

## Jusun Audio FTA88

# Jusun Audio FTA88 180W KT88 Tube Amplifier User Manual

Model: FTA88 | Brand: Jusun Audio

## 1. INTRODUCTION

The Jusun Audio FTA88 is a high-fidelity Class A tube amplifier designed to deliver exceptional audio performance. It features KT88 power tubes, offering a maximum power output of 180W. This amplifier supports both MOSFET and Single-Ended operating modes, providing dynamic and full-bodied sound. With versatile input options including Bluetooth 5.0 with aptX-HD support, coaxial, optical, CD, and DVD inputs, it offers flexibility for various audio setups. The FTA88 is crafted to provide an immersive listening experience with rich, clear, and powerful sound.

## 2. SAFETY INSTRUCTIONS

- **Power Supply:** Ensure the amplifier is connected to a power source that matches the voltage specified on the unit. Use only the provided AC power cable.
- **Ventilation:** Do not block ventilation openings. Allow adequate space around the amplifier for proper airflow to prevent overheating.
- **Moisture:** Keep the amplifier away from water, moisture, and high humidity environments. Do not operate with wet hands.
- **Heat:** Avoid placing the amplifier near heat sources such as radiators, heat registers, stoves, or other heat-producing appliances.
- **Object Entry:** Do not insert any objects into the amplifier's openings, as this may cause electric shock or damage.
- **Servicing:** Do not attempt to service this product yourself. Refer all servicing to qualified service personnel.
- **Tube Handling:** Vacuum tubes can become very hot during operation. Allow them to cool down before handling. Exercise caution when replacing tubes.

## 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Juson Audio FTA88 Amplifier Unit
- 1 x User Manual
- 1 x Remote Control (batteries not included)
- 1 x Bluetooth Antenna
- 1 x AC Power Cable



1\* FTA88

1\* Remote



1\* AC Power Cable

1\* User Manual

Image: Contents of the Juson Audio FTA88 package, showing the amplifier, remote control, AC power cable, and user manual.

## 4. PRODUCT OVERVIEW

### 4.1 Front Panel

# Class A Hi-Fi Tube Amplifier

Both MOSFET & Single-Ended Mode Available



Image: Front view of the FTA88 amplifier, highlighting the input selector, VU meters, USB port, power switch, and volume control.

- **Input Sources Selector:** Rotary knob to select audio input sources (Coaxial, Optical, CD, DVD, Bluetooth, USB).
- **VU Meters:** Visual indicators for audio output levels.
- **Input Sources Indicator:** LEDs indicating the currently selected input.
- **Infrared Receiver:** For remote control signals.
- **Previous Song Button:** For USB/Bluetooth playback control.
- **USB Port:** For connecting USB audio devices.
- **Power Switch:** Turns the amplifier on or off.
- **Next Song Button:** For USB/Bluetooth playback control.
- **Volume Control:** Adjusts the overall output volume.

