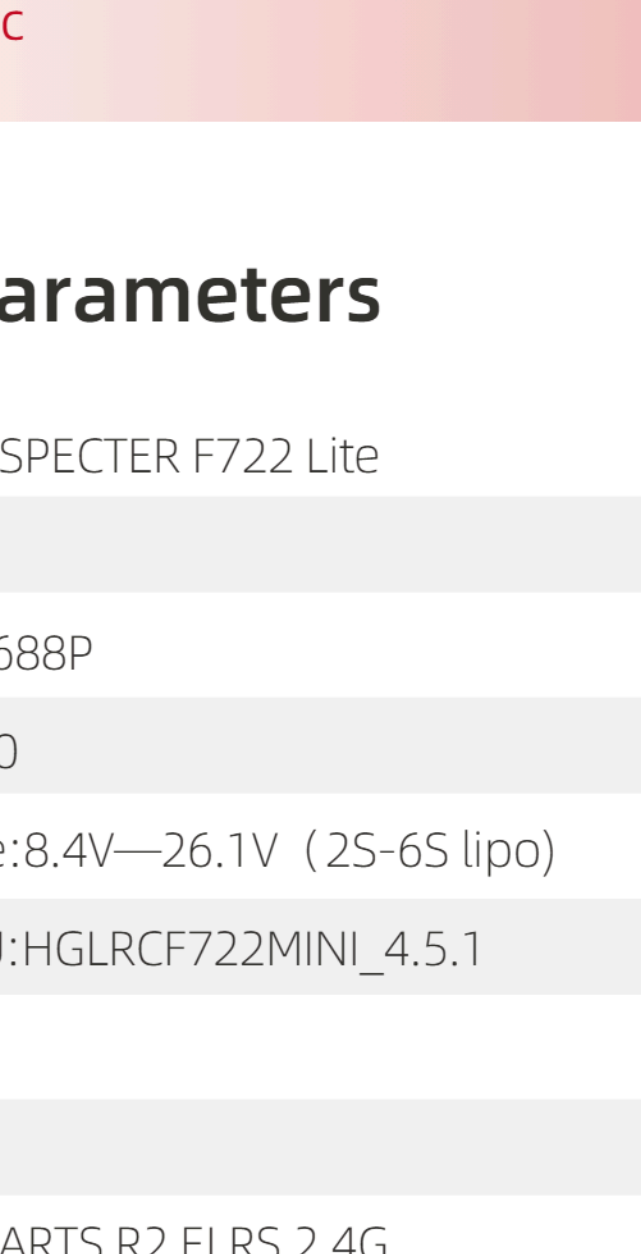
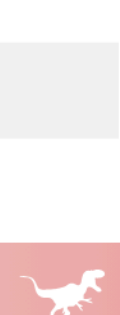


SPECTER F722 Lite FC

Manual



SPECTER F722 Lite FC user's guidance



Product parameters

FC Product name:SPECTER F722 Lite

MCU:STM32F722

Gyroscope:ICM42688P

Barometer:dps310

Operating voltage:8.4V—26.1V (2S-6S lipo)

