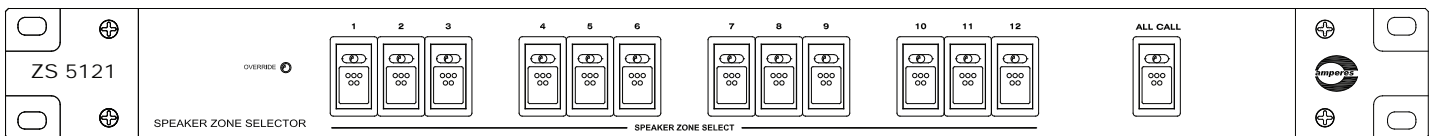
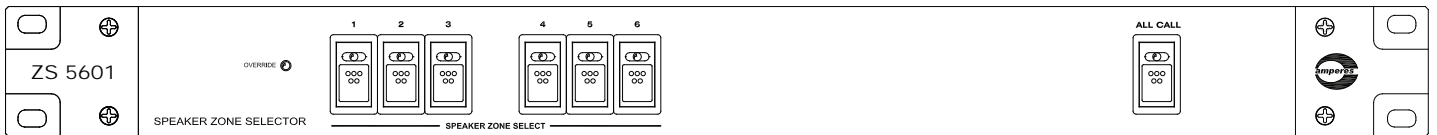




INSTRUCTION MANUAL

ZS5601 6 Ch ZS5121 12 Ch Speaker Zone Selector

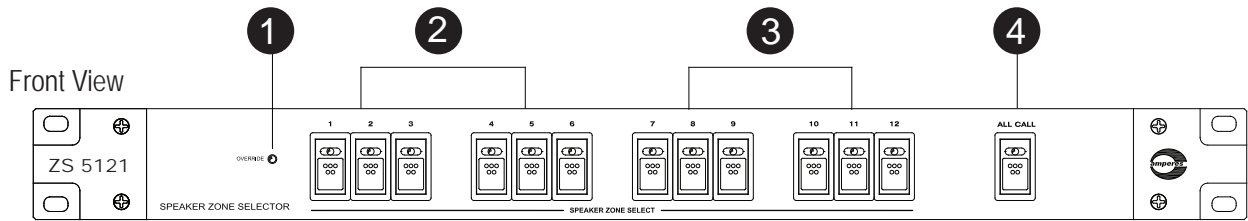


Thank you for choosing another quality product from Amperes Electronics.

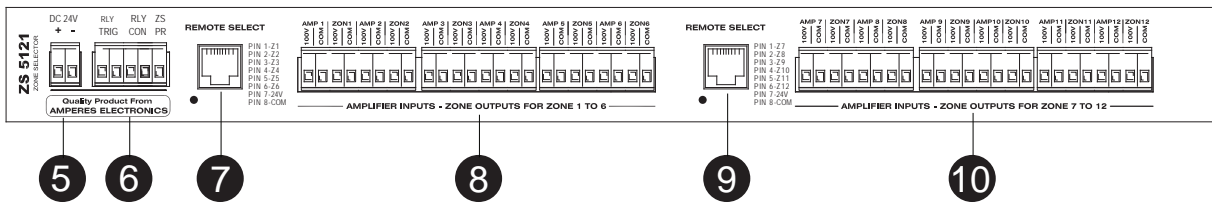
ZS5601 / 5121 speaker zone selector which had been used in thousands of installations for over a decade, is a trusted and reliable essential equipment in PA installations. With its gradual improvements over the years in terms of features, construction and parts, it is no doubt being the most wanted tool for PA setup.

Although it is not difficult to install this unit, a brief reading of the manual is truly recommended to avoid any misconnection as well as explore the potential usage of the product to its maximum.

Parts Identification



Rear View



1. BGM ZONE OVERRIDING INDICATOR

The LED shall it remote paging microphone is active and is overriding the local BGM zone selection. This is active if Amperes PM1060 paging is used or any other paging microphone console with Priority output signal.

2. FRONT PANEL ZONE SWITCHES - ZONE 1 TO 6

Switching for zone 1 to 6.

