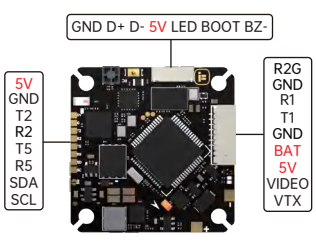
iFlight Borg 2 RX AIO Wiring diagram

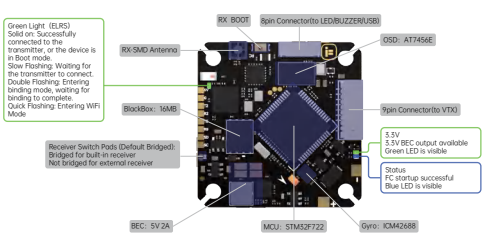
Parameters:

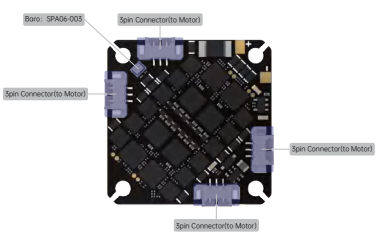
FC Specifications
Input voltage: 2-4S. Support LIHV battery
Dimensions: 32*32mm±1
Mount pattern: 25.5*25.5.φ3
Weight: 7g±1
MCU: STM32F722
Gyro: ICM42688
Baro: SPA06-003
OSD: AT7456E
BlackBox: 16MB
Motor outputs: 4
I2C: Supported
BEC: 5V 2A
LED Strip: Supported
Beeper: Yes
VTX protocol: Support DJI MSP/Smartaudio/IRCTramp/HDZero
UARTS: 4
Uart: 4*UART (UART1、UART2、UART5、UART6)
UART1: VTX HD / Analog
UART2: Built-in ELRS receiver/SBUS input
UART5: GPS or other sensors that require a serial port
UART6: ESC Telemet
Firmware target: IFLIGHT_BLITZ_F722_X1 (Betaflight)
ESC Specifications:
MCU: STM32G071
Driver: FD6288
Input voltage: 2-4S. Support LIHV battery
Output current: 12A Continuous
ESC Firmware: IFLIGHT BLITZ G3 -Rev. 32.9
Current Sensor Rate: 200 (1/10mV/A)
BEC: N/A
Telemetry: Supported (AIO Wires have been connected, set the sensor input of UART6 to ESC to use)
Bidirectional DSHOT: Supported
Protocol: Supports DShot150/300/600、MultiShot、OneShot
Firmware: BL32 (32bit ESC)

Receiver Specification
MCU: ESP8285
RF: SX1281
Receiver Type: 2.4GHz
Telemetry power: 17mW (12.3dBm)
LNA: N/A
Firmware: iFlight 2.4GHz Nano RX
Lua Script: iFlight 2.4GHz Nano
TCXO: Yes

Firmware:
FC Firmware: IFLIGHT_BLITZ_F722_X1
ESC Firmware: IFLIGHT BLITZ G3 -Rev. 32.9
Receiver Firmware: IFLIGHT 2.4GHz Nano RX

