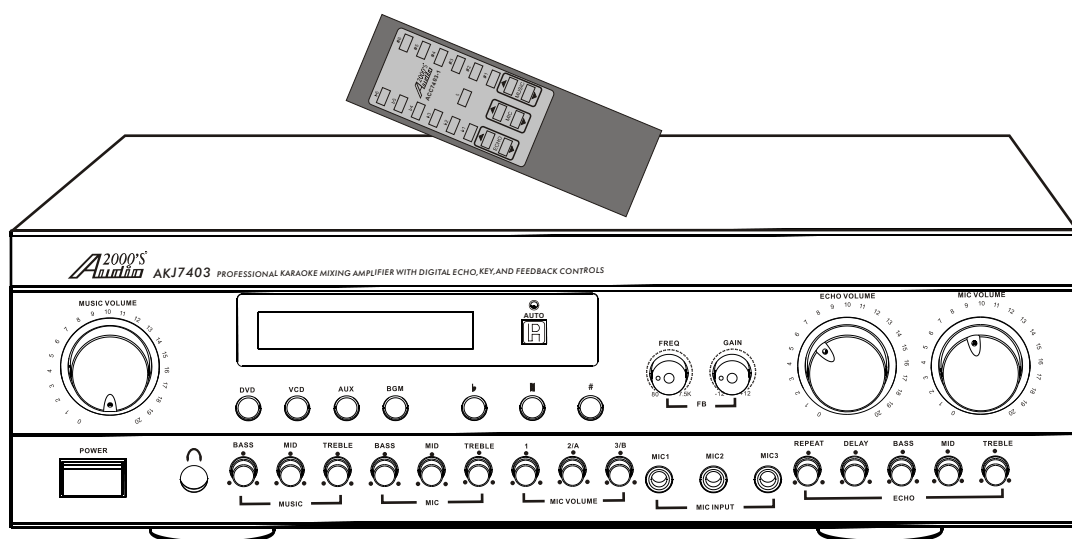




## PROF. KARAOKE MIXING AMPLIFIER WITH DIGITAL ECHO, KEY, AND FEEDBACK CONTROLS

### AKJ7403 OWNER'S MANUAL



**Thank you for purchasing the Audio2000's® professional karaoke mixing amplifier with digital echo, key, and feedback controls! To achieve maximum performance from your new unit, please read this manual thoroughly, and retain it for future reference. For more information, please visit our website ([www.audio2000s.com](http://www.audio2000s.com)).**

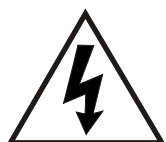
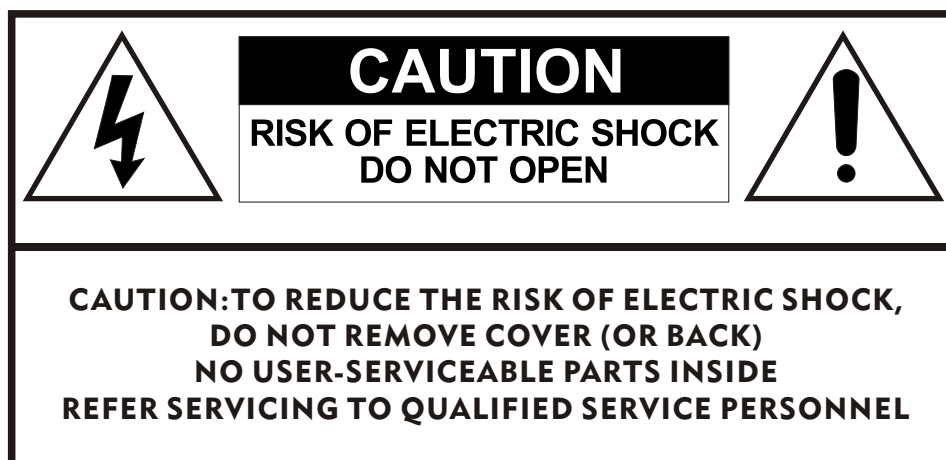
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### **IMPORTANT**

For your protection, please read these instructions completely, and keep this manual for future reference.

Carefully observe and comply with all warnings, cautions, and instructions placed on the equipment or described in the operations instructions to guard against injury.



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 appliance

## **WARNING**

**TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,  
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE**

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**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE  
BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.**

**ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES  
INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS  
LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER  
JUSQU'AU FOND.**

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# SAFETY INSTRUCTIONS

## READ BEFORE OPERATING EQUIPMENT

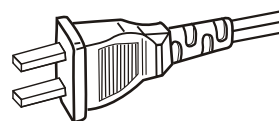
This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

- 1) Read Instructions--All the safety and operating instructions should be read before the appliance is operated.
- 2) Retain Instructions--The safety and operating instructions should be retained for future reference.
- 3) Heed Warnings--All warnings on the appliance and in the operating instructions should be adhered to.
- 4) Follow Instructions--All operating and use instructions should be followed.
- 5) Water and Moisture--The appliance should not be used near water -- for example, near a bathtub, wash-bowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- 6) Carts and Stands--The appliance should be used only with a cart or stand that is recommended by the manufacturer.



- 7) An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 8) Wall or Ceiling Mounting--The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 9) Ventilation--The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- 10) Heat--The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

- 11) Power Sources--The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 12) Grounding or Polarization--The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.



AC POLARIZED PLUG

- 13) Power-Cord Protection--Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 14) Cleaning--The appliance should be cleaned only as recommended by the manufacturer.
- 15) Power Lines--An outdoor antenna should be located away from power lines.
- 16) Nonuse Periods--The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 17) Object and liquid Entry--Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 18) Damage Requiring Service--The appliance 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 spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
- 19) Servicing--The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

# FEATURES

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## FEATURES

1. High Quality Dual Digital Echo Effects with Individual Treble/Mid/Bass Controls.
2. Five Microphone Inputs (Three at the Front Panel, Two at the Rear Panel).
3. Three Individual Microphone Volume Controls (1, 2/A, and 3/B).
4. Master Microphone Volume/Treble/Mid/Bass Controls.
5. Master Music Volume/Treble/Mid/Bass Controls.
6. Feedback Frequency and Gain Controls.
7. Four Audio Inputs with Automatic or Manual Audio Channel Selections.
8. 13-Step Digital Key Changer.
9. Digital Echo Volume/Repeat/Delay/Bass/Mid/Treble Controls.
10. Remote Control.
11. Stereo Headphone Output.
12. Mono Microphone Effect Input/Output.
13. Stereo Music Effect Inputs/Outputs.
14. Four Video Inputs and Four Video Outputs.
15. Audio Input Level Adjustment.
16. Max. Power Output: 600W + 600W @ 8 Ohms.

