

# EMIX

## OPERATIONAL MANUAL

**EMKP-8001**

**180 Zones Paging Microphone**



## **Product Overview**

The **EMKP-8001** is a 180 zones digital paging microphone. As the name digital paging microphone, EMKP-8001 operates digitally. On each paging microphone it is possible to select 180 zones with the possibility to connect up to 30 paging console by using single CAT-5E extension cable. Through a 4X20 characters LCD panel on top of the paging console is used for showing more reliable information such as selected zone, type of chime, priority and other user is on call on the moment. Furthermore, this EMKP-8001 equipped with a cardioid condenser microphone which offers minimum sensitivity at an angle of 180 degrees, reducing pick up of sounds from the rear. It's also tightly controlled unidirectional polar pattern provides excellent ambient noise control allowing the wanted speech stand out from the background of noisy confusion and features selectable microphone gain output. Because the digital paging console provides a balanced line level output, it can be positioned up to 1.2KM away from the zone selector.

## **Features.**

- Built-in microchip controller compile all the features into a single device
- A LCD 4 X 20CH with blue back light to display system status, zones settings and grouping function
- Simple keypad layout make operation simple and user friendly
- Appropriate for a system less than 180zones.
- Allowed data communication distance up to 1.2KM.
- Instead of analogue system, digital system can avoid complicated hardwire configuration by using single CAT5E cable which carrier balanced audio signal, power and data.
- Built-in 8 type of chime with volume gain at the bottom of the console.
- Preset call duration limit from 1 to 10minute to avoid accidently pressed or overlook after used.
- CALL function either can be set in toggle or momentary mode (Press-To-Talk).
- One touch emergency button to override the entire paging console during emergency.
- 9nos of grouping can be saved and recalled from the internal memory.
- By pressing the Synchronize button and send all the setting to other EMKP-8001 except priority level.
- Cardiod condenser microphone with tightly controlled unidirectional polar pattern provides excellent ambient noise control allowing the wanted speech stand out from the background of noisy confusion.
- Adjustable Microphone sensitivity at the rear of the microphone.
- Easily being integrated with EMIX range public address equipment.

