# Caution:

Please do not plug in or unplug RCA
plugs to the amplifier inputs while
the amplifier is turned on. Doing
so is potentially harmful to the amplifier
by allowing RF (radio frequencies)
into the amplifier, causing
instability during the brief period while
the RCA shield is not connected, and the
power is connected. Only plug in or unplug
RCA plugs with the amplifier off as
standard practice with all audio equipment.

# PrecisionPower® Absolutely State of the Art Mobile Audio

Owner's Manual and Installation Guide

\$200.2 \$420.2 \$580.2 \$320.4 \$580.4 \$580.4 \$270.1 \$580.5

#### CONGRATULATIONS

Thank you for choosing Precision Power audio equipment. Designed and engineered in the USA, this product combines innovative technology with the finest materials to consistently deliver Absolutely State of the Art performance, sound quality, reliability, and value. This Precision Power product reflects our commitment to offer you unparalleled performance and quality for years of dependable service and listening enjoyment.

#### SERVICE

Do not attempt to service Precision **Power** products yourself. Performing maintenance on your audio equipment will void the warranty. Many parts of the Precision Power product are custom built to our specifications. Our factory parts are not made available to anyone else nor are they for sale. Our goal is to make sure that your PrecisionPower product will always sound as good as the day it was purchased. Contact your Authorized Precision Power Dealer about obtaining any warranty service through PrecisionPower.

#### IMPORTANT INFORMATION

Serial #	
Dealer's Name	
Date of Purchase	
Installation Shop	
Installation Date	

#### CAUTION

Extended use of a high powered audio system may result in hearing loss or damage. While Precision Power systems are capable of "Concert Level" volumes with incredible accuracy, they are also designed for you to enjoy at more reasonable levels all of the sonic subtleties created by musicians. Please observe all local sound ordinances.

#### **Features**

- High & Low Level Input
- Platinum 4 AWG Power Block
- Infinitely Variable Crossovers w/ Multipliers (High/Low/Band)
- Remote Gain Control (\$420.2 S580.2, S270.1)
- 35Hz Subsonic Filter (1 ch. only)
- 50Hz Bass Boost 0.6 or 12dB

- MOSFET PWM Power Supply
- IDI™Intelligent Distress Indicator for Thermal. Short, & Impedance Protection
- Turn On/Off Delay
- 180 Phase Switch (1 ch. & 5 ch. only)
- Tri-Mode Capable
- 2/4/5 Channel Input
- 2 Ohm Stereo / 4 Ohm Mono Stable

#### **SPECIFICATIONS**

Load Impedance (Stereo): 2-8 ohms Load Impedance (Bridged): 4-8 ohms

Input Sensitivity: 200my - 6 Volts RMS Input Impedance: 20k Ohms

Supply Voltage: 9-15 Volts Damping Factor: >150

S/N Ratio: >98dB

12dB Crossovers Type/Range:

High Pass - 15-3.8kHz (2ch. models)

50-4kHz (ch. 1-2, 4ch. models) 15-500Hz (ch. 3-4, 4ch, models)

Low Pass - 50-5kHz (2 ch. models)

50-4kHz (4 ch. models)

#### **Power and Fuse Ratings**

Model	4 Ohm	2 Ohm	Bridged	Fuse
S200.2	60W x 2	100W x 2	200W x 1	25A x 1
S420.2	120W x 2	210W x 2	420W x 1	25A x 2
S580.2	160W x 2	290W x 2	580W x 1	30A x 2
S320.4	60W x 4	80W x 4	160W x 2	20A x 2
S580.4	100W x 4	145W x 4	290W x 2	30A x 2
S760.4	130W x 4	190W x 4	380W x 2	30A x 3
S270.1	180W x 1	270W x 1	-	20A x 2
S580.5	60W x 4, 180W x 1	90W x 4, 220W x 1	180W x 2	35A x 2

#### **Dimensions**

Model	Length	Width	Height
Wodel			·
S200.2	9.5'' (238mm)	9.5'' (240mm)	2.375'' (60mm)
S420.2	15.3" (388mm)	9.5'' (240mm)	2.375" (60mm)
S580.2	19.2" (488mm)	9.5'' (240mm)	2.375" (60mm)
S320.4	13.3" (338mm)	9.5'' (240mm)	2.375'' (60mm)
S580.4	15.7" (398mm)	9.5'' (240mm)	2.375'' (60mm)
S760.4	19.2" (488mm)	9.5'' (240mm)	2.375'' (60mm)
S270.1	13.3" (338mm)	9.5'' (240mm)	2.375'' (60mm)
S580.5	19.2" (488mm)	9.5" (240mm)	2.375'' (60mm)

#### **Tools/Parts For Installation**



#### **NOTE: TOOLS ARE NOT SUPPLIED**

Small Standard 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.

