

# ChinaReader Reader

## 13.56M Reader

### Manual



**HTTP://WWW.NfcChinaReader.Com**

## 1.1 1. Mifare Standard

- 1024 bytes EEPROM, divided into 16 sectors with 64 bytes on each sector
- 100,000 write endurance cycles
- 10 years data retention
- ISO 14443 A
- 13.56MHz transponder frequency
- 106 kbit baud rate
- Bit-wise anti-collision
- Up to 10 cm operating distance
- 4 byte unique serial number
- Random number generator
- 2 bytes access key per sector
- Individual access condition for each sector
- Purse functionality

## 1.2 2. Technical Specification

- Full Mifare functionality
- Software library for easy integration within the application
- RS232 interface
- Support Windows 7, Windows8, Windows10, ME, 2000, NT, XP
- Demo software running on PC  
VC BC VB DELPHI PB Demo C# source code.
- Power supply: 5V, 80-120mA , USB port .
- Transmission speed: Default 19200 bps
- R/W distance of up to 60mm (up to 100mm with bigger antenna size), depending on TAG
- Storage temperature: -40 °C ~ +85 °C
- Operating temperature: -10 °C ~ +70 °C
- ISP Function easy to update firmware
- Dimension : 123 \* 88 \* 25 (mm)

- Weight : 100 g

### 3. Communication setting

The communication protocol is byte oriented. Both sending and receiving bytes are in hexadecimal format. The communication parameters are as follows,

Baud rate: 19200 bps  
Data: 8 bits  
Stop: 1 bit  
Parity: None  
Flow control: None

### 4. Installation

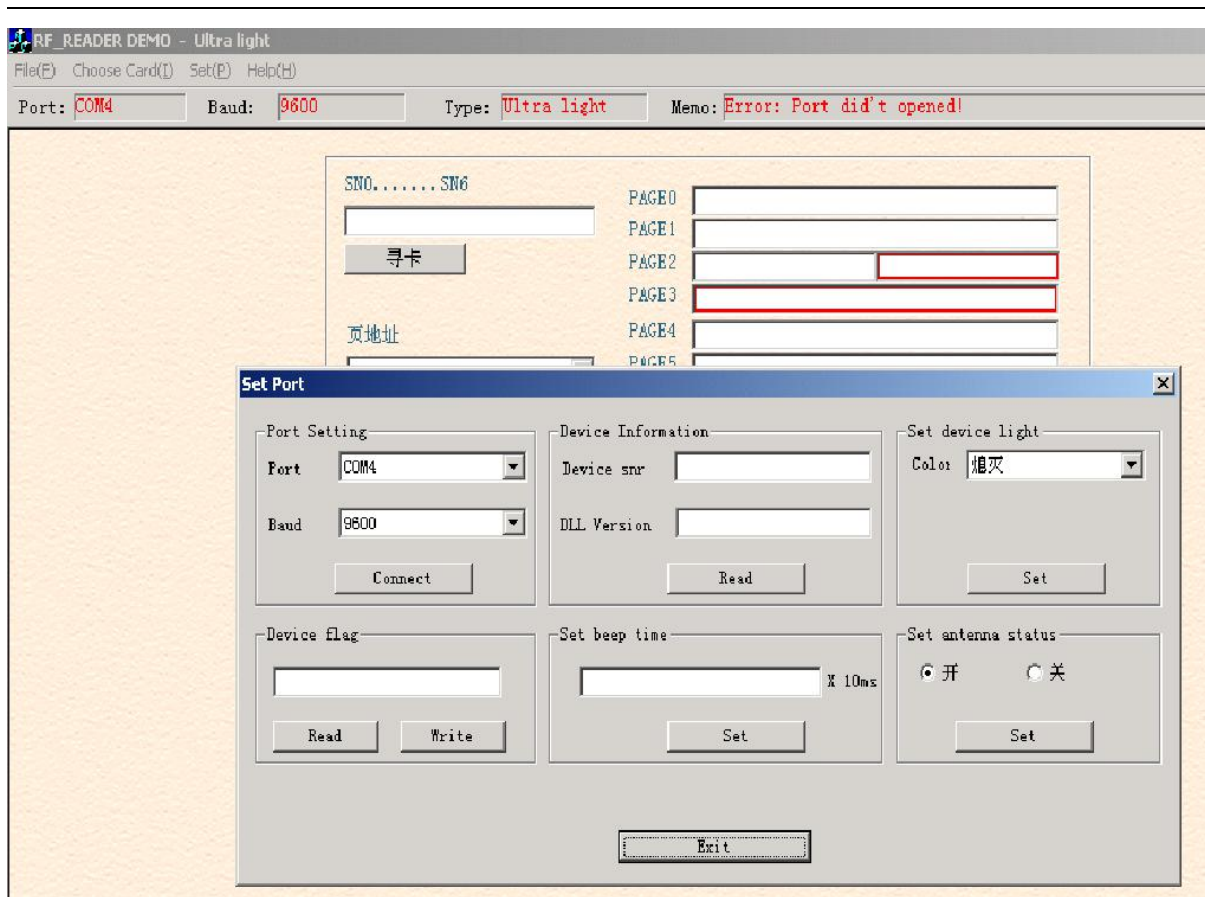
USB Virtual Rs232 reader Need install USB bridge drivers , it will be create a new Comport device, we can found Comport number in Device Management.

