

# INSTRUCTION MANUAL

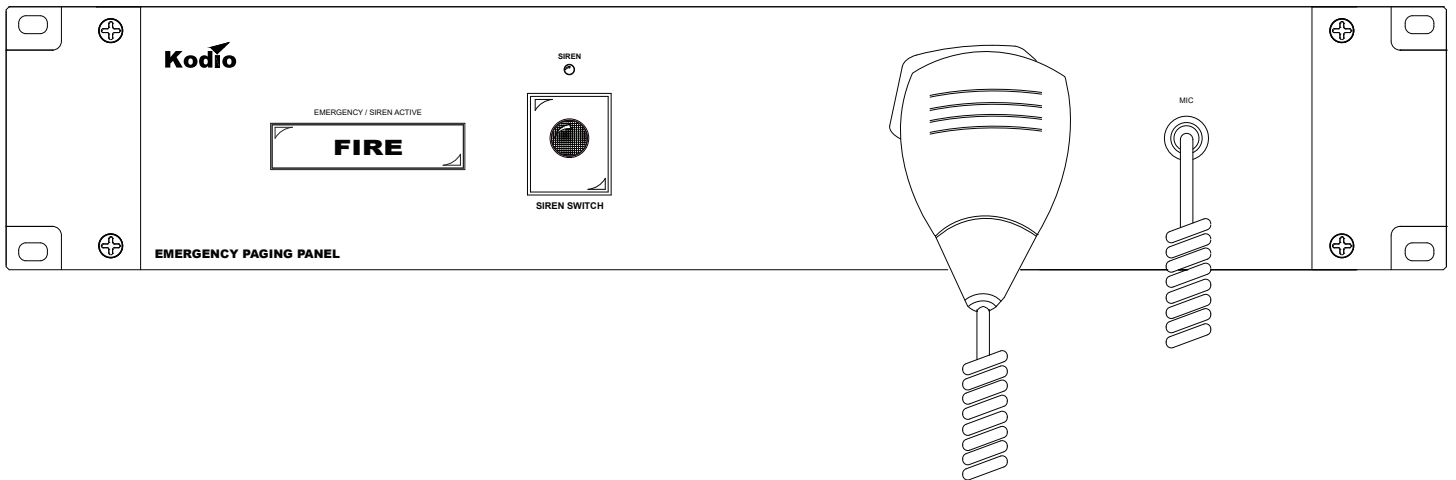
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# Kodio

