LIMITED WARRANTY

Quantum Audio warrants any products purchased in the U.S.A. from an authorized Quantum Audio dealer. All products are warranted to be free from defects in material and workmanship under normal use and service for a period of one (2) years. This warranty applies to the original purchase only.

Quantum Audio will either repair or replace (as its option) any unit that has been found to be defective and under warranty provided the defect occurs within the one (2) years warranty period.

This limited warranty does not extend to units have been subjected to misuse, abuse, neglect, or accident. In Quantum Audio's judgment, products that show evidence of having been altered, modified, or serviced without Quantum Audio's authorization, will be ineligible under this warranty.

To obtain warranty service please contact your retailer or visit our website at www.quantumaudio.net for more details.

302 Hanmore Industrial Parkway - Harlingen, TX 78550

phone: 877.787.0101 - fax: 956.421.4513

www.quantumXaudio.net - support@dbdrive.net

QUANTUM AUDIO™

Feel the Rush!

OWNER'S MANUAL

MODEL:

QPX2000.4, QPX2800.4

QPX1200.2

QPX2000.1M, QPX2500.1D, QPX3000.1D, QPX4000.1D, QPX5000.1D & QPX6000.1D

QUANTUM X AMPLIFIER

CAR AUDIO SYSTEM

PLEASE READ CAREFULLY BEFORE INSTALLING OR OPERATING

INTRODUCTION

Congratulations on your purchase of this Quantum Audio amplifier. Your selection of a Quantum product indicates a true appreciation of fine musical reproduction. To ensure proper use of this unit, please make sure to read the owner's manual carefully before operating and keep it for future reference.

KEEP YOUR SALES RECEIPT

Take this time to attach your sales receipt to the manual and out in a safe place. In case of any unforseen reason this product may need warranty service, your receipt will be necessary to establish purchase date.

RECOMMENDATION

An amplifiers perfomance is only as good as its installation. Proper installation will maximize the system's overall performance. It is recommended that you have our product installed by an authorized Quantum retailer. If you decide to install it yourself, please carefully read through this manual and take your time to do a quality installtion. Due to continuing product improvements and possible manual revisions, we recommend checking our website for the latest product information at:

www.quantumxaudio.com

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

WARNING!

Exposure to high power sound system can cause hearing loss or damage. Listening to your system at loud levels while driving will impair your ability to hear traffic sounds and emergency vehicles. Use common sense when listening to your system.

Serial # _____ Model # _____

QUANTUM AMPLIFIER

Monoblock Amplifier

QPX2000.1M / QPX2500.1D / QPX3000.1D / QPX4000.1D / QPX5000.1D / QPX6000.1D

Features:

- Class D Monoblock Amplifier
- 1 Ohm Stable capability
- Amber-Glow Logo Badge
- Audiophile Grade Components
- Speaker Short Circuit Protection
- High Efficiency Mosfet Design
- 12 dB Variable Low Pass X-over
  *2 Ohm Stable
- 12 dB Variable Bass Boost
- 12 dB Variable Subsonic Filter 15Hz - 55Hz
- Variable Phase Shift
- Double Sided PCB
- Q Link Master/ Slave Technology @ 2 Ohm
- Bass Remote Included

Specifications:

	Model *QPX2000.1M	Model QPX2500.1D	Model QPX3000.1D
Dynamic Power:	2000 Watts 1 X2000 Watts @ 2 Ohm mono, 1 X 1000 Watts @ 4 Ohm mono	2500 Watts 1 X 2500 Watts @ 1 Ohm mono, 1 X 1250 Watts @ 2 Ohm mono	3000 Watts 1 X 3000 Watts @ 1 Ohm mono, 1 X 1500 Watts @ 2 Ohm mono
X-over Slope:		12dB	12dB
Signal to Noise ratio:	>90dB	>90dB	>90dB
Variable Subsonic Filter:	15Hz - 55Hz	0Hz - 50Hz	15Hz - 55Hz
Low Pass Crossover:	40Hz-300Hz	50Hz-220Hz	25Hz-250Hz
Bass Boost @ 45Hz:	0-12db	0-12db	0-12db
Phase Shift Control:	0-180 degree	0-180 degree	0-180 degree
Frequency Response	10Hz - 220Hz	10Hz - 220Hz	10Hz - 220Hz
THD at Rated Power:	1 % <0.1%	1% <0.5%	1% <0.1%
Input Sensitivity:	200mV-6V	285mV - 6V	200mV - 6V

