

Sector4 FR Freestyle FPV Drone HD Manual



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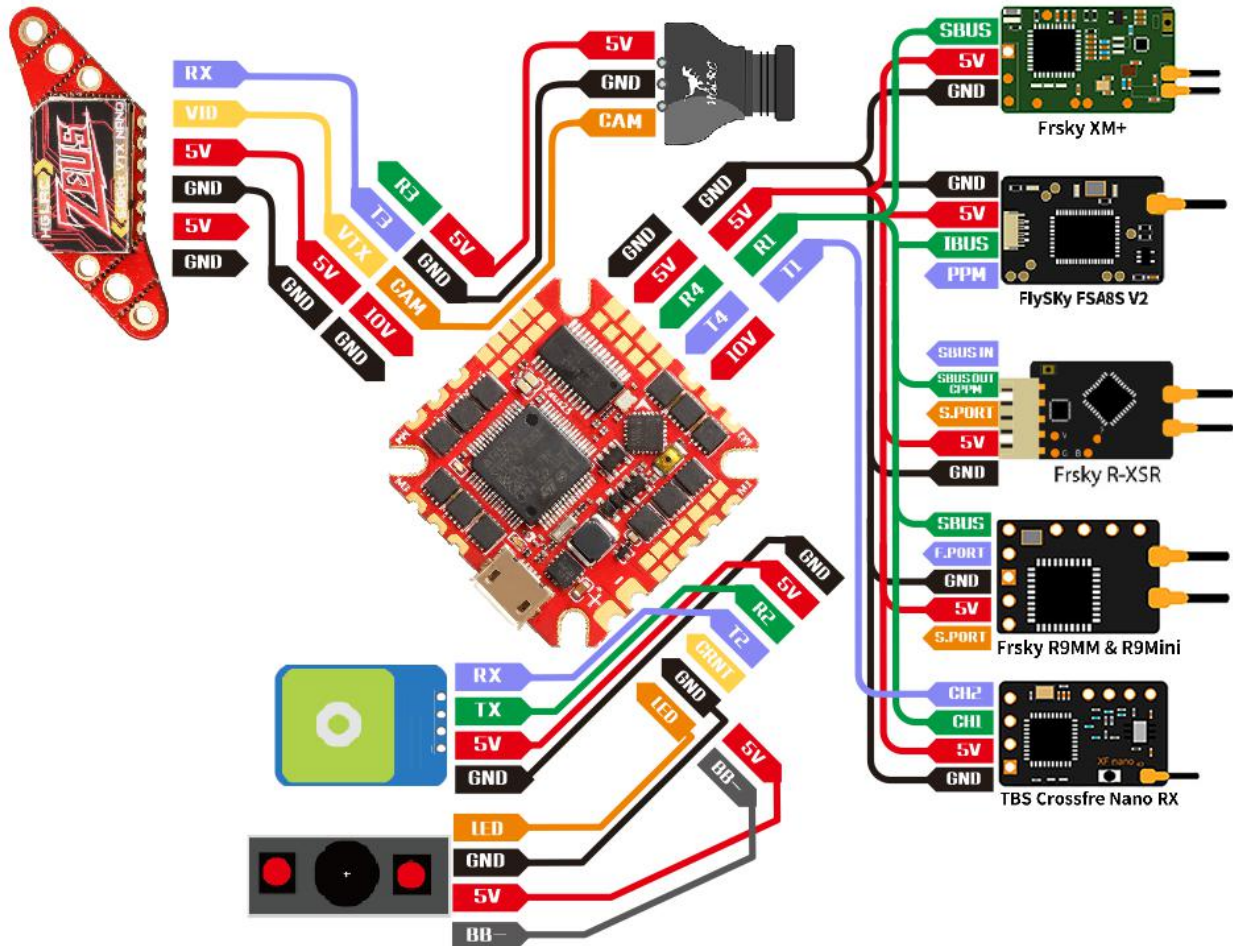
Package Included

Sector4 FR Freestyle FPV Drone HD *1	Accessory Bag*1
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1. Product Specifications