## EM-5105

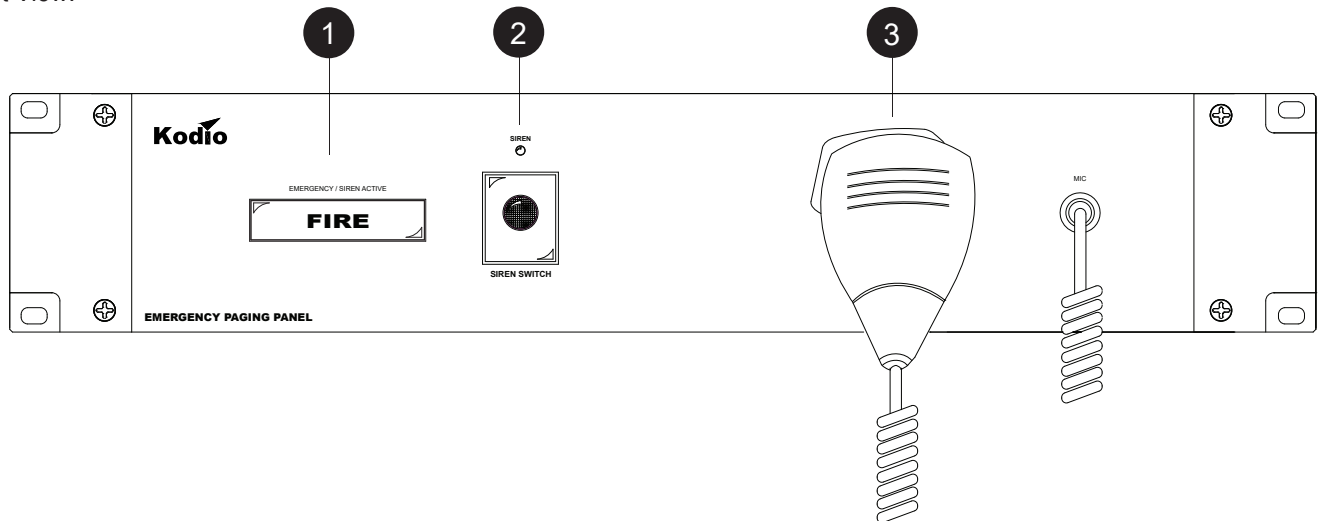
Emergency Paging Microphone Panel

IMPROVED 

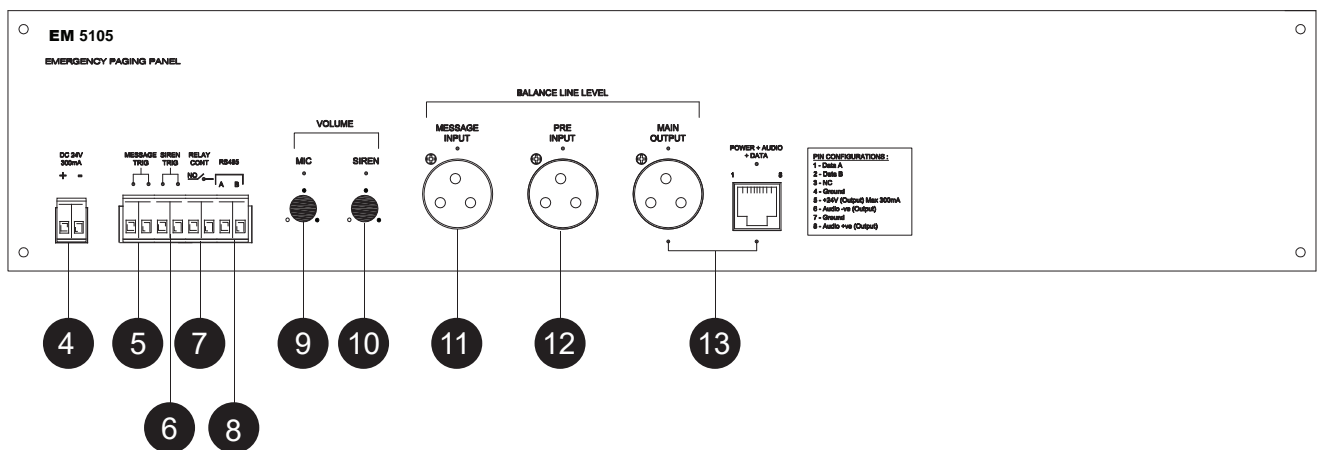


# Parts Identification

Front View:



Rear View:



## 1. FIRE INDICATOR

Whenever siren or external activation device is triggered, the FIRE indicator shall flash alongside with siren audio broadcast. Activate the paging microphone will also turn on the flashing.

## 2. SIREN SWITCH

Press the siren button shall activate the siren. FIRE indicator shall lit and the MIC switch relay contact (7) shall close. Press the siren switch again will turn Off the siren.

## 3. HANDHELD PAGING MICROPHONE

Pressing the microphone switch shall have priority over other inputs such as Siren, External Message input as well as normal paging or BGM feeds. To page, just pick up the handset, press the button and start talking. Releasing the switch, the previous operating mode shall resume.

## 4. 24V INPUT

The unit operates on 24V DC. It is preferred that the unit to be supplied directly from the uninterrupted power source. ie. power supplies linked to back up batteries.

**Note:** Do not connect directly to the terminals of back up battery. It shall damage the equipment.

# Parts Identification

## 5. EXTERNAL MESSAGE TRIGGER PORT

External message player can be linked to it and can be broadcasted to the speakers when this port is triggered. A voltage free contact is recommended to trigger the message playback.

## 6. REMOTE TRIGGER PORT FOR SIREN

External sensor device such as heat detector or fire alarm interface device can be connected to this unit to activate the siren. The external device or switch must be voltage free to avoid damage to the unit. Two ways for the external switch to turn On/Off the siren :

- 1) A <2s close-then-open to turn On; a <2s close-then-open to turn Off
- 2) A >2.5s close to turn On, an open to turn Off

## 7. RELAY CONTACT

Triggering the front panel mic switch message or siren shall activate an internal relay. This ports provide a dry contact which can be used to connect E/M overriding signal or to activate ALL CALL at speaker zone selector. The recommended rating for the contact is 3A. In case higher rating is required, please use external relay or contactor to accommodate the high current requirement.