## 4.2 Rear Panel

# Class A Hi-Fi Tube Amplifier

## Variety Input Available

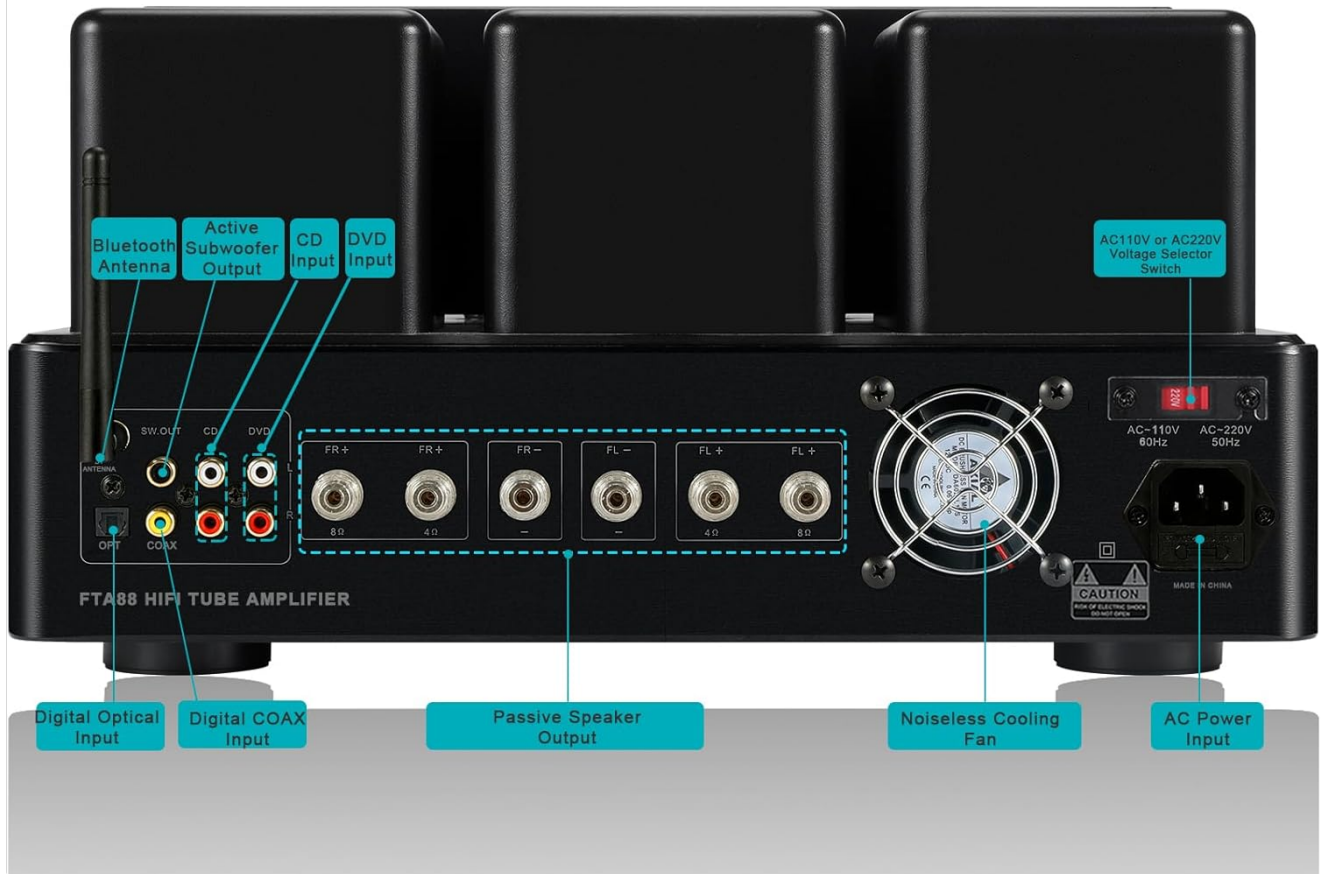


Image: Rear view of the FTA88 amplifier, showing the various input and output connections, including speaker terminals, digital inputs, and the Bluetooth antenna port.

- **Bluetooth Antenna Connection:** For attaching the included Bluetooth antenna.
- **Active Subwoofer Output:** RCA output for connecting an active subwoofer.
- **CD Input (RCA):** Analog RCA input for CD players.
- **DVD Input (RCA):** Analog RCA input for DVD players or other line-level sources.
- **Digital Optical Input:** For connecting optical audio sources.
- **Digital COAX Input:** For connecting coaxial audio sources.
- **Passive Speaker Output:** Binding posts for connecting passive speakers (Left and Right channels).
- **Noiseless Cooling Fan:** Integrated fan for thermal management.
- **AC Power Input:** For connecting the AC power cable.
- **AC 110V or AC 220V Voltage Selector Switch:** Allows selection of appropriate input voltage.

### 4.3 Tube Layout



## 接続が容易

- \* タブレット、携帯電話、その他のBTデバイスからBluetooth経由でお気に入りの音楽をストリーミング
- \* BluetoothチップはQCC 3034であり、aptX、aptX HD、aptX低遅延、SBC、AACオーディオコーデックをサポートすることができる
- \* Bluetooth音量出力を携帯電話のスピーカーの後に設定しないと、スピーカーの音量が低くなる可能性があります

Image: Close-up of the amplifier's top panel, showing the arrangement of the vacuum tubes and switches for tube and mode selection.

The FTA88 amplifier utilizes a combination of vacuum tubes for optimal sound reproduction:

- **KT88 Power Tubes:** Two high-quality KT88 tubes are used for the power amplification stage.
- **Preamp Tubes:** The amplifier comes with 6H2N/6N1/6N2/ECC85 preamp tubes, which can be upgraded or swapped with ECC83/12AX7 tubes for sound customization.
- **Voltage Regulator Tubes:** WY-2 and WY-3P tubes are used for stable voltage regulation.

## 5. SETUP

### 5.1 Unpacking and Placement

1. Carefully remove the amplifier and all accessories from the packaging.
2. Place the amplifier on a stable, level surface with adequate ventilation. Ensure there is enough space around the unit for heat dissipation.