### 5. DEMO software

#### 2.1 DEMO install

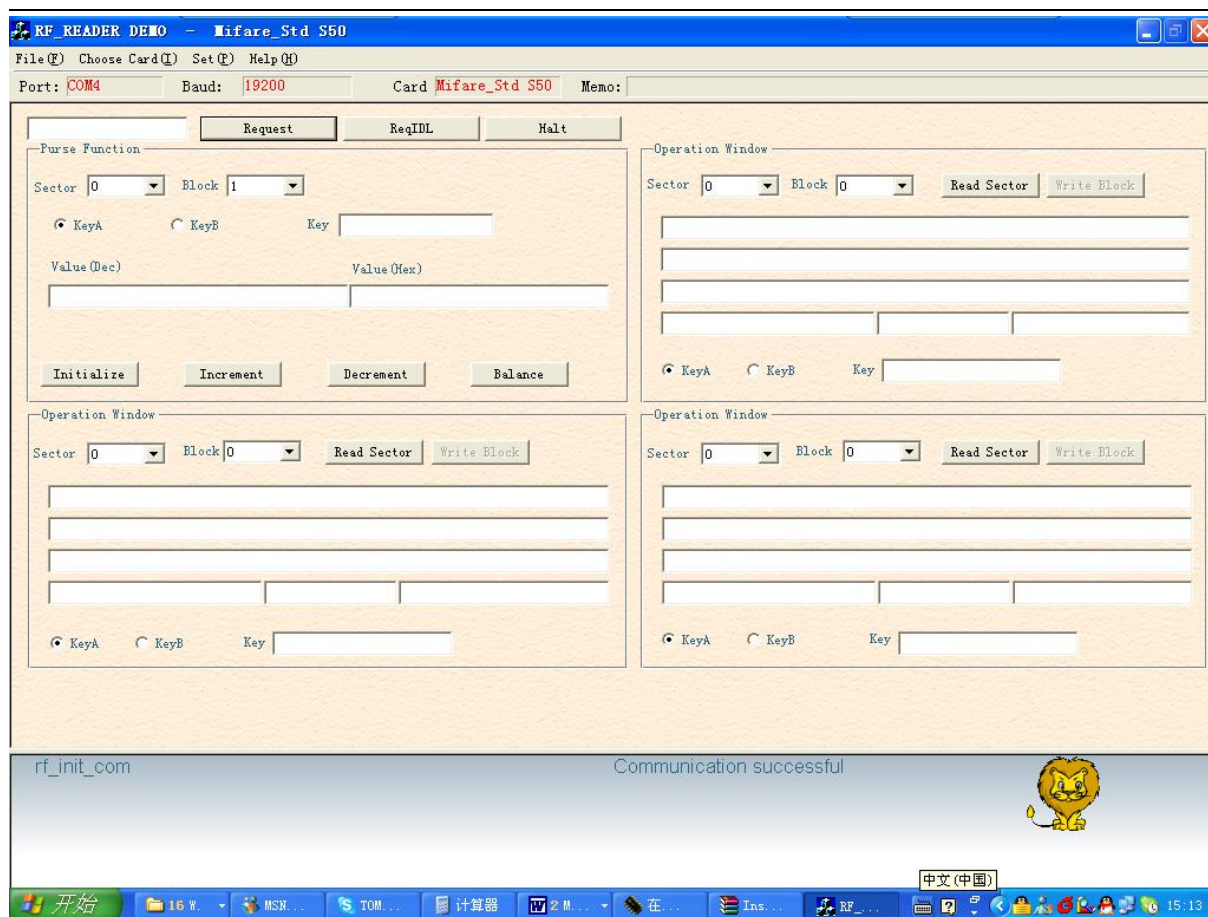
Extract InstDemo\_en.EXE, execute C:\RFREADER\ICTransfer.exe

#### 1. 2 Setting



- Select Port : Select serial COM port and setting baud Rate.
- Read : Read firmware message ,device model & version.
- Device number: Setting Device Node unumber. (no use for Desktop version)
- Buzzer : setting Buzzer beep ,delay time = setting value \* 10ms.
- Led : setting LED color , Red ,Green or off
- Set Antenna status : active field or close field(left option open) .

