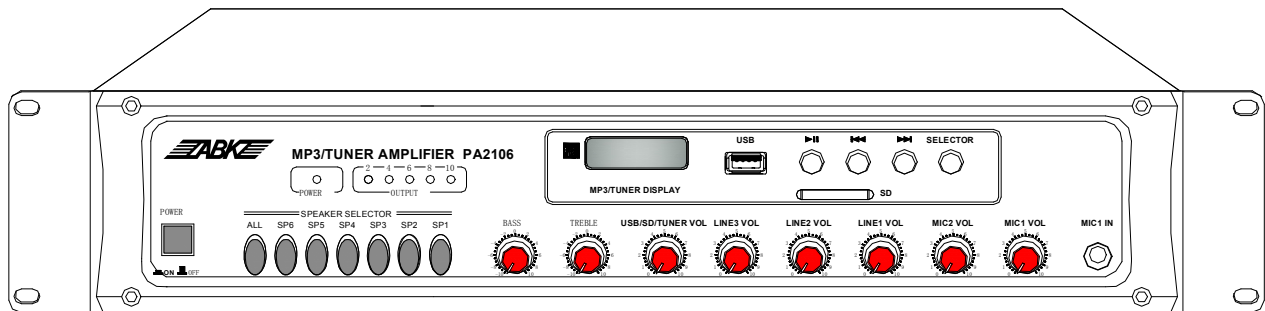




**Public Address System**

## 6 Zones Mixer Amplifier with USB/Tuner

**PA2106**  
**PA2116**



# USER'S MUNUAL

Welcome to use Public Address System. For better use of this equipment, please read this manual carefully before use.

**Guangzhou DSPPA Audio Co., Ltd.**

[www.abk-pa.com](http://www.abk-pa.com)

### **Message on Information of Instructions**

**The instructions contain the introduction to product function, introduction to appearance, technical parameters, and schematic diagram of connection, safety precautions, and after-sales service for the broadcasting power amplifier with MP3/radio/preamplifier/partition manager in the types of PA2106 and PA2116. It is necessary to read this manual prior to the connection and application.**

**The functions and relevant technical parameters described in the instructions shall be applicable as of the completion of development of this product. The functions and technical parameters shall be subject to future change without prior notice.**

**Please preserve the instructions properly for the future use.**

## **Description of Product**

PA2106/PA2116 is advanced public address equipment integrating MP3 player, FM tuner, partition manager (6 partitions), preamplifier and post power amplifier.

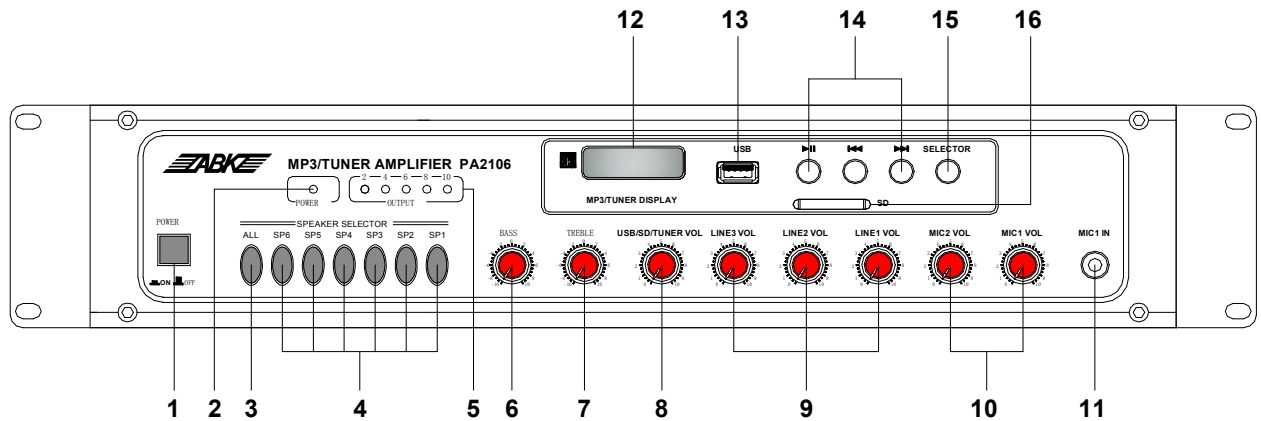
This equipment has three line signal input interfaces, one line signal output interface, and two routes of the microphone input interfaces, of which the signal from the interface of microphone 1# on the front panel shall be granted the highest priority level. Each sound source input (including the MP3 player and FM tuner built in this equipment) shall be provided with the independent volume adjustment button, and the preamplifier shall be provided with the treble and bass adjustment knob. The six partitions are subject to the output at the constant voltage of 100V. Any partition shall be provided with the independent switch control button in addition to a button for the operation of all such six partitions. There is the LED digital tube display screen, which is used to display the working status of the equipment.

