

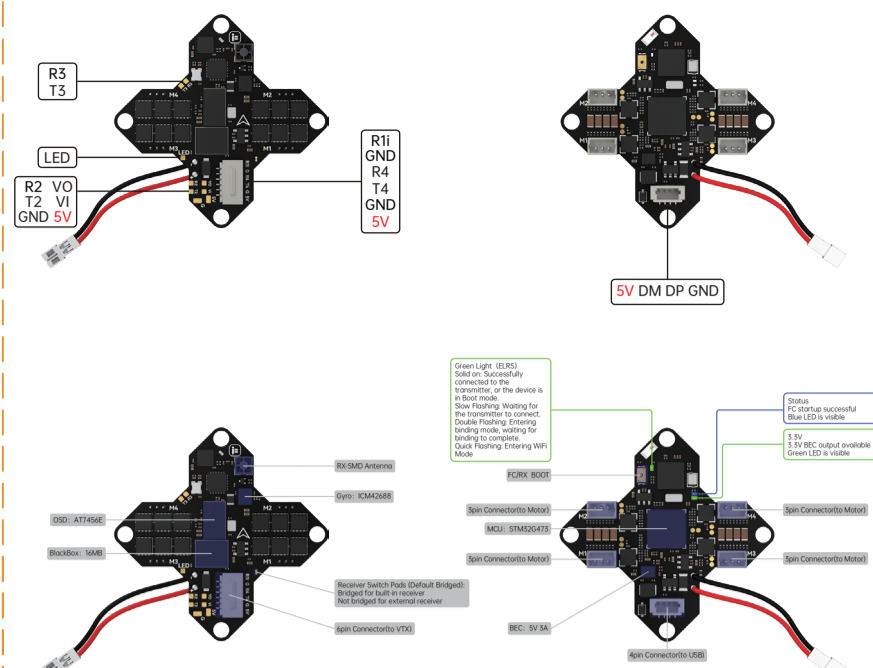
iFlight Borg G4 AIO (RX) Wiring diagram

Parameters:

FC Specifications
 Input voltage: 1S. Support LiHV battery
 Dimensions: 30*30mm±1
 Mount pattern: 25.5*25.5±0.3
 Weight: 4g±1
 MCU: STM32G473
 Gyro: AT456E
 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: EF8BB51F6
 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: BL.8 (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



Green Light: ELRS/SDS1A successfully connected to the transmitter, or the device is programming. If the device is programming, the device is in programming mode. Double flashing: Waiting for the transmitter to connect. Double flashing: Entering landing mode, waiting for landing to complete. Quick flashing: Entering VTX Mode.

Status: FC startup successful. Blue LED is visible. 5.0V BEC output available. Green LED is visible.

DJI Digital Transmitters: SUBS Protocol

Firmware Target: iFLIGHT_BORG_G4_AIO

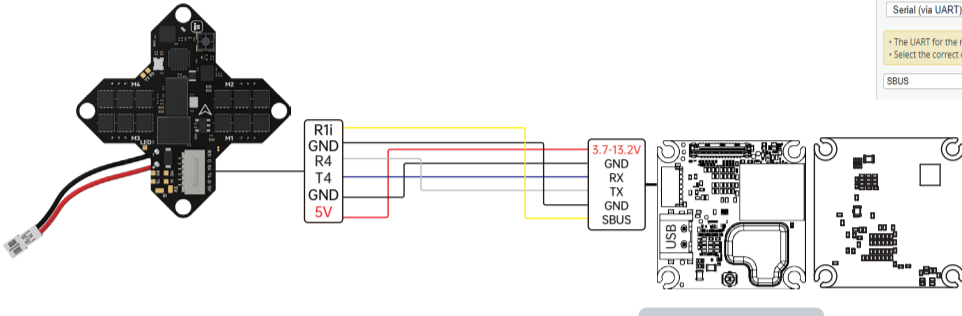
Module	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200	On	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200	Off	Disabled AUTO	Disabled AUTO	Disabled 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



- 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 do not 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

Others Receivers(TBS/ELRS): CRSF Protocol

Module	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200	On	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO

Receiver

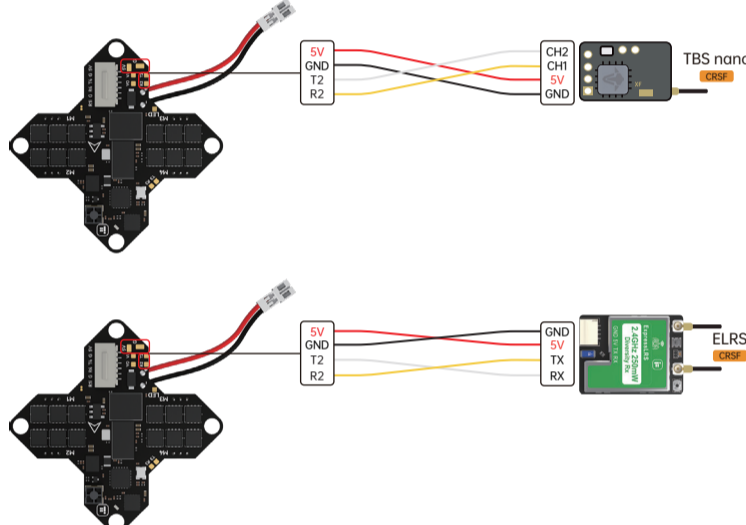
Serial (via UART) Receiver Mode

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.

