



Hifi Sound Quality
Diversified Audio Connectivity
Reliable and Cost Effective



SURE A2100
2 x 100 Watt
Audio Amplifier
Explorer

Specially Designed for Desktop Audio System

1 Benefits

- **Support Multiple Audio Input Source**

There are [five various input methods](#) for audio amplifier.

- a) Audio signal input terminal (RCA) —LED blink once
- b) Audio signal input terminal (3.5mm) —LED blink twice
- c) Bluetooth signal input —LED blink three times
- d) Optical fiber input terminal —LED blink four times
- f) USB Sound Card —LED blink five times ([Available for next version](#))

The priority of Input signals:

RCA > 3.5mm > Bluetooth > Optical fiber > [USB Sound Card](#)

- **Bass Output for Subwoofer** ([Available for next version](#))

There is a [subwoofer output](#) via RCA jack at the rear panel. When this jack is plugged in, the amplifier will transmit the low frequency via the RCA. You can feed this output signal to your own subwoofer amplifier. Meanwhile, the bass level could also be adjusted with the POT on the back panel.

- **IR Remote and Rotary Encoder Switch Control**

With the [remote controller](#) accompanying our product, you could operate several functions as follow:

- a) Operation/ Standby.
- b) Volume control.
- c) Switching audio signal channel.

Also the [rotary encoder switch](#) is able to do the same job precisely.

- **Full Protection and Low Power Consumption**

Besides of built-in chip protection, including [undervoltage protection](#), [overvoltage protection](#), [overtemperature protection](#), [overcurrent protection](#), [ESD and spike protection components](#) used throughout input and output of the amplifier board ensure its robustness and reliability.

The standby power is less than [0.5Watt](#) at 24Volts.

- **High Performance Stereo Headphone Amplifier**

The HP amp delivers up to [80mW](#) per channel into 32ohm and has [THD+N as low as 0.02%](#). Thanks to the [differential input topology](#) and [high PSRR](#), the noise cancellation is enhanced. Audible clicks and pops on startup and shutdown is also suppressed.

- **Aluminium Anodizing Housing**

It is made of [aluminium alloy](#) so that it can resist scratching.

Its overall streamlined and sturdy dark black appearance reflects elegant fashion. Each connector is marked with a [cute icon](#), making it look simple and convenient for user to operate.

- **Technical Support**

As we have standard products [in stock](#), we can assure you of our timely delivery so that you can achieve the zero inventories.

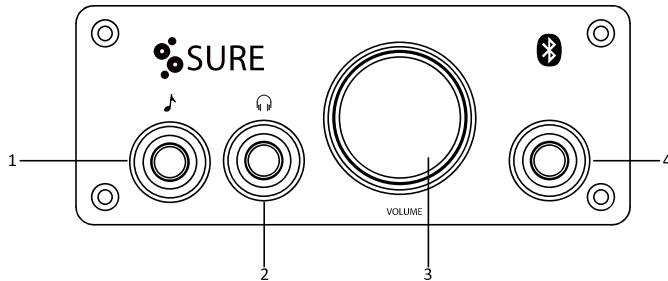
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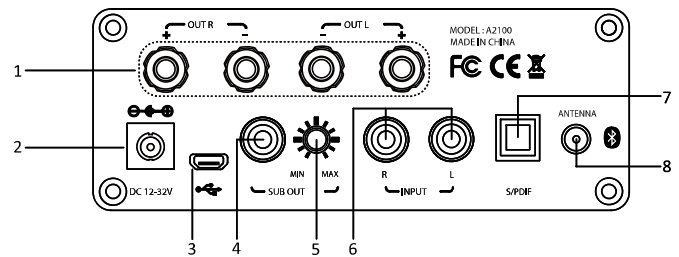
2 Component and Function

FIGURE 3-1 Front panel



- 1—3.5mm audio input
- 2—3.5mm headphone output
- 3—Volume knob
- 4—IR remote receiver

