

PDLC21

2 Channel Intelligent Digital Line Output Converter

OWNERS MANUAL



PDLC21

OWNERS MANUAL

Introduction

Thank you for purchasing Pacific Audio Corporations (PAC) 2ch 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 PDLC21'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 PDLC21 for your audio system and we hope you enjoy the performance that will be achieved utilizing our interface.

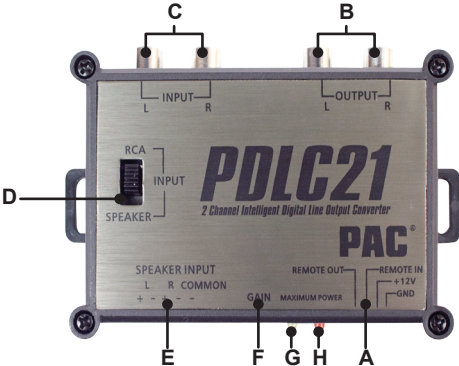
Features & Specifications

PDLC21 Features

- Intelligent Signal Sensing Turn-on Circuit
 - Allows easy addition of aftermarket amplifiers to OEM radios
- Pre-Amp 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
 - Visual adjustment indicator for maximum output
- Plastic Housing
 - For noise and rattle free installations

PDLC21 Specifications

Maximum Input Voltage.....	20 V
Maximum Output Voltage.....	10 V
THD.....	0.01%
Input Impedance.....	>20K ohms
Output Impedance.....	30 ohms
Signal to Noise.....	>87dB
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) RCA Outputs** - These RCA output jacks provide signal to your amplifier.
- C) Low Level Inputs** - These RCA input jacks allow for a low level left and right channel signal input from the source unit.
- D) Input Switch Selector** - This switch is used to select the input of the PDLC21. There are two possible inputs, the RCA position selects the low level RCA input (0-4V) and the Speaker position selects the high level input.
- E) 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.
- F) Input Gain Adjustment** - This control matches the input level of your PDLC21 with the output level of your source unit.
- G) Power Indicator** - This LED indicates when the PDLC21 is powered on.
- H) 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.

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 PDLC21 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 PDLC21 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.

Quick Setup Procedure:

The following steps should be done with RCA outputs DISCONNECTED.

1. Connect all power connections
2. Connect input connections
3. Preferably with a test CD or MP3 track playing pink noise. Adjust volume of source unit to just below full volume. (If no test track is available, normal program material can be used)
4. With volume almost @ full, adjust gain on PDLC21 up until the clip light flickers on slightly, Output gain is now adjusted.
5. Turn volume down on source unit and turn system off
6. Connect RCA outputs
7. Turn gain on amplifier(s) all the way down.
8. Turn system on and test, and make adjustments as needed.

NOTE: Full output volume from an amplifier should be achievable with these settings. The PDLC21 has 10v @ full output and is more than adequate for the majority of amplifier(s) input sections and will allow for the best possible sound quality and noise free operation. Turning up gains on an amplifier may give the appearance that the system is louder, but you will only be driving your amplifier into premature distortion. Slight deviations from this procedure for dissimilar amplifier sizes, multi-channel amplifiers, multi amplifier setups and different speaker sizes may need to be made.

Examples would be using a 4 channel amplifier with only 2 channels of input signal. There may be a desire to have the front channels louder than the rear. By slightly reducing the output of the PDLC21 and then raising the gain on the front channels of the amplifier to the desired output, the differential in volume and retention of proper input levels can be achieved.

