

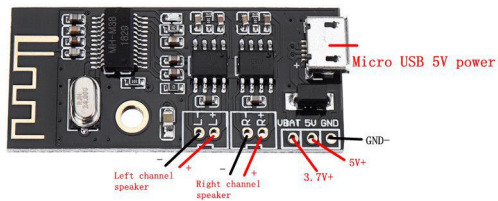
M38

After receiving the goods, please power the module first to see if the indicator light flashes normally. After connecting the equipment with the equipment, please carefully check whether the wiring is correct and then supply power to prevent the wiring from damaging the module.

Since this product is a bare board with components exposed on the board, be careful not to touch the components on the board during use. Especially when the weather is dry, touching the components by hand is easy to cause static electricity to damage the chip.

Common problem

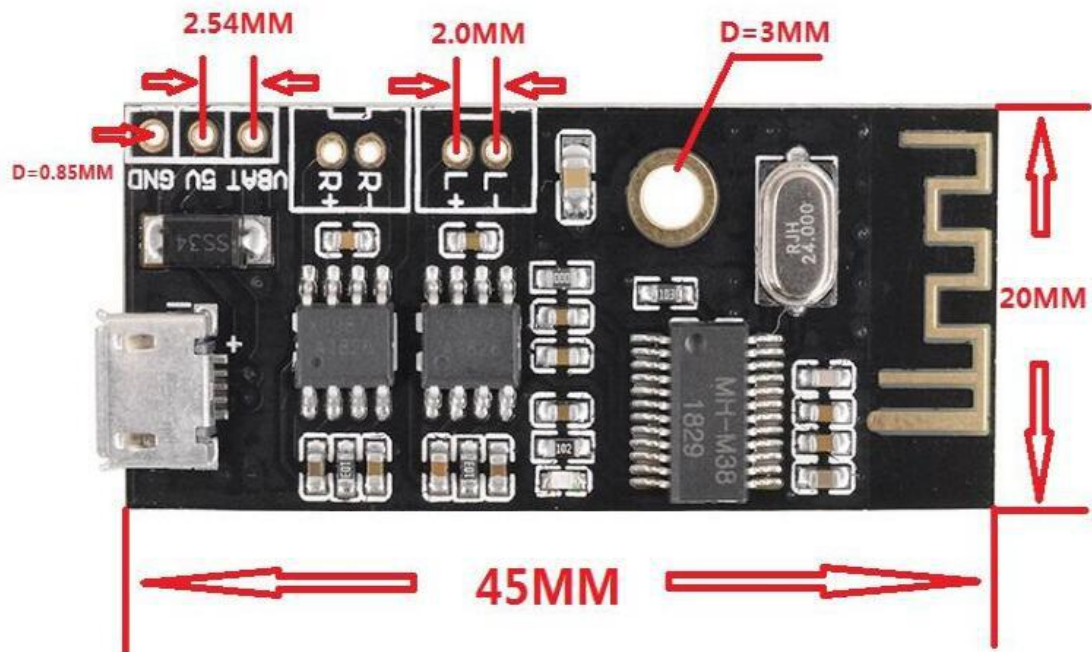
1. The product itself comes with a power amplifier, and can be used by connecting the speaker inside the specification. The output can no longer be connected to the power amplifier board.
2. Note that in the case of a lithium battery, this product cannot be charged directly by the usb lithium battery. There is no lithium battery protection circuit, which is easy to burn the battery.
3. If the speaker is turned up after the sound is turned up, it is not enough power. The power of the power supply is greater than the power added by the two speakers. For example, with two 3W speakers, the total power is 6W, and the input power should be at least 6w. 5W2A 10w power supply is recommended.
4. If it is powered by a computer usb, it will enter the sound card mode, which is the speaker that acts as a computer. Bluetooth can't be searched in this mode, you can use Bluetooth with your phone charger or other power source.
5. You can't connect the left and right channels together. If you only need mono, just connect the left channel or the right channel.
6. Noise or current sound occurs during playback, the power supply part is added to the LC filter circuit, or both ends of the power supply are connected with a large capacitor (at least 10uf, the bigger the better)
7. After the module is powered on, it cannot be connected to Bluetooth. Please check if the power supply voltage is within the normal range or whether the power supply is stable. If the power supply is normal, the phone deletes the Bluetooth name and then searches again. Note that you can search for Bluetooth if the indicator light flashes quickly.
8. The module does not search for Bluetooth, or there is a stuck in Bluetooth playback. Please check if there are any wireless transmitting devices around you that are disturbed and away from these devices.
9. After the mobile phone is connected to the Bluetooth, there is no sound, or the speaker of the mobile phone makes a sound. Please re-power, and re-connect Bluetooth. Check if the media playback in the Bluetooth settings of the mobile phone is turned on.



