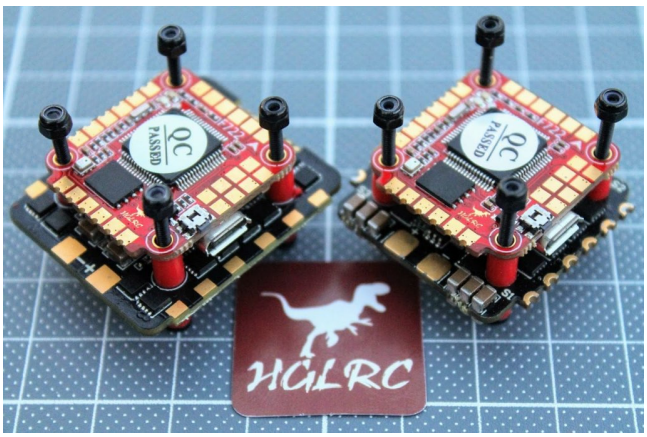


HGLRC Mini Flight Control Zeus User Manual

Contents

HGLRC

HGLRC Mini Flight Control Zeus

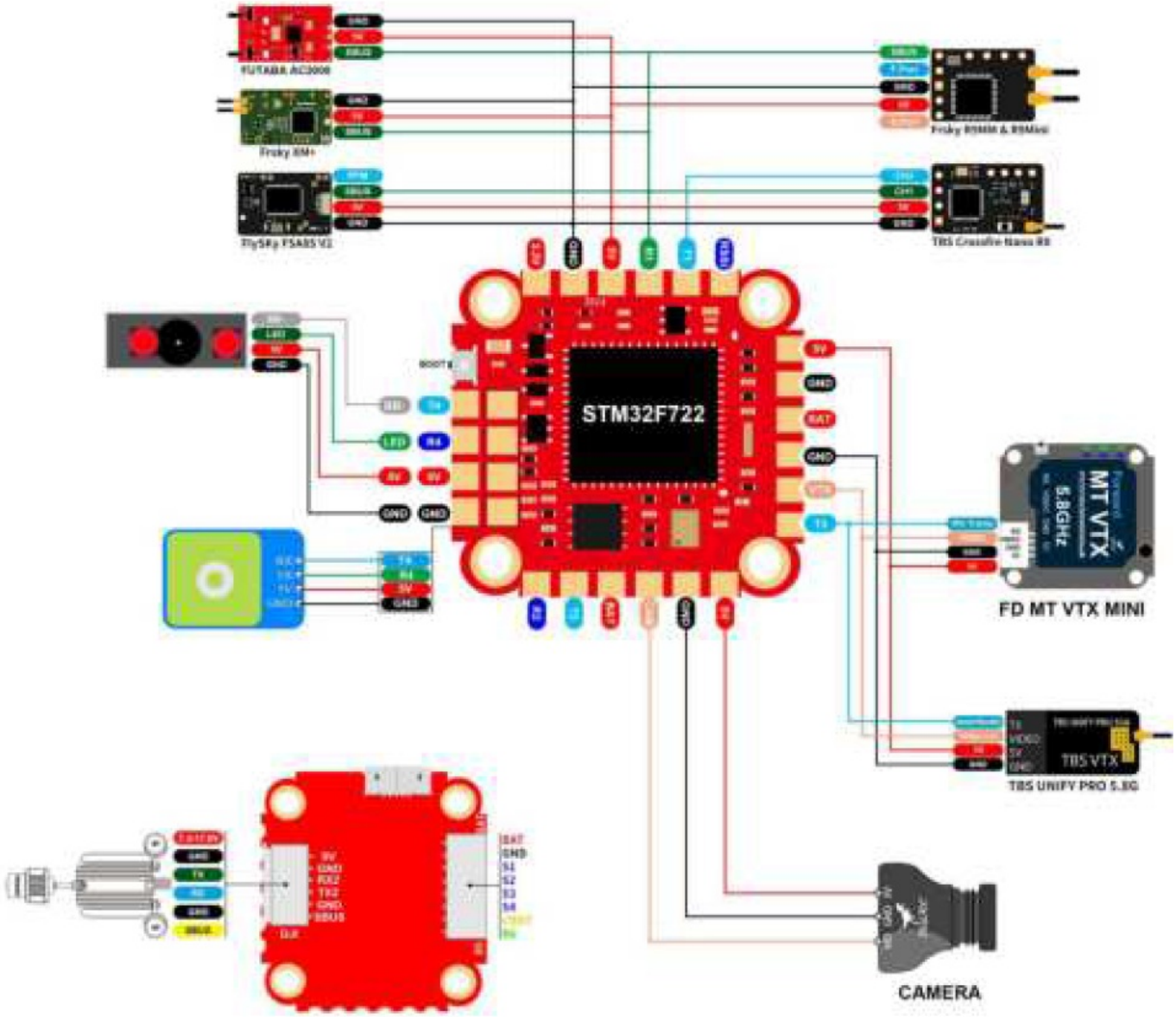
Package Included

- Zeus F722 mini Flight Controller *1
- Accessory Bag *1

Product Specifications

Product parameters	
Model	Zeus F722 mini Flight Controller
Weight	4.6g
Usage	for 100mm-450mm Frame Kit
MPU	MPU6000
CPU	STM32F722 RET6
Black Box	16M
Support receiver	SBUS .IBUS.DSMX/R9MM
Input Voltage	3-6S Lipo
BEC Output	9V/2A.5V/3A
Size	28.2×28.1mm board, M2/M3 mounting holes

