REISS AUDIO

your car hifi specialist

AMPLIFIER
OWNER'S MANUAL



Models:

RS-SD1000.1D/RS-SD2000.1D
RS-SD200.4/RS-SD300.4D/RS-SD450.4D
RS-SD1800.5/RS-SD200.6D/RS-SD200.8D

Designed in Turkey/www.reissaudio.com.tr

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REISS AUDIO

WHERE YOUHEADED?

Thank you for choosing **REISS AUDIO/RS-SD** amps! Your choice of **REISS AUDIO/RS-SD** amps indicates a desire for high quality music reproduction in the automobile.**REISS AUDIO/RS-SD** amps brings to you over four decades of car audio expertise. So whether you are a daily driving music lover, or a serious car audio competitor, **REISS AUDIO/RS-SD** amps have the product for you!
To take full advantage of the **REISS AUDIO/RS-SD** amps gear you have just purchased, please read and follow the instructions in this manual. As with all of our products, professional installation by an authorized **REISS AUDIO** dealer is highly recommended! Otherwise, the performance of your new gear may not be satisfactory. In addition to the installation services and expertise offered by an authorized **REISS AUDIO** dealer, the warranty of this product may be extended when installed by an authorized **REISS AUDIO** dealer . Be sure to ask your authorized **REISS AUDIO** dealer about whether your product may qualify for an extended warranty. You're Headed in the Right Direction with **REISS AUDIO/RS-SD** amps!

INTRODUCTION

The **REISS AUDIO/RS-SD** amplifiers offer high quality audio reproduction for the audiophile and the everyday listener a like. All models feature fully variable crossovers with 12 dB per octave slopes, allowing you the ability to tailor the sound to best fit the speakers and your listening preferences.
Platinum finish connections Ensures solid electrical connections that resist corrosion.
Fully Variable Crossovers Fully variable crossovers promote installation ease and save the cost of outboard crossovers. Additionally, they may be used in conjunction with outboard passive or active crossovers, depending on the complexity required by the system. The 12 dB per octave slope offers steep roll-off above or below the selected frequency.
Protection Circuitry Against Overload, Short Circuit, Thermal, Low Voltage, High Voltage, and Reverse Polarity. These Protection features are designed to protect the amplifier from misuse, as well as from common causes of amplifier failure.

INSTALLATION

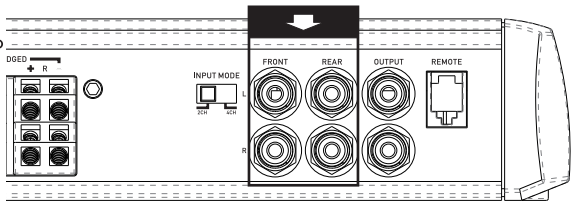
Professional installation by an authorized **REISS AUDIO** dealer is highly recommended! Otherwise, the performance of your new gear may not be satisfactory. In the event that you decide to do your own installation, please read and follow this manual very carefully. Failure to do so may compromise the integrity of this product, your automobile, and possibly void the product warranty.
Amplifiers are generally mounted in the hatch/trunk area of a car or SUV, and under or behind the seat of most pick up trucks. Select a location that will provide adequate ventilation for the amplifier. Avoid mounting the amplifier with the fins facing down. The fins should be facing up, either vertically or horizontally. Secure the amplifier with the screws provided.

INPUT CONFIGURATION

Before securing the amplifier, inspect the mounting location carefully to ensure that you do not drill into or damage any electrical, hydraulic, fluid, or fuel lines.

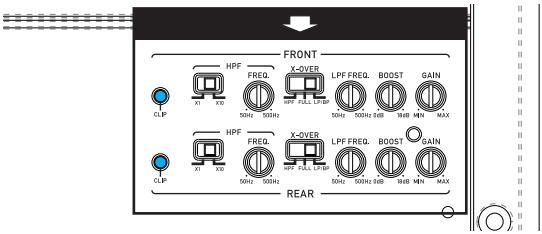
Input Section
Because of the wide range of head unit output configurations all **REISS AUDIO/RS-SD** amps have an adjustable input sensitivity of "Gain" The gain is not a volume or a power limiting control like a throttle. It makes the amp more sensitive to input from the stereo. with the gain up the amp will reach full output at a lower volume setting on the deck. At higher gain settings the amp also becomes more more sensitive to noise from the car's electrical system. Try to run the gain at the lowest setting possible for you system.

There is no correct gain setting. Because speakers require different power demands to reach the same output, the gains most often need to be used to compensate for these differences. If you . tried to set all the gains at half way you would probably find the system didn't sound very good. Using good judgment and listening carefully to each speaker is still the best way to tune a system.



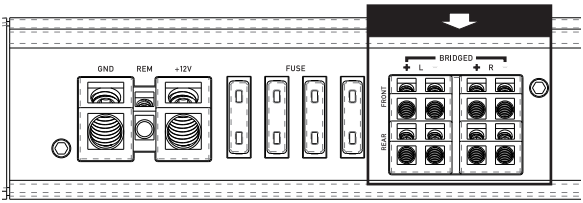
CROSSOVER CONTROLS

A crossover is a device that removes unwanted frequencies from a speaker or amplifier.A tweeter can easily be destroyed by bass notes if they are not filtered out.Likewise a subwoofer will not sound natural if it is playing midrange notes.A crossover removes these sounds from the speaker.As you might guess,careful adjustment in need to ensure that all the speakers are playing the right sounds and that you are left with no "holes" or low spots in the frequency response.



