BINDING HC-05 BT MODULE AND CROSSFIRE

You need to use a usb-ttl/ftdi addapter and a serial com terminal (e.g. Serial Monitor from Arduino IDE, or Hércules) in order to send these AT Commands to the HC-05 BT module. You also need to init the HC-05 in AT Command mode. For more information about how to do it you can follow this link:

https://github.com/raul-ortega/u360gts/blob/master/docs/Bluetooth_english_version.pdf)

If you are an Arduino user, you can configure your HC-05 as explained here:

http://www.techbitar.com/modify-the-hc-05-bluetooth-module-defaults-using-at-commands.html

Once you have your HC-05 ready to receive AT commands follow these steps:

AT+RMAAD Clear any paired devices.

AT+ROLE=1 Set mode to Master.

AT+RESET After changing role, reset is required.

AT+CMODE=0 Allow connection to any address.

AT+INQM=0,5,5 Inquire mode - Standard, stop after 5 devices found or after 5 seconds.

AT+PSWD=1234 Set PIN.

AT+INIT Start Serial Port Profile (SPP) (If Error(17) returned - ignore as profile already loaded).

AT+INQ Start searching for devices.

A list of devices found will be displayed, one of which is the slave module. The format of the output is:

+INQ:address,type,signal

The address of the module is what we need and is in the format:

4:3E:9A440B

NOTE: *We need to replace the colons with commas when we use the address with the following commands.*

If you get more than one device listed and don't know which one is the slave module Crossfire, you can query the module for it's name using:

AT+RNAME?

e.g. (don't forget to change the colons to commas)

AT+RNAME? 4,3E,9A440B
> CROSSFIRE XXXX

Once we are happy we have the correct slave address, we need to pair with it, so carry on with

the next set of commands:

AT+PAIR=4,3E,9A440B,10 The timeout is in seconds and if you need to type in the pin on the slave device you need to give enough time to do this.

AT+BIND=4,3E,9A440B Set bind address to the slave address
AT+LINK=4,3E,9A440B Connect to slave.

I will post a link to the arduino directions in the next post. Mr. Ortega I think it would be a huge help if you could add these directions to github.

Im currently using a 57600 baudrate. 9600 baudrate seemed to drop telemetry repeatedly. I didnt try any other baudrates. I know the crossfire is made to run at 57600 for mavlink so thats what I used.