



FULL RANGE AMPLIFIER
INSTRUCTION MANUAL



MODELS: SRX150.2V // SRX300.4V



STREET REFERENCE MULTI CHANNEL AMPLIFIERS

Memphis Audio built a 50 year legacy in the audio industry engineering the highest quality products to produce the best possible listening experience for our fans and loyal supporters. To fully appreciate our products we recommend taking the time to read and follow the instructions in this manual. As always, we recommend all installations and service be performed by an authorized Memphis Audio dealer.

TIP

For optimal performance, Memphis recommends using only Memphis Connection accessories. Outfitting your system with properly sized Memphis Connection wire and accessories will dramatically boost your listening experience and increase the durability of your Memphis Audio products.

Street Reference amplifiers feature a MOSFET power supply with a 12dB per octave crossover to ensure the most accurate musical reproduction. All models feature a fully variable crossover with 12db per octave slopes allowing you the ability to tailor the sound to best fit your speakers and listening preferences.

TIP

Check out our full line of Street Reference speakers and subwoofers to create a complete Memphis Street Reference system.

Features

- 2 Ω stereo stable / 4 Ω mono
- High & low level inputs
- 0/6/12dB bass boost
- Bridgeable & tri-mode operation
- Protection circuitry: overload, short circuit, thermal & reverse polarity
- Textured aluminum heatsink
- Selectable bass boost
- Variable crossover network
- Ultra-bright LED accent light strip

Bridgeable & Tri-Mode Operation

Street Reference amplifiers can be used in stereo, bridged or tri-mode operation. Tri-mode operation means that a pair of speakers are wired in the conventional stereo manner while a subwoofer is simultaneously connected to the bridged terminals of the same two channels. This is useful for simple 2-channel systems that require a subwoofer in addition to the full range speakers

Nickel Plated Connectors

Ensures solid electrical connection that resist corrosion

Fully Variable High & Low Pass 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 12dB per octave slope offers roll-off above or below the selected frequency.

Protection Circuitry

Protects against overload, short circuit, thermal and reverse polarity. These protection features are designed to protect the amplifier from misuse as well as from common causes of amplifier failure.

LED Light

Blue light indicates that the amplifier is working normally. If the light is not illuminated or is glowing red, consult the troubleshooting section of the manual.

Installation Information

Memphis Audio recommends the installation of our products to be performed by an Authorized dealer. Attempting an installation project on your own or through an unauthorized source may result in damage to your products and may potentially void your warranty.

Amplifiers are generally mounted in the hatch/trunk area of your vehicle or behind the seat of most pick up trucks. Select a location that provides adequate ventilation. Amplifier should be secured using the screws provided.

Warning

For your safety, always inspect the mounting location carefully to ensure you are not drilling into any electrical, hydraulic, fuel or fluid lines. Always check your speaker load with a multi-meter before connecting the amplifier. Connecting any speaker load lower than the rated impedance of the amplifier will result in damage to the amplifier. Damage of this nature is NOT covered under warranty. Please pay close attention to what connections are made to the amplifier.

TIP



If you are uncertain or uncomfortable proceeding with your installation, please contact your local authorized Memphis Audio Dealer

Troubleshooting

When troubleshooting your amp, speaker and speaker wires should be tested first.

No Output:

• Confirm all wiring is firmly connected.

Both +12V and REM terminals must have +12 Volts present and GND must be connected to chassis' ground or to the negative battery terminal.

• Confirm the signal source is connected and supplying an output signal. To confirm the amp is working, connect an RCA patch cord to the line inputs of the amplifier (do not connect the other end of the patch cord). Briefly tap the center pin of each disconnected RCA with your finger. This should produce a noise (brief static or hum) in the speakers.

• If the amp is hot, check the speaker impedance or load. The total minimum impedance of all speakers should not be lower than the rating of the amp.

Only One Channel Works:

• Confirm the speaker terminal strip connections are firmly connected.

• Check "balance" control on your signal source.

