PM 1060 / 1120

version 10

Desktop Paging Microphone With Zone Selector

Thank you for acquiring another product from Amperes.

This is an upgraded version of desktop paging microphone, with simplified connections to Amperes Zone Selectors, making it easier for installer in completing the system connections.

We highly recommend thorough reading of the manual prior to installation to reap the full potential of what this unit can offer as well as avoiding unnecessary error that may occur.

Parts Identifications

1. GOOSENECK MICROPHONE

The illuminated gooseneck microphone can be detached from the console for safekeeping. Its cardioid back electret capsule is sensitive to front voice pick up and reject rear unwanted noise.

2. ZONE SELECT SWITCHES

12 individual zone selection switches are available for PM1120 and 6 for PM1060. LED indicator is provided for active zone.

3. ALL CALL SWITCH

ALL CALL switch shall activate all zones with single press. Please note that a ALL CALL signal is transmitted at the D connector.

4. CHIME / TALK SWITCH

Pressing this switch shall send signal for zones activated and followed by 4 tone upward chime. Blinking LED indicates that the chime is being transmitted and still LED is to alert the user that the microphone is ready for announcement.

Pressing momentary the switch shall deactivate the console in which a 4 tone downward chime shall be broadcasted before shutting down the zone selection.

5. DATA CONNECTOR

The 15 pin D connector is used to send signal for zone selection, power supply and override signal.

D male connector is supplied with every unit of PM series of microphones.

6. MICROPHONE LEVEL CONTROL

It is used to adjust the level of microphone gain.

7. CHIME LEVEL CONTROL

It is used to adjust the level of chime signal.

8. OUTPUT JACK

The output signal is balanced at 0 dB max, connection using stereo 1/4" phone jack.
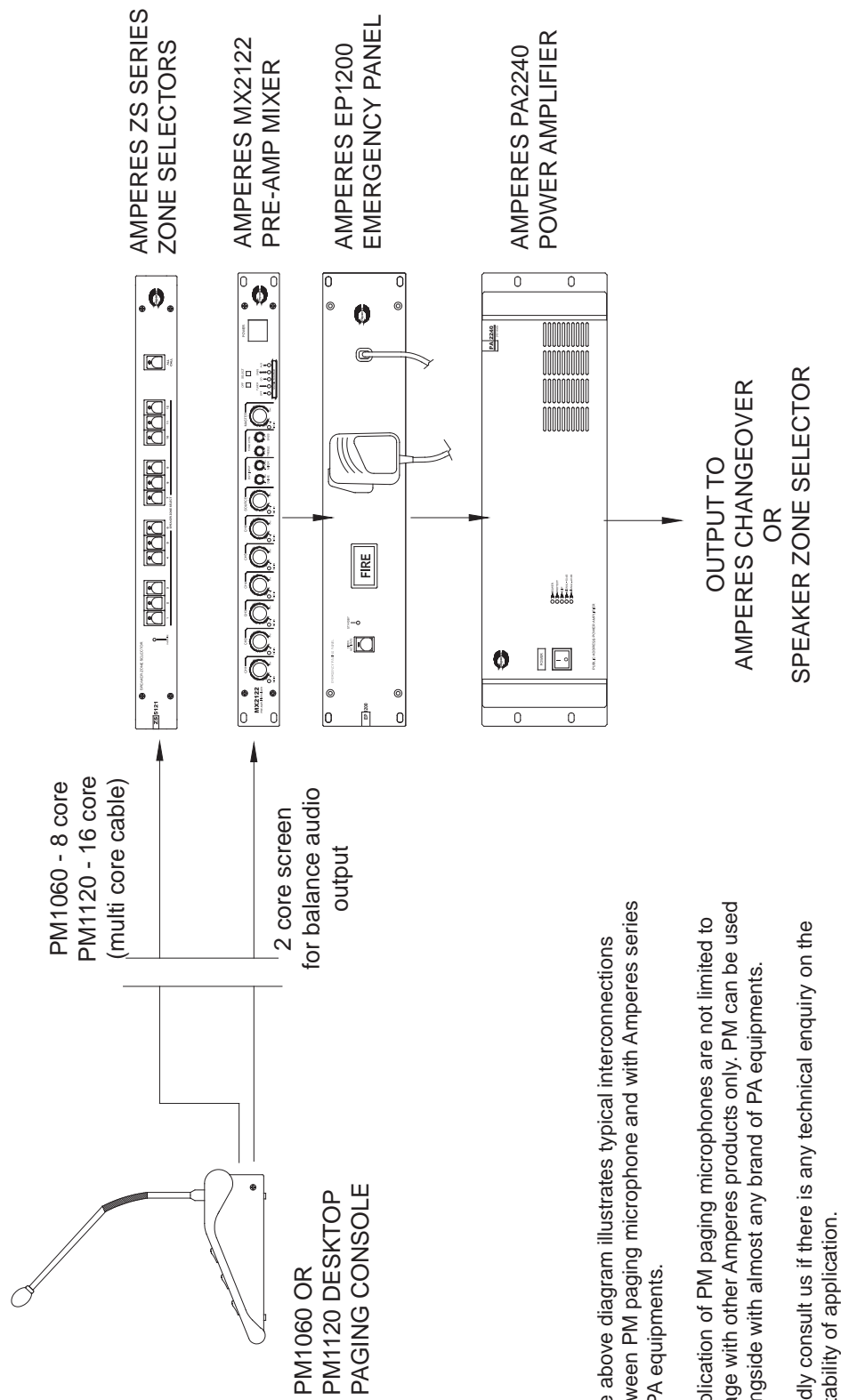
Parts Identifications