#### **Built-in Crossover**

All SEDONA Series Amplifiers feature built-in electronic crossovers. The SEDONA Series Amplifiers feature continuously-variable low pass crossovers and continuously-variable high pass crossovers, with bandpass options.

#### **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 SEDONA Series 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 doubling.

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.

#### **INPUT SENSITIVITY**

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 audio distortion. It can also cause the protection circuit to engage.

#### Mounting the Amplifier

Mark the location for the mounting screw holes by positioning the amplifier where you wish to install it and use a scribe (or one of the mounting screws) inserted in each mounting hole to mark the mounting surface. If the mounting surface is carpeted, measure the hole centers and mark with a felt tip pen.

Drill pilot holes in the mounting surface for the mounting screws and insert the mounting screws into these holes. Tighten them securely.

**Note:** Before beginning your installation, be sure to take note of any wires, lines or other devices in your vehicle which may be located behind any mounting surface.

#### **Electrical Wiring**

All SEDONA Series Amplifiers are equipped with easy top access screw terminals. These terminals are nickel-plated in order to ensure excellent electrical contact and to resist corrosion.

When making electrical connections to the amplifier, please observe the following:

- Use at least 8 gauge or heavier wire for power and ground connections.
- Wire the amplifier directly to the car battery. Make sure there is circuit protection (Such as a fuse) on the positive power lead, within 18 inches of the battery.
- For the ground connection, use the shortest possible wire to a good chassis ground point.
- Wire the Remote connection to the remote turn-on lead of your equalizer or head unit.
   In some cases this may be the power antenna lead of the head unit.

#### **FUSING**

You will need to install an in-line fuse or circuit breaker in the power wire within 18" of the battery. This fuse or circuit breaker is to protect your vehicle from fire in case the power wire shorts to the vehicle body. If your are only using one amplifier, use the fuse rating indicated in the chart on page 2. If your are using more than one amplifier, add up the fuse ratings for all the amplifiers. This sum is the rating for your fuse or circuit breaker. Your may also want to add a power distribution block near your amplifiers to distribute large gauge power cable to multiple amplifiers.

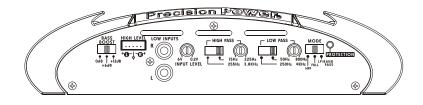
#### REMOTE GAIN CONTROL

The SEDONA Series S420.2, S580.2 & S270.1 are equipped with a dashboard mount remote subwoofer level control. Run the supplied dashboard remote control from the front panel of your amplifier. By turning the level knob clockwise, you will increase the output of low frequencies.

#### PANEL LAYOUT

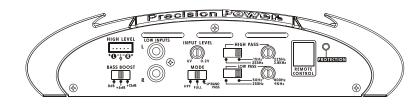
S200.2

LEFT VIEW



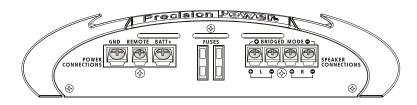
S420.2/S580.2

LEFT VIEW



S200.2 ( use 1 fuse) S420.2 / S580.2 ( use 2 fuses)

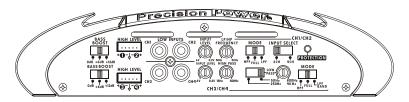
RIGHT VIEW



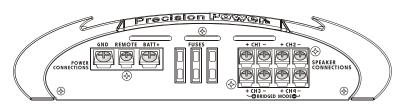
#### PANEL LAYOUT

\$320.4 / \$580.4 ( use 2 fuses) \$760.4 ( use 3 fuses)

