

chal-tec gmbh

elektronik  star



1,4,5,6-Kanal-Auto-Verstärker
10000177

elektronik  star
www.elektronik-star.de

Telefon: 01805-019 180* (Mo-Fr 10-13 und 14-18 Uhr)

*Je 0,14 EUR/Min. inkl. 19% MwSt. aus dem dt. Festnetz oder max. 0,42 EUR/Min. inkl. 19% MwSt. aus dem Mobilfunknetz.

Sehr geehrter Kunde,

zunächst möchten wir Ihnen zum Erwerb Ihres Gerätes gratulieren.

Bitte lesen Sie die folgenden Anschluss- und Anwendungshinweise sorgfältig durch und befolgen Sie diese um möglichen technischen Schäden vorzubeugen.

Datenblatt

Modell	ALP801CH	V- 2600/ALP404 CH	ALP406CH	ALP806CH/F 10000CH
Schaltkreise	OTL Schaltkreis			
Eingang	Chinch			
Ausgänge	1 Kanal	4 Kanal	5 Kanal	6 Kanal
Impedanz	2-16 Ohm (Stereo) 4-8 Ohm (bei Brückung)			
max. Ausgangsleistung	1X10000W	4x4000W	5x6000W	6x10000W
RMS Ausgangsleistung	1x320W(4)	4x60W(4) 4x120W(4)	4x50W+1x100W(4) 4x100W+1x200W(2)	6x160W(4) 6x320W(2)
Leistung gebrückt		2x200W	2x100W+1x200W	3x640W
Hochpassfilter	50Hz-500Hz			
Niedrigpassfilter	50Hz-250Hz			
Low boost	0-6-12dB (50Hz)			
S/N Ratio	90dB			
Frequenz	10Hz-30kHz (+0.5dB-3dB)			
Niedrige Eingangsempfindlichkeit	120mV-1,0V			
Dämpfungsfaktor	>120			
Sicherung	30Ax3	30Ax2	25Ax3	35Ax3
Netzspannung	14.4V (DC) Mit eingebautem Stromregulierer für 12V Batterien			
Maße	600x 330x 68 mm	330x 250x 53 mm 360x 330x 68 mm	420x 330x 68 mm	600x 330x 68 mm

Fehlerbehebung

Die Power-LED leuchtet nicht:

- Die Sicherung ist lose oder durchgebrannt. Setzen Sie die Sicherung richtig ein oder tauschen Sie diese aus.
- Die Erdung ist nicht richtig befestigt. Überprüfen Sie die Erdung.
- Die Spannung ist zu gering. Die Hauptverbindung ist nicht eingeschaltet. Schalten Sie die Hauptverbindung ein.
- Am System hängen zu viele Endstufen. Verwenden Sie ein Relais. Überprüfen Sie die Batteriespannung.

Die Protection-LED leuchtet rot:

- Die Lautsprecherausgänge haben einen Kurzschluss. Schalten Sie den Power-Schalter aus und beseitigen Sie den Grund für den Kurzschluss.
- Der Verstärker wird zu heiß. Verwenden Sie Lautsprecher mit der passenden Impedanz (2-8 Ohm bei Stereo und 4-8 Ohm bei gebrücktem Verstärker). Stellen Sie sicher, dass der Verstärker in gut belüfteter Umgebung verwendet wird.

Störgeräusche:

- Die Stromversorgungskabel befindet sich zu nah an den Lautsprecheranschlüssen.
- Die Erdung ist nicht richtig angeschlossen. Bitte überprüfen Sie den Anschluss.
- Die Negativ-Kabel berühren die Karosserie. Überprüfen und beheben Sie dies.

Ton ist dumpf:

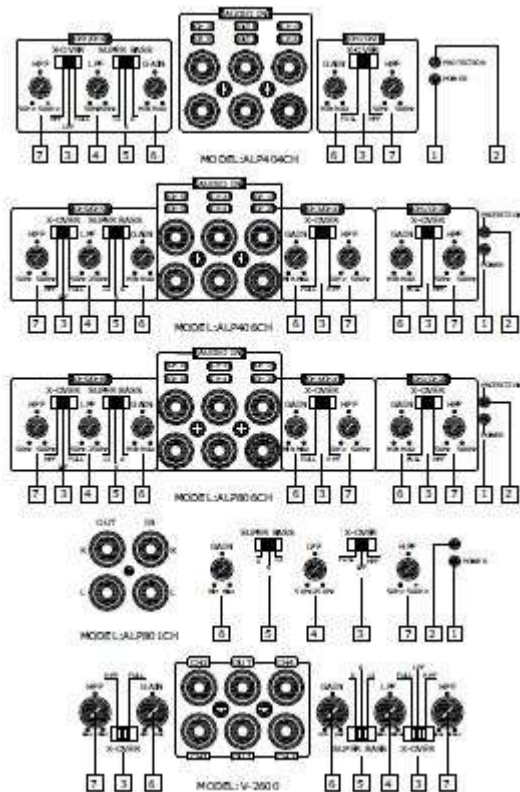
- Stellen Sie den Filter-Schalter auf LPF.

Ton zu tief:

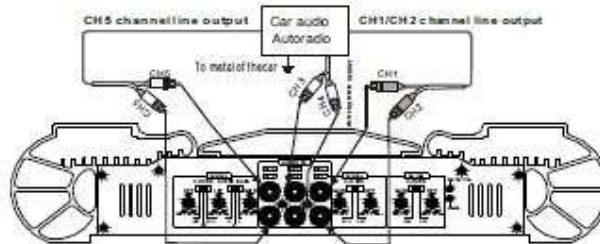
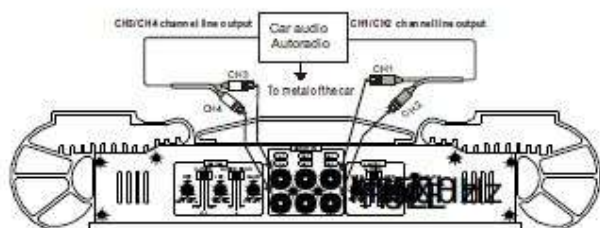
- Der Tiefen-Regler ist auf Minimum geregelt.

Lage und Funktion der Regler

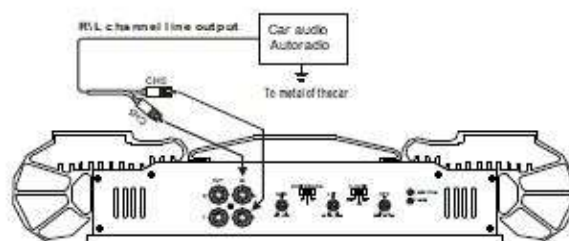
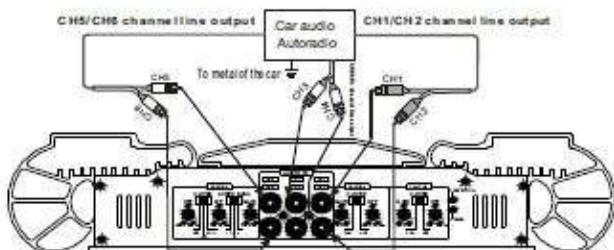
1. **Power-LED:** Leuchtet während des Betriebes grün.
2. **Prtektor-LED:**
Überspannung: leuchtet rot bei Überspannung oder beim Kurzschluss
Offset: leuchtet wenn die Spannung zu den Lautsprecheranschlüssen zu hoch ist.
Thermisch: leuchtet wenn die Temperatur zu hoch ist.
3. **Filter-Wahlschalter:** Wenn der Schalter auf LPF steht, ist der Filter auf Niedrigpass geregelt. Wenn der Schalter auf HPF steht, ist der Filter auf Hochpass geregelt.
4. **Frequenzweichen-Trennungs-Regler:** Regelt die Frequenzweichtrennung für den Niedrigpassfilter
5. **Low Boost Regler:** Um die Frequenzen von 50Hz auf ein Maximum von 12dB zu erhöhen.
6. **Level-Regler:** Das Eingangslevel kann hiermit geregelt werden, wenn Die Eingangsquellen anderer Hersteller verwendet werden.
7. **Frequenzweichen-Trennungs-Regler:** Regelt die Frequenzweichtrennung für den Hochpassfilter



