Firefly 1S Nano Baby Quad

Manual

1/ drone introduction

Firefly 1S Nano Baby Quad is an 20g ultralight 1S Quad for freestyle and crusing. Pilots can enjoy up to 8 minutes and 45 seconds flight time with Flywoo's latest 1S 450mah ! Through a lot of tests, we found the best configuration for Firefly 1S nano baby quad！ It is not only suitable for cruising super long flight time, but also perfect for freestyle like a ripper.Last but not least, it is very quiet, like a mosquito, suitable for both indoors and outdoors.

Features

1/ Equipped with GOKU Versatile F4 5-IN-1 1S AIO W/250mw VTX AIO Flight controller, which is specially designed for 1S Nano Drone . reliable and stable
2/ No Propellers in view, NO Jello flight Footage, stable flight picture
3/ Ultralight 20g, Pilots can enjoy up to 8 minutes and 45 seconds flight time with Flywoo's latest 1S 450mah
4/ Perfect for freestyle and crusiong
5/ it is very quiet, like a mosquito, suitable for both indoors and outdoors

Specification

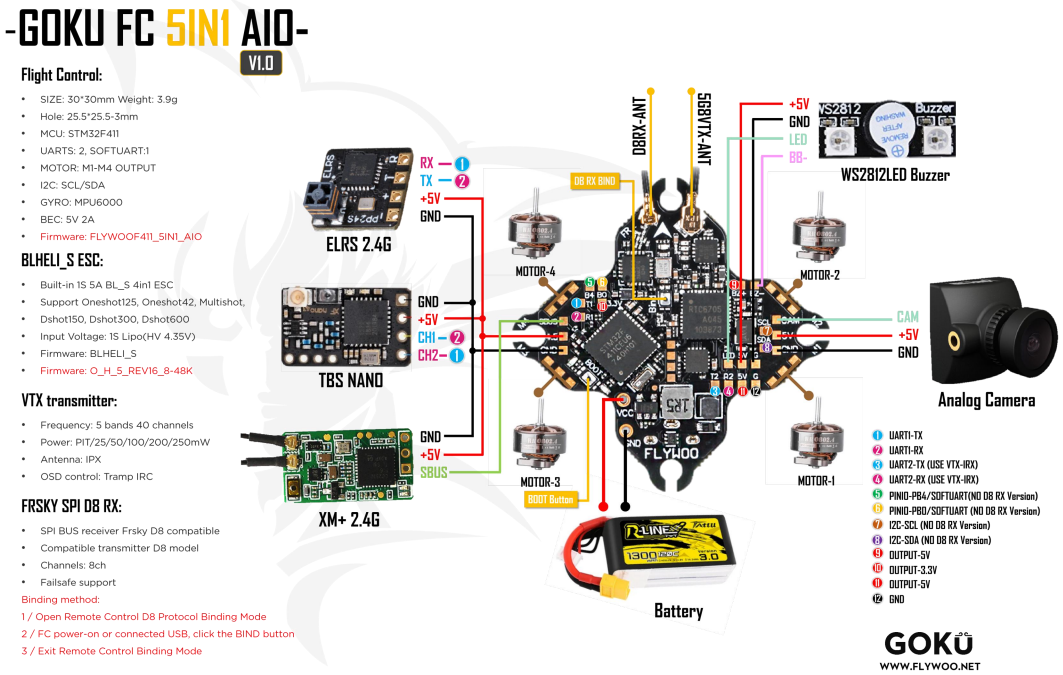
Item: Firefly 1S Nano Baby Quad 40mm
Weight：20.4g
Flight Controller: GOKU Versatile F4 5-IN-1 1S AIO W/250mw VTX
Motor: ROBO 0802.4 16500KV
Compatible Propellers: Gemfan 40mm
Camera : 1.2g Flywoo 1S Nano Camera
Battery: Explorer 450mAh 1S 80C Lipo Battery for tiny quad -PH 2.0
Receiver： PNP \ SPI Frsky \ Elrs 2.4G \ TBS CRSF
Flight time：8mins with Explorer 450mAh 1S 80C Lipo Battery for tiny quad -PH 2.0

