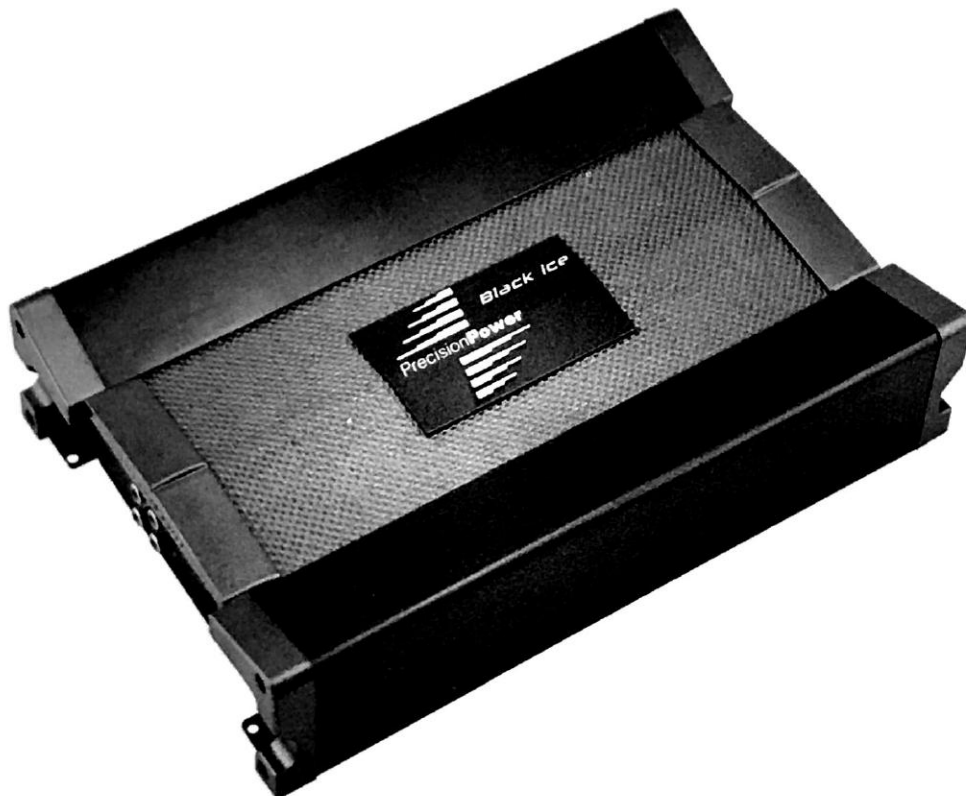


*Precision***Power**®

Absolutely State of the Art Mobile Audio™

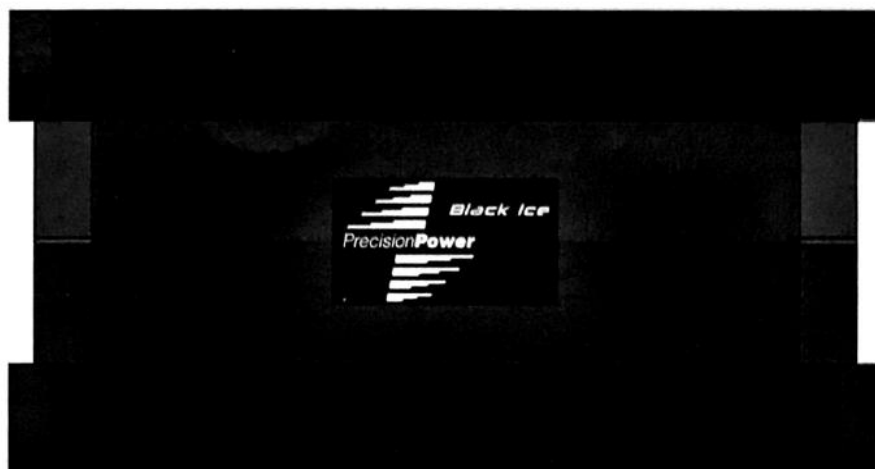


BLACK ICE

Ice 800.2 *Ice* 1000.4 *Ice* 1600.4 *Ice* 2200.5
Ice 1300.1D *Ice* 2600.1D *Ice* 5000.1D *Ice* 7000.1D

Instruction Manual

INTRODUCTION



Amplifier's provide high-performance sound reinforcement for you'r mobile audio equipment. The Multi-Mode bridging capabilities allow flexibility In hosting several different speaker configurations.

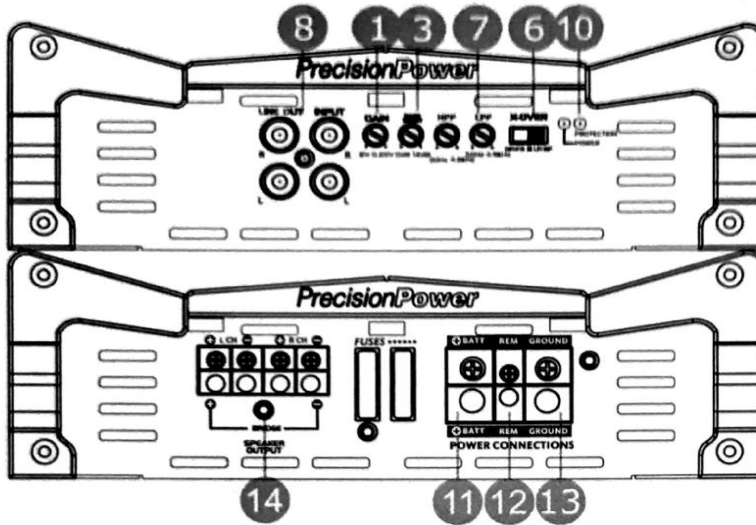
To achieve optimum performance, it is highly recommended that you read

