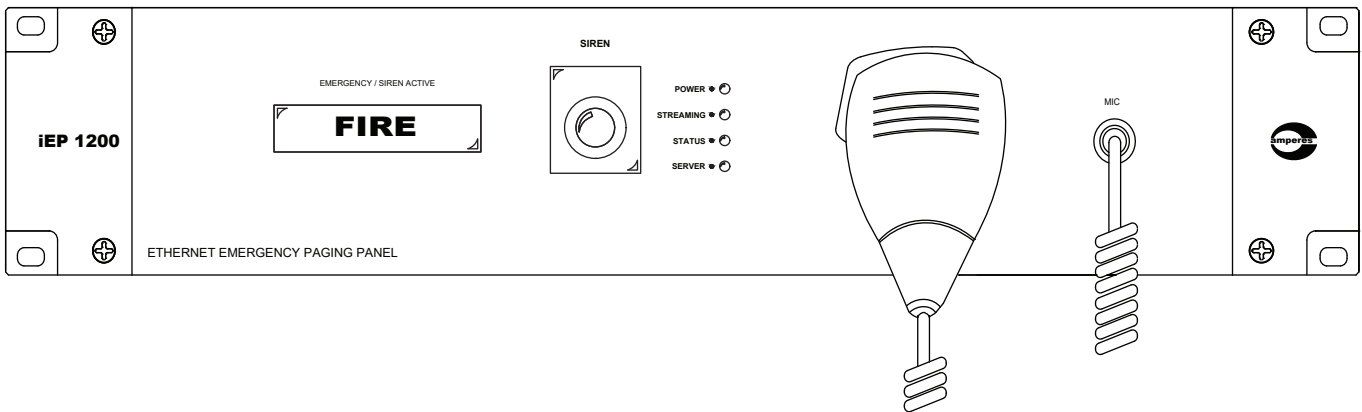




INSTRUCTION MANUAL

iEP1200

Ethernet Emergency Paging Microphone Panel



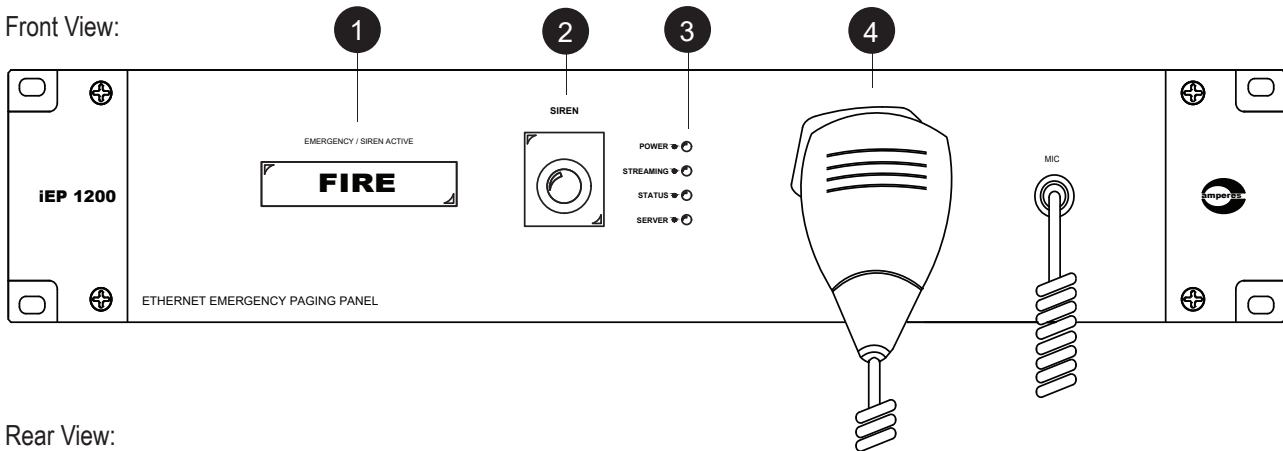
Thank you for choosing another quality product from Amperes Electronics.

iEP1200 is an extension of the conventional EP1200 Emergency Panel which is now LAN ready. It is an essential tool for firemen to access directly to EVAC system with highest priority. All other paging in progress, music streaming would be directly cut off upon activation of the unit.

