

M *Martin Ranger*
PROFESSIONAL KARAOKE

Pure Sound 88 Recording



PROFESSIONAL DIGITAL ECHO MIXING AMPLIFIER
WITH KARAOKE RECORDER

OWNER'S MANUAL

Thank you for your purchase of our new full concept amplifier. Please read this manual thoroughly before making connections and turning on the power. Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new amplifier. Please retain this manual for future reference.

CHARACTERISTICS

≡ High Precision Dual Echo System

The set has two complete, independent, and advanced digital echo processing circuits. When two singers with different compasses sing simultaneously, Digital echo will offer different echo effects to fit the timbres of the singers. This system fully develops the feature of True Stereo Echo Karaoke.

≡ Sound Range Beautified System

The two microphones respectively offer the function of adjusting echo effects. In addition, Echo tone offers the function of beautifying the sound range of the singer, making perfect sound range and ending sound. This system help the singer enjoy enormously the delight of singing and express emotions.

≡ Singing With Great Ease

With the super output power of each channel, high currency capacity of the power filter circuit, the set offers solid power, high-quality timbres, making clear, smooth, and sound-surround music. In addition, with the advanced Echo and Music Mixed Circuit System, the set offers high sensitivity of the echo effect, clearness of the sound. The lowest signal noise ratio guarantees natural, clear sound effects. These systems help the singer sing with great ease.

≡ Protective Function

The set is equipped with advanced Channel Heatsink-Blow System and Overheat Protecting, which guarantee the lowest noise ratio. In addition, the set is equipped with Overload Protection, and Short-circuit Protection. These systems offer protective functions.



≡ Multi-Applications

The set offers 2 systems Echo Mixing microphone inputs and 1 Direct Tone Circuit microphone input for professional DJ/KJ. Besides, the set is equipped with Video Switching, and Multiplex (Auto singing mate/Vocal cancel) function. Above all, the set is equipped with unique Super Bass frequency extension mode selection, which produces different frequency effects matched to the music broadcasted.

The unit offers the newest USB karaoke recording matched with MP3 format to have more fun when recording your own singing.

The multi-function set offers family entertainment and fits commercial Karaoke or various Karaoke occasions.

SAFETY INSTRUCTIONS

	CAUTION RISK OF ELECTRIC SHOCK, DO NOT OPEN!	
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.		

Explanation of Graphical Symbols




The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you 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 you 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 UNIT TO RAIN OR MOISTURE.

- 1 Read instructions- All the safety and operating instructions should be read before the unit is operated.
- 2 Retain Instructions - The safety and operating instructions should be retained for future reference.
- 3 Heed Warnings-All warnings on the units and in the operating instructions should be adhered to.
- 4 Follow Instructions - All operations and other instructions should be followed.
- 5 Water and Moisture- The unit should not be used near water- for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.
- 6 Carts and Stands - The unit should be used only with a cart or stand that is recommended by the manufacturer.
- 6A A unit and card combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn. 
- 7 Grounding or Polarization- Precautions should be taken so that the grounding or polarization is not defeated.
- 8 Ventilation - The unit should be situated so that its location or position does not interfere with its proper ventilation. For example, the unit 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.
- 9 Heat- The unit should be situated away from heat sources such as radiators, stoves, or other appliances that produces heat.
 - 10 Power Sources - The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
 - 11 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 the unit.
 - 12 Cleaning- The unit should be cleaned only as recommended by the manufacturer.
 - 13 Nonuse Periods- The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.
 - 14 Object and liquid Entry- Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the unit.
 - 15 Damage Requiring Service - The unit 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 into the unit; or
 - C. The unit has been exposed to rain; or
 - D. The unit does not appear to operate normally or exhibits a marked change in performance.
 - E. The unit has been dropped, or the cabinet damaged.
 - 16 Servicing - The user should not attempt to service the unit beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.
 - 17 Power Lines - An outdoor antenna should be located away from power lines.
 - 18 Grounding or Polarization - Precautions should be taken so that the grounding or polarization is not defeated.

IMPORTANT

please record the serial number of this unit in the space below.

