IMPORTANT: PACK CAREFULLY IN ORIGINAL CARTON IF POSSIBLE. WE ARE NOT RESPONSIBLE FOR DAMAGE INCURRED IN RETURNING ITEMS FOR REPAIR. A LETTER STATING YOUR EXACT STREET ADDRES, DAYTIME PHONE NUMBER, AND THE PROBLEM YOU ARE EXPERIENCING SHOULD BE INCLUDED. YOU MUST ALSO ENCLOSE A COPY OF THE ORIGINAL RECEIPT A SPROOF OF DATE OF PURCHASE

#### TECHNICAL SUPPORT HOTLINE

OUR TECHNICAL DEPARTMENT WILL GLADLY ANSWER ANY QUESTIONS
YOU MAY HAVE ABOUT OUR PRODUCTS. THEY CANNOT, HOWEVER
TELL YOU THE STATUS OF A REPAIR, OR HANDLE OTHER CUSTOMER
SERVICE SITUATIONS



PYLE SERVICE CENTER
1600 63RD STREET
BROOKLYN, NY 11204
1-800-934-2277
WWW.PYLEAUDIO.COM

# **USER'S MANUAL**

PLA2378
PLA2678
PLA2978
PLA4278
PLA4478
PLA1800
PLA3100D
PLA4600D



# PYLE® DUZE

HIGH SPEED CAR AMPLIFIER

WWW.PYLEAUDIO.COM

# SPECIFICATION

|                              | PLA2378     | PLA2678     | PLA2978     | PLA4278                     | PLA4478   | PLA1800     | PLA3100D    | PLA4600D    |
|------------------------------|-------------|-------------|-------------|-----------------------------|---|-------------|-------------|-------------|
| Channels                     | 2           | 2           | 2           | 4                           | 4   | 4           | ÷           | ÷           |
| Output Power Rating # 4 Ohms | 2×1000W     | 2×2000W     | 2×2500W     | 4×500W                      | 4×1000W   | 1×300W      | 1×900W      | 1×1200W     |
| # 2 Ohms                     | 1           | I           | I           | 1                           | Ţ   | 1×500W      | 1×1200W     | 1×1800W     |
| @ 1.3 Ohms                   | 1           | 1           | Ī           | 1                           | 1   | 1×700W      | 1×1600W     | 1×2400W     |
| Bridged # 4 Ohms             | 1×2000W     | 1×4000W     | 1×5000W     | 2×1000W<br>(2×50qW+1×1000W) | 2×1000W 2×2000W<br>(2×500W+1×1000W) (2×1000W+1×2000W) | 1           | T           | Ť           |
| Maximum Power Output         | 2000W       | 4000W       | S000W       | 2000W                       | 4000W   | 2400W       | 3100W       | 4600W       |
| Frequency Response           | 10Hz-50KHz  | 10Hz-50KHz  | 10Hz-50KHz  | 10Hz-50KHz                  | 10Hz-50KHz  | 10Hz-300Hz  | 15H2-150Hz  | 15Hz-150Hz  |
| Input Sensitivity            | 0.2-5.0V    | 0.2-5.0V    | 0.2-5.00    | 0.2-6.0V                    | 0, 2-6, 0V  | 0.4-4.0     | 0.2-6.00    | 0. 2-6. 0V  |
| Signal To Noise Ratio        | 8P06<       | 8P06<       | 390dB       | 8906<                       | 390dB   | >95dB       | >95dB       | ≥95d8       |
| THD&Noise                    | (0,05%      | <0.05%      | <0.05%      | <0.05%                      | 4.0° 02.8°  | <0.01%      | <0.01%      | <0.01%      |
| Low Pass Cross Frequency     | 40Hz-300Hz  | 40Hz-300Hz  | 40Hz-300Hz  | 60Hz-200Hz                  | 60Hz~200Hz  | 40Hz-300Hz  | 40Hz-150Hz  | 40Hz~150Hz  |
| High Pass Cross Frequency    | 40Hz-300Hz  | 40Hz-300Hz  | 40Hz-300Hz  | 15Hz-250Hz                  | 15Hz~250Hz  | 1           | 1           | 1           |
| Subsonic Filter              | 1           | j           | )           | j                           | 7   | 10Hz~40Hz   | 15Hz-55Hz   | 15H2-55Hz   |
| Bass EQ                      | 0-12dB#45Hz | 0~12dB#45Hz | 0~12dB@45Hz | 0-18dBe45Hz                 | 0-18dBe45Hz   | 0-12dB@45Hz | 0-12dB@45Hz | 0-12dB#45Hz |
| Speaker Impedance            | 2-16 D      | 2~16 0      | 2-16 D      | 2~16 ₪                      | 2−16 Ω  | 1~8 D       | 1—B Q       | 1~8 \O      |
| Fuse Size                    | 2×15A       | 2×40A       | 4×30A       | 2×25A                       | 2×40A   | 2×30A       | 4×25A       | 4×30A       |
| Dimensions (L×H×W) mm        | 280×56×260  | 410×56×260  | 480×56×260  | 370×56×260                  | 450×56×260  | 410×56×260  | 350×56×260  | 370×56×260  |