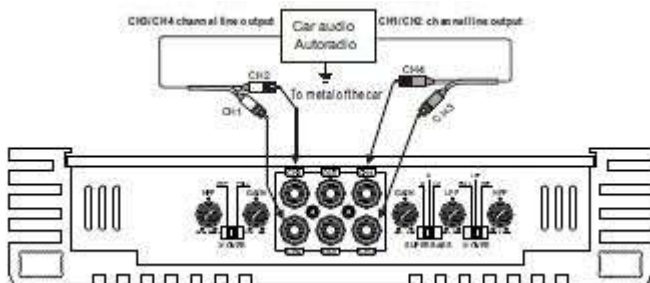
ALP404CH und ALP406CH



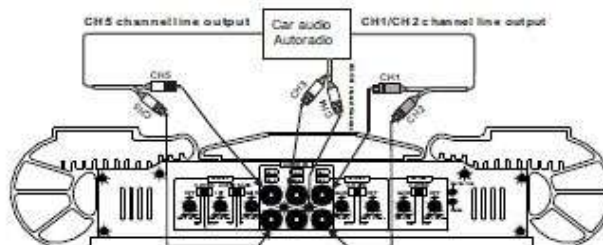
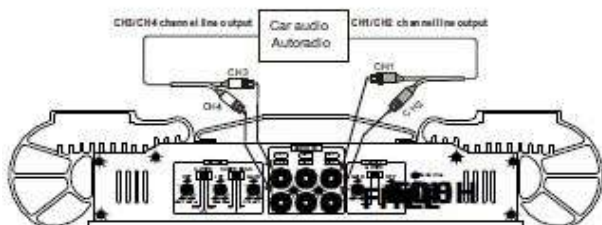
ALP806CH/F-10000CH und ALP801CH



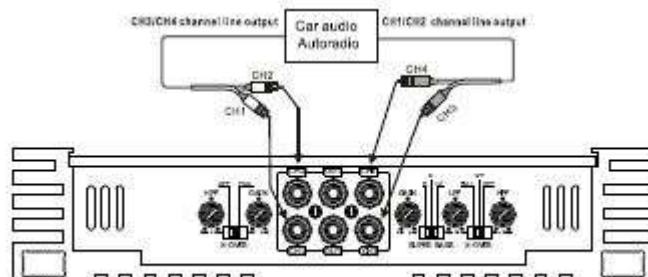
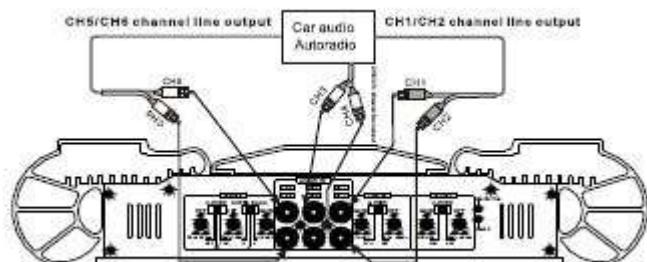
V-2600