**Top View and Rear View**

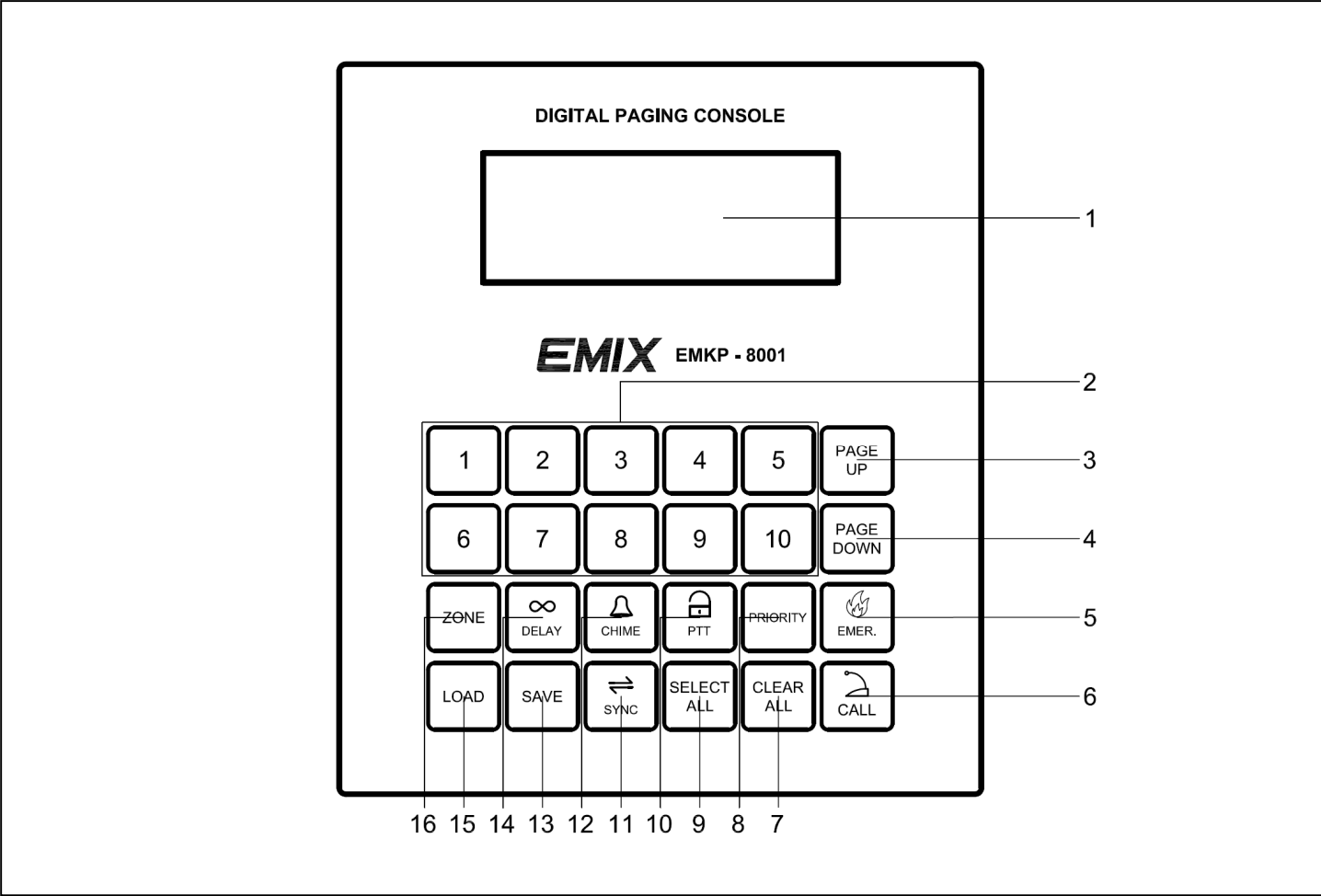


Figure 1.1 Top view of the digital paging console

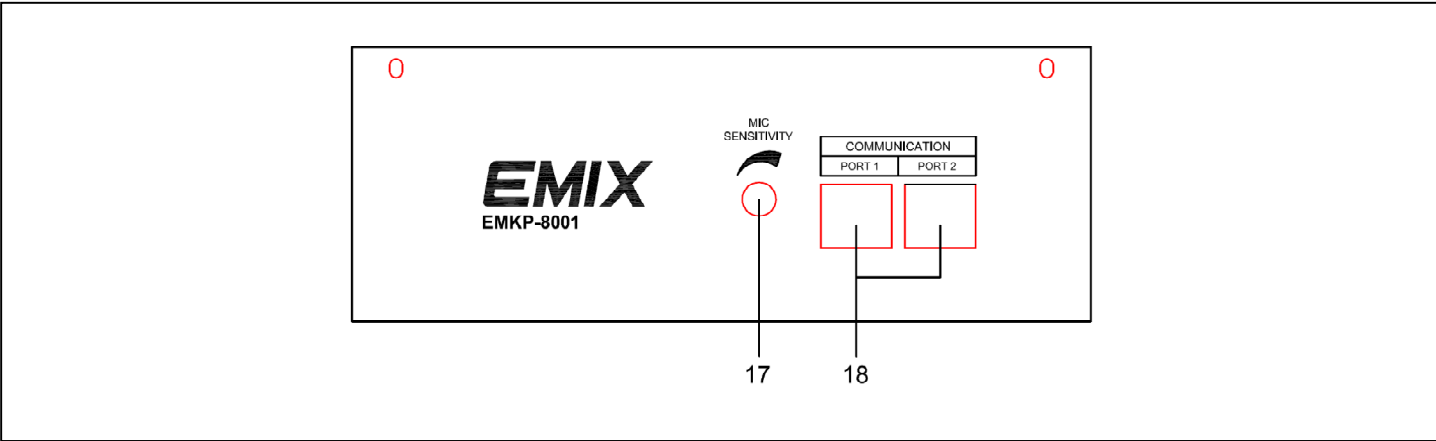


Figure 1.2 Rear view of the paging console

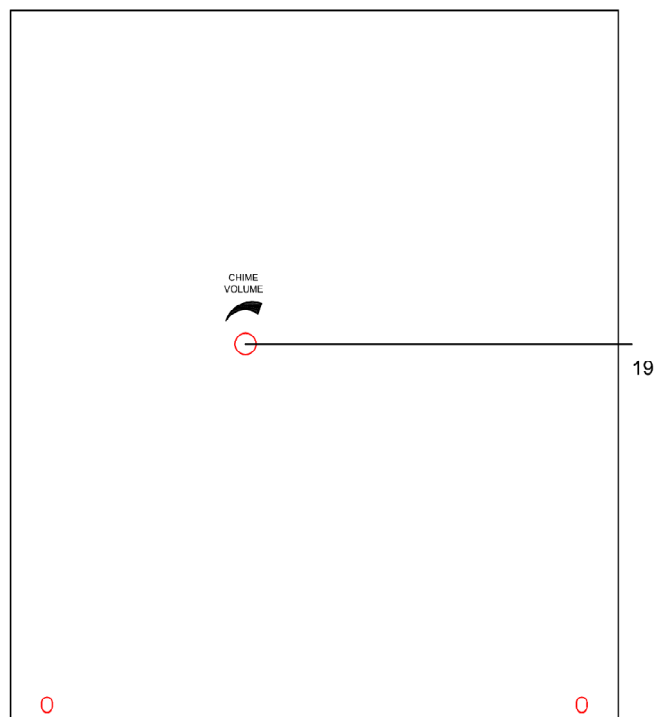


Figure 1.3: Bottom view of the Digital Paging Microphone

## **Keypad and Rear Panel Indication**

### **EMKP-8001 Digital Paging Microphone**

#### **1.1 Keypad Indicator**

- 1     **LCD Display** – 4 X 20 Characters LCD to display system status & message easy for reading. Zones setting and zone grouping are displayed in multi pages for easy viewing
- 2     **Keypad** – The large 24 labeled matrix buttons make operation simple & user friendly.
- 3     **Page Up** – Navigation key for page menu and configuration selection. For example, current page is zone 11 to zone 20, after button pressed will be switched to zone 1 to zone 10. For configuration selection, the menu will be switched reversely when button pressed.  
Used as primarily (next page) as parameter setting button too.
- 4     **Page Down** – Navigation key for page menu and configuration selection. For example, current page is zone 1 to zone 10, after button pressed will be switched to zone 11 to zone 20. For configuration selection, the menu will be switched forwardly when button pressed.  
Used primarily (previous page) as parameter setting button too.
- 5     **Emergency** – To activate immediate paging. When button pressed, all zones will be selected automatically.