\*All specifications subject to change without notice

Congratulations on purchasing the High Speed Power Amplifier. The amplifier has been designed using the latest electronic technology available, allowing you to produce high quality stereo reproduction in mobile applications. This system provides you with low harmonic distortion, a huge considerable amount of reserve voltage and high temperature stability.

Just enjoy the perfect sound this amplifier takes to you!

#### INSTALLATION

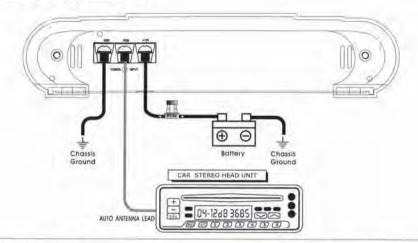
- \* Since the amplifier is sensitive to electrical and motor noise and interference from the amplifier may affect your radio reception, try to mount it at least 3 feet away from the receiver. Good locations include under a seat, in the trunk or hatch area.
- \* Please remember this is a high power unit which generates high electrical energy and heat. Therefore be sure to install the unit in a place with sufficient airflow, a minimum of dust and no moisture. Allow enough space around the cooling fins to permit reasonable airflow and cooling. It is important to ensure that the cooling fins of the heat sink are not against a panel or a surface preventing air circulation.
- \* Never mount the amplifier in a location that is subject to direct sunlight or exposed to moisture. Be sure to mount the amplifier to a strong, solid surface which will not give way under the stress of a sudden stop or accident.
- \* When mounting the amplifier on a side wall, try to position it so that the slots in the cooling fins are vertical. Amplifier should not be mounted on the bottom of a rear deck with the fins facing down because the heat will radiate back up into the amplifier. Leave yourself enough room on either side of the amplifier to make all the wire connections and adjust the controls. If you have a subwoofer box in your vehicle, you can mount the amplifier on the outside of the box.

Caution: If you are mounting the amplifier to the vehicle's floor, check beneath the car to be sure your screws won't puncture a brake or gas line.

#### WARNING!

Continuous exposure to sound pressure levels over 100dB may cause permanent hearing loss. High power autosound system may produce sound pressure levels well over 130dB, use common sense and practice safe sound please!

#### POWER CONNECTION



IMPORTANT! Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system

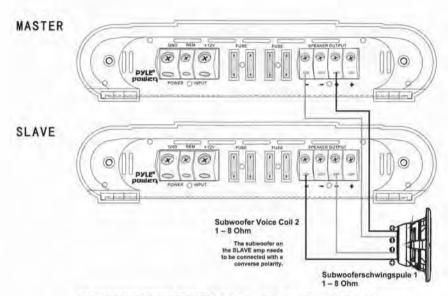
- \* The  $\pm 12V$  DC power cable should be heavy gauge stranded copper cable with heavy insulation, since it draws power directly from the positive battery terminal. Select the cable gauge at least  $10 \text{mm}^2$ . And the ground cable gauge should be the same as the  $\pm 12V$  DC.
- \* Connect the +12V Power terminal to the battery (+) position terminal. An in-line fuse must be installed in the +12V power cable near the battery less than 50mm. Without one, an accidental short circuit could pose a fire hazard and damage your amplifier. Connect the fuse holder to battery, however, do not install fuse at this time.
- \* Connect the GROUND Power terminal directly to the battery (-) position terminal or the car chassis. Ensure that all paint or other insulation is remove from around the hole area, and using self tapping screw, securely affix the bare wire ends to the vehicle chassis. Use as short as possible.
- \* Many radio's and other music sources have an output terminal for connection of the remote turn on of the power amplifier. CONNECT the output terminal to the amplifier REM control jack. If a radio doesn't have a remote turn on feature, you can connect the REM pole to external switch for positive +12V ON/OFF.
- \* To help minimize interference, it is best to run the power cables along the opposite side from the audio cables.

