



INSTRUCTION MANUAL

TD6240

24 Channel Data Decoder

Improved



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Product in Summary

TD6240 is used as data receiver from Amperes PD Series of paging microphones, iPX5155 or iPX5455 IP BGM / Paging clients for zone decoding and thereafter connected to zone selectors for activation of speaker line channels. With its harmonized protocol, it can be used seamlessly with all UART related products from Amperes.

We shall endeavor to make products with contemporary needs and yet expandable for future upgrades. In this version, we had changed the starting address setting, in which the start address is the start of zone number of the first channel of the device, instead of the start address of the whole device. In such case, it will be more flexible and reduce the wastage of unused zone numberings.

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.



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In our support towards environment, we shall no longer print manuals to be accompanied with each product. Please view through browser and print them only when necessary.

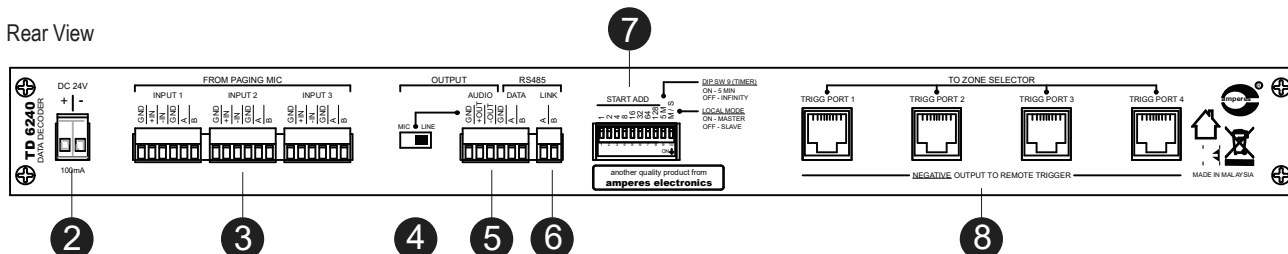


Parts Identification

Front View



Rear View



1. LED INDICATORS

POWER LED for DC input, PRIORITY indicates either PR2 or PR1 is active and ACTIVE is for activation or normal channel

2. POWER SUPPLY INPUT

The decoder is operated by using 24V DC, we recommend Amperes PS9400 power supply to be used or other regulated 24V DC power pack.

3. PAGING MIC CONNECTIONS

The connectors are to link to paging mics via EX2800 using 2 pair screen cable. There are 3 ports, which means 3 circuits are possible and there is no priority connections. Priority level of the paging mic is determined at the setting of the paging console.

4. OUTPUT LEVEL SELECTOR

Output level from the decoder can be set to Mic or Line level.

5. AUDIO OUTPUT

Audio output from the decoder is balanced with output level determined by the level setting as per item 6.

6. DATA LINK FOR CASCADE

This port shall be used if slave units are installed in the system. Link the data signal A/B to the data input of the next unit (Part 7). Ensure correct polarity and the unit setting.

More than one TD6240 shall be used for larger system, such as 25 channels and above.

