# **Warranty Conditions**

Only Kodio Service Centres are allowed to make warranty repairs: a list of UNI AMP Service Centres may be asked for by the purchaser or send directly to UNI AMP or its authorized master distributor, 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.

# **Disclaimer**

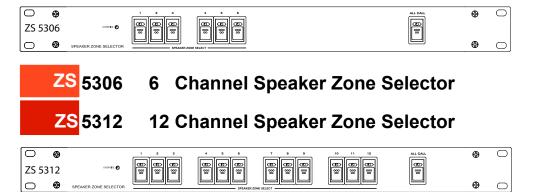
Information contained in this manual is subject to change without prior notice and does not represent a commitment on the part of the vendor. UNI AMP shall not be liable for any loss or damages whatsoever arising from the use of information or any error contained in this manual.

It is recommended that all services and repairs on this product be carried out by UNI AMP or its authorized service agents.

KODIO series must only be used for the purpose they were intended by the manufacturer and in conjunction with this operating manual.

KODIO 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.

# **INSTRUCTION MANUAL**



# Congratulations on the purchase of your new KODIO ZS 5306/5312 Speaker Zone Selector Panel.

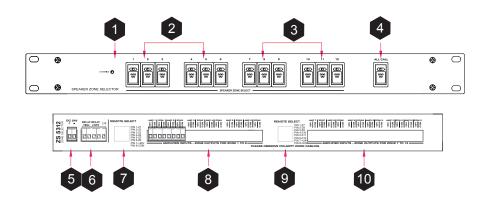
After much improvements made to the earlier models, KODIO ZS5306 and ZS5312 finally rolled out with better features and outlooks.

The original features of emergency paging microphone input port and remote triggering are maintained. However a priority overtaking LED is added to the front panel to alert the user that paging from remote is active and thus the BGM zone selected has been bypassed.

With this new product, you are assured that we live up to our policy, ie. continuous improvement to give you the products that are contemporary and with better value without increment in cost.

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



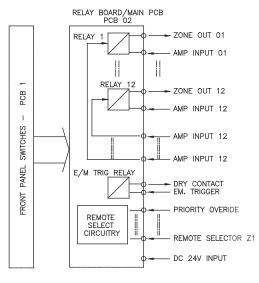
#### 1. BGM ZONE OVERRIDING INDICATOR

The LED shall lit if remote paging microphone is active and is overriding the local BGM zone selection. This is active if KODIO RM 5306 paging is used or any other paging microphone console with Priority output signal.

#### FRONT PANEL ZONE SWITCHES - ZONE 1 TO 6

Switching for zone 1 to 6. They can be configured as zone 1 to 5 with Sub group switch. Refer to Application Example on how to do this.

# **BLOCK DIAGRAM**



The block diagram shown is for the installer to have a better understanding on how the unit works when interfacing it with other brands of PA equipment.

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

# TECHNICAL SPECIFICATIONS

INPUT VOLTAGE : 24V DC ; 0.4 A

POWER CONSUMPTION : ZS 5306 : 3.5W 0.14 A at full zones switched ZS5312 : 6.8W 0.28 A at full zones switched

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ZONE LOAD RATING : 400 W/100 V line input ( Max ) NO OF AMPLIFIER INPUTS : 6 for ZS 5601 or 12 for ZS 5121

ZONE SELECTION : Front panel push button switches or via remote switches

ZONE INDICATION : Front panel LED SWITCHING MODE : Individual or All Call

CABLING CONNECTIONS : Plug in detachable connectors with screw terminals

CABLE SIZE : Up to 2.5 mm sq

DIMENSIONS : 482 (W) X 44 (H) X 130 (D) mm

WEIGHT : ZS 5601 - 1.8 kg ZS 5121 - 2.1 kg

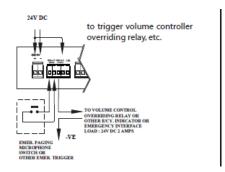
COLOUR : Black, Powder epoxy coating

#### NOTE

KODIO has the policy of improving or reviewing its products in design, performance as well as quality from time to time. It is therefore, KODIO Electronics has the right to change the above specifications without prior notice. The specification change shall cover the physical appearance, features as well as components used. However, KODIO Electronics shall maintain at all times that the products manufactured are of highest quality.