Interface Description

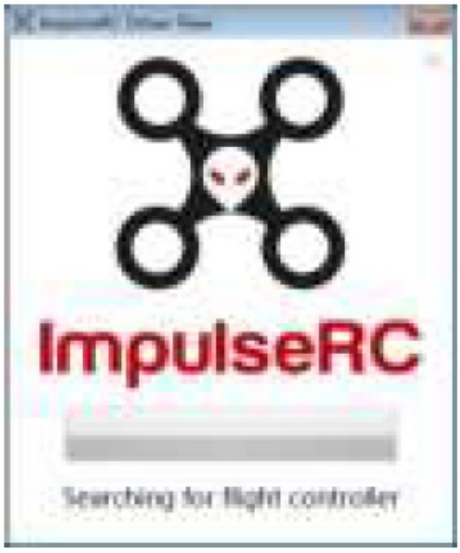


Check the flight control drive

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

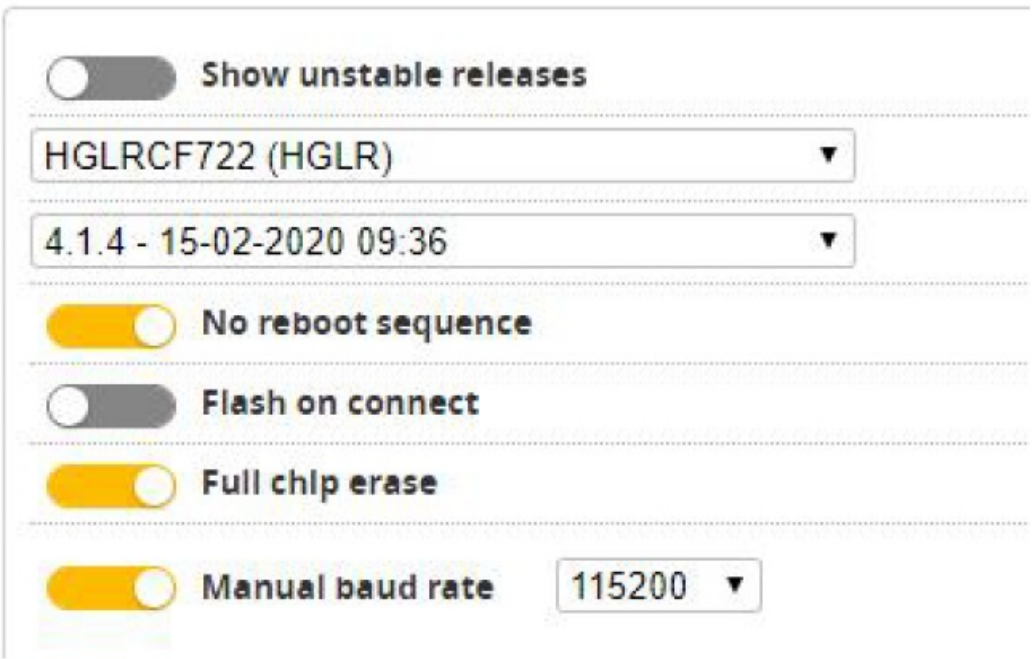
2. Driver cannot be installed, please download ImpulseRC_Driver_Fixer

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

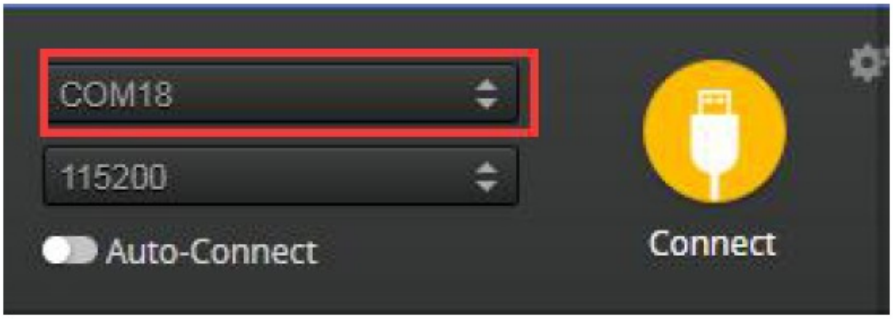


4. open betaflight configurator, enter DFU mode

5. Click Select firmware version



6. Click Load firmware. Waiting for completion It will be prompted upon completion.
7. open betaflight configurator .Controller plugged into the computer. Betaflight Automatically assigned port, click “Connect” Enter setup interface (Different computer COM