7. UNIT ADDRESS DIP SWITCHES

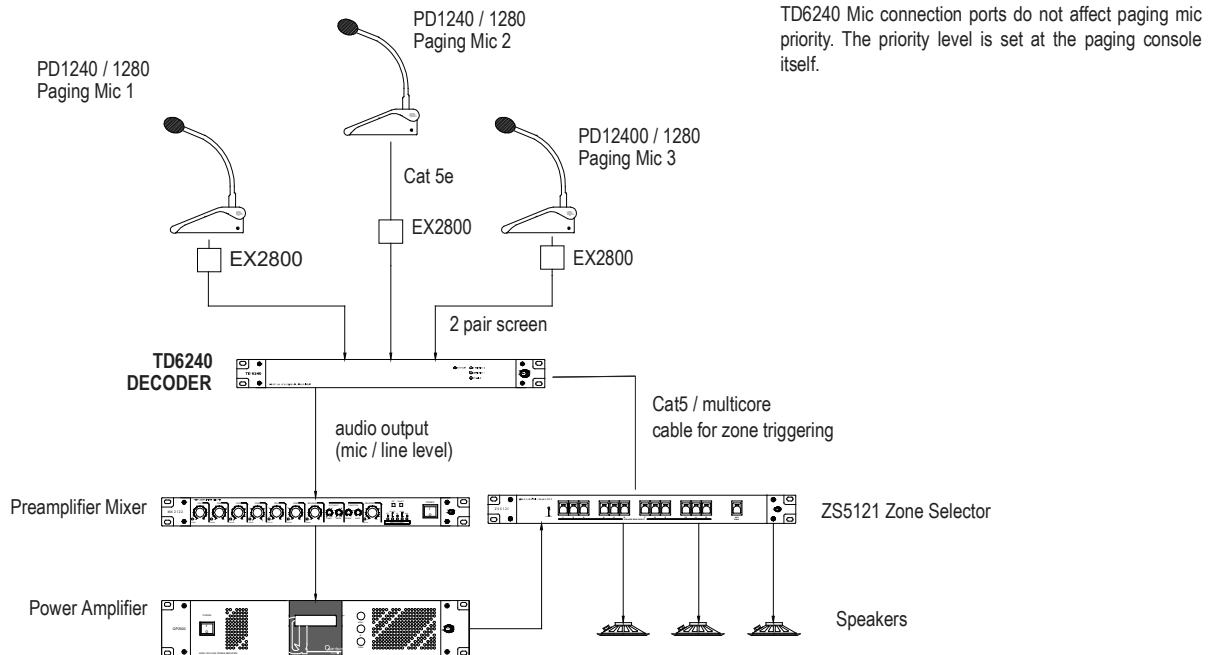
Each decoder caters for 24 channel outputs, thus each DIP setting shall comprise address for a group of 24 channels. Address setting shall be using BCD codes. The starting address refers to the starting address of the first channel and for the rest of the channels of the device.

Example:	DIP SWITCH 1 to 8	DIP SWITCH 9	DIP SWITCH 10
	10000000 - Zone 1 to 24	ON = TIMER 5 MIN	ON = MASTER
	10001000 - Zone 17 to 40	OFF = TIMER INFINITY	OFF = SLAVE
	11000010 - Zone 67 to 90		