Product parameters	
Model	Sector4 FR Freestyle FPV Drone HD
Frame Kit	Sector4 FR FPV Freestyle Frame Kit
Flight Controller	Zeus 25 AIO
VTX	CADDX Vista Nebula Nano
Motor	1804Motor 4S KV3500
Support receiver	SBUS .DSMX.i.BUS
Input Voltage	3-4S Lipo
Weight	160.5g

2. Interface Description



3. Check the flight control drive

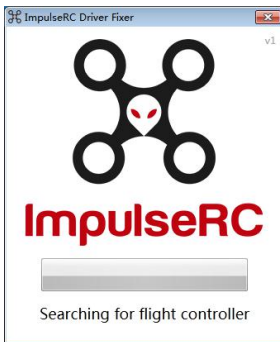
1. Long Press BOOT buttons.connect USB.The system automatically install the driver



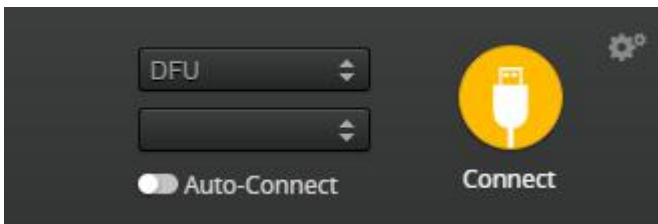
2.Driver cannot be installed, please download ImpulseRC_Driver_Fixer



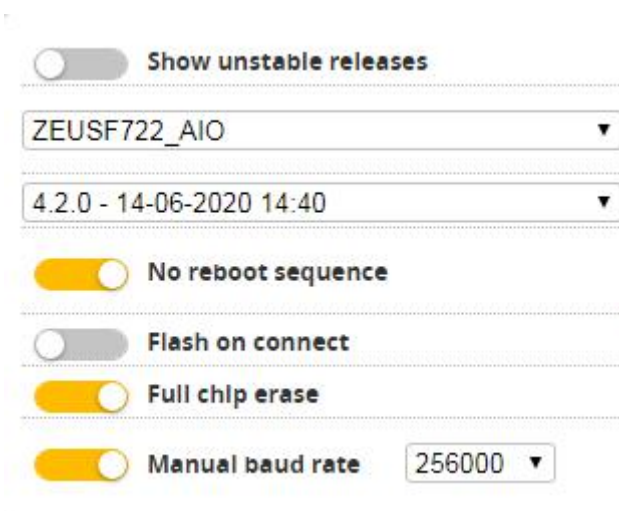
3.Double-click on the run(Plug in the flight controller to automatically install the driver)




4.open betafight configurator , enter DFU mode



5. Click  Select firmware version



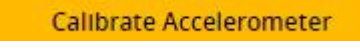
6. Click **Load Firmware [Online]** Load firmware. **Flash Firmware** Waiting for completion **Erasing ...** It will be prompted upon completion. **Programming: SUCCESSFUL**

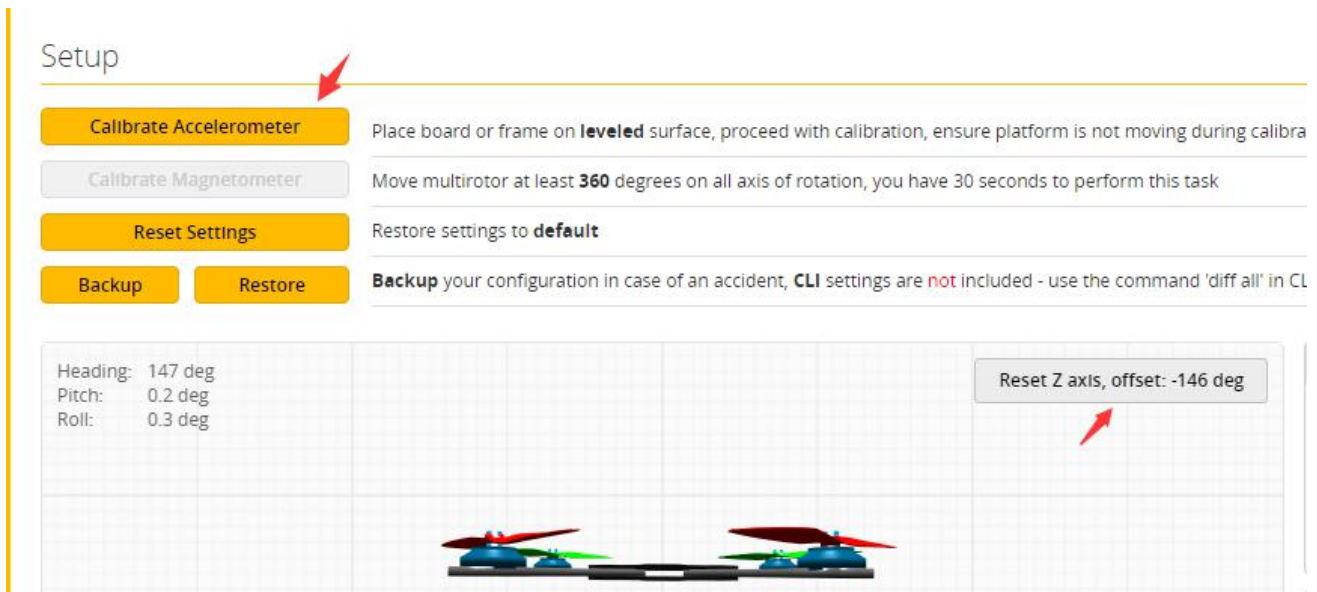
7. open betaflyght configurator  . Controller plugged into the computer. Betaflight Automatically assigned port, click “Connect”
Enter setup interface (Different computer COM)



