Remote Paging Selector   **M-2588**
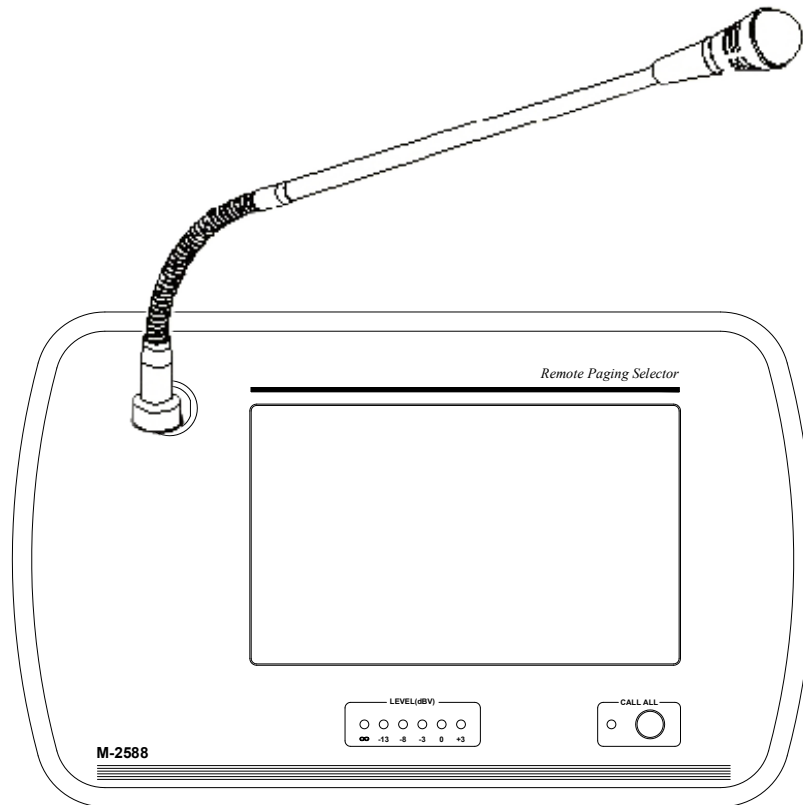

User's Manual

Welcome to use our public address system. Please read this manual carefully before using this device for your better use.

LY International Electronics Co., Ltd.

About this Manual

This Manual is used since the date when the development of intelligent remote paging selector is completed.　The manual contains the system introduction, precautions, system connection instruction, product use instruction, product specification and so on. Please read this manual carefully before installation and use of the device. Follow the instructions in the manual.

All instructions marked with this symbol on the rear panel of the machine are precautions. Please ensure follow them strictly.

Please keep this manual carefully for future reference.

⚠ Warning

The following basic requirements must be strictly observed, to avoid potential personal injury and equipment or property damages to you or any person nearby. The basic requirements include without limitation to the following:

Power source/power cable

• Please disconnect the device from power source by pulling the plug other than the power cord. Pulling the power cord may result in damages.

• Please keep the power cord away from heat source. Do not overbend the power cord or place it anywhere it can be stepped on or may cause to trip.

• This is connected to power source via the plug and any failure or danger occurs, the user can disconnect the device from power source by pulling out the plug out from the socket, therefore, it is required that the power socket should be located somewhere with easy access.

• The device is not completely disconnected from power source when it is switched "OFF". For sake of safety, please disconnect the device from the socket if it is not in user.

Positioning

• Please disconnect the device from power source before relocating the device.

• For avoiding deformation of panels and damages to internal components, please do NOT place the device where there is heavy dust or violent vibration, or where it is extremely cold or hot.

• Please keep this device off water drops or splash or vase filled with water or any other articles of similar nature.

Connection

• Please disconnect other equipment from power source before they are connected to this product. Please tune volume to its minimum level before the device is powered ON or OFF.

• All terminals on the device marked with ⚡ are live and dangerous, and should be connected by trained personnel.

When abnormal conditions are realized

• Please disconnect the device from power source immediately in case the power cord is worn or damaged or if the sound is suddenly cut off or any abnormal odor or smoke comes out from the device, and then have the device inspected and repaired by professional personnel.

Precautions in Operation

• Please do NOT insert any finger into any gap or opening of the device.

• Please prevent foreign objects (paper, plastics or metal etc.) from being inserted or falling into any gap or opening of the device. In such case, please cut off power source immediately.

• Please do NOT put the body or any heavy object on the device and do NOT operate the buttons or switches or connections with excessive force.

Do NOT open

• Please do NOT remove the cover of the equipment, otherwise you may get an electric shock.

• Do NOT attempt to remove any internal component from the device, or to modify the equipment in whatever manner. In case of any abnormal condition, please stop using the device immediately and have it inspected and repaired by professional personnel.

Other Precautions

• Our company shall not be responsible for data loss or damages due to improper use of unauthorized modification to the device.