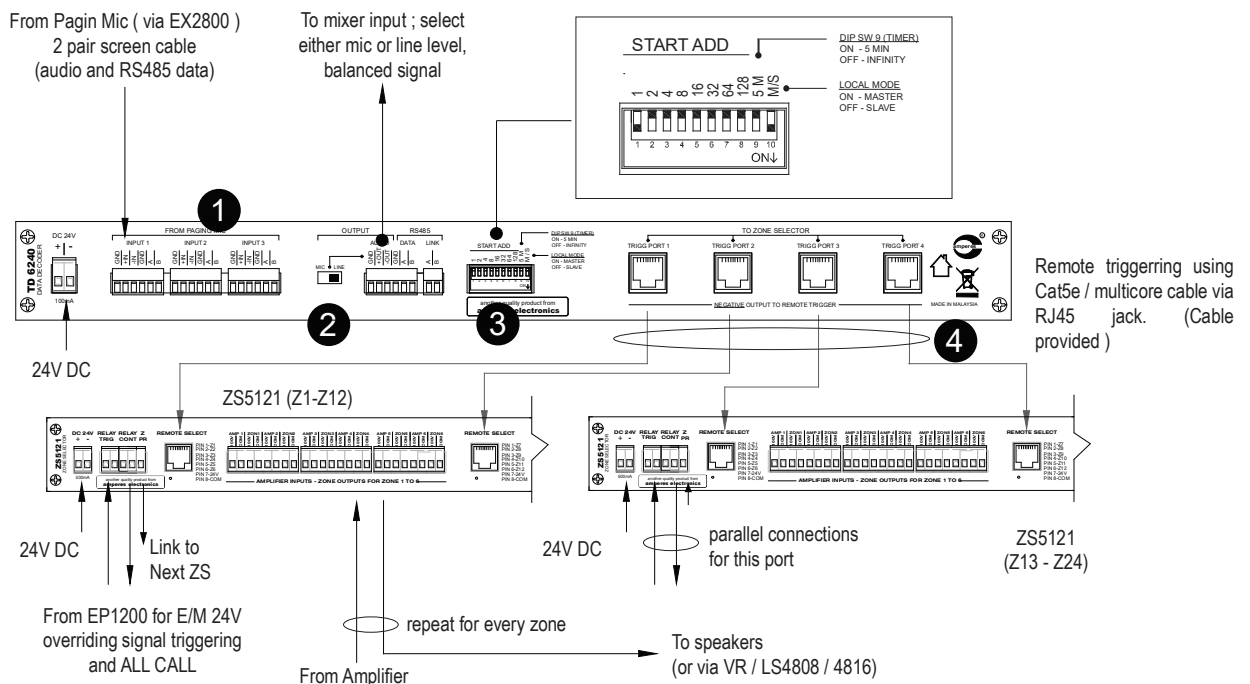
8. TRIGGERING PORT

Connect the zone selector's triggering port using RJ45 connector that is provided with each zone selector. Care has to be taken when using different type of zone selector. Please refer to section "Connection of Triggering Port" for details.

General Schematic Diagram



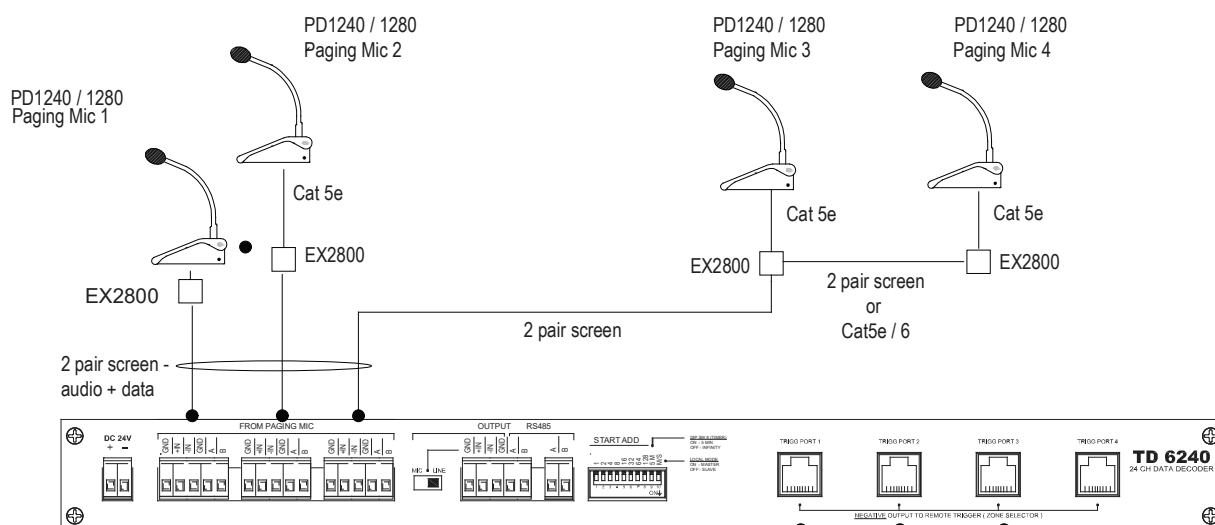
Connecting the Unit - Single Unit Installation



- 1 Paging mic can be connected to any of the port regardless of the priority setting at the paging console.
- 2 Use this switch to select the audio output level ; mic or line level when connecting to pre-amplifier mixer
- 3 Set unit address ; each address represents one unit of decoder of 24 zones.
example : 10000 00001 - Zone 1 to 24 (Set as Master with no time limit)
- 4 Each connection port is for 6 zones triggering. Connect the correct port according to the zone numbering.
(See section : Connection to speaker zone selector)

