



For Customer Use:

Enter below the Model No. and Serial No. which are located on the top or bottom of the cabinet. Retain this information for future reference.

Model No. _____

Serial No. _____

1211MOHMDWKAYA

EN

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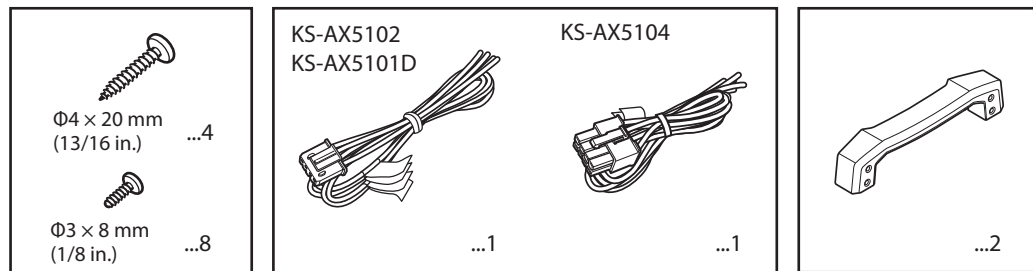
ENGLISH

Thank you for purchasing a JVC product. If you have any questions or require information regarding installation kits, consult your JVC Car audio dealers or a company supplying the kits.

For safety....

- Stop the car before performing any complicated operations.
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.

ACCESSORIES



CAUTIONS AND NOTES

This unit is designed to operate on **12 V DC, NEGATIVE ground electrical systems.** JVC recommends consulting a qualified technician for installation.

- This unit uses BTL (Balanced Transformerless) amplifier circuitry, i.e., floating ground system, so comply with the following:
 - Do not connect the “⊖” terminals of the speakers to each other.
 - Do not connect the “⊖” terminals of the speakers to the metal body or chassis.
- Cover the unused leads with insulating tape to prevent them from short circuiting.
- When an extension lead is used, it should be as thick and short as possible; connect it firmly with insulating tape.
- Be sure to leave an appropriate space between the antenna (aerial) and the wires of this unit.
- If the fuse blows, first make sure the wires aren't touching to cause a short circuit then replace the old fuse with one with the same rating.
- Do not let pebbles, sand or metallic objects get inside the unit.
- To keep the heat dissipation mechanism running effectively, wipe the accumulated dust off periodically.
- Listening to the tape, radio, CD or digital audio player, etc. with the volume set at a high level for a long period of time will exhaust the battery, while the engine is turned off or while the engine is idling.
- This unit becomes very hot. Be careful not to touch the unit not only when using but after using.
- DO NOT disassemble the unit since there are no user serviceable parts inside.

INSTALLATION OF THE UNIT

The following illustration shows a typical installation. However, you should make adjustments corresponding to your specific car.

Location of the unit

Onto the trunk floor
Under the front seat

- Mount this unit on a firm surface, such as in the trunk or under the front seat.
- Since heat is generated in the unit, do not mount it near inflammable objects. In addition, mount it in an area that will not prevent the unit from dissipating the heat.
- Do not mount the unit in the places subject to heat: near a radiator, in a glove compartment or in insulated areas such as under a car mat that will prevent the unit from dissipating heat.
- When mounting the unit under the front seat, make sure that adjusting the seat position will not catch any wire of the unit.

Install the unit

Provided screw
φ 4 × 20 mm (13/16 in.)

Installation board etc.
(thickness : 19 mm or more)

Drilled hole

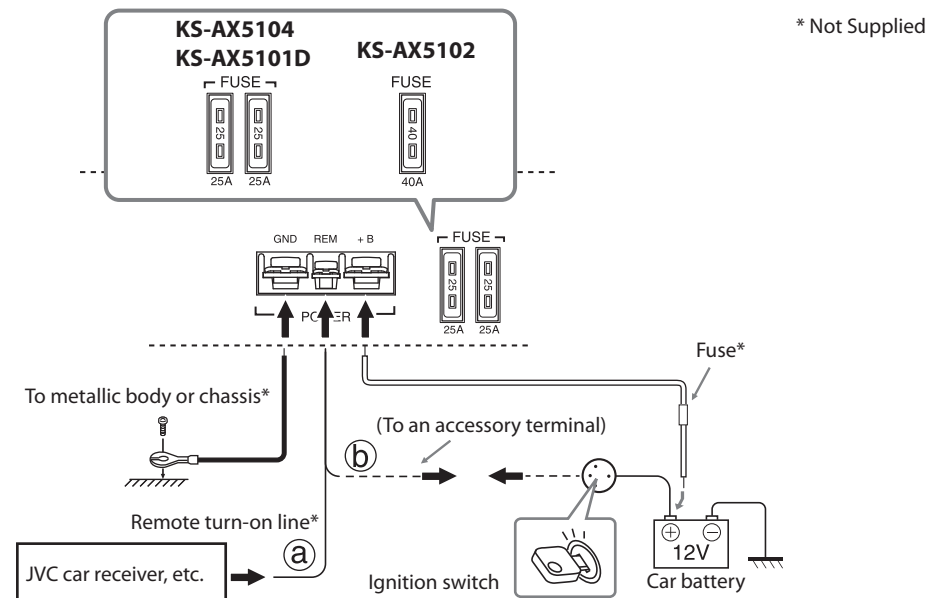
- When mounting this unit, be sure to use the provided screws.
- If any other screws are used, there is a risk of loosening the unit or damaging the parts under the car floor.
- Before drilling holes in the trunk to install the unit, make sure that there is a sufficient space under the trunk so that you do not drill holes in the fuel tank, etc.