## HANDLING PRECAUTIONS

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### Do not install the unit in following places:

- In a place which is exposed to direct sunlight or near a source of heat such as a radiator.
- In a place which may be exposed to rain, such as near a window.
- In a place where the heat cannot escape due to poor ventilation, or where it is very humid or dusty.
- In a place which may be exposed to soot, vapor or heat, such as near a cooking stove.
- In an unstable place with excessive vibrations or sloping.

## BEFORE CONNECTIONS

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### Connection precautions

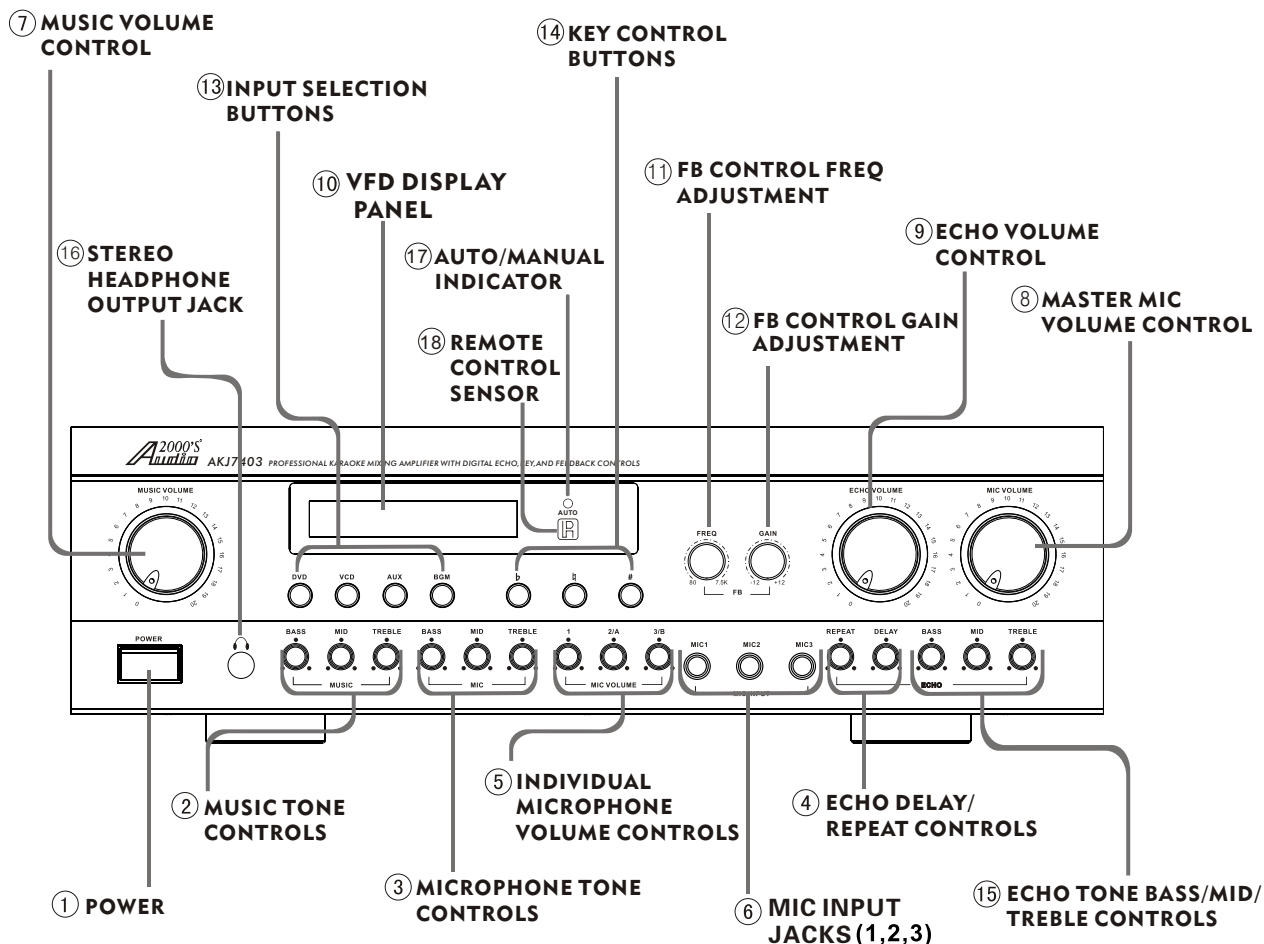
- Be sure to switch off the powers of the related equipment before making any connection.
- The "White" input/output jacks of the amplifier are designed for the Left channel, while the "Red" jacks are for the Right channel. Be sure to connect the cords without mistaking the correspondences of the Left and Right channels.
- Insert the plugs of the connection cords securely into the jacks. If the connection is incomplete, sound may not be produced or noise may be generated.
- When unplugging the power cord from the power outlet, be sure to grasp the plastic molding of the plug and pull.

### Power consumption of AC power outlets

- Be careful that the total power consumption does not exceed the wattage marked on the rear panel. Do not connect other appliances than the system components to the power outlets of this unit.
- Do not connect a TV set to this unit, even if the power consumption value marked on a TV set is below the permissible limit of this unit. A larger current than the permissible value may flow when the TV power is turned on.

## DESCRIPTIONS AND FUNCTIONS

### [FRONT PANEL]



#### ① POWER

Press this button to turn the power on. Press this button again to turn the power off.

#### ② MUSIC TONE (BASS/MID/TREBLE) CONTROLS

These controls are used to boost or cut the low, mid and high frequency responses.

#### ③ MICROPHONE TONE (BASS/MID/TREBLE) CONTROLS

These controls are used to boost or cut the low, mid and high frequency responses of microphones 1, 2, 3, A, and B.

#### ④ ECHO DELAY/REPEAT CONTROLS

Adjust the parameters of the echo effect with these controls as desired.

DELAY Control: Adjust the time duration between each echo sound.

REPEAT Control: Adjust how many times the echo sound is to be repeated.

#### ⑤ INDIVIDUAL MICROPHONE VOLUME CONTROLS (1, 2/A, 3/B)

1: This control knob adjusts the microphone input level from the MIC INPUT 1 jack (front panel).

2/A: This control knob adjusts the microphone input level from the MIC INPUT 2 jack (front panel) and the MIC INPUT A jack (rear panel).

3/B: This control knob adjusts the microphone input level from the MIC INPUT 3 jack (front panel) and the MIC INPUT B jack (rear panel). Normally, set these control knobs to the center positions.

#### ⑥ MICROPHONE INPUT JACKS (1,2,3)

These jacks are for connecting microphones.

## DESCRIPTIONS AND FUNCTIONS

### [FRONT PANEL]

#### ⑦ MUSIC VOLUME CONTROL

This control knob allows the user to adjust the volume of the music output.

#### ⑧ MASTER MICROPHONE VOLUME CONTROL

This control knob adjusts the overall volume of all microphones.