SPEAKER OUTPUTS

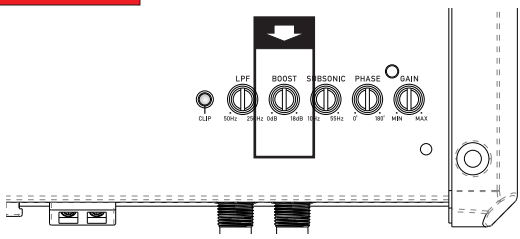
This amplifier is a multi channel amplifier design. Meaning it has more than one channel of speaker outputs. It is equipped with a large block style terminal for speaker connection. Make this connection carefully and neatly. strip your wire back and twist the exposed leads and insert them into the block terminal while being careful that there is no loose or frayed strands of wire and tighten the Allen head screw down on the terminal till the wire is tightly secured in place.



If the wires ever come in contact with each other the amplifier will go into protection.
Know your total ohm load before you make any connections.

BASS BOOST AND CONT

REISS AUDIO / RS-SD1000.1D & RS-SD2000.1D&RS-SD1800.5D amplifiers have an adjustable bass boost which controlled by a potentiometer selecting the most commonly used BASS BOOST setting. Begin your adjustments at low volume. If you do not hear any improvement then woofer does not need any BASS BOOST.
The Low Pass Filter(LPF) must be switched on for the bass boost to activate.



Begin your adjustments at low volume. Turn the Bass Boost Level control about ½ way up. Next, turn the Bass Boost Frequency up and down. this will take some tweaking but try to find the setting that gives you a richer and fuller sound without over working the subwoofer . Play several different kinds of music to test your adjustment You may find you have to go back and make some changes and compromises to get it sounding right with an assortment of music. Use Bass Boost carefully. The demands on power output are tremendous. Try to minimize the use by changing woofer position or the enclosure size.

INSTALLATION INSTRUCTIONS

1. Before you start, disconnect the negative cable from the car battery. Tape up the end so it is isolated from the battery.
2. Run an appropriate gauge wire from the battery to the amplifier. Plan this part of the installation carefully. this cable will carry very high current. If it should short to the body and it is not properly fused it could catch fire.
3. Connect the power wire to the battery using a fuse capable of the total current load of all amplifiers connected. **Don't install the fuse yet**. Wait until the end. locate the fuse as close as possible to the battery. If the fuse is further that 18 inches(wire length)from the battery you should reevaluate the wire and fuse placement.

4. Find the closest clear metal area to the amp for a ground. sand, grind or scrape all paint and undercoating from the body and screw the ground securely in place.
   It is advisable to test the ground with an ohmmeter between the ground cable and the negative battery cable to insure a good low resistance connection. Some alloys used in modern cars do not offer the best ground..If you believe this is the case consult with the vehicle manufacturer.
5. Run the speaker wire to the speakers.It is advised that you leave some extra wire at this point. You can " clean it up" later.
6. If you haven't already done so,mount the amp now.
7. Connect the power and ground to the amplifier.
   Only after this step should you install the fuse at the battery.
8. Connect the remote wire from the head unit to the amplifier .Now is a good time to turn on the amp for the first time. Make sure it turns on properly and does not go into protection.
9. Connect the speaker wires to the amp and speakers (make sure the amp is off first).Make sure the polarity(+add-)is correct.
10. Connect the RCA'S to the amp.
11. Double check the amplifier controls at this time. Make sure everything is set correctly for your system.
12. Now you're ready to play it for the first time. It is best to leave the gain all the way down at first. Start with the head unit volume low and work your way up.
13. Now you can tune the amp. Take your time and make only one adjustment at a time. It may take some time to get the system fully adjusted. During this time the amp is drawing current from the battery. You should check the battery voltage from time to time and re-charge it if it gets low. that's it. You're done. Now have fun.

TROUBLE SHOOTING

NO POWER LED ON, NO OUTPUT

- Check +12V, GND and remote connection
- Check the external fuses or built-in.

POWER LED ON, NO OUTPUT

- Check source unit for output
- Check input gain control
- Check RCA cable quality and connection
- Check speaker and wiring for shorts
- Check for damaged speakers

NO SOUND ON ONE CHANNEL

- Swap left/right input to check source
  . . . If sound swaps, source or signal cable is bad
- Swap left/right speaker to check speakers
  . . . If sound does not swap, speaker or speaker wiring is bad
  . . . In any case, consult authorized dealer