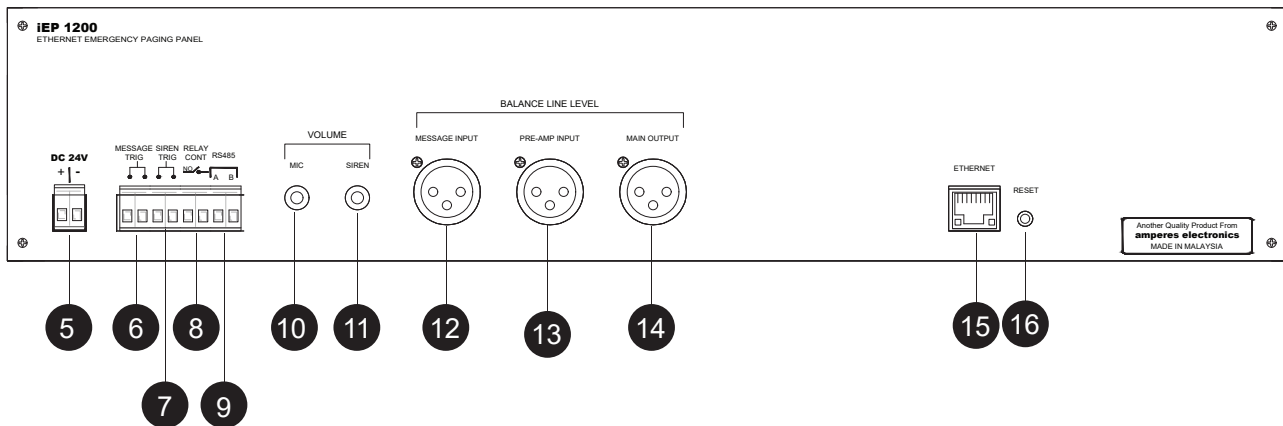
It has an added feature as compared to conventional type, i.e. it can be programmed as local system's highest priority paging device (for distributed system), or as a global highest priority. Although it is essentially an IP based device, other analogue ports are available such as message player input, emergency dry contact and aux line audio output. Direct access to the unit's web page is available for system setup.

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. LED INDICATORS

Power - This blue LED shall light up when iEP1200 is powered up.

Streaming - Blink whenever iEP1200 streaming siren or paging to iPX5155 (Paging Client).

Status - Blink whenever there is a network activity ongoing.

Server - This green LED shall lit when iEP1200 successfully establish a connection with Paging Server (iPX5101).

4. 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.

5. 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

6. EXTERNAL MESSAGE TRIGGER PORT

When this port is triggered by a voltage free contact, iEP1200 shall broadcast audio that applied to EXTERNAL MESSAGE AUDIO INPUT (12).

7. 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

8. 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.

9. RS485 PORT

External controls or interface devices (e.g. PD1280 Paging Mic) shall be able to communicate with the unit via this port.

10. HANDHELD MIC LEVEL CONTROL

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

11. SIREN OUTPUT LEVEL CONTROL

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

12. EXTERNAL MESSAGE AUDIO INPUT

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

13. PRE-AMPLIFIER INPUT

User can connect a pre-amplifier mixer to this port and have the audio playback at AUDIO OUTPUT (14). Triggering higher priority audio such as siren, handheld mic or external message shall override this pre-amplifier audio.

14. AUDIO OUTPUT

Siren, handheld mic paging, external message and pre-amplifier audio are broadcasted via this port to external audio amplifier.

15. ETHERNET PORT

Connectivity to network switch. iEP1200 streaming siren, paging and external message to iPX5155 (Paging Client) via this port.

