

100W HYBRID STEREO TUBE AMPLIFIER WITH BLUETOOTH

Model: JTA50
User Manual



For any support, please contact jusun-cn.com
We'll supply all the best after-sales services.
24 Months Quality Guarantee for Whole Unit
12 Months Quality Guarantee for Tubes
Lifetime Technical support
tel: +86 755 8971 7080
support@jusun-cn.com



Safety Information

IMPORTANT SAFETY INSTRUCTIONS

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel. To reduce the risk of fire and shock do not expose unit to rain or moisture. The unit should be connected to an earth grounded AC electrical socket. The unit should be operated in a well ventilated area. Minimum clearance is 2 inches from the ventilation openings.



FCC STATEMENT

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

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.

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

Important Tips:

Why Can't Tube Amplifier Work?
Most of reasons are the tube amplifier might suffer some crashes during the transportation. Please check if the tubes are in perfect condition and make sure the tubes already inserted tightly.

Welcome

Thank you for your purchasing the Juson Audio JTA50 100W hybrid stereo tube amplifier. This amplifier has been designed to make it easy for anyone to enjoy warm, natural sound quality of vacuum tube amplification without the size, power consumption and the price of traditional tube amplifiers. The JTA series from Juson Audio combined vacuum tube in the preamp input and transistor in power output. Besides, it includes multiple analog and digital inputs for connecting modern devices such as computers with classic sound of tube amplifiers. Meanwhile, the headphone output was designed with high-low gaining, the max output was up to 180mW x 2. The JTA50 unique tubes amplification makes the sound warm, natural and no fatigue even for long time listening.

Contents

Useful Features	3
What's In the Box	3
Controls and Functions	
Front Panel.....	4
Rear Panel.....	5
Top Panel.....	6
Remote Control.....	6
Connections	
Connecting Power	7
Connecting Speakers	7
Connecting Sources	8
Troubleshooting	9
Specifications	10
Warranty	10

Useful Features

- Built-in BP1048 bluetooth chip, you can stream the music easily from your phone or tablet.
- With high-low gain headphone output switch, it fits for 16 ohms to 300 ohms headphones.
- Preamp by vacuum tubes and power amplification by Toshiba Transistors.
- Built-in high-quality USB-DAC for direct connection to any computer, U-Disk capacity should be less than 128G
- Warm glow from the vacuum tubes and front panel controls
- Remote control and motorized volume knob for easy operation from across the room
- Easily add a subwoofer with the dedicated subwoofer output
- Built-in preamplifier, JTA50 can connect to any kinds of turntable

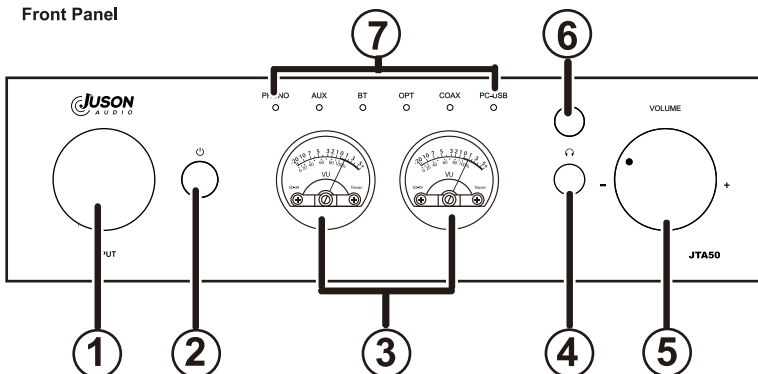
What's In The Box

- JTA50 Tube Amplifier
- Remote Control
- AC Power Cable
- Bluetooth Antenna
- User Manual

*Please check to make sure that nothing is missing from the package

Controls and Functions

Front Panel



1. SOURCE INPUT SELECTOR

Rotated the knob to choose the audio source by turning up and down.

NOTE: USB input will not be selectable unless there is a device connected to the unit and powered on.

2. POWER SWITCH

Turn the amplifier on or off.

NOTE: To safeguard your devices, the amplifier will have around 20 seconds turn-on delay.

3. VU METERS

Reflects the input audio level of the left and right channels.

4. HEADPHONE OUTPUT

The headphone jack (accepting 1/4" TRS connectors) lets you listen privately to any input signal. Inserting headphones here cuts the audio feed to both the main speakers and the SW OUT [9].

NOTE: To safeguard your equipment, ensure the volume is turned down before interacting with headphone or speaker connections.

5. VOLUME CONTROL

Turn this up or down according to different demands and different occasions.