Flight control MCU:HGLRCF722MINI_4.5.1

Black box:16MB

UARTS:5

Built-in receiver:UARTS R2 ELRS 2.4G

Mounting hole:20×20mm, M3

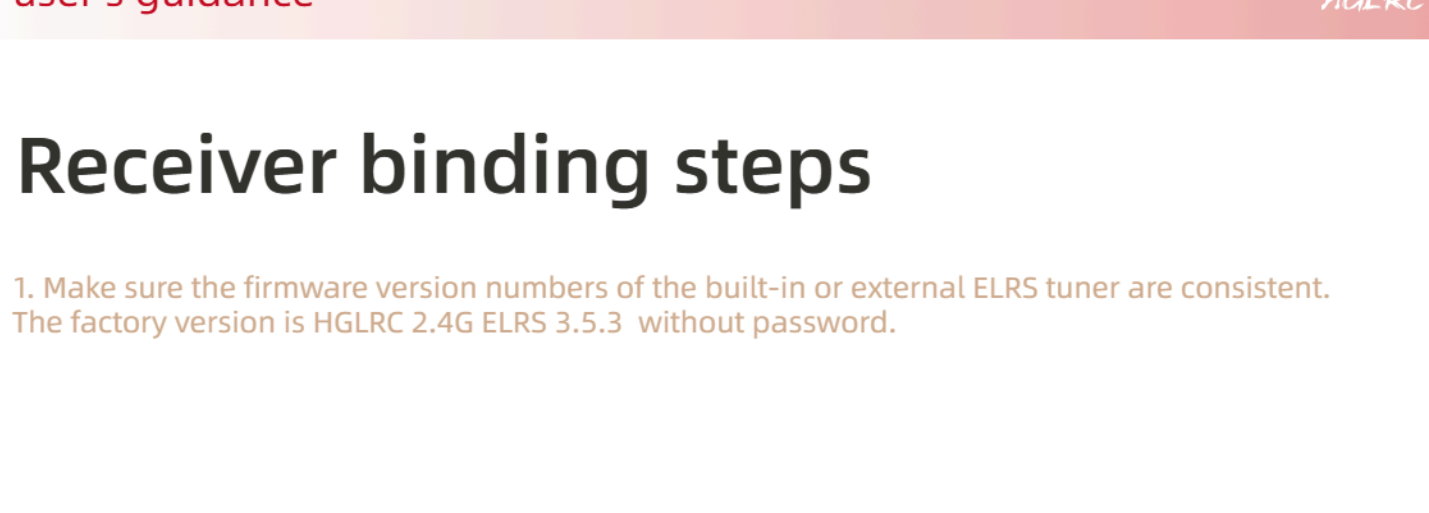
Size:28×28mm

Weight:4g

SPECTER F722 Lite FC user's guidance



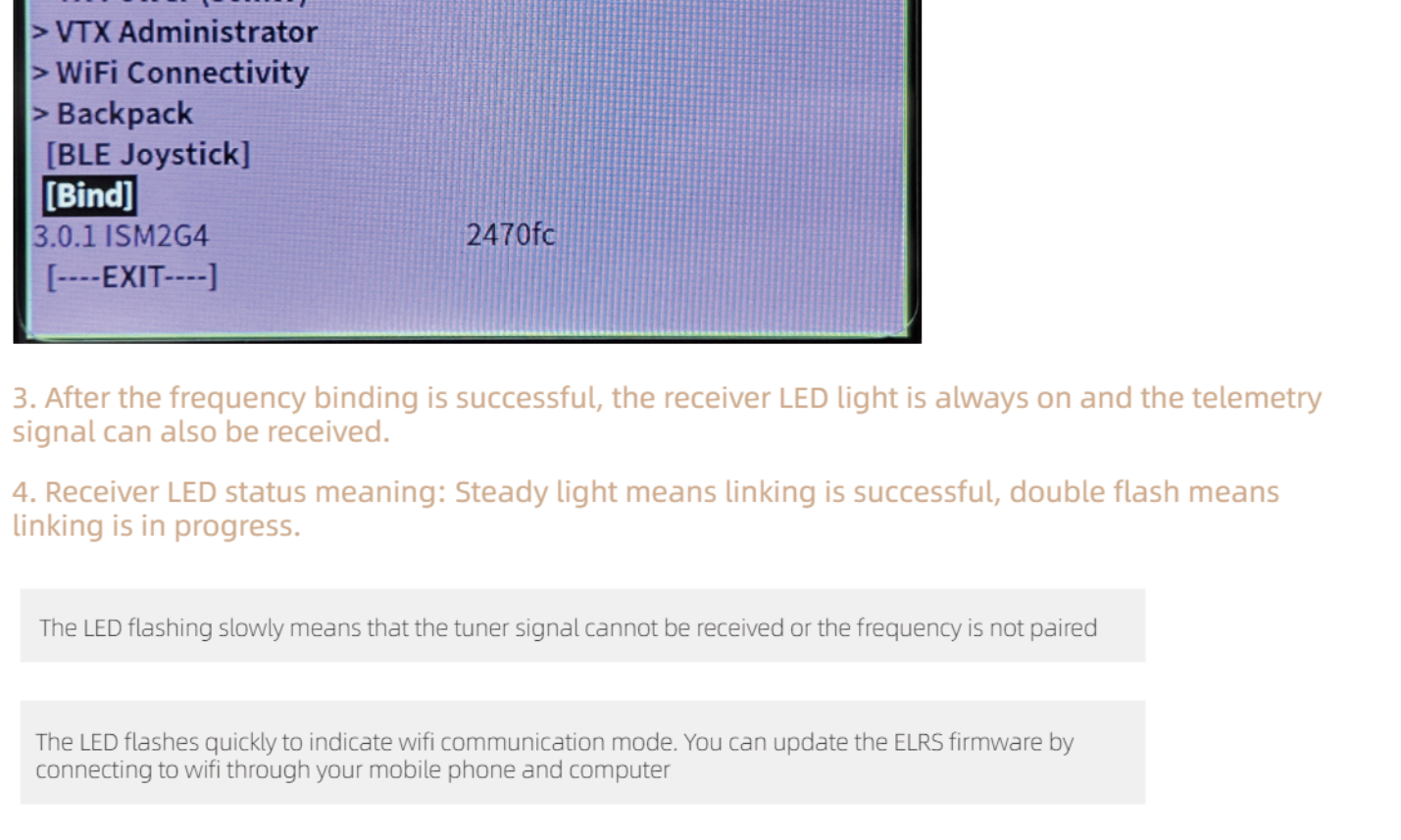
Interface definition



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Wiring diagram

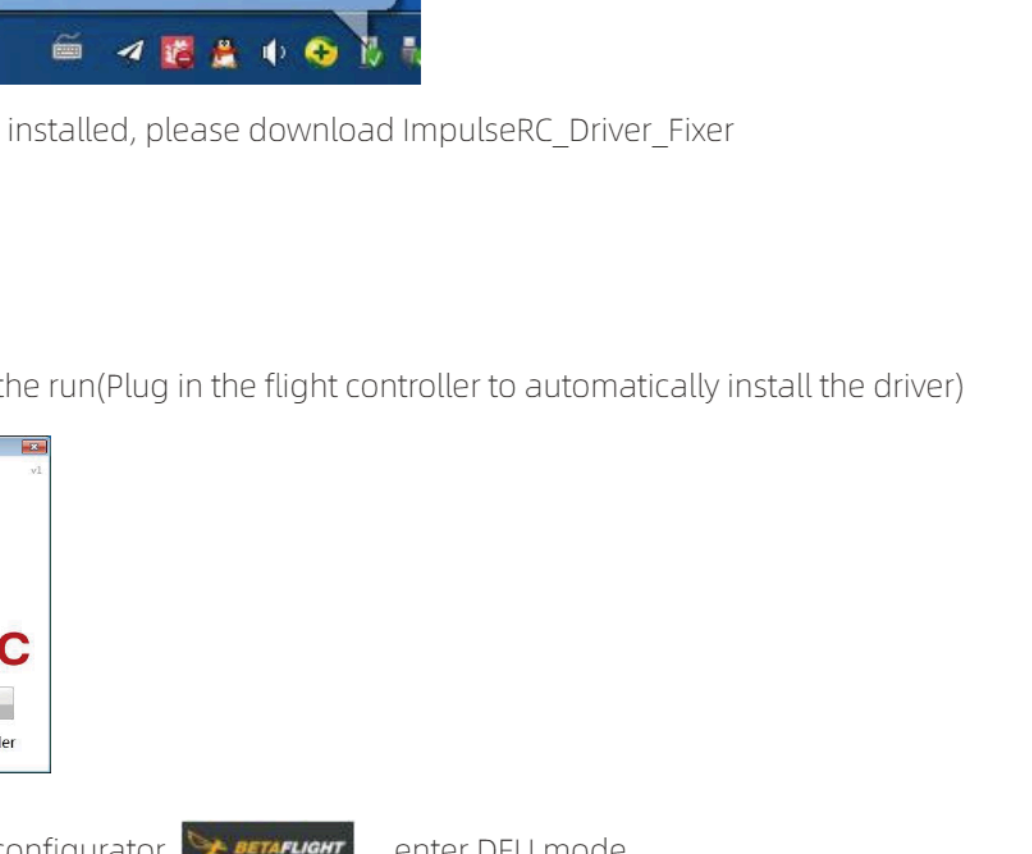


SPECTER F722 Lite FC user's guidance



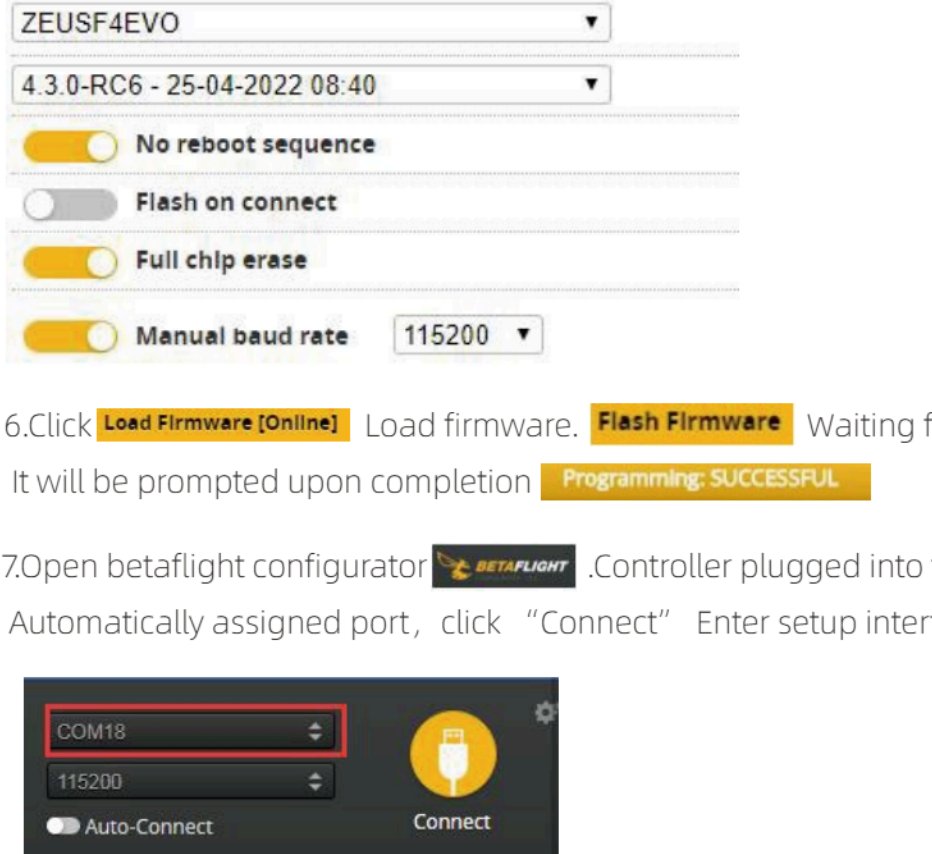
Receiver binding steps

1. Make sure the firmware version numbers of the built-in or external ELRS tuner are consistent. The factory version is HGLRC 2.4G ELRS 3.5.3 without password.