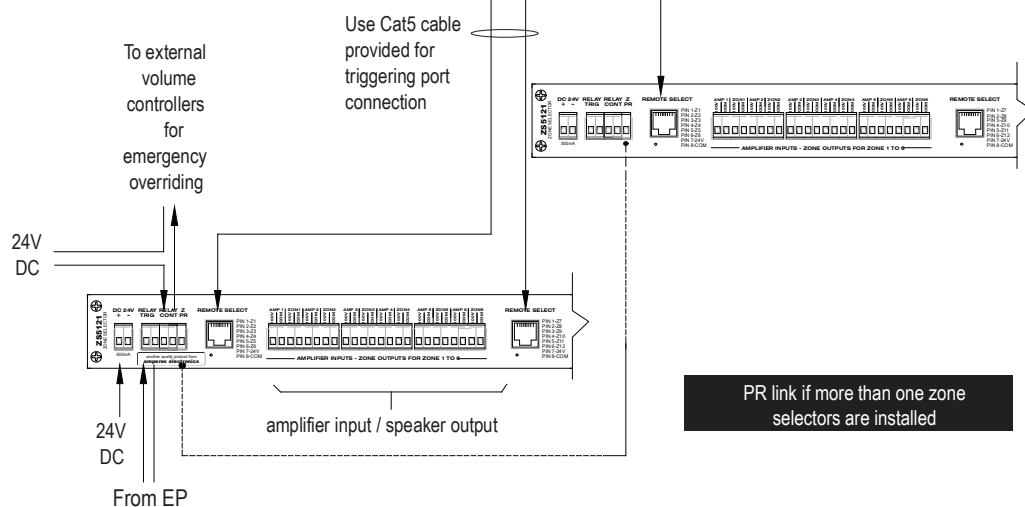
Multipoint Paging Installations and Connections to ZS Speaker Zone Selectors

More than one PD series paging mic can be connected to TD6240, although there are only 3 connection ports available in the decoder. Use EX2800 with IN - OUT link as shown.

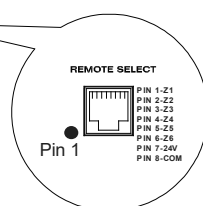
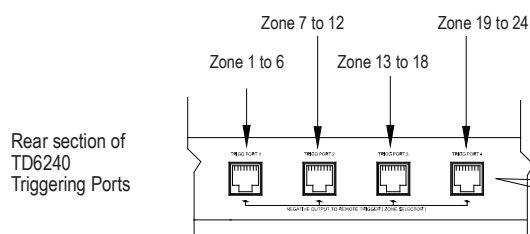


Priority setting is done at the paging mic itself, in which higher priority unit will overtake the lower one and when two mics are of same priority, it will be on first come first serve basis.

Please refer to connection diagram of paging mic for connections on EX2800.

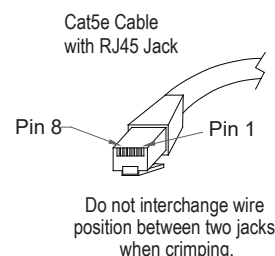


PIN CONFIGURATIONS :



