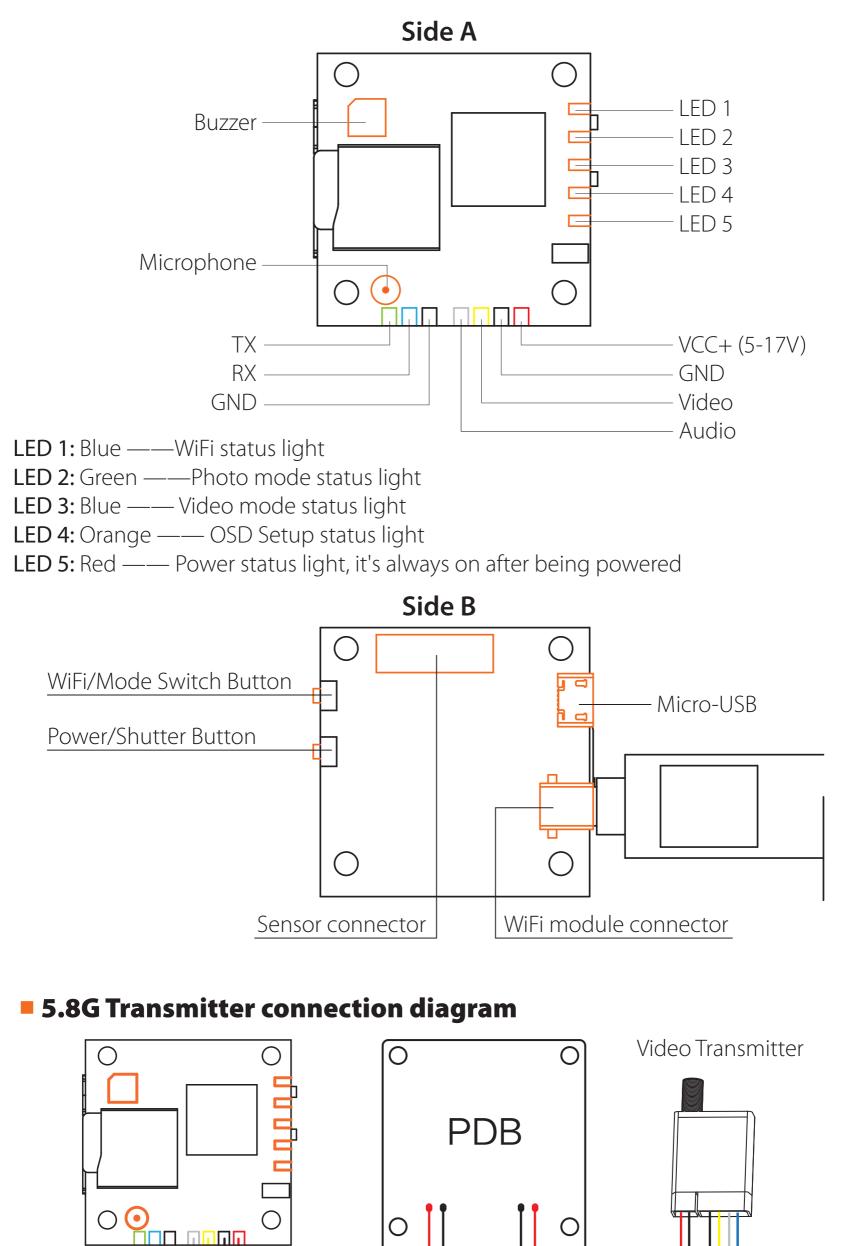
# RunCam Split 2 User Manual



#### Instruction diagram



#### Audio

GND

Video

Power in

GND

### Flight Controller Set

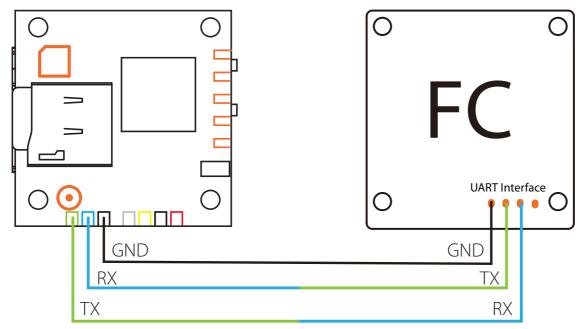
#### Preparation

- Firmware: CleanFlight (≥2.1.0) / BetaFlight (≥3.2.0)
- Any available UART interface on the Flight Controller

5-17V

GND

#### 1. Connect the RunCam Split with the UART interface of the Flight Controller



#### 2. Make the Flight Controller recognize the Split

For example, we connect the Split 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 Split and click Save And Reboot.

