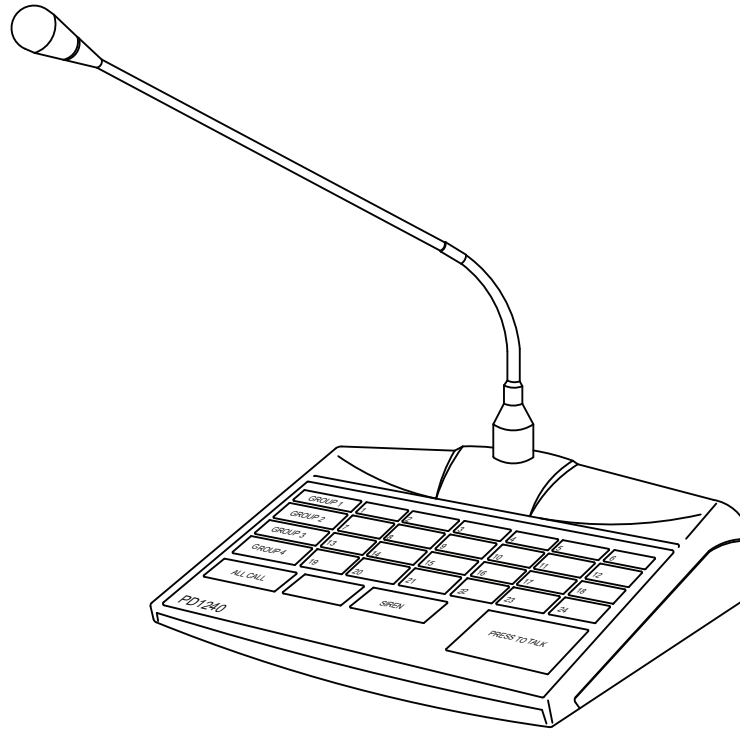## PD1240
24 Zones Digital Paging Microphone

Thank you for choosing another quality product from Amperes Electronics

Product in Summary

Amperes has improved and upgraded this version of PD1240 paging microphone, which can be used and interchanged with other models of PD series paging console in the system. Apart from this, every PD1240 can be used alongside with MxP2288 MatriMix system, thanks to the continuous improvement policy of Amperes.

We shall endeavor to make products with contemporary needs and yet expandable for future upgrades. We are sure you make the right decision to choose Amperes, which is not only offering the product that meets your budget, but perform beyond your expectation.

