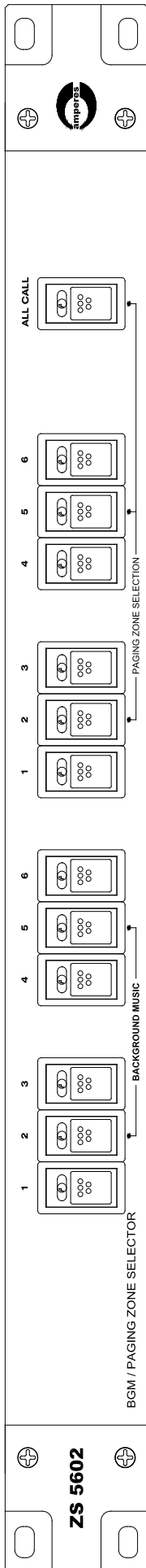




ZS5602

6 CHANNEL UNINTERRUPTED PAGING
SPEAKER ZONE SELECTOR

INSTRUCTION MANUAL



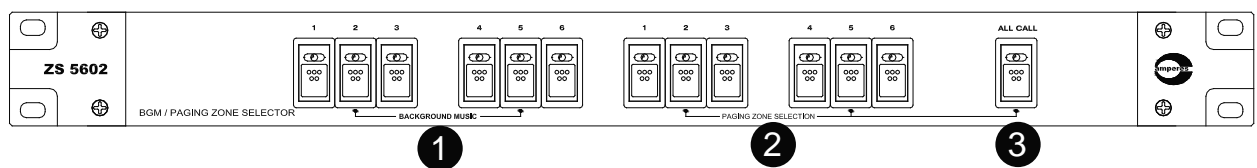
Introduction .. note on this version

ZS5602 has been improved further, in line with our continuous improvement policy as well as creating harmonious equipment within Amperes products. This version sees the introduction of E/M relay triggering as well as RJ45 remote triggering ports, with pin configurations similar to ZS5601 / 5121 versions. This shall allow easy swapping of equipment when the needs arise, without having to modify circuitry or cable configurations.

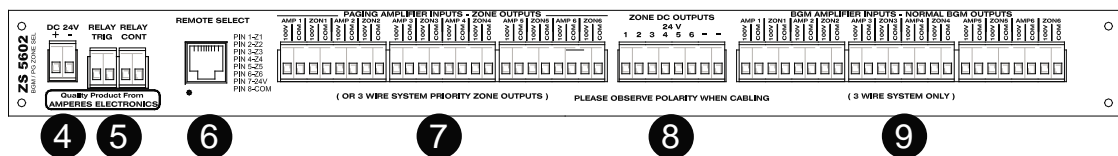
Please read through the manual to avoid unnecessary mistakes during installation and we assure you that you are getting the product of your choice ... *simply essential, truly efficient.*

Parts Identification

front view



rear view



1. BGM FRONT PANEL ZONE SWITCH

These switches are for selecting zones for BGM broadcasting. Selection of BGM zones can only be made at these switches and not from remote control panel.

2. PAGING FRONT PANEL ZONE SWITCH

To page, use these switches and once pressed, it shall override the corresponding BGM zones to allow paging to be broadcasted. A 24V DC signal of the zone would be sent out from the DC output port at the rear panel. Be sure to turn these zones off at the front panel if a remote mic with zone selection is installed in the system.

3. ALL CALL PAGING SWITCH

Pressing ALL CALL switch shall activate all zones into paging mode, thus overriding all BGM broadcast. 24V DC shall present at all zones for emergency overriding purpose.

4. DC POWER INPUT

This equipment operates using 24V DC supply with 1A rating. Should external overriding of volume controllers is required, we suggest that a larger rating of supply is used, such as Amperes PS9400.

5. EMERGENCY OVERRIDE RELAY CONTACT

This port shall be connected to EP1200 Emergency Paging Panel. Once activated, all zones shall be in Paging mode and a dry contact is closed to enable connections for 24V DC supply to volume controllers for overriding purpose.