• The images and screen display in this Manual are only for description and may be different from screen images in actual operation. The screen display depends on the product.

Contents

I. Introduction

## 1.1 Introduction to the device

M-2588 series of remote paging selectors have the feature of high stability as traditional ones, and it operates stably with low failure rate. It adopts signal all-digital transmission design, and the intelligent control as the core. 7-inch LCD true color LCD screen/touch screen control and graphics and texts interfaces are more user-friendly. With auxiliary input and output channels, it can achieve local audio expansion and amplifier expansion.

1.2 Features

- 7-inch true color touch screen, high-grade aluminum alloy industrial drawing panel design.
- Desktop design.
- High-fidelity and hand-held dynamic microphone design.
- Possess multi-level level indication, and the sound pressure is more intuitive.
- Convenience for quick paging in emergencies with manual shortcut keys.
- Possess one line input (extended external program source, wireless microphone access, etc.), one local line output (local output off-line paging), and one auxiliary line output (extended monitoring power).
- Graphic user-friendly design, more intuitive display.
- Embedded real-time system platform, high-performance ARM processor.
- Built-in bell sound.
- Paging function of the host partition.
- User password and privilege management.
- With automatic intelligent microphone-off function, you can see turn off paging time delay by the speaker.
- Manually turn on and turn off the paging microphone power supply.
- With intelligent screen protection function, you can set the color display screen protection delay time.

II. Outline

2.1 Front Side
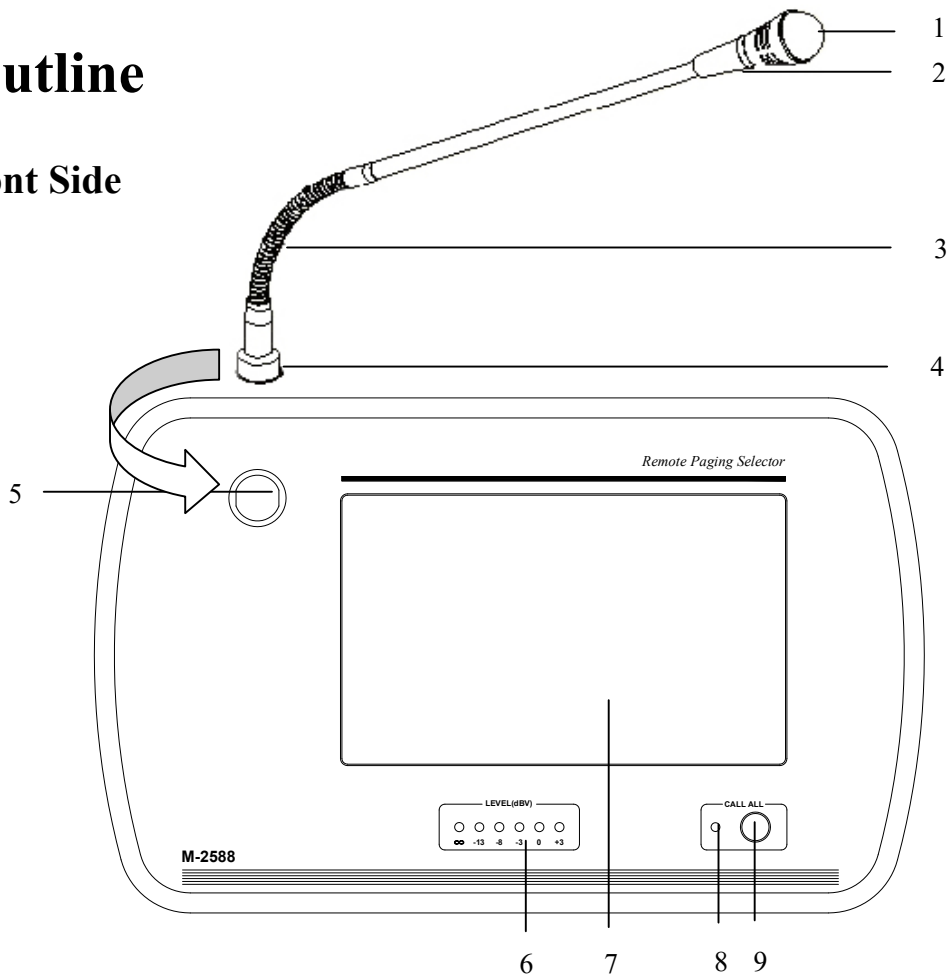
1. Microphone

Do not strike or bump the microphone when using it.

2. Microphone switch indicator light ring

This indicator light:

> ➢ When starting paging by opening the microphone, this ring will start;

> ➢ Open simultaneously with the microphone switch button light when paging all partitions.

3. Microphone lever

Adjust the microphone angle freely.

4. Microphone socket

4-pin Kalong socket:

> ➢ pin 1 is for power supply and microphone head indicator light;

> ➢ Pin 2 is for voice signal input;

> ➢ Pin 3 is empty;

> ➢ Pin 4 is signal input ground terminal.

