

**PRO-Series
Mono Bass
Car Amplifier**



OAX2000

PRO Series

OWNERS MANUAL

PRO-Series Mono Bass Car Amplifier

The Ultimate Sound Experience

Congratulations on purchasing an Option Audio amplifier !
At Option Audio, we like our music LOUD! Manufactured using the latest in cutting edge technology and high quality components, you can trust your Option Audio amplifier will sustain optimum sound, while not compromising quality.

We manufacture a large range of In-Car Audio Visual products, Speakers, Subwoofers, Amplifiers, GPS and Reverse Camera Systems. To view our product range, please visit our website www.optionaudio.com.

Please retain this manual and your sales receipt for future reference.

We appreciate all feedback you may have. Please address this to:

Option Audio
Unit 5, 3-19 University Drive,
Meadowbrook, Qld, 4131
Info@optionaudio.com
Ph: 07 3805 5112



AUSSIE OWNED AND
ENGINEERED

Serial# _____

Dealer's Name _____

Date of Purchase _____

Installation Shop _____

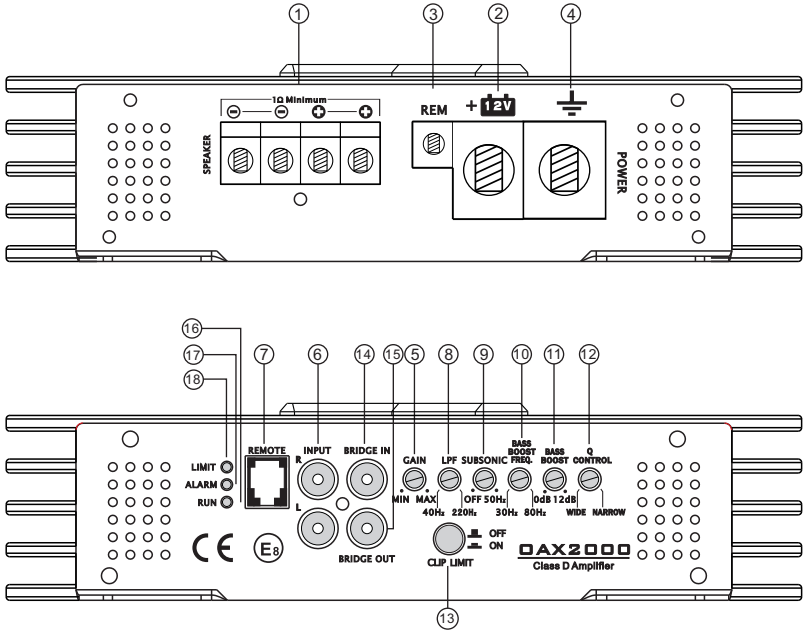
Installation Date _____

DESIGN FEATURES

- ✓ Double side FR-4 PCB, high quality SMD components
- ✓ Compact size & Light weight
- ✓ Full MOSFET circuit design
- ✓ Advanced power management function
- ✓ Clip limit function
- ✓ 24dB Low pass filter and subsonic filter adjustable
- ✓ Bassboost frequency, level and Q factor adjustable
- ✓ Easy bridging, optional remote gain control
- ✓ Overload, thermal, low/high power voltage protection
- ✓ Passed RoHS, E-mark certification

AMPLIFIER FUNCTIONS

OAX2000



1 Speaker connection

Connect your speakers correctly which means plus to plus and minus to minus. Never connect speaker cables with chassis ground directly. It may destroy your amplifier. We recommend AWG 8-10# speaker cable. The two plus units and two minus units are connected inside amplifier. The detailed connection method is shown in page 7-8.

2 +12V Battery Terminal

The +12 Volt power cable must be connected with a fuse in line near the battery+ terminal. Please see table 1 in page 7 to select cable and fuse.

3 REM

Remote terminal. The remote cable must be connected with source unit remote terminal then amplifier will switch on and off automatically with source unit. If there are two or more amplifiers connected to this terminal it might be necessary to add an additional relay.

4 GND

Chassis ground terminal. The chassis ground cable must be connected very tight on a nearby massive and electric conductive place. Please connect chassis ground near amplifier with same gauge as power cable.

