



## Public Address System

### 4-Channel Matrix PA Amplifier with Paging/USB/Bluetooth

**PM906**

**PM912**



## Operation Instructions

Welcome to use our public address system. For the better application of this equipment, please read the operation instruction carefully prior to use.

**LY International Electronics Co., Ltd.**

[Http://www.lyintlcorp.com/](http://www.lyintlcorp.com/)

### **About Operation Instruction**

**This operation instruction shall come into effect on the date on which the development of the four-channel matrix power amplifier PM906/PM912 equipment is completed. The operation instruction contains the systematic introduction to the four-channel matrix power amplifier PM906/PM912 equipment, precautions for use, instruction to connection of system, and instruction to operation of product, and so on. The user shall read this operation instruction carefully prior to connection, installation and use, and shall operate in accordance with the instructions herein.**



The attention must be paid to the instructions with such identification on the back panel of the machine. Please use or operation the machine following such instruction.

**Please keep this operation instruction for the checking in the future.**

# ⚠ Warning

**In order to prevent the personal injury to user and other persons, the damage to equipment or loss of assets, please abide by the following basic precautions:**



**This mark indicates what is prohibited.**

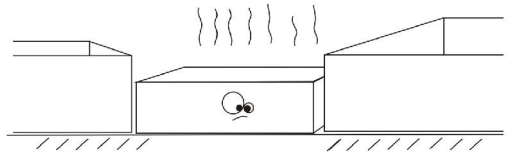


**This mark indicates what must be done.**

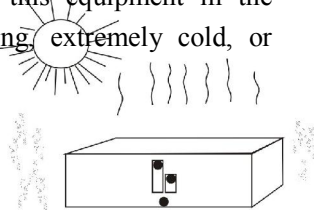
■ Check the power line for damage; please do not unplug by pulling the power cord but unplug directly; otherwise, it will lead to electric shock, short circuit or fire.



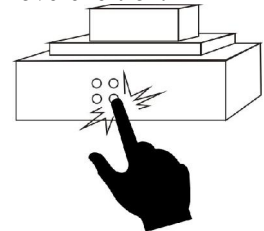
■ During the process of use, do not block the vent. It is required to keep all the vents unblocked in order to prevent the overheating.



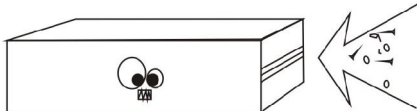
■ Please do not put this equipment in the heavily dusty, shocking, extremely cold, or hot environment



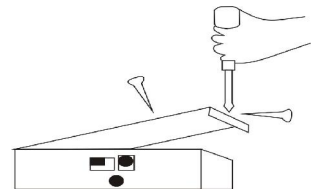
■ Please do not put any weight on this equipment. Do not operate switch and button or connect the external audio source equipment with overexertion.



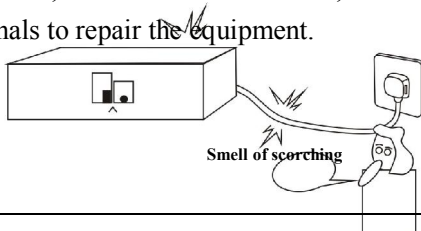
■ Prevent the entry of any foreign matter (e.g. paper and metal) through the clearance or opening of the equipment into it; in such case, please disconnect the power supply immediately.



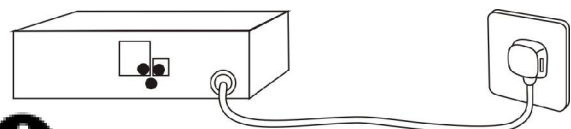
■ Do not try to remove any component in the equipment or transform it in any way.



■ In case of the sudden interruption, or abnormal smell, or smoking during the operation of the machine, please unplug the power supply to prevent the electric shock, fire and other accidents, and ask the professionals to repair the equipment.



■ Please make sure to unplug the AC power line or switch off the socket on the wall to achieve the zero energy consumption if this equipment is out of service for a long term.



