

ZK-502M 2.0 stereo 50Wx2 BT digital power amplifier board module

MINI Multi audio input and output **50W+50W**

2.0 stereo BT digital power amplifier

ZK-502M

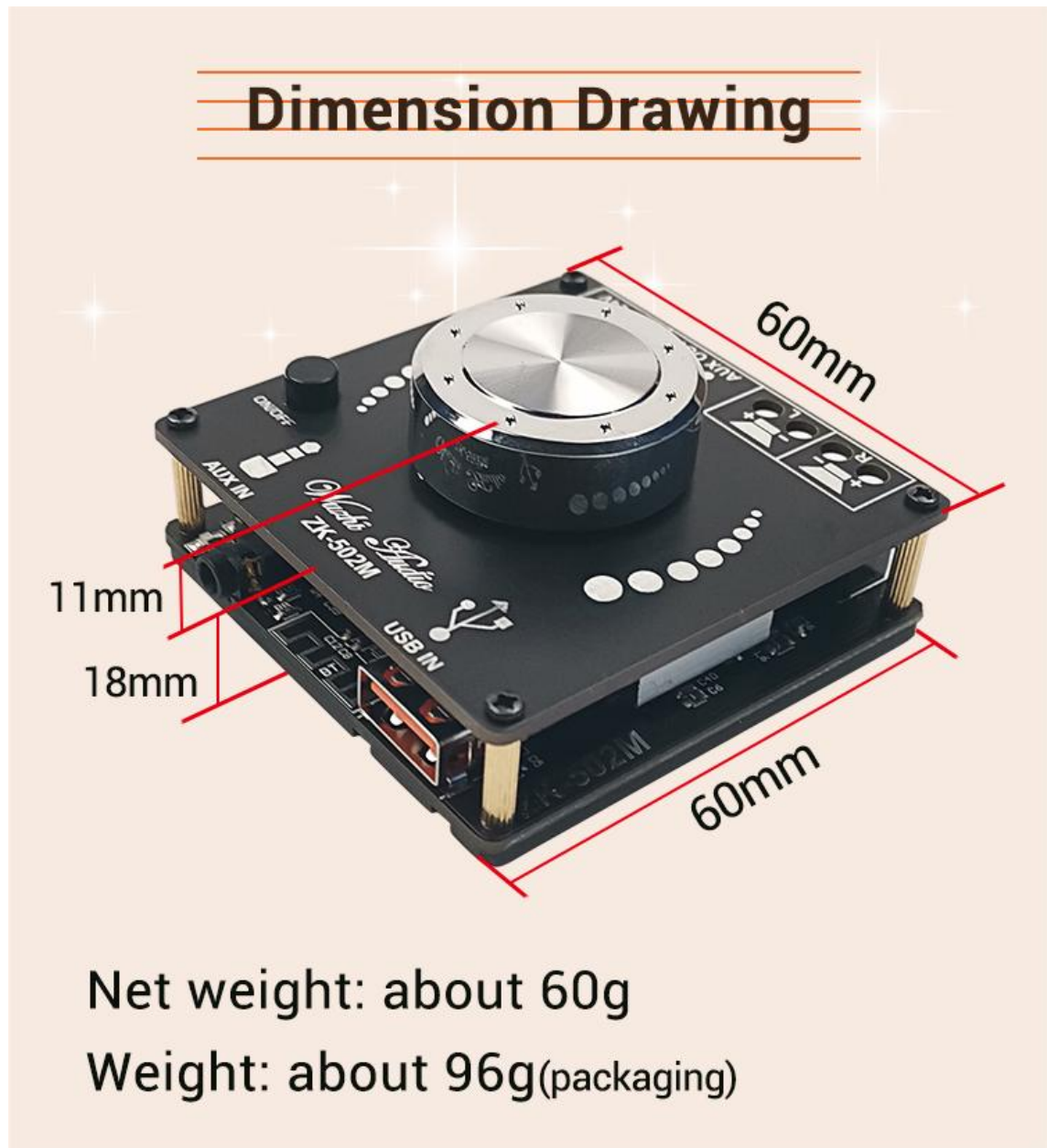
BT5.0 input	AUX input	U disk input	USB sound card input	Active spe- aker output	Passive spe- aker output
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Catalogue

