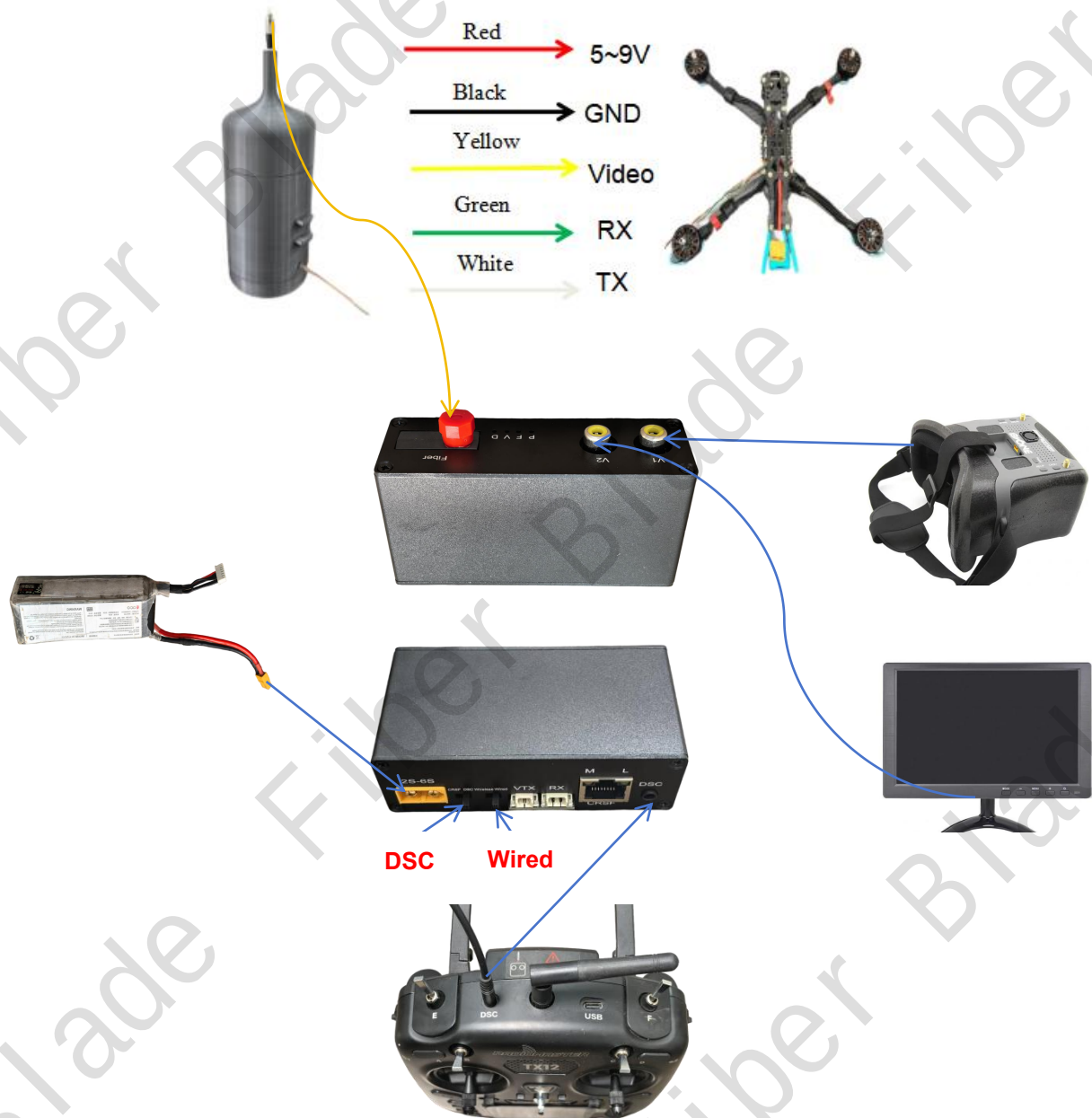


FPV Fiber Reel User Manual

1. Two Versions of Connection Methods

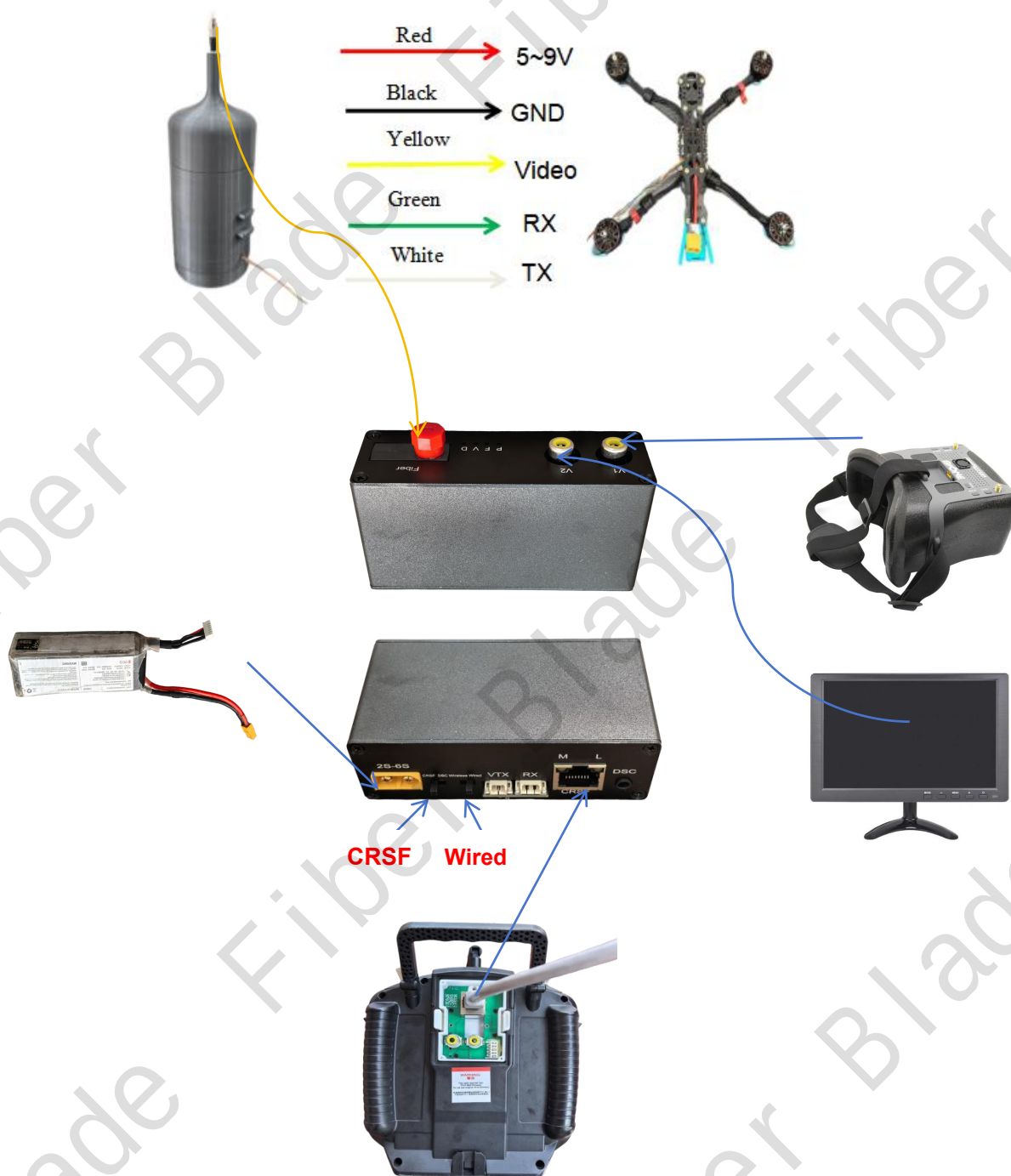
1.1 Use 3.5mm Cable Version Connect:



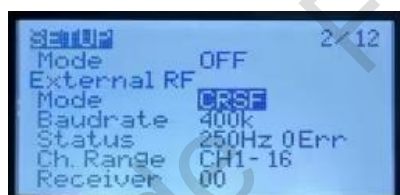
remote control set the mode to **Slave/Jack**