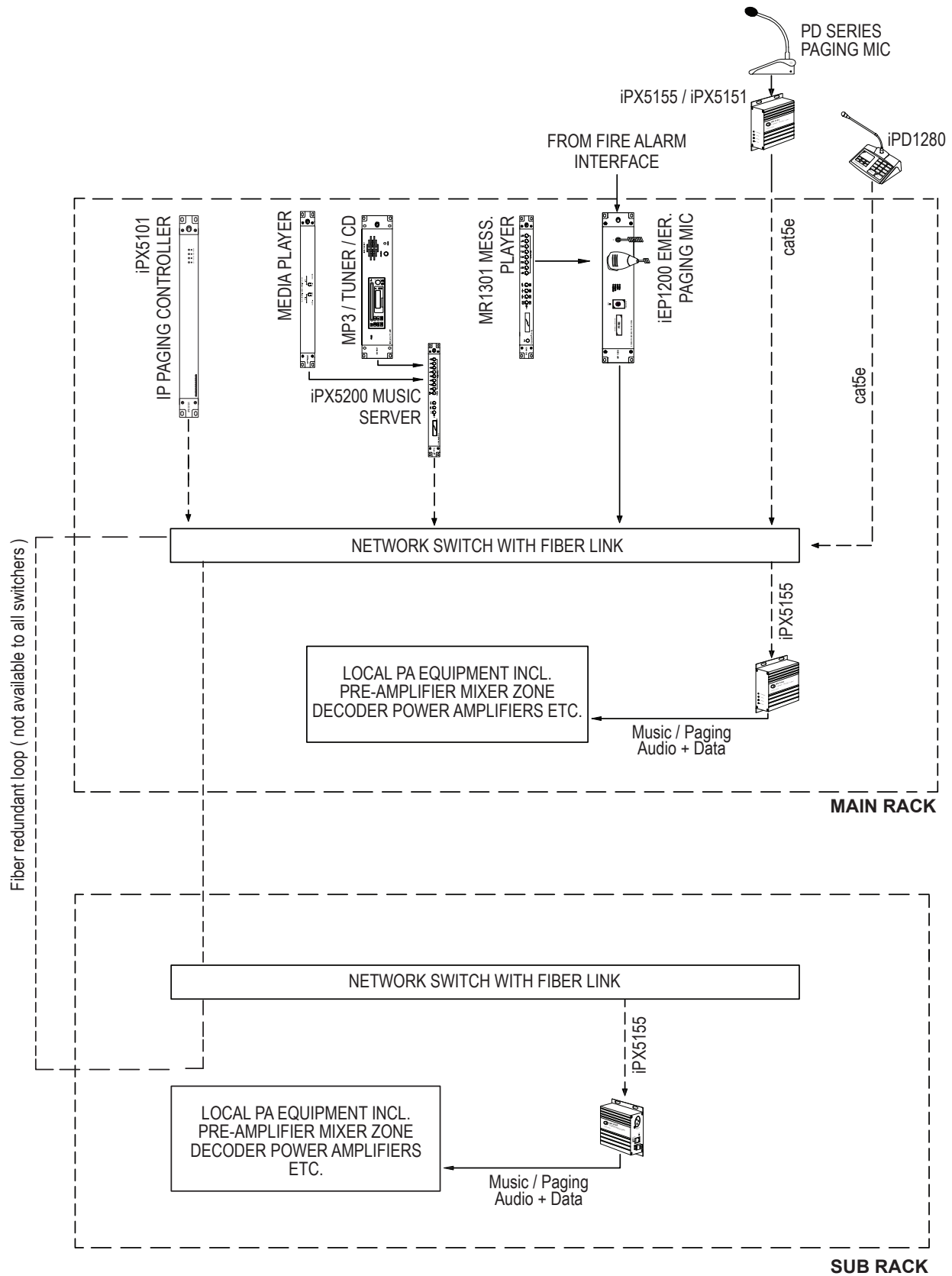
16. RESET SWITCH

Button to allow iEP1200 enters Bootloader mode or reset settings to factory default settings.

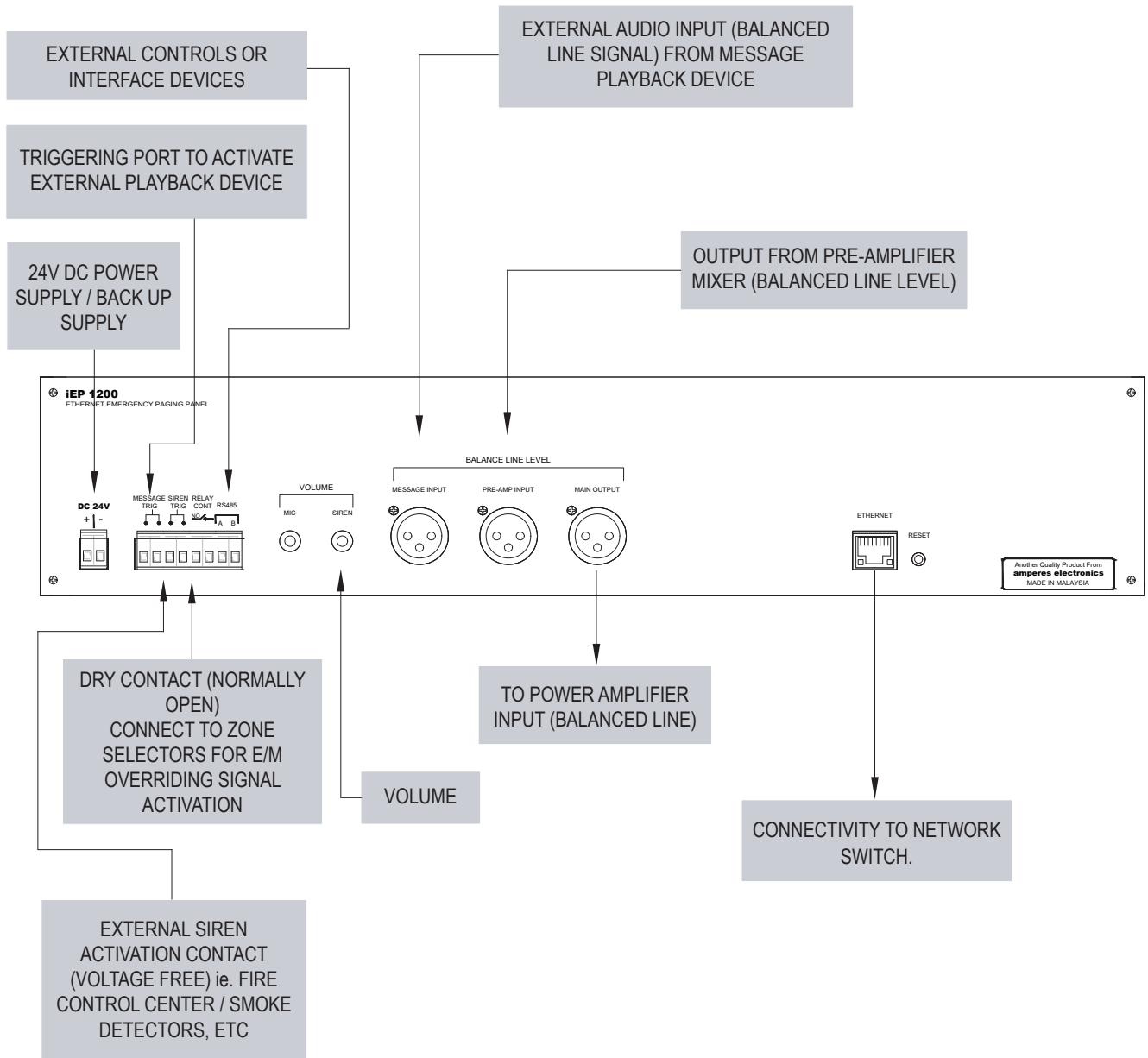
Bootloader mode: To enter this mode, hold the reset button until POWER, SERVER, and STATUS LEDs lit. Enter this mode to do firmware updating if normal mode updating does not work. All iEP1200 settings remain intact in this mode.

