#### **POWER AMPLIFIER: INSTRUCTION MANUAL**



JVCKENWOOD Corporation B5E-0089-10/01 [W]

**English** 

### **A** WARNING

- 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.
- Do not touch the unit during use because the surface of the unit becomes hot and may cause burns if touched.

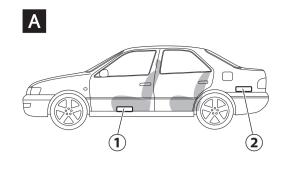
## **A** CAUTION

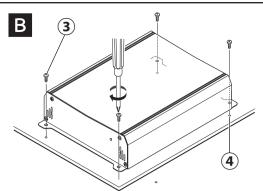
This unit is designed to operate on 12 V DC, NEGATIVE ground electrical systems. JVC recommends consulting a qualified technician for installation.

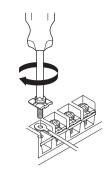
- To prevent short circuits while making connections, keep the battery's negative terminal disconnected.
- This unit uses BTL (Balanced Transformerless) amplifier circuitry, i.e., floating ground system, so comply with the following:
- Do not connect the "

  "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.
- 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.
- 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 TERMINAL CONNECTION







## **English**

#### **INSTALLATION**

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

## A Location of the unit

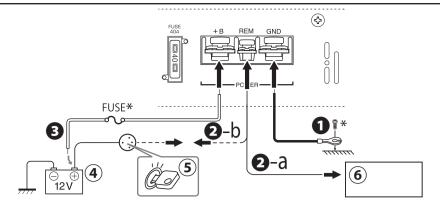
- Mount this unit on a firm surface, such as in the trunk or under the front seat.
- When mounting the unit under the front seat, make sure that adjusting the seat position will not catch any wire of the unit.
- Since heat is generated in the unit, do not mount it near inflammable objects.
- Do not mount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

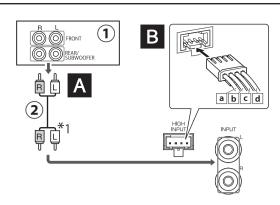
#### **B** Install the unit

- 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.
- $\bigcirc$  Provided screw  $\emptyset$  4  $\times$  20 mm (13/16 in.)
- **4** Drilled hole

#### **TERMINAL CONNECTION**

Use ring terminals (not provided) for secure connection.





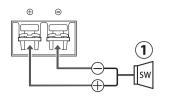
#### **POWER SUPPLY CONNECTION**

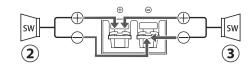
The proper lead wire connected to each POWER terminal is as follows.

- + B and GND: AWG 8 to AWG 4 (The cross section is about 8 mm<sup>2</sup> to 21 mm<sup>2</sup>.)
- REM: AWG 18 to AWG 8 (The cross section is about 0.8 mm<sup>2</sup> to 8 mm<sup>2</sup>.)
- **1** Connect to metallic body or chassis.
- 2-a When you use JVC car receiver with REMOTE OUTPUT, connect to REMOTE OUTPUT.
- 2-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.
- 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**

- A When your receiver is equipped with line output.
- 1) JVC car receiver, etc.
- 2 Line out
  - \*1 Not supplied
- **B** When your receiver is NOT equipped with line output.
- a Gray "FRONT RIGHT (+)"
- **b** Gray (Stripe) "FRONT RIGHT (—)"
- **C** White (Stripe) "FRONT LEFT (−)"
- d White "FRONT LEFT (+)"
- The power is turned on and off as the unit detects input signal ("Auto Turn-On"). Therefore it is not necessary to connect the REM wire. (2-a, 2-b)





C

#### **English**

#### **SPEAKER CONNECTIONS**

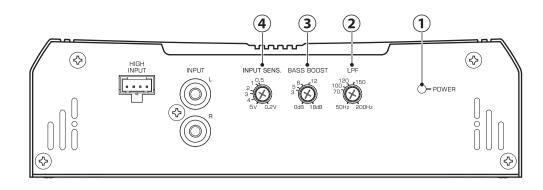
The proper lead connected to each SPEAKER OUTPUT terminal is AWG 18 to AWG 12. (The cross section is about 0.8 mm<sup>2</sup> to 3.3 mm<sup>2</sup>.)

## **C** Subwoofer system

- Use the subwoofer with an impedance of 2  $\Omega$  to 8  $\Omega$ .
- 1 Subwoofer

#### **D** 2-Subwoofer system

- Use the subwoofer with an impedance of 4  $\Omega$  to 8  $\Omega$ .
- Subwoofer
- **3** Subwoofer



## **CONTROLS**

#### 1 POWER indicator

The green lamp lights while the unit is turned on.

## 2 LPF (Low-Pass Filter) controller

Adjust the cutoff frequency (the Low-Pass Filter transmits frequencies lower than the cutoff frequency) within the range of 50 Hz to 200 Hz. Adjust the level while listening to the sound. This controller is preset to 50 Hz when the unit is shipped.

#### **3** 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.

## 4 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**

## 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**

#### **Power Output**

Normal Mode: 250 W RMS  $\times$  1 channels at 4  $\Omega$  and

 $\leq 1\% \text{ THD} + \text{N}$ 

Signal-to-Noise Ratio: 60 dBA (reference: 1 W into 4  $\Omega$ )

#### **Power Output**

Normal Mode: 400 W RMS  $\times$  1 channels at 2  $\Omega$  and  $\leq$  1% THD + N

#### **Maximum Power Output**

800 W

#### **Load Impedance**

Normal Mode:  $4 \Omega$  ( $2 \Omega$  to  $8 \Omega$  allowance)

#### **Frequency Response**

20 Hz to 200 Hz (+0 dB, -3 dB)

#### Input Sensitivity/Impedance

 $2 \text{ V}/21 \text{ k}\Omega$  (0.2 V to 5 V, variable)

#### **Distortion**

Less than 0.08% (at 100 Hz)

#### **Power Requirement**

DC 14.4 V (11 V to 16 V allowance)

#### **Grounding system**

Negative ground

## Dimensions (W×H×D)

227 mm  $\times$  52 mm  $\times$  185 mm

 $(8-15/16 \text{ in.} \times 2-1/16 \text{ in.} \times 7-5/16 \text{ in.})$ 

## Mass (approx.)

1.7 kg (3.8 lbs)

#### **Accessories**

Speaker input connector  $4P \times 1$ 

Mounting Screw Ø 4 (3/16 in.)  $\times$  20 mm (13/16 in.)  $\times$  4

Design and specifications are subject to change without notice.





## Declaration of Conformity with regard to the EMC Directive Declaration of Conformity with regard to the RoHS Directive 2011/65/EU Manufacturer:

JVC KENWOOD Corporation
3-12 Moriya-cho, Kanagawa-ku, Yokohama-shi, Kanagawa, 221-0022 Japan **EU Representative:**JVC Technical Services Europe GmbH

Konrad-Adenauer-Allee 1-11, D - 61118 Bad Vilbel, Germany



# Information on Disposal of Old Electrical and Electronic Equipment (applicable for countries that have adopted separate waste collection systems)

Products with the symbol (crossed-out wheeled bin) cannot be disposed as household waste. Old electrical and electronic equipment should be recycled at a facility capable of handling these items and their waste by products. Contact your local authority for details in locating a recycle facility nearest to you. Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.