If this port is utilised, we recommend that 24V DC port to be ignored.

6. REMOTE SELECT PORT

This can be directly connected to TD6240 decoder or PM1000 series paging mic for remote zone selection during paging.

7. PAGING AMP INPUTS / ZONE OUTPUTS

Paging amplifier outputs are connected to these ports. In a 4 wire system, outputs to zones also comes from these connectors.

Please refer to “Connecting the Unit - 3 Wire System” and “Connecting the Unit - 4 Wire System” for correct set of termination.

8. ZONE 24V DC OUTPUT

24V DC shall present when a zone is pressed for paging. This shall enable 24V to override a volume controller. Alternatively, it can also be used for other purpose, such as indicator in a mimic panel, notifying that paging to a particular zone is in progress.

Note :

We suggest that this is not used in a normal system to avoid unnecessary interruption to sensitive zones during paging. Only override the volume controllers when truly necessary such as during emergency. Use EP1200 and link to ZS5602 instead.

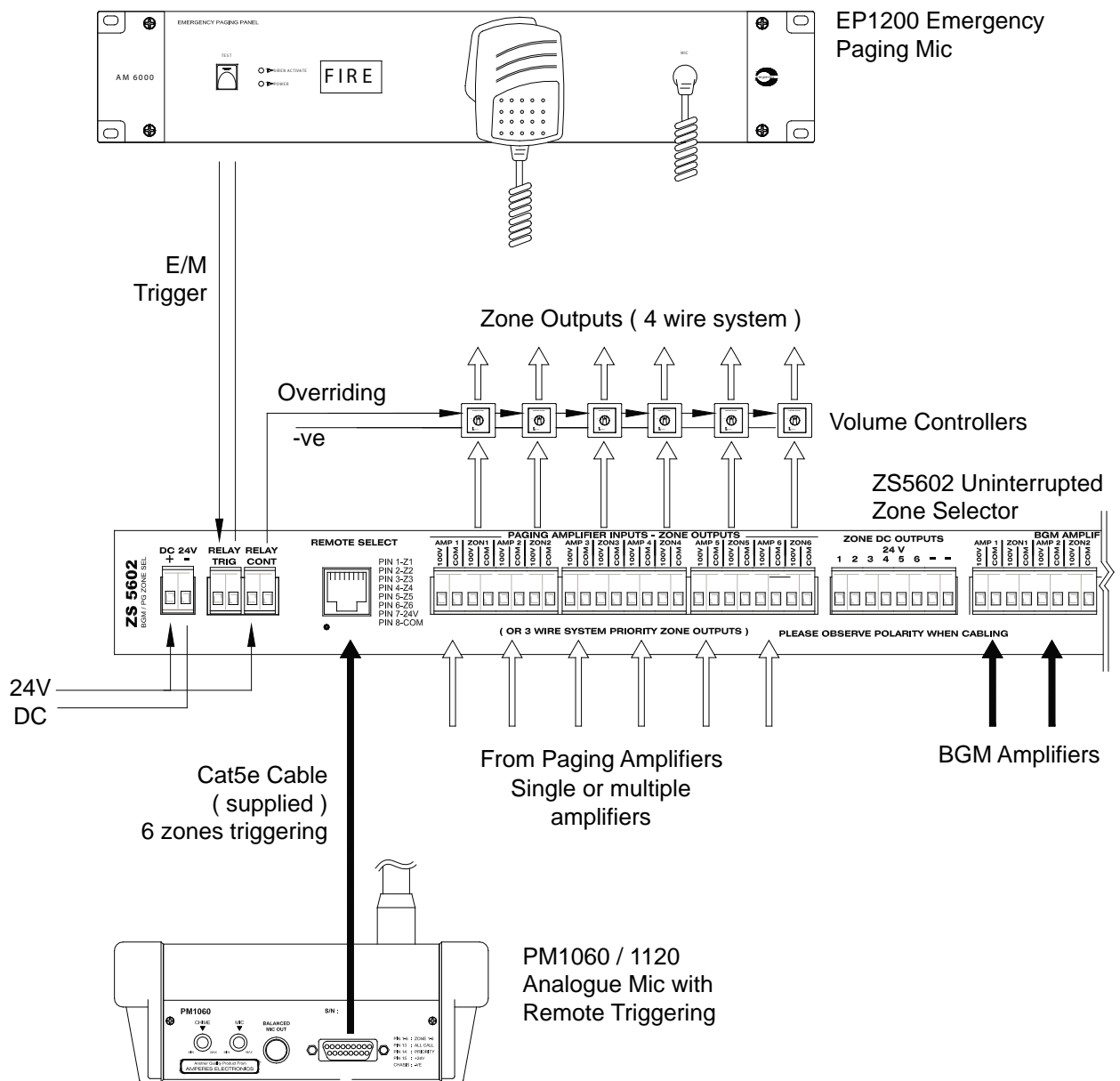
9. BGM AMP INPUTS / 3 WIRE SYSTEM OUTPUTS

