

Bluetooth Shield V2.0

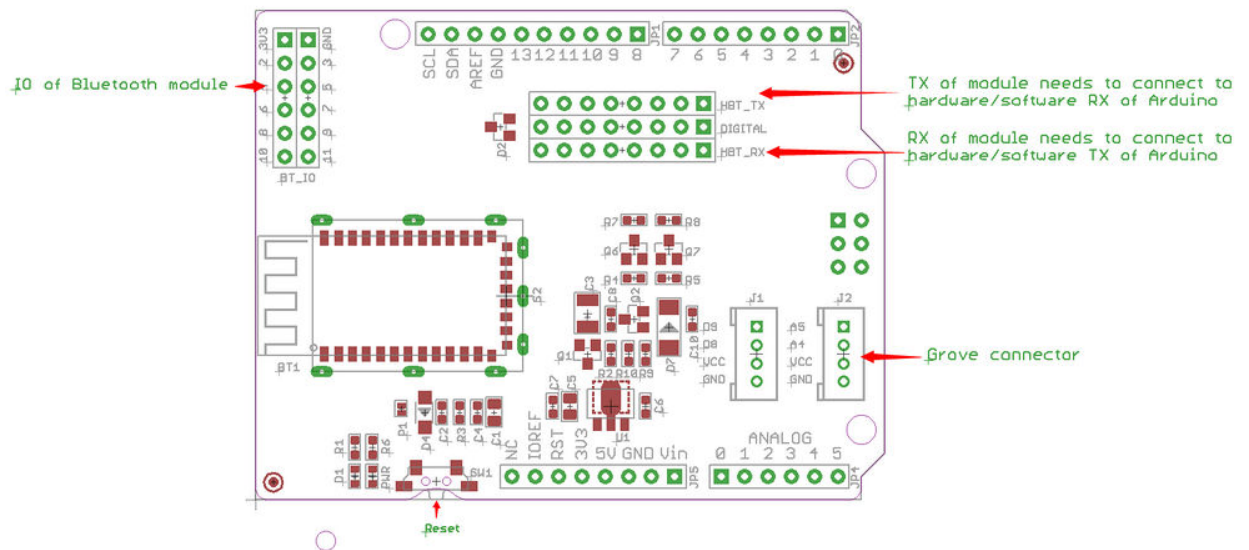


The Bluetooth Shield integrates a Serial Bluetooth module. It can be easily used with Arduino/Seeedstudio for transparent wireless serial communication. You can choose two pins from Arduino D0 to D7 as Software Serial Ports to communicate with Bluetooth Shield (D0 and D1 is Hardware Serial Port). The shield also has two Grove connectors (one is Digital, the other is Analog) for you to install Grove modules.

Features

- Input Voltage: 3.3V
- Baudrate: 9600, 19200, 38400, 57600, 115200, 230400, 460800
- Seeeduino/Arduino compatible
- Up to 10m communication distance in house without obstacle
- UART interface (TTL) with programmable baud rate
- Default Baud rate: 9600, Data bits: 8, Stop bit: 1, Parity: No parity
- Default PINCODE: "1234"
- A full set of configuration commands
- On board PCB Antenna

Interface function



Pad Type	Description
BT_IO	IO Port of Bluetooth module can be control: read, write.
BT_RX	UART Data input of Bluetooth module.
BT_TX	UART Data output Bluetooth module.
Two Grove connectors	One is Digital (D8 and D9), the other is I2C/Analog (A4 and A5).

