amperes ®
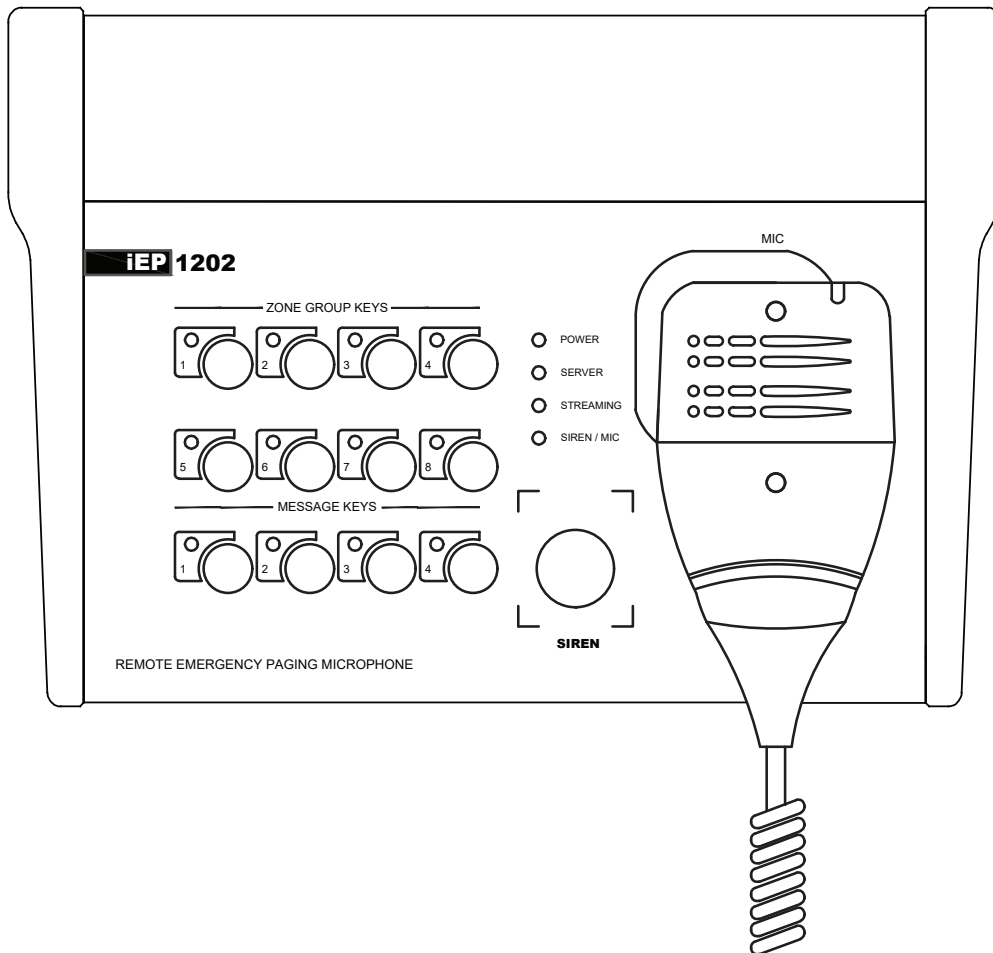
iEP1202
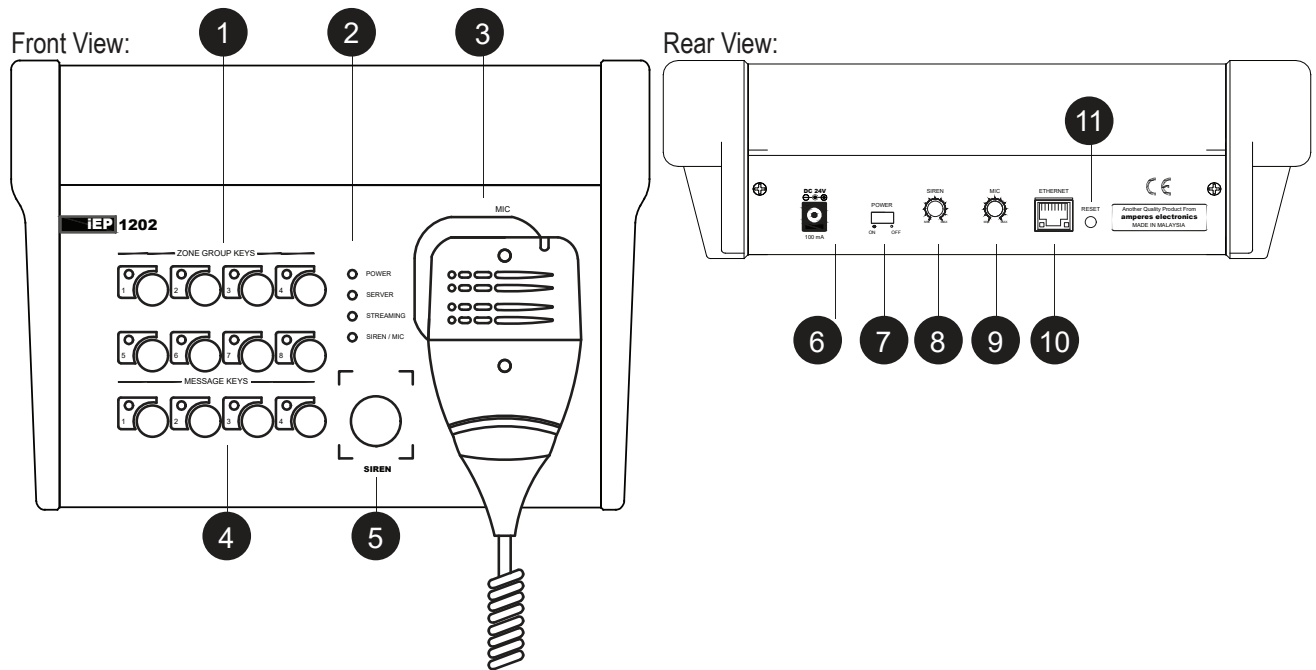## Ethernet Emergency Paging Microphone

