

F722

User Manual



Thank you for choosing RadioLink product. This product is not a toy and is not suitable for children under the age of 14. Adults should keep the product out of the reach of children and exercise caution when operating this product in the presence of children.

You can also download the manual of RADIOLINKF722 from https://www.radiolink.com/f722_manual_download

Read carefully and set the device as instructed. If there is any question, please send messages/ leave comments on Facebook and YouTube or send mails to after_service@radiolink.com.cn



Contact RadioLink RL via Facebook Messenger

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Specifications

Weight & Dimension	Dimension	30.5*30.5mm(1.2"*1.2")
	Weight	9.5g
Hardware	Processor	STM32F722RET6
Sensor	Gyro	ICM42688
	Barometer	BMP280/DPS310
	Blackbox	128MB, record and store flight logs
	OSD Module	AT7456E
Connector	Channel Output	M1 - M8
	HD Digital Video Transmission	Support HD digital video transmission plug-and-play
	Analog Video Transmission	Support analog video transmission plug-and-play
	Betaflight Camera Parameter Setup Soldering Pads	Support
	Battery Scale	110
	UART Port	5
	ESC Features	Support
	12C	Support
	LED Strip	Support, with LED strip soldering pads
	Buzzer	Support, with buzzer soldering pads
	RSSI Output	Support, with RSSI soldering pads

Firmware Type	Betaflight
Firmware Name	RADIOLINKF722
USB Port	1 (Type-C)
RC In Signal Input	SBUS/CRSF
OSD Telemetry	Support, OSD Module Integrated
ESC Protocol	PWM, two-way DShot, and OneShot Protocol
Input Voltage	3-65
BEC	3.3V/300mA; 4.5V/500mA; 5V/3A; 12V/3A
12V BEC Switch	Support (USER1)
Adaptable Models	2-8 axis multi-rotor including X8 models, Airplane, A-tail Quad, Bicopter, Custom Airplane, Custom Tricopter, Dualcopter, Flying-wing, Gimbal, Helicopter120, HEL+, HEX H, HEX X, OCTO FLAT+, OCTO FLAT X, OCTO X8, OCTO X8+, PPM to Servo, Quad+, Quad X, Quad X 1234, Singlecopter, Tricopter, V-tail Quad, Y4, Y6
Operating Temperature	-30~85°

Package



F722(Flight Controller)*1 ESC Connect Cable*2 Camera Connect Cable*1

ELRS Receiver Connect Cable*1 Analog Video Transmission Connect Cable*1 TS100 GPS Connect Cable*1

Receiver Connect Cable (3PIN)*1 R8SM Receiver Package Box*1 Connect Cable*1

LED Indicator



Blue LED: Status indicator.

- Red LED: Power indicator.
- Yellow and green LED: 12V BEC indicator.
 When the 12V BEC is turned on, the yellow and green LED is always on.

Soldering Pad Definition

Solder Pad: for ESC, Receiver, Camera



Solder Pad: for Buzzer, LED Strip, GPS, DJI HD Image Transmission, Analog Video Transmission

Socket Interface Definition



FC & ESC Connection

Method 1: All connectors



ESC 1

Note: When two ESCs are connected in this method, please disconnect the BAT, CURR, TLM cables for one of the ESC.

Method 2: Direct Soldering



FC's Peripheral Connection

Method 1: All connectors



Method 2: Direct Soldering











Note: when connecting DJI image transmission, the SBUS pin of DJI will occupy the R2 pin of F722. If DJI SBUS signal remote control is used, please disconnect the device on the R2 and T2 solder pad or on the receiver socket. If R2 and T2 solder pad or receiver socket are occupied to connect other receivers, please disconnect the DJI SBUS connection.



FC Firmware Update

 Long press the DFU button. At the same time, connect F722 to the computer with a USB cable. Betaflight Configurator will display the DFU mode (See picture below);



 Image: Control
 Image

(2) Select RADIOLINKF722 and 4.5.1 firmware in Betaflight Configurator. Then click "Load Firmware [Online]";

Firmware Flasher

JHEMO		E FLIGHT FS	10		
Cnable Expert Mode		Warning			
Show release candidates	Please do not try to flash	non-Detaflight hardware with this firmware flasher.			
RADIOLINKF722 ~ 🕘 (Accordance)	0	and of same an your computer while recome			
4.5.1 [27-Jul-2024] · · ·	Note: Auto-Connect is a	is stored in HUHL, it cannot be broked. ways disabled while you are inside firmware flasher.			
No rebost sequence	Note: Make sure you have Note: If you have probler	Nete: Male sure you have a backup some upprader/downprader will winge your configuration. Nete: Hypor Jahow problems (having by discassing all cables formy your PE first, you rehoaring, upgrade drivers. Nete: When flashing boards that have electly connected USB sockets (most newer boards) ensure you have read the USB Flashing section of			
Resh on connect	Note: When flashing boa				
Full chip erase	Con December 11 and and				
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CRSF	¥ 6	Automatically Included	× 0		
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×Acro Trainer ×GPS ×LED Strip ×OSD (SD) ×OSD (HD)	×Pn IO ×VTX 0	DSHOT	~ 0		
Custom Defines			+		
Please load firmware file		Date DFU Mode Rach Removers	Load Firmware [Online] Load Firmware [Loco		

(3) After the firmware is loaded, click "Flash firmware";

Loaded Online Firmware: betaflight_4.5.1_STM32F7X2_RADIOLINKF722_2215931f.hex (394539 bytes)

(4) After the firmware is flashed, connect it to Betaflight Configurator again. The icon of gyroscope, accelerometer, barometer and DataFlash will be displayed.

Exit DFU Mode

Flash Firmware

Estatight Configurator					- 0
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ID Power & Ballery	Calibrate Wagnetweeter: Now multimore at least 360 degrees on all and of rotation, you have 30 seconds to perform this task				
🗢 Faibure	Reset Settings	Report the fight controller to an another gamed states.			
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