



## Eachine Trashcan 2S Brushless Whoop Racing Drone FlySky Version User Guide

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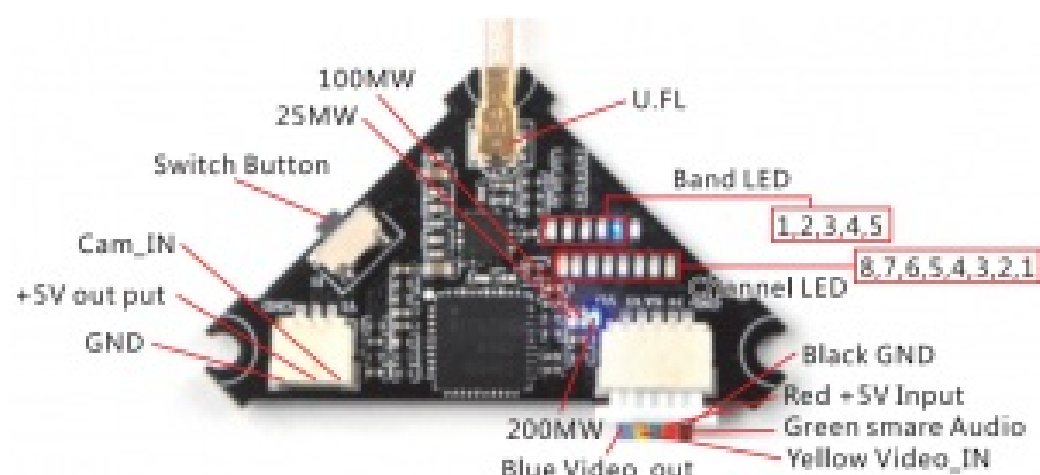
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## Specifications

<b>Brand Name:</b> Eachine
<b>Item Name:</b> 2S 75mm Brushless Whoop racer drone BNF
<b>Wheelbase:</b> 75mm
<b>Size:</b> 98mm*98mm*36mm
<b>Weight:</b> 33g(without battery)

## VTX Bands and Channels setup

Blue LEDS and Red LEDS light on. indicating frequency  
5917MHZ( BANDS and CHS)  
Blue LED 1 and Red LED 2 light on, indicating frequency  
5845MHZ(BAND1 and CH2)



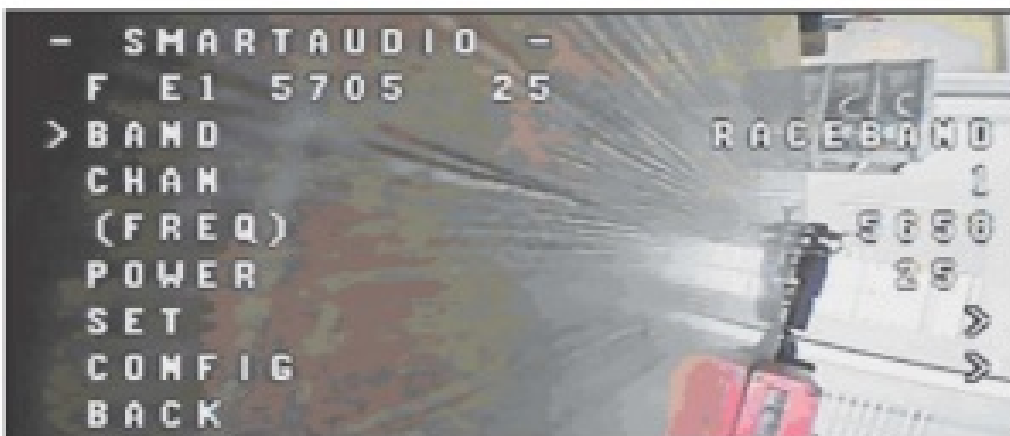
Frequency and channel frequency table:

FR—————CH	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
Band1(A)	5865M	5845M	5825M	5805M	5785M	5765M	5745M	5725M
Band2(B)	5733M	5752M	5771M	5790M	5809M	5828M	5847M	5866M
Band3(E)	5705M	5685M	5665M	5665M	5885M	5905M	5905M	5905M
Band4(F)	5740M	5760M	5780M	5800M	5820M	5840M	5860M	5880M
Band5(R)	5658M	5695M	5732M	5769M	5806M	5843M	5880M	5917M

