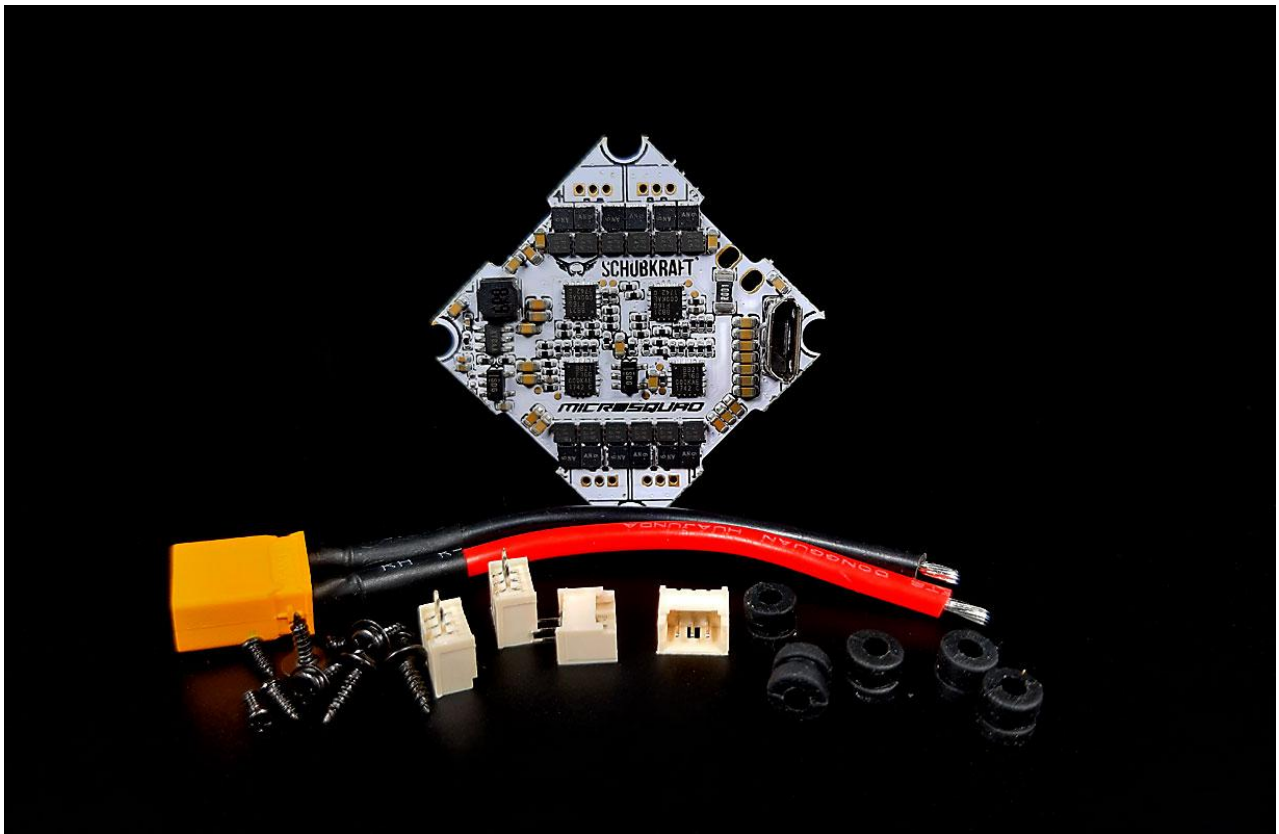


F4 15A 2-4s HV AIO (FC+ESC AIO) User Manual V1.0





MICROSQUAD

I7 48D 507v KY **AIO IF**

Brand: Microsquad - A SCHUBKRAFT Devision

Item name: Microsquad F4 15A AIO FC (FC+ESC AIO)

Processor: STM32F411

Sensor: MPU-6000 (connected by SPI)

Input Voltage: 2-4S Lipo or 2- 4S HV Lipo

Size: 28.5×28.5mm, whoop mounting pattern

Weight: 3.9g (W/O battery wire, plugs)

FEATURES :

- :The largest support 4S Lipo HV battery, with Current meter
- F411 Flight Controller, BEC 5V 2.5A
- MPU6000 Gyro
- Include Buzzer pad
- Invert and non-invert SBUS port
- Light design

