SOUNDSTREAM®

TECHNOLOGIES

Owner's Manual and Installation Guide

Lil wonder **III** *Generation*

LW2.260
LW4.500
LW4.620
LW1.400
LW1.800
LW5.1000

CONGRATULATIONS!

You now own a Limited Edition LIL'WONDER Amplifier, the product of an uncompromising design and engineering philosophy.

To maximize the performance of your system, we recommend that you thoroughly acquaint yourself with its capabilities and features. Please retain this manual and you sales receipt for future reference.

Soundstream amplifiers are the result of American innovation and the highest quality control standards. When properly installed, they will provide you with many years of listening pleasure. Should your amplifier ever need service or replacement due to theft, please record the following information which will help protect your investment.

Serial # _____

Dealer's Name _____

Date of Purchase _____

Installation Shop _____

Installation Date _____

C A U T I O N !

Prolonged listening at extremely high levels may result in hearing loss. Even though your new Soundstream **Limited Edition LIL'WONDER Amplifier**, sounds better than anything you've heard, exercise caution to prevent hearing damage.

FEATURES

- TRI-MODE BASS BOOST CONTROL: 0 dB, +6 dB, +12 dB
- THERMAL, SHORT-CIRCUIT / OVERLOAD PROTECTION SYSTEMS
- 2 OHM STABLE / 4 OHM MONO
- PWM MOSFET POWER SUPPLY
- POWER & PROTECTION INDICATORS
- SELECTABLE CROSSOVER Hpf Lpf Full
- INFINITEL VARIABLE X-OVER POINT (50 800)/ 250 -4K (X 5)
- CROSSOVER RANGE SELECTOR SWITCH (Normal/ x5)
- PLATINUM TERMINAL STRIPS & RCA JACKS
- HEAVY-DUTY ALUMINUM ALLOY HEATSINK
- SOFT TURN-ON / OFF（No "POP"）.
- HIGH (Speaker) OR LOW (RCA) LEVEL INPUTS.
- PHANTOM (5^{th}) CHANNEL FOR POWERING SUB / CENTER CHANNEL (5 Channel Model).

SPECIFICATIONS

Signal / Noise Ratio	>92dB
Frequency Response 1.0dB	10Hz - 30KHz
HPF	15Hz - 225Hz/225Hz - 3.8KHz
LPF	50Hz - 800Hz/250Hz - 4KHz
Input Voltage Range	11 - 16 Volts DC
High Impedance RCA/LINE Level Input Impedance	47K Ohms

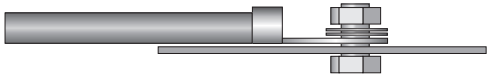
POWER RATINGS & FUSE

MODEL	*4 ohm STEREO*	*2 ohm STEREO*	*4 ohm BRIDGED*	*FUSE*
LW2.260	60W x 2	120W x 2	260W	30A
LW4.500	60W x 4	120W x 4	500W	25A x 2
LW4.620	80W x 4	150W x 4	620W	20A x 3
LW5.1000	55W x 4 + 160W x 1	100W x 4 + 280W x 1	220W x 2 + 300W x 1	25A x 3
LW1.400		300W x 1		25A x 2
LW1.800		600W x 1		30A X 3

DIMENSIONS

MODEL	*Length*	*Width*	*Height*
LW2.260	200 mm	205 mm	52 mm
LW4.500	300 mm	205 mm	52 mm
LW4.620	340 mm	205 mm	52 mm
LW5.1000	450 mm	205 mm	52 mm
LW1.400	300 mm	205 mm	52 mm
LW1.800	450 mm	205 mm	52 mm

TOOLS/ PARTS FOR INSTALLATION



NOTE: TOOLS ARE NOT SUPPLIED

Small flat blade screwdriver Phillips screwdriver (#2 or medium sized), Wire cutters, Wire strippers, - #6 round head screws, and 1 - #8 sheet metal screw (or nut, bolt flat washer, start washer) (see detail) 2 Ring connectors (large enough to accommodate your method of grounding) In-line fuse or circuit breaker see fuse chart below Power ground wire see Power Wire Calculator on page 6 Speaker wire 12/ 16 gauge Grommets 12 / 16 gauge Grommets (Sized to work with the power wire you plan to use in your installation) Tube of silicone seal.

