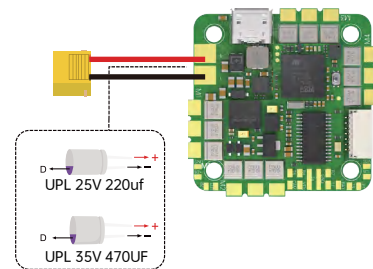
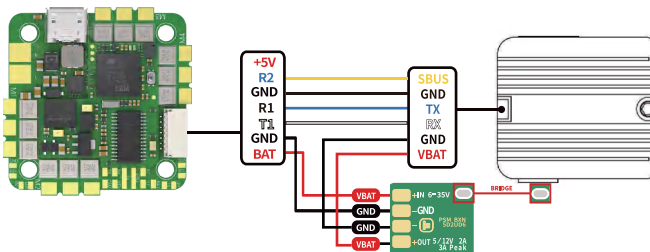


# iFlight BLITZ Whoop F7 AIO Wiring Diagram

## Caution

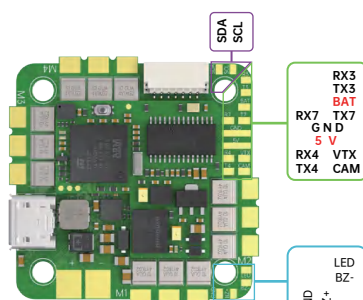
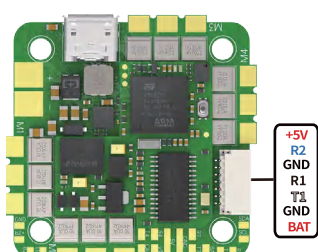


- This is a tiny high power AIO board! It's necessary to add a low ESR capacitor on your battery pads or battery lead! There's a choice of capacitors already in the package.
- 4s motors usually need 25V/220uF and up, for bigger and more aggressive 6s motors use at least 35V/470uF. It's necessary to protect the hardware from motor generated back emf and voltage spikes.



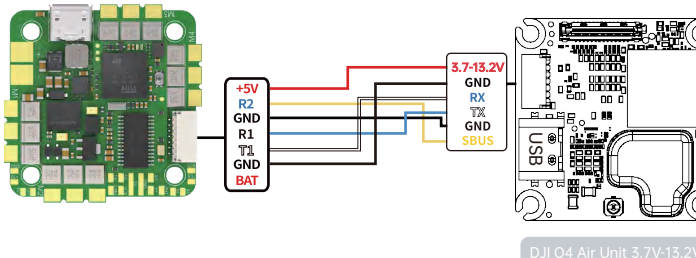
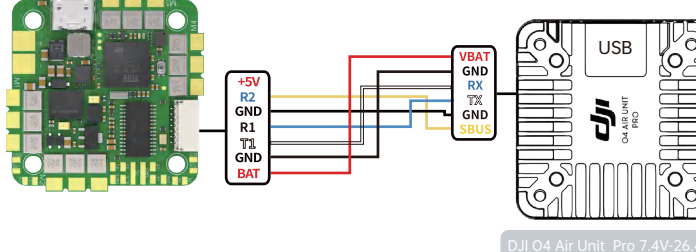
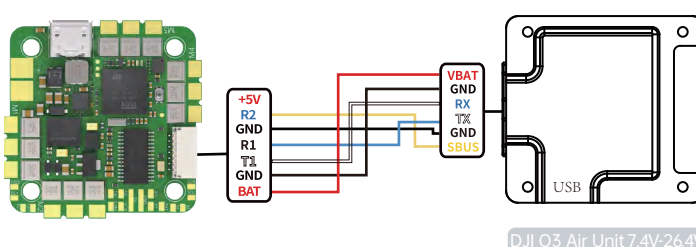
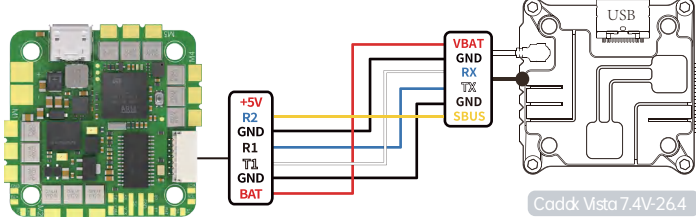
- The DJI Plug&Play connector has a VBAT passthrough! Please remember, the DJI Air Unit can just handle voltage up to 4S! To fly up to 6S batteries, please use an additional BEC (Voltage regulator).