1. Bluetooth V4.2 version, supports Bluetooth automatic connection technology, supports WAV/WMA/FLAC/APE/MP3 lossless decoding, stereo dual channel output.
 2. Power supply: It can be directly powered by the MICRO USB Android cable 5V, or it can be connected to a 5V power supply or a 3.7V lithium battery (as shown in the figure above). Note that the 5V and 3.7V power supply interfaces are different. 5V is connected to 5V and GND, and the 3.7V lithium battery is connected to VBAT and GND.
- The maximum operating current is 5V2A. It is recommended to use a regulated power supply of 5V2A for better sound quality.
3. After the module is powered on, the phone searches for the Bluetooth name MH-M38 and can play music after connecting to Bluetooth.
 4. Support USB sound card, free drive (plug and play). Connect the module to the computer with the USB cable, and the computer can play music through the module amplifier output.
 5. Module blue indicator light:
 - When the Bluetooth is not connected, the indicator light flashes quickly;
 - When the Bluetooth connection is on, the indicator light is always on;
 - When the Bluetooth is playing, the indicator light flashes slowly.
 6. Audio output: output left and right channel stereo audio signals, can be connected to two 2-8 euro, 3-5W speakers, push 4 O 3W speakers.
 7. This product has its own dual 5W power amplifier circuit, and must not be connected to another amplifier! The outputs of the two amplifiers cannot be connected in parallel or the negative poles are connected together, otherwise the power amplifier chip is damaged.

Pin number	Pin header	Description
1	5V	Power positive 5V
2	GND	Negative power supply
3	VBAT	Lithium battery positive 3.7-4.2V
4	L+/L-	Left channel output (direct speaker)
5	R+/R-	Right channel output (direct speaker)

MH-M38 :



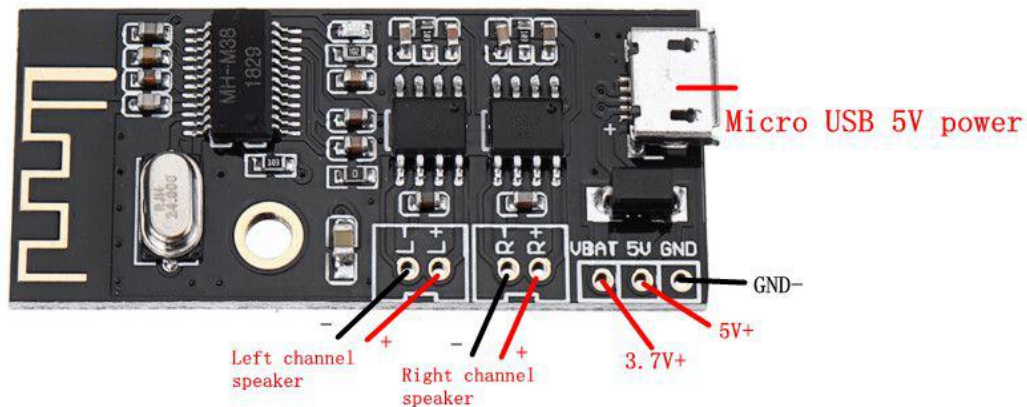
1. Power supply: You can directly use the MICRO USB Android cable 5V for direct power supply, or you can also connect 5V power supply or 3.7V lithium battery (as shown in the figure below). Note that the 5V and 3.7V power supply interfaces are different. 5V is connected to 5V and GND, and the 3.7V lithium battery is connected to VBAT and GND.

The maximum operating current is 5V2A. It is recommended to use a regulated power supply of 5V2A for better sound quality.

2. Support USB sound card, free drive (plug and play). Connect the module to the computer with the USB cable, and the computer can play music through the module amplifier output.

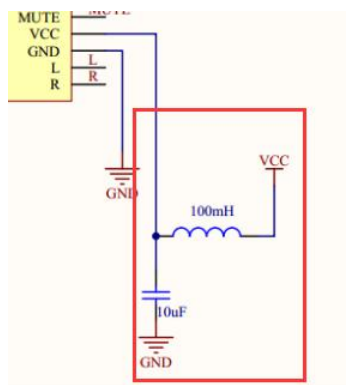
3. Audio output: output left and right channel stereo audio signals, can be connected to two 2-8 euro, 3-5W speakers, push 4 O 5W speakers.

4. This product has its own dual 5W power amplifier circuit, and must not be connected to another amplifier! The outputs of the two amplifiers cannot be connected in parallel or the negative poles are connected together, otherwise the power amplifier chip is damaged.



Note:

1. If noise occurs during playback, the Bluetooth audio module has a very high power requirement, which will affect the quality of the audio. It is recommended to use a linear regulated power supply. If you are using a DC-DC switching power supply (such as a mobile phone charger), it is recommended to add an LC filter circuit (as shown below) to reduce power supply harmonic interference.



2. Signal interference: Bluetooth antennas are extremely susceptible to high frequency or strong electromagnetic signals, and should be placed away from places where wireless devices are sent. And the board can't be close to metal objects, keeping a certain distance.

3. Since this product is a bare board design, try not to touch the components on the board with your hands. It is easy to cause the static electricity to kill the chip and cause it to burn.

Warning: The charging interface of this product is in current-limiting charging mode, without charging management! For the safety of your life and property, please be sure to use the lithium battery with protective plate produced by the regular manufacturer. If the loss is caused by improper use, the company will not bear any responsibility!