

## BLUETOOTH AUDIO TRANSFER MODULE M18/M28/M38

M18/M28/M38 are a low-power Bluetooth design solution that supports the latest Bluetooth 4.2 transmission, two-channel stereo lossless playback, and Bluetooth wireless transmission when the module is connected to Bluetooth, from mobile or TV or other Bluetooth device supporting audio transfer. In an open environment, the Bluetooth connection distance can be up to 20 meters. Widely used in a variety of Bluetooth audio reception, a variety of audio DIY modification. For your different needs, we offer 3 versions for you to choose from:

	M18	M28	M38
MICRO USB (power supply)	×	√	√
Audio headphone jack	×	√	×
Built-in amplifier	×	×	√ ( 5W+5W )
Lithium battery powered	√	√	√
Support USB sound card(free drive)	×	×	√
Volume memory/adjustment	√	×	×
MUTE interface	√	×	×
Button extension	√	×	×
Bluetooth version	Bluetooth V4.2		
Support Bluetooth protocol	HFPV1.7、 A2DPV1.2、 AVRCPV1.5、 AVCTPV1.2、 AVDTPV1.2		
Format support	WAV/WMA/FLAC/APE/MP3 lossless decoding, stereo dual channel output		
Operating Voltage	5V/3.7V-4.2V		
Not connected broadcast status	5.5MA		
Connection work status	20MA		
Deep sleeping	3UA		
Transmission distance	20M ( MAX )		
Operating temperature	"-40°C-+85°C		
Sensitivity	"-87dbm		

## FUNCTION

Bluetooth V4.2 version, support Bluetooth automatic connection technology, support WAV/WMA/FLAC/APE/MP3 lossless decoding, stereo dual channel output.

After the module is powered on, the mobile phone searches for the Bluetooth name M18/ M28/ M38, and can play music after connecting Bluetooth.

## BLUE INDICATOR LIGHT

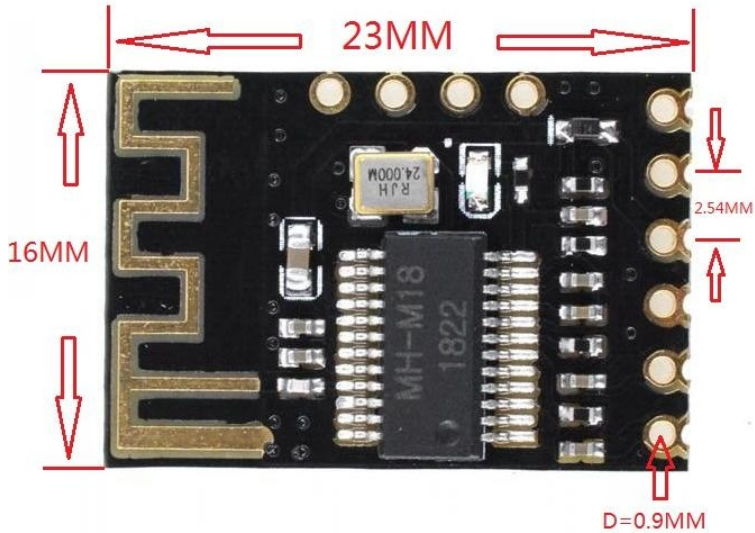
- When the Bluetooth is not connected, the indicator light flashes quickly;
- When the Bluetooth connection is on, the indicator light is always on;

The following is an introduction to each version:

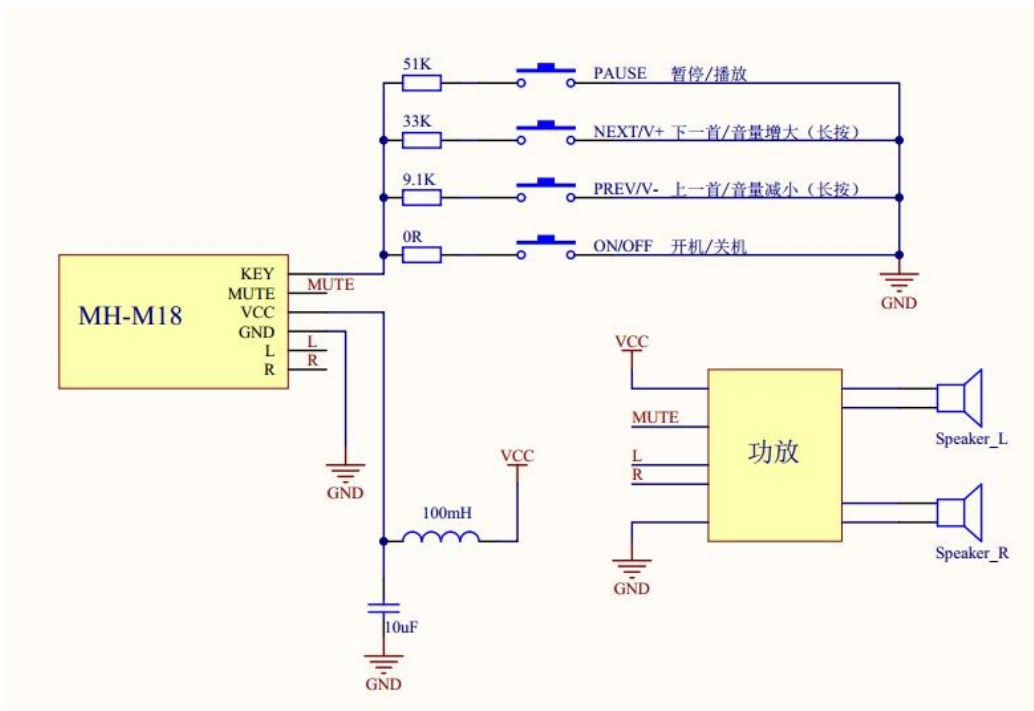
## M18

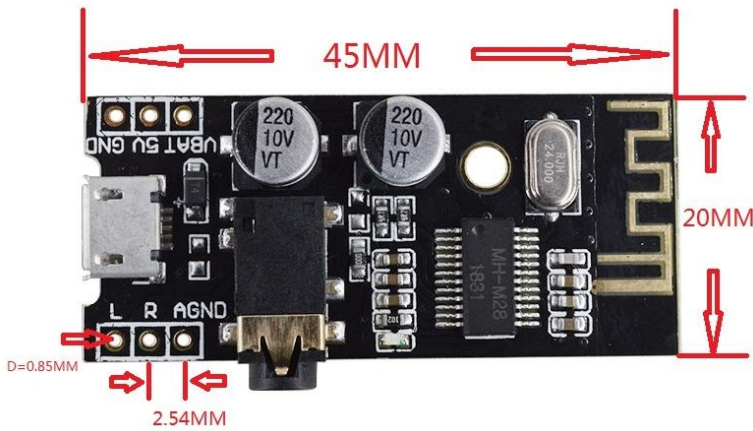
PCB size: 23x16mm (length, width and height)

Pin pitch: 2.54mm (can be directly attached or soldered)



PIN NO	Function	Description
1	KEY	Button control terminal (4 button functions, additional resistors such as wiring diagram)
2	MUTE	Mute control terminal (output high level 3.3V when muting, output low level during playback)
3	VCC	Positive power supply 5V (lithium battery 3.7V power supply requires short circuit diode)
4	GND	GND
5	L	Left channel
6	R	Right channel