3. FRONT PANEL ZONE SWITCHES - ZONE 7 TO 12

switching for zone 7 - 12 for ZS5121 only.

4. ALL CALL SWITCH

All zones will be activated by pressing this switch, regardless of any inactive zone.

5. DC SUPPLY INPUT PORT

24V DC supply is required to operate this unit. Ensure polarity is correctly terminated to the port. It is recommended that supply with 1A rating of regulated source is used. Amperes PS9400 is recommended as a DC supply source to your installation.

6. EMERGENCY OVERRIDE TERMINAL

External switch (eg. fr emergency paging mic with dry contact) can be connected here, which shall trigger the built in relay when pressed. This shall then provide a dry contact in which would enable the installer to apply several functions such as providing 24V DC output for volume controller overriding purpose, trigger external device or link to BAS system, etc.

7. REMOTE SELECT PORT - Z1 TO 6

This is to connect to remote paging mic (PM series) or Data Decoder (TD Series) for remote zone triggering. Upon triggering the zone via this port, it shall override the locally selected zones. External triggering switches or other makes of paging microphone can utilise this facility provided -ve triggering method is used.

8. AMPLIFIER - ZONE OUTPUT CONNECTORS (ZONE 1 TO 6)

Output from amplifiers are connected to these terminals and speaker zoning is configured to the respective unit of amplifier. The user has the flexibility to configure the zoning system as each zone comes with single amplifier output connection.

Please observe polarity when terminating the amplifier / speaker zones and ensure that each zone is not overloaded (less than 500W rms)

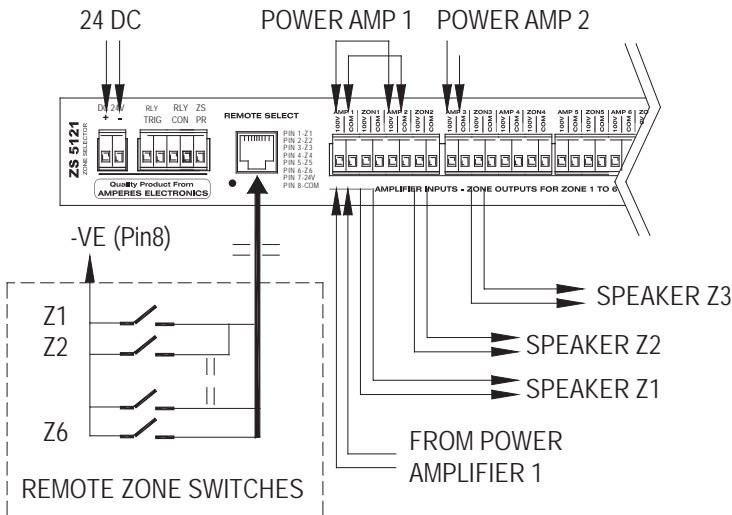
9. REMOTE SELECT PORT - Z7 TO 12

Similar function as Part 7 but only available for ZS5121.

10. AMPLIFIER - ZONE OUTPUT CONNECTOR (ZONE 7 TO 12)

Similar to Part 8 but only available for model ZS5121.

Single Unit Installation With Remote Select



The sample connections shown are using a single unit of either ZS5121 or ZS5601 in a small scale installation. i.e. small number of zone outputs.

Assumptions made are that :

1. Volume control overriding facilities are done separately. (refer example on page 6)
2. Paging or background music is transmitted only to the zone selected. (Not uninterrupted paging system)
3. Power amplifier unit 1 is to serve zone 1 and 2
4. Power amplifier unit 2 is to serve zone 3

The diagram above shows installation of a 3 zone system with remote triggering employing external switches. (this is optional). In this case, zone triggering can be made from remote area but the front panel switches has to be at OFF position.

Note :

Triggering any zone via the remote port shall override the previously selected zones. No Priority connection is required.