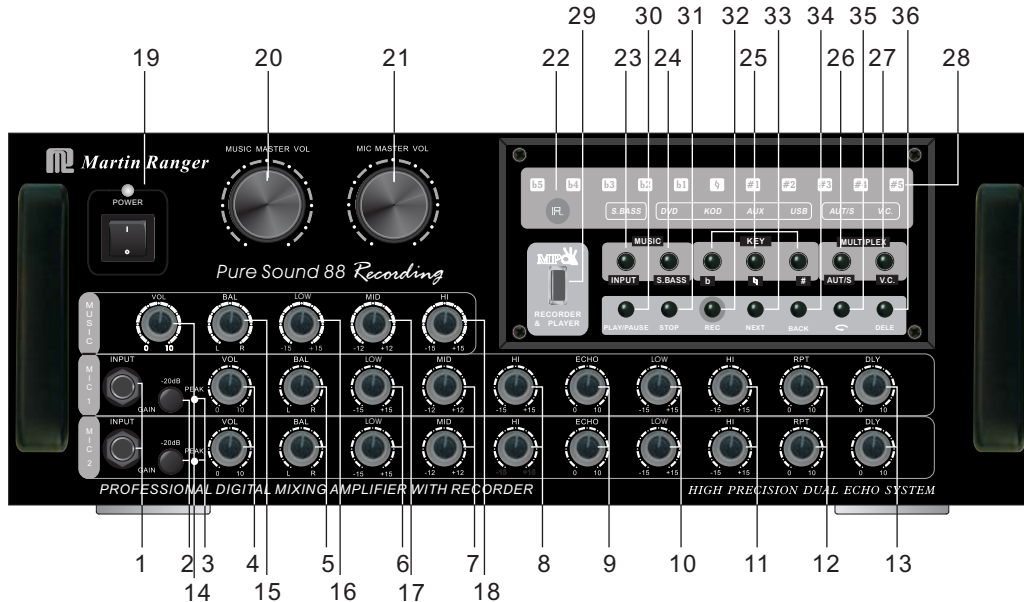
Model:

Serial No.:

The serial number is located on the rear of the unit.

Retain this Owner's Manual in a safe place for future reference.

1.OPERATING GUIDE



MICROPHONES

- 1.Microphone input jacks
- 2.Input signal attenuators
- 3.Auto-gain level indicators
- 4.Microphone volume control
- 5.Balance control
- 6.Bass adjust
- 7.Mid-range adjust
- 8.Treble adjust

ECHO

- 9.Echo volume control
- 10.Echo bass control
- 11.Echo treble control
- 12.Repeat length control
- 13.Delay time control

MUSIC

- 14.Music volume control
- 15.Balance control
- 16.Bass adjust
- 17.Mid-range adjust
- 18.Treble adjust

POWER CONTROL

- 19.Power ON/OFF switch

MASTER VOLUME

- 20.Music master volume control
- 21.Microphone master volume control

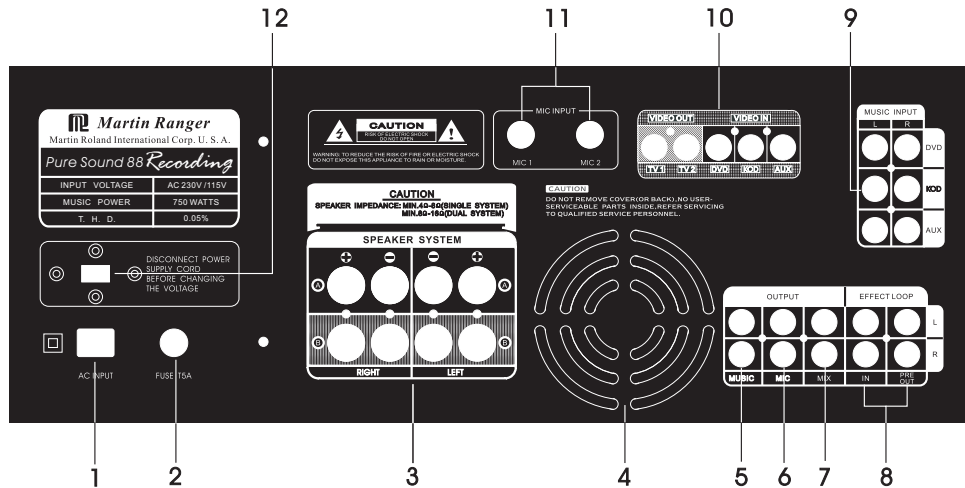
FUNCTION CONTROL

- 22.Remote control sensor
- 23.Input source selector
- 24.Super Bass Switch
- 25.Key control button
- 26.Auto singing-mate switch
- 27.Vocal cancel switch
- 28.Key Display