Board Revisions and Changes

Revision 2.1

1. This version modify some issues for manufacturing.Nothing changes in circuits.

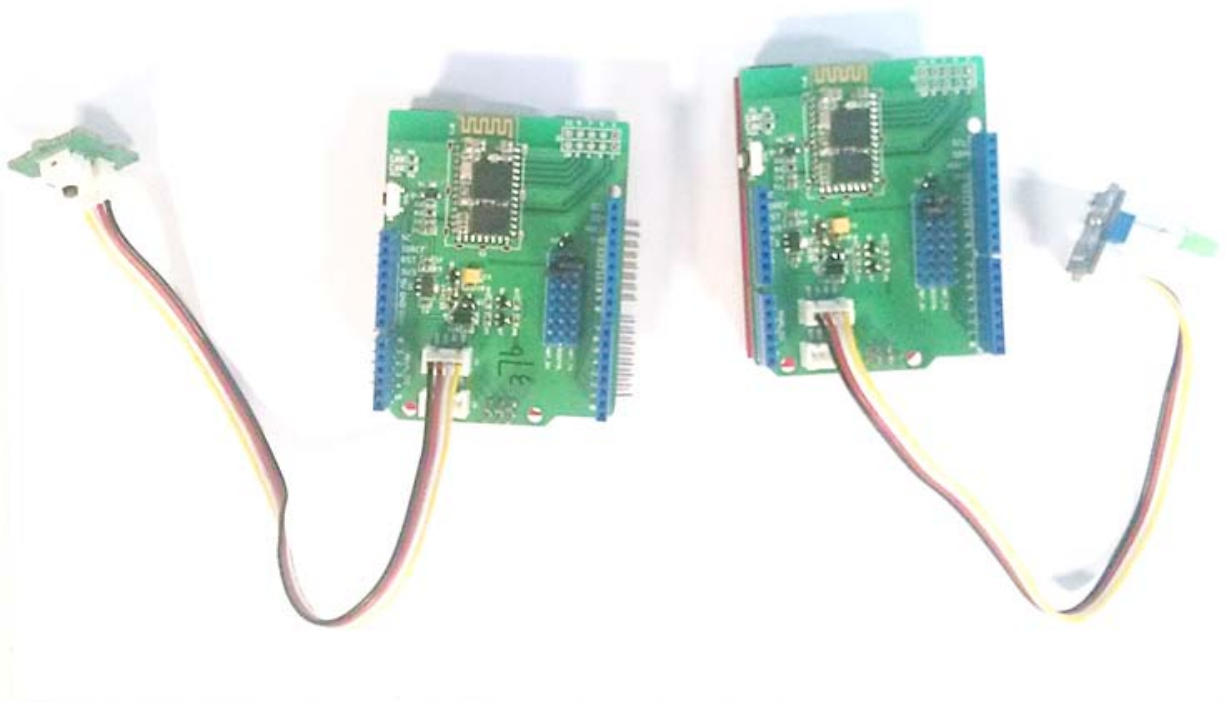
Demonstration 1 : Two Bluetooth Shield Connect

This demo will show you how to connect two Bluetooth shield.

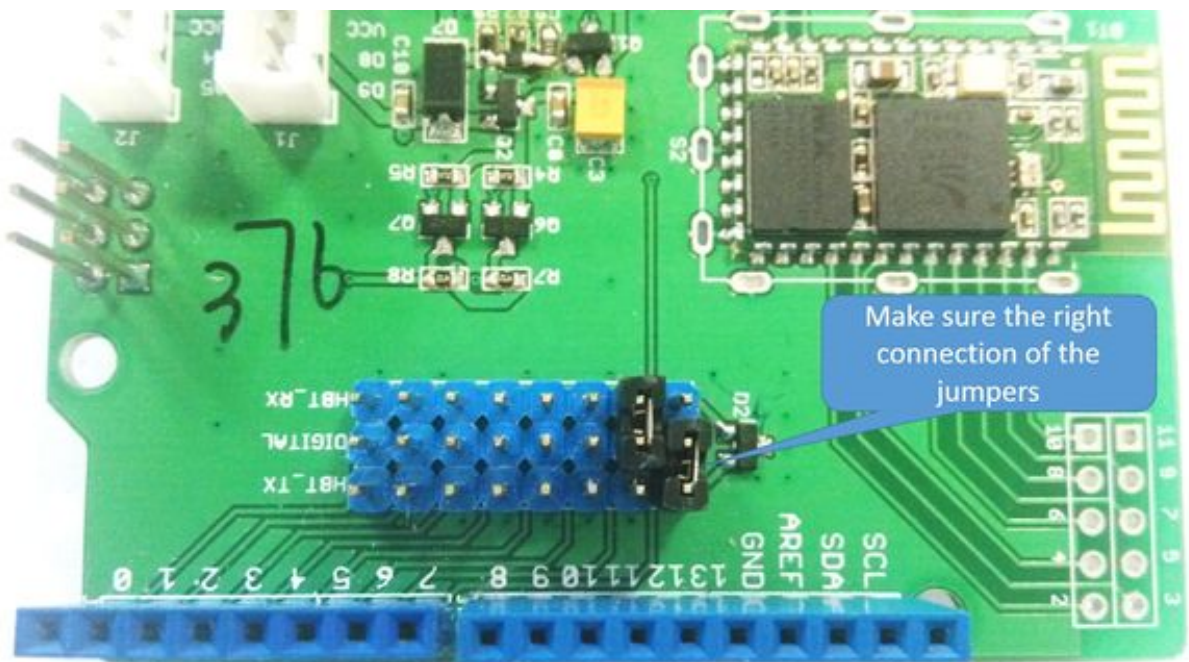
You need two piece of [Seeeduino V3.0](#), One Bluetooth Shield as Master while the other as Slave.