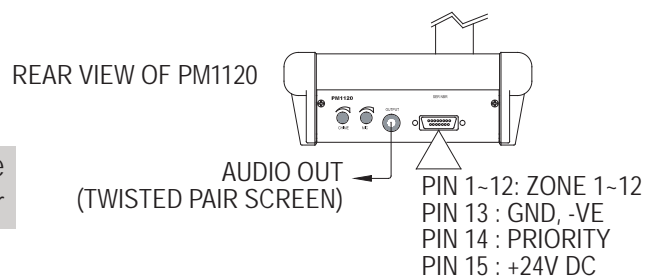
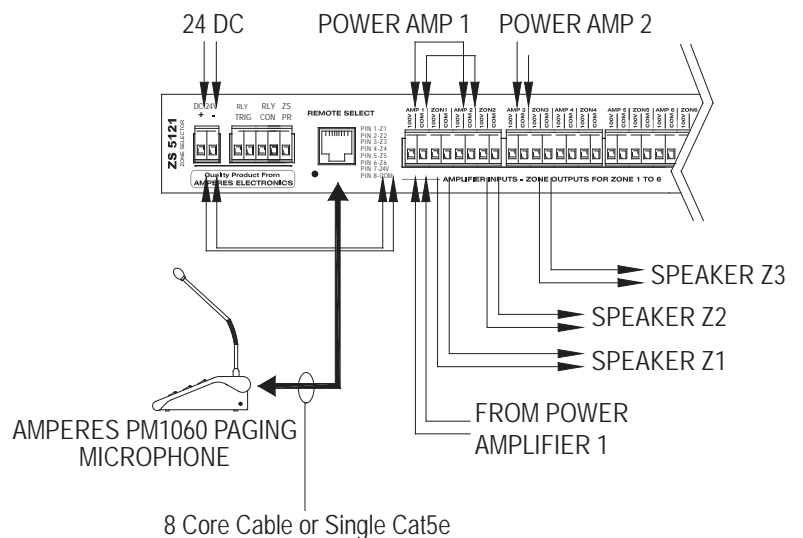
The illustration below shows a zone selector connected to the Amperes PM1060 desktop paging microphone. This shall provide a better zone selection than the above configuration.

Two way zone selection can be done, either from the PM1060 or via the front panel switches of the zone selector , with PM1060 has a priority over the former.

Example :

With front panel switches 1 and 2 active, and the user wishes to page zone 3 only , activation of zone 3 from PM1060 shall override zone 1 and 2.

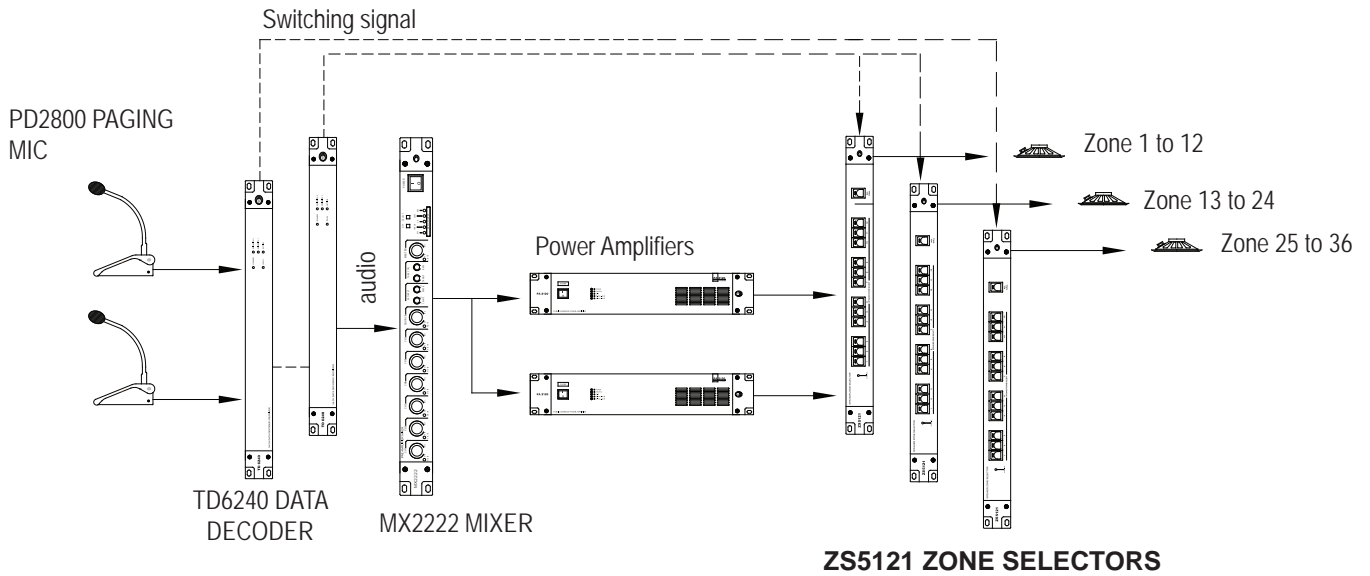
Upon releasing zone 3 from PM1060, zone 1 and 2 shall then return to its previous state.