- 6     **Call** – To activate paging after zone selection. Used as primarily (Enter) as parameter setting button too.
- 7     **Clear All** – To clear all selected zone.
- 8     **Priority** – To enter priority setting menu.
- 9     **Select All** – To select all zones.
- 10    **PTT** – To enter paging mode configuration. 2 configurations are included which is Push to Talk (momentary) mode and Toggle mode (Push to on & push to off).
- 11    **Synchronize** – To synchronize group memory or device setting.
- 12    **Chime** – To enter chime configuration. 7 types chime configuration included.
- 13    **Save** – To save zones group. Maximum 10 setting can be saved.
- 14    **Delay** – Delay (Paging countdown timer) is an added feature which able to prevent unwanted paging. User might not deactivate the device after paging and this causes unwanted paging. By setting Delay, the device will automatically deactivate when the delay period is time out.
- 15    **Load** – To load saved zones group. Maximum 10 setting can be loaded.

- 16     **Zone Selection** – To select zone within every page menu. 1 page contain 10 zones for example 1<sup>st</sup> page is zone 1 to zone 10, press **Page Down (3)** will be next 10 zones **e.g.** zone 11 to zone 20.

## **1.2 Rear Panel indicator**

- 17     **Mic sensitivity** – To adjust microphone sensitivity.
- 18     **Communication Port** – This RJ45 socket accepts the CAT5 straight cable connected to EMZS-8006 6CH speaker zone selector and EMZS-8012 12CH speaker zone selector. It also can be linked to extension unit.