## Pad definition



## DJI Digital transmitters

FC Remote: iFLIGHT BLITZ F7 AIO



Identifier	Configuration/MSP	Serial Rx
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

Receiver

Serial (via UART)

Receiver Mode

The UART for the receiver must be set to "Serial Rx" in the Ports tab!

Select the correct data format from the drop-down, below.

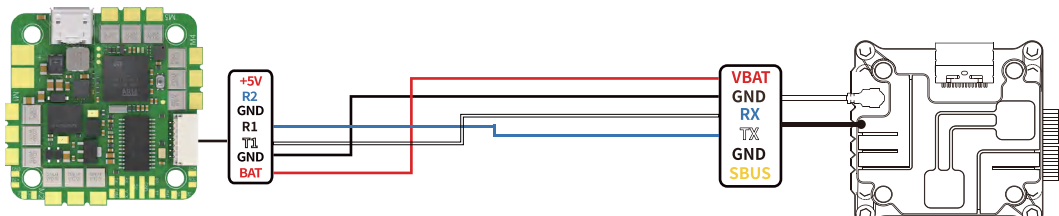
SBUS

Serial Receiver Provider

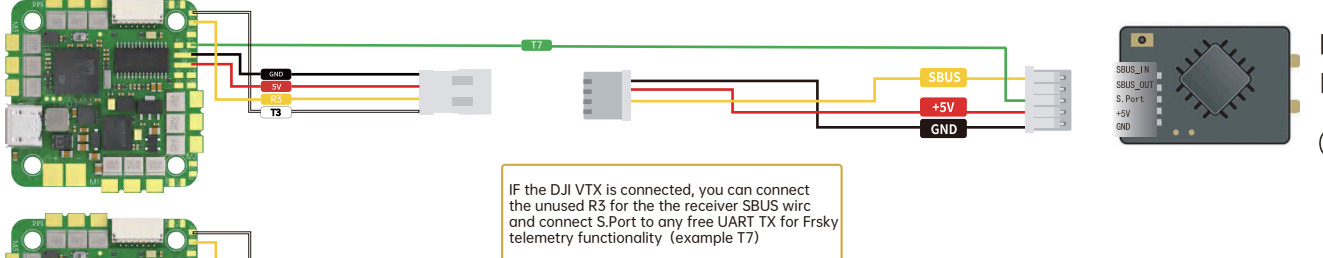
- Please check your protocols, otherwise your DJI Radio won't input signals!  
DJI Goggle protocol and Betaflight protocol has to match!  
For lower signal latency use the SBUS, BAUD\_FAST protocol option on both ends.  
For Betaflight Copy/Paste "set sbus\_baud\_fast=on" into your Betaflight Configurator CLI then hit enter.  
Use "save" and hit enter to save the changes.  
Default: sbus\_baud\_fast=off, Goggle protocol set to NORMAL

- For DJI O3 Air Unit, In to the Betaflight Configurator Cli, Set osd device to MSP, "set osd\_displayport=device = MSP"  
Specify the serial port of msp displayport as 0 (the number in this place should be the serial port number minus 1): "set displayport msp serial = 0"  
then type "save" and exit

## Another Transmitters



When not using the DJI remote controller, don't connect the SBUS and GND.



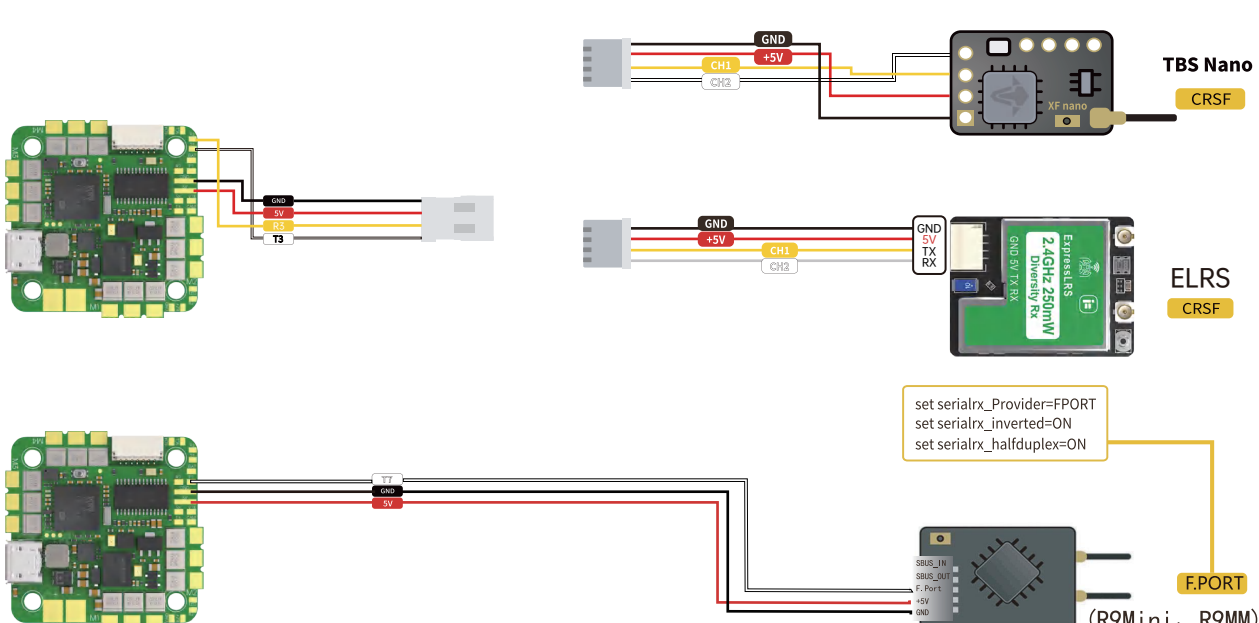
If the DJI VTX is connected, you can connect the unused RX for the receiver SBUS wire and connect S-Port to any free UART TX for Frsky telemetry functionality (example T7)

