

# PDLC81

8 Channel Intelligent Digital Line Output Converter with  
Auxiliary Input and Remote Level Control

## OWNERS MANUAL



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### Introduction

Thank you for purchasing Pacific Audio Corporations (PAC) 8ch intelligent line output converter. This advanced LOC will allow you to integrate with any number of OEM systems and achieve astounding sound quality. The flexibility of the PDL81's applications is only limited by the system for which it is used.

Precision components were chosen with sound quality and noise free operation being the main goals. We are proud you have chosen the PDL81 for your audio system and we hope you enjoy the performance that will be achieved utilizing our interface.

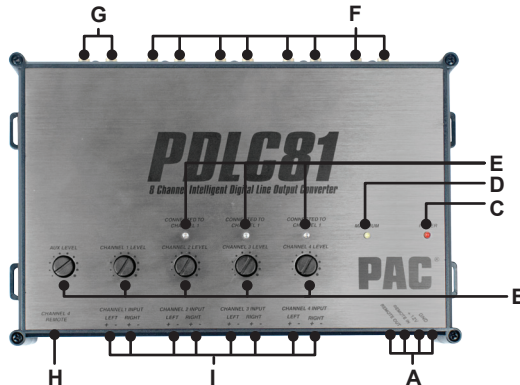
### Features & Specifications

#### PDL81 Features

- Intelligent Signal Sensing Turn-on Circuit
  - Allows easy addition of aftermarket amplifiers to OEM radios
- Independent Front / Rear / Subwoofer / Auxiliary Level Adjustments
  - Full system control
- Multi-Input summing/blending
  - Installation flexibility with high end multi-channel OEM systems
- High Output 10volt RCA Output
  - Enough power to cleanly drive any amplifier
- Ultra Low 50m Ohm output / 20 Ohm input impedance
  - Virtually impervious to noise interference
- SMT (Surface Mount Technology)
  - Precision components for noise free operation
- Output clipping LED's
  - Visual adjustment indicator for maximum output on each channel
- Remote Level control with Auxiliary input
  - Subwoofer level adjustment and additional audio input

#### PDL81 Specifications

Maximum Input Voltage.....	50 V
Maximum Output Voltage.....	9 V
THD.....	0.01%
Input Impedance.....	>20K ohms
Output Impedance.....	.50 ohms
Signal to Noise.....	>98dB
Signal Sense Level.....	DC sense



### Operation & Function

- A) Power Connections** - These connections are for input power, chassis ground, and remote turn-on. Use a minimum of 18 gauge wire for power and ground connections. The power wire should be fused with a 1 amp fuse.
- B) Input Gain Adjustment** - This control matches the input level of your PDLC81 with the output level of your source unit.
- C) Power Indicator** - This LED indicates when the PDLC81 is powered on.
- D) Maximum Indicator** - This LED indicates when the signal is at its maximum level before distortion occurs. When the input "Gain" adjustment is set correctly and the source unit is at its maximum volume this LED should flicker intermittently.
- E) Summing Indicators** - These LED's indicate when a channel is being summed with the main channel.
- F) RCA Outputs** - These RCA output jacks provide a full range signal to your amplifier. Channel 4 has one additional feature. When there is no signal present on Channel 4, Channel 3's input will automatically be sent out Channel 4.
- G) AUX Input** - This RCA input jack allows you to connect an additional source to the PDLC81 such as an iPod.
- H) Remote Control** - This port is for the dual function remote control (Included). The first function is source selection. Pushing the control knob in will toggle the PDLC81's input between the AUX and Main channels. The second function allows the user to control the level of Channel 4's output up to the maximum adjustment level set on the PDLC81. This control does not add any additional gain, it only attenuates the level at which the PDLC81 was set.
- I) High Level Inputs** - This terminal block allows for a high level left and right channel signal input from the source unit. Use this if your source unit does not have RCA outputs.

### Installation Guidelines

#### INSTALLATION PRECAUTIONS

- Always mount the unit in a fashion so that it can be easily accessible for making adjustments.
- Avoid mounting the unit to subwoofer enclosures or high vibration areas.
- Do not cover the unit with carpet or any other material.
- Do not mount the unit in the engine compartment or anywhere that it will be subject to high temperatures, (ie, direct sunlight or heater) moisture, dust or dirt.
- Use rubber or plastic grommets to protect wires when routing them through metal.
- Always keep signal wires away from high current power wires.
- The ground connection should always be the first connection made.