Connect BGM set of amplifier outputs to these ports.

In 4 wire system, no zone outputs shall be connected from here. The outputs shall only be used for 3 wire installations. Please refer to “Connecting The Unit - 3 Wire System”



Connecting The Unit - 4 Wire System



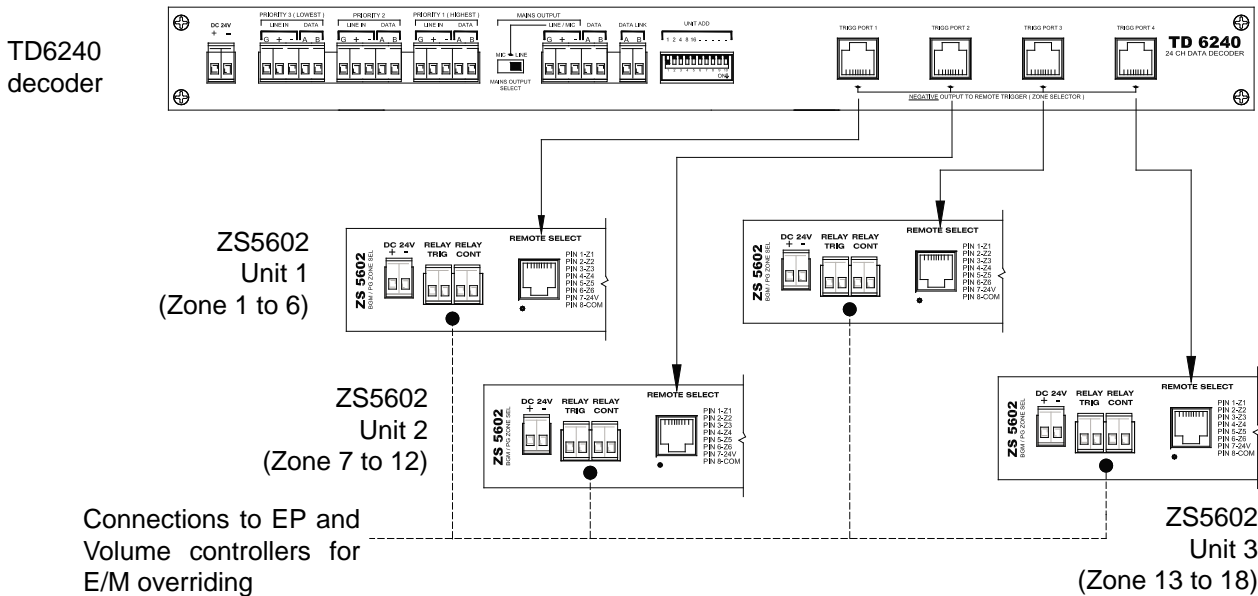
Triggering ZS5602 can be made via PM1060 / 1120 paging mic or PD2400 / 2800 via TD6240. (Refer to Cascading the Unit).

