

### **▶ FEATURES**

- IMU inner dampin built-in
- Integrated Flight Controller, pre-loaded with Betaflight
- Integrated 40 channel 5.8GHz Video Tx
- Ultra-thin & integral profile with lower air resistance and more solid structure
- 1/3 SONY Super HAD II CCD, PAL, 600TVL Camera, 2.5mm Lens
- VTx power switch 25mw/600mw, easy switch when racing
- 7-segment display for VTx band switching, more intuitive and convenient for adjusting
- Compatible with all the 220X motors

### **▶**SPECIFICATIONS

## Flight controller

IMU	MPU6050, 3 axis Gyro,3 axis Accelerometer
CPU	STM32F303 32-bit-cortex M4 core processor
Firmware	Betaflight

#### Power

Standard prop	4040-4blade
Race Motors	2205-2750kv
Recommended Battery	1300mAh 4S

#### **ESC**

Type	Blheli
Rating	30A continuous,40A peak
Feature	Oneshot125, and Motor Braking

#### Camera

Video Standard	1/3 SONY Super HAD II CCD, PAL, 600TVL Camera, 2.5mm Lens
----------------	---

#### Video TX Features

Transmitter Module	Integrated,5.8GHz module
Channels	40 Initally
Bands	5, including RaceBand
Power Output	25mw or 600mw
Recommended Antenna	4 leaf

### R/C Receiver

Channel Required	Absolute minimum four. Five recommended to support mode switch.
Interface	5v S.Bus, 3.3v SPK.Sat,or 5V PPM sum

## Weight and Size

Weight, as shipped,ARF	370~g	
Weight, Typical RTF	520~g with 1300Ah 4s pack, and SPK•Sat receiver	
Size	180mm between diagonal motors	

## ▶2 STEPS UNBOXING TO RACING

# Bind or Install Compatible R/C receiver

We have had a DSMX.SAT (or FASST compatible receiver as alternative) on the Shuriken 180 Pro when it is delivered, you may bind it with your transmitter

# ★ DSMX binding Procedures:

Power on the Shuriken180 Pro then press the bind button, the DSMX.sat receiver will enter the binding mode.

## ★ FASST binding Procedures

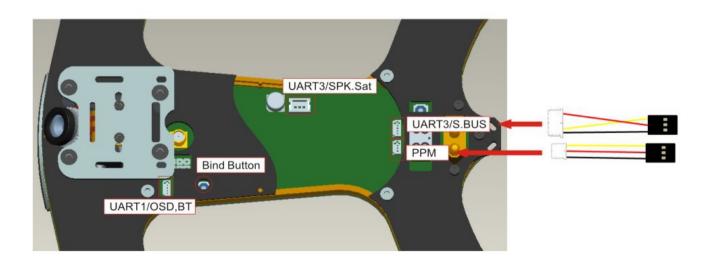
- 1. Turn on the transmitter; press the bind button and power on the Shuriken180 Pro, the LED will blink red when the aircraft is ready to bind.
- 2. Release the Bind button, the LED will blink red and green alternately for a while and then stay green, which indicates the binding is successful.
- 3. Please try again if it doesn't work. A still red LED means the binding is not done properly.

## ★ Frsky RX bind Proceures

- 1. Turn on the TARANIS and enter the bind mode(MENU>PAGE> 
   ···find 'Bind'>ENT)
- 2. Connect battery to the Shuriken180 Pro while holding bind button on the Shuriken180 Pro. The LED on the reciever will flash, indicating the binding process is completed
- 3. Turn off both the transmitter and the receiver
- 4. Turn on the transmitter and connect the battery.the green LED on the receiver indicates the binding is successful.

Shuriken180 Pro is also compatible with CPPM receivers you can setup on Cleanflight configurator

It is not compatible with standard R/C receivers with multiple channels of PWM out



## **Setup The Video Link**

The Shuriken 180 Pro uses a button to define video TX channels.

The Shuriken180 Pro ships with a default TX frequency of 5740MHz, which corresponds to

FatShark frequencies, Channel 1

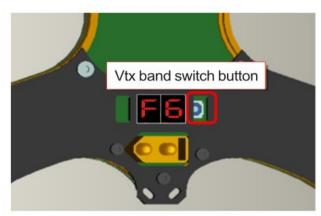
To switch bands, press the button ,hold 2 seconds and release.



To switch channels ,short press the button.

The left 7-segment display is band number, the right 7-segment display is channel number.





### The band order is as follows

		1	2	H	Ĺ	5	5	7	8
F	IRC/FS	5740	5760	5780	5800	5820	5840	5860	5880
C	RaceBand	5658	5695	5732	5769	5806	5843	5880	5917
E	Band E	5705	5685	5665	5645	5885	5905	5925	5945
8	Band B	5733	5752	5771	5790	5809	5828	5847	5866
H	Band A	5865	5845	5825	5805	5785	5765	5745	5725

## ► SETUP FLIGHT CONTROLLER VIA BETAFLIGHT CONFIGURATOR

Betaflight has been flashed as the default firmware, which is taken as an example to illustrate how to set up the FC.

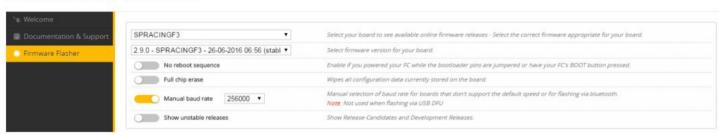


 Install latest Silicon Labs CP2102 USB to UART Bridge VCP Drivers http://www.silabs.com/products/mcu/pages/usbtouartbridgevcpdrivers.aspx

- Install and launch the Betaflight Configurator tool
   https://chrome.google.com/webstore/detail/betaflight-configurator/kdaghagfopacdngbo-hiknlhcocjccjao?hl=en-US&utm\_source=chrome-ntp-launcher
- Connect Shuriken 180 Pro to computer via USB cable.
- Select the correct COM port if it is not automatically detected.
- Click connect, verify that communication is established.
   How to play: https://github.com/betaflight

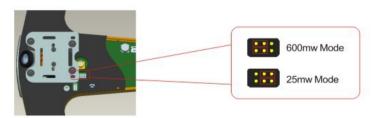
## **▶FIRMWARE UPGRADE**

- 1.Click the Firmware Flasher tab."
- 2. Select the latest SPRacingF3 stable release.
- 3. Set the flashing baud rate to 256000.
- 4. Click 'Load firmware [Online]' and wait for firmware to download and read release notes.
- 5.Click 'Flash Firmware'.



## **▶VTX POWER SWITCH 25MW/600MW**

The output of VTx is available for 25mw and 600mw, you can choose the output value for VTx using two jumpers



# ►INSTALLATION INSTRUCTIONS FOR GOPRO STAND