Caution: The power cables must be connected tightly. A loose connection may cause malfunctions or interference noise or distortion.

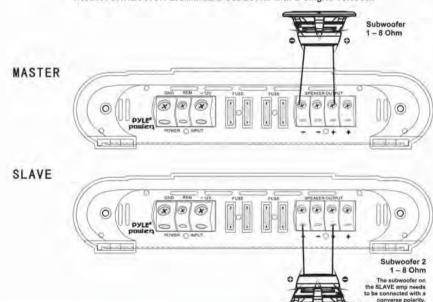
#### MONO CHANNEL AMPLIFIER - APPLICATIONS

#### PLA3100D/PLA4600D

INTERCONNECTION EXAMPLE 1 Subwoofer with a Dual-Voicecoil



INTERCONNECTION EXAMPLE 2 Subwoofer with a Singlel-Voicecoil



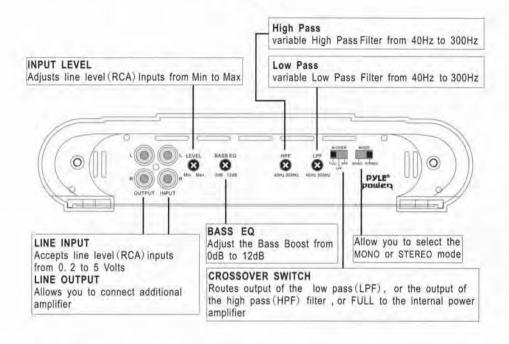
# MONO CHANNEL AMPLIFIER - APPLICATIONS PLA3100D/PLA4600D

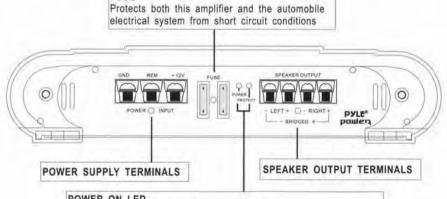
INTERCONNECTION EXAMPLE 1 Subwoofer with a Single-Voicecoil MASTER/SLAVE Link like described on page 17.

# MASTER ONO REM 127 PUBE FUSE SPEAKEROUTPUT POWER DINGT POWER RAPUT Subwoofer 2-8 ohm

## 2 CHANNEL AMPLIFIER - FEATURES

**PLA2378** 





POWER ON LED

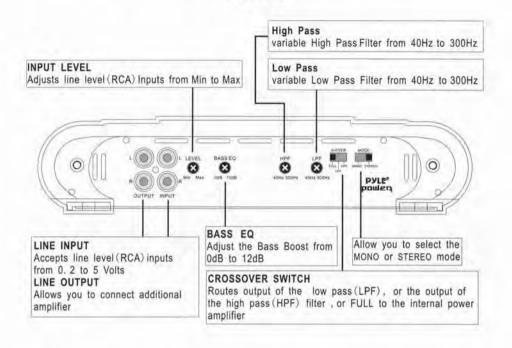
FUSE

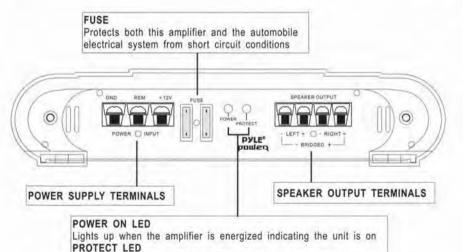
Lights up when the amplifier is energized indicating the unit is on PROTECT LED

Lights indicating the amplifier has gone into a protection mode

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# 2 CHANNEL AMPLIFIER - FEATURES PLA2678



