Sinilink XY-S100H 2.1 channel Bluetooth audio power amplifier board module high and bass adjustment subwoofer 50W\*2+100W original imported TPA3116D2



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# **1.Comparison chart of S100H and S100L**

S s	eries 5000*2+10000 Bluetoot board selection	h power amplifier table
Model	XY-S100L Ultimate Edition	XY-S100H Extreme Edition
Picture		A DETERMINE
Character	Designed by efficient Class-D stereo amplifier, with excellent audio performance, good distor- tion and anti-pop function, Sound mellow, voice permeabili- ty, superior sound	Designed by efficient Class-D stereo amplifier TPA3116D2, with superhigh fidelity (HIFI) and stronger driving ability
sinilink APP	YES	YES
Power Supply	DC5-26V/5A	DC5-26V/5A
Bluetooth Version	5.0	5.0
Audio Input	Bluetooth + AUX + U disk + USB soundmax	Bluetooth + AUX + U disk + USB soundmax
Volume control	Rotate 360 degrees by encoder	Rotate 360 degrees by encoder
Audio output	R&L Channels +3.5mm Audio jack	R&L Channels +3.5mm Audio jack
Output power	50W*2 (left and right channels) +100W (heavy bass)	50W*2 (left and right channels) +100W (heavy bass)
Output filter	NO filter	Professional audio LC filter
Protections	overcurrent, short circuit, overtemperature protection and electrostatic protectioN	over temperature, overvoltage, undervoltage, DC-detect and short circuit protection and elec- trostatic protection
Thermal solution	Heat sink and shell	Heat sink and shell
Left and right channel speaker	4-8Ω, 10-100W	4-8Ω, 10-100W
Subwoofer	4-8Ω, 20-200W	2-8Ω, 20-200W
Size	95mm*88mm*25mm	95mm*113mm*25mm
Weight	156g	189g

Supreme Edition XY-S100H SOUND CHANNEL BLUETOOTH AUDIO AMPLIFIER BOARD 50W × 2+100W SUBWOOFER PATETR O F nilink

Accessories with 6 exquisite knob cap, 5 small and 1 large The two styles can be matched freely according to personal preference

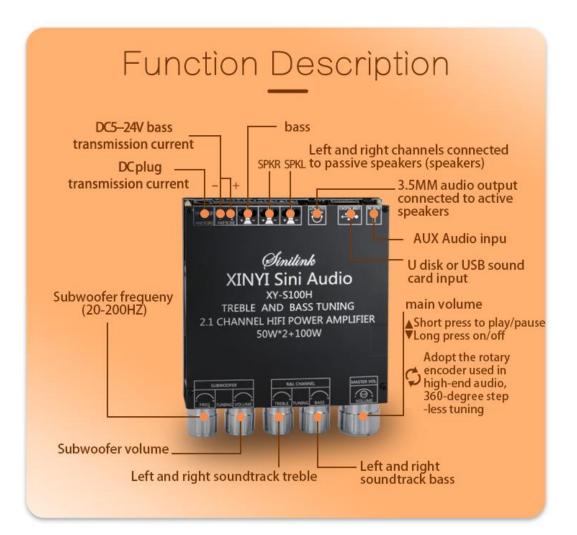
## 2.Multi-function main knob

## Classic look Multi-function main knob

The main knob adopts a rotary encoder that is only used in high-end power amplifiers. Realize 360-degree stepless tu -ning, smooth feel, one-key start and stop.Long press switc -h machine operation is simple and convenient.