TOP VIEW

REAR VIEW

AMPERES ZS SERIES
ZONE SELECTORS

AMPERES MX2122
PRE-AMP MIXER

AMPERES EP1200
EMERGENCY PANEL

AMPERES PA2240
POWER AMPLIFIER

PM1060 - 8 core
PM1120 - 16 core
(multi core cable)

2 core screen
for balance audio
output

OUTPUT TO
AMPERES CHANGEOVER
OR
SPEAKER ZONE SELECTOR

PM1060 OR
PM1120 DESKTOP
PAGING CONSOLE

NOTE:
The above diagram illustrates typical interconnections
between PM paging microphone and with Amperes series
of PA equipments.

Application of PM paging microphones are not limited to
usage with other Amperes products only. PM can be used
alongside with almost any brand of PA equipments.

Kindly consult us if there is any technical enquiry on the
suitability of application.

Operating Sequence

Operating this unit is simple and straight forward.

Selecting zone for paging.
1. Press the required zone for paging and LED shall lit to indicate the zones selected. To select all the zones, only ALL CALL button has to be pressed.

2. Press "Chime/Talk" button and the LED shall blink to indicate that the selected zones (or ALL ZONES) has been activated as well as preannouncement chime is being broadcasted.

3. When the LED stops blinking, the console is ready to broadcast voice announcement.

4. To end paging, press "Chime/Talk" button again and this shall be followed by ending chime and shutting off zone selection. LEDs of selected zones shall remain lit and it is not necessary to switch them off. It serves as indication for zone selection for next paging.