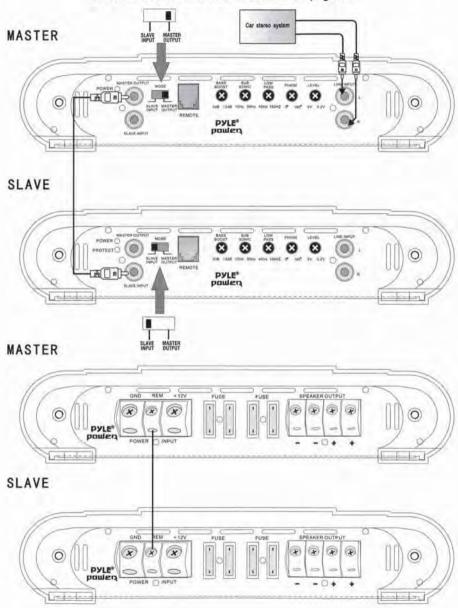


Lights indicating the amplifier has gone into a protection mode

#### MONO CHANNEL AMPLIFIER - APPLICATIONS

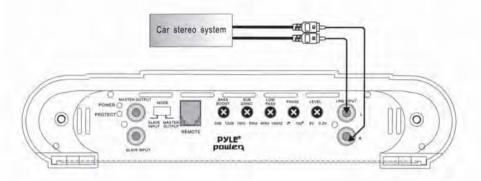
#### PLA3100D/PLA4600D

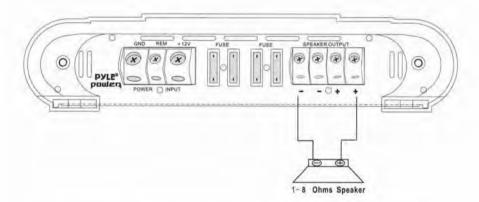
MASTER/SLAVE Link like described on page 17.

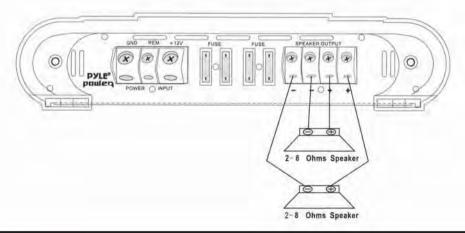


## MONO CHANNEL AMPLIFIER - APPLICATIONS

#### PLA3100D/PLA4600D

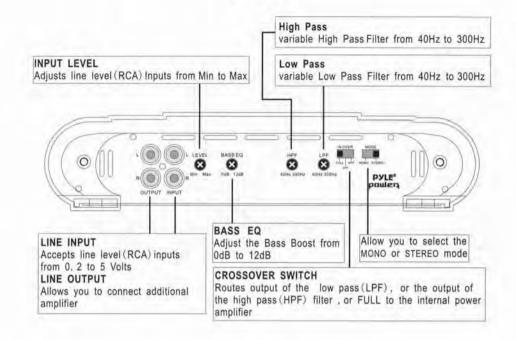


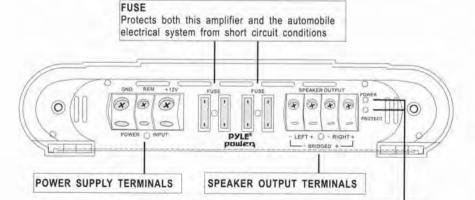




## 2 CHANNEL AMPLIFIER - FEATURES

#### **PLA2978**





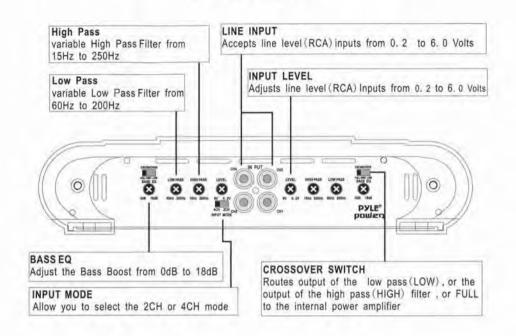
#### POWER ON LED

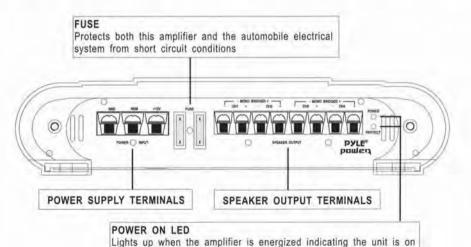
Lights up when the amplifier is energized indicating the unit is on PROTECT LED

Lights indicating the amplifier has gone into a protection mode

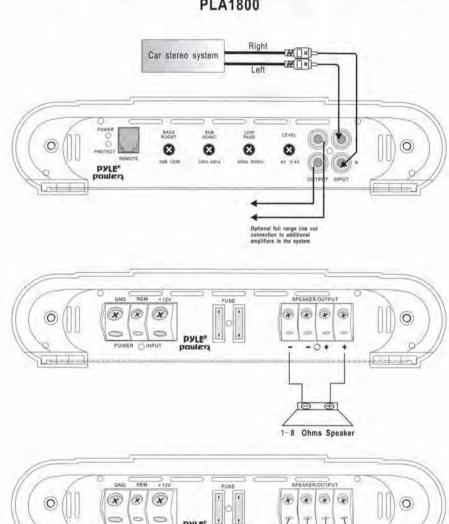
#### 4 CHANNEL AMPLIFIER - FEATURES

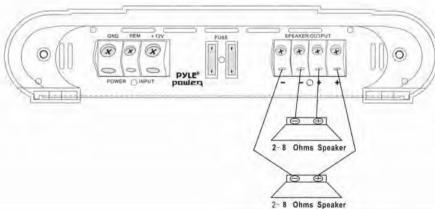
#### PLA4278/PLA4478





# MONO CHANNEL AMPLIFIER - APPLICATIONS PLA1800





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Lights indicating the amplifier has gone into a protection mode