We appreciate that you read through the manual to avoid any mishandling as well as to explore the full potential this unit can offer. Keep this manual for future reference and we believe that you are getting an optimum product in its class.
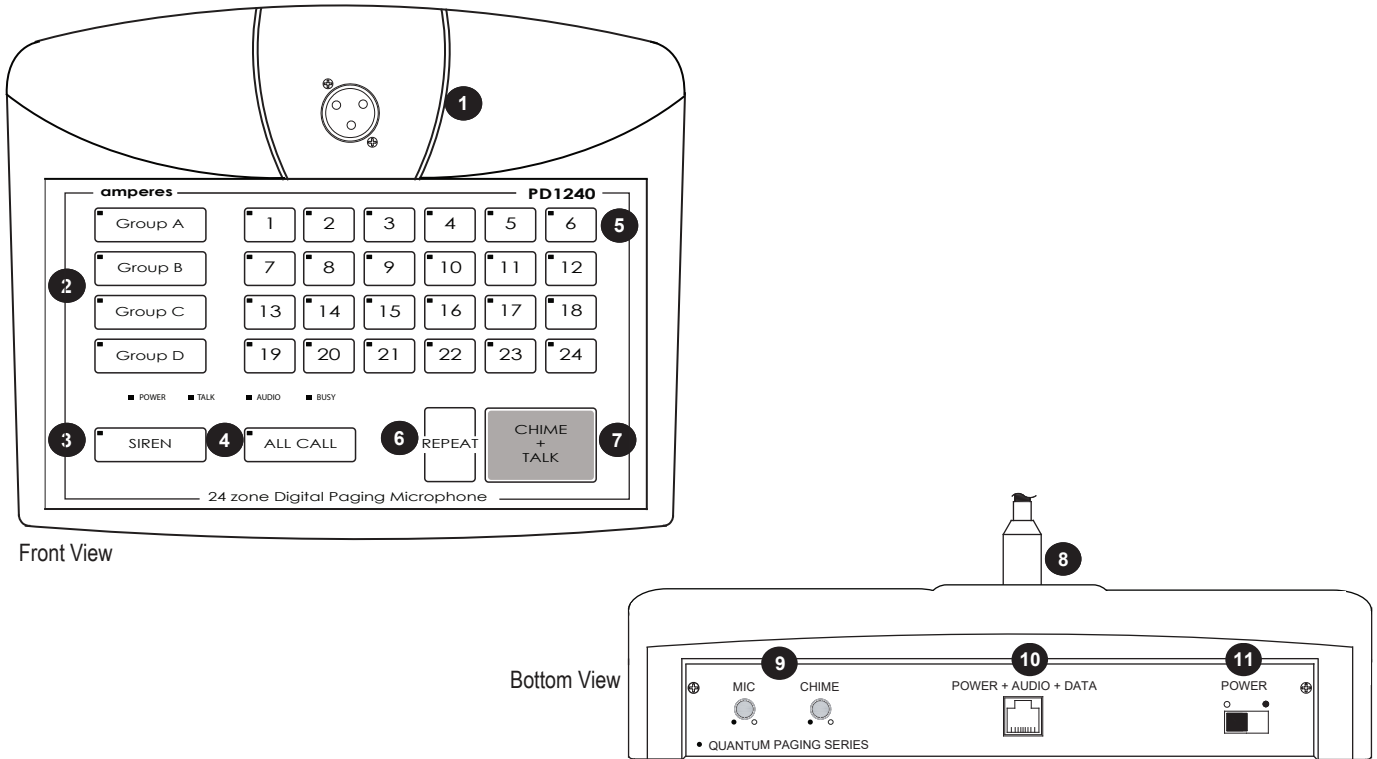
Notice On This Version Of PD1240

PD1240 and PD1280 shall be the next generation of desktop paging microphones for Amperes. They are enhanced versions of the popular PD2400 series, featuring soft touch sensor buttons to meet today's aesthetic demand.

Common specifications from PD2000 series are included but further improved with better sound delivery, thanks to the embedded sound processor. Features available include priority level assignment, multipoint paging setup, chime and microphone volume controls as well as illuminated gooseneck microphone.

Parts Identification

Front View

Bottom View

1. PAGING MICPOHONE INLET

XLR inlet for gooseneck microphone. Only condenser microphone supplied or those operates under 3 to 9 V.

2. GROUPING SELECTION

Each group represents 6 zones. This is a convenient way of selecting zones according to groups.

3. SIREN BUTTON

Pressing this siren button the LCD shall show the 'Siren Active', after that press the 'Chime & Talk' button shall activate the EP1200A to siren mode.

4. ALL CALL BUTTON

Mic shall be activated instantly without crime, triggering all normal zones. Note that making ALL CALLs will not trigger the overriding relay at the zone selectors, thus the volume controllers set at minimum shall not be overridden.

5. INDIVIDUAL ZONE SELECTION

Individual zone selection switch to trigger the zone selector.

6. REPEAT BUTTON

Press repeat button for recall previous zone selection.

7. CHIME & TALK BUTTON

Select the zones required before pressing this button. A chime shall start (if selected) and followed by mic activation, which is indicated by the illuminated ring at the gooseneck microphone.

8. GOOSENECK MIC

This detachable condenser mic comes with illuminated ring when the mic is active mode and ready for paging.

9. MIC & CHIME VOLUME CONTROL

Individual volume for chime and microphone output level can be adjusted according to site requirement.

10. OUTPUT CONNECTION

Data and audio from other EX2800 (if any) are fed to this port forming a circuit. This connection is applicable only if multipoint paging setup is established. Use a DC24V power adaptor supplied for powering the unit.

