Features
AIO Flight controller with Serial ELRS Receiver and 5.8G Openvtx
Super light 1S 65mm Brushless whoop only 17.7g
Equipment with the lightest brushless motors - SE0702 only 1.46gram
FX17 - B 1/3 CMOS 800TVL Camera awesome footage
Smooth and powerful
Compatible for 1S Lipo/LIHV
2.4G Serial ELRS receiver could flash single ELRS firmware

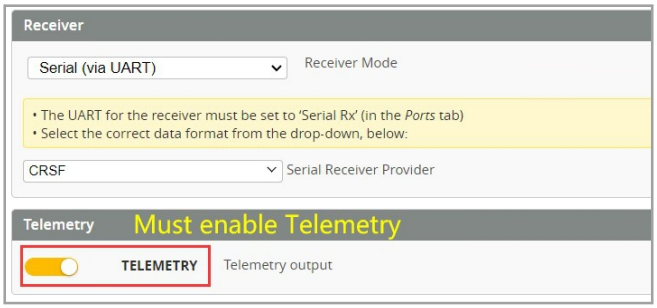
Specifications
Brand Name: Happymodel
Item Name: Mobula6 2024 1S 65mm ultra light micro FPV Whoop
Wheelbase: 65mm
Size: 81mm*81mm*37mm
Weight: 17.7g

Package includes	
Item Name	Qty
Mobula6 2024 1S 65mm whoop Drone Frame +Canopy	1
SuperX ELRS AIO 5 - IN - 1 Flight controller	1
SE0702 KV28000 brushless motor	4
Gemfan 1208 - 3 31mm tri - blade propellers(4cw+4ccw)	1
FX17 - B 1/3 CMOS 800TVL camera NTSC 4:3	1
Onboard 5.8G 25mw~400mw VTX	1
Spare canopy	1
Propeller disassemble tool	1
Screw driver	1

Bind procedure video for your refrence

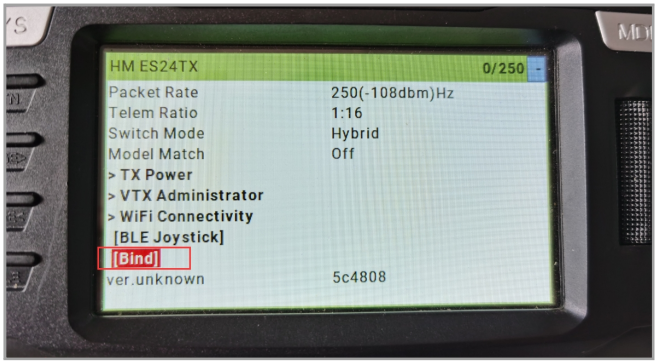
Bind procedure video for your refrence :https://bit.ly/3UwEbed

1) Supply power to the flight controller by plug USB, then immediately unplug USB when the RGB LED turned on, and then repeat one time again. When the FC is powered on for the third time, the RGB LED light will start to double - flash, which means that the onboard uart receiver enters into the binding mode



2) Please make sure your ExpressLRS tx module firmware is v3.x.x. And go to ExpressLRS.lua from “TOOLS” menu of your radio transmitter. Then hit [Bind] to binding with the onboard ExpressLRS receiver. The RGB LED should blinking slowly first then turn to solid, that means binding was successfully.

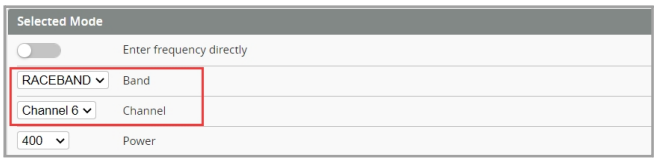
3)"Telemetry" from receiver tab must enable for this flight controller



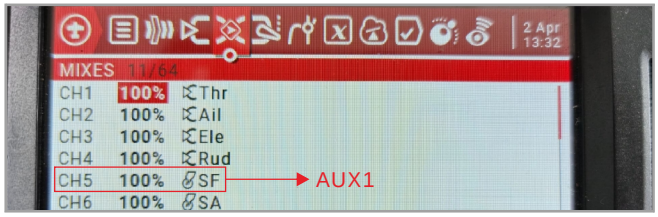
Arm/Disarm the Motor

1)Turn on your radio transmitter and connect the battery to the Mobula6 2024 1S . Then place Mobula6 2024 1S horizontally on the ground.