KARAOKE RECORDING

- 29.USB port (Matched with MP3 format)
- 30.Play/Pause
- 31.Stop
- 32.Record
- 33.Next
- 34.Back(Previous)
- 35.Circulate broadcast
- 36.Delete

2.FUNCTION OF REAR PANEL



1. AC POWER SUPPLY

Before plug-in the power supply, be sure to pick the voltage of 230V 50Hz or 115V 60Hz correctly.

2. AC POWER FUSE HOLDER

Use T5A fuse.

3. SPEAKER SYSTEMS TERMINAL

1. Do not let the bare speaker wires touch each other or any other metal part as this could damage this unit and / or speakers.
2. Make sure that the polarity of the speaker wires is correct. that is : +and-marking are observed. If these wires are reversed, the sound will be unnatural and will lack bass.
3. When one speaker system is used, speakers with an impedance of 4 to 8 ohms should be connected for used as main amplifier output terminals. Be careful when using two pairs speaker system at the same time, since use of speakers with an impedance of less than 8 ohms will lead to damage, should use speakers with an impedance of 8 ohms to 16 ohms.

4. HEATSINKING BLOWER OUTLET

Air vents front and rear must not be obstructed.

5.MUSIC OUTPUT TERMINAL

This terminal outputs music sound only from the amplifier. without music tone adjust, and not through master volume control.

6.MIC SIGNAL OUTPUT

This terminal outputs microphones' sound only from the amplifier with mike tone adjust. But not through master Mic volume control.

7. MIX OUTPUT TERMINAL

This terminal outputs music through music tone adjust and microphone's sound with echo effect, through master volume control. The terminal can be used to connect MP3 recorder or power amplifier.

8.SOUND-EFFECT DEVICE INPUT/OUTPUT

Use this terminal when connecting external sound effect devices such as graphic equalizer, power amplifier.

9.MUSIC SOURCE INPUT

The terminal use to connect sound source, such as DVD CDG KOD AUX etc. The original setting is on DVD position.

10.VIDEO INPUT/OUT JACKS

Connect input jack with the video output of DVD CDG KOD or AUX etc. And connect output jack with the video input of the monitor/TV.

11.REAR MIC INPUT JACKS

These jacks are also for connecting microphones. The MIC A is connected to the same circuit as the MIC 1 jack on the front panel. And the MIC B is connected to the same circuit as the MIC 2 jack on the front panel.

12. DUAL VOLTAGE SELECTOR

Before turn on power switch, be sure the AC voltage selector is seted to the appropriate AC voltage according to your area.

3.KARAOKE RECORDING

HOW TO OPERATE THE RECORDING

- 1.Press "MUSIC INPUT" button to get the music source from DVD or KOD or AUX.
- 2.Press "REC" button to record the selection.
- 3.Press "STOP" the recording function stops and the current recording is kept in USB.
- 4.Press "MUSIC INPUT" button to access to USB.
- 5.Press "PLAY" button to access to the play record folder in USB.
- 6.Press "BACK" button, the current recording will be played.

KEY/BUTTON DESCRIPTION

1.PLAY/PAUSE

Press the button to enter into play/pause mode. Press STOP button, this function will be cancelled automatically.

(In recording mode, press STOP button when recording is finished, and then the current recording will be kept in USB record folder.

Press PLAY/PAUSE button to access to the play record folder.

Press "BACK" button, the current recording will be played.)

2.STOP

In play mode, the set stops playing. In recording mode, the set stops record function and keeps the current recording.

3.REC

Recording button. Press the button to record the selection.