There are 3 ways to switch the vtx channels:

1. Long press the switch button to change the Band of the VTX, shorter press the switch button to change the channels of the VTX. {Can't save ,it will lost the channel while re-power for the Trashcan since the SmartAudio function enabled)
2. Go to Betaflight CU ,type the command:  
Setvtx\_band=3  
Setvtx\_channel=1  
Setvtx\_freq=5705  
save  
**Notes:** The vtx\_freq should match the vtx\_band and vtx\_channle as the VTX Channel list shows. For example, if you setvtx\_freq=5732, you should setvtx\_band=5 and vtx\_channel=3
3. Enable Smart audio for UART1, then move the stick of the transmitter (THR MID+YAW LEFT + PITCH UP) to enter OSD Menu, Enter to Features, then enter to VTXSA to set VTX Band and channel

Identifier	Configuration/MSF	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB HCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled • AUTO •	Disabled • AUTO •	Disabled • AUTO •
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled • AUTO •	Disabled • AUTO •	TBS SmartAud • AUTO •
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled • AUTO •	Disabled • AUTO •	Disabled • AUTO •



## Binding procedure

1. Press and hold the bind button and then Plug the USB to power for the Crazybee F4 PROFS flight controller, the LED Combo(2 red LED an 2 white LED) will blinking fast, this indicate the Crazybee F4 PROFS flight controller is in binding mode and then release the binding button

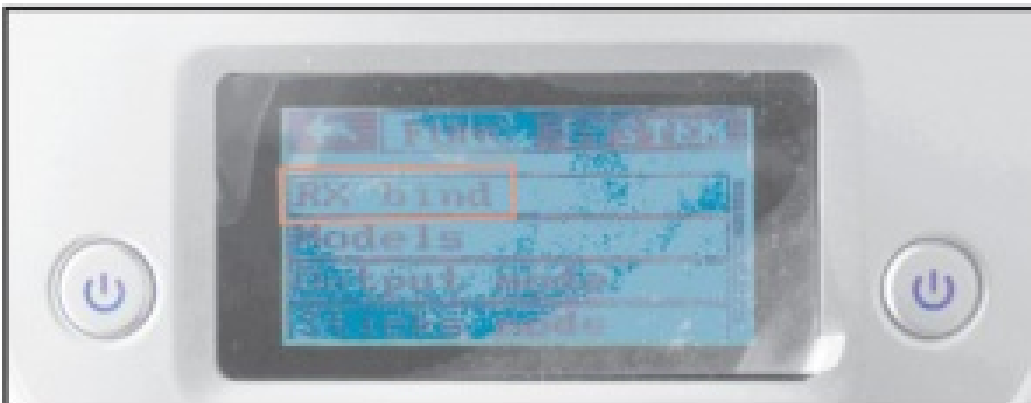


Another easy way to getting into binding mode(Need the latest Firmware):

Plug USB and go to the CLI command in the Betaflight configurator ,then type “bind\_rx\_spi” , the Crazybee F4FS Pro flight controller will getting into binding mode, and then you just make the Flysky transmitter to Binding with it.

