

Specifications

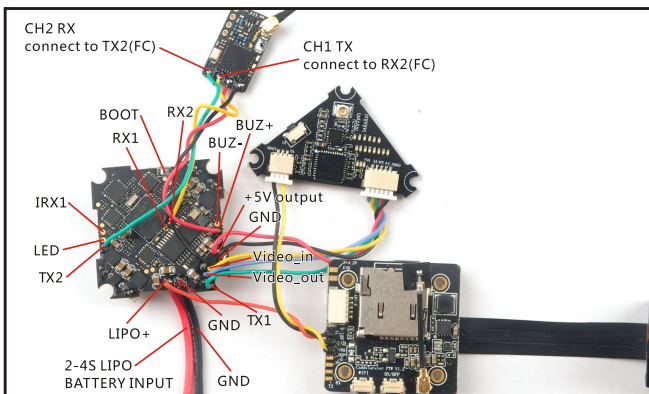
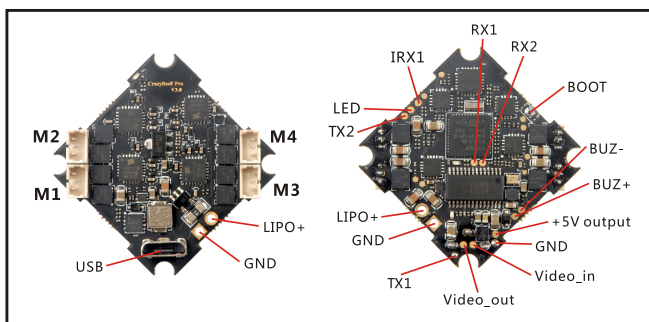
Brand Name: Eachine
Item Name: Cinecan 85mm 4K Cinewhoop
Wheelbase: 85mm
Size: 115mm*115mm*55mm
Weight: 63.5g(without battery)
Weight:89g(with Original 3s 300mah Lipo battery)

Package includes

Item Name	Qty
Cinecan 85mm Frame	1
Option1: Crazybee F4FR V3.0 PRO FC built-in Frsky NON-EU RX	1
Option2: Crazybee F4FS V3.0 PRO FC built-in Flysky RX	
Option3: Crazybee F4 V3.0 with external TBS Crossfire Nano RX	
Option4: Crazybee F4 V3.0 PRO FC no RX version	
1103 KV7000 motor	4
2" propeller(4cw+4ccw)	1
Caddx Tarsier	1
5.8G 40ch 25mw-200mw VTX	1
3S 11.4v 300mah 30C/60C battery	1
Propeller disassemble tool	1
Screwdriver	1

* ND Filter UV Lens not include

Flight controller connection diagram



Receiver configuration

1. Connect CH1(TX) of the XF Nano receiver to RX2 pad of the Crazybee FC, Connect CH2(RX) of the XF Nano receiver to TX2 pad of the Crazybee FC. Enable Serial RX for Uart2 and Smart audio for UART1

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	Disabled	Disabled	Disabled	Disabled
UART1	115200	Enabled	Disabled	Disabled	TBS SmartAuc
UART2	115200	Enabled	Disabled	Disabled	Disabled

2. Choose the receiver mode to Serial-Based receiver and the Serial Receiver Provider is CRSF. Enable telemetry in the Betaflight configurator and set AUX8 for RSSI