5 Gain

Gain control regulates the sensitivity of amplifier to match the signal output voltage of your source unit. The gain control is not a volume adjustment. Use high quality CD music and increase the volume of your source unit to 75%. Position the gain at the minimum and then increase gain slowly (clockwise). Stop at the first sign of distortion, then lower the gain a little (counter clockwise) to achieve clear undistorted music at the maximum level.

6 RCA audio-input

These RCA audio-inputs connect with your source unit RCA outputs. Please use car audio RCA cables, otherwise it may be disturbed. Keep these cables as short as possible. To avoid disturbances from your car electronics, please don't close the existing car cables when you install the RCA cables. If your source unit has only speaker outputs, you should use a HIGH-LOW level adaptor.

7 Remote Volume Control (Optional)

When using the remote volume control you can adjust volume in the driver seat conveniently.

8 LPF(Low Pass Filter)

Filter out high frequency from 40Hz to 220 Hz that the woofer can't play. Adjust this knob to match the woofer's frequency response.

9 SUBSONIC

It is the opposite of the LPF. It can filter out unwanted low frequency from 10Hz (OFF) to 50Hz. This function will increase the power handling of your woofers.

10 BASSBOOST FREQ

This knob controls the boosted center frequency. The frequency can be adjusted from 30Hz to 80Hz according the specification of your car audio system. (Eg. When you adjust this knob to 50Hz, amplifier can boost the frequency around 50Hz.) This function should be adjusted along with bassboost level and Q control.

11 BASSBOOST

This knob adjust the boost level of the bassboost center frequency. It can be adjusted from 0 to 12dB. Combining with bassboost frequency and Q control, you can accurately match the amplifier to subwoofer's response.

12 Q-Control

This knob adjust the curve shape of bassboost. Turn it to narrow side will make the boosted frequency narrow and sharp, turn it to wide side will extend the boosted frequency range. Combining with bassboost frequency and bassboost level adjusting, you can achieve a perfect bass response matching your system.

13 CLIP LIMIT Switch

This switch control the output clip limit on/off. When switched on, the amplifier will control the output level at clip point and reduce the distortion. This will keep your amplifier at a low distortion at clipped signal.

14 BRIDGE IN

This RCA jack receives signal from the master amplifier when this amplifier is bridged as slave. DO NOT use input jacks when the amplifier is working as slave. All the functions will be adjusted by the master amplifier. Please see the drawing of bridging in page 12.

15 BRIDGE OUT

This RCA output send out bridge signal to another same X-series amplifier in bridging configuration. All the functions will be adjusted by the master amplifier. Please see the drawing of bridging in page 12.

16 Run Indicator

This blue LED will light up when amplifier work properly. It will flash or shut down once amplifier in self-testing or malfunction.

17 Alarm Indicator

This red LED will light if amplifier has detected a fault or has shut down to protect itself from permanent damage. This may caused by one of the following: excessive heat, short circuit, low voltage, high voltage or overload. If this happens please shut down the amplifier and check the problem.

18 Limit Indicator

This yellow LED will light if amplifier is driven to it's power limit. This may occur when amplifier output clipping, overload or overheat. When limit indicator light up, the amplifier will reduce or hold output power to protect subwoofer and amplifier. Please turn down volume or cool down the amplifier when this indicator light up continually.

PRE INSTALLATION

- Please prepare sufficiently to layout your car space before installation. We recommend to have the installation done by an Autho rized OPTION AUDIO Dealer.

- Use good insulated power cable to endure up to 80A current draw. The +12 Volt power cable must be connected with a fuse in line near 20cm of battery+ terminal. Required current, power cable and proper external fuse listed as following.

