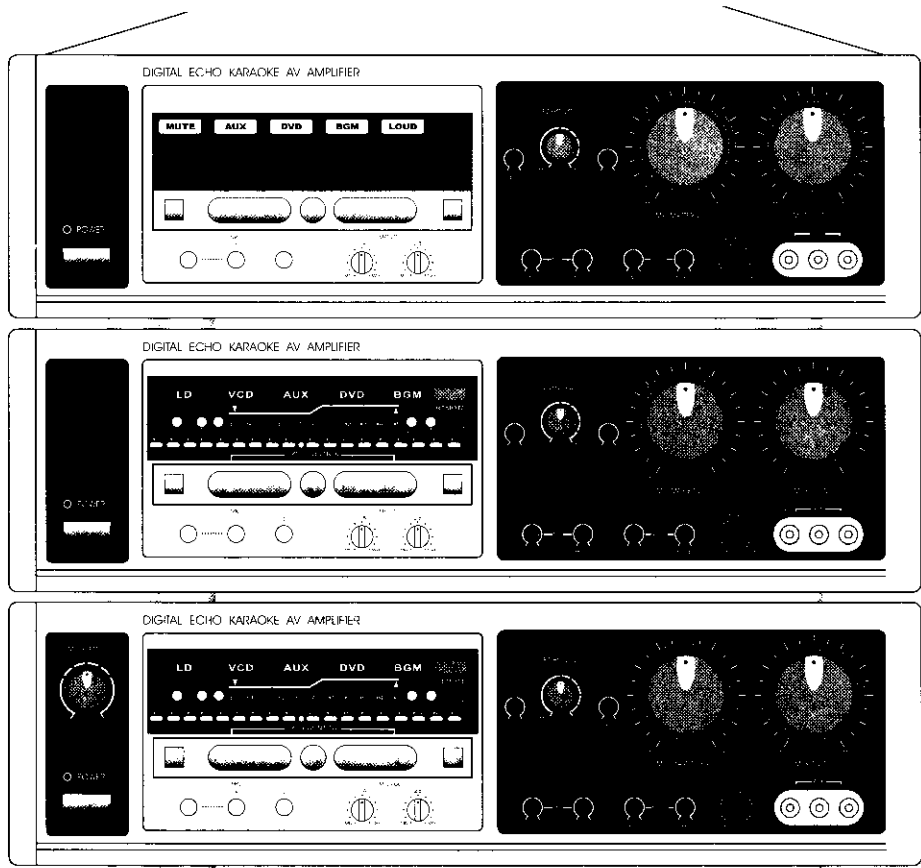


DIGITAL ECHO KARAOKE AV AMPLIFIER

Owner's Manual



FEATURES

- * Rated power: 200W+200W (8 ohms)
- * Signal source manual selecting
- * 5-Microphone inputs(Front 3,Rear 2)
- * Built-in high quality digital echo.
- * Built-in the BMB remote control code and apply to professional system for choosing song.

SPECIFICATIONS

Amplifier

Rated power:.....	200W+200W (8 ohm)
Total Harmonic Distortion (1KHz,-3dB,8 ohm).....	<0.04%
Input jacks(Sensitivity/Impedance)	
MIC.....	5mV/1.5-kohm
AUX. VCD. LD. DVD.....	250mV/47- kohm
BGM (Continuous).....	250mV/47- kohm
Output Jacks(Output level/Output impedance)	
PRE-output.....	2V/1-kohm
Frequency Responses	
MIC.....	10Hz to 18KHz. +0/-3 dB
MUSIC.....	10Hz to 25KHz. +0/-3 dB
Tone Control Characteristics	
Music Bass.....	±10dB(100Hz)
Treble.....	±10dB(10KHz)
Microphone Bass.....	±8dB(100Hz)
Treble.....	±8dB(10KHz)

Power supply, etc.

Supply voltage.....	AC 110V-120V/50Hz-60Hz
Power Consumption.....	400W
SWITCHED(250W max).....	2
Dimensions(W×H×D).....	440×150×360mm
G.W.:.....	12.2kg
N.W.:.....	11kg

Accessories

Operator's Manual.....	1
AC Power cord.....	1

PRECAUTIONS FOR HANDLING AND STORAGE

Avoid placing the unit under the following conditions:

- * Direct sunlight or heating(near a heater).
- * Poorly ventilated, extremely hot, wet or dusty places.
- * Unstable places where vibrating, or tilting.
- * Near window cooking stove where unit may be exposed to rain,moisture,soot and steam.