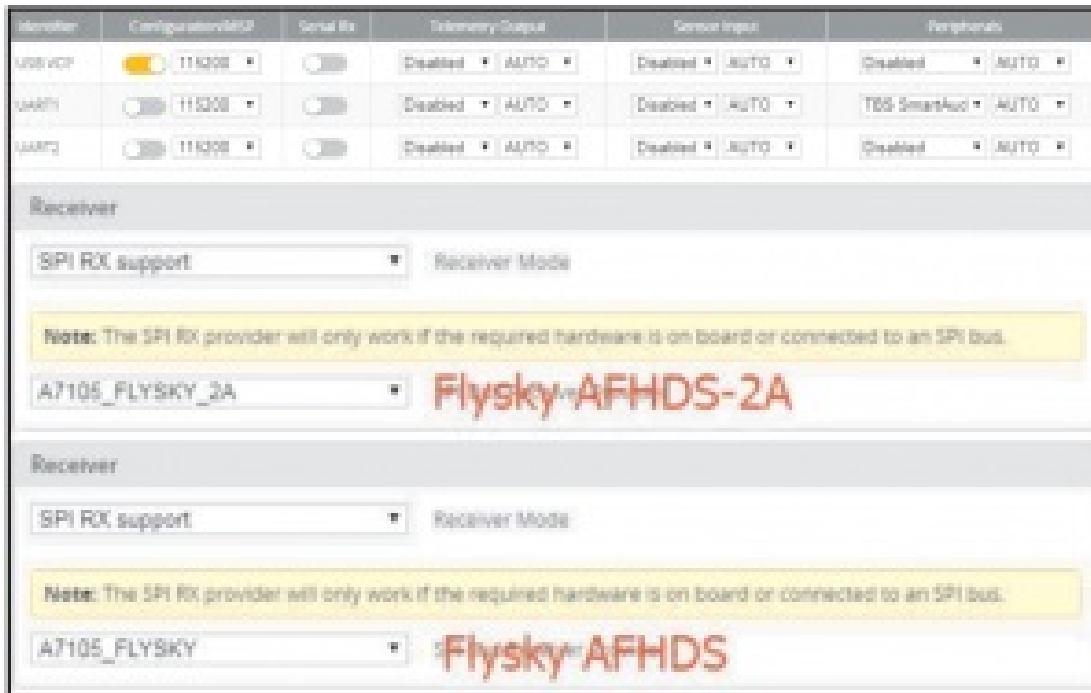
```
$M>-107V17-5M>7t7rARM:ANGLE:HORIZON:HEADFREE:FAILSAFE:ANTI C  
MIX:CAMERA CONTROL 1:CAMERA CONTROL 2:CAMERA CONTROL 3:FLIP O  
CONTROL:—$M>+ , □□□!□□□□□□□□□□□□□□□□□□□□□□□□□□□□  
Entering CLI Mode, type 'exit' to return, or 'help'  
  
# bind_rx_spi  
Binding...
```

2. Turn on your Flysky transmitter, and Choose receiver mode AFHDS-2A or AFHDS according to your Betaflight receiver configuration(A710S\_Flysky\_2A=AFHDS-2A, A7105\_Flysky=AFHDS)
3. ENT RX [BIND] to binding with the Crazybee F4 POR Flight controller, the LED Combo(2 red LED and 2 white LED) will getting to be solid on the flight controller ,this indicate binding successfully, the AFHDS-2A radio will auto exist the binding mode but the AFHDS radio should exist binding mode by yourself.



## Receiver configuration

Please set Receiver mode to be SPI RX Support from the Configuration tab of the Betaflight Configurator, then select A7105\_Flysky\_2A Provider for AFHDS-2A Protocol Radio transmitter or Select A7105\_Flysky Provider for AFHDS Protocol Radio transmitter, don't enable Serial RX since the Crazybee F4 PRO Flight controller is integrated SPI BUS Receiver



## Arm/Disarm the Motor

1. The Default Arm/Disarm switch for Trashcan is AUX1 (Channel S),and you can also customize it with Betaflight Configurator.

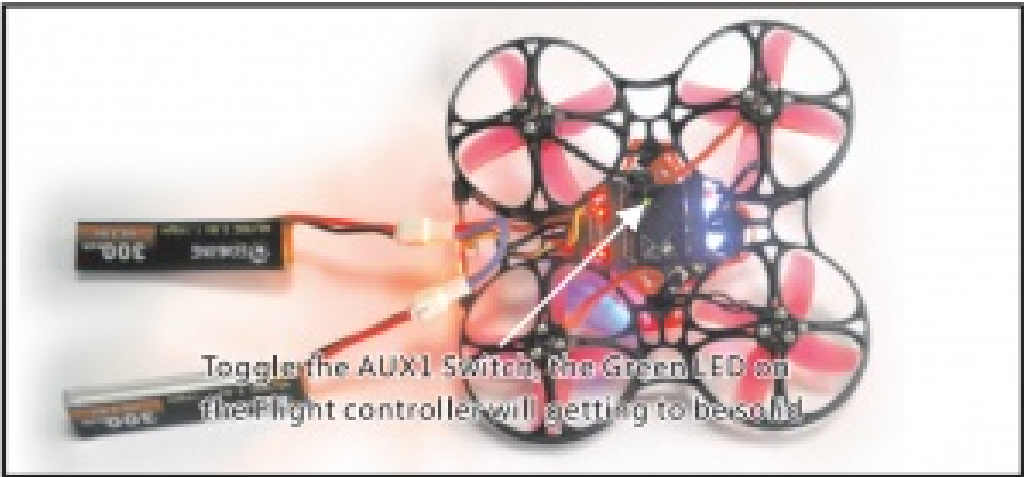


2. Set Arm/Disarm switch for your Flysky Radio: Move to the Aux. channels interface, Set “SWA” or “SWB” or “SWC” switch etc. for Ch5 to ARM/DISARM the motor.