CLEANF2 CONFIGURATOR 2.0.4				▲ ♥ 🖉 Gyro Acc	el Mag Baro GPS Sonar	Dataflash Disconnect
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۶ Setup	Ports					DOCUMENTATION FOR 2.1.0
🖌 Ports						DOCUMENTATION FOR 2.1.0
Configuration				vare detects this the serial port configu	ration will be reset. flash and erase your configuration if you	de .
D Power & Battery	Note: Do NOT	disable MSP on the first serial po	int unless you know w	mat you are doing. You may have to rel	lash and erase your configuration if you	00.
🕈 Failsafe	Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
		115200 \$	0	Disabled \$ AUTO \$	Disabled \$ AUTO \$	(Disabled \$) AUTO \$
	UART1	110200				
h PID Tuning	UART1 UART2	115200 \$		Disabled \$ AUTO \$	Disabled \$ AUTO \$	Disabled \$ AUTO \$
h PID Tuning Receiver				Disabled + AUTO +	Disabled  AUTO  Disabled  AUTO  Disabled  AUTO  Disabled  Disabled  Disabled  AUTO  Disabled  Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled Disabled	Disabled   AUTO    RunCam Split    AUTO
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h PID Tuning Receiver Modes	UART2	(115200 \$				
PID Tuning Receiver Modes Adjustments Servos	UART2	(115200 \$				
PID Tuning Receiver Modes Adjustments Servos GPS	UART2	(115200 \$				
h PID Tuning Receiver Modes	UART2	(115200 \$				

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

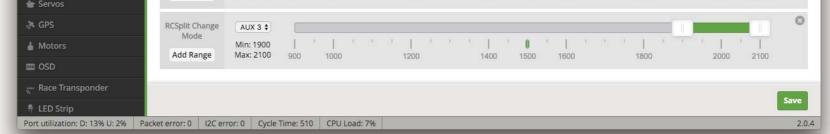
### In the Flight Controller Configurator, navigate to the Modes tab. There are new CAMERA WI-FI, CAMERA POWER and CAMERA CHANGE modes.

- CAMERA WI-FI: turn on/off the WIFI of the camera. When in the OSD of the camera, this is used to confirm your selection.
- 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 three modes, video, photo 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:

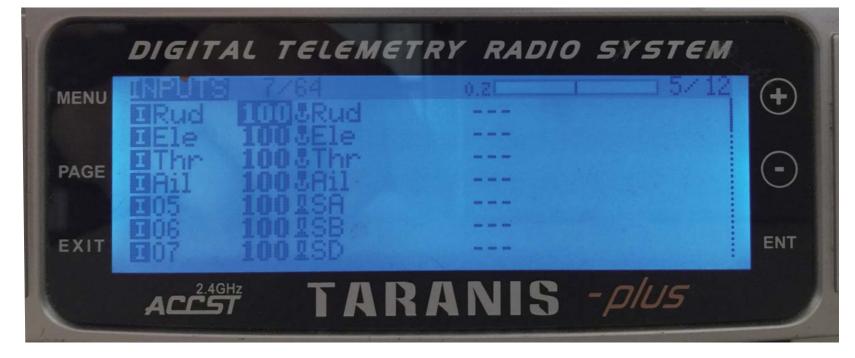
- Assign the AUX1 to the CAMERA WI-FI, range 1900-2100
- Assign the AUX2 to the CAMERA POWER, range 1900-2100
- Assign the AUX3 to the CAMERA CHANGE MODE, range 1900-2100

CONFIGURATOR 2.0.4	TLIGHT								Gyro /	Accel N	N C Mag Bai			10.000	MB / 8.0MB )ataflash		sconnect	
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#### 4. Assign the channel to the switch of the controller

Please choose your Model on the controller, then access to the Inputs interface and assign the channel to the switch of the controller. Take opentx 2.2.0 for example, assign the channels AUX5, AUX6 and AUX7 to SA, SB and SD respectively.