Includes

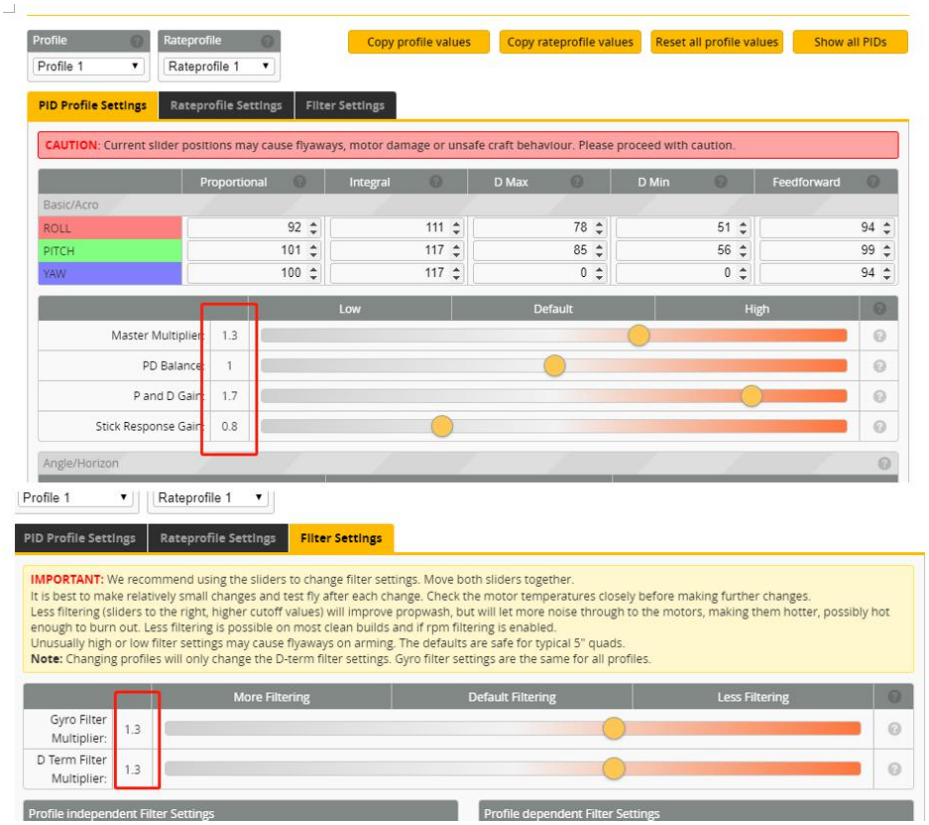
1 x Firefly 1S Nano Baby Quad 40mm Drone
2 x set of Gemfan 40MM 1610-2

2/ Configuration and wiring diagram description

Flight control wiring diagram



PID and filter settings



Default serial port settings

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

UART1: TBS/R9M/XM+/DSMX/SBUS receiver
UART2: VTX IRC/SA Control

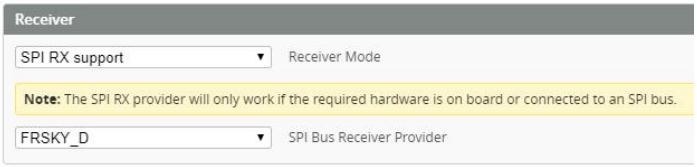
Frequency table：：

FR/CH	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
A	5865	5845	5825	5805	5785	5765	5745	5725
b	5733	5752	5771	5790	5809	5828	5847	5866
E	5705	5685	5665	5645	5885	5905	5925	5945
F	5740	5760	5780	5800	5820	5840	5860	5880
r	5658	5695	5732	5769	5806	5843	5880	5917