FEATURES

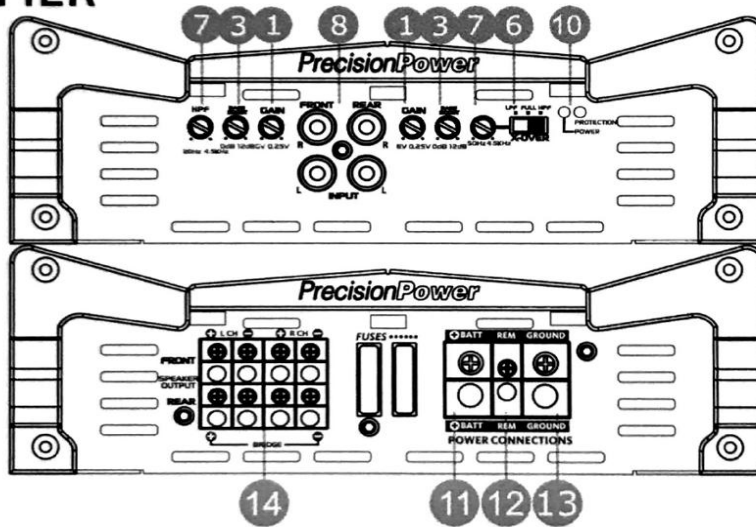
- .Regulated MOSFET PWM Power Supply
- .Three-way Protection Circuitly
- .Pre-AMP Low Level Outputs - 2CH AMP
- .Low Level Input Sensitivity:250mV ~ 6V
- .Frequency Response:10 ~ 35KHz
- .Damping Factor:250
- .Total Harmonic Distortion:0.05%
- .Signal-to-Noise Radio:100dB
- .Channel Separation:65dB
- .Variable 20~4.5KHz 12dB High Pass Crossover
- .Variable 50~4.5K/1KHz 12dB Low Pass Crossover
- .Variable 50~1KHz 12dB High Pass Crossover - 5CH
- .Variable 500~4K/1KHz 12dB Low/Band Pass Crossover - 5CH
- .Variable 40~220Hz 24dB Low Pass Crossover -1/5CH AMP
- .Variable 20~50Hz 24dB Subsonic Crossover - 1/5CH AMP
- .Variable 0-12dB 45Hz Bass Boost
- .Variable remote dsash mounts gain control - 1/5CH AMP
- .4 Gauge Power/Ground & 8 Gauge Speaker Terminals Connection
- .Strippable for Double Power w/2-ohm - 1CH AMP
- .Soft Start

CONTROLS&FUNCTIONS

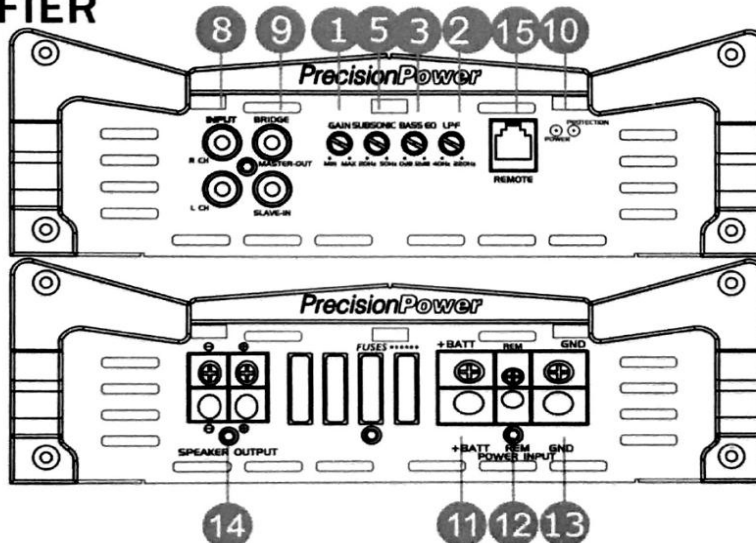
2CH AMPLIFIER



4CH AMPLIFIER

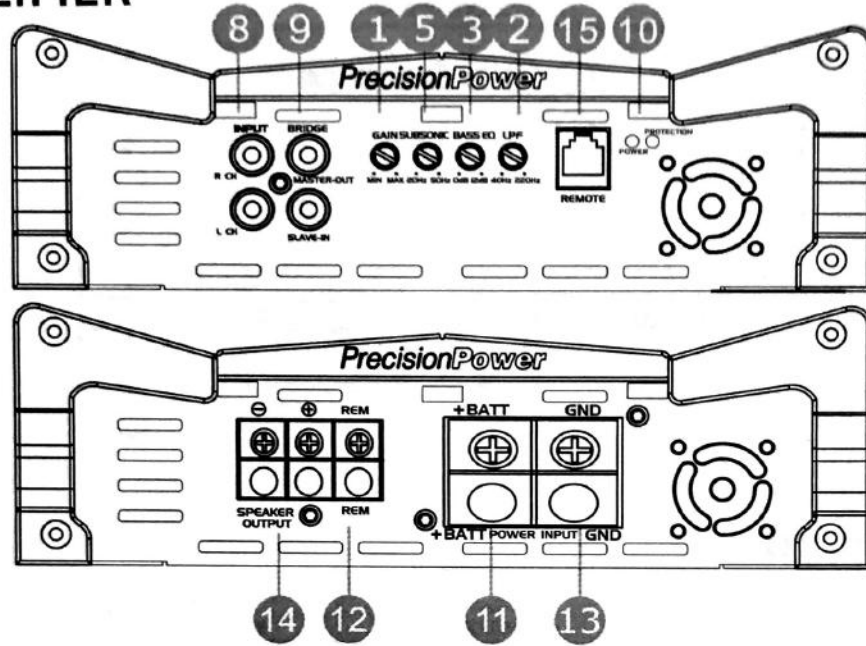


1CH AMPLIFIER

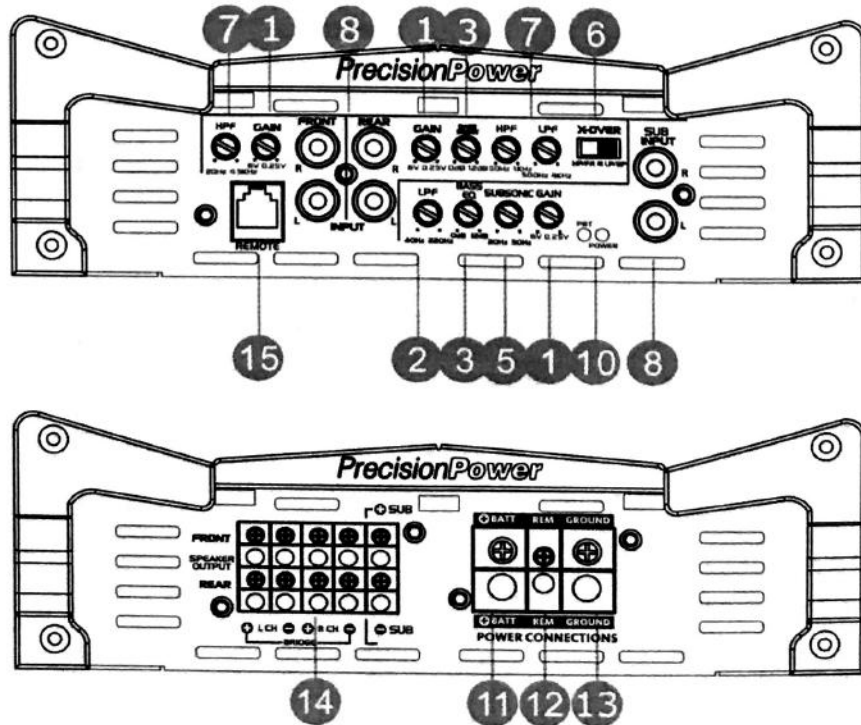


CONTROLS&FUNCTIONS

1CH AMPLIFIER



5CH AMPLIFIER



1. Input Level Adjustment

This control adjusts the amplifier's input sensitivity. Input sensitivity is variable from 200 Millivolts to 6Volt. Clockwise increases sensitivity.