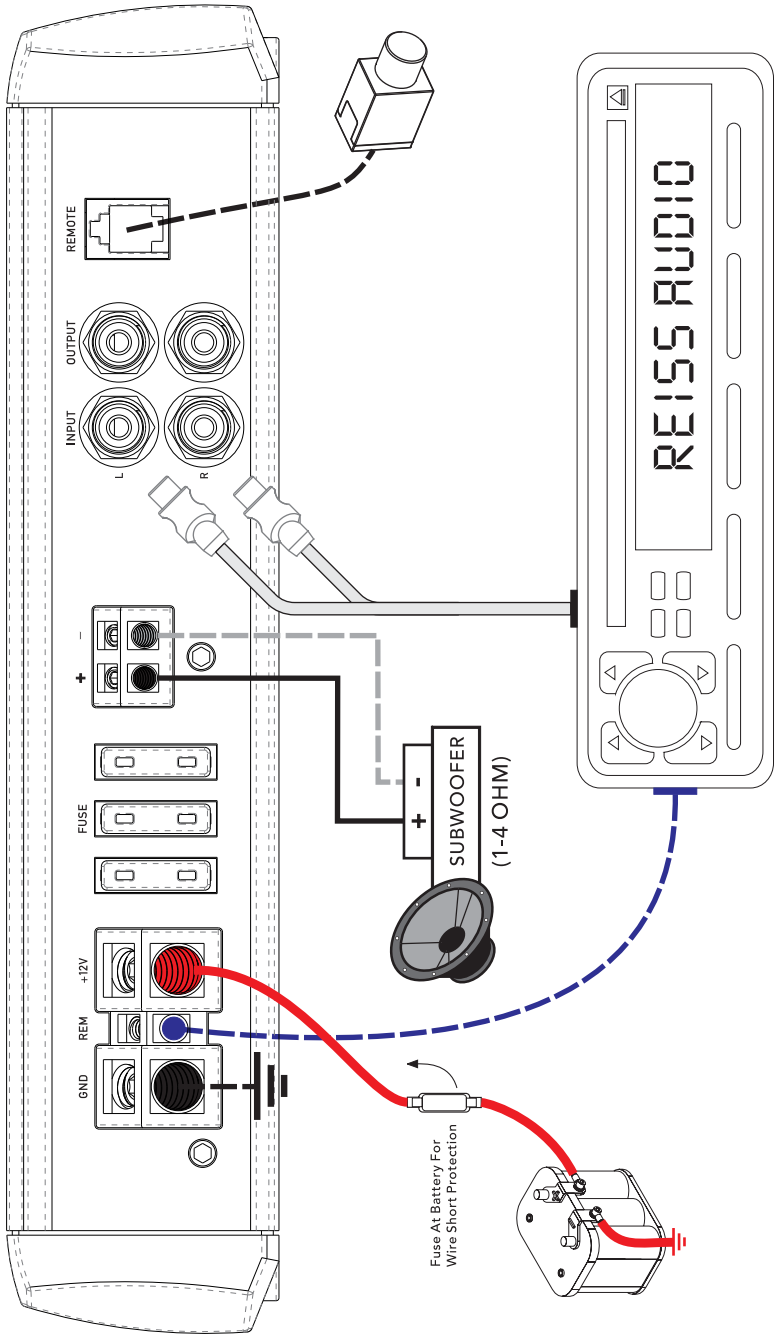
AMPLIFIER GOES IN PROTECTION MODE AT HIGHER GAIN

- Check speaker impedance.
- Check working voltages (9.0V - 16.0Volts)
- Check speaker wiring for short circuit

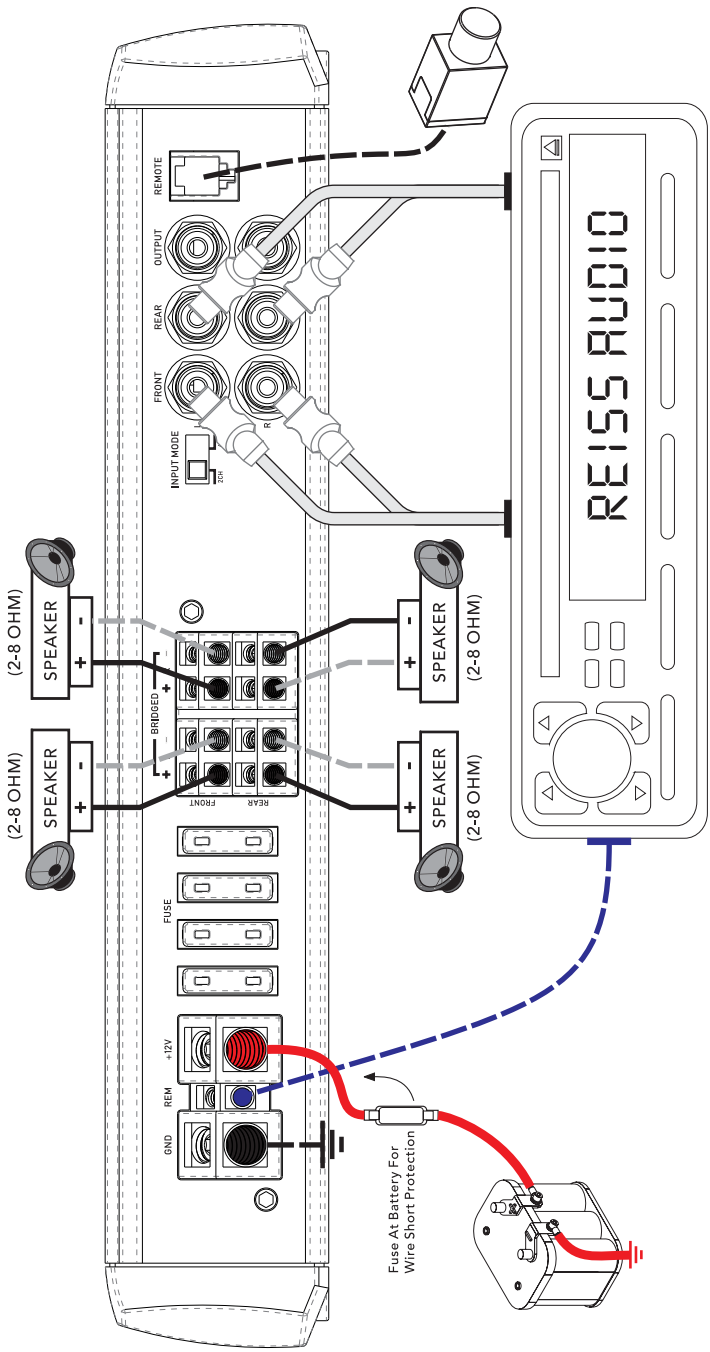
ENGINE OR ALTERNATOR WHINE NOISE

- Check wiring make sure RCA cables are not run parallel on same side of vehicle as power cable.
- Check any processors in the signal path between source unit and amplifier
- Make sure ground pin (shield or outer barrel of RCA cables) have not lost connection and that source unit has a good reference ground.

