

KENWOOD

KAC-7205 KAC-7205M

STEREO/BRIDGEABLE POWER AMPLIFIER INSTRUCTION MANUAL

立体声/桥路放大器 使用说明书

Kenwood Corporation

Safety precautions

▲ WARNING

To prevent injury or fire, take the following precautions:

- Mounting and wiring this product requires skills and experience. For safety's sake, leave the mounting and wiring work to professionals.
- When extending the ignition, battery, or ground wires, make sure to use automotive-grade wires or other wires with the range of 8 mm² (AWG 8) or more to prevent wire deterioration and damage to the wire coating.
- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit.
- If the unit starts to emit smoke or strange smells, turn off the power immediately and consult your Kenwood dealer.
- Do not touch the unit during use because the surface of the unit becomes hot and may cause burns if touched.

▲ CAUTION

To prevent damage to the machine, take the following precautions:

- Be sure the unit is connected to a 12V DC power supply with a negative ground connection.
- Do not open the top or bottom covers of the unit.
- Do not install the unit in a spot exposed to direct sunlight or excessive heat or humidity. Also avoid places with too much dust or the possibility of water splashing.
- When replacing a fuse, only use a new one with the prescribed rating. Using a fuse with the wrong rating may cause your unit to malfunction.
- To prevent a short circuit when replacing a fuse, first disconnect the wiring harness.

NOTE

- If you experience problems during installation, consult your Kenwood dealer.
- If the unit does not seem to be working right, consult your Kenwood dealer.

Cleaning the unit

If the front panel gets dirty, turn off the power and wipe the panel with a dry silicon cloth or soft cloth.

▲ CAUTION

Do not wipe the panel with a hard cloth or a cloth dampened by volatile solvents such as paint thinner and alcohol. They can scratch the surface of the panel and/or cause the indicator letters to peel off.

To prevent battery rise

When the unit is used in the ACC ON position without turning the engine ON, it depletes the battery. Use it after starting the engine.

Protection function

The protection function is activated in the following situations:

This unit is equipped with a protection function for protecting this unit and your speakers from various accidents or problems that can occur.

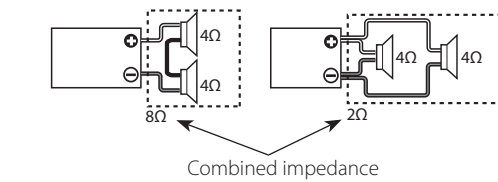
- When the protection function is triggered, the power indicator goes off and the amplifier stops operating.
- When a speaker wire may be short-circuited.
- When a speaker output contacts ground.
- When the unit malfunctions and a DC signal is sent to the speaker output.

■ Wiring

- Take the battery wire for this unit directly from the battery. If it's connected to the vehicle's wiring harness, it can cause blown fuses etc.
- If a buzzing noise is heard from the speakers when the engine is running, connect a line noise filter (optional) to each of the battery wire.
- Do not allow the wire to directly contact the edge of the iron plate by using Grommets.
- Connect the ground wire to a metal part of the car chassis that acts as an electrical ground passing electricity to the battery's negative ⊖ terminal. Do not turn the power on if the ground wire is not connected.
- Be sure to install a protective fuse in the power cord near the battery. The protective fuse should be the same capacity as the unit's fuse capacity or somewhat larger.
- For the power cord and ground, use a vehicle type (fireproof) power wiring cord. (Use a power wiring cord with the range of 8 mm² (AWG 8) or more.)
- When more than one power amplifier are going to be used, use a power supply wiring wire and protective fuse of greater current-handling capacity than the total maximum current drawn by each amplifier.

■ Speaker Selection

- The rated input power of the speakers that are going to be connected should be greater than the maximum output power (in Watts) of the amplifier. Use of speakers having input power ratings that are less than the output power of the amplifier will cause smoke to be emitted as well as damage.
- The impedance of the speakers that are going to be connected should be 2Ω or greater (for stereo connections), or 4Ω or greater (for bridged connections). When more than one set of speakers are going to be used, calculate the combined impedance of the speakers and then connect suitable speakers to the amplifier