# Table of Contents

<b>I. INSTRUCTION TO PRODUCT .....</b>	<b>1</b>
1.1DESCRIPTION OF EQUIPMENT.....	1
1.2PERFORMANCE CHARACTERISTICS .....	1
<b>II. DESCRIPTION OF APPEARANCE.....</b>	<b>2</b>
2.1DESCRIPTION OF FRONT PANEL .....	2
2.2DESCRIPTION OF REAR PANEL .....	4
<b>III. INSTRUCTION TO CONNECTION .....</b>	<b>5</b>
<b>PACKING LIST .....</b>	<b>7</b>
<b>PERFORMANCE SPECIFICATION .....</b>	<b>8</b>

# I. Introduction to Product

## 1.1 Description of Equipment

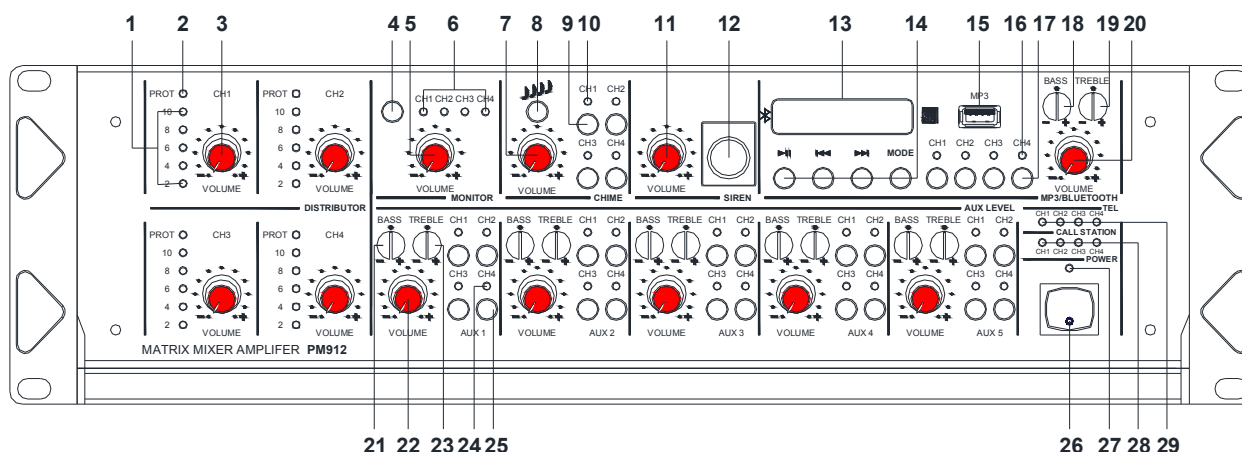
PM906/PM912 four-channel matrix power amplifier is a kind of cost-effective professional intelligent address system combining the luxurious and high-grade aluminum-alloy panel with standard and exquisite case with an elegant appearance, and also suitable for household, factory, school, hospital, shop and other commercial application. The amplification system of this equipment is designed with imported power tube, resulting in the strong power, wide frequency band, low noise, high fidelity and quality at the level of performance. In the equipment, there are four channels of power output in order to facilitate the user to access the back-end loudspeaker. With the perfect and reliable DC output protection, overload protection, short-circuit protection, and overheat protection, the safety performance of this equipment is improved. The technical essence of this product is focused on the super adaptability and perfect performance.

## 1.2 Performance Characteristics

- 2 channels of line input, each of which may adjust the volume and tune independently;
- 3 channels of microphone balanced input, each of which may adjust the gain and tune independently with the optional +48V phantom power supply;
- 4 channels of remote paging microphone inputs (Linking up to 10 equipments) and 1 channel of telephone signal input (Adjustable volume); the remote paging microphone is connected to this equipment with the crystal plug, and this equipment is connected to the telephone line with the telephone socket, i.e. this equipment is an slave machine connected to this telephone set;
- Fire alarm signal (Adjustable volume) and bell sound source (Adjustable volume);
- With built-in MP3 module, play mainstream 32G U-disks and the documents in the formats of MP3, WMA, WAV and ACC transferred through the bluetooth;
- All the sound sources have the function of matrix four-channel output;
- Priority level (Default): AUX1---siren---telephone---remote paging microphone 1, 2, 3 and 4---bell---MP3, AUX2, AUX3, AUX4, AUX5; the priorities of AUX1 and telephone are exchangeable through the "PRIORITY" terminal on the rear panel; with regard to the priority, the hard priority is used for siren, telephone and remote paging microphone, and the soft priority is used for AUX 1 and bell; the other remaining sound sources may be mixed into any channel of output simultaneously;
- Four channels of line output;
- Four channels of power output, each of which has its own 4-16 $\Omega$  terminal, 70V terminal, and 100V terminal;
- The power amplifier has the DC output protection, overload protection, short-circuit protection, and overheat protection;
- LED indication, level indication, and protection indication;
- 1 channel of 1W/8 $\Omega$  adjustable volume, which is used to monitor the four channels of line output;
- 1 channel of RS232 interface, which is used to expand the computer to control this equipment.