Calibration Accelerometer

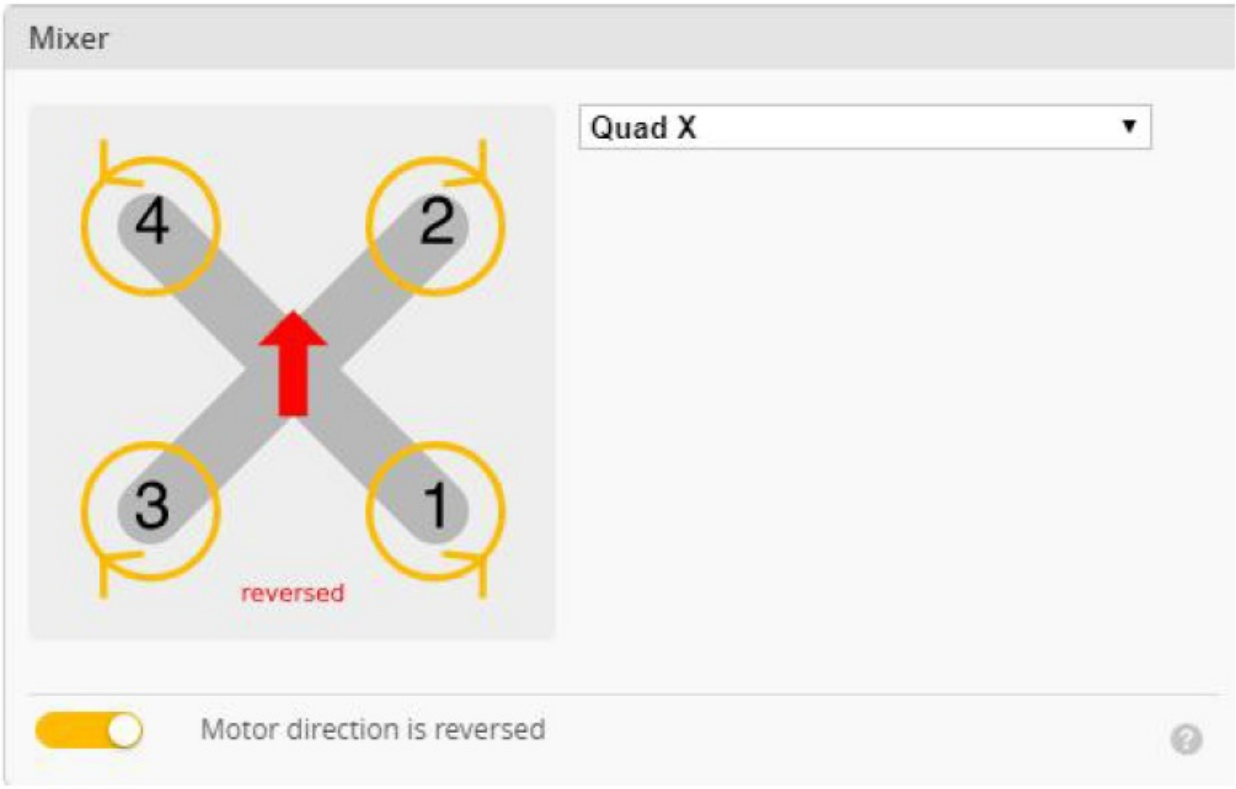
Put the aircraft horizontal and click“Reset Z axis” Click again

URAT serial port use

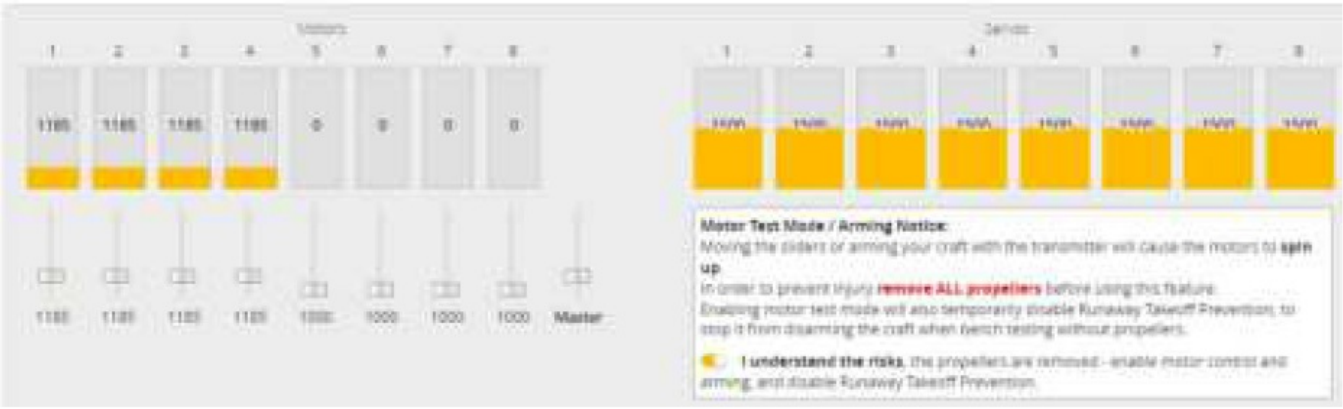
1. URAT1 uses the receiver
2. URAT2 uses GPS
3. URAT3 uses VTX image transmission
4. URAT4 uses DJI
5. URAT6 uses ESC telemetry