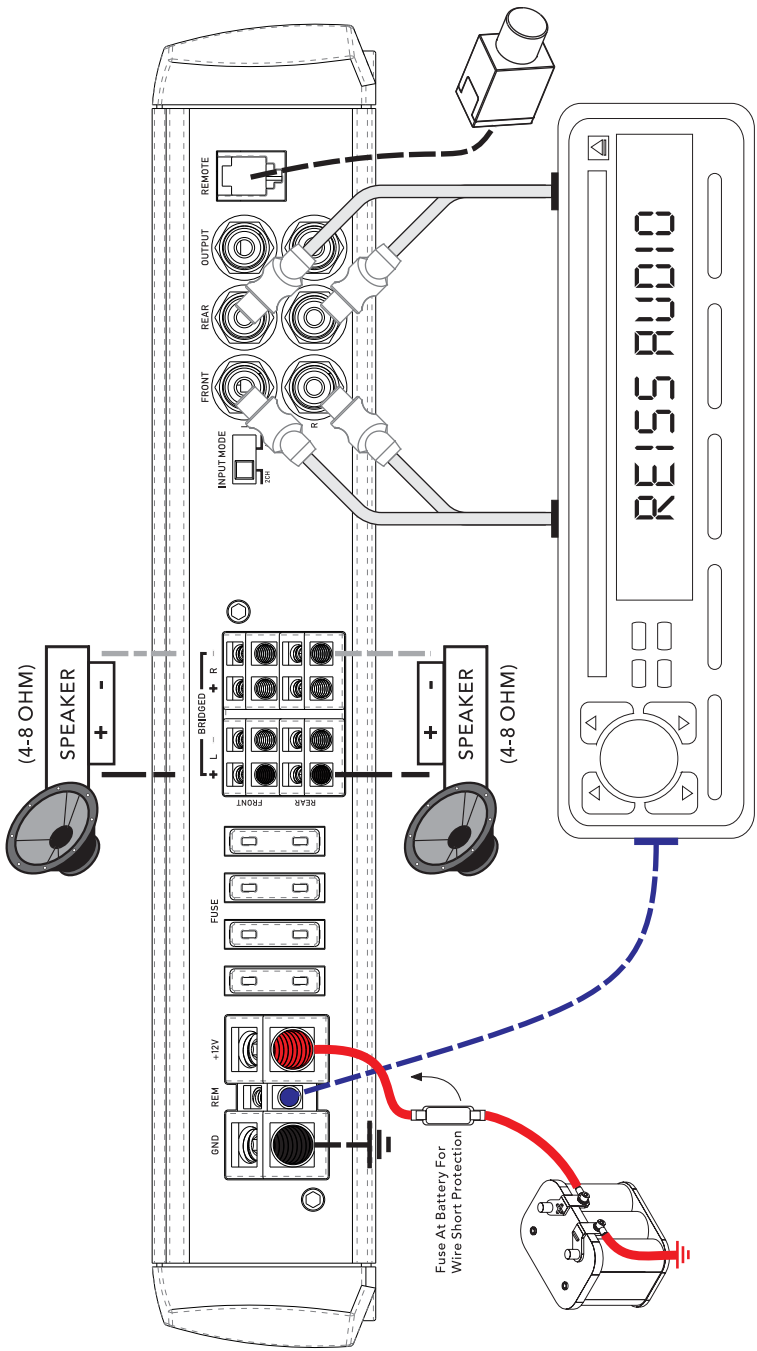
NORMAL INSTALLATION (RS-SD1000.1D&RS-SD2000.1D)



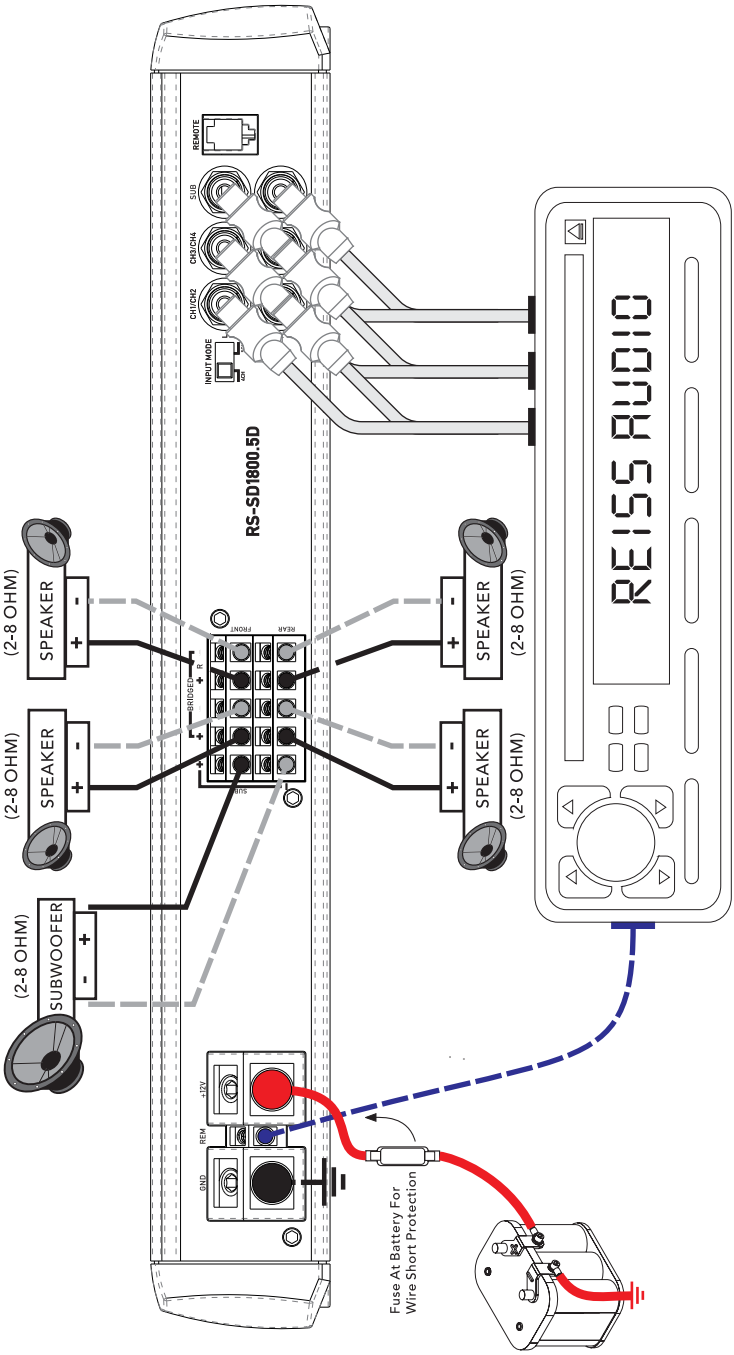
NORMAL INSTALLATION (RS-SD200.4D&RS-SD300.4D&RS-SD450.4D)



