

Changing SSID of HC-05 Bluetooth Module

The Bluetooth module you are provided with has the following credentials:

SSID: HC05
Passkey: 1234

Since all Bluetooth module has the same SSID, it will be difficult to recognize which one to connect with. Hence, you should CHANGE the SSID of the Bluetooth module.

To change the SSID (name) of the HC-05 Bluetooth module using an Arduino, follow this guide. This process involves entering AT command mode and sending specific commands to configure the module.

Components Needed

- **Arduino Uno** (or compatible board)
- **HC-05 Bluetooth Module**
- **Jumper wires**
- **USB cable** for Arduino

Wiring Connections

Connect the HC-05 module to the Arduino as follows:

- **HC-05 VCC** to **Arduino 5V**
- **HC-05 GND** to **Arduino GND**
- **HC-05 TX** to **Arduino RX (Pin 0)**
- **HC-05 RX** to **Arduino TX (Pin 1)**
- **HC-05 Key/Enable pin** to **5V** (to enter AT command mode).

Step-by-Step Instructions

Step 1: Upload Basic Code

Open the Arduino IDE and upload a simple sketch that initializes serial communication. Here's an example code snippet:

```
void setup() {  
    Serial.begin(38400); // Set baud rate for HC-05  
}  
  
void loop() {  
    // No additional code needed here  
}
```

Step 2: Power Cycle the Module

- Hold the button on HC-05 while powering up
- The LED on the HC-05 should blink every two seconds, indicating it is in AT command mode.
- Release the button after powering up

Step 3: Open Serial Monitor

1. In the Arduino IDE, open the Serial Monitor (Ctrl + Shift + M).
2. Set the baud rate to **38400**.
3. Change "Line ending" to **Both NL & CR**.

Step 4: Send AT Commands

Now you can send AT commands to change the SSID and password:

1. Check Module Response:

- Type **AT** in the Serial Monitor and press Send. You should receive an **OK** response, confirming that the module is ready.

2. Change Bluetooth Name (SSID):

- To change the name, use the command format: **AT+NAME=NilgiriXXXXYY**
- Replace **XXXXYY** with your lab and table number:
 - XXX = Your lab number (e.g., 114)
 - YY = Your table number (e.g., 15)
- Example: For lab 114, table 15, type:

```
AT+NAME=Nilgiri11415
```

- Press Send and wait for the response "OK"

Note: Ensure there are no spaces in the name and maintain the exact format: "Nilgiri" followed by lab number (3 digits) and your table number (2 digits).

DO NOT CHANGE THE PASSWORD. ONLY SSID

3. Check Current Settings:

- To verify the current name and password, you can use:
and

```
AT+NAME?
```

Step 5: Exit Command Mode

To exit command mode:

1. Disconnect the Key pin from VCC.
2. Power cycle the HC-05 by disconnecting and reconnecting it.

Step 6: Verify Changes

Reconnect your device to check if it recognizes the new name:

1. Use a smartphone or another Bluetooth-enabled device to search for Bluetooth devices.
2. Look for `YourNewName` in the list of available devices.

Important Notes

- Ensure all connections are secure; incorrect wiring may damage your module.
- The default baud rate for communication with HC-05 in AT command mode is typically set at **38400**, while in data mode it might be set at **9600**.

By following these steps, you can successfully change the SSID of your HC-05 Bluetooth module using an Arduino setup.

Once this is done, go ahead with two activities of the lab.

Reference Video (RX and TX connections are wrong in the video, still helpful)

HC-05 Bluetooth Module | Change Name and Password | AT Commands

Hey friends in this video I will show you how you can change the Name and Password of your HC-05 Bluetooth Module

 <https://www.youtube.com/watch?v=DgFZE16UKTM>