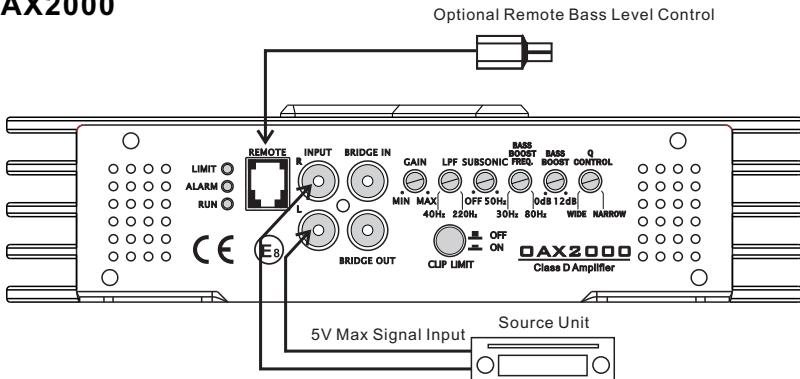
Table 1

Model	Fuse	Cable
OAX2000	150AMP	AWG 0-2#

- Please use car audio RCA cables, otherwise it may be disturbed. Keep these cables as short as possible. To avoid disturbances from your car electronics, please don't close the existing car cables when you install the RCA cables.
- Don't expose any cables out of car. Please take care insulated cables to avoid be damaged when cables pass through metal, rubber and plastic etc. Don't install all cables too tight.
- The ground wire should be connected directly with the chassis of your vehicle which should be metal to metal ground point connection.
- The amplifier must be mounted securely at a solid, dry and low vibration surface in the trunk or passenger area. Fix the amplifier in an open air area to insure proper heat dissipation. Fix the amplifier in a place where can access easily to set input controllers.