• If using RCA Low-Level inputs, reverse the input plugs at the amplifier. If the channel that is silent reverses position, the problem is in the source unit or connecting cable.

Weak Output

• Check input sensitivity control adjustment.

Unwanted Noise

• Whine that increases and decreases with engine speed - confirm the Amp & Source unit are grounded properly.

• Clicking or popping noise at a rate that follows engine speed - this is often induced by the vehicles ignition system. Confirm that the vehicle is equipped with resistor spark plugs and wires. The ignition system may need service.

• Noise can be caused by routing speaker input wires too close to the light wires and other accessory wires in the vehicle. Re-route wires to avoid unwanted interference.

• If above steps do not improve/reduce noise, the system should be checked by a professional audio installer at a Memphis Authorized Dealer.

Red LED is Illuminated

• Speaker or wire is shorted

• Battery voltage too high

• Battery voltage too low

• Amplifier has overheated due to improper ventilation

Power Supply Connections



Install the fuse at the battery last!



Use conventional stranded copper wire for all connections. Finish the ends of the wires at the amp and vehicle with proper size terminals. Poorly made connections and/or inadequate wire size will generate excessive heat and may lead to equipment failure.

12 Volt + Connection

Make the 12V+ connection directly at the positive battery post using the proper wire size and fuse listed below. The fuse should be installed within 18" of the battery. This fuse is vital to protecting the vehicle from damage in the case of a dead short.

Model	Amp Kit
SRX150.2V	8
SRX300.4V	4

Ground Connection:

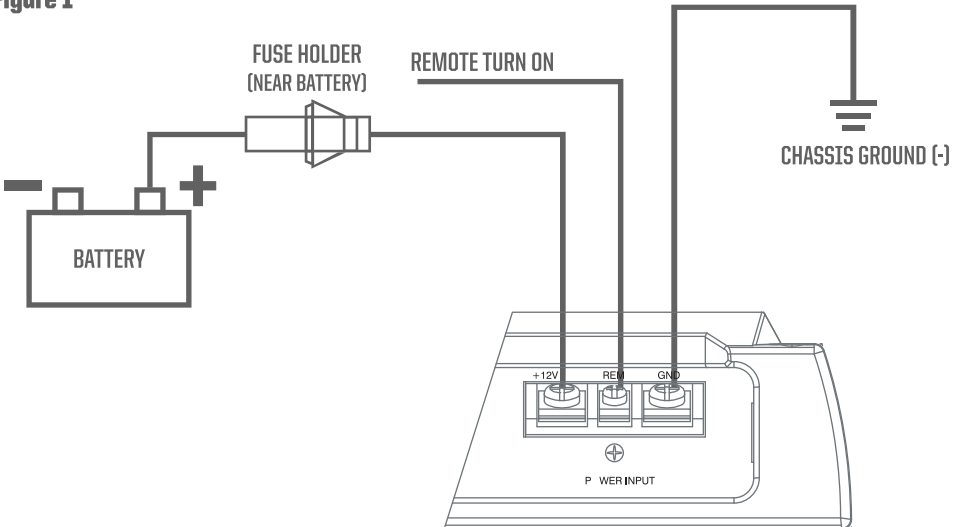
Make ground connection directly to the chassis of the vehicle as close to the amp as possible. Make sure this connection is made with the same wire size as used for the 12 volt connection. Ensure that all dirt, grease, paint and coatings are removed prior to attaching the ground wire to chassis.