Reset to factory default settings: Hold the reset button until POWER, SERVER, STATUS and STREAMING LEDs lit will reset all iEP1200 settings to factory default settings.

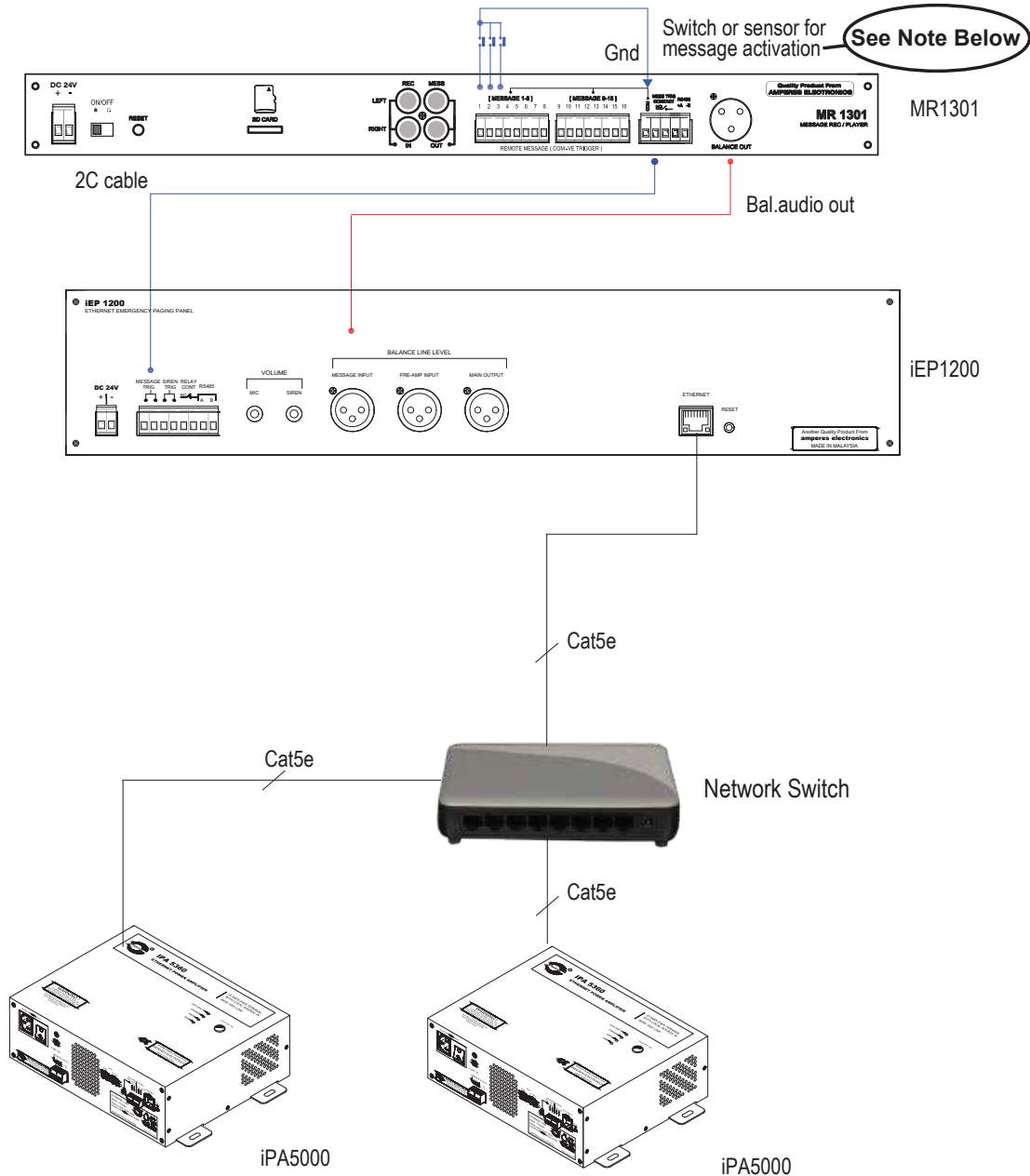
Connecting to iEP1200



Connecting The Unit



Connecting The Unit - Full IP Based with iEP1200

