

# PYLE®

PyleUSA.com



**INV559BA**  
5 Channel 3000 Watts Max  
Mosfet Amplifier



**INV669BA**  
6 Channel 3000 Watts Max  
Mosfet Amplifier



**INV500DBA**  
1 Channel 1000 Watts Max  
Mosfet Amplifier



**INV1000DBA**  
1 Channel 2000 Watts Max  
Mosfet Amplifier

## Invincible Series Amplifier

**USER GUIDE**

## INTRODUCTION

PYLE amplifiers provides high-performance sound reinforcement for your mobile audio equipment. Its versatility enables compatibility with optional Equalizers, Frequency Dividing Crossover Networks, and other audio processors in customized system. The Multi-Mode bridging capabilities allow flexibility in hosting several different speaker configurations.

To achieve optimum performance, it is highly recommended that you read this Owners Manual before beginning installation.

### WARNING!

High powered audio systems in a vehicle are capable of generating "Live Concert" high levels of sound pressure. Continued exposure to excessively high volume sound levels may cause hearing loss or damage.

Also, operation of a motor vehicle while listening to audio equipment at high volume levels may impair your ability to hear external sounds such as; horns, warning signals, or emergency vehicles, thus contributing to a potential traffic hazard. In the interest of safety, PYLE recommends listening at lower volume levels while driving.

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## PLANNING YOUR SYSTEM

**Before beginning the installation, consider the following**

1. *Do you plan to add additional mobile electronics equipment in the future?*

If you plan to expand your system by adding other components sometime in the future, ensure adequate space is left, and cooling requirements are met.

2. *Should you use high or low level inputs?*

Your Amplifier has been designed to accept Low-Level (Pre-Amp outputs from your radio) signal source. If your radio/source is equipped with Pre-Amp outputs, it is possible to utilize them to drive the Amplifier and connecting (Amplifier) to the 2 rear speakers. Then, use the built-in power of your radio to drive the 2 front speakers.

3. *Are your components matched?*

The RMS power rating of your speaker's must be equal or greater than the RMS power rating of your amplifier. Your speaker(s) also must be 2- 8 Ohms impedance for stable amplifier operation. Impedance information is normally printed on the speaker basket or magnet.

4. *Where will the amplifier be installed?*

Consider both the length of your leads and routing when determining the mounting location. It is best to run power and RCA wiring on opposite sides of the vehicle to prevent induced noise. Pre-Amp input Jacks require a length (depending on location) of high quality shielded male to male RCA patch cord.

## WIRING CONNECTION

### CAUTION:

**AS A PRECAUTION, DISCONNECT THE POWER WIRE FROM THE BATTERY WHILE MAKING THE POWER AND GROUND CONNECTIONS TO THE AMPLIFIER.**

4/8 GAUGE (Thicker if planning for additional Amplifiers) wire is recommended for both the power and ground wires. 12 Gauge, For the remote turn-on wire, 16 Gauge. Both types are available at most Mobile Audio Dealers or Installation Shop.

### 1. Ground: To Vehicle Chassis

To avoid unwanted ignition noise caused by ground loop, it is essential that the Amplifier be grounded to a clean, bare, metal surface of the vehicle's Chassis.

**NOTE:**

**GROUND WIRE SHOULD NOT BE EXTENDED MORE THAN 3 FT, (1 METER).**

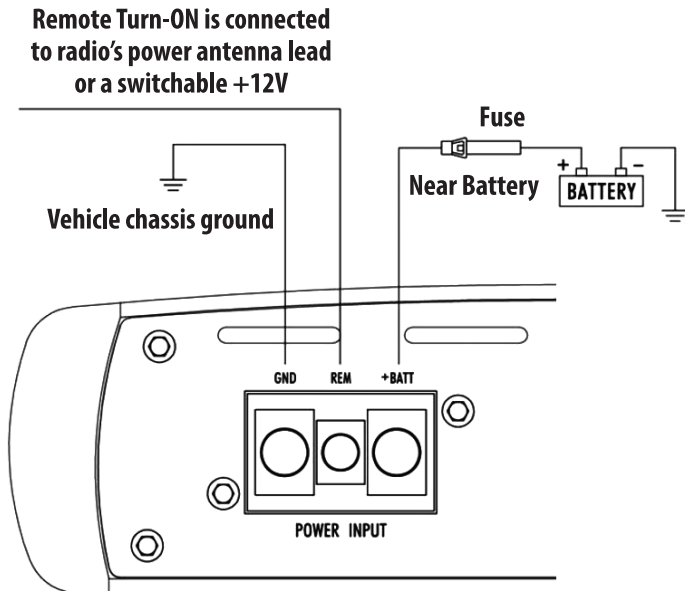
### 2. +12 Volt (Fused) Constant Power: To Battery (+)

Due to the power requirements of the Amplifier, this connection should be made directly to the positive (+) terminal of battery. For safety measures, 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.