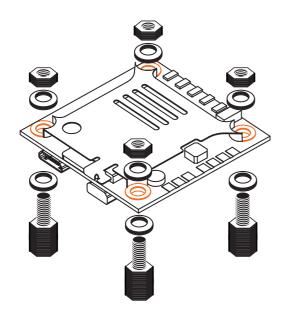


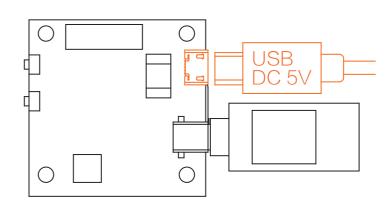
#### 5. Test

#### Power the Flight Controller and the RunCam Split

- Set the SA to the bottom, the camera starts/stops the video
- Set the SB to the bottom, the camera turns on/off the WIFI
- Set the SD to the bottom, the camera switches among the three modes: video, photo and OSD setting mode

#### Installation Diagram

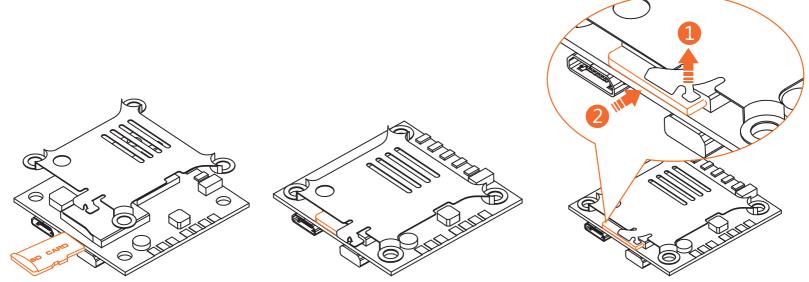




Warning: USB port only supports DC 5V

#### MicroSD Card

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



Please push the metal piece 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.

Lens module connection diagram

**Warning:** Please push upward the black locking arm before you unplug the lens cable in case the connector is destroyed. And Golden fingers on ends of the lens cable should face to the opposite of each other. For more details about how to connect the lens cable properly, you may refer to: <u>https://goo.gl/PoGg1T</u>

#### Basic Camera Operation

Doworing On/Off	Long proce the Dower/Chutter butter					
Powering On/Off						
WiFi On/Off	/Off Short press the WiFi/Mode Switch button					
Mode Switching	After powering on, long press the WiFi/Mode Switch button to cycle through the three modes: Video/Photos/OSD settings.					
Video ModeCamera Status Light: Blue (LED 3)• Press the Power/Shutter button to start/stop recording.						
Photo Mode	Camera Status Light: <b>Green (LED 2)</b> • Press the Power/Shutter button to capture photos.					
OSD Setup Mode	Camera Status Light: Orange (LED 4) • Press the Power/Shutter button to move to a setting. • Press the WiFi/Mode Switch button to select. • Long press the WiFi/Mode Switch button to exit the menu.					
Forced Shutdown	Simultaneously press the Power/Shutter button and WiFi/Mode Switch button.					
Reset	In standby mode, press the WiFi/Mode Switch button three times in rapid succession (within 2 seconds). When resetting is complete, the status light (orange) blicks twice, and the camera automatically shuts down.					

**Note:** Recording automatically after turing on by default, with the V1.0 firmware, under the video status, short press WIFI/MODE SWITCH button to pause/start the recording. With the V1.1 and later firmware, under the video status, short press WIFI/MODE SWITCH button to stop the recording and turn on the WIFI; Under the standby mode, the function of the WIFI/MODE SWITCH button doesn't change.

#### App(Android | iOS)

Search 'RunCam App' on Google Play/Apple Store, or download on our website: runcam.com/download/runcamsplit2 Default SSID: RCSplit\_ \*\*\*\*\*\* (\* for letters or numbers) Default WiFi password: 1234567890

#### Technical Support

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

#### Parameter

FOV Angle of Field	FPV FOV 130°/Recording FOV 165°
Video Resolution	1080@60fps/1080@30fps/720@60fps
Video Files	MOV
Image Resolution	2 Megapixels
TV Output	NTSC (720*480)/PAL (720*576) Switchable
Real-Time Audio Output	Yes
Interface	Micro USB / UART
Max Micro SD Card Supported	64G(need Class 6 or above, recommend Class 10/UHS-I/UHS-II)
WiFi Module	Support (Removable)
Dimensions	PCB 38*38mm/Lens Module 22*20mm
Power Input	DC 5-17V / DC 5V(USB)
Working Current	650mA @5V/270mA @12V
Weight	21g/23g (Plus WiFi Module)