ALP404CH und ALP406CH

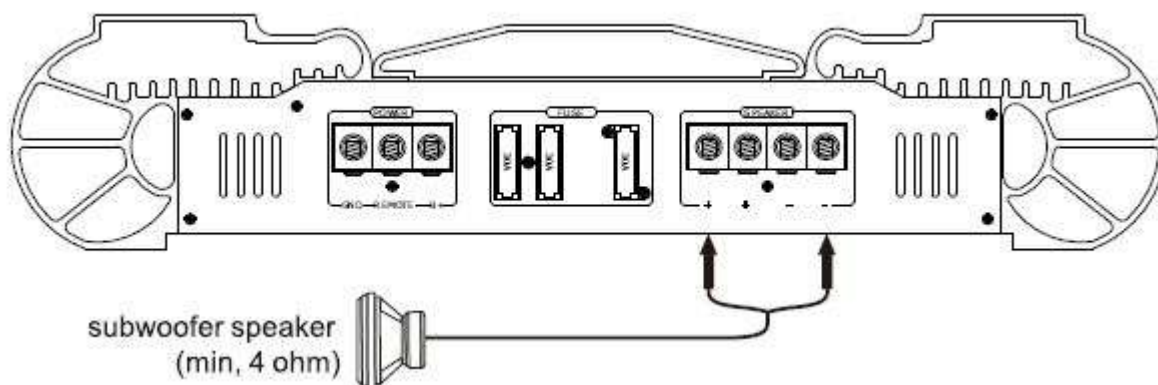


ALP806CH/F-10000CH und V2600



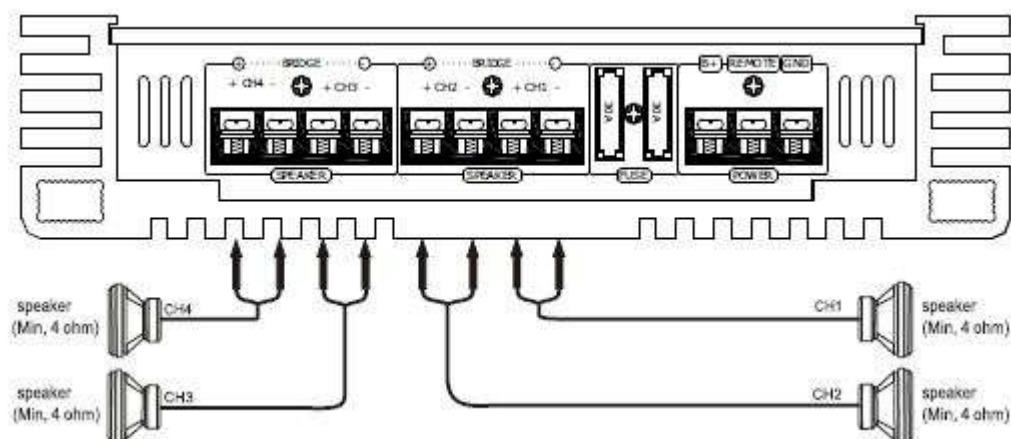
ALP-801CH Lautsprecherverbindung

1-Lautsprecher-System

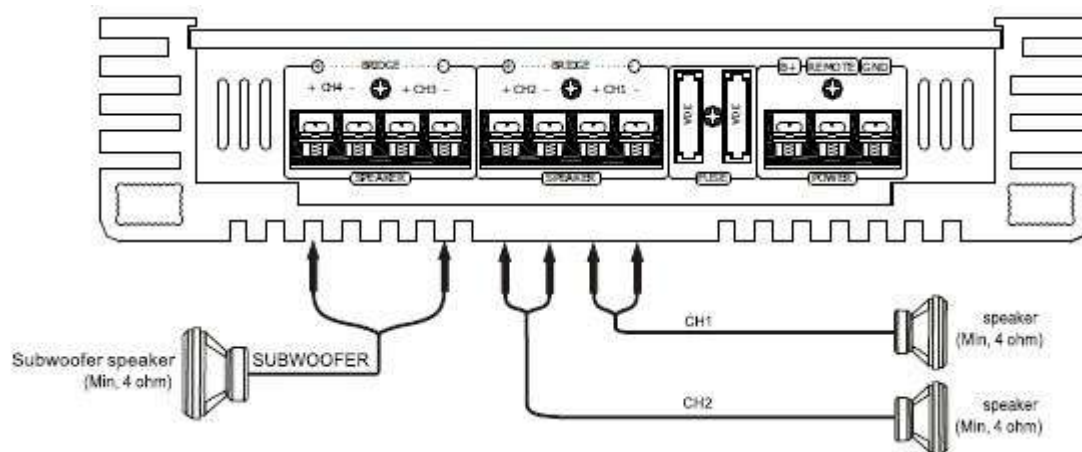


V-2600 Lautsprecherverbindung

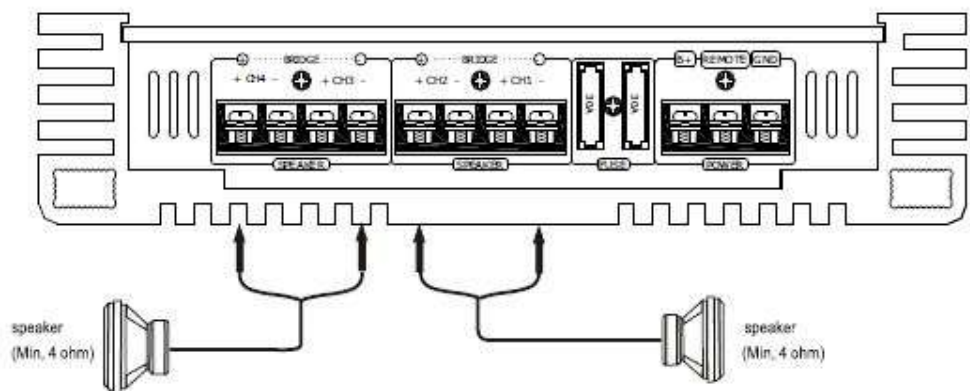
4-Lautsprecher-System



3-Lautsprecher-System

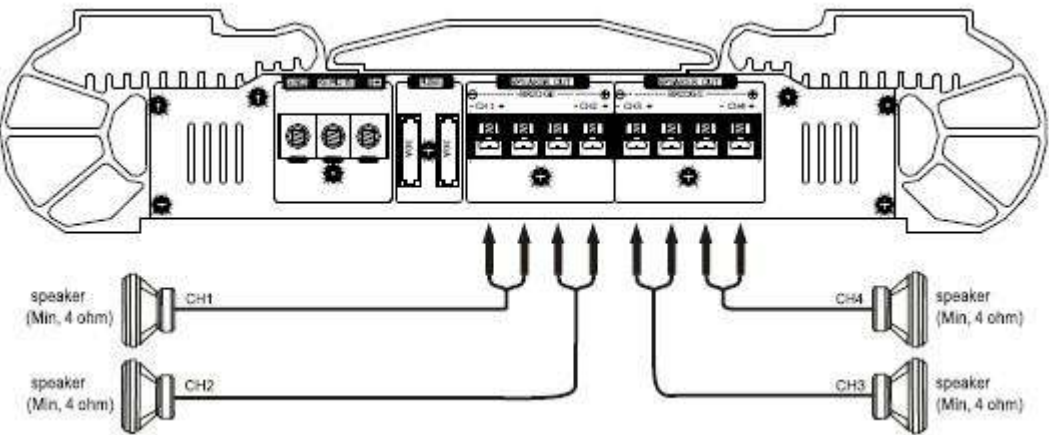


2-Lautsprecher-System

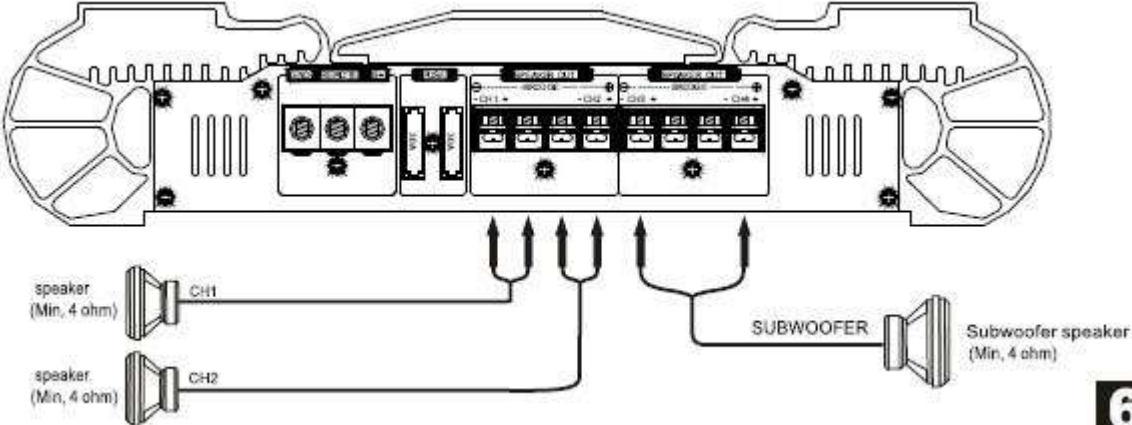


ALP404CH Lautsprecherverbindung

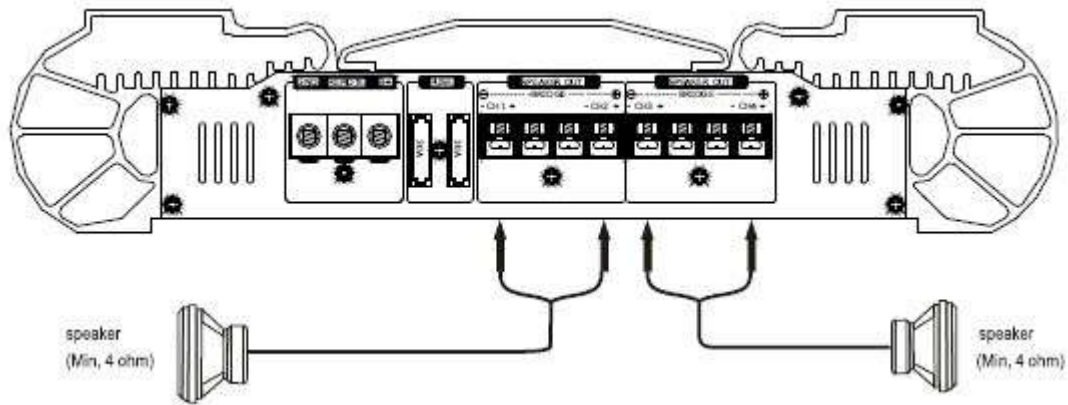
4-Lautsprecher-System



3-Lautsprecher-System

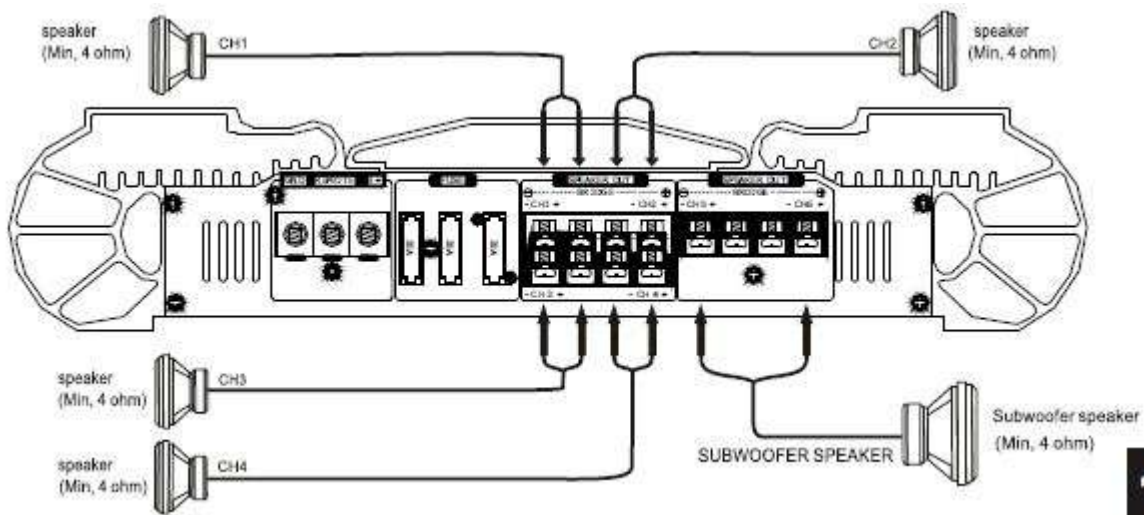


2-Lautsprecher-System

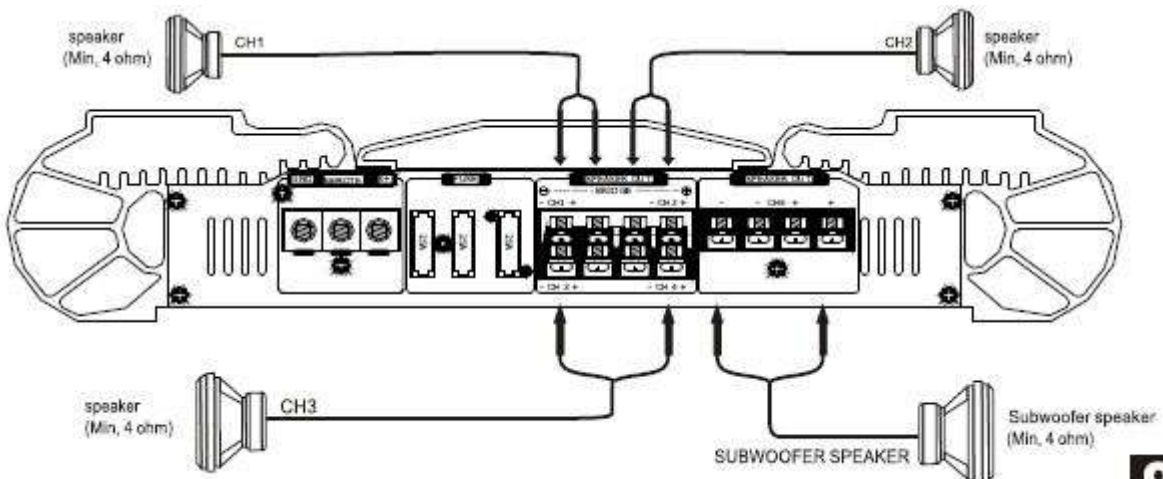


ALP406CH Lautsprecherverbindung