2. Turn the receiver on and off quickly three times, the receiving status light will flash twice, and the receiver will enter the binding mode.

Enter the tuner parameter adjustment script and select the Bind option



3. After the frequency binding is successful, the receiver LED light is always on and the telemetry signal can also be received.
4. Receiver LED status meaning: Steady light means linking is successful, double flash means linking is in progress.

The LED flashing slowly means that the tuner signal cannot be received or the frequency is not paired

The LED flashes quickly to indicate wifi communication mode. You can update the ELRS firmware by connecting to wifi through your mobile phone and computer

Indicator light status description

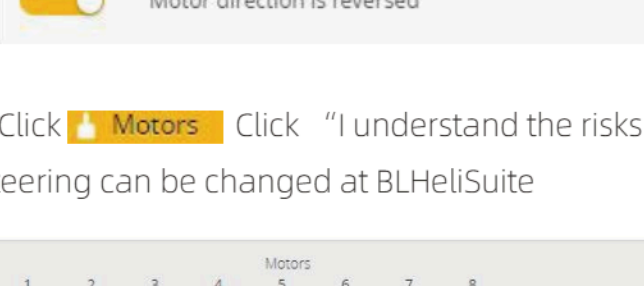
Flash slowly for 500 milliseconds	Waiting for connection from tuner
Flash quickly for 25 milliseconds	Enable WiFi mode
Medium speed flashing 100 milliseconds	Radio chip not detected
Double flash then pause	Enable bonding mode
Three flashes then pause	Connected to tuner but model matching configuration does not match
Always on	Connect to a tuner, or enable bootloader mode