Tip: Image transmission control can only be controlled by IRC

3/ Receiver binding

SPI D8 RX:
Binding method:
1 / Open Remote Control D8 Protocol Binding Mode



2 / FC power-on or connected USB, click the BIND button

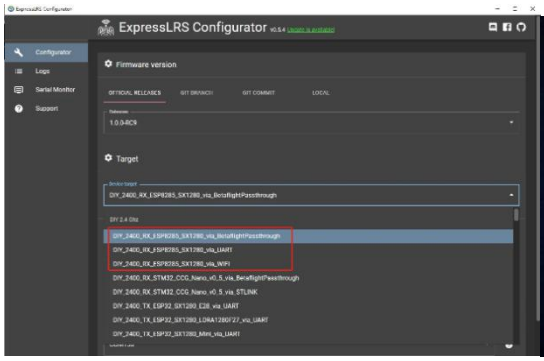
3 / Exit Remote Control Binding Mode

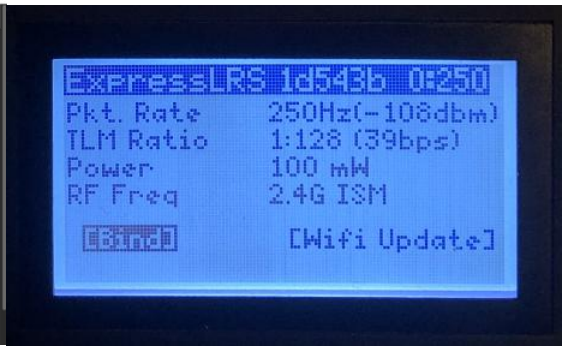
TBS NANO 915:

When the USB is connected, the green light of the receiver flashes, and then bind according to the picture operation.

https://www.youtube.com/watch?v=-iNkVcOLITM&ab_channel=Danimal3D

ELRS 2.4G RX:





Bind procedure:

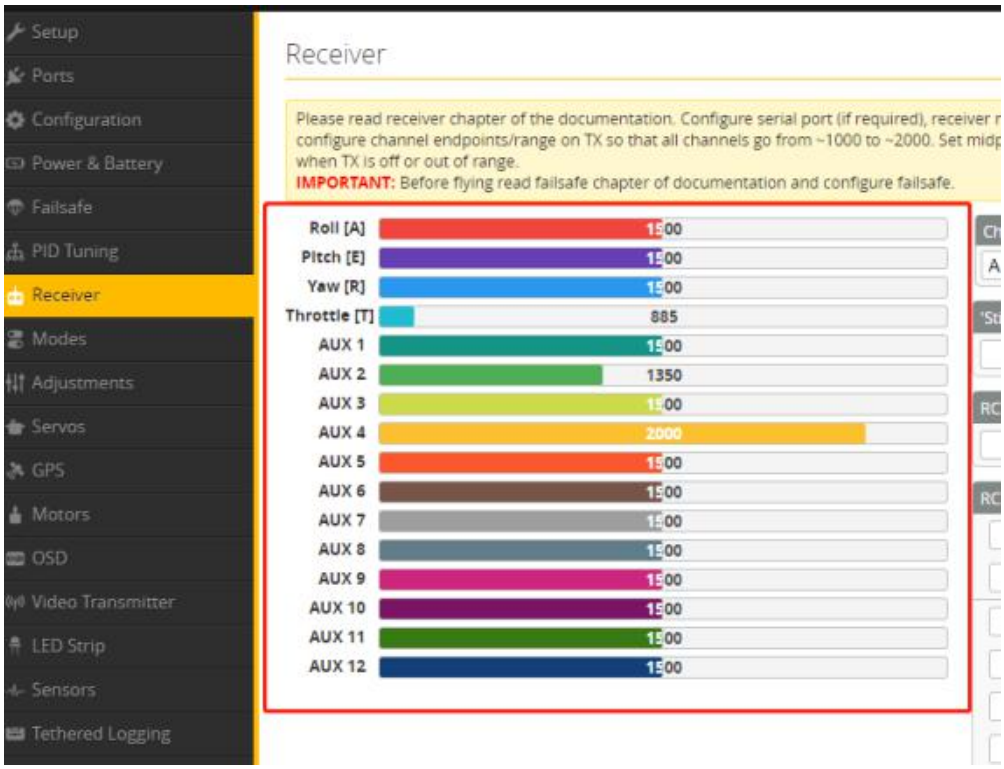
- Supply power to the EL24E/EL24P rx, wait until the LED on the RX is off, immediately turn off the power, and then repeat again the above steps. When the RX is powered on for the third time, the LED light will start to double-flash, which means that the RX enters the binding mode