1.2 Use Network Cable Version Connect:

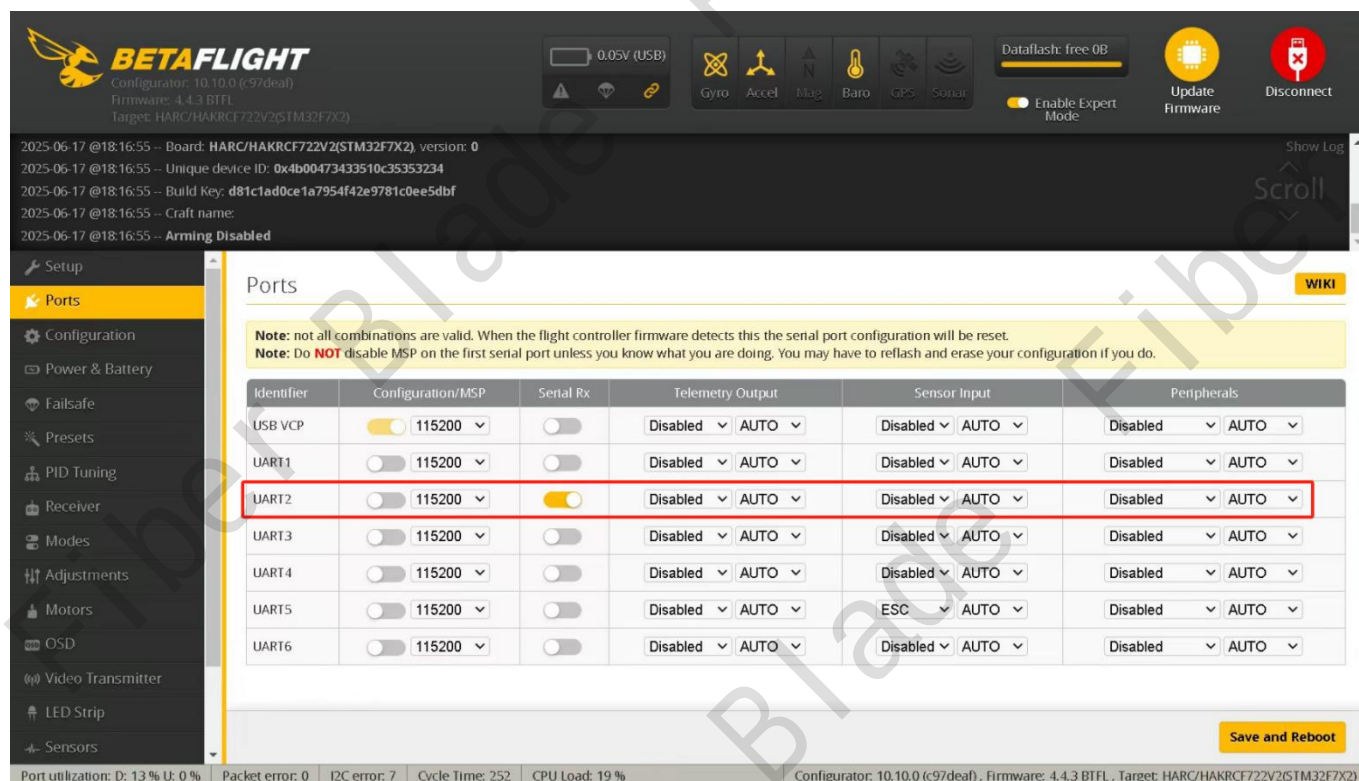


remote control set the mode to **CRSF**



2. Receiver Port Settings and Protocols

2.1 If flight control line weld RX2, set UART2 as the receiver port in the Betaflight ground station. (If weld RX1, open UART1)