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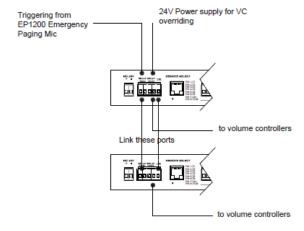
# CONNECTING EMERGENCY OVERRIDING PORT



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.



# PARTS IDENTIFICATION

#### 3. FRONT PANEL ZONE SWITCHES - ZONE 7 TO 12

Switching for zone 7 - 12 for ZS5121 only. Refer to Application example for grouping.

#### 4. ALL CALL SWITCH

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

#### DC SUPPLY INPUT PORT

24V DC supply is required to operate this unit. Ensure polarity is correctly terminated to the port. It is recommeded that supply with 1A rating of regulated source is used. Amperes PS5424 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

Remote switches ( desktop paging microphone with zone selector ) can be connected to this port using negative triggering method. Upon triggering, this shall activated the zone selected from remote. If port PR is used, the remote activation shall override the selected zone via front panel and shall follow those of remotely selected zones. Otherwise, the remote and local selected zones shall overlap.

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

Outputs 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 palarity when terminating the amplifier / speaker zones and ensure that each zone is over overloaded ( less than 400 W rms )

#### 9. REMOTE SELECT PORT - Z7 TO 12

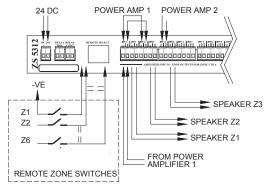
Similiar function as Part7 but only available for ZS5121

# 10. AMPLIFIER - ZONE OUTPUT CONNECTORS (ZONE 7 TO 12)

Similiar to Part 7 but only available for model ZS 5121

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# SINGLE UNIT INSTALLATION WITH REMOTE SELECT



The sample connections shown are using a single unit of either ZS5312 or ZS5306 in a small scale installation, ie, small number of zone outouts.

Assumptions made are that :

- 1. Volume control overriding facilities are done separately. ( refer example on page 6)
- 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 untie 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:

When using paging console other than RM5006 which has no PR output, selecting zone remotely shall not override the local zone selection but shall overlap.

To allow external paging microphone to override local selection, array of diodes has to be added as shown in Page 5 - REMOTE TERMINAL DIODES CONNECTIONS.

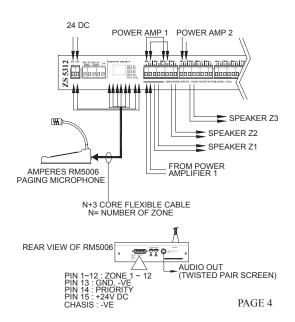
The illustration below shows a zone selector connected to the Amperes RM5006 desktop paging microphone. This shall provide a better zone selection than the above configuration.

Two way zone selection can be done, either from the RM5006 or via the front panel switches of the zone selector, with RM5006 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 RM5006 shall override zone 1 and 2.

Upon releasing zone 3 from RM5006, zone 1 and 2 shall then return to its previous state.

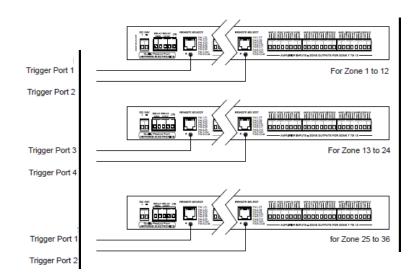


# MULTIPLE UNIT INSTALLATION (CASCADING)

# REMOTE SELECT



New RJ45 Pin configurations Note that All Call and PR from remote mic shall not be required



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