## **1.3 Bottom Panel indicator**

- 19     **Chime Volume** – To adjust the chime volume.

## 2.0 Installation Diagram / Schematic Diagram

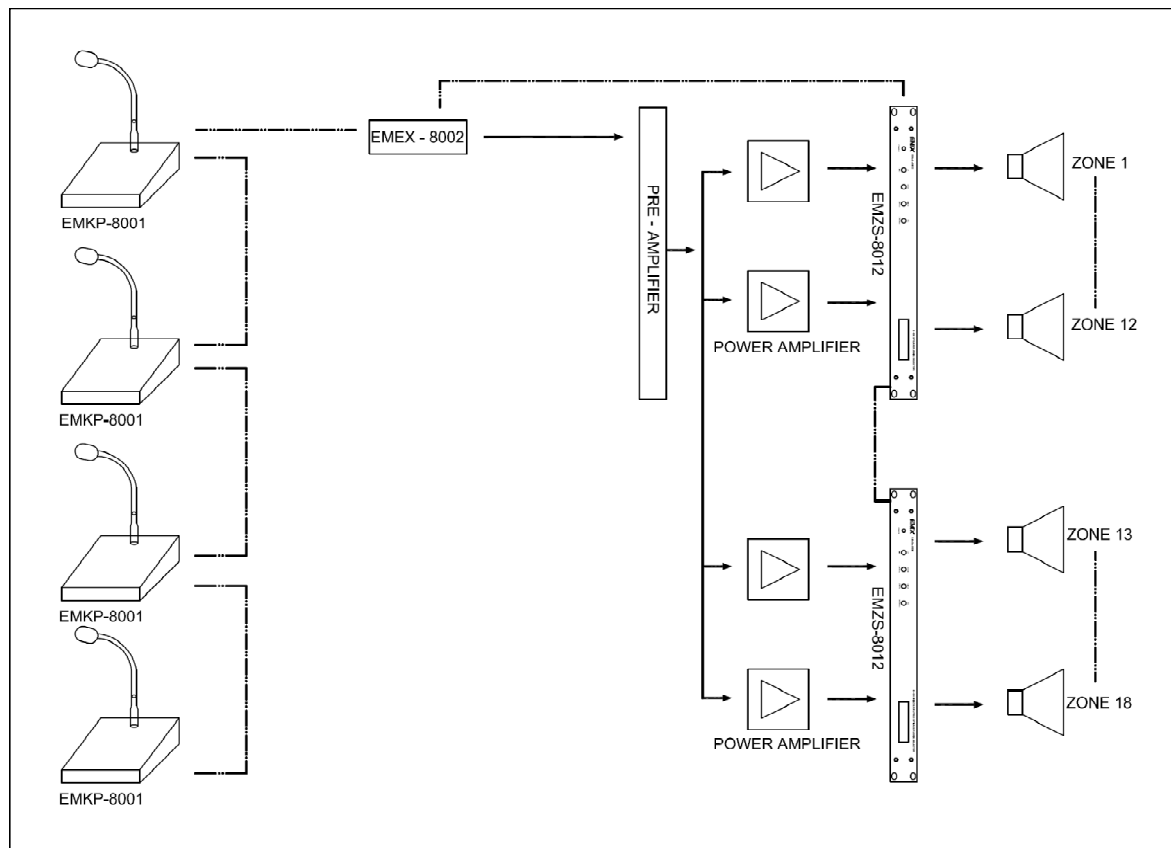


Figure 1.3: There are 4nos of 180zones paging console connected up with 2nos of 12CH Zone selector EMZS-8012 through RJ45 to line converter. All of the paging consoles have a loop through connection from the last paging console to zone selector. From the single line shown above, there is total 7nodes taken up for the system.

👉 Notes: Maximum 32nos nodes can be connected up.



### 3.0 Unit Setup - Zone configuration

Press **Zone** button to enter zone setting menu as below:-



Figure: Zone setting. By default, number of zone is set to 180 zones.

