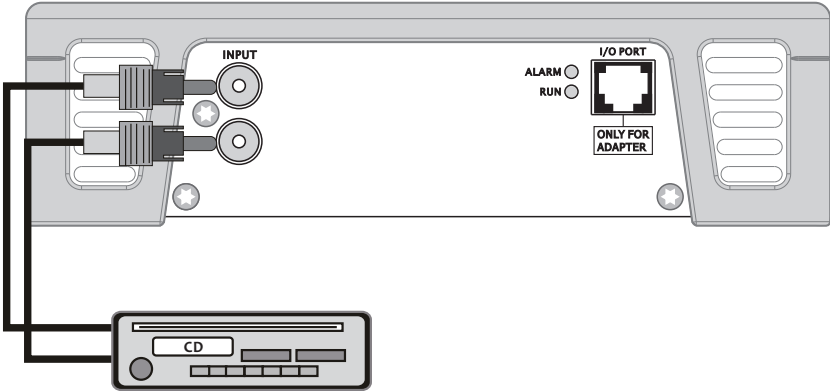
6) When removing the plastic end caps, hold two ends of the plastic cap (as shown in the following figure) and pull them up about 2mm from the amp. Then they can be taken away parallelly.



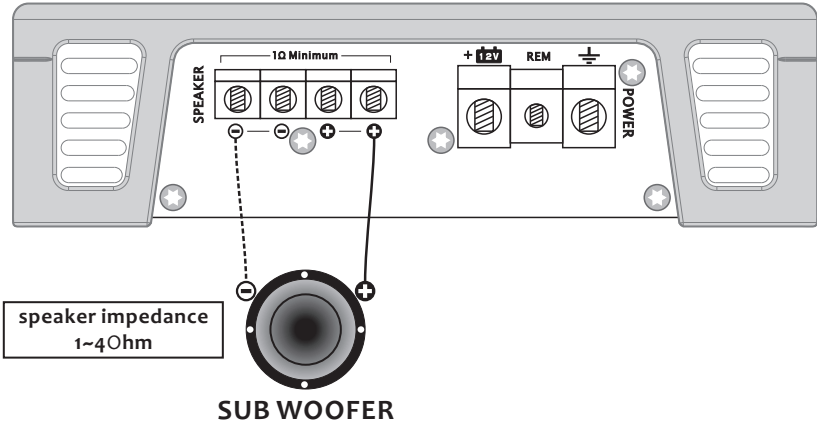
# WIRING DIAGRAM

## SE800.1/1500.1/2000.1/3500.1 Amplifier wiring

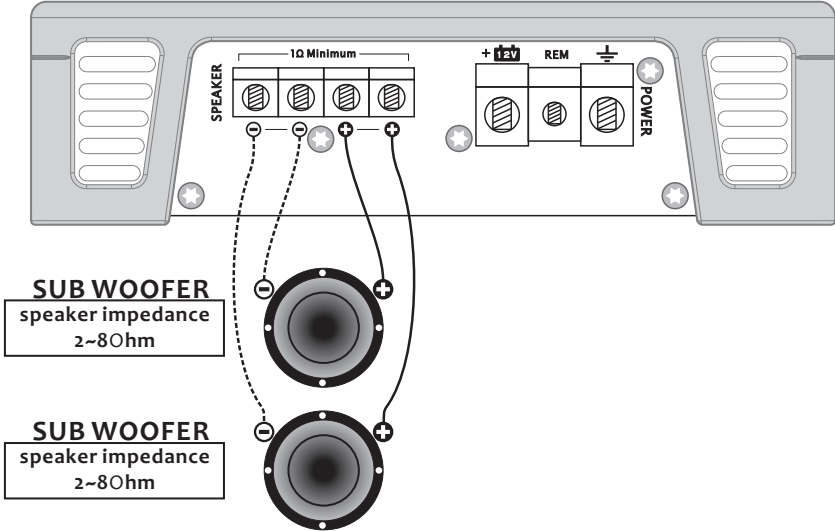
### Single channel input Mode



### One Woofer Load Mode



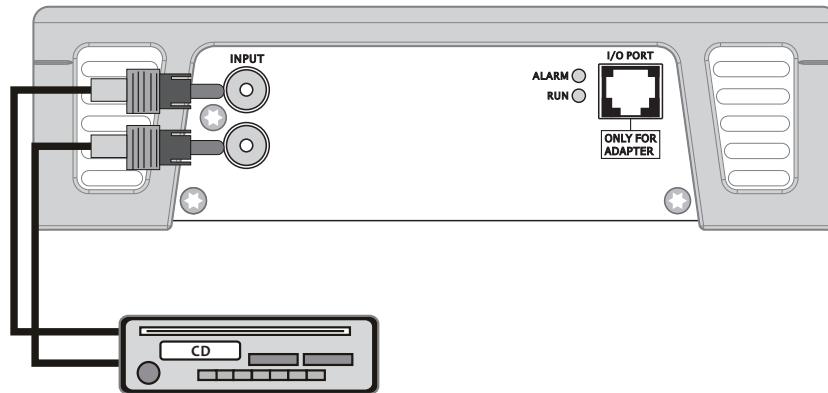
### Two Woofer Load Mode



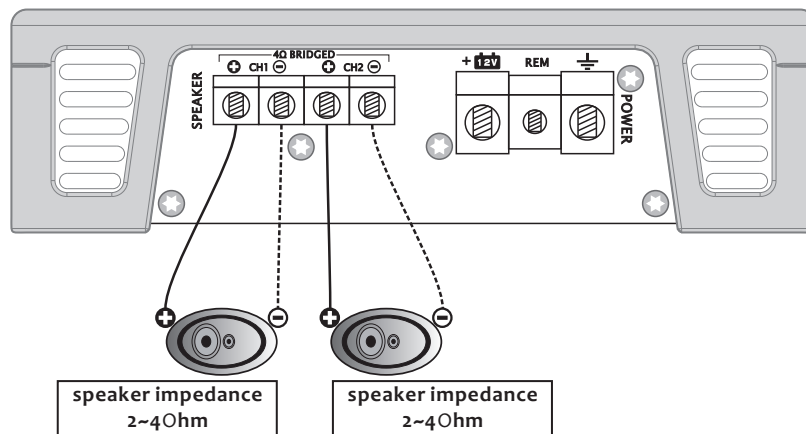
# WIRING DIAGRAM

## SE90.2/SE150.2 Amplifier wiring

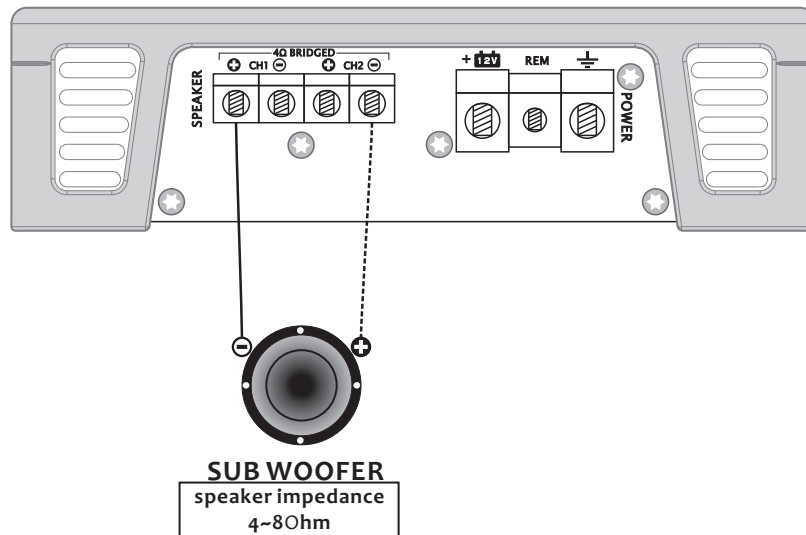
### Input 2 Channel Mode



### Stereo Mode



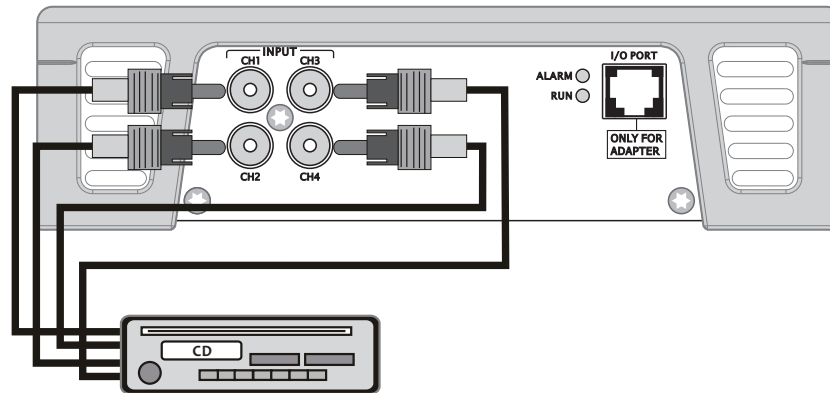
### Bridged Mode



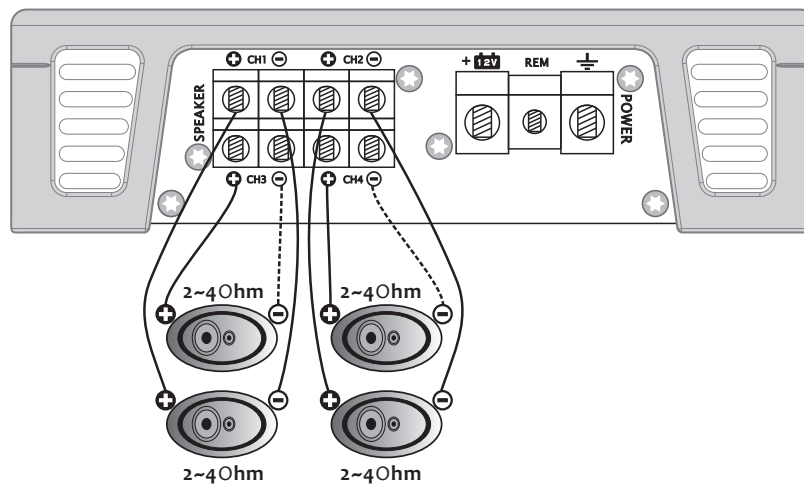
