

OWNER'S MANUAL

KM1X-1
KARAOKE PRE-AMPLIFIER

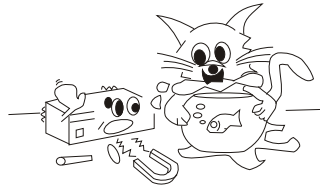
SAFETY PRECAUTIONS

In case of abnormality



In case of abnormality and 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.

Keep away from water and foreign objects.



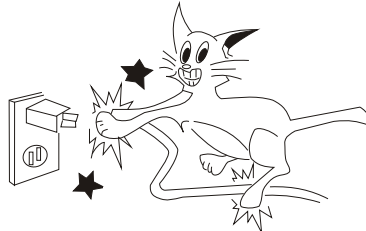
Do not insert or drop metallic objects, such as a hairpin, nail and coin, or flammable objects, such as paper and matches, through the ventilation holes or other openings on the unit, for this will cause malfunction or hazard of fire and electric shock. In case water or a foreign object enters inside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

Do not open the unit.



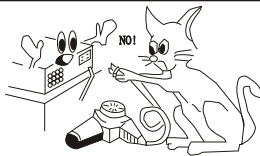
High-voltage components are used inside the unit. Do not open the cabinet to check or modify the unit, for this will cause the danger of electric shock. Performance degradation or malfunction due to the user modification will not be covered by the warranty.

Do not damage the power cord.



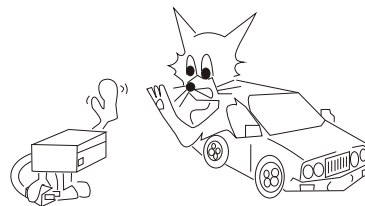
Hold the power plug when plugging or unplugging the power cord. Do not pull the cord or touch in with wet hands, for this may cause short-circuit or or electronic hazard. Do not leave the power cord under this unit. Or under furniture, or between objects

Do not exceed the maximum power capacity.



The components equipped with the rear panel AC OUT-LETS 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.

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



These openings must not be blocked or covered. If they are blocked or covered accidentally, the inside temperature will rise, and cause a fire. There are ventilation openings on upper and bottom of the case to prevent overheating.

FEATURES:

KMIX-1, a pre-amplifier built with latest four-channel pro performance Karaoke system in side. It is suitable for using in high-grade KTV rooms and entertainment applications. And also can be as a effector.

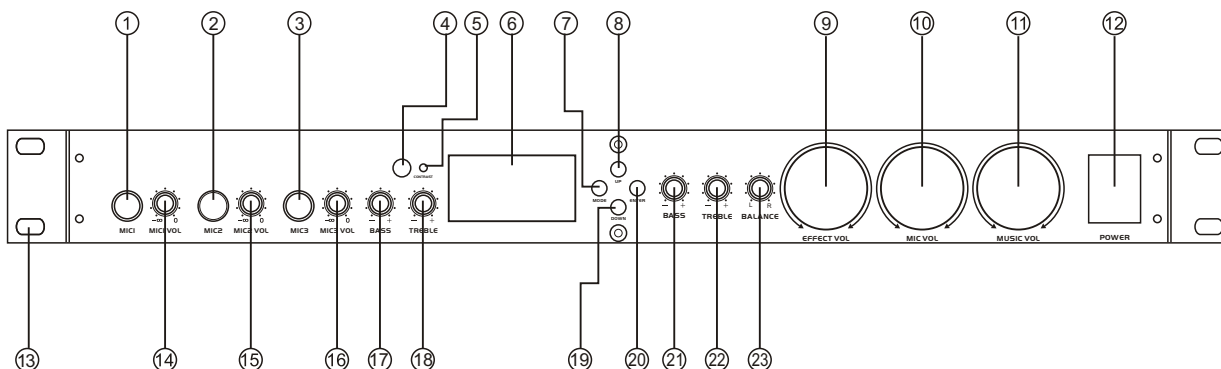
- 1)It can perform 15 different pro performance by built-in pro performance system .
Making the sound more perfect and comfortable.
- 2)Digital stereo tonal modification(the difference is 2.5music scale between +5 and -5 grade) make sound more natural.
- 3)The implement both have external signal input jack and internal signal output jack.
- 4)Four balanceable output (left channel/right channel/middle channel/subbass), can be flexible work with post power amplifier.
- 5)Adopting advanced LCD display technology, Flash MENU and easy for operation.
- 6)Automatic wireless remote controller, It can be connected ext. controller according to the commercial application.
- 7)Adopting MITSUBISHI volume chip, High S/N, High precision and reliability.
- 8)Three channels synchro exchanger can set to be auto/hand mode and also can set auto sound source choosing mode.
- 9)The unit is used the high reliable module and cooperated with many mini-controllers together. Be steady for working and easy for software updating.
- 10)Three monitors can work together and will not infect the colors,suited for application of mutil-monitors.
- 11)BGM is an assistant signal source. It can play backgroud music while AUX1 and AUX2 are no signal, to avoid stage wait.
- 12)All the parameters are saved automatically. Ensure that will not lose the data while opening.