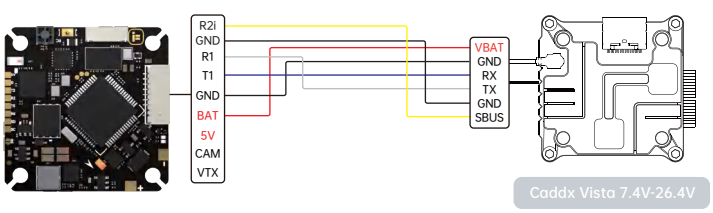




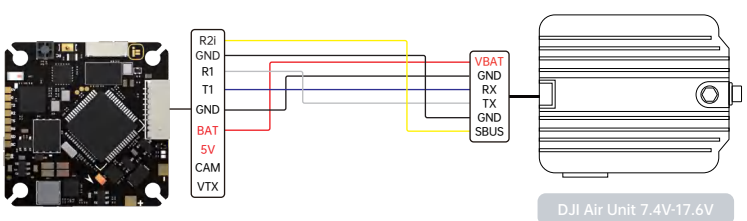


DJI Digital Transmiters

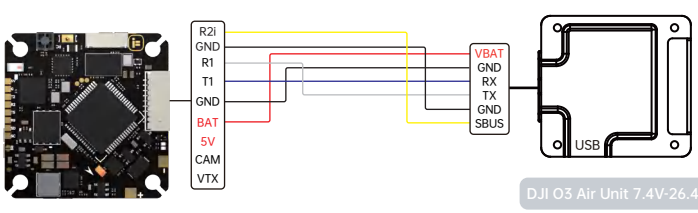
Firmware Target: IFLIGHT_BLITZ_F722_X1



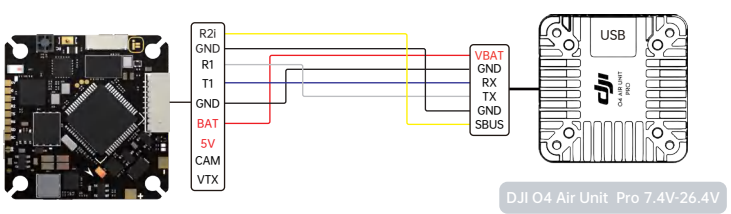
Caddx Vista 7.4V-26.4V



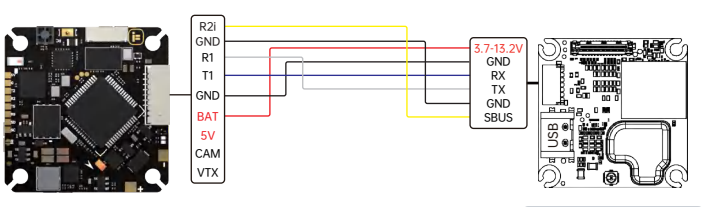
DJI Air Unit 7.4V-17.6V



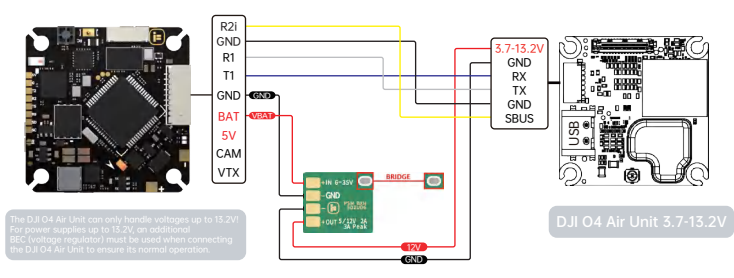
DJI O3 Air Unit 7.4V-26.4V



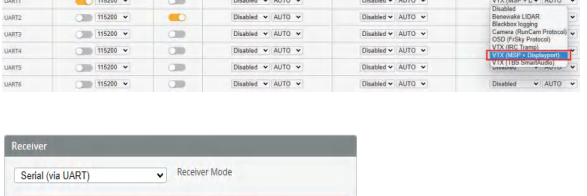
DJI O4 Air Unit Pro 7.4V-26.4V

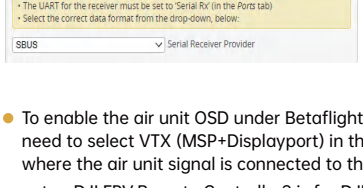


DJI O4 Air Unit 3.7-13.2V



DJI O4 Air Unit 3.7-13.2V

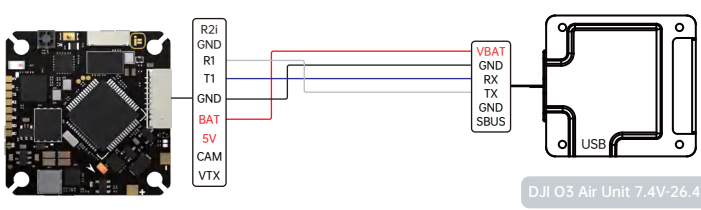




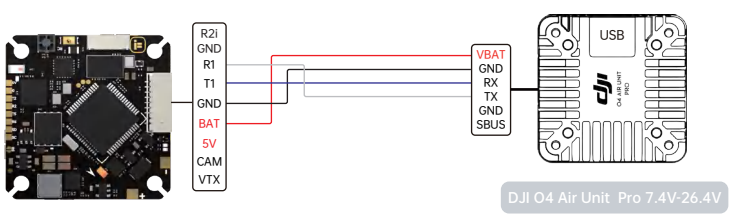
- To enable the air unit OSD under Betaflight 4.4 version, you need to select VTX (MSP+Displayport) in the peripheral port where the air unit signal is connected to the port interface.
- note: DJI FPV Remote Controller2 is for DJI O3 Air Unit
  DJI FPV Remote Controller is for DJI Air Unit and Vista
- 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