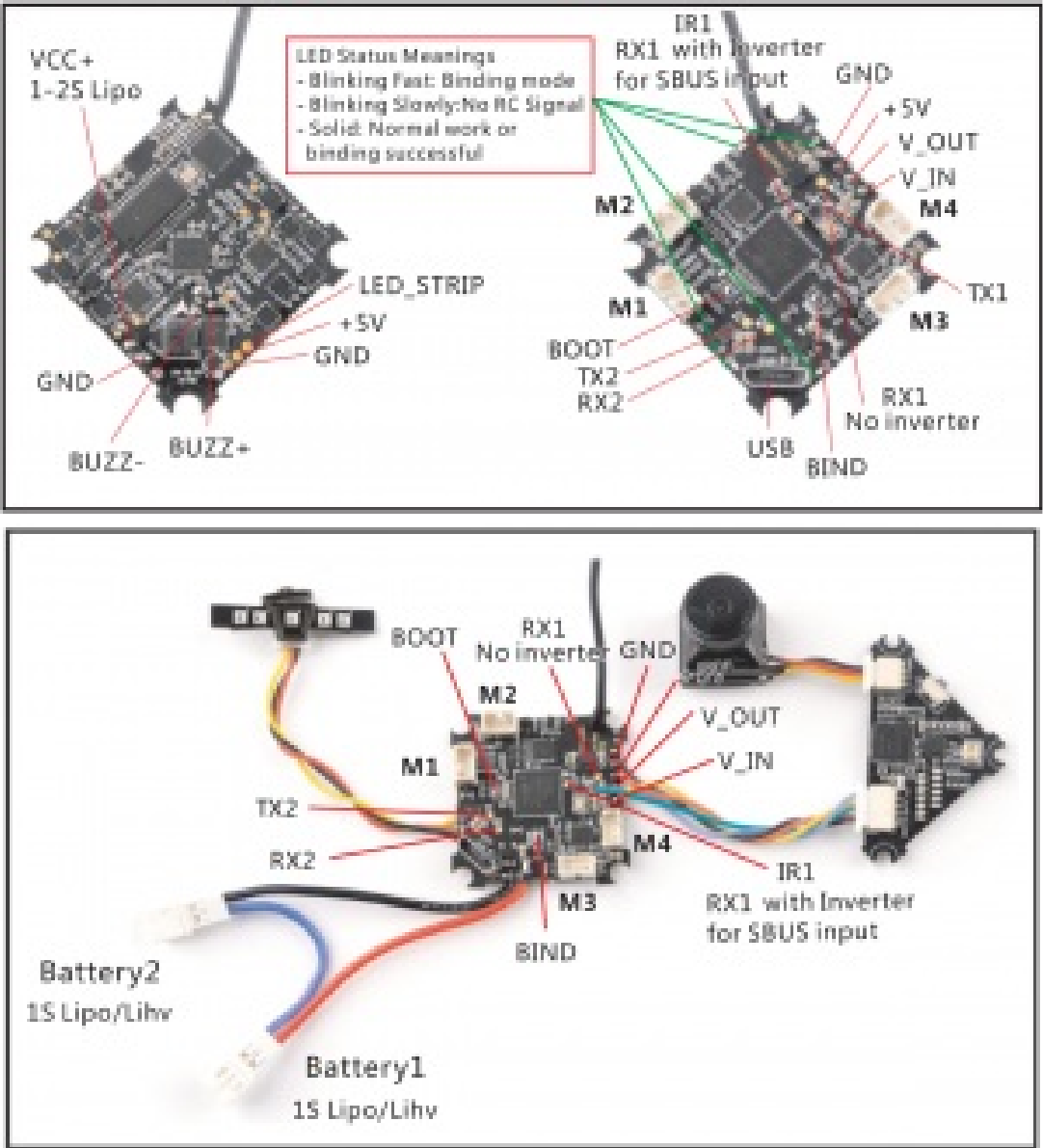


3. The default channel map for Trashcan Flysky version is AETR1234, please make sure your transmitter is

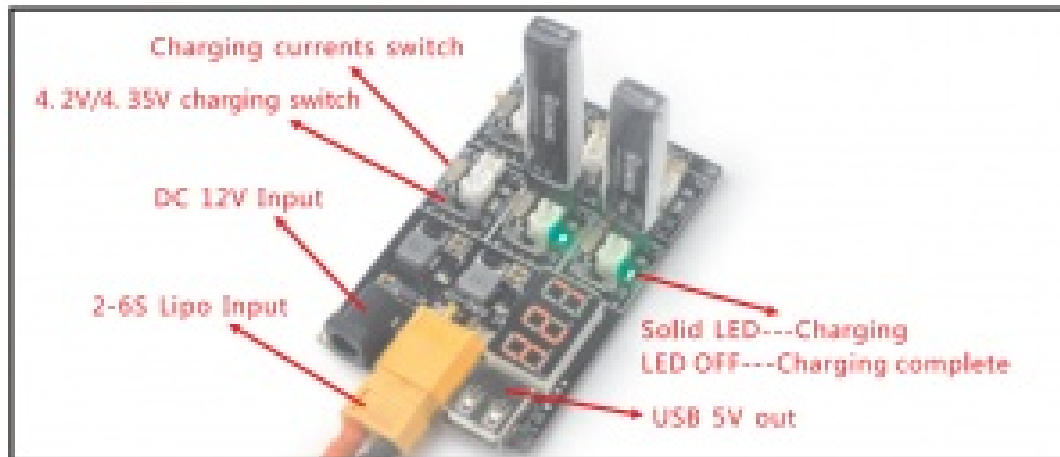
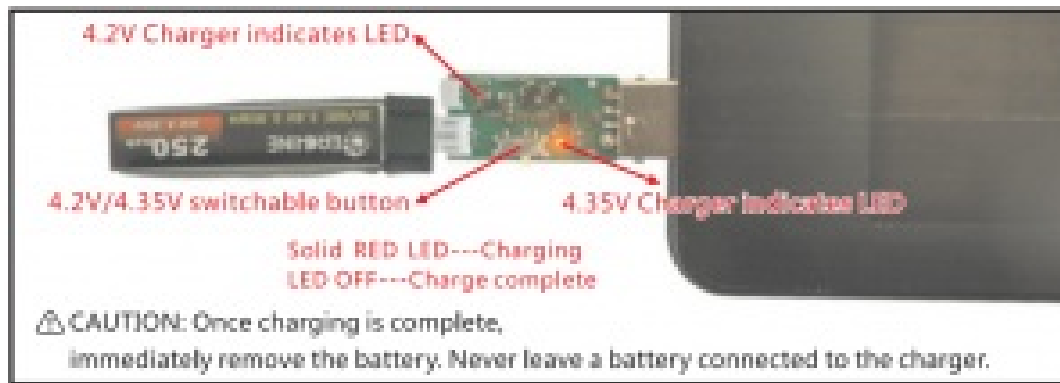
matched, otherwise it will can't be armed. Toggle the AUX1 Switch ,the Green LED on the flight controller will getting to be solid, this indicates the motor was armed. And also you can found “Armed” displayed on your FPV Goggles or the FPV Monitor. Please make sure keep the Trashcan level before arming .Be careful and enjoy your flight now!