DESCRIPTION

It can be used as pro effector. With 15 different performance and flexible input/output jacks reinforce its applying range. Details as following :

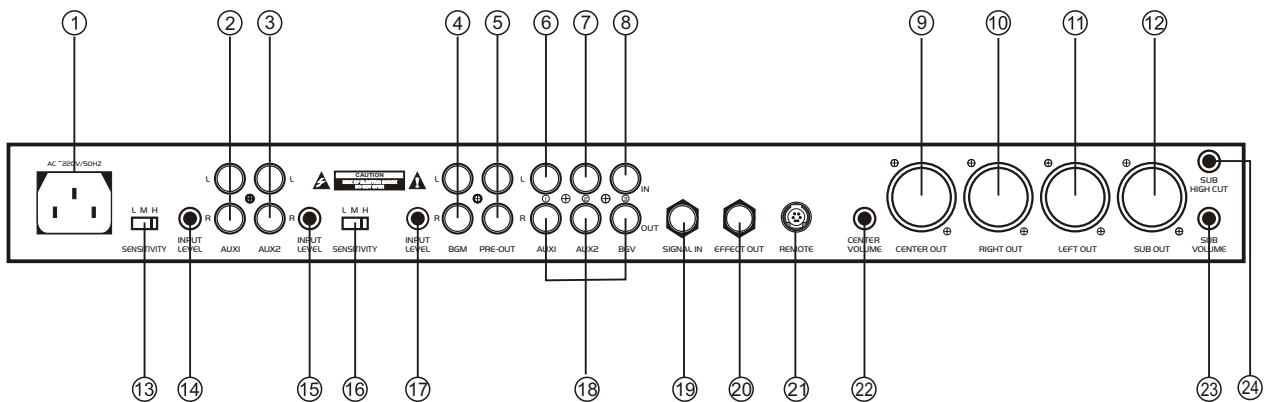
No	Effect	Description
1	ECHO1	Adjustable delaying time and feedback times
2	ECHO2	Adjustable delaying time and feedback times
3	ECHO3	Adjustable delaying time and feedback times
4	ECHO4	Adjustable delaying time and feedback times
5	ECHO5	Adjustable delaying time and feedback times
6	REV1	Adjustable reverberation time
7	REV2	Adjustable reverberation time
8	REV3	Adjustable reverberation time
9	REV4	Adjustable reverberation time
10	REV5	Adjustable reverberation time
11	REV6	Adjustable reverberation time
12	ECH+REV1	Adjustable delaying time/feedback times/ reverberation time /rate of reverberation and echo
13	ECH+REV2	Adjustable delaying time/feedback times/ reverberation time /rate of reverberation and echo
14	ECH+REV3	Adjustable delaying time/feedback times/ reverberation time /rate of reverberation and echo
15	ECH+REV4	Adjustable delaying time/feedback times/ reverberation time /rate of reverberation and echo

