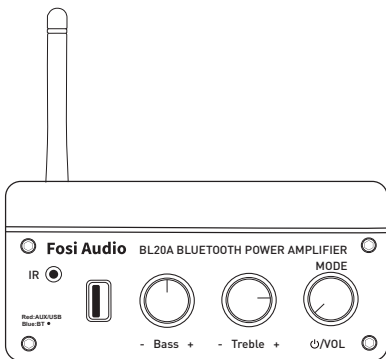




## BL20A Bluetooth Power Amplifier User's Manual



# Product Specifications

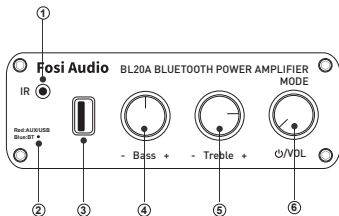
- Fosi Audio BL20A is a powerful Bluetooth 5.0 HiFi stereo amplifier with AUX pre-output, which can be used as a pre-amplifier. Design Treble & Bass control and remote control to meet your more needs.
- The BL20A supports AUX/U-Disk/Bluetooth input, suitable for most home passive speakers. Using two low-distortion TPA3116 high-performance chips to display ultra-high-definition sound quality.
- Let's join the audiophile's music journey with Fosi Audio BL20A!

|                                 |                                                  |
|---------------------------------|--------------------------------------------------|
| Input Interface                 | AUX/U-Disk/Bluetooth Input                       |
| Output Interface                | Speaker's Output +<br>3.5MM AUX Pre-out          |
| Output                          | Passive Speakers,<br>Powered Speakers, Amplifier |
| SNR                             | 92dB                                             |
| THD                             | <0.001%                                          |
| Power Amplifier Chip            | TPA3116×2                                        |
| Bluetooth Chip                  | ATS2853                                          |
| Power Adapter                   | 24V/4.5A                                         |
| DC Input Range                  | DC 12-24V                                        |
| Frequency Response Range        | 20Hz- 20KHz                                      |
| Load Impedance                  | 2-8 Ohm                                          |
| Input Sensitivity               | 500mV                                            |
| U-Disk Capacity                 | Max 32GB                                         |
| Support Format                  | MP3/WMA/APE/ FLAC/WAV                            |
| Bluetooth Transmission Distance | Bluetooth 5.0, up to 164ft/50m                   |
| Max Power Output                | 100watt×2                                        |

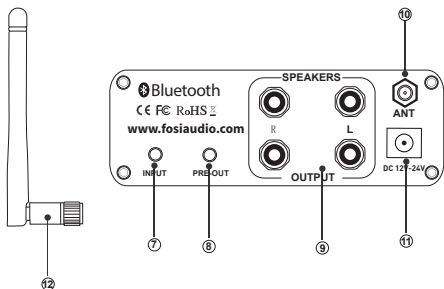
|                |                                      |
|----------------|--------------------------------------|
| Dimensions     | 3.54×4.72×1.18 inches<br>(9×12×3 cm) |
| Product Weight | 0.71lb / 323g                        |

## Product Overview

|                                                                                                                                                                 |                 |                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------|
| 1: Infrared Radiation                                                                                                                                           | 3: U-Disk Input | 5: Treble Control                                                 |
| 2: AUX/U-Disk/Bluetooth Input Indicator Light                                                                                                                   | 4: Bass Control | 6: Multi-function Knob(Power Switch/ Mode Switch/ Volume Control) |
| <b>Note:</b> Multi- function Knob: Long press to power on/off; Short press to switch mode; Turn left to decrease the volume; Turn right to increase the volume. |                 |                                                                   |

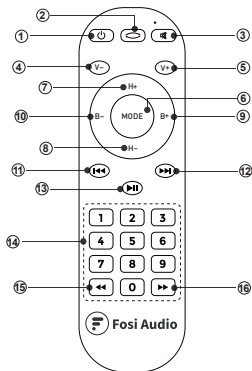


|                         |                                 |                       |
|-------------------------|---------------------------------|-----------------------|
| 7: 3.5MM AUX Input      | 9: Passive Speakers Output      | 11: DC Input          |
| 8: 3.5MM AUX Pre-output | 10: Bluetooth Antenna Interface | 12: Bluetooth Antenna |



## Remote Control

Infrared remote control working distance:  $\leq 15$  m



|    |                                                                                    |                                                                                                                                                                       |
|----|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  |      | Short press to power on/off the BL20A                                                                                                                                 |
| 2  |    | Single cycle/All loop<br><b>Note:</b> When playing music in U-Disk mode, short press this button to switch single loop or all loop playback.                          |
| 3  |    | Short press to mute                                                                                                                                                   |
| 4  |    | Short press: Volume down                                                                                                                                              |
| 5  |    | Short press: Volume up                                                                                                                                                |
| 6  |    | Short press to switch mode (AUX/U-Disk/Bluetooth)<br><b>Note:</b> U-Disk must be inserted into the BL20A, skip it if not.                                             |
| 7  |    | Short press: Treble up                                                                                                                                                |
| 8  |    | Short press: Treble down                                                                                                                                              |
| 9  |    | Short press: Bass up                                                                                                                                                  |
| 10 |    | Short press: Bass down                                                                                                                                                |
| 11 |    | Short press: Previous track<br><b>Note:</b> It can only be used in Bluetooth or U-Disk mode. AUX mode does not work.                                                  |
| 12 |  | Short press: Next track<br><b>Note:</b> It can only be used in Bluetooth or U-Disk mode. AUX mode does not work.                                                      |
| 13 |  | Short press: Play / Pause<br><b>Note:</b> After connecting Bluetooth to the BL20A in Bluetooth mode, long press this button will disconnect the Bluetooth connection. |