### 3. Remote Turn-On Input: To Power Antenna output of Car Stereo

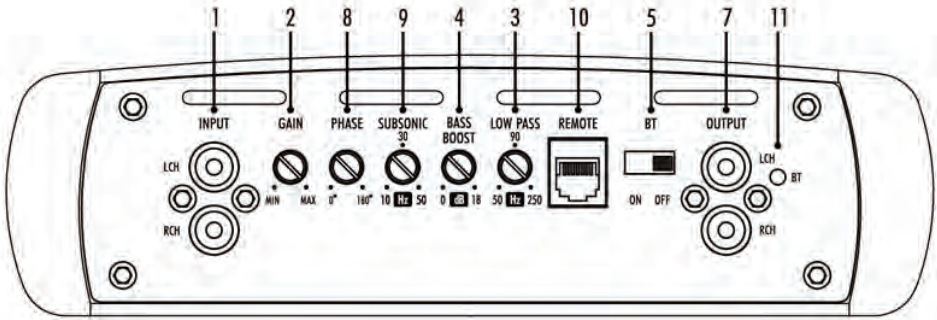
This Amplifier is turned "ON" remotely when the vehicle's stereo is turned "ON".

**NOTE: IF YOUR RADIO DOES NOT HAVE A +12 VOLT OUTPUT LEAD WHEN THE RADIO IS TURNED ON, REMOTE TERMINAL ON THE AMPLIFIER CAN BE CONNECTED TO VEHICLE'S ACCESSORY CIRCUIT THAT IS LIVE WHEN THE KEY IS "ON".**