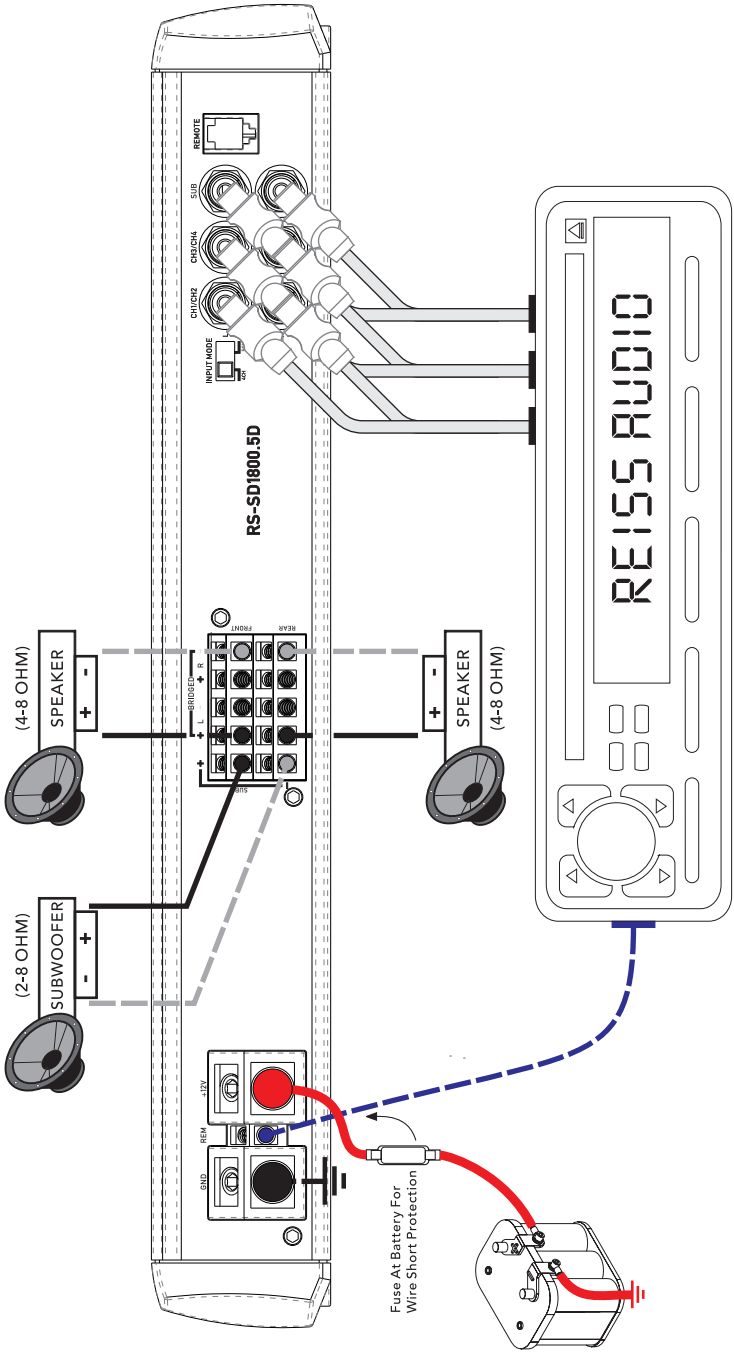
BRIDGED INSTALLATION (RS-SD200.4D&RS-SD300.4D&RS-SD450.4D)



