

Features

The lightest 4K Cinewhoop in the World
Powerful and smoothly
Caddx Loris 4K Camera & DVR ready
Runcam Split3-lite 1080P Camera & DVR ready
Betaflight OSD support ,easy to get RSSI, Voltage, ,current from your goggles
Camera Angle adjustable
VTX power switchable 25mw~200mw

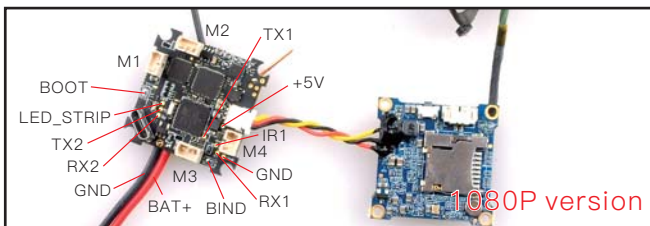
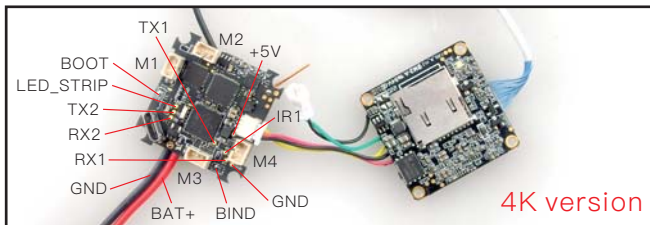
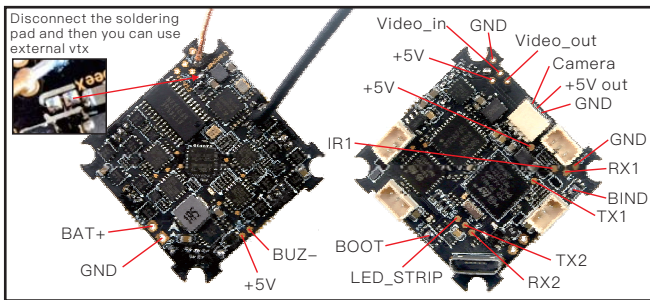
Specifications

Brand Name: Eachine
Item Name: 1S Cinefun 75mm 1080P/ 4K Cinewhoop
Wheelbase: 75mm
Size: 97mm*97mm*51 mm
Weight: 39g(without battery)
Weight:54.5g(with Original 1s 650mah Lipo battery)

Package includes

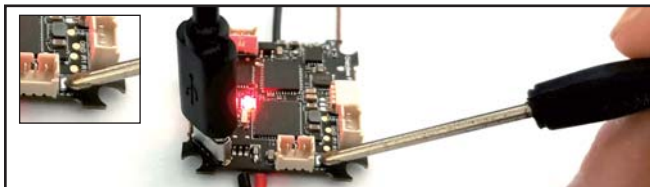
Item Name	Qty
75mm Frame	1
Option1 : CrazybeeX FR V2.2 built-in SPI Frsky receiver	
Option2: CrazybeeX FS V2.2 built-in SPI Flysky receiver	1
Option3: CrazybeeX PNP V2.2 with external TBS Crossfire Nano RX	
NC1102 KV19000 motors	4
HQPROP 1.6x1.6x4 propeller(4cw+4ccw)	1
Option1:Runcam Split3-lite	1
Option2:Caddx Loris	
Built-in 5.8G 40ch 25mw~200mw VTX	1
1s 650mah Lipo battery	4
Propeller disassemble tool	1
Screwdriver	1

Flight controller connection diagram



Binding procedure

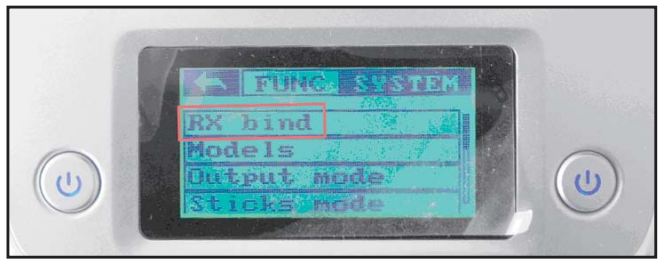
1. Betaflight 3.5.7 version(Original firmware out of box) binding procedure: Press and hold the bind button then powering the Cinefun , the Red LED at the bottom of the flight controller will blinking fast , this indicate the receiver is in bind mode .
Betaflight firmware later than 4.0.1(include)binding procedure: Powering the Cinefun first, then Press the bind button for 1 second ,the red Led at the bottom of the flight controller will blinking fast, this indicate the receiver is in bind mode.