PROTECTION LED

#### MONO AMPLIFIER - APPLICATIONS

#### INPUT CONNECTIONS

\* This amplifier has RCA connections for low level inputs. Low level signal is carried through RCA cables. it is preferred to use low level inputs to the amplifier if the head unit is equipped with the low level outputs.

#### SPEAKER OUTPUT CONNECTIONS

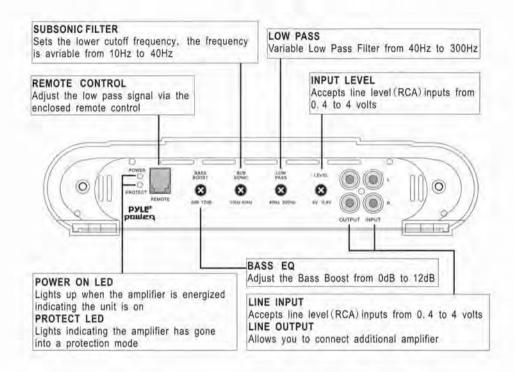
You do not need to make any adjustment for the input connection of amplifier before you connect the speaker output.

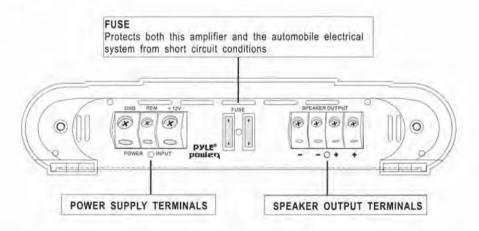
- \* Connect subwoofer wire to corresponding speaker output terminals of the amplifier.
- \* Be sure to have the positive wire from the speaker to the positive speaker terminal of the amplifier and the negative wire from the speaker must connect with the speaker terminal of the amplifier. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

#### LEVEL CONTROLS

Turn the VOLUME control on the amplifier to Min initially. Once the initial power sequence has been performed, set the CD/RADIO volume control to roughly 80% of full. Insert a CD or tune to a radio station and slowly turn up the amplifier VOLUME control until you hear some distortion, and then back it off for clean sound.

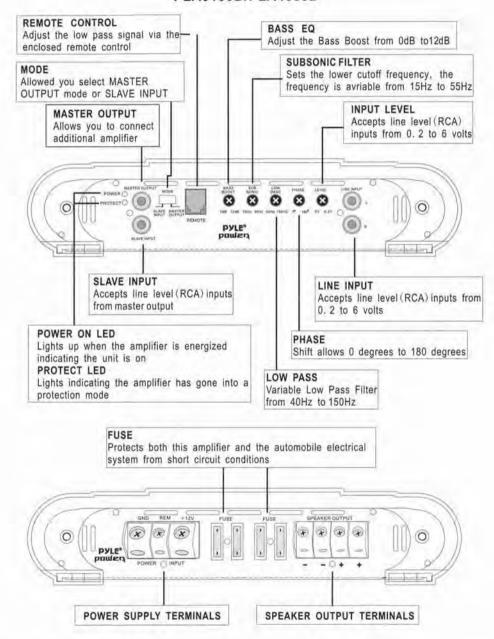
# MONO CHANNEL AMPLIFIER - FEATURES PLA1800





