

# Owner's Manual and Installation Guide

# 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.



P2.150
P2.200
P2.400
P4.140
P4.260
P4.500
P4.800
P5.610

P1.210

## **CONGRATULATIONS!**

You now own a Picasian 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 your 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.

## **IMPORTANT INFORMATION**

Serial#			
Dealer's	Name		
Date of P	urchase		
Installati	on Shop		
Installati	on Date		

## CAUTION!

Prolonged listening at extremely high levels may result in hearing loss. Even though your new **Soundstream**  $\mathcal{D}_{i \leftarrow s}$  **Amplifier** sounds better than anything you've heard, exercise caution to prevent hearing damage.

# FEATURES: P1.210/P2.150/P2.200/P2.400/P4.140 P4.260/P4.500/P4.800/P5.610

- Four Channel MOSFET Power Amplifier
- Heavy-duty Aluminum Alloy Heatsink
- Class A-B Operation
- Continuously-Variable HP/LP Pass Crossover: 50Hz-4KHz
- Bass Boost: 0 or +18dB
- Remote Subwoofer Level Control
- Continuously-Variable Input Gain Control
- Nickel Plated RCA And Speaker Level Inputs
- Remote Turn-On/Turn-Off Circuit
- MOSFET Pulse Width Modulated Power Supply
- 2 Ohm stable
- Soft Turn-On Circuit
- Thermal and Speaker Short Protection Circuitry
- LED Power and Protection Indicators

## **Specifications**

Signal / Noise Ratio	105dB
THD	0.015%
Frequency Response	10 - 35k
Damping Factor	>250
Signal Voltage Range	200mV - 6V
Power Voltage Range	11V - 16V

## **Power and Fuse Ratings**

Model	4 Ohm	2 Ohm	Bridged	Fuse
P1.210	130w x 1	210w x 1	_	25A x 1
P2.150	50w x 2	75w x 2	150w x 2	20A x 1
P2.200	70w x 2	100w x 2	200w x 2	25A x 1
P2.400	125w x 2	200w x 2	400w x 1	25A x 2
P4.140	25w x 4	35w x 4	_	15A x 1
P4.260	45w x 4	65w x 4	130w x 2	20A x 2
P4.500	80w x 4	125w x 4	250w x 4	25A x 2
P4.800	125w x 4	200w x 4	400w x 2	80A x 1
P5.610	60w x 4 & 170 x 1	85w x 4 & 270 x 1	170w x 4 & 270 x 1	70A x 1

### **Dimensions**

Model	Length	Width	Height
P1.210	7.75" (197.4mm)	8.25" (207mm)	2.1" (53mm)
P2.150	7.0" (177.4mm)	8.25" (207mm)	2.1" (53mm)
P2.200	8.6" (217.4mm)	8.25" (207mm)	2.1" (53mm)
P2.400	12" (307.4mm)	8.25" (207mm)	2.1" (53mm)
P4.140	7.4" (187mm)	7.4" (188mm)	1.8" (45mm)
P4.260	11.6" (295mm)	8.25" (207mm)	2.1" (53mm)
P4.500	13.6" (345mm)	8.25" (207mm)	2.1" (53mm)
P4.800	19.8" (505mm)	8.25" (207mm)	2.1" (53mm)
P5.610	19.4" (495mm)	8.25" (207mm)	2.1" (53mm)

#### **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 Picasso Amplifiers feature built-in electronic crossovers. The Picasso 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 Picasion 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 Picaso 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**

Fuses protect both the amplifier and the electrical system of your vehicle from faulty conditions. If you must replace the fuse in your  $\mathcal{D}_{act}$  Amplifier, use a fuse of exactly the same type and rating. A different type or rating may result in damage or cause a fire.