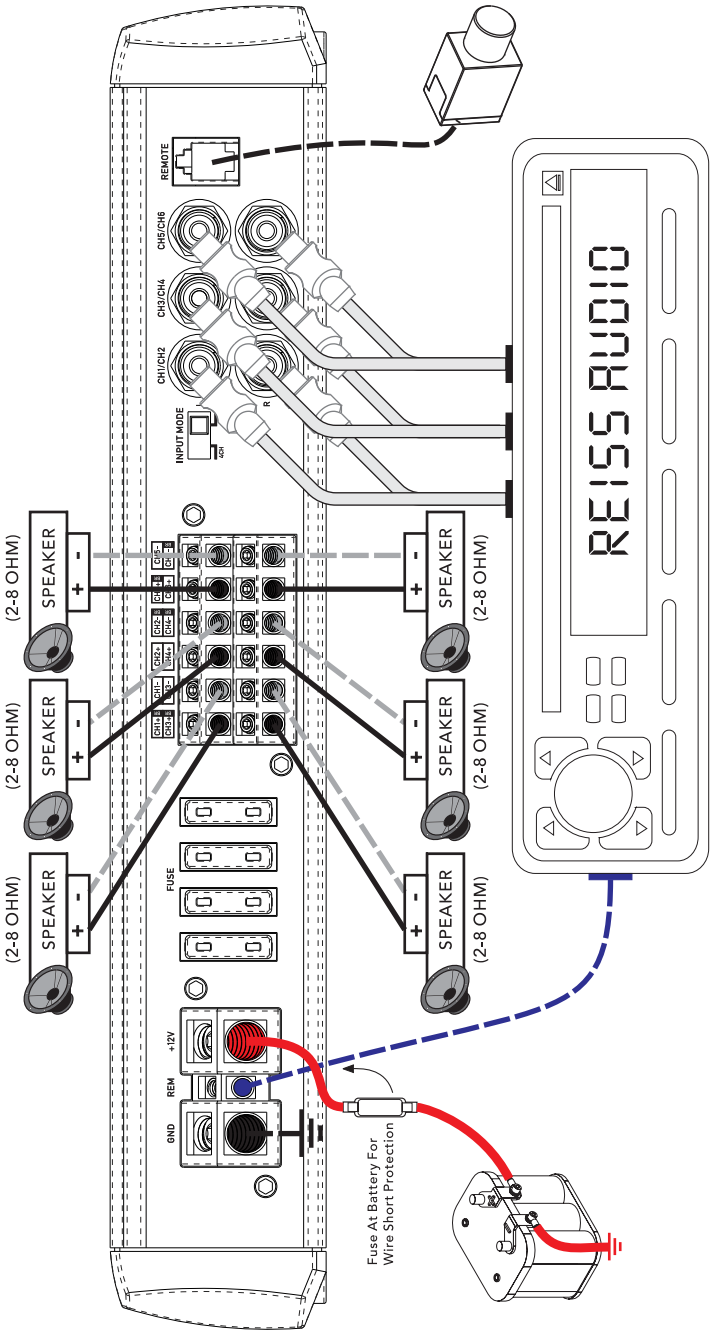
NORMAL INSTALLATION (RS-SD1800.5D)



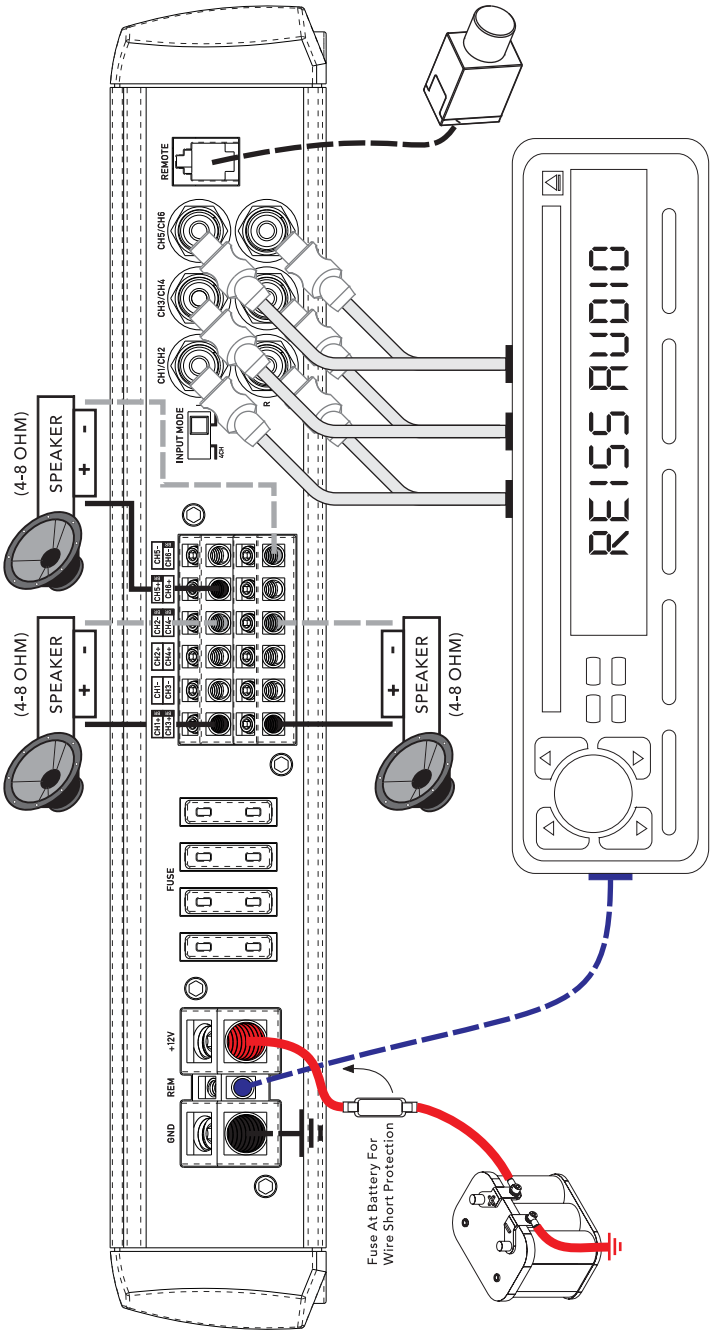
BRIDGED INSTALLATION (RS-SD1800.5D)