4. Calibration accelerometer

1. Put the aircraft horizontal and click “Reset Z axis”



Click again 

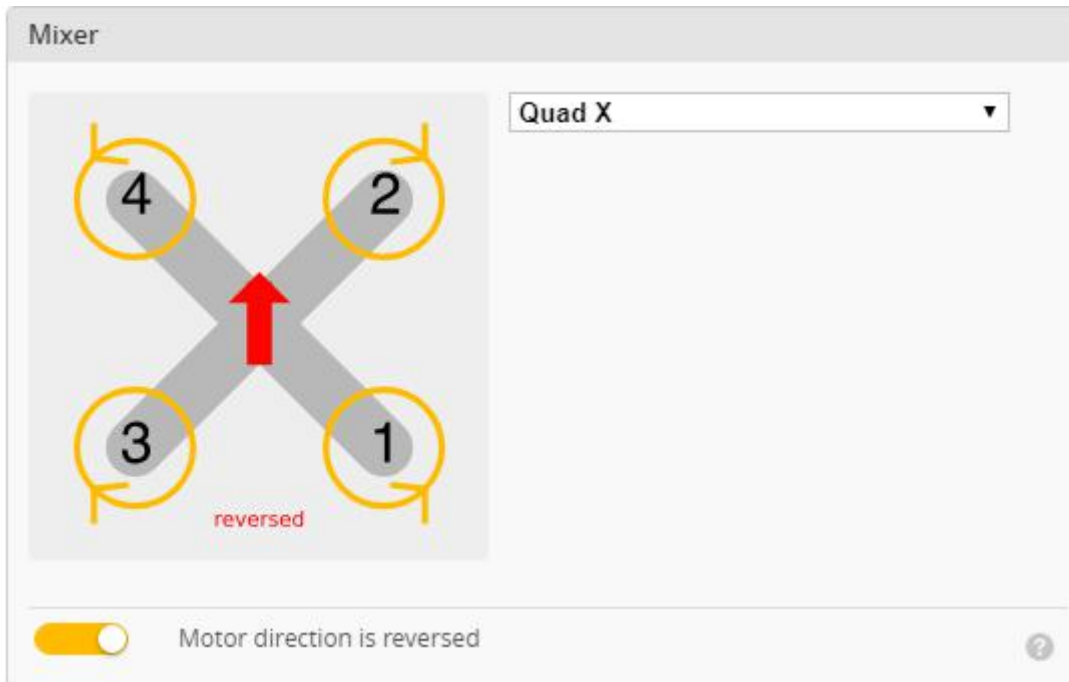



5. UART serial port use

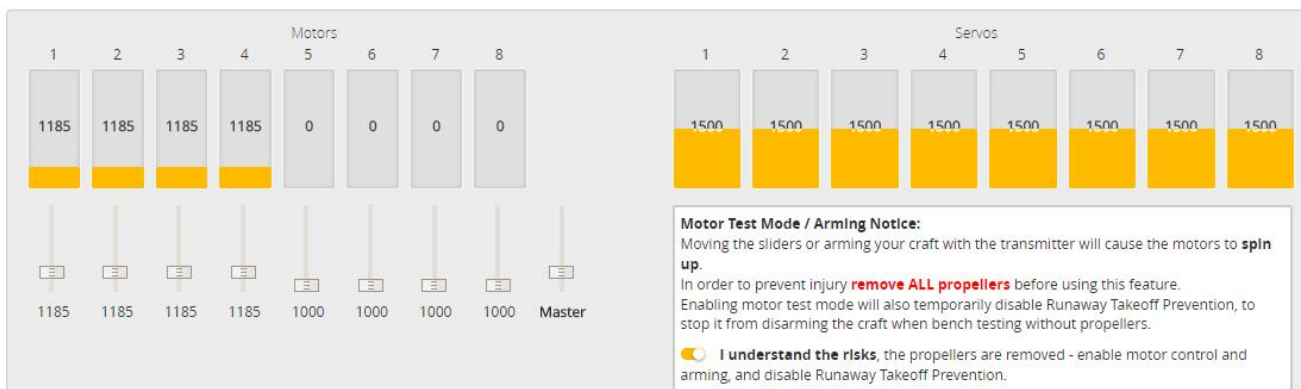
1. UART1 uses the receiver
2. UART2 uses GPS
3. UART3 uses VTX/DJI
4. UART4 uses WiFi module