5. Microphone connector

Pin 4 is for Kalong socket, one-to-one corresponding to 4 pins on the socket of the microphone pole.

6. Output level indicator light

The higher the output volume, the more light the level indicator light is on.

7. LCD true color screen

Display the working state and operating interface of paging selector; carry out the option operation by touching the screen.

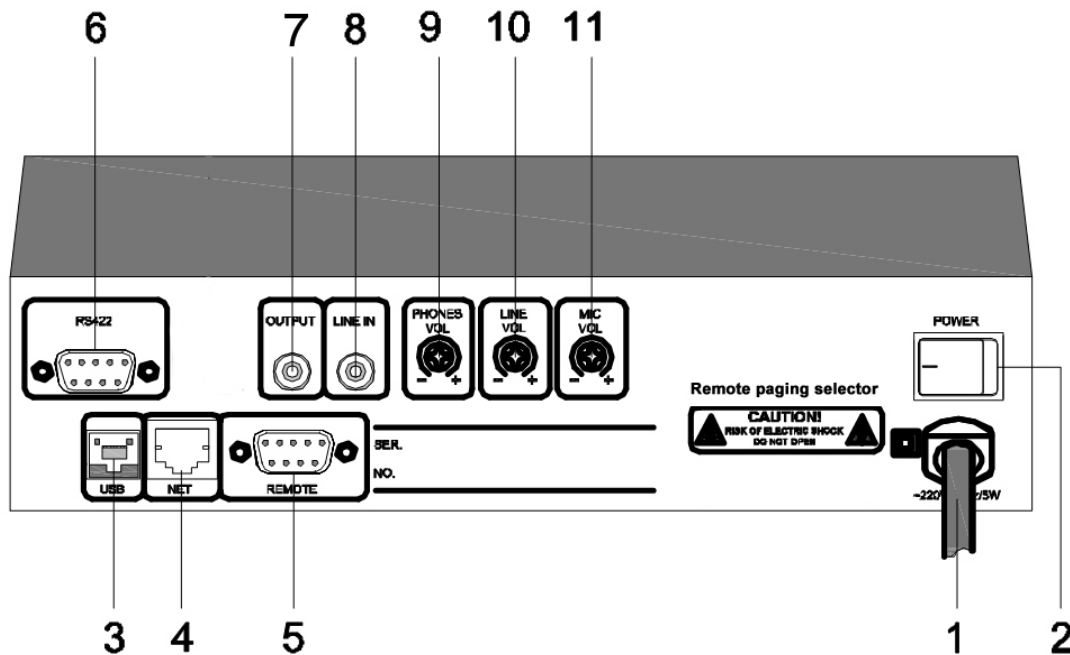**8. Microphone switch indicator light**

Press the button "CALL ALL" to open all partitions, at this time, the indicator light is on.

9. Microphone switch key /system reset key

Used for full-open and full-closed operations for partitions. (Press the key "full open", then press the key "full closed").

2.2 Rear panel

1. AC220V power input cable

2. Power switch

Press down "一" to turn on the power, and rebound from "一" to turn off the power.

3. USB interface

For the paging system upgrading; not access to users.

4. Network interface

Not access to users.

5. Data exchange interface

Used for paging system debugging, not access to users.

6. Data exchange interface

RS422 analog paging function interface, connected to M-2189 host.

7. Line audio output interface

Connect the amplifier.

8. Line audio input interface

Connect the player device such as a DVD player or a tuner, etc..

9. Clock volume adjustment knob

Adjust bell and music volume, increase the volume by rotating clockwise, and decrease the volume by rotating counterclockwise.

10. Line output volume adjustment knob

Increase the volume by rotating clockwise, and decrease the volume by rotating counterclockwise.

11. Microphone volume adjustment knob

Adjust the microphone volume of the paging selector. Increase the volume by rotating clockwise, and decrease the volume by rotating counterclockwise.

III. Connection Diagram

3.1 Diagram of M-2588 system

Host   M-2588 paging selector
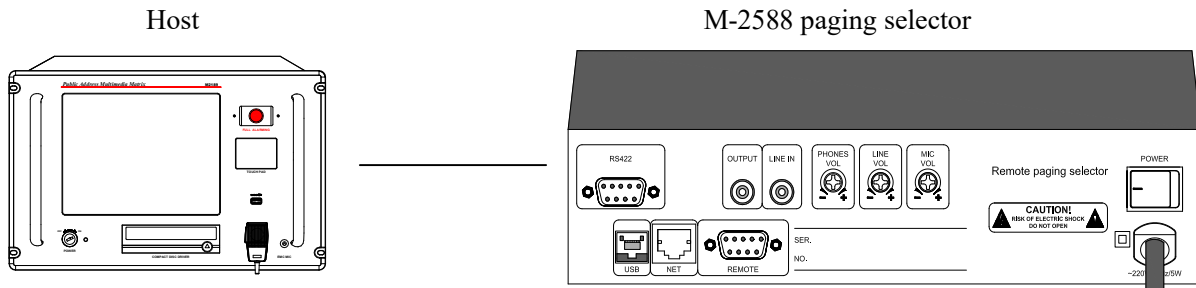

Note: ① The above figure only illustrates the application of M-2588 paging selector. For the connection of the whole system, please refer to the instruction manual of M-2189 host.

