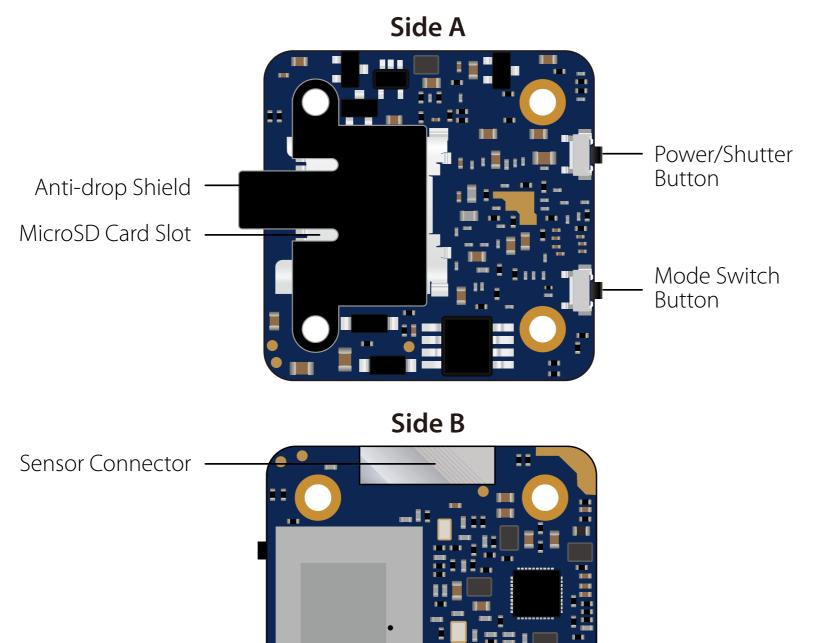


RunCam Split 3 Series

User Manual

Instruction Diagram



VCC + (5-20V)ТΧ GND RX Microphone

Lens Module Connection Diagram

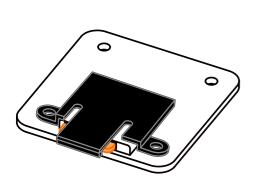


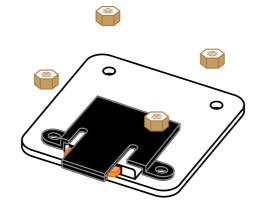


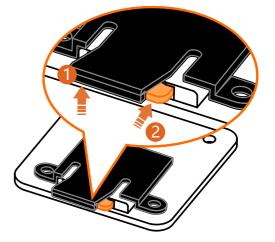
Split 3 nano

Micro SD Card

Capacity up to 64GB; Please use high speed cards(Class10/UHS-I/UHS-II)





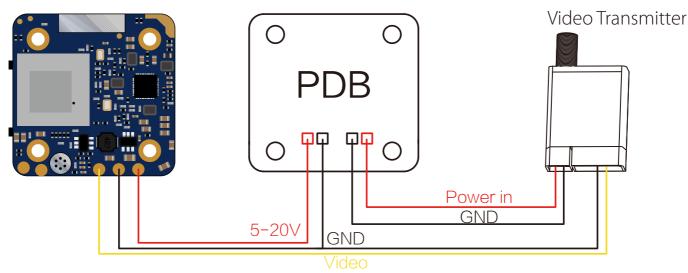


Please push the shield a little bit up with one hand like showed in above step 1 and then press the SD card(step 2) with another hand to let the card pop out.

Basic Camera Operation

Powering On/Off	Long press the Power/Shutter button						
Standby Mode	Camera Status Light: Blue is On						
Mode Switching	In Standby Mode, long press the Mode Switch button to cycle through the two modes: Video/OSD settings.						
Video Mode	Camera Status Light: Blue blinks Press the Power/Shutter button to start/stop recording.						
OSD Setup Mode	Camera Status Light: Orange is On • Press the Power/Shutter button to move to a setting. • Short press the Mode Switch button to change setting. • Long press the Mode Switch button to exit the menu.						
Firmware Upgrading	Camera Status Light: Orange blinks https://www.runcam.com/download/runcamsplit3series						
Reset	In standby mode, press the Mode Switch button three times in rapid succession (within 2 seconds). When resetting is complete, the status light (orange) blinks twice, and the						

Transmitter Connection Diagram



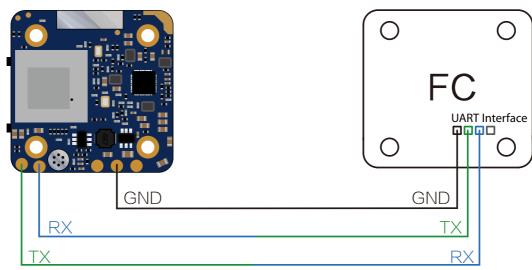
Warning: Current Input \geq 1A (Don't powered by VTx)

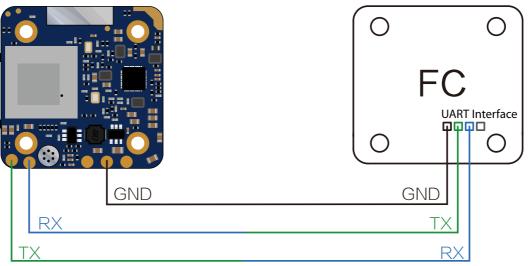
Flight Controller Set

Preparation

• Firmware: BetaFlight Firmware (≥3.2.0),CleanFlight Firmware(≥2.1.0),

- KISS Firmware (\geq 1.3-RC30) or INAV Firmware (\geq 1.7.3).
- Any available UART interface on the Flight Controller
- 1. Connect the Split 3 series with the UART interface of the Flight Controller





2. Make the Flight Controller recognize the Split 3 series

For example, we connect the Split 3 series to the UART 3 interface on the Flight Controller: connect the Flight Controller to the computer, then open the configurator software of the Flight Controller. (Open up the configurator that matches the firmware you are running, Betaflight Configurator for Betaflight, Cleanflight Configurator for Cleanflight). In the Peripherals column of the line UART3 (on the Ports tab), select RunCam Device and click Save And Reboot.