When recording, the master music and master mic volume of the set does not function to the recording volume, please adjust the music and microphone volume by the music volume and the separately microphone volume to get suitable volume for recording.

4.NEXT

The next selection.

5.BACK

The previous selection.

6.↶ PLAY-MODE

Press the button, the selection is circulated. Press and hold for 3 seconds, the whole folder is circulated.

7.DELE

Delete button. Press the button to delete the current selection in play.

ORIGINAL SETTING FUNCTION

The set is built with original setting function. When playing, the whole folder is circulated.

INDICATOR

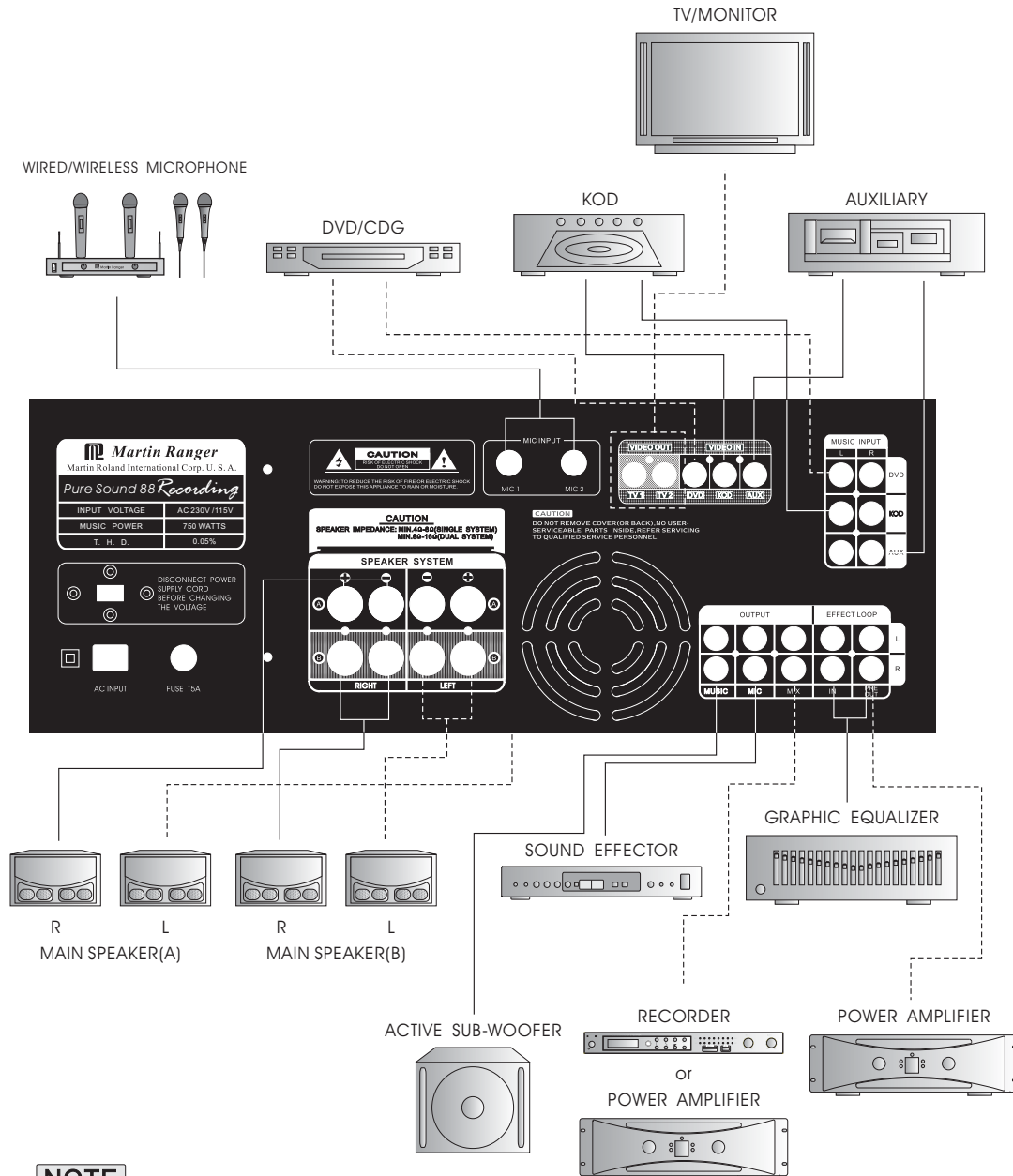
1.Play/Pause indicator

In play mode, the indicator illuminates steadily. In recording mode, the indicator flickers.