# WIRING DIAGRAM

## SE90.4/SE150.4 Amplifier wiring

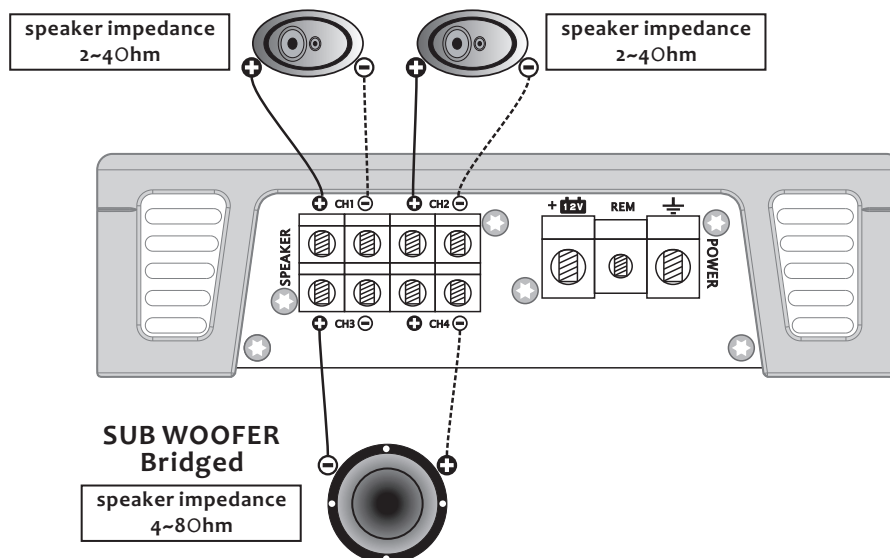
### Input 4 Channel Mode



### 4 - Channel Mode



### 3 - Channel Mode

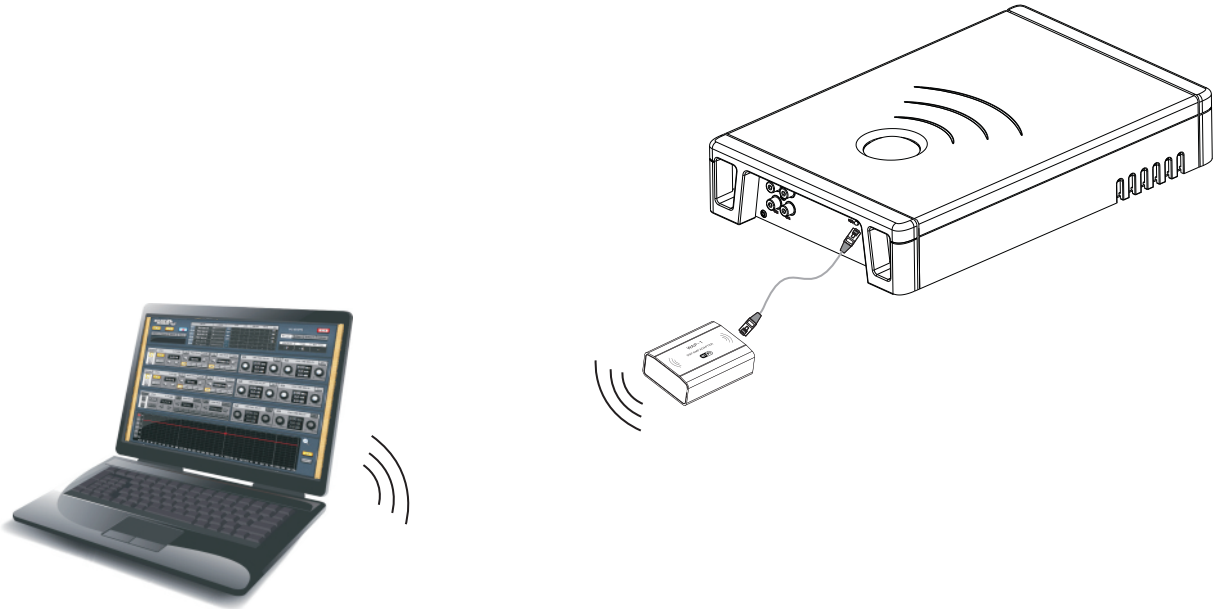


# AMPLIFIER AND WIFI WIRING DIAGRAM

## WAP-1 And amplifier connection steps

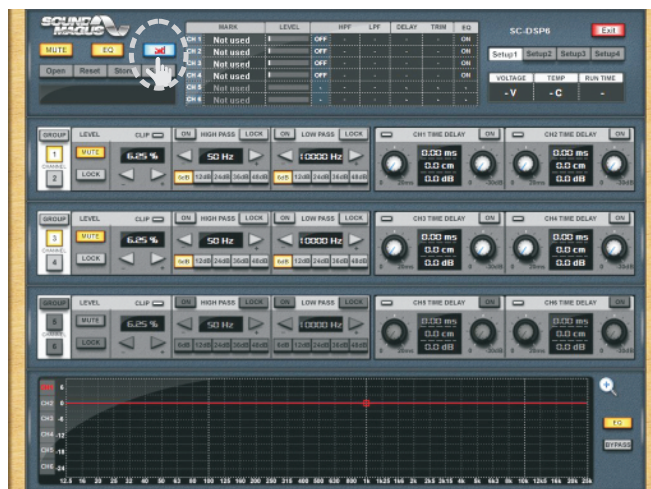
### Connection steps

1. Make sure of correct wiring of amplifier (Such as 9 ~ 11 page).
2. Using special connecting line will wi - fi adapter (WAP -1) and amplifier connection.
3. Start the amplifier to work normally.



### Wireless Connecting with PC and software steps

1. Link the DSP AMP Wi-Fi on PC with password.
2. Click on open DSP operating software, into the DSP interface.
3. Right-click the DSP software interface the top left corner of the wireless icon, click "select device", select the popup menu in the connection Wi - Fi equipment, Click on the "selete" connection.