#### REMOTE GAIN CONTROL

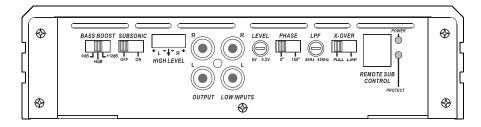
The P1.210, are equipped with a

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

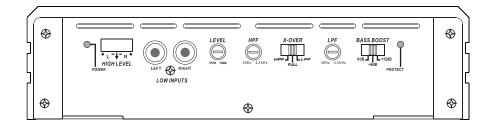
P1.210

#### LEFT VIEW



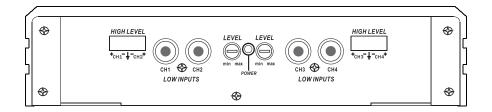
## P2.150 P2.200 P2.400

#### LEFT VIEW



## P4.140

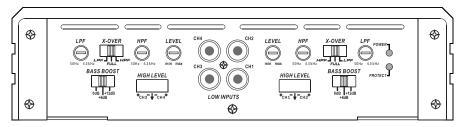
### RIGHT VIEW



## PANEL LAYOUT

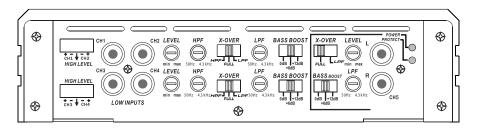
P4.260 P4.500 P4.800

#### LEFT VIEW



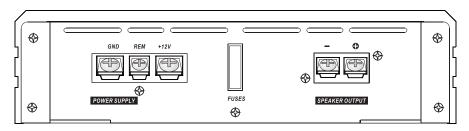
## P5.610

#### LEFT VIEW



## P1.210

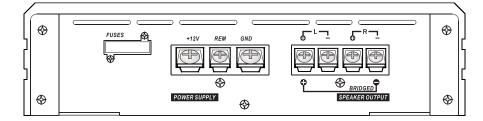
#### RIGHT VIEW



## PANEL LAYOUT

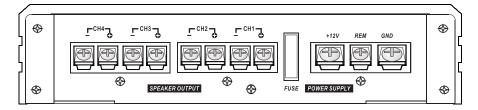
P2.150 P2.200 P2.400

#### RIGHT VIEW



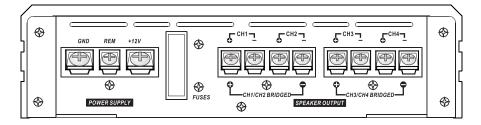
## P4.140

#### RIGHT VIEW



# P4.260 P4.500 P4.800

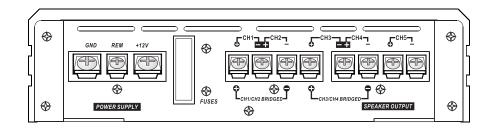
### RIGHT VIEW



## PANEL LAYOUT

P5.610

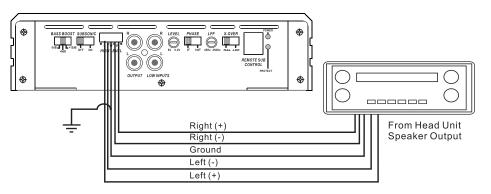
#### RIGHT VIEW



## **High Level Inputs**

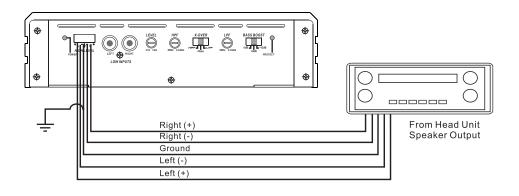
**WARNING:** If you use High Level (Speaker) inputs, do not use the Low Level inputs at the same time.

