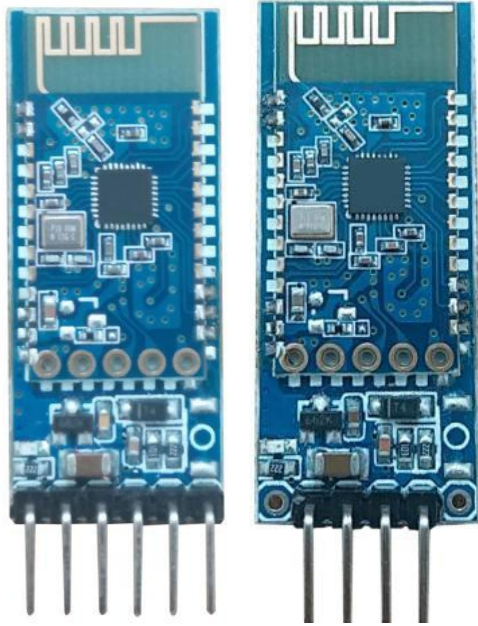


Bluetooth SPP serial port transparent transmission module



JDY-31 Bluetooth Backplane User Manual

1. Product Introduction and Application

JDY-31 Bluetooth is designed based on Bluetooth 3.0 SPP, which can support Windows, Linux, Android data transmission, working frequency band 2.4GHZ, modulation mode GFSK, maximum transmission power 8db, maximum transmission distance 30 meters, support users to modify the device name through AT commands, Baud rate and other commands, convenient and quick to use and flexible.

2. Product Application

JDY-31 is a classic Bluetooth protocol that can communicate with Bluetooth-enabled computers (desktops, notebooks) and mobile phones (android). Can be applied

- ◆ Windows computer Bluetooth serial port transparent transmission
- ◆ Android Bluetooth serial port transparent transmission
- ◆ Smart Home Control
- ◆ Automobile OBD testing equipment
- ◆ Bluetooth toy
- ◆ Share mobile power, share weight
- ◆ Medical equipment

3. Detailed module parameters:

Model	JDY-31
Working frequency	2.4GHZ
Communication Interface	UART
Voltage	3.6-6V (suggest 5V)
Temperature	-40℃ - 80℃
antenna	Built-in PCB antenna
distance	30m
Master-slave support	Slave
Size	19.6 * 14.94 *1.8 mm
Version	Bluetooth 3.0 SPP
STM	<260℃
Current	8mA
Transmit power	8db (Max)
Receiving sensitive	-97dbm
SPP maximum throughput	16K bytes/s(android、windows)

Four, pin function description:

STATE	连接状态引脚（未连接低电平，连接后高电平）
RXD	串口输入引脚（TTL 电平）
TXD	串口输出引脚（TTL 电平）
GND	电源地
VCC	电源（支持 3.6-6V）
EN	空

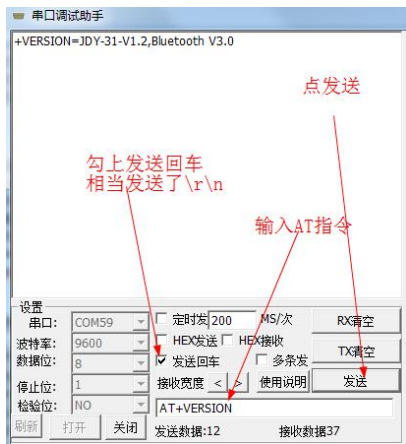
JDY-31 蓝牙 SPP 串口透传模块

五、串口 AT 指令集

JDY-31模块串口发送AT指令务必加上\r\n

序列	指令	功能	默认
1	AT+VERSION	版本号	JDY-31-V1.2
2	AT+RESET	软复位	
3	AT+DISC	断开连接（连接状态下有效）	
4	AT+LADDR	查询模块的MAC地址	
5	AT+PIN	连接密码设置与查询	1234
6	AT+BAUD	波特率设置与查询	9600
7	AT+NAME	广播名设置与查询	JDY-31-SPP
8	AT+DEFAULT	恢复出厂设置	
9	AT+ENLOG	串口状态输出使能	1

AT指令串口工具使用方法



在连接状态下发送断开连接指令方法



1、查询版本号

JDY-31 蓝牙 SPP 串口透传模块

指令	响应	参数
AT+VERSION	+VERSION=JDY-31-V1.2,Bluetooth V3.0	无

2、复位

指令	响应	参数
AT+RESET	+OK	无

3、断开连接

指令	响应	参数
AT+DISC	+OK	无

在连接后发有效

4、BLE 蓝牙 MAC 地址

指令	响应	参数
AT+LADDR	+LADDR=<Param>	无

5、波特率设置/查询

指令	响应	参数
AT+BAUD<Param>	+OK	Param:(4 到 9)
AT+BAUD	+BAUD=<Param>	4: 9600 5: 19200 6: 38400 7: 57600 8: 115200 9: 128000

JDY-31 支持 128000 波特率连续收发数据，并且不丢包，传输速度可以达到 16Kbytes 每秒

6、SPP 蓝牙配对密码

JDY-31 蓝牙 SPP 串口透传模块

指令	响应	参数
AT+PIN<Param>	+OK	Param: 4位密码 默认PIN: 1234
AT+PIN	+PIN=<Param>	

7、广播名设置/查询

指令	响应	参数
AT+NAME<Param>	OK	Param: BLE广播 名最长: 18字节 默认广播名: JDY-31-SPP
AT+NAME	+NAME=<Param>	