LEFT VIEW



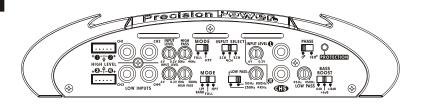
RIGHT VIEW



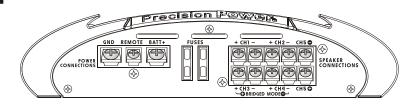
#### PANEL LAYOUT

S580.5

LEFT VIEW

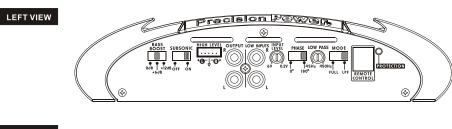


RIGHT VIEW

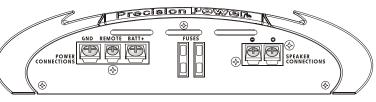


#### PANEL LAYOUT

#### S270.1



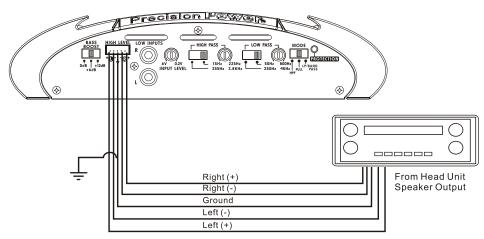




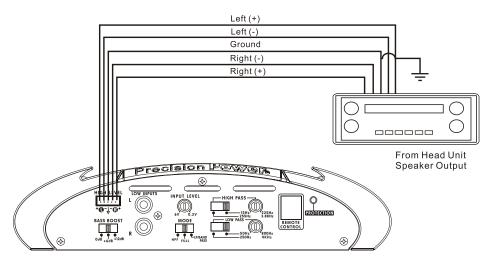
#### High Level Inputs

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

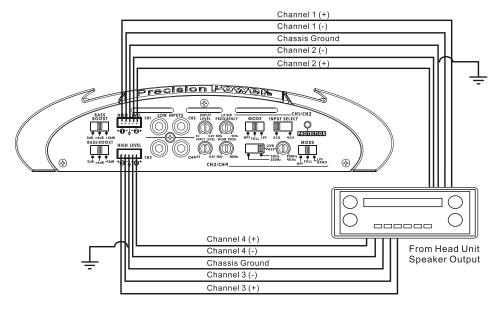
#### S200.2



#### S420.2/S580.2



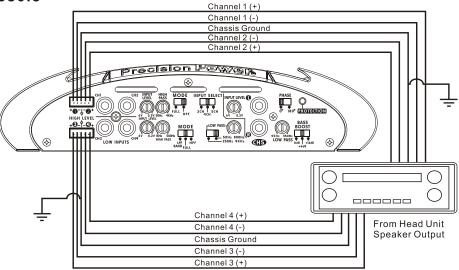
#### S320.4 / S580.4 / S760.4



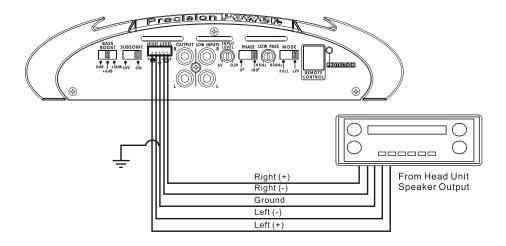
#### **High Level Inputs**

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

#### S580.5

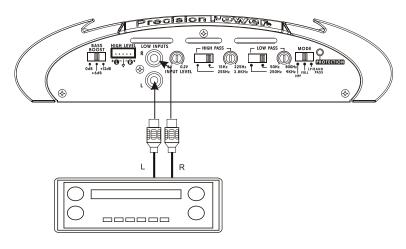


#### S270.1

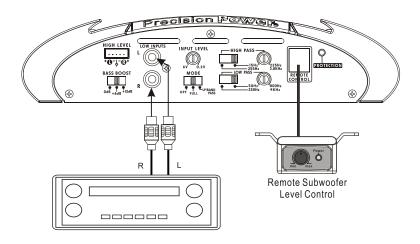


#### Low Level Inputs

#### S200.2

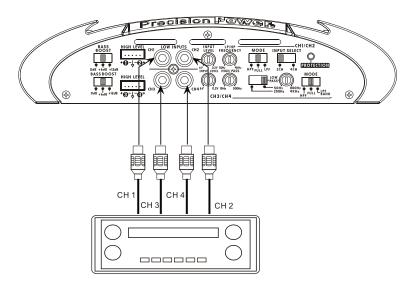


#### S420.2/S580.2

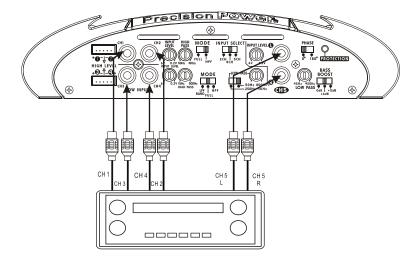


### Low Level Inputs

#### S320.4/S580.4/S760.4

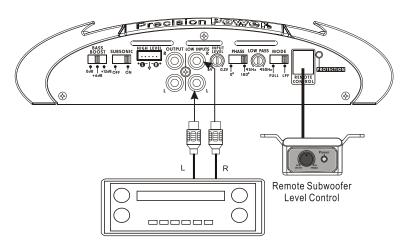


