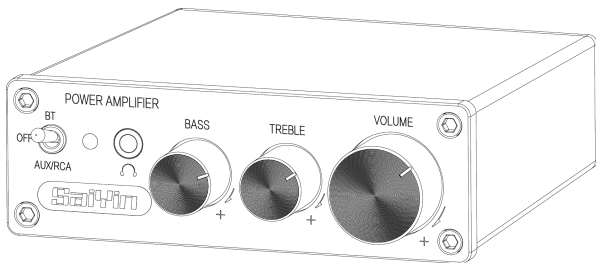


**Sine Audio**® by Sine Audio

## Power Amplifier



PA300 / PA400 / PA500 / PA600  
PA310 / PA410 / PA510 / PA610

## User Manual

E-mail: [support@sineaudio.com.cn](mailto:support@sineaudio.com.cn)

## > Warranty information

The warranty period for this product is 12 months from the date of its original purchase. If manufacturing defects occur, please contact your dealer at the first time, we will instruct you on how to return the defective unit back to us for repair or replacement.

The following are excluded from the Sine Audio warranty coverage:

- Product over warranty.
- Damage resulted from misuse and abusive action.
- Damage resulted from chemical, fire, radioactive substance, and poison, liquid.
- Damage resulted from natural disaster.

## > FCC information

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changers or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of more of the following measure:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- This device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

## > Unpacking

- Remove all packaging and check for the presence of all parts and for transport damage. In case of damage or incomplete delivery, please contact your dealer.
- Please keep the packaging. The system can be stored in it, if not used for a longer period of time.



- Make sure the power adapter is disconnected from the electrical outlet before making any mounting and connection.



→ During operation, if the cables require to be reconnected, the power adapter must be disconnected first, otherwise damage to the system may result.

## > Package Contents

PA300:	1 x Power amplifier	PA400:	1 x Power amplifier
	1 x Power adapter		1 x Power adapter
	1 x Audio cable		1 x Optical cable
	1 x User manual		1 x User manual

## > Features

- Stereo class D power amplifier
- Gold Plated Speaker Banana Jacks
- Aluminum alloy housing
- 3.5mm headphone output and line out interface (PA310 PA410 PA510 PA610)
- Stream music from smart phone or tablet
- Analog audio interface ( AUX input )
- Digital audio interface ( optical and coaxial input , PA400/PA600)
- Tone control (bass, treble PA500/PA600) and volume control

## > Specifications

### → Power adapter

Input : 100-240VAC 50/60Hz  
Output : 22.5V / 3.2A OCP : 7.1A

### → Power amplifier

Output power: 80W per channel  
Matching impedance: 4-8  $\Omega$   
Frequency Response: 20Hz - 20KHz  
Total harmonic distortion: 0.04%  
Signal to noise ratio:96dB  
Digital audio interface: optical and coaxial  
Digital audio sampling rate: 192KHz / 24bit

### → Headphone output

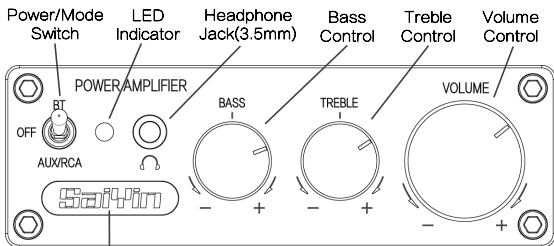
Output power: 125mW X 2 ( 32 $\Omega$  load )  
Matching impedance: 16-200  $\Omega$   
Total harmonic distortion: 0.001%  
Signal to noise ratio : 98dB

Note: Accessories and specifications are subject to change without notice.

## &gt; System Overview

## &gt;&gt; PA300 PA310 (PA500 PA510 With Bass Treble Control)

- Switch to BT : Blue indicator light flash.
- Switch to AUX : Blue/green indicator light stay solid.
- Headphone Jack(3.5mm) is only for PA310 and PA510.

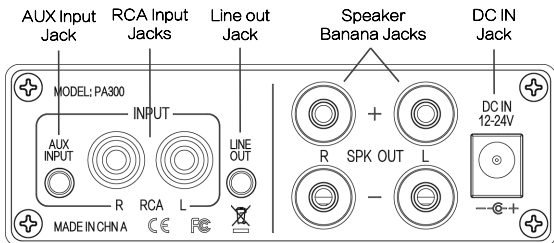
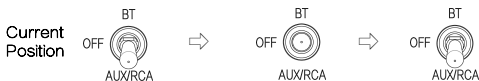


Antenna → Do not block, shield or interfere with the antenna.