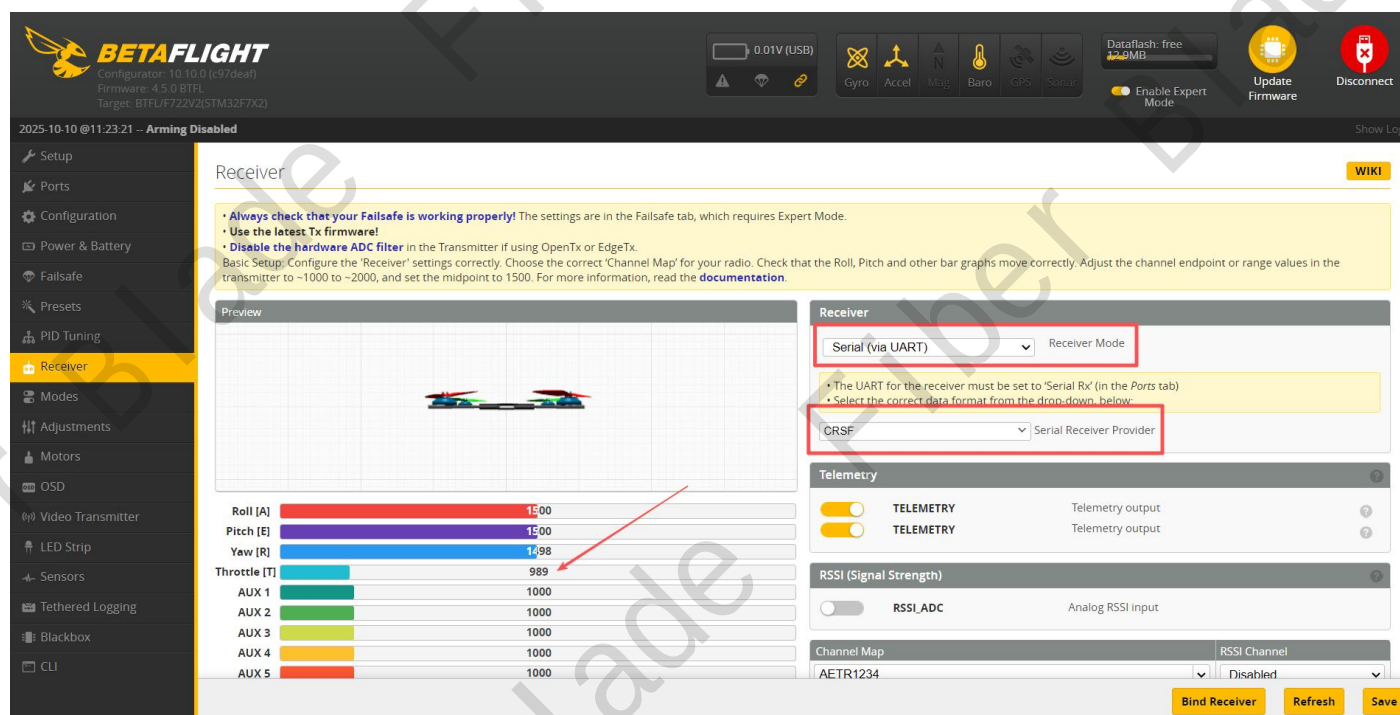


The screenshot shows the Betaflight Configurator interface with the 'Ports' tab selected. The top status bar indicates 'Arming Disabled' and '0.05V (USB)'. The left sidebar lists various configuration options. The main area displays a table of serial ports and their settings. UART2 is highlighted with a red box, showing it is enabled and set to 115200 baud. The table also shows settings for Telemetry Output, Sensor Input, and Peripherals for each port.

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	☐	Disabled	Disabled	Disabled
UART1	115200	☐	Disabled	Disabled	Disabled
UART2	115200	☒	Disabled	Disabled	Disabled
UART3	115200	☐	Disabled	Disabled	Disabled
UART4	115200	☐	Disabled	Disabled	Disabled
UART5	115200	☐	Disabled	ESC	Disabled
UART6	115200	☐	Disabled	Disabled	Disabled

2.2 Set the receiver protocol to UART and CRSF.

If Throttle (T) is 900+, the remote control can working.



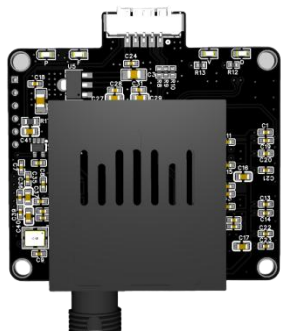
The screenshot shows the Betaflight Configurator interface with the 'Receiver' tab selected. The top status bar indicates 'Arming Disabled' and '0.01V (USB)'. The left sidebar lists various configuration options. The main area displays the 'Receiver' settings, including a preview of the receiver's signal strength and a table of receiver settings. The 'Receiver Mode' is set to 'Serial (via UART)' and the 'Serial Receiver Provider' is set to 'CRSF'. The 'Throttle (T)' value is shown as 989, which is highlighted with a red arrow.

Receiver	Serial Receiver Provider
Serial (via UART)	CRSF

Roll [A]	Pitch [E]	Yaw [R]	Throttle [T]	AUX 1	AUX 2	AUX 3	AUX 4	AUX 5
1500	1500	1498	989	1000	1000	1000	1000	1000

3. Sky and Ground Module

3.1 Sky Module:

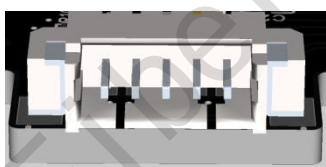


P - Power indicator, power on green light ●

F - Fiber indicator, fiber connected green light ●

V - Video indicator, video signal on green light ●

D - Data indicator, data connected green light ●

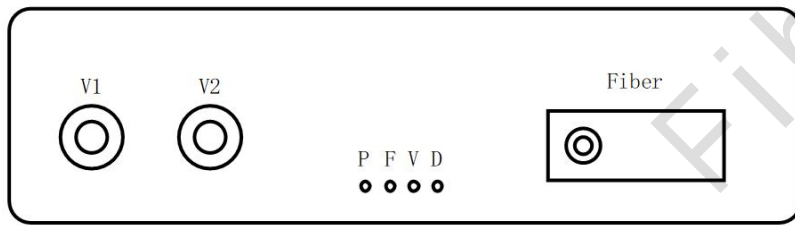


Data terminal definition from left to right

1. TTL-RX
2. TTL-TX
3. VIDEO
4. GND

Specification	Parameter
Working voltage	DC-5~9V
Operating power	≤2.1W
Fiber optic interface	FC
Transmission distance	≤60km
Video protocol	PAL/NTSC
Size	42mm*42mm
Weight	15g