## 8. RS485 PORT

External controls or interface devices shall be able to communicate with the unit.

## 9. HANDHELD MIC LEVEL CONTROL

This is to adjust the front paging mic volume. It is recommended that the setting is made during testing and commissioning works.

## 10. SIREN OUTPUT LEVEL CONTROL

Adjust the siren output to an optimum level during testing and commissioning works.

## 11. EXTERNAL MESSAGE AUDIO INPUT

The external message playback signal shall be balanced line level. ( e.g: audio from MR1301 )

## 12. PRE-AMPLIFIER INPUT JACK

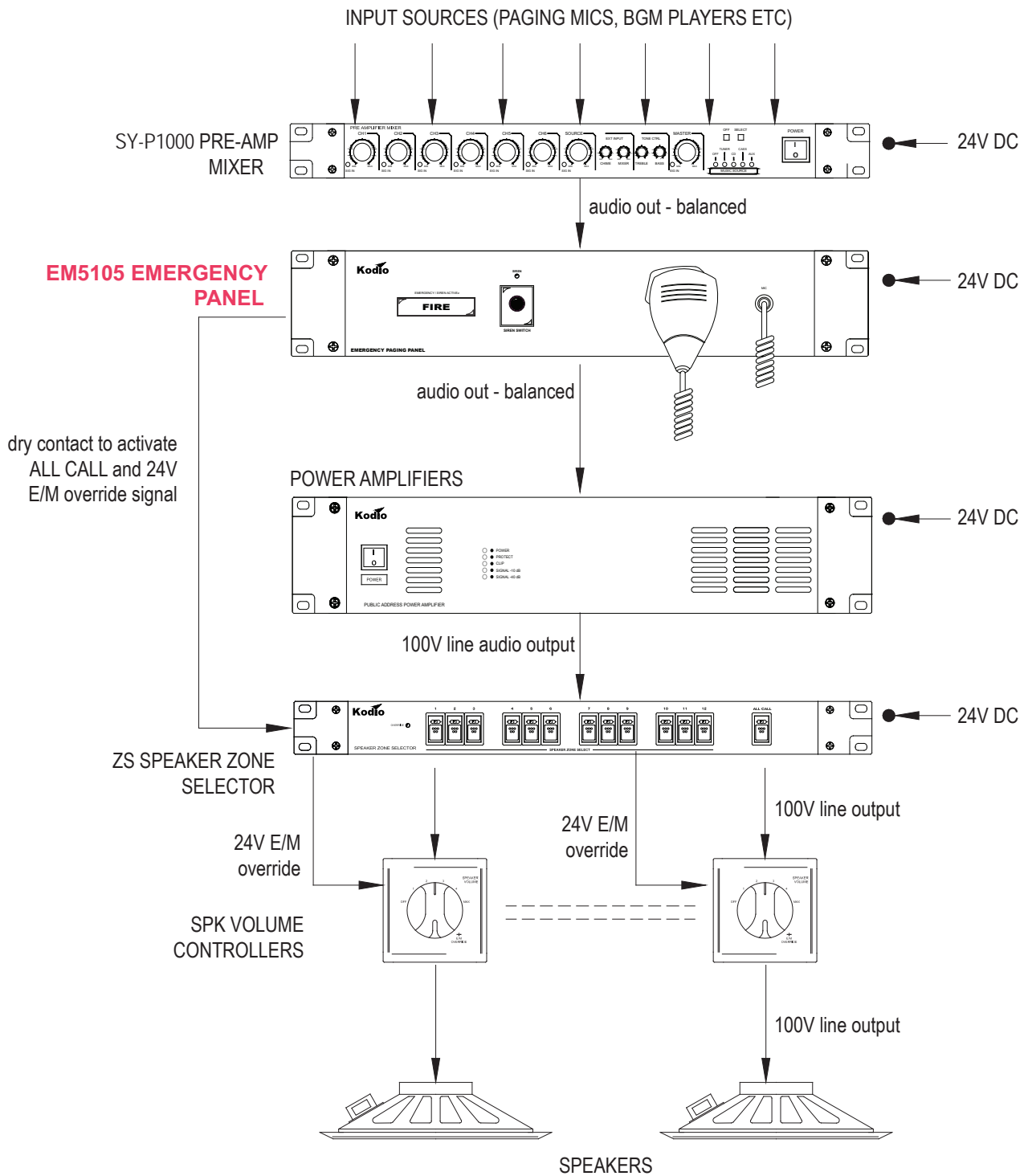
Output from pre-amplifier mixer (balanced line level ) is connected to the unit which is normally closed when the unit is not activated. Triggering the panel shall bypass the signal to allow higher priority audio to the PA system.

