



OPERATIONAL MANUAL

EMER-8015

EMERGENCY PAGING PANEL



Product Overview

EMER-8015 Emergency Paging Panel is a 1U rack-mounting unit, providing highest priority source of announcement during emergency situation. It features a built in siren tone generator and external voice message input providing alternative solution in system configuration. In EMIX public address system, EMER-8015 Emergency Paging Panel is linked with EMPR-8007 Universal Pre-amplifier through a single CAT5E cable to override all others input sources. It allows only emergency announcement in the form of paging microphone, siren or message player. However, a pre-amplifier input port is ready for bypassing signal from pre-amplifier mixer other than EMPR-8007 Universal Pre-amplifier. This purpose is to allow highest paging priority in public address system. EMER-8015 also provides remote voice message, siren triggering and a dry contact which makes it possible to be used in triggering other systems such as alarm light or sending overriding signal to bypass volume controller's attenuation. Proper configuration is required to utilize this feature.



Features

- Single CAT5 cable inter-link up with EMIX EMPR-8007 Universal Pre-amplifier eliminate those complex signal cable
- Handheld paging microphone with switch attached with a customize 2U panel
- Built-in siren tone generator
- External voice message input
- Remote voice message, siren tone triggering
- Voltage free dry contact is provided for trigger other system
- RJ45 communication port (Digital +/- Data) through CAT-5E cable
- 2X 16 characters Liquid crystal display (LCD) to display system status & message
- Built-in Microchip controller makes every step of control simple to operate

