

APPLICATION 1 :Using HC06 Bluetooth to Serial Wireless UART Adaptors with Arduino

Component needed:

- Arduino UNO
- Arduino HC-06 Serial Port Bluetooth
- Jumper wires

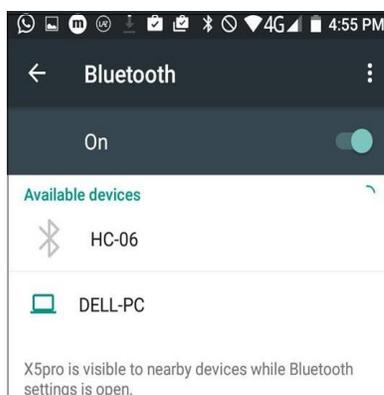
This tutorial will explain on how to setup communications between an Arduino and a Bluetooth device running serial terminal software. The purpose is to control a digital output pin on the Arduino by sending text commands from the smartphone, and also sending text from the Arduino back to the smartphone.

1. Connect the HC-06 Bluetooth serial port to Arduino UNO.

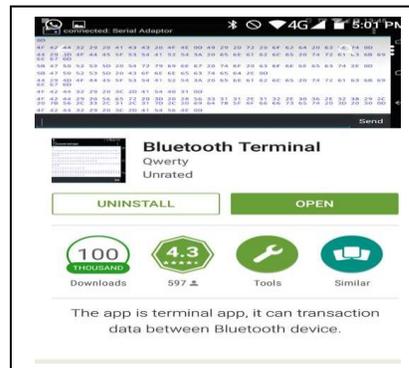
The pin's connection as follow:

Arduino	Bluetooth Module
5V	Vcc
GND	GND
D10	TX
D11	RX

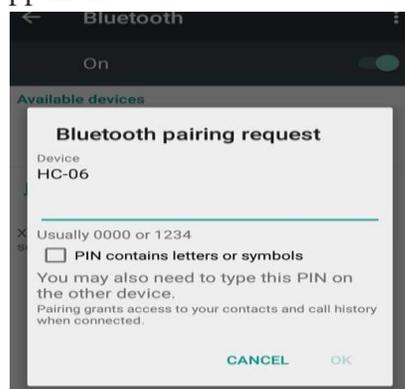
2. Upload the sketch into the arduino IDE. You can get the code from Application1_Sketch.
3. You may notice that the HC-06 bluetooth serial port will blink, means there is no connection to other devices.
4. You will need to pair your Bluetooth module to the smartphone. To do this, enter the Bluetooth menu in setting, then search for new devices. After a moment the device "HC06" will appear, for example:



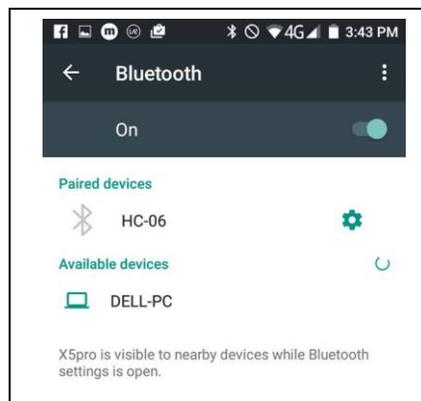
5. Install the “*Bluetooth Terminal*” by *qwerty* from Google Play.



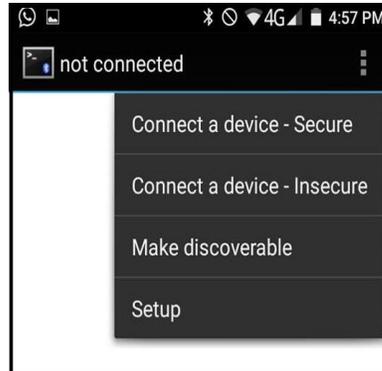
6. Once the app has been installed, Tap the HC06 in the list, and you will then be asked for the PIN – enter 1234. Finally, open your terminal app on the smartphone, and select "Connect a device" from the app menu.



7. The LED on the Bluetooth module should stay on and the app will show "connected: HC-06" or “paired devices”.



8. Then open the bluetooth terminal and choose “Connect a device-Secure”.



9. After the device is connected, send the number 1 through the terminal and the onboard LED on the Arduino should turn on. Send 2 and it should turn off.

