

## Before you start



### CAUTION



Many new and factory radios require a reset code when disconnected from battery power. This is an anti-theft feature. Before unplugging power, you must determine if your radio/source unit requires a reset code. Check the operation manual for your vehicle or contact the dealer.

### Power / Ground cable size

It is critical to use the proper power and ground cable. Select the size listed here for your amplifier model. Always use high quality copper cable.

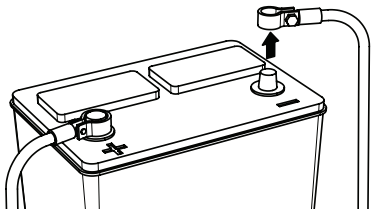
Cable size recommendations for multi amp systems are available on our website.

Model	Fuse Size	Cable Size
PZ-820.2	1-30A	4ga
PZ-1020.2	1-35A	
PZ-1520.2	2-30A	
PZ-2020.2	2-35A	
PZ-3520.2-Pro	2-35A	
PZ-1020.4	2-15A	
PZ-1520.4	2-20A	
PZ-2020.4	2-25A	
PZ-4020.4-Pro	2-40A	
PZ-3020.1D	1-60A	
PZ-4020.1D	1-80A	
PZ-5020.1D	2-60A	

## Installation

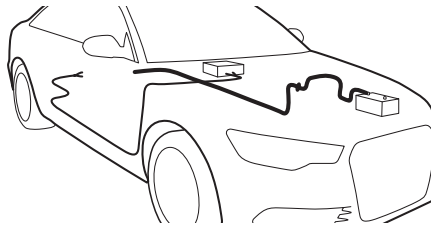
### 1 Disconnect negative battery terminal

Place terminal in a secure position so that it won't accidentally contact the negative battery post



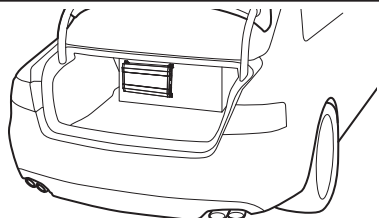
### 2 Run Cables

Properly route power, speaker and RCA cables through the vehicle.



### 3 Mount Amplifier

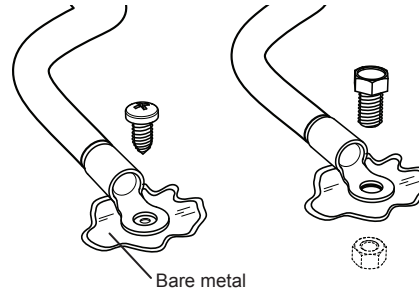
Choose a mounting location that will provide adequate air ventilation. Mount the amplifier to a secure surface. Do not mount the amplifier upside down.



### 4 Chassis Ground

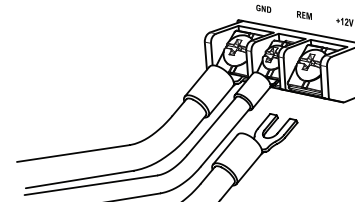


The chassis ground connection is critical to the performance of the amplifier. Choose a location that is close to the amplifier. Completely scrape away the paint and use a nut and bolt if possible. **DO NOT USE AN EXISTING FACTORY BOLT!**



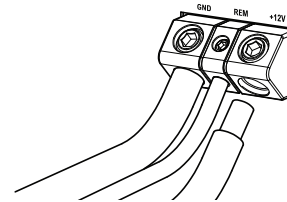
### 5a Power Connections Smaller amps

Using spade terminals, connect the +12V to the power cable from the battery, the REM to the source unit turn-on wire and the GND to the chassis ground..



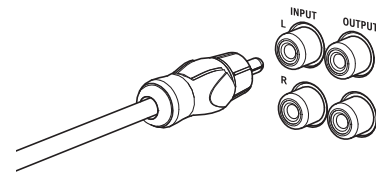
### 5b Power Connections Larger amps

Strip each cable back approx 1/2", connect the +12V to the power cable from the battery, the REM to the source unit turn-on wire and the GND to the chassis ground..



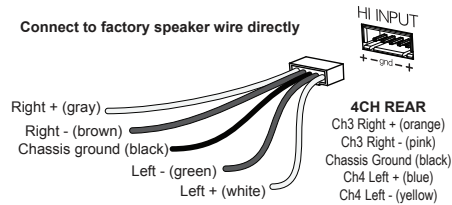
### 6 Signal Input Low Level RCA

Connect the RCA cables to the INPUT connectors. The OUTPUT can be used to provide input for a second amplifier.



### 7 Signal Input High Level

The HI INPUT is for use with source units that do not offer RCA outputs. Use the supplied harness to connect to the source unit's speaker output.



### 8 Level Control

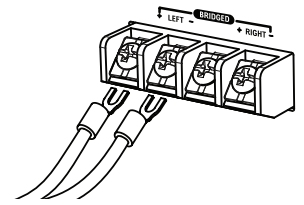


Turn the LEVEL control completely counter-clockwise to minimum.

