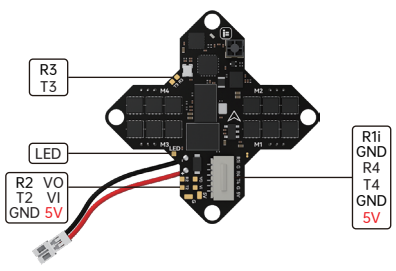
iFlight Borg G4 AIO（RX）Wiring diagram

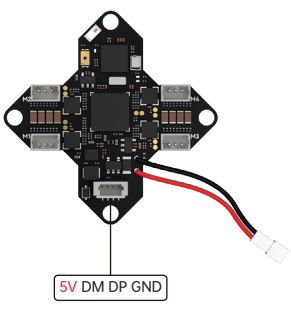
Parameters:

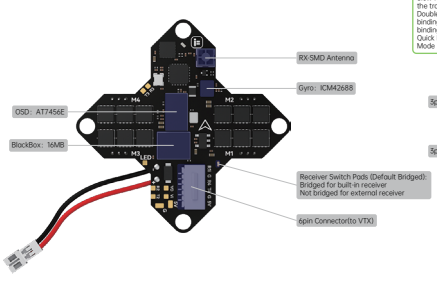
FC Specifications
Input voltage：1S. Support LIHV battery
Dimensions：30*30mm±1
Mount pattern：25.5*25.5.φ3
Weight：4g±1
MCU：STM32G473
Gyro：ICM42688
Baro：N/A
OSD：AT7456E
BlackBox：16MB
Motor outputs: 4
I2C：N/A
BEC：5V 3A
LED Strip：Supported
Beeper：N/A
VTX protocol：Support DJI MSP/Smartaudio/IRCTramp/HDZero
UARTS: 4
Uart：4*UART（UART1、UART2、UART3、UART4）
UART1：SBUS input
UART2：GPS or other sensors that require a serial port
UART3：Built-in ELRS receiver/SBUS input
UART4：VTX HD
ESC Specifications:
MCU：EFM8BB51F16
Driver：N/A
Input voltage：1S. Support LIHV battery
Output current：12A Continuous
Peak current：18A 3 Seconds
ESC Firmware：C-X-5 - Bluejay, 0.19, 96kHz
Current Sensor Rate：400（1/10mV/A）
BEC：N/A
Telemetry：N/A
Bidirectional DSHOT：Supported
Protocol：Supports DShot150/300/600、MultiShot、OneShot
Firmware：BL8 (8bit ESC)

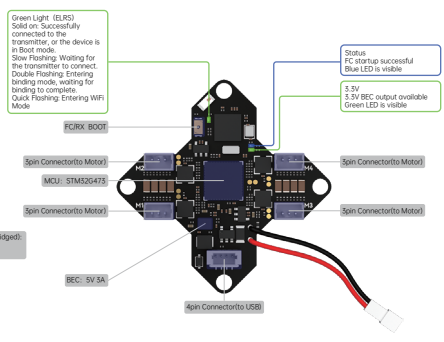
Receiver Specification
MCU：ESP8285
RF：SX128X
Receiver Type：2.4GHz
Telemetry power：100mW (20dBm)
LNA：YS
Firmware：iFlight 2.4GHz RX
Lua Script：iFlight 2.4GHz RX
TCXO: Yes

Firmware:
FC Firmware：IFLIGHT_BORG_G4_AIO
ESC Firmware：C-X-5 - Bluejay, 0.19, 96kHz
Receiver Firmware：iFlight 2.4GHz RX



