



## Ks0055 keyestudio Bluetooth Module

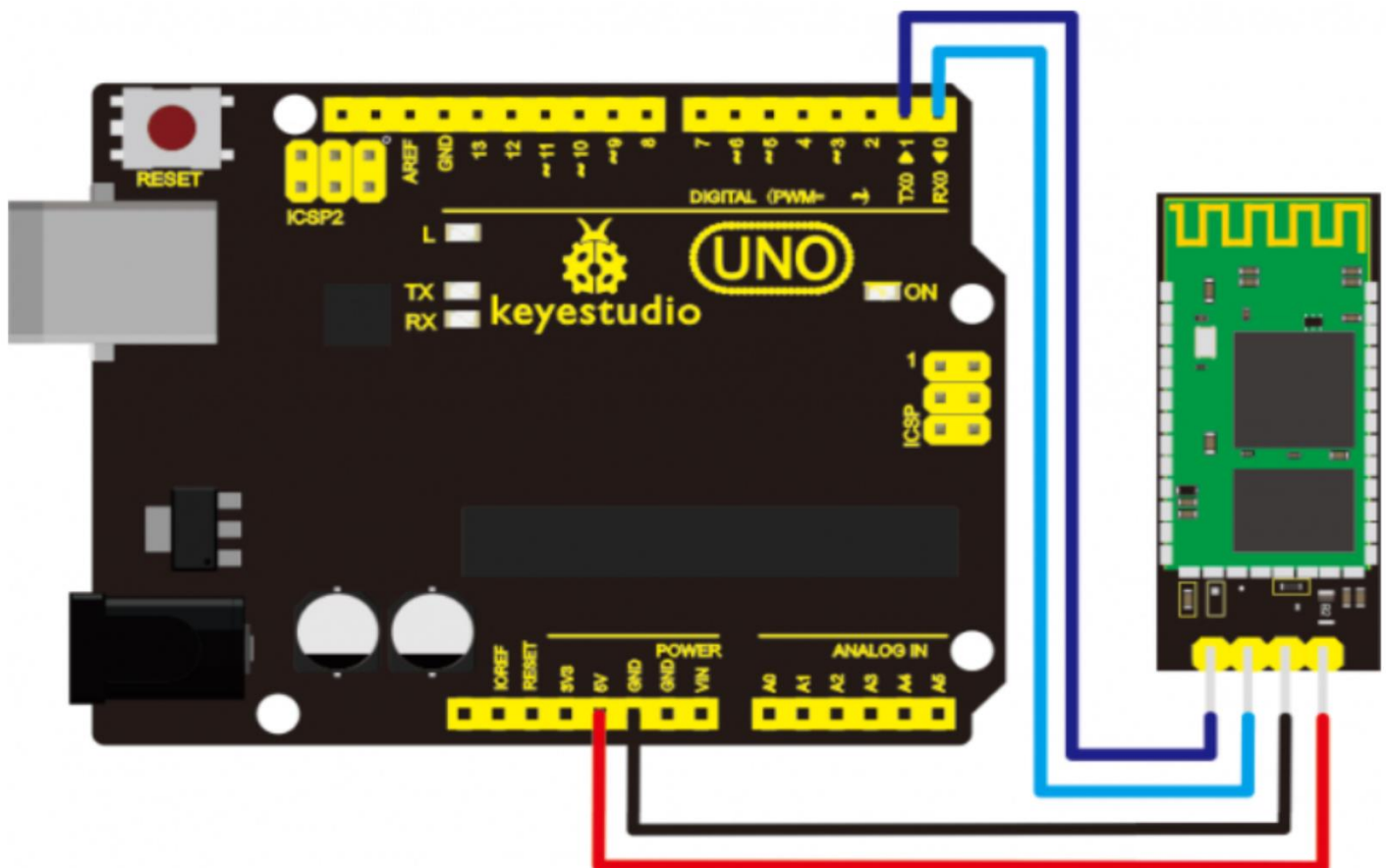
### Introduction:

This Bluetooth module can easily achieve serial wireless data transmission. Its operating frequency is among the most popular 2.4GHz ISM frequency band (i.e. Industrial, scientific and medical). It adopts Bluetooth 2.1+EDR standard. In Bluetooth 2.1, signal transmit time of different devices stands at a 0.5 seconds interval, so that the workload of Bluetooth chip can be reduced substantially and more sleeping time can be saved for Bluetooth. This module is set with serial interface, which is easy-to-use and simplifying overall design/development cycle.