11. POWER SWITCH

This switch is for On/Off the 24V DC power.
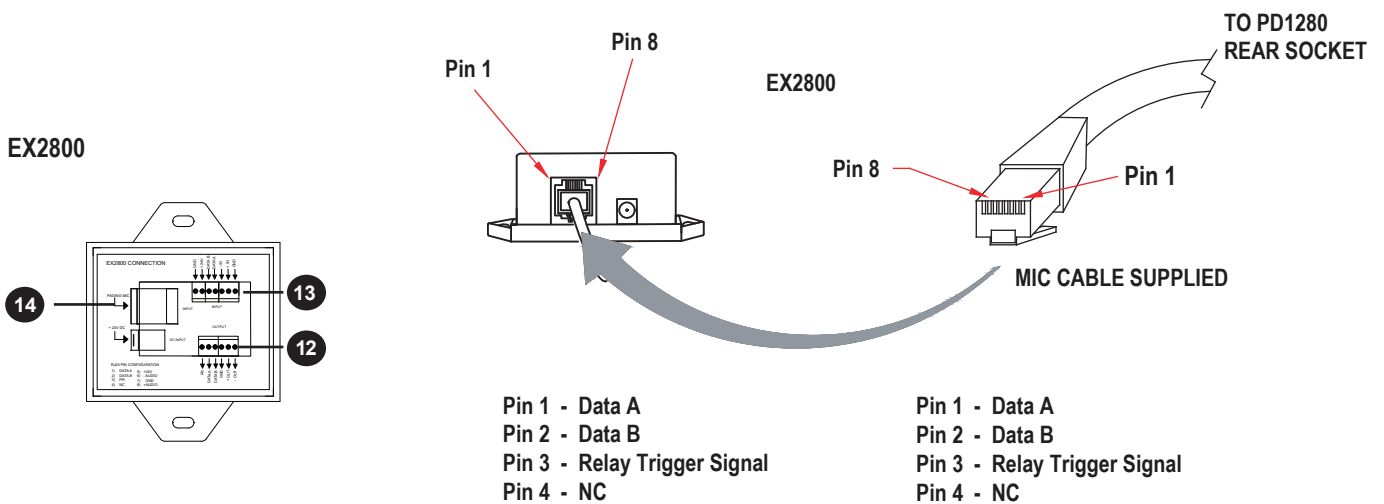
12. DATA / AUDIO OUTPUT

Data and audio are linked to TD6240 decoder unit using 2 pair screen cable. Please refer to 'Connecting the Unit' for detailed connection diagram.