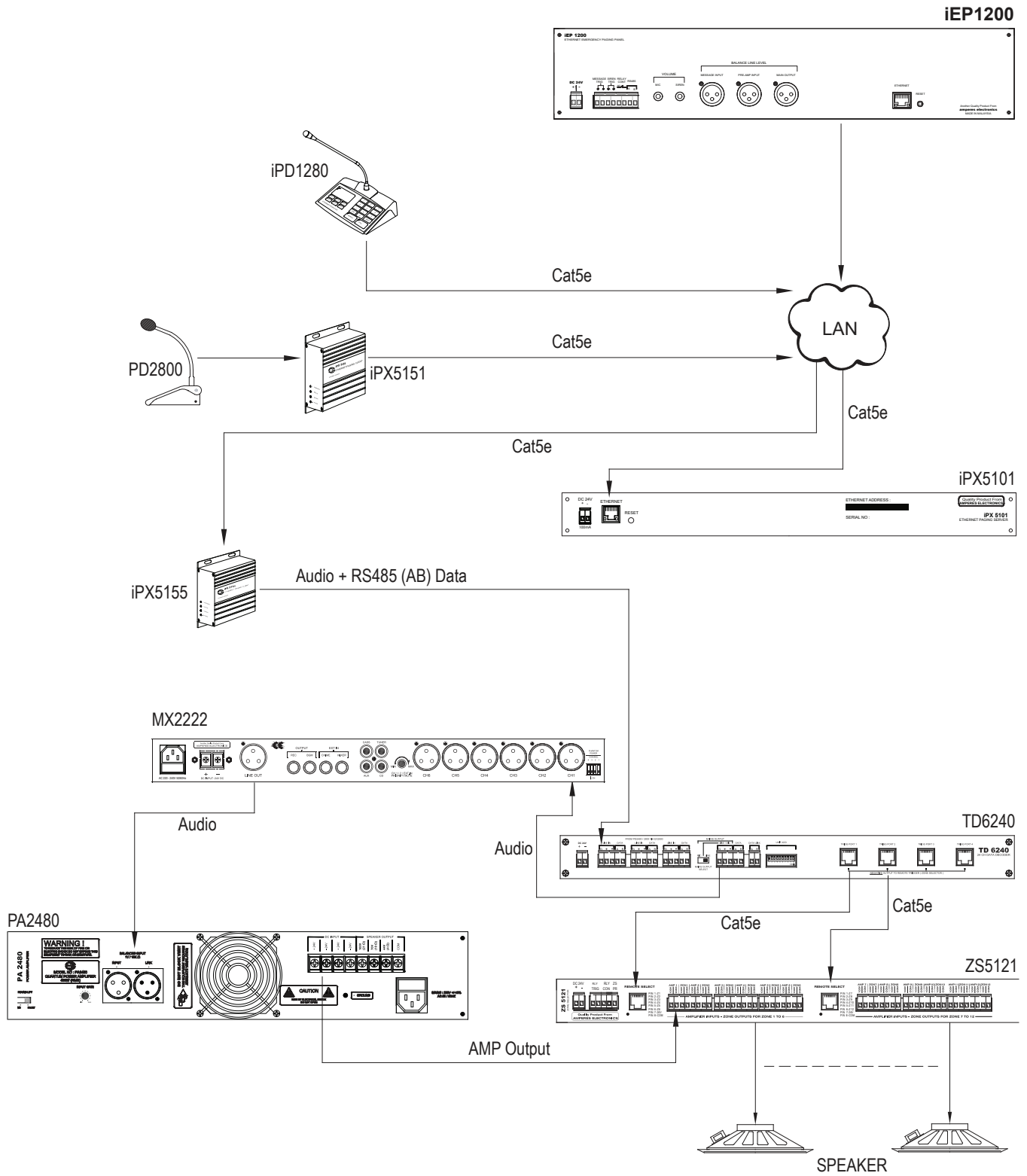


The dry contact at the MR1301 is used to trigger iEP1200, thus overriding the normal audio source for priority paging. It is then connected to the Emergency Relay trigger at the Zone Selector, providing a dry contact for connecting 24V DC to override external volume controllers.