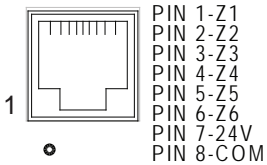
No connection required for Pin 14 to zone selector

Multiple Unit Installation (Cascading)

A sample of system with TD6240 zone decoder and few zone selectors

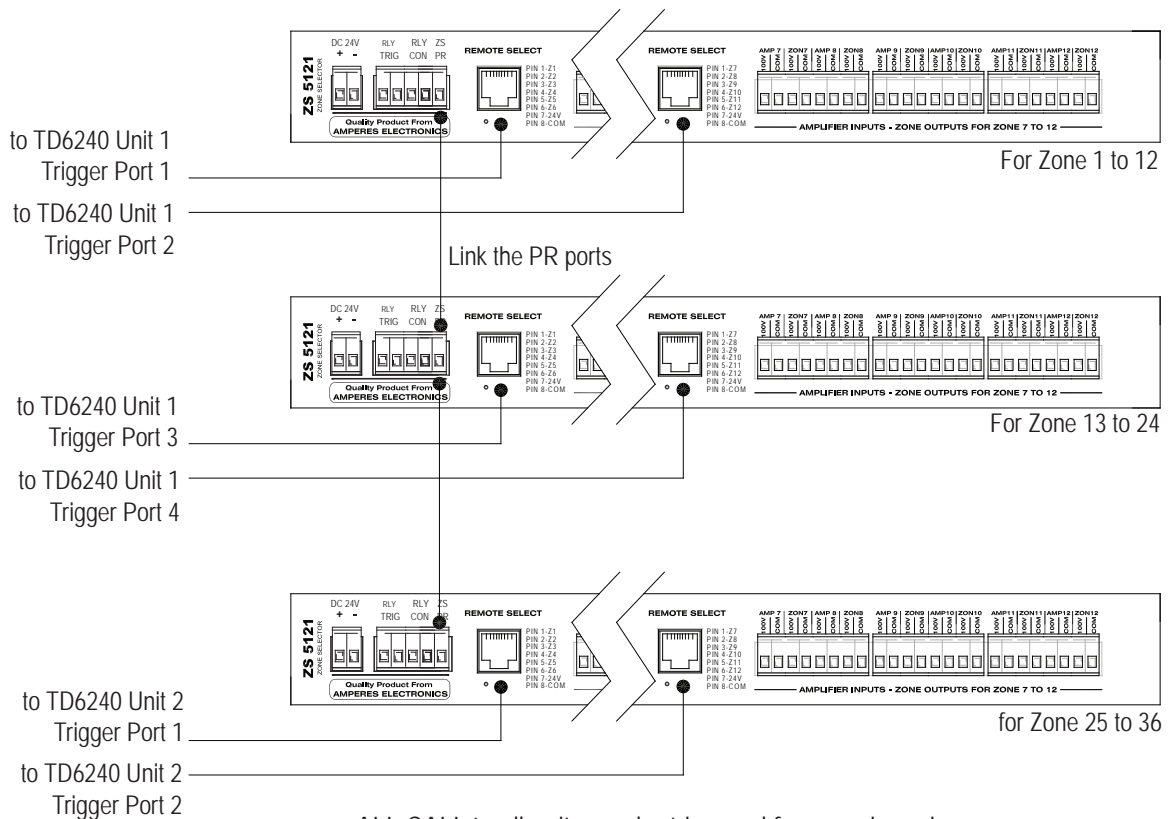


REMOTE SELECT



RJ45 Pin configurations.