Remote Turn On

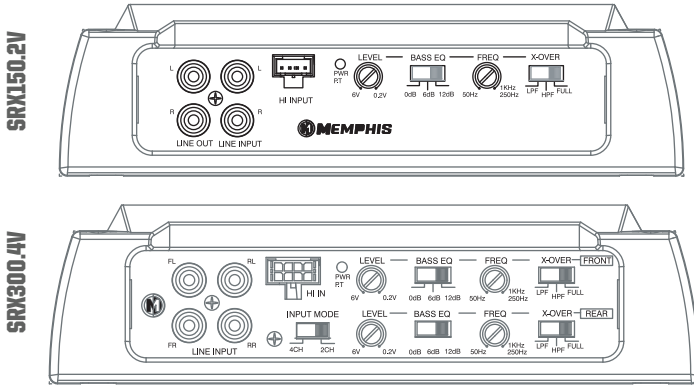
Remote turn on should be connected to the source unit's remote turn on lead or power antenna output wire. When using the power antenna wire, make certain it does not lose power when any source other than the radio is selected.

Power Connections

Figure 1



Features & Controls



Gain

The gain control is NOT a volume control. The gain control adjusts the amount of signal required to drive the amplifier to full output. With the gain at full clockwise rotation, less signal voltage is required to drive the amp to full output. With the gain at full counter clockwise rotation, more signal voltage is required to drive the amp to full output. For optimal performance, set the gain control to minimum.

High Pass Filter (HPF)

The high pass crossover/filter is designed to remove low frequency information from a speakers. This is generally used to protect smaller devices from trying to reproduce low frequency information that might damage them. The crossover frequency is adjustable from 50Hz to 1kHz and uses 12dB per octave slope. To engage the HPF simply slide the switch to the position on the marked HPF. Crossover frequency selection is made by rotating the dial: Clockwise raises the frequency, counter clockwise lowers the frequency. Most mid-bass or midrange drivers should be set between 80 and 400 Hz depending on how high the subwoofer plays. For mid-range drivers that are 5" or smaller we suggest setting the HPF to 120Hz. The HPF can also be combined with passive crossovers on a separate or coaxial speaker set to provide low frequency protection to the midrange driver, or to form a band-pass filter for a midrange speaker already using a passive low-pass filter.

Low Pass Filter

The low pass crossover/filter is designed to remove high frequency information from a speaker. This is generally used to prevent mid bass speakers or subwoofers from trying to reproduce mid and high frequency information that they are not designed to reproduce. The crossover frequency is adjustable from 50Hz-250Hz and use a 12dB per octave slope. To engage the LPF slide the switch to the position marked LPF. Frequency selection is made by rotating the dial: Clockwise raises the frequency, counter clockwise lowers the frequency. Most subwoofers should be set between 80Hz and 100Hz depending on how low the mid-bass or midrange drivers are capable of playing.

Bass Boost

Bass boost is switchable to off (0dB) or +6dB and +12dB. Boost should be used with discretion. Electronically enhance boost places an additional load on the amplifier and the speakers they are connected to.

Remote Level Control

The amplifiers have inputs for a remote level control (RLC). This will allow the amplifier input level to be adjusted from the listening position. Connect the RJ45 jack on the front to the amplifier. Install the control module in front of the vehicle in a location that is easily accessible to the driver.

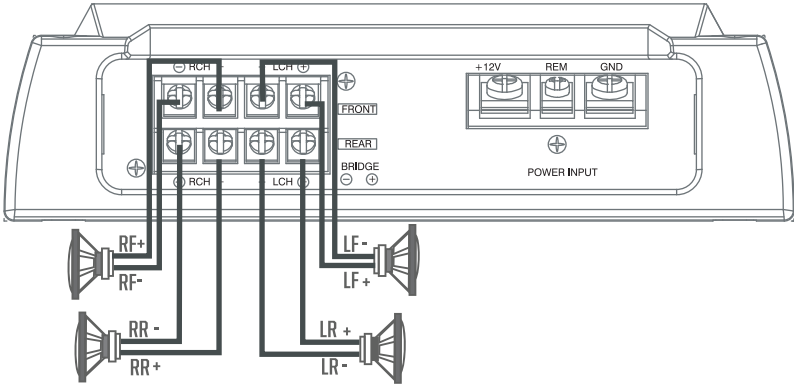
Subsonic Filter

The subsonic filter utilizes an internal 12dB per octave slope and is variable from 15Hz-50Hz