Note:

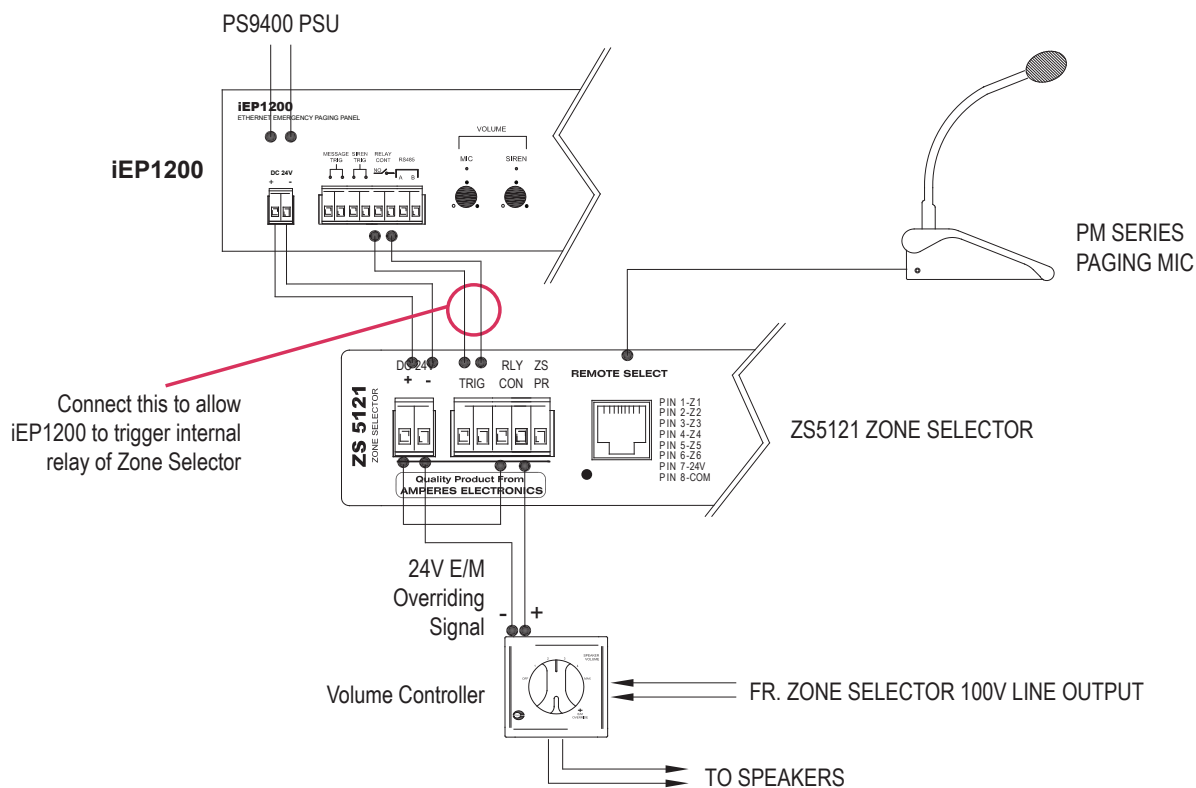
By default, the mode of activation is momentary. For this configuration, set it to momentary, and the dry contact shall be closed for the duration of the playback. This shall perform bypass of mixer audio output at iEP1200 until the message is stopped.

Connecting The Unit - IP Setup



iEP1200, 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 iEP1200 to override volume control and activating ALL CALL at zone selector.

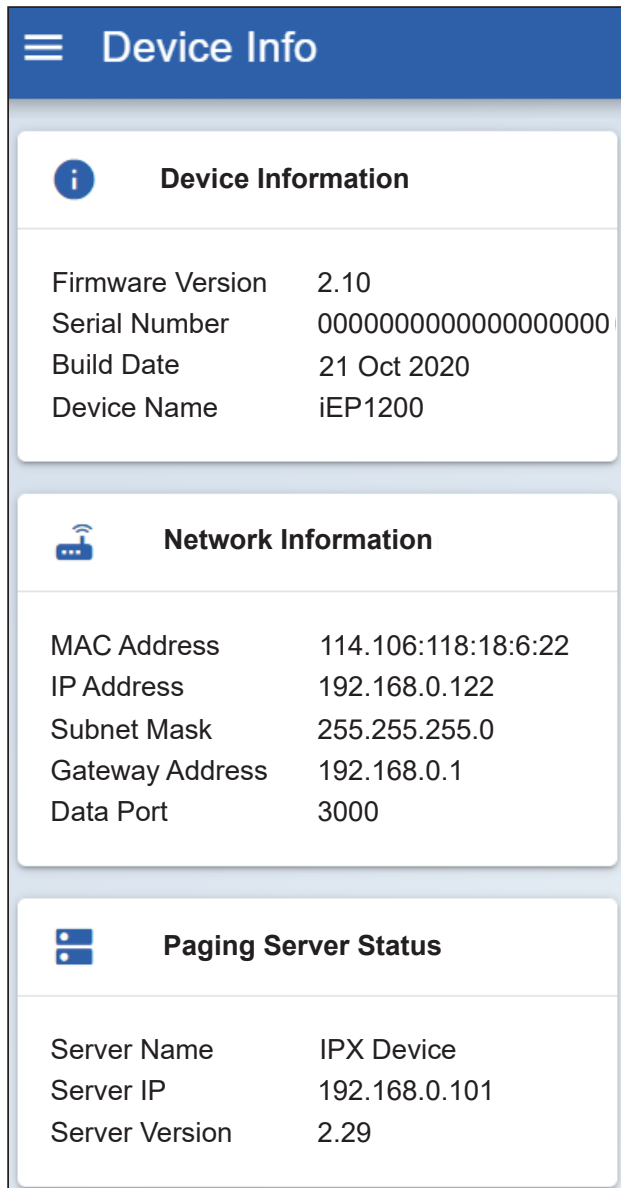
Device Setup Via Browser

iEP1200 shall require some simple setups, kindly follow the step by step instructions as listed below. The unit shall be connected to LAN together with iPX5101 Paging Server and iPX5155 Paging Client to form a complete system. The default IP address is 192.168.0.100. Login page shall appear and the default User ID and password are both "admin".