5. UART6 uses ESC telemetry

6. Select aircraft model

1. Click  Configuration  Select model

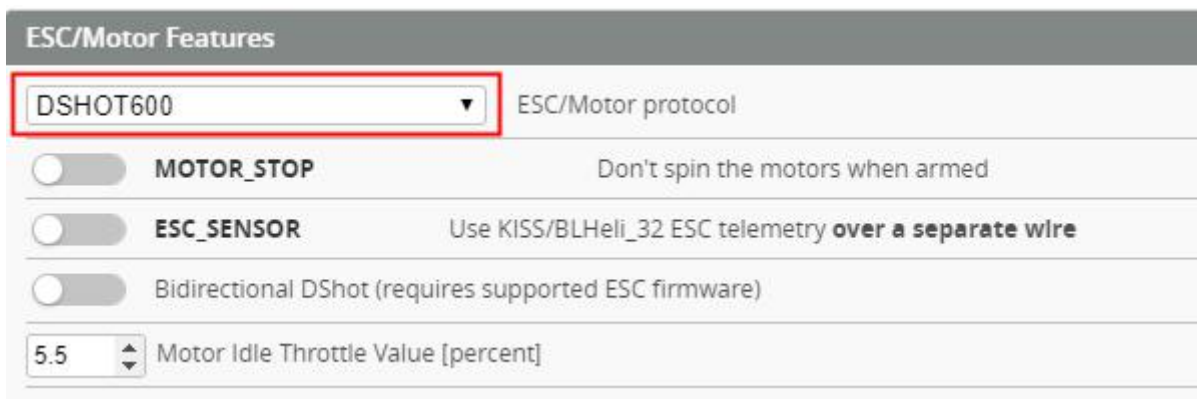


2. Click  Motors Click **“I understand the risks”** Push Master to check motor steering **“Master”** Steering can be changed at [BLHeliSuite](#)