INSTALLATION OF THE SIDE COVER

Provided screw
Φ 3 × 8 mm (1/8 in.)

- Attach the side cover using the provided screws after connected speaker and power supply cables and installed the unit.

POWER SUPPLY



Caution

- To prevent short circuits while making connections, keep the battery's negative terminal disconnected.
- When using a power cord (purchased separately), be sure to place the fuse near the battery as shown.
- Connect the lead wire (power cord) through which power is supplied directly to the battery's “⊕” terminal only after all the other connections have been made.

The proper lead wire connected to each POWER terminal is as follows.

- + B and GND: AWG 8 to AWG 4 (The cross section is about 8 mm² to 21 mm².)
- REM: AWG 18 to AWG 8 (The cross section is about 0.8 mm² to 8 mm².)

- (a) When you use JVC car receiver with a remote lead, connect to the REM terminal on this unit.
- (b) When you connect a unit without a remote lead, connect to the accessory circuit of the car which is activated by the ignition switch. In this case, noise may occur when the car receiver is turned on or off. To avoid this noise, do not turn on or off the car receiver itself. You can turn on or off the car receiver along with the on/off operation of the ignition switch.

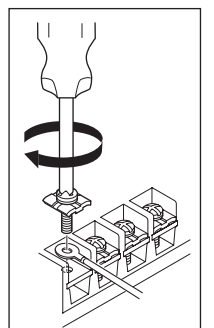
TERMINAL CONNECTIONS

When making terminal connections, properly fix each terminal with the provided screw by turning it as illustrated.

- Use ring terminals (not provided) for secure connection.

Notes

- Make sure the screw is fixed in place to prevent disconnections.
- Avoid over-tightening as it may cause the damage to the screw or its head slot.



SPEAKER SYSTEMS

Notes

- Be sure not to connect the “⊖” terminals of the speakers to a common point.
- If the same lead is used for both left/right or front/rear speaker wirings, this unit cannot be used. Always use the independent leads for each speaker. In this case, redo the wirings.
- Use the speakers with an impedance of 2 Ω to 8 Ω (4 Ω to 8 Ω: when used in Bridge Mode).
- Use the speakers which have sufficient capacity to the unit.

The proper lead connected to each SPEAKER OUTPUT terminal is as follows.

- KS-AX5104/KS-AX5102: AWG 18 to AWG 12 (The cross section is about 0.8 mm² to 3.3 mm²).
- KS-AX5101D: AWG 18 to AWG 8 (The cross section is about 0.8 mm² to 8 mm²).

SPEAKER CONNECTIONS

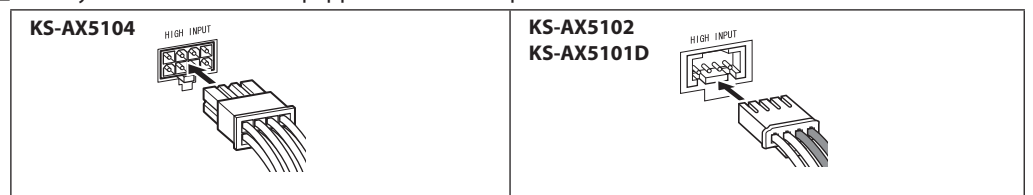
Connection varies depending on the number of the speakers used in your car. Select the appropriate connection referring to the following diagrams.

Notes

- Securely connect all the parts. If the connections are loose, due to contact resistance etc., heat will break out and may cause an accident.
- Run the connection leads under the car mats to prevent accidental disconnections.

(A) When your receiver is equipped with line output.

(B) When your receiver is NOT equipped with line output.

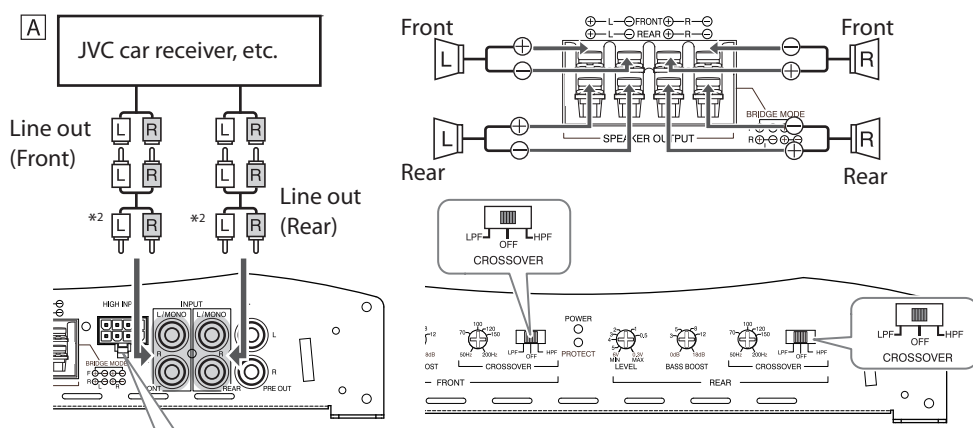


- Connect each lead of the speaker input connector to a speaker positive lead or negative lead of the receiver.