Device Info:

Once is login to the iEP1200 page the below information is shown:

- 1) Firmware version
- 2) Networking addresses
- 3) Connection status to Paging Server



Device Information	
Firmware Version	2.10
Serial Number	00000000000000000000
Build Date	21 Oct 2020
Device Name	iEP1200

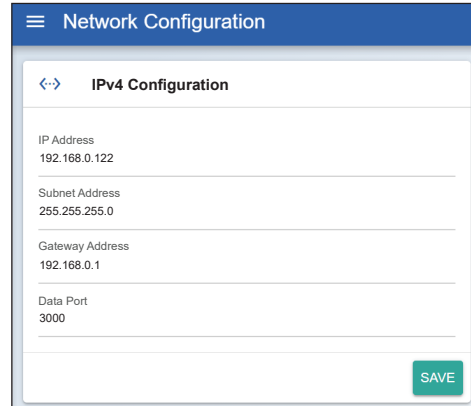
Network Information	
MAC Address	114.106:118:18:6:22
IP Address	192.168.0.122
Subnet Mask	255.255.255.0
Gateway Address	192.168.0.1
Data Port	3000

Paging Server Status	
Server Name	IPX Device
Server IP	192.168.0.101
Server Version	2.29

Note: If Paging Server IP address is changed to an unknown value, turn On the Auto Connect allow iEP1200 auto capture the server IP address and show up in the device information page.

Network Configuration

Edit iEP1200 IP address, Subnet address and Gateway address here to suit you networking environment. It is recommended to leave the Data port number unchanged. Click the "SAVE" button to save your changes.



IP Address	192.168.0.122
Subnet Address	255.255.255.0
Gateway Address	192.168.0.1
Data Port	3000

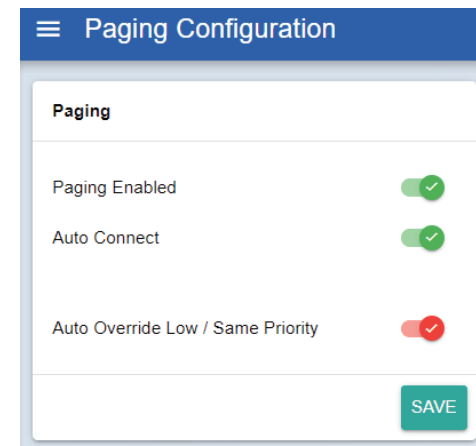
SAVE

Paging Configuration

Paging Enabled: Enable this setting all the time.

Auto Connect: We can either turn On the Auto Connect to allow iEP1200 search and connect to Paging Server automatically or turn Off the setting and specify the Paging Server IP address here.

Auto Override Low / Same Priority : Enable this setting to have iEP1200 to have highest priority over iPD / PD paging



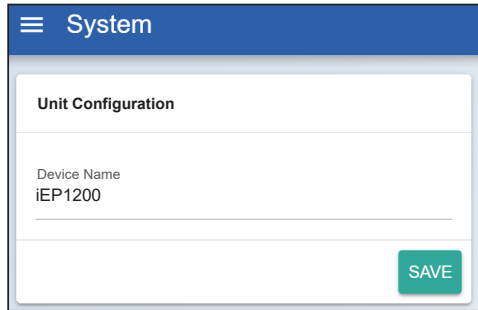
Paging Enabled	<input checked="" type="checkbox"/>
Auto Connect	<input checked="" type="checkbox"/>
Auto Override Low / Same Priority	<input type="checkbox"/>

SAVE

Device Setup Via Browser

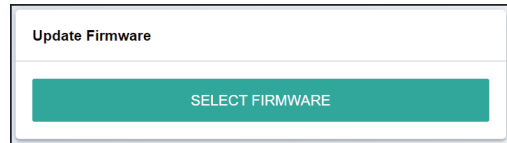
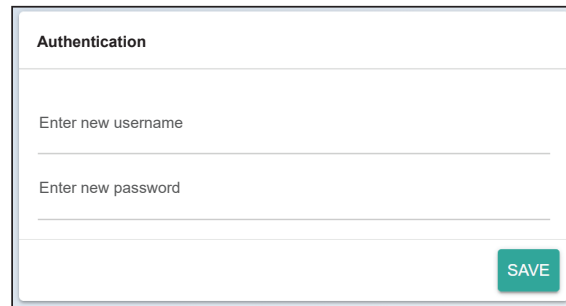
Unit Configuration

Device Name: We can assign a meaningful name here. E.g. “5th Flr iEP”. The name shall appear in Paging Server-Client Browser tab to show iEP1200 information and connection status.