Hardware Installation

as following:

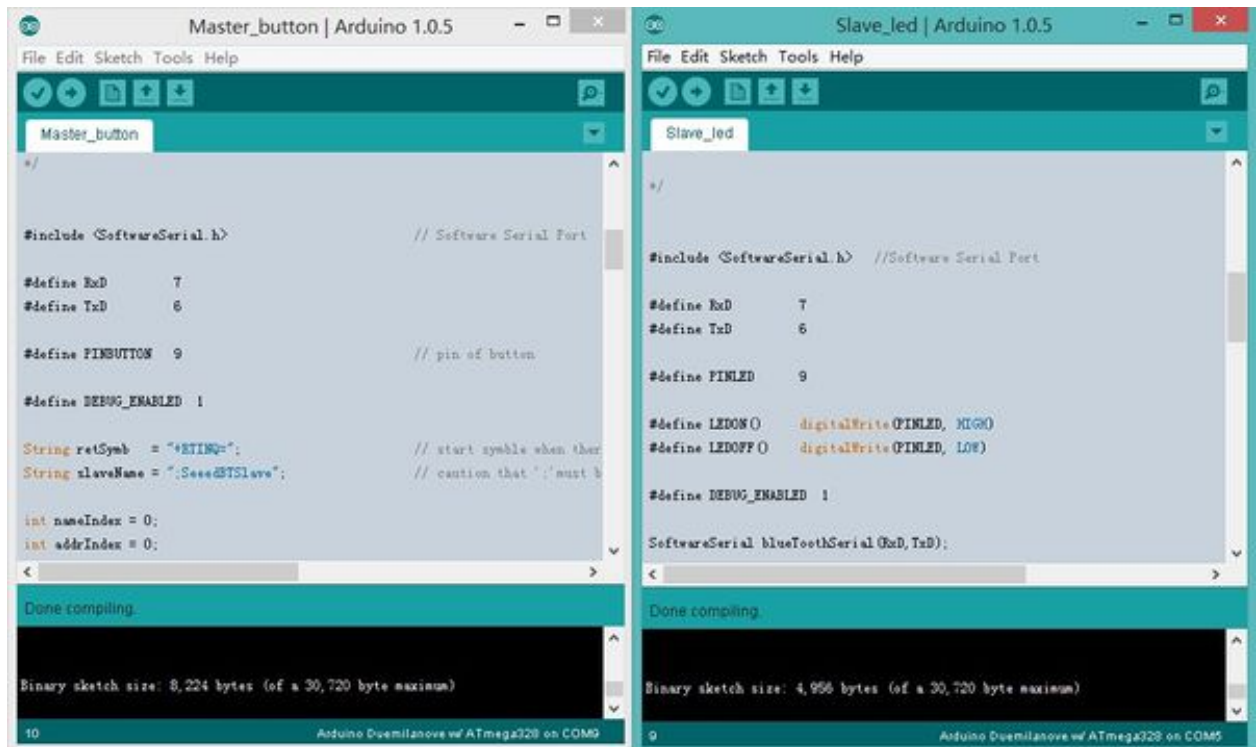


make sure the right connection of the jumpers



Download Code and Upload

1. You can download the code in github, Bluetooth Shield V2 Demo Code, then extract it to libraries folder of Arduino.
2. Open Arduino IDE, open File -> Examples -> Bluetooth_Shield_V2_Demo_Code -> Master_Button, then you can open the code of Master
3. Open Arduino IDE, open File -> Examples -> Bluetooth_Shield_V2_Demo_Code -> Slave_led, then you can open the code of Slave
4. Click Upload to Upload the code.



Check The Result

1. After finish Uploading the code to both Master and Slave, reset the two devices meanwhile
2. You can see the led blink, indicate that devices was initializing and connecting.
3. After about servel seconds, led on, indicate that Master and Slave had connected.

Note: If the phenomenon is not observed above, try unplugging the power and re-plug in again.