## WIRING INSTRUCTIONS

### Ground Connection (GND)

The main ground connection should be made between the Gnd terminal on the unit and a metal part of the vehicle close to the mounting location. This wire needs to be as short as possible to minimize the possibility of induced noise. You should use 18 gauge wire or larger for the ground connection. The metal point on the vehicle where the ground connection is made needs to have all paint removed and be scuffed down to the bare metal. The ground wire should have a ring terminal soldered to it and be bolted directly to the vehicle with the use of a star washer. Do not ground the unit near existing (factory) ground points. These areas generally have multiple devices ground- ed to them and can cause induced noise.

### Power Connection (+12V)

The main power connection should be made at the battery. This will ensure that the unit receives the best possible connection to minimize noise. There must be an inline fuse (1 amp) placed in series with the unit. The fuse should be within 18" of the bat- tery. You should use 18 gauge wire or larger for the power connection. The power wire should have a ring terminal soldered to it and be bolted to the vehicles battery. Do not install the fuse in the holder until all the systems connections have been made.

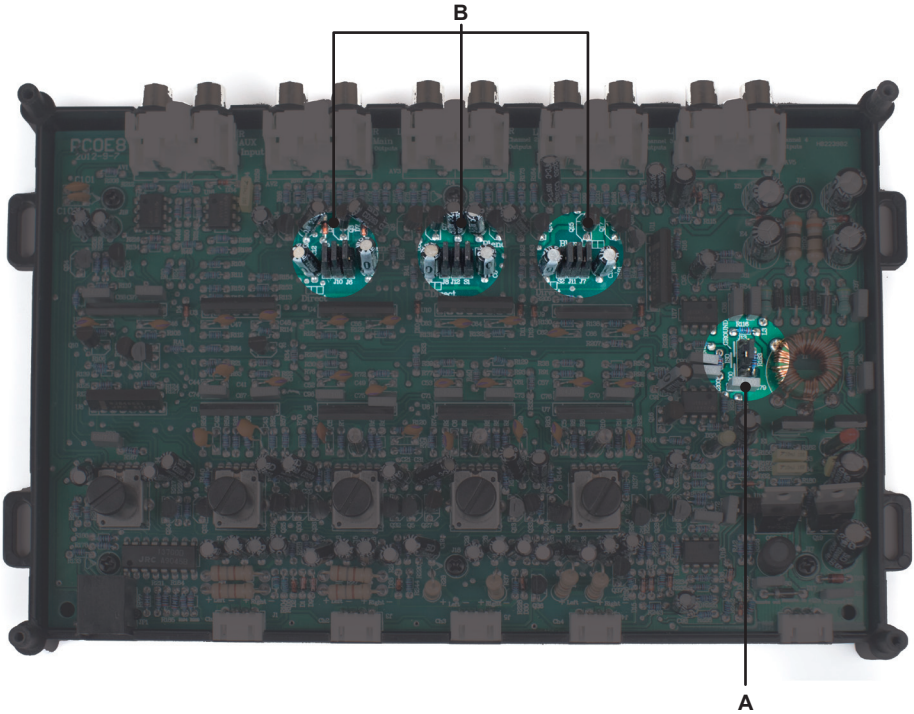
### Remote In (Optional)

This PDLC81 unit is turned on by applying +12 VDC to the remote turn-on terminal. This terminal should be connected to the remote lead from the car stereo. This remote lead from the source unit will trigger a +12V output only when the car stereo is turned on. If the source unit does not provide a remote turn on you can use the accessory terminal in the cars fuse block. This will however turn the unit on and off with the key, regardless of whether the source unit is on or off.

### Remote Out (Optional)

This PDLC81 unit is equipped with a signal sensing circuit that can detect a signal on its input and provide a +12V output signal to turn on an aftermarket amplifier. Connect this to the remote terminal on an aftermarket amplifier.