KS-AX5104

4-speaker system—Normal Mode

• Use the speakers with an impedance of **2 Ω to 8 Ω**.



B Speaker input connector.

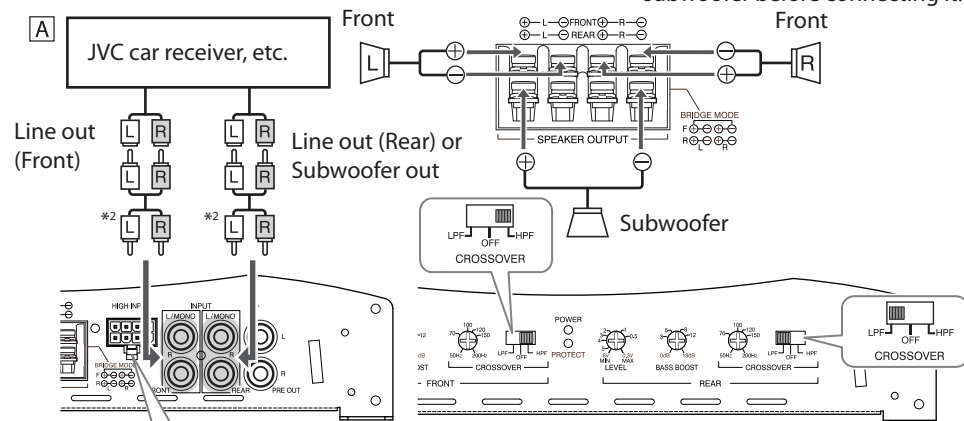
Connector lead	To Receiver	Connector lead	To Receiver
• White "Front left (+)"	→ Front left (+) lead	• Green "Rear left (+)"	→ Rear left (+) lead
• White (Stripe) "Front left (-)"	→ Front left (-) lead	• Green (Stripe) "Rear left (-)"	→ Rear left (-) lead
• Gray "Front right (+)"	→ Front right (+) lead	• Purple "Rear right (+)"	→ Rear right (+) lead
• Gray (Stripe) "Front right (-)"	→ Front right (-) lead	• Purple (Stripe) "Rear right (-)"	→ Rear right (-) lead

2-speaker system plus subwoofer—Bridge Mode

• Use the speakers with an impedance of **2 Ω to 8 Ω**.
• Use the subwoofer with an impedance of **4 Ω to 8 Ω**.

Notes

• Check the impedance of subwoofer before connecting it.



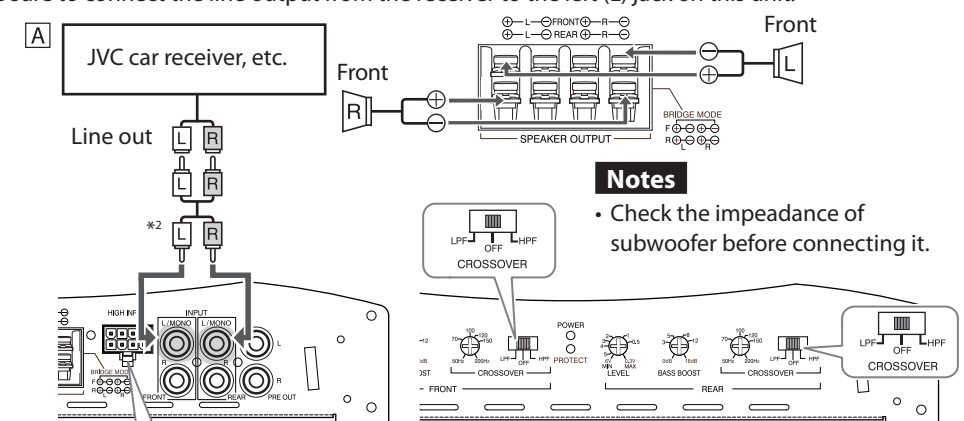
B Speaker input connector.

Connector lead	To Receiver	Connector lead	To Receiver
• White "Front left (+)"	→ Front left (+) lead	• Green "Rear left (+)"	→ Rear left (+) lead
• White (Stripe) "Front left (-)"	→ Front left (-) lead	• Green (Stripe) "Rear left (-)"	→ Rear left (-) lead
• Gray "Front right (+)"	→ Front right (+) lead	• Purple "Rear right (+)"	→ Rear right (+) lead
• Gray (Stripe) "Front right (-)"	→ Front right (-) lead	• Purple (Stripe) "Rear right (-)"	→ Rear right (-) lead

2-speaker system—Bridge Mode

• Use the speakers with an impedance of **4 Ω to 8 Ω**.