→ Switch to AUX/RCA to enter the AUX or RCA input mode.

→ Switching to AUX/RCA may enter AUX input mode when the AUX audio cable is plugged in, you need to switch to OFF and switch to AUX/RCA again to enter RCA input mode.

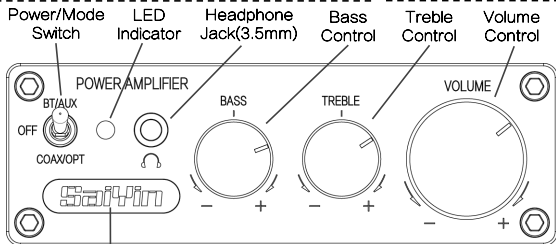


→ Please turn off the power amplifier first, connect the audio input and speaker cable, adjust the volume to half, and then turn on the power amplifier after connecting the DC power supply.



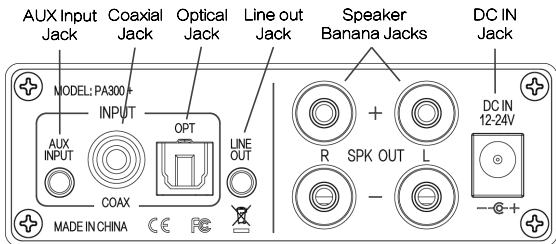
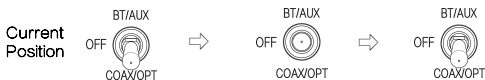
## &gt;&gt; PA400 PA410 PA600 PA610

- |                    |                                   |                               |                             |
|--------------------|-----------------------------------|-------------------------------|-----------------------------|
| → Switch to BT :   | Blue indicator light flash.       | → Headphone Jack(3.5mm)       | is only for PA410 and PA610 |
| → Switch to AUX :  | Blue indicator light stay solid.  | → Bass treble control is only | for PA600 and PA610         |
| → Switch to COAX : | Green indicator light stay solid. |                               |                             |
| → Switch to OPT :  | Red indicator light stay solid.   |                               |                             |



Antenna → Do not block, shield or interfere with the antenna.

- Switch to COAX/OPT to enter the digital audio input (coaxial or optical) mode.
- Switching to COAX/OPT may enter one of the digital audio input (coaxial or optical) mode, you need to switch to OFF and switch to COAX/OPT again to enter the other digital audio input (coaxial or optical) mode.

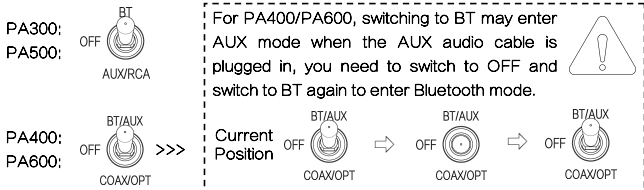


- Please turn off the power amplifier first, connect the audio input and speaker cable, adjust the volume to half, and then turn on the power amplifier after connecting the DC power supply.

## > Bluetooth function

External Bluetooth devices can be connected to the amplifier via Bluetooth connection.

1. Switch to BT to enter the Bluetooth mode. The Bluetooth indicator lights up blue.



2. Activate the Bluetooth function of the external device and search for Bluetooth devices.
3. Select the amplifier (SineAudio Amplifier) from the Bluetooth device list.
4. Follow the instructions shown on your device's screen.

### >> Disconnecting the Bluetooth device:

→ PA300/PA500



→ PA400/PA600



→ You can also use the Bluetooth device to disconnect the Bluetooth connection. The amplifier starts searching for another Bluetooth device.

### Notes:

- If you cannot pair your Bluetooth device, you may need to remove the amplifier from the pairing list, and try pairing again .
- Bluetooth works best within a range of up to 33 feet (10 meters).
- The music streaming may be interrupted by obstacles between the Bluetooth device and amplifier, such as walls, metallic casing that covers the device, or other devices nearby that operate in the same frequency.

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Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

#### Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement in portable exposure condition without restriction.