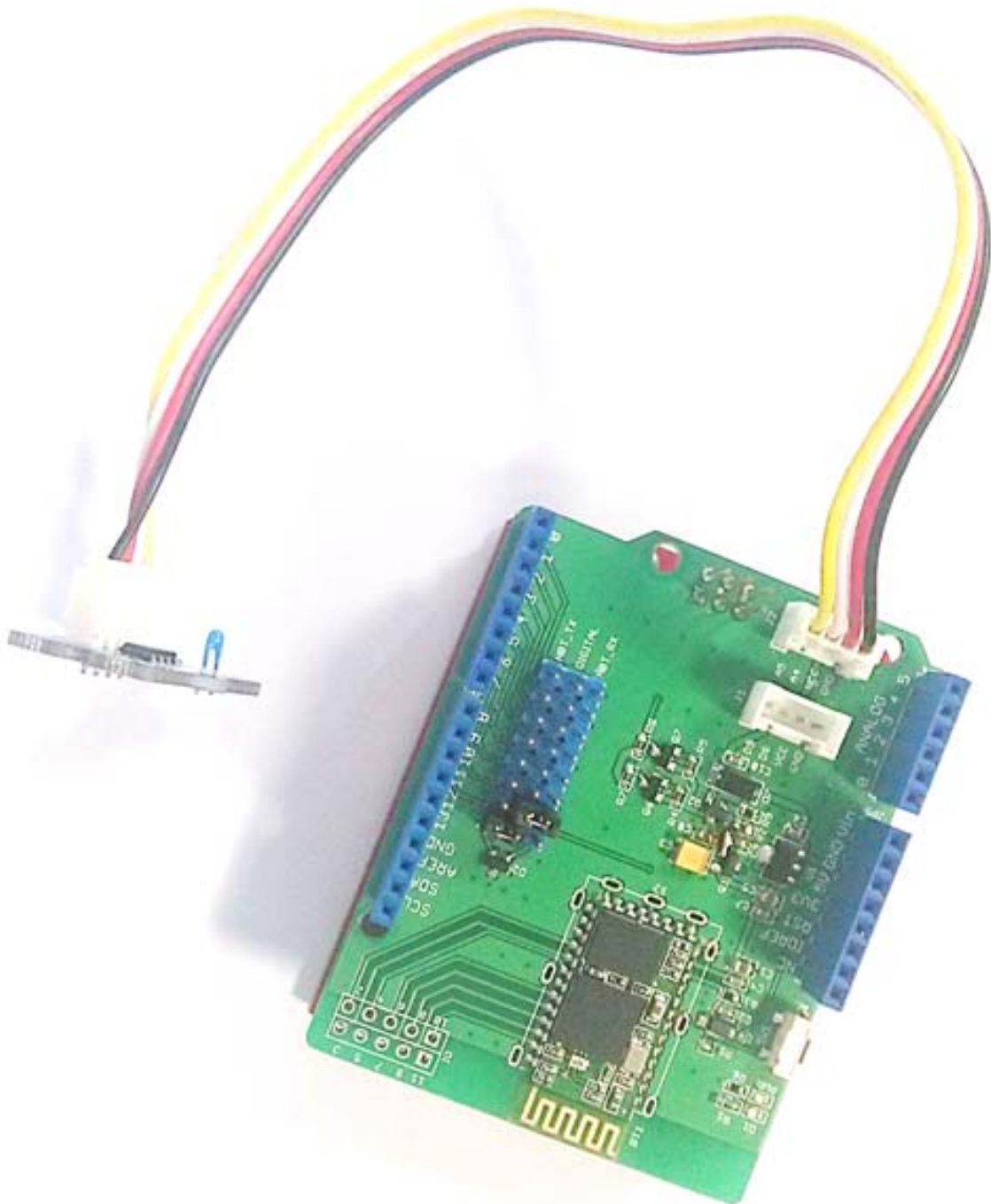
Demonstration 2 : Connect to Smart Phone

This demo will show you how to connect Bluetooth Shield to a Smart Phone.

We need a Seeeduino V3.0, a Smart Phone that with Bluetooth function.