Identifier	Configuration/MSP	Serial Rx
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

Receiver	Serial (via UART)	Receiver Mode
The UART for the receiver must be set to "Serial Rx" in the Ports tab!		
Select the correct data format from the drop-down, below.		
SBUS	Serial Receiver Provider	

Telemetry	TELEMETRY	Telemetry output
UART7	<input type="checkbox"/> 115200	SmartPort
AUTO		

Receiver	Serial (via UART)	Receiver Mode
The UART for the receiver must be set to "Serial Rx" in the Ports tab!		
Select the correct data format from the drop-down, below.		
SBUS	Serial Receiver Provider	



set serialrx\_provider=FPORT  
set serialrx\_inverted=ON  
set serialrx\_halfduplex=ON

Identifier	Configuration/MSP	Serial Rx
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

Receiver	Serial (via UART)	Receiver Mode
The UART for the receiver must be set to "Serial Rx" in the Ports tab!		
Select the correct data format from the drop-down, below.		
CRSF	Serial Receiver Provider	

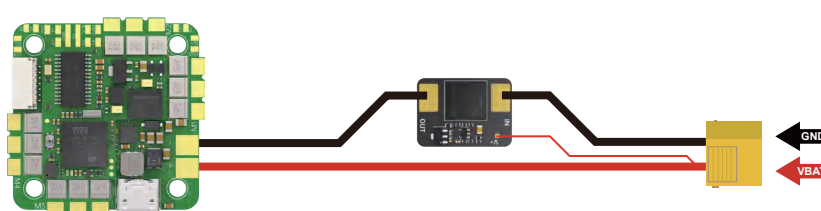
Telemetry	TELEMETRY	Telemetry output
TELEMETRY		

Identifier	Configuration/MSP	Serial Rx
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART1	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART3	<input type="checkbox"/> 115200	<input checked="" type="checkbox"/>
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>

Receiver	Serial (via UART)	Receiver Mode
The UART for the receiver must be set to "Serial Rx" in the Ports tab!		
Select the correct data format from the drop-down, below.		
FPort	Serial Receiver Provider	