## 13. DATA AUDIO OUTPUT

Audio output from the decoder is balanced line output level. RJ45 connector consists of audio, data and power with the following pin configuration:-

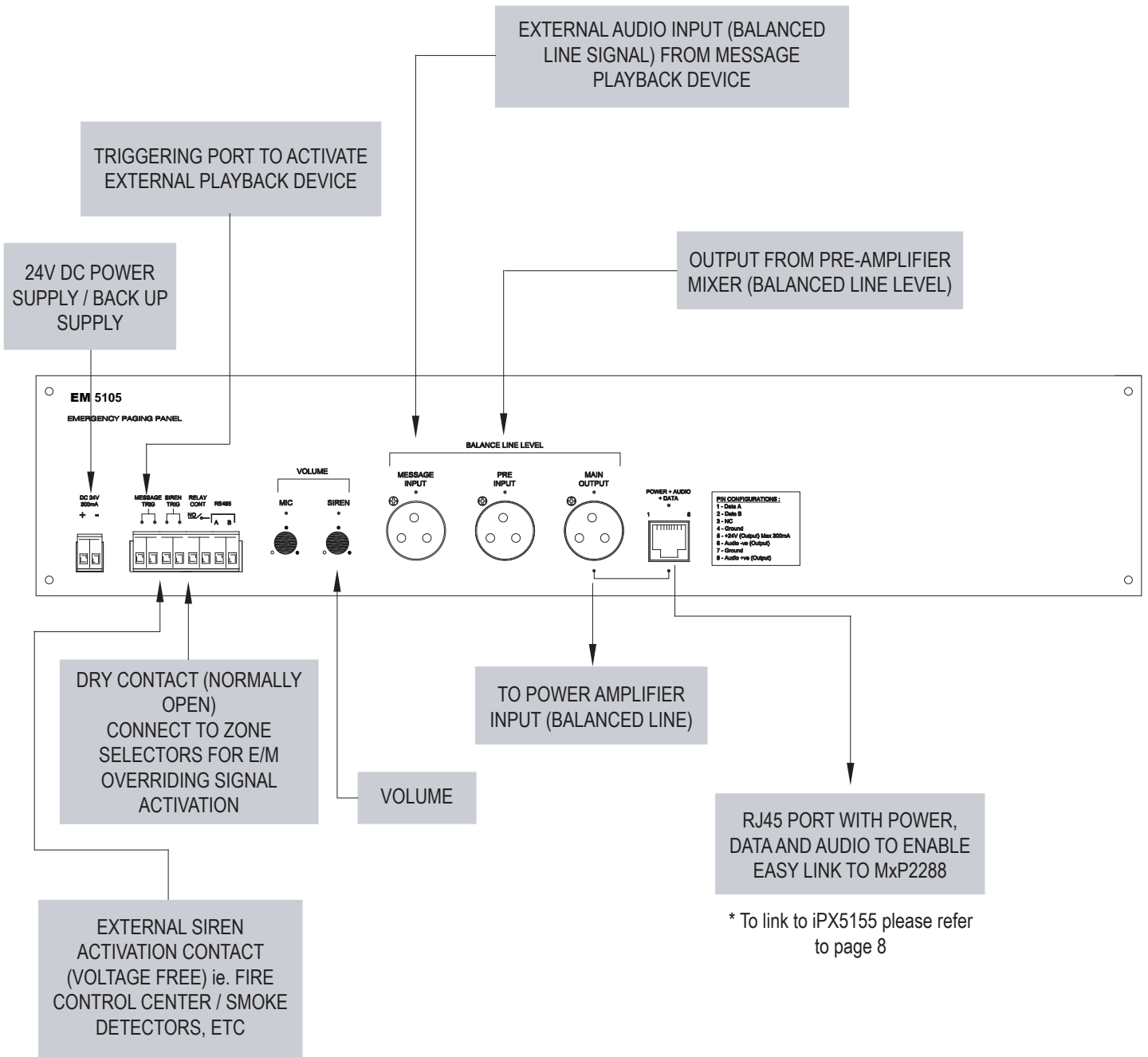
Pin 1 - Data A	Pin 5 - +24V Supply
Pin 2 - Data B	Pin 6 - Audio -ve output
Pin 3 - NC	Pin 7 - Ground
Pin 4 - Ground	Pin 8 - Audio +ve Output