## P1.210

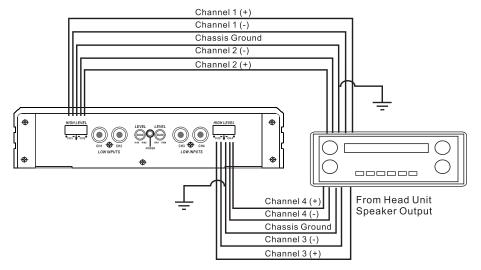


# **High Level Inputs**

## P2.150 P2.200 P2.400

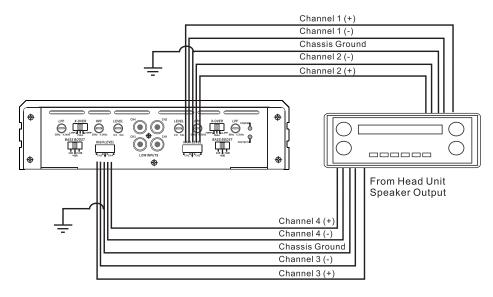


## P4.140

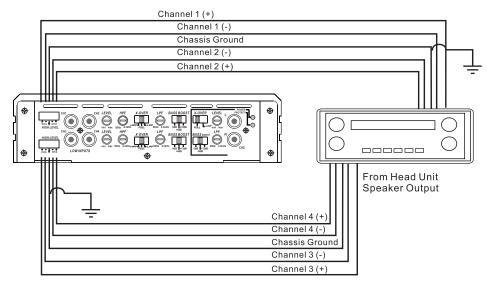


# **High Level Inputs**

## P4.260 P4.500 P4.800

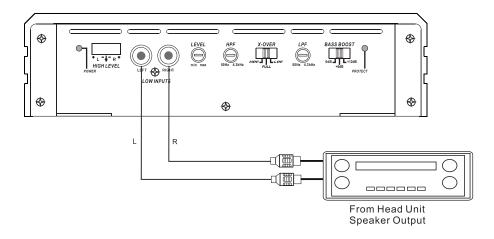


P5.610

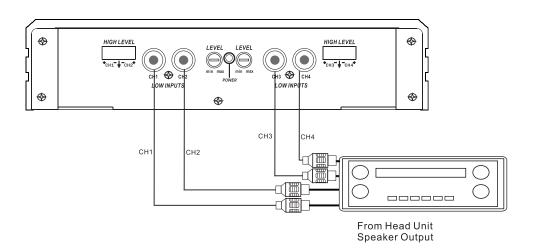


## Low Level InPuts

## P2.150 P2.200 P2.400

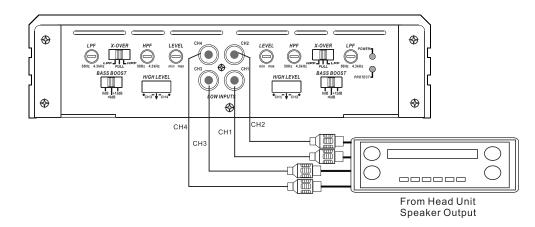


## P4.140

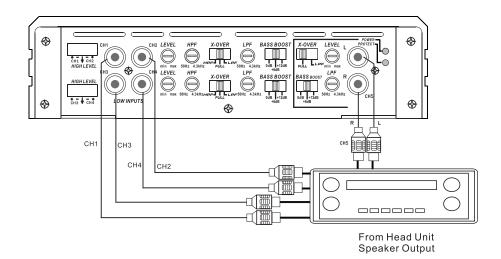


### Low Level InPuts

## P4.260 P4.500 P4.800

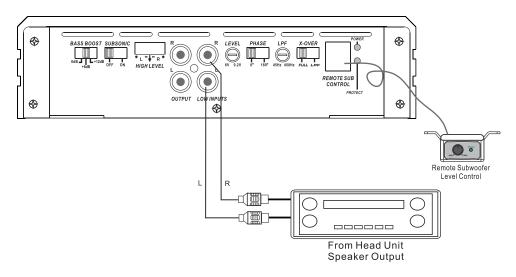


## P5.610



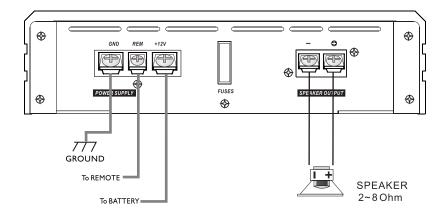
# Low Level Inputs

## P1.210



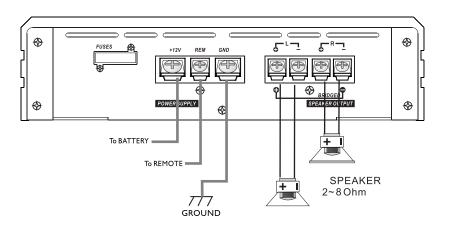
# **Speakers Connections**

1Ch.Stereo: P1.210

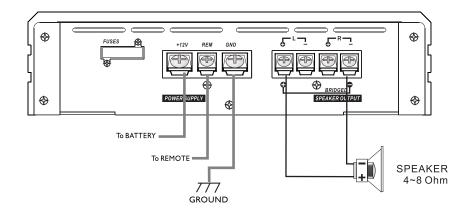