• Be sure to connect the line output from the receiver to the left (L) jack on this unit.



Notes

• Check the impedance of subwoofer before connecting it.

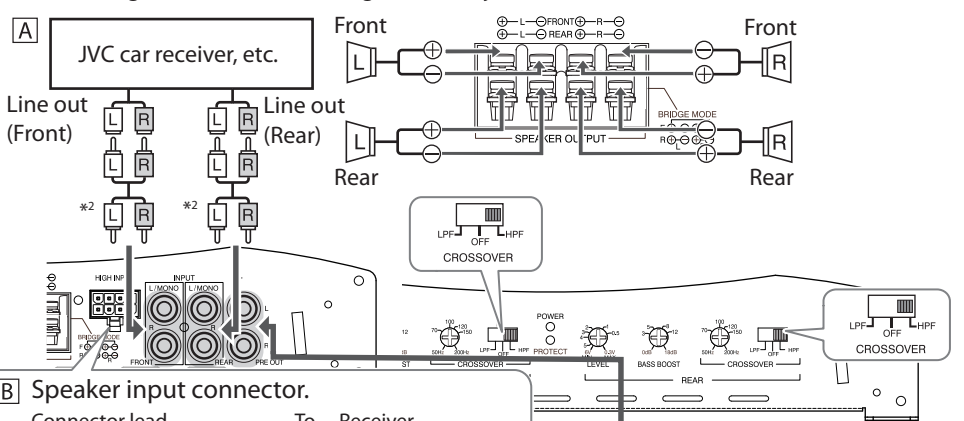
B Speaker input connector.

Connector lead	To Receiver	Connector lead	To Receiver
• White "Front left (+)"	→ Front left (+) lead	• Green "Rear left (+)"	→ Rear left (+) lead
• White (Stripe) "Front left (-)"	→ Front left (-) lead	• Green (Stripe) "Rear left (-)"	→ Rear left (-) lead
• Gray "Front right (+)"	→ Front right (+) lead	• Purple "Rear right (+)"	→ Rear right (+) lead
• Gray (Stripe) "Front right (-)"	→ Front right (-) lead	• Purple (Stripe) "Rear right (-)"	→ Rear right (-) lead

4-speaker system plus subwoofer (PRE OUT)

• Use the speakers with an impedance of **2 Ω to 8 Ω**.

• Down mixed signals are emitted through PRE OUT jacks.



B Speaker input connector.

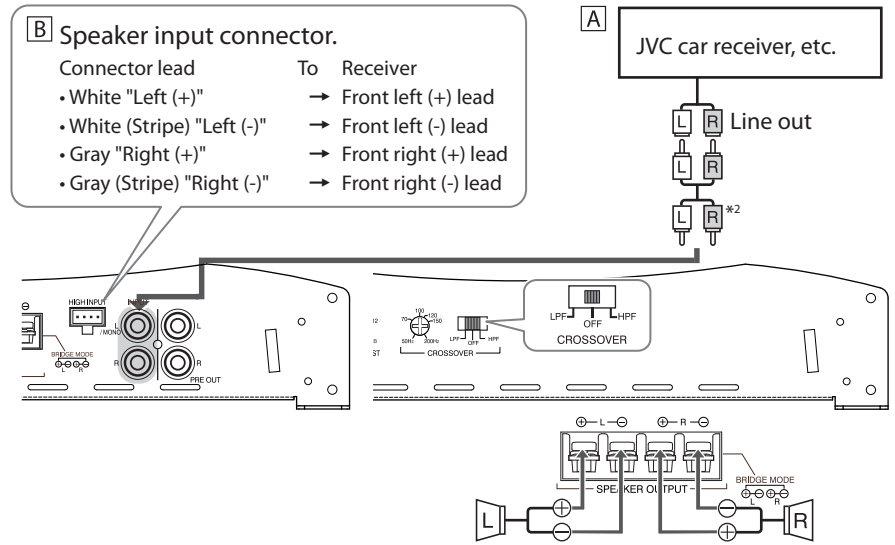
Connector lead	To Receiver	Connector lead	To Receiver
• White "Front left (+)"	→ Front left (+) lead	• Green "Rear left (+)"	→ Rear left (+) lead
• White (Stripe) "Front left (-)"	→ Front left (-) lead	• Green (Stripe) "Rear left (-)"	→ Rear left (-) lead
• Gray "Front right (+)"	→ Front right (+) lead	• Purple "Rear right (+)"	→ Rear right (+) lead
• Gray (Stripe) "Front right (-)"	→ Front right (-) lead	• Purple (Stripe) "Rear right (-)"	→ Rear right (-) lead

Subwoofer System

KS-AX5102

2-speaker system—Normal Mode

• Use the speakers with an impedance of **2 Ω to 8 Ω**.