Note that All Call and PR from remote mic shall not be required.

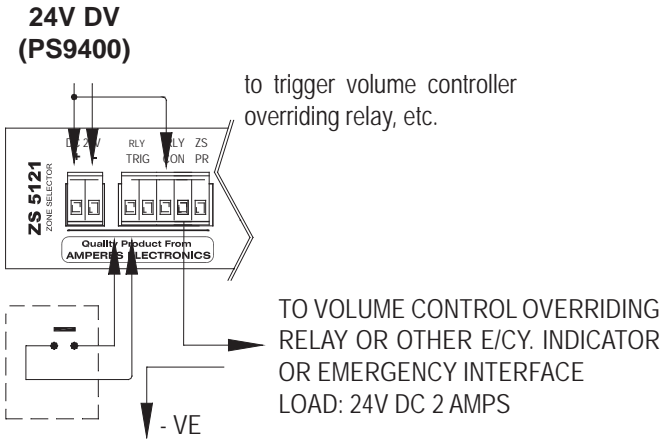


ALL CALL to all units can be triggered from paging mic.

Pressing ALL CALL button from zone selector front panel shall only trigger all zones of the particular unit only. And the connection ZS PR must link.

Use EP1200A to make ALL CALL to all ZS installed - refer to page 6

Connecting Emergency Overriding Port



EMER. PAGING MICROPHONE SWITCH OR OTHER EMER. TRIGGER

More than often, volume controllers are installed at areas that requires sound level to be attenuated, eg. conference room, etc.

Overriding is required when an emergency switch is pressed, normally via firemen paging mic with a dry contact. With the connection shown, whenever the switch is pressed, it would trigger the internal relay which shall then provide a dry contact. It can be used to trigger overriding relay at volume controller or other external device such as emergency light indicator . It can also be used to trigger ALL CALL.

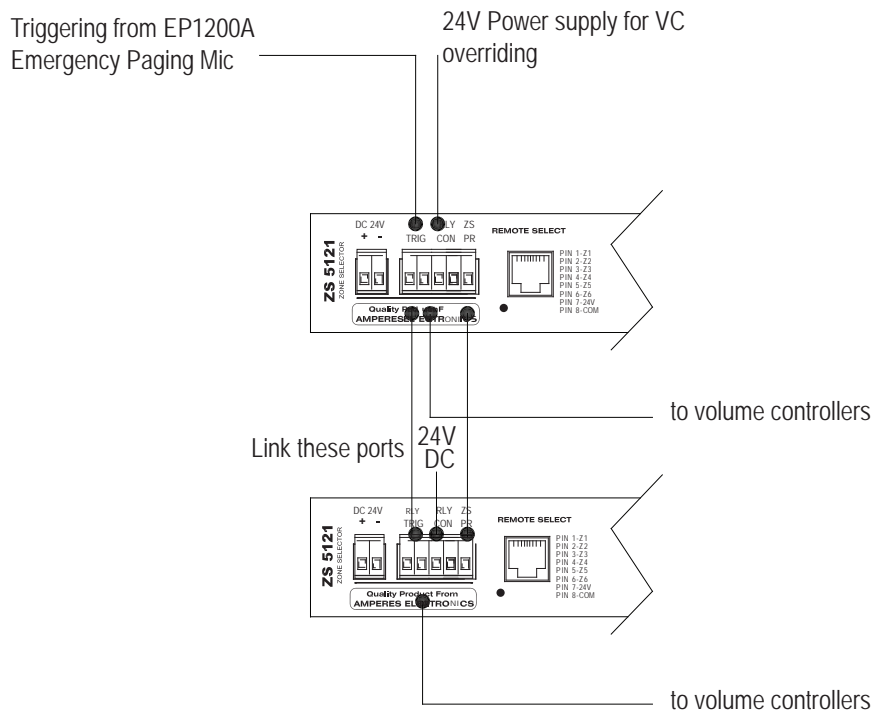
Please ensure the loading does not exceed the limits as indicated. Polarity must also be observed when connecting this port.

