

**Bluetooth Smart® V4.1 Low Energy (BLE)
Serial RS-232 Adapter
Model: BLE-232**



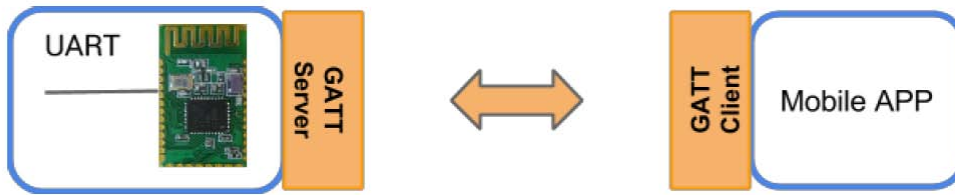
Applications:

- Automation
- Sports & fitness
- Health care & Consumer wellness
- Home application
- Automotive
- Security & Proximity
- Data Transferring

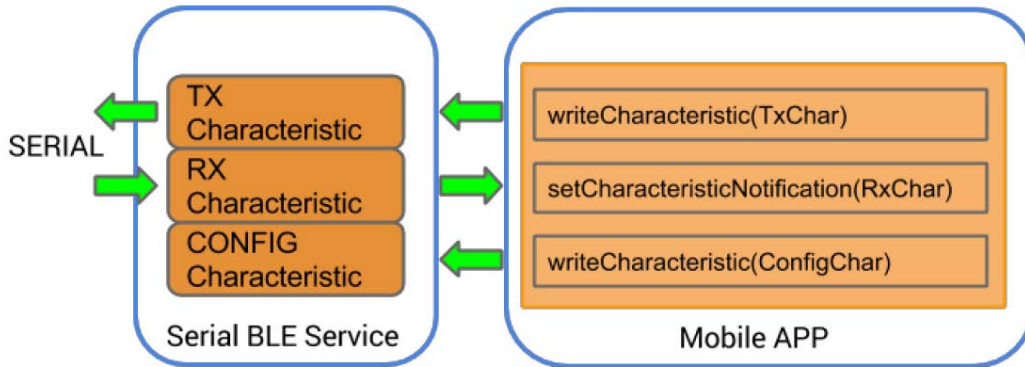
Specifications:

Frequency band	2.4GHz ISM (2.40000 – 2.4835GHz)
Microcontroller	32-bit ARM Cortex M0
On-air data rate	250 kbps, 1 Mbps or 2 Mbps
Modulation	GFSK
Output power	Programmable: +4 to -20dBm in 4dB steps
Sensitivity	-93dBm <i>Bluetooth</i> low energy -96dBm at 250kb -90dBm at 1Mbps -85dBm at 2Mbps
Radio current consumption LDO at 1.8V	16mA – TX at +4dBm output power 10.5mA – TX at 0dBm output power 13mA – RX at 1Mbps
Radio current consumption DC-DC at 3V	10.5mA – TX at +4dBm output power 8.1mA – TX at 0dBm output power 9.5mA – RX at 1Mbps
System current consumption	420nA – No RAM retention 530nA - 8k RAM retention 2µA – All peripherals in IDLE mode
Hardware Security	128-bit AES ECB/CCM/AAR co-processor

System Architecture:



GATT Service:



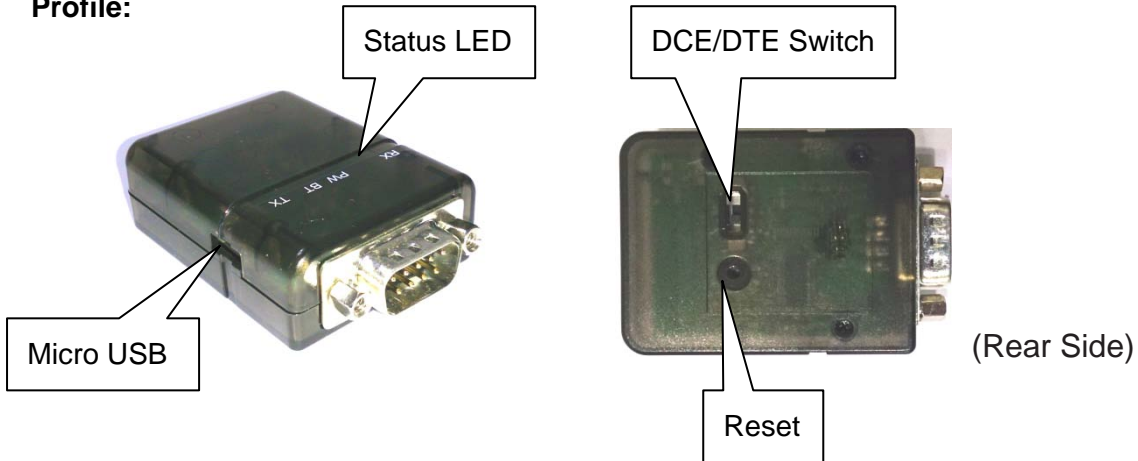
Programming Interfaces:

GATT	UUID
Serial BLE Service	ba920001-d666-4d59-b141-05960b3a4ff7
TX Char	ba920002-d666-4d59-b141-05960b3a4ff7
RX Char	ba920003-d666-4d59-b141-05960b3a4ff7
Config Char	ba920004-d666-4d59-b141-05960b3a4ff7

Configuration Command:

Function	Command
Config Serial baud rate	<baud rate>,8,<parity>,1,<flow control> ex. "115200,8,0,1,0" (baud rate 115200, no parity, no flow control)
Pin code	123456
Change Device Name	name=<device name> ex. "name=SerialBLE"

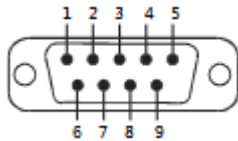
Profile:



User Interfaces:

1. DB9 Male
2. Micro USB (side): Power input
3. Slide switch (Rear side): DCE/DTE
4. Tact switch (Rear side): Reset to default setting

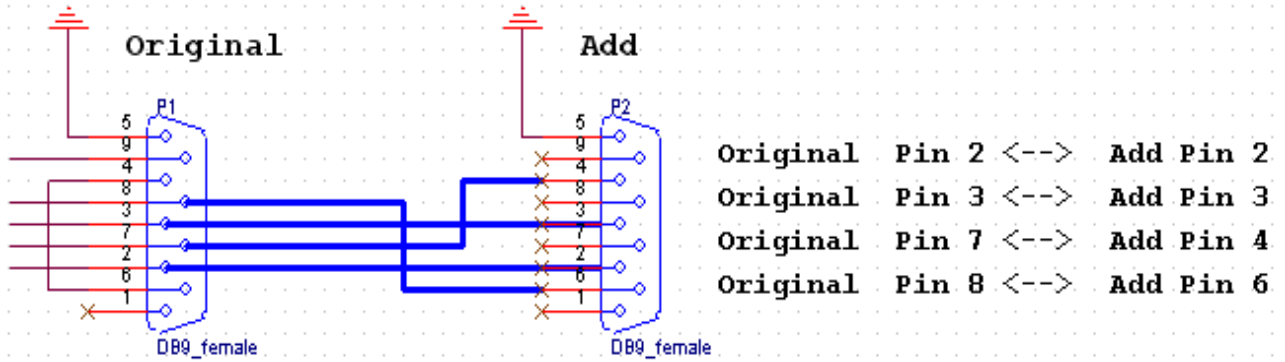
Pin-out Definition: (DB9 Male)



Signals:

Pin	Signal	DTE Direction	DCE Direction	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.)