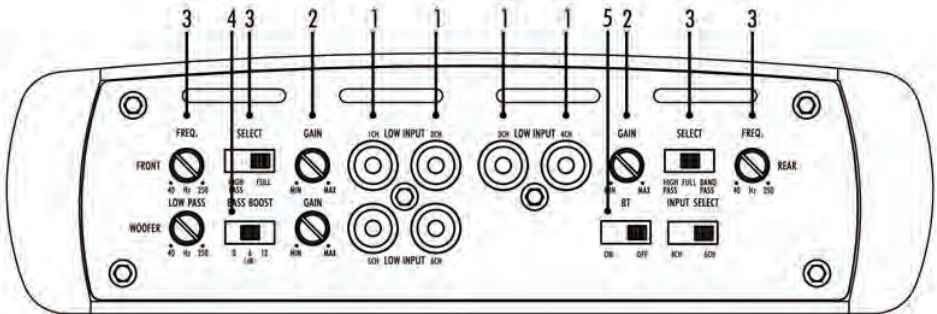


## PANEL LAYOUT

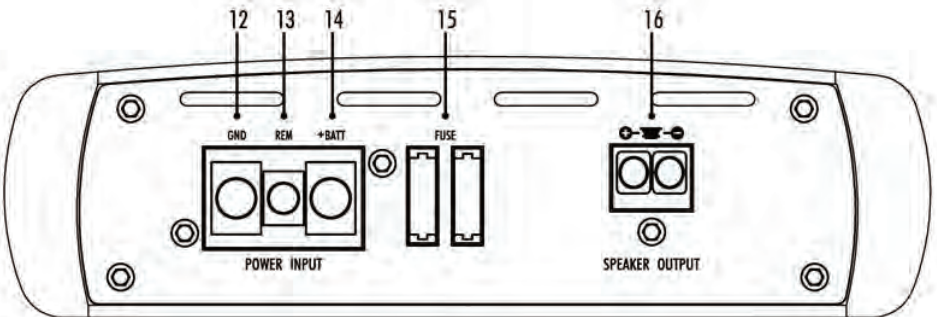
### INV500DBA/ INV1000DBA FRONT VIEW



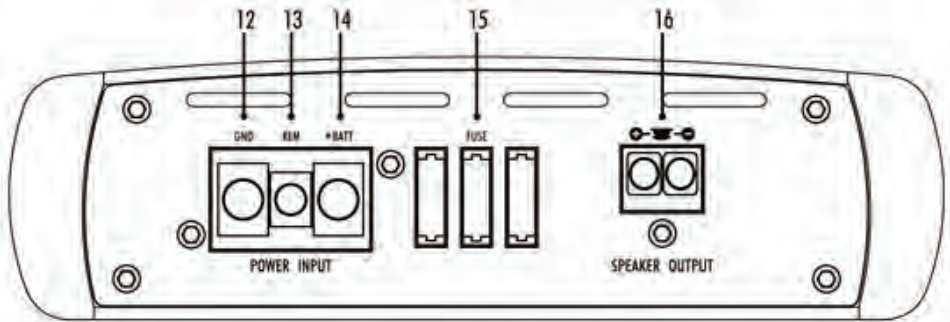
### INV559BA/ INV669BA FRONT VIEW



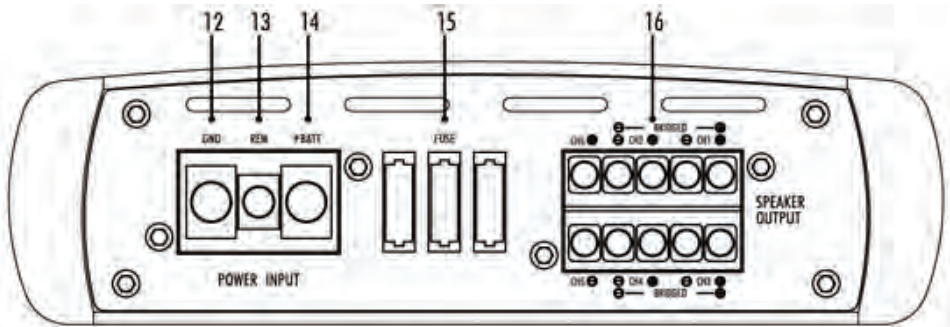
### INV500DBA REAR VIEW



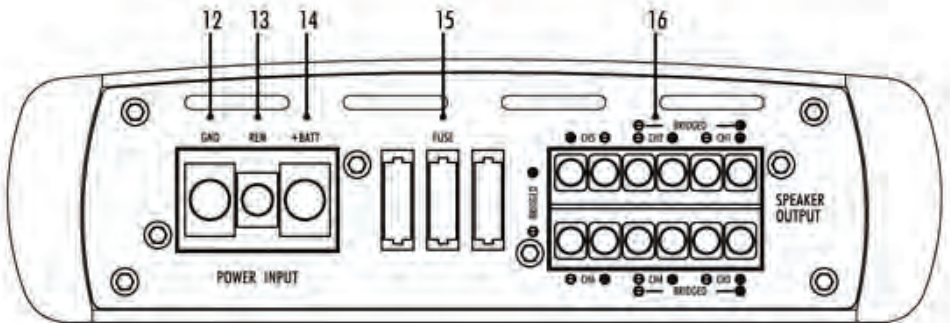
### INV1000DBA REAR VIEW



### INV559BA REAR VIEW

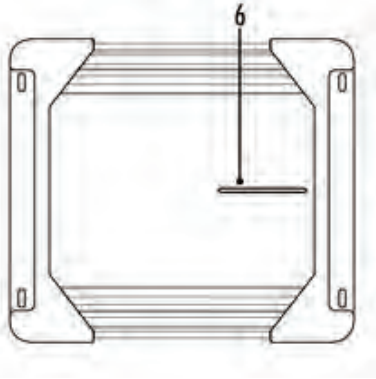


### INV669BA REAR VIEW

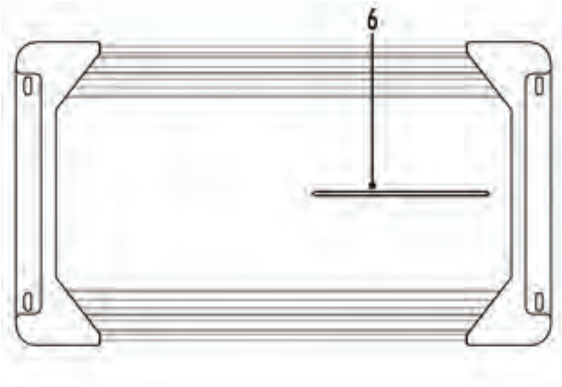


## TOP VIEW

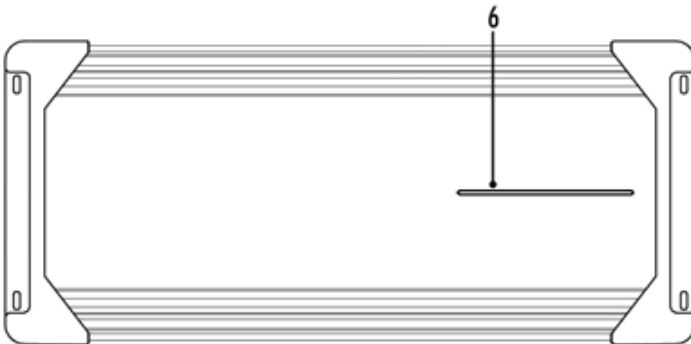
### INV500DBA TOP VIEW



### INV1000DBA TOP VIEW



### INV559BA/INV669BA TOP VIEW



## CONTROL FUNCTIONS

### 1. RCA Input jacks

These RCA input jacks are for use with source units that have RCA or Line level outputs. A source unit with a minimum level of 200mV is required for proper operation. The use of high quality twisted pair cables is recommended to decrease the passivity of radiated noise entering the system.

### 2. GAIN Control

The level control will match the amplifiers sensitivity to the source units signal voltage. The operating range is 200mW minimum to 6W maximum.

**CAUTION: Do not run the amplifier in high volume for long time. Otherwise the loudspeakers will be damaged.**

### 3. X-OVER

#### \*Full pass x-over switch

When the switch is in Full position, the full range is bypassed.

#### \* Low Pass x-over switch

**INV500DBA - INV1000DBA:** The low pass can be adjusted between 50Hz and 250Hz.

**INV559BA - INV669BA:** When the switch is in "LPF" position, frequencies lower than the low pass, frequency setting are passed. The frequency can be adjusted between 40Hz and 250Hz.

