

USER MANUAL



VOICE EVACUATION & PUBLIC ADDRESS SYSTEM

VA-6ZRM

Thanks for using ITC Voice Evacuation& Public Address System.
For better operation, please read this manual carefully before operating the system.

Notification



WARNING

To ensure the reliability of the equipment and the safety of personnel, please observe the following when installing, using and maintaining:

- If any of the following conditions are found, please immediately turn off the power, plug out and quickly contact your nearest dealer. Do not continue using this unit, which may cause a fire or electric shock.
 - If you find smoke or have a strange taste from the machine.
 - If water or metal falls into the machine.
 - If the unit is dropped or the case is damaged.
 - If the wire is damaged (wire core exposure, broken wire, etc.).
- If the machine contains high-pressure parts, in order to avoid the fire or electric shock, absolutely don't open the case, if any questions please inform your nearest dealer.
- Do not place cups, bowls, vases or metal and other water-filled substances on the unit. Serious spilled liquid may cause a fire or electric shock.
- Never expose the unit to rain and any moisture or water, which may cause electric shock or fire.
- Do not place metal objects or flammable materials from the vents on the machine cover, nor place coins, which may cause fire or electric shock.
- Do not place heavy objects on the unit to avoid personal injury or property damage when the unit is slipping.
- Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.
- Make sure that the volume is turned on at the beginning of the boot, and the high volume of the boot may cause hearing problems.
- For long-term accumulation of dust to be cleaned, please inform your dealer to regularly clean the machine, so as to avoid damage to the machine or cause a fire.
- The battery must be replaced with the same type of product and the correct installation should be made in order to avoid electrical damage and explosion hazard.
- The product is a Class III device. The device must be well connected to ground. The power plug must be connected to a power outlet with a grounding device to ensure that the equipment is fully grounded.
- This product uses a power plug or appliance input socket as a disconnecting device with the power supply, and must be disconnected if necessary for safety reasons.



- This equipment is only suitable for safe use at altitudes under 2000 meters.

Precautions

1. The installation environment

When installing the unit, in order to ensure the normal cooling of the host, should avoid the poor ventilation of the place or high temperature environment, to avoid direct sunlight.

Recommend to install cabinet or other well-ventilated place indoor. If you use the machine in the outdoors, please pay attention to waterproof, moisture, lightning protection measures.

Avoid installing in a violent place of vibration; do not place other equipment on the machine.

Working temperature : +5°C~ +40°C.

Humidity is limited to 5% to 90% (non-condensing).

2. To avoid electric shock and fire

Do not touch the hands and the source with wet hands

Do not spill liquid on the machine, so as to avoid short-circuit or fire inside the machine.

Do not place other equipment directly on the top of the unit.



Non-professional service personnel Do not disassemble the unit yourself to avoid damage and electric shock.

3. Transport and handling

The packaging of the machine is designed and tested to ensure that the host will not be accidentally damaged during transport. It is best to use the original packaging when handling the unit.

Do not move the host device between the place or cold or over hot to avoid condensation inside the machine, affecting equipment life.

4. Please follow the warning instructions on this product, the warning signs on behalf of:

	Applicable to 2000 meters above sea level and below safe use
	Safe use only in non-tropical climates

5. Agreement

Please strictly follow the instructions in this manual. The software, hardware and appearance of this product will be upgraded and updated continually. The above changes will be made without notice.

Non-professional maintenance personnel, do not remove the product, to avoid damage and electric shock.

Contents

1. Product picture	5
1.1 Product picture.....	5
2. Introduction to features	6
2.1 EVAC-6RM Features.....	6
2.2 Main technical parameters.....	7
3. Panel function instruction	9
3.1 Front panel function instruction.....	9
3.2 Rear panel function description.....	11
4. Instructions	12
5. Online upgrade instructions	13
Accessories: DIP switch table	14