Remark: DSR/DTR Connection



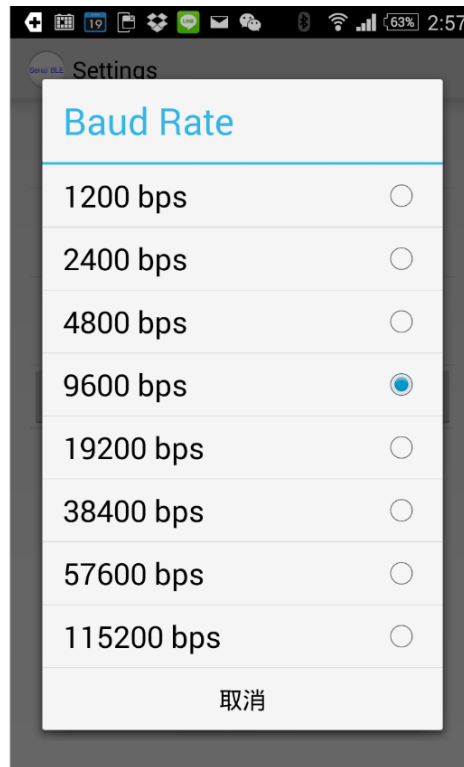
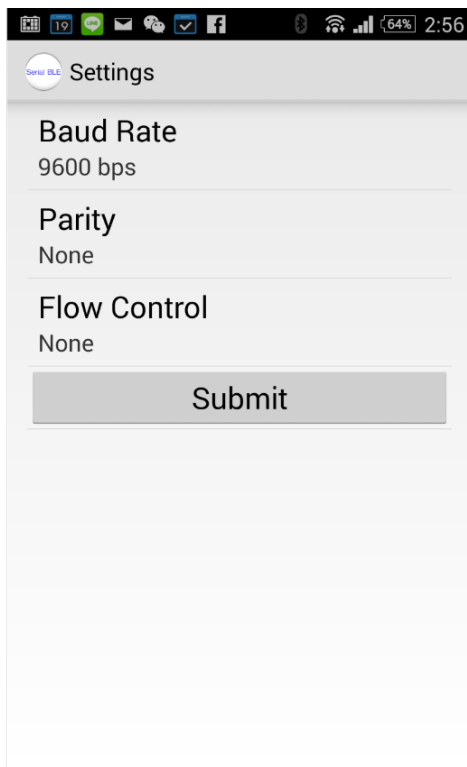
Configuration

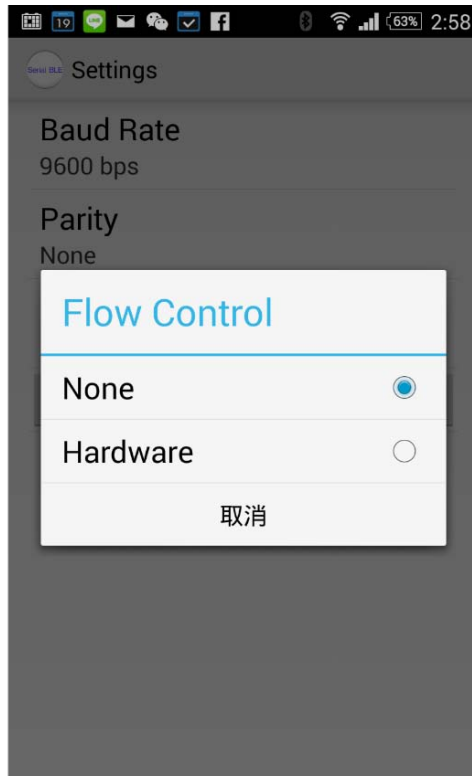
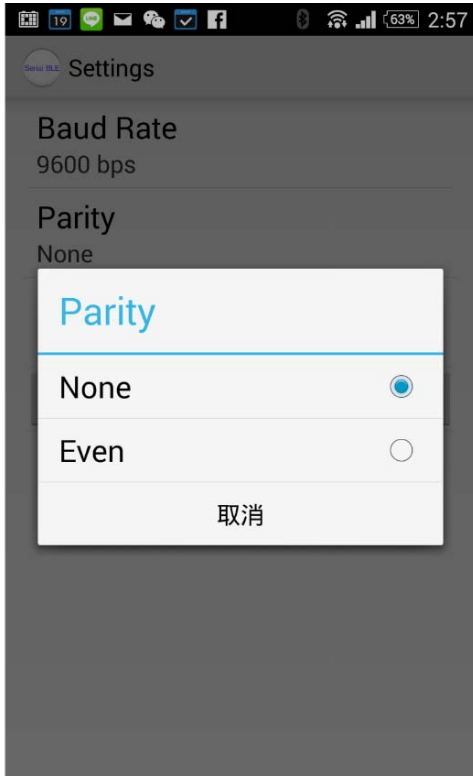
Android