#### ⑨ ECHO VOLUME CONTROL

This control knob adjusts the volume of the microphone echo effect.

#### ⑩ VFD DISPLAY PANEL

This panel display all input information and key control information.

#### ⑪ FEEDBACK CONTROL FREQUENCY ADJUSTMENT (FREQ)

When the use of microphones causes feedback (howling) results, turning the frequency adjustment knob to match the feedback control frequency to the howling frequency. The feedback control frequency range is from 80Hz to 7.5KHz.

#### ⑫ FEEDBACK CONTROL GAIN ADJUSTMENT (GAIN)

When the use of microphones causes feedback (howling) results, turning the gain adjustment knob to adjust the amplitude (gain) of the howling frequency. The feedback control gain can be adjusted between -12dB and +12dB.

#### ⑬ INPUT SELECTION BUTTONS

These buttons can be manually set only when the AUTO ON  $\leftrightarrow$  OFF switch on the rear panel is set to OFF.

When used, press any of these buttons to select the desired music input source.

#### ⑭ KEY CONTROL BUTTONS

b : Lowers the music key one step (each step is 1/4 note) each time this button is pressed.

4 : Resets the music key to its natural key.

# : Raises the music key one step (each step is 1/4 note) each time this button is pressed.

Note: The key will stay until it is changed further.

#### ⑮ ECHO TONE (BASS/MID/TREBLE) CONTROLS

These controls are used to boost or cut the low, mid and high frequency responses of the echo sound.

#### ⑯ STEREO HEADPHONE OUTPUT JACK

Connecting headphones to this jack will have the speaker output jacks deactivated. This jack is used when privacy is desired.

#### ⑰ AUTO / MANUAL INDICATOR

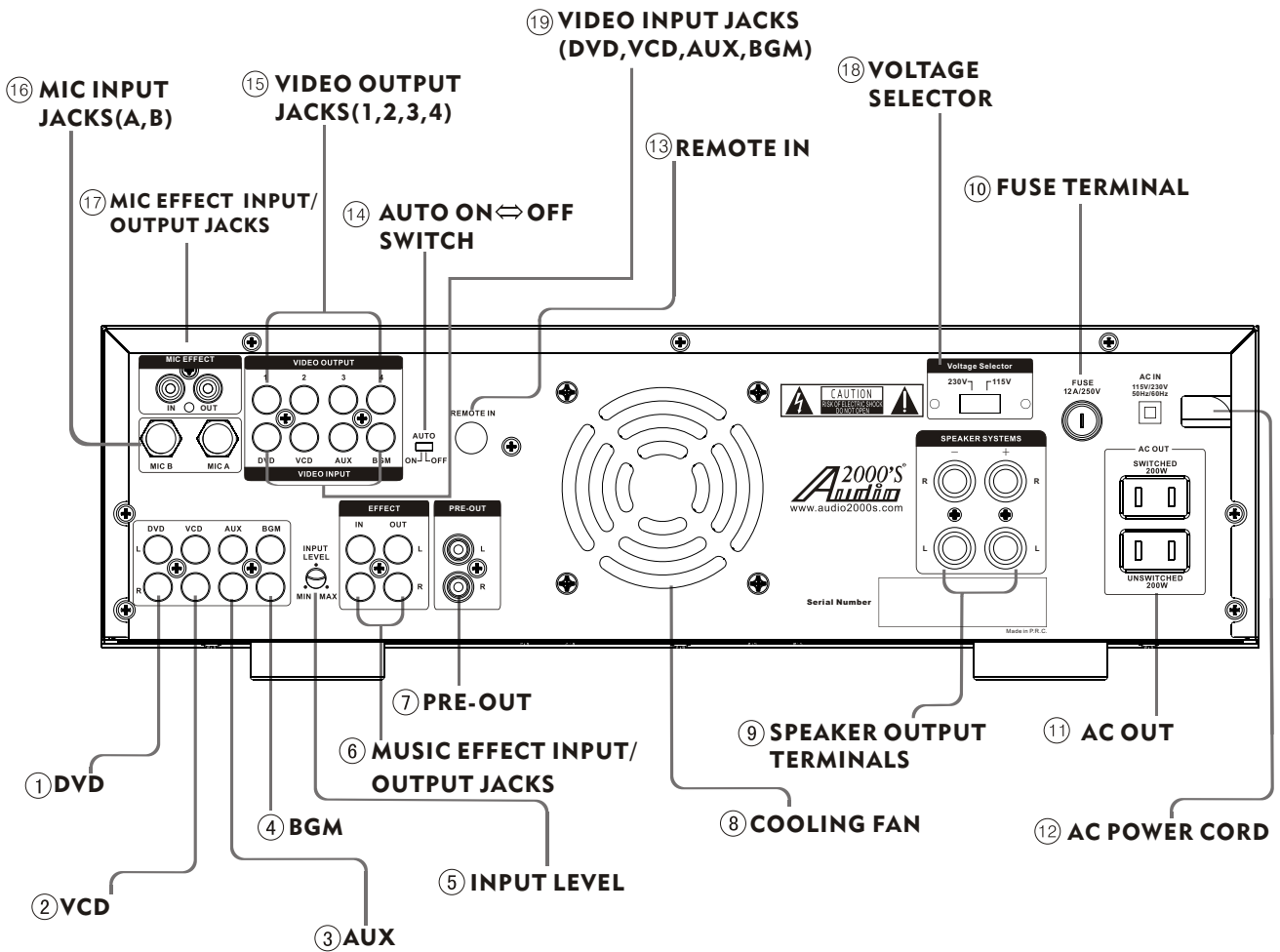
This is to indicate the status of the AUTO ON  $\leftrightarrow$  OFF switch on the rear panel. When the AUTO ON  $\leftrightarrow$  OFF switch is set to ON, the LED indicator will be turned on. When the AUTO ON  $\leftrightarrow$  OFF switch is set to OFF, the LED indicator will be turned off.

#### ⑱ REMOTE CONTROL SENSOR

The infrared control signal from the remote control commander is to be received through this sensor.

## DESCRIPTIONS AND FUNCTIONS

### [REAR PANEL]



#### ① DVD

Connect the output jacks of the DVD player to these jacks.

#### ② VCD

Connect the output jacks of the VCD player to these jacks.

#### ③ AUX

Connect the audio output of any auxiliary component, such as a cable broadcasting tuner, to these jacks.

#### ④ BGM

Connect the output jacks of the BGM (background music) player to these jacks.



## DESCRIPTIONS AND FUNCTIONS

### [REAR PANEL]

#### ⑤ INPUT LEVEL

Turn this input level control to adjust the input level. Turn the input level control counter-clockwise to reduce the input level. Turn the input level control clockwise to raise the input level.