Authentication

We can change the login user name and password here.



Update Firmware:

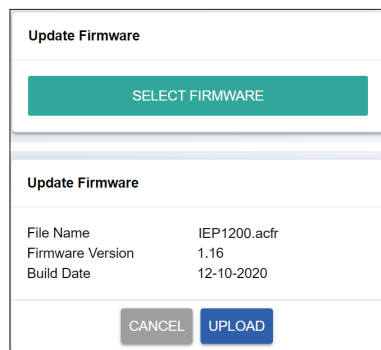
Update system firmware, please refer to “ Firmware Update” section below.

Firmware Update

System firmware shall be updated once in a while when new features are available or to fix bugs. There are 2 methods of doing:

Update firmware in Normal Operation Mode:

1. Open a browser and type in the iEP1200 IP Address.
2. Under “System” page look for “Update Firmware” section as shown in below.



Click “SELECT FIRMWARE” and choose a binary file with “acfr” extension. Click “UPLOAD”.

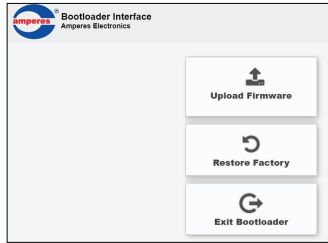
Once the update is completed, the browser should enter the login page.

Update firmware in Bootloader Mode:

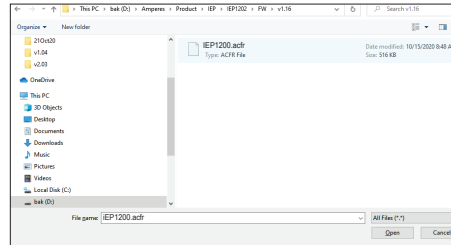
If the iEP1200 “hanged”, it is required to perform system reset by :

1. Press & hold the reset button until “STREAMING” LED is turned ON. This will set the IP address to default address 192.168.0.100.
2. Open a browser and enter the IP address 192.168.0.100. A web page as shown in following page shall appear.
3. Select “Upload Firmware”, choose a binary file with “.acfr” extension and click “UPLOAD”
4. Once the uploading is completed, the browser shall enter the login page.

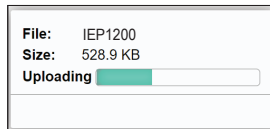
Firmware Update



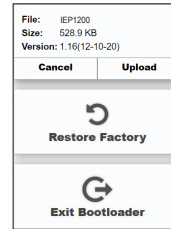
Click the Upload Firmware button to find the updated firmware file.



Find the updated firmware file.



Updating progress



Ready to upload, click Upload button to upload the firmware.



After finish updating firmware, the browser automatically restart.

Technical Specifications

Power requirement	24V DC 500mA
Power consumption (DC)	
- Idle	1.5W
- Active	5W
Current consumption (DC)	
- Idle	60mA
- Active	210mA
Microphone	Handheld condenser omni directional
Siren frequency	Continuous at 8 KHz paging mic
Outputs	Balanced line out (1.2V)
Priority sequence	Paging mic - message - siren - pre amp in
Indicators	Front test switch / remote contact
Connection	
- LAN interface	RJ45 (10 / 100 Base - T)
- RS485	Phoniex connector
User interface	IE Ver 8 and above, Google Chrome, RS485, Firefox V22+
Protocols	TCP/IP, UDP, IGMP, Http
Dimension (WxHxD)	482 x 88 x 180
Weight	2.85 kg

Note:

The above specifications are correct at time of printing but subjected to changes without prior notice due to product improvements.

Warranty Conditions

Only Amperes Electronics Service Centres are allowed to make warranty repairs : a list of Amperes Electronics Service Centres may be asked for by the purchaser or send directly to Amperes Electronics Sdn Bhd at 70 Jalan Industri PBP 3, Tmn Perindustrian Pusat Bandar Puchong, 47100, Puchong, Selangor, Malaysia or its authorized dealers. This warranty is not valid if repairs are performed by unauthorized personnel or service centres.

This warranty covers only repairs and replacement of defective parts ; cost and risks of transportation as well as removal and installation of the product from the main system are for the account of 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 product 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 out of use of the unit; moreover the warranty does not cover any damages which may be caused to people and things when using the product.

This warranty certificate is valid only for the described product, and is not valid if modifications are made on this certificate or on the identification label applied on the product.

This warranty covers all the material and manufacturing defects and is valid for a period of 36 months from the date of purchase or for a specified 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.

Amperes Electronics Sdn Bhd is not obliged to modify previously manufactured products under warranty if the design changes or improvements are made.

Disclaimer

Information contained in this manual is subject to change without prior notice and does not represent a commitment on the part of the vendor. AMPERES ELECTRONICS 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 AMPERES ELECTRONICS SDN BHD or its authorized service agents.

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

AMPERES ELECTRONICS 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.



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