Pin connections of PM1060/1120 to ZS5602 :

PM1060 / 1120	ZS5602
Pin 1 to 6	Pin 1 to 6 (Zone 1 to 6)
Pin 7 to 12	to next unit Pin 1 to 6
Pin 13 (-ve)	Pin 7 (-ve)
Pin 14 (NC)	nil
Pin 15 (+ve)	Pin 8 (+ve)

Cascading the Units

ZS5602 can be cascaded if required in a large installation. There is no limitation on the number of units to be cascaded and no extra link cable is required.

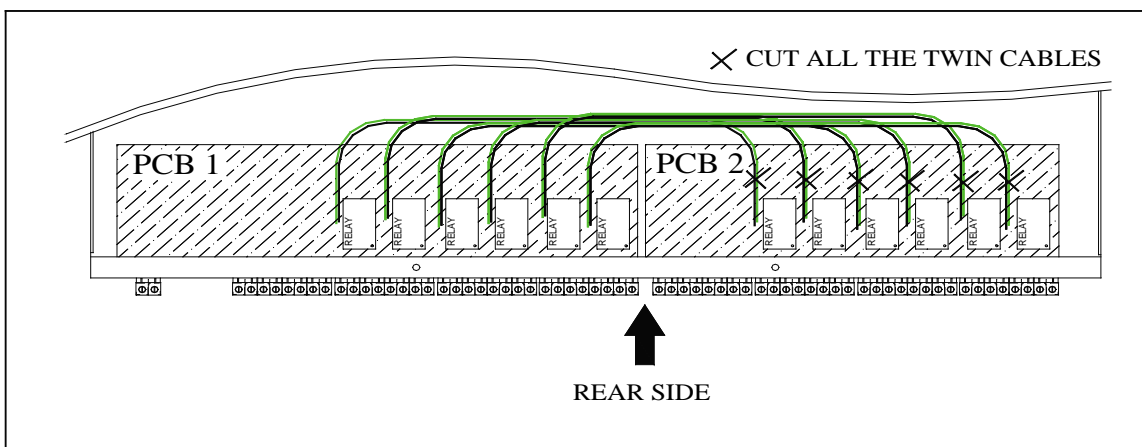


Connecting the Unit - 3 Wire System

ZS5602 is suitable for both 3 and 4 wire setup. If 3 wire system is required, a little modification to the unit is required, as illustrated below

