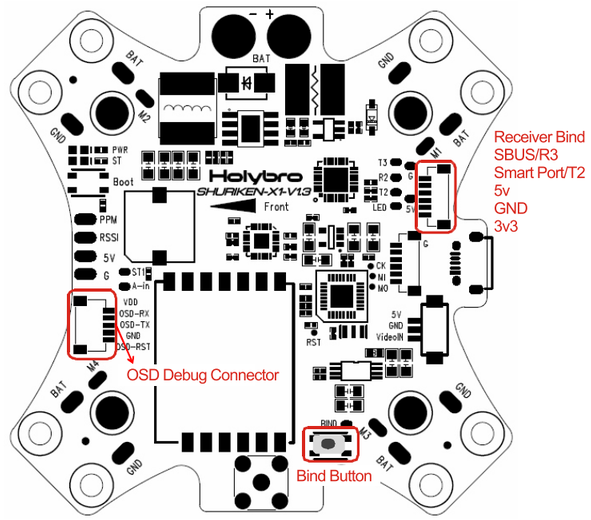
▶ BOARD LAYOUT



Pin	Function
VIDEO	Video In
GND	Ground
5V	5V output 2A
LED	LED Trip
T2	UART2 TX
R2	UART2 RX
T3	UART3 TX
G	Ground
5V	5V output 2A
PPM	PPM Input
RSSI	RSSI
5V	5V output 2A
G	Ground
ST1	Softserial1 TX
A-in	Audio In
VDD	5V input
OSD-TX	OSD UART TX
OSD-RX	OSD UART RX
GND	Ground
OSD-RST	OSD DTR
M1	PWM Output (Motor 1)
M2	PWM Output (Motor 2)
M3	PWM Output (Motor 3)
M4	PWM Output (Motor 4)
BAT	Input voltage 7-42v
BIND	Receiver Bind

Note:

(1) UART1 occupied by USB&OSD

(2) [Connect RX] Connect signal (PPM/SRX3), power (3.3-5V), and GND pins to your receiver.

(3) [Enable Telemetry] Connect RX port on Receiver to UART pin T2

Features

- Full 3K Carbon Fiber
- Nickel-plated 12.9 screws
- Easy grip black anodized spacers
- FC;OSD;PDB;VTX and voltage/current sensor are all integrated in one PCB which makes an integral structure with a much lower barycentre
- 5.8GHz, 200/600mw switchable, 40 Channel Vtx with built in push button switching and channel display
- High quality spiroNet antenna
- Intergrated MWOSD (firmware V1.5 preloaded)
- 1/3 SONY Super HAD II CCD, PAL, 600TVL Camera, 2.5mm Lens
- S.bus, DSMX, or PPM Receivers Compatible
- 3-colour LED board included controlled by LED Trip signal
- Two mounting positions for the FPV Camera: one for a 0°~40° view angle, a second mounting position for 35°~70° view angle
- Included TPU GoPro Session mount. HD Camera angle 35°
- BetaFlight Pre-loaded | CleanFlight Ready

Specifications

- 32-bit F3 Flight Controller, MPU6050 Gyro/Accelerometer
- ATmega328P with Arduino Bootloader(minim OSD)
- MAX7456 Monochrome On-Screen Display(minim OSD)
- FTDI Cable Compatible Pinout(minim OSD)
- 30A / 40A burst BLHeli S ESC's
- 2305-2600kv Motors (T-MOTOR OEM)
- Compact size for 5" propellers, 200mm motor to motor.
- Input voltage 7v to 42v.
- PCB Maximum Continuous Current 120A
- Filtered voltage output - output 5.2v 2A
- Weight, ~343g without battery

Bind or Install Compatible R/C receiver

We have had a DSMX.SAT (or FASST compatible receiver as alternative) on the Shuriken X1 when it is delivered, you may bind it with your transmitter

DSMX binding Procedures:

Power on the Shuriken X1 then press the bind button, the DSMX.sat receiver will enter the binding mode.

FASST binding Procedures:

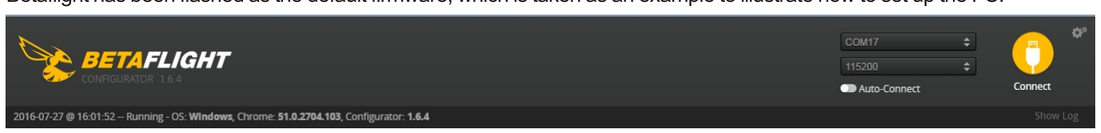
1. Turn on the transmitter; press the bind button and power on the Shuriken X1, the LED will blink red when the aircraft is ready to bind.
2. Release the Bind button, the LED will blink red and green alternately for a while and then stay green, which indicates the binding is successful.
3. Please try 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 Shuriken X1 while holding bind button on the Shuriken X1.The LED on the reciever will flash, indicatingthe 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.