3.2 Connection of local interface of M-2588 paging selector

This paging selector can output audio signals. The audio channel is used to connect the amplifier and speaker, to achieve PA of the local paging selector. This personalized design can meet the needs of the terminal field high-power and multi-sources; the paging selector is provided with auxiliary audio input interface, which is connected to the player device.

The connection diagram of the local interface is as follows:
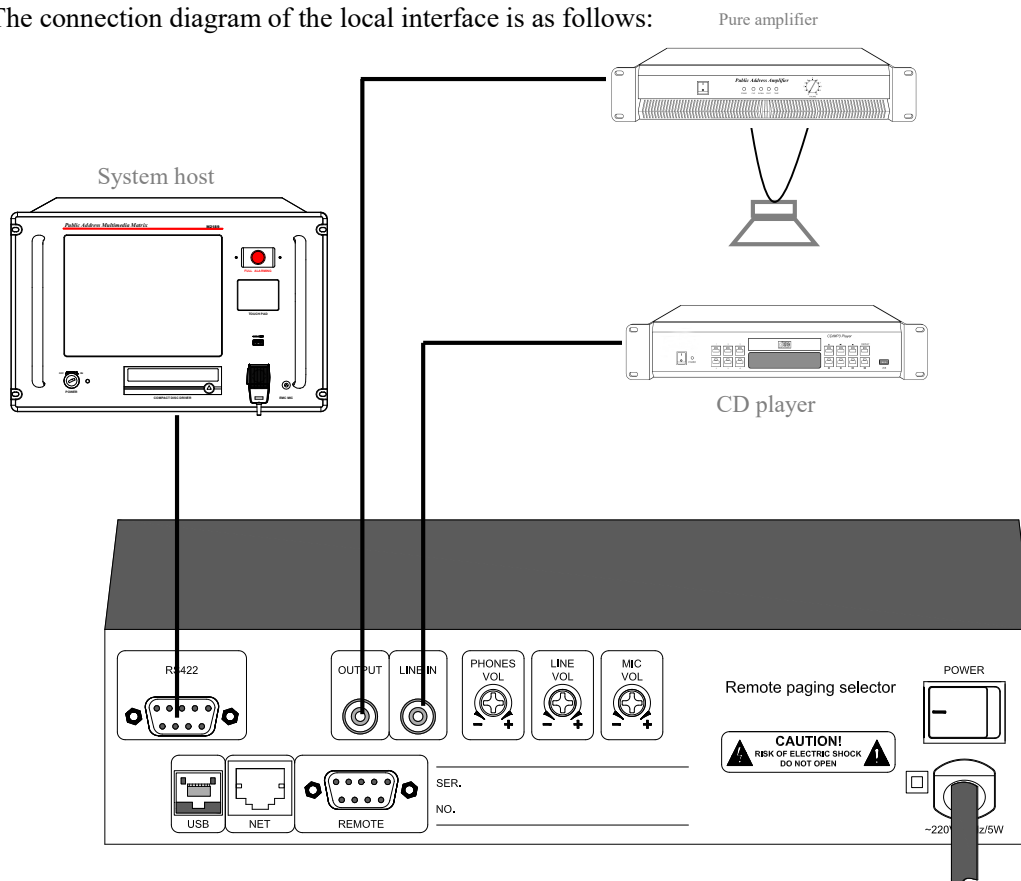
IV. Operation instructions