1. Open the top casing
2. Cut the twin cables connecting the PCBs (PCB 1 and PCB 2)
3. Close the casing

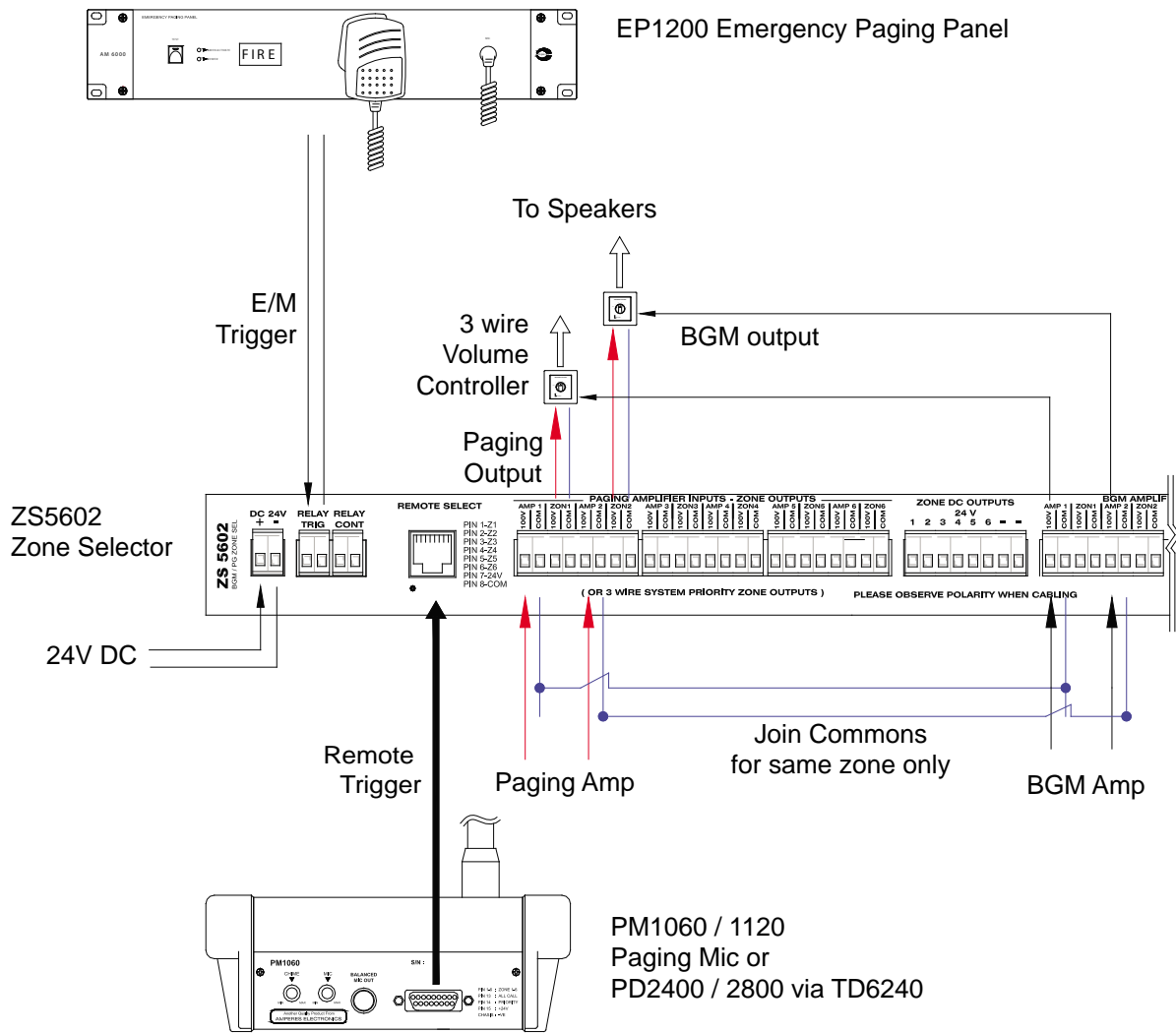
Please make sure that the cut cable are properly insulated and do not let any loose copper strands visible that may be in contact with the metal casing.



Cut only when it is intended to be used in 3 wire system



Connecting The Unit - 3 Wire System (con't)

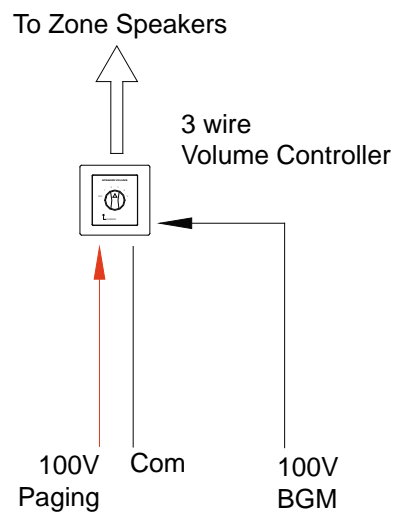


Note :