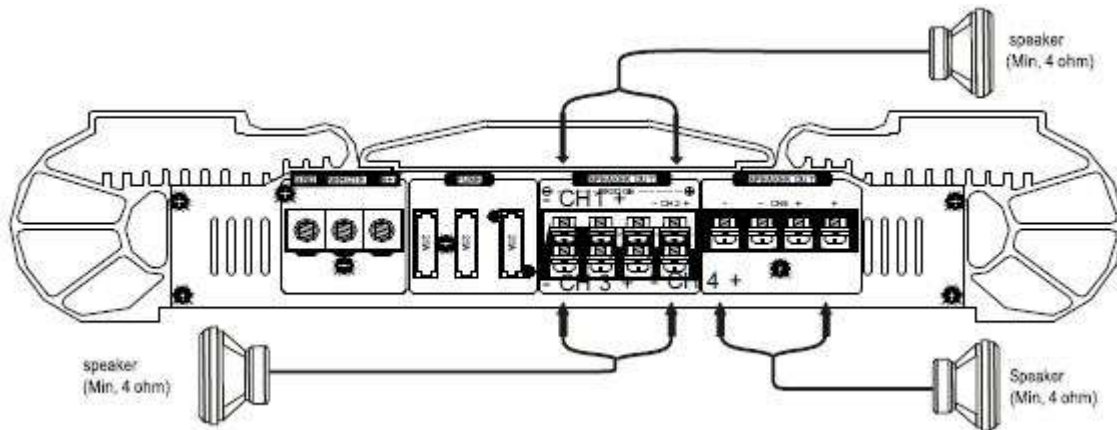
5-Lautsprecher-System



4-Lautsprecher-System

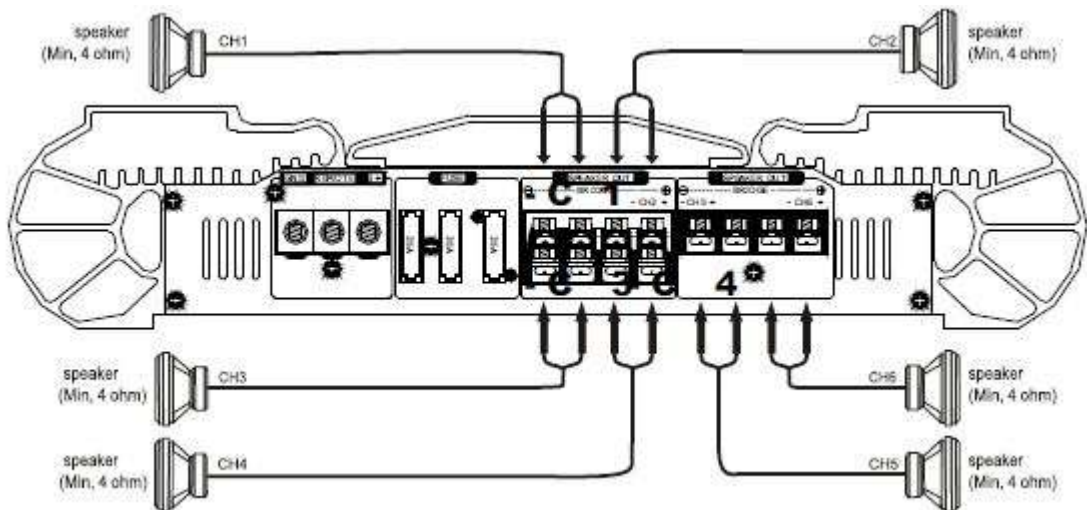


3-Lautsprecher-System

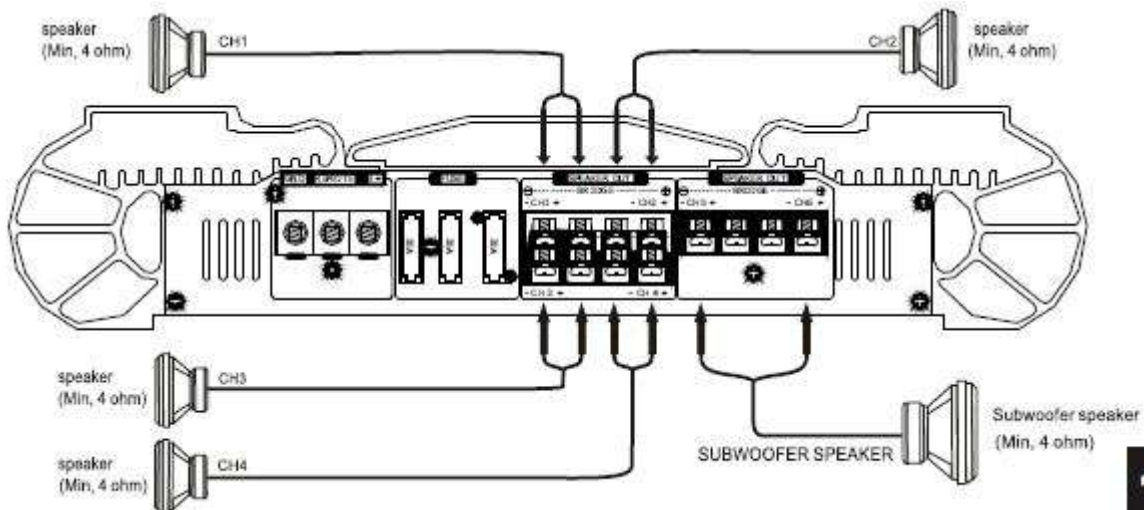


ALP-806CH/F-10000CH Lautsprecherverbindung

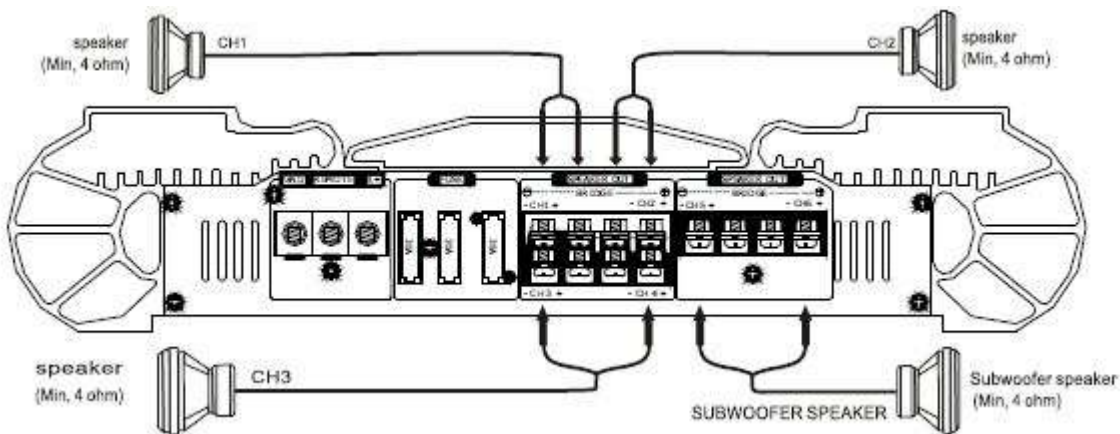
6-Lautsprecher-System



5-Lautsprecher-System

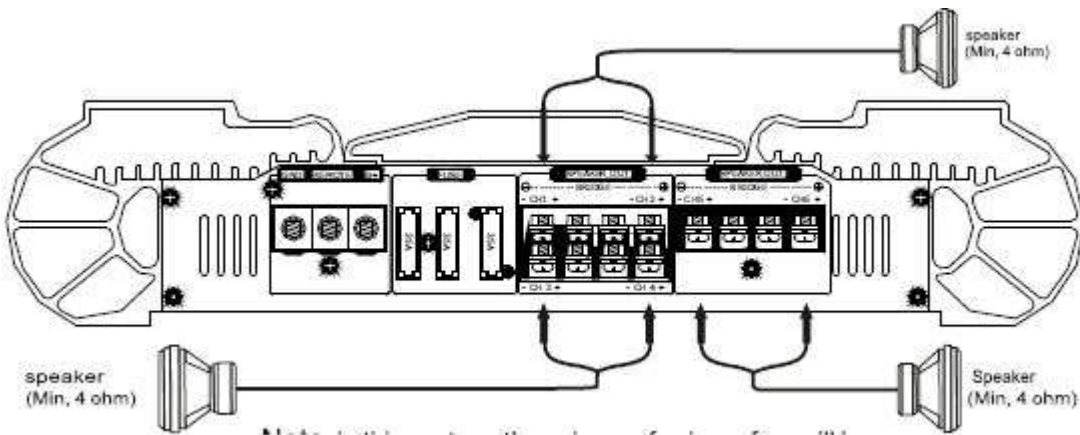


4-Lautsprecher-System

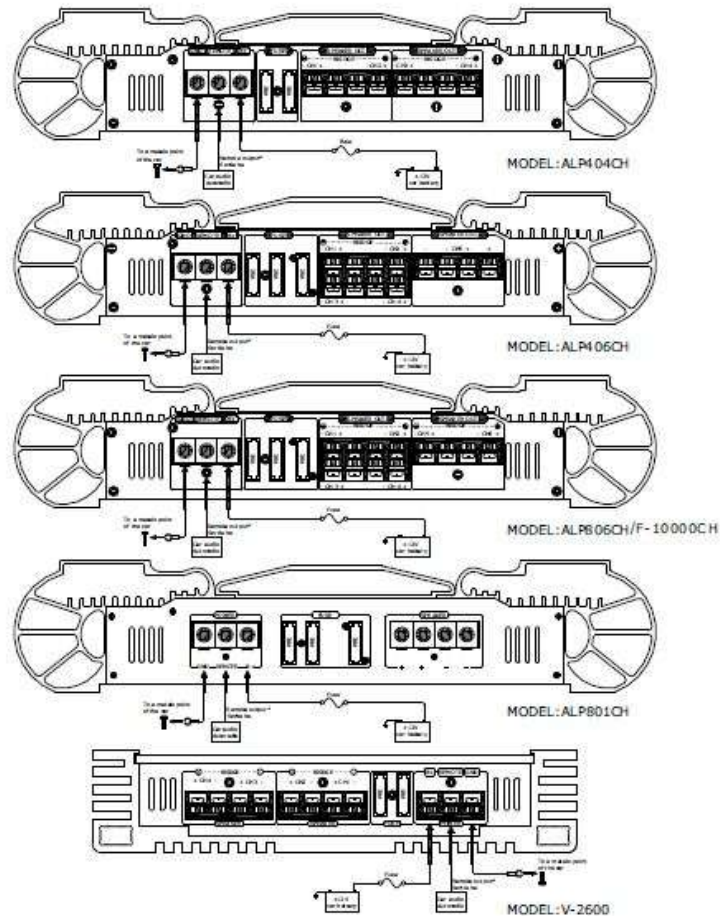


ALP806CH Lautsprecherverbindung

3-Lautsprecher-System



Stromverbindung



SICHERHEITSHINWEISE UND GEWÄHRLEISTUNG

- Diese Bedienungsanleitung dient dazu, Sie mit der Funktionsweise dieses Produktes vertraut zu machen. Bewahren Sie diese Anleitung daher stets gut auf, damit Sie jederzeit darauf zugreifen können.
- Sie erhalten bei Kauf dieses Produktes zwei Jahre Gewährleistung auf Defekt bei sachgemäßem Gebrauch.
- Bitte verwenden Sie das Produkt nur in seiner bestimmungsgemäßen Art und Weise. Eine anderweitige Verwendung führt eventuell zu Beschädigungen am Produkt oder in der Umgebung des Produktes.
- Ein Umbauen oder Verändern des Produktes beeinträchtigt die Produktsicherheit. Achtung Verletzungsgefahr!
- Öffnen Sie das Produkt niemals eigenmächtig und führen Sie Reparaturen nie selber aus!
- Behandeln Sie das Produkt sorgfältig. Es kann durch Stöße, Schläge oder den Fall aus bereits geringer Höhe beschädigt werden.
- Halten Sie das Produkt fern von Feuchtigkeit und extremer Hitze.