13. DATA / AUDIO INPUT LINK / DC SUPPLY

Data and audio from other EX2800 (if any) are fed to this port forming a circuit. This connection is applicable only if multipoint paging setup is established. Use a DC24V power adaptor supplied for powering the unit.
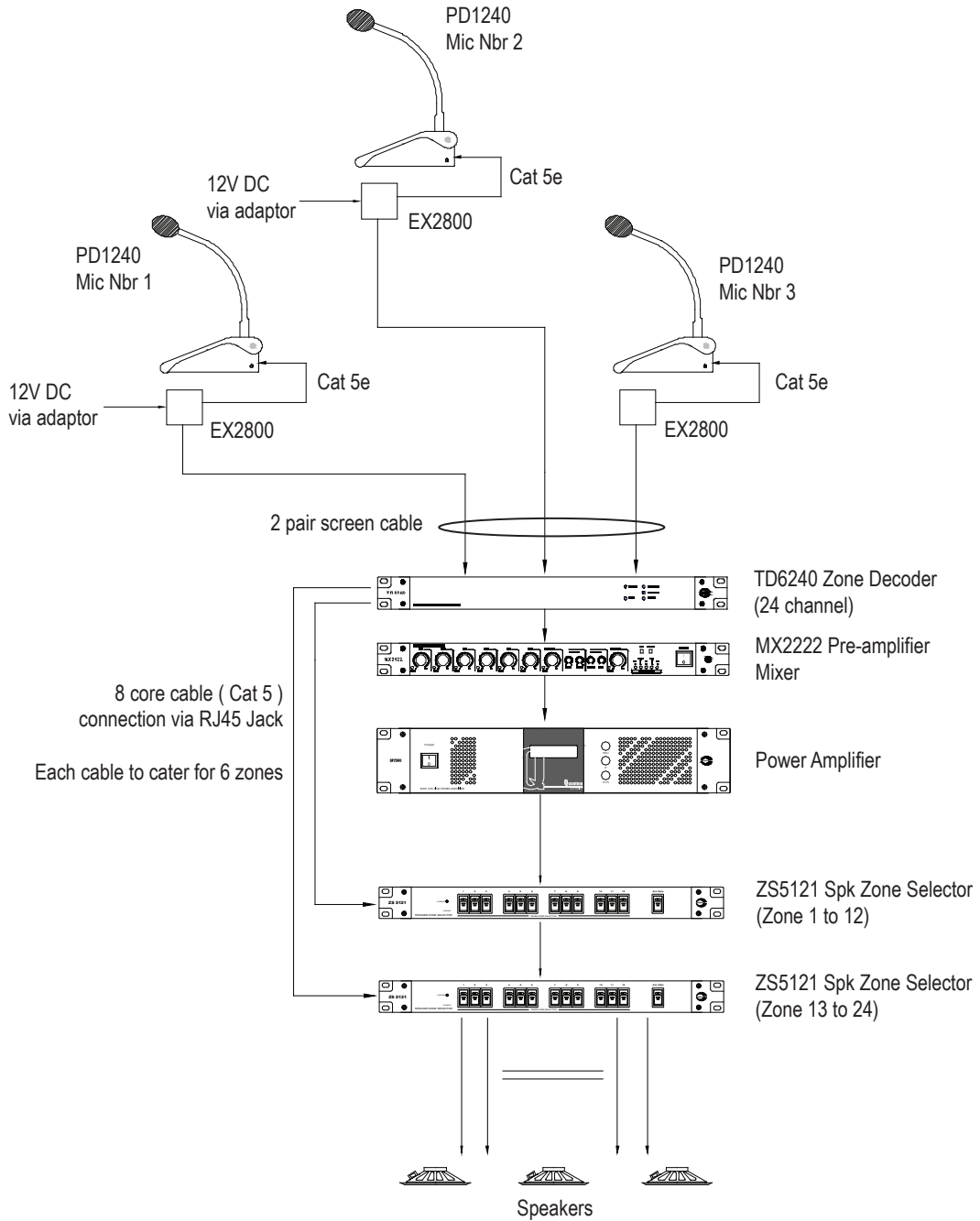
14. PAGING MIC CONNECTION

Connect to the paging mic via this RJ45 connector. For pin configuration, refer to the diagram.

EX2800

Pin 8

Pin 1

EX2800

TO PD1280
REAR SOCKET

Pin 8

Pin 1

MIC CABLE SUPPLIED

EX2800

14

13

12

Pin 1 - Data A
Pin 2 - Data B
Pin 3 - Relay Trigger Signal
Pin 4 - NC

Pin 1 - Data A
Pin 2 - Data B
Pin 3 - Relay Trigger Signal
Pin 4 - NC

General Schematic Diagram

At remote location

PD1240
Mic Nbr 2

Cat 5e

12V DC
via adaptor

EX2800

PD1240
Mic Nbr 1

PD1240
Mic Nbr 3

12V DC
via adaptor

Cat 5e

EX2800

Cat 5e

EX2800

2 pair screen cable

TD6240 Zone Decoder
(24 channel)

MX2222 Pre-amplifier
Mixer

8 core cable (Cat 5)
connection via RJ45 Jack

Each cable to cater for 6 zones

Power Amplifier

ZS5121 Spk Zone Selector
(Zone 1 to 12)