1. Product picture

1.1 Product picture

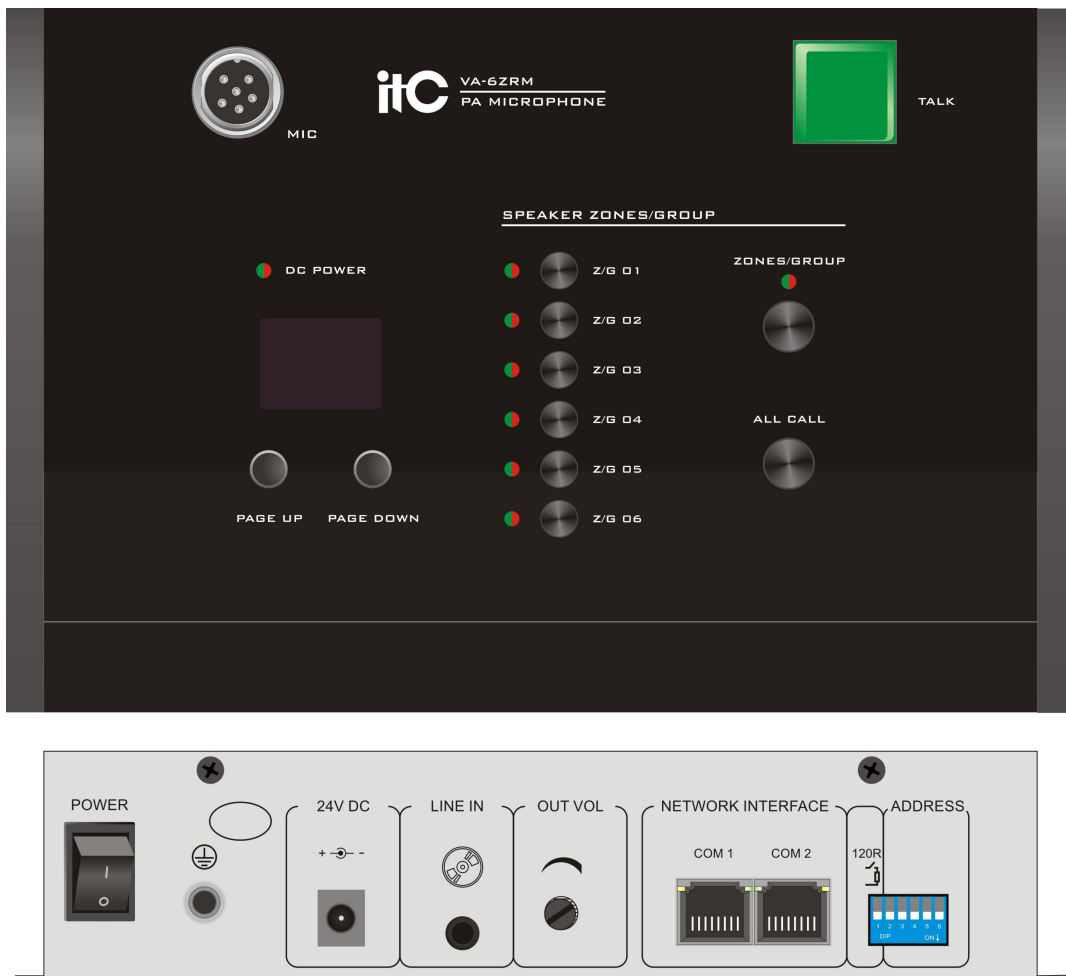


Figure 1- 1VA-6ZRM Product picture

2. Introduction to features

2.1 EVAC-6RM Features

- ◆ Support 160 zones, 6 groups paging
- ◆ Support configuring any zone to any group
- ◆ Support paging to any zone of any controller.
- ◆ Supports mix output / microphone priority output and adjustable output volume.
- ◆ Support device paging priority configuring.
- ◆ Support real-time display of zone status
- ◆ Support 24 DC power supply, POE power supply;
- ◆ Support online upgrade
- ◆ Supports max. 32 remote microphones

2.2 Main technical parameters

Electrical indicators

① Power supply

- ◆ 24V DC power supply
- ◆ 24V power supply through network interface

Performance

① Analog audio

✧ MIC. input

- ◆ Sensitivity 10MV \pm 1mV
- ◆ Frequency 200Hz ~ 10KHz
- ◆ Input impedance 1k Ω