Thank you for choosing another quality product from Amperes Electronics.

iEP1202 is a desktop version of ethernet based Emergency Paging Mic with additional features as compared to rack mounted iEP1200. It can be placed at FCC or Security / Guard house where direct access with highest priority to PA system is more convenient and faster.

Zone groupings and messages are programmable via web browser with user friendly UI. iEP1202 is an essential tool for emergency broadcast in IP Network PA setup.

Parts Identification

1. ZONE GROUP KEYS

8 buttons available for triggering zone or group of zones. Each button can be programmed to include several zones. Refer to "Key Configuration : Programmable Zone Keys " at Page 5.

2. LED INDICATORS

POWER - Light up when iEP1202 is powered ON.
SERVER - Light up when iEP1202 successfully establish a connection with Paging Server (iPX5101).
STREAMING - Blink whenever iEP1202 is streaming audio to Paging and Music Client (iPX5155).
SIREN / MIC - Light up when user activate the handheld mic or 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 all zones, just pick up the handset, press the switch and start talking. To page a group of zones, press the corresponding Zone Group Key then press the handset switch then talk.

4. MESSAGE KEYS

Message keys for direct message activation to all zones. MES 1 to MES 4 with LED indicators.

5. SIREN SWITCH

Press siren key shall activate the siren. Press the key again will turn the siren Off.

6. 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 or through UPS.

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

Parts Identification

7. POWER SWITCH

To turn On / Off iEP1202 power.