Setup flight controller via Betaflight configurator

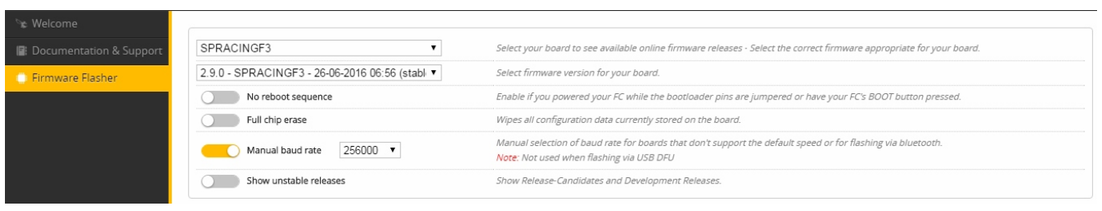
Betaflight has been flashed as the default firmware, which is taken as an example to illustrate how to set up the FC.



- 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/kdaghagfopacdngbohiknlhcocjccjao?hl=en-US&utm_source=chrome-ntp-launcher
- Connect Shuriken X1 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’.

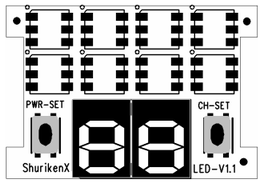


PID Setting

Every PID setting has been set to the optimal value by the factory pilot before the drone is packaged.
These PID settings will be all lost when you upgrade the firmware. You can download the backup file of the PID settings on http://www.holybro.com/download.html,which can be imported to the Shuriken X1.

Setup the Video Link

A. Press 'PWR-SET' button to switch between band mode and power mode.
B. In band mode, press 'CH-SET' button to switch channels around CH1-8 circularly.
C. In band mode, press and hold 'CH-SET' button for 2 secs to switch the band around band A/B/C/E/F
D. In power mode, press and hold 'PWR-SET' for 2 secs to switch vtx power between 200mW->600mW->Power off…

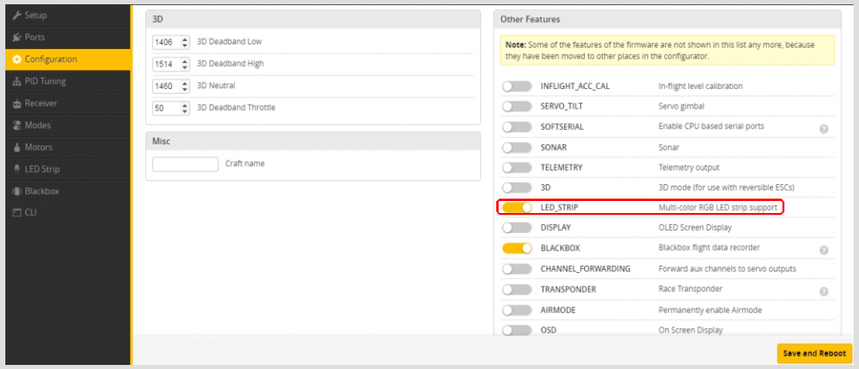


F6 ⟶ Band mode 'F6'
20 ⟶ Power mode '200mW'
60 ⟶ Power mode '600mW'
PF ⟶ Power mode'power off'

Setup the OSD

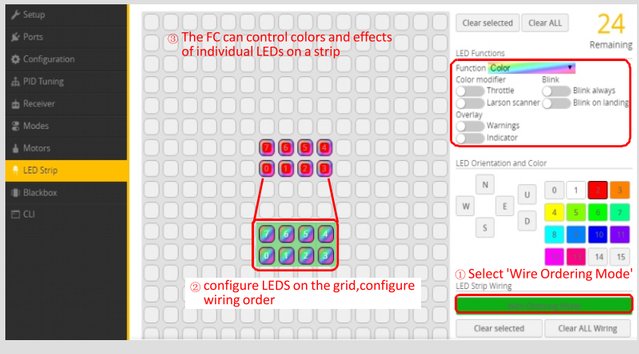
MWOSD Firmware upgrade http://www.mwosd.com/ https://github.com/ShikOfTheRa/scarab-osd

Setup Led Trip

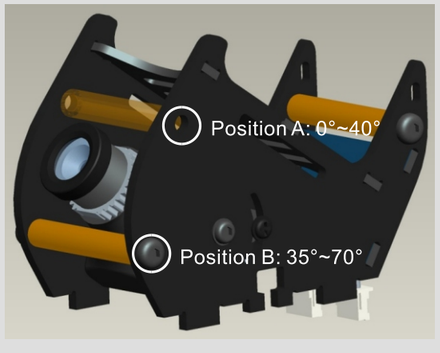


▶ Enable 'Led Trip'

▶ Configure Led color



▶ Configure FPV Camera Angle



Warranty & Return Policies

Technical staff of our after-sales service center will examine the returned product to identify the problem.
In the case of product failure due to defective material or manufacturer workmanship within the 60 days from the date of purchase,
the product will be repaired or replaced (decided by the manufacturer) with no charge to the customer,
but the customer will pay for the returning shipping costs under all circumstances.
Returned items should include the original packaging and all the accessories.
Refund occurs only when the item is lost by the shipping company.
Maximum refund amount will not be more than the selling price, freight fee will not be returned.
After-sale service email: productservice@holybro.com