Front View and Rear View

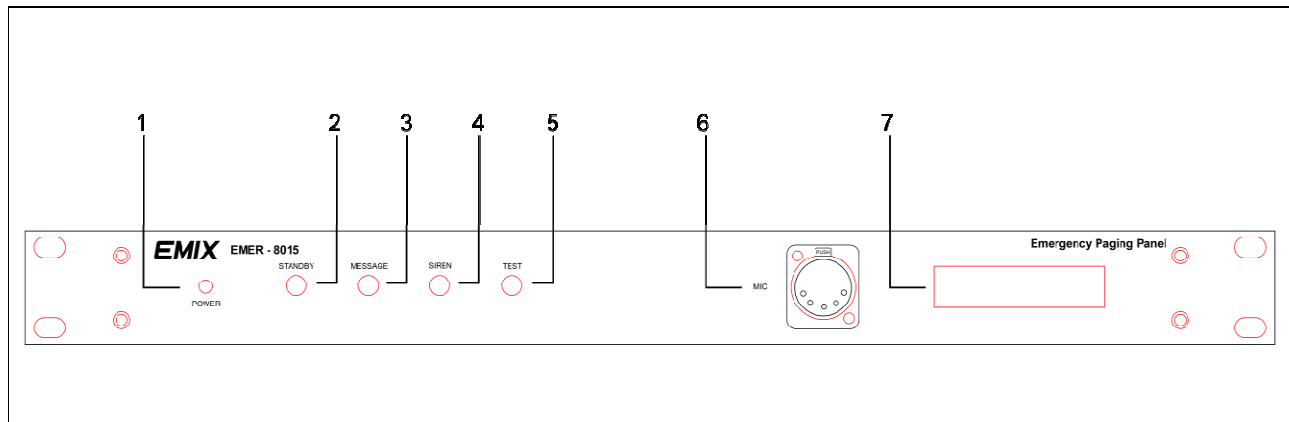


Figure 1.1 Front view of the Emergency Paging Panel

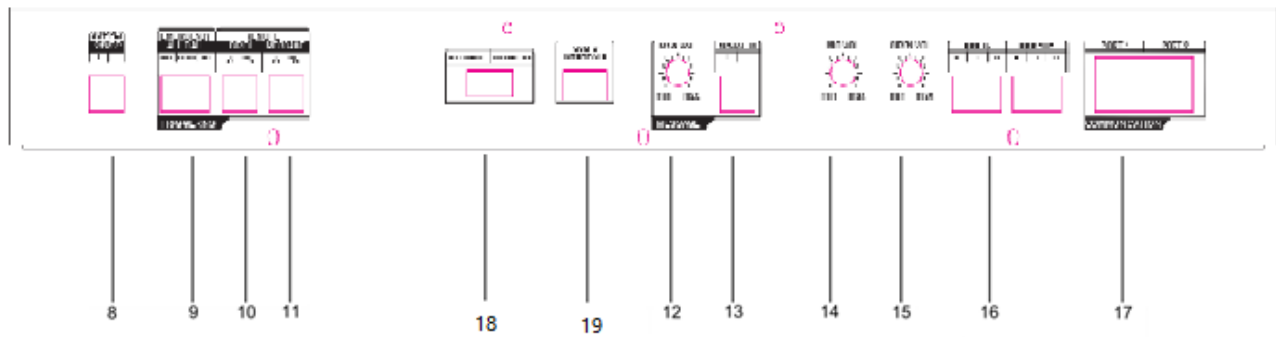


Figure 1.2: Rear view of the Emergency Paging Panel

Front Panel and Rear Panel Indication

EMZS-8012 12 Channel Zone Selector

1.1.0 Front Panel Indicator

- 1 **Power LED** – This LED indicates the unit is powered “ON”
- 2 **STANDBY** button – To set EMER-8015 into standby mode
- 3 **MESSAGE** button – To set EMER-8015 into message mode and broadcast voice message from external message player
- 4 **SIREN** button – To activate siren tone generator and broadcast siren tone
- 5 **TEST** button – Press and hold for 3sec to get into test mode and test the functioning of message mode and siren mode
- 6 **MIC** input – Connect emergency handheld microphone.
- 7 **LCD Display** – Display the status of the unit and the selected mode.

1.2.0 Rear Panel connection

- 8 **Power Inlet** – Power terminal connection for the EMER-8015 Emergency Paging Panel using 24VDC ($\pm 10\%$) power supply. When connecting the power inlet, ensure the polarity is correct. EMIX EMPS-8024 power supply Unit and EMBC-8025 Intelligent Battery Charger is highly recommended.
 **NOTE:** Observe the (+) and (-) polarity carefully before connecting.
- 9 **Emergency Dry Contact** – This dry contact is active once emergency microphone is pressed to call and EMKP-8001 180zones digital paging console emergency button is pressed. Utilize this dry contact to activate emergency light or to override volume control through an external circuit.
- 10 **Remote Siren Tone** – This remote trigger activates the siren tone generator and turns the system to emergency mode.
- 11 **Remote Voice Message** – This remote trigger activates the system to broadcast pre-recorded voice message from external voice message player.
- 12 **Voice Message Volume Pre-set** – This controls voice message volume.
- 13 **Voice Message Input** – This is voice message input from external voice message player.
- 14 **Microphone Volume Control** – This controls the emergency paging microphone volume control.
- 15 **Siren Tone Volume Control** – This controls the siren tone volume.
- 16 **Pre-amplifier Input and Output** – These ports are reserved for those pre-amplifier mixer other than EMPR-8007 Universal Pre-amplifier. It allows overriding other pre-amplifier mixer signal during emergency paging.
- 17 **Communication Port** – This RJ45 socket accepts the CAT5E straight cable linked to EMPR-8007 Universal Pre-amplifier and also EMZS-8006 6CH Zone Selector and EMZS-8012 12CH Zone Selector.

18 Selector switch either for internal signal or external signal in message.

19 USB type C:

- Support MP3 and WAV decoding formats.
- Support sampling rate (KHz): 8/11.025/12/16/22.05/24/32/44.1/48

Selector switch: internal/external signal. USB-C: Connect to computer to copy MP3 files to the internal module and rename 00001

Power off EMER-8015.

- Connect it to your PC using with USB-C cable.
- An external storage folder will appear.
- Copy the tone file to this drive, ensuring the filename is 00001
- The drive only single file.