7. Choose ESC protocol

1. Choose the right ESC protocol, the optional universal protocol DSHOT600.

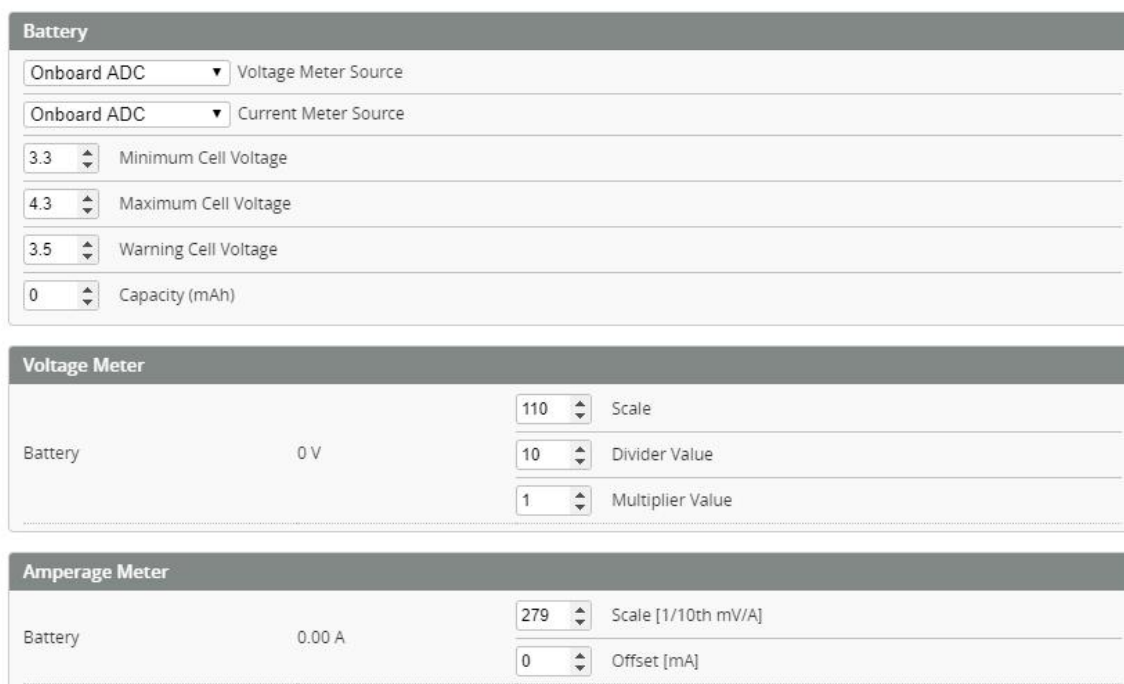


The screenshot shows the 'ESC/Motor Features' configuration panel. A dropdown menu is set to 'DSHOT600'. Below it are three toggle switches: 'MOTOR_STOP' (off), 'ESC_SENSOR' (off), and 'Bidirectional DShot (requires supported ESC firmware)' (off). At the bottom, a numeric input field is set to '5.5' for 'Motor Idle Throttle Value [percent]'.