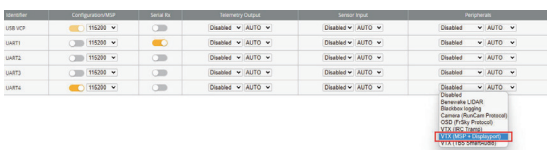


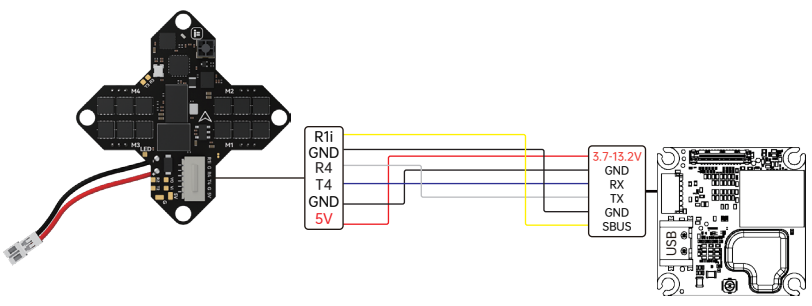




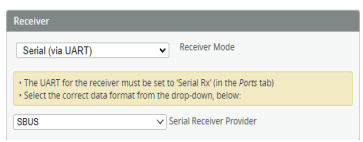
DJI Digital Transmiters: SUBS Protocol

Firmware Target：IFLIGHT_BORG_G4_AIO



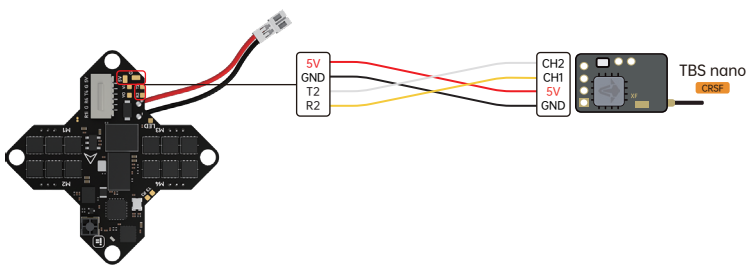


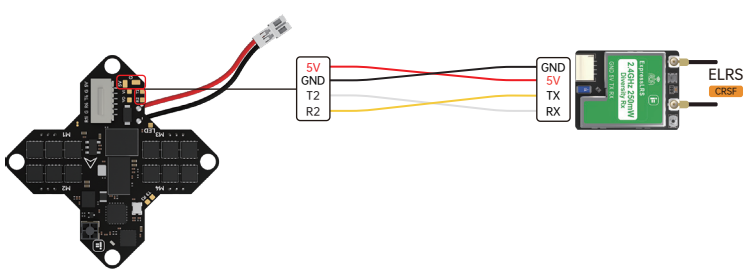
DJI O4 Air Unit 3.7-13.2V

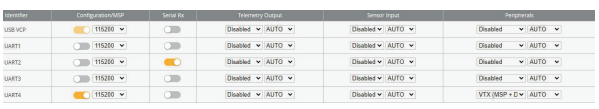


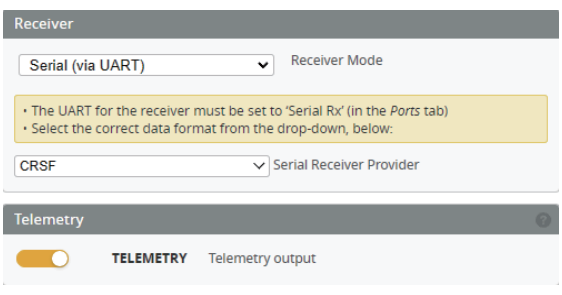
- To enable the air unit OSD under Betaflight 4.4 version, you need to select VTX (MSP+Displayport) in the peripheral port where the air unit signal is connected to the port interface.
- Please check your protocols, otherwise your DJI Radio won't input signals!
  DJI Goggle protocol and Betaflight protocol has to match!
  For lower signallatency use the SBUS BAUD_FAST protocol option on both ends.
- For Betafllght Copy Paste"set sbus_baud_fast=on"into your Beataflight Configurator CLI then hit enter.
  Use"save"and hit enter to save the changes.
  Default: sbus_baud_fast=off, Goggle protocol set to NORMAL