2.↶ Play-mode indicator

The indicator illuminates when the selection circulated, the indicator unilluminated when the whole folder circulated.

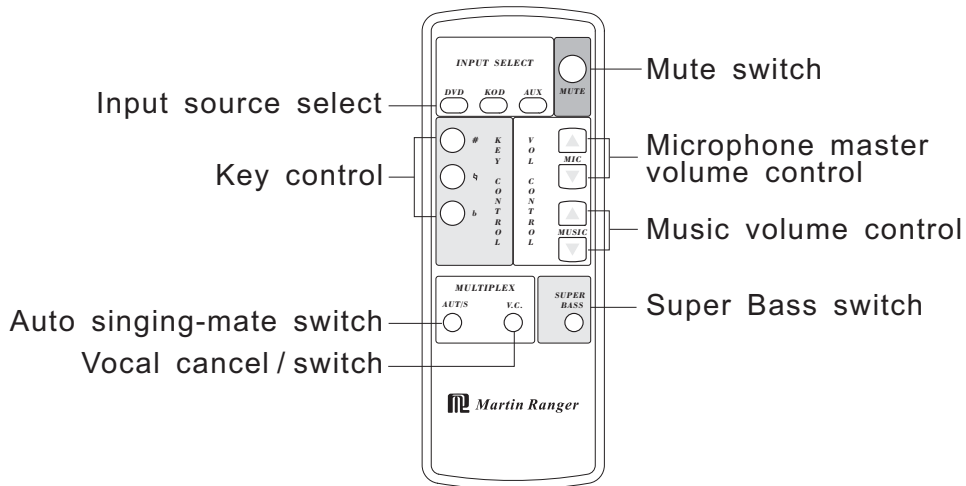
4.CONNECTING GUIDE



NOTE

- Do not power on the unit until all the connections are completed.
- When the pin plug cords are employed, always connect the "White" plug to the left channel and "Red" plug to the right channel. This helps to avoid reversed connections.
- Insert the plugs firmly, poor contact will result no sounds or noise.
- Speaker Impedance: A or B one Speaker system 4-8 ohm
A + B dual Speaker system 8-16 ohm

5.REMOTE CONTROL



6.SPECIFICATIONS

Audio output max.	750W
Mic input sensitivity	15mV
External devices sensitivity	250mV
Signal / Noise ratio (with IHF A Fiter)	≥90dB
T.H.D. (1 kHz. AUX 150mV INPUT)	0.1%
Frequency Response	25Hz~20KHz
Mic. Tone adjustment	80Hz±15dB 3.5KHz±5dB 12KHz±15dB
Echo tone adjustment	80Hz±15dB 12KHz±15dB
Power source	AC115V /60Hz AC230V /50Hz
Net Weight	1.6KGS
Dimension (WxHxD)	430x156x355(mm)

*Specifications and features are subject to changed without notice.

HOW TO USE THE MICROPHONE PROPERLY

- Keep the microphone apart approx. 5 to 10cm from your mouth.
- To make the clean voice sound, leave the proper space between microphone head and your hold position on microphone.
- Do not cover the lower wind screen of the microphone, which may interrupt the audio sound and may cause howling.



ETIQUETTE OF SOUND



The karaoke performance you enjoy may disturbing others. When performing karaoke, be sure to consider your neighbors. The volume of karaoke is at your command. Remember that even small sound transmits very well in the quiet night, be specially careful in karaoke performance in the night. It is recommended to close the windows to avoid sound leakages to the neighbors, and have considerations for comfortable living environments of others.

Martin Roland is constantly striving to maintain the highest quality and standards. As a result of these efforts, modifications may be made to this product without notice.



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