

# GOTRONIC HC06 Bluetooth Module User Manual

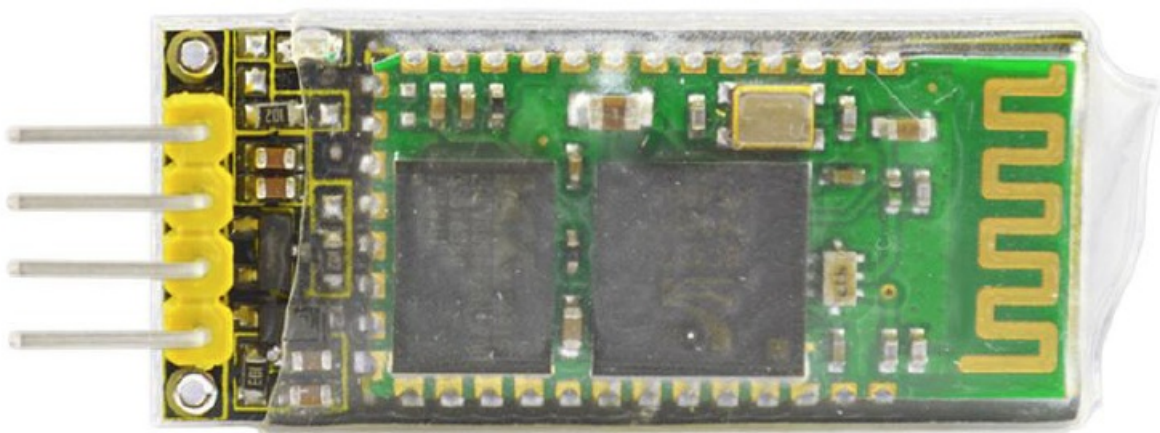
[Home](#) » [GOTRONIC](#) 

## Contents

- [1 GOTRONIC HC06 Bluetooth Module](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 Introduction](#)
- [5 Specification](#)
- [6 Connection Diagram](#)
- [7 Documents / Resources](#)



## GOTRONIC HC06 Bluetooth Module



## Product Information

The Bluetooth Module operates on the 2.4GHz ISM frequency band with a Gauss frequency Shift Keying

modulation mode. It has a transmit power of 4dBm, second stage, and a sensitivity of -84dBm at 0.1% Bit Error Rate. The transmission speed is 2.1Mbps (Max)/160 kbps (Asynchronous), 1Mbps/1Mbps (Synchronous). The module has authentication and encryption safety features and supports a Bluetooth serial port (major and minor) configuration. It requires a supply voltage of 5 V DC 50mA and has an operating temperature range of -20 to 55.

## Product Usage Instructions

1. Connect the Bluetooth module to the device according to the connection diagram provided in the user manual.
2. Upload the sample code provided in the user manual to the device using programming software.
3. Power on the device and ensure that it is within the operating temperature range.
4. Pair the device with a Bluetooth-enabled device by following the instructions provided in the user manual for the specific Bluetooth serial port configuration.
5. Once paired, use the Bluetooth-enabled device to send commands to the device through the Bluetooth module.
6. The sample code provided in the user manual allows for the control of an LED connected to pin 13 of the device through Bluetooth communication. Modify the code as necessary for specific usage needs.

## 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).

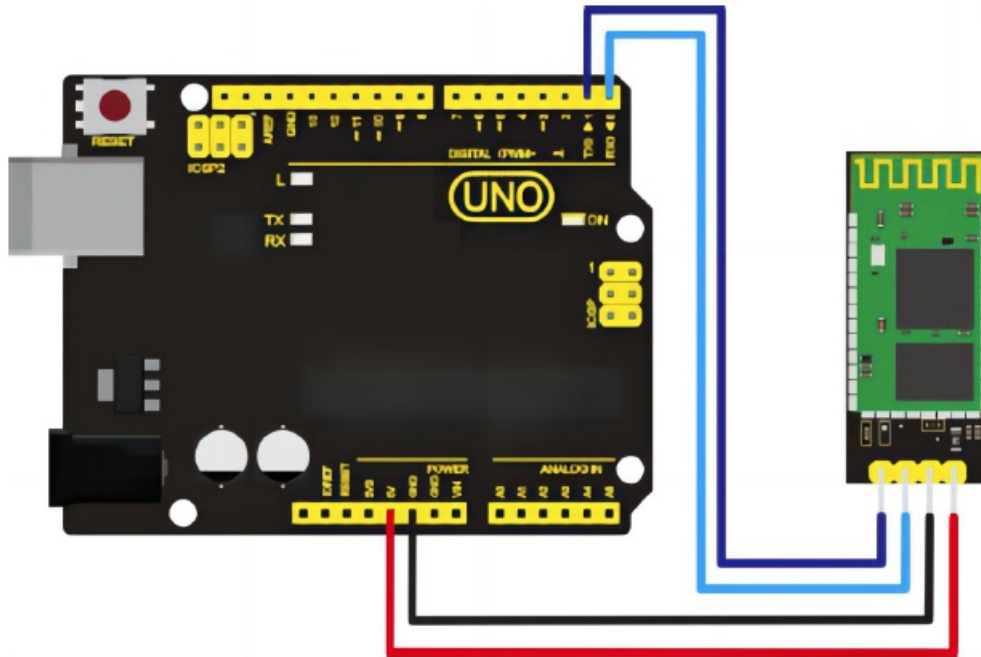
It adopts Bluetooth 2.1+EDR standards. In Bluetooth 2.1, the signal transmit time of different devices stands at a 0.5 seconds interval, so that the workload of Bluetooth chip can be reduced substantially and more sleeping time can be saved for Bluetooth.

This module is set with a serial interface, which is easy to use and simplifies the 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°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("Gotronic"); } } *****
```

## Documents / Resources

# GOTRONIC HC06 Bluetooth Module



**Features**

- The Bluetooth module can easily achieve serial-to-serial data transmission. Its working frequency is ranging from 2.402 GHz to 2.480 GHz (Frequency band is a licensed radio channel).
- Easy-to-use! GOTRONIC HC06 module is Bluetooth 1.1, supported serial-to-serial data transfer at a 115,200 baud rate, or the baud rate of Bluetooth chip can be changed externally and can support RS-485 serial-to-Bluetooth.
- The module is in an ultra-thin package, which is easy to use and supporting serial-to-Bluetooth power pins.

**Specifications**

- Bluetooth protocol: Bluetooth 1.1 or 2.0 module
- I/O pinout: 10B or 11.5

# [pdf] User Manual

## HC06 Bluetooth Module, HC06, Bluetooth Module, Module