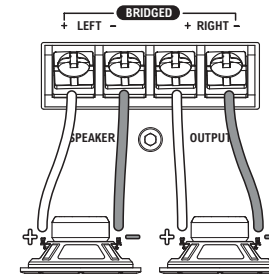


### 9 Speaker Connections

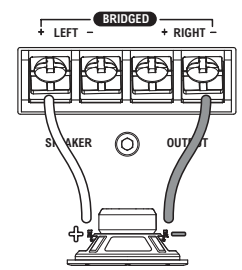
Using spade terminals, connect the speaker cables to the speaker output connectors. Follow the diagram below that best fits your speaker configuration.



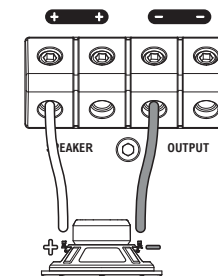
#### Stereo



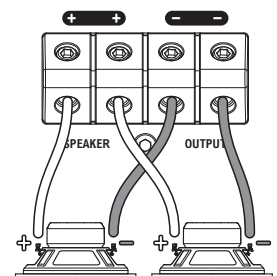
#### Bridged



#### Monoblock single woofer

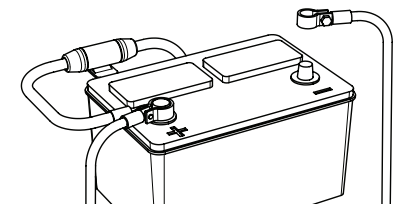


#### Monoblock multiple woofers



### 10 Positive Battery Connection

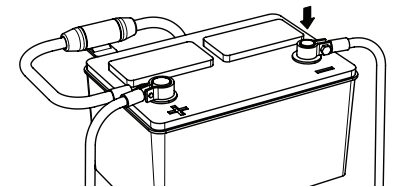
Connect the power cable to the positive battery terminal. The power cable must be fused within 18 inches of the battery terminal.



**Be prepared to disarm your vehicle's alarm and to enter your radio / source unit code.**

### 11 Re-connect Negative Battery Terminal

Re-connect the negative battery terminal making sure it is securely tightened.



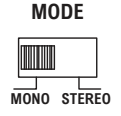
## Setup

**A** **Input Mode**

The input MODE switch will “sum” or combine the right and left channel signals in the MONO position to improve bass performance. Select MONO only when the amp is being used for subwoofers.

**MODE**

MONO STEREO

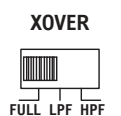


**B** **Xover Mode**

The XOVER Mode switch sets the type of crossover that will be active. 4 channel models will have two switches, one for each set of channels.

**XOVER**

FULL LPF HPF




**C** **High pass Adjustment**

The HPF (high pass filter) control will limit the output below the selected frequency. This is typically used to protect midrange and hi frequency speakers from damage and to allow a smooth transition from a subwoofer.

**HPF**

60Hz 1.2KHz

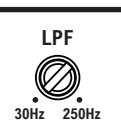


**D** **Low pass Adjustment**

The LPF (low pass filter) control will limit output above the selected frequency. This is used to allow a smooth transition to the higher frequency speakers.

**LPF**

30Hz 250Hz




**E** **Bass Boost**

The BASS BOOST or BASS EQ control will increase the output at 45Hz for more pronounced bass. Exercise caution. Increase the level in small amounts until distortion is noticed, then back off a little.

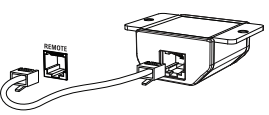
**BASS BOOST**

0dB 9dB



**F** **Remote Level Control**

Some models include a bass remote. Avoid adjusting the bass remote while operating vehicle.



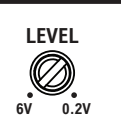
**G** **Level Setting**

This is a critical step to insure your amplifier is properly adjusted to match the signal output level of your source unit.

**LEVEL**

6V 0.2V

**THIS IS NOT A VOLUME CONTROL!**



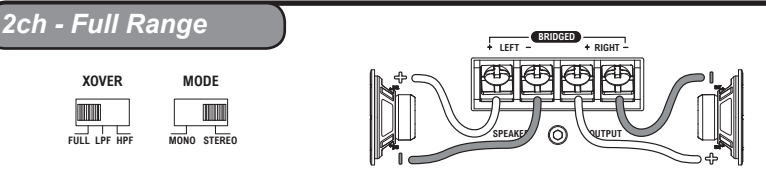
1. If possible, with the source unit off, confirm that the primary volume control is turned down (counter clockwise).
2. Turn on the source unit (CD, or MP3 player). Re-confirm that the volume is turned down. Make sure the source unit controls; balance, fader, bass and treble are all set to center or “0” adjustment. Make sure that the green LED on the end of the amplifier is illuminated.
3. Play a clean musical selection of which you are very familiar. CD is preferred. Do not use radio signals for level setting. Hit play and start turning the volume of the source unit up.
4. Stop increasing the source unit volume when you reach 3/4 (about 75%) or until you hear speakers begin to slightly start producing distortion.
5. Increase the amplifier level (clockwise) until distortion is heard, then back the level down (counter clockwise) until the distortion is eliminated. Small adjustments may need to be made to balance the levels of multiple amplifiers.