4. When the wireless icon shows green, it indicates successful connection and you can begin your setup.



# TROUBLE SHOOTING

Symptom	Possible Remedy
<b>Amplifier will not power up</b>	Check to make sure you have a good ground connection. Check that there is battery power on the (+)terminal . Check all fuses, replace if necessary . Make sure that the Protection LED is not illuminated.
<b>Protection LED Comes on</b>	Check for short circuits on speaker leads. Check the speaker load not beyond the minimum load. Remove speaker lead, and reset the amplifier. If the protection LED still Comes on, then the amplifier is faulty and needs servicing .
<b>No output</b>	Check that the RCA audio cables are plugged into the proper inputs. Check all speakers wiring. Check the headunit output and the amplifier level setting.
<b>Low output</b>	Reset the level Control. Check the Crossover Control settings.
<b>High hiss in The speakers</b>	Check the RCA cable is not shorted to power ground at amplifier side. Check the amplifier grounding.
<b>Distorted sound</b>	Check that the Input level control is set to match the signal level of the head unit. Always try to set the Input level as low as possible. Check that all crossover frequencies are properly set. Check for short circuits on the speaker leads.
<b>Amplifier gets Very hot</b>	Check that the minimum load impedance for the amplifier model is correct. Check that there is good air circulation around the amplifier. In some applications, It may be necessary to add an external cooling fan.