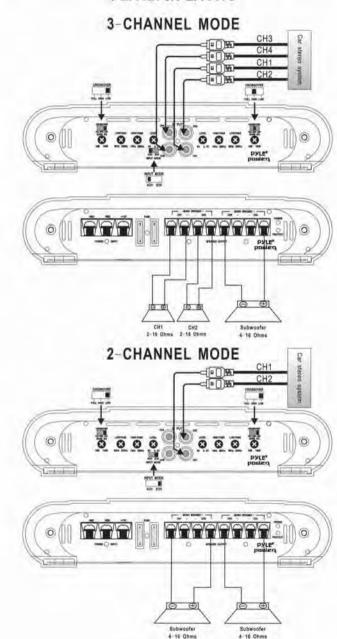
#### MONO CHANNEL AMPLIFIER - FEATURES

#### PLA3100D/PLA4600D



#### 4 CHANNEL AMPLIFIER - APPLICATIONS

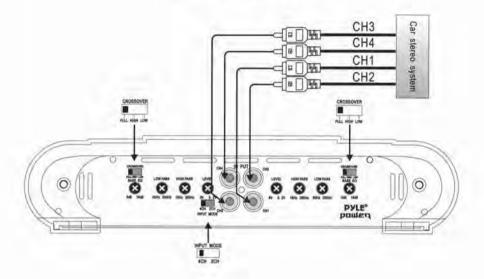
PLA4278/PLA4478

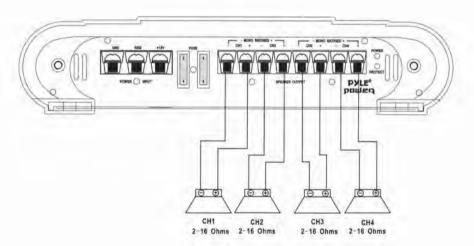


#### 4 CHANNEL AMPLIFIER APPLICATIONS

PLA4278/PLA4478

#### 4-CHANNEL MODE





#### 2 CHANNEL AMPLIFIER - APPLICATIONS

#### INPUT CONNECTIONS

- \* This amplifier has RCA connections for low level inputs. Low level signal is carried through RCA cables. It is preferred to use low level inputs to the amplifier if the head unit is equipped with the low level outputs.
- \* This amplifier has high input connection. High level input is used from radios that do not have line-level outputs.
- \* Be sure not to use both low and high level inputs simultaneously!

#### SPEAKER OUTPUT CONNECTIONS

You do not need to make any adjustment for the input connection of amplifier before you connect the speaker output.

- \* Connect right and left speaker wire to corresponding speaker output terminals of the amplifier.
- \* Be sure to have the positive wire from the speaker to the positive speaker terminal of the amplifier and the negative wire from the speaker must connect with the speaker terminal of the amplifier. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

#### LEVEL CONTROLS

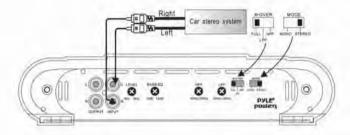
Turn the VOLUME control on the amplifier to Min initially.

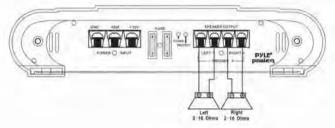
Once the initial power sequence has been performed, set the CD/RADIO volume control to roughly 80% of full. Insert a CD or tune to a radio station and slowly turn up the amplifier VOLUME control until you hear some distortion, and then back it off for clean sound.

#### 2 CHANNEL AMPLIFIER - APPLICATIONS

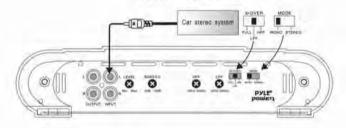
#### PLA2378/PLA2678/PLA2978

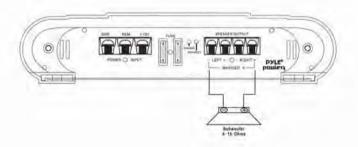
#### STEREO MODE





#### MONO MODE





#### 4 CHANNEL AMPLIFIER - APPLICATIONS

#### INPUT CONNECTIONS

\* This amplifier has RCA connections for low level inputs. Low level signal is carried through RCA cables. it is preferred to use low level inputs to the amplifier if the head unit is equipped with the low level outputs.

#### SPEAKER OUTPUT CONNECTIONS

You do not need to make any adjustment for the input connection of amplifier before you connect the speaker output.

- \* Connect right and left speaker wire to corresponding speaker output terminals of the amplifier.
- \* Be sure to have the positive wire from the speaker to the positive speaker terminal of the amplifier and the negative wire from the speaker must connect with the speaker terminal of the amplifier. Reversing any of these connections will result in the speaker cones moving out of phase which causes bass cancellation.

#### LEVEL CONTROLS

Turn the VOLUME control on the amplifier to Min Initially. Once the initial power sequence has been performed, set the CD/RADIO volume control to roughly 80% of full. Insert a CD or tune to a radio station and slowly turn up the amplifier VOLUME control until you hear some distortion, and then back it off for clean sound.

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