

POWER CLASS PRO COMPETITION AMPLIFIERS

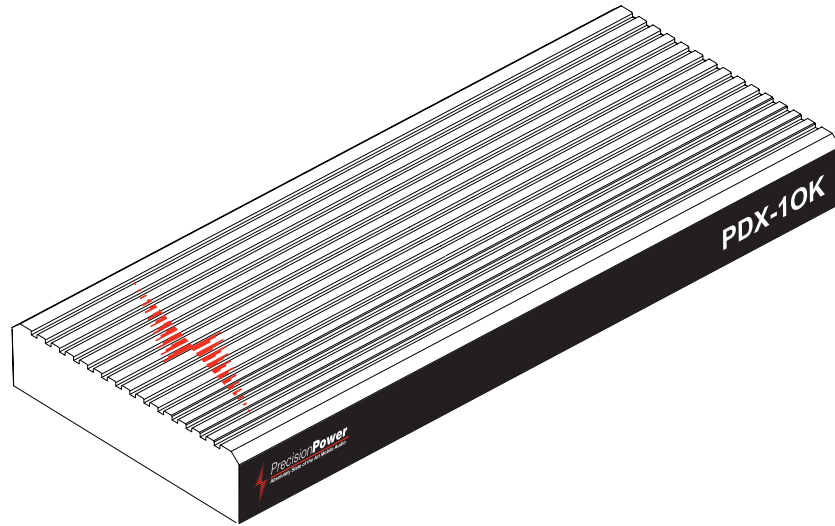
OWNER'S MANUAL

PDX-10K



TABLE OF CONTENTS

| | |
|---------------------------------|-------|
| INTRODUCTION | 2 |
| FEATURES & SPECIFICATIONS | 3 - 4 |
| CONTROLS & FUNCTIONS | 5 - 9 |
| WIRING DIAGRAM | 10 |
| ADJUSTING & TUNING | 11 |
| TROUBLE SHOOTING | 12 |



INTRODUCTION

Amplifiers provide high-performance sound reinforcement for your mobile audio equipment. The Multi-Mode bridging capabilities allow flexibility in hosting several different speaker configurations.

To achieve optimum performance, it is highly recommended that you read this Owners Manual before beginning installation.

FEATURES

Class D Topology IR2110S

S/N 87dB at 12kW @ 1 ohm

All "N" Channel MOSFET TO218 Transistors

Unregulated Power Supply

160 Volt Rails +/- for INSANE Amounts of Power

Capacitance Voltage 200V

Monster Solid Copper Buss Bars to Pass > 800 Amps of Current

Idle Current Draw 6 amps

Maximum Current Draw >1200 amps

Dual Monoblock Internally Bridged

Digitally Controlled Module for Damping Factor >1000 @ 100Hz

200mV - 7.6V Input Sensitivity

Short Circuit Speaker Protection

Thermal Protection

Optimized for a 16 Volt DC Power Supply

Totally Separated PWM Circuit to Eliminate Noise

SPECIFICATIONS

Unique Protection Sensing Circuit for Maximum Power

2.5mm Thick PCB (57% thicker than normal 1.6mm)

Over 40 Pounds!