ACHTUNG:

Es wird keine Haftung für Folgeschäden übernommen. Technische Änderungen und Irrtümer vorbehalten!

Wichtige Hinweise zur Entsorgung

Dieses Elektrogerät gehört NICHT in den Hausmüll. Für die fachgerechte Entsorgung wenden Sie sich bitte an die öffentlichen Sammelstellen in Ihrer Gemeinde.

Einzelheiten zum Standort einer solchen Sammelstelle und über ggf. vorhandene Mengenbeschränkungen pro Tag/ Monat/ Jahr sowie über etwa anfallende Kosten bei Abholung entnehmen Sie bitte den Informationen der jeweiligen Gemeinde.

Warnhinweise

- Reparaturen am Gerät sollten nur von einer autorisierten Fachwerkstatt durchgeführt werden.
- Öffnen Sie in keinem Fall das Gerät.
- Falscher Zusammenbau führt möglicherweise zu Fehlfunktionen oder dem Totalausfall.
- Das Gerät sollte vor jeglichen Feuchtigkeit und direkter Sonneneinstrahlung geschützt werden.
- Das Gerät bitte nicht mit Reinigungsmitteln reinigen.
- Verwenden Sie zur Reinigung nur ein trockenes (Mikrofaser) Tuch.
- Schließen Sie das Gerät nur an die dafür vorgesehene Netzspannung.
- Schließen Sie das Gerät in **keinem Fall** an andere Spannungen als vorgesehen an.

Die Gewährleistung verfällt bei Fremdeingriffen in das Gerät.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

320/60/50/70 watts per channel minimum continuous average power into 4 ohms, both channels driven from 20Hz to 20kHz with no more than 0.04% total harmonic distortion per Car Audio Ad Hoc committee standards.

Other specification

Model	ALP801CH	V-2600/ALP404CH	ALP406CH	ALP808CH(F-10000CH)
Circuit system	OTL(output transformer less)circuit,pulse power supply			
Input	RCA pin jacks			
Outputs	1 channels speaker terminals	4 channels speaker terminals	5 channels speaker terminals	6 channels speaker terminals
Speaker impedance	2-16 (stereo) 4-8 (when used as a bridging amplifier)			
MAX power output	1X10000W	4X4000W	5X6000W	6X10000W
RMS power output	1X320W (4)	4X60W (4) 4X120W (4)	4X50W+1X100W (4) 4X100W+1X200W (2)	6X160W (4) 6X320W (2)
Bridgeable power		2X200W	2X100W+1X200W	3X640W
High pass filter	50Hz-500Hz			
Low pass filter	50Hz-250Hz			
Low boost	0-6-12dB(50Hz)			
S/N Ratio	90dB			
Frequency response	10Hz-30KHz(+0.5dB-3dB)			
Low input sensitivity /Impedance	120mV-1.0V			
Damping factor	>120			
Fuse	30AX3	30AX2	25AX3	35AX3
Power supply voltage	14.4V(DC)			
Dimensions(LXWXH)	600X330X68(MM)	330X250X53(MM)(V-2600) 360X330X68(MM)(ALP404CH)	420X330X68(MM)	600X330X68(MM)

Design and specifications are subject to change without notice.

Features

- Maximum power output of 320/60/50/70 watts pre channel (at 4 ohm)
- This unit can be used as a bridging amplifier with a maximum output of 320/200/250 watts.
- Direct connection can be made with the speaker output of your car audio if it is not equipped with a line output (High level input connection).
- Built-in variable LPF low-pass filter, HPF (high-pass filter) and low boost circuit.
- Protection circuit and indicator provided.
- Pulse power supply* for stable, regulated output power.

Pulse power supply

this unit had built-in power regulator which converts the power supplied by the DC12v car battery into high speed pulses using a MOS-FET semiconductor switch. These pulses are stepped up by the built-in pulse transformer and separated into both positive and negative power supplies before being converted into direct current again, this is to regulate fluctuating voltage from the car battery. This light weight power supply system provides a highly efficient power supply with a low impedance output.

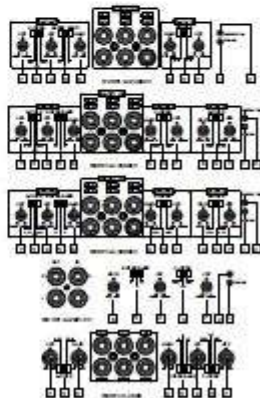
Troubleshooting Guide

The following checklist will assist in the correction of most problems which you may encounter with your unit. Before going through the connection and operating procedures.

Problem	Cause / solution
The power indicator does not light up.	- The fuse is loose or blown -- fasten the fuse or change it with a new one. - The ground lead is not securely connected -- fasten a metal point of the car. - the voltage going into the remote terminal is too low. - the connection master unit is not turned on, -turn on the master unit. - the system employs too many amplifiers. --use a relay. Check the battery voltage (10.5-15V)
outout off. The protection indicator light up in red	- The speaker outputs are short-circuited. --Turn off power switch, Rectify the cause of the short-circuit and correct. - The unit heats up abnormally or operating temperature. - Use speakers with suitable impedance--2-8 Ω (stereo), 4-8 Ω (when used as a bridging amplifier) - make suer to place the unit in a well ventilated location.
Alternator noise is heard.	- The power connecting leads are installed too close to the RCA pin cords. --Tidy these connecting leads and keep the leads away from the cords. - The ground lead not securely connected--Fasten the ground lead securely to a metal point of the car. - Negative speaker leads are touching the car chassis. --Keep the leads away from the car chassis.
The sound is muffled.	The FILTER switch set to the "LPF" position.
The sound is too low.	The level adjustment control is set "MIN" position.

Location and function of controls

- 1 POWER indicator**
Lights up in green during operation.
- 2 PROTECTOR indicator**
OVER CURRENT:
lights up in red when output is powerful or Speaker short-circuit.
OFFSET:
lights up in red when the voltage going out to The speaker terminal or the pin jack is too high.
THERMAL:
lights up in red when the temperature rises to an unsafe level.
- 3 FILTER selector switch**
when the switch is in the LPF positions, the filter is set to low-pass. When in the HPF position, the filter is set to high-pass.
- 4 Cut-off frequency adjustment control**
Sets the cut-off frequency (50-250Hz) for the low-pass filter.
- 5 LOW BOOST level control**
turn this control to boost the frequencies around 50 Hz to a maximum of 12 dB.
- 6 LEVEL adjustment control**
the input level can be adjusted with this control when using source equipment made by other manufacturers. Turn it to MAX when the output level of the car audio seems low.
- 7 Cut-off frequency adjustment control**
Sets the cut-off frequency (50Hz-500 Hz) for the high-pass filter.



Fuse replacement

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest goods dealer.

Warning

When replacing the fuse, be sure to use one matching the amplifier stated above the fuse holder. Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

Caution

- Before making any connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Be sure to use speakers with an adequate power rating. If you use small capacity speakers, they may be damaged.
- Do not connect the "+" terminal of speaker system to the car chassis and do not connect the "-" terminal of the right speaker with that of the left speaker.
- Install the input and output cords away from the power supply lead as running them close together can generate some interference noise.
- This unit is a high powered amplifier. Therefore, it may not perform to its full potential if used with the speaker cords supplied with the car.
- If your car is equipped with a computer system for navigation or some other purpose, do not remove the ground wire from the car battery. If you disconnect the wire, computer memory may be erased. To avoid short circuits when making connections, disconnect the +12V power supply lead until all the other leads have been connected.