Built-in Crossover

All **LIL'WONDER Amplifiers** feature built-in electronic crossovers. The **LIL'WONDER Amplifiers** also feature continuously-variable low pass crossovers and continuously-variable high pass crossovers.

Protection Circuitry

The amplifier protection circuitry will disable the amplifier if the inputs are overloaded, short-circuited or extremely high temperature conditions are detected. When the protection mode is in operation, the LED indicator on the front panel will be illuminated, indicating the amplifier has gone into a self-preservation mode.

If you observe that the protection LED is lit, please check the system carefully to determine what has caused the protection circuit to engage. The amplifier can be reset by turning the remote power off and then on again. If the amplifier shuts down due to a thermal overload condition, please allow it to cool down before powering up. If the amplifier shuts down because of an input overload or short circuit, be sure to repair these conditions before attempting to power up the amplifier again.

2 Ohm Operation (in stereo mode)

Your **LIL'WONDER Amplifier** was designed to operate effectively at loads down 2 Ohms. This means that you can install four 8 Ohm speakers per channel when using parallel wiring. Increasing the number of woofers per channel at low frequencies (up to 100Hz) produces an acoustic coupling effect. This acoustic coupling increases your power output by 3 dB per speaker.

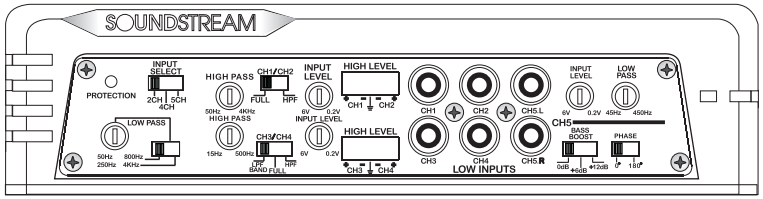
When operating at 2 Ohms, the amplifiers will increase their output power by approximately 50%. The current draw will also increase by about the same amount, so be sure you have enough current to run the amplifiers into a 2 Ohm load. If you lack adequate current, your music reproduction will be distorted.

Please note: The gain control of any car audio amplifier should not be mistaken for a volume control. It is a sophisticated device, designed to match the output level of your audio source unit to the input level of the amplifier. Do not adjust this input level to maximum unless your input level requires it. Ignoring these instructions will result in an input overload to the amplifier, and excessive audiodistortion. It can also cause the protection circuit to engage.