Comes with Plexiglass & Metal Bottoms

Remote Bass Control Included

12 5/8" W x 2 3/4" T x 23 1/4" L

Subsonic Filter 15-50Hz @ 24dB Per Octave

Low-Pass X-over 35-250Hz @ 24dB Per Octave

Bass Boost 40-120Hz, 0-18dB

(2) 1/0 Gauge Power Input Terminals

(2) 1/0 Gauge Ground Input Terminals

(2) 8 Gauge Remote Turn-On Terminals

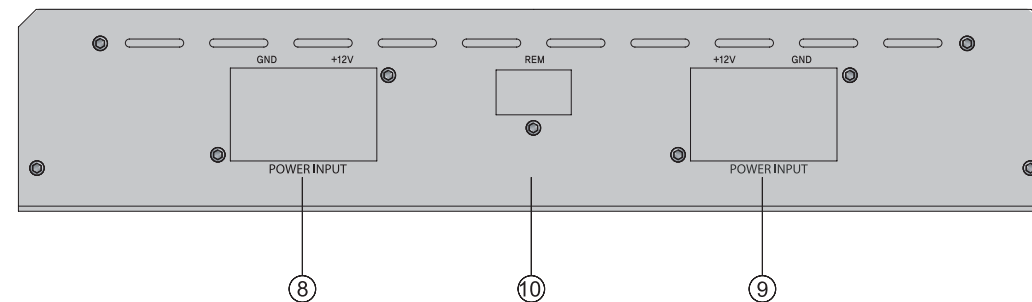
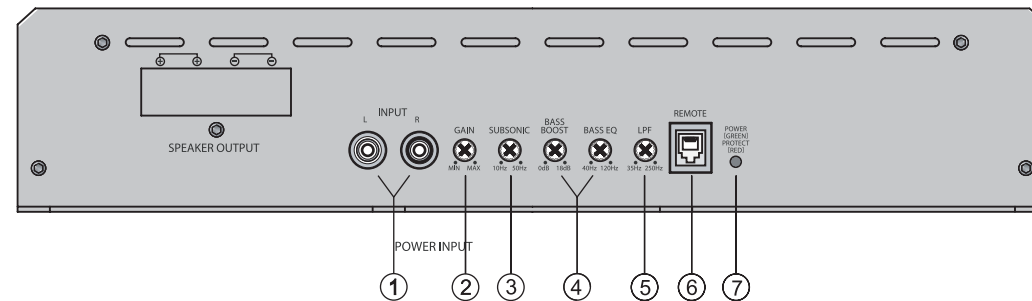
(4) 8 Gauge Speaker Output Terminals

The PDX-10K performs best with a 16 volt power source.

PrecisionPower recommends using a minimum 14.4 power source.

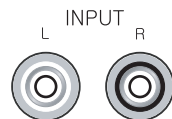
| Power at 16 Volts | |
|-------------------|--------------|
| Load | Output Power |
| 2 ohm each ch | 3.7kW |
| 1 ohm each ch | 6.1kW |
| 0.5ohm each ch | 10kW |

Controls & Functions



Controls & Functions

1. Input RCA jacks



These inputs are for signal cables from the source. Always use high quality RCA cables.

2. Gain



This control allows you to vary the amplifier's input sensitivity between 0.2[200millivolts]and 7.6volts. Clockwise rotation raises the threshold and lowers the sensitivity, requiring higher input signal voltage from the source. in order to obtain maximum output. counter-clockwise adjustment lowers the threshold and raises the sensitivity, requiring a lower source voltage from source unit. The overall objective is to set this control to closely match the voltage produced by the source unit. Avoid setting the threshold too low and supplying excessive input signal voltage, as this would saturate the input stages and introduce unwanted distortion.

3. Subsonic

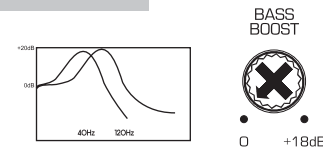


Variable Subsonic Filter[10Hz – 50Hz]

The Subsonic filter will roll off all the unwanted frequencies below 10Hz – 50Hz. This will allow the amplifier to use that wasted power in the audible bandwidth.

Controls & Functions

4. Bass Boost & EQ Control



The Bass EQ control is used to select the boost frequency. Any frequency from 40 to 120 Hz can be selected. The Bass Boost control will increase the frequency selected from the Bass EQ up to 18dB.

5. LPF Control



This control is used to set desired low pass frequency[35 ~ 250Hz]. The filter acts to cut-off frequencies above the set-point.

6. Remote Control input



The Remote input can be connected to the Remote Dash Control with the supplied connection cable. This control can be used to adjust the amplifier's input sensitivity.