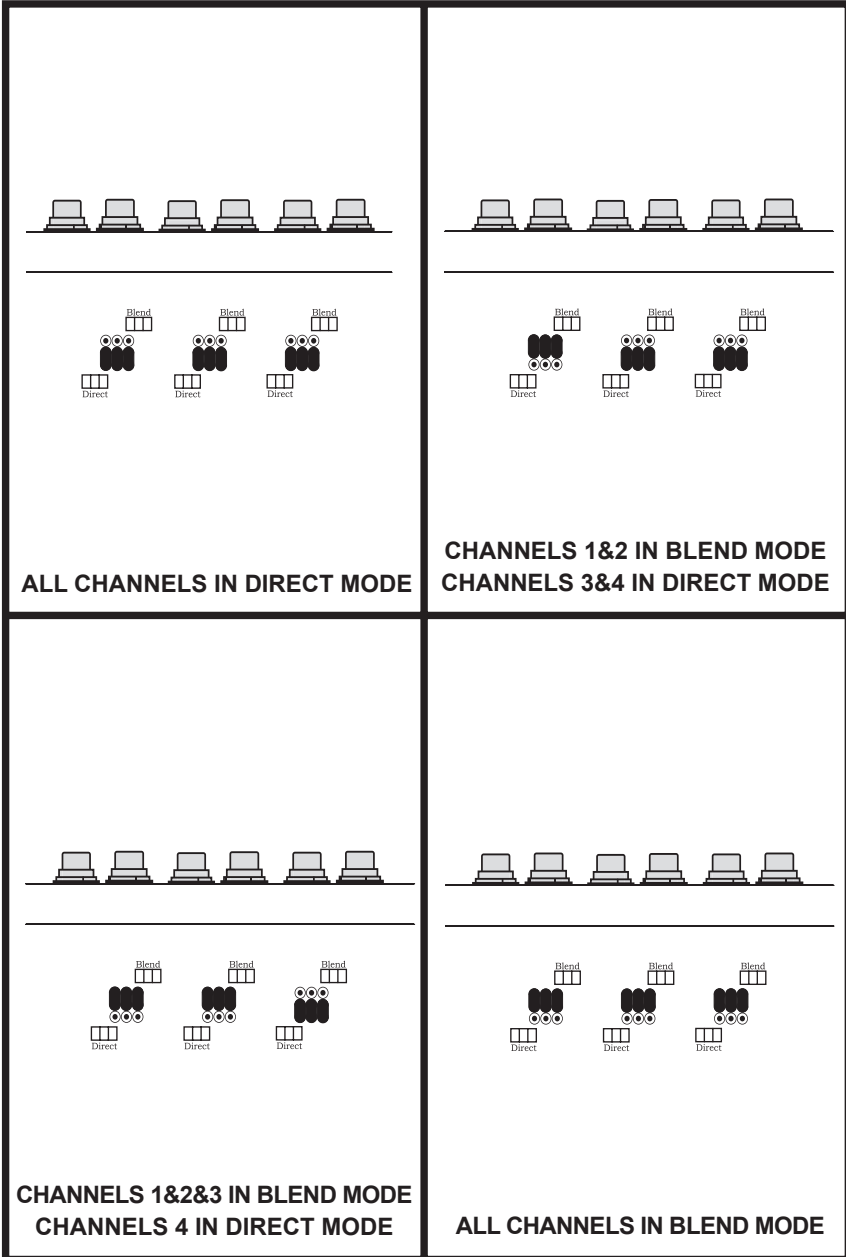


**\* PDLC81 shown with top cover removed.**

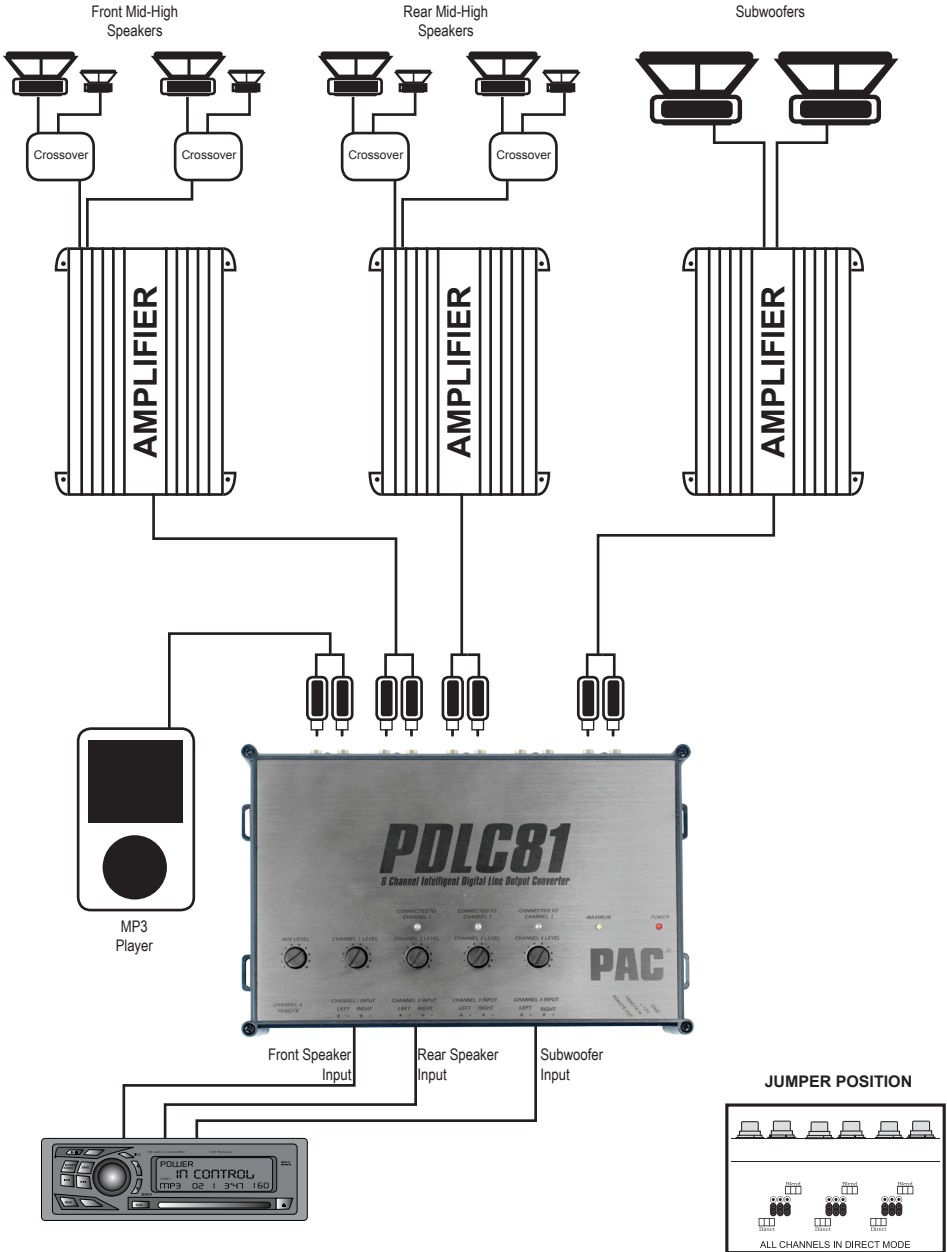
**A)** Isolation Jumpers - This jumper provides three different ground isolation options for the input of the PDLC81.

The three input options include GND, Isolation, and 200ohms. Make sure the coe6 is turned off before making your selection.