	Model QPX4000.1D	Model QPX5000.1D	Model QPX6000.1D
Dynamic Power:	4000 Watts 1 X 4000 Watts @ 1 Ohm mono, 1 X 2000 Watts @ 2 Ohm mono	5000 Watts 1 X 5000 Watts @ 1 Ohm mono, 1 X 2500 Watts @ 2 Ohm mono	6000 Watts 1 X 6000 Watts @ 1 Ohm mono, 1 X 3000 Watts @ 2 Ohm mono
Signal to Noise ratio:	>90dB	>90dB	>90dB
Variable Subsonic Filter:	15Hz - 55Hz	15Hz - 55Hz	10Hz - 40Hz
Low Pass Crossover:	25Hz-250Hz	25Hz-250Hz	40Hz-300Hz
Bass Boost @ 45Hz:	0-12db	0-12db	0-12db
Phase Shift Control:	0-180 degree	0-180 degree	0-180 degree
Frequency Response	10Hz - 220Hz	10Hz - 220Hz	10Hz - 220Hz
THD at Rated Power:	1 % <0.1%	1 % <0.1%	1 % <0.1%
Input Sensitivity:	200mV - 6V	200Mv - 6V	200Mv - 6V

Due to continuing product improvement, specifications subject to change without notice.

QUANTUM AUDIO

Features

- Class A/B Circuitry
- 2 Ohm Load Stereo Capability
- Amber-Glow Logo Badge
- Audiophile Grade Components
- Speaker Short Circuit Protection
- High Efficiency Mosfet Design
- 12 dB Variable High Pass and Low Pass X-over
- Selectable: 0, 6, 12 dB/ Octive Bass Boost
- Buffered Line Output for Easy Daisy-Chaning

Specifications:

	Model: QPX2000.4	Model: QPX2800.4
Dynamic Power:	2200 Watts 4 x 80 watts @ 4 ohms stero 4 x 160 watts @ 2 ohms stereo 2 x 300 watts @ 4 ohms bridged	3600 watts 4 x 180 watts @ 4 ohms stereo 4 x 360 watts @ 2 ohms stereo 2 x 600 watts @ 4 ohms bridged
Ch 1-2 High Pass Crossover:	20Hz-250 Hz	20Hz-250 Hz
Ch 3-4 High pass Crossover:	20Hz-250 Hz	20Hz-250 Hz
Ch 3-4 Low pass Crossover:	50Hz - 250 Hz	50Hz - 250 Hz
X-over Slope:	12 dB	12 dB
Bass Boost @ 45Hz:	0-12dB	0-12dB
Input Sensitivity:	285Mv - 6V	285Mv - 6V
Signal to Noise ratio:	>90dB	>90dB
THD at Rated Power:	<0.5%	<0.5%

2 Channel Amplifier

	Model: QPX1200.2
Dynamic Power:	1800 Watts 2 X 180 Watts @ 4 Ohm stereo 2 X 360 Watts @ 2 Ohm stereo 1 X 600 Watts @ 4 Ohm bridged
X-over Slope:	12 dB
Bass Boost @ 45Hz:	0-12dB
Input Sensitivity:	285Mv - 6V
HP Xover:	120 Hz - 3k Hz
Ch 1-2 High Pass Crossover:	20Hz-250 Hz
Ch 1-2 Low Pass Crossover:	120 Hz - 3k Hz
Signal to Noise ratio:	>90dB
THD at Rated Power:	<0.5%

Due to continuing product improvement, specifications subject to change without notice.