Installation Diagram / Schematic Diagram

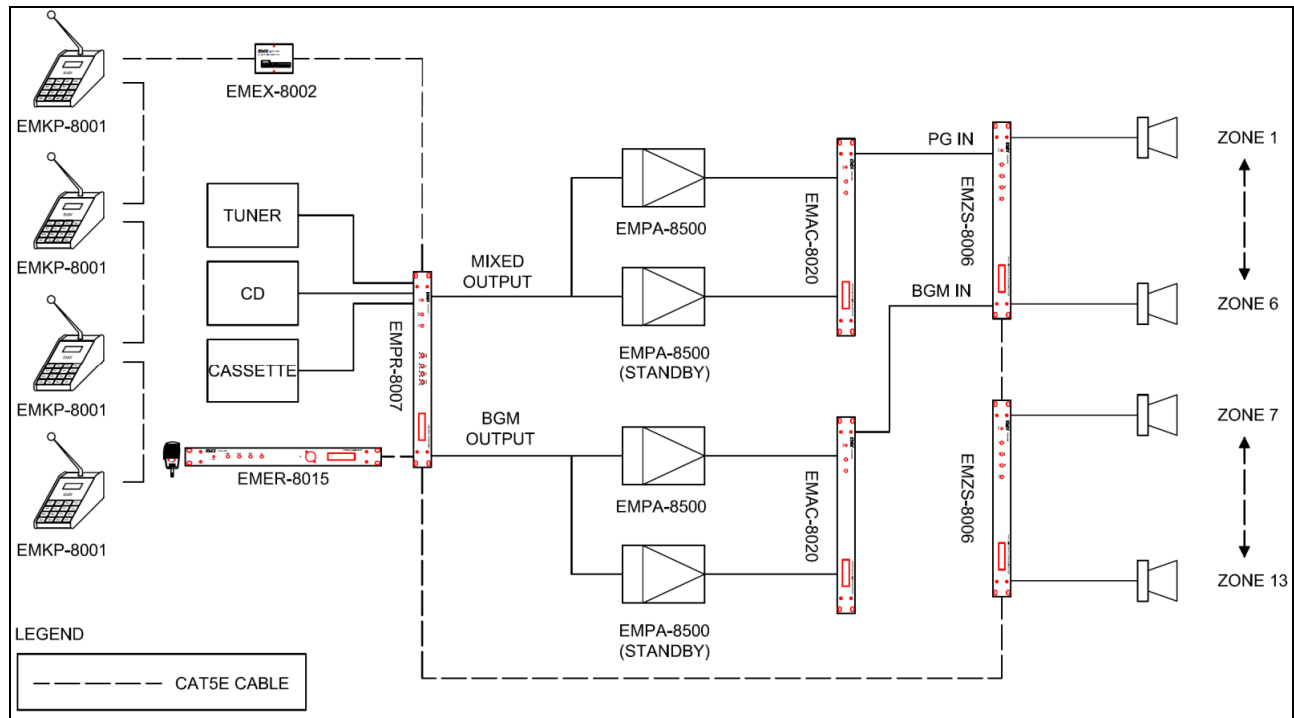


Figure 1.3: the EMER-8015 connected directly to the EMPR-8007 input. Where there are 4nos of 180zones Digital Paging Console connected up with 2nos of 6CH Zone selector EMZS-8006 through an EMEX-8002 RJ45 to Audio & Data decoder. All of the paging consoles have a loop through connection to add an additional paging console. From the single line shown above, there are a total of 9 nodes taken up for the system.

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

Configuration

Connect EMER-8015 Emergency Paging Panel to EMPR-8007 Universal Pre-amplifier via standard CAT5E cable. If remote trigger is needed, connect siren tone and voice message trigger to respective triggering port. A dry contact port is ready for user to trigger device which is needed to be activated as emergency paging panel such as emergency light. Besides, this dry contact port is possible to bypass volume control's attenuation with proper configuration.