◆ LINE unbalanced line audio input

- ◆ Sensitivity 775MV \pm 50mV
- ◆ Frequency 80Hz ~ 16KHz
- ◆ Impedance 10k Ω

✧ Balance line output

- ◆ Range 1000MV \pm 50mV
- ◆ Distortion <0.3%, 1KHz
- ◆ Frequency 80Hz ~ 16kHz
- ◆ Output impedance 470 Ω
- ◆ SNR > 60dB

② Communication

✧ CAN interface

- ◆ Remote MIC console CAN interface
- ◆ Baud rate 100Kbps
- ◆ Supports max.32 remote MIC consoles

③ Mechanical indicators

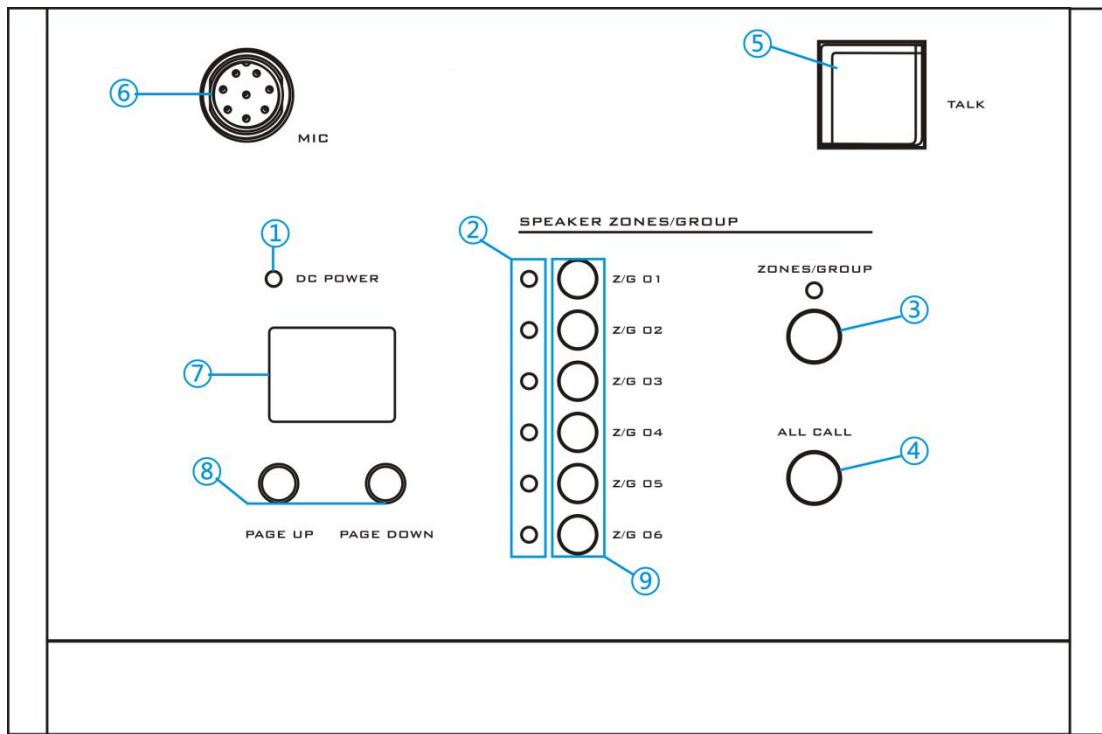
- ◆ Size (L × W × H) mm
- ◆ Net weight Aaround 1.1 Kg
- ◆ Installation desktop or 19-inch cabinet
- ◆ Color black

④ Environmental requirements

- ◆ Operating temperature +5 °C ~ +40 °C
- ◆ Storage temperature -20 °C ~ +70 °C
- ◆ Relative temperature <95%

3. Panel function instruction

3.1 Front panel function instruction



Front panel design sketch of VA-6ZRM

1. Panel indicator light

① Power indicator (DC POWER)

- Green: Normal input voltage
- Light is out: Unusual input voltage

② Zone grouping status indicator (Z/G)