#### \*Band pass select switch

**INV559BA - INV669BA:** When the switch is in "Band pass" position, the band Pass range is bypassed.

### 4. Bass BOOST

**INV500DBA - INV1000DBA:** The boost can be adjusted between 0dB to 18dB.

**INV559BA - INV669BA:** The boost can be selected among 0dB, 6dB and 12dB.

### 5. BLUETOOTH

Wireless Bluetooth "ON/OFF"

### 6. LED

Will illuminate BLUE to indicate the amplifier is on and operating normally, and will be laminated RED if the amplifier shuts down due to short circuit DC offset, or overheating detected by on board protection circuitry.



## 7. Auxiliary Outputs

The Auxiliary outputs offer PYLE amplifiers easy, unlimited system expansion. Route RCA, from the line out of the first amplifier to the line input of a second amplifier when using a single source output.

**8. PHASE:** Allows you to invert the subwoofer phase from 0 to 180.

**9. SUBSONIC:** The frequency can be adjusted between 10Hz and 50Hz.

## 10. REMOTE

Controls the subwoofer amplifier gain from a remote location for ease of adjustment during listening.

**WARNING:** Do not connect a lee control knob from other manufacturers to the Remote sub level control of any amplifier. Even though the connectors fit properly, the control knob and connector pin position maybe different and the amplifier will be damaged.

## 11. BLUETOOTH LED Light

When the amplifier is successfully connected to the source device, the (Bluetooth) indicator will stay lit.

## 12. GND

Connect this terminal directly to the sheet metal chassis of the vehicle using the shortest wire necessary to make this connection. Always use wire of the same gauge or larger than the (+) 12 volt power wire. The chassis connection point should be scraped free of paint and dirt.

Use only quality crimped and/or soldered connectors scraped free of paint and dirt. Use only quality crimped and/or soldered connectors.

**WARNING:** Do not connect this terminal directly to the vehicle battery ground terminal or any other factory ground points.

## 13. Remote Turn ON

This terminal turns on the amplifier when (+) 12 volt is applied to it. Connect it to the remote turn on lead of the head unit or signal source.

## 14. (+) 12 Volt Power

Connect this terminal through a FUSE or CIRCUIT BREAKER to the positive terminal of the vehicle battery or the positive terminal of an isolated audio system battery.

**WARNING:** Always protect this power wire by installing a fuse or circuit breaker of the appropriate size within 12 inches of the battery terminal connection.

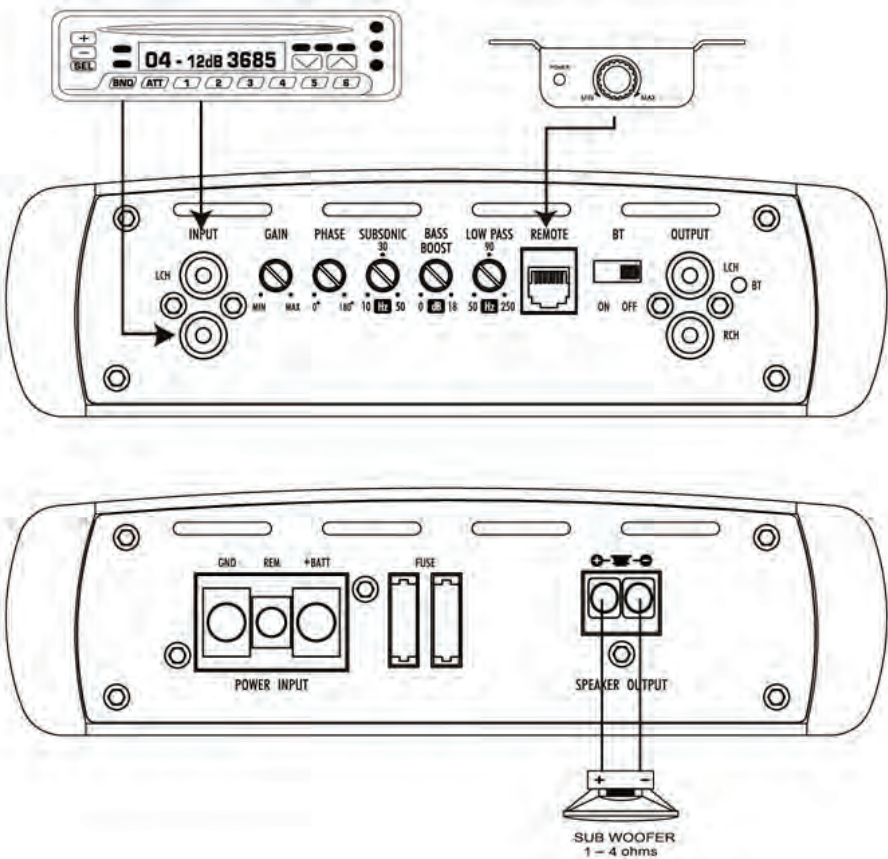
## 15. FUSE

These fuses protect the amplifier against internal electrical damage and are meant to protect the amplifier only. All other power connections should be fused at the source.

