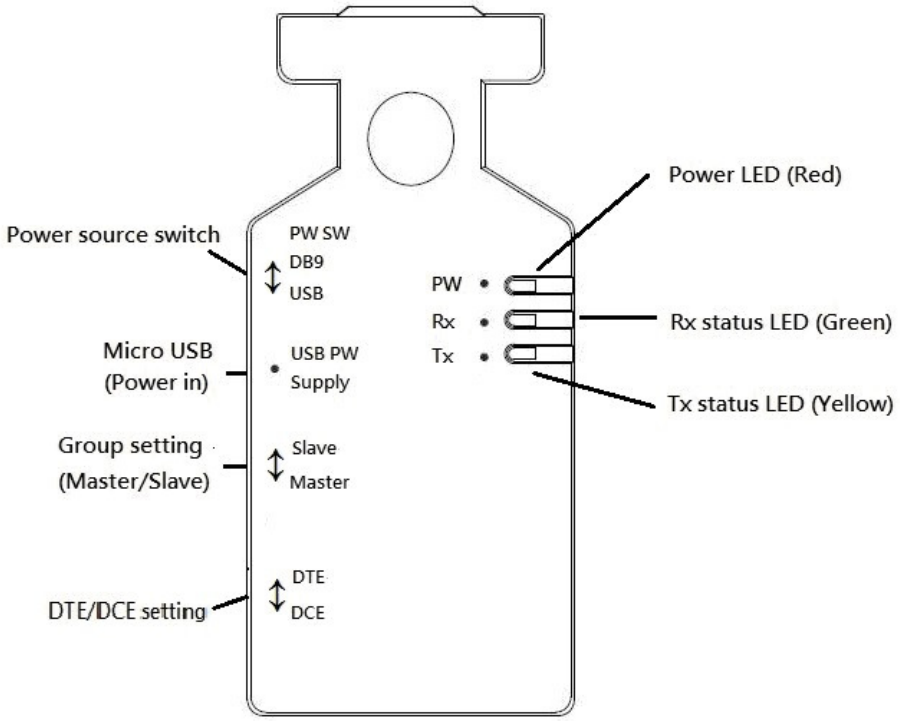
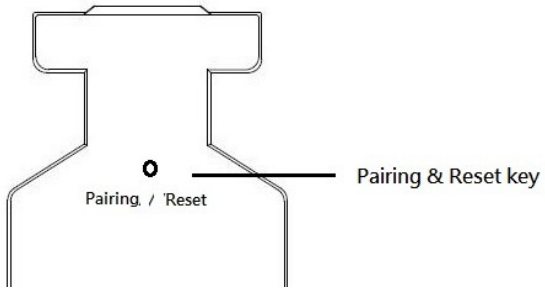
UHF 433 MHz RS-232 Adapter

1. Packing Contents:
   1.1 RS-232 adapter x 1
   1.2 User manual x 1
   1.3 USB Cable x 1
   1.4 Antenna x 1
2. Profile:

2.1 Top view



2.2 Rear view:



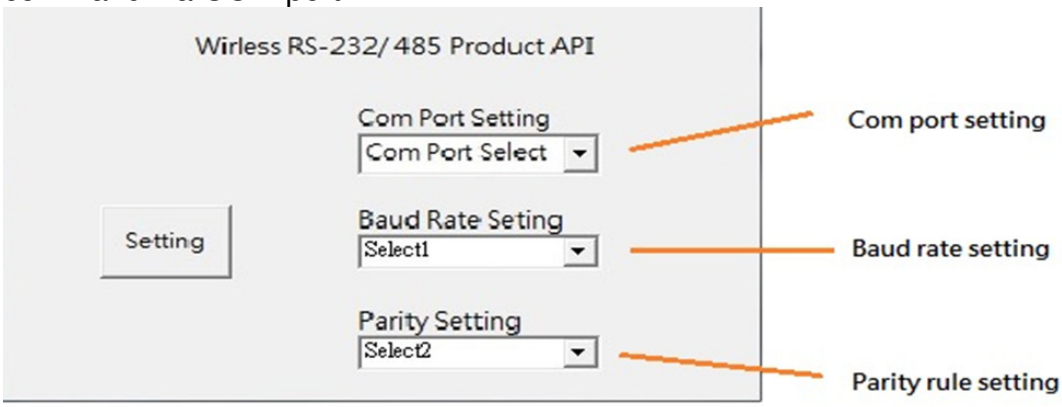
3. Quick guide
   3.1 Power input: Micro USB or Pin 9 of DB9 connector please slides the switch to the right direction. Please check the section 2.1 diagram.