ALL CALL paging can be performed from Emergency Paging Mic (EP1200A), which when Relay Trigger port is energised, it shall provide a voltage free relay contact. Connect 24V DC power supply from PSU to trigger external volume controllers for Overriding purpose.

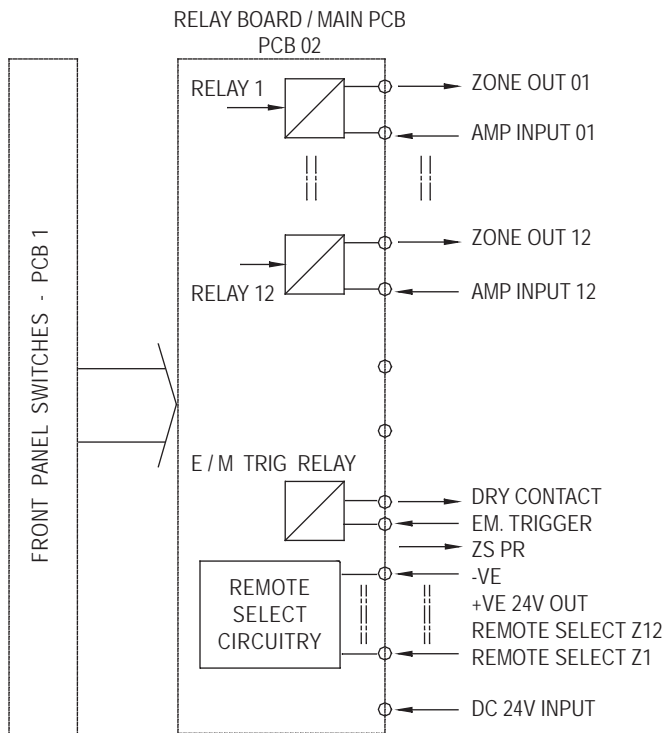
When multiple ZS are used, link the Relay Trig ports together, thus any triggering from EP1200A shall perform ALL CALL paging to all zones at all the zone selectors.

Note :

Pressing ALL CALL at individual zone selector shall only trigger all zones at the unit, without triggering the relay output ; ie. this shall not override the volume controllers



Block Diagram



The block diagram shown is for the installer to have a better understanding on how the unit PA equipment.

It is however not recommended that the internal circuitry of the unit be modified without prior consultation with the manufacturer

NOTE ON UPGRADE VERSION:

RJ45 CONNECTOR
- TO REMOTE
PAGING MIC

Connection to remote paging mic PM1060 / PM 1120 or to Data Decoder has been made easier with the new pin configuration.

Older version of Paging Mic can still be used together with this Zone Selector

Technical Data

	ZS5601	ZS5121
Operating voltage	24V DC adaptor	
Power consumption	3.5W, 0.14A w All Call	6.8W, 0.28A w All Call
Max load / channel	500W at 100V line	
Number of zones	6	12
Amplifier inputs	6	12
Zone selection	Front panel switch and remote	
Cascade limitation	Unlimited	
Remote triggering	-ve triggered (common ground)	
Indicators	Individual zone switch, Priority	
Switching mode	Individual, All Call Local zone selection bypassed when remote trigger is activated	
Dimensions (W x H x D)	482 x 44 x 180 mm	
Weight	1.7 kg	2.1 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 master distributor, TNT Links Sdn Bhd / MyPA Systems Sdn Bhd. 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 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.

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

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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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AMPERES ELECTRONICS SDN BHD
MADE IN MALAYSIA
Published : MAY 2015