ZS5121 Spk Zone Selector
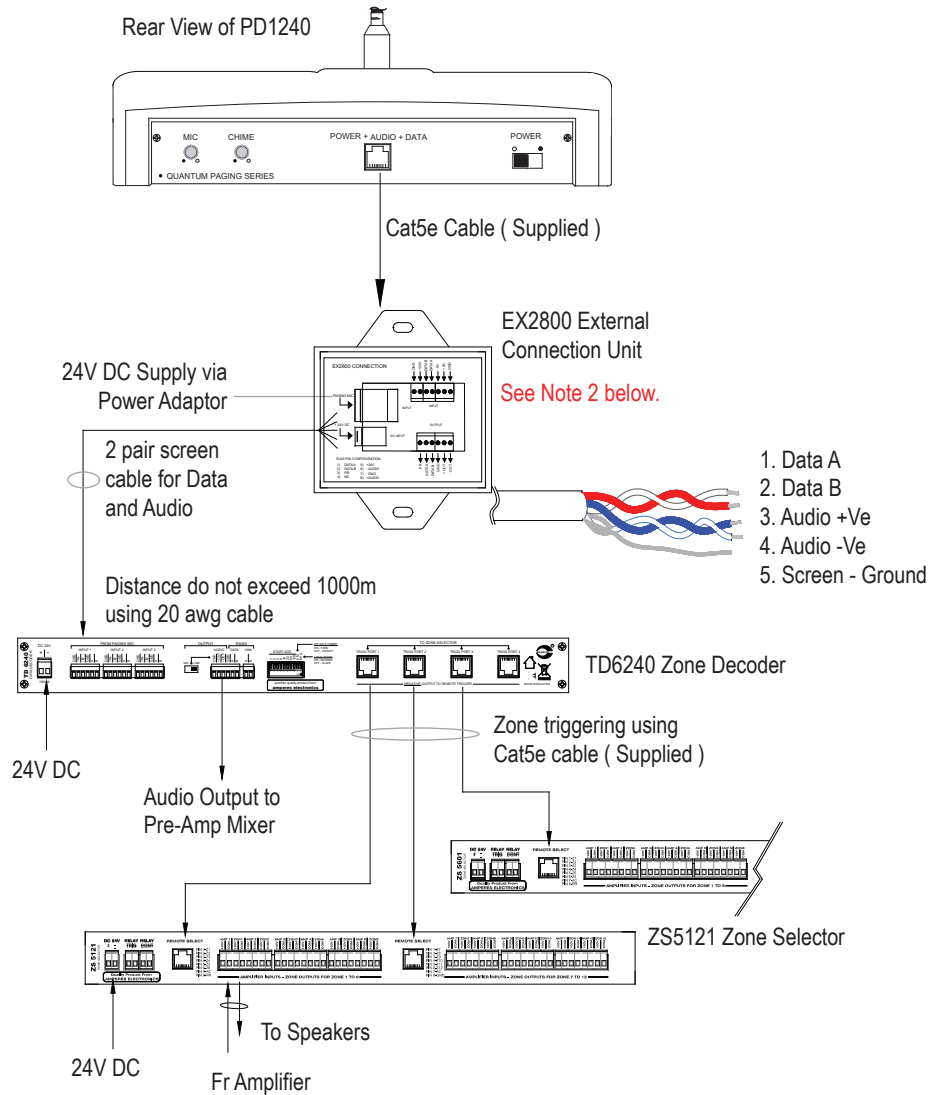(Zone 13 to 24)

Speakers

The above configuration shows a typical system with 24 speaker zones, using 3 units of PD1240 with a single TD6240 (24 zone decoder) and 2 ZS5121.

Other made of zone selectors of Amperes ZS5602 can be used to replaced ZS5121.