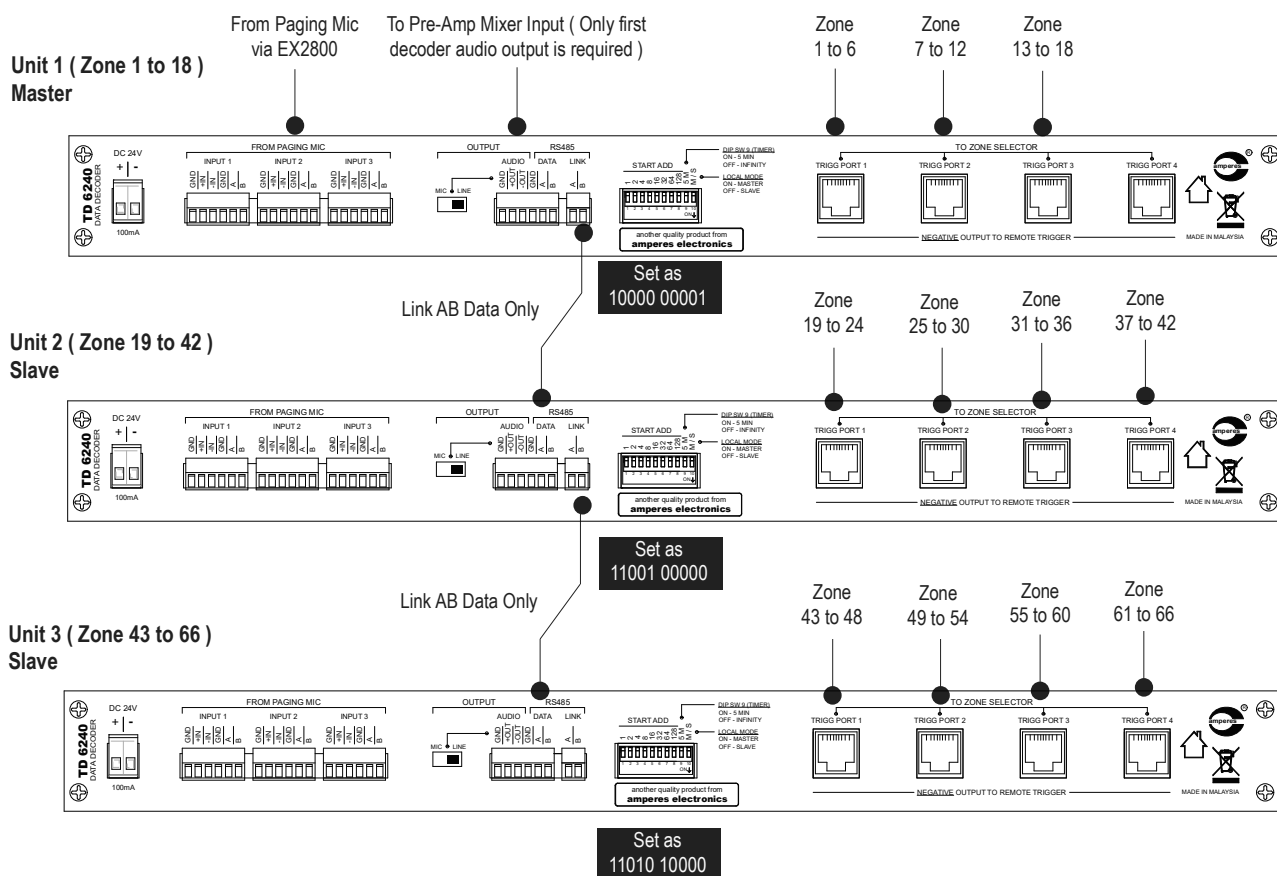
IMPORTANT NOTICE :

Always check pin compatibility between TD6240 and Zone Selectors as earlier versions may not work properly with the upgraded models.



Cascading Multiple TD6240

Multiple units can be cascaded for larger zone setups of up to 248 zones. Since the address DIP switch is the starting address of the first zone, other units will have flexibility to start with the address to suit the zone configurations.



Technical Specifications

Operating voltage	24V DC
Consumption	2.4W (100 mA)
Switching channels	24
Cascade / max zones	16 (max 248 zones)
Input circuit	3
Output connection (Triggering)	RJ45 to ZS zone selector
AUDIO	
Input impedance (Ohm)	Line : 10 K
Output impedance	600 Ohm balanced
Freq response	70 ~ 15 KHz
Audio input	Line
Max audio output	Line 1.1V
DATA	
Data protocol	RS485
Baud rate	19.2 K bps
Dimension (WxHx D)	482 x 44 x 180 mm
Weight	1.9 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 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.

This warranty covers only repairs and replacement of defective parts. 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.

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 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.

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.

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.

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.

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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.

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