Fuse amplifiers power wire at the battery

Be sure to fuse the power wire within 12" of the car's battery. This will protect the car's battery in case of a short circuit between the power amplifier and battery. THIS IS A MUST, the amplifier's built-in fuse will only protect the power amplifier not the car's battery!

Use high grade wire connectors

To ensure maximum power transfer and secure safe connections, it is recommended to use high grade barrier spades (for connection at amplifier) and terminal rings (for connection at battery).

Do not run any wires underneath vehicle

Exposed wires have a chance of being cut or damaged. It is best to run all wires through the vehicle under the carpet and/or side panels. This lends to a cleaner installation and less risk of damage.

Use caution when mounting amplifier

Remember there are many electrical wires, gas lines, vacuum lines, brake lines as well as a gas tank in the automobile. Make sure you now where they are when mounting the amplifier to avoid puncturing lines, shorting wires or drilling holes in the gas tank.

Run signal wires away from electrical wires

To avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise), run wires away from the car's electrical wiring.

Make all ground wires as short as possible and at the same point

In order to reduce the chance of ground loops (i.e. engine noise), make the grounding wire as short as possible to reduce the wire's resistance. Also, when using multiple components, make sure all units are grounded at the same point.

Avoid sharp edges when running the wires

To avoid the possibility of power, signal or speaker shorts, be careful not to allow the amplifiers wires to come in contact with sharp edges. Use a grommet to protect the wire when running through the fire wall.

DC Offset Protection

This circuit protects the output of the amplifier against DC voltage. If for some reason DC voltage is detected at the output stage, the amplifier will shut down protecting the speakers from direct current.

Short Circuit Protection

The circuit protects the amplifier from damage due to a short found in the speakers or wiring. If one of the speakers or its wiring comes in contact with ground, the amplifier will shut down. To resume normal operation, correct the problem and turn the head unit off, then back on. The amplifier will reset and play again.

Thermal Protection

To protect the amplifier circuitry against damage caused by prolonged exposure to high temperatures, a thermal protection circuit is activated if the amplifier reaches excessively high operating temperature. Once the thermal circuit is activated, the amplifier will shut down to cool off. The amplifier will automatically turn back on once it cools down to a safe operating temperature.

Power Indicator

The diagnostic L.E.D. illuminates when the amplifier is on and receiving power.

Built-in Crossover

The Quantum QPX2000.4, **QPX2800.4** and **QPX1200.2** are equiped with a built in variable crossover network allowing you to select the crossover function and frequency for each the front channels or rear channels of the amplfier independently.

The Quantum QPX2000.1M, QPX2500.1D, QPX3000.1D, QPX4000.1D, QPX5000.1D and **QPX6000.1D** are equipped with a built in variable lowpass crossover network allowing you to select the crossover function and frequency for each the front channels or rear channels of the amplfier independently.

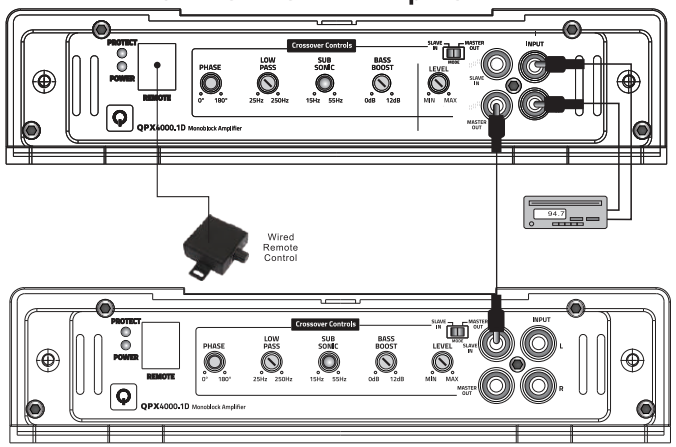
Power and Speaker Distribution Blocks

Heavy gauge bare wire distribution blocks are provided for maximum power and signal transfer with minimal resistance.