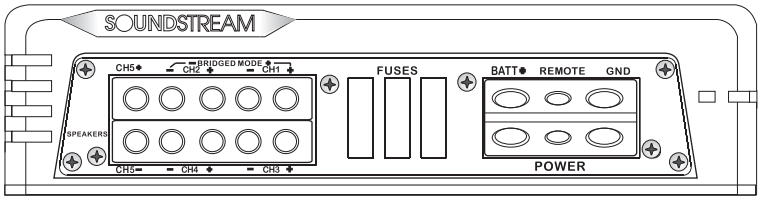
PANEL LAYOUT

LW5.1000

LEFT VIEW

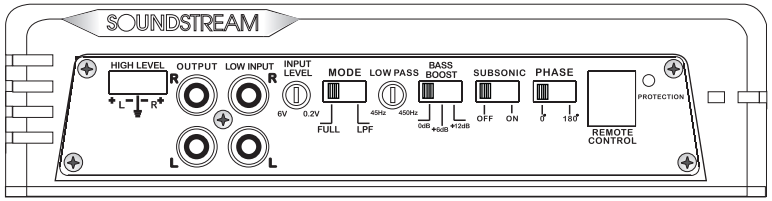


RIGHT VIEW

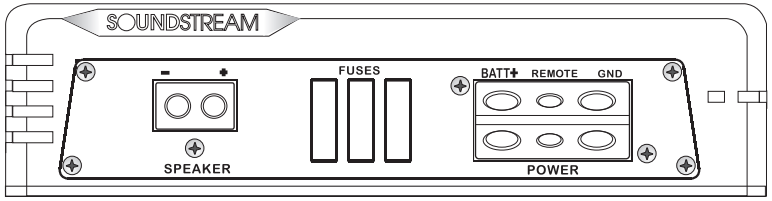


LW1.400 / LW1.800

LEFT VIEW



RIGHT VIEW



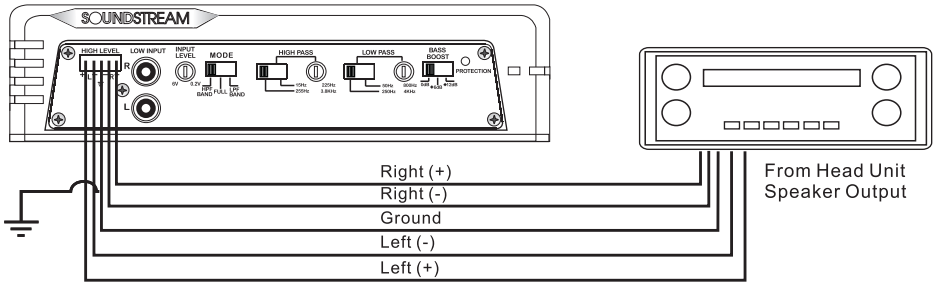
LW2.260 / LW4.500 / LW4.620 / LW5.1000 / LW1.400 / LW1.800

- 1 & 2 & 4 & 5 Channel power amplifier
- 4 & 8 Ohm stable in stereo mode
- MOSFET power supply
- Low Level Input
- Gain < input level > controls
- Bass Boost Control
- Phase change 0 or 180 control (1 & 5 Channel)
- Short Circuit Protection
- Thermal Protection
- Remote Subwoofer Control (1 Channel)
- Sub Sonic Control (1 Channel)
- X-over Control
- Remote Turn-on/Turn-off circuit
- Protection Condition LED Indicator
- Power On LED Indicator

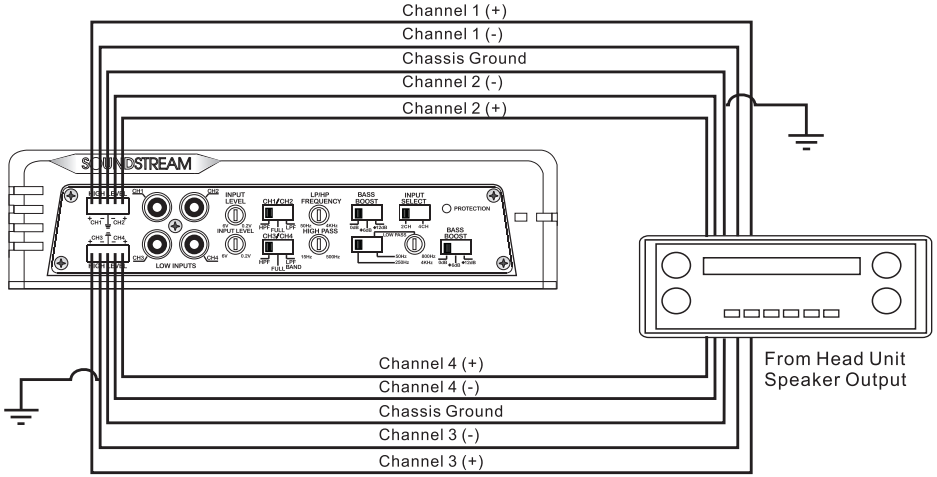
High Level Inputs

WARNING: If you use High Level (Speaker) inputs, do not use the Low Level inputs at the same time.