NAME OF PARTS AND FUNCTIONS FRONT PANEL

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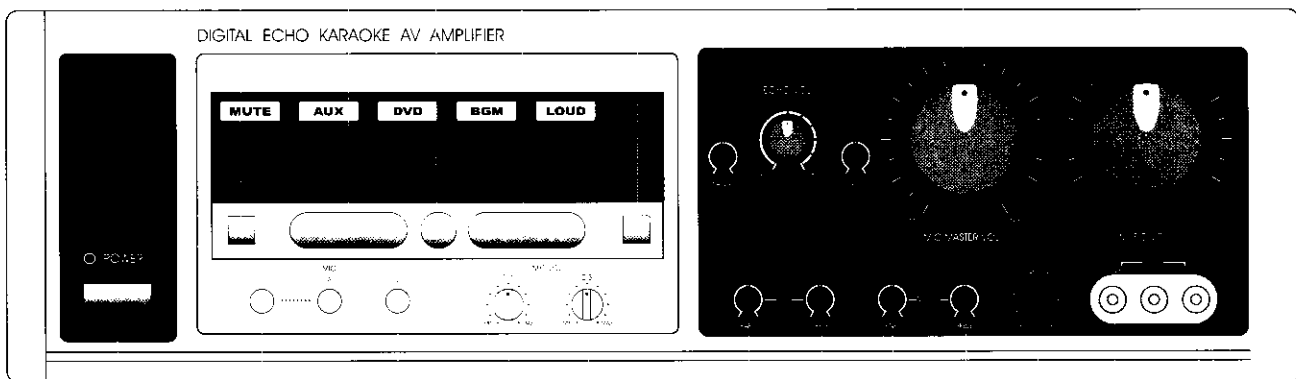
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① **POWER Switch** Press this switch to turn the power ON. Press it again to turn the power OFF.

② **MIC INPUT Jacks (1/A/2)** These jacks are for connecting microphones.

③ **MIC VOL Controls(1/A,2/B)**

1/A: This control adjusts the microphone input level from the MIC INPUT 1 jack and A jack.

2/B: This control adjusts the microphone input level from the MIC INPUT 2 jack.

④ **MIC TONE BASS/TREBLE Controls**

These controls are used to boost or cut the low and high frequency response of microphones

⑤ **MUSIC TONE BASS/TREBLE Controls**

These controls are used to boost or cut the low and high frequency response of music

⑥ **BALANCE Control**

With this control you can adjust the balance of the volume between left and right channel.

⑦ **AUX(VIDEO/AUDIO)INPUT Jack(subject to internal connection)**

Connect the video/TV Game camera recorder AUDIO OUTPUT to the AUDIO (L) (R) jacks and AUX VIDEO INPUT.

⑧ **MUTE** mute button

⑨ **AUX/DVD/BGM** Audio input selectors

(They are used to match the input sources from rear panel)

⑩ **LOUDNESS**

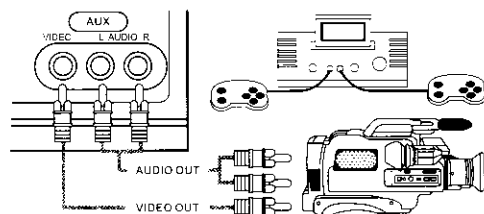
This button compensates for the non-linear response of the human ear at low volumes, set this switch to the off position when listening at normal levels.

⑪ **ECHO VOL./EFFECT RETURN VOL (DELAY/REPEAT) Control**

*ECHO Control: Adjust the echo effect of Microphone, when this control deasiled (right) the effect is enhanced, the effect is weakened when anticlockwise (left).

*DELAY Control: Adjust the delay time of return volume, when knob deasiled (right) the delay time of return volume is enhanced, the delay time is faded when anticlockwise (left).