Schematic diagram:

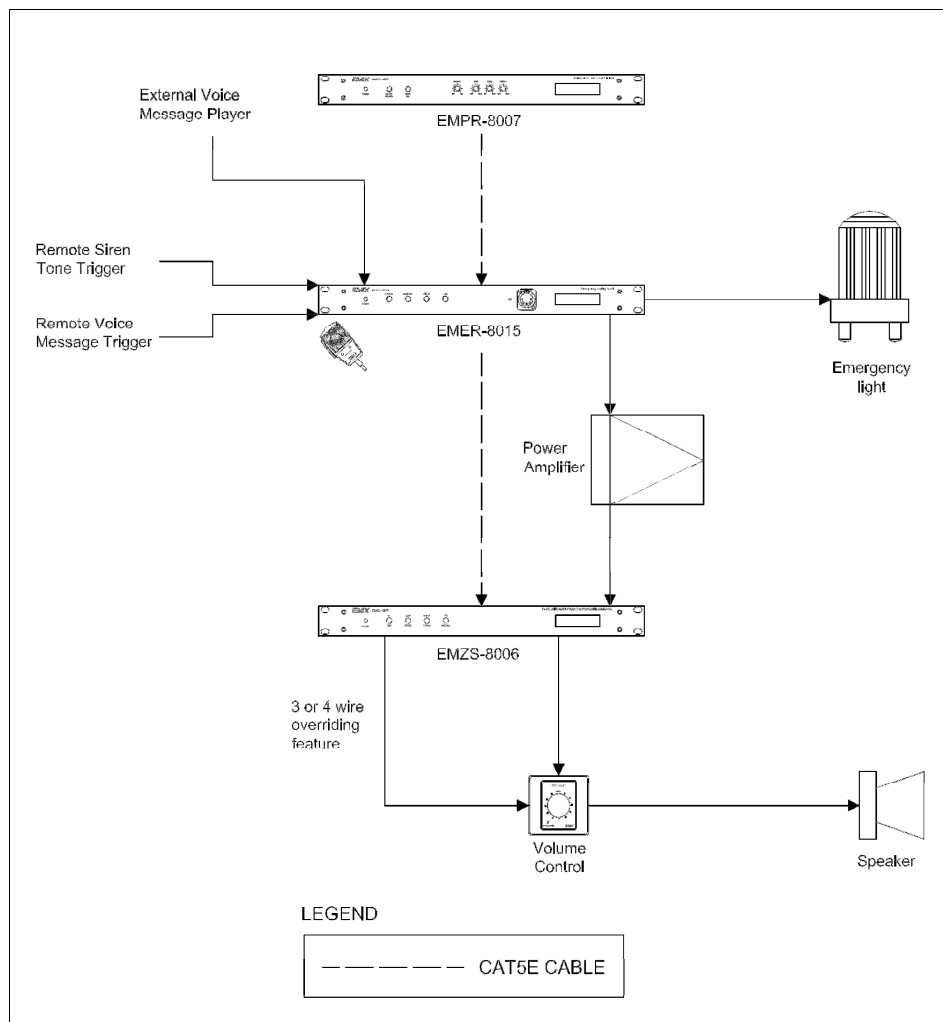


Figure 1.4: Example system configuration 1

Connect EMPR-3306 Universal pre amplifier to EMER-8015 Emergency Paging Panel through a 2-core screen audio cable. If remote trigger is needed, connect siren tone and voice message trigger to respective triggering port. A dry contact port is ready for user to trigger device which is needed to be activated as emergency paging panel such as emergency light. Besides, this dry contact port is possible to bypass volume control's attenuation with proper configuration.