8. Voltage and current parameters setting

1. Click **Power & Battery** Setting parameters

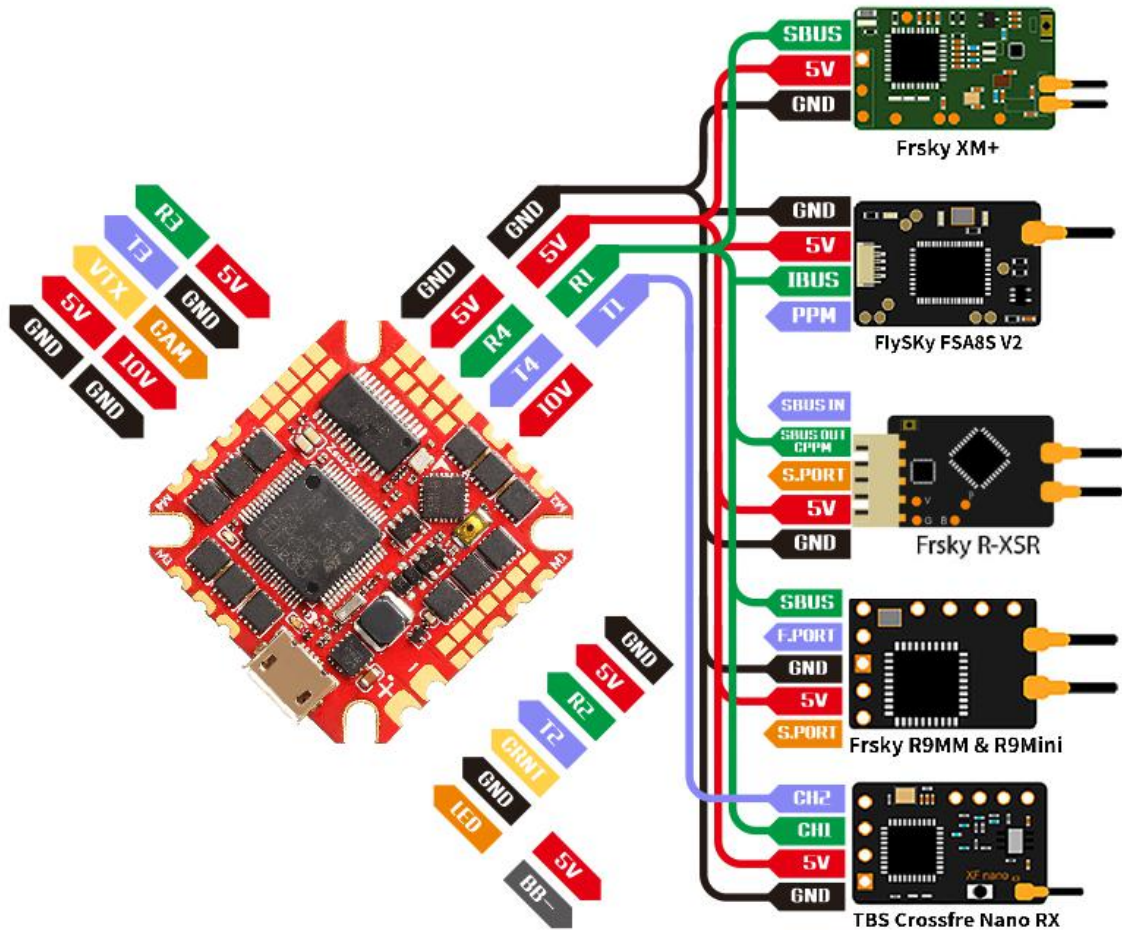
Power & Battery



The screenshot displays the 'Power & Battery' settings page, divided into three sections: 'Battery', 'Voltage Meter', and 'Amperage Meter'.
- **Battery**: Includes 'Onboard ADC' for both Voltage and Current Meter Sources, 'Minimum Cell Voltage' (3.3), 'Maximum Cell Voltage' (4.3), 'Warning Cell Voltage' (3.5), and 'Capacity (mAh)' (0).
- **Voltage Meter**: Shows 'Battery' at '0 V'. Settings include 'Scale' (110), 'Divider Value' (10), and 'Multiplier Value' (1).
- **Amperage Meter**: Shows 'Battery' at '0.00 A'. Settings include 'Scale [1/10th mV/A]' (279) and 'Offset [mA]' (0).

9. Setting up the receiver

1. Receiver connection diagram



2. Click Ports have found “UART1” Open the receiver serial port

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART1	<input type="checkbox"/> 115200 ▾	<input checked="" type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART2	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART3	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	VTX (IRC Tran ▾ AUTO ▾
UART4	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART6	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	ESC ▾ AUTO ▾	Disabled ▾ AUTO ▾

3. Set the **SBUS** receiver

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.

SBUS ▼ Serial Receiver Provider

4. Set the **i.BUS** receiver

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.

IBUS ▼ Serial Receiver Provider

5. Set the **DSMX** receiver

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.

SPEKTRUM2048 ▼ Serial Receiver Provider

.Set the **CRSF** receiver

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.