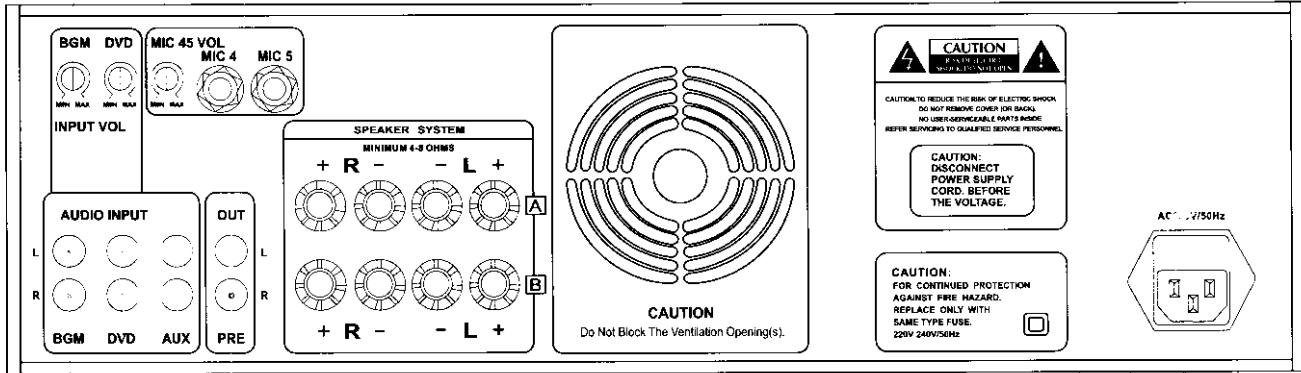
*REPEAT Control: Adjust repeat time of return volume, when this control deasiled (right) the repeat time is more, the repeat time is less when anticlockwise (left).



- ⑫ **MIC MASTER VOL. Control** This control adjusts input volume of microphone, deasil (right) for enhancing volume, anticlockwise (left) for lower volume.
- ⑬ **MUSIC VOLUME Control** This control adjusts input volume of the audio music, deasil (right) for enhancing volume, anticlockwise (left) for lower volume.

NAME OF PARTS AND FUNCTIONS REAR PANEL

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- ① **BGM AUDIO INPUT Jacks**
Connect the audio/video output jacks of the BGM function(cable broadcasting) to these jacks.
- ② **DVD AUDIO INPUT Jacks**
Connect the audio/video output jacks of the DVD player to these jacks.
- ③ **AUX AUDIO INPUT Jacks**
Connect the video/TV game camera recorder AUDIO output to the AUDIO (L) jacks and AUX VIDEO INPUT
- ④ **PRE/OUT AUDIO OUTPUT**
Can be connected for sub-woofer or other audio device, or to be connected with another amplifier.
- ⑤ **SPEAKER SYSTEM OUTPUT Jacks**
Connect speaker with an impedance of 4 to 8 ohms to these jacks
- ⑥ **AC POWER SOCKET**
Be sure to connect the power cord to an AC outlet which supplies the correct voltage AC 110V-120V/50Hz-60Hz
- ⑦ **BGM INPUT VOL. Control**
This control adjusts the BGM input volume. Turn right to rise vol . Turn left to lower vol.
- ⑧ **DVD INPUT VOL. Control**
This control adjusts the DVD INPUT volume. Turn right to rise vol . Turn left to rise vol.
- ⑨ **MIC VOL . Control**
It is used to match with MIC VOL. Control on the panel. Turn right to rise volume . Turn left to low volume.
- ⑩ **MIC INPUT Jacks**
These jacks are also for connecting output of wireless microphone, volume can be adjusted by MIC.4,5 knobs. or microphone delay output signal line.

FEATURES

- * Preset memory function for music and microphone level that can return automatically.
- * Microphone expand dynamically by 5 steps to choose
- * Specified power: 200W+200W (8 ohms)
- * Five line inputs Auto function by the order or priority.
- * Built-in DSP Key controller ± 2.5 tones in half-tone steps. (Reset automatically at the end.)
- * Auto vocal changing & MULTI-Sounding
- * 5-Microphone inputs (Front 3, Rear 2)
- * Built-in high quality digital echo.
- * Wireless remote controller. (Control of Music, Microphone, Key controller, Echo, Loudness, Muting, AV Source Select, Wutaake.)
- * Fit professional KARAOKE engineering output control system
- * Command with record out terminals outside,
- * Built-in the BMB remote control code and apply to professional system for choosing song.