3.2 The red Led named “PW” will solid on.

3.3 Default Serial Port setting:

- Baud rate: 9600 bps
- Data bit: 8
- Parity: None
- Stop bit: 1

If not, please modify the setting by using hyper terminal software and the setup command via COM port.



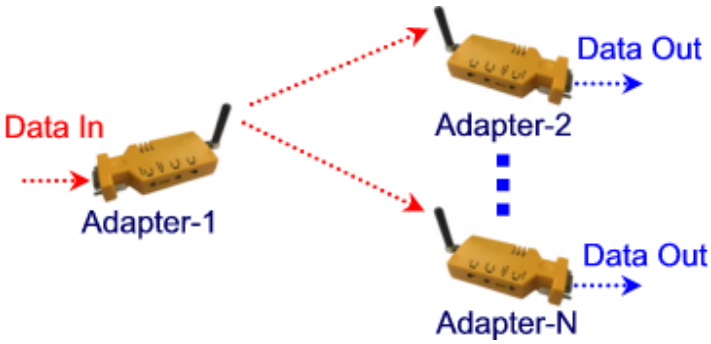
3.4 One to One connection: The communication will be acknowledged by both sides.

3.4.1 Slide the master or slave switch on the side of the adapter.
Please check the section 2.1 diagram.

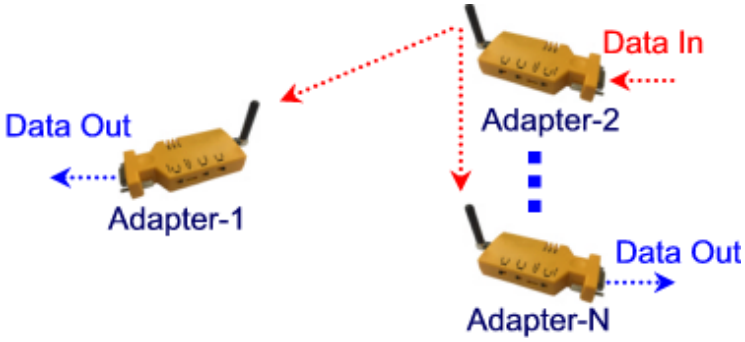
3.4.2 Pairing: Short press and release the pairing keys on the rear side of both adapters. Please check the section 2.2 diagram. The green and orange LEDs will flash for 3 times and then off. The connection is complete.

3.5 One to Many connections: The communication will broadcast and will not acknowledge the data transmission. Every device will send the data and the rest devices will receive the same data from the sender, please check the scenarios.

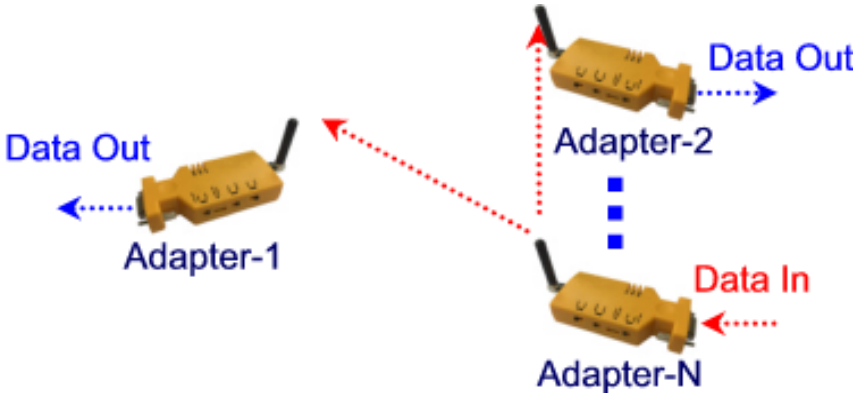
3.5.1 Broadcast-1



3.5.2 Broadcast-2



3.5.3 Broadcast-3



3.5.1 Slide one master and the others are slave.
3.5.2 Pairing: Please follow the step 3.4.2 for each slave.
3.5.3 The communication will broadcast and will not acknowledge the data transmission. for all adapters.

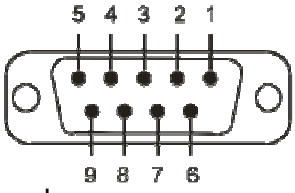
4. Internet of Things gateway: The adapter will be connected with the smart phone or Internet via the converters by the RS-232 head to head.