Press **Page Up** or **Page Down** button to select total usage number of zone in the system

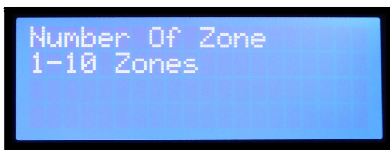


Figure: **Page Down** button pressed



Figure: **Page Down** button pressed again

Once total number of zone is confirmed, pressed **CALL** button (Enter)



Pages & Number of Zone:

Page 01 : 1-10 Zones

Page 02 : 11-20 Zones

Page 03 : 1-30 Zones

Page 04 : 1-40 Zones

Page 05 : 1-50 Zones

Page 06 : 1-60 Zones

Page 07 : 1-70 Zones

Page 08 : 1-80 Zones

Page 09 : 1-90 Zones

Page 10 : 1-100 Zones

Page 11 : 1-110 Zones

Page 12 : 1-120 Zones

Page 13 : 1-130 Zones

Page 14 : 1-140 Zones

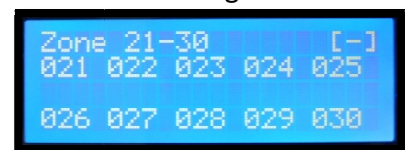
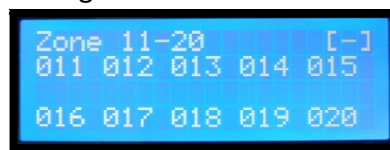
Page 15 : 1-150 Zones


Page 16 : 1-160 Zones

Page 17 : 1-170 Zones

Page 18 : 1-180 Zones

You are able to view total 3 pages of zoning from zone 1 to zone 30 after chosen as the diagram shown above

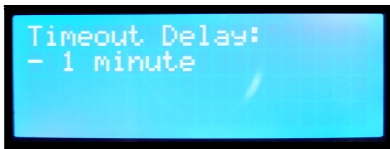


 Notes: This setting must be done to reduce the hassle of too many pages exists when operator making paging.

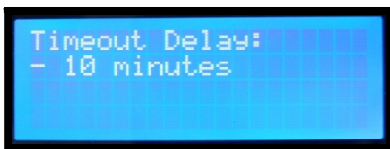
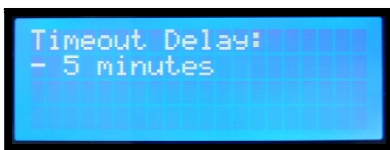
### 3.1 Unit Setup - Delay (Paging period timer) configuration

The purpose of setting up the timeout delay to prevent the microphone accidentally turned on and left unoccupied after an announcement has been made.

Press **Delay** button to enter delay period setting:



Press **Up** or **Down** button to select your timeout delay



👉 Notes: If no entry is made within 10seconds, the setup menu shall exit automatically and return to the front page.

Once confirm the Timeout delay setting press **CALL** button it will result as below:-



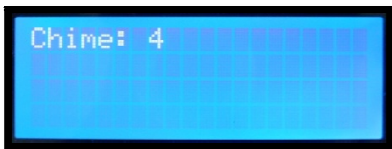
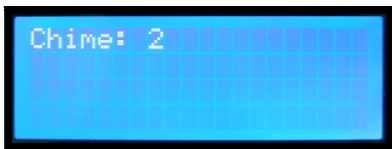
### 3.2 Unit Setup - Chime configuration

This unit has built-in 7 type of different chime, usually user given to choose their desire of chime through this menu.

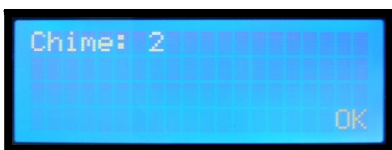
Press **Chime** button to enter Chime setting:



Press **Up** or **Down** button to select your desire chime.



Once confirm the chime setting by user, kindly press **CALL** button it will shown as below:-



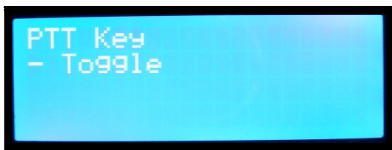
### 3.3 Unit Setup - PTT configuration

To select momentary (press to talk) or toggle press to on and press to off when the user used for paging.