#### ⑥ MUSIC EFFECT INPUT/OUTPUT JACKS

The EFFECT allows the AKJ7403 user to add any sound effector, such as an equalizer, as a part of the music loop in the AKJ7403 unit. If a sound effector is not used, check to make sure that two U-shaped connectors are connected from the IN jacks to the OUT jacks. The first U-shaped connector is to be connected from the white IN jack to the white OUT jack. The second U-shaped connector is to be connected from the red IN jack to the red OUT jack. If a sound effector is to be placed in between the IN jacks and the OUT jacks, the U-shaped connectors need to be removed from the unit and make sure that these U-shaped connectors are taped to the bottom of this unit for future use. The IN jacks are to be connected to the input ports of the sound effector and the output ports of the sound effector are to be connected to the OUT jacks.

#### ⑦ PRE-OUT

The pre-amplifier audio output (PRE-OUT) can be connected to an external power amplifier if needed.

#### ⑧ COOLING FAN

#### ⑨ SPEAKER OUTPUT TERMINALS

Banana jacks are used as the speaker output terminals. The overall effective impedance of the speaker sets to each side (left or right side) of the speaker terminals needs to be within the range of  $4\Omega$  to  $16\Omega$ . (Caution: If two sets of  $8\Omega$  speakers are connected to one set of speaker terminal, the effective impedance of these two speakers will be  $4\Omega$ , just half of its original impedance.)

#### ⑩ FUSE

Please turn off the AC power and unplug the AC cord before replacing the fuse (ONLY replacing with the same type and rating of fuse).

#### ⑪ AC OUT

SWITCHED 200W: This AC outlet is controlled by the main power button.

UNSWITCHED 200W: This AC outlet is not controlled by the main power button.

NOTE 1: Do NOT connect any of these AC power outlets to any device or combination of devices, which may consume more than 200W of power.

NOTE 2: Please refer to the Power Consumption of AC Power Outlets part on page 3.

#### ⑫ AC POWER CORD

Plug this cord into an AC wall outlet.

#### ⑬ REMOTE IN

This jack is used to connect to an external remote control sensor. When an external remote control sensor is used, the remote sensor on the front panel is deactivated.

#### ⑭ AUTO ON⇔OFF SWITCH

When this AUTO ON ⇔ OFF switch is set to ON, the audio/video input source will be automatically switched to any audio/video input source with signals. The priority of determining which audio/video input source with signals to be selected is as follows: video > audio and DVD > VCD > AUX > BGM. When the AUTO ON ⇔ OFF switch is set to OFF, the audio/video input source needs to be selected manually by pressing any of the input selection buttons. The initial input source selection after the power is turned on is the DVD input.

#### ⑮ VIDEO OUTPUT JACKS (1, 2, 3, 4)

These video output jacks are to be connected to TV monitors.

#### ⑯ MICROPHONE INPUT JACKS (MIC A AND MIC B)

These microphone input jacks are to be connected to microphones. The MIC A jack is common to the MIC 2 jack on the front panel. The MIC B jack is common to the MIC 3 jack on the front panel.

#### ⑰ MIC EFFECT INPUT/OUTPUT JACKS

The MIC EFFECT allows the AKJ7403 user to add any sound effector, such as an equalizer, as a part of the microphone loop in the AKJ7403 unit. If a sound effector is not used, check to make sure that the U-shaped connector is connected from the IN jack to the OUT jack. If a sound effector is to be placed in between the IN jack and the OUT jack, the U-shaped connector needs to be removed from the unit and make sure that the U-shaped connector is taped to the bottom of this unit for future use. The IN jack is to be connected to the input port of the sound effector and the output port of the sound effector is to be connected to the OUT jack.

#### ⑱ VOLTAGE SELECTOR

Check to make sure the AC Voltage Selector switch is set to the proper voltage for your area (120V/60Hz for the North America Area) before plugging in the AC cord to the AC power outlet.

**CAUTION: UNPLUG THE AC CORD FROM THE AC POWER OUTLET BEFORE RESETTING THE AC VOLTAGE SELECTOR SWITCH.**

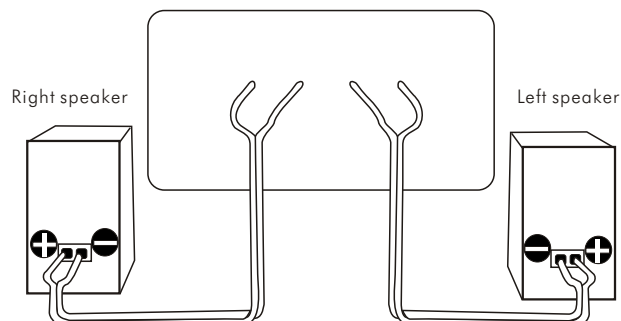
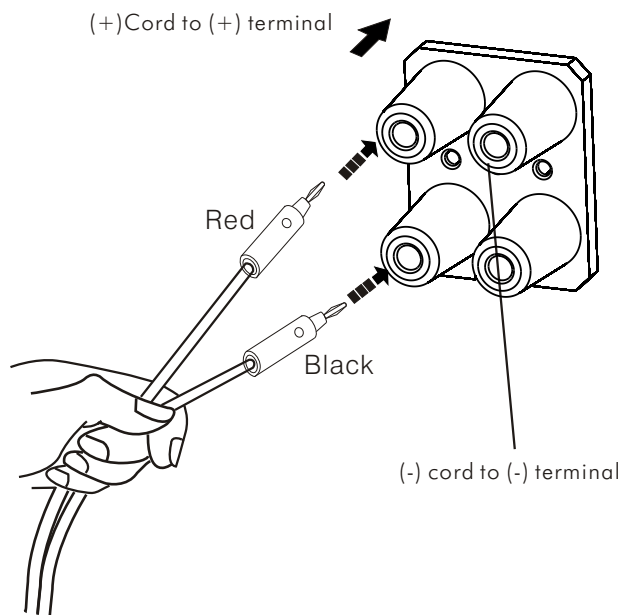
#### ⑲ VIDEO INPUT JACKS (DVD, VCD, AUX, BGM)

These video input jacks are to be connected to a DVD player, a VCD player, or other video units.

# SPEAKER CONNECTIONS

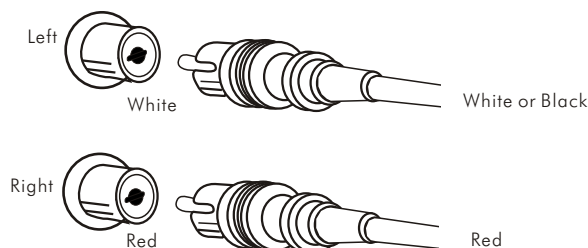
## Connection of Speaker Cables

Insert the banana connectors on the speaker cables into the banana speaker jacks on the AKJ7403 rear panel. Please refer to the following pictures.