Select aircraft model

Click **“Configuration”** Select model

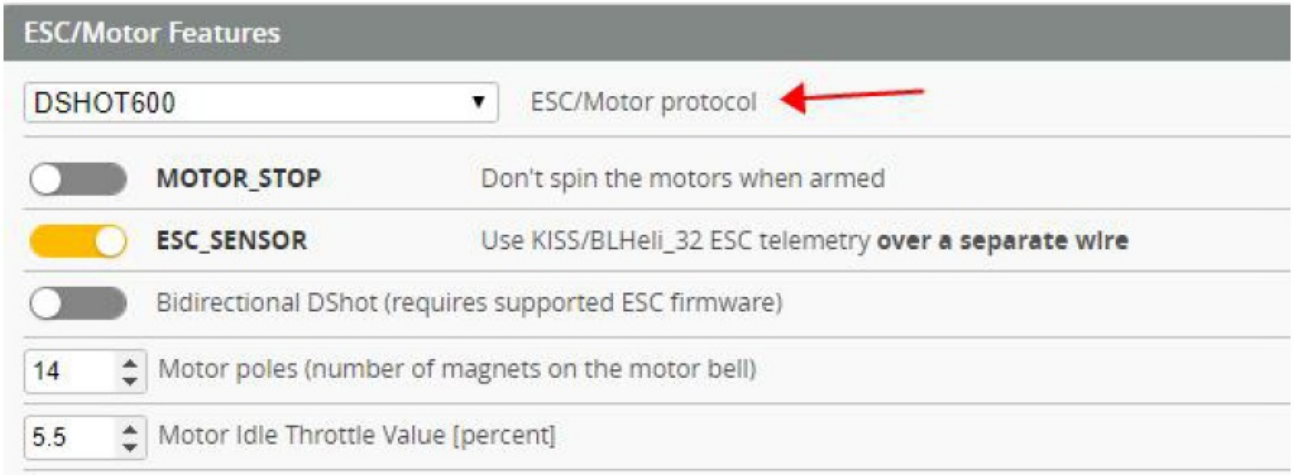


Click Click “I understand the risks” Push Master to check motor steering “Master” Steering can be changed at BLHeliSuite