Counterclockwise decreases sensitivity.

The amplifier can be driven to full power with a wide range of signal levels.

A lower signal level will require increased sensitivity lower than necessary as this would introduce unwanted distortion.

2. Low pass filter Control

This control is used to set the desired low pass frequency(50Hz~220Hz).

The filter acts to cut-off frequencies above the set-point. In general, the selected frequency should closely match the resonant frequency of the speaker box

3. Bass Boost Control

By using the bass boost function, bass notes at 35Hz-80Hz are emphasized as much as 18dB.

4. Phase Shift Control

Allows you to change the phase of your subwoofer from 0 to 180 degrees to help compensate for timing differences between drivers.

5. Subsonic Filter Control

Variable Subsonic Filter(10Hz - 50Hz)

The Subsonic filter will roll off all of the unwanted frequencies below 10Hz - 50Hz.

This will allow the amplifier to use that wasted power on the audible bandwidth.

6. Cross over Switch

Adjust the crossover for your chosen installation method.

LOW: Low pass filter-only bass tones(20Hz-4.5KHz) go to speakers. Use with woofer or sub-woofer.

FULL: No filter-all tones go to speakers. Use with full-range speakers, or with external crossovers.

HIGH: High pass filter-blocks very low tones(20Hz-4.5KHz) from the speakers.

7. HIGH/LOW Filter Freq Control

Variable HIGH/LOW Pass Filter(20Hz-4.5KHz)

The Input Circuit filters out all Frequencies Below 20Hz....4.5KHz

8. Low Level Input/Line output RCA jack

These input are for signal cables from the source. Always use high quality shielded Rca cables.

9. Bridge mode Input RCA jack

These input are for master signal cables from the source.

These output are for slave amp signal.

10.LED Indicator

POW(power): This GREEN LED will illuminate when the amplifier is turned "on". If it fails to illuminate, check the power connections to the Amplifier and fuse

PRT(Protection): The amplifier protection circuitry will disable the amplifier if input overload, short circuit or extremely high temperature conditions are detected.

When the protection mode is in operation, the LED indicator on the side 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 shut down due to a thermal overload condition, please allow it to cool down before restarting.

If the amplifier shut down because of an input overload or short circuit, be sure to repair these conditions before attempting to power up the amplifier again.

11.B+ Terminal(Battery positive)

Due to the power requirements of the Amplifier, this connection should be made directly to the positive(+) terminal of battery. For safety measure, install an in-line fuse Holder (not included) as close to the battery positive(+) terminal as possible with an ampere rating; not to exceed total value of fuses in Amp.

12.Remote Power ON

13.B - Terminal(Chassis ground)

To avoid unwanted ignition noise caused by ground loops, it is essential that the Amplifier be grounded to a clean, bare, metal surface of the vehicles chassis.

Note: GROUND WIRE SHOULD NOT BE EXTENDED MORE THAN 3FT(1MEYER).

14.Speaker terminals

15.Remote control input

Remote level control: This control adjusts the level for the amplifier speaker output

Planning & Mounting Your System

The mounting position of your Amplifier will have a great effect on its ability to dissipate the heat generated during normal operation.

Under normal conditions , the heatsink will dissipate sufficient heat to avoid thermal shutdown. However please do not install the amplifier in a wooden box or similar device as this will prevent heat dissipation into the atmosphere.

Temperatures in car trunks have been measured as high as (155°F) in the summer time. since the thermal shut-down point for the amplifier is (158°F) it is easy to see that it must be mounted for maximum cooling capability.

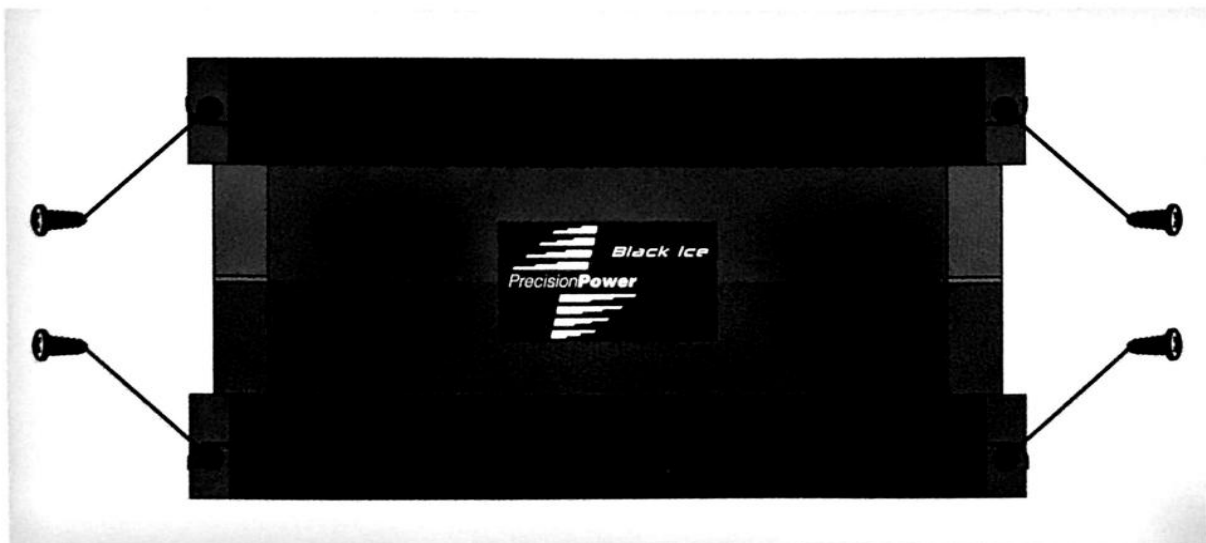
To achieve maximum advantage of convection air flow in an enclosed trunk, mount the amplifier in a horizontal position.

Cooling requirements are considerably relaxed when mounting inside the passenger compartment since the driver will not often allow temperatures to reach a critical point. Floor mounting under the seat is usually satisfactory as long as there is at least 1 inch of clearance (2.54 cm) above the Amplifier's fins for ventilation.

A. Select a suitable location that is convenient for mounting ,is accessible for wiring. And has ample room for air circulation and cooling.