FRONT PANEL INTRODUCTION



1. Jack of microphone 1.
Used for connecting microphone.
2. Jack of microphone 2.
Used for connecting microphone.
3. Jack of microphone 3.
Used for connecting microphone.
4. Remote control receiver.
If the remote controller not aim at the remote control receiver, the remote controller will not be available.
5. Display contrast control(hidden).
The lightness will rise when turn the knob clockwise, reduce when turn the knob anti-clockwise.
6. Display
Show the interfaces and parameters.
7. Key
Move the cursor,choose the parameter which need revise
8. Key
Change the parameter pointed by cursor
9. Coder for adjust of microphone effect volume
The volume rise when turn the knob clockwise, the volume reduce when turn the knob until-clockwise.
10. Coder for adjust of microphone volume
the volume rise when turn the knob , clockwise the volume reduce when turn the knob until-clockwise.
11. Coder for adjust of microphone music volume
The volume rise when turn the knob clockwise, the volume reduce when turn the knob until-clockwise.
12. Power supply switch
13. Mounting rack
14. Volume adjust potentiometer for microphone 1 (hidden), volume of microphone 1 rise when turn clockwise, volume of microphone 1 reduce when turn until-clockwise.
15. Volume adjust potentiometer for microphone 2 (hidden), volume of microphone 2 rise when turn clockwise, volume of microphone 1 reduce when turn until-clockwise.
16. Volume adjust potentiometer for microphone 3 (hidden), volume of microphone 3 rise when turn clockwise, volume of microphone 3 reduce when turn until-clockwise.
17. Adjust potentiometer of microphone bass (hidden), The bass of microphone rise when turn clockwise, the bass of microphone reduce when turn until-clockwise.
18. Adjust potentiometer of microphone hi-frequency (hidden), The hi-frequency of microphone rise when turn clockwise, the hi-frequency of microphone reduce when turn until-clockwise.
19. Key
Change the parameter pointed by cursor
20. Key
Enter the parameter pointed by cursor and set inner parameters or back to main manu
21. Music bass adjust potentiometer(hidden)
Music bass rise when turn clockwise, music hi-frequency reduce when turn until-clockwise.
22. Music hi-frequency adjust potentiometer(hidden)
Music hi-frequency rise when turn clockwise, music bass reduce when turn until-clockwise.
23. Balance adjust potentiometer(hidden)
Balance the volume on the L/R channel, not available for the central channel and subbass channel.

BACK PANEL INTRODUCTION



1. Power input jack
220V±10% AC
2. AUX1 circuit input
The display shows A_AUX1 when choose the circuit input.(outomatic choose mode is A_AUX1, hand mode is M_AUX1.)
Independent sensitivity switch is adjustable.
3. AUX2 circuit input
The display shows A_AUX2 when choose the circuit input.(outomatic choose mode is A_AUX2, hand mode is M_AUX2.)
Independent sensitivity switch is adjustable.
4. BGM circuit input
The display shows A_BGM when choose the circuit input.(outomatic choose mode is A_BGM, hand mode is M_BGM.)
Signal on channel as the assistant signal, if no signal on AUX1 and AUX2,it will play the background music to avoid stage wait.
5. Pre-output,no volume and tone, just can choose AUX1 and AUX2,no gain, no modification.
6. AUX1 video input
Synchro switch for AUX1 video and AUX2 audio, connect with VCD,LD,DVD video output.
7. AUX2 video input
Synchro switch for AUX2 video and AUX2 audio, connect with VCD,LD,DVD video output.
8. BGV video input
Synchro switch for BGV video and BGV audio, connect with VCD,LD,DVD video output.
9. Central channel output
Connect with the central channel of four channel amplifier, no need connect for two channel just output white sound of microphone(no effect). independent volume adjust, controlled by master volume.
10. Right channel output
Connect with right channel of four channels amplifier. Just connect with right channel for two channel.
11. Left channel output
Connect with left channel of four channels amplifier. Just connect with left channel for two channel.
12. Subbass output
Connect with subbass channel of four channels amplifier. Just connect with subbass channel for two channel. independent volume adjust, controlled by main volume.
13. Optional switch of AUX1 sensitivity
Set assistant audio signal test and sensitivity when input switch to assistant signal source. when signal input on AUX1, switch is available for Low/middle/High
14. AUX1 input voltage control potentiometer
Adjust the potentiometer ensure signal input of AUX1 circuit the best situation.
15. AUX2 input voltage control potentiometer
Adjust the potentiometer ensure signal input of AUX2 circuit the best.