PM1060/1120 and ZS5601 / 5121.
When using PM1060/1120 with Amperes ZS5601/5121, activation of paging console shall automatically mute the BGM broadcast of the zones at the zone selector panel. Upon deactivation of the paging mic, the BGM broadcast shall resume of the preselected zones.
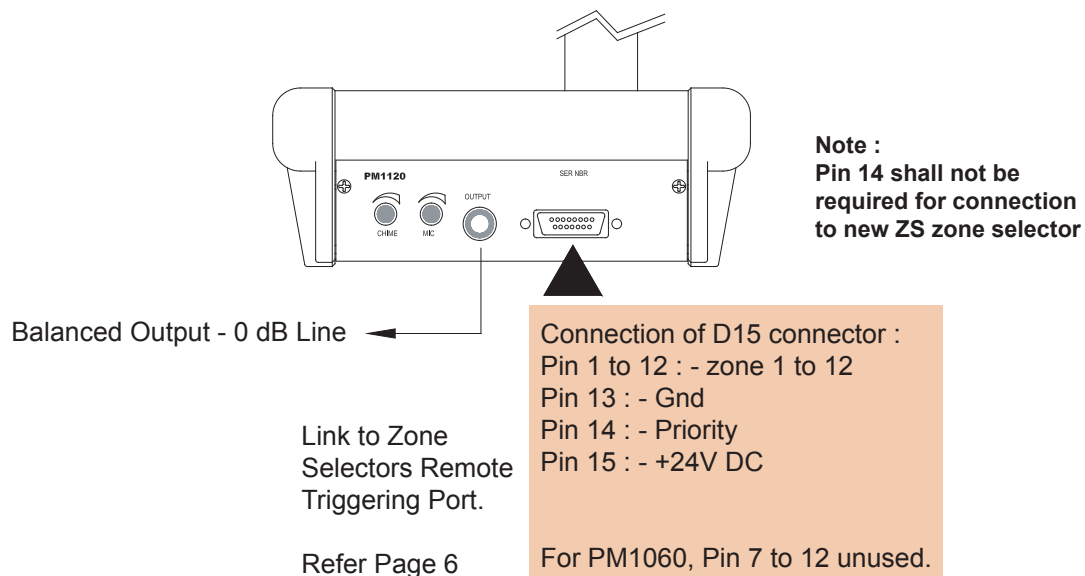
PM1060/1120 and ZS602
Unlike ZS5601/5121, activation of PM1060/1120 shall mute the selected Paging Zones only while other selected BGM zone shall not be interrupted.

Connecting The Unit

We recommend that the paging microphone is used with Amperes Zone Selector in order to tap the full features available.

Other brand of zone selectors can be employed provided that the remote zone selection uses negative signal triggering method.

Note :
Pin 14 shall not be required for connection to new ZS zone selector

Balanced Output - 0 dB Line

Link to Zone Selectors Remote Triggering Port.

Refer Page 6

Connection of D15 connector :
Pin 1 to 12 : - zone 1 to 12
Pin 13 : - Gnd
Pin 14 : - Priority
Pin 15 : - +24V DC

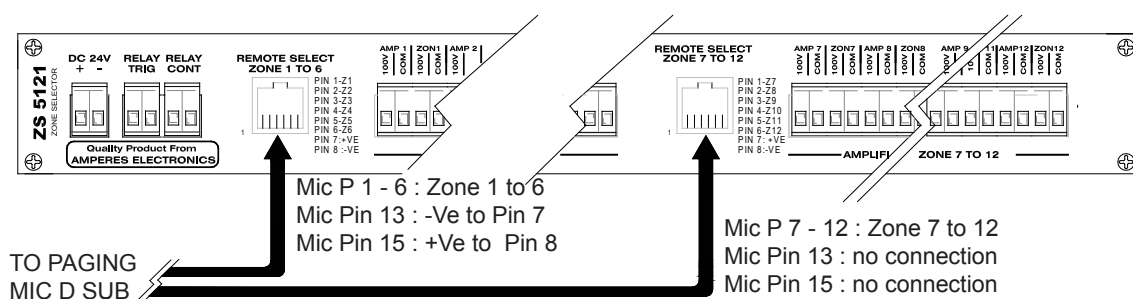For PM1060, Pin 7 to 12 unused.

Connecting To Zone Selectors

EXAMPLE 1 - CONNECTION TO ZONE SELECTOR - AMPERES ZS5121

The diagram below shows the connection of incoming paging microphone to the zone selector - Amperes ZS5121.