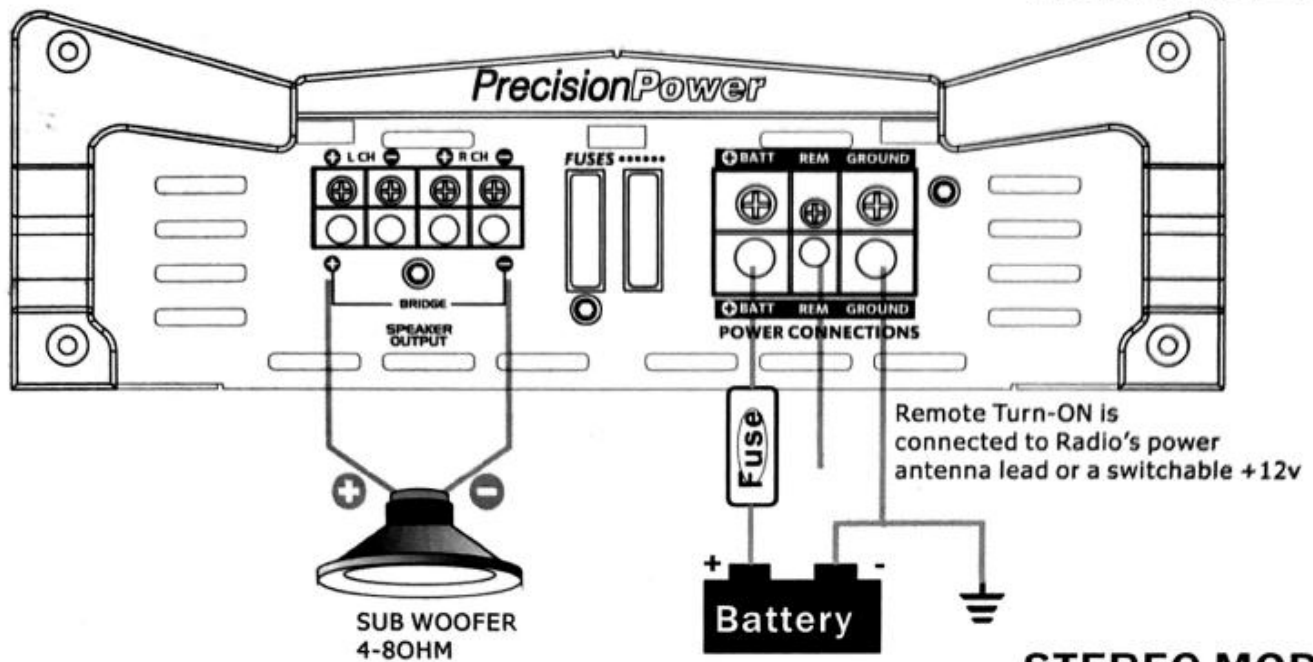
B. Use the amplifier as a template to mark the mounting holes. Remove the Amplifier and drill holes. Use extreme caution ,inspect underneath surface before drilling!