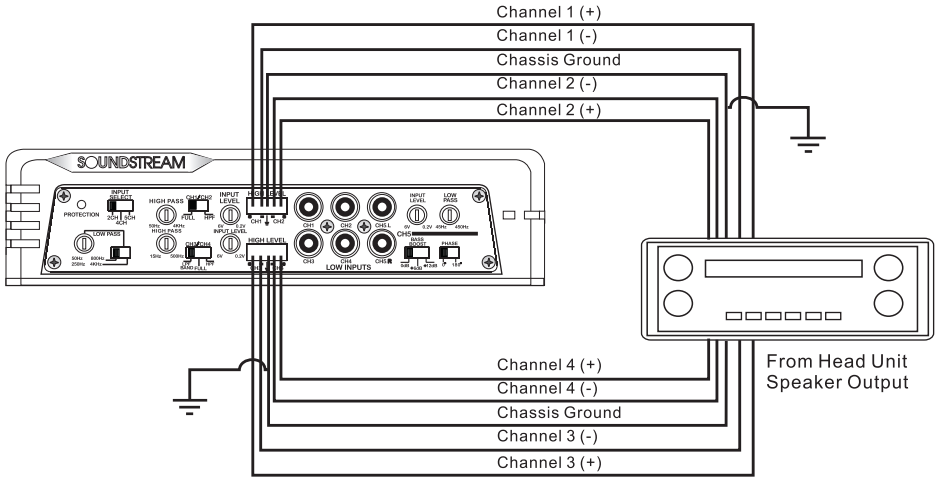
LW2.260



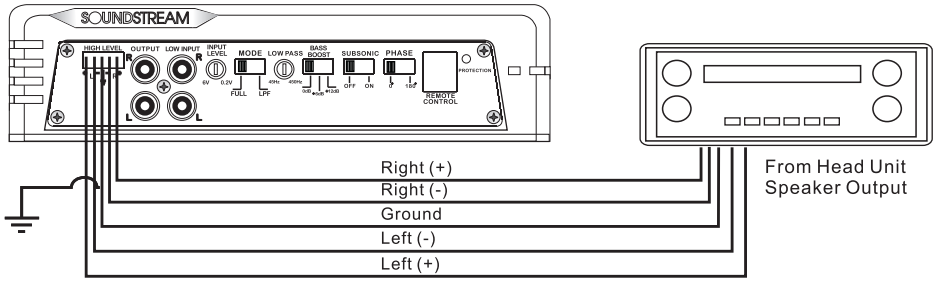
LW4.500 / LW4.620



LW5.1000

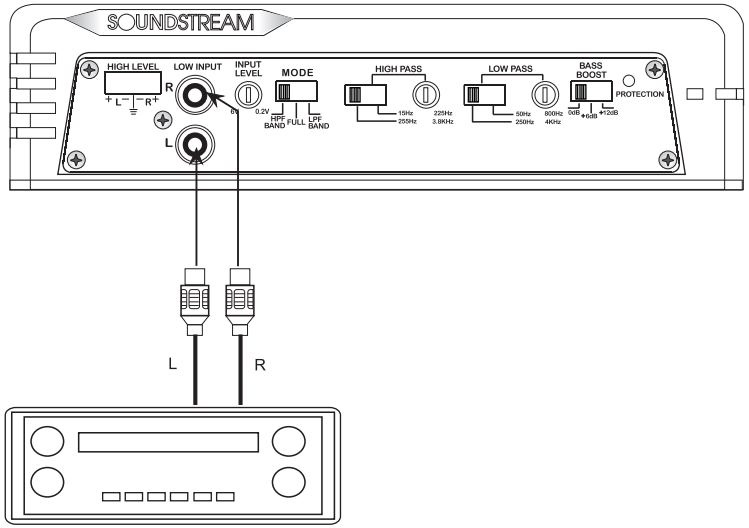


LW1.400 / LW1.800

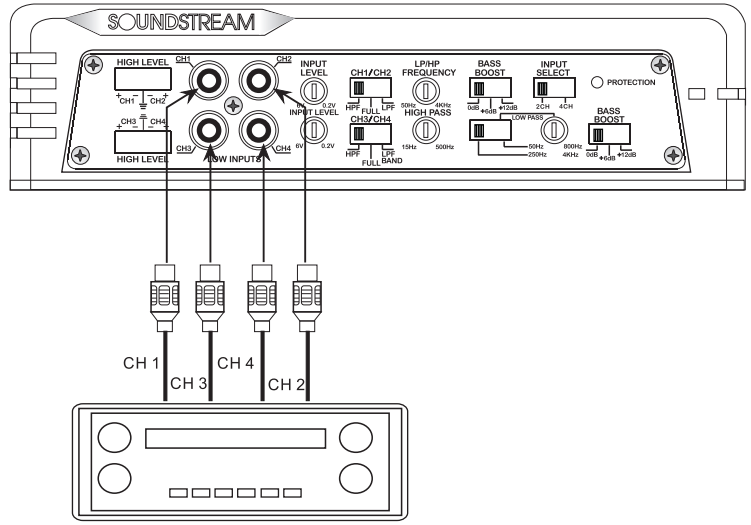


Low Level Inputs

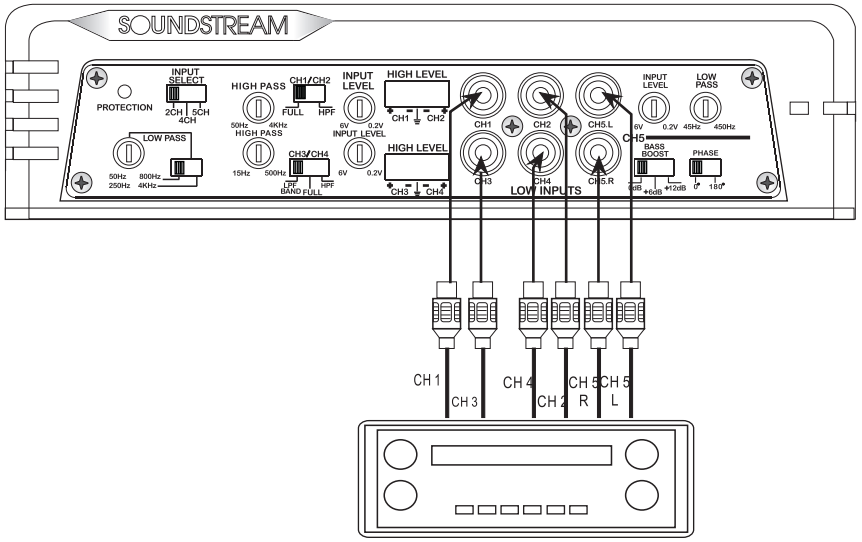
LW2.260



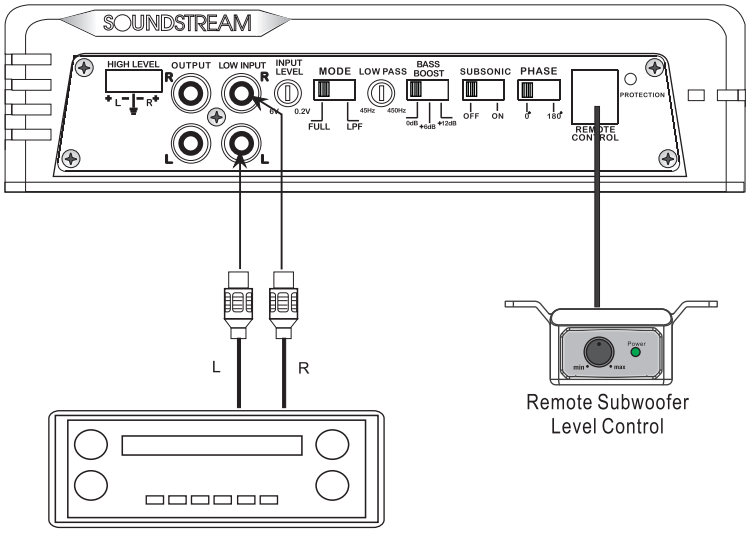
LW4.500 / LW4.620



LW5.1000

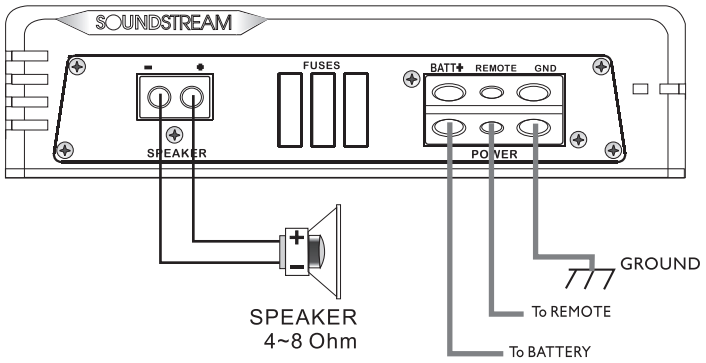


LW1.400 / LW1.800

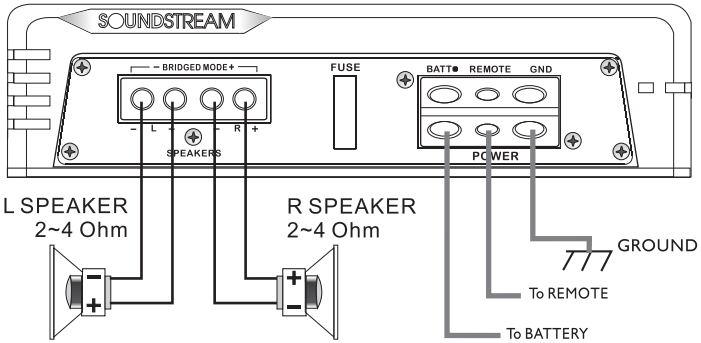


Speakers Connections

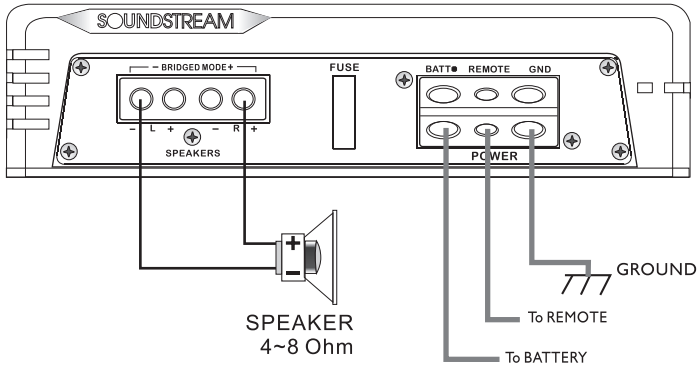
MONOBLOCK AMPLIFIERS: LW1.400 / LW1.800