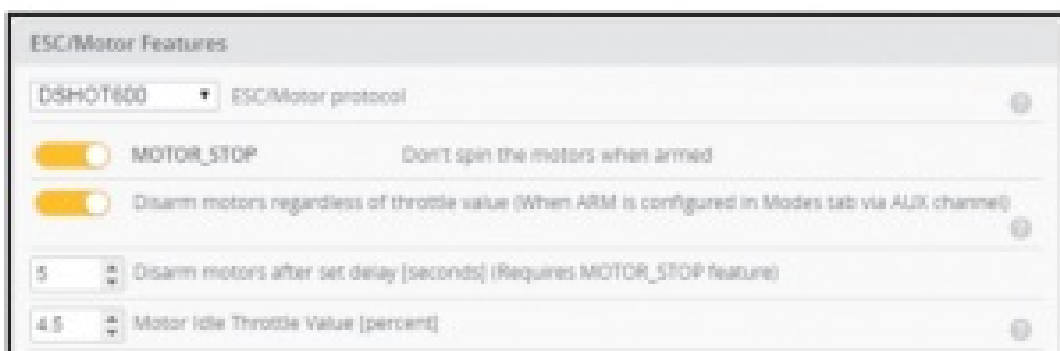
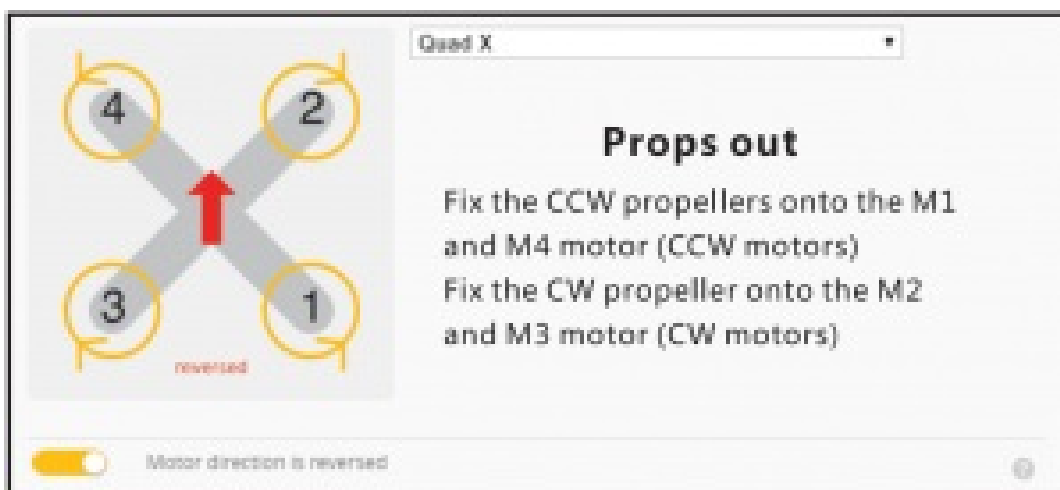
Flight controller connection diagram



## Charger the Lipo Battery



## Mixer type and ESC/motor protocol



## Default PID setting

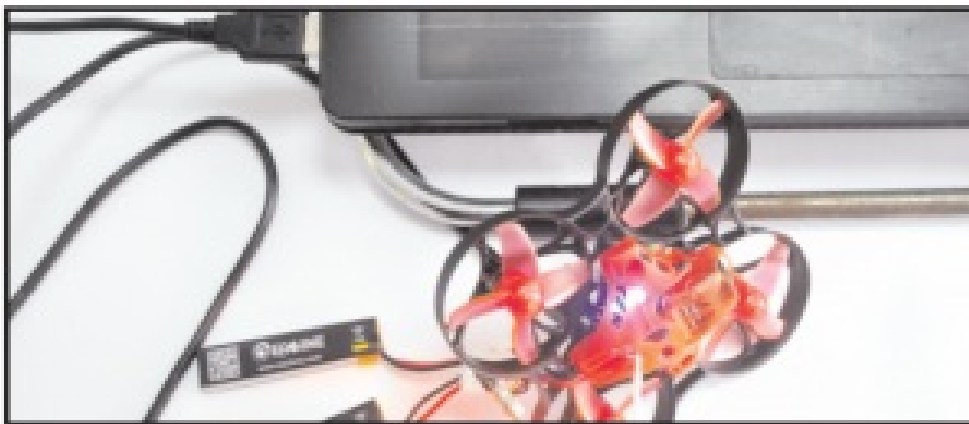
	Proportional	Integral	Derivative	Feedforward	RC Rate	Super Rate	Max Vel (deg/s)	RC Expo
Basic/Acro								
ROLL	45	45	25	60	20	0.75	960	0.00
PITCH	50	50	27	60	20	0.75	960	0.00
YAW	45	100	0	100	1.30	0.80	1300	0.00