Any other Receiver

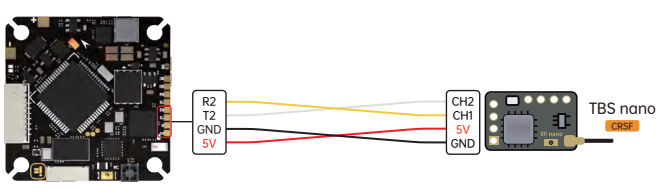
Firmware Target: IFLIGHT_BLITZ_F722_X1

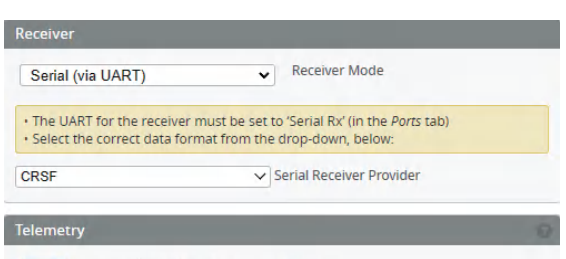


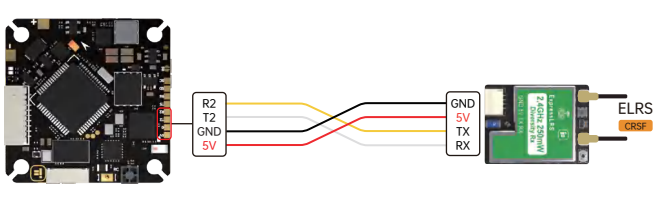
DJI O3 Air Unit 7.4V-26.4V



DJI O4 Air Unit Pro 7.4V-26.4V

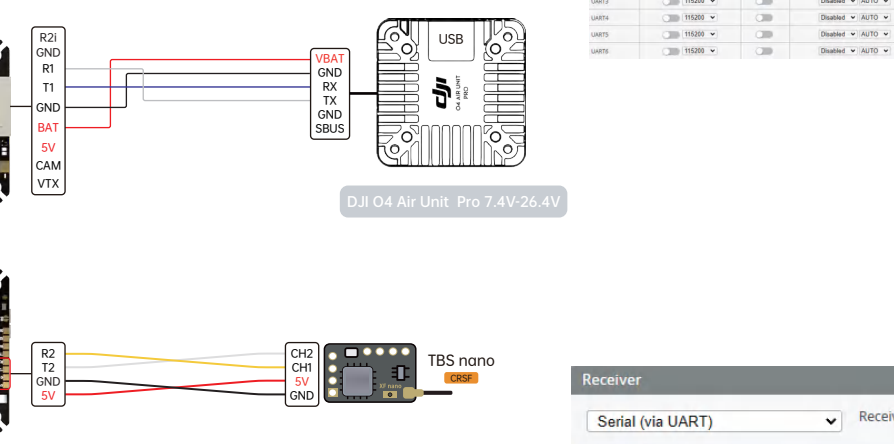


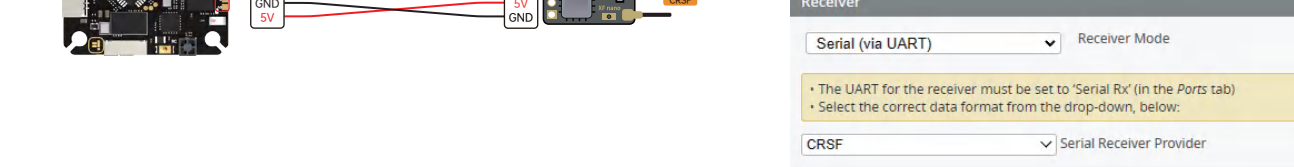




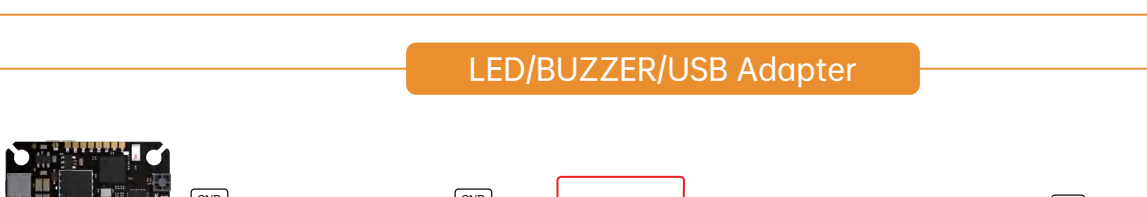
LED/BUZZER/USB Adapter

VTX/CAM





- BAT is a controllable VTX output port. The default factory setting is AUX9, this mode is always on. Users can set the AUX channel according to actual needs.



- VTX_ON_OFF Mode On

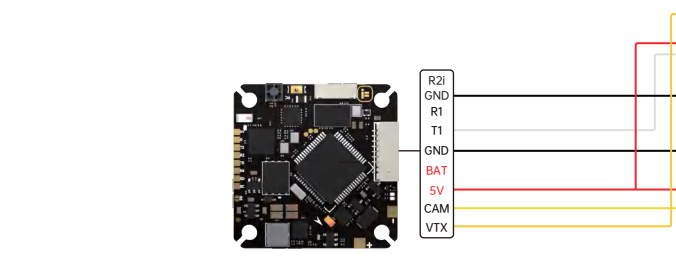