3.2 Ground module:



V1/V2: 2 video outputs BNC/AV lily seat is optional ●

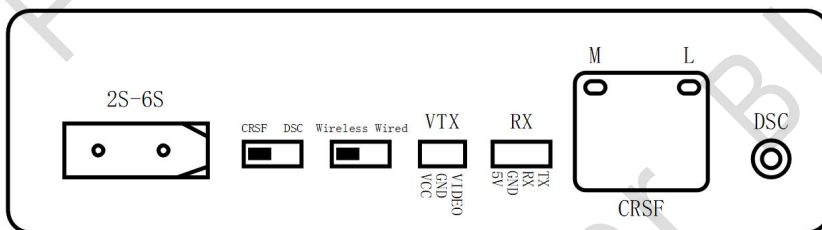
P - Power indicator light, power on green light ●

F - Fiber indicator light, fiber connected green light ●

V - Video indicator light, video signal connected green light ●

D - Data indicator light, data connected green light ●

Fiber: Optical fiber interface FC connector



XT60: Power input interface 2S~6S

Slide switch 1: Protocol switching switch

Slide switch 2: Switch for switching between wired and wireless modes

When switch 2 is turned on to the left, the wireless mode M/L indicator light is off. In this state, switch 1 fails and the wireless receiver can be connected to the VTX/RX interface to realize wireless control at the ground end

Switch 2 is turned to the right for wired mode, M light is always on, L light is flashing, and the corresponding socket is inserted. The protocol connection is normal and L light is always on.



In this state,CRSF/PPM protocol can be selected through switch 1.

Switch 1 is CRSF to the left. Use the corresponding remote control adapter board and network cable to link the ground end and the remote control, as shown in the figure below. The remote control is set as an external high-frequency head CRSF. After the connection is normal, the L light is always on.



VTX Graphics interface
Video: Video output
GND
VCC: Power output 2S-6S
RX Receiver interface
5V:5V power output
GND
RX:TTL-RX
TX:TTL-TX

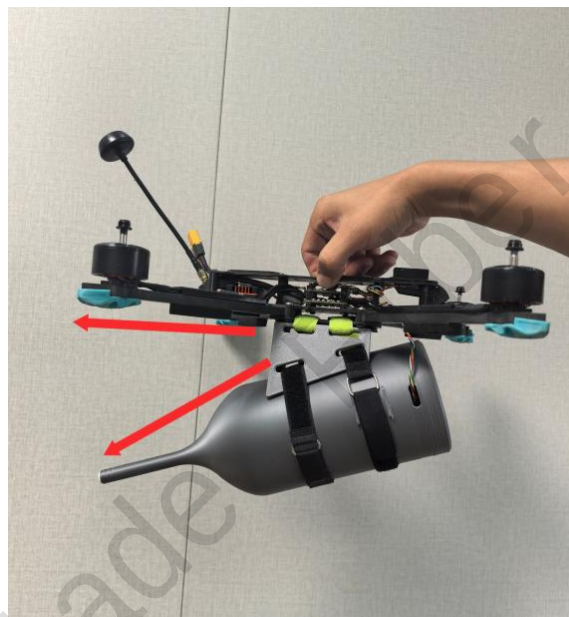
Specification	Parameter
Working voltage	2S-6S/XT60 interface
Operating power	≤2.1W
Fiber optic interface	FC
Transmission distance	≤60km
Video protocol	PAL/NTSC
Size	95mm*62mm
Weight	112g

4. Pre-flying matters need attention

4.1 The fiber at the ground end needs to be stick it with tape.



4.2 Tie the base to keep the fiber nozzle away from the blades.



4.3 Trips:

- During flight, check whether the fiber output is smooth and make sure that the fiber cable outlet is away from the propellers.
- Avoid rapid deceleration and rapid descent. Avoid small angle turns when descending. Avoid rapid descent when turning. These operations may cause the fiber to be cut by propellers easily.
- Avoid winding at small bending angles when the fiber is output.
- Flight speed to be controlled within 200km/h.
- Before flying, please put FC connector ground module of FC interface .
- When taking off, please pull the fiber out 2-3 meters and use hands hold it 2-3 meters away, accelerate slowly, avoid too fast accelerating and turning at small angles during the entire flight. Otherwise, fiber is easily entangled into propeller.