4.1 Start

Connect the system line to supply electricity to the paging selector, open the power switch on the rear panel to start the machine. After power on, it will enter the system initialization state, and the paging selector screen will display the WELCOME Starting, please wait .... During this process, the system will load the last operation information of the paging selector, after about 30 seconds, complete the start and enter the following window:
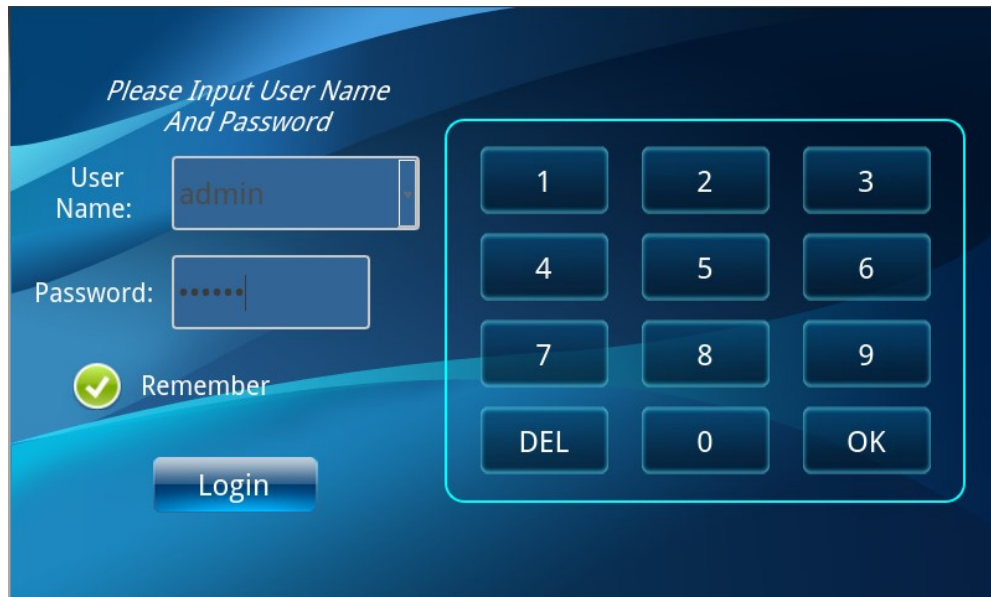
Touch the digital buttons on the screen as above, enter the system password, to enter the paging main menu. The main menu is shown as follows:
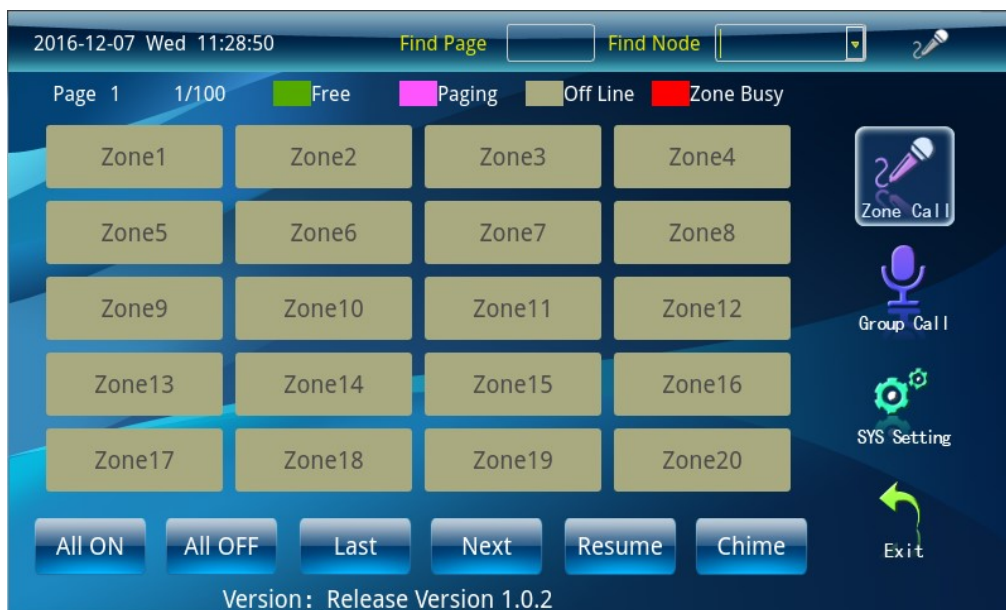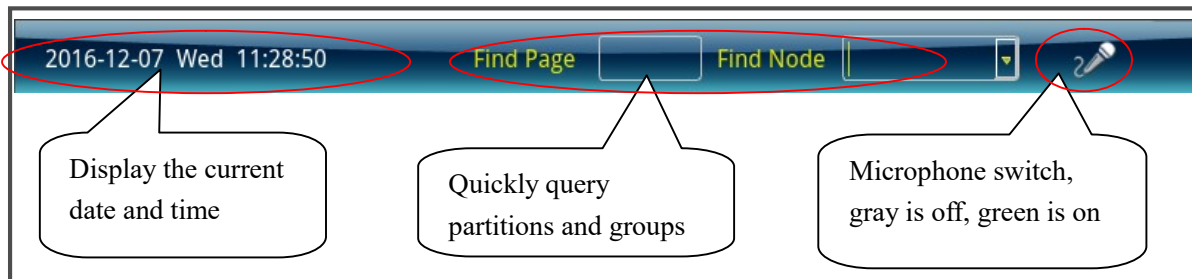

The main functions include: state operation, bell and partition state display, partition paging / group paging / system settings/ exit function buttons.

4.2 Description of main menu

4.2.1 Display of time state

The above state column of the main menu as shown above shows the current time and date.

4.2.2 Partition status display

Display the working state of each partition on the partition button such as partition name, the current task. When the paging selector is connected to the system host, the partition button displays green, when it is not connected, the partition button displays gray.