Press **PTT** button to enter paging mode configuration:



Press **Up** or **Down** button to select your toggle or momentary when paging.



Once confirm the PTT setting press **CALL** button it will shown as below:-

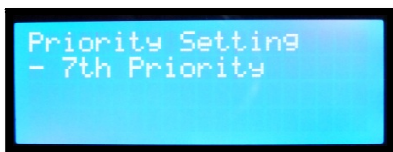
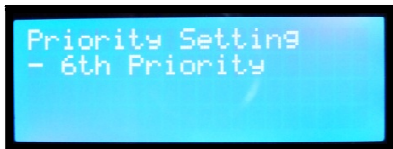
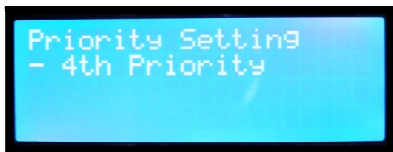
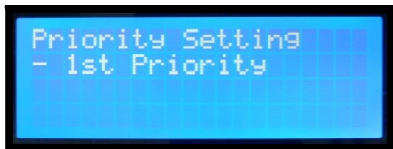


👉 Notes: Manufacturing default Setting will be always on Toggle mode where the user need to press the CALL button for paging and press the CALL button to end the calling.

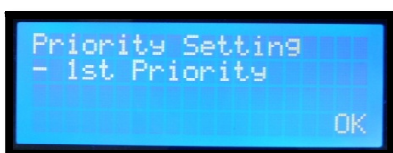
### **3.4 Unit Setup - Priority configuration**


This is to set the priority level of the paging microphone. Priority 1<sup>st</sup> is the highest while 7th is the lowest priority.

Press **Priority** button to set device priority:



Once confirm the Priority level setting press **CALL** button it will shown as below:-



 Notes: Manufacturing default Setting will be always set on 1<sup>st</sup> Priority Setting.

### 3.5 Unit Setup - Group SAVE setting

Zone grouping consider a pre-configured action which means user can select the require zone and group the selected zone together. enable easy access to a group of zone when paging.

Kindly select the preferred channel where you wish to get-together into same group.



Press [**Save** + no.1] button at the same time to save zones group as shown below to memory 1:



Which means Zone 01, 02, 03, 04 & 05 are grouped together in Group 1.

Press [**Save** + no.8] button at the same time to save zones group as shown below to memory 8:



👉 Notes: Repeat the step shown above to program other grouping.

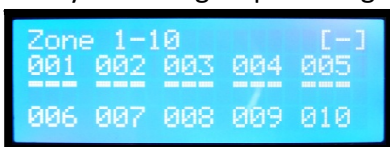
### 3.6 Unit Setup – Group LOAD setting

Zones grouping that had been grouped during the earlier stage and this can be recall back for paging purpose.

Press [**Load** button and no.1] at the same time to load saved zone groups from particular memory:



Kindly find the groups setting shown below which has been saved in memory 1.



After performing a load function from the paging console of recall from Group 1 consists of zone 1, 2, 3, 4 & 5, press the **CALL** button to perform paging.

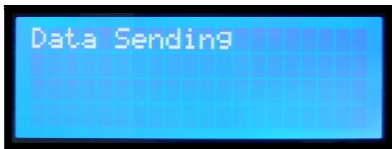
### **3.7 Unit Setup - Synchronize setting**

Press **SYNC** button to synchronize device setting with other devices. There are 2 different settings for user to select for synchronize:



Press numeric keypad [No.1 or No.2] to select which setting is wanted to be sending to another paging console.

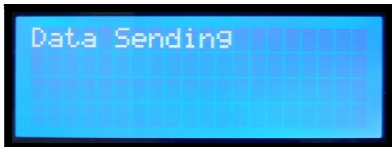
Press **No.1** button on the numeric keypad to synchronize group of zone for paging. The saved groups will be transfer to other linked up digital paging console



Example of application:-

All lobbies of different floors can be merged under single group to allow simultaneous paging to the entire floor.