SPECTER F722 Lite FC user's guidance



Check the flight control drive

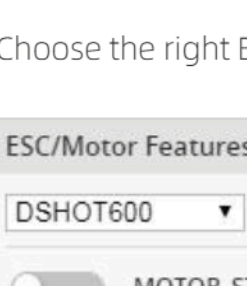
1. Long Press BOOT buttons, connect USB. The system automatically install the driver



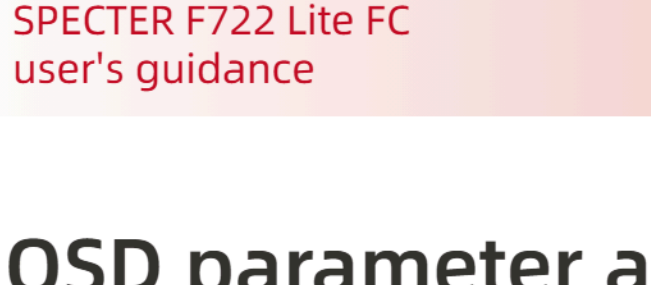
2. Driver cannot be installed, please download ImpulseRC_Driver_Fixer



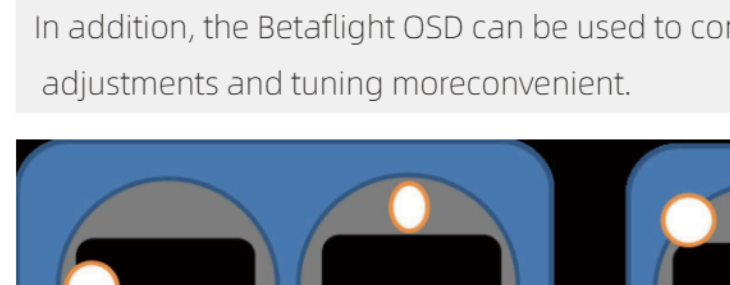
3. Double-click on the run (Plug in the flight controller to automatically install the driver)



4. Open betafight configurator, enter DFU mode



5. Click Firmware Flasher, Select firmware version



6. Click Load Firmware [Online], Load firmware: Flash Firmware, Waiting for completion

It will be prompted upon completion: Programming SUCCESSFUL

7. Open betafight configurator, Controller plugged into the computer. Betaflight Automatically assigned port, click "Connect" Enter setup interface (Different computer COM)