The partition status is indicated by the color: 1. Gray, indicating that the partition is not connected ; 2. green, indicating that the partition has been connected, but the paging selector does not operate on it; 3. pink, the paging selector is paging on its partitions; 4. Red, this partition is occupied, and the paging selector is unable to operate it.
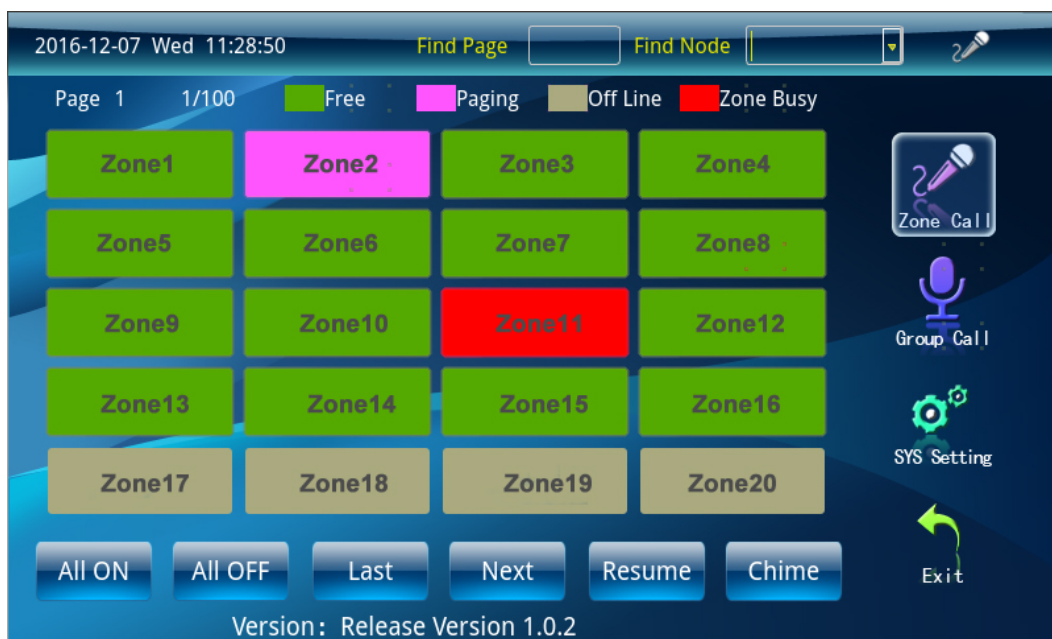
4.2.3 Partition paging operation

Carry out paging operation on partitions:

➢ Firstly touch the "partition page" icon on the upper right corner of the main menu (the selected

"partition page" button displays the white side), then touch the partition button that gives paging to select the partition (the selected partition turns pink), and then touch this partition to end the paging (the color changes to green).

➢ When paging all partitions, firstly select the "partition page" button on the upper right corner, then touch the "partition fully-open" to page all partitions, then touch the "Partition Off" button to stop paging.

Note: After paging, touch the small microphone icon [icon] in the upper right corner, the microphone will be turned on, the small icon will turn green, and then touch again to close it. When the partition is fully open, the microphone will be opened. When the partition is fully closed, the microphone is turned off.

4.2.4 Grouping state display

Four grouping states, as shown below:

4.2.5 Grouping Paging Operation

Grouping paging operations:

➢ Touch the "Group paging" icon in the upper right corner of the main menu (the selected "partition page" button displays the white side), then touch the corresponding group button to start the page. Touch the packet again to stop paging and let the paged groups resume the state before the paging operation.

➢ To page all groups, first select the "Group Paging" button on the upper right corner, then touch the "Group fully –open" button to select all groups to start paging. Touch the "Group fully-closed" button to stop paging.

Note: After paging, touch the small microphone icon [icon] on the upper right corner, the microphone will be turned on, the small icon will turn green, and then touch again to close it.

4.2.6 **Other operations**

The "Page up" "Page down" buttons control the page up and down of "partition paging", "group paging".

The "State Recovery" button means to return to the previous state.

"Bell" button, the bell audio output (select the bell I, II, III on the system setting)

In the main menu, touch ⬑ icon to exit the main menu, return to the power-on password input window.