### 5.2 Tube Installation (if applicable)

The tubes are typically pre-installed. If you are replacing or upgrading tubes:

1. Ensure the amplifier is powered off and unplugged from the mains.
2. Carefully remove the protective tube cage (if present).
3. Gently pull out the existing tubes. Note their positions and types.
4. Align the pins of the new tubes with the sockets and gently push them in until they are firmly seated. Do not force them.
5. Replace the tube cage.

### 5.3 Connecting Speakers

1. Connect your passive speakers to the 'Passive Speaker Output' binding posts on the rear panel.
2. Ensure correct polarity: connect the positive (+) terminal of the amplifier to the positive (+) terminal of the speaker, and the negative (-) terminal of the amplifier to the negative (-) terminal of the speaker.
3. If using an active subwoofer, connect it to the 'Active Subwoofer Output' RCA port.

## 5.4 Connecting Audio Sources

- **Analog Sources (CD/DVD):** Connect your CD or DVD player to the corresponding RCA inputs on the rear panel.
- **Digital Sources (Optical/Coaxial):** Connect your digital audio source (e.g., TV, media player) to the 'Digital Optical Input' or 'Digital COAX Input' on the rear panel.
- **USB Audio:** Connect a USB device to the front panel USB port.
- **Bluetooth Antenna:** Screw the provided Bluetooth antenna onto the 'Bluetooth Antenna Connection' port on the rear panel.

## 5.5 Power Connection

1. Before connecting power, ensure the 'AC 110V or AC 220V Voltage Selector Switch' on the rear panel is set to match your local mains voltage.
2. Connect the AC power cable to the 'AC Power Input' on the rear panel and then plug it into a wall outlet.

# 6. OPERATING INSTRUCTIONS

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## 6.1 Powering On/Off

Press the 'Power Switch' on the front panel to turn the amplifier on or off. Allow a few moments for the tubes to warm up after powering on.

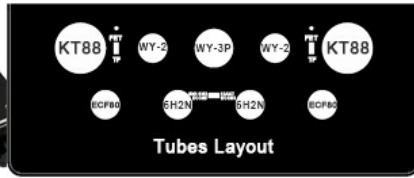
## 6.2 Input Selection

Rotate the 'Input Sources Selector' knob on the front panel to choose your desired audio source (Coaxial, Optical, CD, DVD, Bluetooth, USB). The corresponding LED indicator will light up.

## 6.3 Volume Adjustment

Turn the 'Volume Control' knob on the front panel clockwise to increase volume and counter-clockwise to decrease it. Adjust to a comfortable listening level.

## 6.4 Bluetooth Pairing



FTA 88 MOSFET Hi-Fi管アンプは、出力管を通す必要がないため、高電流なしでより高い電力を得ることができるハイエンドの全管アンプです。出力電力は合計90ワット\*2@4オームに達することができます。力強く力強い低音と完璧な中音、はっきりとした高音！人の声、シンフォニー、ロックの躍動感と強烈な動感のある音楽が好きなマニアに適しています。



チューブスイッチセレクト

プリアンプチューブはアップグレードできます。プリアンプ管6 N 1/6 N 2/ECC 85は、12 AX 7/ECC 83に切り替えることができますが、電源オフ後に行う必要があります。



FETおよびTFモードスイッチセレクト

フィールド効果トランジスタモード (FET) とシングルエンドモード (TF) の間を切り替えるとき、電源をオフにした後に30のセンサーがあることを確認して下さい



最大9個の真空管

2つのKT 88チューブを電力増幅器として使用します。プリアンプとして2つの6 H 2 Nチューブ、2つのECF 80は、プリアンプの定電圧として機能する。電源電圧安定化装置として2つのWY-2と1つのWY 3 Pを用いた。

Image: A smartphone displaying Bluetooth settings, indicating a successful connection to the amplifier for wireless audio streaming.

1. Select 'BT' input using the Input Sources Selector.
2. On your Bluetooth device (smartphone, tablet, etc.), enable Bluetooth and search for available devices.
3. Select 'FTA88' from the list to pair. Once paired, you can stream audio wirelessly.
4. The FTA88 uses a QCC3034 Bluetooth chip supporting aptX, aptX HD, aptX Low Latency, SBC, and AAC audio codecs for high-quality wireless audio.
5. **Note:** If the Bluetooth input volume is low, ensure your source device's Bluetooth volume output is set to maximum.