Integrating the whole set of the broadcasting program as the small-sized public address system including the sound source, partition, preamplifier, post power amplifier and volume control and other functions, this equipment is applicable to the sites needing the public address by the small-sized public broadcasting system.

## **Features**

- Combined power amplifier series with MP3, radio playing function and integrating the output of six partitions and the preamplifier and post power amplifier.
- Plugged with U disc, SD card and other memory equipment to provide MP3 sound source.
- Two microphone inputs, three Line inputs, and one Line output for link.
- Transform the output into 6 zones.
- Muting function.
- Individual volume control. Bass and treble tone control.
- A five-element LED level meter is provided for the quick and easy visual monitoring of sound level.

## ● FRONT PANEL



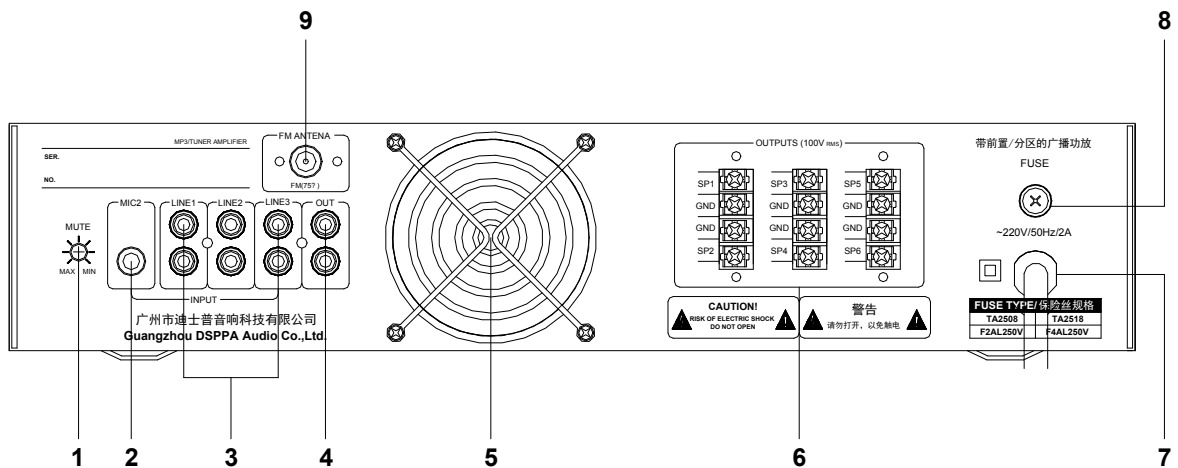
1. Power switch (power indicator lighting as ON state) for main power.
2. LED power indicator For main power.
3. Zone ALL ON button
4. Zone button of six
5. LED level meter Indicate output level.
6. Bass control Adjust bass response.
7. Treble control Adjust treble response.
8. MP3/SD/TUNER output volume control

9. Line volume control Adjust Line input volume.
10. Mic volume control Adjust microphone volume.
11. Mic1 input jack Connect to microphone of unbalanced 30–600Ω with 1/4" phone plug. The muting function is activated while the signal is sent to Mic 1.
12. MP3/TUNER Display
13. MP3 USB input jack
14. MP3/TUNER Player control button
15. Sound of output selector button
16. MP3 SD jack

### Note:

When all the five elements (+10dB) of the LED level meter remain lit, it indicates that the sound is distorted. In such case, adjust each volume controlling knob, until LED element 4 (+8dB) and LED element 5 (+10dB) shall flashing.

# REAR PANEL



1. Mute control

Adjust muting function.

2. Mic2 input

Connect to the microphones at unbalanced 30-600  $\Omega$  with 1/4 " phone plug. The signals from Mic2

Be muted by the signal from Mic1.

3. Line 1 input, Line 2 input & Line 3 input

Connect to linear source equipment.

4. Line output

Connect a recorder

5. Fan Exhaust Window

6. 6 Zone Output terminals

Connect to speakers.

7. AC power connector

Connect to AC power source.