- Insert the 2.4G ELRS TX to Radio transmitter, and choose External RF mode to CRSF protocol, then you can find ELRS menu from the Radio systems(Need to copy the ELRS.LUA file to the SD-Card tools first), Enter into ELRS and press [Bind], the LED on the RX module will getting to be solid if bind successfully.

- Receiver LED status meanings:

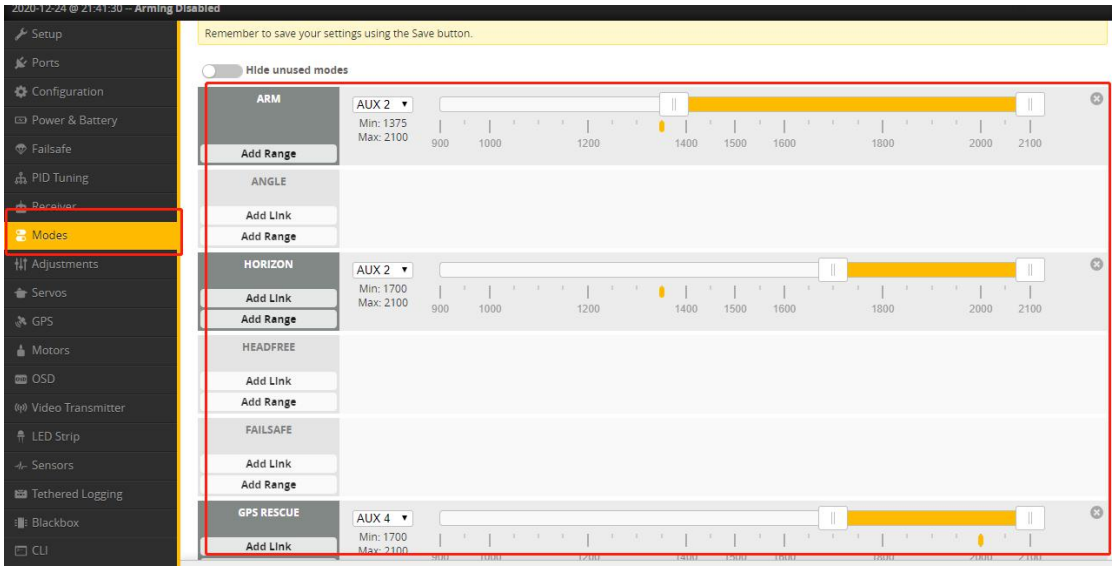
EL24E/EL24P RX: LED solid means bind successful or Connection established; LED double-flash means in bind mode; LED flash slowly means no signal connection from the TX module; LED flash fast means in WIFI hotspot mode, you can connect the WIFI of the RX and upgrade firmware of the RX via visit 10.0.0.1 from the web browser(password: expresslrs)

3-1/ Then set the corresponding serial port and receiver protocol to ensure the normal output of each channel of the receiver.



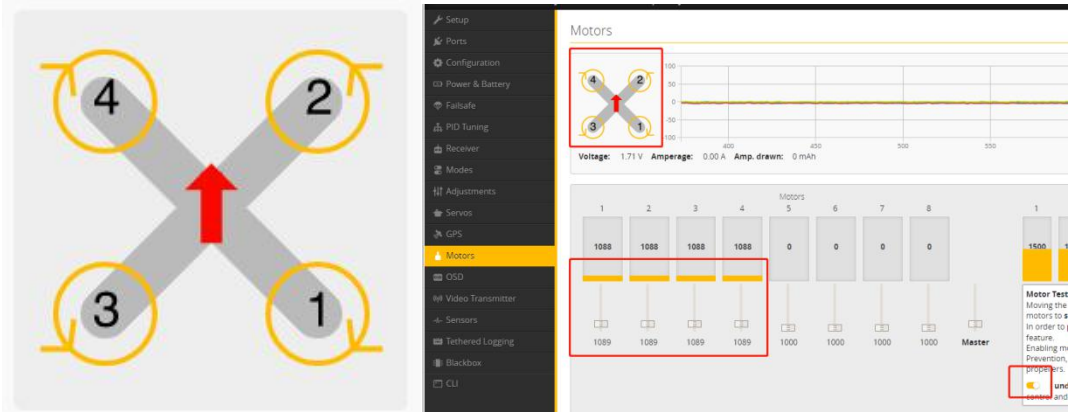
4/ Mode setting:

Set the ARM switch and flight mode switch, AUX* corresponds to the remote control switch, and the yellow area mark is turned
on.



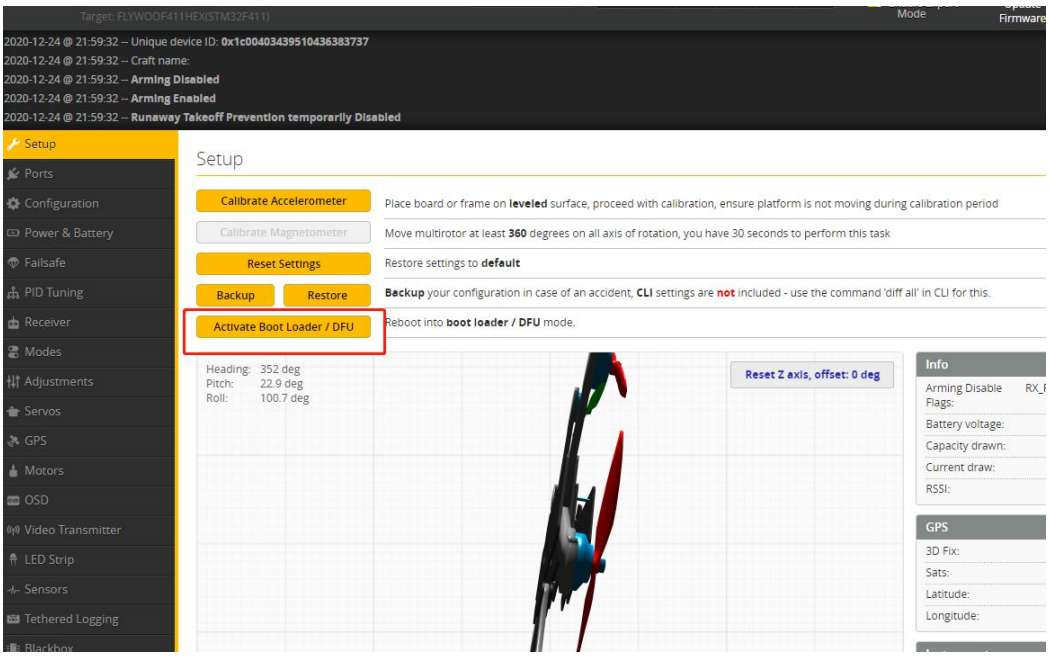
5/ Motor test:

Unload the propeller, test the rotation direction of the motor, turn on the safety switch, and test the rotation of the motors one by one.