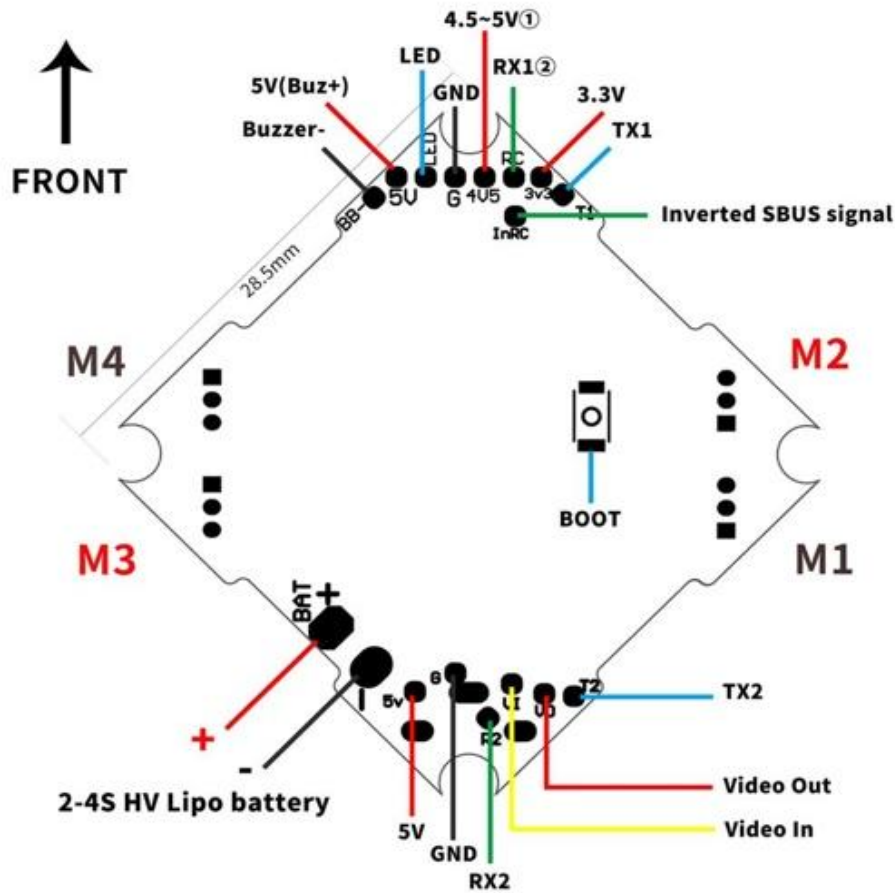
FC SPECIFICATIONS :

- CPU: STM32F411CEU6 (100MHZ)
- Six-Axis: MPU6000 (SPI connection)
- Größe: 28,5mm x 28,5mm, whoop mounting pattern
- Firmware: Betaflight MATEKF411 (MK41)
- OSD: Built-in BetaFlight OSD (STM32 controls OSD chip over SPI in DMA mode)
- Receiver support: Support Frsky XM/XM+/R9M / Futaba / Flysky / TBS Crossfire / DSM2/X
- Invert und non-Invert S-BUS Port
- Support programmable LED like WS2812 etc
- Buzzer support
- Built-in current sensor
- Weight: 3.9g

ESC SPECIFICATIONS :

- Support BLheli/BLHELI_S suite Pass-through ready
- Support PWM, Oneshot125, Oneshot42, Multishot, Dshot150, Dshot300, Dshot600
- Input voltage: 2S-4S HV Lipo
- Current/Peak: 15A
- Firmware: BLHELI_S
- Motor Connectors: 1.25mm header pins connectorn (comes with package but not soldered)

Pins Assignment



*①When the AIO board is powered only via USB port , only this pad provided output voltage.

*②This pad can connect with PPM/DSM/non-inverted SBUS receiver' s signal port.

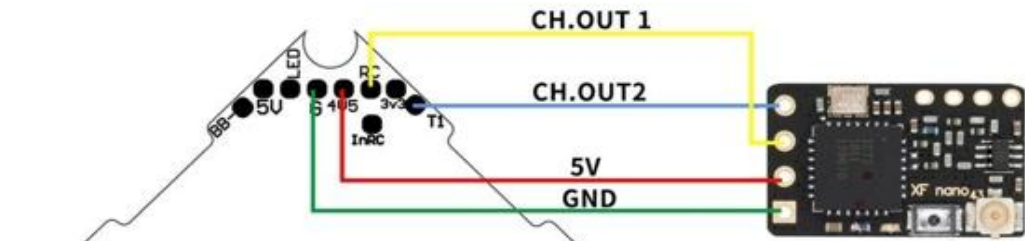
Power & Battery

Battery	
Onboard ADC	Voltage Meter Source
Onboard ADC	Current Meter Source
3.3	Minimum Cell Voltage
4.3	Maximum Cell Voltage
3.5	Warning Cell Voltage
300	Capacity (mAh)