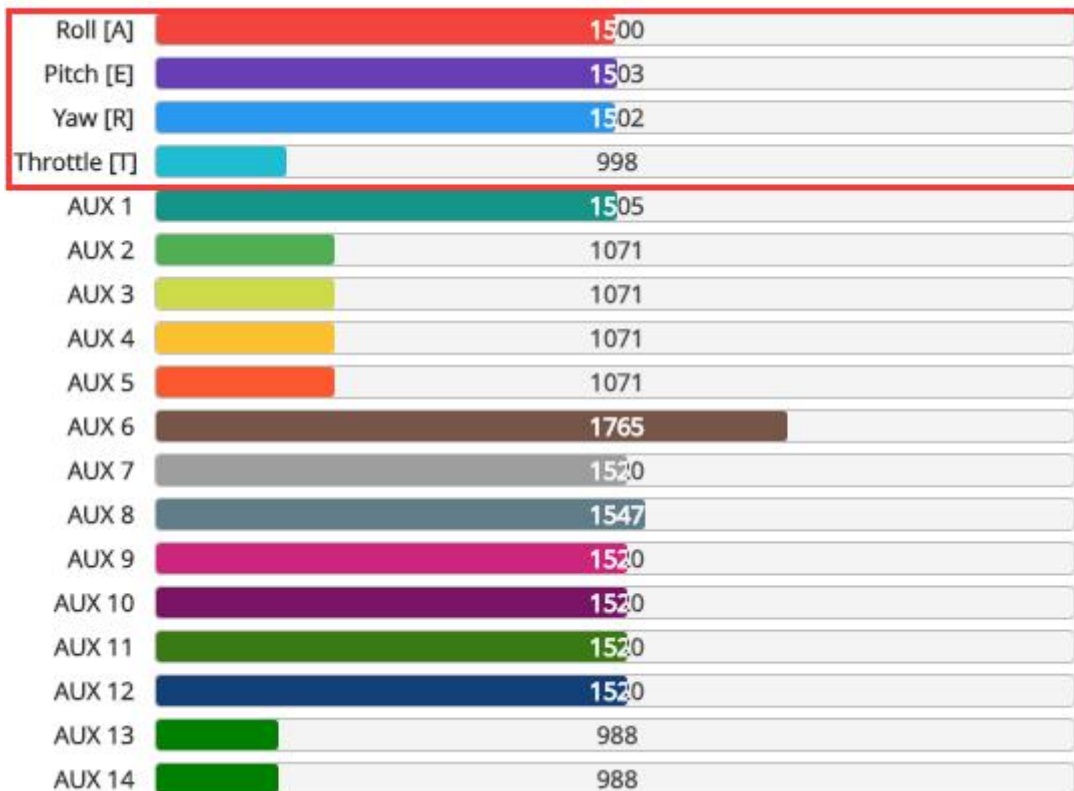
CRSF ▼ Serial Receiver Provider

3. DJI serial port opens

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART1	<input type="checkbox"/> 115200 ▾	<input checked="" type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART2	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART3	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	VTX (IRC Tran ▾ AUTO ▾
UART4	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾	Disabled ▾ AUTO ▾
UART6	<input type="checkbox"/> 115200 ▾	<input type="checkbox"/>	Disabled ▾ AUTO ▾	ESC ▾ AUTO ▾	Disabled ▾ AUTO ▾

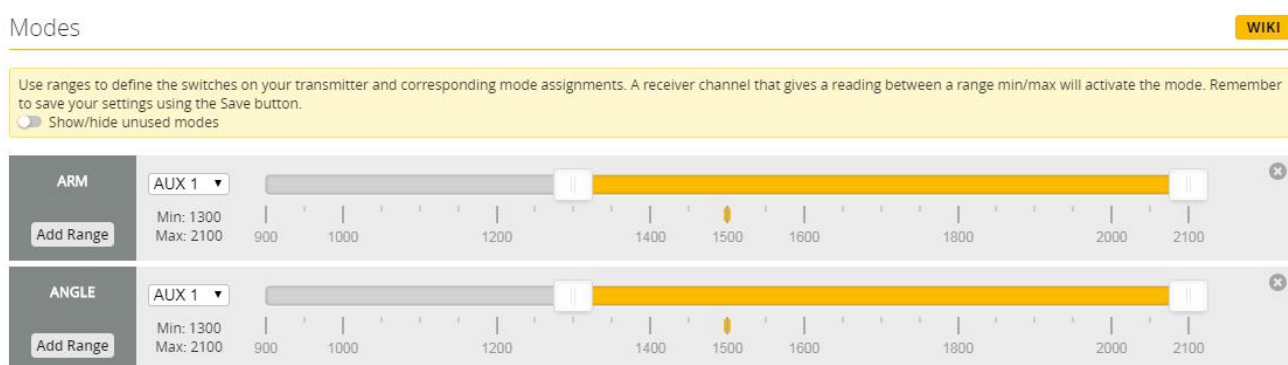
11. Check receiver signal

1. Click  Receiver Check the remote control output signal



12. Select flight mode startup mode

1. Click **Modes** set up the function of remote control switch across the channel (below are for reference only)



13. OSD settings

1. Click **OSD** the OSD Settings, according to the need to choose, drag the OSD schematic diagram of the parameters can be adjusted.