## II. Description of Appearance

### 2.1 Description of Front Panel



#### 1 Channel CH1 level indicator lamp

Indicate the input level of this channel, and for channel CH2, CH3, CH4 and so on.

#### 2 Channel CH1 power amplifier protection indicator lamp

When using this channel, this indicator lamp is alight, and for channel CH2, CH3, CH4 and so on.

#### 3 Channel CH1 volume adjustment knob

Turn it clockwise to increase the volume, and for channel CH2, CH3, CH4 and so on.

#### 4 Channel monitoring selection key

Press this key to select channel CH1, CH2, CH3 and CH4 in turn, and the corresponding indicator lamp will be alight; in such case, adjust the monitoring volume of this channel.

#### 5 Channel monitoring volume adjustment knob

Press key 4 to select the channel, and then turn this button to adjust the monitoring volume of this channel.

#### 6 Channel monitoring selection indicator lamp

When pressing key 4 to select the channel, the corresponding channel indicator lamp will be alight.

#### 7 Channel bell volume adjustment knob

Press the key 8 to turn on the bell; after pressing the key 9 to select the channel, turn this knob to adjust the bell volume of this channel.

#### 8 Channel bell turn-on key

Press this key to turn on the bell.

#### 9 Channel CH1 bell on-off key

Press this key, and the indicator lamp is alight, indicating that this channel is selected at this time, and then adjust the volume of the channel bell. Press this key against to turn it off, and for CH2, CH3, CH4 and so on.

#### 10 Channel CH1 bell selection indicator lamp

Press the key 8 to turn on the bell; press the key 8 and the indicator lamp is alight, and then select this channel, and for CH2, CH3, CH4 and so on.

#### 11 Siren volume adjustment knob

Turn it clockwise to increase the volume.

#### 12 Siren on-off key


Remove the white transparent shield and press this key to give the alarm.


#### 13 MP3 display screen

Display the playing.

**14 MP3 control key**

: Play/pause;

: Previous song;

: Next song;

: MP3 and bluetooth switching key.

**15 USB interface**

Support 32UG disk.

**16 Channel CH4 playing indicator lamp**

When the Channel CH4 is playing MP3 or bluetooth program, the corresponding channel indicator lamp is alight, and for channel CH1, CH2, CH3 and so on.

**17 Channel CH4 program playing on-off key**

Press this key and indicator lamp 16 will be alight, indicating that channel CH4 is selected, and for channel CH1, CH2, CH3 and so on.

**18 MP3/bluetooth bass adjustment knob BASS**

Adjust this knob with screwdriver.

**19 MP3/bluetooth treble adjustment knob TREBLE**

Adjust this knob with screwdriver.

**20 MP3/bluetooth volume adjustment knob**

Press key 17 to select the channel so as to adjust the volume of such channel.

**21 Auxiliary output AUX1 bass adjustment knob BASS**

Adjust this knob with screwdriver, and for AUX2, AUX3 and so on.

**22 Auxiliary output AUX1 volume adjustment knob**

Press key 25 to select the channel so as to adjust the volume of such channel.

**23 Auxiliary output AUX1 treble adjustment knob TREBLE**

Adjust this knob with screwdriver, and for AUX2, AUX3, AUX4, AUX5 and so on.

**24 Auxiliary output AUX1 channel CH4 indicator lamp**

Press the key 25 to select the channel, and this indicator lamp is alight; press this key again, the indicator lamp is off. Repeat the same operation for channel CH1, CH2, and CH3, and for AUX2, AUX3, AUX4, AUX5 and so on.

**25 Auxiliary output AUX1 channel CH4 on-off key**

Press this key and the corresponding indicator lamp 24 is alight, indicating the channel CH4 is turned on. Repeat the same operations for channel CH1, CH2, and CH4, and for AUX2, AUX3, AUX4, AUX5 and so on.