16. Switch of AUX2 sensitivity
Set assistant audio signal test and sensitivity when input switch to assistant signal source.

when signal input on AUX2, switch is available for Low/middle/High

17. BGM (background music)input voltage
Level control potentiometer adjust the potentiometer ensure the BGM on optimum situation.

18. Video input
Choose one video signal, three way output, can connect three monitors, but not affect the color.

19. External signal input interface
Input interface of external sets, such as mixer. when exist signal input, MIC1/MIC2/MIC3 is not available.

20. Built-in effect signal output interface
Built-in effect output interface, such as mixer. When exist signal output, no mic signal output on L/R out.

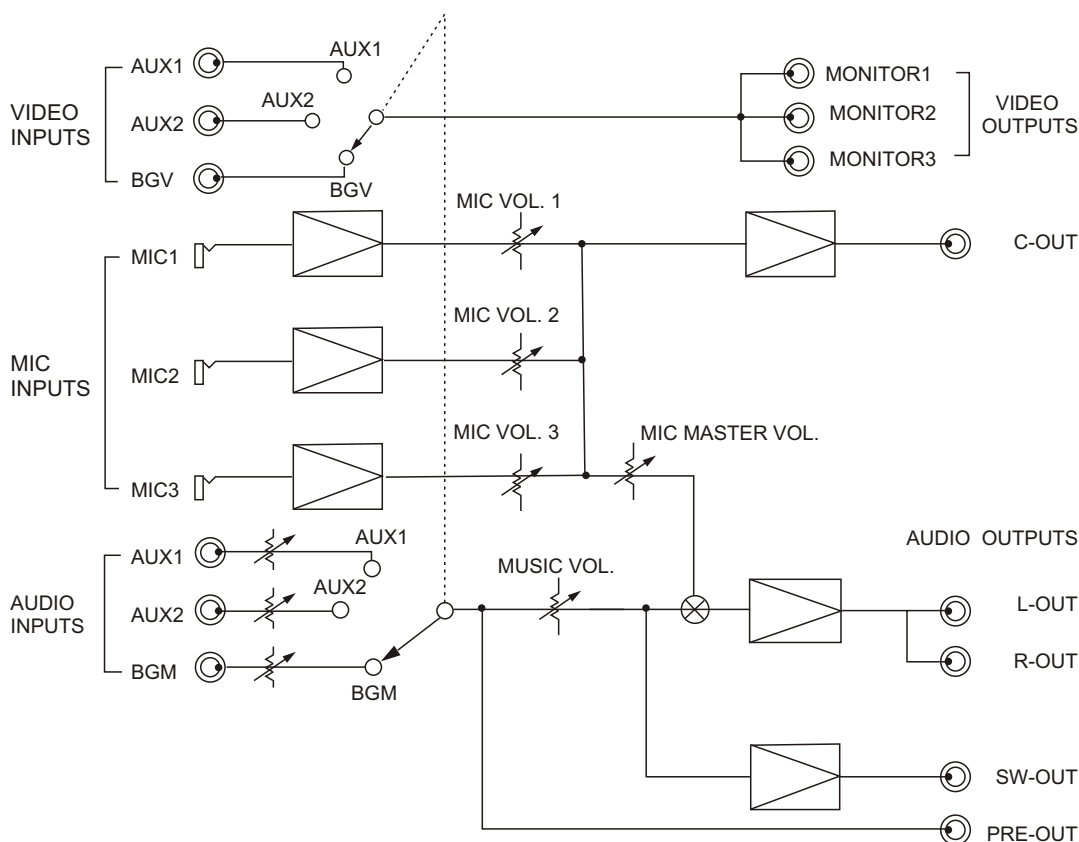
21. S terminal wire control input
Insert S terminal, the remote controller is not available.