|                                                                                    |                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14  | <p>Select a specific song in U-Disk mode (0-9 Number buttons)</p> <p><b>Note:</b> It can only be used in U-Disk mode. For songs ranked after 10, click the corresponding serial number directly, please click the number keys continuously. After 5 seconds it will play, or you can click the “▶” button to play immediately.</p> |
| 15 ◀                                                                               | Long press: Fast backward                                                                                                                                                                                                                                                                                                          |
| 16 ▶                                                                               | <p>Long press: Fast forward</p> <p><b>Note:</b> Fast backward and Fast forward functions can only be used in U-Disk mode.</p>                                                                                                                                                                                                      |

## Package Contents

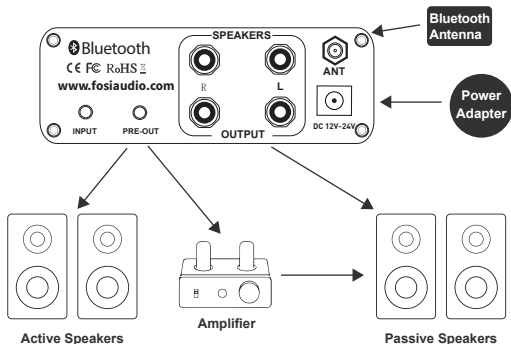
BL20A Bluetooth Amplifier x 1  
 Bluetooth Antenna x 1  
 Remote Control x 1 (Not include battery)  
 Power Adapter x1  
 AC Cord x1  
 User Manual x 1

## Quick Setup

**Step 1:** Install the Bluetooth antenna to the BL20A.

**Step 2:**

- Use speaker's wire to connect the speaker's output to your passive speakers.
- Or use 3.5MM audio cable to connect the 3.5MM AUX pre-out of BL20A to your amplifier, then use speaker's wire to connect the amplifier with your passive speakers.
- Or use 3.5MM audio cable to connect the 3.5MM AUX pre-out of BL20A to your powered speakers.



**Note:** You don't need to connect all the outputs. You can connect 2 passive speakers only.  
Or you can connect it to the pre-out as a preamplifier.  
And you can connect all the outputs simultaneously.

**Step 3:** Connect the power adapter to BL20A and the socket. Long press the Multi-function Knob(Power Switch/Mode Switch/Volume Control) to power on the BL20A. Then the input mode indicator light of BL20A stays red after power is on.

**Note1:** Please make sure the LED light on the power adapter stays on.

**Note2:** Before connecting the power supply, please turn down the bass and treble control to 0 (always to the left) to avoid your hearing from damage.

**Step 4:** Connect the audio source (AUX input/U-Disk input/Bluetooth input) to the BL20A.

- **AUX Input:** Use a 3.5mm audio cable to connect the BL20A and your device. The input indicator light will stay on Red.





- **U-Disk Input:** Insert your U-Disk into the U-Disk input interface. The input indicator light is red and flashes continuously.
- **Bluetooth Input:** Short Press the Multi-function Knob (Power Switch/Mode Switch/Volume Control) to the Bluetooth mode input(the blue input mode indicator light flashing). Then turn on the Bluetooth on your device,select "BL20A" for pairing, the input mode indicator light will stay blue after a successful connection.

**Input priority: The latest input mode first.**

**Note:** Please keep the BL20A away from other electric devices. The BL20A can't use with a radio simultaneously.

**Step 5:** Adjust the Volume control, Bass/Treble control, then enjoy it!

**Note:** Make sure that all the cables are completely pushed into the device.

## Q&A/ Troubleshooting

### 1. Get noise when playing music?

- Bluetooth input play mode: Try to use other Bluetooth devices. Weak or unstable Bluetooth signal will cause this problem, try to close your device to the BL20A.
- U-Disk input play mode: Try to use other U-Disks, and make sure the audio format is compatible with the BL20A. (BL20A supports MP3/WMA/APE/ FLAC/WAV audio format). Make sure that the U-Disk capacity does not exceed 32GB and can be used normally.
- AUX input play mode: Please change the audio cable to have a try.
- Try another RCA cable and make sure the audio cable is connected correctly.

- Please unplug the RCA cable from the amplifier, and then turn it on to have a try.
- Please change the audio source or other brand devices to have a try.
- Did you set the "treble" volume to the top? please volume down the "Treble" volume.
- Make sure that all the cables are completely pushed into the device, incompletely connection will cause this issue.
- Please keep this device away from other electronic devices.