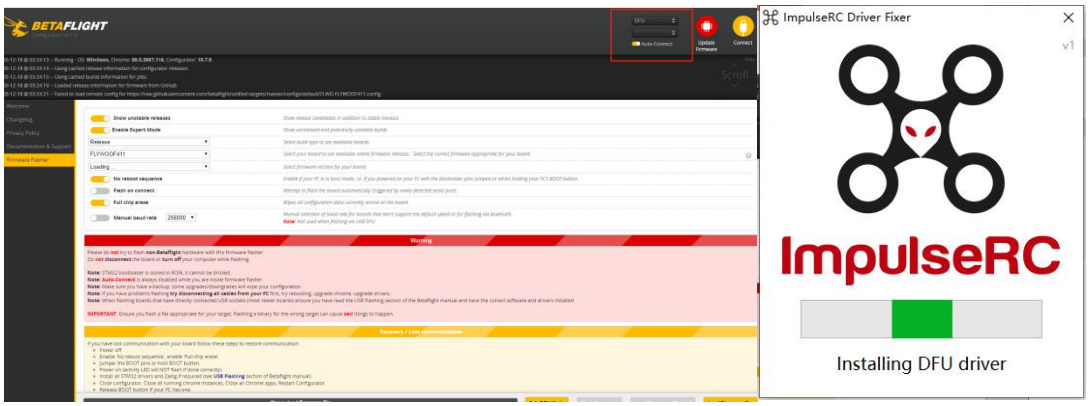


6/ Flight firmware upgrade and write default CLI

1/ Activate DFU
mode

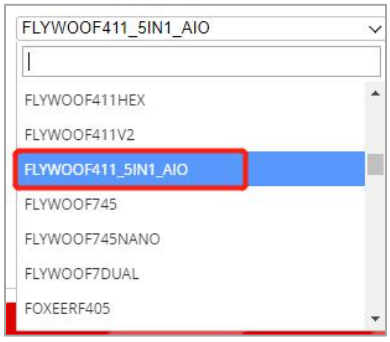


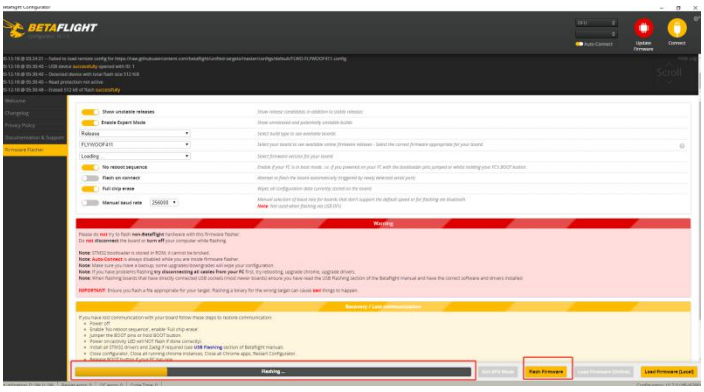
2/ BF Configurator will display to enter DFU mode. If it does not enter DFU mode, it may be that the driver is not installed. The driver can be installed using IMPULSE RC software

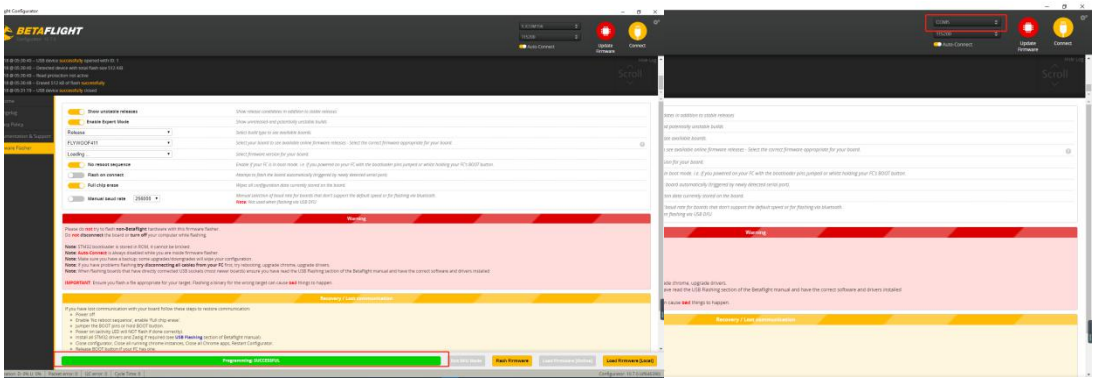


Driver software:
https://impulserc.blob.core.windows.net/utilities/ImpulseRC_Driver_Fixer.exe

3/ Then load the local HEX firmware and wait for the flashing to complete. A green progress bar is displayed to indicate completion, and DFU will become a COM port