**16. SPEAKERS:** Connect subwoofers to these terminals.

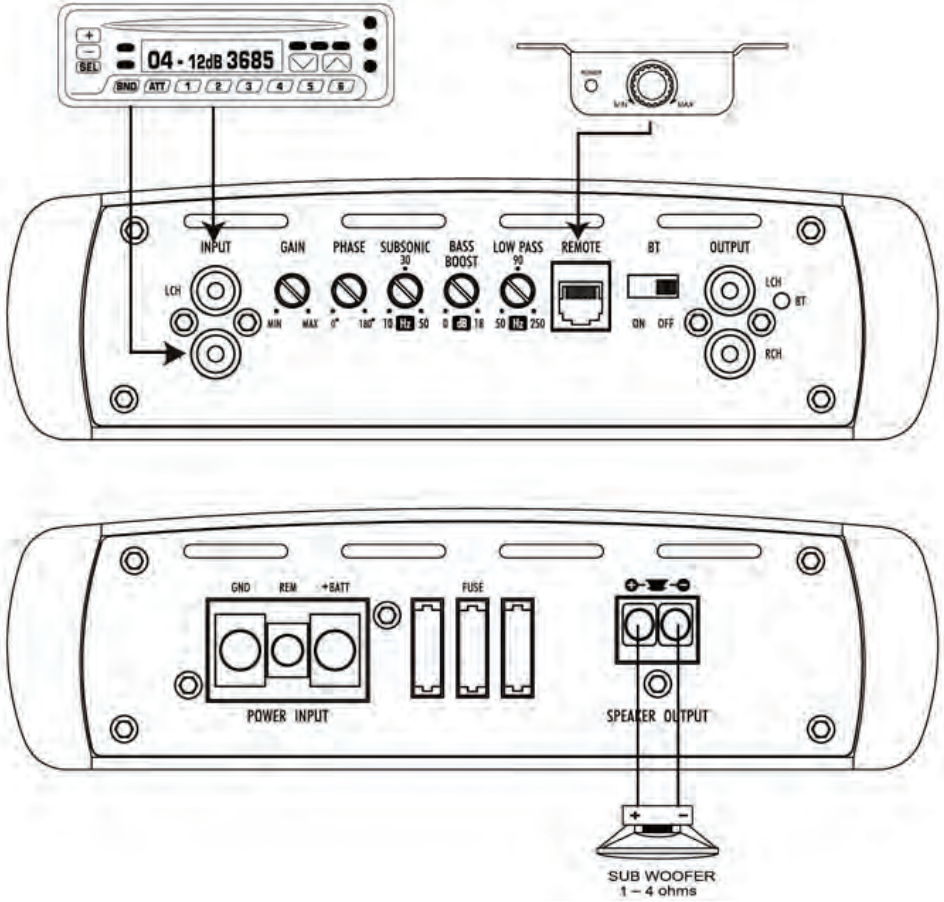
## SPEAKER CONNECTION

### MONO Channel System Design #1 INV500DBA



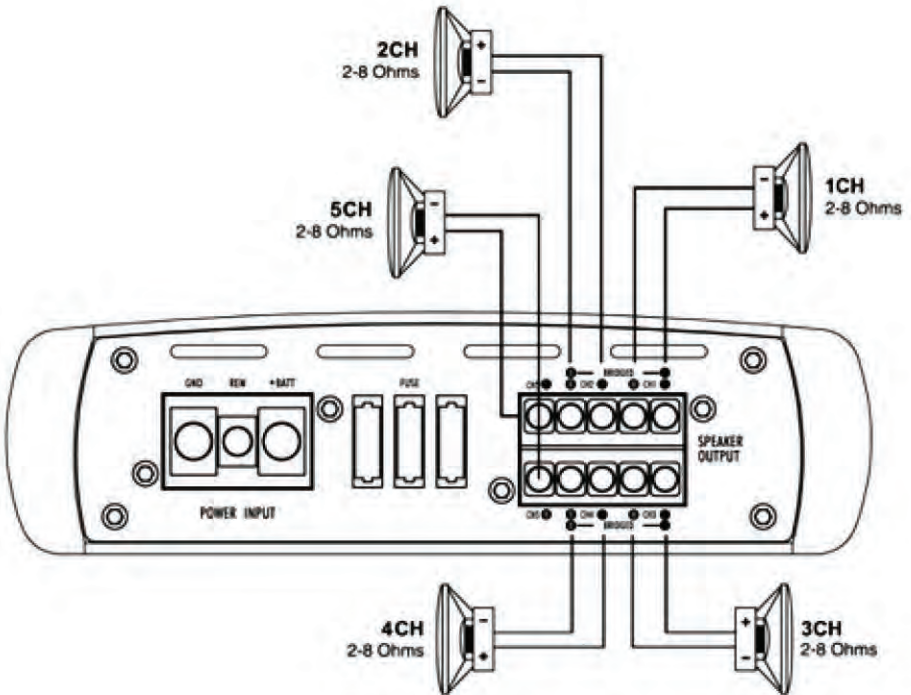
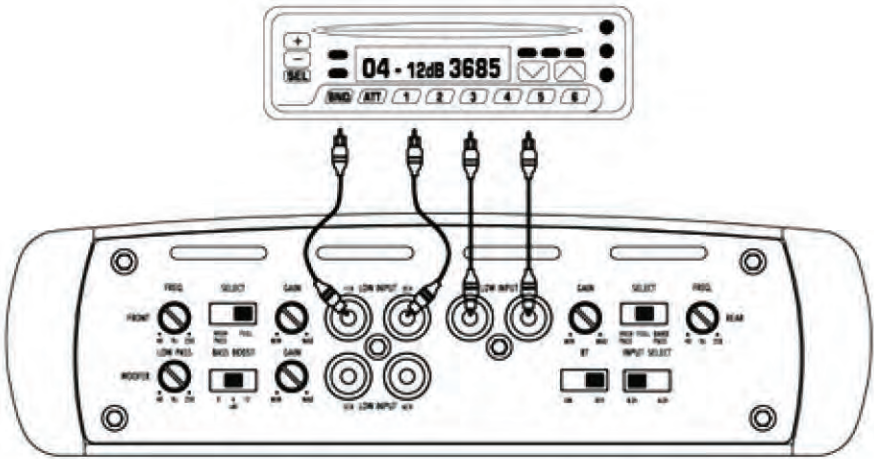
# MONO Channel System Design #2