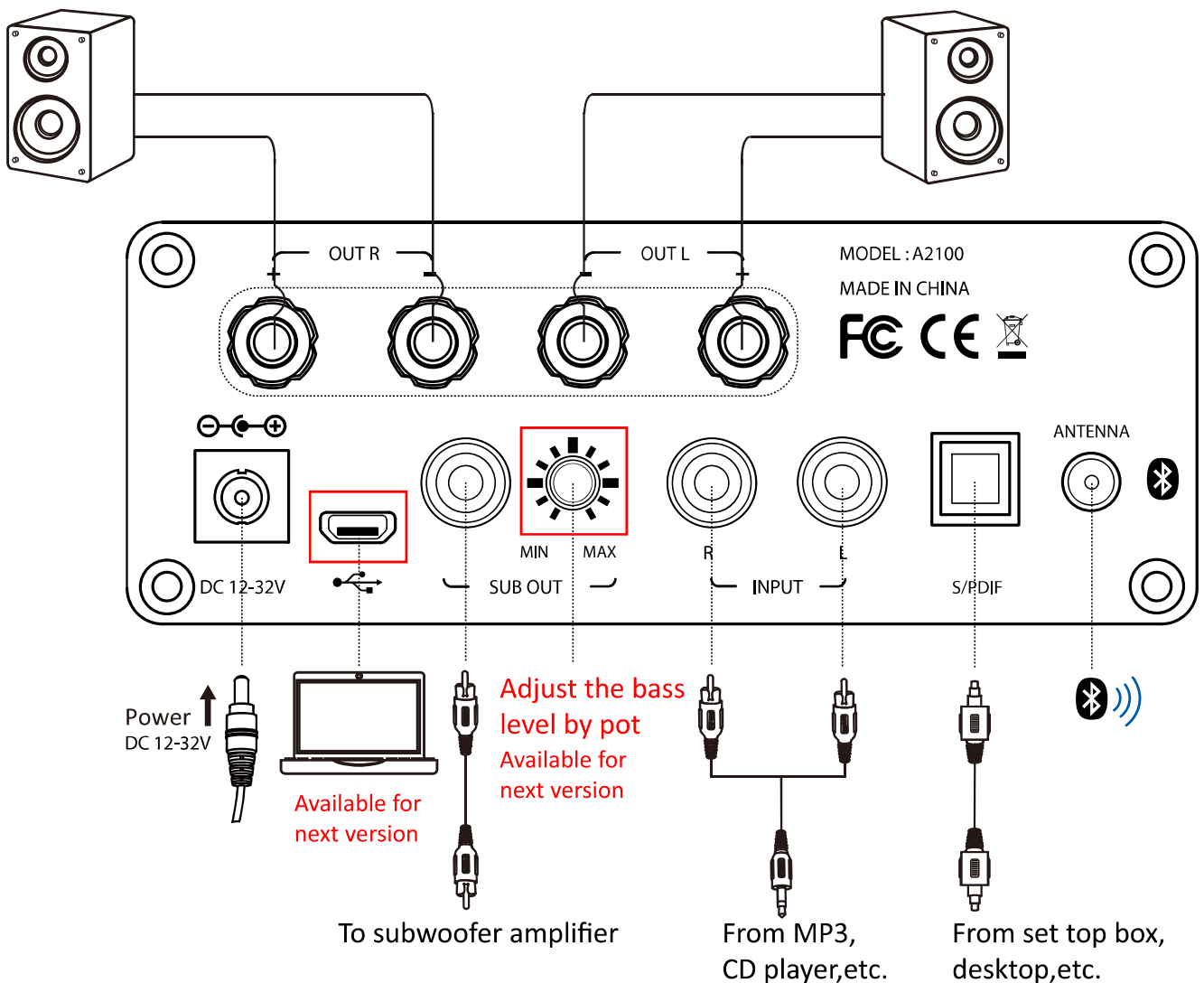
FIGURE 3-2 Rear panel



- 1—Speaker output
- 3—USB sound card*
- 5—Subwoofer volume control*
- 7—Optical fiber input
- 2—Power input
- 4—Subwoofer output
- 6—Audio signal input (RCA)
- 8—Bluetooth receiver

* Available for next version

3 Connection



4 How to Connect?

1. 3.5mm Jack or RCA

It is suggested to finish the connection before you power up the amplifier. Hot plug-in is not recommended.

2. Bluetooth

After power up the amplifier, just pair BT device "SURE-A2100" with your mobile device without PIN number. Only one mobile device is allowed to be connected every time.