C. Secure the Amplifier using the screws provided.

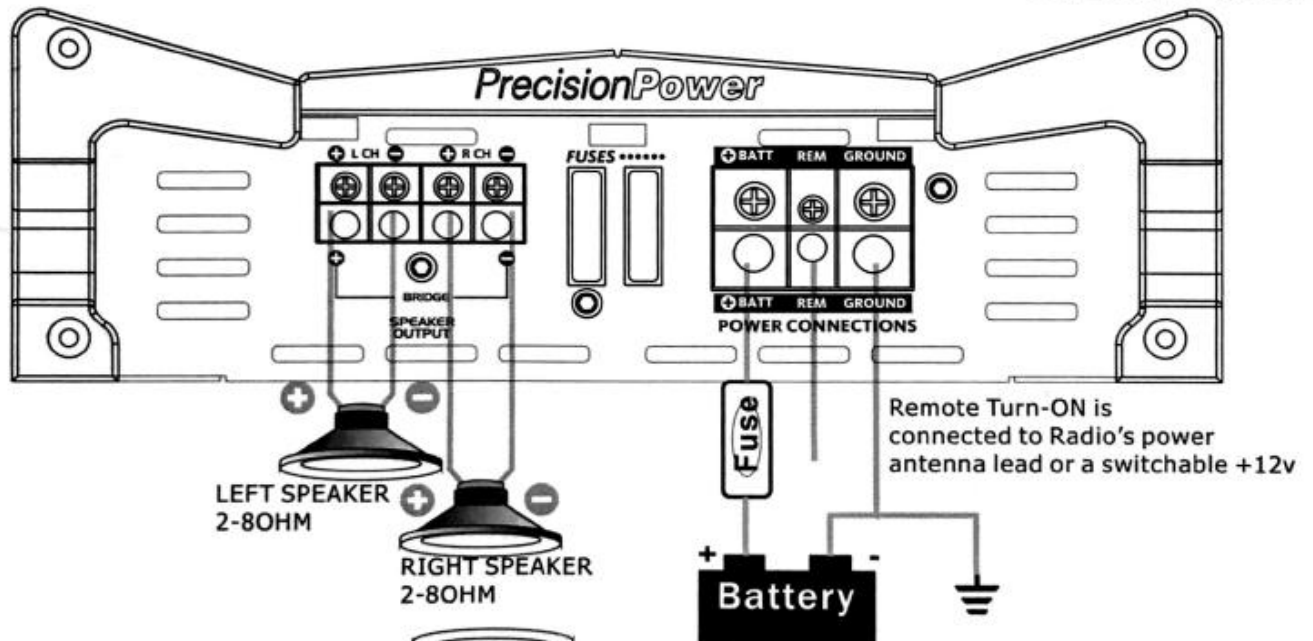


2CH AMPLIFIER

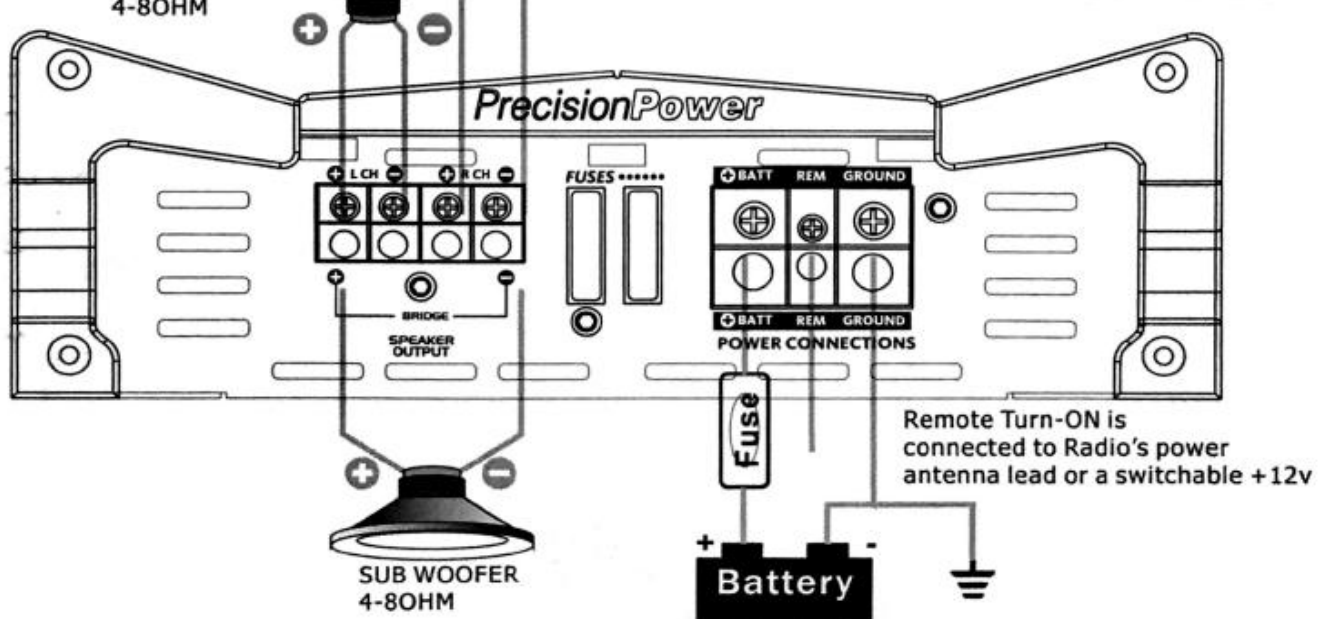