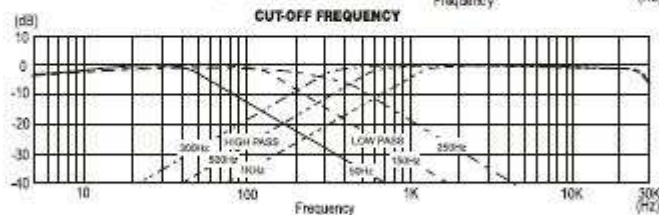
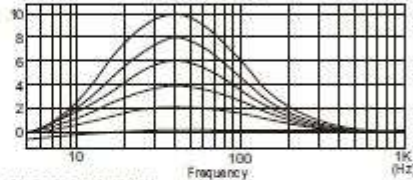
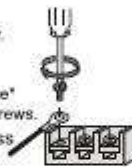
Make the terminal

connections as illustrated below.

Note

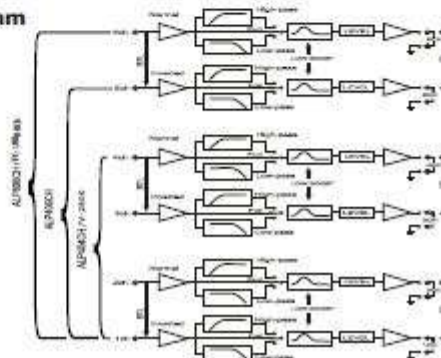
tighten the screws firmly, but be careful not to apply too much force* as doing so may damage these screws.

*the torque value should be less than 1 N·m.



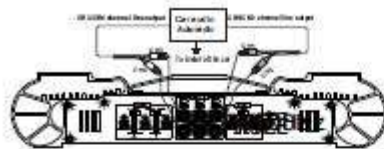
Circuit diagram

First, place the unit where you plan to install it, and mark positions of the four screw holes on the surface of the mounting board (not supplied). Then drill the holes approximately 3 millimeters (mm) in diameter and mount the unit onto the board with the supplied mounting screws. The supplied mounting screws are 15mm long. Therefore, make sure that the mounting board is thicker than 15mm.

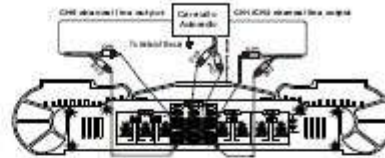


Input.connections

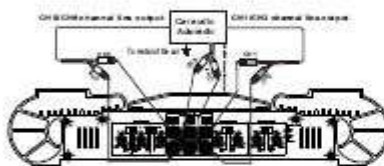
**ALP404CH Line input connection
(with speaker connection 7)**



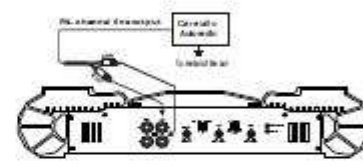
**ALP406CH Line input connection
(with speaker connection 10)**



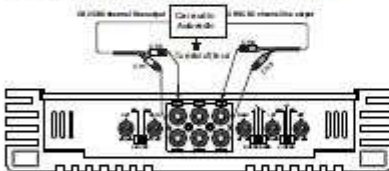
**ALP806CH/F-10000CH Line input connection
(with speaker connection 7, 8)**



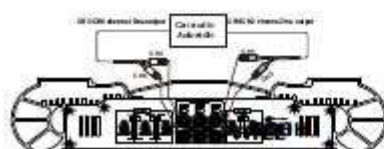
**ALP801CH Line input connection
(with speaker connection 3)**



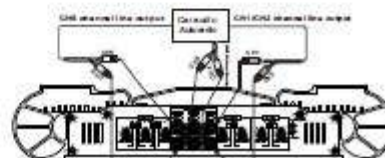
**V-2600 Line input connection
(with speaker connection 4)**



**ALP404CH Line input connection
(with speaker connection 5, 6)**

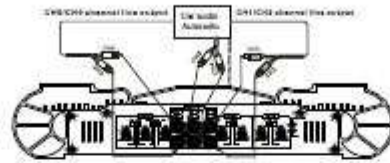


**ALP406CH Line input connection
(with speaker connection 8, 9)**

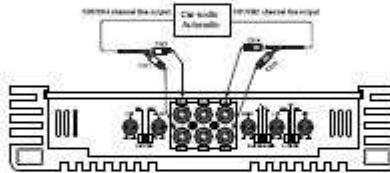


Input.connections

ALP806CH/F-10000CH Line input connection
(With speaker connection **1213**)



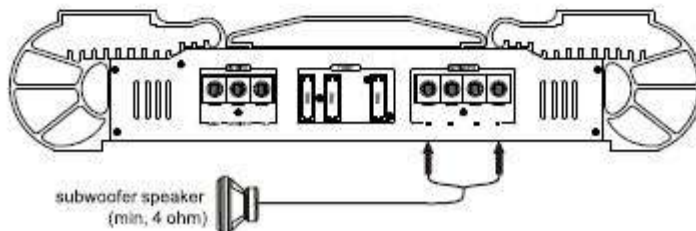
V-2600 Line input connection
(with speaker connection **23**)



ALP-801CH Speaker connections

1-speaker system

For details on the settings of switches and controls, refer to "Location and function of controls."

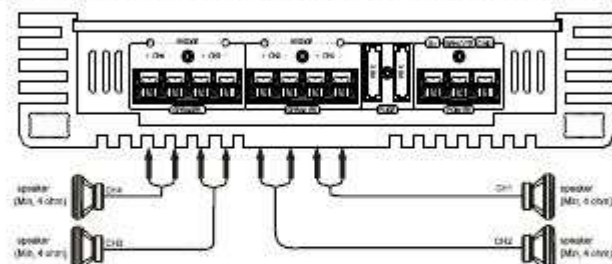


Notes In this system, the volume of the subwoofer will be controlled by the car audio fader control.
In this system, the output signals to the subwoofer are a combination of both the REAR L and R INPUT jack or the REAR high level input connector signals.

V-2600 Speaker connections

4-speaker system

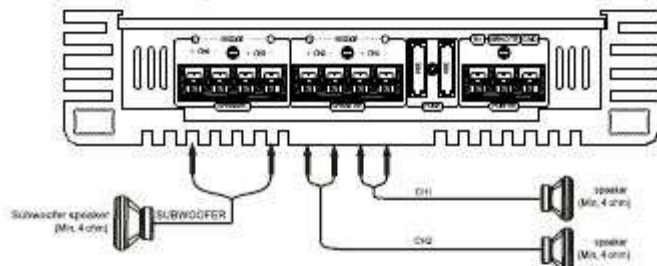
four details on the settings of switches and controls, refer to "Location and function of controls."



2

3-speaker system

three details on the settings of switches and controls, refer to "Location and function of controls."

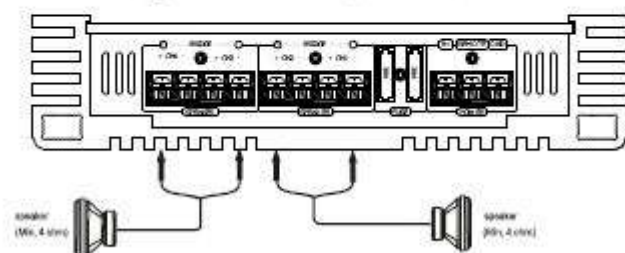


3

Notes In this system, the volume of the subwoofer will be controlled by the car audio fader control. In this system, the output signals to the subwoofer are a combination of both the REAR L and R INPUT jack or the REAR high level input connector signals.