- VTX_ON_OFF Mode Off

- To control VTX on/off, please drag the range to 1600-2000. If the icon is yellow, it is on, and if it is gray, it is off.

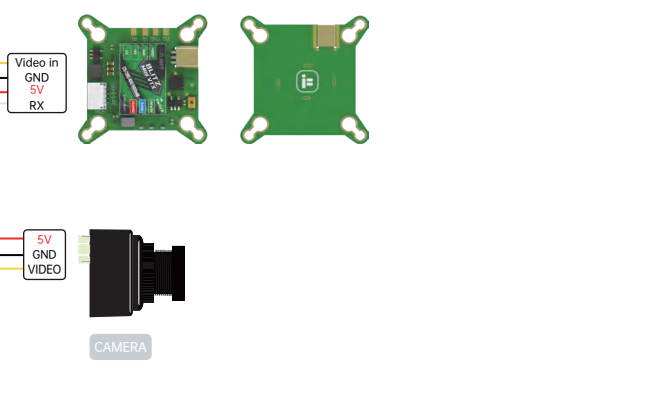
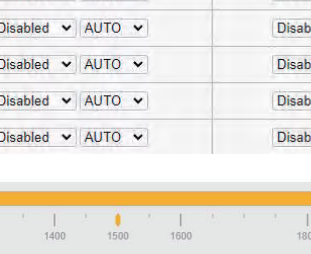
⚠ Reflashing firmware or restoring the default factory settings requires manually entering the following commands in Betaflight CLI to re-enable VTX switch control:

```
resource PINIO 1 C0
set pinio_config = 1,1,1,1
set pinio_box = 40,41,255,255
set box_user_1_name = VTX_ON_OFF
aux 0 40 8 900 2100 0 0
save
```

GPS



SDA/SCL pads can not be remapped to UARTs



Dimensions/Mounting pattern