22. Central volume adjust potentiometer
If the central channel output is available, adjusting the potentiometer can change the volume of central channel.

23. Subbass volume adjust potentiometer
If subbass output is available, adjust the potentiometer can change the volume of subbass.

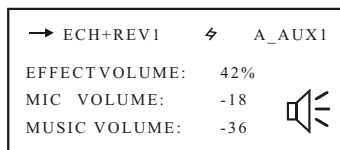
24. Bass output hi-frequency cut point is adjustable from 80Hz to 250Hz.

SYSTEM SCHEMATIC DIAGRAM



OPERATION

Display

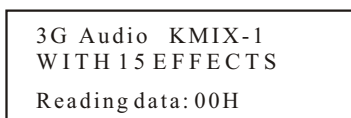


Explain

symbol	Meaning
→	current editable parameter
ECH+REV	current number
↔	current tone modification(auto reset when no signal)
A_AUX1	current input(A means auto, M means handle)
EFFECT VOLUME:	current effect volume(available range from 0 to 60%)
MIC VOLUME:	current microphone volume(available rang from -80 to 00)
MUSIC VOLUME:	current music volume available range from -80 to 00

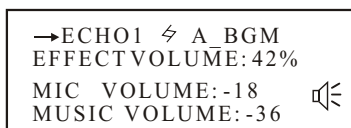
NORMAL STATE

- 1、 Turn on the power, the display shows:

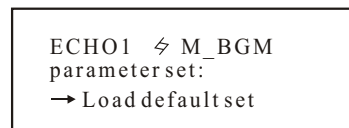


Adjust the parameter by UP/DOWN, choose the parameter by MODE,press ENTER to back to main manu.

- 2、 Enter the main manu after auto inspection:
(show the parameter last time if no signal input)



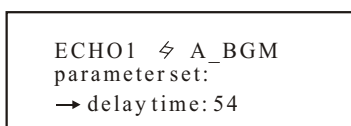
4. If want to recover the default, press MODE to choose "Load Default Set".



press the ENTER,then press MODE, it will back to main manu, the current set is default. Note: just current single effect back to default value, not all the effect and situation back to default value.

press MODE to move cursor to the pointed parameter; press UP/DOWN to change the current parameter; press ENTER to enter the item pointed by cursor.

- 3、 Press ENTER to enter the interface of effect parameter:



5. Signal input choosing set(just available for auto input), it is in main menu, press MODE key, move the cursor to A-AUX1,press ENTER to start the set.

```
ECHO1 ↵ A_AUX1
input select by:
Audio → Audio/Video
Video Audio+Video
```

AUDIO: auto choose just according to audio
VIDEO: auto choose just according to video
AUDIO/VIDEO: auto choose according to audio or video
AUDIO+VIDEO: auto choose according to audio and video

9. set the music tone modification effect:

```
ECHO1 → ↵ A_AUX1
EFFECT VOLUME: 42%
MIC VOLUME: -18 🔊
MUSIC VOLUME: 00
```

press MODE key to move cursor to ↵, press
UP to increase the tone: #1, #2, #3, #4, #5;
press DOWN to reduce the tone: b1, b2, b3, b4, b5

RECOVER THE DEFAULT SET

1. Press MODE and ENTER, turn on the power supply, display shows:

```
3G Audio KMIX-1
WITH 15 EFFECTS
Ready to default..
```