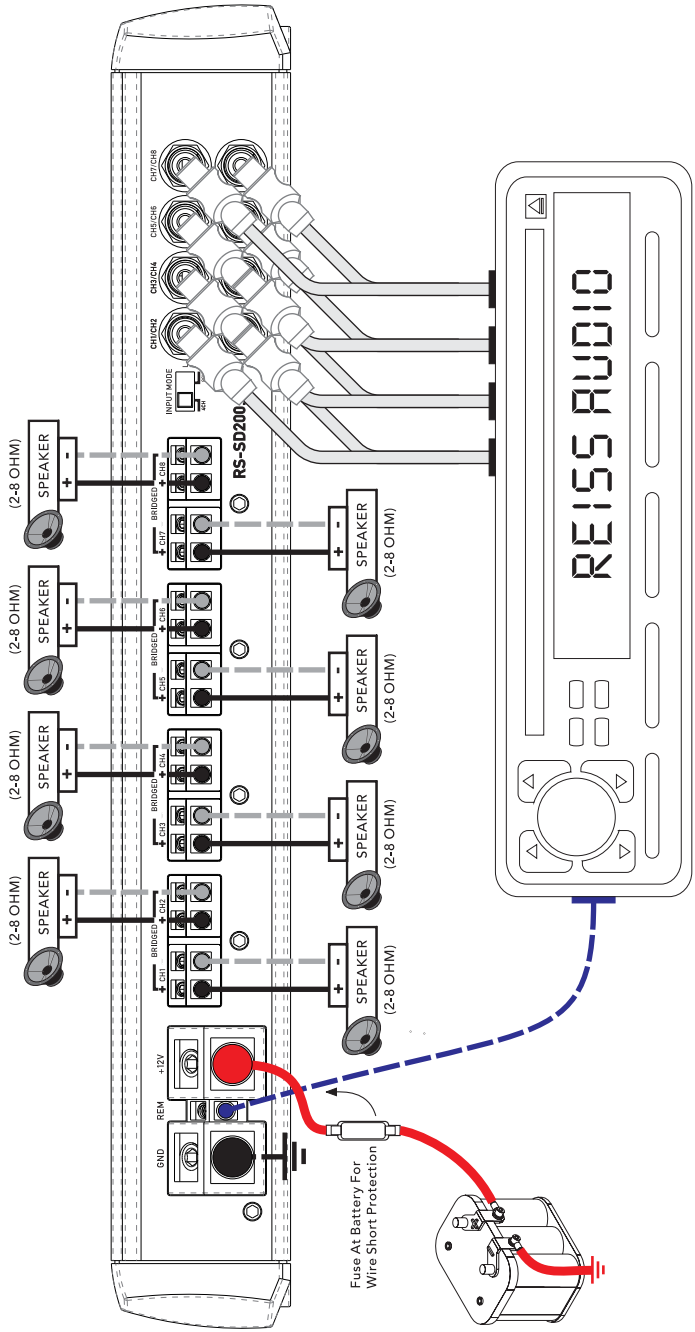
NORMAL INSTALLATION (RS-SD200.6D)



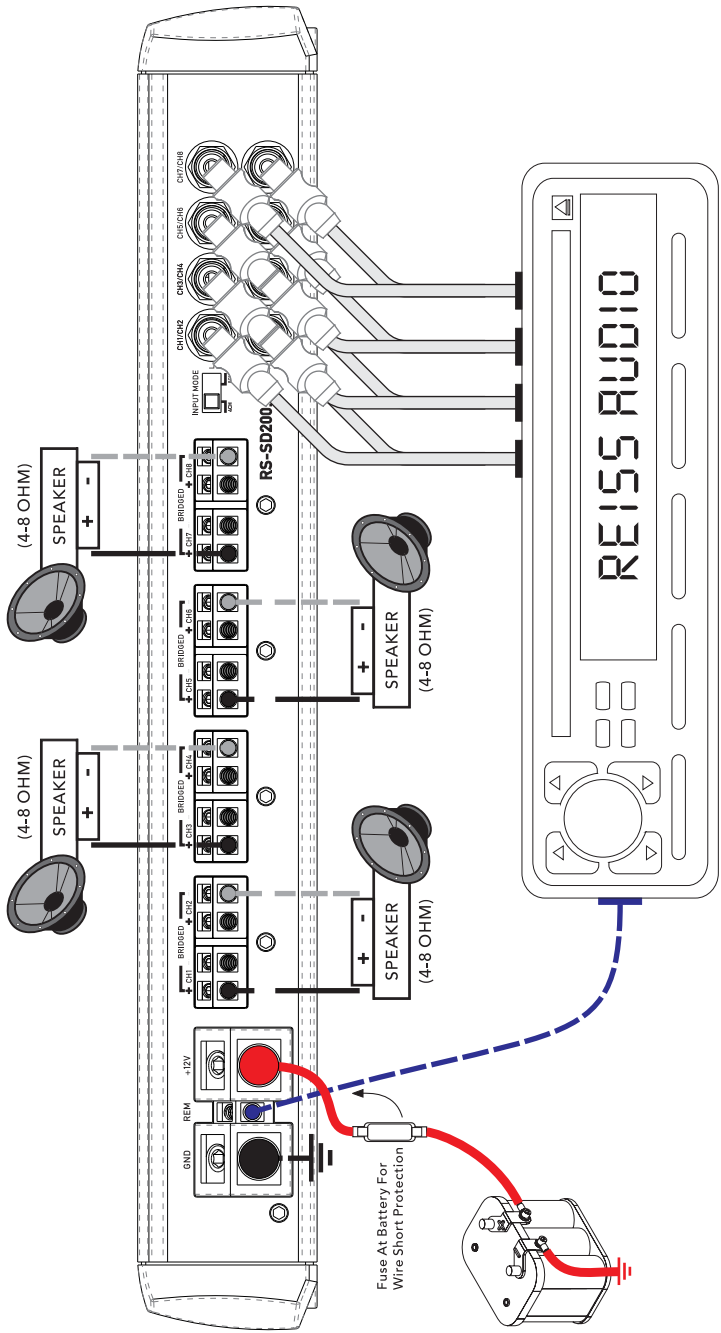
BRIDGED INSTALLATION (RS-SD200.6D)