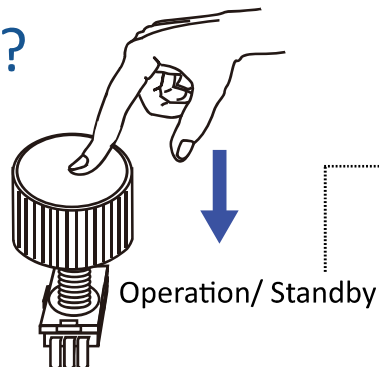
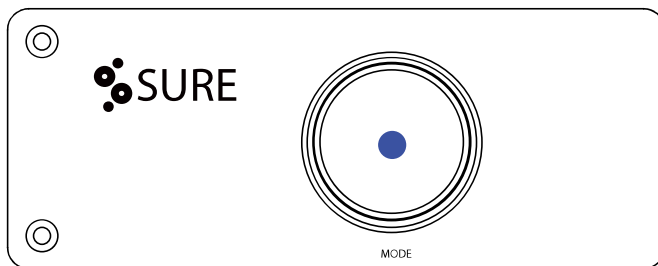
3. Toslink

Plug two ends of a TOSLINK cable into the TOSLINK ports on the both sides separately. And set output data with 48KHz sampling rate and 24-bit word length.

4. USB DAC (Available for next version)

You may connect the computer's USB to the amplifier microUSB port with a USB cable.

5 How to Switch Modes?

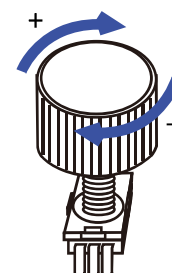
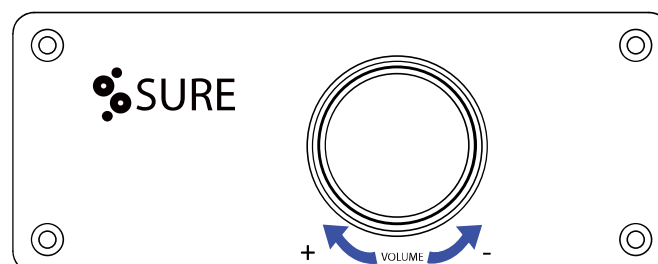


Push on the volume knob to switch between operation mode and standby mode.

TABLE 2-2 SWITCH FUNCTION

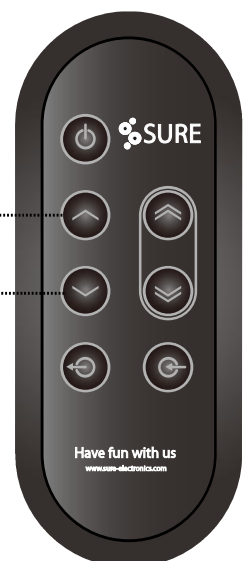
State	Function	LED state
Standby	Amplifier not working	LED lighting in a breathing-effect state
Operation	Amplifier working	LED turn off

6 How to Adjust the Volume?



Volume +

Volume -



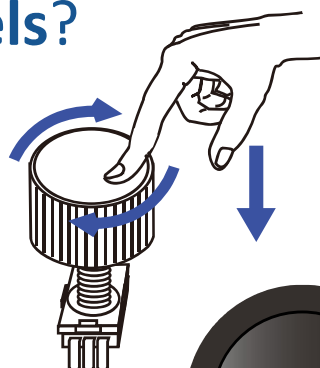
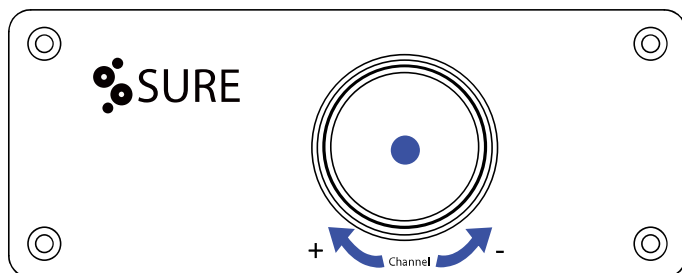
We adopt digital volume potentiometer of high-quality in Classic series which can adjust the volume precisely after long-time use.

Clockwise rotation —Volume +

Anticlockwise rotation —Volume -

Volume will not be changed during the further adjustment when reach to maximum or minimum level.

7 How to Switch Channels?



There are five various input methods for audio amplifier.

- a) Audio signal input terminal (RCA) —LED blink once
- b) Audio signal input terminal (3.5mm) —LED blink twice
- c) Bluetooth signal input —LED blink three times
- d) Optical fiber input terminal —LED blink four times
- f) USB Sound Card —LED blink five times (Available for next version)

The priority of Input signals:

RCA > 3.5mm > Bluetooth > Optical fiber > USB Sound Card

You can switch channels by pushing and rotating the knob.

Also you can switch channels by using remote controller.