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1.Product size

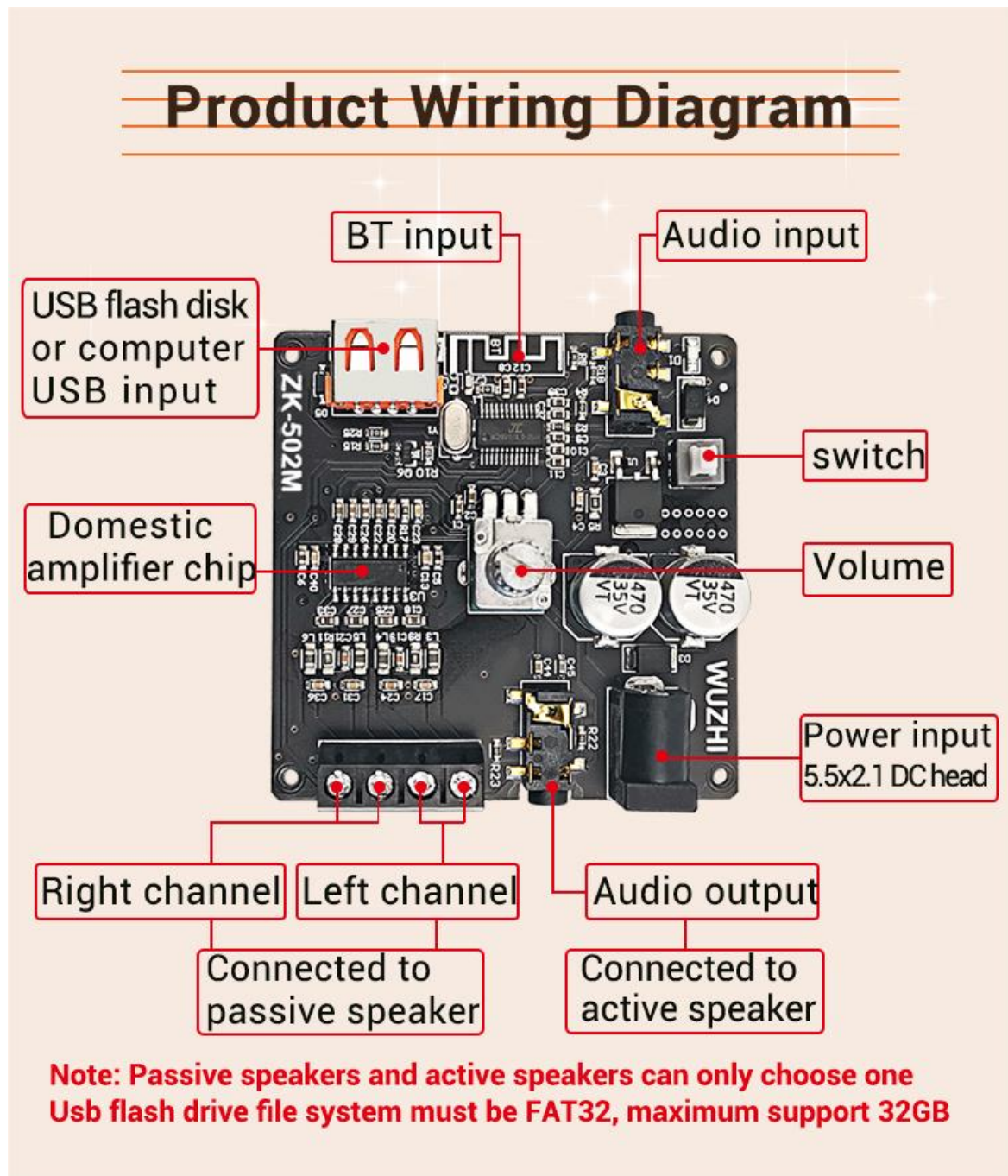


2. Product parameters

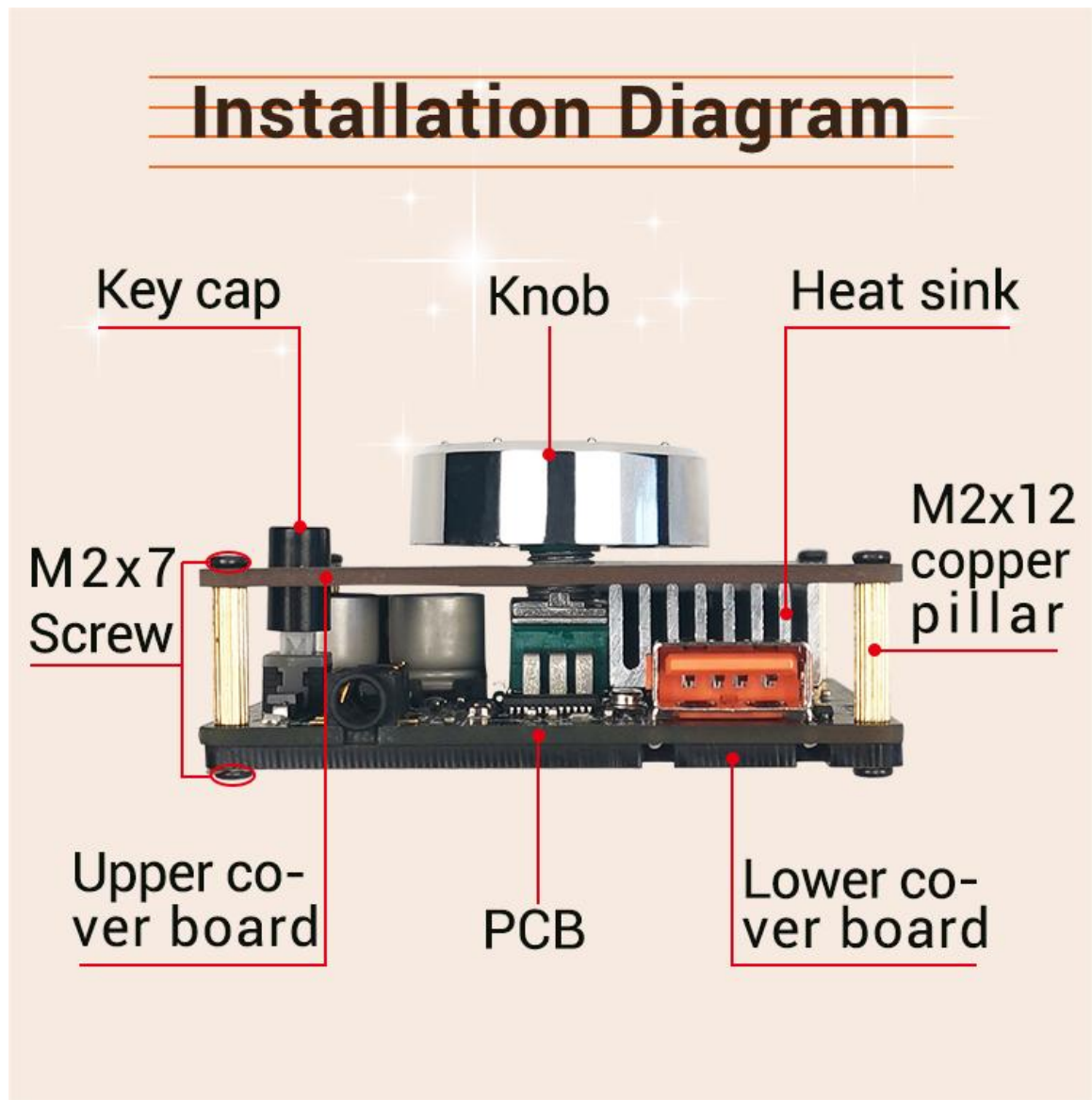
Product Parameters

Product Name	MINI 2*50W BT5.0 power amplifier module
Product model	ZK-502M
Chip model	Chinese amplifier chip
Audio input	BT+AUX+USB flash disk+Computer USB (plug and play)
Power Supply	DC5-24V(high power recommended high voltage)
Adapter speaker	10-100W;4-8Ω
Channels	left and right stereo (stereo)
BT version	5.0(>15 meters without occlusion)
BT name	Wuzhi Audio
Protection mechanism	Overheat, Overcurrent, short circuit protection
Product size	60x60x29mm
Product weight	about 96g(packaging)
Tip: To have enough output power if the audio input is sufficient and the supply voltage/current is sufficient. The power supply voltage is higher and the relative power will be larger. The speakers with different impedances will have different output power. In the case of sufficient voltage and current, the larger the ohms of the horn, the smaller the relative sound power. Please pay attention!	
Power supply voltage:12V-----8Ω/12W+12W,4Ω/20W+20W 15V-----8Ω/18W+18W,4Ω/30W+30W 19V-----8Ω/30W+30W,4Ω/40W+40W 24V-----8Ω/40W+40W,4Ω/50W+50W	

3. Product wiring diagram



4. Installation diagram



5. Question and answer

Question and answer

1.How to choose a power supply?

The power supply for the module is critical. The power supply requires small output ripple and low internal resistance. The higher the voltage, the higher the current and the better the output power. If you only have 12V 1A, you can bring a 3-4 inch speaker. If you are 19V 5A or above, there is no problem with 8-10 inches, and the power supply must be highly valued. If the voltage is too low, the sound will be distorted after the sound is amplified. If the current is too small, the speaker will pull the voltage low, work abnormally or the sound quality will deteriorate.