2. Another simple way to bind with the Flysky transmitter is : plug the usb and move to the CLI Command , then type bind code "bind_rx_spi"(for betaflight 4.0.1~4.0.6) or type bind code "bind_rx"(for betaflight 4.1.X) , the receiver will getting into bind mode, and then make your Flysky transmitter to be bind mode, the LED at the bottom of the flight controller will getting to be solid if bind successfully. (Betaflight 3.5.7 firmware not support these bind code)

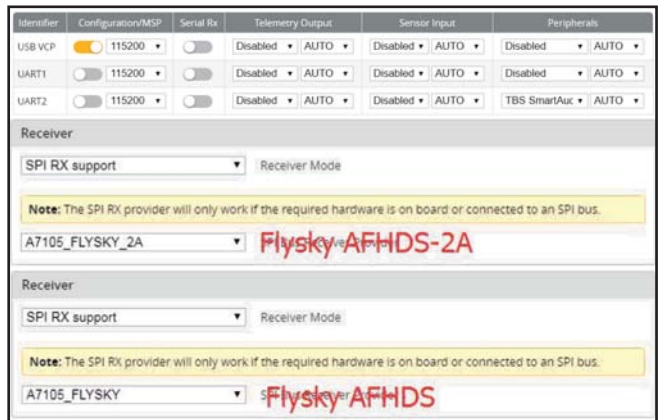
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>M>0e~000!00000000 000000000000$M> n000000000e
Entering CLI Mode, type 'exit' to return, or 'help'