- Green light normally on: Zone/Group output normally
- Green light flashing: Zone/Group in selected status
- Red light normally on: Zone in emergency/evacuation status.
- Yellow light flashing: Zone in short-circuit status.
- Yellow light normally on: Zone in open-circuit status
- Light is out: No output from Zone/Group

③ Zone/Group selected mode indication (ZONE/GROUP)

- Green light normally on: Zone mode

- Light is out: Zone mode
- Green light flashing: on-line upgrading mode
- Red light flashing: on-line upgrading failed

④ **Selecting all zones (ALL CALL)**

- Grouping mode: cancel/select the corresponding 6 groups of the main controller.
- Zone mode: cancel/select the associated with 6 zones of the main controller.

⑤ **Paging indicator (TALK)**

- Green light normally on: normal remote paging
- Green light flashing: The priority level of the current device is too low to page.
- Light is out: The device is in stand-by status

⑥ **Gooseneck microphone indicator**

- Green light normally on: Stand-by status
- Green light flashing: failed to race to control the paging microphone
- Red light normally on: Normal working in zone broadcasting
- Red light flashing: The current associated main controller is playing emergency audio source.
- Red light and green light flashing in between: device in self-inspection

⑦ **Nixie tube display**

- When nixie tube displays “1-20”, it means the current microphone associated with the selected main controller number.
- When nixie tube displays “Er”, it means the current device is not in the system configuration.
- When nixie tube displays “Al”, it means the current device is selected with all-zone mode.
- When nixie tube displays “88”, it means the current device is in self-inspection.
- When nixie tube displays “--”, it means the current device is in on-line upgrading status.

⑧ **Set up associated main controller keys**

⑨ **6 zone/group selecting keys**

3.2 Rear panel function description

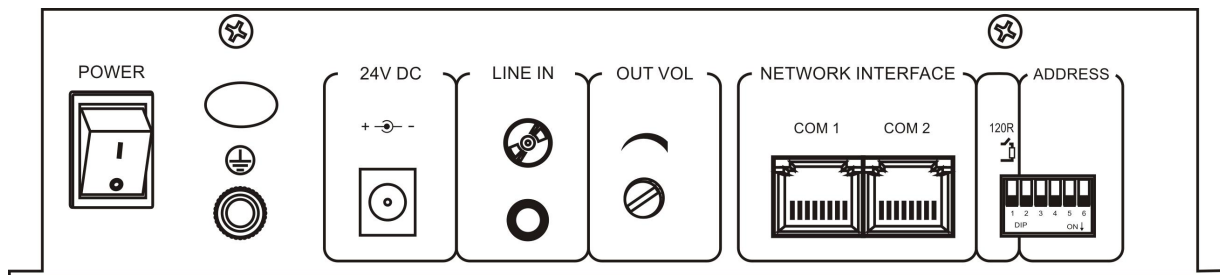
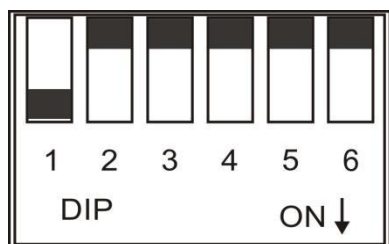


Figure 4- 2VA-6ZRM Rear panel renderings

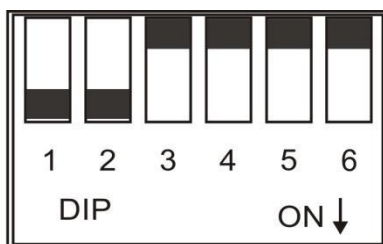
- ① Switch
- ② Grounding post
- ③ DC voltage input
- ④ Line sound source input
- ⑤ Output volume adjustment
- ⑥ CAN communication network port
- ⑦ DIP setting: (up: enable down: off)

PIN1: Can communication match resistance switch

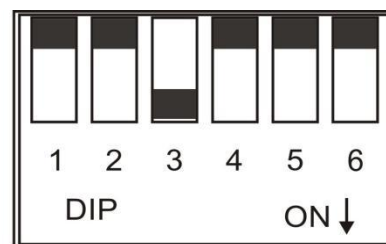
PIN2 ~ PIN6: Device address code set, using binary code address.