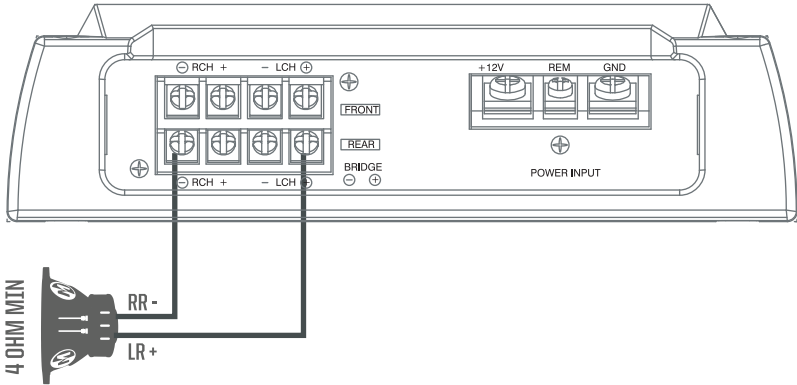
Speaker Connections Continued

4 Channel Model SRX300.4V

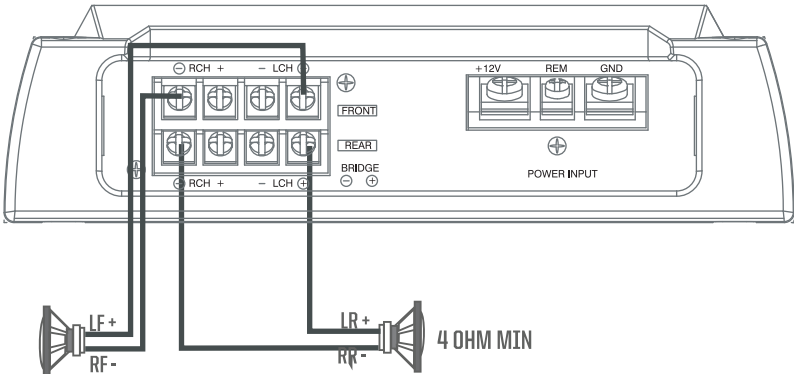
4 Channel Mode



3 Channel Mode



2 Channel Mode

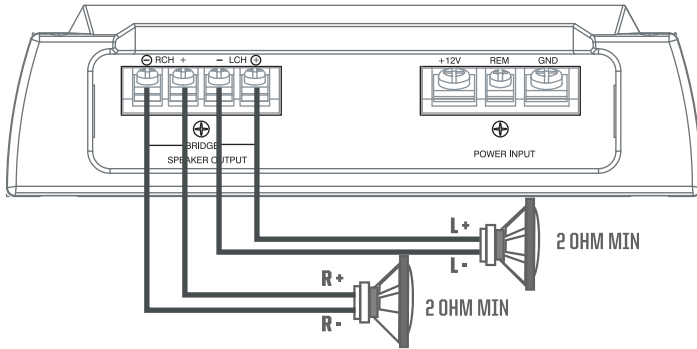


Speaker Connections Continued

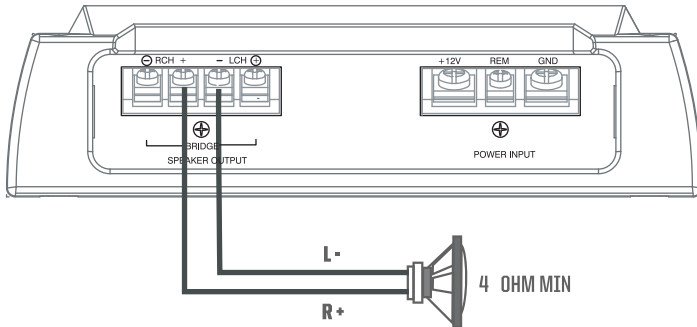
Speakers have a positive and negative marking on the terminals. These are used to indicate polarity and must be considered when wiring speakers or subwoofers to an amplifier. Amplifiers also have positive and negative markings on their speaker outputs. Use these markings to match polarities to ensure the speakers are in phase. Failure to wire speakers or woofers in phase with one another will result in a loss of bass. All Street Reference amplifiers require a minimum 2Ω impedance in stereo or 4Ω in mono (bridged) mode.