SPECIFICATION

Amplifier

Specified power:.....	200W+200W (8 ohm)
Total Harmonic Distortion (1KHz,-3dB,8 ohm).....	0.04%
Input jacks(Sensitivity/Impedance)	
MIC.....	5mV/1.5-kohm
AUX. VCD. LD. DVD.....	250mV/47- kohm
BGM (Continuous).....	250mV/47- kohm
Output Jacks(Output level/Output impedance)	
PRE-output.....	2V/1-kohm
Frequency Responses	
MIC.....	10Hz to 18KHz. +0/-3 dB
MUSIC.....	10Hz to 25KHz. +0/-3 dB
Tone Control Characteristics	
Music Bass.....	± 10 dB(100Hz)
Treble.....	± 10 dB(10KHz)
Microphone Bass.....	± 8 dB(100Hz)
Treble.....	± 8 dB(10KHz)
Key Control Range.....	11steps. $\pm 2-1/2$ tone
Video Input Jack	
(Sensitivity/Input impedance).....	1VP-p/75-ohm
Video Output Jack	
(Output level/Output impedance).....	1VP-p/75-ohm
Power supply, etc.	
Supply voltage.....	AC 110V-120V/50Hz-60Hz
Power Consumption.....	400W
UN SWITCHED(250W max).....	2
Dimensions(W×H×D).....	440×150×360mm
Weight:.....	9.5kg
Accessories	
Operator's Manual.....	1
Remote control unit.....	1
Batteries(SUM-7).....	2
AC Power cord.....	1

PRECAUTIONS FOR HANDLING AND STORAGE

Avoid placing the unit under the Following conditions:

- * Direct sunlight or heating(near a heater).
- * Poorly ventilated, extremely hot, wet or dusty places.
- * Unstable places where vibrating, or tilting.
- * Near window cooking stove where unit may be exposed to rain,moisture,soot and steam.

THE FUNCTION OF VOLUME AUTO-ADJUSTED FOR MUSIC AND MICROPHONE

Advantage:

The product offers convenient control to operators in business area and KTV cabinets. To protect from heart accumulating to prevent from excessively feedback and excessively high volume, and increase the life cycle of speaker, each machine has the function of volume auto-adjusted that can maximize the effect in every cabinet or song-selecting machine.

Operation Procedure

A. Adjust to manufacturer preset values:

- Press and hold on key ① and key ③ while turn power on .
- When the LED of the panel is on , release the key after the blue LEDs of music and microphone volume adjuster flash for 8 times and the adjusters droop automatically.

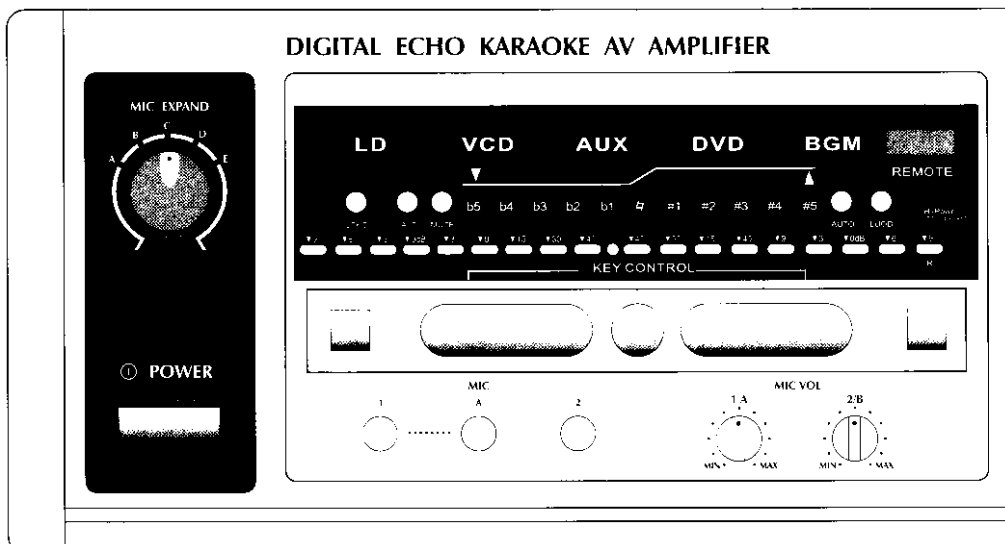
B. Cancel automatic setting

- Press and hold on key ① and key ② while to turn power on .
- When the LEDs of the panel is on ,release the key after the blue LEDs of music and microphone volume adjusters flash for 8 times and the adjusters drop automatically.

C. User Intelligent Setting (The volume will be adjusted to minimum when the unit is powered on every time, then increase the preset volume making the operation is safe & convenient.)