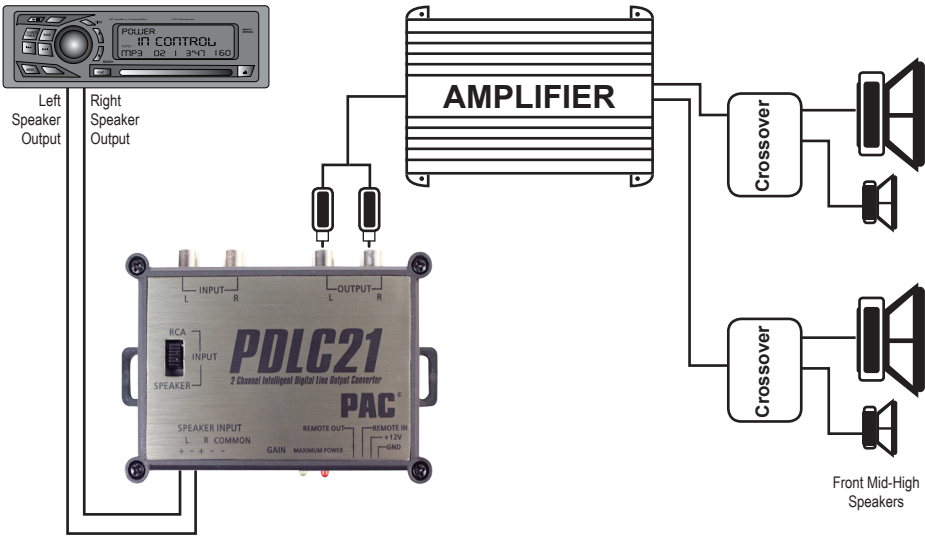


PDLC21

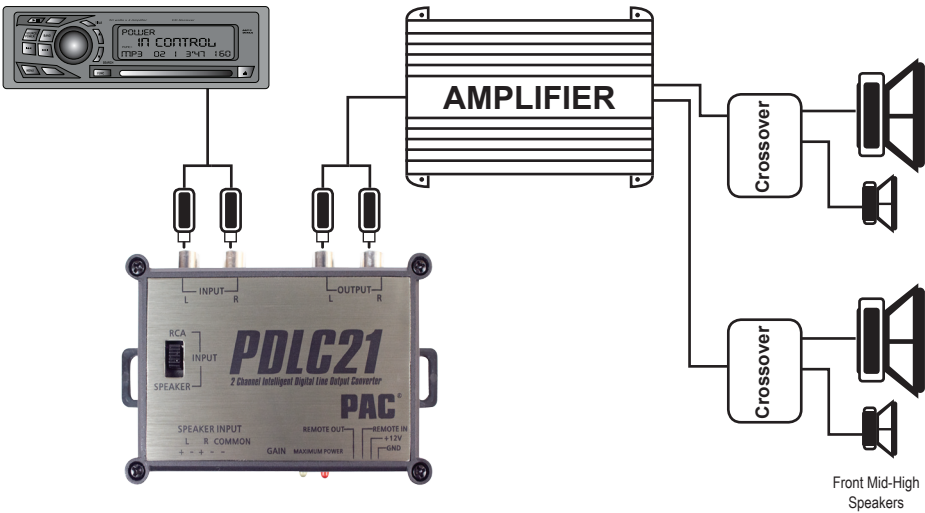
OWNERS MANUAL

Installation Guidelines (Cont.)

EXAMPLE SYSTEM #1



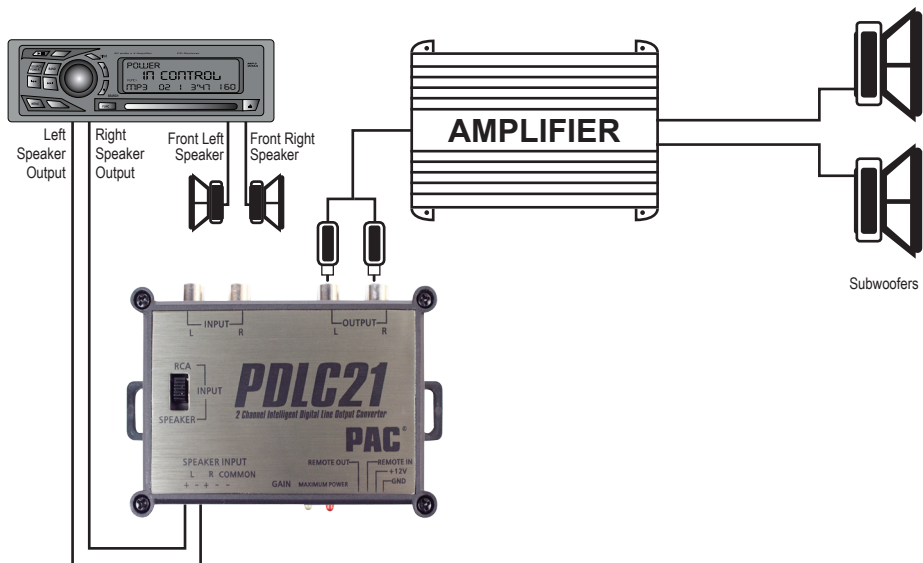
EXAMPLE SYSTEM #2



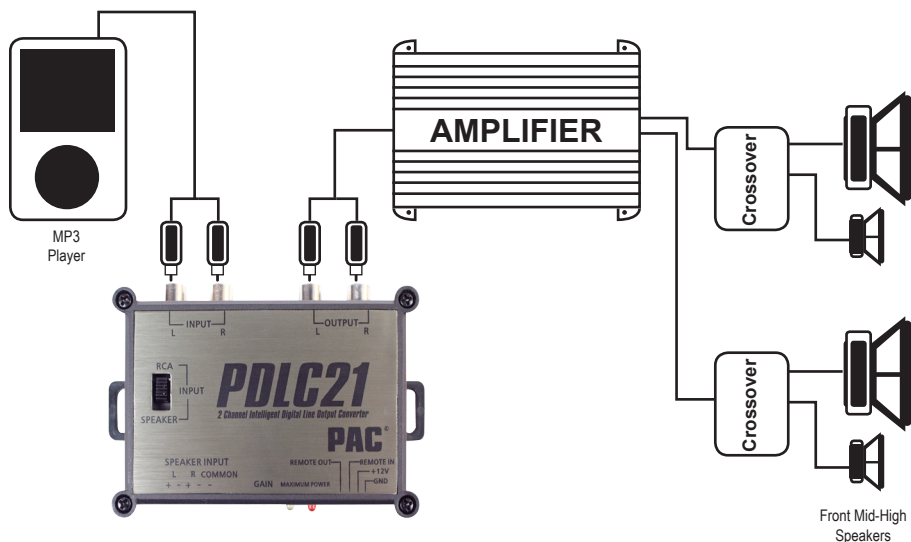
OWNERS MANUAL

Installation Guidelines (Cont.)

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.





PDLC21

OWNERS MANUAL

Pacific Accessory Corporation®
Santa Ana, California 92705 | Ph. 866-931-8021 | support@pac-audio.com
©2011 Pacific Accessory Corporation
www.pac-audio.com