Please download the APP from:

<https://play.google.com/store/apps/details?id=tw.com.uconnect.serialble&hl=en>

Screenshots:



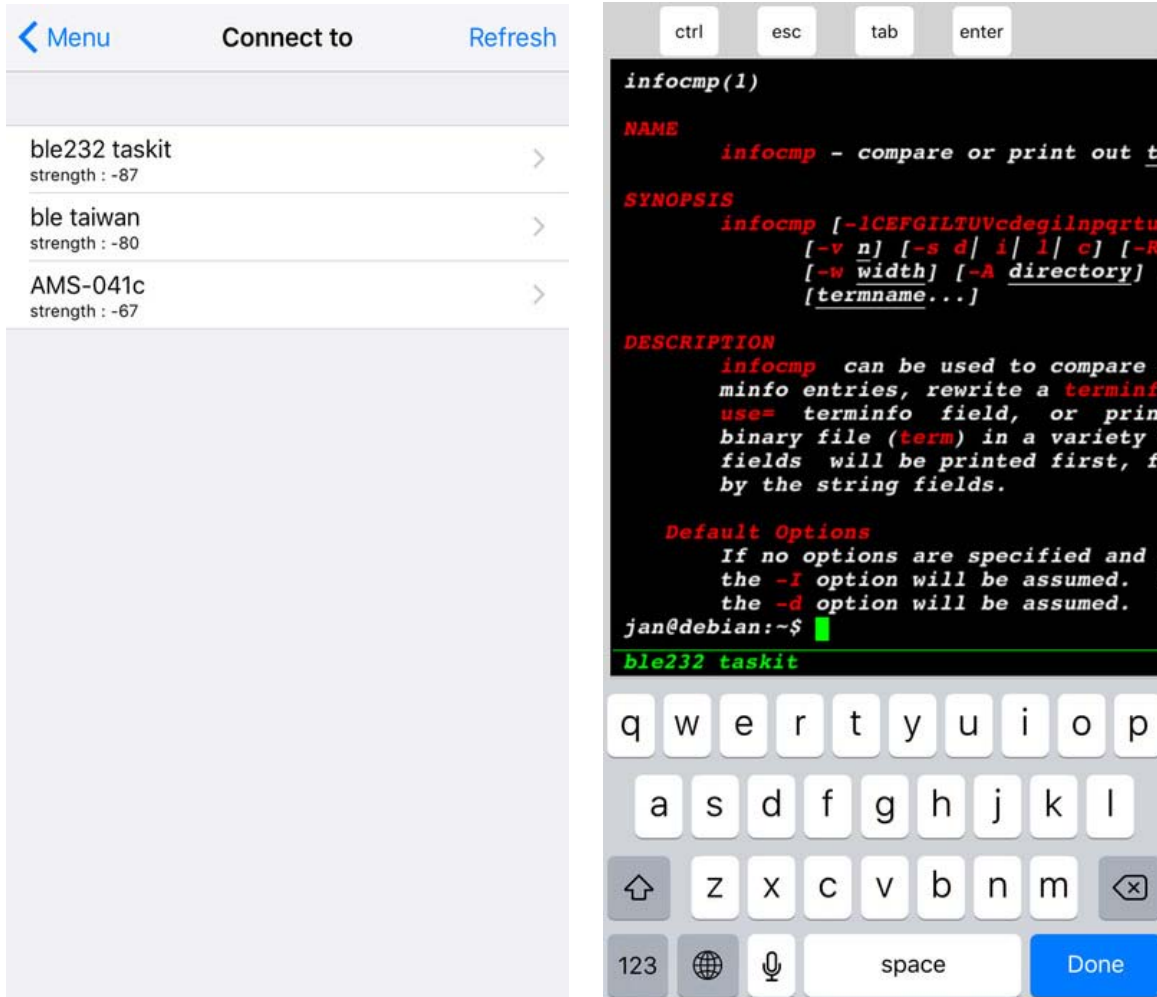


iOS

Please download the APP from:

<https://itunes.apple.com/us/app/rs232-lite/id1039883024?ls=1&mt=8>

Screenshots:



Remark: All contents are subject to change without notice.