	FL 3.2.3 (Target: OB72)					
17-12-14 @ 14:44:12 Run 17-12-14 @ 14:44:12 Boa	ique device ID: 0x35001a33	n: Dec 11 2017 07:57:37				
₽ Setup	Ports					WIKI
🖄 Ports	FOILS					
Configuration				etects this the serial port configuration will ou are doing. You may have to reflash and e		
Power & Battery	Note: Do NOT di	sable MSP on the first serial port unle	ss you know what yo	u are doing, fou may have to reliash and i	erase your configuration if you do.	
եր PID Tuning	Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
Receiver	USB VCP	(115200 🛊		Disabled \$ AUTO \$	Disabled \$ AUTO \$	Disabled \$ AUTO \$
B Modes	UART1	115200 \$		Disabled \$ AUTO \$	Disabled \$ AUTO \$	Disabled \$ AUTO \$
Motors	UART2	115200 \$		Disabled \$ AUTO \$	Disabled \$ AUTO \$	Disabled \$ AUTO \$
OSD	UART3	115200 \$		Disabled \$ AUTO \$	Disabled \$ AUTO \$	RunCam Device \$ AUTO \$
	UART6	115200 🛊		Disabled \$ AUTO \$	Disabled \$ AUTO \$	Disabled \$ AUTO \$
li Blackbox					ESC \$ AUTO \$	Disabled

3. Instructions of the functions of the camera and assigning transmitter channels to them

In the Flight Controller Configurator, navigate to the Modes tab. There are new CAMERA WI-FI, CAMERA POWER and CAMERA CHANGE modes

- CAMERA POWER: start/stop the video. When in the OSD of the camera, this is used to move to the next menu item.
- CAMERA CHANGE MODE: switch among the two modes: video and OSD setting mode. When in the OSD of the camera, this will exit the menu

Assign any available channel to the function you need, for example:

- Assign the AUX2 to the CAMERA POWER, range 1900-2100
- Assign the AUX3 to the CAMERA CHANGE MODE, range 1900-2100

BETAFI Configurator: 10.0 Firmware: BTFL 3.										Syro	1 Accel	A A Ba	ro GPS	()) Sonar) datafiash hlp found a ble Expert Mode	e Disconne	¢ ect
017-12-14 @ 14:45:12 Running 017-12-14 @ 14:45:12 Board: (017-12-14 @ 14:45:12 Unique 017-12-14 @ 14:45:12 Craft na 017-12-14 @ 14:45:53 EEPROM	- DB72, version: 0 device ID: 0x35001a33355 me:		7:37															lide Log
🗲 Setup	FPV ANGLE MIX																	
🖌 Ports	Add Range																	
Configuration																		0
Power & Battery	CAMERA WI-FI BUTTON	(AUX 1 🛊)				- 1	an a							24				0
a PID Tuning	Add Range	Min: 1900 Max: 2100	900	1000			1200		1400	150	0 1	600		 1800		2000	2100	
Receiver																		0
Modes	CAMERA POWER BUTTON	AUX 2 \$		с. т.	т т		1 6	12	a a			р. р.		- 1	(1) 1	т. т		
Motors	Add Range	Min: 1900 Max: 2100	900	l 1000			1 1200		1400	150	0 .	1 600		l 1800		2000	2100	
OSD			-															0
E Blackbox	CAMERA CHANGE MODE	AUX 3 \$		e r			ar e		с т			p c		- 1	(1) T		-	
] cu	Add Range	Max: 2100	900	1000		1	1200		1400	150	D	600		1800		2000	2100	
	PREARM																	
	Add Range																	
	Add Named																	_

4. Assign the channel to the switch of the controller

Please choose your Model on the controller, then access to the MIXER interface and assign the channel to the switch of the controller. Take opentx 2.2.0 for example, assign the channels CH5, CH6 and CH7 to SA, SB and SD respectively



5. Test

Power the Flight Controller and the Split 3 series

- Set the SA to the bottom, the camera starts/stops the video
- Set the SD to the bottom, the camera switches among the two modes: video and OSD setting mode

Technical Support

Please visit: <u>https://support.runcam.com</u>

Parameter

Model	Split 3 Micro	Split 3 Nano					
Field of View(FOV)	Recording FOV 165°(FPV FOV: 165 ° @16:9, 130 ° @4:3)						
Video Resolution	1080@60fps/1080@50fps/1080@30fps/720@60fps						
Video File Format	MOV						
Image Resolution	2 MP						
TV Mode	NTSC (720*480)/PAL (720*576) Switchable						
Interface	JST 1.25mm / UART						
Max Micro SD Card Supported	64G(need Class 6 or above, recommend Class 10/UHS-I/UHS-II/UHS-III)						
Mounting Hole Distance	20*20mm						
PCB Size	29*29mm						
Lens Module Size	19*19mm	14*14mm					
Lens Specs	M12	M8					
Power Input	DC 5-20V (Non-direct power supply from battery, Powered directly with battery will generate surges and burn the camera.)						
Working Current	650mA @5V/270mA @12V						
Weight	14g 10.5g						