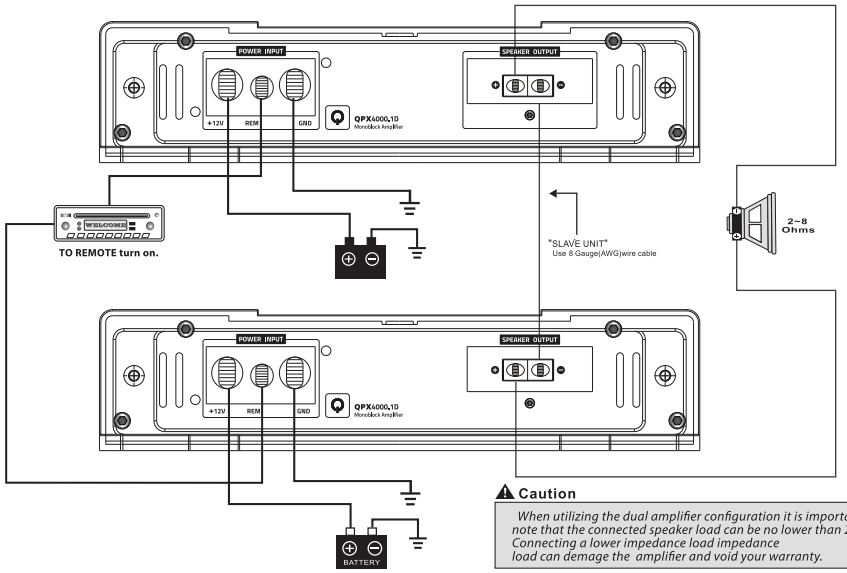
QLink Input Connection (MASTER & SLAVE RCA Connection)

Using a QLink configuration, the MASTER amplifier has total control over the SLAVE amplifier.When using dual amplifier to operate subwoofer, the positive terminal of the subwoofer`s voice coil must be connected to the positive terminal of the MASTER amplifier and the negative terminal of the subwoofer`s voice coil must be connected to positive terminal of the SLAVE amplifier.Be advised that the dual amplifier configuration has tremendous output potential, so ensure that your subwoofers can handle such a large amount of power.

To "MASTER SLAVE" Amplifier



QLink Power and Speaker Connection "MASTER UNIT"