安全注意事项

▲ 警告

为了防止受伤和火灾，请遵守下列注意事项。

- 安装本产品 and 连接导线需要一定的技能和经验。为了保证安全，应请专业人员完成安装和连接导线作业。
- 当延长蓄电池导线和接地导线时，请使用车辆用导线或 8mm²（AWG 8）以上的导线，以防止导线劣化和被覆面的损伤。
- 为了防止短路等事故，请勿将金属物品（硬币，工具等）掉落在装置中。
- 万一装置冒烟或有异味时，请立即关闭电源，并与建伍经销商洽谈。
- 在使用中请尽量不要接触装置表面。因为装置在使用中表面发热会烫伤人体。

▲ 注意

为了防止装置发生故障，请遵守下列注意事项，正确操作和使用。

- 请以负接地线的12V直流电源向本装置供电。
- 请勿打开顶部和底部的盖子。
- 请勿将本装置安装在暴露于直射阳光，高温或高湿，水可能飞溅的或有灰尘的地方。
- 更换保险丝时，请更换规定容量相同的保险丝，如使用不同容量的保险丝，可能会造成装置的故障。
- 更换保险丝时，为了防止短路事故，请先拔下来电源线束再进行更换。

注

- 安装有困难时，请与建伍经销商洽谈。
- 如果仍不能恢复正常时，请与建伍经销商洽谈。

装置的保养

如果外表行驶时，请关闭电源，使用干燥的湿布或柔软的布擦拭。

▲ 注意

请勿使用硬布或涂料稀释剂，酒精等挥发性溶剂，以免损坏外表面或将所附指示字符擦掉。

防止蓄电池全部放电

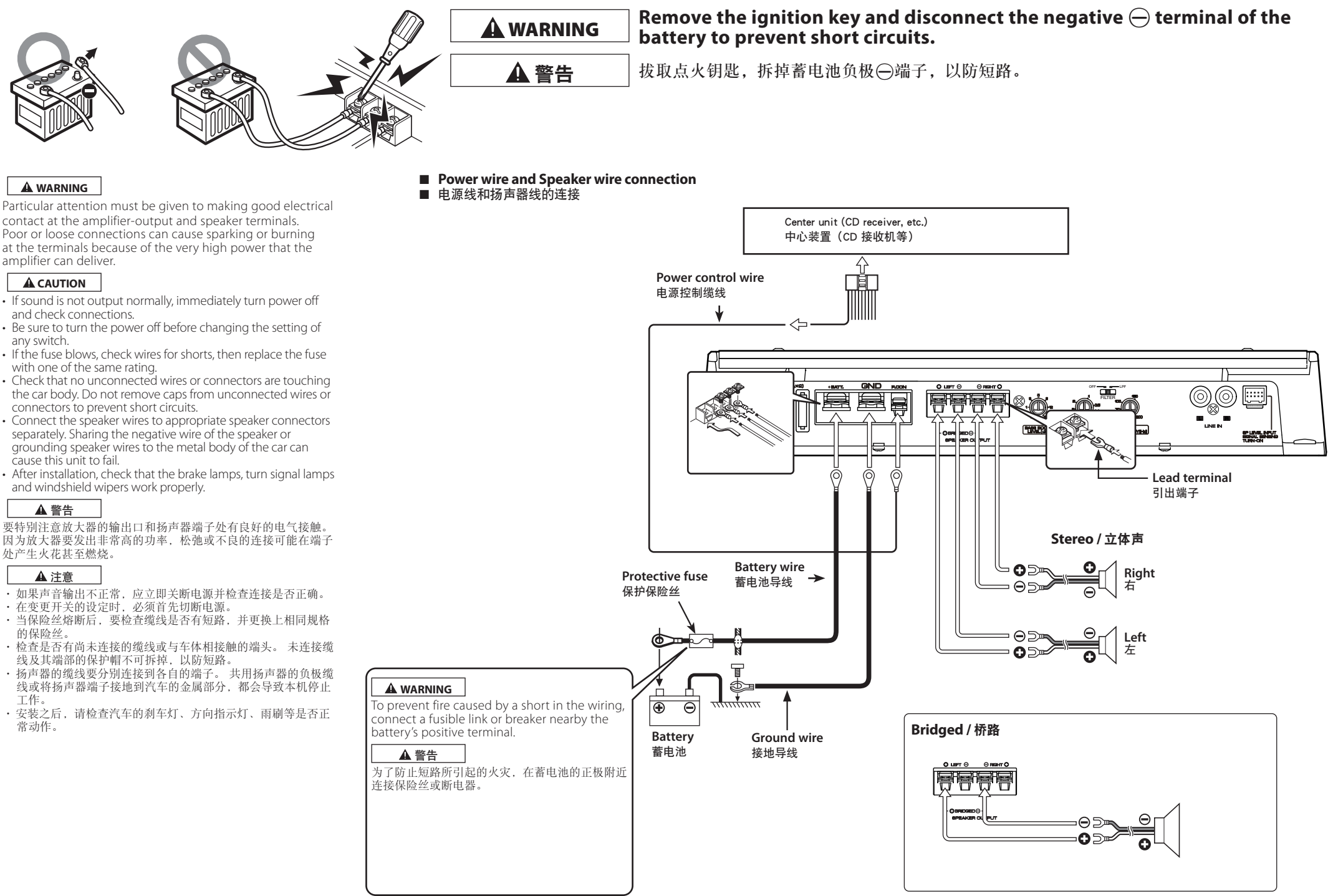
当本机在ACC ON位置使用而不启动发动机时，将消耗蓄电池的电量，请在启动了发动机之后使用。