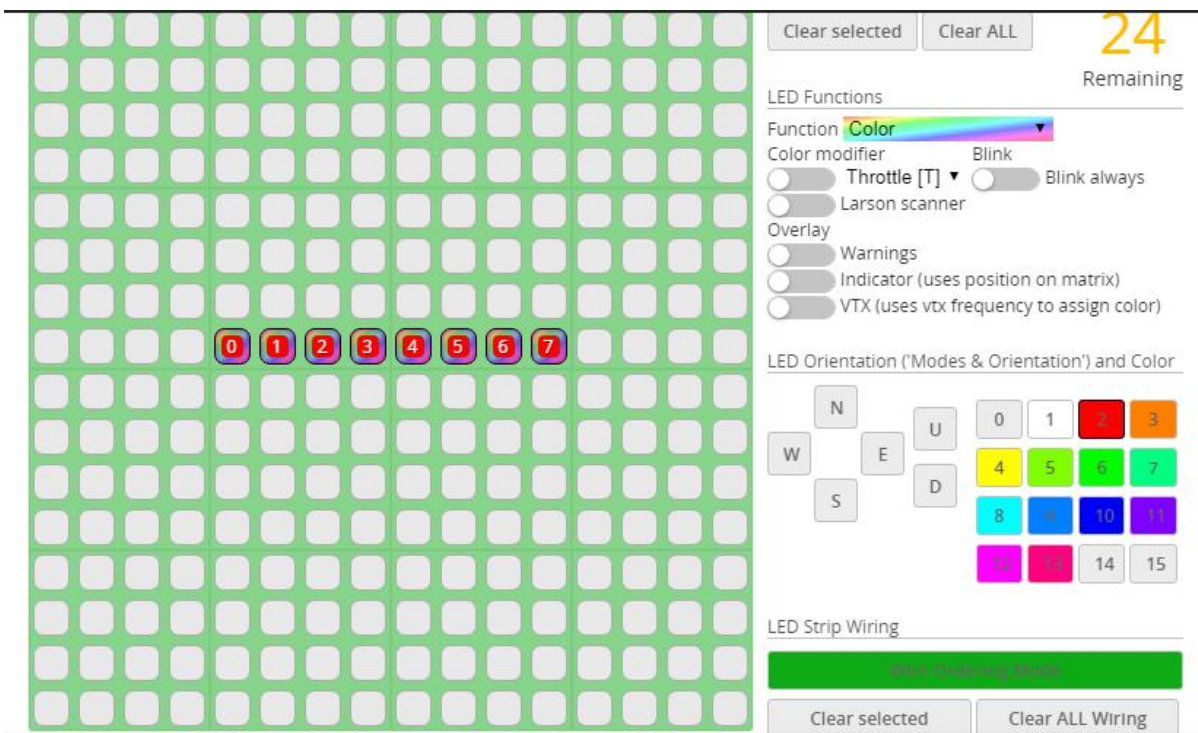


14.LED settings

1. Click  Configuration Turn on LED support



2. Click  LED Strip .Click  set according to need



15.Troubleshooting

Warning:

Please read the cautions as follows, otherwise stability of your flight controller cannot be ensured, your flight controller will even get damaged.

- Keep focus on the polarity. Check carefully before power supply.
- Cut off the power when you connect, plug and pull anything.
- The refresh rate of PID and Gyroscope is up to 4K/4K.

after sales question:

1. After receiving the goods, it is found that the product can not be used normally. If the return to the factory is a quality problem, the repair service will be provided free of charge.
2. If the product is damaged due to improper operation, the repair service may be provided under the condition that the inspection can be repaired.
3. For domestic customers, please contact the after-sales service personnel. For overseas customers, please contact the official website for after-sales service.

Product daily problems

1.OSD garbled:

If you find garbled characters, please open Betaflight, click "OSD" .and click "Font Manager" clicks on "Upload Font" to update

1. When plugged in the battery, the aircraft does not pass the self-test without "BBB" sound. There is only one sound.

Please check if the ESC agreement is correct

3.The spin of the aircraft keeps spinning

1. Please check if the propeller is correct
2. Please check if the motor direction is correct