## Connecting the RCA Cables

When connecting the RCA cables to the RCA jacks, be sure to insert the red RCA plug into the red RCA jack and the white or black RCA plug into the white RCA jack.

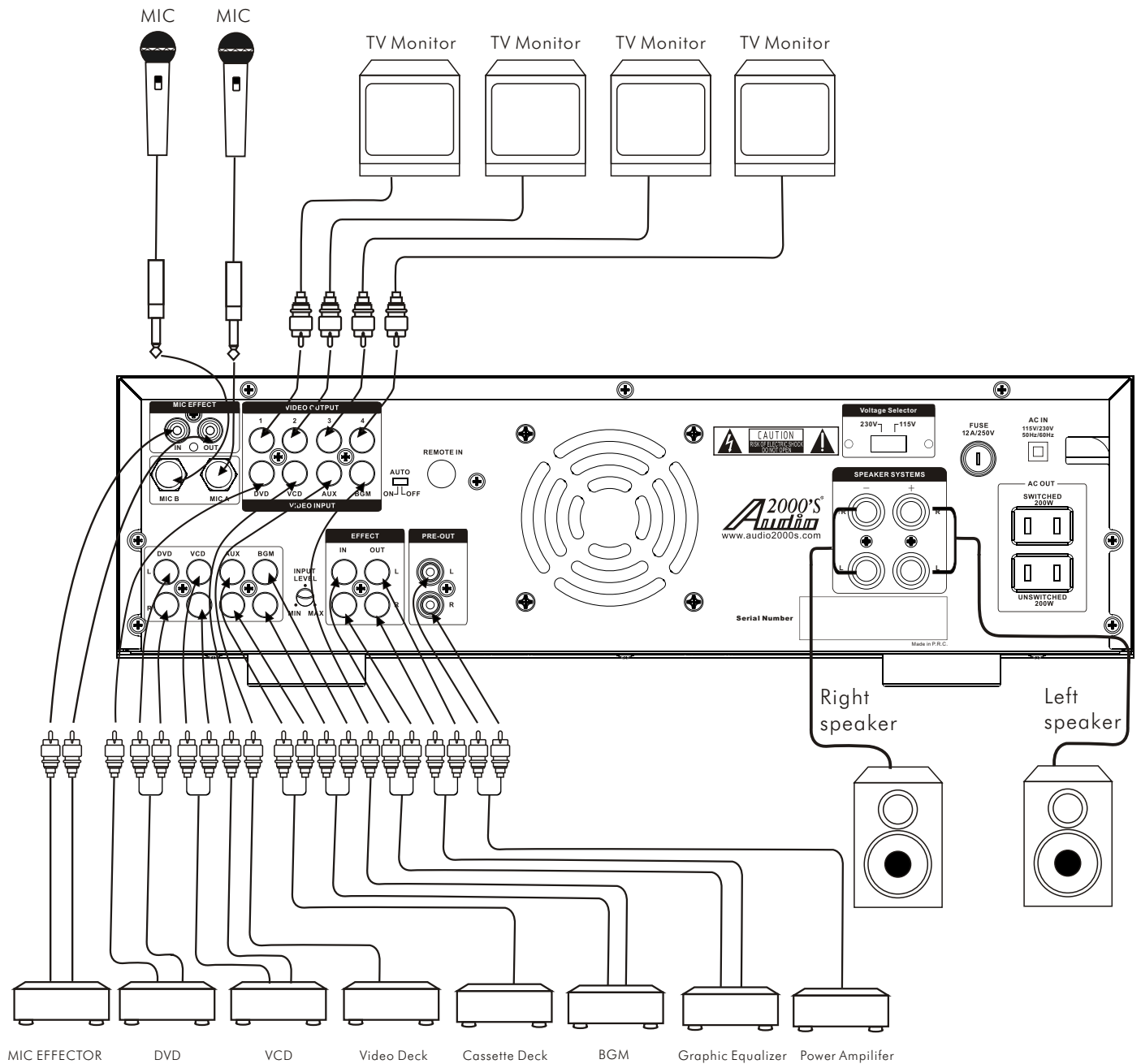


## Caution:

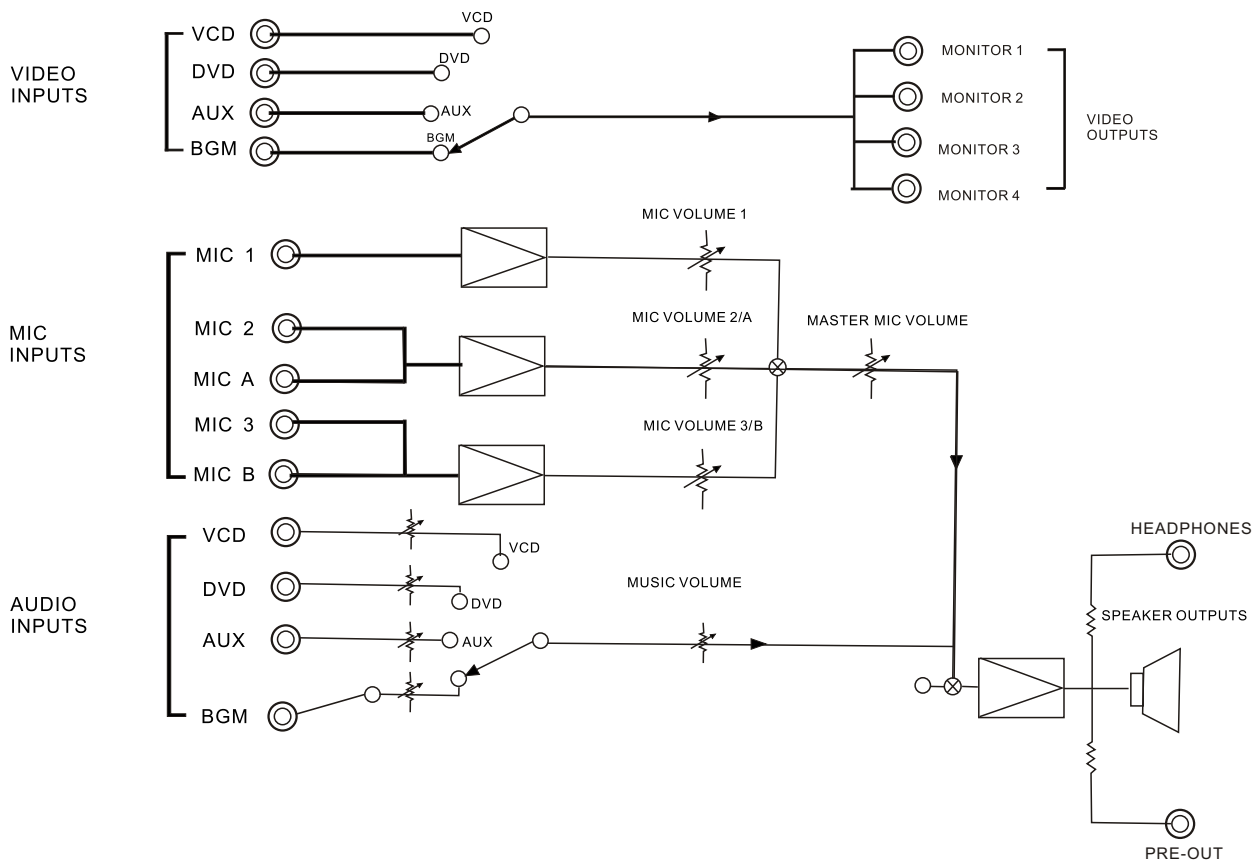
Turn off the AKJ7403 power when connecting the speaker cables to the speaker output terminals on the AKJ7403. Before turning on the AKJ7403, make sure that any metal part or copper wire of one speaker cable is NOT IN CONTACT with any metal part or copper wire of another speaker cable.