# Schematic Diagram

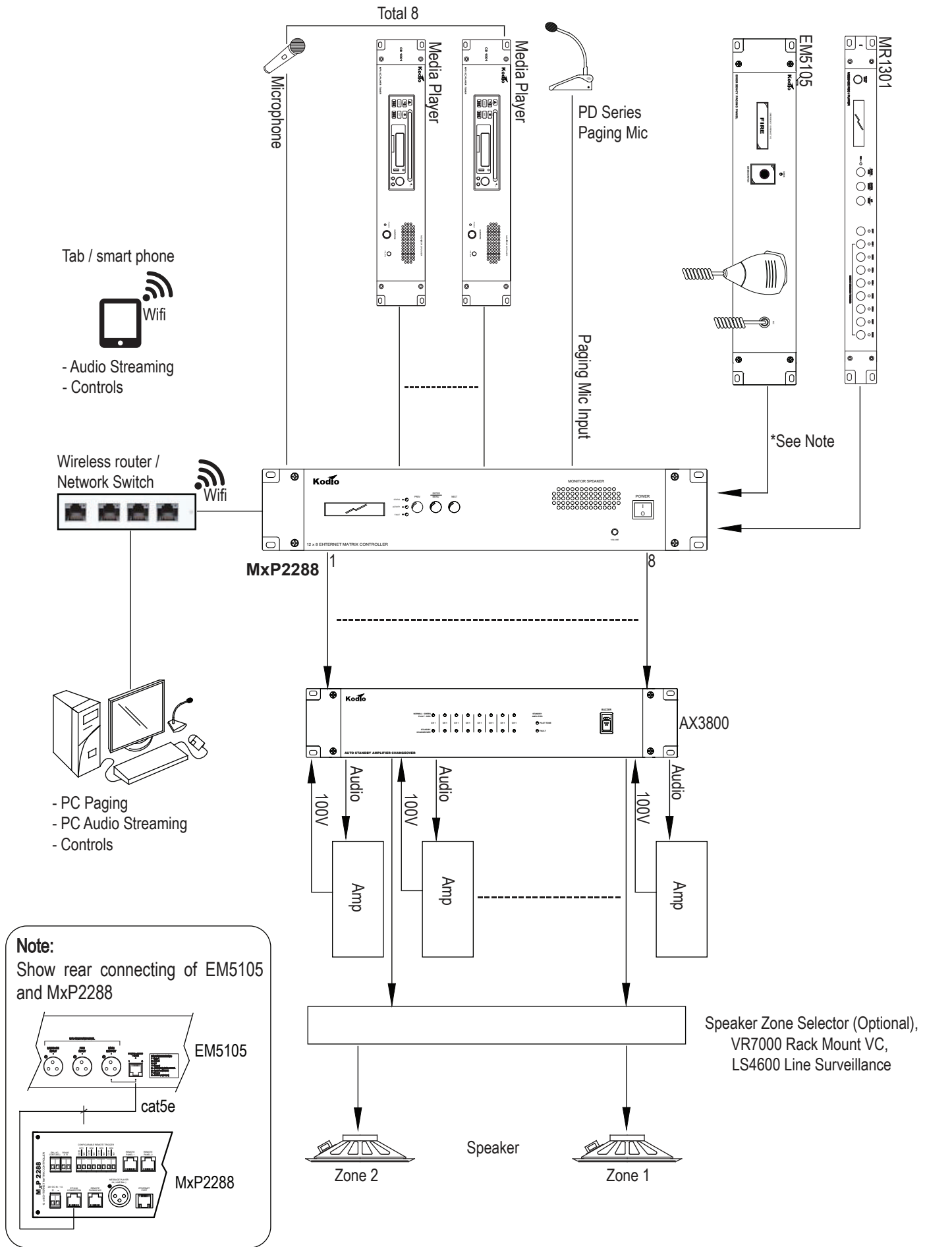


The schematic shown above is typical for most conventional installations. Audio output from mixer shall go through EM-5105 prior to amplifier inputs to enable emergency paging being highest priority.