# **3. Function Introduction**



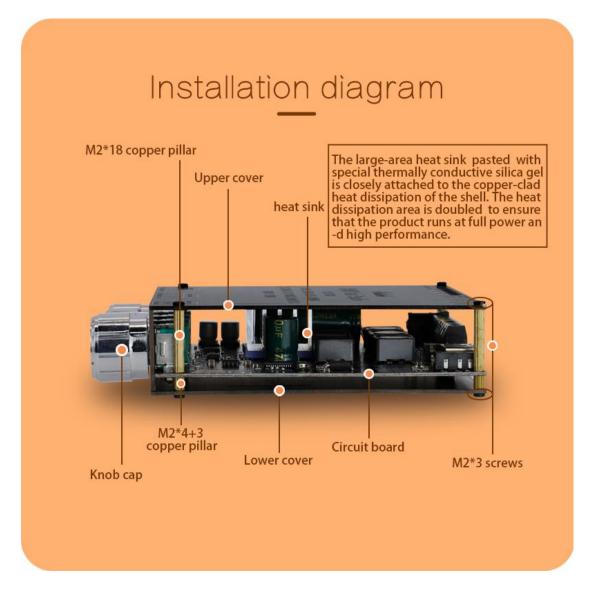
#### 4.Nude plate construction

#### Bare board structure display diagram

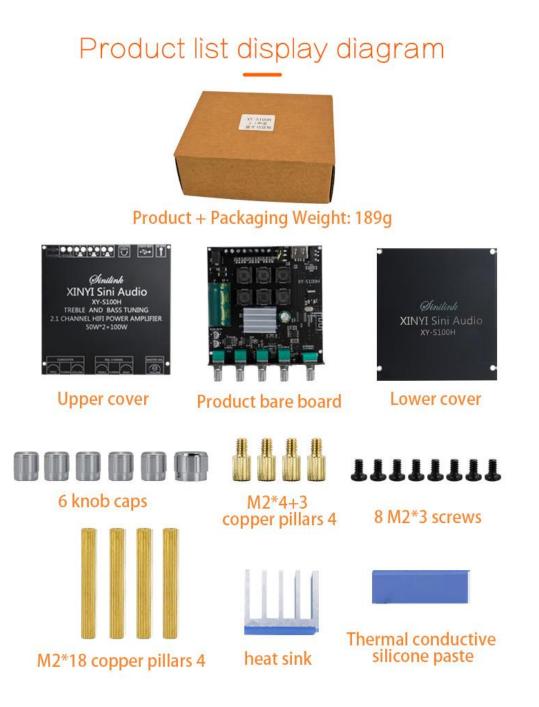
#### High-guality all-copper DC plug with long life Shield power inductor XY-S100H **High-guality** Send large area energy storage heat sink capacitors **Original imported** TPA3116D2 power amplifier chip at the bottom of the heat sink main volume adjust Low noise front Adopt the rotary encoder used in high-end audio, stage op amp 360-degree stepless tuning

Note: There are 2 TPA3116D2 chips under the radiator, not 1.

## 5.Installation schematic diagram



# 6.Product shipping list



# 7.product size



#### 8.Product parameter table

Product parameter information table
Brand: XINYI Sini Audio Product number: XY-S100H
Product name: 2.1 channel Bluetooth audio power amplifier board
Power supply: DC5-26V/10A or more
Audio channel: 2.1 channel Bluetooth version: 5.0
Audio input: Bluetooth+AUX+U disk+USB sound card
Audio output: left and right channel + subwoofer + 3.5mm interface stereo output
Volume adjustment: high-end encoder knob adjustment, smooth feel
Frequency range: 20Hz-30KHz S/N ratio: 92dB
Output power: 50W*2 (left and right channels) + 100W (subwoofer)Satellite box (left and right channel) adapted speakers: 10W-100W /4Ω-8Ω
Subwoofer (subwoofer) adapted speakers: 20W-200W /2 $\Omega$ -8 $\Omega$
Protection mechanism: static electricity, overvoltage, undervoltage, overheating, DC detection and short circuit protection
Unique function: support Sinilink-APP control
Product size: 113mm*95mm*25mm Product weight: 189g

## 9.Notes for product use

#### 9.1 Heat sink installation

During assembly, we must pay attention to the installation of the heat sink, stick the silicon gel to the radiator, and then stick the silicone side to the amplifier chip; note that the radiator metal shell must not contact with the surrounding components to avoid short circuit; finally, the top

plate press the heat sink, through the top plate to achieve better heat dissipation effect.