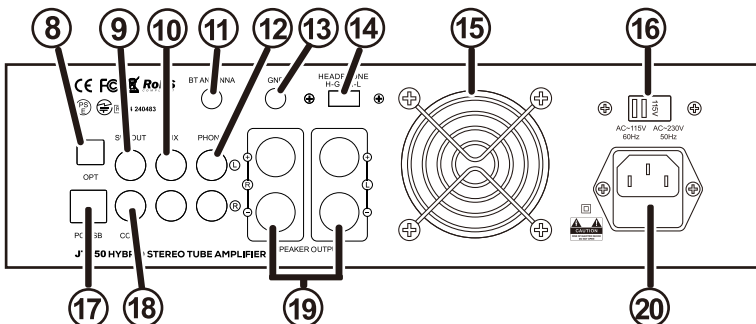
6. INFRARED RECEIVER

The infrared receiver used for connected with remote.

7. SOURCE INPUT INDICATOR

Indicates the input sources

Rear Panel



8. DIGITAL (OPTICAL) INPUT

9. ACTIVE SUBWOOFER OUTPUT

Connect the SW OUT to a powered subwoofer or subwoofer amplifier using a single RCA cable. This outputs a full-range mono signal whose volume level is controlled by the front panel volume knob.

NOTE: The signal output will be cut off when the headphone connects to the amplifier.

10. LINE LEVEL(AUX)INPUT

11. BLUETOOTH ANTENNA

Screw up the supplied Bluetooth antenna here for signal strength.

12. PHONOINPUT

Phono input and Ground terminal are for turntable which does not have amplification. If turntable has amplification, please connect to AUX input.

13. GROUND TERMINAL

14. HEADPHONE OUTPUT GAIN SWITCH

Switch headphone output gain from 16 ohms to 600 ohms according to your headphone setting.

15. SMART COOLING FAN

Automatically turn on when the working temperature is up to 65 degrees.

16. AC VOLTAGE SELECTOR SWITCH

The unit is set at the factory for 115V or 230V in different version. For switching other operation, move the voltage selector switch the other voltage position. When operating at different voltage the internal fuse located in the IEC socket should also be changed and used the correspondent power cord. It might not be included, please prepare it by yourself.

17. PC-USB INPUT

18. DIGITAL (COAXIAL) INPUT

19. SPEAKER OUTPUTS

Maintain absolute polarity alignment:

Amplifier **positive (+)** outputs → Speaker **positive (+)** terminals

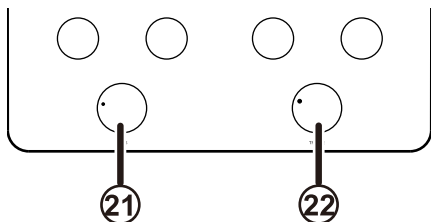
Amplifier **negative (-)** outputs → Speaker **negative (-)** terminals

Applies identically to both left and right channels

NOTE: The speaker outputs are not bridgeable.

20. AC POWER INPUT

Top Panel



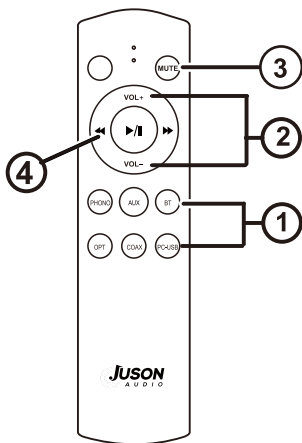
21. BASS CONTROL

Adjust the bass level

22. TREBLE CONTROL

Adjust the treble level

Remote Control



1. INPUT SELECTION

1. Directly select any of the inputs here.
2. **NOTE:** USB is only selectable when a device is connected to the USB port on the rear of the unit.

2. VOLUME +/-

1. Control the volume of the amplifier. The volume knob will rotate to indicate the current level of the amplifier.

3. MUTE

1. MUTE ON/OFF

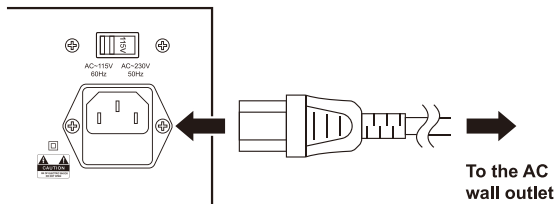
4. TRACK TRANSPORT CONTROLS

1. Control the playback of the USB Flash Drive input.
2. "play/pause logo" – start/pause the current song.
3. "forward logo" – skip forward to the next song.
4. "backward logo" skip backward to the beginning of the current song or the previous song.