Press **No.2** button on the numeric keypad to synchronize group of zone for paging. The saved setting such as Delay time, Chime type & PTT settings will be transfer to other linked up digital paging console.



#### **4.0 - Emergency (Immediate) paging**

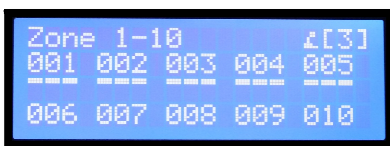
To do immediate paging, user has to press **EMERGENCY**. All zones will be automatically selected and paging will be activated once **EMER** button has been pressed:



👤 Notes: This is the highest priority, no matter what is your paging console priority level setting was set on the previous setting.

#### **4.1 Other - Paging Console**

Paging console priority no.3 itself is doing announcement through the digital paging console.



#### **4.2 Other - Paging Console**

When there is another paging console higher priority (no.1) than the current paging console making announcement through the system. This digital paging console LCD will show up a Funnel whereby the user does not allow to do calling or paging at this moment.





## **Technical Specifications**

|                        |  |
|------------------------|--|
| Input voltage          | 24VDC  |
| Max. Power consumption | 100mA  |
| Zoning Capacity        | >180Zones  |
| Data Communication     | RS485 protocol                                       |
| Input connectors       | Double RJ-45, via CAT-5 cable                        |
| Operation distance     | up to 1.2KM data communication                       |
| Chimes Settings        | 8nos type of chime selection                         |
| Display                | 4 x 20CH LCD with blue back light                    |
| Frequency response     | 100 Hz to 12 KHz                                     |
| S/N ratio              | >60dB  |
| Grouping Capacity      | 9nos groups, each group can be store up to 180 zones |
| Microphone             | Condenser Type                                       |
| Output impedance       | Audio signal Balanced, 600Ω                          |
| Output level           | Audio signal Balanced, 0-700mV                       |
| Output Dry contact     | N.A  |
| Output Gain control    | Chime volume & adjustable gain for Microphone        |
| Microphone length      | 400mm (excluded paging console)                      |
| Dimension (W x H x D)  | 400 x 105 x 230mm                                    |
| Gross Weight           | 1.75 kg  |
| Net Weight             | 1.6 kg   |

Only EMIX Technical Service Centers are allowed to make warranty repairs. Send the equipment directly to AV Electronics Marketing Sdn Bhd, or contact us for a list of Emix Technical Centers. This warranty is not valid if repairs are performed by unauthorized personnel or service centers.

This warranty covers only repairs and replacement of defective parts. Costs and risk of transportation as well as removal and installation of the product/equipment from the main system are to be borne by the purchaser. This warranty shall not extend to the replacement of the unit.

This warranty does not cover damages caused by misuse, neglect, accident of the products as well as using the product with power supply voltage other than shown on the product, or any other power supply source / adaptor not recommended by the manufacturer. This warranty does not cover damages caused by fire, earthquakes, floods, lightning and every cause not directly related to the unit.

This warranty does not include any indemnity in favor of the purchaser or the dealer for the period of use of the unit; moreover the warranty does not cover any damages which may be caused to people and things when using the products.

This warranty certificate is valid only for the described product, and is valid for a period of 12 months from the date of purchase or for a longer period in countries where this is stated by a national law. In this case, the extension is valid only in the country where the product is purchased.

AV ELECTRONICS MARKETING SDN BHD is not obliged to modify previously manufactured products under warranty if the design changes or improvements are made.

Information contained in this manual is subject to change without prior notice and does not represent a commitment on the part of the vendor. AV ELECTRONICS MARKETING SDN BHD shall not be liable for any loss or damages whatsoever arising from the use of information or any error contained in this manual.

It is recommended that all services and repairs on this product be carried out by AV Electronics Marketing Sdn Bhd or its authorized service centers/agents.

EMIX products must only be used for the purpose they were intended by the manufacturer and in conjunction with this operating manual.

AV ELECTRONICS MARKETING SDN BHD cannot accept any liability whatsoever for any loss or damages caused by service, maintenance or repair by unauthorized personnel, or by use other than that intended by the manufacturer.



Professional Public Address System

[www.emix.com.my](http://www.emix.com.my)