# **Speakers Connections**

2Ch.Stereo:P2.150 P2.200 P2.400

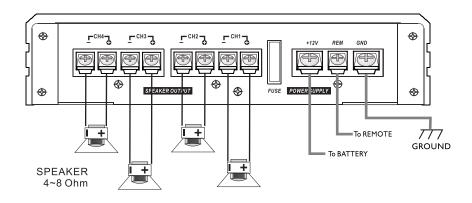


2Ch.Bridged:P2.150 P2.200 P2.400

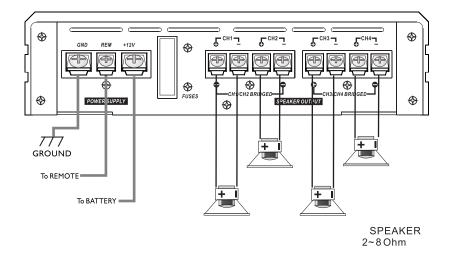


# **Speakers Connections**

## 4Ch.Stereo:P4.140

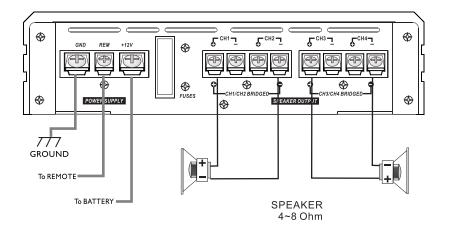


## 4Ch.Stereo:P4.260 P4.500 P4.800

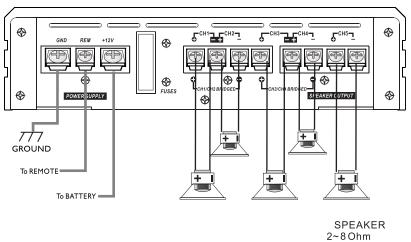


# **Speakers Connections**

# 4Ch.Bridged:P4.260 P4.500 P4.800

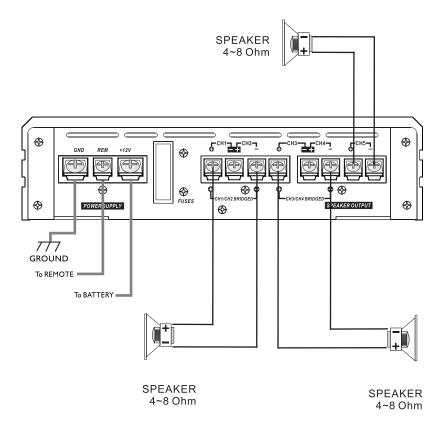


## 5Ch.Stereo:P5.610

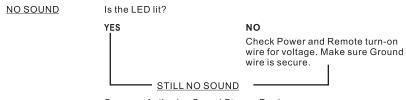


## **Speakers Connections**

5Ch.Bridged:P5.610



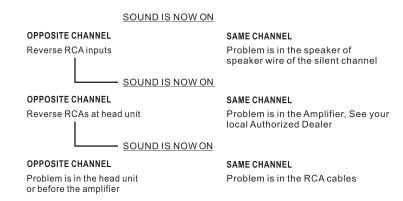
#### TROUBLE SHOOTING



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.



## **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.