## **2. All cables are connected, but there is no audio output?**

- Please check the input indicator light on the front panel of the BL20A and the power supply are on.
- If the input indicator light is on, please check if the volume knob is at the minimum state, if it is, please turn up the volume.
- Make sure that the BL20A is in the play mode you want.

**Note:** Bluetooth input mode (The input mode indicator light will stay on blue.)

AUX input mode (The input mode indicator light will stay on red.)

U-Disk input mode (The input indicator light is red and flashes continuously.)

### **Input priority: The latest input mode first.**

- Make sure that the U-Disk capacity does not exceed 32GB and can work normally.
- Please check if the audio source is paused.
- Please try to change the sound source, cables and speakers.
- Restart the BL20A and your device, then try to connect again.

**Note:** Make sure that all the cables are completely pushed into the device.

### **3. My Bluetooth device can't pair with the BL20A?**

- Make sure that the BL20A is powered on and the LED light on the power adapter stays on.
- Make sure that the BL20A is not paired with another device.
- Make sure that the distance between your device and the BL20A is not too long, close your device to the BL20A to have a try.
- Make sure there are no obstacles between your device and the BL20A, obstacles will affect the Bluetooth operation distance. (Maximum transmission distance without obstacles: 164ft/50m)
- Please try to change another Bluetooth audio source to test.
- Please replug the power supply, move the amplifier to another room and test it again.
- Restart the BL20A and then try to connect again, try to use another brand of mobile phone.

### **4. Why Bluetooth is intermittent?**

- Use another Bluetooth device to have a try.
- Ensure that there is no interference from other electronic equipment between the BL20A and the audio source.
- Put your device close to the BL20A.
- Replug the power adapter.

### **5. One channel does not work?**

- Please test whether the Bluetooth, U-Disk, and AUX inputs have the same problem first.
- If these three modes have the same problem, swap the speaker cables of the left and right channels, or change

another speaker, and then test whether this channel still does not work;

- If only Bluetooth, U-Disk, or AUX mode does not work, change the audio source, change the audio cable and test again, and make sure that all the cables are completely pushed into the device.

## **6. U-Disk cannot be played?**

- Please try other different U-Disk playback tests.
- Make sure that the U-Disk capacity does not exceed 32GB and can work normally.
- Make sure that the BL20A is in the U-Disk play mode.

## **7. U-Disk play rustling?**

- Song format problem. WAV contains DTS multi-channel, the BL20A supports stereo but does not support multi-channel, you can convert DTS to stereo. Download the Foobar2000 software on the computer to convert the audio channel.

## **8. Can't power on?**

- Long press the power switch button to power on/off.
- Make sure that the LED light on the power adapter stays on.
- If it does not light up: Unplug the power adapter from the BL20A, plug the power adapter directly into the AC power source, and see if the LED will light up. If it still does not light up, it may be a problem with the power adapter. Please contact us to replace the power adapter.
- You can use the DC12-24V power adapter of the camera or router to connect the BL20A to test whether the BL20A can be turned on.

## **9. The BL20A can be used as a pre-amp?**

- Yes. There is a PRE-OUT interface on the rear panel, which can be used as a preamplifier.

## **10. Do I have to connect all the outputs of BL20A? Can I only connect 2 speakers? Or just use it as a preamp?**

- You don't need to connect all the outputs. You can connect 2 passive speakers only. Or you can connect it to the pre-out as a preamplifier. And you can connect all the outputs simultaneously.

## **11. Sound quality is not good?**

- Make sure all the cables are fully connected.
- Adjust the treble and bass control of the BL20A to achieve the right tone.
- Please try to change the sound source and cables to test.

## **12. Why the sound cut in and cut out?**

- Try to reduce the sound of the sound source.
- Try to change the audio source to test.
- Reduce the volume of the treble and bass knob on the BL20A.
- Ensure that the positive and negative poles of the speaker output do not touch together. Some relatively large banana plugs are easy to touch together and cause a short circuit.

## **13. Does the BL20A support Bluetooth aptX and Low Latency?**

- No. The BL20A does not support Dolby, aptX, aptX HD and aptX Low Latency.

#### **14. Can this amp be left on all the time?**

- It can be connected all the time and it is safe without power consumption.

#### **15. Can I listen to two audio inputs at the same time?**

- No, only one mode can be used at a time.

## **Warranty Information**

- All Fosi Audio products have an 18-month limited warranty on parts and labor from the date of purchase. Please contact us if you have any problems.

## **About Fosi Audio**

- Fosi Audio designs and builds innovative audio products with all your music in mind. Great sound, simple but elegant designs, high-quality materials, and truly useful features are what Fosi Audio is about. We sincerely hope you get as much enjoyment from our products as we've had to create them!

**Our website:** [www.fosiaudio.com](http://www.fosiaudio.com)

**Amazon store:** [www.amazon.com/fosiaudio](http://www.amazon.com/fosiaudio)

**Our Youtube channel:** Fosi Audio

**Our Facebook page:** Fosi Audio

**After-sale Service and  
Technical Support Email:**

[support@fosiaudio.com](mailto:support@fosiaudio.com)

[fosiaudio@hotmail.com](mailto:fosiaudio@hotmail.com)