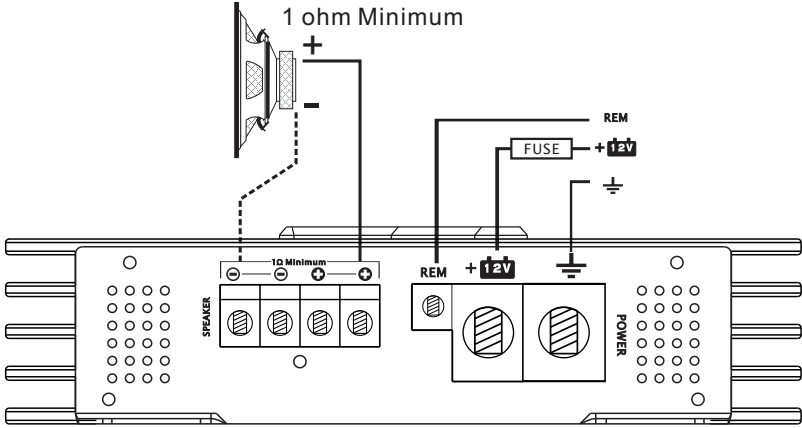
INPUT WIRING CONFIGURATION

OAX2000

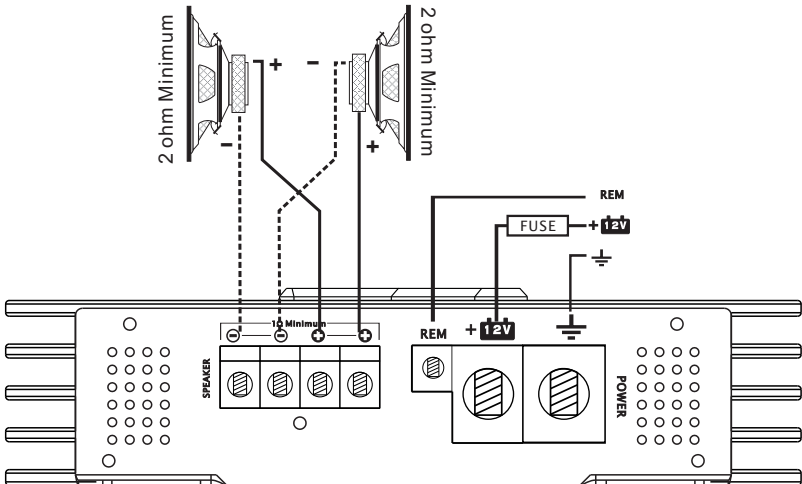


OUTPUT WIRING CONFIGURATION

One Subwoofer Wiring OAX2000

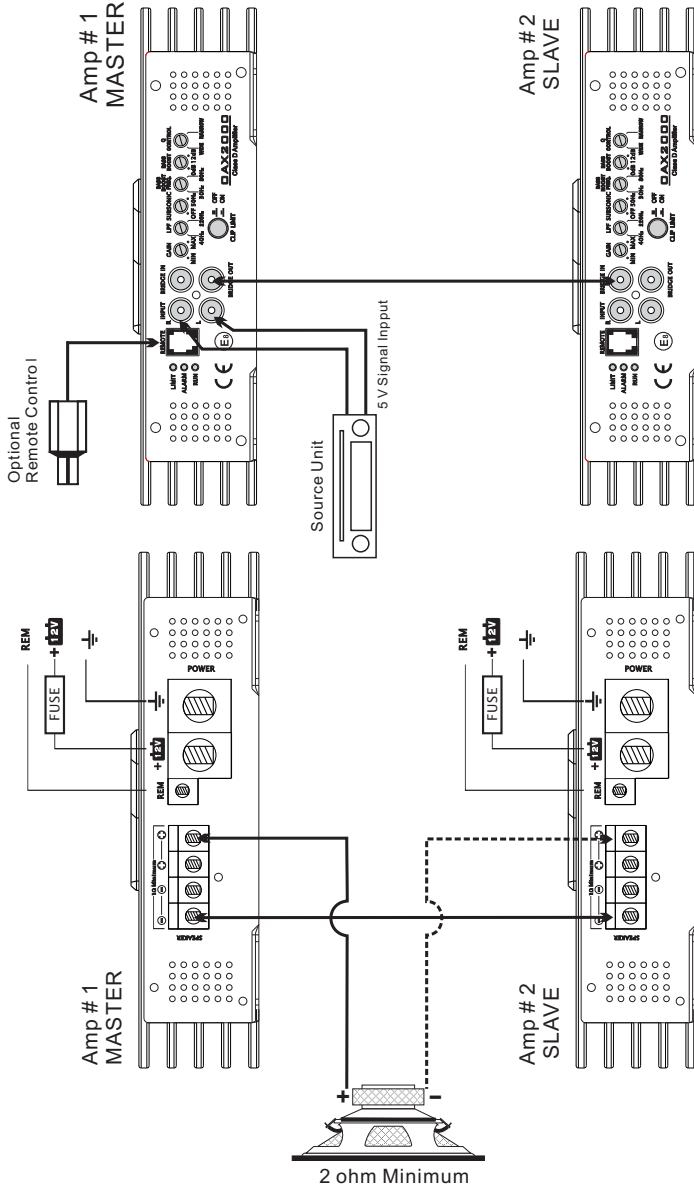


Two Subwoofers Wiring OAX2000



BRIDGING

OAX2000



IMPORTANT

- When bridging two amplifiers you should use same model amplifiers.
- Please make sure the negative speaker terminal of two amplifiers are connected by the same gauge cables as the positive terminal being used. Also make this cable as short as possible.
- DO NOT connect any signal cables to the input RCA jacks when bridged as slave unit.
- All the functions will be disabled on slave amplifier when bridged. It will be adjusted by the master amplifier.

TROUBLE SHOOTING

MALFUNCTION	SOLUTION
Power LED off	Check connections both at amplifier and at other ends Check plus and minus battery cables Check all fuse on amplifier Check remote voltage
No Output (Power LED on)	Check volume control on the source unit Check GAIN regulator on amplifier Check RCA cables and connections Check speaker cable and connections
Bass is weak	Subwoofers connected out of phase Dual voice coils on subwoofer wired out of phase Bass control on source unit is set on low Bad speaker connections
Amplifier switches on and off	Check chasis ground connection with amplifier Check cable terminals and battery terminals Low voltage from battery Check remote wire connect right
Distorted Output	Source unit gain set too high Amplifier gain set too high Speaker(s) blown
No Output (Alarm LED on)	Subwoofer is short circuit or damage Amplifier is over temperature Amplifier overloaded +12V voltage is too low or too high

If your amplifier is still malfunction after checking through the troubleshooting section, please contact our authorized OPTION AUDIO dealer.

SPECIFICATION

MODEL	OAX2000
RMS Power @ 4 OHM	800W
RMS Power @ 2OHM	1300W
RMS Power @ 1OHM	2000W
Input Sensitivity	0.2~5V
LPF	40~220Hz
Frequency Response	10~180Hz
Subsonic Filter	10~50Hz
BassBoost Frequency	30~80Hz
BassBoost Level	0~12dB
BassBoost Q control	Yes
THD at 4Ohm load 30% Rated Power	<0.2%
S/N Ratio	>70dB
Efficiency @ 4Ohm load, rated power	>85%
Minimum load	1 Ω
Optional remote control	YES
Bridging	YES
Over load system	YES
Overheat temperature protection	90C/194F
Components & PCB	SMT& Double side board
Transparent Isolation Connector	YES
DIMENSIONS(HXWXL) MM	53×228×396



PRO-Series Mono Bass Car Amplifier

