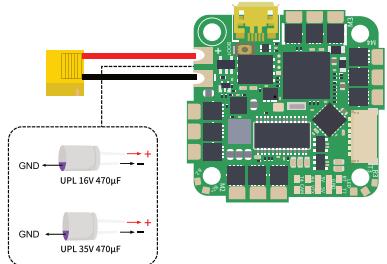
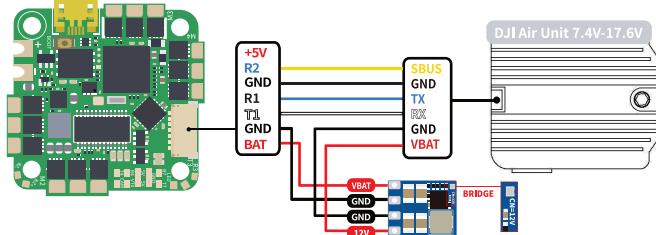


IFLIGHT Beast F7 55A AIO V2 Wiring Diagram

Caution

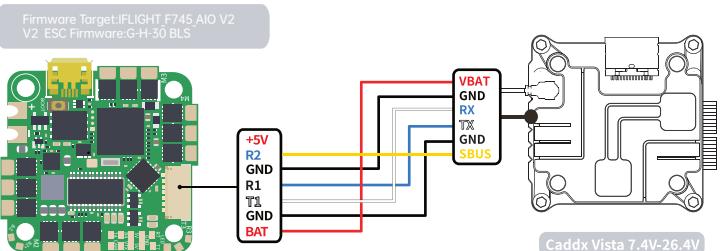


- This is a tiny high power AIO board! It's necessary to add a low ESR capacitor on your battery pads or battery lead! There's a choice of capacitors already in the package.
- Small 4S motors usually need 16V/220μF and up, for bigger and more aggressive 6S motors use at least 35V/470μF. It's necessary 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).

DJI Digital Transmitters



Identifier	Configuration/MSP	Serial Rx
USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	ON
UART3	115200	OFF
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

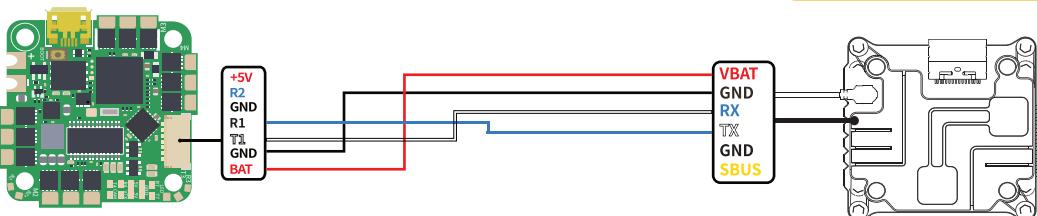
- Please check your protocols, otherwise your DJI Radio won't input signals!
- DJI Goggle protocol and Betaflight protocol has to match!
- For lower signal latency use the SBUS_BAUD_FAST protocol option on both ends.
- For Betaflight Copy/Paste "set sbus_baud_fast=on" into your Betaflight Configurator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

