JZ 系列产品与 LED 控制卡的配合使用说明

（RS-232 接口）

l **Operation Manual For JIZHUO Serials Used With Led Controller.**
(RS-232 Interface)

1、 用电脑与控制卡连好，用控制卡的原配操作软件，读取控制卡的参数，并作记录（串口：波特率、校验位、数据位、停止位）

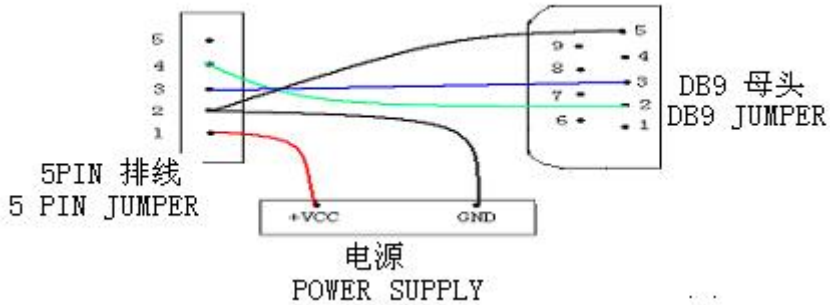
l Connecting led controller with computer by 232 cable, then in computer, open control software of led control device. Then get parameter (baud rate, check bit, data bit, stop bit) of this led control device. And record it.

2、 用电脑与 JZ 系列产品（要与控制卡相连的模块）连好，用无线模块的原配参数设置软件读取参数，并对照上次记录的控制卡的串口参数，是否一致，如果不一致，必须设为一致（可以更改控制卡的参数，也可以更改模块的参数）。一致了，还要记录模块的参数（信道、空串波特率）。接线方法见第 3 步。

l Connecting JIZHUO RF module with computer by 232 cable, then in computer, open setting software such as V3.06, then click button to read RS232 baud rate、Check bit, RF channel, RF baud rate.

Compare the RS232 Baud Rate、Check bit of RF module with that of Led controller. If RS322 Baud Rate and Check bit of both are different. You must change the two parameters to the same. Such as if the RS232 Baud rate of led controller is 9600 bps, and the RS232 baud rate of RF modules must be 9600 bps. Check bit is same. The connecting figure is in below.

3、 上述操作都完成了，把模块与控制卡连上。



l If done above things, connecting led controller with RF module .

4、 完成上述操作就可以接好控制端的设备了，另一台模块与电脑连接好，先用模块原配软件读取参数，记录参数（信道、空中速率、串口参数、第几个串口）。

l Connecting the 2th RF module with computer, and open setting software of RF module such as v3.06. and read parameter of the 2th rf module such as RS232 baud rate、Check bit, RF channel, RF baud rate.

5、 确认二台模块的参数一致（信道、空中速率）。不一致，则应更改为一致。

l Make sure that the channel and RF baud rate of the two RF module are the same.

Make sure that the RS232 baud rate and Check bit between computer and RF module are the same. Make sure the RS232 baud rate and Check bit between LED controller and RF module are the same.

6、 关闭模块软件，打开控制卡原配软件，选好第五步所记录的第几个串口，设置好串口参数。

l Start software of led controller and set com num and baud rate.

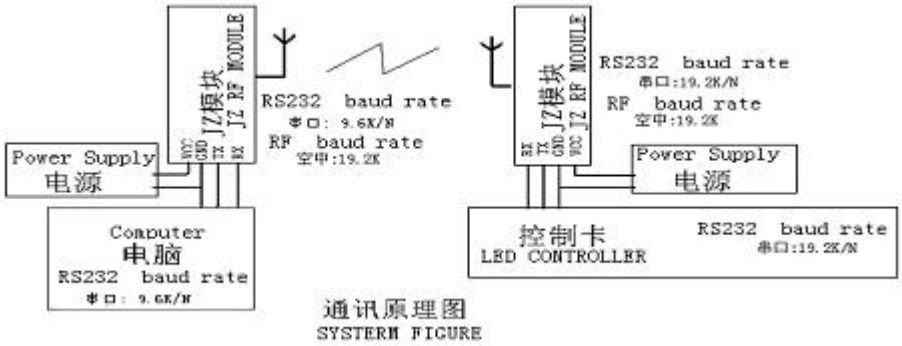
7、 可以开始通讯了。

l Now you can control your led screen by your computer.

备注 1：

在与 **LED** 控制卡通讯时，通常情况下我们会把 **PC** 端的串口速率做成比空中速率低一半**(**各种速率可设置**)**，如下图：

l **It's recommend that the RS232 baud rate of computer is half RF baud rate of RF module by below.**



通讯原理图
SYSTERM FIGURE

备注 2：

检查电脑与 JZ 模块、控制卡与 JZ 模块的连线是否连对时，在线连好及分别都通上电的情况下，可以用万用表测试电压来判断：

用万用表的黑表笔接 GND，红表笔分别接测模块 TX、RX 端，当 TX、RX 端均有一定的负电压时，表明该接线法是正确的。相反如果测的 TX、RX 端，一个有负电压，一个没有负电压时，则表明 TX、RX 线接反了，我们必须让它交叉接。

- **When you want to test 232 cable. You can test the voltage of PIN 2 and PIN 3 of DB9 jumper. If the two voltage both are negative voltage, prove it is normal. Or if one of both is no voltage(0 v), maybe PIN 2 and PIN 3 are in reverse state and if the power is on.**

备注 3：

通上模块电源时模块绿灯亮时，代表模块正在接收数据，或者说有相同频率设备的干扰，此时对模块进行设置无效，应停止对方发送，减少干扰（更换信道）。才能对该模块进行设置、通信。

- **In condition that RF module is POWER ON, and the green red is always light on, shows RF module is receiving data, or shows RF modules has been interrupt. Now you can not set the parameter of RF module. To avoid this sense, You can stop the data sending of another RF module. In condition no light of green led, you can set your module of RF module.**