- Use speakers with the impedance of 4  $\Omega$  to 16  $\Omega$ .
- If two sets of speakers are connected to any one speaker output terminal on the AKJ7403, each speaker must have its impedance higher than 8  $\Omega$ . Connecting two 8  $\Omega$  speakers to a speaker output terminal is the same as connecting a 4  $\Omega$  speaker to the speaker output terminal. If any of the speaker output terminals is connected to a speaker or a speaker set with impedance lower than 4  $\Omega$ , the protection circuitry in the AKJ7403 will be activated and the stereo performance will be abnormal.

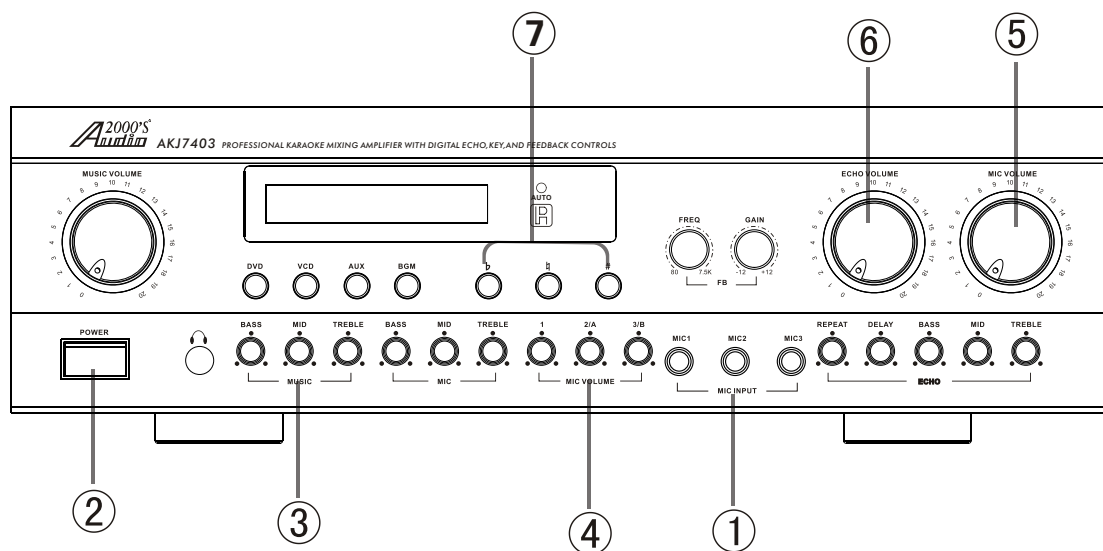
# SYSTEM CONNECTIONS



## PRINCIPLE OF AUDIO↔VIDEO SWITCHOVER



# GENERAL OPERATION



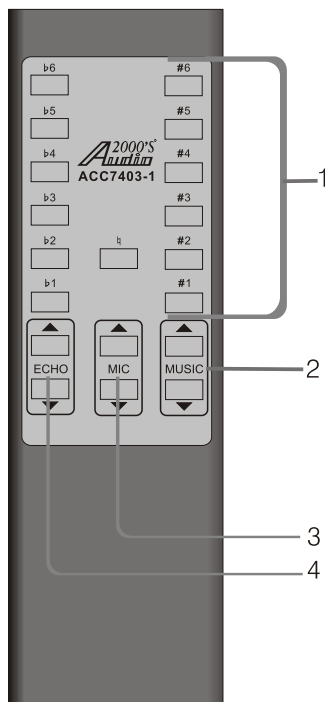
- ① Connect a desired number of microphones to the microphone inputs on the AKJ7403.
- ② Turn on the power of the AKJ7403 and other needed components.  
(Press the POWER button on this unit to turn on the power.)
- ③ Start playing the karaoke music from a source component and turn the MUSIC VOLUME control knob to adjust the music volume.
- ④ Adjust each microphone volume by adjusting the INDIVIDUAL MIC VOLUME control knobs.
- ⑤ Adjust the desired relative volumes between microphones and music by adjusting the MASTER MIC VOLUME control knob and the MUSIC VOLUME control knob.
- ⑥ Adjust the echo volume by adjusting the ECHO VOLUME control knob.
- ⑦ Press the KEY CONTROL buttons to set the desired key.

## Notes for Proper Use of a Microphone

- Hold a microphone to have the top of its windscreen 1 to 2 inches away from your mouth.
- To get the best pickup result, point the microphone toward your mouth.
- To ensure a clear vocal output, do not block the lower part of the microphone windscreen. Blocking the lower part of the microphone windscreen will disturb the proper voice reproduction with an unclear bass which tends to cause the feedback (howling) results.

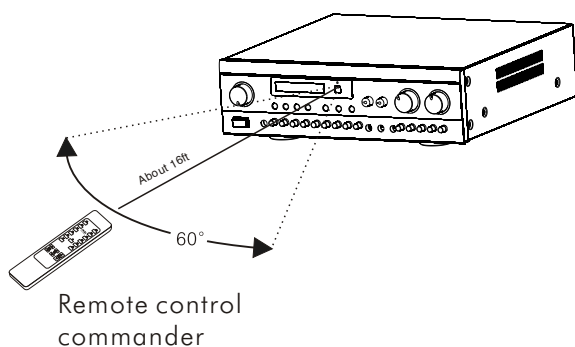
# REMOTE CONTROL COMMANDER

## DESCRIPTIONS AND FUNCTIONS



### 1. Operating range

- The operating range of the remote control commander is within a distance of about 16ft from the remote control sensor on the amplifier.
- Do not point the transmitter on the front edge of the remote control commander to any other direction than the remote control sensor of the amplifier or leave an obstacle between the remote control commander and the amplifier. Doing these may make remote control impossible



### 2. Loading batteries

- The battery life is about 1 year under normal use, but it is recommended to replace the batteries when their power seem to be weaken.
- This remote control commander accepts "AAA" batteries.
- Remove the batteries if the remote control commander is not to be used for a long period of time.