Connections

Connecting the Power Cable

Before connecting the main power cable, make sure that the voltage is the same as your local voltage. Incorrect voltage could cause damage to the amplifier and has a potential risk of fire.

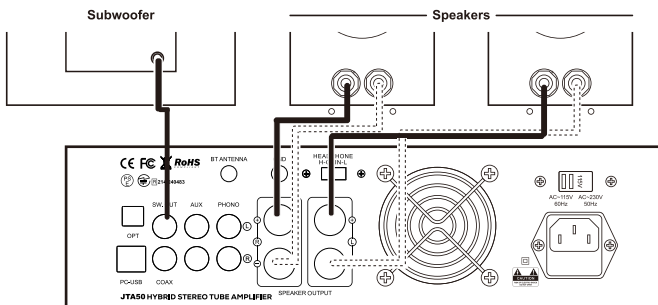


Connecting Speakers

The amplifier can power speakers with a minimum impedance of 4Ω. Using high quality two conductor speaker wire connect your speakers to the binding posts on the rear of the unit.

Connect the JTA50's left speaker terminals marked "L-" and "L+" to the corresponding "-" and "+" terminals on your left speaker. Repeat the same process for the right channel.

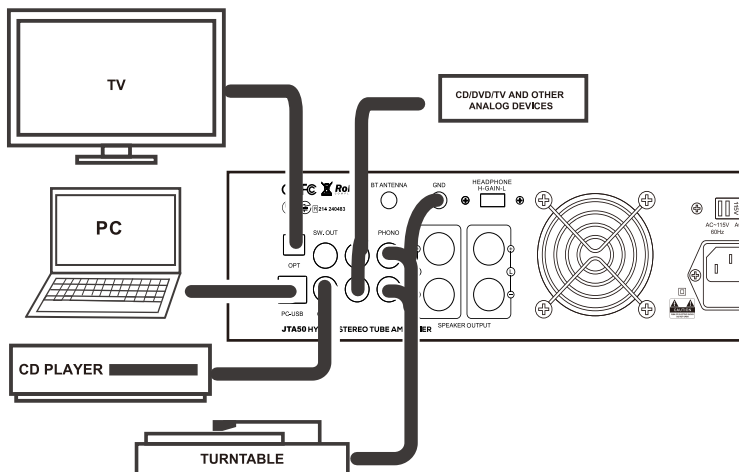
Note: Never connect the negative terminals together or to ground. The JTA50 is not designed to operate in a bridged mode and attempting to do so may damage the amplifier.



Connecting A Subwoofer

If you want to feel a profound low-frequency experience makes music and movies more realistic and dynamic, try to connect with an active subwoofer to the SW OUT connection of the rear pannel of JTA50. This signal is full range and will send a mono summed signal that is control lable by the front volume knob. Using a single RCA cable you can connect to the line level input on a powered subwoofer or to any external subwoofer amplifier to power passive subwoofers.

Connecting Sources



The JTA50 is capable of receiving signals directly from a wide variety of sources. Using high quality cables will ensure the best possible transmission from your connected devices.

Bluetooth as a Source

1. Connect the Bluetooth antenna to the BT ANTENNA port on the rear of the unit. Also make sure that the Bluetooth input is selected on the JTA50.
2. Using a smart phone, tablet, computer, or other device capable of transmitting Bluetooth audio, go the devices settings and scan for available Bluetooth devices.
3. Look for and select "JTA50" in the device list and begin pairing.
4. Once finished pairing, you can begin streaming your favorite music from up to 30 feet away.
5. Using MVSILICON BP1048, it supports SBC/AAC playing file format.

Connecting a Turntable

The JTA50 is capable of connecting directly to most turntables without the addition of an external phono preamplifier.

1. Ensure that your turntable is set to output a phono signal. Many modern turntables have the ability to output either a line level signal or a phono signal. If your turntable is set to output a line level signal please connect it to the AUX input on the .
2. Remove the covers from the PHONO RCA plugs and connect the turntable to the phono input.
3. Connect the ground wire of the turntable to the ground terminal on the rear of the JTA50