NOTE :
In this version, ALL CALL and Priority connection shall not be required when connecting to ZS5601 / 5121. Paging shall override the selected BGM zone when mic is activated. Likewise, ALL CALL from PM1060 / 1120 shall trigger all zone but would not trigger the E/M override relay at the zone selector.
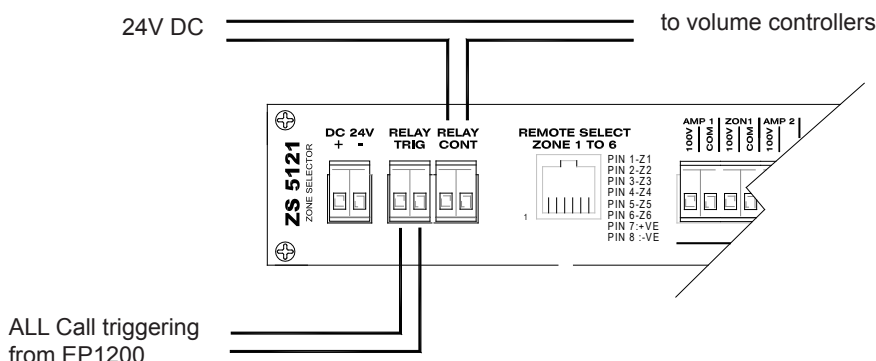
For application of 6 zones, pin 7 to 12 from the D15 connector are not used.
The recommended connection between the paging mic and zone selector is below 100 m, due to the voltage drop along the cable.

Mic P 1 - 6 : Zone 1 to 6
Mic Pin 13 : -Ve to Pin 7
Mic Pin 15 : +Ve to Pin 8

TO PAGING
MIC D SUB

Mic P 7 - 12 : Zone 7 to 12
Mic Pin 13 : no connection
Mic Pin 15 : no connection

EXAMPLE 2 - CONNECTION FOR VOLUME CONTROLLER OVERRIDE

All Call paging from the Paging mic would trigger all zone but would not trigger the zone selectors E/M relay. The overriding of volume controllers shall require 24V DC for the activation of their internal relay and this can be done via EP1200

Some simple interlining connections at the remote triggering port shall be able to serve the purpose with the diagram shown.

24V DC — to volume controllers

ALL Call triggering
from EP1200

Summary Of Features

PAGING ZONE CONTROL

Announcement to speaker zone can be selected from the paging console, individually or ALL CALL.

PREANNOUNCEMENT CHIME

4 tone chime is broadcasted prior to mic activation and the same with downward chime when announcement is ended.

BGM MUTING

When using the paging mic with Amperes series of zone selectors, activation of the paging mic shall automatically mute the BGM zone at the zone panel. The BGM broadcast shall resume to the preselected zone upon mic deactivation. Using the paging mic with ZS5602 shall have the same features but shall not interrupt the BGM zones not selected for paging.

CHIME AND MIC VOLUME CONTROLS

Output level of chime and microphone can be adjusted individually as required.

BALANCED OUTPUT

Balanced line output is the standard feature for all the paging desk, designed for professional application and longer distance audio transmission with minimal noise.

Technical Specifications

System	Condenser microphone, cardioid.
Output impedance	600 Ohm
Output level	1.1 V, Balanced
Output level controls	Chime and mic
Chime	4 tone (Up and Down)
Frequency response	100 - 12 k Hz
Signal to Noise Ratio	60 dB
Indicators	Chime active
	Ready to talk
	Zone active
	Gooseneck mic LED upon activation
Power supply	24V DC
Power consumption	170 mA
Line out connection	1/4" stereo phone jack
Data connection	15 pin D connector female
Operating distance (controls)	Up to 30 m
Max line out distance	Up to 300 metres.
Dimensions	174(w) x 178(d) x 62(h) excluding microphone
Gooseneck mic length	300 mm
Weight	900 gms

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.

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. 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 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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