2 Channel Model SRX150.2V

Stereo Mode



Mono Mode



Specifications

SPECIFICATIONS	SRX150.2V	SRX300.4V
RMS Power/CH 4Ω	50W X 2	50W X 4
RMS Power/Ch 2Ω	75W X 2	75W X 4
RMS Power/Bridged 4Ω	150W X 1	150W X 2
THD 4Ω	<0.1%	<0.1%
THD 2Ω	< 0.5%	< 0.5%
Signal/Noise Ratio	> 90 dB	> 90 dB
Channel Separation	> 50 dB	> 50 dB
Frequency Response +/- .5dB	10 Hz -27 kHz	10 Hz - 24 KHz
Crossover Frequency LPF	50 Hz - 250 Hz	50Hz - 250Hz
Crossover Frequency HPF	50 Hz - 1 KHz	50 Hz - 1 kHz
Bass Boost	45Hz 0/6/12 dB	45Hz 0/6/12 dB
Dimensions	8.92" x 7.87" x 2.16"	12.46" x 7.87" x 2.16"
Input Sensitivity		
Low Level	200mv-6.3v	200mv-6.3v
High Level	1.8m-25v	1.8m-25v
Input Impedance		
Low Level	10K Ω	10K Ω
High Level	47Ω	47Ω

*Features and specifications are subject to change without notice

Service/ Returns

Please consult with your local authorized dealer if you experience issues with your amplifier.

You may also contact Memphis Audio customer service at 800.489.2300 or email tech support directly at: techsupport@memphiscaraudio.com. 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 up to 30 days allowing us time to contact you and obtain a copy of the receipt. After 30 days all units will be returned to you unrepai red.

Warranty

Street Reference Amplifier Limited Warranty:

This product has a 1 year warranty from the date of purchase for defects in material or workmanship. This warranty will extend to 2 years when installed by an authorized Memphis Audio dealer using Memphis Connection products. The warranty is void if the product has been physically damaged by improper usage or abuse. If repairs are attempted outside of Memphis Audio facility, the warranty is void.

This warranty is limited to the original retail purchaser and does not cover expenses incurred in the removal or re-installation of the product. This warranty does NOT apply to product exterior and cosmetics. Memphis Audio disclaims any liability for incidental or consequential damages caused by product defects. Memphis Audio liability will not exceed the purchase price of the product and the warranty period specified.

WHAT IS NOT COVERED UNDER WARRANTY:

- Damage due to improper installation
- Damage cause by exposure to moisture, excessive heat, chemical cleaners and/or UV radiation
- Damage through negligence, misuse, accident or abuse. (Repeated returns for the same damage may be considered abuse)
- Product damaged in accident and/or due to criminal activity
- Service performed by anyone other than Memphis Audio
- Subsequent damage to other components
- Any cost or expense related to the removal or re-installation of product
- Products with tampered, missing, altered or defaced serial numbers/labels
- Freight damage
- The cost of shipping product to Memphis Audio
- Return shipping on non defective items
- Any product not purchased from an authorized Memphis Audio dealer

Some states do not allow the exclusion or limitation of incidental consequential damages. The above limitations or exclusions may not apply to you. This warranty gives you specific rights, you may have other rights which vary from state to state.

If warranty service is required, a return authorization number is required to return the product to Memphis Audio. Warranty shipments to Memphis Audio are the responsibility of the purchaser. Pack the product carefully in the original carton if possible. Memphis Audio will not be responsible for damages incurred in shipment or due to improper packing materials used by the purchaser.

If determined to be within warranty, your product will be repaired or replaced at the discretion of Memphis Audio.