Receiver

Serial-based receiver (SPEKSAT, S) Receiver Mode

Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

CRSF Serial Receiver Provider

Channel Map

TAER1234

RSSI Channel

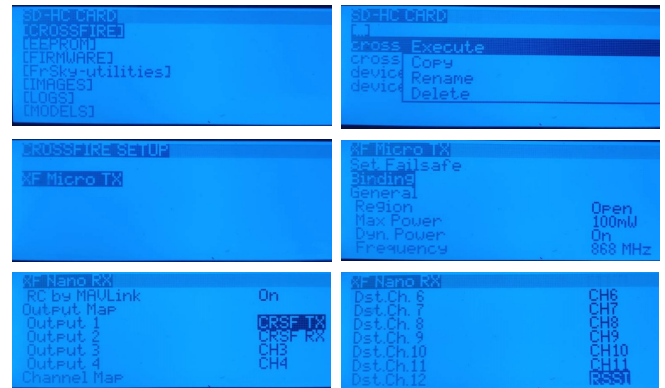
AUX 8

TELEMETRY

Telemetry output

TBS Micro TX configuration

Some TBS TX and RX setting screen shot



TBS CRSF NANO Bind and Setup video <https://www.youtube.com/watch?v=ioDzyV2vGb0>

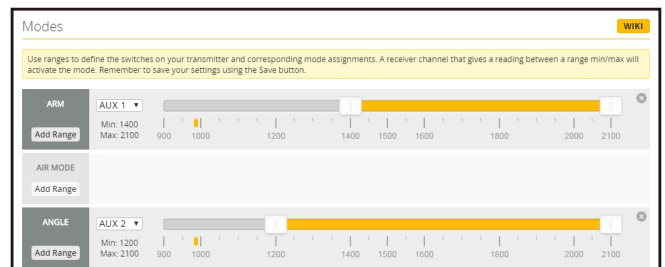
Binding procedure

Binding the transmitter and receiver is super simple.

- Just power up the TBS CROSSFIRE transmitter
- On the standard transmitter, enter the configuration menu by pressing and holding the joystick for 3 seconds, select "General" and "Binding" - a message "Binding" will start blinking, waiting for the receiver. On the micro transmitter, a short press on the button will initiate binding mode.
- Now, power up the receiver (without pressing the Bind button!), if your receiver has not been previously bound, it will automatically bind. Otherwise, press and release the "BIND" button on the receiver to initiate binding. On the receiver is a timeout of one minute for after power up to enter bind mode. If the status LED will start blinking slowly the receiver has switched successfully to bind mode.
- Within a few seconds the process will finish with a "Binding complete" message on the standard transmitter, or a solid green LED on the micro transmitter. The receiver has now stored the unique serial number of that particular CROSSFIRE transmitter. If it doesn't bind, please verify that your firmware is to the newest version on both the receiver and the transmitter.

Arm/Disarm the Motor Use frsky x9d as an example

- The Default Arm/Disarm switch for Cinecan is AUX1(Channel 5),and you can also customize it with Betaflight Configurator.



- Turn on the Frsky transmitter (Use X9D+ as an example) and move to the MIXER interface, Set "SA" or "SB" switch etc. for Ch5 to ARM/DISARM the motor.

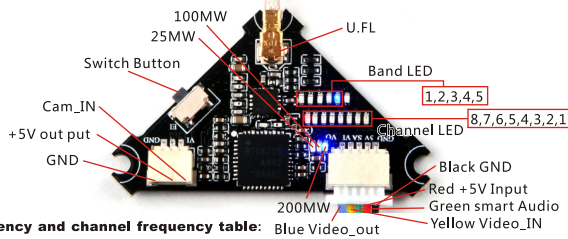


- The default channel map for Cinecan Crossfire version is TAER1234, please make sure your transmitter is matched, otherwise it will can't be armed. Toggle the AUX1 Switch, the Green LED on the flight controller will getting to be solid, this indicates the motor was armed. And also you can find "Armed" displayed on your FPV Goggles or the FPV Monitor. Please make sure keep the Cinecan level before arming. Be careful and enjoy your flight now!



VTX Bands and Channels setup

Blue LED5 and Red LED8 light on, indicating frequency
5917MHZ (BAND5 and CH8)
Blue LED1 and Red LED2 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	5645M	5625M	5605M	5585M	5565M	
Band4(F)	5740M	5760M	5780M	5800M	5820M	5840M	5860M	5880M	
Band5(R)	5658M	5695M	5732M	5769M	5806M	5843M	5880M	5917M	

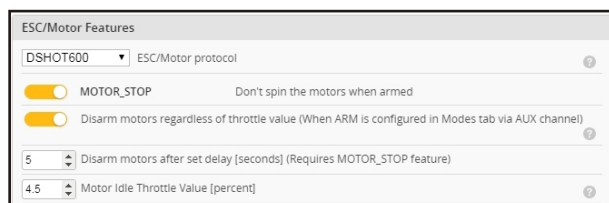
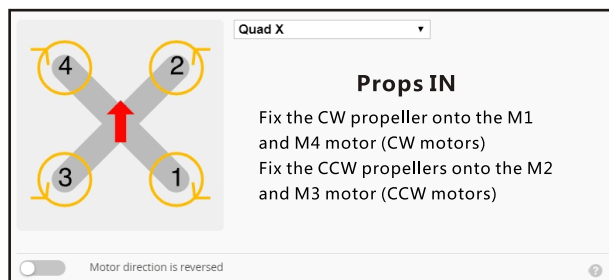
There are 3 ways to switch the vtx channels:

- 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 Cinecan since the Smartaudio function enabled)
- Go to Betaflight CLI, type the command:
Set vtx_band=3
Set vtx_channel=1
Set vtx_freq=5705
save
Notes: The vtx_freq should match the vtx_band and vtx_channel as the VTX Channel list shows.
For example, if you set vtx_freq=5732, you should set vtx_band=5 and vtx_channel=3
- Enable Smartaudio 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 VTX SA to set VTX Band and channel

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	Disabled	AUTO	Disabled	AUTO
UART1	115200	Disabled	AUTO	Disabled	AUTO
UART2	115200	Disabled	AUTO	Disabled	AUTO



Mixer type and ESC/motor protocol

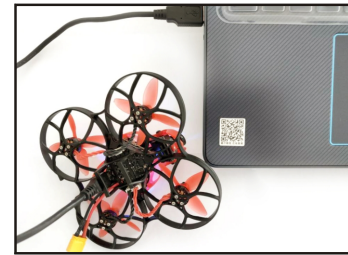


Default PID setting

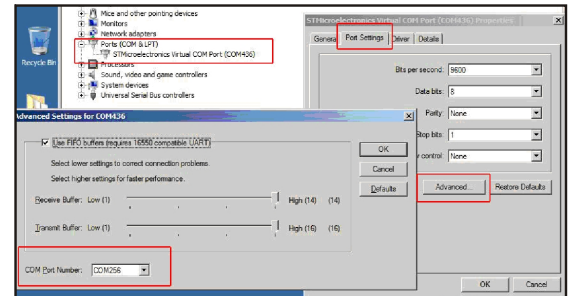
	Proportional	Integral	Derivative	Feedforward	RC Rate	Super Rate	Max Vel [deg/s]	RC Expo
Basic/Acro								
ROLL	50	45	27	60	1.00	0.75	800	0.23
PITCH	50	50	30	60	1.00	0.75	800	0.23
YAW	72	55	0	100	1.00	0.70	667	0.00

ESC Check and Flash firmware

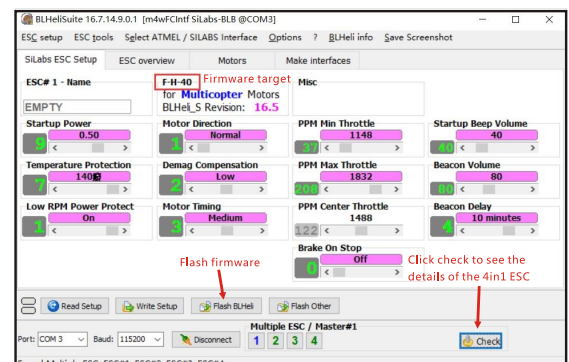
- Download New release BLHeliSuite from:
<https://www.mediafire.com/folder/dx6kfaasyo241/BLHeliSuite>
- Connect the Crazybee F4 PRO flight controller to computer and power for it with battery



- 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 following step:

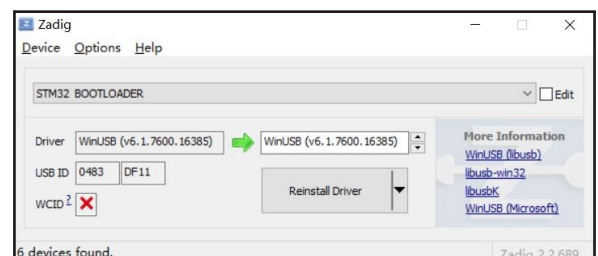


- Open the BLHELISUITE, Select SILABS BLHeli Bootloader (Cleanflight) from the third tab on the top side. Then Select the right Serial com port and Click connect. You can also Flash the new release BLHeli_s firmware via the BLHELISUITE, the firmware Target is "F-H-40"



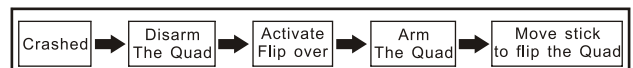
Flight controller firmware update

- Install latest STM32 Virtual COM Port Driver
<http://www.st.com/web/en/catalog/tools/PF257938>
- Install STM BOOTLOAD Driver (STM Device in DFU MODE)
- Open Betaflight configurator and choose firmware target "CrazybeeF4DX", then select the firmware version.
- There are 2 ways to get in DFU Mode: 1). solder the boot pad and then plug USB to computer 2). loading betaflight firmware and hit "flash", then it will getting into DFU Mode automatically.
- Open Zadig tools to replace the drivers from STM32 Bootloader to WINUSB Driver.
- Reconnect the flight controller to the computer after replace driver done, and open Betaflight Configurator, loading firmware and flash.



"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.



Notes:

- If only plug the usb, there is no video display on the goggles, need to plug the battery