MONO MODE



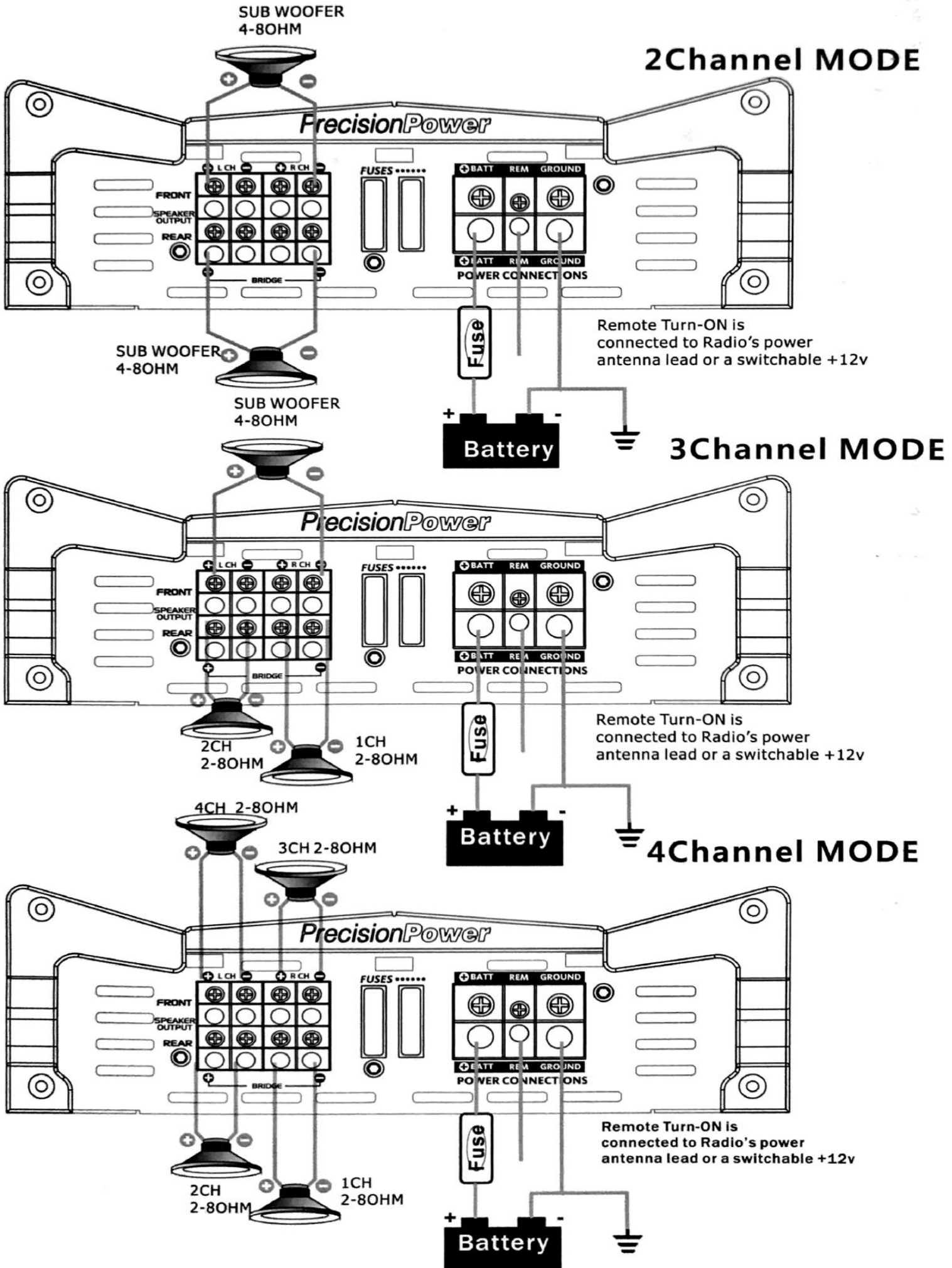
STEREO MODE



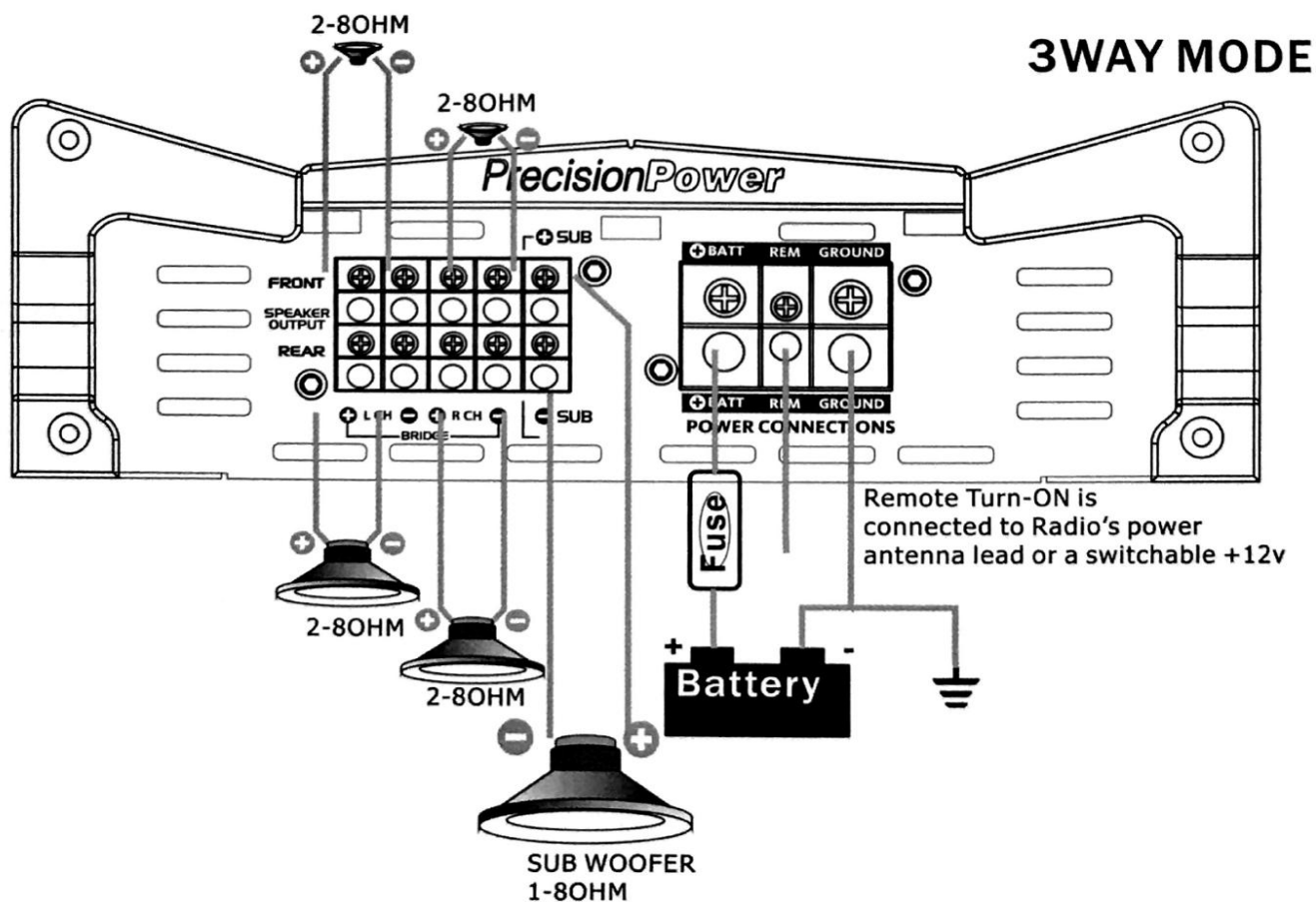
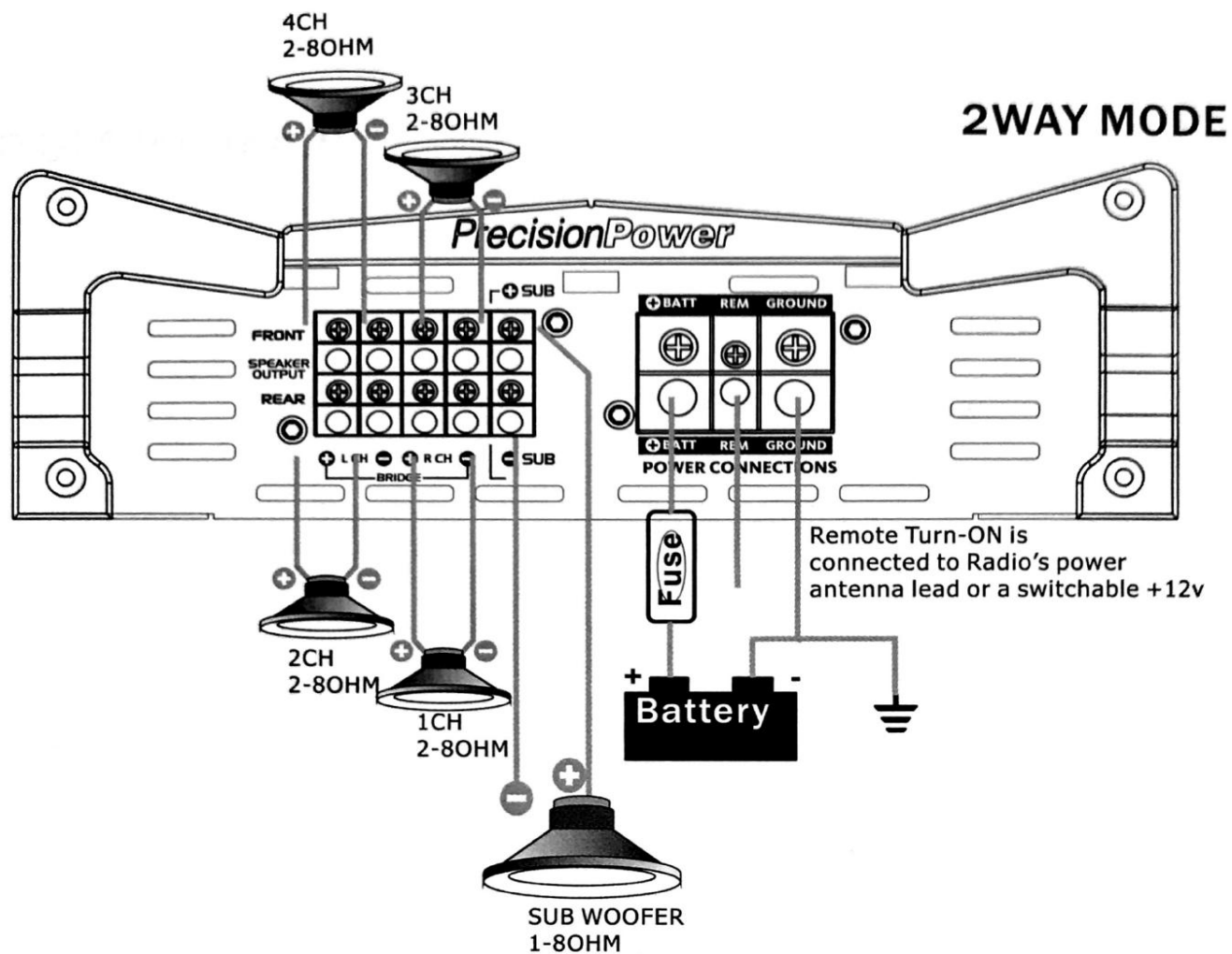
TRAY MODE