2. Loose the key when showing the following menu:

```
3G Audio KMIX-1
WITH 15 EFFECTS
Loading default...
```

3. Enter the main menu after loading the datas:

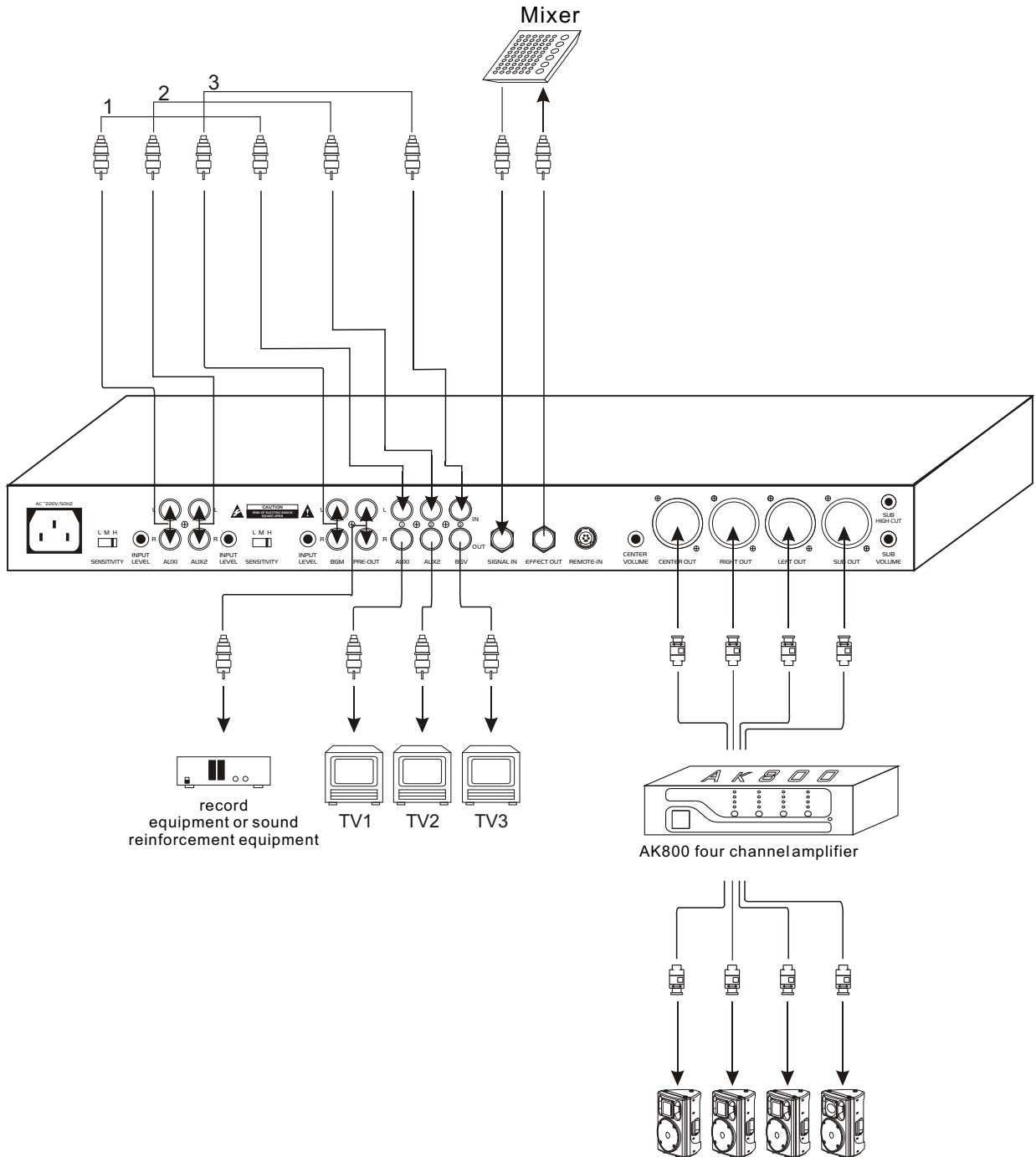
```
→ ECHO1 ↵ A_BGM
EFFECT VOLUME: 42%
MIC VOLUME: -18 🔊
MUSIC VOLUME: -36
```

It is back to the default set.