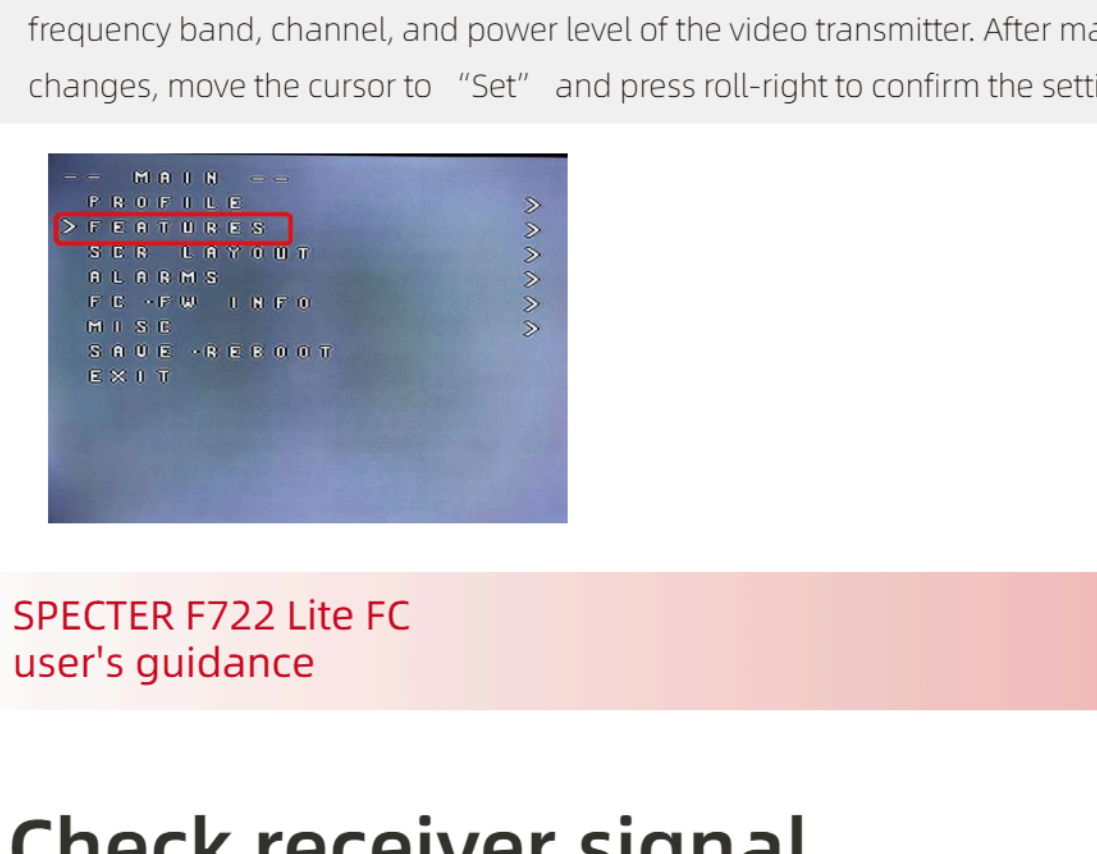


SPECTER F722 Lite FC user's guidance



Calibration accelerometer

1. Put the aircraft horizontal and click "Reset Z axis" Click again



SPECTER F722 Lite FC user's guidance



UART serial port use

1. VTX

Device	Configuration	Serial	Transmitter	Receiver	Protocol
UART1	TX1	TX2	TX3	TX4	TX5
UART2	TX1	TX2	TX3	TX4	TX5
UART3	TX1	TX2	TX3	TX4	TX5
UART4	TX1	TX2	TX3	TX4	TX5
UART5	TX1	TX2	TX3	TX4	TX5

2. Receiver

Device	Configuration	Serial	Transmitter	Receiver	Protocol
UART1	TX1	TX2	TX3	TX4	TX5
UART2	TX1	TX2	TX3	TX4	TX5
UART3	TX1	TX2	TX3	TX4	TX5
UART4	TX1	TX2	TX3	TX4	TX5
UART5	TX1	TX2	TX3	TX4	TX5

3. DJI VTX

Device	Configuration	Serial	Transmitter	Receiver	Protocol
UART1	TX1	TX2	TX3	TX4	TX5
UART2	TX1	TX2	TX3	TX4	TX5
UART3	TX1	TX2	TX3	TX4	TX5
UART4	TX1	TX2	TX3	TX4	TX5
UART5	TX1	TX2	TX3	TX4	TX5