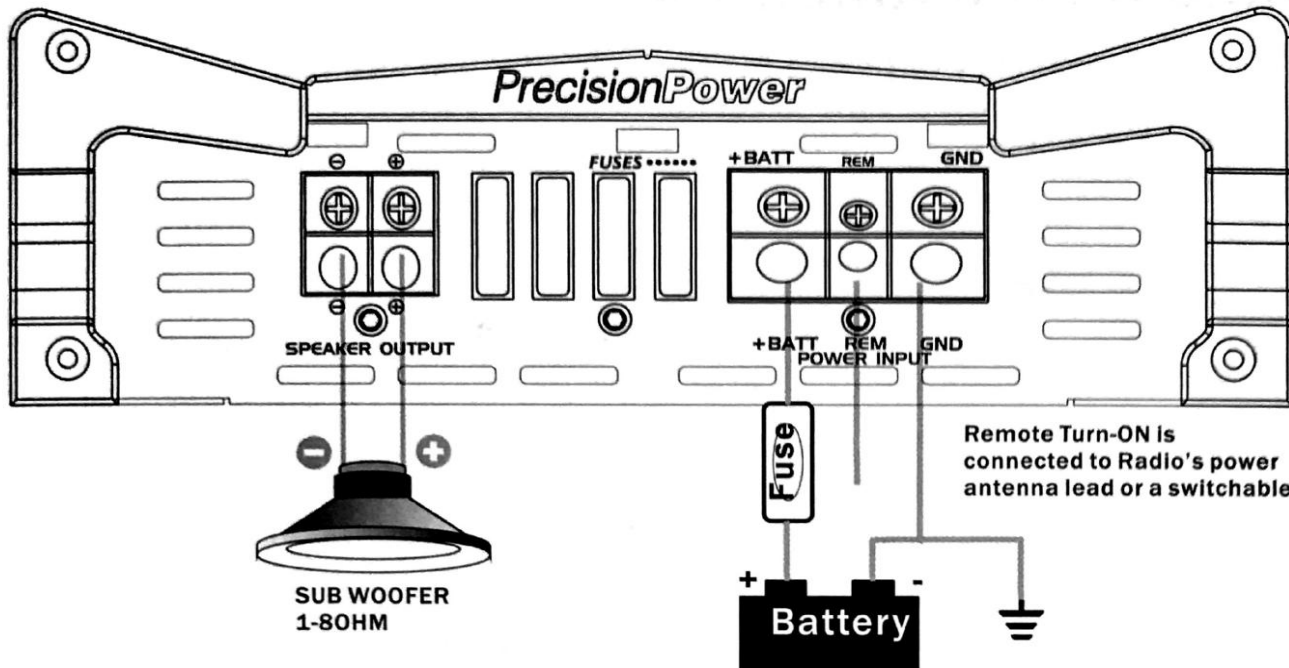
4CH AMPLIFIER



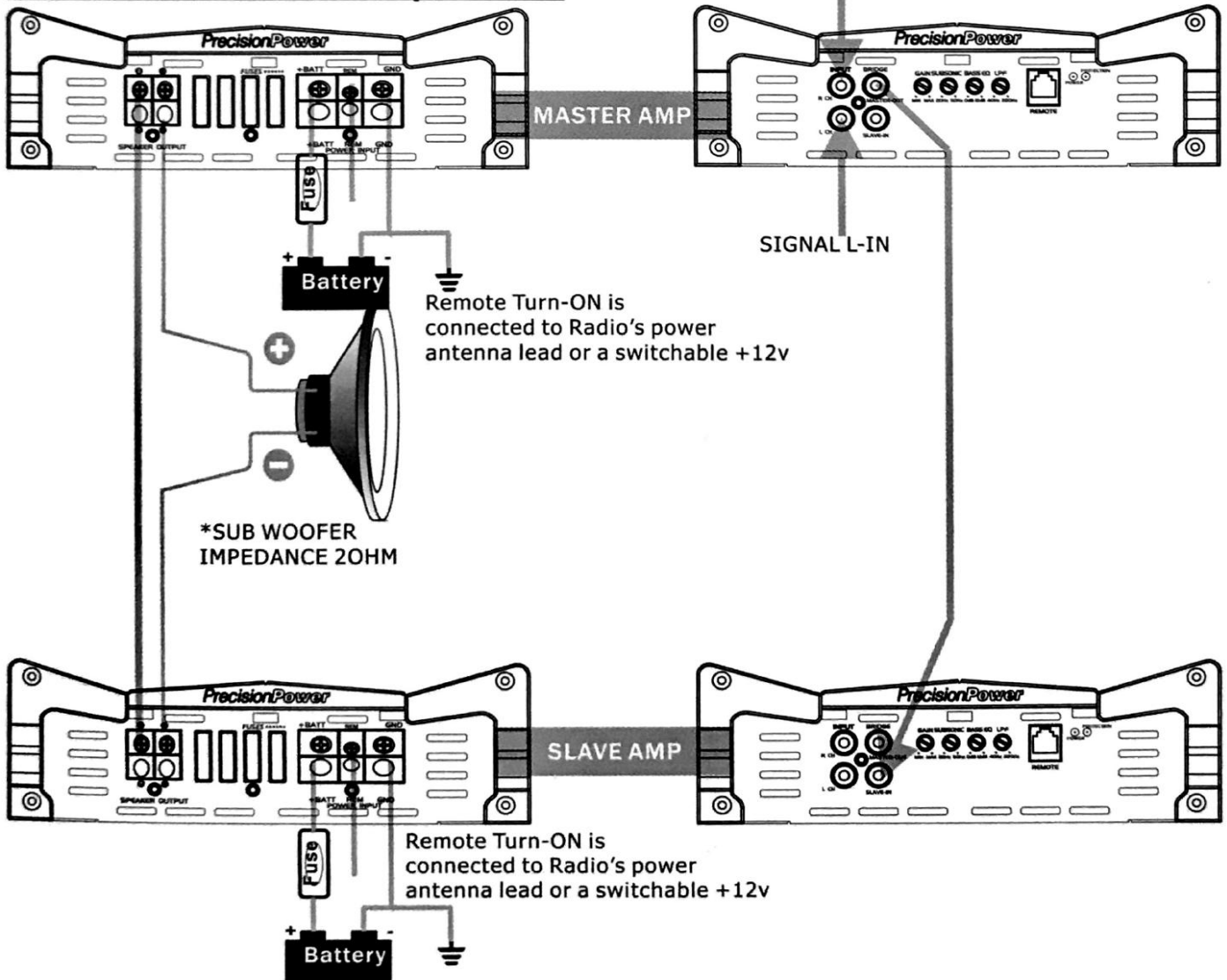
5CH AMPLIFIER



1CH AMPLIFIER



BRIDGING TWO Amplifier's



Tuning on the Amplifier

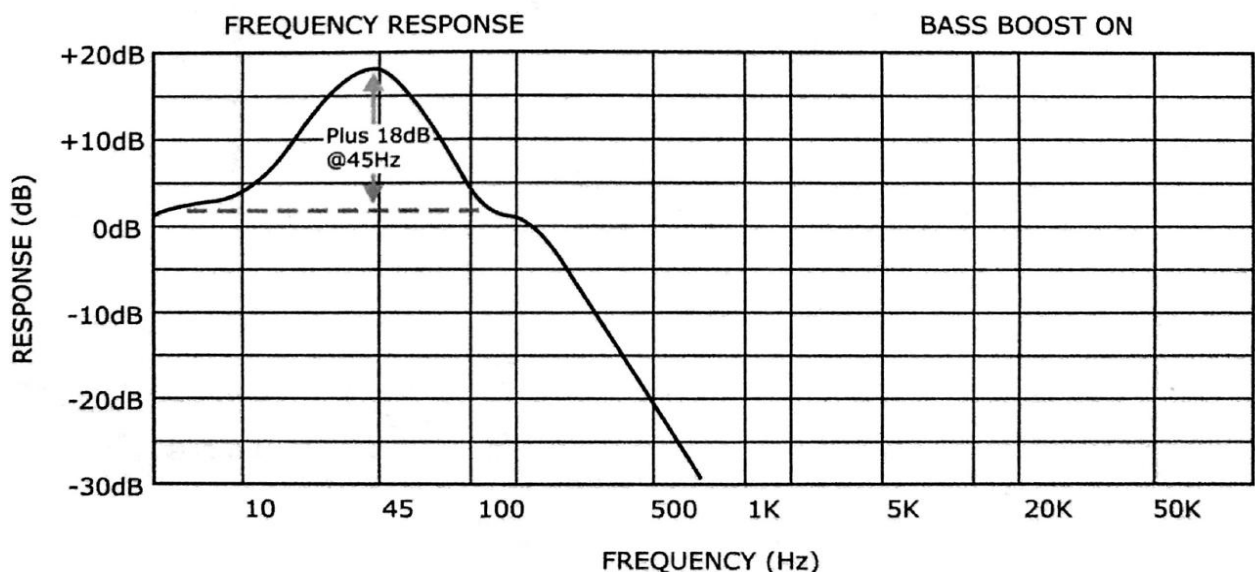
The amplifier automatically turns on a few seconds after you turn your vehicle's ignition switch to ACC or ON or turn on your auto sound system, depending on how you wired the system. The POWER indicator on the top of the amplifier lights when the amplifier is on.

Important: Your amplifier requires 30 amps or more of power from your vehicle's battery during operation. To protect your battery from discharging, do not operate the amplifier unless your vehicle is running.

Adjusting The Audio Level

For the best performance, you must set GAIN(MIN/MAX) on the side of the amplifier to adjust the level of the audio signals that enter the amplifier.

1. Use a screwdriver to turn GAIN(MIN/MAX) fully counterclockwise to MIN.
 2. Turn the auto sound system's volume control to about one-third of its full range.
 3. Adjust GAIN(MIN/MAX) to a comfortable listening level.
 4. Turn up the auto sound system's volume control until the sound begins to distort. Then immediately turn the volume down to a point just before where the distortion began.
- Caution: Never turn up the auto sound system's volume control more than needed to adjust the audio level, more than two thirds of its maximum volume.
5. Adjust GAIN(MIN/MAX) until the sound is at the maximum level you want the amplifier to produce
 6. Adjust the auto sound system's volume control to a comfortable listening level.



NOTE: Raising the Bass frequency allows higher frequencies to reach the bass speakers centered around 45Hz. This "BUMP" can have a dramatic effect on the bass system's apparent volume. Use caution! When adjusting this control as serious subwoofer damage may result from overpowering or overexcursion.

Trouble Shooting

