

# User Manual 1

“AT88CRF-USB232” RFID reader has two kinds of interface.  
And the interface is selected automatically by the first command.  
If the reader received USB commands after power on,  
the interface is fixed to USB 1.1.  
If the reader received RS-232C commands after power on,  
the interface is fixed to RS-232C.

The software version of this document is

“USB/RS232 Reader.V1.04”.

<b>Company</b>		<b>Atmel Beijing</b>		
Model				
AT88CRF-USB232		Date	Ver	Rev
Designer	James Liu	17-April-2008	1	1
Approval	Lucy Wang	17-April-2008		

# User Manual 2

## Connector Pin Layout

8Pin	Shield GND	( for cable shield )
7Pin	Signal GND	( USB )
6Pin	USB D+	( USB )
5Pin	USB D-	( USB )
4Pin	VBUS (5Vdc)	( USB / RS232C )
3Pin	TXD	( RS232C )
2Pin	RXD	( RS232C )
1Pin	Signal GND	( RS232C )

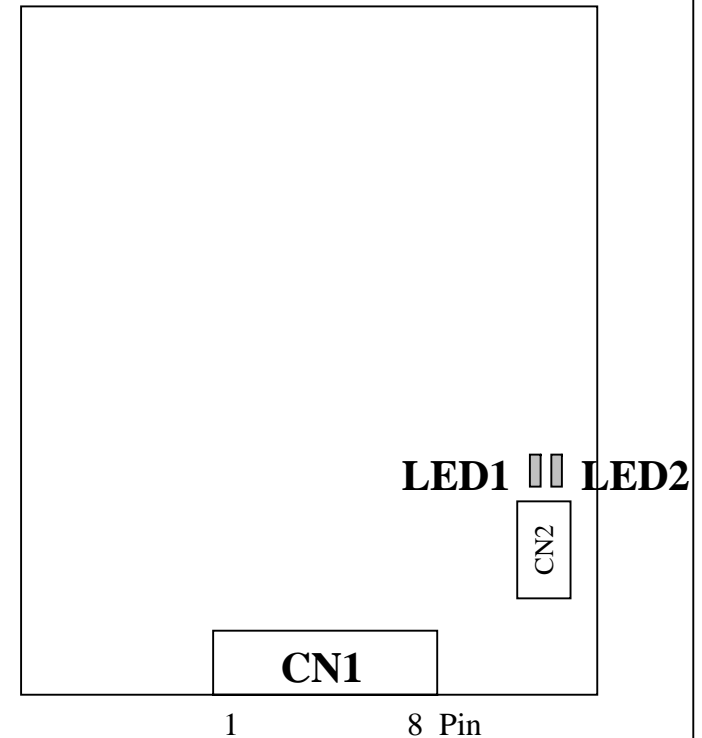
## Interface

USB mode :

Pin 4-8 have to be connected.

RS-232C mode :

Pin 1-4 and Pin8 have to be connected.



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# User Manual 3

## Interface condition

### USB

The condition is compliant with USB 1.1.

### RS 232C

Baud rate : 38400 bps  
Data length : 8 bit  
Parity : none  
Stop bit : 1 bit

## LED condition

### LED1 (Blue)

This LED show the Field status.

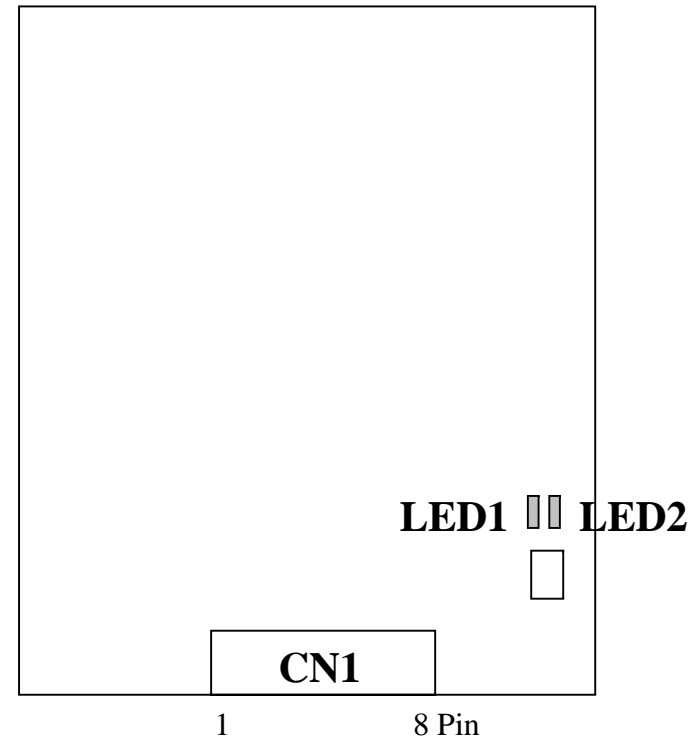
ON : Field ON.

OFF: Field Off.

### LED2 (Green)

ON : Power is supplied.

OFF: Power is not supplied.



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# User Manual 4

## Application Software

For controlling this reader , the DLL file”HG\_Crypto\_Reader.dll” is prepared.

This program supports three kinds of command.

- 1) Open port ( Select USB or RS-232C )
- 2) Close port
- 3) Communication function

Field open , Field Close , SW status check (USB only) , RFID communication , etc.

More detail information is described in the Software Manual of AT88CRF-USB232.

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