8. SIREN LEVEL CONTROL

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

9. MIC LEVEL CONTROL

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

10. ETHERNET PORT

Connection to network switch. The unit is non - POE equipment, thereby external 24V DC power supply is required.
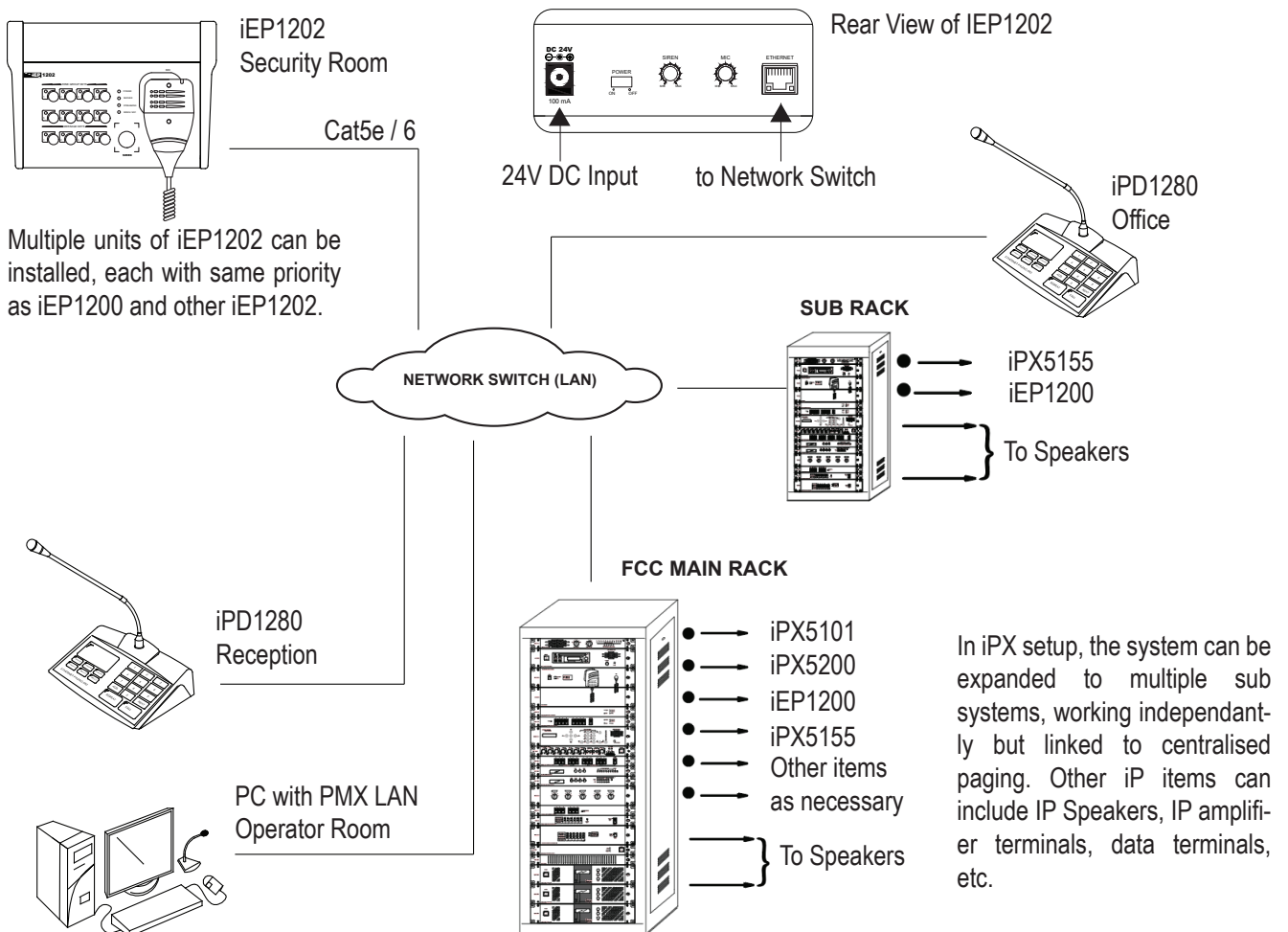
11. RESET BUTTON

Button to allow iEP1202 enters Bootloader mode or reset settings to factory defaults/

Bootloader mode : To enter this mode, hold the Reset button until Power, Server, Streaming, Siren / Mic and Message LEDs lit. Only enter this mode for firmware updates when normal updating mode does not work. All iEP1202 settings and message library files shall remain intact.

Reset to Factory Default settings : Hold the Reset button until Power, Server, Streaming and Siren/Mic LEDs lit. It will reset all iEP1202 settings to default. All messages in Message Library will be removed.

General Schematic

iEP1202
Security Room

Rear View of IEP1202

Cat5e / 6

24V DC Input   to Network Switch

iPD1280
Office

Multiple units of iEP1202 can be installed, each with same priority as iEP1200 and other iEP1202.

SUB RACK

NETWORK SWITCH (LAN)

iPX5155
iEP1200

To Speakers

FCC MAIN RACK

iPD1280
Reception

iPX5101
iPX5200
iEP1200
iPX5155
Other items
as necessary

In iPX setup, the system can be expanded to multiple sub systems, working independantly but linked to centralised paging. Other iP items can include IP Speakers, IP amplifier terminals, data terminals, etc.

PC with PMX LAN
Operator Room

To Speakers

Device Setup Via Browser

Some initial setups are required as below. iEP1202 is to be connected with iPX5101 to form a complete system. The default address is 192.168.0.100. The login page shall appear with User ID and Passwords as "admin".

Device Info

Once is login to the iEP1202 page the below information is shown:

1) Firmware version
2) Netwoking address
3) IP Address paging
4) Connection status

Network Configuration

Edit iEP1202 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.