Priority setting is done at each individual mic, connected to TD6240 remote mic inputs. Note that connection to the TD6240 can be made freely to the connectors unlike the previous version.
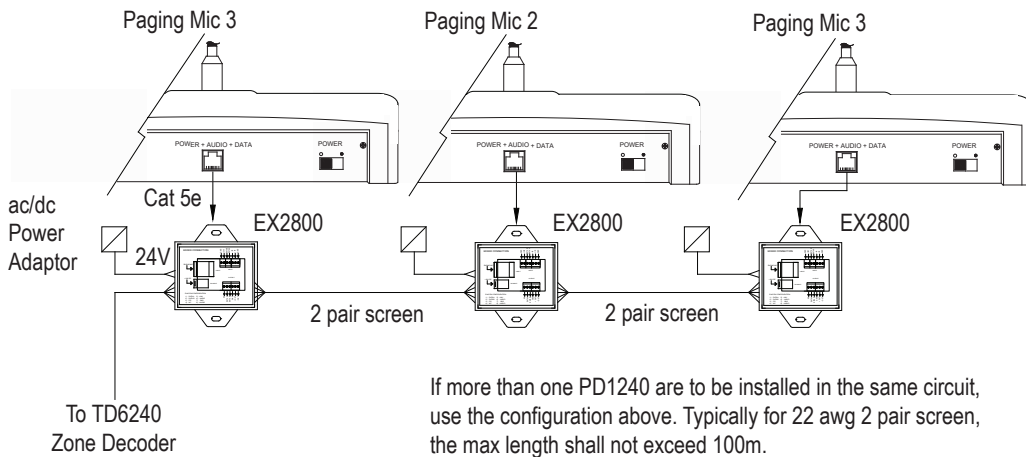
PD1240 can also be used with MatriMix system. In this case EX1102 shall be used instead of EX2800 as the external connection unit.

Connecting the Unit

Rear View of PD1240

MIC   CHIME   POWER + AUDIO + DATA   POWER

QUANTUM PAGING SERIES

Cat5e Cable (Supplied)

EX2800 External
Connection Unit

See Note 2 below.

EX2800 CONNECTION

24V DC Supply via
Power Adaptor

2 pair screen
cable for Data
and Audio

1. Data A
2. Data B
3. Audio +Ve
4. Audio -Ve
5. Screen - Ground

Distance do not exceed 1000m
using 20 awg cable

TD6240 Zone Decoder

Zone triggering using
Cat5e cable (Supplied)

24V DC

Audio Output to
Pre-Amp Mixer

ZS5001

ZS5121 Zone Selector

ZS 5121

24V DC

To Speakers

Fr Amplifier

Note 2 :
More than 1 PD1240 can be installed in a single circuit. In this case, loop the data / audio cable via the EX2800 terminals accordingly.
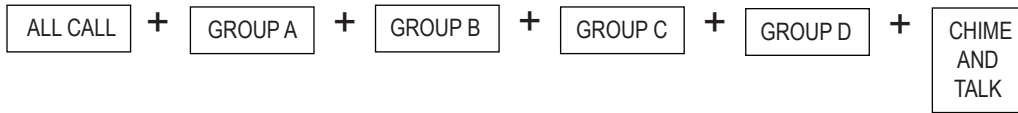
Connecting PD1240 in Same Circuit

Paging Mic 3   Paging Mic 2   Paging Mic 3

POWER + AUDIO + DATA   POWER

ac/dc
Power
Adaptor

Cat 5e

EX2800   EX2800   EX2800

24V

2 pair screen   2 pair screen

To TD6240
Zone Decoder

If more than one PD1240 are to be installed in the same circuit,
use the configuration above. Typically for 22 awg 2 pair screen,
the max length shall not exceed 100m.

Setting Mode

A simple setup is required during installation, otherwise they shall operate in factory default mode, such as priority level at normal (0) and time out at off.

To enter setup, press

| ALL CALL | **+** | GROUP A | **+** | GROUP B | **+** | GROUP C | **+** | GROUP D | **+** | CHIME AND TALK |

In setup mode, the following parameter can be made:

Unit priority (Priority level from 1 to 6, with 1 being highest)

Press | GROUP A | **+** from | 1 | to | 6 |

Chime 1 : First Chime

Press | GROUP B | **+** | 7 | Chime 1 or Type 1 | 8 | Chime type 2 |

Chime 2 : 2nd Chime

Press | GROUP C | **+** | 13 | Chime 2 or | 14 | Chime type 2 |

Set Time Out (to set auto cut period off of paging mic)