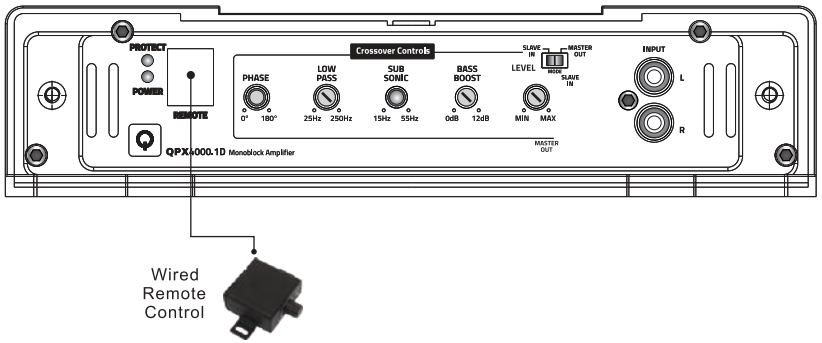


Caution

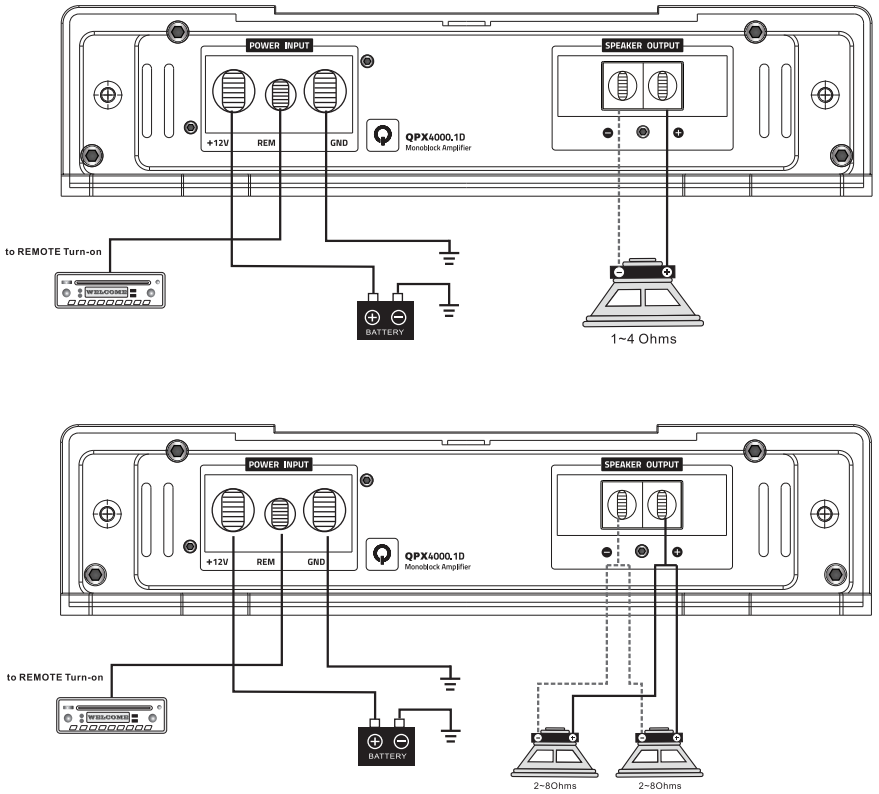
When utilizing the dual amplifier configuration it is important to note that the connected speaker load can be no lower than 2 Ohmns. Connecting a lower impedance load impedance load can demage the amplifier and void your warranty.

RCA Connections Monoblock

Single Amp Input Connection



Speakers Connections



Full range line outputs have been provided for convenient connection to additional amplifiers in the system. The outputs are buffered to reduce signal loss.

Power Fusing

This protects the amplifier against short circuits and excessive current.

Remote Turn-on

Automatically turns amplifier on when connected to the head unit's remote output. amplifier will turn on and off with the head unit to save current consumption. This control also operates the reset circuit for the amplifier's protection. It must be connected withthe head unit in order to reset protection circuits.

Adjustable Input Sensitivity

Allows you to fine-tune the level matching between your source and the power amplifier.

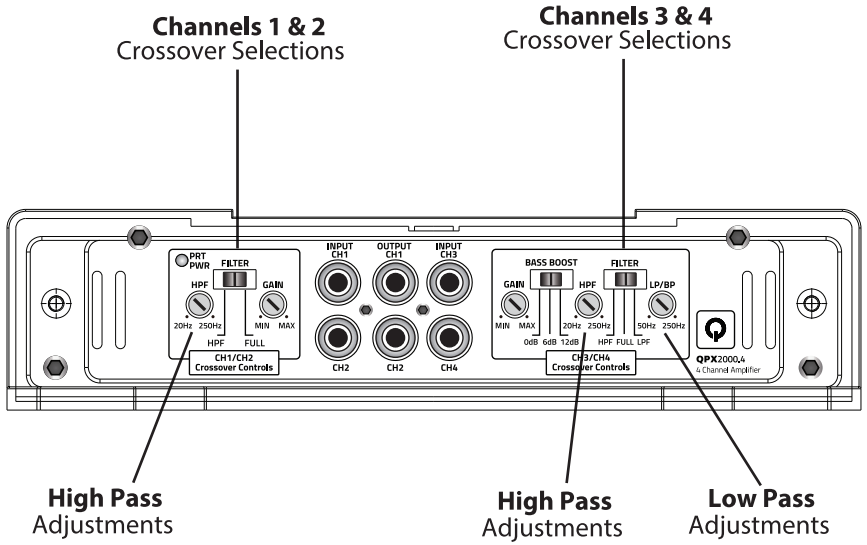
Low Impedance Stability		*Height*	*Width*	*Length*
4 CHANNEL STEREO AMPLIFIERS				
QPX2000.4	2 Ohms Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*280 mm / 11"*
QPX2800.4	2 Ohms Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*348 mm / 13.7"*
2 CHANNEL STEREO AMPLIFIERS				
QPX1200.2	2 Ohms Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*250 mm / 9.8"*
MONOBLOCK AMPLIFIERS				
QPX2000.1M	2 Ohms Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*280 mm / 11"*
QPX2500.1D	1 Ohm Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*257 mm / 11"*
QPX3000.1D	1 Ohm Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*190 mm / 7.50"*
QPX4000.1D	1 Ohm Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*230 mm / 9.05"*
QPX5000.1D	1 Ohm Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*280 mm / 11"*
QPX6000.1D	1 Ohm Stereo	*50 mm / 1.96"*	*220 mm / 8.6"*	*302 mm / 11.87"*