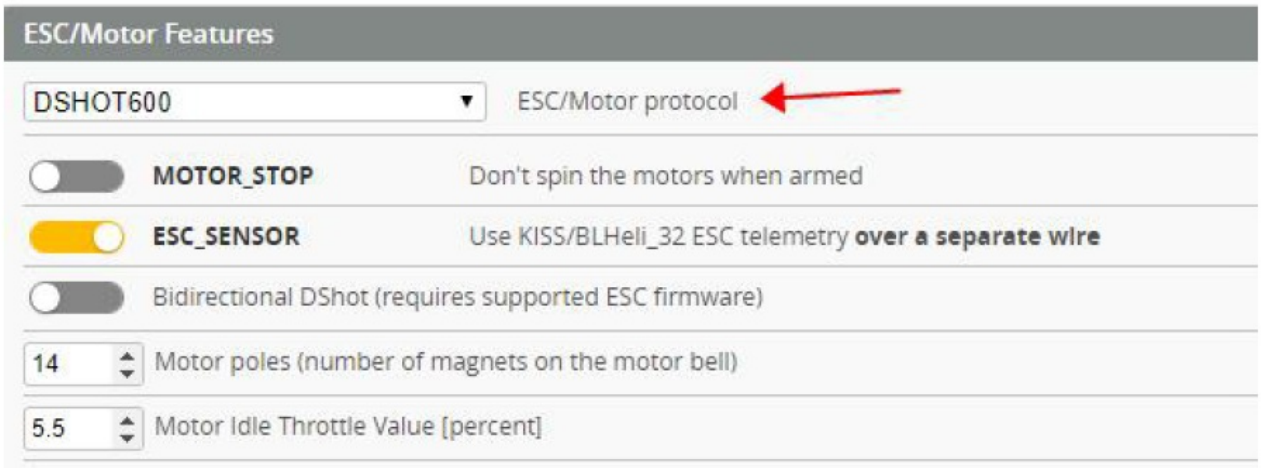
Choose ESC protocol

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



Turn on ESC telemetry

1. Use BLHeli_32 ESC telemetry over a separate wire

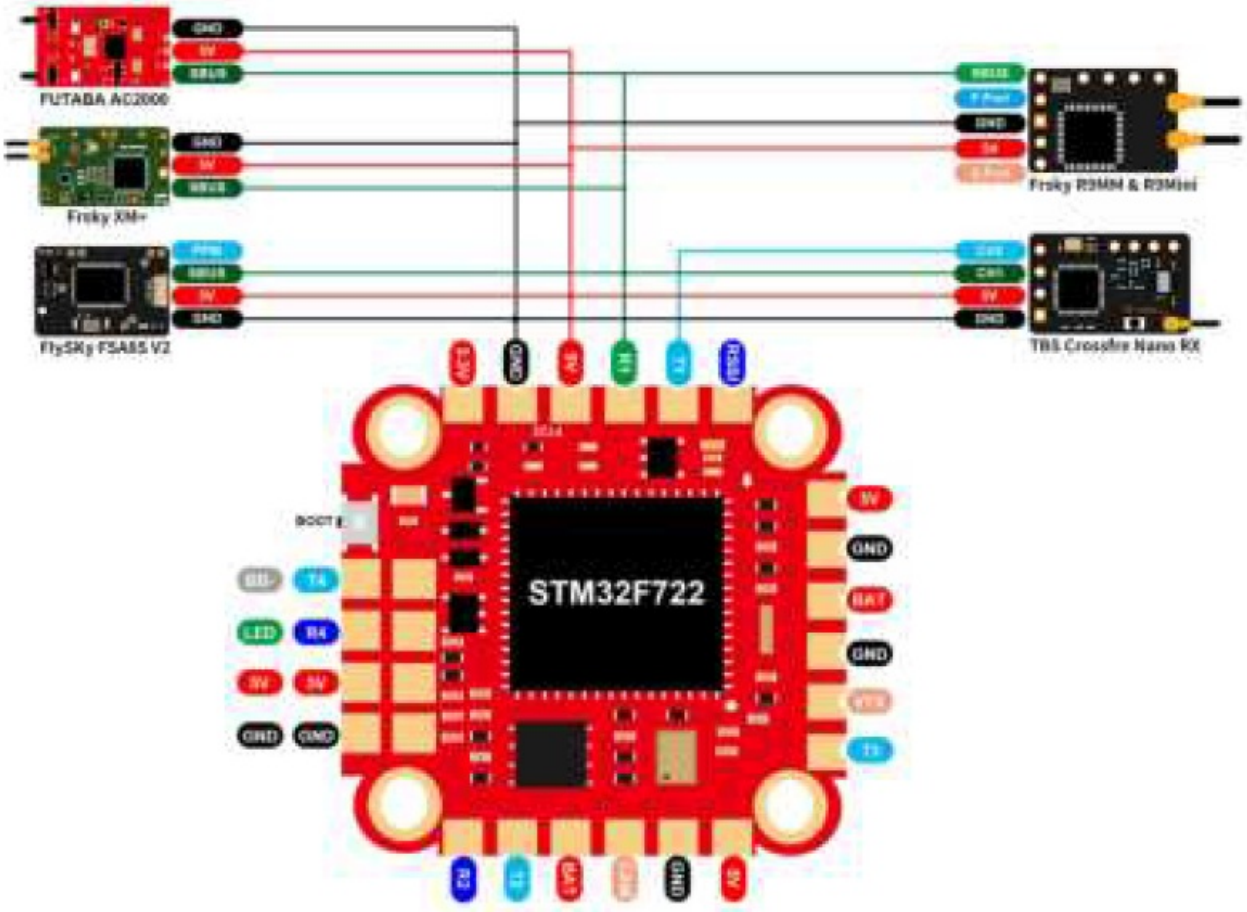


2. Open ESC telemetry serial port. TX on the ESC needs to be connected to the RX6 on the flight controller to use the ESC telemetry