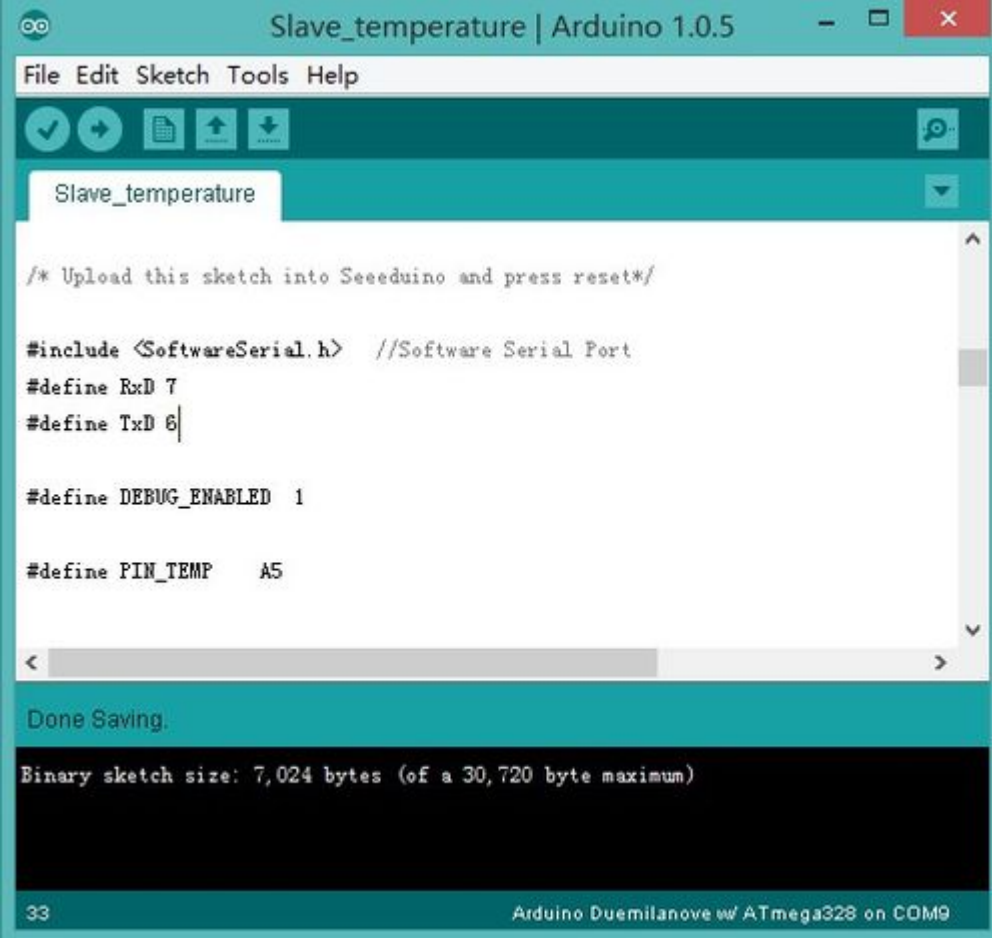
Via a Bluetooth SPP App

Hardware Installation



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4. Click Upload to Upload the code.



```
Slave_temperature | Arduino 1.0.5
File Edit Sketch Tools Help
Slave_temperature
/* Upload this sketch into Seeeduino and press reset*/

#include <SoftwareSerial.h> //Software Serial Port
#define Rx D 7
#define Tx D 6

#define DEBUG_ENABLED 1

#define PIN_TEMP A5

33 Arduino Duemilanove w/ ATmega328 on COM9
Done Saving.
Binary sketch size: 7,024 bytes (of a 30,720 byte maximum)
```

Download a SSP App

Here we use an Android Phone, Mine is a Xiaomi 2A, open Google Play, search bluetooth spp, you can find many results.



Most of this app are useful, just choose one and have try.

Get Temperature

After installing an SPP app, try connecting it to SeeedBTSlave, pin code is: "0000"

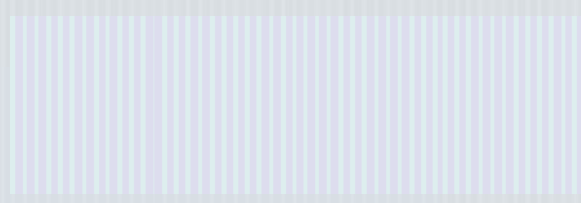


When connect is ok, send 't' to SeedBTSlave, and you can get the temperature now:

Txd: 1B Rxd: 18B Running: 15s

等待接收数据中...

temperature: 24



t



Q W E R T Y U I O P
A S D F G H J K L
↑ Z X C V B N M ⊗
123 符 , _ . 中/英 ↵