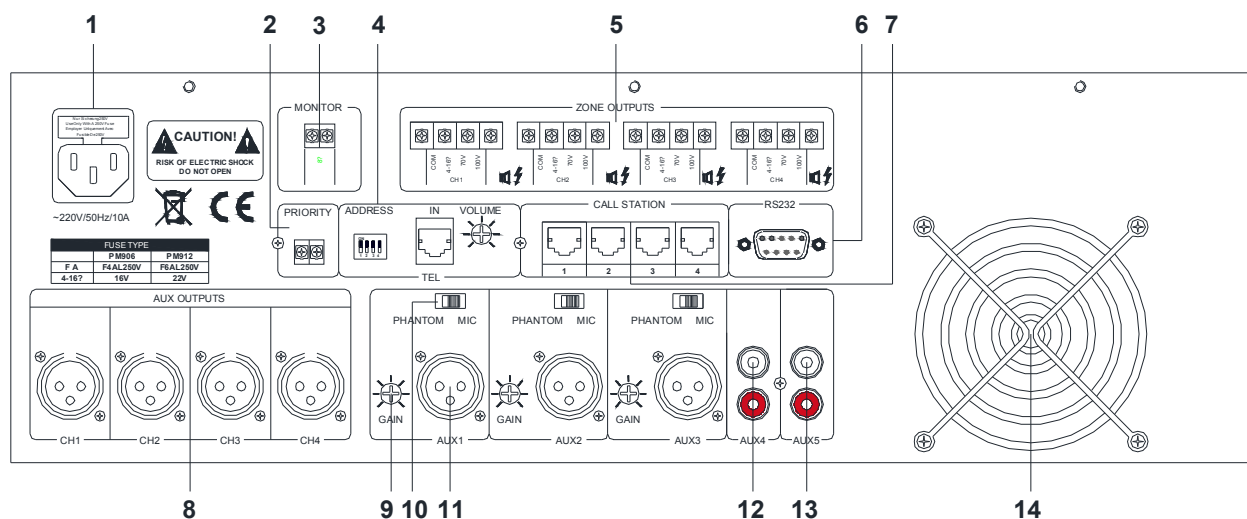
**26 Power switch****27 Power indicator lamp****28 Remote paging microphone indicator lamp**

Indicate whether the corresponding channel is turned on or not.

**29 Telephone signal channel indicator lamp**

Indicate whether the corresponding channel is turned on or not.

## 2.2 Description of rear panel



### 1 Power line socket

Connect ~220V/50Hz power supply.

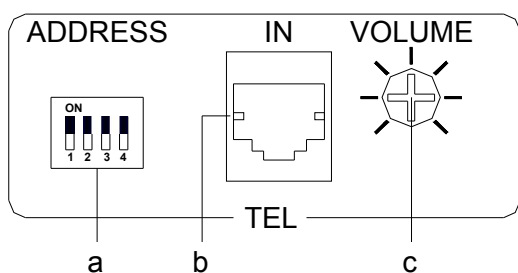
### 2 Priority level adjustment terminal PRIORITY

Please see description of performance characteristics for priority level in details.

### 3 Monitoring terminal

1W/8Ω adjust the volume and monitor the output of the four channels of lines.

### 4 Telephone signal input module



a Address dial-up

b Telephone line socket

c Volume adjustment knob

### 5 Matrix 4-channel output interface

Four-channels of power output, each of which has independent 4-16Ω terminal, 70V terminal, and 100V terminal. Connect the loudspeaker.

### 6 RS232 interface

It is used to expand the computer to control this

equipment.

### 7 Remote paging microphone interface

4-channel remote paging microphone input (Linking up to 10 equipments)

### 8 AUX output interface

4-channel line output.

### 9 AUX1 input gain adjustment knob

And for AUX2, AUX3 and so on.

### 10 Microphone and phantom power supply switching key

3-channel microphone balanced input, each of which can adjust the gain and volume and tune independently with optional +48V phantom power supply.

### 11 AUX1 input interface

Connect microphone and other external sound sources, and for AUX2, AUX3 and so on.

### 12 AUX4 input interface

Connect other external sound sources.