保护功能

在以下场合中保护功能被激活

- 本机装有保护功能，可以保护本机以及扬声器不会受到可能发生的各种意外事故的损害。
- 当保护功能被触发时，电源指示灯将熄灭，放大器也停止工作。
- 当扬声器线缆短路时。
- 当扬声器的输出接地时。
- 当本机出现误动作，有 DC（直流）信号传送到扬声器输出端子时。

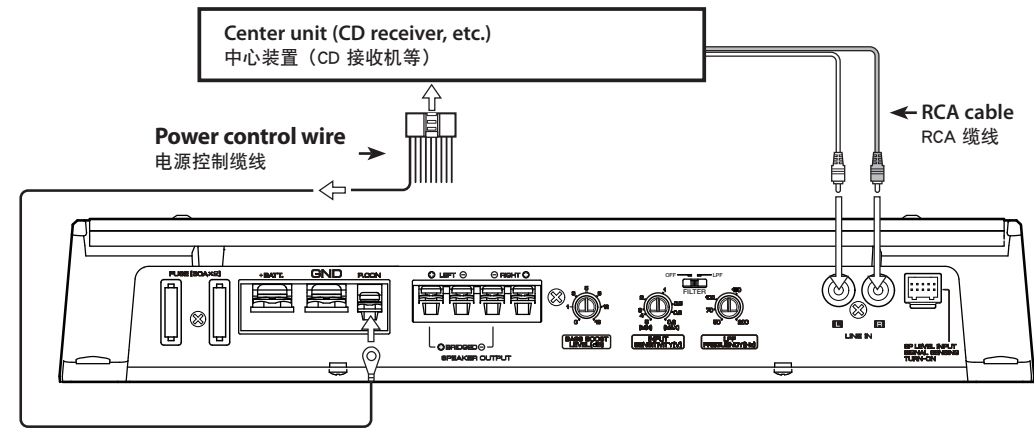
Connection / 连接



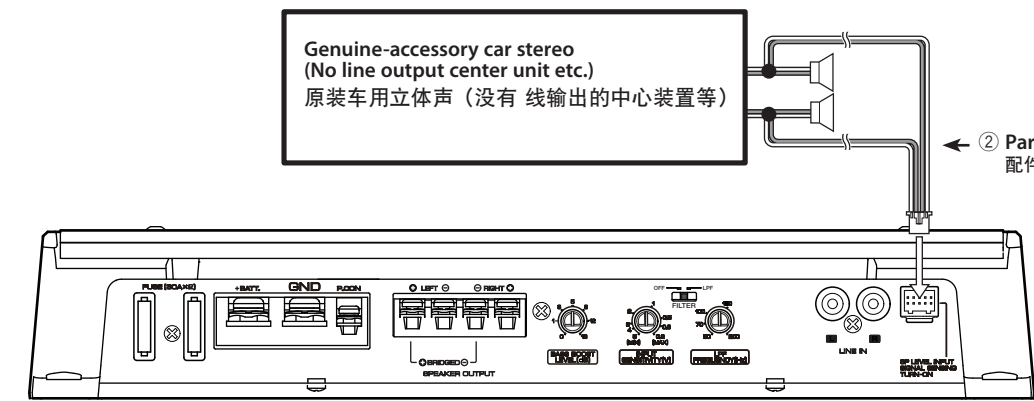
Connection / 连接

- **RCA cable or Speaker level input connection**
- RCA连接线或扬声器电平输入连接

RCA cable connections / 连接RCA 缆线



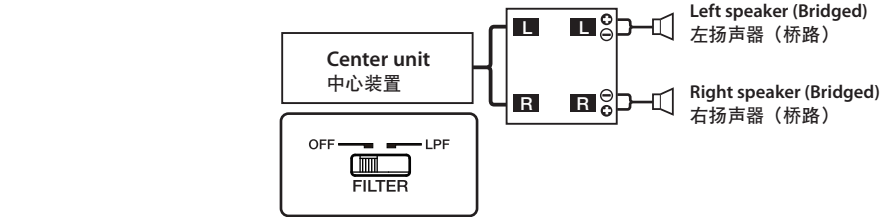
Speaker level input connections / 连接扬声器电平输入



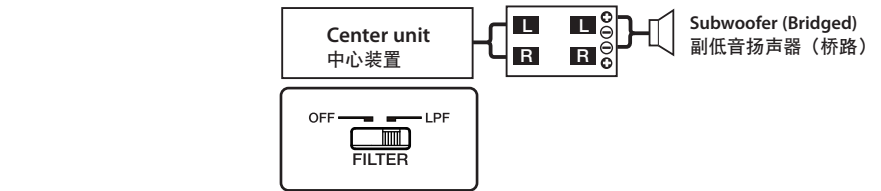
NOTE	