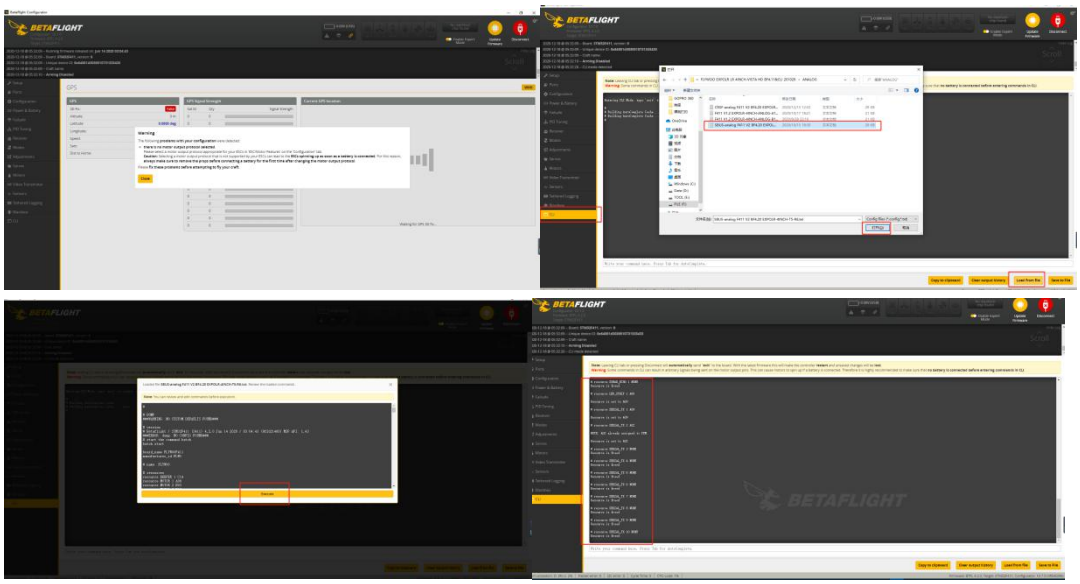




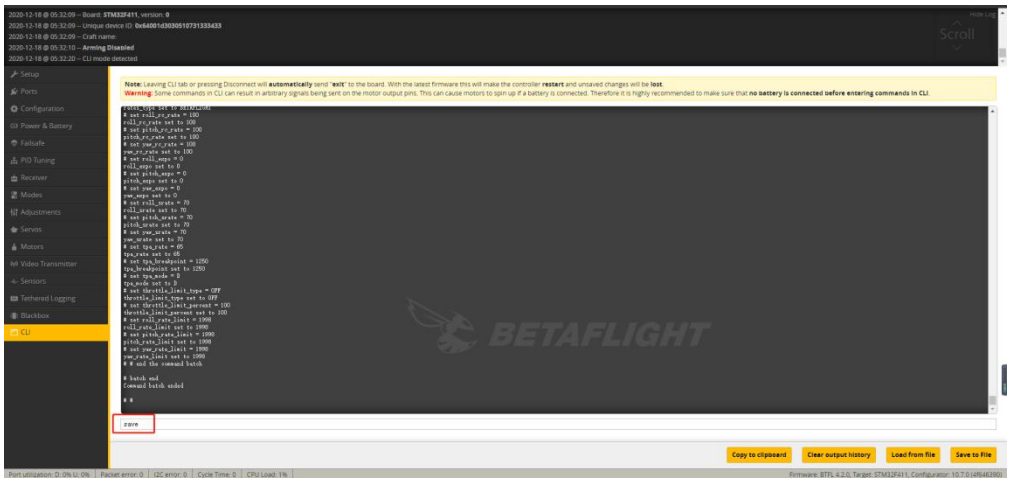


4/ After the connection is entered, it is a blank interface, you need to write CLI commands, Factory CLI LINK: https://flywoo.net/pages/manual

*Please do not try to update the ESC firmware. It will cause the ESC to burn out and cannot be repaired.
**Default ESC firmware: O_H_5_REV16_8-48K



5/ If the command is not restarted after writing the command, please write SAVE and press Enter to save, and the FC will restart



6/ Then all functions of FC return to normal.