2-speaker system

two details on the settings of switches and controls, refer to "Location and function of controls."



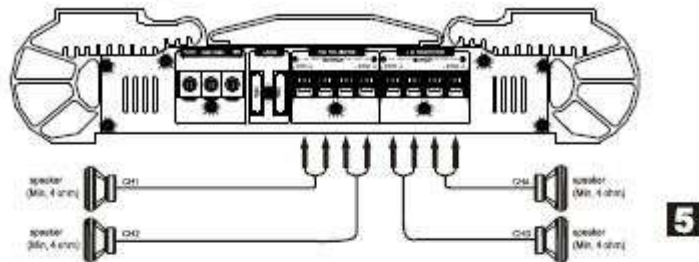
4

Notes In this system, the volume of the subwoofer will be controlled by the car audio fader control. In this system, the output signals to the subwoofer are a combination of both the REAR L and R INPUT jack or the REAR high level input connector signals.

ALP404CH Speaker connection

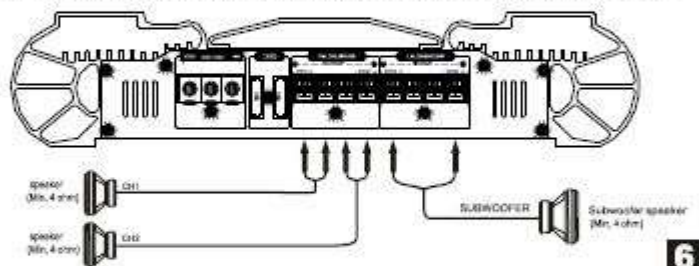
4-speaker system

four details on the settings of switches and controls, refer to "Location and function of controls."



3-speaker system

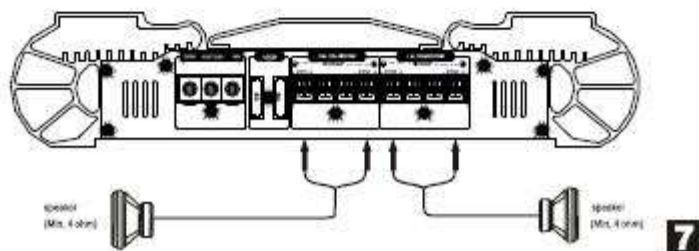
three details on the settings of switches and controls, refer to "Location and function of controls."



Notes: In this system, the volume of the subwoofer will be controlled by the car audio fader control. In this system, the output signals to the subwoofer are a combination of both the REAR L and R INPUT jack or the REAR high level input connector signals.

2-speaker system

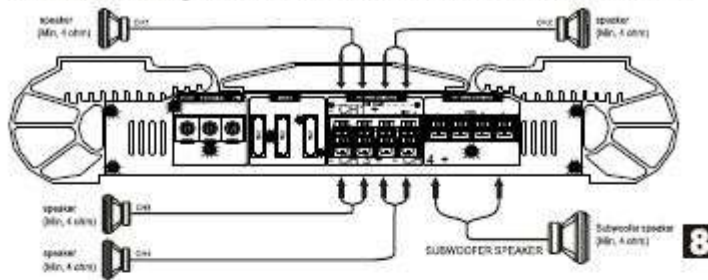
two details on the settings of switches and controls, refer to "Location and function of controls."



ALP406CH speaker connections

5-speaker system

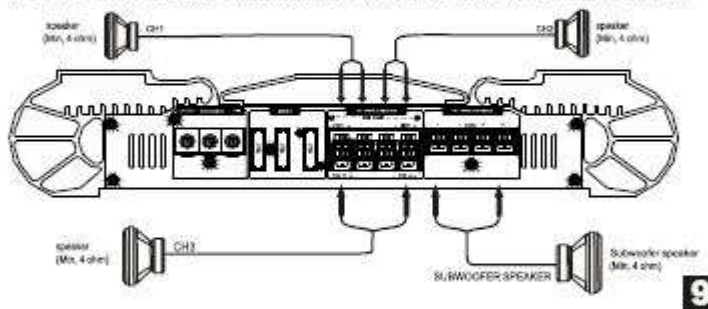
five details on the settings of switches and controls, refer to "Location and function of controls."



Notes In this system, the volume of the subwoofer will be controlled by the car audio fader control.
In this system, the output signals to the subwoofer are a combination of both the REAR L and R INPUT jack or the REAR high level input connector signals.

4-speaker system

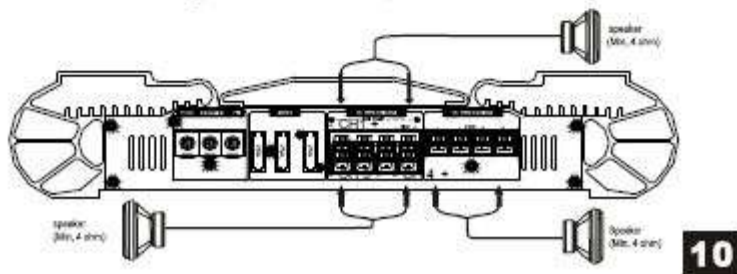
four details on the settings of switches and controls, refer to "Location and function of controls."



Notes In this system, the volume of the subwoofer will be controlled by the car audio fader control.
In this system, the output signals to the subwoofer are a combination of both the REAR L and R INPUT jack or the REAR high level input connector signals.

3-speaker system

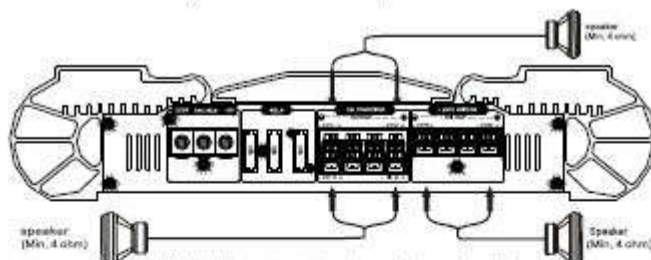
three details on the settings of switches and controls, refer to "Location and function of controls."



ALP806CH Speaker connection

3-speaker system

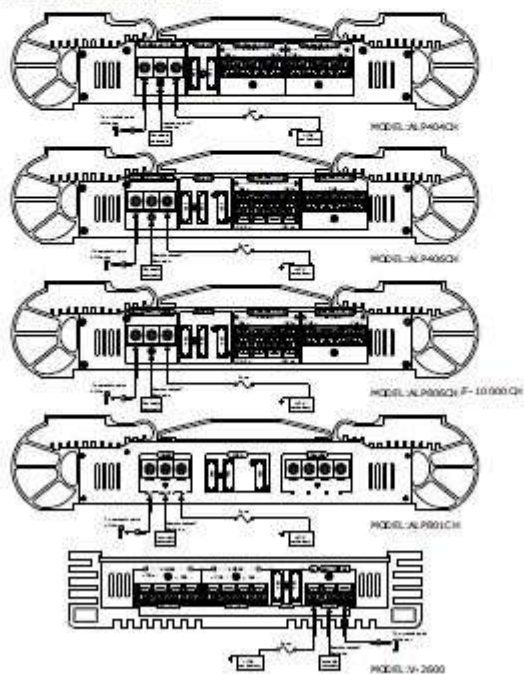
three details on the settings of switches and controls, refer to "Location and function of controls."



Note: in this system, the volume of subwoofers will be controlled by the car audio fader control.

14

power connection leads



*If you have the factory original or some other car audio without a remote out-put on the amplifier, connect the remote input terminal (REMOTE) to the accessory power supply.

15