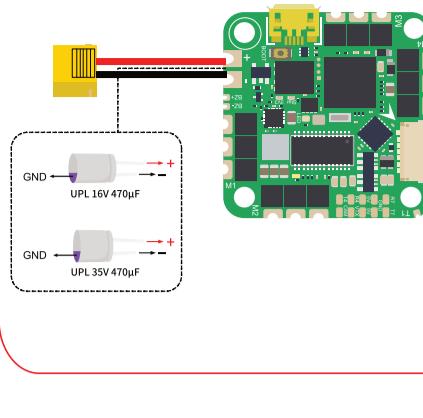


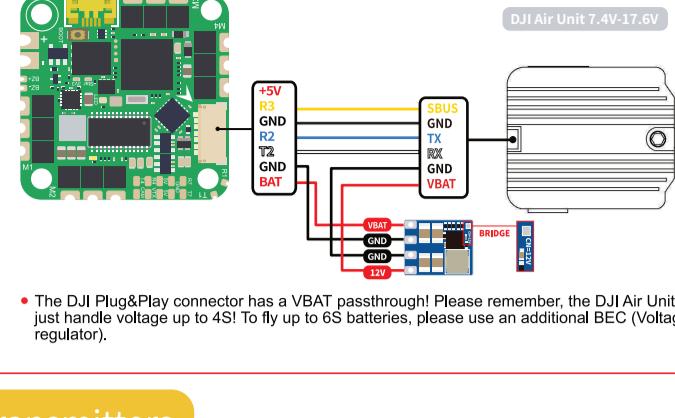
IFLIGHT Beast F745A AIO Wiring Diagram

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.

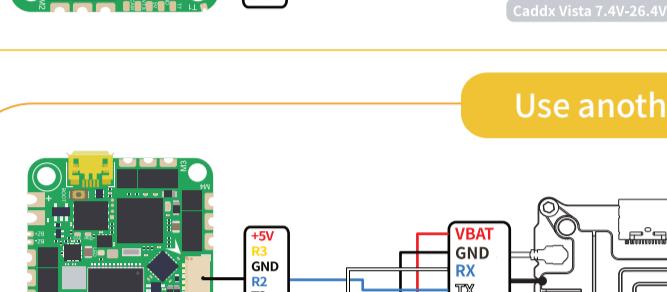
- Small 4S motors usually need 16V/220 μ F and up, for bigger and more aggressive 6S motors use at least 35V/470 μ F. It's necessary to protect the hardware from motor generated back EMF and voltage spikes.



- 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

Firmware Target:IFLIGHT_F745_AIO
ESC Firmware:G-H-30 BLS 16.7

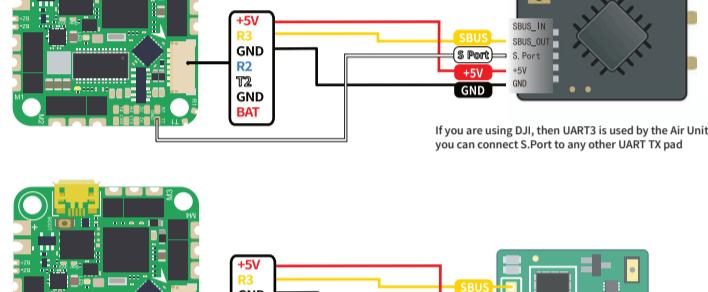


Identifier	Configuration/MSP	Serial Rx
USB VCP	115200	<input type="checkbox"/>
UART1	115200	<input type="checkbox"/>
UART2	115200	<input type="checkbox"/>
UART3	115200	<input checked="" type="checkbox"/>
UART4	115200	<input type="checkbox"/>
UART6	115200	<input type="checkbox"/>
UART7	115200	<input type="checkbox"/>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

Please check your protocols, otherwise your DJI Radio won't receive signals!
Both Goolge protocol and Betaflight protocol have 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

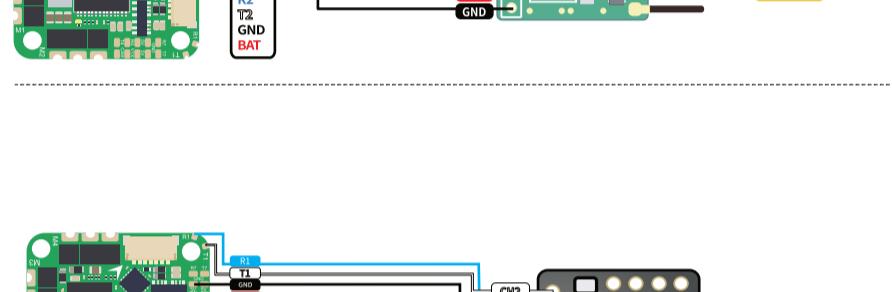
Receiver	Serial-based receiver (SPEKSAT, S)	Receiver Mode
SBUS	Serial Receiver Provider	

Use another transmitter(HD)



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

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



Receiver	Serial-based receiver (SPEKSAT, S)	Receiver Mode
SBUS	Serial Receiver Provider	



SBUS
XM+

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

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

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

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

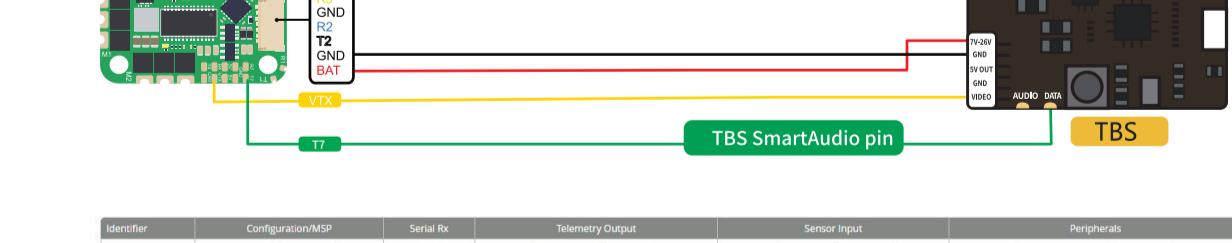
Analog

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART6	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART7	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	ITX (IRC Tran) AUTO
UART8	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO



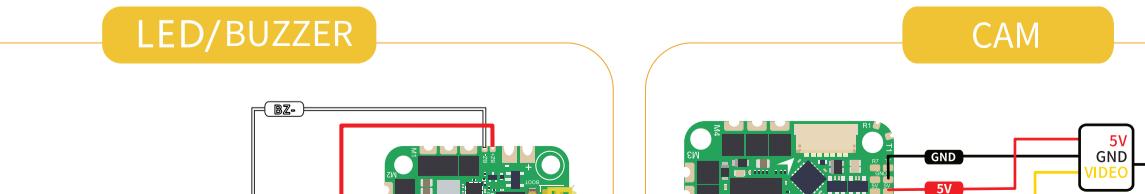
set serialrx_Provider=FPORT
set serialrx_inverted=ON
set serialrx_halfduplex=ON

F.PORT



TBS SmartAudio pin

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART6	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART7	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	VTX (TBS Sm) AUTO
UART8	115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO



TBS

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