Do not connect cables and leads to both RCA cable input jacks and the speaker level input terminals simultaneously, for this may cause malfunction or damage.	
注	
不可同时连接缆线和引线到 RCA 缆线输入端子 及 扬声器输入端子。否则，将造成误动作 或损坏。	
Cable color of the connector / 接头连接线颜色	
Ⓐ Left / 左输入	⊕ White / 白色
	⊖ White-Black / 白色-黑色
Ⓑ Right / 右输入	⊕ Gray / 灰色
	⊖ Gray-Black / 灰色-黑色

System examples / 系统配置实例

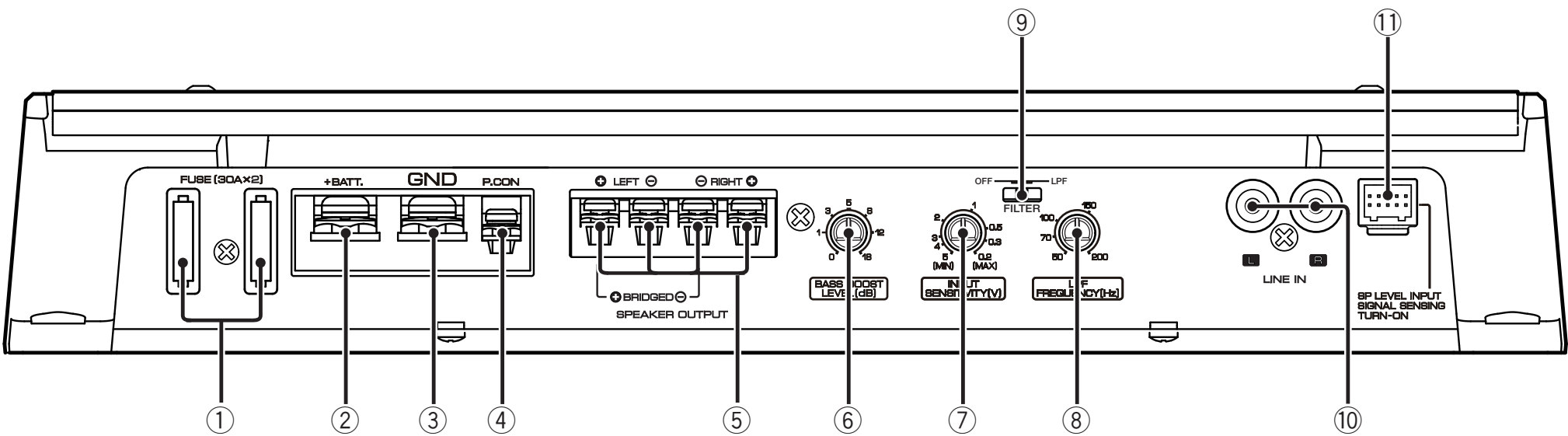
- **2-channel system**
- 2 声道系统



- **Subwoofer system**
- 副低音扬声器系统



Controls / 控制



① Fuse (30 A x 2)

NOTE

If you can't find the specified capacity fuse at your store etc., consult your Kenwood dealer.

② Battery terminal (BATT.)