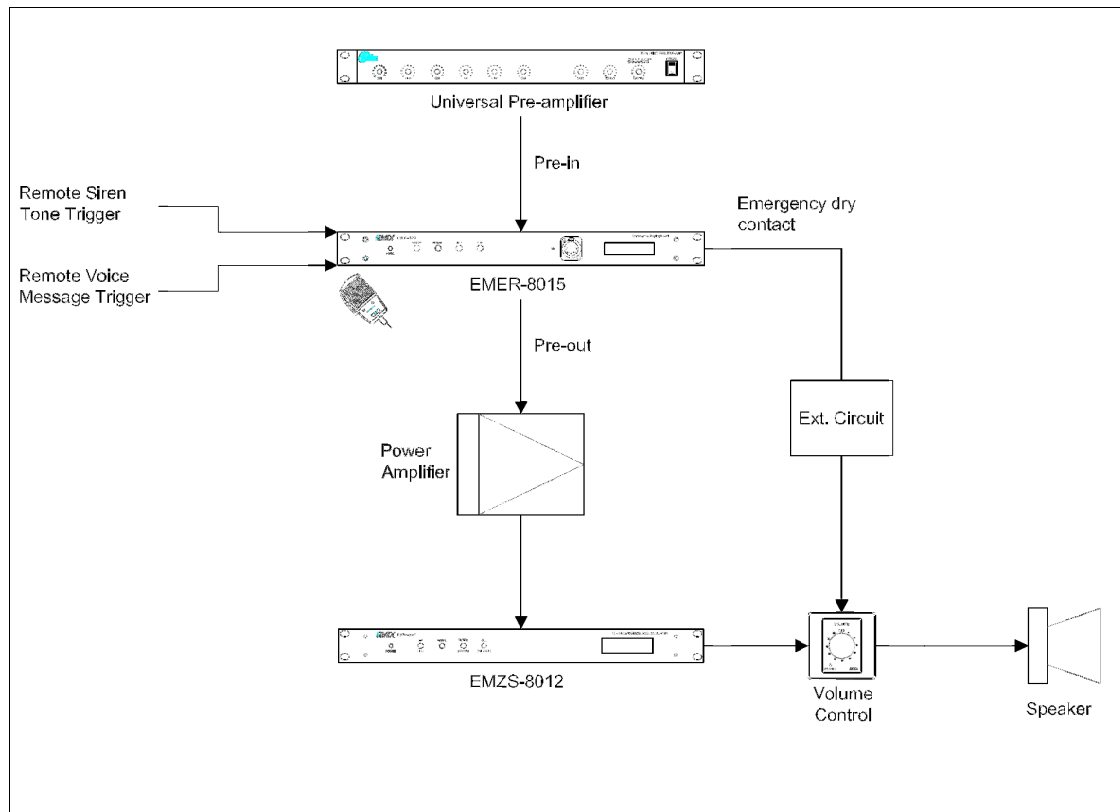


Figure 1.5: Example system configuration 2

Operation

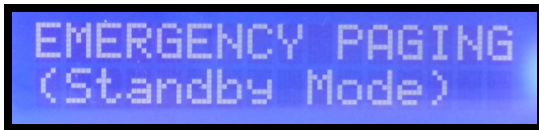


Figure 1.6: Standby Mode

Standby mode – The system is in standby mode and ready for any emergency paging.

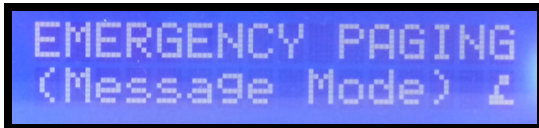


Figure 1.7: Message Mode

Message mode – The system is in message mode and voice message from external message player is being broadcasted.

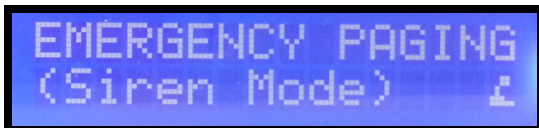


Figure 1.8: Siren Mode

Siren mode – The siren tone generator is activated in this mode and siren tone is being broadcasted



Figure 1.9: Test Mode (Voice Message)

Test mode (Voice Message) – The system is in testing mode and message mode will be tested for few second.