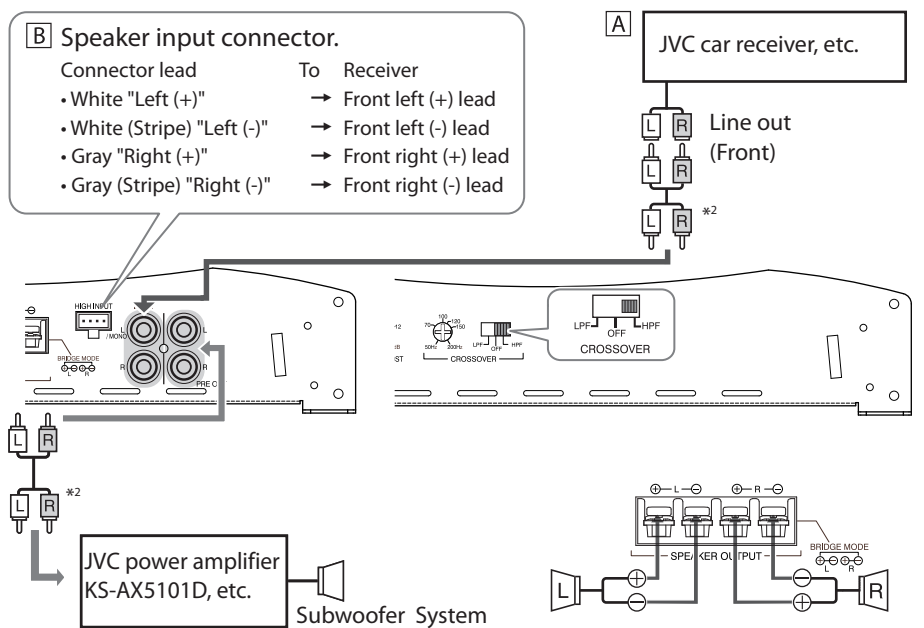


B Speaker input connector.

Connector lead	To Receiver	Connector lead	To Receiver
• White "Left (+)"	→ Front left (+) lead	• Green "Rear left (+)"	→ Rear left (+) lead
• White (Stripe) "Left (-)"	→ Front left (-) lead	• Green (Stripe) "Rear left (-)"	→ Rear left (-) lead
• Gray "Right (+)"	→ Front right (+) lead	• Purple "Rear right (+)"	→ Rear right (+) lead
• Gray (Stripe) "Right (-)"	→ Front right (-) lead	• Purple (Stripe) "Rear right (-)"	→ Rear right (-) lead

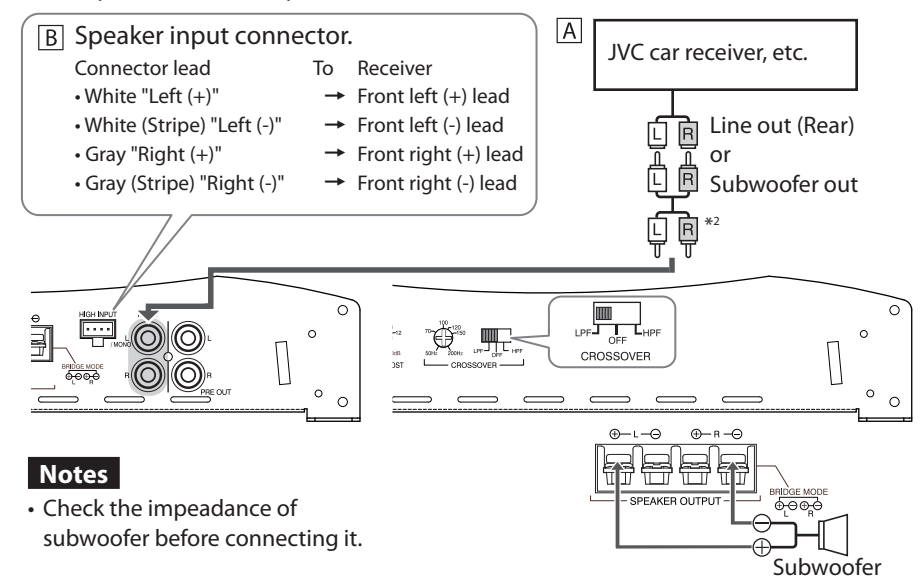
2-speaker system plus subwoofer (PRE OUT)

• Use the speakers with an impedance of **2 Ω to 8 Ω**.