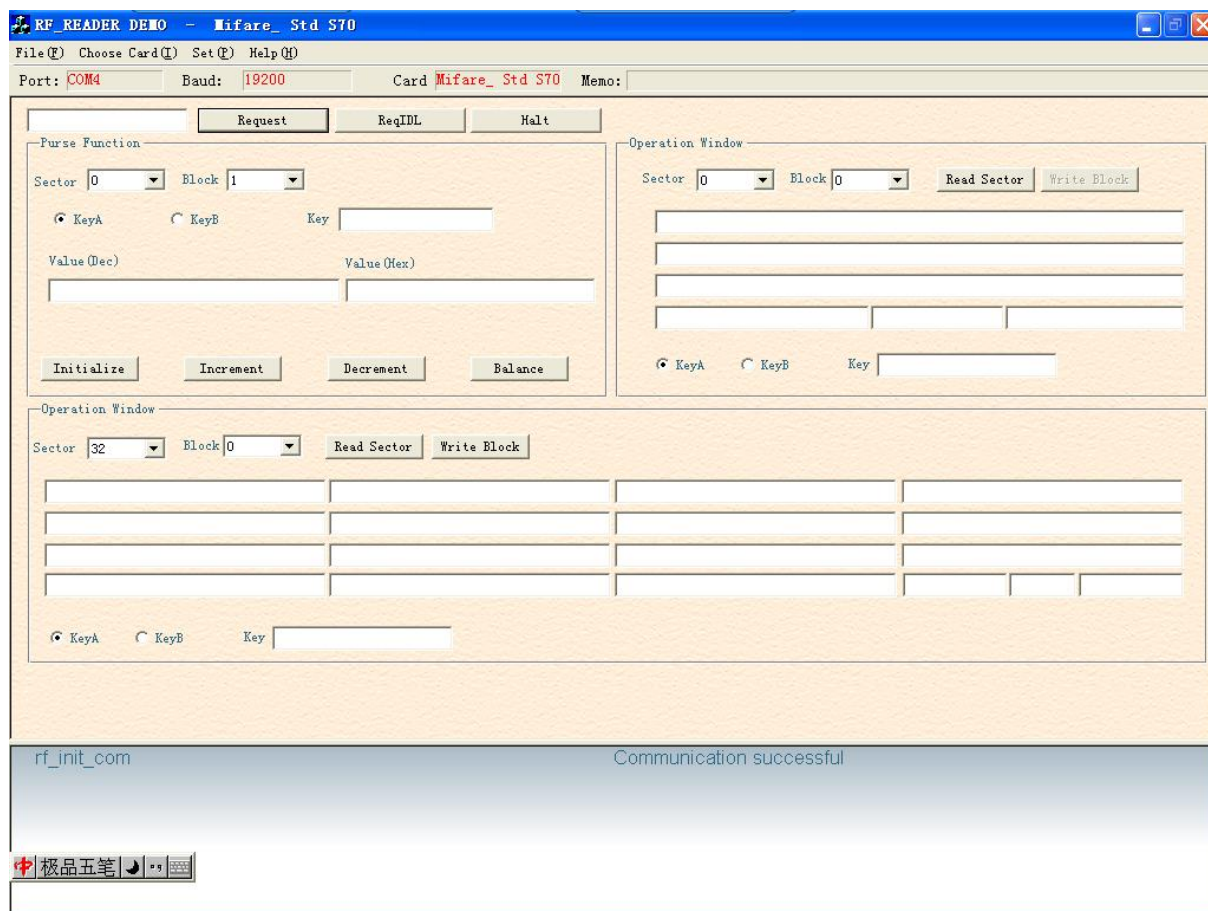
### 1.3 MifareOne card operation (iso 14443 type A )



- Request : Request mifare card ,if succeed ,serial number should show in the left text bos.
- Purse Function : Initialize \Decrease\increase\Read balance 。  
Left text box = Value in DEC , right = Value HEX 。
- Opration window: Reader Sector ,Write Block  
Select KEYA or KEYB option , Input Key in KEY TextBox then click “Reader Sector” it should reader data which Sector select ;  
Select Sector & block , input data into which block should write data ,click Write Block , data should be changed in card memory.

#### 1.4 Mifare S70 card operation (iso 14443 type A )

S70 have a mor Opration window to read/write Sector 32 to 39 . same step read/write like S50 or S70 other block.



Model	Description	
CR5011A	Mifare s50/s70,ultralight,FM1108,TYPE A	RS232
CR5011AU	Mifare s50/s70,ultralight,FM1108,TYPE A	USB virtual RS232
CR522A	Mifare s50/s70,ultralight,FM1108 , SR176, SR4k	RS232
	Ultralight C ,Ntag213/5/6	
CR522AU	Mifare s50/s70,ultralight ,FM1108 , SR176, SR4k	USB Virtual RS232
	Ultralight C ,Ntag213/5/6	
CR5011D	IS015693, I. codesli, Ti2k, SRF55V01, SRF55V02, SRF55V10	RS232
CR5011DU	IS015693, I. codesli, Ti2k, SRF55V01, SRF55V02, SRF55V10	USB virtual RS232
CR5011E	Mode A+Mode IS015693	RS232
CR5011EU	Mode A+Mode IS015693	USB virtual RS232
CR501AU-Desfire	MifareS50, S70, ultraLight, Desfire EV1 (3DES)	USB virtral RS232
CR508AU/CR608-02AU	USB emulation Keyboard	