## INV1000DBA



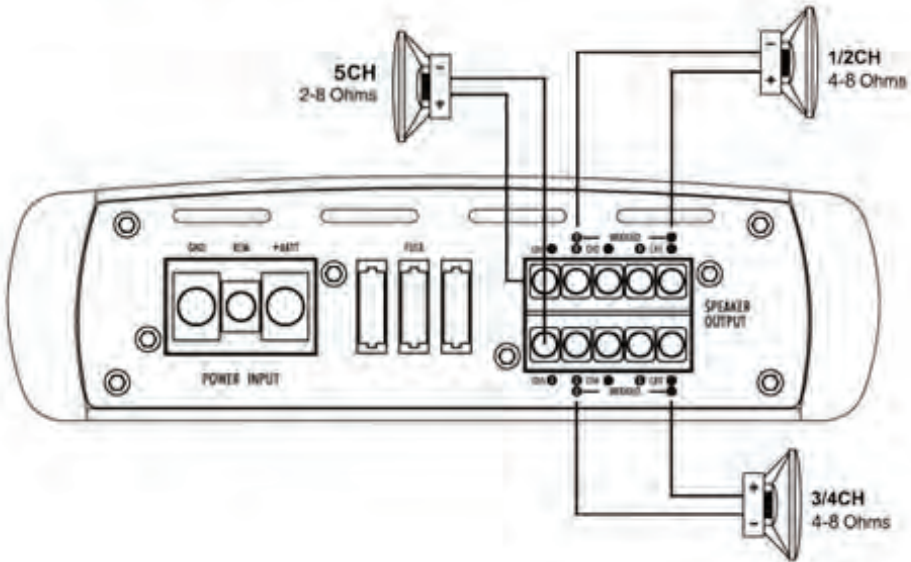
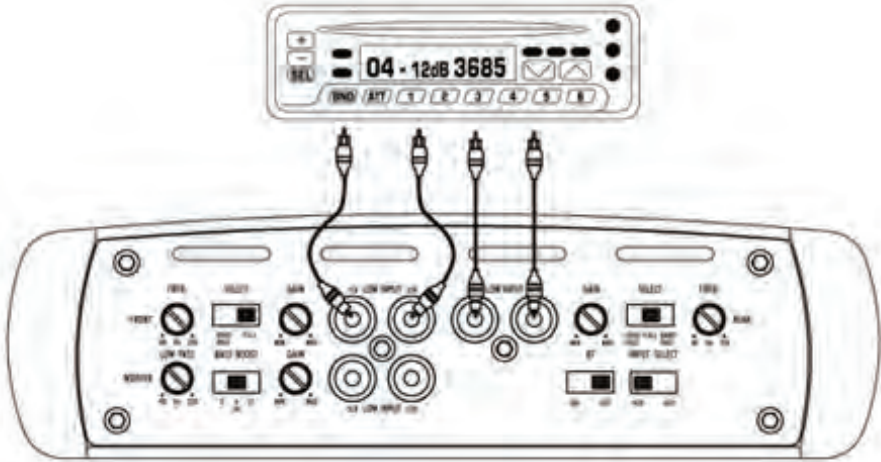
# 5 Channel System Design #1