4.3 System Setting

Touch the "system setting" icon on the main interface to enter the system setting window, which is displayed as follows:
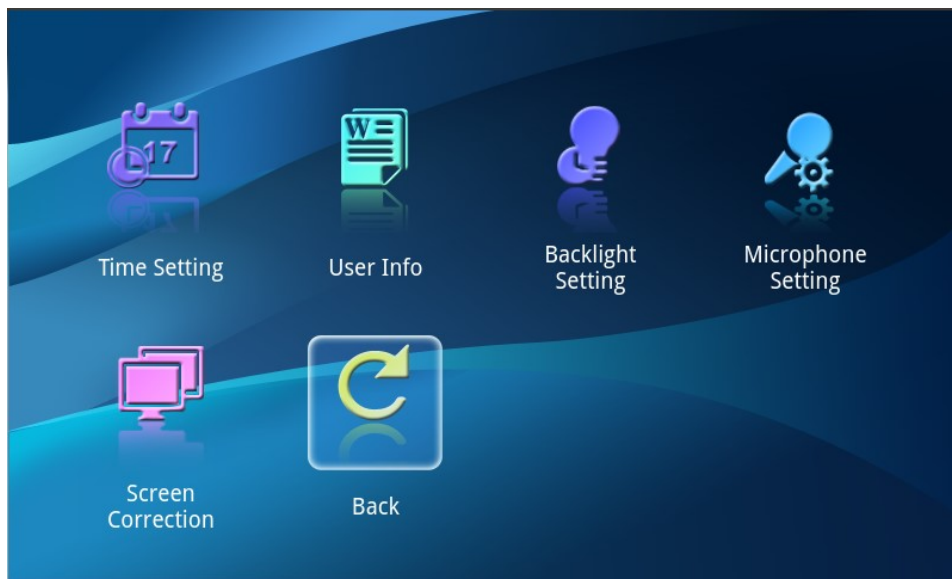
System Setting Window

The system setting window includes the following options:

  Time setting: set the system time and date;

  User information: set the password, partition name and group name;

  Backlight time: set the backlight time for the paging selector;

  Microphone setting: Set the time when the microphone of the paging selector is automatically turned off;

  Bell setting: Select the bell.

  Return: return to the main menu.

4.3.1 Time Setting

  Enter the "System Setting" menu, touch the "Time Setting" icon to enter the system time setting window. Set the time and date of the current system on the window.

➢ Touch the small white triangle in the number box when setting, to adjust the digits.

➢ After setting, touch the "OK" button to confirm and exit the setting window; if you touch the "Return" button rather than the "OK" button to exit the setting window, this operation will not change the time and date set previously.
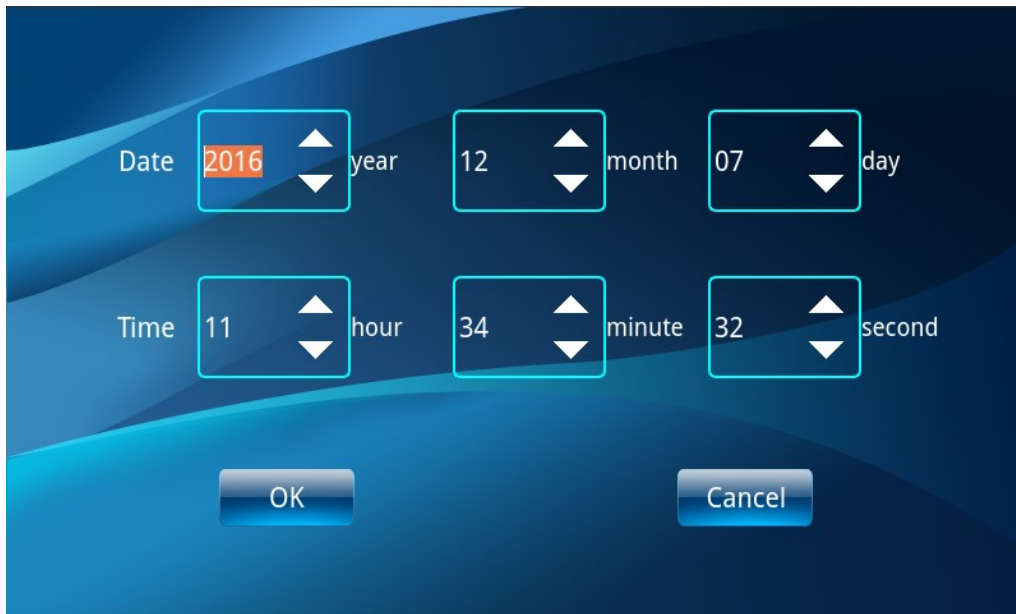
4.3.2 User Information

Go to the "System Setting" menu, touch the "User Information" icon to enter the user management interface.

➢ Default a user "admin", with the initial password "123456".

➢ The initial password can be modified. Select the user name, enter the password, and then enter the new password twice, touch "OK" to modify the password.

➢ Users can self define the partition and group name, and restore the default name after self-defined.

For example: modify the name of "partition 1" to "Grade One", firstly check the partition setting, enter the "1" in the partition name, enter "Grade One" in the partition name, then click "set partition name" button to save it. If you want to restore it, the partition name is empty, click to set the partition name, you can restore it. The grouping setting process is the same.

➢ Click to restore all partitions and all groups, all self-defined partition names and group names become the default values.

4.3.3 **Backlight time**

Go to the "System Setting" menu, touch the " backlight time" icon to enter the backlighting time setting interface.

