

4 CH MIXING KEYBOARD AMPLIFIER

KC-100

OWNER'S MANUAL

We'd like to take a moment to thank you for purchasing the Roland KC-100 4CH MIXING KEYBOARD AMPLIFIER.



Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (page 2), "USING THE UNIT SAFELY" (page 3), and "IMPORTANT NOTES" (page 4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, this manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

Main Features

- The KC-100 is a high-quality monitor amp designed for digital keyboards, electric drums, guitar synthesizers, and the like.
- A 12 inch (30 cm) speaker and a tweeter are contained in a compact and light package together with a 60-watt amplifier that delivers a truly high-powered output.
- The input section provides four channels, and an XLR connector for microphone input is also provided for channel 1. Channel 4 features a monitor function that is convenient for synchronized performances.
- Stand adaptors are provided for compatibility with speaker stands. By using a speaker stand, the KC-100 can be placed at the height ideal for monitoring.

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	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS QUVRIR		
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

1. Read all the instructions before using the product.
2. Do not use this product near water — for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
3. This product should be used only with a cart or stand that is recommended by the manufacturer.
4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
5. The product should be located so that its location or position does not interfere with its proper ventilation.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
9. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
10. The product should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled onto the product; or
 - C. The product has been exposed to rain; or
 - D. The product does not appear to operate normally or exhibits a marked change in performance; or
 - E. The product has been dropped, or the enclosure damaged.
11. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

For the USA

GROUNDING INSTRUCTIONS

This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock.


This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product — if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

For the U.K.

WARNING: THIS APPARATUS MUST BE EARTHED
IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.
 GREEN-AND-YELLOW: EARTH, BLUE: NEUTRAL, BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured GREEN or GREEN-AND-YELLOW.



The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.



The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

The product which is equipped with a THREE WIRE GROUNDING TYPE LINE PLUG must be grounded.







USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About  **WARNING** and  **CAUTION** Notices









 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols








	The  symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual. 
- Do not open or perform any internal modifications on the unit. 
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. 
- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged. 
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit. 
- Protect the unit from strong impact. (Do not drop it!) 
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through. 
- Before using the unit in a foreign country, consult with your dealer, or qualified Roland service personnel. 

CAUTION

- Always grasp only the plug on the power-supply cord when plugging into, or unplugging from an outlet. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 
- Never handle the power cord or its plug with wet hands when plugging into, or unplugging from, an outlet. 
- Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices. 
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet. 
- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet. 

IMPORTANT NOTES

In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "USING THE UNIT SAFELY" on pages 2 and 3, please read and observe the following:

Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- This unit contains powerful magnets. If placed in the vicinity of TVs, it may cause interference (irregularities in color). Should this occur, reposition this unit so it is located at a greater distance from such devices.

Maintenance

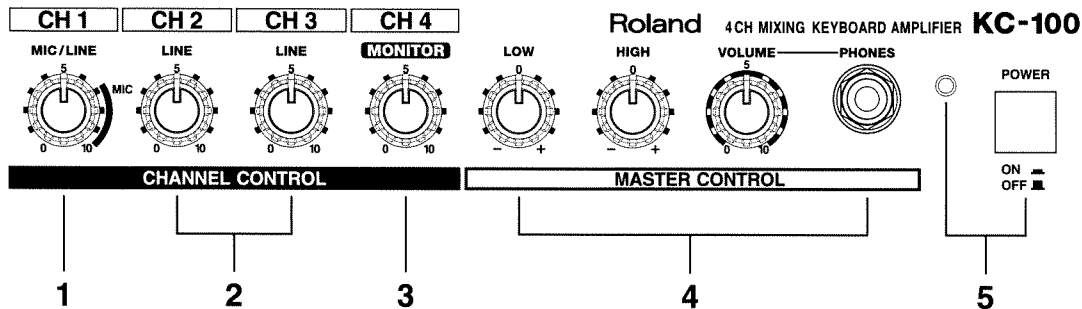
- Caring for the metal parts
Wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Caring for the covering
Clean with a stiff-bristled brush.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

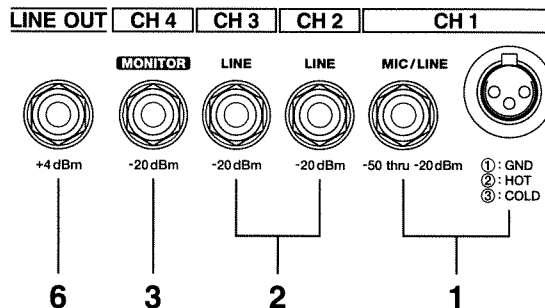
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

PANEL DESCRIPTIONS

CONTROL PANEL



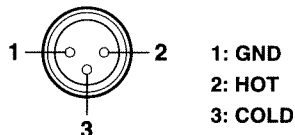
JACKS (REAR PANEL)



1. CH1 Controls

The unit accommodates a complete range of signals—from mic level (-50 dBm) to line level (-20 dBm). In addition to phone jack, a convenient XLR connector is also provided, allowing for the connection of a microphone.