8. AC fuse

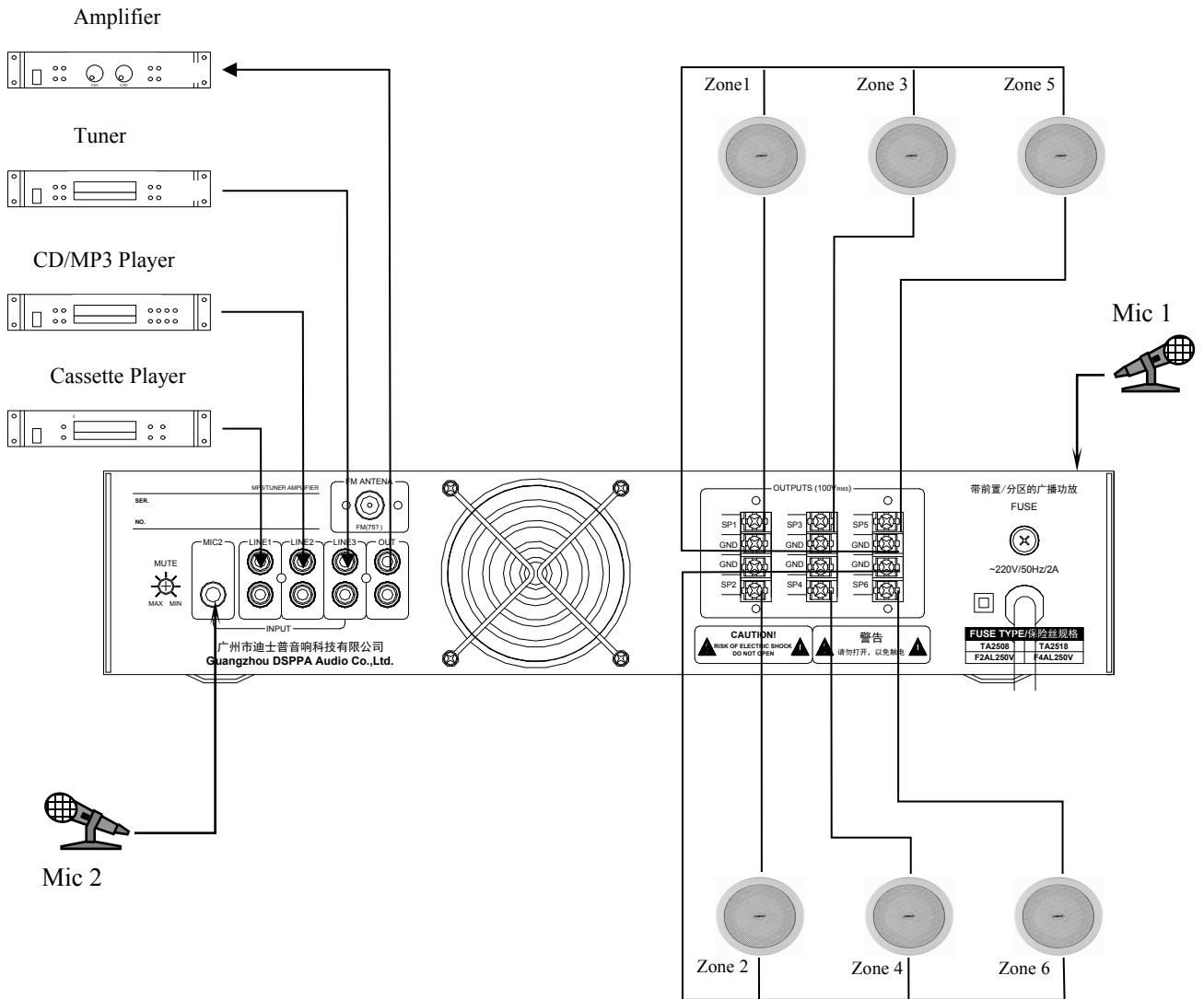
Prevent the excessive AC current flow.

9. FM Antenna

## Note:

When connecting to speakers, use one pair of speaker output terminals only.