Paging Configuration

We can either turn On the Auto Connect to allow iEP1202 search and connect to Paging Server automatically or turn Off the setting and specify Paging Server IP address here.

* Note: Turning ON the auto connect when, Paging Server IP address got changes, iEP1202 will auto capture the IP Address.
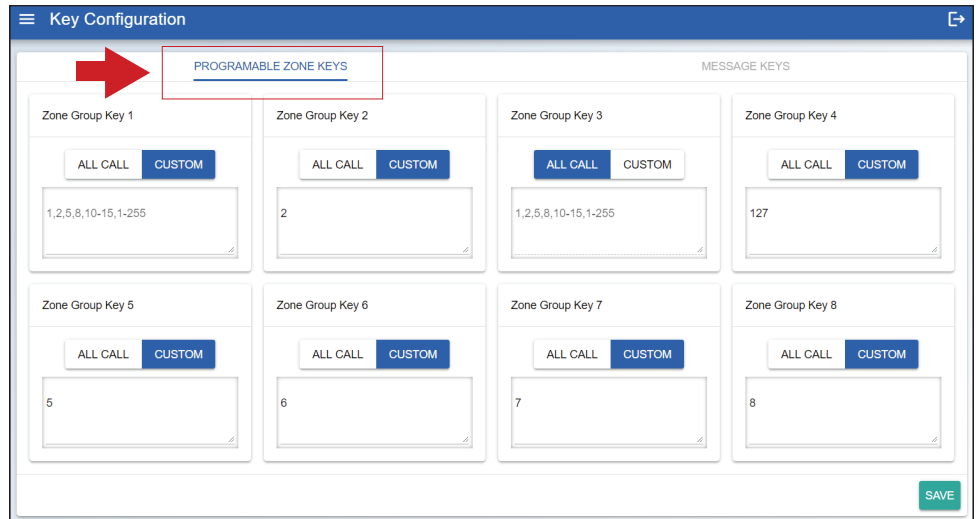
Device Setup Via Browser

Key Configuration : Programmable Zone Keys

This is to assign the zones to "Zone Group Keys". This is to enable targeted paging to group of zones such as "Staircases", " Lobbies ", " Guest Rooms ", etc.

Each group key can accomodate up to 254 zones.

To assign several zones to a key, select "CUSTOM" and enter the zone number e.g. 1,2,10 - 15. If we select "CUSTOM" but not enter any zones, no zone will be called during paging.
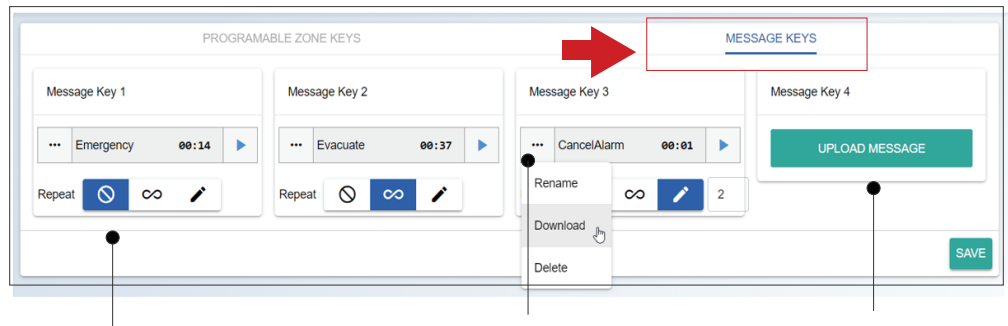
To assign the key as ALL CALL, just select "ALL CALL", by default each key is assigned as ALL CALL.

Click "Save" upon completion of setup.

During paging a specific group of zones, just select desired group key then activate the mic to talk and broadcast the message to the zones. Activate the mic without prior select a group key will broadcast the paging to all zones.

Key Configuration : Message Keys

There are 4 programmable message keys, each able to store message of up to 2 minutes.

There are 3 modes of message playback :
- Play once
- Play indefinitely until manually stopping it
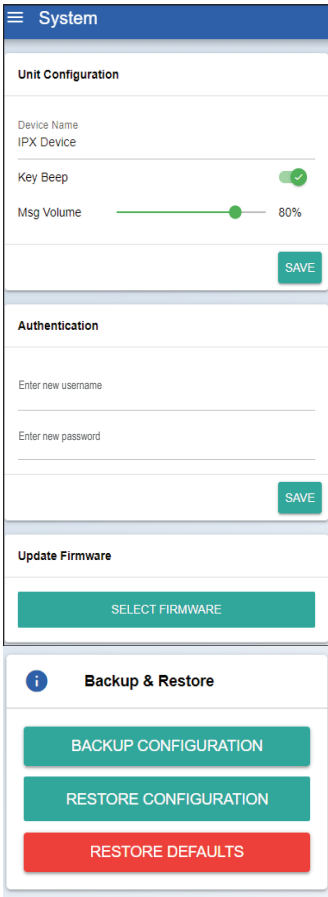- Play for number of times which can be assigned.