### ① KEY CONTROL BUTTONS

- UPWARD BUTTONS(#1 to#6)**  
The key can be transposed upward from the natural key up to one and a half notes. (Total 6 steps. Each step is 1/4 note.)
- NATURAL KEY BUTTON( $\natural$ )**  
Press to reset to the natural key.
- DOWNWARD BUTTONS (b1 TO b6)**  
The key can be transposed downward from the natural key up to one and a half notes. (Total 6 steps. Each step is 1/4 note.)

### ② MUSIC VOLUME

- These music volume control buttons are used to raise or reduce the music volume. The LED on the MUSIC VOLUME CONTROL knob on the front panel of the main unit blinks during the adjustment. A fine adjustment is available by pressing the button intermittently.

### ③ MIC VOLUME

- These master microphone volume control buttons are used to raise or reduce the microphone volume. The LED on the MASTER MIC VOLUME CONTROL knob on the front panel of the main unit blinks during the adjustment. A fine adjustment is available by pressing the button intermittently.

### ④ ECHO VOLUME

- Press one of these echo volume control buttons to raise or reduce the echo volume.

### 3. Battery handling precautions

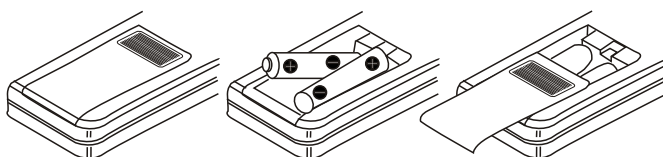
Battery may explode or its fluid may leak if the batteries are handled in a wrong way. Take care of the following when handling the batteries.

- Insert batteries with correct positive (+) and negative(-) polarities as indicated on the set.
- Even batteries with the same shape sometimes have different voltages. Do not mix batteries with different types together.
- Do not use new and old batteries together. When replacing batteries, be sure to replace both of them.
- Do not heat, open or short-circuit a battery or dispose of it in fire.
- Some batteries are rechargeable and some are not. Check the indication on each battery well.

1. Push the tab and remove the battery cover.

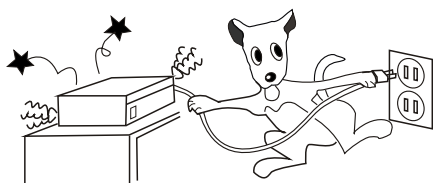
2. Insert batteries with correct positive(+) and negative(-) polarities. "AAA" batteries X 2

3. Push the cover close until it clicks.



## SAFETY PRECAUTIONS

### In case of abnormality



In case an abnormal noise or smell is generated from the unit during use, immediately switch the power off, unplug the power cord from the power outlet, and consult your dealer or an authorized service center for a check-up.

### Do not open the unit



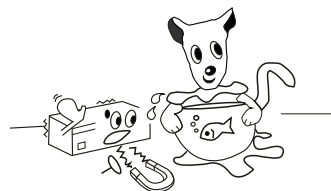
High-voltage components are used inside the unit. Do not open the cabinet to check or modify the unit, for this will cause the danger of electric shock. Performance degradation or malfunction due to the user modification will not be covered by the warranty.

### Do not exceed the maximum power capacity



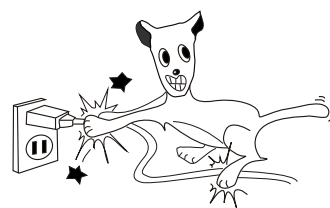
The components equipped with the rear panel AC OUTLETS accept the connection of other stereo system components. However, do not connect components the total power consumption of which exceed the power capacity marked on the panel, for this may cause malfunction or fire hazard. Also note that components in which large current flows when the power is switched on, such as a TV, cannot be connected to such an AC outlet unless it has been designed to accept the connection of a TV set.

### Keep away from water and foreign objects



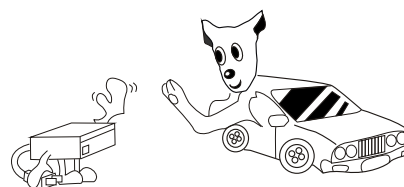
Do not insert or drop metallic objects, such as a hairpin, nail and coin, or flammable objects, such as paper and matches, through the ventilation holes or other openings on the unit, for this will cause malfunction or hazard of fire and electric shock. In case water or a foreign object enters inside the unit, consult an authorized service center or your dealer for a check-up.

### Do not damage the power cord



Hold the power plug when plugging or unplugging the power cord. Do not pull the cord or touch it with wet hands, for this may cause short-circuit or electric hazard. Do not leave the power cord under this unit, or under furniture, or between objects. Also do not tie the power cord with another cord, make a knot on the power cord, or leave it in a place where people walk frequently.

### When the unit is not to be used for a long period



When you will be away from home for a long period of time, for example before going on a trip, set the power switch to off and unplug the power plug from the power outlet for safety. This will prevent fire hazard due to unexpected accidents with the unit.

## TROUBLESHOOTING

### MAINTENANCE

When the set gets dirty, wipe with a soft, dry cloth. If the set is extremely dirty, soak a soft cloth in a 5 to 6% solution of dishwashing detergent to water, wring it tightly, wipe the dirt away, and finally wipe the set with a dry cloth.

Never use alcohol, thinner, benzene, insecticide or other volatile agents, as they may damage the surface paint or gloss of the set.

Also do not wipe the set with a chemical cloth or leave it on the set for a long period, as the surface finish may be damaged or the paint may be stripped off.

### TROUBLESHOOTING

Should problems occur, they are, in many cases, due to simple operation mistakes or the like. On the basis of the following checks, you will be able to rectify a number of problems yourself without difficulty.