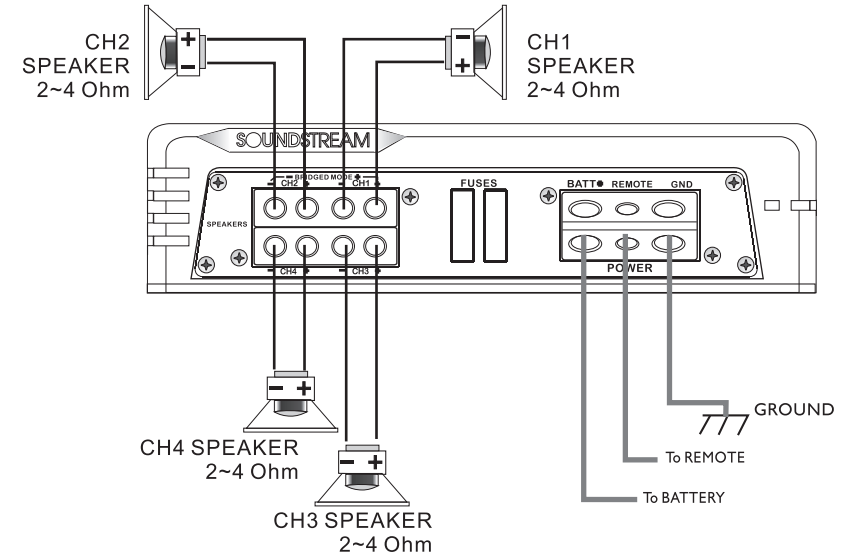
2 CHANNEL STEREO LW2.260



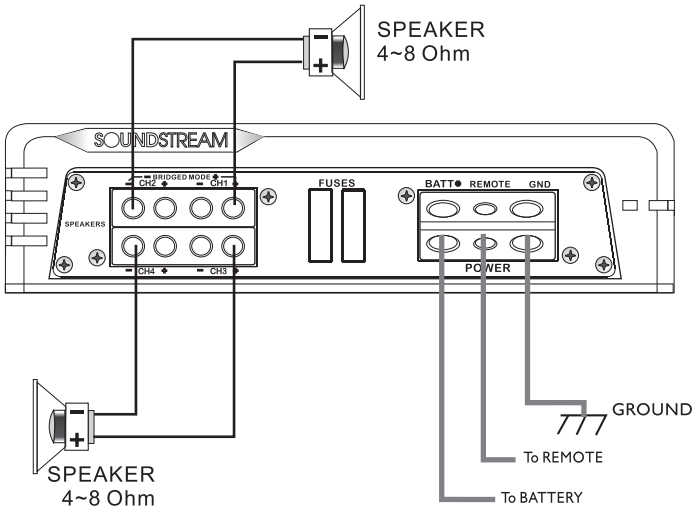
2 CHANNEL BRIDGED LW2.260



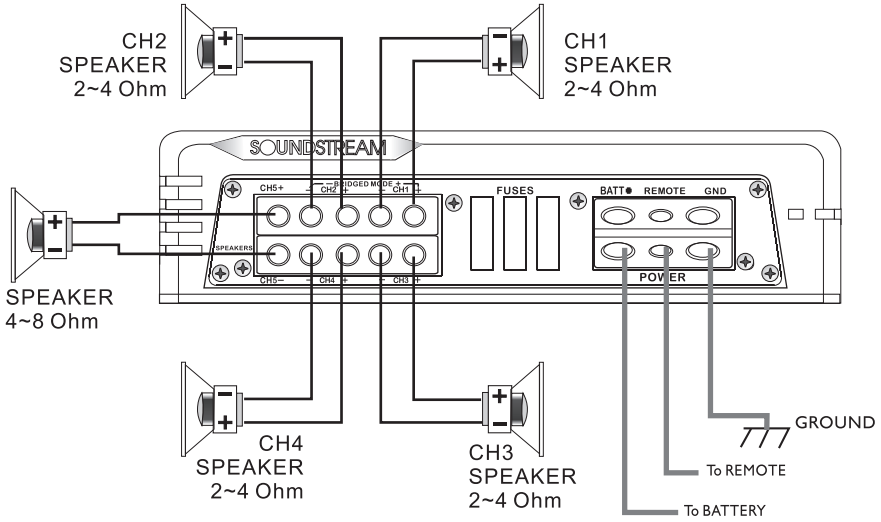
4 CHANNEL STEREO LW4.500 / LW4.620



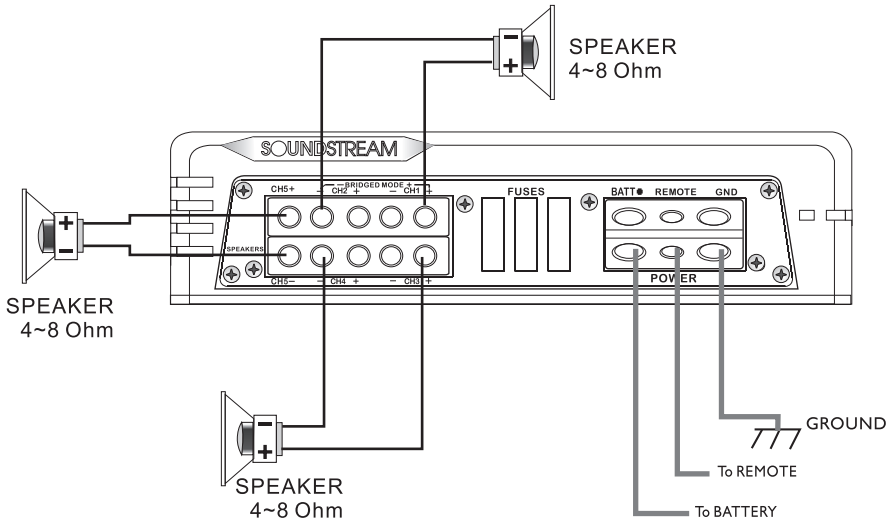
4 CHANNEL BRIDGED LW4.500 / LW4.620



5 CHANNEL STEREO LW5.1000



4 CHANNEL BRIDGED LW5.1000



TROUBLE SHOOTING

NO SOUND — Is the LED lit?

YES

NO

Check Power and Remote turn-on wire for voltage. Make sure Ground wire is secure.

STILL NO SOUND

See your Authorize Sound Stream Dealer.

SOUND IN ONE CHANNEL ONLY

Reverse left and right speakers by unplugging the speaker connector, turning it over and plugging it back in.

SOUND IS NOW IN

OPPOSITE CHANNEL

Reverse RCA inputs

SAME CHANNEL

Problem is in the speaker of speaker wire of the silent channel

SOUND IS NOW IN

OPPOSITE CHANNEL

Reverse RCAs at head unit

SAME CHANNEL

Problem is in the Amplifier, See your local Authorized Dealer

SOUND IS NOW IN

OPPOSITE CHANNEL

Problem is in the head unit or before the amplifier

SAME CHANNEL

Problem is in the RCA cables

PROTECTION CIRCUIT

Short Circuit Protection engaged: The amplifier will turn off and try to come back on immediately. The amplifier will cycle like this indefinitely, with "blips" of sound each time. If this is the case, check your speakers and wiring for low impedance and short circuits.

Thermal Protection engaged: The amplifier will turn off and several minutes later will come back on. In this case, ensure that there is nothing blocking the normal convective airflow of the amplifier. No obstruction n should be within 2" of the amplifier on all sides.

NOTE: Low battery voltage will cause the amplifier to run warmer and possibly damage the amplifier.