- press and hold on key ② and key ③ while turn power on .
- When the LEDs of the panel is on ,release the key after the blue LEDs of music and microphone volume adjusters flash for 8 times and the adjusters drop automatically.
- After the adjusters zero themselves ,music adjuster will turn green and turn to manufacturer preset value, Press key ② or key ④ to adjust to the wanted starting value, then press key ①. At this moment music adjuster will start rotating, press key ② or key ④ again to set the value of the remote controller and to set the music volume to the wanted value (the maximum value maybe), and then press key ①. Music adjuster will start rotating once again and zero itself.
- After microphone volume adjuster appoints itself to manufacturer preset value, press key ② or key ④ to adjust to the wanted starting value and then press key ①. At this moment, microphone volume adjuster will start rotating : Press key ② or ④ again to setup the maximum adjustable value on the remote controller then press key ①, After microphone volume zeros itself ,music and microphone adjusters will rotates to the new setting value . With these, the setup is complete.

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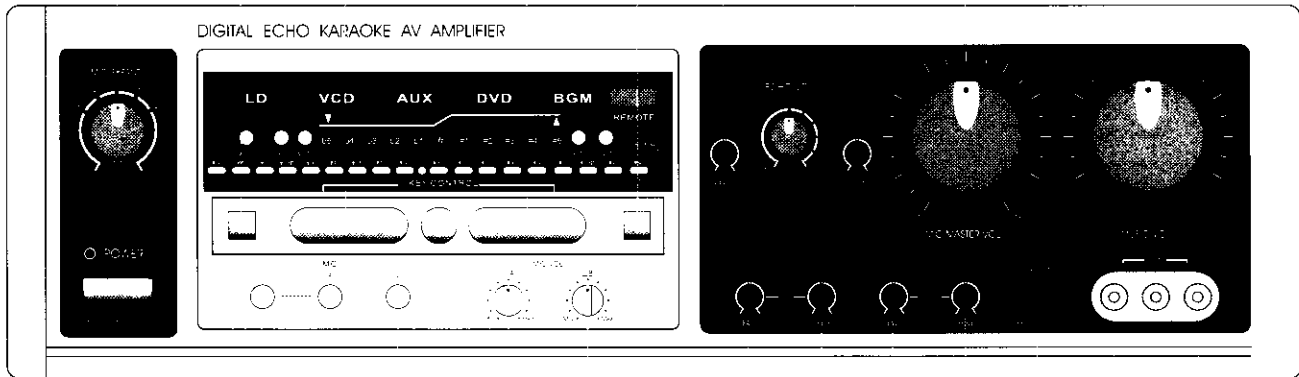
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① **POWER Switch** Press this switch to turn the power ON. Press it again to turn the power OFF.

② **MIC INPUT Jacks (1/A/2)** These jacks are for connecting microphones.

③ **MIC VOL Controls(1/A,2/B)**

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

2/B: This control adjusts the microphone input level from the MIC INPUT 2 jack(front panel).

④ **MIC TONE BASS/TREBLE Controls**

These controls are used to boost or cut the low and high frequency response of microphones

⑤ **MUSIC TONE BASS/TREBLE Controls**

These controls are used to boost or cut the low and high frequency response

⑥ **BALANCE Control**

With this control you can adjust the balance of the volume between the left and right channels.

⑦ **AUX(VIDEO/AUDIO)INPUT Jack**

Connect the video/TV Game camera recorder AUDIO OUTPUT to the AUDIO (L) (R) jacks and AUX VIDEO INPUT.

⑧ **MIC EXPAND**

A: Expand dynamically the volume range and more increase the Treble scale

B: Expand dynamically the volume range to increase the Treble and Bass scale

C: Expand and increase the echo effect.

D: Expand dynamically the volume range and more increase the Bass scale.

E: Expand dynamically the volume range and more increase the Treble and Bass scale.

⑨ **WUTAOKE/ALT SING**

When this button is pressed during playing a digital Multiplex audio disc, the LED indicator lights and the Right channel audio is muted . With normal stereo sources, set this button to the off position with which the LED indicator does not light.

⑩ **Key Control Button**

Press to transpose the key of the music, the key can be transposed by 5 steps up and 5 steps down the original key in 1/2 tone per step . The new key is indicated by the indicator above the button.(The original key resume after one song or after sound has not been produced for 4 seconds.)