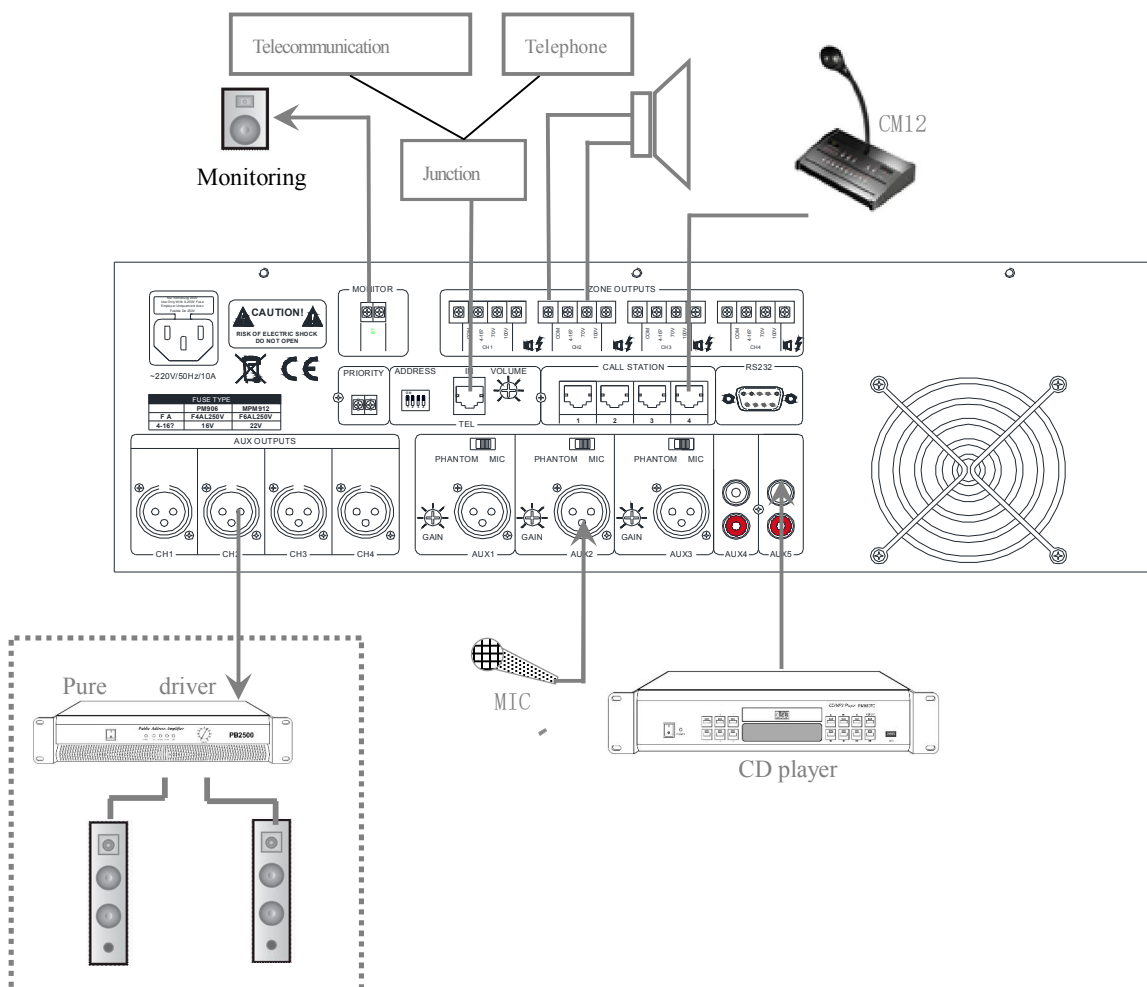
### 13 AUX5 Input interface

Connect other external sound sources.