## Common System Setup

**2ch - Full Range**

**XOVER** **MODE**

FULL LPF HPF MONO STEREO

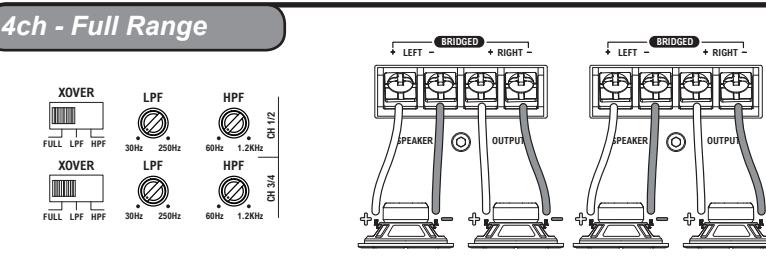


**4ch - Full Range**

**XOVER** **LPF** **HPF**

FULL LPF HPF 30Hz 250Hz 60Hz 1.2KHz CH 1/2

FULL LPF HPF 30Hz 250Hz 60Hz 1.2KHz CH 3/4

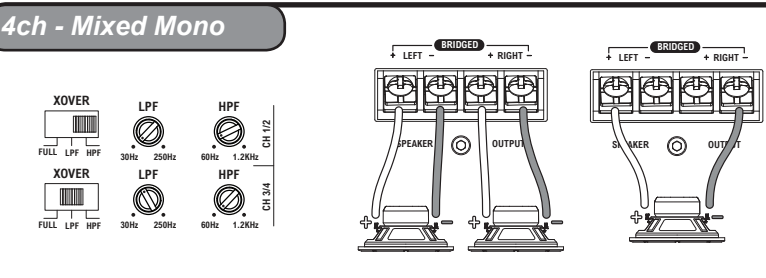


**4ch - Mixed Mono**

**XOVER** **LPF** **HPF**

FULL LPF HPF 30Hz 250Hz 60Hz 1.2KHz CH 1/2

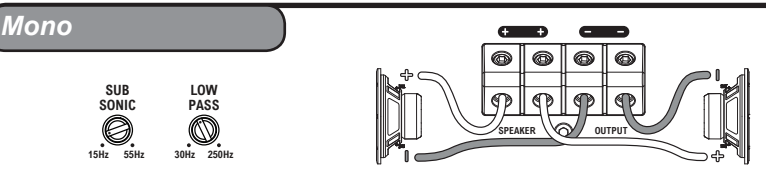
FULL LPF HPF 30Hz 250Hz 60Hz 1.2KHz CH 3/4



**Mono**

**SUB SONIC** **LOW PASS**

15Hz 55Hz 30Hz 250Hz

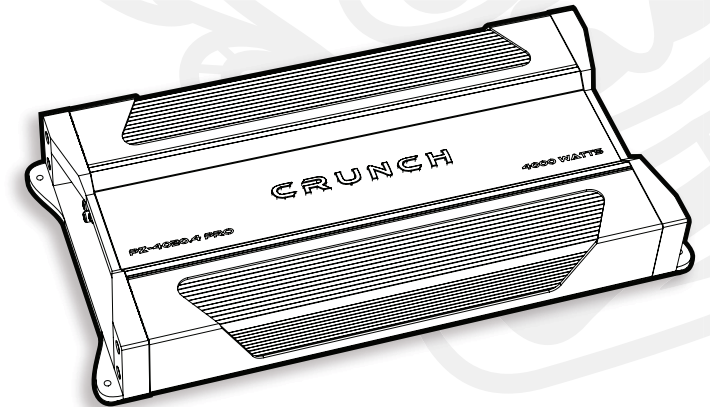


The information contained within this document is intended to offer some basic guidelines for a few of the most common installations. More complex audio systems should be installed by a competent professional.

**MAXXSONICS®**

# CRUNCH®

## Quick Start Installation Guide



**PZ-820.2** **PZ-1020.4**  
**PZ-1020.2** **PZ-1520.4**  
**PZ-1520.2** **PZ-2020.4**  
**PZ-2020.2** **PZ-4020.4-PRO**  
**PZ-3520.2-PRO**

**PZ-3020.1D**  
**PZ-4020.1D**  
**PZ-5020.1D**

Congratulations on your choice of a Crunch amplifier. This “Quick Start Installation” guide is meant to help you “hook up” and play music.

Crunch provides the best in car amplifiers equipment.