Others Receivers(TBS/ELRS): CRSF Protocol

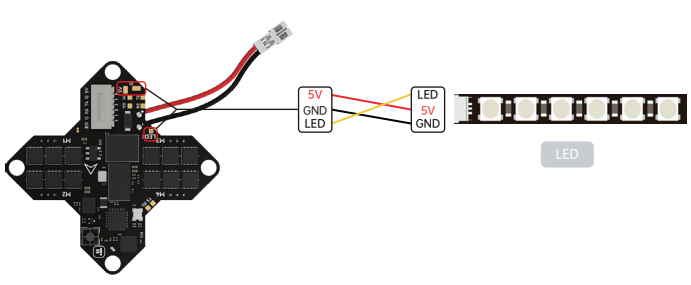


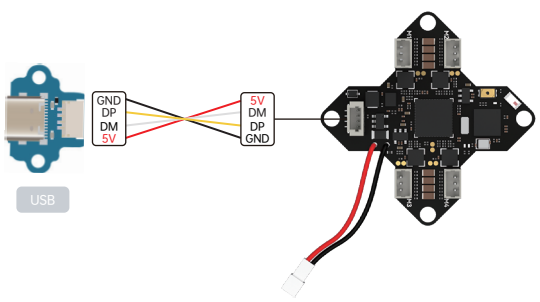




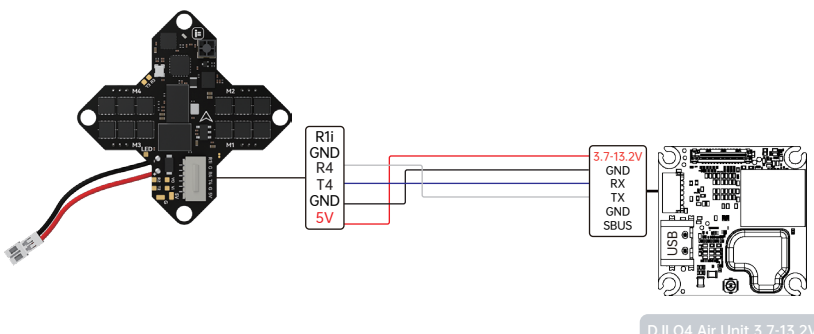


LED/USB Adapter





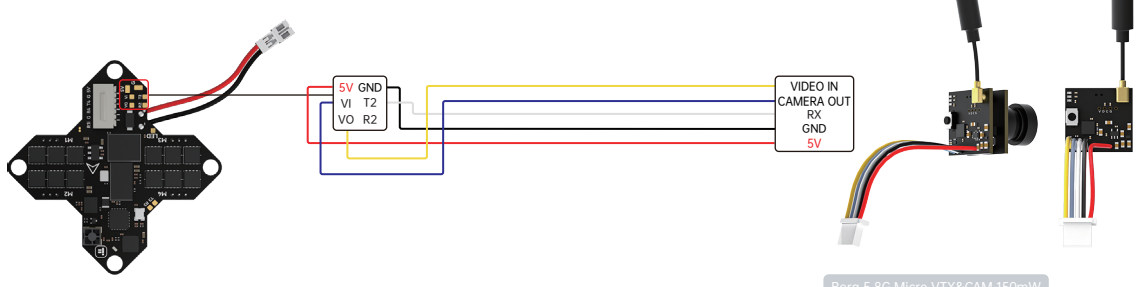
VTX/CAM



DJI O4 Air Unit 3.7-13.2V

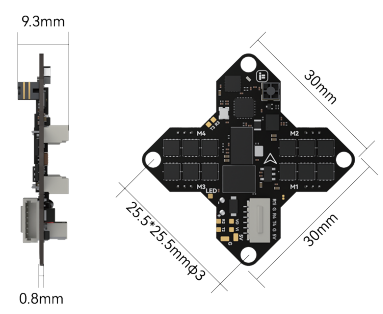
Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200		Disabled AUTO	Disabled AUTO	VTX (MSP + D AUTO

Disabled
Benewake LIDAR
Blackbox logging
Camera (RunCam Protocol)
OSD (FrSky Protocol)
VTX (IRC Tramp)
VTX (MSP + Displayport)
VTX (TBS SmartAudio)



Borg 5.8G Micro VTX&CAM 150mW

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200		Disabled AUTO	Disabled AUTO	VTX (IRC Tran AUTO
UART3	115200		Disabled AUTO	Disabled AUTO	
UART4	115200		Disabled AUTO	Disabled AUTO	

Disabled
Benewake LIDAR
Blackbox logging
Camera (RunCam Protocol)
OSD (FrSky Protocol)
VTX (IRC Tramp)
VTX (MSP + Displayport)
VTX (TBS SmartAudio)

Dimensions/Mounting pattern