



**SERIES 8000**

# **PUBLIC ADDRESS AMPLIFIER**

**Installation and User Instructions**



## **Power Amplifier**

- **PAB-9120**
- **PAB-9240**
- **PAB-9360**

## IMPORTANT

Before installing or operating this product, please always read this manual carefully.

## WARNING:

To prevent the risk of fire or electric shock, never expose this product to rain or humidity.

## Table of contents

Important safeguards-----	2
Table of contents-----	2
1. Introduction-----	3
2. Features-----	3
3. Front Panel-----	3
4. Rear Panel-----	4
5. Installation-----	5
6. Specification-----	8

## Introduction

PAB-9120/9240/9360 is a power amplifier series. The output power are 120W, 240W and 360W for wide range purpose.

Once there is defective, it will be indicated at the front panel.

Dry contact will short to trigger external system when the fault is detected in the amplifier or installation system.

0-8  $\Omega$  -70V-100V different level output for different speaker system.

24V battery back up power source will operate when the AC power source is off.

## Features

- It has 20 KHz built-in detecting circuit, which is used to detect whether the unit works normally or not.
- It has 100V input terminal. It can apply to long distance extension network installation.
- It has balanced XLR input terminal and unbalanced RCA input terminal.
- The unit could be triggered by remote control terminal.
- It has 0-8  $\Omega$  -70V-100V output terminal for different output voltage and impedance.

## Front Panel:



### 1. Power LED

When it is power ON, the blue LED will light up.

### 2. Fault LED

Set the built-in 20 KHz detect switch at “ON”.

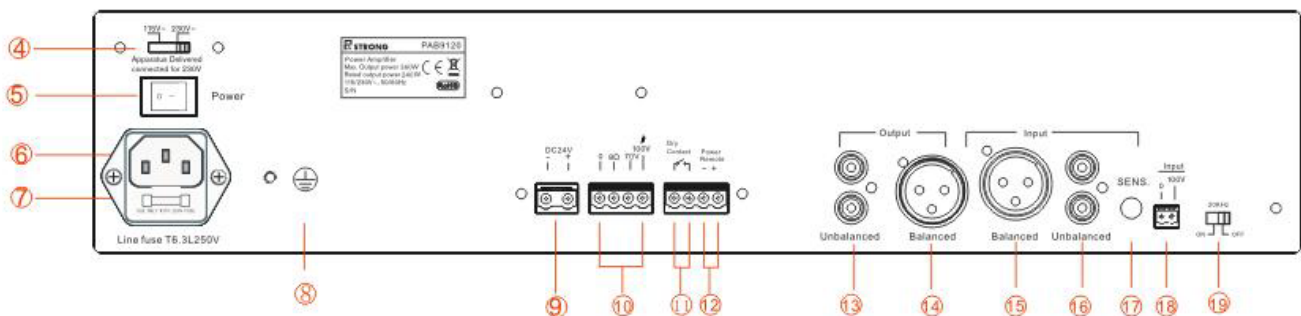
If there is no 20 KHz signal output, over heat, short circuit, the Fault LED will light up.

Set the built-in 20 KHz detect switch at “OFF” will not detect 20KHz in the system. The Fault LED will not light up.

### 3. LED VU Meter.

VU meter to indicate output signal level.

## Rear Panel



### 4. AC Line Voltage Selector.

Set the slide switch to select AC line voltage (115V or 230V AC).

#### Note:

Never set the switch to wrong AC Line voltage, it will cause damage to the unit.

### 5. Power Switch

Press rocker switch to switch on the unit. Press again to switch off the unit.

### 6. AC Inlet Socket

To plug in AC power cord.

### 7. AC Line Fuse Bracket

Insert fuse to the fuse bracket to provide protection for over current.

#### Note:

Always use fuse with correct current and voltage rating.

### 8. Chassis Ground

A Chassis Ground should be connected during installation

## **9. DC 24V Input Terminal**

Input terminal to connect DC 24V power source

### **Note:**

Never connect to the wrong polarity of DC power source.

## **10. Output Terminals**

Amplifier output terminals with 0-8  $\Omega$  -70V-100V for different output voltage level and impedances.

## **11. Dry Contact Control Terminal**

Dry contact will close when the unit is damaged or no output.

## **12. Power Remote ON/OFF Terminal**

Remote control the unit to power ON when the unit is under power switch OFF state.

Short Remote Power ON/OFF terminal, the unit will be switched to power “ON”.

If the unit is switched to power “ON” state, this Remote Power ON/OFF terminal can not control the unit.

When the unit is operated by DC source, it can not be controlled by Remote Power terminal.

## **13. Loop Through RCA Unbalanced Output**

RCA terminal for unbalanced input loop through signal to pass the input signal to other amplifiers.

## **14. Loop through XLR Balanced Output**

Loop through XLR balanced output terminal.

## **15. XLR Balanced Input**

XLR socket for balanced input signal.

1 Vrms, balanced, XLR input.

## **16. RCA Unbalanced Signal Input**

RCA unbalanced signal input is in parallel to XLR balanced input.

The signal level is 1V, 10K  $\Omega$  unbalanced.

## **17. Input Signal Level Trimmer**

To adjust the input level of input signal.

## **18. 0-100V**

For 100V signal input.

## **19. 20KHz ON/OFF Switch**

Set it at “ON”, pilot tone detect function is ON.

Set it at “OFF”, the pilot tone detect function will be off.

# **3. Installation**

## **3.1. Unpack packing box**

Open the package box and take out the unit.

Please check the accessories and read manual before operate the unit.

### 3.2. (optional) Install unit in rack.

The PAB-9120/9240/9360 is designed for table top use.

If user wants to use in the rack, please screw on rack mounting bracket .