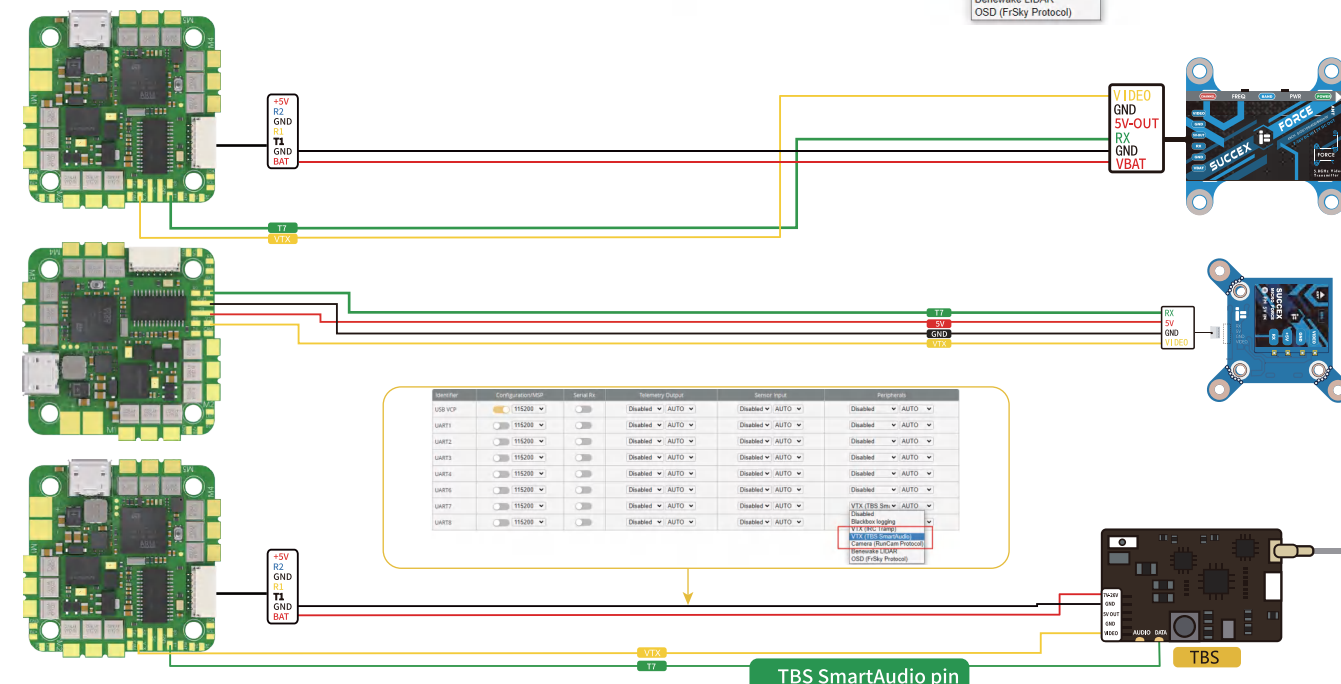
Telemetry	TELEMETRY	Telemetry output
TELEMETRY		

## Anti-Spark filter

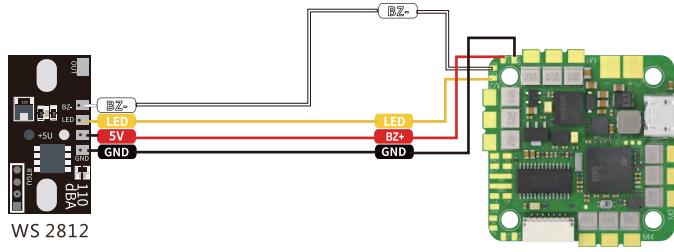


## Analog VTX

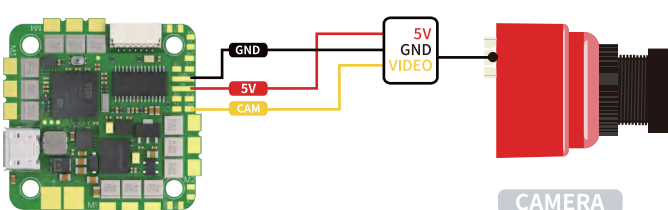
Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Telemetry Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled	AUTO	Disabled



## LED&Buzzer



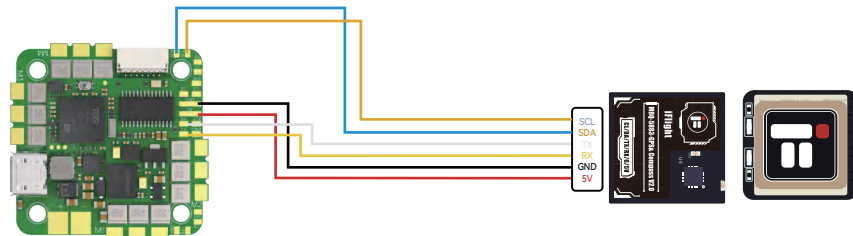
## CAM



## status indicator

- Start FC startup successful  
Blue LED is visible
- 3V3 3.3V & MCU available  
Red LED is visible
- Bat Vbat is available  
Orange LED is visible
- 5V 5v output is available  
Green LED is visible

## GPS



Identifier	Configuration/MSP	Serial Rx	Serial Tx	Telemetry Output	Telemetry Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART5	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART7	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled
UART8	<input type="checkbox"/> 115200	<input type="checkbox"/>	<input type="checkbox"/>	Disabled	AUTO	Disabled

GPS	<input checked="" type="checkbox"/> GPS	GPS for navigation and telemetry
Note: Remember to configure a Serial Port Use Ports tab when using GPS features.		
UBLOX	<input type="checkbox"/> Protocol	
Auto Baud		
Auto Config		
Use Galileo		
Set Home Point Once		
Auto-detect		
Ground Assistance Type		