Lossless Bluetooth Audio Module

JDY-64 Audio Bluetooth Module Manual



I. Product introduction

JDY-64 is a low power consumption lossless two-channel stereo design, and the overall performance is very advantageous. It only needs to connect the module to the application products so that users can quickly achieve wireless music transmission, which defaults no prompt tone for button, switch, connection, fragment opening, and integrated SD card defaults earphone function does not support SD card function. It supports button control on music up and down, play and stop, switch, volume turn up and down, and other functions.

II . Product application

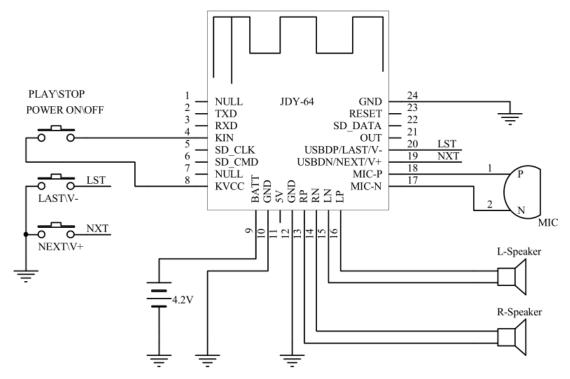
JDY-64 is mainly applied to mobile phones, computers, PAD, etc. It can be applied to Bluetooth mono-channel headphones, headsets, Bluetooth dual-channel headphones, Bluetooth speakers, Bluetooth audio receivers and so on.



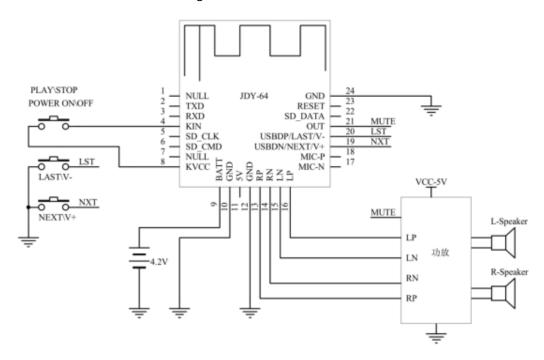
$\scriptstyle \coprod$. Module parameters

Model	JDY-64
Bluetooth version	Bluetooth V4.2
Support Bluetooth	HFPV1.7、A2DPV1.2、AVRCPV1.5、AVCTPV1.2、
protocol	AVDTPV1.2
Working voltage	DC3.3-4.2V
Unconnected	3.5mA
broadcast status	
current	
Post connected	20MA
working state current	
Deep sleep current	3uA
Working temperature	-40°C - 80°C
Transmission distance	15m
Sensitivity	-87dbm
Patch temperature	<260℃

${ m IV}.$ Pin function and schematic diagram



Schematic diagram of two-channel Bluetooth headset



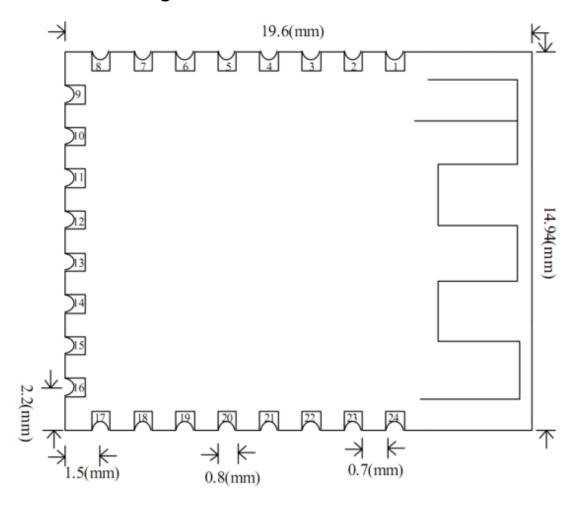
Bluetooth stereo speaker schematic diagram

Wiring:

JDY-64 and speaker amplifiers are not connected to the wiring diagram Note: This wiring method must not be shared with the power amplifier or the power supply. Otherwise, it will cause noise to play or stop playing. This circuit connection method is recommended to connect RN and LN to 104pF capacitor to ground.

Special note: JDY-64 is a 4-wire differential output. For example, the power amplifier is connected to the JDY-64 module and the power amplifier is a 3-wire input (single-ended input mode). Be sure to add a differential-to-single-ended output circuit. Otherwise, the circuit will cause an unbalanced output. So there will be noise

\boldsymbol{V} . Dimension figure



$\ensuremath{W\mbox{.}}$ Pin function description

Pin No.	Pin function	Pin function description
1	NULL	Null
2	TXD	Serial port output
3	RXD	serial ports input
4	KIN	Power button input pin (long press on/off, short click
		to play, stop or answer the phone).
5	SD_CLK	SD card clock pin
6	SD_CMD	SDK command pin
7	NULL	Null
8	KVCC	Power button power supply pin
9	BATT	Power supply (battery powered) DC3.3-4.2V
10	GND	Ground
11	5V	Power supply (5 volts) for lithium battery charging
12	GND	Ground
13	RP	Right channel differential output positive electrode
14	RN	Right channel differential output negative electrode
15	LN	Left channel differential output negative electrode
16	LP	Left channel differential output positive electrode
17	MIC-N	MIC input negative electrode (for telephone voice)
18	MIC-P	MIC input positive electrode (for telephone voice)
19	USBDN/NEXT/V+	Push-button input pin (short press NEXT, long press
		turn up volume)
20	USBDP/LAST/V-	Push-button input pin (short press LAST, long press
		turn down volume)
21	OUT	Status pin output
22	SD_DATA	SD card data pin
23	RESET	Reset (low level effective)
24	GND	Ground

VII. Software can be customized with special requirements

The default function of JDY-64 is the headset function, and the default supports three keys. Button 1 supports switching on and off, music playing or stopping, answering the phone. Button 2 supports the next song and volume turn down. Button 3 supports the last song, volume turn up and other functions. It defaults no prompt tone for startup, shut down, buttons, connection, and disconnection. It also defaults earphone function does not support SD card, to wake up not sleep, and the broadcast name is JDY-64. The above are the default parameters and functions. If there are special requirements, the function can be customized according to the customers' requirements.

7.1 Customizable function content

- ◆ Button function
- ◆ Various prompt tones
- ◆ Broadcast name
- ◆SD card
- ◆ Serial port instruction
- ◆ Startup sleep or awaken (default startup awaken)
- ◆IO pin output function

7.2 Customizable products

◆ Various of Bluetooth headsets are customized, and the Bluetooth

headset PCBA can be displayed according to the size provided by the client.

- ◆ Various of Bluetooth speakers can be customized, and the Bluetooth speakers PCBA can be displayed.
- ◆ PCBA customization of various Bluetooth music player products

 JDY-64 is a standard module. If customers do not need modules, we can customize PCBA or chip according to customers' requirements.