⑪ **LOUDNESS**

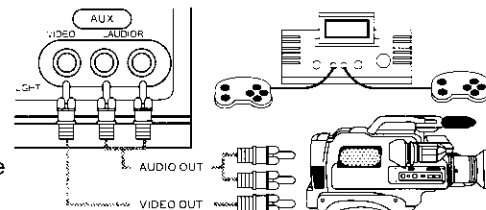
This button compensates for the non-linear response of the human ear at low volumes ,set this switch to the off position when listening at normal levels.

⑫ **ECHO VOL./EFFECT RETURN VOL (DELAY/REPEAT) Control**

* ECHO Control: Adjust the echo effect of Microphone, when this control deasiled (right) the effect is enhanced, the effect is weakened when anticlockwise (left).

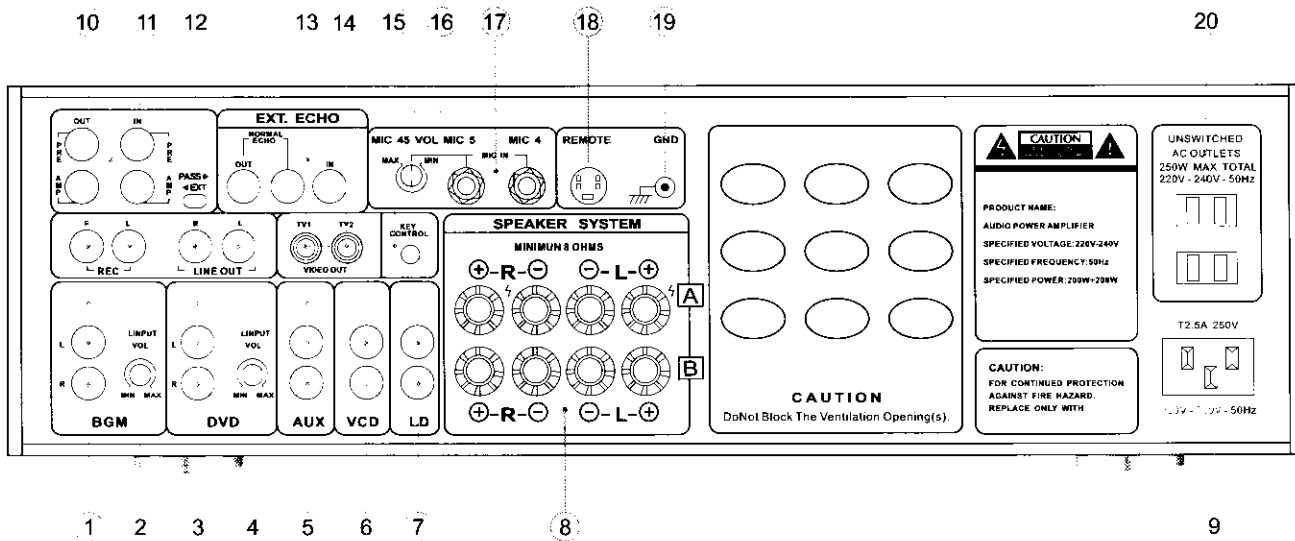
* DELAY Control: Adjust the delay time of return volume, when knob deasiled (right) the delay time of return volume is enhanced, the delay time is faded when anticlockwise (left).

* REPEAT Control: Adjust repeat time of return volume, when this control deasiled (right) the repeat time is more, the repeat time is less when anticlockwise (left).



- ⑬ **MIC MASTER VOL. Control** This control adjusts input volume of microphone, deasil (right) for enhancing volume, anticlockwise (left) for lower volume.
- ⑭ **MUSIC VOLUME Control** This control adjusts input volume of the audio music, deasil (right) for enhancing volume, anticlockwise (left) for lower volume.

NAME OF PARTS AND THEIR FUNCTIONS REAR PANELE



① BGM AUDIO/VIDEO INPUT Jacks

Connect the audio/video output jacks of the BGM function(cable broadcasting) to these jacks.

② BGM INPUT VOL. Control

This control adjusts the BGM input vol. Turn right to stentorian vol . Turn left to weaken vol.

③ DVD AUDIO/VIDEO INPUT Jacks

Connect the audio/video output jacks of the DVD player to these jacks.

④ DVD INPUT VOL. Control

This control adjusts the DVD INPUT VOL. Turn right to stentorian vol . Turn left to weaken vol.