It is recommended to use 18V19V24V power supply with current above 3A. If you only have 9V12V or 1A 2A power supply, it can also be used but the power is small. Please pay attention to the maximum volume when using it, which may affect the sound quality.

2.How to choose a speaker?

The commonly used horn is usually 4 ohm or 8 ohm. If your speaker power is small, it may be used between 10W-30W. The power supply voltage is small to prevent the amplifier from burning out after burning. For example, select a power supply below 15V. If you are a 50W-100W speaker, don't worry about the speaker burnout. You can choose 12-24V power supply. The higher the voltage you choose, the louder the output sound or power. The speaker power is not recommended to exceed 100W, otherwise the sound quality will be affected.

3. How to choose BT or AUX audio input mode?

This audio amplifier module follows the principle of hardware connection first. A successful USB connection is in USB mode, and AUX insertion is in AUX mode. If the USB is not connected and AUX is not plugged in, it is in bluetooth mode, which supports automatic reconnection. Mode toggle with mode prompt. When choosing USB audio input mode, it is important to note that USB can directly connect to the computer and other devices with USB audio output without installing a driver. USB input is lossless input, good sound quality, no interference, no noise.

4. When the sound becomes louder, the phenomenon of turbid sound appears.

The sound is distorted. Please change the adapter power supply with a higher voltage rating.

5. After the sound becomes louder, the sound is stuck.

The input power is insufficient, and the power supply itself is intermittently powered off. Please replace the power supply with a larger power. Or the output power is too large, the power amplifier board is seriously heated, and thermal protection occurs, reducing power usage or enhancing heat dissipation.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction