JVC

KS-AX204

JVCKENWOOD Corporation
LVT2505-001A [K]

POWER AMPLIFIER: INSTRUCTION MANUAL

English

⚠CAUTION

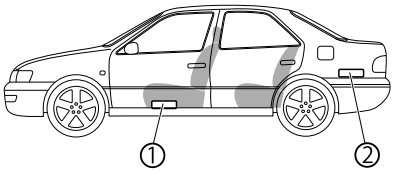
This unit is designed to operate on 12 V DC, NEGATIVE ground electrical systems. JVC recommends consulting a qualified technician for installation.

- To prevent short circuits while making connections, keep the battery's negative terminal disconnected.
- This unit uses BTL (Balanced Transformerless) amplifier circuitry, i.e., floating ground system, so comply with the following:

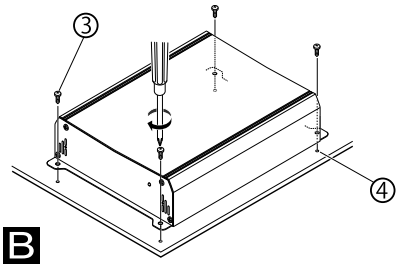
– Do not connect the "⊖" terminals of the speakers to each other.
– Do not connect the "⊖" terminals of the speakers to the metal body or chassis.

- Cover the unused leads with insulating tape to prevent them from short circuiting.
- 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.
- 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.
- To keep the heat dissipation mechanism running effectively, wipe the accumulated dust off periodically.
- Do not let pebbles, sand or metallic objects get inside the unit.
- 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.
- Use the speakers which have sufficient capacity to the unit.

INSTALLATION



A



B

English

INSTALLATION

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

A Location of the unit

- Mount this unit on a firm surface, such as in the trunk or under the front seat.
- When mounting the unit under the front seat, make sure that adjusting the seat position will not catch any wire of the unit.
- Since heat is generated in the unit, do not mount it near inflammable objects.
- 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.

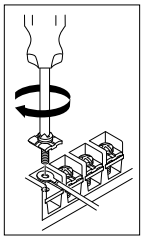
① Under the front seat
② Onto the trunk floor

B Install the unit

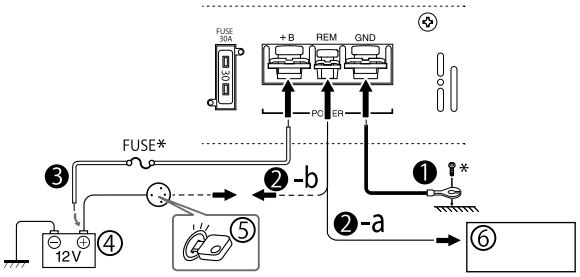
- When mounting this unit, be sure to use the provided screws.
- If any other screws are used, there is a risk of loosening the unit or damaging the parts under the car floor.
- Before drilling holes in the trunk to install the unit, make sure that there is a sufficient space under the trunk so that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

③ Provided screw Ø 4 × 20 mm (13/16 in.)
④ Drilled hole

TERMINAL CONNECTION



POWER SUPPLY CONNECTION



English

TERMINAL CONNECTION

Use ring terminals (not provided) for secure connection.

POWER SUPPLY CONNECTION

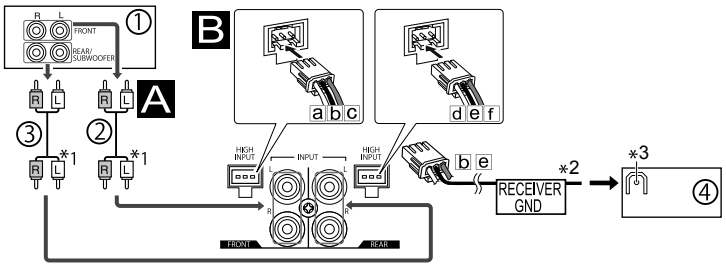
The proper lead wire connected to each POWER terminal is as follows.

- + 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.)

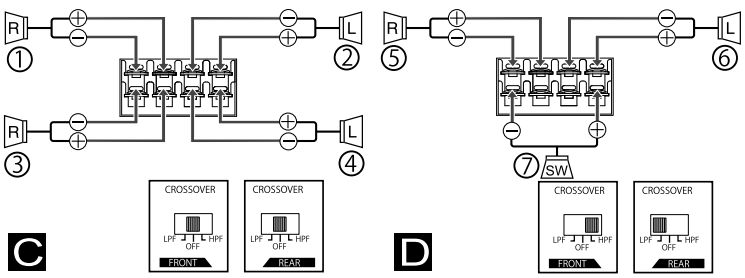
❶ Connect to metallic body or chassis.
❷-a When you use JVC car receiver with REMOTE OUTPUT, connect to REMOTE OUTPUT.
❷-b When you use a unit without REMOTE OUTPUT, connect to the accessory circuit of the car which is activated by the ignition switch. In this case, noise may occur when the car receiver 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.
❸ After all connections have been made, connect to the battery 12 V.
– Be sure to place the fuse near the battery as shown.
④ Car battery
⑤ Ignition switch
⑥ JVC car receiver, etc.

* Not supplied

AUDIO INPUT CONNECTION



SPEAKER CONNECTIONS



English

AUDIO INPUT CONNECTION

A When your receiver is equipped with line output.

① JVC car receiver, etc.
② Line out (Front)
③ Line out (Rear)/ Subwoofer
*1 Not supplied

B When your receiver is NOT equipped with line output.

a White "FRONT LEFT (+)"
b Black "RECEIVER GND"
c Gray "FRONT RIGHT (+)"
d Green "REAR LEFT (+)"
e Black "RECEIVER GND"
f Purple "REAR RIGHT (+)"
④ JVC car receiver, etc.
*2 Example: connecting to the ground
*3 Rear ground terminal

SPEAKER CONNECTIONS

The proper lead connected to each SPEAKER OUTPUT terminal is AWG 18 to AWG 12. (The cross section is about 0.8 mm² to 3.3 mm².)

C 4-speaker system—Normal Mode

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

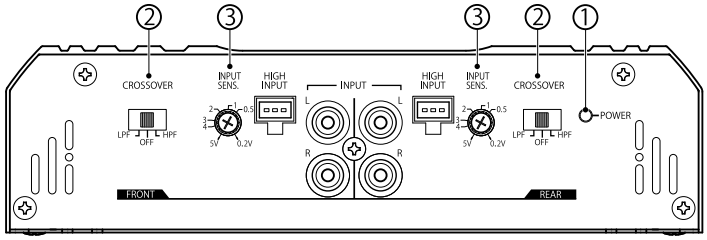
① Right Front
② Left Front
③ Right Rear
④ Left Rear

D 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.

⑤ Right Front
⑥ Left Front
⑦ Subwoofer

CONTROLS



English

CONTROLS

① POWER indicator

The green lamp lights while the unit is turned on.

② CROSSOVER filter switch

OFF:

Normally set to this position.

LPF:

Set to this position when you want to turn on the LPF (Low-Pass Filter) switch. The Low Pass Filter transmits frequencies lower than 80 Hz.

HPF:

Set to this position when you want to turn on the HPF (High-Pass Filter) switch. The High-Pass Filter transmits frequencies higher than 150 Hz.

③ INPUT SENS. (input sensitivity) controller

Set this control according to the line-output level of the center unit connected with this unit. For the line-output level, refer to the "SPECIFICATIONS" in the instruction manual of the center unit. This controller is preset to 5 V when the unit is shipped.

TROUBLESHOOTING

English

TROUBLESHOOTING

The POWER indicator does not light.

- Change the fuses if the current one is blown.
- Connect the ground lead securely to a metal part of the car.
- Confirm the battery voltage (11 V to 16 V).
- Leave the unit turned off to cool it down if it heats up abnormally.

No sound is heard.

- Confirm the connections for the power supply. (See "POWER SUPPLY CONNECTION".)
- Connect the RCA pin cords to the INPUT jacks, or the speaker input connector to the HIGH INPUT terminal.
- Confirm the speaker wirings and the position of the CROSSOVER filter switch. (See "SPEAKER CONNECTIONS".)

Alternator noise is heard.

- Keep the leads of the POWER terminals 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 speaker negative leads do not touch the car chassis.
- Connect a bypass capacitor across the accessory switches (horn, fan, etc.).

Noise is made when you connect the unit to an AM (MW/LW) tuner.

- Move all the leads of this unit away from the antenna (aerial) lead.

SPECIFICATIONS

English

SPECIFICATIONS

Power Output
Normal Mode: 40 W RMS × 4 channels at 4 Ω and ≤ 1% THD + N
Signal-to-Noise Ratio: 80 dBA (reference: 1 W into 4 Ω)
Power Output
Normal Mode: 60 W RMS × 4 channels at 2 Ω and ≤ 1% THD + N
Bridge Mode: 120 W RMS × 2 channels at 4 Ω and ≤ 1% THD + N
Maximum Power Output
600 W
Load Impedance
Normal Mode: 4 Ω (2 Ω to 8 Ω allowance)
Bridge Mode: 4 Ω (4 Ω to 8 Ω allowance)
Frequency Response
5 Hz to 50,000 Hz (+0 dB, −3 dB)
Input Sensitivity/Impedance
2 V/21 kΩ (0.2 V to 5 V, variable)
Distortion
Less than 0.06% (at 1 kHz)
Power Requirement
DC 14.4 V (11 V to 16 V allowance)
Grounding system
Negative ground
Dimensions (W×H×D)
300 mm × 49.5 mm × 185 mm
(11-13/16 in. × 2 in. × 7-5/16 in.)
Mass (approx.)
1.9 kg (4.2 lbs)
Accessories
Speaker input connector 3P × 2
Mounting Screw Ø 4 × 20 mm (13/16 in.) × 4

Design and specifications are subject to change without notice.

Learn more about car amplifiers on our website.