4. GPS

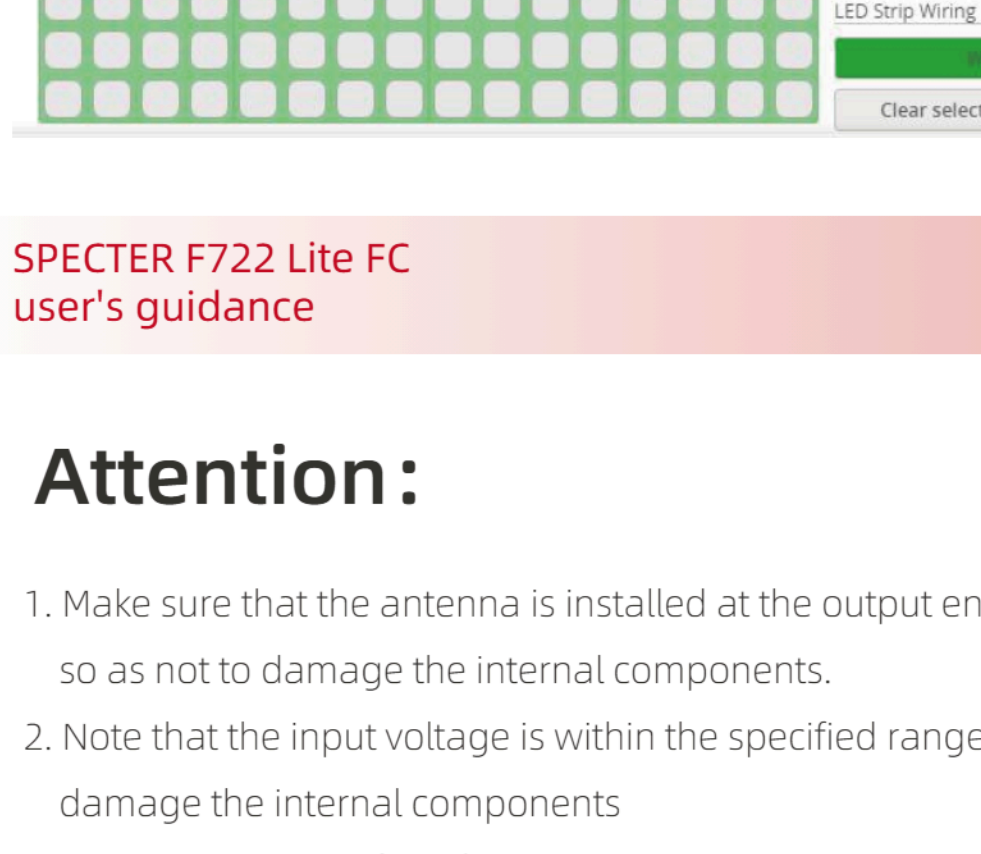
Device	Configuration	Serial	Transmitter	Receiver	Protocol
UART1	TX1	TX2	TX3	TX4	TX5
UART2	TX1	TX2	TX3	TX4	TX5
UART3	TX1	TX2	TX3	TX4	TX5
UART4	TX1	TX2	TX3	TX4	TX5
UART5	TX1	TX2	TX3	TX4	TX5

SPECTER F722 Lite FC user's guidance

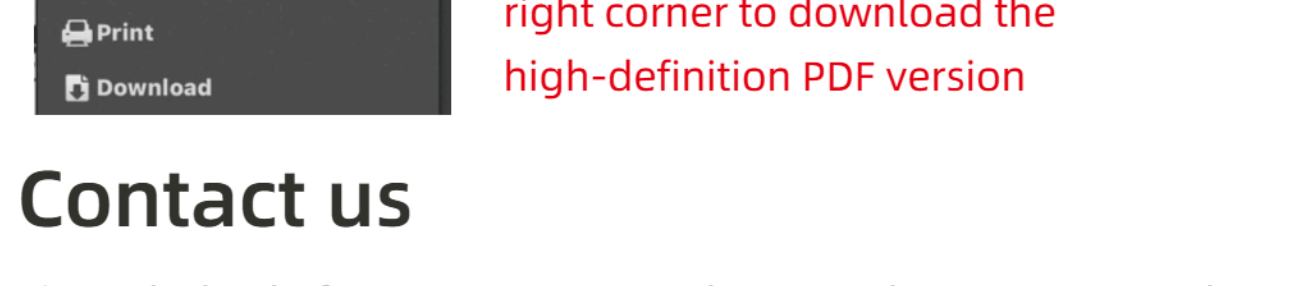


Select aircraft model

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



SPECTER F722 Lite FC user's guidance



Choose ESC protocol

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

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OSD parameter adjustment

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" or "VTX TR"

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.

SPECTER F722 Lite FC user's guidance

Check receiver signal

1. Click Receiver, Check the remote control output signal

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Select flight mode startup mode

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

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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.

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LED settings

1. Click Configuration, Turn on LED support

2. Click LED Strip, Click Wire Ordering Mode, set according to need

SPECTER F722 Lite FC user's guidance

Attention:

1. Make sure that the antenna is installed at the output end before powering on, so as not to damage the internal components.
2. Note that the input voltage is within the specified range and correct, so as not to damage the internal components
3. The temperature of the flight controller is high, so it is strictly forbidden to touch it directly with hands to avoid injury.

Attention

If the manual is unclear you can click the arrow in the upper right corner to download the high-definition PDF version

Contact us

Sincerely thanks for everyone trust! Welcome to choose HGLRC products