Press this "..." button to rename the uploaded file name, download or delete it.

Upload message : Click the "UPLOAD MESSAGE" button, select the file required from your PC.

To switch a message to another, e.g. while playing message 1, press again the key to stop and then press message 2.

Activation of Siren or manual paging will override the message playback, either from the unit itself or from another iEP1202.

Device Setup via Browser

System :

Unit Configuration

Device Name: We can assign a meaningful name here. E.g. " 5th Flr iEP "

Key Beep: To enable / disable key beeping when user press a Group key.

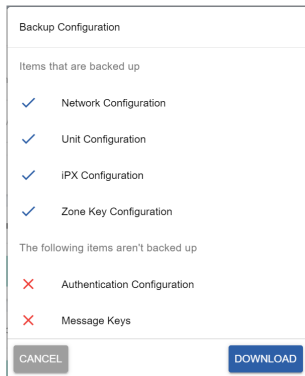Message Volume: Adjust volume level of playing message.

Authentication:

Allows user name and password change to avoid unnecessary tampering to the configurations

Update Firmware :

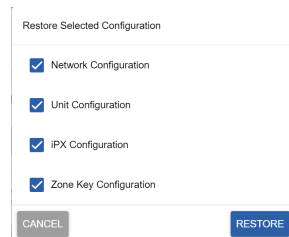Allow firmware update to the unit under normal update process. See section below.

Backup Configurations :

To save all system settings except Authentication and messages uploaded to the unit in .json file.
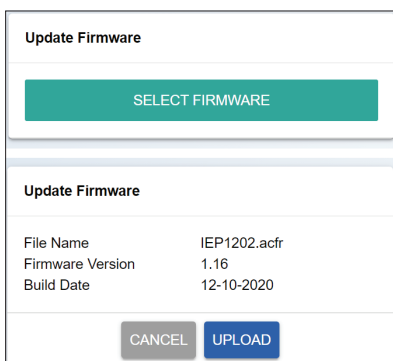
Restore Configurations :

To extract previously saved settings from a file and restore the following components which is selectable.

Restore Defaults :

To revert to factory default settings

Firmware Update

There are 2 ways to perform firmware or system updates :
- Web browser
- Bootloading (normally when the unit hangs)

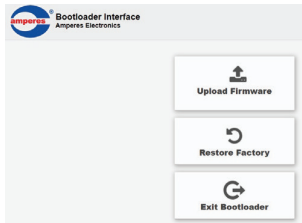To update via web browser, login into the unit under the "System" tab.

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 iEP1202 "hanged", it is required to perform system reset by :

1. Press & hold the reset button until "SIREN / MIC" LED is turned ON. This will set the IP address to default add. 192.168.0.100.
2. Press & hold the reset button untill "STREAMING" LED is turned ON. This will make iEP1202 entering bootloader mode.
3. Open a browser and enter the IP address 192.168.0.100. A web page as shown below shall appear.
4. Select "Upload Firmware", choose a binary file with ".acfr" extension and click "UPLOAD"

5. Once the uploading is completed, the browser shall enter the login page.

Updating via Bootloader mode

Technical Specifications

Power requirement	24V DC 100mA
Power consumption (DC)	
Idle	1.3W
Active	1.8W
Current consumption (DC)	
Idle	53mA
Active	72mA
Microphone	Handheld condenser omni directional
Siren frequency	Continuous at 8 kHz
Connection:	
- LAN interface	RJ45 (10 / 100 Base - T)
- Protocols	TCP/IP, UDP, IGMP, Http, ADMP
Transmission mode	Unicast & Multicast
Paging encoding format	G.722
Zone groupings	8
Zones per group	248
Message:	
Duration per message	2 minutes
Total duration	590 seconds
Message key storage	1 message per message key
Upload format	MP3, WAV
Download format	WAV
User interface	IE Ver 9 and above, Firefox or Google Chrome (preferred)
Dimension (WxHxD)	248 x 65 x 190 (excl. mic)
Weight	900 g

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.