Subwoofer system—Bridge Mode

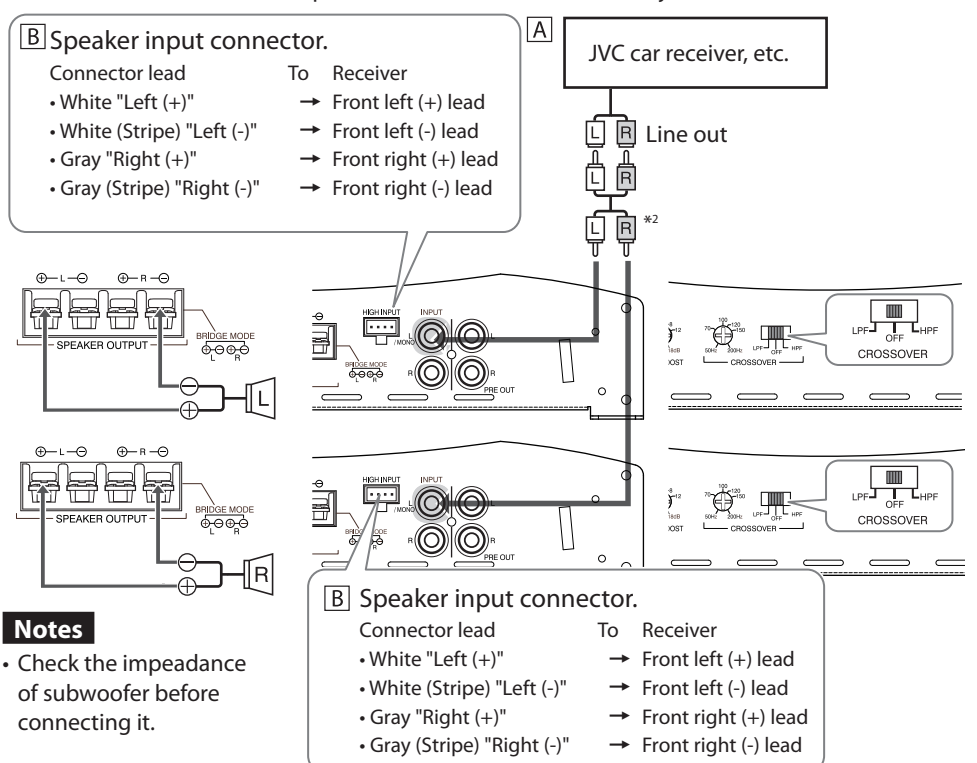
• Use the speakers with an impedance of **4 Ω to 8 Ω**.



2-speaker system (2 amplifiers)—Bridge Mode

• Use the speakers with an impedance of **4 Ω to 8 Ω**.

• Be sure to connect the line output from the receiver to the left (L) jack on this unit.



Notes

• Check the impedance of subwoofer before connecting it.

B Speaker input connector.

Connector lead	To Receiver	Connector lead	To Receiver
• White "Left (+)"	→ Front left (+) lead	• Green "Rear left (+)"	→ Rear left (+) lead
• White (Stripe) "Left (-)"	→ Front left (-) lead	• Green (Stripe) "Rear left (-)"	→ Rear left (-) lead
• Gray "Right (+)"	→ Front right (+) lead	• Purple "Rear right (+)"	→ Rear right (+) lead
• Gray (Stripe) "Right (-)"	→ Front right (-) lead	• Purple (Stripe) "Rear right (-)"	→ Rear right (-) lead

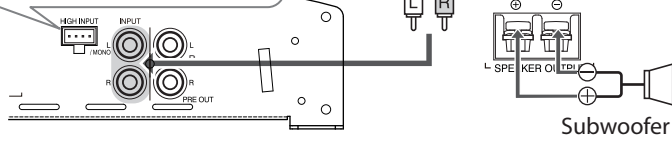
KS-AX5101D

Subwoofer system

- Use the speakers with an impedance of **2 Ω to 8 Ω**.

B Speaker input connector.

- | | |
|-----------------------------|------------------------|
| Connector lead | To Receiver |
| • White "Left (+)" | → Front left (+) lead |
| • White (Stripe) "Left (-)" | → Front left (-) lead |
| • Gray "Right (+)" | → Front right (+) lead |
| • Gray (Stripe) "Right (-)" | → Front right (-) lead |

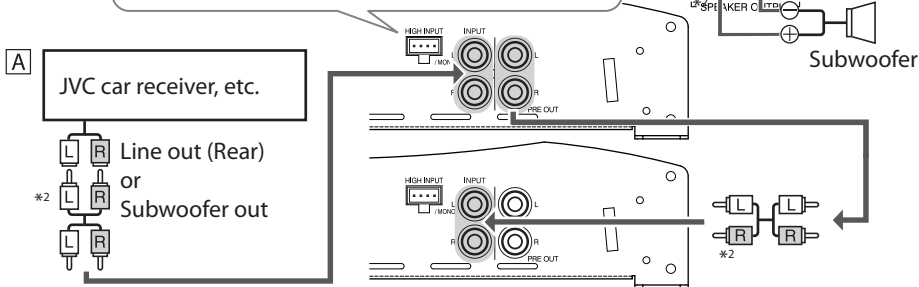


2-Subwoofer system (2 amplifiers)

- Use the speakers with an impedance of **2 Ω to 8 Ω**.
- Incoming signals from INPUT jacks are emitted through the PRE OUT jacks.

B Speaker input connector.