- * The pin assignment for the XLR connectors is as shown below. Before making any connections, make sure that this pin assignment is compatible with that of all your other devices.



2. CH2 and CH3 Controls

The inputs accept line levels (-20 dBm), and feature phone jacks.

3. CH4 Controls

CH4 is dedicated to monitoring channel. The inputs accept line levels (-20 dBm), and feature phone jack. The signal that is input to CH4 will not be output from the LINE OUT jack, but will be output only from the internal speaker and from the headphones. This is a very convenient way to provide sound that is meant only for the performer, such as the talkback from the main PA console, or a click track to play to when using sequencer accompaniment, etc.

- * If your setup does not use line output, CH4 can be used in the same way as the other channels.

4. Master Controls

These controls control the output of the built-in speaker and the PHONES jack.

- LOW: This adjusts the volume of the bass.
- HIGH: This adjusts the volume of the treble.
- VOLUME: This adjusts the volume.

Two-band tone control with Low and High is provided. The ideally tuned equalization provides a versatile tonal range. When headphones are connected to the PHONES jack, the internal speaker will be silent.

- * Before connecting or disconnecting headphones, be sure to turn down the VOLUME control for the MASTER CONTROL section to 0.
- * The PHONES output is mono.

5. Power Switch, Pilot Light

This switch turns the power on/off. When the power is on, the pilot light will be lit.

- * Before turning the power switch on/off, be sure to have all volumes and levels at their lowest value, 0.
- * This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

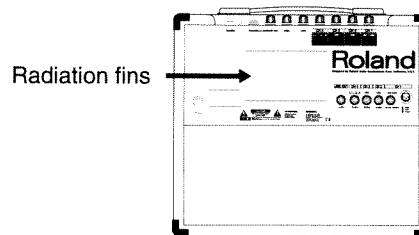
6. Line Out

Provides +4 dBm output. Accepts standard phone jack.

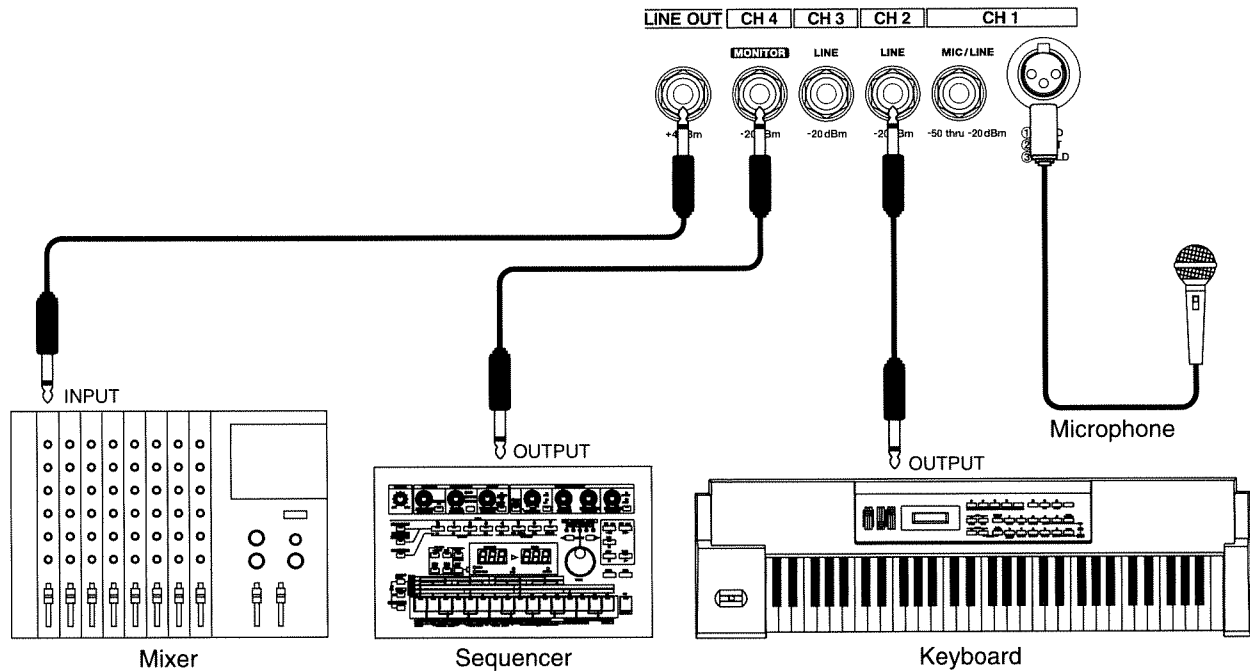
- * The signal input to CH4 (monitor) will not be output.