### Specification:

- Bluetooth protocol: Bluetooth 2.1+ EDR standard
- USB protocol: USB v1.1/2.0
- Operating frequency: 2.4GHz ISM frequency band
- Modulation mode: Gauss frequency Shift Keying
- Transmit power:  $\leq 4\text{dBm}$ , second stage
- Sensitivity:  $\leq -84\text{dBm}$  at 0.1% Bit Error Rate
- Transmission speed: 2.1Mbps(Max)/160 kbps (Asynchronous) ; 1Mbps/1Mbps (Synchronous)
- Safety feature: Authentication and encryption
- Supported configuration: Bluetooth serial port (major and minor)
- Supply Voltage: 5 V DC 50mA
- Operating temperature:  $-20$  to  $55^{\circ}\text{C}$

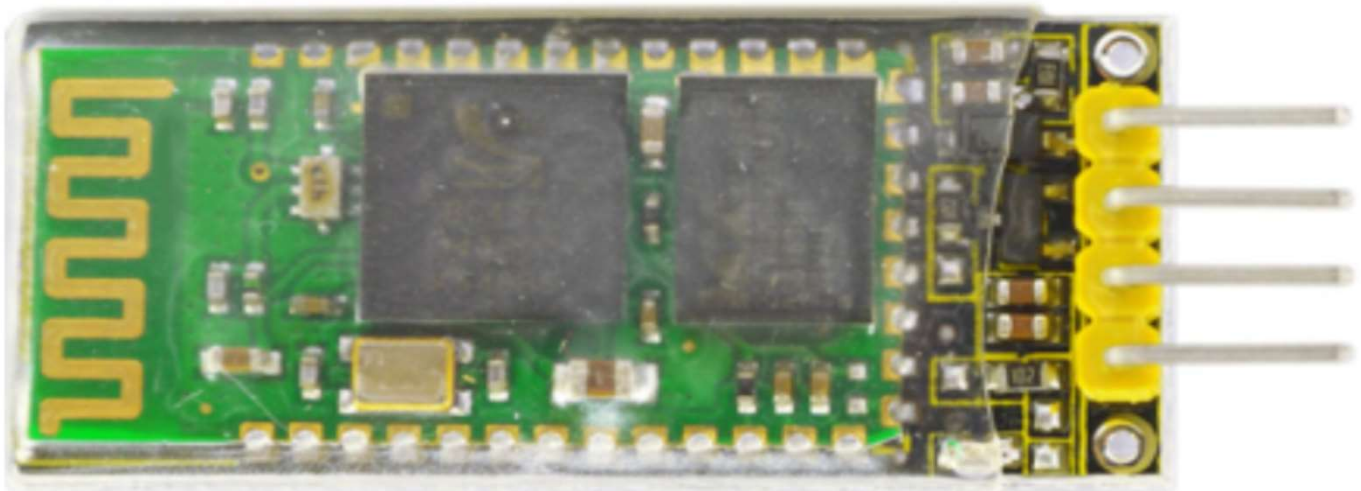
### Connection Diagram





## Sample Code:

```
int val;
int ledpin=13;
void setup()
{
  Serial.begin(9600);
  pinMode(ledpin,OUTPUT);
} void loop()
{ val=Serial.read();
  if(val=='a')
  {
    digitalWrite(ledpin,HIGH);
    delay(250);
    digitalWrite(ledpin,LOW);
    delay(250);
    Serial.println("keyestudio");
  }
}
```



## Resources:

[https://wiki.keyestudio.com/Ks0055\\_keyestudio\\_Bluetooth\\_Module](https://wiki.keyestudio.com/Ks0055_keyestudio_Bluetooth_Module)