The device address code is 1
CAN communication match
resistance is open



The device address code is 2



The device address code is 3

4. Instructions

1. In standby mode, users can associate with any host (host ID number: 1-20) through the panel **【page up】** , **【page down】** key settings. In zone / group paging mode, default partition mode, if selecting group mode, the group indicator light is green.
2. According to selected group/zone mode, users can click to select 6 group/zone. After selecting, the corresponding group/zone indicator will turn green and flash. After pressing the panel paging button, the remote microphone make judgments to line output according to users 'operation, long press to select the line output, short press to select the microphone output. If the paging is successful, the corresponding group / zone indicator is green, indicating that the currently selected group/ zone have normal paging output. That paging button is green means the device is paging.
3. If the corresponding partition is currently playing other audio sources, and the audio source has higher priority than the microphone, when the page button is pressed, the corresponding partition indicator is off, and panel paging indicator, gooseneck microphone indicator turn green and flash, then the microphone paging is unsuccessful.
4. During paging, if the selected partition is preempted by other higher priority devices, the microphone paging button indicator will be automatically extinguished, and the paging status is exited at the same time.
5. If you need whole area paging, through the panel **【page up】** 、 **【page down】** button to associate with area selection, then panel digital displays **【AL】** , press the green paging button, you can page the whole area.
6. When the device enters the paging state, the microphone indicator light is green. After the paging is completed, press the paging button again to automatically turn off the paging state, the paging indicator is off, the microphone indicator is green, and the group / zone indicator is synchronized to the associated host.

5. Online upgrade instructions

1. After making sure the cable connection between computer and controller is correct, start the controller, to check whether the computer and controller communication is normal by ping controller IP address (default IP: 192.168.1.253), if found abnormal communication, please modify the computer IP address and controller IP address to the same network segment.
2. Open the TFTP software, set the following parameters:

Controller: Fill in the controller IP address: 192.168.1.253 (default IP address)

Port: Fill in the port number: 69

Local File: Select the path where theVA-6ZRM.bin file is located (please do not change the file name), then click the [Put] button to upload the file to the controller.

3. After completing the above steps, connect theVA-6ZRM to the controller, turn on the controller, re-power theVA-6ZRM ,VA-6ZRM will automatically enter into the upgrade state and upgrade process, the panel indicator flashes indicate the current update progress, and the group indicator light flashes means upgrade is completed; when 6 indicator lights all bright on panel, then the device will automatically restart, upgrade is completed!

Note: If the upgrade process is failed due to various reasons, the panel partition / group red indicator light flashes, lease check whether the upgrade file has been uploaded to the controller, and make sure that the remote microphone is in good communication with the controller. If the above 2 points confirmed no problem, please press the panel paging button to restart the remote microphone, when the green paging light is on, release the paging button, the microphone will automatically enter into the upgrade mode, to re-upgrade.

Accessories: DIP switch table

Address code table (Address Code Description: Dial up: 0 Dial down: 1)					
PIN2	PIN3	PIN4	PIN5	PIN6	MIC_ID
0	0	0	0	0	1
1	0	0	0	0	2
0	1	0	0	0	3
1	1	0	0	0	4
0	0	1	0	0	5
1	0	1	0	0	6
0	1	1	0	0	7
1	1	1	0	0	8
0	0	0	1	0	9
1	0	0	1	0	10
0	1	0	1	0	11
1	1	0	1	0	12
0	0	1	1	0	13
1	0	1	1	0	14
0	1	1	1	0	15
1	1	1	1	0	16
0	0	0	0	1	17
1	0	0	0	1	18
0	1	0	0	1	19

1	1	0	0	1	20
0	0	1	0	1	21
1	0	1	0	1	22
0	1	1	0	1	23
1	1	1	0	1	24
0	0	0	1	1	25
1	0	0	1	1	26
0	1	0	1	1	27
1	1	0	1	1	28
0	0	1	1	1	29
1	0	1	1	1	30
0	1	1	1	1	31
1	1	1	1	1	32

itC

Version: 0.1