4 Channel Stereo Amplifiers

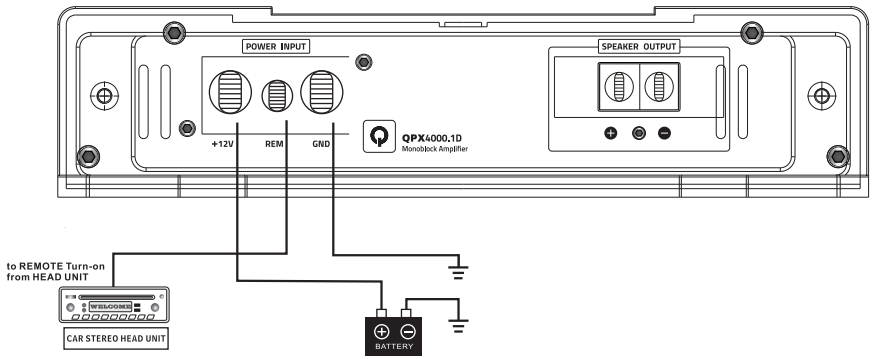
The Quantum **QPX2000.4** and **QPX2800.4** are equipped with a built in variable crossover network allowing you to select the crossover function and frequency for each the front channels or rear channels of the amplfier independently.

Channels 1 and 2 feature a high pass filter to protect your high frequency speakers from low bass or the option to run your speakers full range.

Channels 3 and 4 allow the user to select a High pass, Low Pass or full range signal to the loud speakers.



Power Connections



It is important that you read this manual very carefully and follow it for your installation carefully. Before you start your installation,please consider following concerns.

1. Disconnect the negative (-) battery cable before mounting the amplifier orma king any connections. Check the battery and alternator ground (-) connections. Make sure they are properly connected and free of corrosion.

2. Before selecting a mounting location for amplifier, please take some concerns into consideration with cooling efficiency and safety.

3. Power connection
Before installing amplifier,disconnect the negative (-) wire from battery to protect any accidental damage to your amplifier and System.This Amplifier is designed to use 4 AWG POWER and GROUND cables.

4. Ground connection
Locate a secure grounding connection as close to the amplifier as possible. Make sure the location is clean and provides a direct electrical connection to the frame of the vehicle.Connect one end of a short piece of the same size cables as the power cable to the grounding point.Run the other end of the cable to the amplifier mounting location. Connecting the ground cable to the screw terminal labeled as GND.

5. Remote connection
Run a remote turn on cable from the switched +12V source you will be using to turn on the system components. This may be a toggle switch, a relay, or your source unit`s remote trigger wire, or power antenna trigger wire. Connect the remote turn on cable to the power terminal labeled as REM. Run this lead to the amplifier mounting location. Using 16AWG wire or larger.