3. View telemetry data on OSD

Setting up the receiver

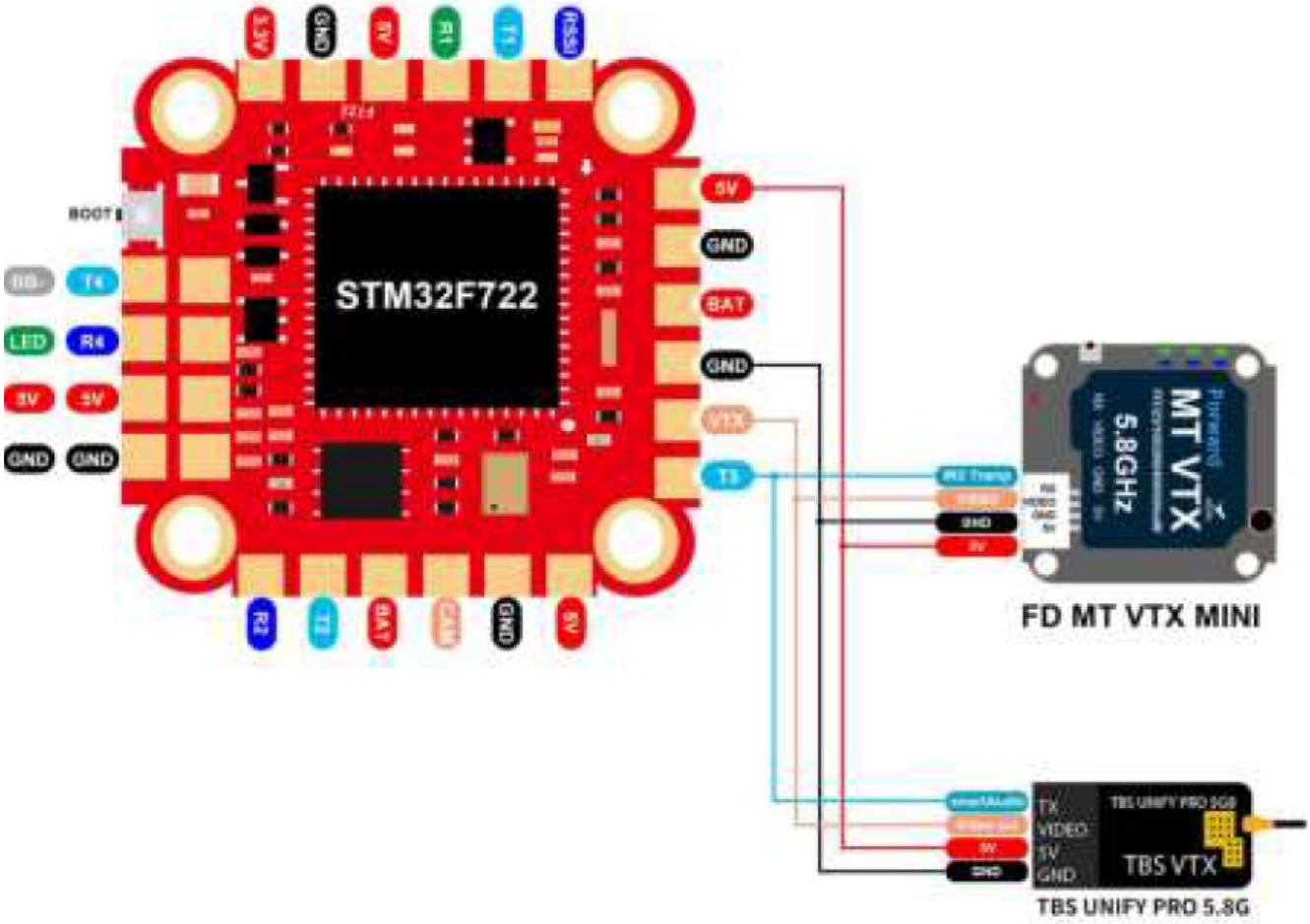
1. Receiver connection diagram



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

3. Set the SBUS receiver
4. Set the DSMX receiver

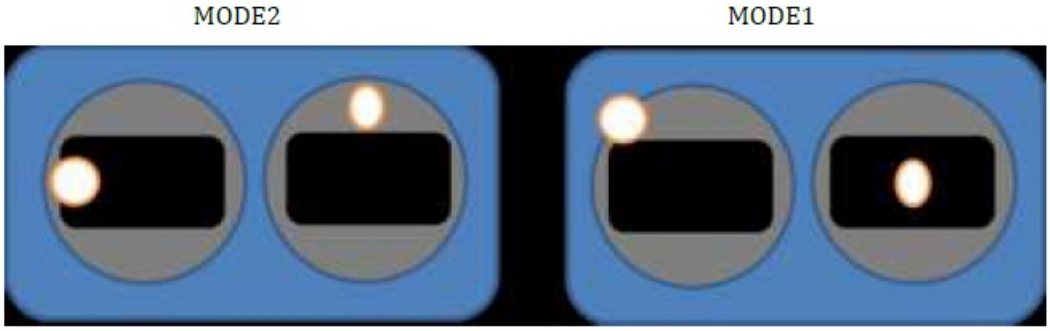
VTX serial port use. VTX uses OSD smart audio



VTX serial port opens. The protocol is selected according to its own VTX protocol.

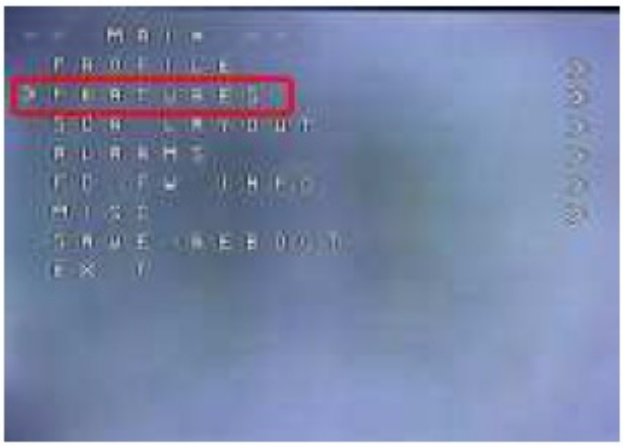
Use OSD to adjust VTX

which displays information like battery voltage and mAh consumed while you fly. In addition, the Betaflight OSD can be used to configure the quadcopter, making in-field adjustments and tuning more convenient.



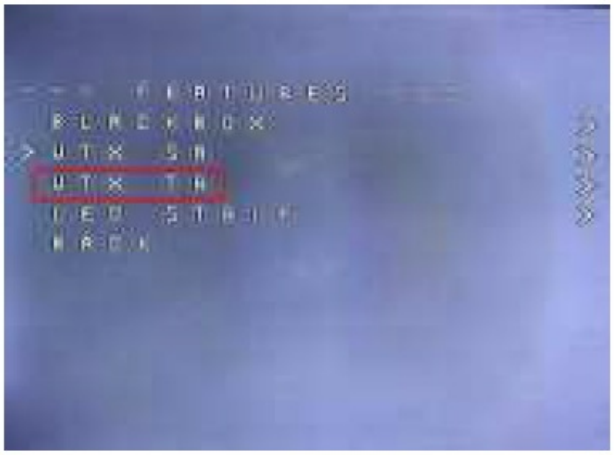
The graphics above show the stick command to bring up the OSD menu. The stick command is: throttle centered, yaw left, pitch forward. The exact stick command therefore depends on which mode your transmitter sticks are in. In the OSD menu, use pitch up/down to move the cursor between menu items. When a menu option has a > symbol to the right of it, this indicates that it contains a sub-menu.

Roll-right will enter the sub-menu. For example, in the screen to the right, moving the cursor to “Features” and then moving the roll stick to the right will enter the “Features” sub-menu.



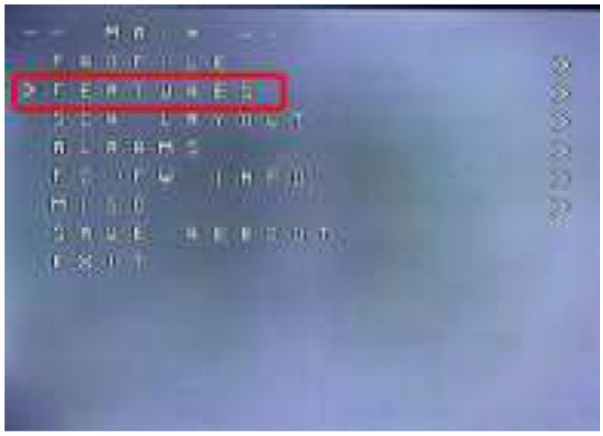
If you are using a video transmitter that supports remote configuration, enter the “Features” menu to configure the

vTX. From there, enter either “VTX SA” if you are using SmartAudio (TBS Unify) or “VTX TR” if you are using IRC Tramp Telemetry.
To adjust PIDs, rates, and other tuning-related parameters, enter the “Profile” sub-menu.



In the “Scr Layout” sub-menu, you can move the OSD elements (like battery voltage, mAh, and so forth) around on the screen.
The “Alarms” sub-menu lets you control when the OSD will try to alert you that battery voltage is too low or mAh consumed is too high.