③ Ground terminal (GND)

④ Power control terminal (P.CON)

Controls the unit ON/OFF.

NOTE

Controls the unit power. Be sure to connect it with all the systems.

⑤ Speaker output terminals

Stereo Connections:

When you wish to use the unit as a stereo amplifier, stereo connections are used. The speakers to be connected should have an impedance of 2Ω or greater. When multiple speakers are to be connected, ensure that the combined impedance is 2Ω or greater for each channel.

Bridged Connections:

When you wish to use the unit as a high-output monaural amplifier, bridged connections are used. (Make connections to the LEFT channel ⊕ and the RIGHT channel ⊖ SPEAKER OUTPUT terminals.) The speakers to be connected should have an impedance of 4Ω or greater. When multiple speakers are to be connected, ensure that the combined impedance is 4Ω or greater.

⑥ BASS BOOST LEVEL control

Sets the low frequency level to be compensated.

⑦ INPUT SENSITIVITY control

Set this control according to the pre-output level of the center unit connected with this unit.

NOTE

For the pre-output level, refer to the <Specifications> in the instruction manual of the center unit.

⑧ LPF (Low-Pass Filter) FREQUENCY control

This control adjusts the frequency band output from this unit.

⑨ FILTER switch

This switch allow filtering of the speaker output signals.

• OFF position:

The entire bandwidth is output without filtering.

• LPF (Low-Pass Filter) position:

The filter outputs the band of lower frequencies than the frequency set with the "LPF FREQUENCY" control.

The speaker output is automatically switched to monaural (L+R).

⑩ LINE IN terminal

⑪ SP LEVEL INPUT terminal

The genuine-accessory car stereo shall have a maximum power output of no more than 40 W.

The power is turned on and off as the unit detects input signal (SIGNAL SENSING TURN-ON). Therefore it is not necessary to connect the power control wire.

⑫ Power indicator

When the power is turned on, the Power indicator lights.

① 保险丝 (30 A x 2)

注

万一在销售店等找不到指定容量的保险丝的话,请与建伍专销公司联系。

② BATT. (蓄电池) 端子

③ GND (接地) 端子

④ P.CON (电源控制) 端子

控制本机的接通 / 关闭。

注

控制本机电源。 务必与全部系统连接。

⑤ SPEAKER OUTPUT (扬声器输出) 端子

• 立体声连接端子:

当您希望本机作为立体声放大器时, 必须使用立体声连接端子。所连接的扬声器的阻抗必须为 2 欧姆或更高。 当多个扬声器被连接时, 必须保证每声道的综合阻抗大于或等于 2 欧姆。

• 桥路连接端子:

当您希望本机作为大功率单声道放大器使用时, 可以进行桥路连接。 (连接 LEFT 声道 ⊕、RIGHT 声道 ⊖ 及 SPEAKER OUTPUT 端子) 所连接的扬声器的阻抗必须为 4 欧姆或更高。 当多个扬声器被连接时, 必须保证每声道的综合阻抗大于或等于 4 欧姆。

⑥ BASS BOOST LEVEL (低音提升) 控制

设定进行补偿的低音电平。

⑦ INPUT SENSITIVITY (输入灵敏度) 控制

根据与本放大器连接的中心装置的前置输入电平调节本控制钮。

注

关于中心装置的前置输出电平, 请参考其使用说明书。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
安装基板	×	○	○	○	○	○
框架	×	○	○	○	○	○
其他 (附件)	×	○	○	○	○	○

○: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

	该标识中表示的数字为自生产日期开始对环境的保护期限、表示不会因产品中含有的有毒有害物质或元素的外泄造成环境污染、以及对人体或财产造成严重损害的年数。该环境保护期限并不是对于性能、功能的保证期限。
表示例	在产品 & 电池等正常使用结束、进行废弃时, 请遵守各地方政府的法律和规定予以处理。

For Turkey

Bu ürün 26891sayılı Resmi Gazete'de yayımlanan Elektrikli ve Elektronik Eşyalarda Bazı Zararlı Maddelerin Kullanımının Sınırlandırılmasına Dair Yönetmeliğe uygun olarak üretilmiştir.

This product complies with Directive, Number 26891 regarding "REGULATION ON THE RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT".

Troubleshooting Guide

What might appear to be a malfunction in your unit may just be the result of slight misoperation or miswiring. Before calling service, first check the following table for possible problems.