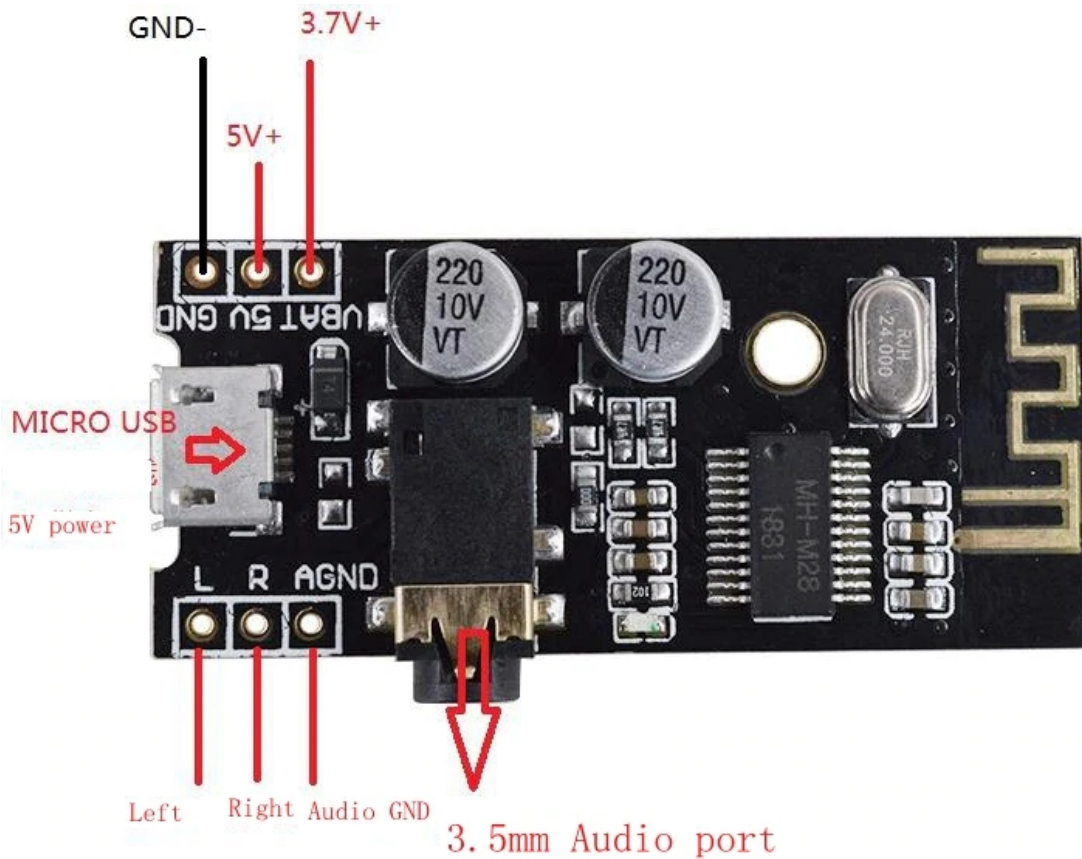


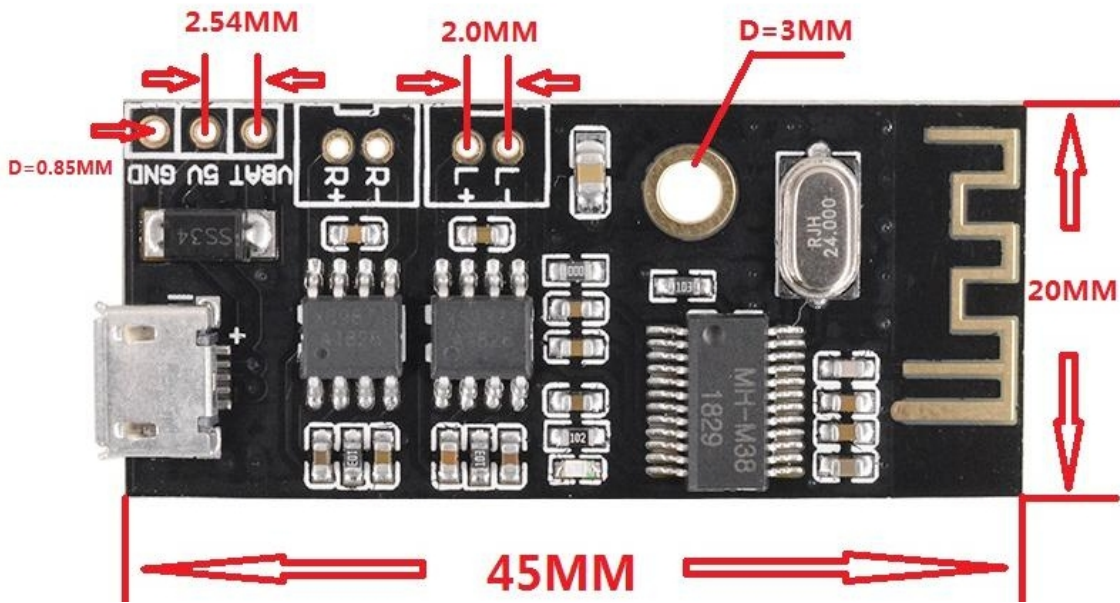


	PIN	Description
1	5V	5V
2	GND	GND
3	VBAT	lithium battery 3.7V power supply 3.7V-4.2V
4	L	Left channel
5	R	Right channel
6	AGND	Audio GND

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 below). Note that the 5V and 3.7V power supply interfaces are different. The 5V voltage is connected to 5V and GND, and the 3.7V lithium battery is connected to VBAT and GND.

Audio output: The earphone can be directly connected to the 3.5mm audio interface, or it can be wired for the audio input of the power amplifier board (the interface L/R/AGND can be directly wired as shown).





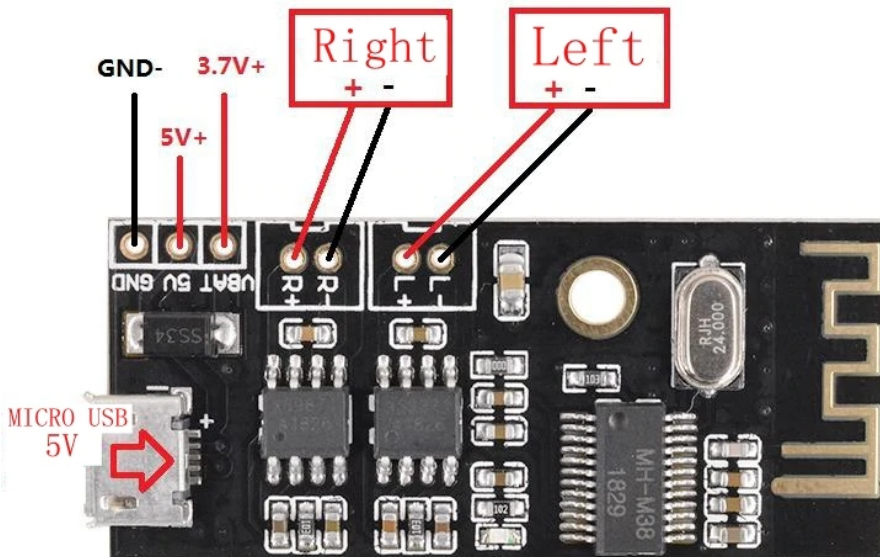
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The maximum operating current is 5V2A. It is recommended to use a regulated 5V2A power supply for better sound quality. Support USB sound card, free drive (plug and play). Connect the module to the computer with a USB cable, and the computer can play music through the module amplifier output.

**Audio output:** output left and right stereo audio signals, which can be connected to two 2-8 ohm, 3-5W speakers, and 4 Ohms 5W speakers.

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



## ORDERING DETAILS

Sunrom Part#	Type	Ordering Page
5727	M18	<a href="http://www.sunrom.com/m/5727">http://www.sunrom.com/m/5727</a>
5728	M28	<a href="http://www.sunrom.com/m/5728">http://www.sunrom.com/m/5728</a>
5729	M38	<a href="http://www.sunrom.com/m/5729">http://www.sunrom.com/m/5729</a>