⑤ AUX AUDIO/VIDEO INPUT Jacks

Connect the video/TV game camera recorder AUDIO output to the AUDIO (L) jacks and AUX VIDEO INPUT

⑥ VCD AUDIO INPUT Jacks

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

⑦ LD AUDIO INPUT Jacks

Connect the audio output jacks of the LD player to these jacks

⑧ SPEAKER SYSTEM OUTPUT Jacks

Connect speaker with an impedance of 8 ohms to these jacks

* Speaker system A fit front speaker of 8 ohms

* Speaker system B fit rear speaker of 8 ohms

⑨ AC POWER SOCKET

Be sure to connect the power cord to an AC outlet which supplies the correct voltage AC 110V-120V/50Hz-60Hz

⑩ REC OUTPUT Jacks

Connect with the input jacks of the tape deck recorder

⑪ PRE./ POW. Amp OUTPUT/INPUT Jacks

Adjust the switch to "PASS " connect the PRE-Amplifier output jacks of the power-Amplifier to the jacks

⑫ LINE OUTPUT Jacks

Connect the output jacks of the extension power amplifier or the mixer to these jacks

⑬ EXT.ECHO

These jacks are used to connect with other ECHO processor

⑭ VIDEO OUTPUT Jacks

Connect with the video of the monitor TV1and TV2

⑮ KEY CONTROL OUTPUT Jack

Connect the KEY output jack can press to transpose tone of the music

⑯ MIC VOL . Control

It is used to match with MIC VOL. Control on the panel. Turn right to stentorian vol . Turn left to weaken vol.

⑰ MIC INPUT Jacks

These jacks are also for connecting wireless microphone receiver output terminal or microphone delay output signal line.

18 REMOTE CONTROL PIN JACK

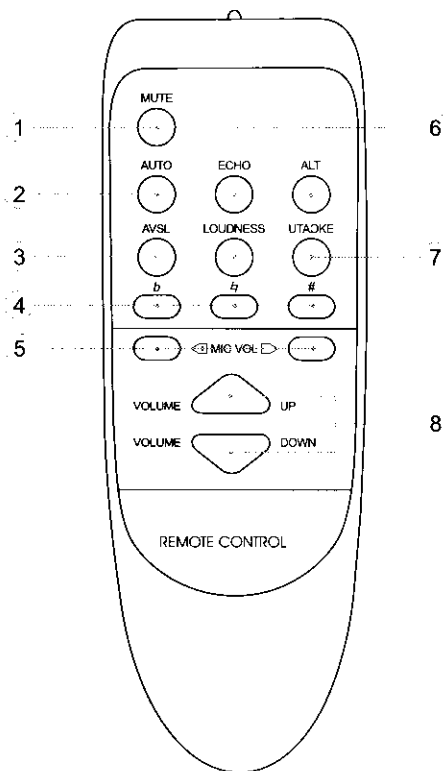
Connect with the light receptor of external remote controller

19 GROUND Jack

The ground wire shall be drive into the earth to reduce the risk of electric shock

20 AC OUTLETS

SWITCHES(total power consumption max. 250W);The power supplied through these outlets is turned ON-OFF by the power switch in the front panel.



1 MUTE BUTTON

Press the button. Bright LED means to stop the sound source input to be non-sound situation. Dark LED means to start source input to normal condition.

2 AUTO BUTTON

Press the button, Dark LED means hand start ,Bright LED means function start.

3 AVSL BUTTON

Press the button. When the front panel AUTO LED is dark . It change AV SELECTOR.

4 KEY CHANGE BUTTON

* Upward key transpose(#1 to #5)

By pressing the buttons # a higher key than the standard key by up to two tones can be set in half-tone steps.

* Downward key transpose(b1 to b5)

By pressing the buttons, a lower key than the standard key by up to two tones can be set in half-tone steps.

* The key is reset automatically to the standard key every time that a music has been played.

5 MIC VOLUME CONTROL Buttons

Press one of the buttons to increase and decrease the overall volume of the microphones. The LED on the MIC VOLUME control of the main unit blinks during the adjustment .A fine adjustment is available by pressing a button intermittently.

6 ECHO/LOUDNESS/ON-OFF-CHANGE BUTTONS

7 WUTAOKE/SING ALT CHANGE BUTTONS

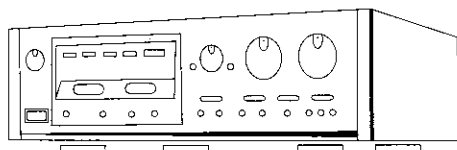
8 MUSIC VOLUME CONTROL BUTTONS

Press one of the buttons to increase the music volnme.