8 Q&A

Situation	Solutions
No sound	1. Check if it is connected with the power and confirm that the voltage regulator works well. If not, connect the power according to the connection schematics.
	2. Check if the signal input cable is connected correctly and if there is signal. If not, connect the cables according to the schematic and input the audio signal.
	3. Check if the output cable is damaged and if the speaker works or not. If not, change the output cable and the speaker.
	4. Check if the LED keeps off or not. If not, restart it and ensure that the LED displays breathing effect in standby. If it still doesn't work, remove the power and contact us.
Suddenly no sound when the product is working	1. Check if the product has worked for long time or if the audio signal is too high. If it is, turn off the power and turn it on again.
LED off	1. Check if it is connected with the power and confirm that the voltage regulator works well or not. If not, correctly connect it to the power according to the schematics.
No sound with Optical	1. Only supports 48KHz sampling rate, 8/16/24-bit word length.

Note: If the problems above still cannot be solved, maybe the product has something wrong. Now please turn off the power, pull out the power cord from the socket and then contact us. Please refer to chapter eleven for our contact information.

9 Specification

Parameters	Conditions	Min	Typ	Max
Power Supply Range(VDC)	/	12	24	32
Idle Power(W)	24V, No Audio Input	/	0.4	0.5
Standby Power(mW)	Only When Low Power Module Available	/	2	10
Input Sensitivity(mV)	RCA, 24V @ 4Ω, 100W	700	775	850
	3.5mm, 24V @ 4Ω, 100W	700	775	850
	Bluetooth, 24V @ 4Ω, 100W	700	775	850
	USB Sound Card, 24V @ 4Ω, 100W	700	775	850
	Toslink/ Coaxial, 24V @ 4Ω, 100W	700	775	850
Supports Sampling Rate(KHz)	/	48		
BT Wireless Range(M)	Open space, no physical obstructions	/	10	/
Digital Audio Input	/	Coaxial or Toslink		
Input Impedance(KΩ)	RCA / 3.5mm	15	20	25
Gain(dB)	/	23	26	29
Output Power for Speaker(W)	24V @ 4Ω, THD+N=10% Single Channel	/	100	/
Efficiency	100W, 24V @ 4Ω Single Channel	85%	88%	90%

10 Mechanical Drawing

FIGURE 6-1 Front panel

mm [inch]

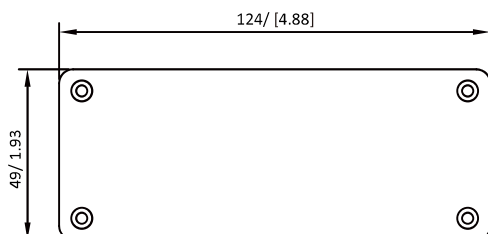


FIGURE 6-2 Rear panel

mm [inch]

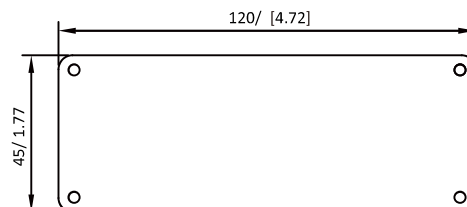
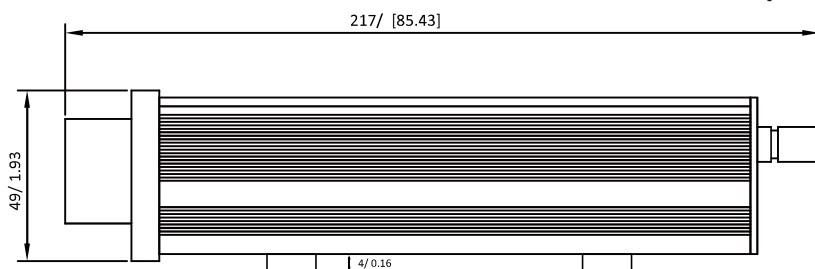


FIGURE 6-3 Side view

mm [inch]



Main Product		
SKU	Price Item	Listed Price
AA-AS32189	2 X 100W A2100 Class D Audio Amplifier Explorer	\$69.90
PS-SP11575	Mean Well GS120A24-R7B Desktop Adapter Power Supply 24V 5A 120W	\$49.90
MB-CM11111	Small 7-key Remote Control	\$5.99
Combination Product		
SKU	Price Item	Listed Price
AA-AC11158	2 X 100W A2100 Class D Audio Amplifier Explorer with Bluetooth, Remote Control & Adapter	\$119

11 Contact Us

We are always here for cooperating with you!
Any requirements or questions, please feel free to contact us.



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