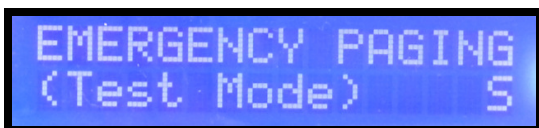


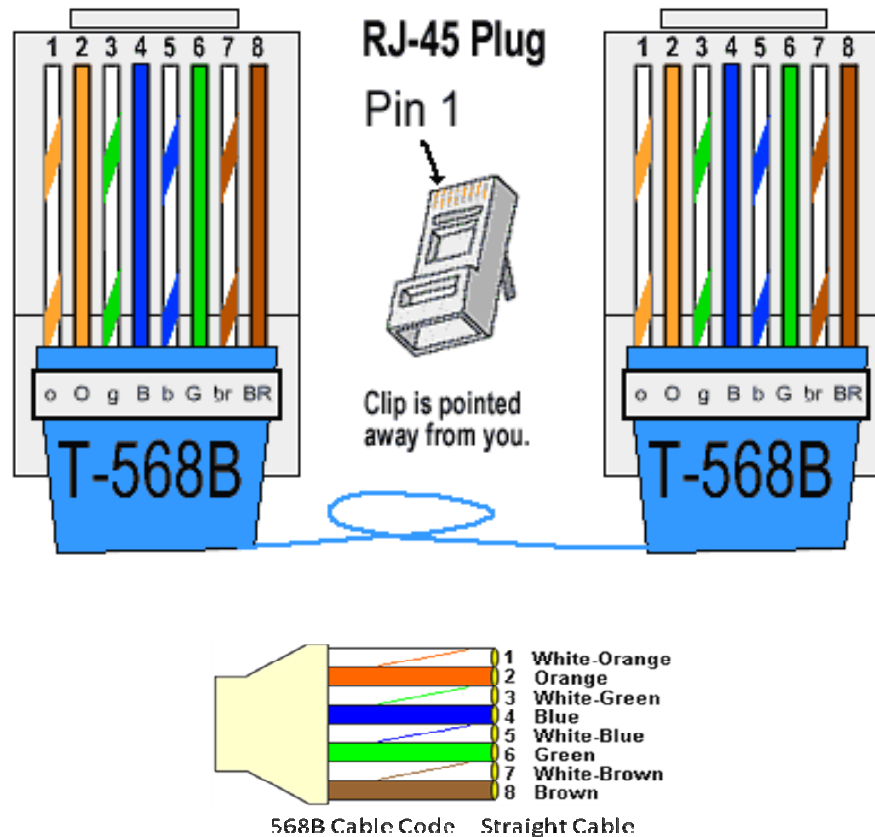
Figure 1.10: Test Mode (Siren)

Test mode (Siren) – The system is in testing mode and siren mode will be tested for few second.

Input Connections (RJ-45)

For wiring RJ45, Standard straight cable 568 (shielded CAT-5E) is recommended.

CAT 5 cable configuration (Color code, International Standard)

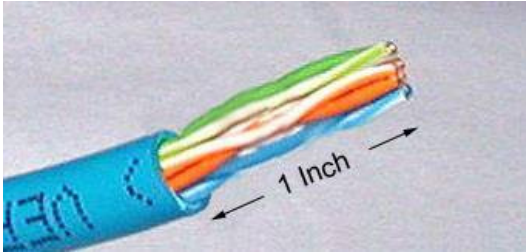


EMIX internal Cable Configuration

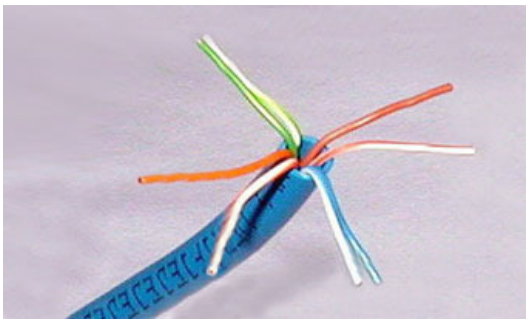
Pin 1	White - Orange	Audio Signal (+)
Pin 2	Orange	Audio Signal (-)
Pin 3	White – Green	Data + A
Pin 4	Blue	+ 24VDC
Pin 5	White – Blue	+ 24VDC
Pin 6	Green	Data – B
Pin 7	White – Brown	-24VDC
Pin 8	Brown	-24VDC