Controls & Functions

7. LED indicator

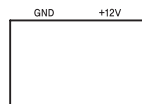


POWER : This GREEN LED will illuminate when the amplifier is turned "ON" . If it fails to illuminate check the power connections to the amplifier and fuses.

PROTECT : The amplifier protection circuitry will disable the amplifier if input overload, short circuit or extremely high temperature conditions are detected. when the protection mode is in operation the red LED indicator on the side panel will be illuminated the amplifier has gone into a self-preservation mode.

If you observe that the protection LED is lit, please check the system carefully to determine what has caused the protection circuit to engage. the amplifier can be reset by turning the remote power off and then on again. If the amplifier shut down due to a thermal overload condition. please allow it to cool down before restarting. If the amplifier shut down of an input overload or short circuit .be sure to repair these conditions before attempting to power up the amplifier again.

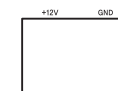
8.Gnd(Chassis ground)



To avoid unwanted ignition noise caused by ground loops. It is essential that the amplifier be grounded to a clean, bare, metal surface of the vehicles chassis. It is not recommended to use seat or seat belt bolts..

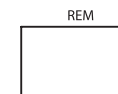
Controls & Functions

9.Power[Battery positive]



Due to the power requirements of the amplifier this connection should be made directly to the positive [+] terminal of battery. For safety measure install an in-line fuse Holder [not included] as close to the battery positive [+] terminal as possible with an ampere rating not to exceed the maximum current specified on page 3