4.1 WiFi RS-232 converter (TCP/IP)
4.2 Ethernet RS-232 converter (TCP/IP)
4.3 Bluetooth RS-232 converter (V2.1 SPP or V4.1 BLE)

(WiFi) (Ethernet) (Bluetooth) (BLE)

5. RS232 Interface (Female DB9)

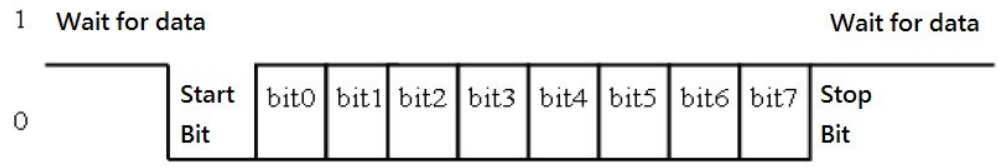
4.1 Pin out



4.2 Signals:

Pin	Signal	DTE	DCE	Description
1	CD	Input	Output	Not connected
2	TxD	Output	Input	Transmitted data
3	RxD	Input	Output	Received data
4	DSR	Input	Output	Contact manufacturer to set this
5	GND	N/A	N/A	Signal ground
6	DTR	Output	Input	Contact manufacturer to set this
7	CTS	Input	Output	Clear to send
8	RTS	Output	Input	Request to send (Default)
9	Vcc	Input	Input	Power supply (5VDC, 1.5A Max.)

6. Data format:



7. Configuration API command via UART:
(Hex format)

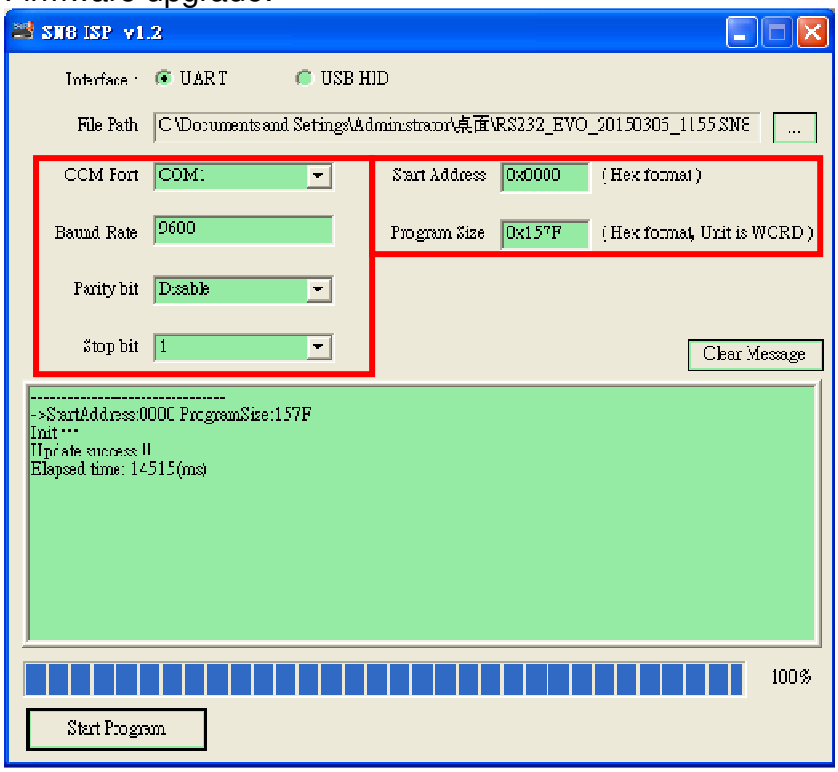
98	95	93	AB

7.1 A byte (Hex)
0X = NONE(預設值) ; 1X = ODD ; 2X = EVEN

7.2 B byte (Hex)

X0 = 9600(預設值)	X3 = 4800	X6 = 38400
X1 = 1200	X4 = 9600	X7 = 57600
X2 = 2400	X5 = 19200	X8 = 115200

8. Firmware upgrade:



Firmware upgrade:
1. Press “Pairing” key for 3 seconds, TX/RX LED is On
2. Continuous press until TX/RX LED is Off
3. Select Firmware
4. Setup:
   Start Address: 0x0000
   Program Size: 0x157F
   Baud: 9600
   None Parity
   1 Stop bit
5. Start Program

9. Specifications:
   - Support TXD/RXD/CTS/RTS
   - Frequency bands: 433 MHz@FSK modulation
   - TX power: up to 17 dBm @ 433.92MHz, Distance: 200-300m
   - Low consumption: TX: 30mA, RX: 14mA @10dBm
   - RF Data Rate : 100 Kbps
   - Receiver Sensitivity: -103 dBm @250K bps
   - Support software and API setting for Baud rate option
   - Baud rate: 1,200/2,400/4,800/9,600(Default)/19,200/38,400/57,600/115.200 bps
   - Hopping Frequency: 433.3MHz, 433.6MHz, 434MHz, 3 Chanel