Receiver

Serial-based receiver (SPEKSAT, S) Receiver Mode

Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

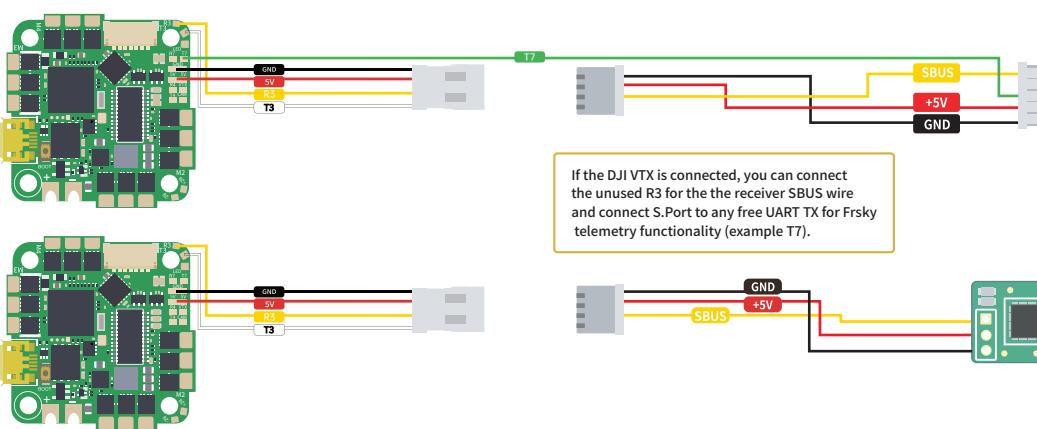
SBUS Serial Receiver Provider



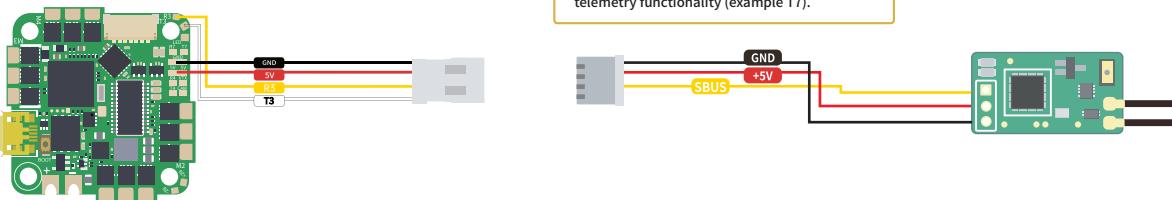
When not using the DJI remote controller, don't connect the SBUS and GND.

Identifier Configuration/MSP Serial Rx

USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF



If the DJI VTX is connected, you can connect the unused R3 for the receiver SBUS wire and connect S.Port to any free UART TX for Frsky telemetry functionality (example T7).



SBUS XM+

Identifier Configuration/MSP Serial Rx

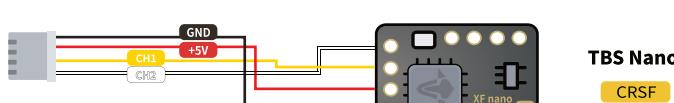
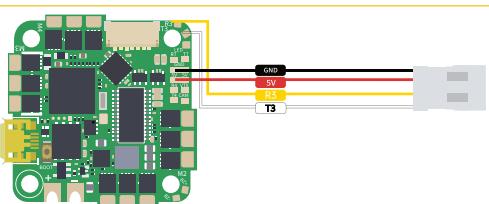
USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

Receiver

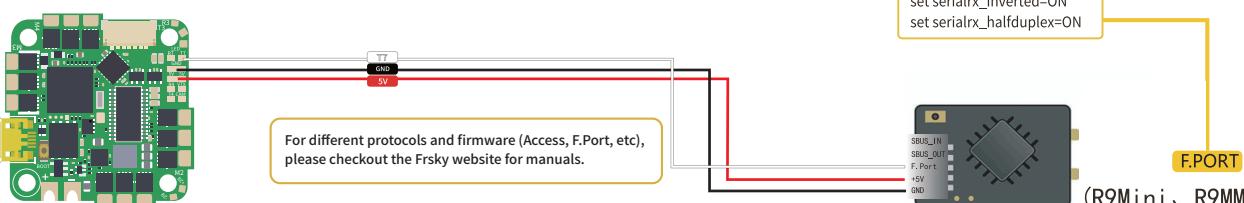
Serial-based receiver (SPEKSAT, S) Receiver Mode

Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

SBUS Serial Receiver Provider



set serialrx_Provider=FPORT
set serialrx_inverted=ON
set serialrx_halfduplex=ON



F.PORT

Identifier Configuration/MSP Serial Rx

USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

Identifier Configuration/MSP Serial Rx

USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

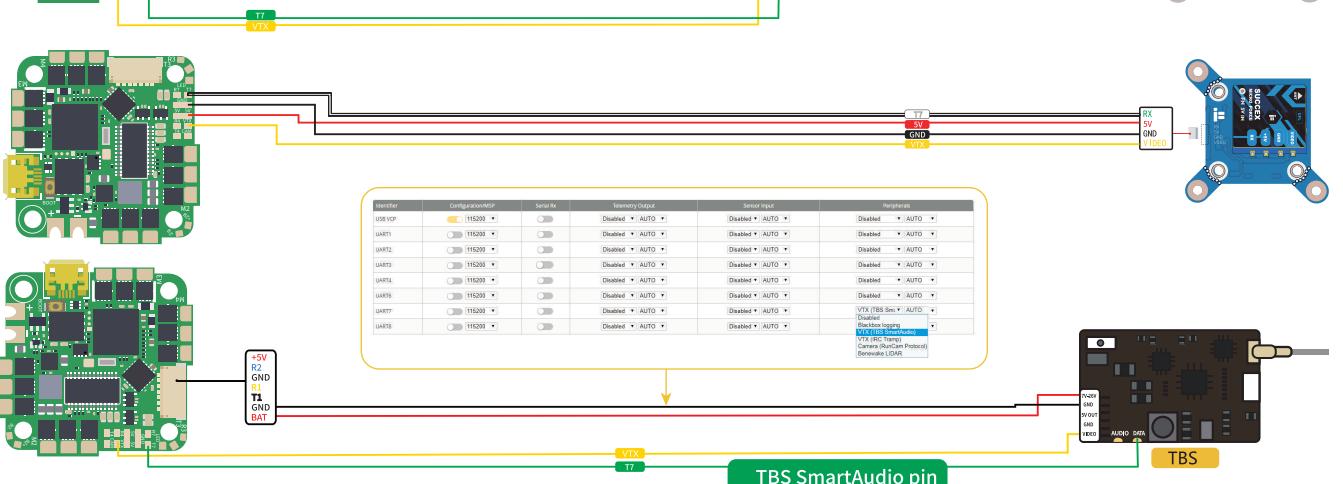
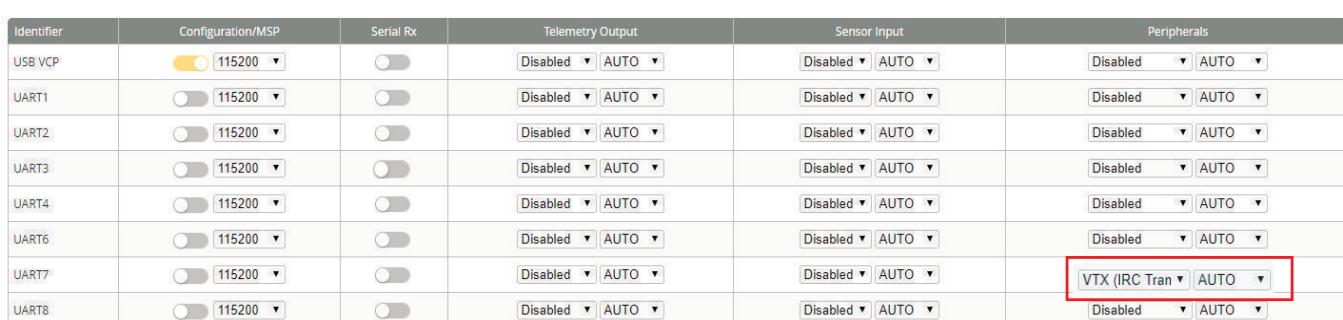
Receiver

Serial-based receiver (SPEKSAT, S) Receiver Mode

Note: Remember to configure a Serial Port (via Ports tab) and choose a Serial Receiver Provider when using RX_SERIAL feature.

FrSky FPort Serial Receiver Provider

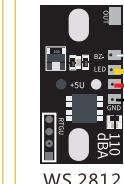
Analog



Identifier Configuration/MSP Serial Rx

USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

LED/BUZZER

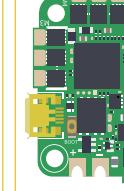


WS 2812

Identifier Configuration/MSP Serial Rx

USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

CAM



CAMERA

Identifier Configuration/MSP Serial Rx

USB VCP	115200	OFF
UART1	115200	OFF
UART2	115200	OFF
UART3	115200	ON
UART4	115200	OFF
UART5	115200	OFF
UART6	115200	OFF
UART7	115200	OFF
UART8	115200	OFF

Status indicator

3V3 3.3V & MCU available Red LED is visible

Start FC startup successful Blue LED is visible