# bind_rx_spi
Binding..
```



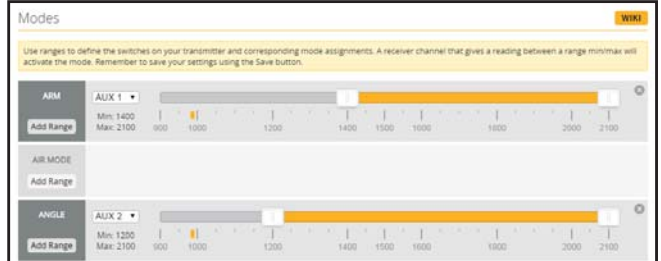
Receiver configuration

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 lite Flight controller is integrated SPI BUS Receiver



Arm/Disarm the Motor

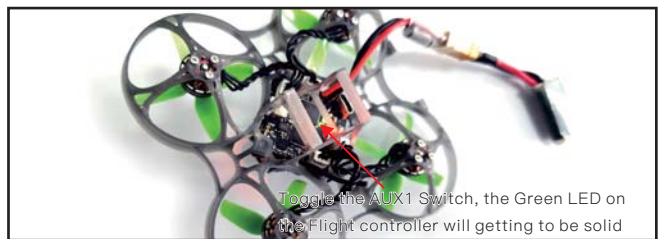
1. The Default Arm/Disarm switch for Cinefun is AUX1(Channel 5),and you can also customize it with Betaflight Configurator.



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 Cinefun 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 Cinefun was armed . And also you can found "Armed" displayed on your FPV Goggles or the FPV Monitor. Please make sure keep the Cinefun level before arming .Be careful and enjoy your flight now!



VTX Bands and Channels setup

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	5665M	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 2 ways to switch the vtx channels:

1.If we need to use Channel 5705 then we should Go to Betaflight CLI,type the command:

Set VTX_band=3

Set VTX_channel=1

save

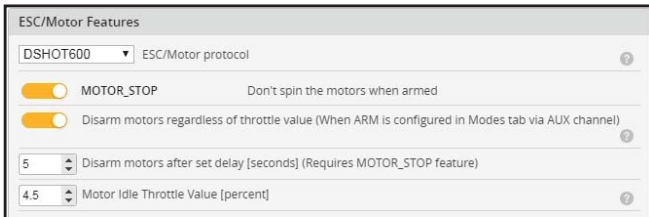
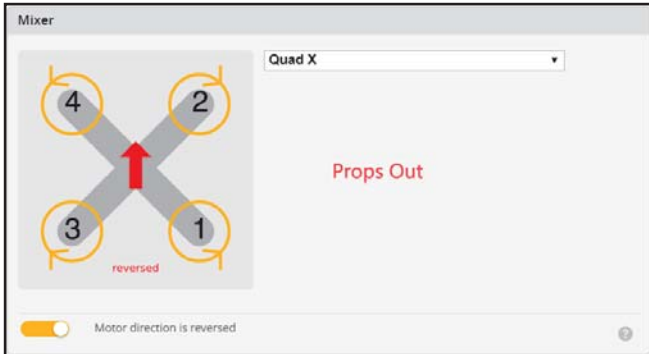
2.Disarm the Cinefun and then move the stick of the transmitter(THR MID+YAW LEFT+PITCH UP)

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	TBS SmartAuc



Mixer type and ESC/motor protocol



Default PID setting

Betaflight 3.5.7 Default PID settings:

	Proportional	Integral	Derivative	Feedforward	RC Rate	Super Rate	Max Vel [deg/s]	RC Expo
ROLL	85	100	85	120	1.00	0.70	662	0.00
PITCH	80	100	85	120	1.00	0.70	662	0.00
YAW	100	100	0	120	1.00	0.70	662	0.00



Note:
"ESC Check and flash firmware" and "Flight controller firmware update" procedure are not necessary. The procedure at the right side is just a tutorial to show how to do it. We already pre-install firmware and pre-configure the ESC and the flight controller.

ESC Check and Flash firmware

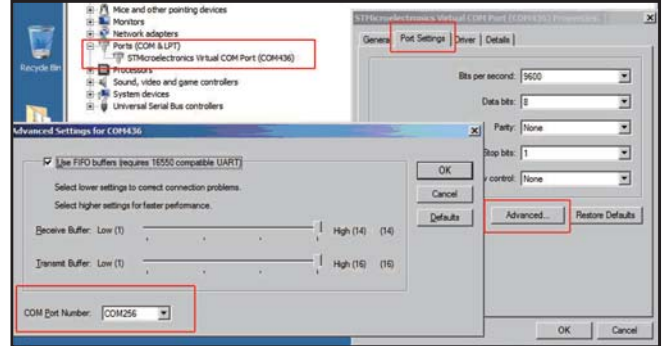
1.Download New release BLHeliSuite from:

<https://www.mediafire.com/folder/dx6kfaasvo24i/BLHeliSuite>

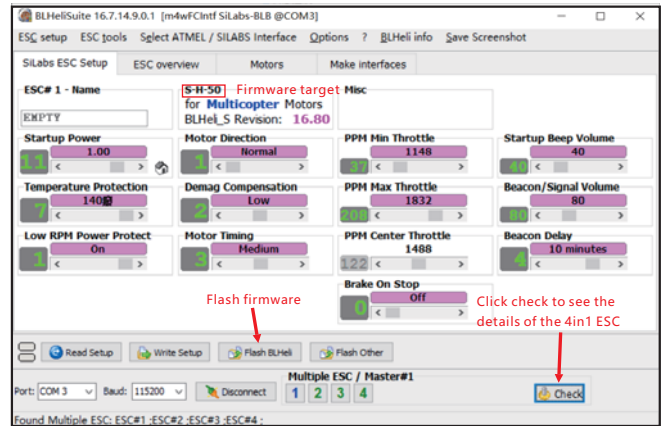
2.Plug the usb and connect the flight controller to computer



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 following step:



4.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 "S-H-50"



Flight controller firmware update

1.Install latest STM32 Virtual COM Port Driver

<http://www.st.com/web/en/catalog/tools/PPF257938>

2.Install STM BOOTLOAD Driver (STM Device in DFU MODE)

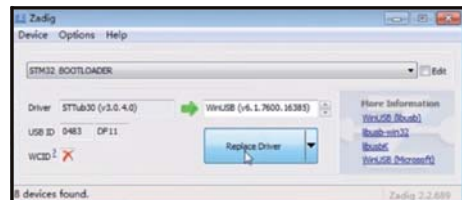
3.Open Betaflight configurator and choose firmware target "CRAZYBEEF4FS(LEGACY)", then select the firmware version.

4.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.

5.Open Zadig tools to replace the drivers from STM32 Bootloader to WINUSB Driver.

6.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.

The default Switch for Activate "Flip" is AUX4(Channel8)