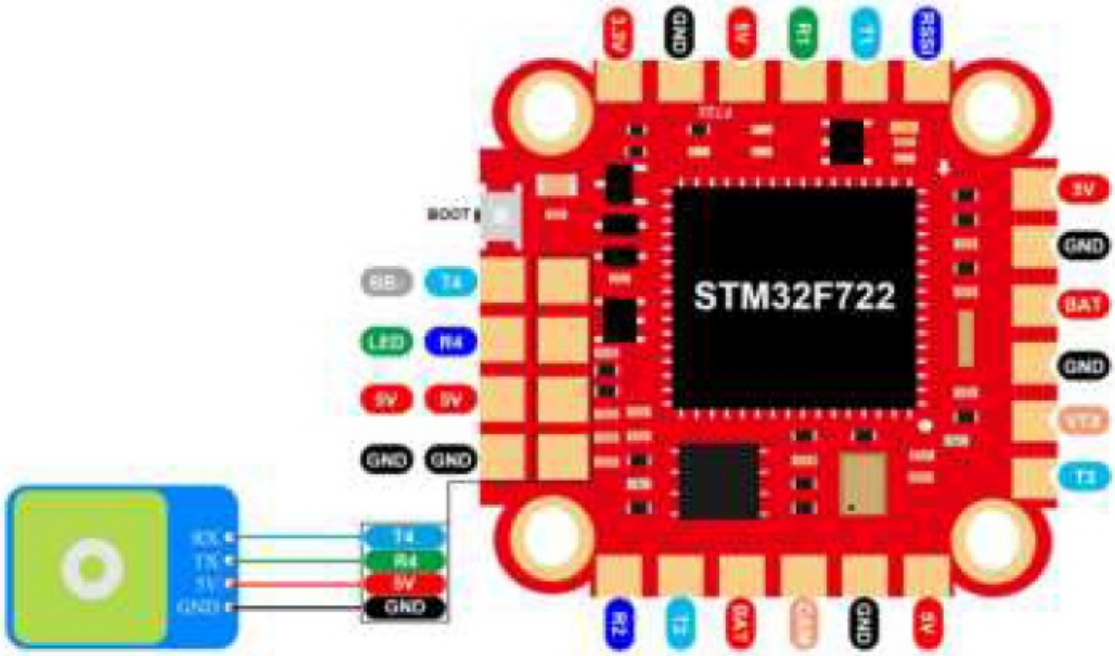
When a parameter can be modified, the parameter’s current value will be shown on the right-hand side of the screen. In this case, roll left/right will adjust the parameter up and down.



The screen to the right shows the current vTX settings. From here, you can change the frequency band, channel, and power level of the video transmitter. After making the changes, move the cursor to “Set” and press roll-right to confirm the settings.