Note: the operation will recover all the default datas, user's modification will be cleared, the data will be lost

4. The parameter is editable at this time, operation is the same with normal situation.

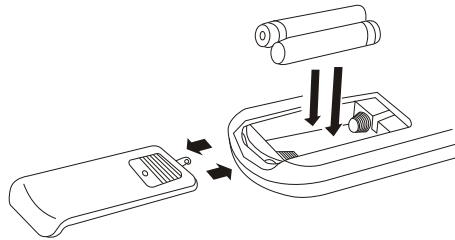
SYSTEM CONNECTION



Note:

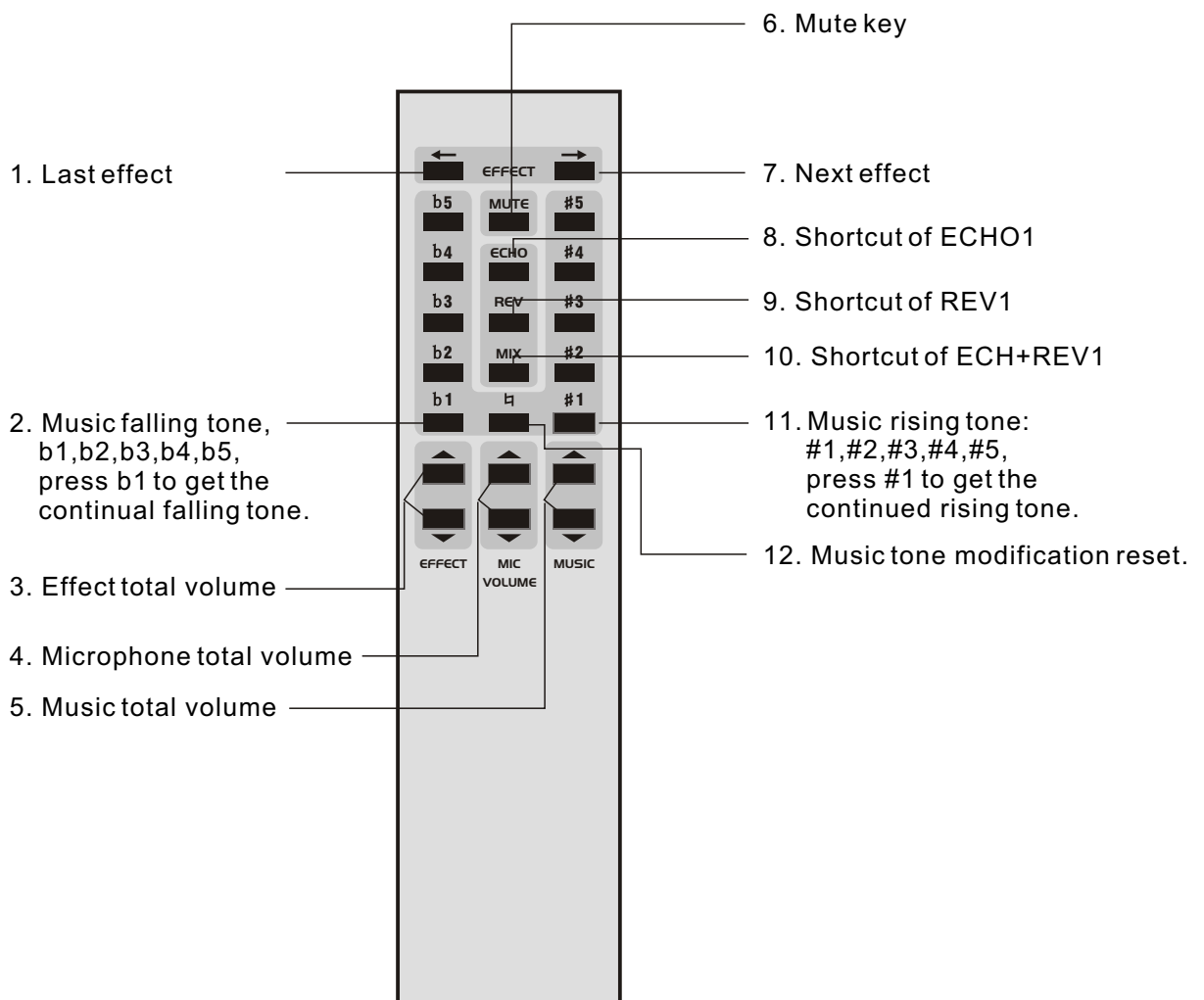
1. First group:
audio1 L/R channel signal+video1 signal input
2. Second group:
audio2 L/R channel signal+video2 signal input
3. Third group:
audio3 L/R channel signal+video3 signal input
4. AK800 is the recommended amplifier with four channels