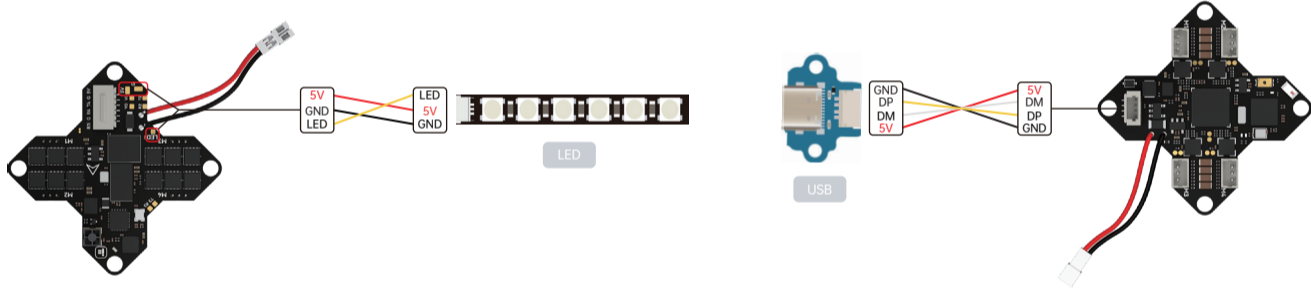
CRSF Serial Receiver Provider

Telemetry

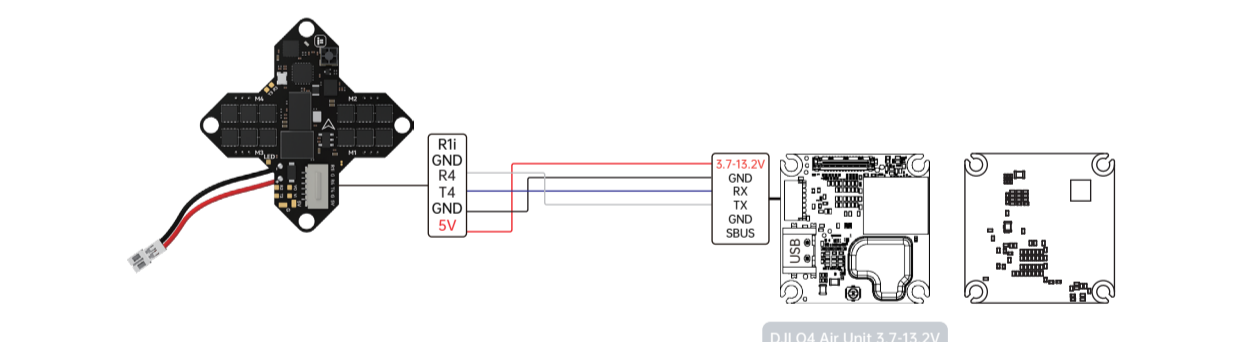
TELEMETRY Telemetry output



LED/USB Adapter

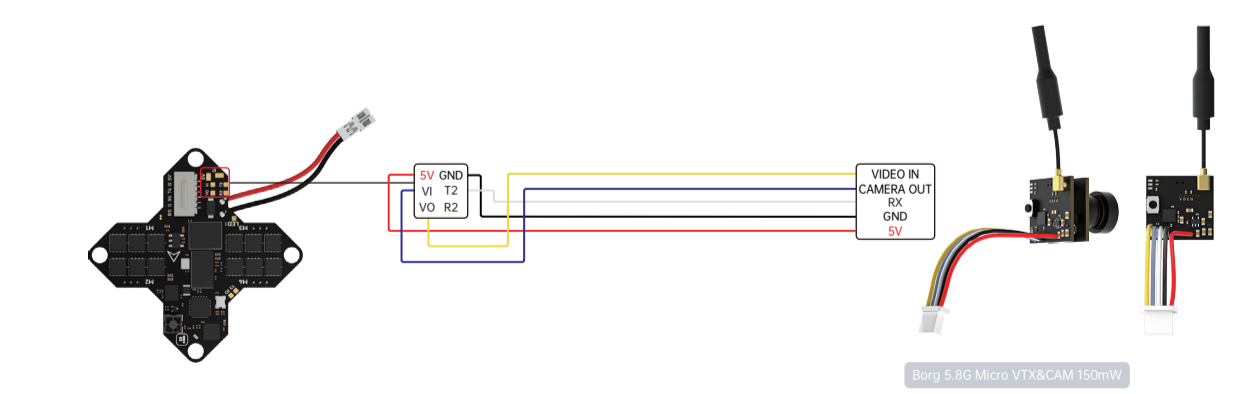


VTX/CAM



Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200	On	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200	Off	Disabled AUTO	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)



Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART3	115200	On	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART4	115200	Off	Disabled AUTO	Disabled AUTO	Disabled AUTO

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

Dimensions/Mounting pattern