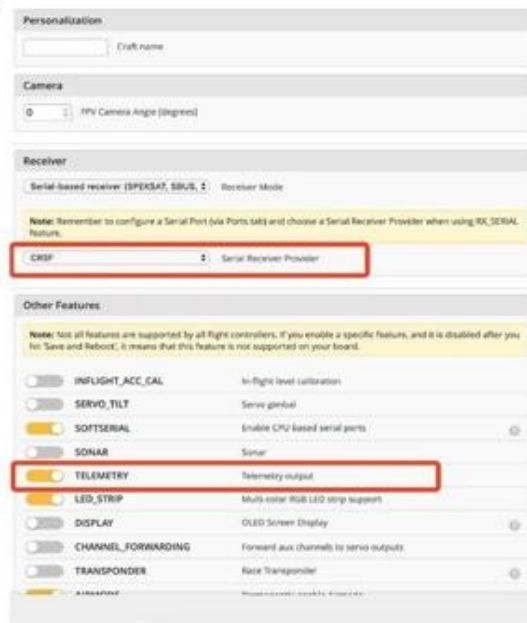
Voltage Meter	
Battery	0 V
	110 Scale
	10 Divider Value
	1 Multiplier Value

Amperage Meter	
Battery	0.00 A
	750 Scale [1/10th mV/A]
	0 Offset [mA]

TBS Crossfire Nano RX:

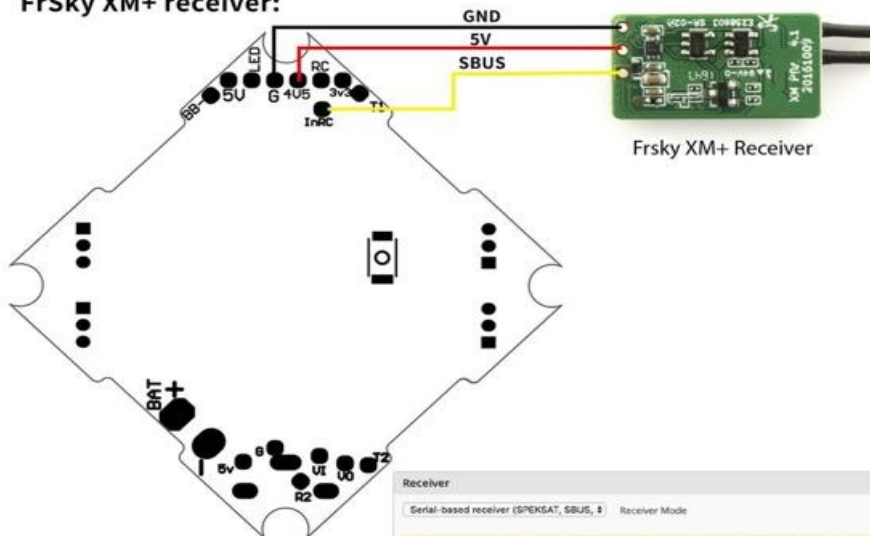


TBS Crossfire Nano RX

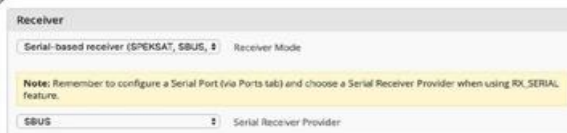


To connect the receiver

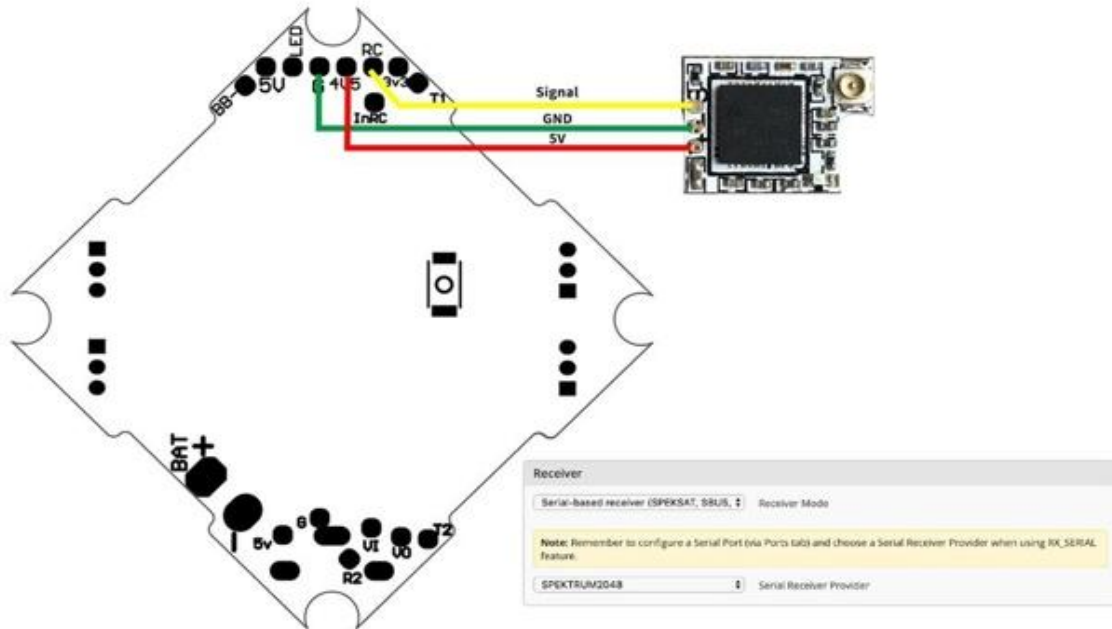
FrSky XM+ receiver:



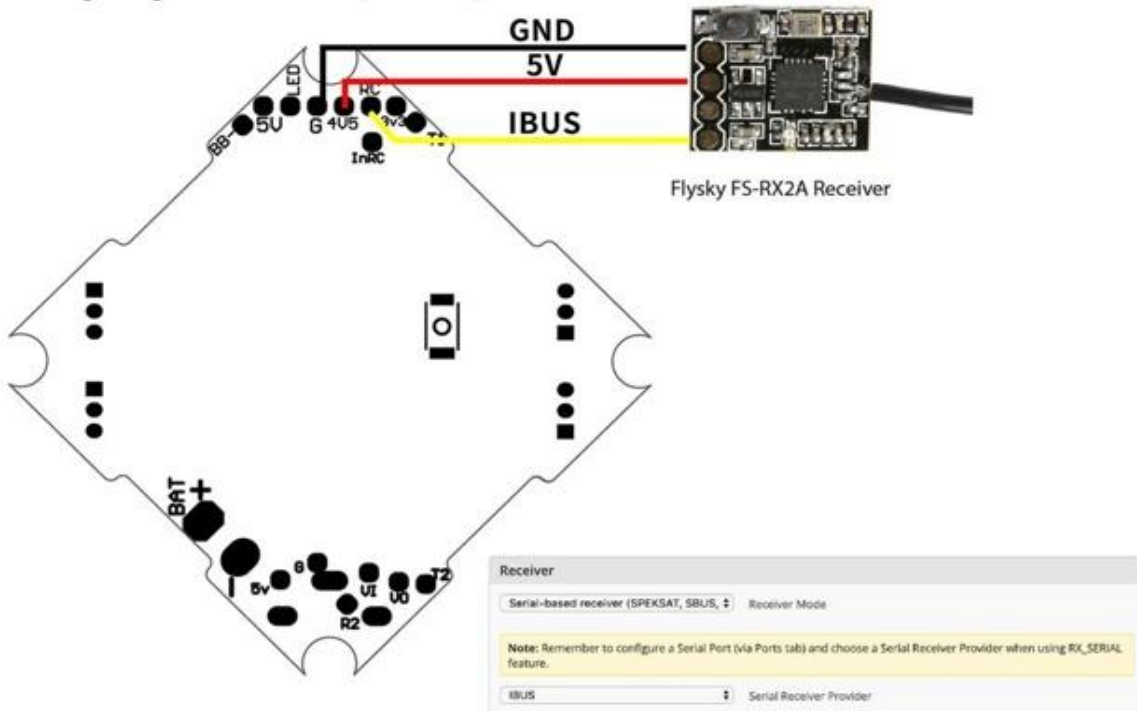
Frsky XM+ Receiver



DSMX(FullSpeed) :



Flysky FS-RX2A(IBUS):



AC900(Support FrSky D16 && FUTABA S-FHSS)