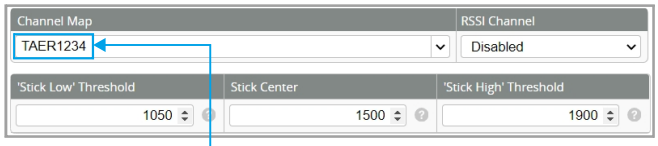
2)Prepare your goggles, and match the channel with the VTX_table



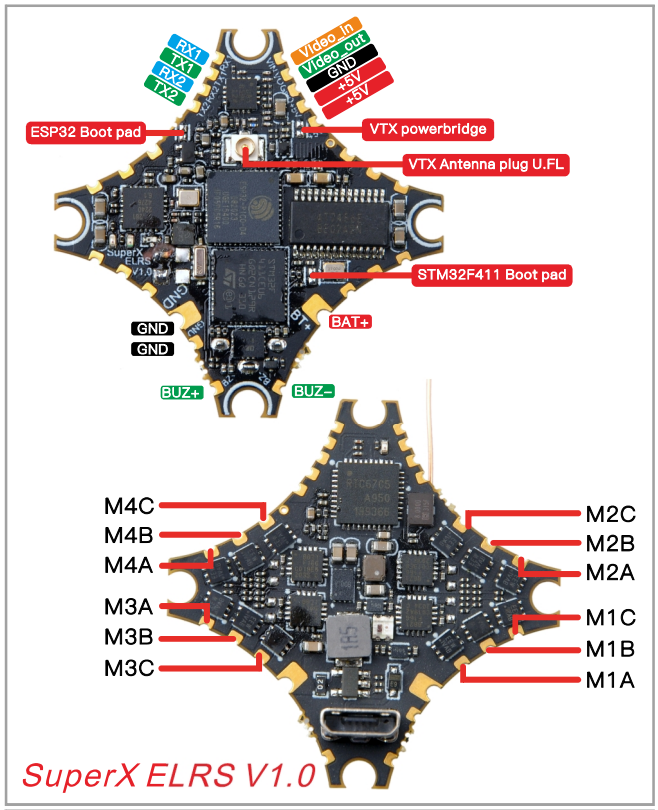
3)The default ARM/DISARM switch was set to "AUX1", usually it's Channel5 of your radio. You can customized a switch for AUX1(Channel5). Then Toggle Aux1 switch to arm the motors, The green LED on the top side of the flight controller would get solid once armed ,happy flying .

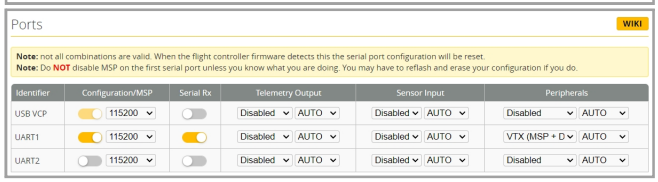


4)Please make sure the MIXES of your radio settings is match the Channel Map of betaflight settings,otherwise it won't be able to armed. The default channel map is "TAER1234", you can also set it to "AETR1234" if necessary.