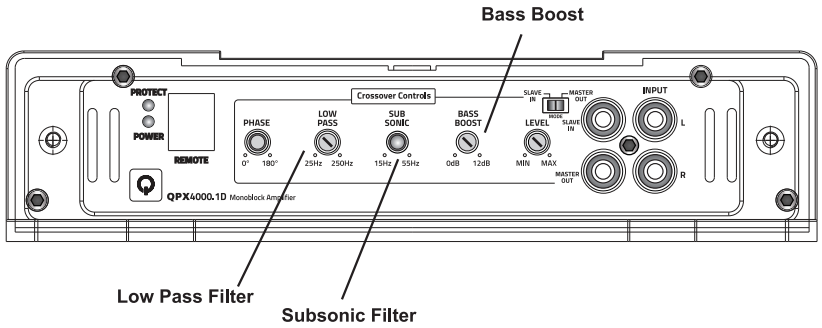
MODELS:
QPX2000.1M / QPX2500.1D / QPX3000.1D / QPX4000.1D / QPX5000.1D / QPX6000.1D

Built - In - Crossover

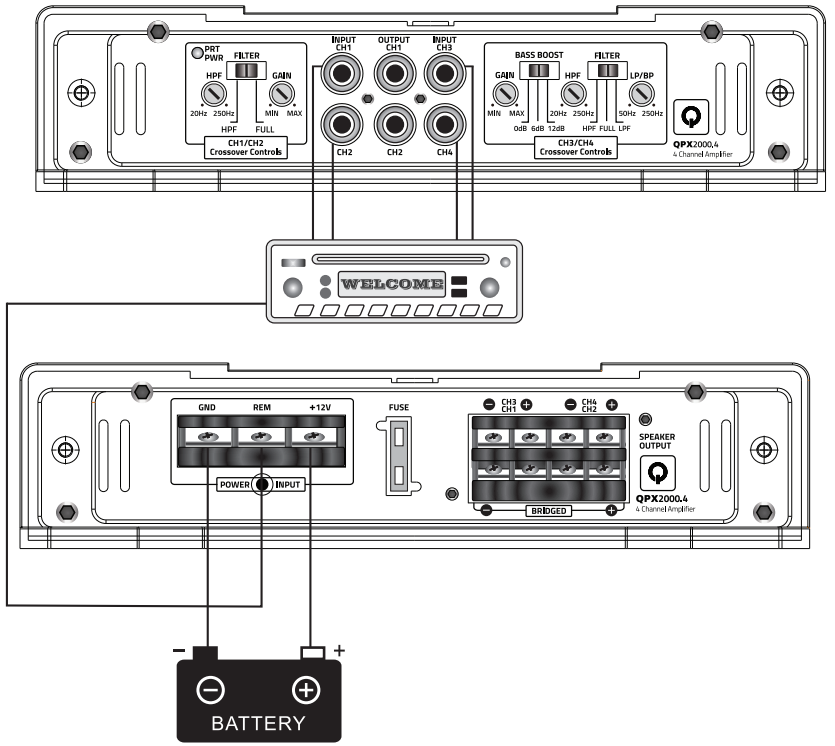
The Quantum Audio **QPX** mono amplifiers are equipped with a 24 dB per octave variable Low Pass crossover.

They also feature a variable **Sub Sonic filter between 15Hz - 55 Hz to protect your subwoofers** from ultra-low frequencies when using vented enclosures.

A Variable Bass Boost is available to tune your subwoofer enclosure.