## INV559BA



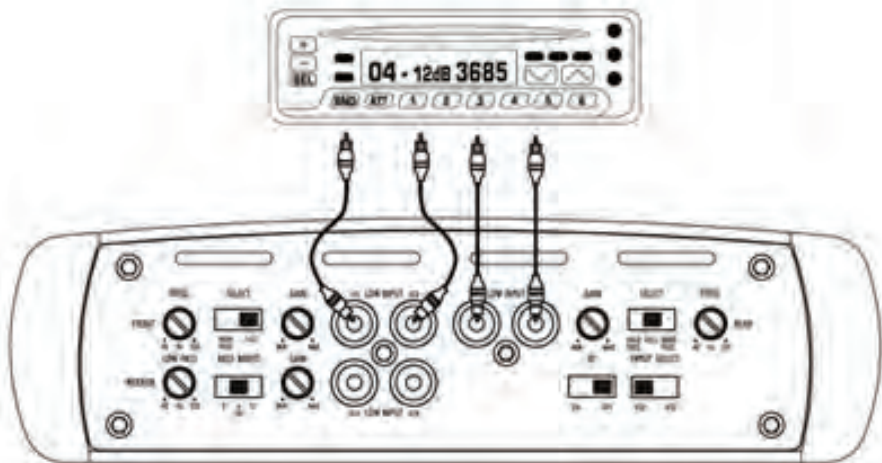
# 5 Channel System Design #2

## INV559BA

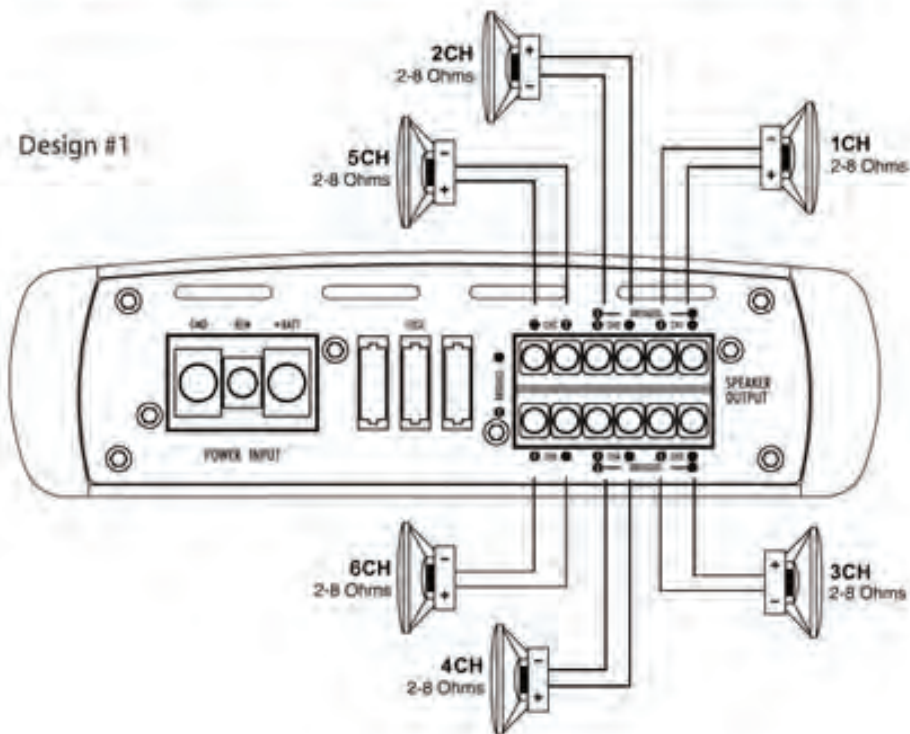


# 6 Channel System Design #1

## INV669BA



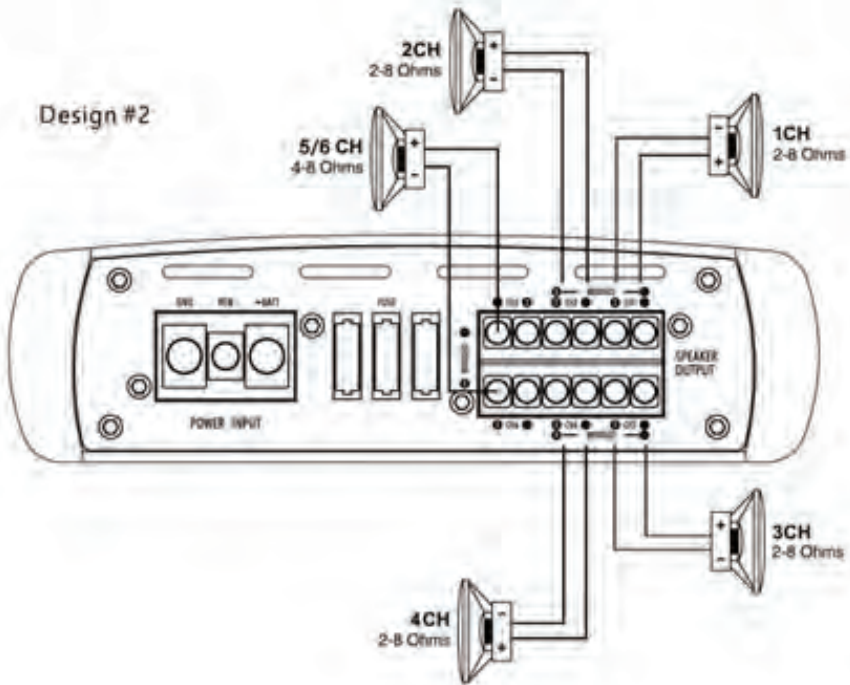
Design #1



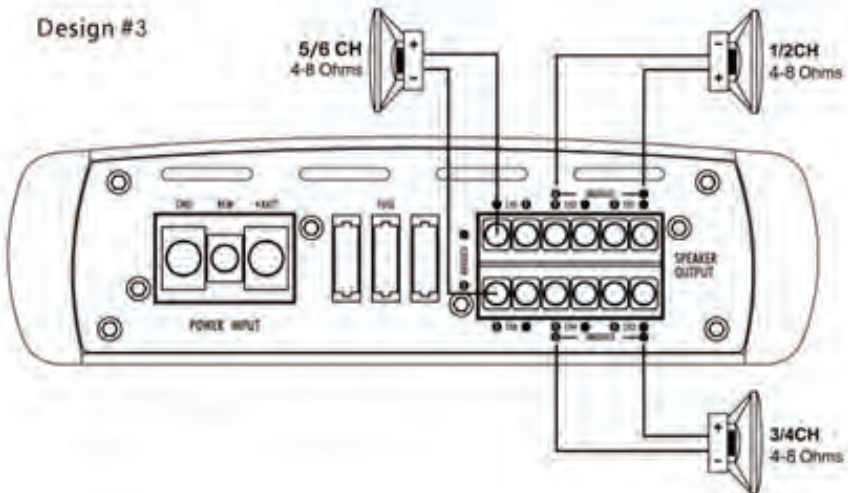
# 6 Channel System Design #2

## INV669BA

Design #2



Design #3



## TROUBLESHOOTING GUIDE

Issue	Possible Cause	Solution
<b>NO SOUND</b>	Is the power LED illuminated?	Check all fuses, replace if necessary. Make sure the power is securely fastened.
<b>UNIT WILL NOT TURN ON</b>	No power to power wire	Repair power wire or connections
	No power to remote wire with receiver on	Check connections to radio
	Fuse broken	Check all fuses, replace if necessary
<b>NO SOUND IN ONE CHANNEL</b>	Check speaker leads	Inspect for short circuit or an open connection
	Check audio input leads	Reverse Left and Right RCA inputs to determine if it is occurring before the amp. Check Tune/Deck volume level. Clean the contacts on fuse holders.
<b>AMP TURNING OFF MEDIUM HIGH VOLUME</b>	Check speaker load impedance	Be sure proper speakers are used to ensure impedance recommendations are observed. (If you use an Ohm meter to check speaker resistance, please remember that DC resistance and AC impedance may not be the same.)

### WARNINGS

Investigate the layout of your automobile thoroughly before you drill or cut any holes. Take extra care when working near gas tanks, fuel lines, brake or hydraulic lines and electrical wiring. Never operate the amplifier when it is unmounted. Attach all