PROBLEM	POSSIBLE CAUSE	SOLUTION
No sound. (No sound from one side.) (Blown fuse.)	<ul style="list-style-type: none">• Input (or output) cables are disconnected.• Protection circuit may be activated.• Volume is too high.• The speaker cord is shorted.	<ul style="list-style-type: none">• Connect the input (or output) cables.• Check connections by referring to <Protection function>.• Replace the fuse and use lower volume.• After check the speaker cord and fixing the cause of the short, replace the fuse.
The output level is too small (or too large). The sound quality is bad. (The sound is distorted.)	<ul style="list-style-type: none">• The input sensitivity adjusting control is not set to the correct position.• The speakers wire are connected with wrong ⊕/⊖ polarity.• A speaker wire is pinched by a screw in the car body.• The switches may be set improperly.	<ul style="list-style-type: none">• Adjust the control correctly referring to <Controls>.• Connect them properly checking the ⊕/⊖ of the terminals and wires well.• Connect the speaker wire again so that it is not pinched by anything.• Set switches properly by referring to <System examples>.

故障检修

有时被认为是故障的现象, 其实是因微小的操作或配线失误而造成。 在要求维修之前, 请参照下表稍事检查为盼。

现象	原因	排除方法
没有声音 (保险丝跳断)	<ul style="list-style-type: none">• 输入 (或输出) 缆线未连接。• 保护线路可能被触发。• 音量过大。• 扬声器电线短路。	<ul style="list-style-type: none">• 连接输入 (或输出) 缆线。• 参考 <保护功能> 一节, 检查连接状况。• 请更换保险丝, 减小音量。• 确认扬声器线, 解除短路原因后, 更换保险丝。
输出电平过低 (或过高) 声音质量很差 (声音失真)	<ul style="list-style-type: none">• 输入灵敏度调节不当, 没有位于妥当位置。• 扬声器缆线的极性 ⊕/⊖ 连接错误。• 扬声器缆线的一根被车体螺钉压迫。• 开关的设定可能不妥。	<ul style="list-style-type: none">• 调节该控制器。请参考 <控制>。• 请将缆线的极性 ⊕/⊖ 连接正确。• 重新连接缆线, 使之不再受螺钉压迫。• 请参考 <系统配置实例>, 将开关正确设置。

Specifications

Specifications subject to change without notice.

Audio Section	Low Pass Filter Frequency (-24 dB/oct).....50 Hz ~ 200 Hz (variable)
Max Power Output	1000 W (500 W × 2)
Rated Power Output (+B = 14.4V)	Bass Boost Control (40 Hz).....0 ~ +18 dB (variable)
Normal (4 Ω) (20 Hz ~ 20 kHz, ≤ 0.08 % THD).....	250 W × 2
(2 Ω) (1 kHz, ≤ 0.8 % THD).....	500 W × 1
Bridged (4 Ω) (1 kHz, ≤ 0.8 % THD).....	2 Ω ~ 8 Ω
Speaker impedance.....	4 Ω ~ 8 Ω (Bridged)
Frequency Response (+0, -3 dB).....	5 Hz ~ 50 kHz
Sensitivity (rated output) MAX.	0.2 V
MIN.	5.0 V
Signal to Noise Ratio.....	95 dB
Input Impedance.....	10 kΩ

规格

规格可能会变更, 恕不另行通知。

音频部	低通滤波器过滤频率 (-24 dB/oct).....50 Hz ~ 200 Hz (可变)
最大输出功率	1000 W (500 W × 2)
额定输出功率 (+B = 14.4V)	低音增强控制 (40 Hz)0 ~ +18 dB (可变)
普通 (4 欧姆) (20 Hz ~ 20 kHz, ≤ 0.08 % THD).....	170 W × 2
(2 欧姆) (1 kHz, ≤ 0.8 % THD).....	250 W × 2
桥路 (4 欧姆) (1 kHz, ≤ 0.8 % THD).....	500 W × 1
扬声器阻抗	2Ω ~ 8Ω
	4Ω ~ 8Ω (桥路)

频率响应 (+0, - 3 dB).....	5 Hz ~ 50 kHz
灵敏度(额定输出) 最大	0.2 V
最小	5.0 V
信噪比	95 dB
输入阻抗	10 kΩ

共同

使用电压	14.4 V (允许11 ~ 16 V)
消耗电流	38 A
安装尺寸 (宽×高×深)	350 × 59 × 238 mm
重量	3.2 kg