BATTERY INSTALLATION



1. Undraw the cover according to the indication
2. Install the battery(AA,R6,UM-3) according to the drawing
3. Shut up the cover

REMOTE CONTROLLER



SPECIFICATION

Item	AUX1 channel			AUX2 channel			BGM channel			Test condition
Circuit	LEFT	RIGHT	SUBBASS	LEFT	RIGHT	SUBBASS	LEFT	RIGHT	SUBBASS	No modification, H/L frequency on balance position
S/N Ratio (dB)	95	95	92	95	95	92	95	95	92	1KHz@0dBu-input, balance input 4dBu
Distortion (%)	0.012	0.014	0.03	0.014	0.012	0.03	0.012	0.007	0.007	1KHz@0dBu-input, balance input 4dBu
Max.input Voltage (V)	5.3	5.3		5.3	5.3		5.3	5.3		THD+N ≤ 0.7%, 1KHz
Max.output Voltage (V)	9.0	9.0		9.0	9.0		9.0	9.0		THD+N ≤ 0.7%, 1KHz
L/R Channel Gain Difference (dB)	0.1			0.1			0.1			
Separation (dB)	L/R 78dB	L/R 77dB		L/R 81dB	L/R 78dB		L/R 86.6dB	L/R 81.2dB		1KHz@0dBu-input, balance input 4dBu
Input Impedance (Ω)	unbalance input 20KΩ									
Output Impedance (Ω)	balance output 300Ω									
Input Auto Inspection Sensitivity	H: 7mV M:13mV L:18mV									
Input Auto Switch Time	the longest time is 0.2s from low priority to high priority, about 4.5s from high priority to low high priority.									
Frequency Response	20Hz-20KHz(+0dB/-1dB,L/R channel),20Hz-160Hz(+0dB/-3dB,subass channel)									
Tone Adjust Range	100Hz(-10dB~+10dB), 10KHz(-9dB~+9.8dB)									
Tone Modification Range	Total 11, ±2.5, 0.5									
Subbass Output Voltage	10dBu(left, right channel each input 100Hz@0dBu)									

Microphone	Test condition
Sensitivity	15mV 1KHz@ balance output 0dBu
S/N Ratio	75dB(left), 75dB(right), 75dB(mid) 1KHz@0dBu-input, balance input 4dBu
Distortion	0.02% 1KHz@0dBu-input, balance input 4dBu
Tone Modification Range	100Hz(-11.1dB~+11.1dB), 10KHz(+12dB~+11.8dB)
Mute Value	initiative controlling voltage 3.3mV, initiative controlling time 4S
External Connection Output	200mV 1KHz@15mV
External Connection Input	1Vrms(max) 1KHz

Power Supply Voltage	220V ± 10% / 50Hz
Power Consumption	25W
Dimension	482 x 220 x 45 mm
Packing Dimension	550 x 310 x 70 mm
Net Weight	3.7Kg
Gross Weight	4.5Kg

User Manual	1
Wireless Remote Controller	1
Battery	2
Mounting Bracket	2

3G Audio

K a r a o k e s y s t e m