audio system components securely to prevent damage, especially in an accident. Don't mount this system so that the wire connections are unprotected or are subject to pinching or damage from nearby objects. The +12V DC power wire must be fused at the battery positive terminal connection. Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals. If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the amplifier. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by the manufacturer's warranty.



## SPECIFICATIONS

	INV59BA	INV669BA	INV500DBA	INV1000DBA
MAXIMUM POWER OUTPUT	3000W	3000W	1000W	2000W
POWER OUTPUT RMS @40hm	1CHx200W	1CHx400W	4x250W+ 1x650W	6CHx250W
POWER OUTPUT RMS @20hm	1CHx350W	1CHx700W	4x350W+ 1x1500W	6CHx350W
POWER OUTPUT RMS @10 hm	1CHx500W	1CHx1000W	NONE	NONE
BRDGED POWER MAX @40hm	NONE	NONE	2CHx1000W	3CHx1000W
THD	0.01	0.01	0.01	0.01
FREQUENCY RESPONSE -3.00B	250Hz	250Hz	45KHz	45KHz
HPF	NONE	NONE	40-250Hz	40-250Hz
LPF	50-250Hz	50-250Hz	40-250Hz	40-250Hz
SUBSONIC	10-50Hz	10-50Hz	NONE	NONE
BASS BOOST (50Hz)	0, 6, 12dB	0, 6, 12dB	0, 6, 12dB	0, 6, 12dB
ADJUSTABLE SENSITIVITY RANGE	0.2-6V	0.2-6V	0.2-6V	0.2-6V
PHASE	0-180°	0-180°	NONE	NONE
INPUT IMPEDANCE (LOW LEVEL)	20K	20K	20K	20K
FUSE	25Ax2	30Ax3	30Ax3	25Ax3
PRODUCT DIMENSIONS (L x W x H)	18.5" x 8.13" x 2.28" -in	18.5" x 8.13" x 2.28" -in	9.21" x 8.13" x 2.28" -in	14.33" x 8.13" x 2.28" -in



**PYLE**<sup>®</sup>  
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***Questions? Comments?***

We are here to help!

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