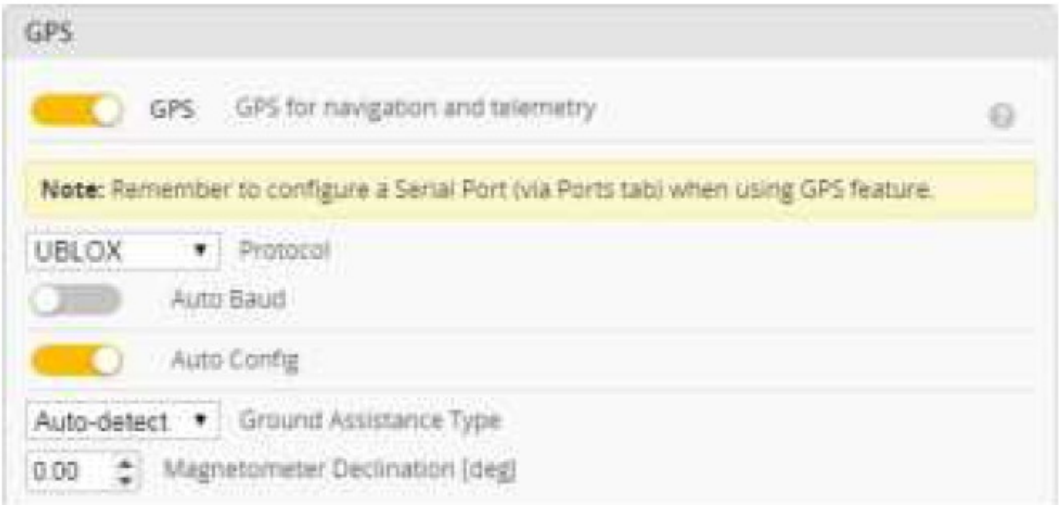
GPS parameters setting

1. GPS parameters setting



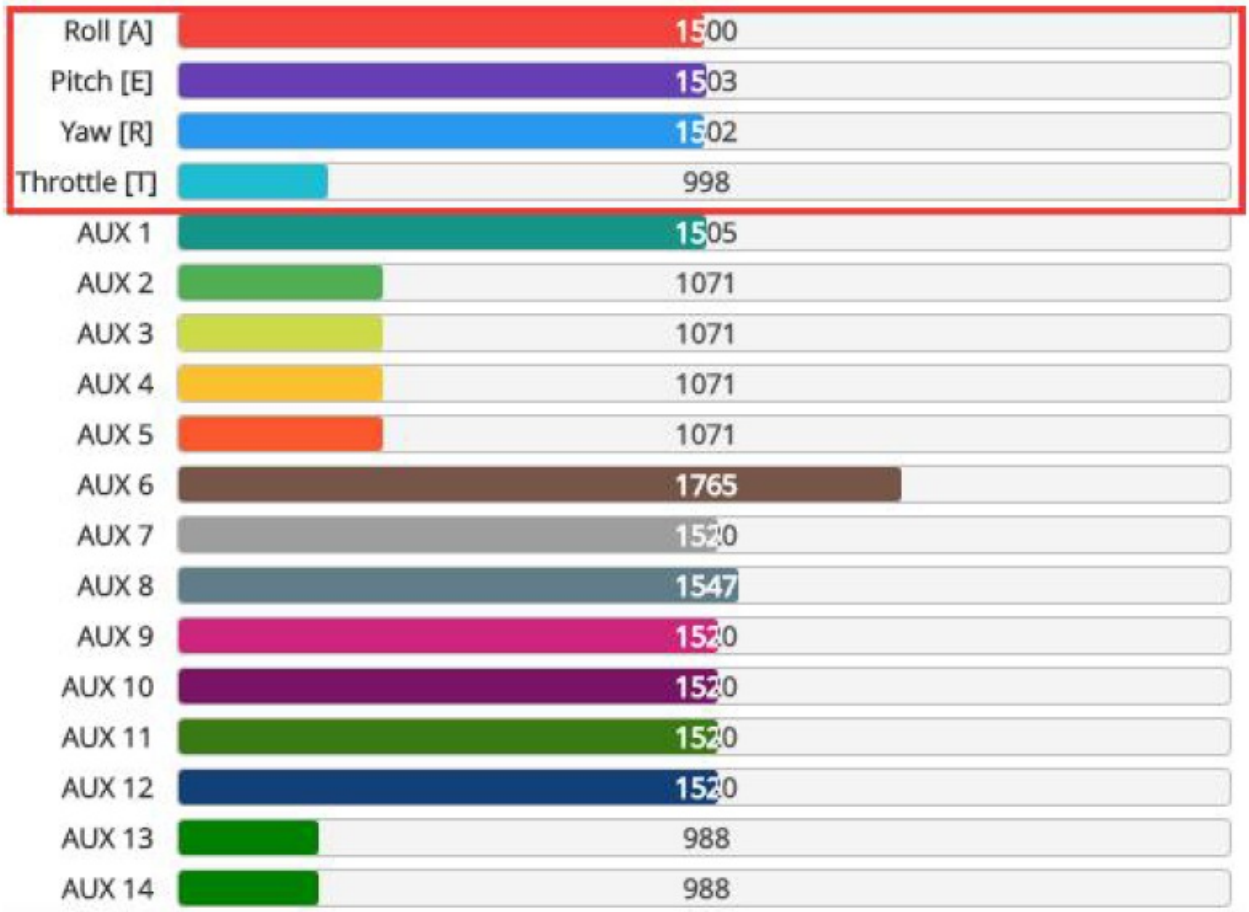
2. Open the GPS serial port

3. When using the GPS function, remember to configure the serial port (via the Ports tab).



Check receiver signal

Click “Receiver” Check the remote control output signal



Select flight mode startup mode

Click “Modes” set up the function of remote control switch across the channel (below are for reference only)

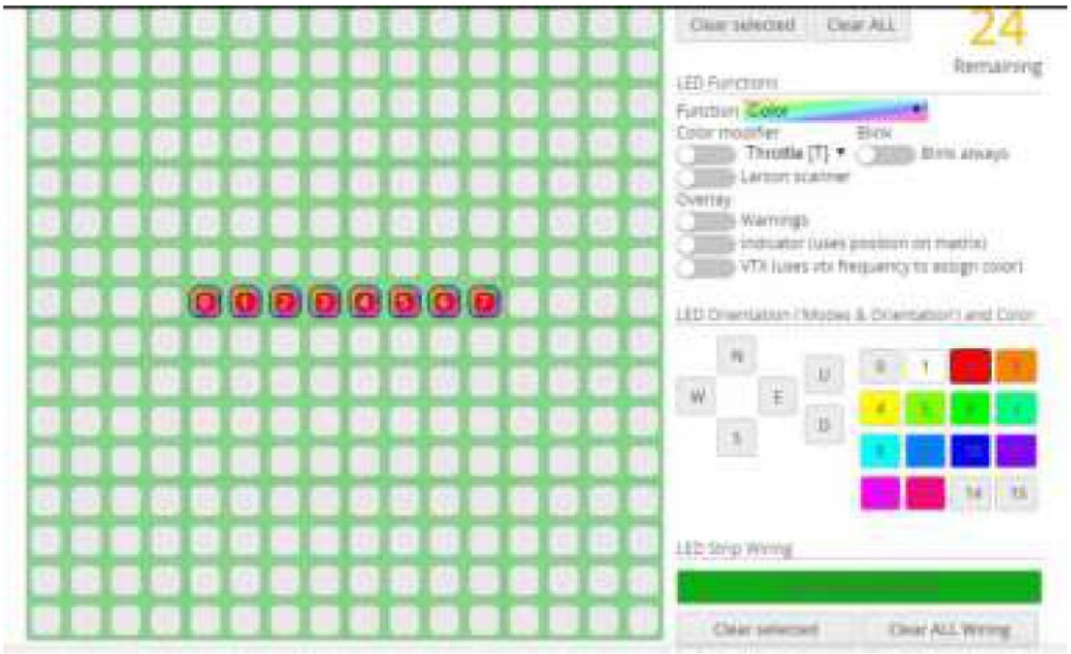
OSD settings

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

LED settings

Click “Configuration” Turn on LED support

4.Click  Click  set according to need



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 32K/16K.

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

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.
2. Please check if the ESC agreement is correct
3. The spin of the aircraft keeps spinning

- Please check if the propeller is correct
- Please check if the motor direction is correct

www.hglrc.com

Documents / Resources

	HGLRC Mini Flight Control Zeus [pdf] User Manual Mini Flight Control Zeus, F722