- | | |
|-----------------------------|------------------------|
| Connector lead | To Receiver |
| • White "Left (+)" | → Front left (+) lead |
| • White (Stripe) "Left (-)" | → Front left (-) lead |
| • Gray "Right (+)" | → Front right (+) lead |
| • Gray (Stripe) "Right (-)" | → Front right (-) lead |

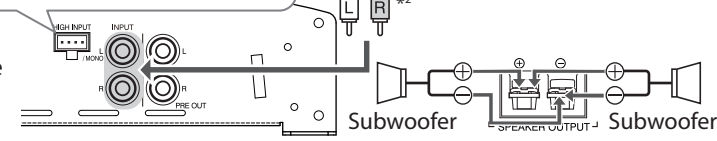


2-Subwoofer system

- Use the speakers with an impedance of **4 Ω to 8 Ω**.

B Speaker input connector.

- | | |
|-----------------------------|------------------------|
| Connector lead | To Receiver |
| • White "Left (+)" | → Front left (+) lead |
| • White (Stripe) "Left (-)" | → Front left (-) lead |
| • Gray "Right (+)" | → Front right (+) lead |
| • Gray (Stripe) "Right (-)" | → Front right (-) lead |

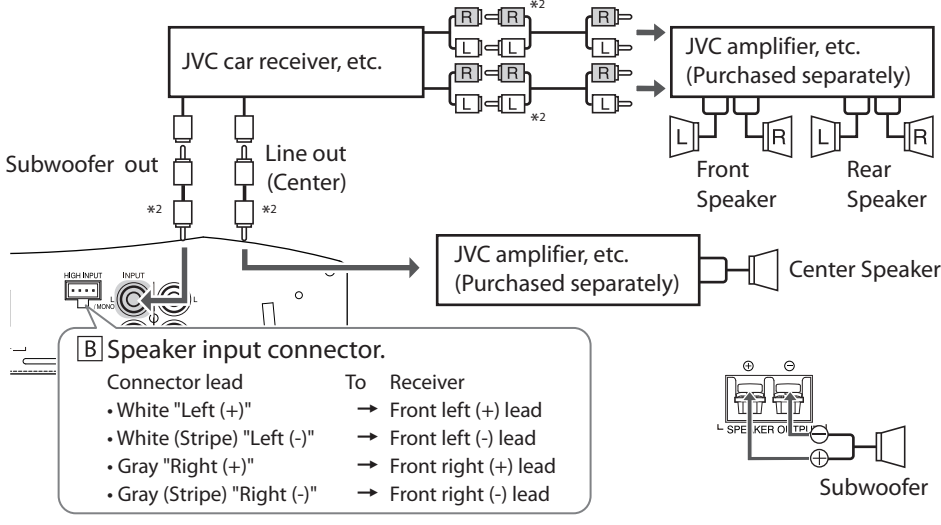


Notes

- Check the impedance of subwoofer before connecting it.

5-speaker system plus subwoofer—5.1-channel (3 amplifiers)

- Use the speakers with an impedance of **2 Ω to 8 Ω**.
- Be sure to connect the line output from the receiver to the left (L) jack on this unit.

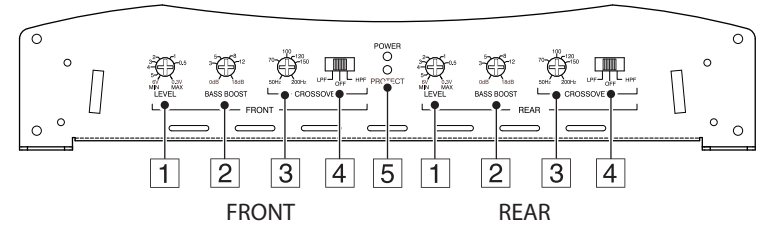


B Speaker input connector.

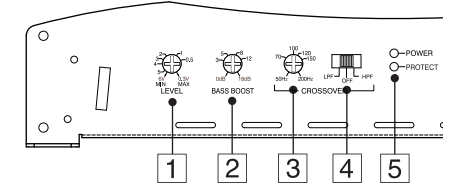
- | | |
|-----------------------------|------------------------|
| Connector lead | To Receiver |
| • White "Left (+)" | → Front left (+) lead |
| • White (Stripe) "Left (-)" | → Front left (-) lead |
| • Gray "Right (+)" | → Front right (+) lead |
| • Gray (Stripe) "Right (-)" | → Front right (-) lead |

CONTROLS

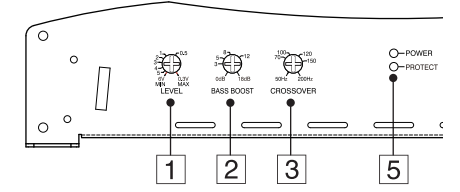
KS-AX5104



KS-AX5102



KS-AX5101D



1 Input LEVEL controller

The input level can be adjusted with this control when this unit is connected to other source equipment. Adjust the level while listening to the sound. This control is preset to MIN when the unit is shipped.

2 BASS BOOST controller

Turning this boosts the 45 Hz frequency within the range of 0 dB to +18 dB. Adjust the level while listening to the sound. This controller is preset to MIN when the unit is shipped.