10. Remote Power On

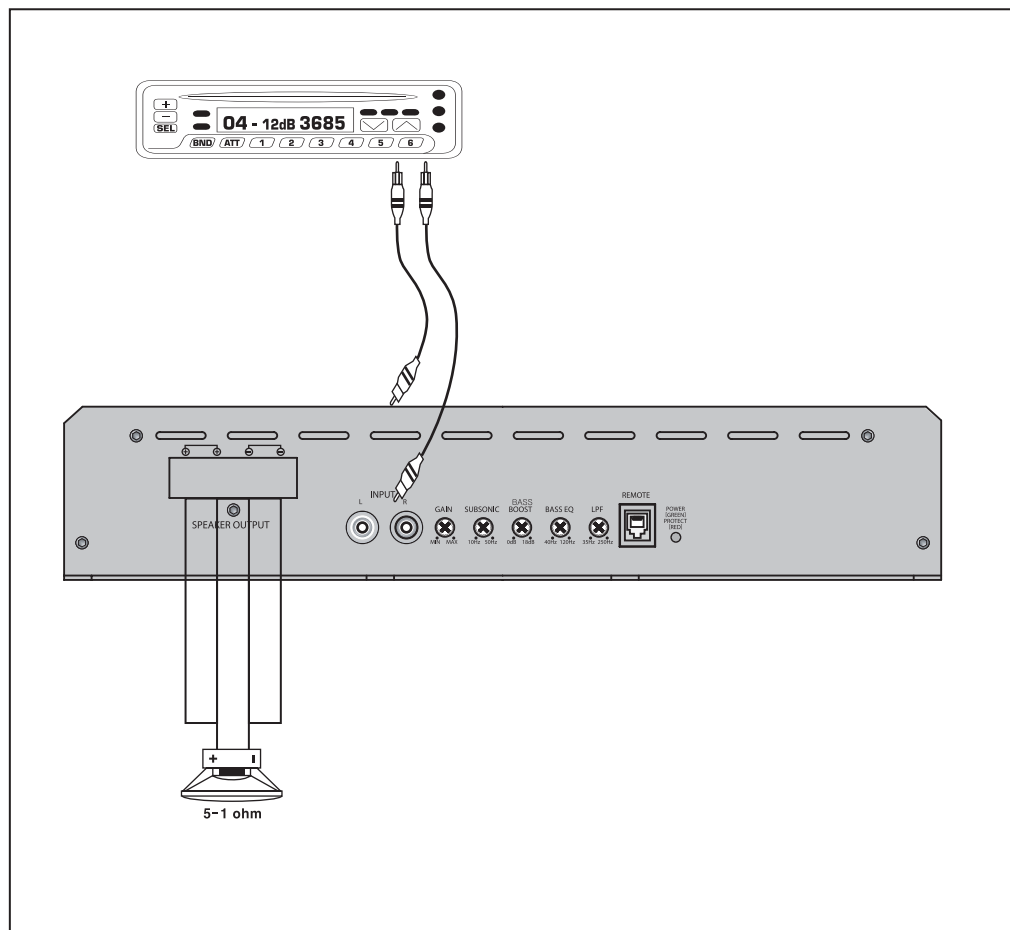


To remote wire from source unit.

The amplifier is turned "ON" remotely when vehicle's source unit is turned "ON"

Note : IF YOUR RADIO DOES NOT HAVE +12 VOLT OUTPUT LEAD WHEN TURNED ON, THE "REMOTE" TERMINAL ON THE AMPLIFIER CAN BE CONNECTED TO VEHICLES ACCESSORY CIRCUIT WHICH PROVIDES +12V WHEN THE CAR IS ON.

Wiring Diagram



Turning on the Amplifier

The amplifier automatically turns on within a few seconds after remote voltage is applied. If your system is set-up so that the source unit provides the remote voltage. Then it would turn on when your stereo is turn on. Note that there are alternate means of providing the 12 volt remote control signal, including and auxiliary switch.

Adjusting The Audio Level

As stated previously, it is important to obtain a close match between the source unit's output voltage and The amplifier's sensitivity or admittance setting.

1. Use a screwdriver to turn the input sensitivity fully counter-clockwise to 200mV.
 2. turn the auto sound system's volume control to about one-third of its full range.
 3. Adjust input sensitivity to a comfortable listening level.
 4. turn up auto sound system's volume control until the sound begins to distort. then immediately turn the volume down to a point just before where the distortion began.
- Caution : Never turn up the auto sound system's volume control more than needed to adjust the audio level, more than two thirds of its maximum volume.
5. Adjust the LPF to a desired setting. Raising the LPF will allow higher bass frequencies to play. Lowering the LPF will block the higher bass frequencies.
 6. Adjust the Sensitivity to closely match the output produced by the source unit, or the maximum level the amplifier should play.
 7. Set the Bass EQ to a desired frequency, and adjust the Bass Boost to a desired boost level.

Trouble Shooting

| SYMPTOMS | CHECK | REMEDY |
|--------------------------------------|--|---|
| NO SOUND | Is the power LED illuminated? (NO) | Check all fuses to amplifier. Be sure Turn-on lead is connected check signal leads. Check gain control. Check Tuner/Deck volume level. Clean contacts on fuse holders. |
| | Is the Diagnostic LED illuminated? (YES) | Check for speaker short or amplifier overheating. |
| AMP NOT SWITCHING ON | No power to power wire | Repair power wire or connections. |
| | No power to remote wire with receiver on | Check connections to radio. |
| | Burnt or broken fuse | Replace fuse |
| NO SOUND IN ONE CHANNEL | Check Speaker Leads | Inspect for short circuit or an open connection. |
| | Check Audio Leads | Reverse Left and Right RCA inputs to determine if the problem is occurring before the amp. |
| AMP TURNING OFF MEDIUM / HIGH VOLUME | Check Speaker load impedance | Be sure proper speaker load impedance recommendations are observed. (If you use an ohmmeter to check speaker resistance, please remember that DC resistance and AC impedance may not be the same.) |
| PROTECTION LAMP ON | Shut down | Turn radio down Wait for AMP to cool |
| | Speaker wires shorted | Separate speaker wires and insulate |



*Precision***Power**

Absolutely State of the Art Mobile Audio