Press | GROUP D | **+** | 19 | for off or | 20 | 3 mins time out   or | 21 | 5 mins cut off |

To Exit and Save the Setup Mode, Press | CHIME AND TALK |

Operating The Unit

Select the zone for paging	Select the individual zone for paging or as group or ALL CALL, LEDs at the switches shall lit accordingly.
Press Chime + Talk button to page	A 4 tone upward chime shall be broadcasted to the zones selected. This shall be followed by activation of gooseneck mic, indicated by LED ring near the mic capsule. The console is now ready for paging.
Press Chime + Talk button to end	A 4 tone downward chime shall be broadcasted to the selected zones. LED ring turned off and the console is deactivated.

All Call Paging with 24V Override

Pressing ALL CALL from PD1240 shall activate all the zones at the zone selectors. If any volume controllers are installed in the particular zone and is switched off, this feature shall not override the VC. This is to avoid unnecessary interruption to the areas concerned, especially Emergency or Privacy Zones, such as Boardroom, Prayer Hall, Function Hall, etc.

To override the volume controllers during emergency, use EP1200A installed at the rack. Please refer to ZS manual to make necessary connection.

Technical Data

	PD1240
Operating Voltage	24V DC via EX2800 with local power adaptor
Power Consumption	1.2W
Zone Selection	24 zone keys, Group, All Call
Switching Selection	Sensor touch keypad
Microphone	Gooseneck condenser capsule; unidirectional
Output Impedance	600 Ohm
Output Level	1.2V balanced line output
Output Controls	Chime, mic volume
Data Connections	RS485; 19.2 kbps
Cabling to Decoder	2 pair screen; 22 AWG / Cat 5e
Recommend Operating Distance	500m max (18 AWG cable)
Compatible Interfacing Device	MxP2188, TD6240, TD6400
Chime	4 tone up and 4 tone down
Indicators	Zones, power, audio, data, gooseneck ring LED
Displays	NIL
Frequency Response	100 - 12 KHz @ 1 KHz +/- 3dB
S / N Ratio	>65 dB @ 1 KHz
Gooseneck mic length	370 mm
Dimension (W x H x D)	230 x 192 x 65 mm (Excluding Mic)
Weight	0.75 kg

Warranty Conditions

Only Amperes Electronics Service Centres are allowed to make warranty repairs : a list of Amperes Electronics authorized service centres may be asked by the purchaser or send directly to Amperes Electronics Sdn Bhd at 70 Jalan Industri PBP3, Tmn Perindustrian Pusat Bandar Puchong, 47100, Puchong, Selangor. This warranty is not valid if repairs are performed by unauthorized personnel or service centres.

Eligibility :
Amperes Electronics' Service Center will accept any device send in for repair / checking purchased from any of our dealers. Some dealers may have the right to refuse repair / service / checking for any device not purchased from them directly.

Coverage
This warranty covers only repairs and replacement of defective parts, due to defects of components or workmanship during product warranty period. For any product purchased exceeding the warranty period, a cost of repair shall be presented and will only proceed to rectifications upon agreed value. If the owner decides not to proceed, a minimal checking fees will be applied.

Exclusions
This warranty does not cover damages caused by misuse, negligence in application as well as using the product with power supply voltage other than shown on the product, or any other power supply source / adapter 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 certificate is valid only for the described product, and is not valid if modifications are made on this certificate or identification labels applied to the unit or any other modifications to the physical unit other than its intended usage.

Duration / Warranty Period
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.

Cost of Claiming Warranty
Cost and risk 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.

Limitations
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 cause to the people and things during the use of the product. Our liability is limited to the cost of the product

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

The purchaser is deemed to agree to the above warranty conditions once the product packaging is unpacked., Otherwise the product shall be returned to the seller in proper original condition.

Disclaimer

Information contained in this manual is subjected 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 of this product to be carried out by Amperes Electronics or its authorized service agents.

Amperes products must only be used for the purpose they were intended by the manufacturer and in conjunction with this operation 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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