The LED on the MUSIC VOLUME control of the main unit blinks during the adjustment, A fine adjustment is available by pressing a button intermittently.

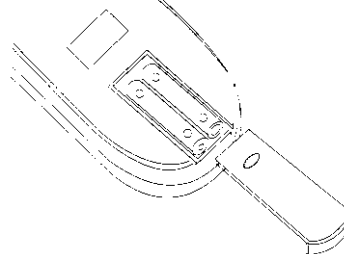
Wireless remote control

The distance between the wireless remote control and the unit should be less than 5 metres. Note that the remote control may not operate if the light transmitter window of the remote control unit is pointed to other direction instead of the light receptor direction or if there is an obstacle between the Remote control unit and light receptor.



Loading Batteries

The life of the batteries used in the remote control unit is about half an year with normal use . If the remote control unit is not to be used for a long time , take out the batteries from it .When the batteries become weak, replace them earlier.



SAFETY PRECAUTIONS

Caution

When this unit is to be used in an area where the local voltage is AC 110V-120V/50Hz-60Hz

In case of abnormality

In case 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 for check.

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.

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

When you are going to stay away from home for a long rime , for example before you are going to a trip, set the power switch to off and unplug the power plug from the power outlet for safety. This will prevent from fire hazard due to unexpected accident with this units.

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 foreign object enters inside the unit, consult the aftersales service agent or your dealer for check.

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 distribute the power cord under this unit or 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.

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 that 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 as AC outlet unless it has been designed to accept the connection of TV set.

MAINTENANCE

When, the set gets dirty, wipe with a soft and dry cloth . If the set is extremely dirty, soak a soft cloth in a solution by 5 to 6 times of tableware detergent, wring it tight, wipe the dirt away, and finally wipe the set with a dry cloth.

Never use alcohol, thinner, benzine, insecticide or other volatile agents, for 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, for the surface finish may be degraded or the paint may be stripped off.

TROUBLE SHOOTING

Should faults occur, it is in many cases due to a simple operation mistake or like. On the basis of the following checks you will be able to rectify a number of faults yourself without difficulty.

If the fault cannot be remedied after the following check, please consult your dealer.

Problem	Problem cause	Remedy
Speaker sound is not output at all	<ol style="list-style-type: none"> 1.The Power ON/OFF switch is set to "OFF" 2.The Power cord is unplugged. 3.The MUSIC VOL. Control is in the minimum position. 4.the ⑩ of rear panel in EXT position. 	<ol style="list-style-type: none"> 1. Set the Power ON/OFF switch to "ON" 2. Plug the power cord securely into the power outlet. 3. Adjust the control. 4.Adjust the PASS position
Sound is not output from one of the speakers.	<ol style="list-style-type: none"> 1.The BALANCE control is turned fully to an extreme position. 2.One of the speaker cords are disconnected. 	<ol style="list-style-type: none"> 1.Adjust the BALANCE control. 2.Connect the input cords securely.
Microphone sound is not output	<ol style="list-style-type: none"> 1.The microphone plug is not fully inserted. 2.The switch on the microphone is set to "OFF" 3.The corresponding MIC VOL. Control or MIC MASTER VOL. Control is in the minimum position 4.The microphone is too far from your mouth, or the microphone handing is improper. 5.the ⑪ of rear panel is disconnected 	<ol style="list-style-type: none"> 1.Insert the plug securely into the jack. 2.Set the switch on the microphone to "ON" 3.Adjust the control. 4.Refer to the use s manual splied with your microphone. 5.Please plug ⑪ of the rear panel
When listening to the music in stereo, left/right speakers sounds reversed.	Speakers are connected wrongly.	After checking, if need, connect correctly again.
Low hum or buzzer sound	Power line of fluoresent light is installed near to wall outlet of this product.	Place this product away from electric devices as far as possible.
Sound cut during listening to the music or no sound even though power is ON.	Speaker impedance is less than the prescribed for this unit.	After turning off the power and then turning it on again reduce the volume or change to the regulated speakers.
No signal from amplifier suddenly when in use	Thermal protection function activates and amplifier stops working	Check and keep good ventilation. Restart the amplifier when temperature turns down
No output signal when switch on the amplifier	Fuse burn probably	Check the fuse and replace it if it's burn.