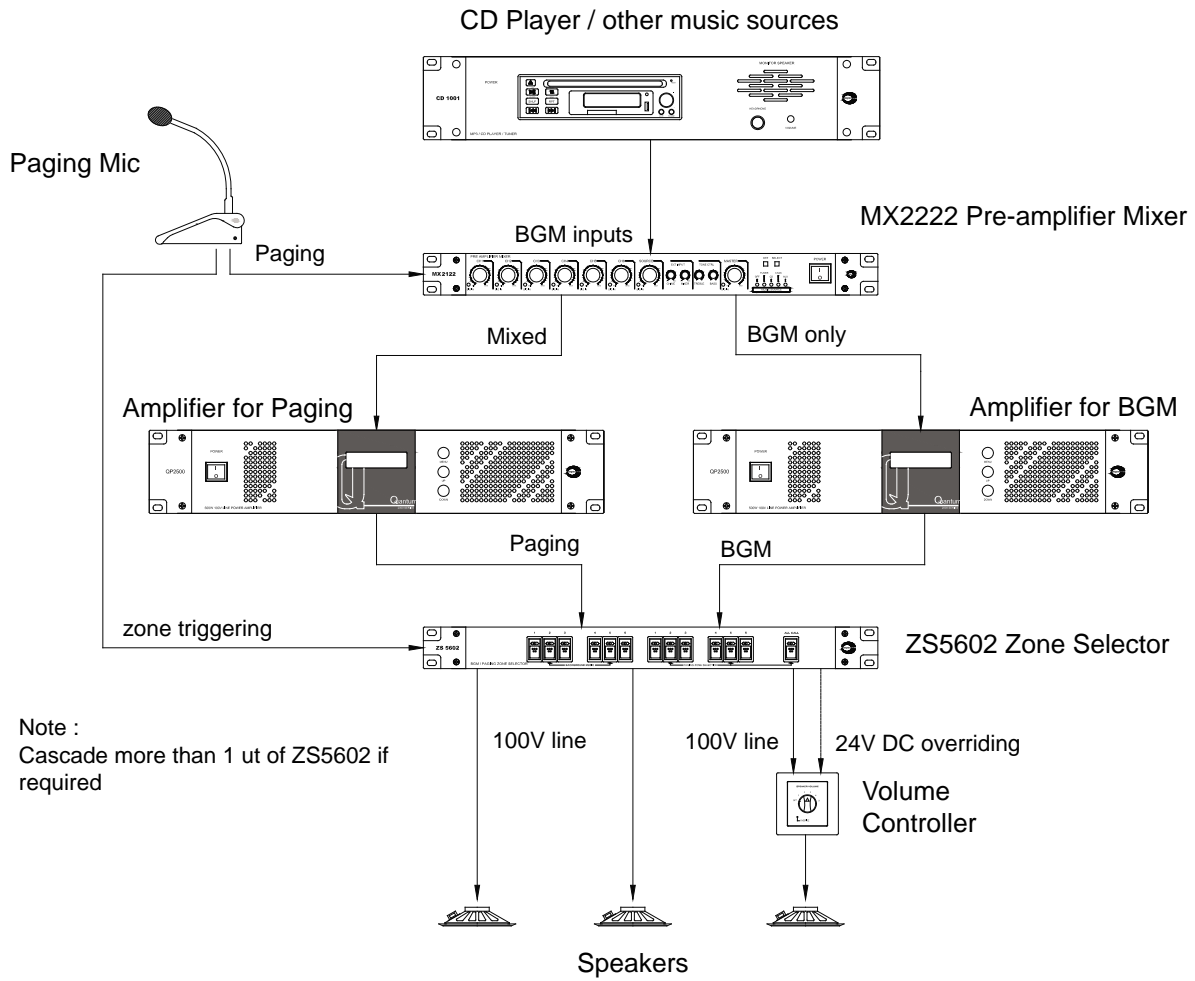
Join the COM connections for the same zone, ie Zone 1 Paging COM to Zone 1 BGM com outputs.

Use only external volume controllers suitable for 3 wire system.

Proper cabling / termination works need to be observed in 3 wire installations. Failure to do so may cause audio crossing to adjacent zone, or slight leakage of sound through speaker though the volume controller is at off position.



General Schematic Diagram



Technical Data

Input voltage	24V DC ; 0.5 A
Power consumption	10W ; 0.42 at ALL CALL (without volume controllers connected)
Relay contacts	Double pole ; 5A
Zone load rating	400W 100V line
DC output rating	5A per zone
Remote select	RJ45 - 6 zones
Amplifier inputs	6 BGM and 6 Paging Amplifiers
Zone selections	6 zones via front panel / remote select
Switching indicators	Front panel LED
Cabling connections	Up to 2.5 mm via detachable connectors
Dimensions (W x H x D) mm	482 x 44 x 180 mm
Weight	2.3 kg



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, Amperes Global Marketing. 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.

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