IRXON IR220 RS232 Serial Port Infrared Adapter

Description

IR220 is a RS232 RAW IR (IrPHY Only) adapter, it can instantly convert RS232 port to infrared, no need any driver installation, no IrDA protocol software required. It features a PC or embedded RS232 cable replacement, there are six fixed baud rates to choose when buyer place an order, no software modification Required.

Features

• Deriving power from DTR and RTS of standard RS232 interface, no external DC_IN needed, user must enable DTR and RTS before using it.
• IRXON can fix IR220 baud rate to 4800, 9600, 19200, 38400, 57600, 115200 bps by changing IR220 internal hardware and software, user cannot self change the baud rate.
• Compatible with ACTISYS IR220L+/IR200L/IR220Li/IR220LN/IR200Li.
• There is a red LED on the top center of the adapter body, the LED indicate the activity of infrared TX signal.
• Using as a IrDA adapter by downloading and installing IrDA driver on PC. (For fixed baud rate 9600bps adapter only)

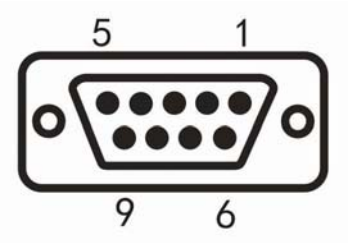
Specification

• Connection: DB9-F RS232 Serial COM Port
• Fixed IR baud rate options: 4800/9600/19200/38400/57600/115200bps
• Communication Distance: 1 to 150 cm. (15°optical cone angle)
• Size and weight: 2.8"L x 1.63"W x 0.68"H (69 x 39 x 18mm) , 2.44oz (66g)
• RS232 Cable length: 1.2m
• Power Source: From DTR and RTS of RS232 port
• Peak Power Consumption: 0.3W
• Operating Temperature: -10℃ to 60℃

Package Contents

• IR220 RS-232 Serial Port IR Adapter x 1 pcs

IR220 DB9F Connector Pin Definition

	2, TXD, Data from IR220 to PC 3, RXD, Data from PC to IR220 4, DTR, Supply power, select baud rate 5, GND, Ground 7, RTS, Supply power, select baud rate Pin 1,6,8,9, Not Connected

Raw IR Application

• HyperTerminal setting:

Please set HyperTerminal to baud rate e.g. 9600, N, 8, 1, Flow control: none or Xon/Xoff, enable DTR and RTS.

The default baud rate can be fixed to 4800/9600/19200/38400/57600/115200bps by changing IR220 internal SW and HW, when the preset baud rate is non-9600bps, it can't act as a standard IrDA adapter any more.

• Baud rate software modification:

If you buy a standard IR220 adapter which has a default baud rate of 9600bps, you can also change baud rate to the others by changing your application program source code, the following list is programming steps.

1, Open com port, clear DTR

2, Set RTS, and wait at least 7 us

3, Send Control Byte to IR220 through TXD to set new baud rate.

Baud Rate	Control Byte:
115200	0x00
57600	0x01
38400	0x02
19200	0x03
9600	0x04

4, Wait until the stop bit of Control Byte is sent (for 9600 baud rate, it takes about 100 ms)

5. Clear RTS (return to NORMAL Operation)

6. Wait at least 50 us, new baud rate takes effect.

You can download demo baud rate setting program and its source code from this address: http://www.irxon.com/english/products/ir220_e.htm