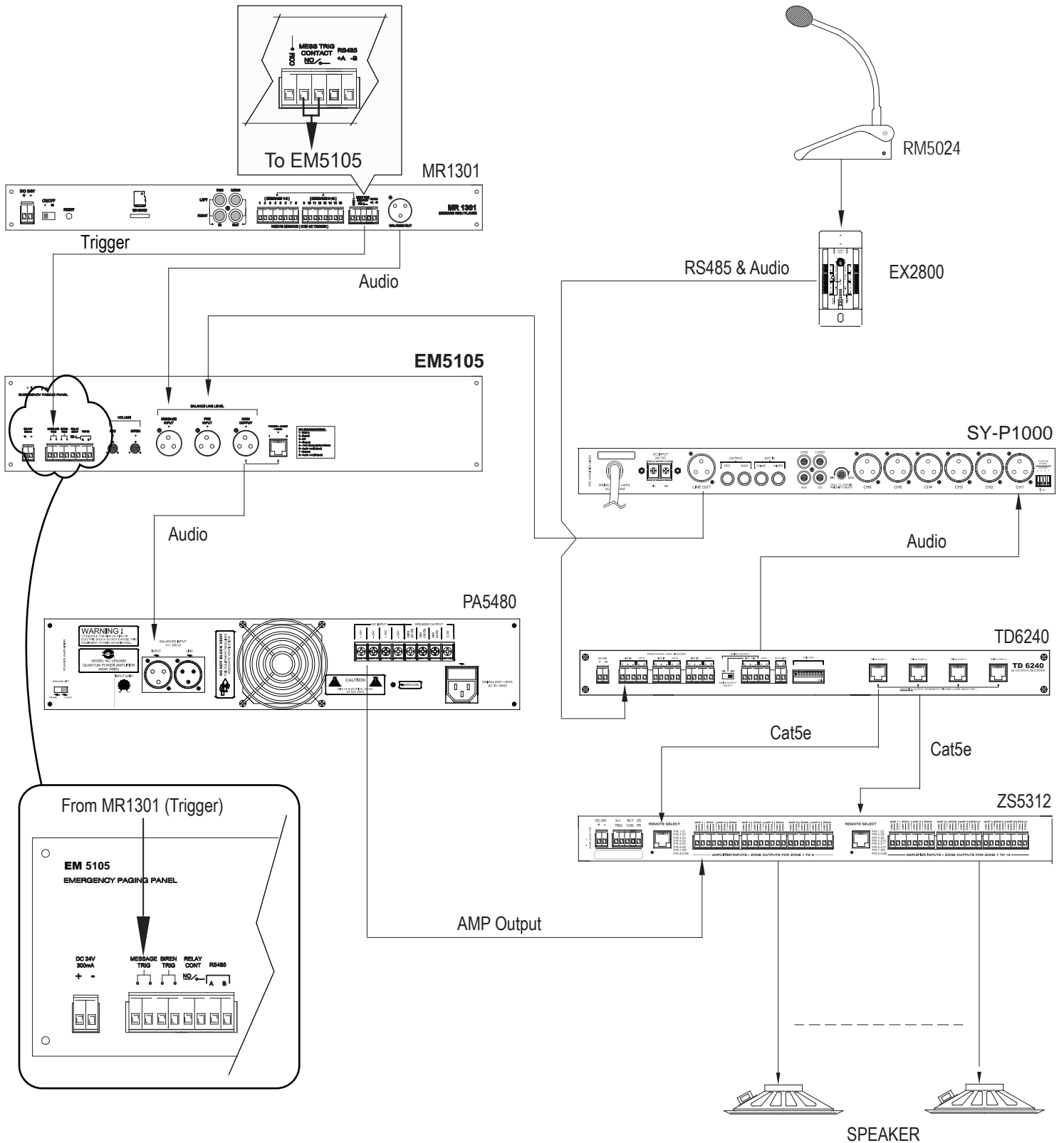
# Connecting The Unit



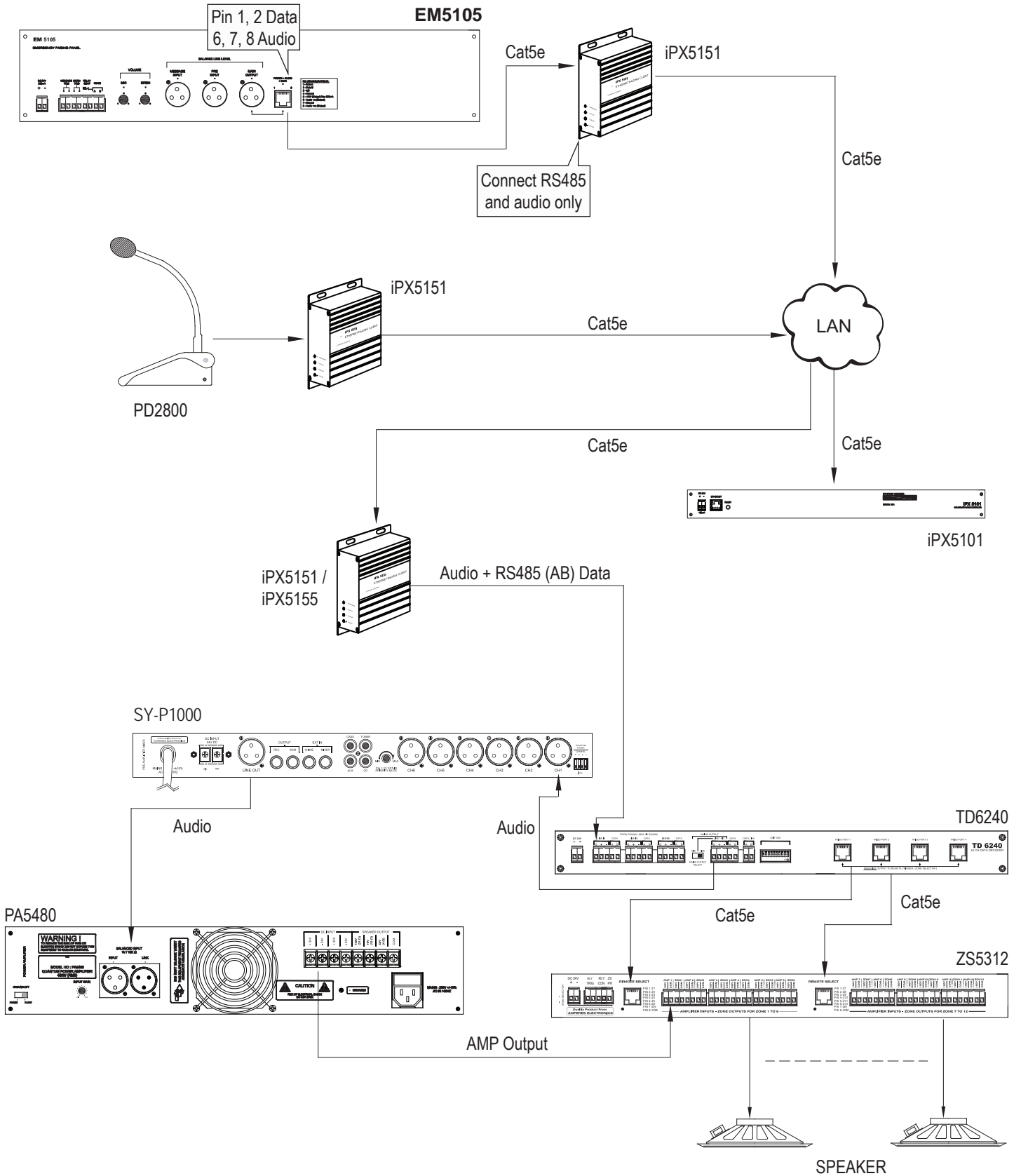
# Connecting The Unit - Matrix System



# Connecting The Unit - Conventional System



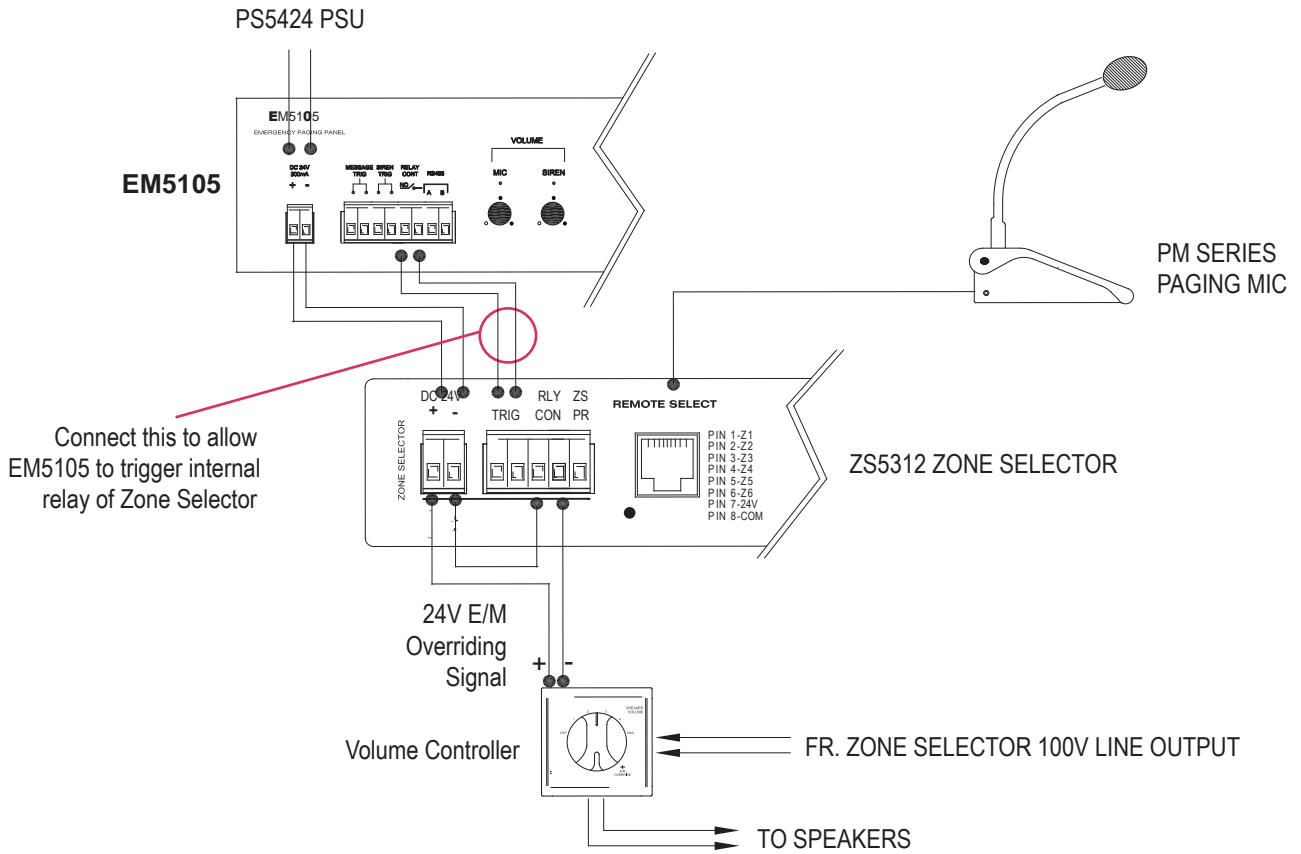
# Connecting The Unit: IP Setup



EM5105, which is installed at main rack for a large system using IP as communication interface, shall be able to override remote buildings / system as similar to single rack installation.



# Configuring ALL CALL And E/M Overriding



The above diagram shows detailed connections for using EM5105 to override volume control and activating ALL CALL at zone selector.

## Summary Of Features

- Built in siren tone generator (constant signal)
- Visual FIRE indicator
- External voice message activation
- Dual mode siren tone activation
- Dry contact when paging mic is activated
- Priority paging via front panel microphone, bypassing all other audio sources
- Output level controls for siren and message / paging microphone

## Technical Specifications

Power requirement	24V DC
Power consumption	3.5W
MICROPHONE	
Mic sensitivity	-72 dB Omni directional
Impedance	600 Ohm
Frequency response	300 ~ 8 KHz
SIREN	
Siren frequency	Continuous at 8 KHz
Siren duration	Continuous when activated
Siren activation	Front test switch / remote contact
Input channel	Pre-amplifier output, message recorder
Output level	Balanced line out (1.2V)
Priority sequence	Paging mic - message - siren - pre amp in
Indicators	Front FIRE with backlight illumination
Dimension (WxHxD)	482 x 88 x 180 mm
Weight	3.0 kg