NORMAL INSTALLATION (RS-SD200.8D)



BRIDGED INSTALLATION (RS-SD200.8D)



FEATURES

- Balanced Differential Inputs for Noise-Free Operation Regardless of the Source
- High Sound Quality & Performance Class-D Topology Driven by INFINEON Chipset
- Compact Size Footprint for Easy Installation of Many Applications
- Variable Full Crossover Filter: LPF & BP / FULL / HPF(Multi-Freq. X1 and X10);
  Only LPF for RS-SD1000.1D & RS-SD2000.1D
- High Level JRC4580 Operational Amplifier Circuit and Multi-Filterings to Ensure High Sound Quality Performance
- Surface Mount Component Technology
- Audio Precision Quality Control Verification
- Stable & Reliable Four Layers PCB Trace Layout
- Illuminated Power & Speaker Terminals Indicate the Working / Protection Status
  and Additional Clipping Led Indicator Led Lights Status Indicator
- 12dB Per Octave Slopes for Multi-Channels Models & 24dB Per Octave Slope for Mono Channel Models
- Short circuit, thermal , DC Offset, Overload and High/Low Battery Voltage Protections
- Bass Knob Controller Included (Except RS-SD200.8D)

SPECIFICATIONS

MODEL NO.	RS-SD1000.1D	RS-SD2000.1D	RS-SD200.4D	RS-SD300.4D	RS-SD450.4D
CIRCUIT TOPOLOGY	Mono Block Class-D	Mono Block Class-D	Full Range Class-D	Full Range Class-D	Full Range Class-D
RMS POWER OUTPUT AT 1 Ω	1000W	2000W	N/A	N/A	N/A
RMS POWER OUTPUT AT 2 Ω	740W	1600W	350Wx4CH	450Wx4CH	675Wx4CH
RMS POWER OUTPUT AT 4 Ω	440W	900W	200Wx4CH	300Wx4CH	450Wx4CH
RMS POWER OUTPUT AT 4 Ω BRIDGED	N/A	N/A	700Wx2CH	900Wx2CH	1350Wx2CH
TOTAL HARMONIC DISTORTION	<0.3%	<0.3%	<0.3%	<0.3%	<0.3%
S/N RATIO REF 1W AT 4Ω	>90dB	>90dB	>90dB	>90dB	>90dB
GAIN RANGE	0.2-10V	0.2-10V	0.2-10V	0.2-10V	0.2-10V
PER OCTAVE SLOPES	24dB	24dB	12dB	12dB	12dB
OPAMP CHIPSET	JRC4580	JRC4580	JRC4580	JRC4580	JRC4580
CROSSOVER RANGE	50-250Hz	50-250Hz	LPF:50-500Hz HPF:50-500Hz / 500-5KHz		
OPERATION FREQUENCY RANGE	20-500Hz	20-500Hz	20-20KHz	20-20KHz	20-20KHz
SUBSONIC	10-55Hz	N/A	N/A	N/A	N/A
BASS BOOST	0-18dB	0-18dB	0-18dB	0-18dB	0-18dB
BASS KNOB	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
DIMENSIONS(MM)	234.2x174x48	314.2x174x48	254.2x174x48	284.2x174x48	354.2x174x48

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MODEL NO.	RS-SD1800.5D	RS-SD200.6D	RS-SD200.8D
CIRCUIT TOPOLOGY	Full Range Class-D	Full Range Class-D	Full Range Class-D
RMS POWER OUTPUT AT 1 Ω	1000W (SUB Only)	N/A	N/A
RMS POWER OUTPUT AT 2 Ω	200Wx4CH + 750W	350Wx6CH	350Wx8CH
RMS POWER OUTPUT AT 4 Ω	125Wx4CH + 500W	200Wx6CH	200Wx8CH
RMS POWER OUTPUT AT 4 Ω BRIDGED	400Wx2CH (F & R Only)	700Wx3CH	700Wx4CH
TOTAL HARMONIC DISTORTION	<0.3%	<0.3%	<0.3%
S/N RATIO REF 1W AT 4Ω	>90dB	>90dB	>90dB
GAIN RANGE	0.2-10V	0.2-10V	0.2-10V
PER OCTAVE SLOPES	F / R :12dB SUB:24dB	12dB	12dB
OPAMP CHIPSET	JRC4580	JRC4580	JRC4580
CROSSOVER RANGE	Front / Rear : LPF:40-400Hz HPF:40-400Hz / 400-4KHz SUB:50-250Hz	LPF:40-400Hz HPF:40-400Hz / 400-4KHz	LPF: N/A HPF:40-400Hz / 400-4KHz
OPERATION FREQUENCY RANGE	20-20KHz	20-20KHz	20-20KHz
SUBSONIC	10-55Hz (SUB Only)	N/A	N/A
BASS BOOST	0-18dB (SUB Only)	0-18dB	N/A
CLIPPING INDICATOR	YES	YES	YES
INPUT MODE	4CH / 5CH	4CH / 6CH	4CH / 8CH
BASS KNOB	INCLUDED	INCLUDED	N/A
DIMENSIONS(MM)	354.2x174x48	294.2x174x48	354.2x174x48

WARRANTY

Should your amplifier require service Please consult with the dealer from which it was purchased,or contact **REISS AUDIO** Local Dealer.
Do not attempt to return your amplifier directly to us without first calling for a Return Authorization Number. Units received without an accompanying Return Authorization Number will be processed more slowly. Additionally, you must include a copy of your purchase receipt from an authorized dealer for consideration of in-warranty service; otherwise repair charges will apply.Units received without a receipt will be held for 30 days, allowing us time to contact you and obtain a copy of the receipt. After 30 days,all units will be returned.

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