3 CROSSOVER frequency controller

Turning this adjusts the cutoff frequency within the range of 50 Hz to 200 Hz. Adjust the level while listening to the sound. This control is preset to 50 Hz when the unit is shipped.

4 CROSSOVER filter switch

OFF: Normally set to this position. The switch is preset to this position when the unit is shipped.

LPF: Set to this position when you want to turn on the LPF (Low-Pass Filter) switch.

HPF: Set to this position when you want to turn on the HPF (High-Pass Filter) switch.

5 POWER lamp

The green lamp lights while the unit is turned on.

PROTECT lamp

If the lamp lights in red with the unit on, some trouble has occurred (see "TROUBLE SHOOTING").

TROUBLESHOOTING

For more details, consult your JVC car audio dealer.

The POWER lamp does not light.

- Change the fuses if the current one is blown.
- Connect the ground lead securely to a metal part of the car.
- Turn on the equipment connected to this unit.
- Use a relay if your system employs too many amplifiers.
- Confirm the battery voltage (11 V to 16 V).

The PROTECT lamp lights in red and/or the unit heats up abnormally.

- Use the speakers of suitable impedance.
- Correct the speaker wirings if they are short-circuited.
- Make the speaker wirings away from the power cord to prevent DC offset error.
- Leave the unit turned off for a while to cool it down.

No sound is heard.

- Confirm the connections for the power supply (see "POWER SUPPLY" on page 1).
- Connect RCA pin cords to the INPUT jacks, or the speaker input connector to the HIGH INPUT terminal.

Alternator noise is heard.

- Keep the power cords away from the RCA pin cords.
- Keep the RCA pin cords away from other electrical cables in the car.
- Connect the ground lead securely to a metal part of the car.
- Make sure the negative speaker leads do not touch the car chassis.
- Replace the plugs or use plugs with load resistors.
- Connect a bypass capacitor across the accessory switches (horn, fan, etc.).
- Connect the LINE NOISE FILTER (commercially available) between Line Output (through the receiver) and INPUT jacks on this unit.

Noise is made when you connect the unit to an AM tuner.

- Move the speaker and power cords away from the antenna lead.

SPECIFICATIONS

	KS-AX5104	KS-AX5102	KS-AX5101D
Power Output • Normal Mode:	70 W RMS × 4 channels at 4 Ω and ≤ 1% THD + N	100 W RMS × 2 channels at 4 Ω and ≤ 1% THD + N	300 W RMS × 1 channels at 4 Ω and ≤ 1% THD + N
Signal-to-Noise Ratio	80 dBA (reference: 1 W into 4 Ω)	80 dBA (reference: 1 W into 4 Ω)	60 dBA (reference: 1 W into 4 Ω)
Power Output • Normal Mode: • Bridge Mode:	100 W RMS × 4 channels at 2 Ω and ≤ 1% THD + N 200 W RMS × 2 channels at 4 Ω and ≤ 1% THD + N	150 W RMS × 2 channels at 2 Ω and ≤ 1% THD + N 300 W RMS × 1 channels at 4 Ω and ≤ 1% THD + N	500 W RMS × 1 channels at 2 Ω and ≤ 1% THD + N —
Maximum Power Output	1000 W (500 W × 2)	600 W	1000 W
Load Impedance • Normal Mode: • Bridge Mode:	4 Ω (2 Ω to 8 Ω allowance) 4 Ω (4 Ω to 8 Ω allowance)	4 Ω (2 Ω to 8 Ω allowance) 4 Ω (4 Ω to 8 Ω allowance)	4 Ω (2 Ω to 8 Ω allowance) —
Frequency Response	5 Hz to 50,000 Hz (+0 dB, -3 dB)	5 Hz to 50,000 Hz (+0 dB, -3 dB)	20 Hz to 200 Hz (+0 dB, -3 dB)
Input Sensitivity/Impedance	2 V/20 kΩ (0.25 V to 5 V, variable)	2 V/20 kΩ (0.25 V to 5 V, variable)	2 V/20 kΩ (0.25 V to 5 V, variable)
Distortion	Less than 0.04% (at 1 kHz)	Less than 0.04% (at 1 kHz)	Less than 0.08% (at 100 Hz)
Power Requirement	DC 14.4 V (11 V to 16 V allowance)	DC 14.4 V (11 V to 16 V allowance)	DC 14.4 V (11 V to 16 V allowance)
Grounding system	Negative ground	Negative ground	Negative ground
Dimensions (W×H×D)	310 mm × 60 mm × 300 mm (12-1/4 in. × 2-3/8 in. × 11-13/16 in.)	260 mm × 60 mm × 300 mm (10-1/4 in. × 2-3/8 in. × 11-13/16 in.)	260 mm × 60 mm × 300 mm (10-1/4 in. × 2-3/8 in. × 11-13/16 in.)
Mass (approx.)	3.2 kg (7.1 lbs)	2.6 kg (5.8 lbs)	2.7 kg (6.0 lbs)