➢ Touch the lighting time value or the circle at the front of the "normally on" state, when the circle becomes white and displays "√", it indicates selected. If you do not carry out any operation on the paging selector within the selected time, the display backlight will turn off automatically, which can save energy and extend the life of the display.

➢ After setting, touch "OK" button to confirm and exit the setting interface, or directly touch "Back" to cancel the setting and exit the setting interface.

4.3.4 **Microphone setting**

Go to the "System Setting" menu, touch the "Microphone Setting" button to enter the microphone auto-off time setting interface.

➢ Touch the time value or the circle at the front of the "normally on" state, when the circle becomes white and displays "√", it indicates selected. If there is no signal input for the microphone within the selected time, then the microphone and the paged partitions of the paging selector will be turned off automatically.

➢ After setting, touch "OK" button to confirm and exit the setting interface, or directly touch "Back" to cancel the setting and exit the setting interface.

4.3.5 **Bell setting**

Go to the "System Setting" interface, touch the "bell" button to enter the bell selection options.

➢ Touch the circle in front of "Bell 1", "Bell 2" and "Bell 3", when the circle becomes white and displays "√", it indicates selected.

➢ Touch the "OK" button to save and exit

Touch the " ⟳ " to exit the system setting interface in the "System Setting" menu and return to the main menu.

VI. Packing List

No.	Item	Quantity
1	EVA foot pad (black)	4 p
2	Microphone	1p
3	9-pin network serial port line	1p
4	1.5-m audio line with RCA plug	1p
5	Manual	1p
6	Certificate of conformity	1p
7	Warranty Card	1p

VII. Specification

Item	Value
Rated output voltage	1.0±0.2V
MIC Input Sensitivity (Output 1V)	50±10mV
MIC distortion (1kHz / 1V)	MIC：≤0.2%
Effective range of MIC gain limits (± 3dB)	100-12000Hz
MIC SNR (30k low pass)	≥68dB
MIC AGC starting control threshold	600±50mV
AUX Input Sensitivity (Output 1V)	300±50mV
AUX distortion (1kHz / 1V)	AUX≤0.2%
AUX SNR (30k low pass)	≥75dB
Effective range of AUX gain limits (± 3dB)	35-20000Hz
AUX dynamic range	≥26dB
Operating voltage range	AC180-240V
Standby power consumption	14.5W
Power supply	AC220V（±10%）/50Hz
Total power consumption	22W
Outer packing size (L × W × H mm)	415×285×160
Machine size (L × W × H mm)	290×180×77
Gross weight	3.4kg
Net weight	2.4kg

V. Precautions for use

1. Precautions for safety in use

- Before connecting the system line properly, don't insert the power plug of this equipment into the grid.
- Ensure the voltage input to the equipment shall be fully consistent with the voltage of this equipment to prevent the risk in the burning of the equipment.
- There is the hazardous voltage in the machine, which is sufficient to cause the electric shock to the person. Please do not open the machine cover without authorization to prevent the hazard of electric shock.
- In the event that the power supply to this equipment is turned off, the machine is not fully disconnected with the power supply of the grid. For the purpose of safety, please pull the power plug out of the socket when the equipment is not in service.
- Please do not put the equipment in the extremely cold or hot place.
- Ensure the good ventilation in the working environment of the equipment, to prevent the damage to the equipment due to the heating in working and excessively high temperature.
- In the rainy and humid days or if the machine is not in service for a long term, please pull out the power plug.
- Before removing or reassembling any part of the equipment, disconnecting or reconnecting any electrical plug or other connections of the equipment, be sure to pull out the power plug to ensure the full disconnection of the equipment with the grid.
- In case of any fault in the equipment, the non-professional person shall not disassemble the housing for repair without the approval, in order to prevent accident or aggravate the damage to the equipment.
- Do not put any corrosive chemicals nearby or on the equipment.

2. Precautions for after-sales service

- In case of the installation and operation according to this instruction, the company will provide the free warranty service (Including replacement of parts free of charge) for any problem in the normal operation for three years since the date of purchase.
- In case of the warranty, the user shall show the user's voucher of warranty card and the invoice as the certificate.
- In any of the following cases, the free warranty shall not be applicable:
  1. In any of the following cases, the free warranty shall not be applicable:
  2. The damage to the product due to the abnormal conditions (e.g. excessively high power voltage or ambient humidity);
  3. The damage to the product due to natural and man-made disaster and other accidents;
  4. The number on the product body is changed, altered or removed;
  5. The product has been repaired or refitted by the person other than those authorized by the company;
- Please keep the operation instruction and warranty card properly.
- For the issue or matter not covered herein, please contact the distributor or visit http://www.lyintlcorp.com.
- In case of any fault occurred during the period of warranty, please contact the service personnel of our company (or distributor); our company will not take responsibility for the damage due to the unauthorized disassembly or the repair by the person other than the technicians of our company.