If your amplifier is still malfunction after checking through the troubleshooting section, please contact our authorized SOUNDMAGUS dealer.

## SPECIFICATIONS

**Table 1**

MODEL	CHANNEL	RMS@4Ohm	RMS@2Ohm	Bridged @4Ohm	Mas Power	DIMENSIONS(mm) (L) x (W) x (H)
SE90.2	2	80W x 2CH	120W x 2CH	230W x 1CH	480W	243 x 202 x56
SE150.2	2	135W x 2CH	160W x 2CH	320W x 1CH	640W	263 x 202 x56
SE90.4	4	80W x 4CH	120W x 4CH	230W x 2CH	960W	313 x 202 x56
SE150.4	4	135W x 4CH	160W x 4CH	320W x 2CH	1280W	380 x 202 x56

**Table 2**

MODEL	CHANNEL	RMS@4Ohm	RMS@2Ohm	RMS@1Ohm	RMS@0.5Ohm	Mas Power	DIMENSIONS(mm) (L) x (W) x (H)
SE800.1	MONO	320W x 1CH	550W x 1CH	800W x 1CH	—	1600W	351 x 202 x56
SE1500.1	MONO	580W x 1CH	980W x 1CH	1400W x 1CH	—	3000W	428 x 202 x56
SE2000.1	MONO	660W x 1CH	1150W x 1CH	1900W x 1CH	—	4000W	445 x 202 x56
SE3500.1	MONO	580W x 1CH	1150W x 1CH	1900W x 1CH	3100W x 1CH	7200W	588 x 202 x56