### 14 Fan outlet



### III. Instruction to Connection



# Precautions for safety in use

## 1. Precautions for safety in use

- Before connecting the system line properly, do not insert the power plug of this equipment into the grid.
- Ensure the voltage input to the equipment shall be fully consistent with the voltage of this equipment to prevent the risk in the burning of the equipment.
- There is the hazardous voltage in the machine, which is sufficient to cause the electric shock to the person. Please do not open the machine housing without authorization to prevent the hazard of electric shock.
- In the event that the power supply to this equipment is turned off, the machine is not fully disconnected with the power supply of the grid. For the purpose of safety, please pull the power plug out of the socket when the equipment is not in service.
- Please do not put the equipment in the extremely cold or hot place.
- Ensure the good ventilation in the working environment of the equipment, to prevent the damage to the equipment due to the heating in working and excessively high temperature.
- In the rainy and humid days or if the machine is not in service for a long term, please pull out the power plug.
- Before removing or reassembling any part of the equipment, disconnecting or reconnecting any electrical plug or other connections of the equipment, be sure to pull out the power plug to ensure the full disconnection of the equipment with the grid.
- In case of any fault in the equipment, the non-professional person shall not disassemble the housing for repair without the approval, in order to prevent accident or aggravate the damage to the equipment.
- Do not put any corrosive chemicals nearby or on the equipment.

## 2. Precautions for after-sales service

- In case of the installation and operation according to this instruction, the company will provide the free warranty service (Including replacement of parts free of charge) for any problem in the normal operation for three years since the date of purchase.
- In case of the warranty, the user shall show the user's voucher of warranty card and the invoice as the certificate.
- In any of the following cases, the free warranty shall not be applicable:
  1. The damage to the product due to the incorrect installation, use or handling;
  2. The damage to the product due to the abnormal conditions (e.g. excessively high power voltage or ambient humidity);
  3. The damage to the product due to natural and man-made disaster and other accidents;
  4. The number on the product body is changed, altered or removed;
  5. The product has been repaired or refitted by the person other than those authorized by the company;
- Please keep the operation instruction and warranty card properly.
- For the issue or matter not covered herein, please contact the distributor or visit <http://www.lyintlcorp.com>.
- In case of any fault occurred during the period of warranty, please contact the service personnel of our company (or distributor); our company will not take responsibility for the damage due to the unauthorized disassembly or the repair by the person other than the technicians of our company.

## Packing List

No.	List	Quantity
1	Power amplifier	1 set
2	Warranty card	1 copy
3	Certificate	1 copy
4	Operation instruction	1 copy
5	10A GB power line	1 piece
6	1500MM double-modulator audio line	1 piece
7	6.35R lotus plug	2 pieces
8	4P lockable green plug/2ERJKM-5.08-4P	4 pieces
9	2P green plug/2ERJK3.81-2P	2 pieces
10	H21-612 remote controller	1 piece

## Performance specification

Type	PM906	PM912
Rated output power	60W×4	120W×4
Loudspeaker output	4-16Ω, 70V, 100V	
Input sensitivity and input impedance	AUX1, AUX2, AUX3: (3±0.5mV/600Ω) ~ (300±50mV /10KΩ) balanced input; AUX4, AUX5: 300±50 mV /10 KΩ unbalanced input; TEL: 300±50mV /10 K Ω; CALL STATION1, 2, 3: 2000±100 mV/10KΩ balanced input	
Tune	Bass 100Hz ±10±2 dB; Treble 10000H ±10±2dB;	
Frequency response	80Hz~16KHz	
Signal to noise ratio	≥75 dB	
AUX1---4 output level	2V/600 Ω balanced output	
MP3	Play documents in the formats of MP3, WMA, WAC and ACC stored in 32GU disk or transferred by bluetooth	
Dimension of equipment (L×W×H mm)	483×132×440mm	
Dimension of packing (L×W×H mm)	550×550×215mm	
Net weight	25.5kg	28kg
Gross weight	28kg	30.5kg

### Attention

- If the power switch of the equipment is “off”, the machine is not disconnected to the grid; for the purpose of safety, please pull the power line plug out of the socket if this equipment is not in service.
- This equipment shall not suffer from water dripping or spraying. Do not place the vase full of water onto the equipment.
- Do not open the cover plate of the machine without authorization to prevent electric shock. The repair shall be conducted by the professional with professional certificate if necessary.
- The terminal marked with ⚡ in the equipment indicates the hazardous electrification. The connection of such terminal shall be completed by the trained personnel.
- This equipment is connected to the power supply of the grid with the power line plug; in case of any fault or risk in the equipment, pull out the power line plug to disconnect the connection between the equipment and the grid; therefore, the power line plug shall be put in the place easy for plug-in/out of the power line.