Troubleshooting

Problem	Cause	Solution
The unit fails to turn on	The power cable is not connected properly	Check to make sure both ends of the power cable are connected properly.
	Incorrect voltage selection switch setting	Verify that the voltage selection switch is set according to the region and power standard in your country.
	Protection circuit has been activated	Turn the amplifier off and check that your speakers wires are not shorting out. If this problem persists, please contact Juson Audio for customer support.
The unit turns off suddenly	There is a short in the connected speaker wire.	Examine the speaker wire for any damage. Do not use any cable that has exposed wire.
	Speaker malfunctioning	Disconnect the speakers one at a time to see if the issue is caused by the speakers or the amplifier. If the problem persists with all speakers, please contact Juson Audio customer support.
No sound	Correct input has not been selected	Verify that the correct input is selected.
	Headphones are connected	Unplug the headphones from the front panel. Audio should resume in the connected speakers.
	Incorrect cable connections	Double check that the device that you are trying to listen to is connected to the correct input.
Low volume	Volume on the playback device is turned down	Verify that any volume control on your phone, computer, or connected playback device is turned up.
The sound output lacks bass	The speakers polarity is reversed	Double check the speaker connections, ensuring that the + and - terminals are connected properly on both speakers. (p.6)
	The bass knob is turned down	Ensure that the "BASS" control knob is not turned down all the way.
There is a "humming sound"	No ground connection from the amplifier to the turntable	Make sure that the GND connection is made between the turntable and the amplifier.
The turntable is distorted	The turntable is set to line output but is connected to the PHONO input	Verify that if your turntable is using a line out signal that it is connected to the AUX input on the amplifier. If the turntable is outputting a phono signal verify that it is connected to the PHONO input.
	The phono connection is improperly grounded	Make sure that there is a connection between the grounding terminals on the amplifier and the turntable.
Cannot connect by bluetooth	There is another BT device connected on it	Disconnect the device and reconnect it by correct device
	The signal select is incorrect.	Select correct signal input by remote or physical button.
Cannot work in USB	Didnot have correct connector.	Prepare PC-USB cable and Female to femal USB connector and insert U disk or computer in correct port.
	The signal select is incorrect.	Select correct signal input by remote or physical button.
Cannot work in Macbook	The Macbook's audio output setting is incorrect.	Change the Macbook's audio output setting by Amplifier.

Important Tips: Why Can't Tube Amplifier Work?

Most of reasons are the tube amplifier might suffer some crashes during the transportation. Please check if the tubes are in perfect condition and make sure the tubes already inserted tightly. If all is fine, please check if the input signal was correct setting.

Specifications

Maximum Power Output (Peak).....	100W x 2 @ 4 Ohm
RMS Power Output	65W RMS x2 @ 4 Ohm
Total Gain	28 dB
THD+N	<0.5% @ Maximum Rated Output
Frequency Response	15 Hz – 20,000 Hz (±1 db)
Input Sensitivity.....	1V
Channel Separation.....	58 dB
Minimum Speaker Impedance.....	4 Ohm
Tone Controls – Bass/Treble	±6 dB/oct at 200 Hz and 4,000 Hz
Signal To Noise Ratio.....	75 dB

Digital Section

Digital Inputs	SPDIF LPCM (up to 48 kHz 16 Bit)
PC-USB.....	up to 48 kHz 16 Bit
Bluetooth.....	5.0,MVSILICON BP1048,support SBC and AAC audio codecs
Headphone Power Output.....	130 mW X 2 @ 32 Ohms 180 mW X 2 @ 300 Ohms

General

Power Requirement	
USA.....	115V, 60 Hz
EC.....	230V, 50 Hz
Preamplifier Tubes	6J9 x 2
Stabilivolt Tubes.....	10DX8 x 2
Amplification.....	Class AB
Standby Consumption Power.....	15W
Transistor.....	Toshiba A1941 x 2;Toshiba C5198 x 2
Dimensions (W, H, D)	271 x 166 x 286 mm / 10.7 x 6.6 x 11.3 in
Product weight	6.08 kg / 13.4 Lbs

All Specifications are accurate at the time of printing.

Juson audio reserved the right to make improvements without notice.

Warranty

Juson Audio products are warranted to be free of the whole unit for 2 YEARS and vacuum tube for 1 YEAR from the date of purchase from an authorized Juson Audio dealer. This warranty and all rights provided are limited to the original owner and are non-transferable. Responsibility is limited to replacement or repair as set forth in this warranty statement.

Should a product require warranty service during this period, Juson Audio will repair or replace without charge, any part or product proving defective in material or workmanship. All warranty repairs and service must be performed by an authorized Juson Audio technician or service facility. The use of non-authorized repair services renders this warranty null and void, and any charges relating to non-authorized repair are the responsibility of the product owner. All expenses (except return shipping costs) related to replacing or repairing a defective part or product under this warranty shall be assumed by Juson Audio. Juson Audio reserves the right to replace defective product with a new or factory reconditioned unit.

For more information and to register your new Juson Audio device visit juson-cn.com.