# Connections



## Operation Instructions to MP3

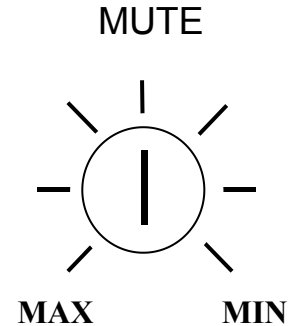
- 1) Connect the lines properly according to the above connection diagram, plug in the power, and turn on power
- 2) switch on the front panel. Under the default condition and after the switch-on, this equipment will play the
- 3) program which was played prior to the previous switch-off. For example, if the radio program was being played
- 4) prior to the previous switch-off, the radio program will be played automatically after this switch-on. In order to
- 5) play MP3 program, please press the “MP3/TUNE” playing operation button or “SELETCOR” key for switching.
- 6) 1. To play MP3 program
- 7) 1) Start playing: Switch to MP3 playing state by the above way (If MP3 program is being played, such
- 8) operation is omitted), plug the U-disc storing MP3 program into USB interface, and the equipment start
- 9) playing automatically. Make use of the 14 buttons on the panel of the equipment to select the program
- 10) to be played and to control the suspension of playing.
- 11) 2) U/SD: The MP3 player built in this equipment is able to play the program from USB interface or to
- 12) play the program from SD interface. This equipment will select the program on the memory plugged
- 13) finally to play. For example, it is playing the program from USB interface, and then plug SD card into
- 14) the equipment, and it is switched automatically to play the MP3 program on SD card.
- 15) 2. To play tuner radio program
- 16) Switch to “TUNE” playing mode by the above way, and then start to play the radio program.
- 17) 1) To search radio station:
- 18) Make use of the button on the panel of the equipment to search automatically from the low-
- 19) frequency range to high-frequency range, and the searched radio stations will be stored to the
- 20) storage number starting from 1 in order so as to facilitate the direct invoking of the radio station in
- 21) the future.
- 22) 2) Invoking of radio station: The channel of radio station searched and stored automatically will be
- 23) invoked directly for playing in the future. Make use of the “ or ” button on the panel of
- 24) the equipment to select the storage number in order to invoke the radio station for playing.

### **Note:**

**If the U-disc is not plugged into this equipment prior to startup, the radio program will be played automatically after the startup. At this moment, plug in the U-disc, and it will be switched to MP3 playing state.**

## MUTING FUNCTION

This equipment provides muting function. The inputs from Mic2, Line1, Line 2& Line3 are automatically muted by a input from Mic1, as the signal from Mic1 overrides other input signals. The level of MUTE can be adjusted within the range from MAX to MIN by adjusting MUTE control button on the rear panel. It is preset at MAX before shipping from the factory.



## PRECAUTION OF INSTALLATION

- 1 Do not block ventilation holes.
- 2 The amplifier should not be placed in any of the areas:
  - 1) With poor ventilation;
  - 2) Exposed to direct sunlight;
  - 3) With high ambient temperature or adjacent to heat-generating equipment;
  - 4) With high humidity or heavy dust;
  - 5) Susceptible to vibration.
- 3 Make sure the power outlet conforms to the plug of the unit.
- 4 Do not use this unit if the electrical power cord is frayed or broken.
- 5 Always operate the unit with the AC ground wire connected to the electrical system's ground.
- 6 If an alarm rings after the power has been on and the signal has been fed, there must be an output short-circuit trouble. In such a case, please turn the power off. Do not turn on the power again, until the trouble shall be resolved.

## Packing List

No	Specification	Quantity
1	5×19 whole machine fixing screw	4
2	SY542 wire (AV terminal audio wire)	1
3	Instructions	1
4	Warranty card	1
5	Certificate	1
6	Plastic washer	4
7	FM antenna	1
8	Remote controller (for MP3/radio)	1



# SPECIFICATIONS

Model	PA2106	PA2116
Rated output	60W	120W
Output regulation	Less than 3dB。	
Speaker output	100V	
AUX output	0dBV	
Input Sensitivity	Mic1,2 : 3mV(±0.5mV) unbalanced	
	Line 1,2,3 : 300mV(±30mV) unbalanced	
Frequency response	65Hz-20kHz ( ± 3dB )	
Distortion	Less than 1% at 1kHz , 1/3 rated output voltage	
The ratio of signal to noise ratio	Bigger than 80dB	
Tone	Bass: ± 12dB (100Hz)	
	Treble: ± 12dB (10kHz)	
FM	87.5MHz-108.0MHz	
MP3 Input Sensitivity	230-280mV	
Protection	AC fuse; DC voltage; overload; short-circuit.	
Colling	Steeples frequency conversion fan for heat radiation。	
Muting function	Mic1 overrides other input signals with 0 ~ -30dB attenuation	
Power requirements	AC220-240V/50-60Hz	
Power consumption	100W	200W
Dimensions	430×280×88mm	
Gross weight	8.5kg	10.3kg
Net weight	7.2kg	8.9kg

Specifications are subject to change without notice

## CAUTION

- Do not put the vase full of water and similar things on the machine. Please pull out the plug from the outlet when the machine is OFF state.
- To reduce the risk of electric shock, do not remove the unit's cover.
- No user parts are inside. For services, refer to a qualified service person.

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