## ESC Check and Flash firmware

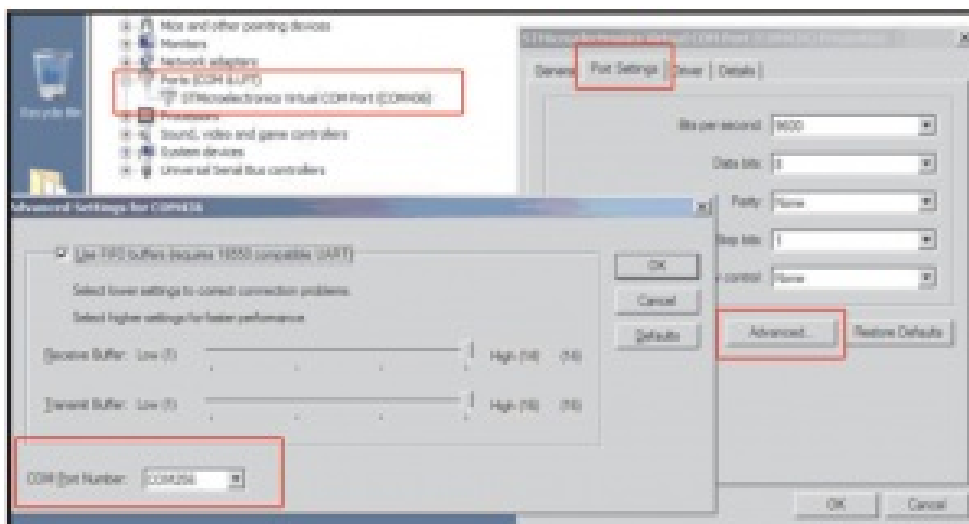
1. Download New release BLheli suite from:

<https://www.mediafire.com/folder/dx6kfaasyo24l/BLHeliSuite>

2. Connect the Crazybee F4 PRO flight controller to computer and power for it with battery

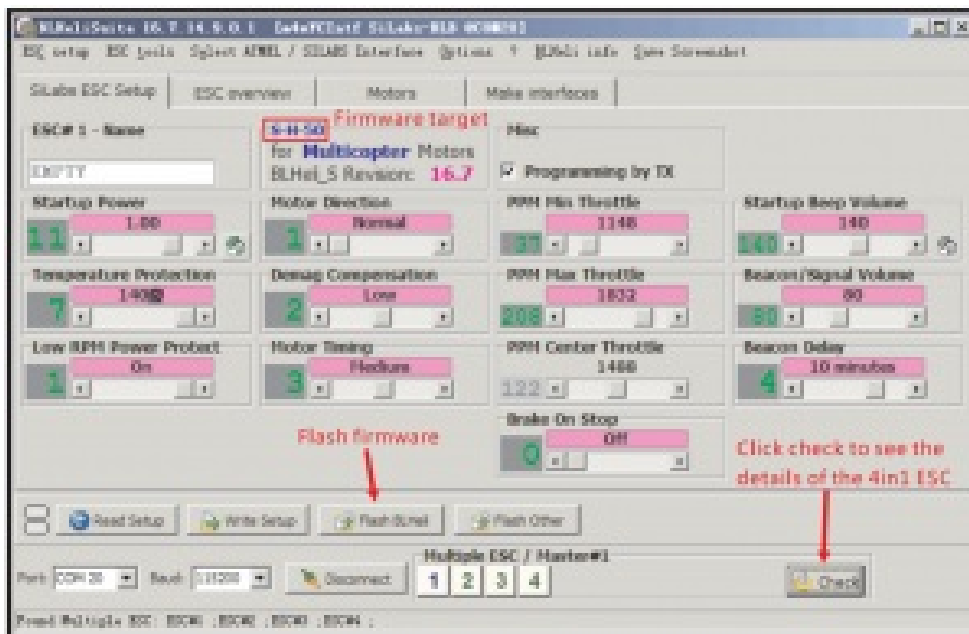


3. Open the Device Manager of your computer, find the Ports, please make sure the Com port Serial Number is under 255, otherwise it will can't connect to the BLHELISUITE. You can change the port serial number like the bellowing step:



4. Open the BLHELISUITE, Select SI LABS BLHeli Bootloader (Cleanflight) from the third tab on the top side. Then Select the right Serial com port and Click connect. You can also Flash the new release BLHeli\_s firmware via the BLHEILISUITE, the firmware Target is "S-H-50"





***\*We will update the firmware for Crazybee F4 PRO and release to our website in time.***

### **“Flip over after crash” procedure**

Set one channel of your radio transmitter to activate the Flip over function in the Mode tab of Betaflight configurator.



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