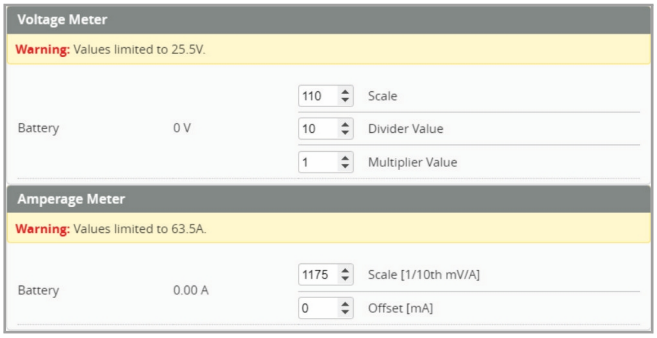
Flight controller connection diagram



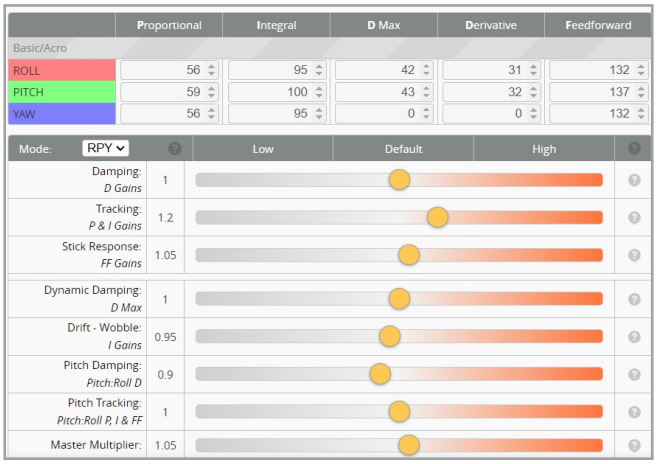


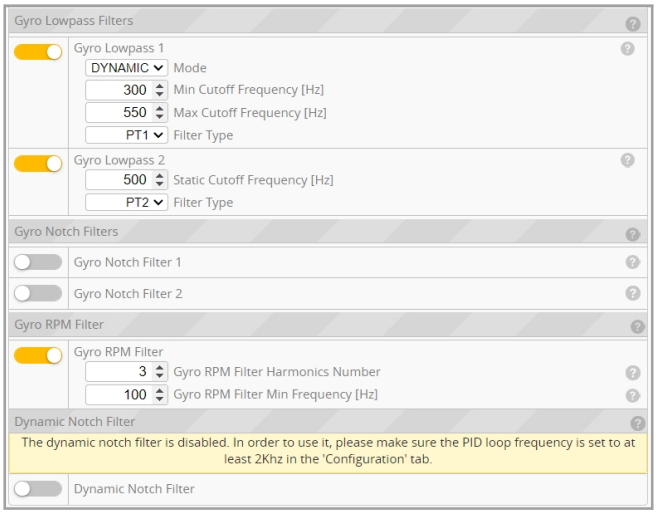
*RX2/TX2/+5V/GND pads could be used for External Serial Based equipment.

Voltage and Currents meter settings

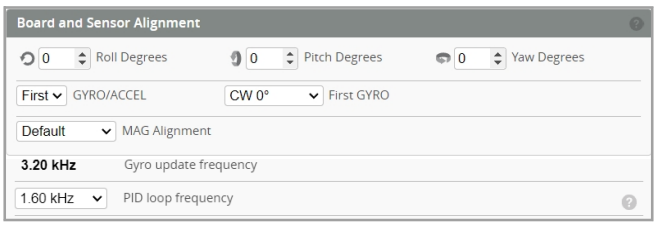


Default PID and Filter Settings

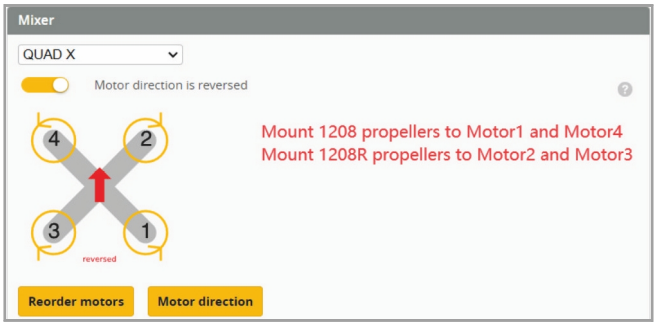


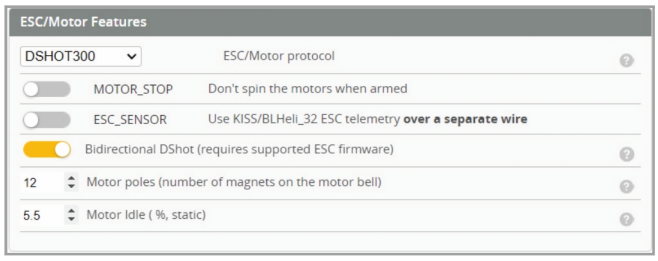


Board and sensor alignment and frequency settings

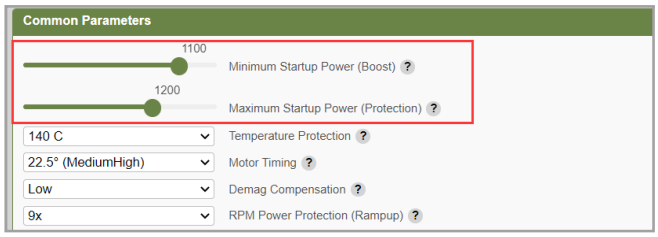


Motors and ESC settings





Blujay ESC settings



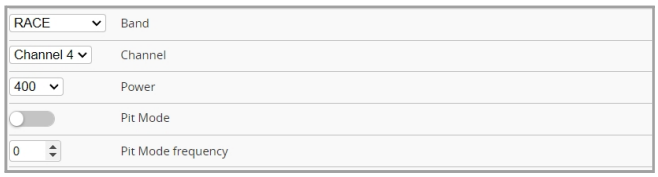
In order to motors spin smoothly , need to change the ESC Min Startup power to “1100” and Max Startup power to “1200”

VTX Bands and Channels setup

VTX band/channel/power_level settings:

There 3 ways to change vtx channel band and power , ELRS vtx administrator

1).Go to Video transmitter menu ,then choose correct Band ,Channel and power level that you needed.



2).Disarm the Mobul6 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

3).Enter into ExpressLRS.lua then choose VTX administrator menu; Change Band, channel value, power level that you needed and then final Send vtx . Some times need to cycle power for the drone to make it effective.