When this unit is operating, the radiation fins located on the rear panel will become hot, so do not touch it with your bare hands.



CONNECTIONS AND POWERUP



* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections. On the KC-100, be sure that the volume levels for all Sections are set to "0."

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

* This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

1. Make sure that all volume controls on the KC-100 and connected devices are set to 0.
2. Turn on the keyboard(s) and sequencer (if you're using one).
3. Turn on the KC-100.
4. If a mixer is connected to the LINE OUT jack on the KC-100, turn on the mixer.
5. Adjust the volume levels for the devices.

Before switching off the power, lower the volume on each of the devices in your system and then **TURN OFF** the devices in the reverse order to which they were switched on.

- * Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:
1. Changing the orientation of the microphone(s).
 2. Relocating microphone(s) at a greater distance from speakers.
 3. Lowering volume levels.

USING A SPEAKER STAND

The KC-100 can be mounted on a commercially available speaker stand. If a speaker stand is used, the KC-100 can be placed at a height ideal for monitoring, and can also be used as a simple PA system.

- * Use a speaker stand that has a load capacity of 20 kg (44 lbs) or greater.
- * If you use a speaker stand, adjust the height to 120 cm (47 inches) or less, and adjust the legs to a width of 100 cm (40 inches) or more.



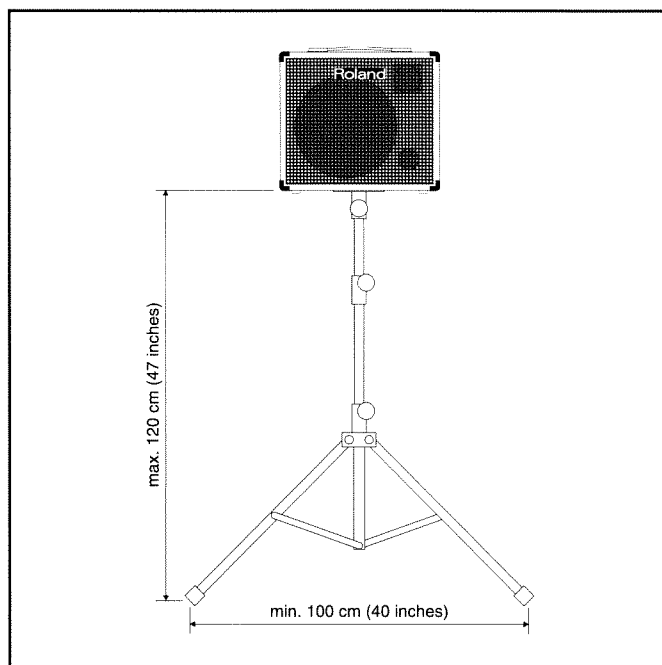
When mounting this unit on a speaker stand, you must have at least one additional person help you, so as to avoid pinched fingers or accidents that might be caused should the unit be dropped.



When using the unit with a speaker stand recommended by Roland, the speaker stand must be carefully placed so it is level and sure to remain stable.



Cables connected to this unit should be given enough slack to prevent accidents that might result from someone tripping over them.



SPECIFICATIONS

• Rated Power Output
Speaker Out 60 W / 8 Ω

• Nominal Input Level (@1 kHz)
INPUT

Channel 1 (MIC/LINE) XLR Type -50 dBm thru -20 dBm
Channel 1 (MIC/LINE) PHONE Type -50 dBm thru -20 dBm
Channel 2,3 (LINE) -20 dBm
Channel 4 (MONITOR) -20 dBm

• Nominal Output Level (@1 kHz)
LINE OUT + 4 dBm
0 dBm = 0.775 Vrms

• Speakers
30 cm (12 inches) x 1 + Tweeter x 1

• Controls
Channel 1 Volume
Channel 2 Volume
Channel 3 Volume
Channel 4 Volume
Equalizer LOW
HIGH
MASTER VOLUME
POWER Switch

• Connectors
Channel 1 Input Connector (XLR Type Balanced)
Channel 1 Input Jack
Channel 2 Input Jack
Channel 3 Input Jack
Channel 4 Input Jack
LINE OUT Jack
PHONES Jack

• Power Supply
AC 117, 230, 240 V

• Power Consumption
60 W

• Dimensions
478 (W) x 273 (D) x 430 (H)mm
18-7/8 (W) x 10-3/4 (D) x 16-15/16 (H)inches

• Weight
14.5 kg
32 lbs

• Accessories
Owner's Manual

• Options
Speaker Stand SS-115A
Speaker Cap SS-CAP

* When using an SS-115A speaker stand, be sure to use an SS-CAP speaker cap in conjunction with it.

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.



This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For EU Countries

 Roland®

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UPC

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Roland