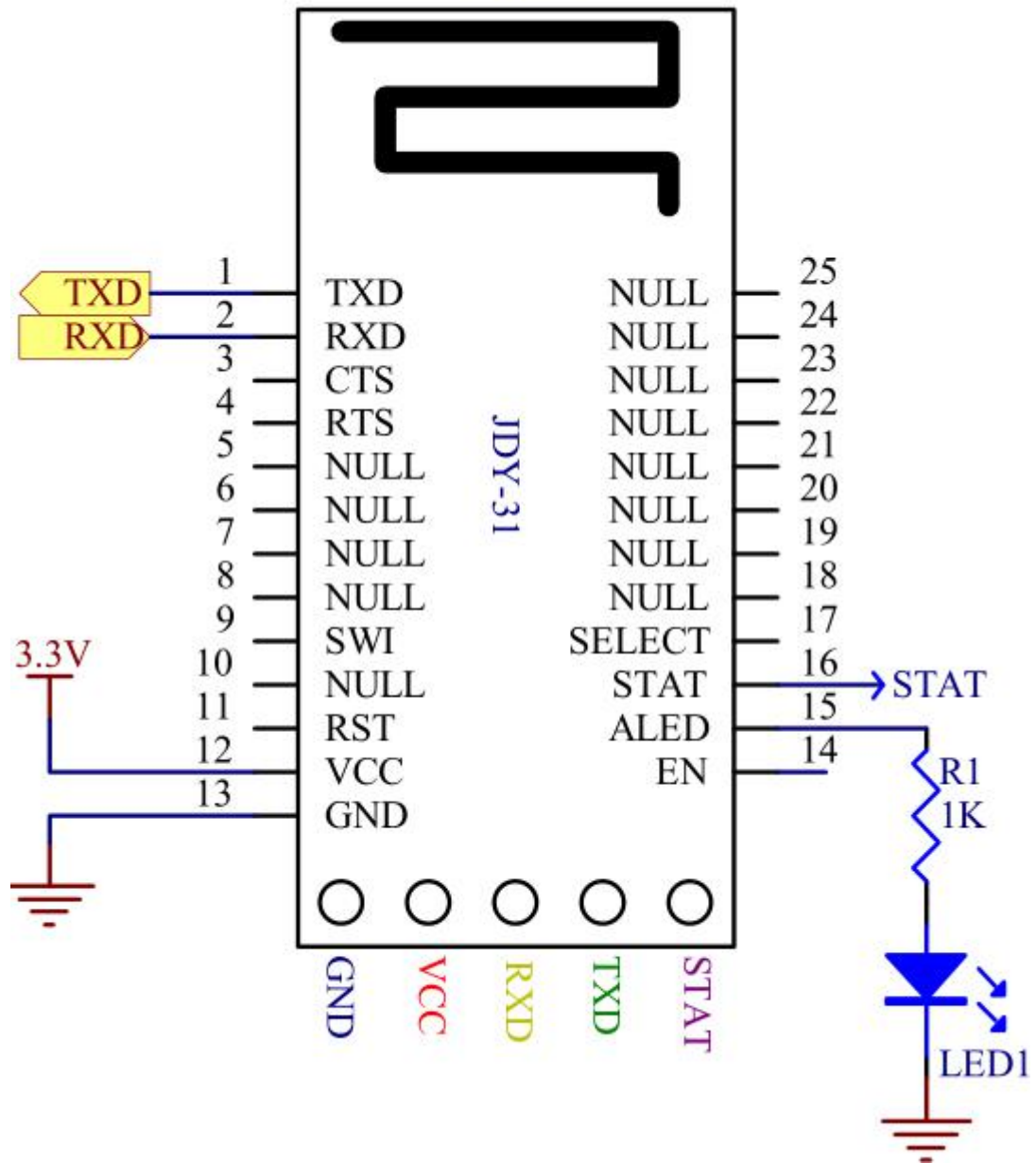
8、回复出厂配置

指令	响应	参数
AT+DEFAULT	OK	无

9、串口状态输出使能设置/查询

指令	响应	参数
AT+ENLOG<Param>	OK	Param: 1 或 0 1: 打开串口状态输出 0: 关闭串口状态输出 默认值: 1
AT+ENLOG	+ENLOG=<Param>	

贴片式接线



2.

patch application: general application only need to connect VCC, GND, RXD, TXD 4 pins, if you need to actively disconnect in the connection state, send AT+DISC in the connection state

Pin function description:

Number	Pin function	Pin function description
1	TXD	Serial output pin (TTL level)
2	RXD	Serial input pin (TTL level)
3	CTS	
4	RTS	
5	NULL	

6	NULL	
7	NULL	
8	NULL	
9	SWI	
10	NULL	
11	RST	Reset (active low)
12	VCC	Power supply (1.8–3.6V)
13	GND	
14	EN	
15	ALED	Broadcast status pin (not connected to flash, output high level after connection)
16	STAT	Connection status pin (not connected low level, output high level after connection)
17	SELECT	
18	NULL	
19	NULL	
20	NULL	
21	NULL	
22	NULL	
23	NULL	
24	NULL	
25	NULL	