SYMPTOMS	CHECK	REMEDY
NO SOUND	Is the power LED illuminated? (NO)	Check all fuses to amplifier. Be sure Turn-on lead is connected Check signal leads. Check gain control. Check Tuner/Deck volume level. Clean contacts on fuse holders.
	Is the Diagnostic LED illuminated(YES)	Check for speaker short or amplifier overheating.
AMP NOT SWITCHING ON	No power to power wire	Repair power wire or connections.
	No power to remote wire with receiver on	Check connections to radio.
	Burnt or broken fuse	Replace fuse
NO SOUND IN ONE CHANNEL	Check Speaker Leads	Inspect for short circuit or an open connection.
	Check Audio Leads	Reverse Left and Right RCA inputs to determine if the problem is occurring before the amp.
AMP TURNING OFF MEDIUM/ HIGH VOLUME	Check Speaker load impedance	Be sure proper speaker load impedance recommendations are observed. (If you use an ohmmeter to check speaker resistance, please remember that DC resistance and AC impedance may not be the same.)
PROTECTION LAMP ON	Shut down	Turn radio down Wait for AMP to cool
	Speaker wires shorted	Separate speaker wires and insulate

SPECIFICATIONS

MODEL	CHANNEL	RMS@4Ohms	RMS@2Ohms	Bridged @4Ohms	Max Power	DIMENSIONS (W) x (H) x (L)
Ice 800.2	2	130W x 2CH	200W x 2CH	400W x 1CH	800Watt	8.38 x 2.68 x 13.11"
Ice 1000.4	4	80W x 4CH	125W x 4CH	250W x 2CH	1000Watt	8.38 x 2.68 x 12.71"
Ice 1600.4	4	130W x 4CH	200W x 4CH	400W x 2CH	1600Watt	8.38 x 2.68 x 15.47"
Ice 2200.5	5	90W x 4CH + 380W x 1CH	135W x 4CH + 560W x 1CH	270W x 2CH 500W x 1CH	2200Watt	8.38 x 2.68 x 17.04"

MODEL	CHANNEL	RMS@4Ohms	RMS@2Ohms	RMS@1Ohms	Max Power	DIMENSIONS (W) x (H) x (L)
Ice 1300.1D	1	300W mono	450W mono	650W mono	1300Watt	8.38 x 2.68 x 10.35"
Ice 2600.1D	1	600W mono	900W mono	1300W mono	2600Watt	8.38 x 2.68 x 13.11"
Ice 5000.1D	1	1200W mono	1700W mono	2500W mono	5000Watt	8.38 x 2.68 x 17.04"
Ice 7000.1D	1	1000W mono	1500W mono 3500W mono	2300W mono	7000Watt	8.38 x 2.68 x 20.98"