## 6.5 MOSFET and Single-Ended Modes

# MOSFET/SINGLE-ENDED HI-FI TUBE AMPLIFIER

MOSFET/Single-ended mode self-selected  
MOSFET mode with more powerful output  
Single-ended mode fits for VOICES listening  
KT88 Power-amp for better sound output  
Preamp tubes can be upgraded  
IR Remote available



Image: The FTA88 amplifier set up with speakers, illustrating its capability to operate in both MOSFET and Single-Ended modes for different sound characteristics.

The FTA88 offers two distinct operating modes:

- **MOSFET Mode:** Provides a smooth, stable, and distortion-free sound output with powerful dynamics. Ideal for a clean and robust audio experience.
- **Single-Ended Mode:** Delivers warm, vintage sound characteristics, often preferred for vocal and acoustic music.

Switch between these modes using the dedicated switch on the amplifier. Allow approximately 30 seconds after switching off the power before changing modes to ensure proper circuit reset.

## 6.6 Remote Control

The included remote control allows for convenient operation from a distance. It can control input selection, volume, and track navigation for USB/Bluetooth sources.

**Note:** The remote control does not include batteries. Please install 2x AAA batteries (not supplied) before use.

## 7. MAINTENANCE

## 7.1 Cleaning

To clean the amplifier, power it off and unplug it from the wall outlet. Use a soft, dry cloth to wipe the exterior surfaces. Do not use liquid cleaners or abrasive materials.

## 7.2 Tube Replacement/Upgrade

Over time, vacuum tubes may degrade or you may wish to experiment with different tube types for sound customization. Refer to section 5.2 for installation instructions. Ensure you use compatible tubes (e.g., ECC83/12AX7 can replace 6H2N/6N1/6N2/ECC85 preamp tubes).

## 7.3 Cooling Fan

The FTA88 features a built-in smart cooling fan that activates automatically when the internal temperature reaches 60°C to maintain optimal operating conditions and prolong component life.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power	Power cable not connected; Power switch off; Blown fuse	Check power cable connection; Ensure power switch is on; Check and replace fuse if necessary (consult service personnel).
No sound output	Incorrect input selected; Speaker cables loose/incorrectly connected; Volume too low; Source device not playing/muted; Faulty tubes.	Select correct input; Check speaker cable connections and polarity; Increase volume; Verify source device operation; Inspect tubes for damage or consult service.
Distorted sound	Volume too high; Faulty speaker connection; Damaged tubes; Input signal too strong.	Reduce volume; Check speaker connections; Inspect/replace tubes; Reduce input signal level from source.
Bluetooth connection issues	Amplifier not in BT mode; Device not discoverable; Interference; Low volume on source device.	Select BT input; Ensure device Bluetooth is on and in pairing mode; Move closer to amplifier; Check source device's Bluetooth volume settings.
Remote control not working	No batteries; Dead batteries; Obstruction to IR receiver; Remote out of range.	Install/replace batteries; Remove obstructions; Point remote directly at IR receiver; Move closer to amplifier.

## 9. SPECIFICATIONS

Feature	Detail
Model Number	FTA88
Brand	Juson Audio (DIFIIFOL)
Power Output	180 Watts (Total); Up to 90W RMS per channel (MOSFET mode)

Feature	Detail
Channels	2
Tube Types	KT88 (Power), 6H2N/6N1/6N2/ECC85 (Preamp, interchangeable with ECC83/12AX7), WY-2/WY-3P (Voltage Regulator)
Operating Modes	MOSFET, Single-Ended
Inputs	Coaxial, Optical, CD (RCA), DVD (RCA), Bluetooth 5.0, USB
Bluetooth Codecs	aptX, aptX HD, aptX Low Latency, SBC, AAC
Outputs	Passive Speaker Output, Active Subwoofer Output
Product Dimensions (LxWxH)	37 x 38 x 20.6 cm
Product Weight	14.5 kg
Manufacturer	Shenzhen Juson Technology Co., Limited
Country of Origin	China

## 10. WARRANTY AND SUPPORT

### 10.1 Warranty Information

- **Electronic Tubes:** 1-year warranty from the date of purchase.
- **Entire Unit:** 2-year warranty from the date of purchase, covering manufacturing defects.

Please retain your proof of purchase for warranty claims.

### 10.2 Technical Support

Juson Audio provides lifetime technical support for the FTA88 amplifier. If you encounter any issues or have questions regarding the product, please contact our customer service team. Our dedicated support staff will assist you with troubleshooting and guidance.

For support, please refer to the contact information provided with your purchase or visit the official Juson Audio website.