Please refer to the drawing.

### 3.3. Set correct AC line in voltage

Refer to the AC line in voltage select switch (4)



Set the slide switch to correct AC line in voltage.

### 3.4. Plug in AC power cord

Plug the AC power cord to the AC socket.



Before switch on the unit, please confirm all the installation system is properly connected.

## 4 Connections and settings

### 4.1. Balanced/unbalanced signal input



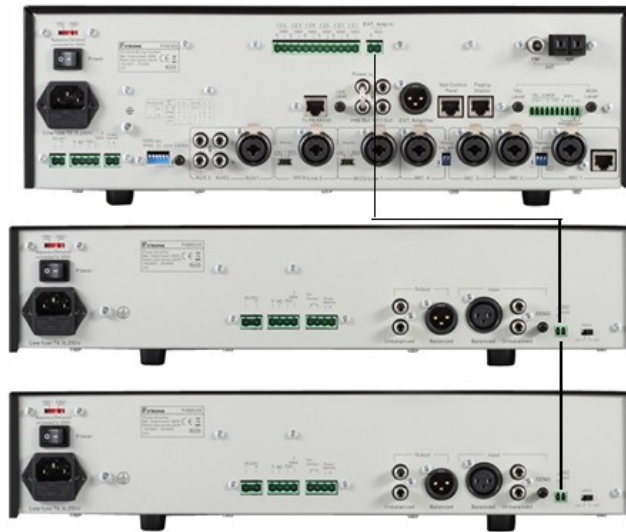
There are two types of input:

One is balanced signal, the other is unbalanced.

It is convenient for connecting the signal from external music source or preamplifiers.

## 4.2. 100V input

100V input can be connected to amplifier's output. It is suitable for long distance network.



## 4.3. Adjust input signal level

Turn the input trimmer. (17) to adjust input level.

## 4.4. Loop through output

The input signal is loop through to output XLR and RCA terminal.  
It can be connected to next amplifier.

## 4.5. 20KHz ON/OFF

20KHz is a pilot tone signal. By the detecting of 20KHz in installation system, we can judge the system is working properly or not .

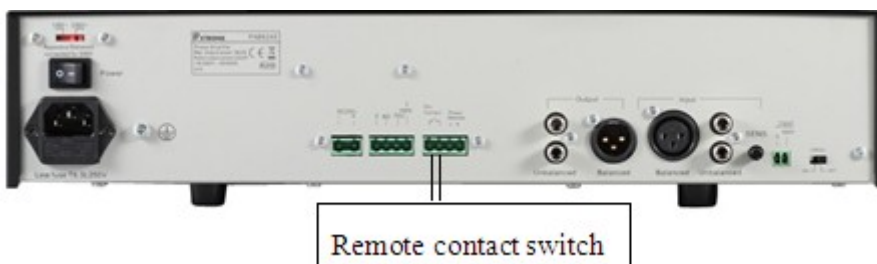
Set the switch at “ON”, the built-in 20KHz detecting system will work to judge the operation of the system. If there is not 20KHz, the fault LED will light up, and dry contact terminal (10) will be activated.

Set the switch at “OFF”, the built-in 20KHz detecting system will not work .

## 4.6. Power remote control

Switch off the Power Switch, the unit is off.

With external switch closed, the unit can be powered on and operate.



## 4.7. Speaker connection

There is output terminal with 0-8  $\Omega$  -70V-100V for different purpose and load.



Please pay attention to the total equivalent impedance should not be lower than the rated load impedance.

## 4.8. DC battery

The DC batteries 24V is a back up power source.

When the AC power source is off, the DC 24V will take over and let the unit to continue to work.



## PAB-9120/9240/9360 Power Amplifier Specifications

Model No.	PAB-9120	PAB-9240	PAB-9360
Power Source	115/230V AC, 50/60Hz, 24V DC		
Rated Output	120W	240W	360W
Amp Type	Analog	Analog	Analog
Power Consumption	360W	720W	1080W
Frequency Response	50 - 20KHZ    +1/-3dB		
Distortion	<1%    under rated output power		
Input	Balanced LINE IN:	1V,balanced XLR terminal	
	Unbalanced LINE IN:	1V, 10 K $\Omega$ , unbalanced RCA terminal	
100V Input	100V, balanced input		
Output	Unbalanced loop through:	1V, unbalanced, RCA Jack output	

	Balanced loop through:	1V, balanced, XLR Jack output		
	Output:	100V - 70V - 8Ω - 0.		
S/N Ratio	> 85dB			
Control Input	Remote Power:	Dry Contact terminal Open Voltage: 24V DC ( when the unit's power is OFF ), Short circuit to switch ON the unit.		
	Dry Contact:	Open: during normal operation Short: when unit is abnormal		
Indicator	Output level meter:	5 LED		
	Power indicator:	1 LED (Blue)		
	Fault indicator:	1 LED (Amber)		
Control	Sen. VR to adjust input signal level			
	20KHz Slide Switch:	ON/OFF 20KHz pilot tone		
Operating Temperature:	-10~45℃			
Dimension (H×W×D):	88×430×300 mm	88×430×300 mm	88×430×385 mm	
Weight:	Approx 10.0kg	Approx 13.0kg	Approx 20.0kg	
Mounting ( optional )	Table Top or 19" Rack Mountable	Table Top or 19" Rack Mountable	Table Top or 19" Rack Mountable	

\* 0dB = 1V

\* -20dB = 0.1V

\* -60dB = 1mV

● Load:

PAB-9120: 83Ω

PAB-9240: 42Ω

PAB-9360: 28Ω

## Note:

The specification and design are subject to change without notice for improvement.

Once fault protection LED light up, the unit will stop operation until faulty issue is solved.