S580.5



#### Low Level Inputs

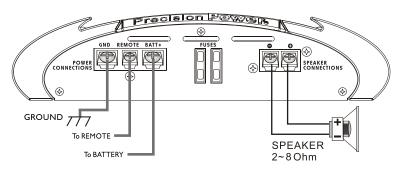
#### S270.1



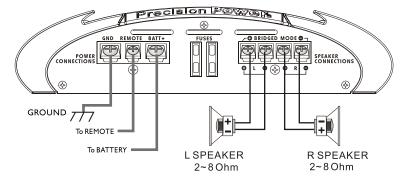
#### **Speakers Connections**

#### $MONOBLOCK\ AMPLIFIER:$

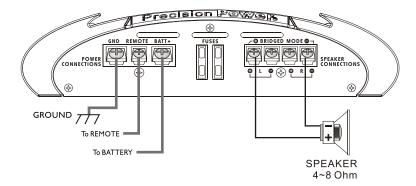
S270.1



#### 2 CHANNEL STEREO S200.2 / S420.2 / S580.2

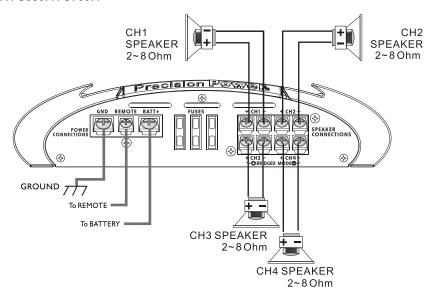


#### 2 CHANNEL BRIDGED \$200.2 / \$420.2 / \$580.2

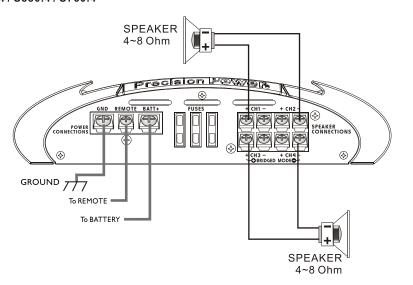


#### **Speakers Connections**

4 CHANNEL STEREO \$320.4 / \$580.4 / \$760.4

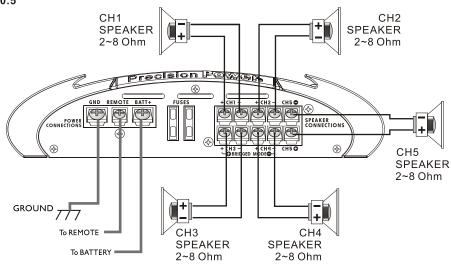


4 CHANNEL BRIDGED \$320.4 / \$580.4 / \$760.4

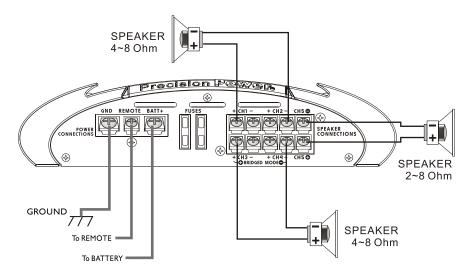


#### **Speakers Connections**

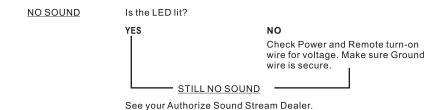
## *5 CHANNEL STEREO* \$580.5



#### 5 CHANNEL BRIDGED \$580.5

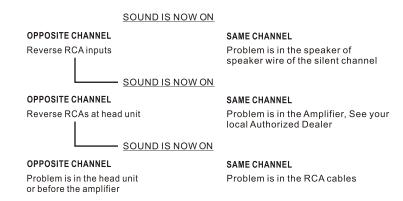


#### TROUBLE SHOOTING



#### SOUND IN ONE CHANNEL ONLY

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



#### **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 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.