If the problem cannot be remedied after the following checks, please consult your dealer.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
No power	Power is off.	Turn on the mixing amplifier.
	AC power cord is unplugged.	Plug the AC power cord to an AC power outlet (120V).
	The fuse inside the transformer is open.	Send the mixing amplifier to an authorized service center.
One Side No Sound	One bad RCA cable or one poor RCA contact.	Make sure that all RCA cables are not damaged and all RCA contact points are proper.
	One bad speaker cable or one poor speaker connector contact.	Make sure that all speaker cables are not damaged and all speaker cable contact points are proper.
	One U-shaped connector is not inserted into the music effect jacks or one U-shaped connector is not properly inserted.	Make sure all the U-shaped connectors are properly inserted.
Distorted sound	The electrical signal from the output of the player to the mixing amplifier is over the limit of the input of the mixing amplifier.	Turn down the master volume control of the player and turn up the volume control of the mixing amplifier to maintain the same sound level.
	Incorrect AC Voltage (The AC power cord is plugged to a 240V outlet or to an unstable 120V outlet).	Make sure the AC power cord is plugged to an AC power outlet with a correct and stable AC voltage.
No sound	Incorrect input selection.	Make sure the input source selection button is set correctly.
	The input level on the rear panel is set to the minimum position.	Adjust the input level control.
	Music volume control knob is turned all the way down (zero sound output).	Turn the music volume knob to a position that the sound level is desired.
	Both U-shaped connectors are not inserted into the music effect jacks or not properly inserted.	Make sure all the U-shaped connectors are properly inserted.
	Bad cable or poor contact.	Make sure that all cables are not damaged and all contact points are proper.
No microphone sound	The microphone cable is not plugged into the microphone input jack properly.	Make sure the microphone cable is plugged into the microphone jack properly.
	The switch on the microphone is set to "OFF".	Set the switch on the microphone to "ON".
	The corresponding INDIVIDUAL MIC VOLUME control or the MASTER MIC VOLUME control is in the minimum position.	Adjust the volume control.
	The U-shaped connector is not inserted into the MIC EFFECT jacks or not properly inserted.	Make sure the U-shaped connector is properly inserted into the MIC EFFECT jacks.
	A condenser microphone is used.	Change the condenser microphone to a dynamic microphone or a condenser microphone accepting battery power.
Humming noise	Grounding problems between two adjacent equipments.	Try to use an isolator to remove the grounding problems.

### ETIQUETTE OF SOUND

The karaoke performance you enjoy may be disturbing noise to others. When performing karaoke, be sure to be considerate of your neighbors.

The volume of karaoke is at your command. Remember that even small sounds transmit very well in the quiet night. Be specially careful in karaoke performance at night. It is recommended to close the windows to avoid sound leakages to the neighbors. Avoid noise pollution to protect the comfortable living environment of those around you.



# SPECIFICATIONS

## Amplifier

Maximum Output(1KHz,8 $\Omega$  ,THD 1%)---600W+600W  
 Total Harmonic Distortion ..... 0.03%  
 (1KHz,100W,8 $\Omega$ )

### Input Jacks(Sensitivity/Impedance)

MIC(1 ,A/2,B/3) ..... 3.5mV/5k $\Omega$   
 DVD,VCD,AUX,TAPE ..... 220mV/23k $\Omega$   
 BGM ..... 220mV/30k $\Omega$

### Output Jacks(Output level/Output impedance)

PRE OUT ..... 2V/150 $\Omega$   
 TAPE OUT ..... 300mV/470 $\Omega$

### Frequency Responses

MIC ..... 20Hz to 25kHz, +3/-3dB  
 MUSIC ..... 10Hz to 20kHz, +3/-3dB

## Tone Control Characteristics

Music BASS ..... +7/-7dB(100Hz)  
 MID ..... +5/-5dB(2KHz)  
 TREBLE ..... +7/~7dB(10KHz)  
 Microphone BASS ..... +10/-10dB(100Hz)  
 MID ..... +5/-5dB(2KHz)  
 TREBLE ..... +10/-10dB(10kHz)

Key Control Range ..... 13 steps,  $\pm$ 3tones

## Video Input Jack

(Sensitivity/Input impedance) ..... 1Vp-p/75 $\Omega$

## Video Output Jack

(Output level/Output impedance) ..... 1Vp-p/75 $\Omega$

## Power Supply, etc.

Supply Voltage ..... AC 115V/230V 50Hz/60Hz  
 Power Consumption ..... 1300W

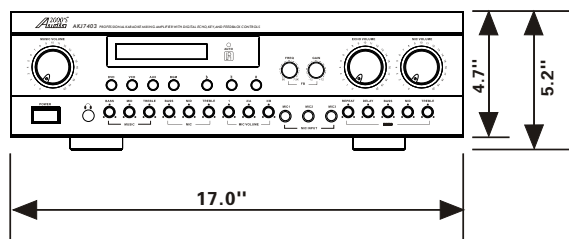
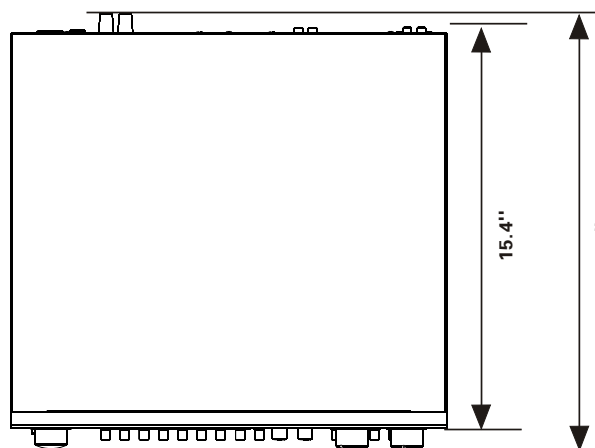
## AC Power Outlets

SWITCHED(TOTAL 200W max.) ..... 1  
 UNSWITCHED(TOTAL 200W max.) ..... 1  
 Dimensions(W X H X D)-----17.0" X 5.2" X 17.1"  
 Mass ..... 29.8lbs

## Accessories

Remote Control Unit ..... 1  
 Batteries "R6" ..... 2  
 Rack Mount..... 2  
 Owner's Manual ..... 1  
 Warranty Card..... 1

## Dimensions



# SERVICE INFORMATION

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## SHIPPING DAMAGE

If the shipping carton is found to be damaged, notify the delivery company immediately. Save the damaged carton as evidence for the delivery company to inspect. It is the responsibility of the consignee to file a claim with the delivery company for any damaged that occurs during shipping. In the case that the shipping carton is in good condition but the unit is damaged or defective, call **Audio2000'S®** at 805-523-2759.

## FACTORY SERVICE

If the equipment needs factory service, call **Audio2000'S®** at 805-523-2759 for a Return Authorization number (RA number) and the address of the authorized service representatives. Insure and ship the product, prepaid, in its original carton along with proof of purchase in the form of a bill of sale or receipted invoice to the above address. Please clearly write the RA number on the shipping carton. Also enclose a note describing the problem along with any other helpful information such as where and how the unit was used.

## LIMITED WARRANTY

H&F Technologies, Incorporated (H&F) hereby warrants that **Audio2000'S®** products will be free from defects in material and workmanship for a period of 1 (one) year from date of purchase. At its option, H&F will repair or replace the defective product and promptly return it to you.

The Limited Warranty will not cover any item that has been, in H&F's estimation, subject to alteration, misuse, neglect, accident or improper installation. In addition, any service not performed by H&F or an authorized service center will terminate terms of this warranty. Normal wear and tear of this product will not be covered by this or any implied warranty.

No liability will be accepted for damages/loss directly caused from the use of this product.

H&F's liability shall be limited to the repair/replacement of this product if found to be defective.