Power Connection Leads



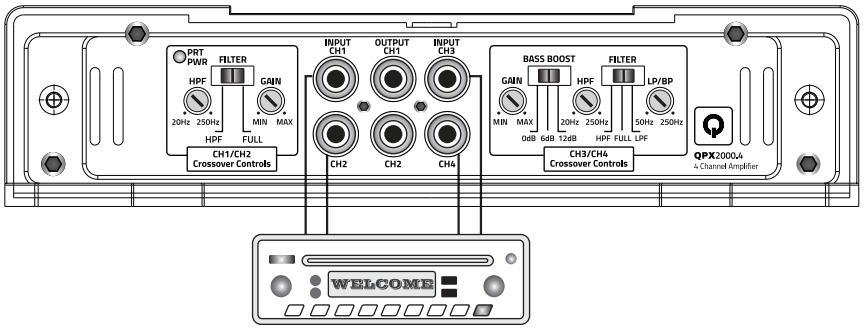
Notes on the power supply

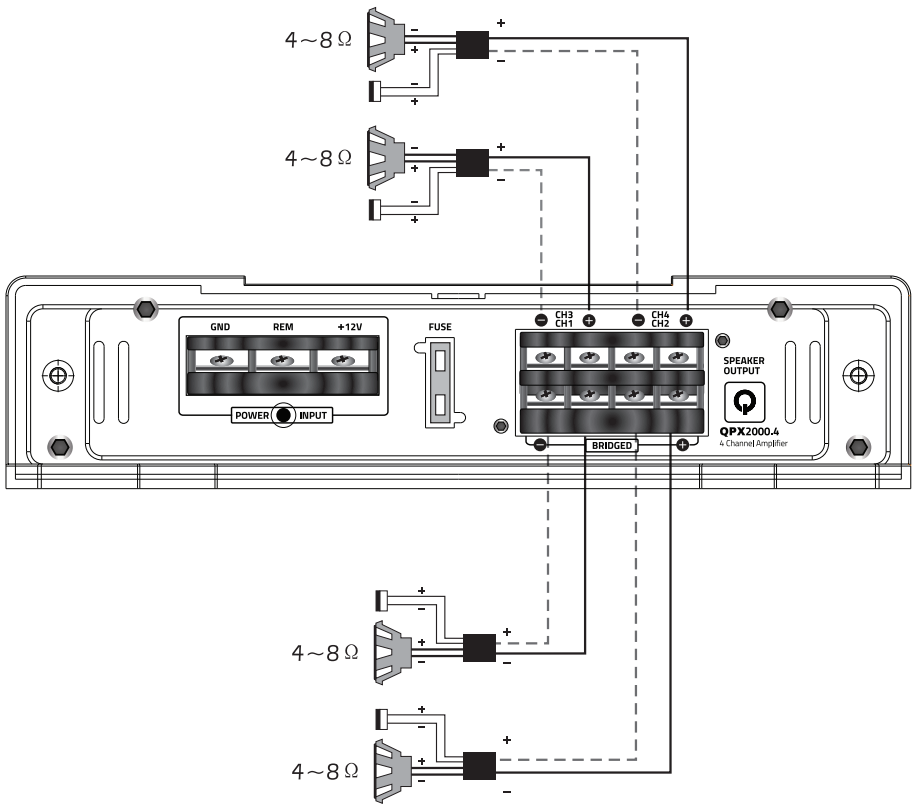
Connect the +12V power input lead only after all other leads have been connected.Be sure to connect the ground wire of the unit securely to a metal part of the car. A lose connection may cause a malfunction of the amplifier.

REMOTE: The unit is turned on by applying +12Volts to this terminal. This terminal does not draw heavy current like the two power terminal so a thinner connecting wire is acceptable. Standard 18 GUAGE is fine and the standard color is yellow. If the power antenna wire is already in use, you can still splice into it. With this method, the unit will turn on automatically with the radio. Use the power supply lead with a fuse attached whose value is the same as original fuse.
Place the fuse in the power supply lead as close as possible to the car battery.

During a full power operation. Maximum current will run through the system. Therefore,Make sure that the leads to be connected to the +12V and GND terminals of the unit respectively must be larger than 10-Guage (AWG 10)

System 1: 4 Channel Mode





QPX2000.4 & QPX2800.4
System 2: Bridged Connection Subwoofer