#### 9.2 Audio input mode switch

This product default Bluetooth mode without any external audio device; if the external playback device is inserted into AUX or U disk, the default is AUX or U disk play mode; follow the priority, such as inserting AUX, during Bluetooth playback, immediately switch to AUX playback; if inserting U disk, immediately switch to U disk play; switching audio mode can also choose with APP, which is very convenient.

Try to choose AUX lines with shielding to reduce noise.

U disk playback to use MP3 format as possible, WAV format sampling rate must be within 44100Hz, too high sampling rate may lead to not playback.

When using the USB sound card function, you can connect the computer with the USB data cable. Without installing any drive, most computer systems will switch the USB sound card by default. If you cannot switch automatically, you can manually choose to switch.

#### 9.3 Power supply selection

Power supply range 5-26VDC, compatible with standard 5.5-2.1/2.5 power adapter plug, recommended 12V/24V standard power adapter, current output above 10A.

Power power must be greater than the sum of the horn power.

Select the power size is related to the horn power used, if it is pushing the 4  $\Omega$  horn recommended power supply below 21V, push the 8  $\Omega$  horn recommended 24V power supply The supply voltage must not be higher than 26V, and higher than 26V, circuit board is burned. If the volume is increased during the playback process, the power amplifier board is restarted, which is caused by insufficient power supply, and you can replace the power supply with a larger output current.

#### 9.4Hororn selection

Left and right channel speakers

The left and right channels can continuously output 50W\*2 of power, 10W~100W horns can be pushed, and a 4-8  $\Omega$  full frequency horn is recommended.

Heavy bass horn

Heavy bass channels can continuously output 100W of power, 20-200W speakers can be pushed, 2-8 ohms bass horn is recommended, the frequency of 20Hz-200Hz best.

If the horn is less than the continuous output power of the power amplifier, the supply voltage can be appropriately reduced, or the volume can be adjusted to avoid the noise caused because the power amplifier output power is greater than the power of the horn. If multiple horns are used in parallel, be sure that the total impedance after the horn in parallel is controlled above 4 ohms, too small impedance, the power amplifier is easy to enter the overcurrent protection state.

#### 9.5 Signal problem

This product uses a PCB antenna with the visible distance of 15 m without shielding. If you do

not find Bluetooth, or connect to Bluetooth, it is a signal problem. Stay away from the router when used. Avoid use on metal tops, which will affect the PCB antenna signal Modify the speaker, if it is a metal shell, be sure to put the antenna out of the shell, the metal will shield the signal.

# 10.How to connect your mobile phone to Bluetooth

	Mobile phone Bluetooth connection
16:17:14 13 13 13 26 <	Do not connect to Sinilink-APP here, if it is connected, please unpair and search aga
手机名称 允许被其他设备发现 <sup>可用设备</sup> Sinilink-APP	When the Bluetooth board is powered on the blue LED flashes guickly and enters
S XinYi	the Bluetooth connection mode; the mobile phone searches for XinYi, clicks "XinYi" to complete the connection and
	the sound is played, at this time the blue LED enters a long light state; open the mobile phone to play music , The blue LEI
	flashes slowly and enters the playback state.

Make sure that Bluetooth enters Bluetooth connection mode-blue LED flash, AUX do not insert, can not enter Bluetooth connection state after insertion

Search for Bluetooth on the mobile phone, found "complete the connection after XINYI", click, accompanied with the prompt sound. After the successful connection, the LED enters the long beam state, open the mobile phone music software to play music, blue LED flash, enter the playing state;

When the phone searches for Bluetooth, come out. "Sinilink-APP", don't connect this Bluetooth here, this is connected inside the APP. If connected, please cancel the pairing and search again, otherwise it will cause you unable to connect inside the phone APP.

#### 11. How to download a mobile APP



Scan the code to download APP, foreign customers please download in Google Market,hunt for 'sinilink' download.

## 12. How to connect to your cell phone APP

#### Steps to connect Bluetooth via mobile APP

Note: When using the APP, you must turn on all the APP permissions in the phone settings, otherwise some phones, compatibility issues will occur, causing Bluetooth to fail to connect.