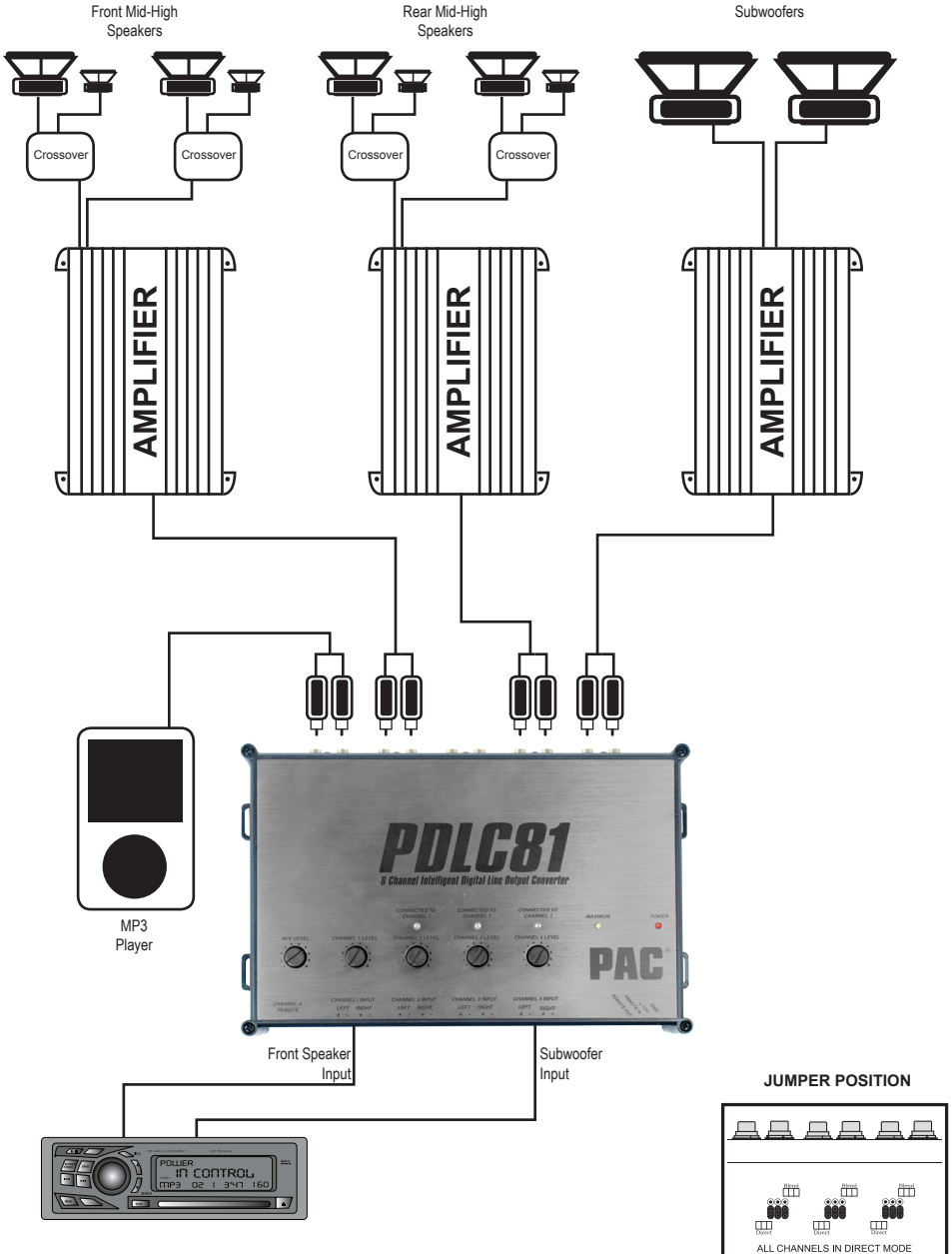
**B)** Blending Jumpers - These jumpers are used to select either a Direct (separate) or a Blended (summed) output. In the direct position the signal on an individual channels input will come out the same channels output. In the blended position the signals on two or more channels can be combined with Channel 1 to provide one full range output. All of the channels that have been selected to have their inputs blended will be combined and output onto Channel 1. Each of the remaining channels being blended (2, 3, & 4) will have the same signal on their channels output as what is on their input (not a full range output like Channel 1).