How to Build an Ethernet Cable Instructions:

1. Pull the cable off the reel to the desired length and cut using Wire Cutter. If you are pulling cables through holes, it's easier to attach the RJ-45 plugs after the cable is pulled.
2. Start on one end and strip the cable jacket off (about 1") using wire stripper or a knife. Be extra careful not to nick the wires, otherwise you will need to start over.



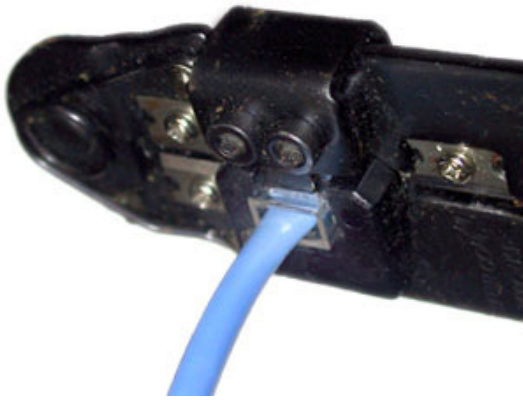
3. Spread, untwist the pairs, and arrange the wires in the order of the desired cable end. Flatten the end between your thumb and forefinger. Trim the ends of the wires so they are even with one another, leaving only 1/2" in wire length. If it is longer than 1/2" it will be out-of-spec and susceptible to crosstalk. Flatten and insure there are no spaces between wires.



4. Hold the RJ-45 connector (8P / 8C) with the clip facing down or away from you. Push the wires firmly into the plug. Inspect each wire is flat even at the front of the plug. Check the order of the wires. Double check again. Check that the jacket is fitted right against the stop of the plug. Carefully hold the wire and firmly crimp the RJ-45 with the Crimping tools.



5. Check the color orientation, check that the crimped connection is not about to come apart, and check to see if the wires are flat against the front of the plug. If even one of these is incorrect, you will have to start over.

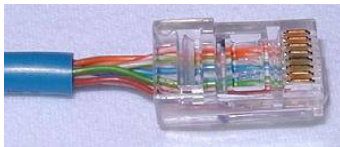


☞ Note: Diagram A, The cable do not go all the way to end of the connector



(A) Diagram

☞ Note: Diagram B, Shielding is not inside the connector where it can be locked into place. The wires are too long. They should be $\frac{1}{2}$ inch from the sleeve.



(B) Diagram

Technical Specifications

Input voltage	24VDC $\pm$ 5%
Max. Power consumption	135mA
Min. Power Consumption	100mA
Mode Selection	Front Panel (Standby, Message & Siren Mode)
Message Signal In	Audio signal in with gain control
Relay Contact	Free voltage contact (NC/NO) when operation
External Trigger	Siren / Message (Priority)
Siren Signal	Built-in with gain control
Audio Signal In/Out	Yes with gain control
LCD Display	2 X 16CH (Blue)
Max. Nodes Connected	32Nodes
Paging Selection	Hardwire or software RS485 remote Triggering
I/O connector	RJ45 Female Connector (Paging Console or Link In/Out)
Memory	For Mode selection
Dimension (W x H x D)	483mm x 45mm x 224mm (1U)
Net Weight	2.89kg
Gross Weight	4.20kg

Parts Included:-

Quantity	Component
1	EMER-8015 Emergency Paging Panel
1	2U Customize Emergency Paging Aluminum Panel with hook
1	Emergency Microphone
1	Operation Instruction Manual
1	90cm CAT5E (shielded) cable completed with modular plug

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.

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