## EXAMPLE SYSTEM #1

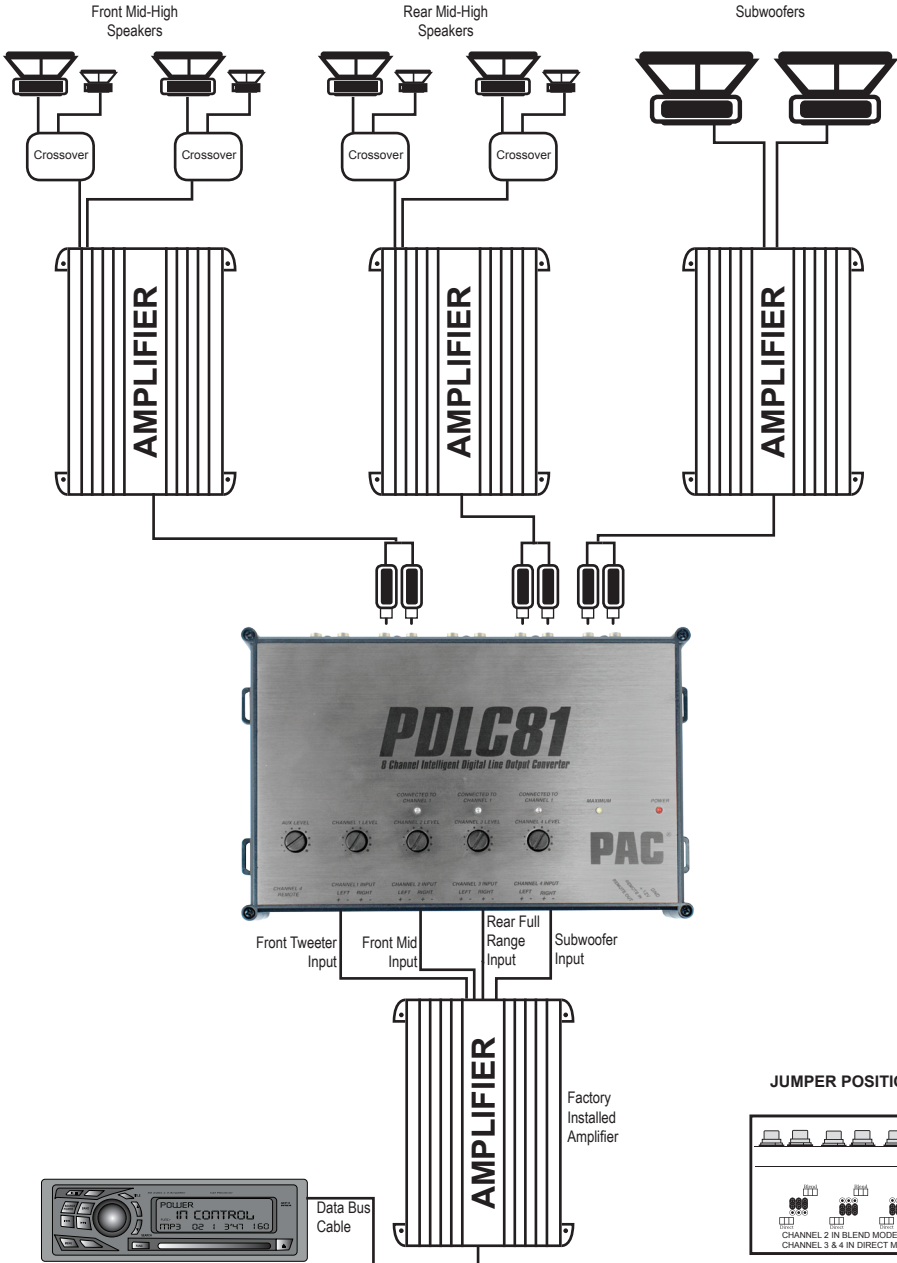


## EXAMPLE SYSTEM #2

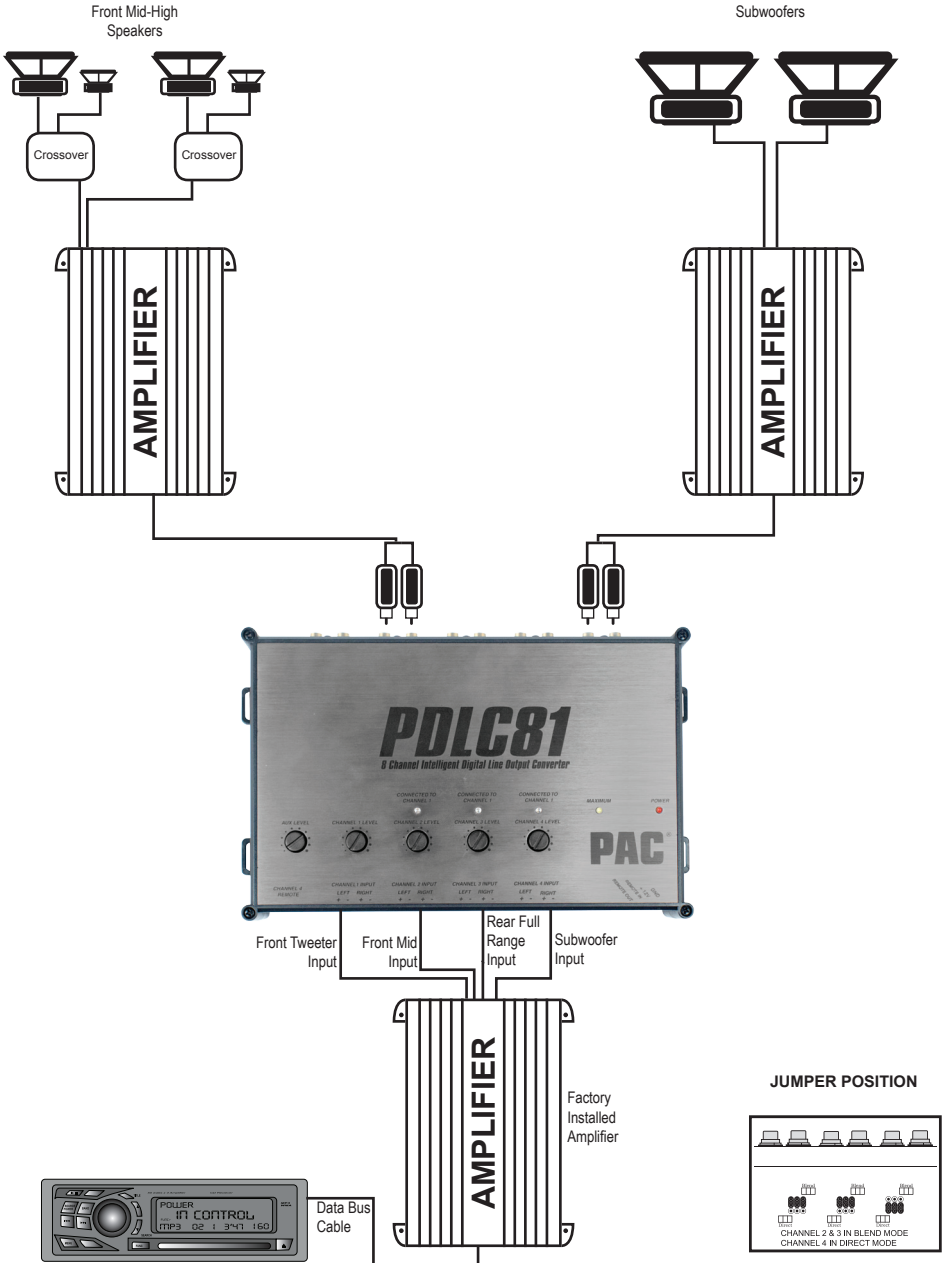




## EXAMPLE SYSTEM #3



## EXAMPLE SYSTEM #4



## One Year Limited Warranty

The quality controls used to manufacture all PAC products are designed to ensure your complete satisfaction.

This warranty applies only to original purchaser of PAC products from an authorized PAC dealer. It covers any supplied or manufactured PAC parts that, upon inspection by authorized PAC personnel, are found to have failed in normal use due to defects in material or workmanship. This warranty does not apply to installation expenses.

Attempting to service or modify any of our products, or operating them outside their recommended usage, will render this WARRANTY VOID.

Unless prescribed by law, PAC is not liable for any personal injury, property damage and/or any incidental or consequential damages (including water damage) resulting from product malfunctions, defects and/or misuse. PAC is also not liable for any products that are improperly altered or installed.

### **All PAC product parts are guaranteed for 1 year as follows:**

Within the first 12 months from the purchase date, subject to the conditions above, PAC will repair or replace any product at its discretion if it is defective in material or workmanship. For this warranty to be effective, it must be returned to an Authorized PAC Dealer with PROOF OF PURCHASE from that PAC dealer.

PAC advertises and sells select third party or distributed brand products. Warranties on 3rd party products may vary.





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