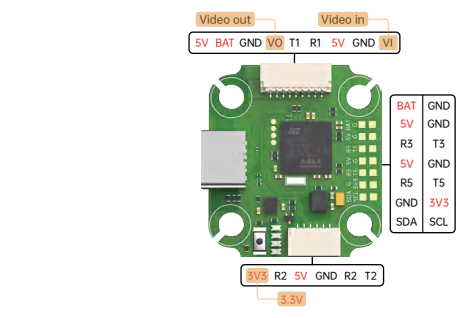
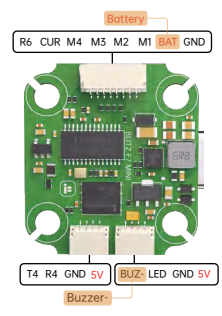
iFlight BLITZ MINI F745 Instructions

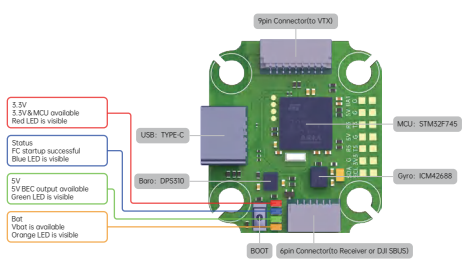
Parameters:

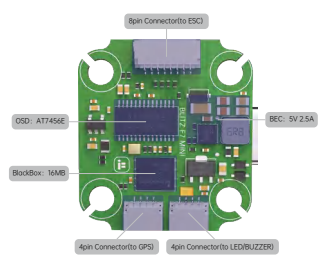
MCU: STM32F745
Gyro: ICM42688
Baro: DPS310
OSD: AT7456E
BEC: Output 5V 2.5A continuous output current, 3A peak current (15 seconds)
BlackBox: 16MB
Uart: 6*UART(UART1、UART2、UART3、UART4、UART5、UART6)
UART1 for VTX HD/Analog
UART2 for Receiver
UART3、UART4、UART5 for GPS or Other devices that require serial ports
UART6 for ESC Telemetry
4×Dshot/PWM outputs
1×I2C
1xSH1.0 9pin connector for HD VTX/Analog VTX&CAM (5V/BAT/G/VO/T1/R1/5V/G/VI)
1xSH1.0 8pin connector for ESC (R6/CUR/M4/M3/M2/M1//BAT/G)
1xSH1.0 6pin connector for Any Receiver or DJI (3V3/R2/5V /G/R2/T2)
1xSH1.0 4pin connector GPS (T4/R4/G/5V)
1xSH1.0 4pin connector LED&Beeper (BUZ-/LED/G/5V)
4×0402 LEDs for FC STATUS (3.3V Red) / (Start Blue) / (5V Green) / (BAT Orange)
Smartaudio&IRCTramp VTX protocol supported
WS2812ledStrip: Yes
Beeper: Yes
Dimensions: 30.5*27mm
Mounting hole: 20*20mm/φ4
Weight: 4.8g

Firmware target:
Betaflight: IFLIGHT_BLITZ_F7_AIO
INAV: /
Ardupilot: arduplane_with_bl



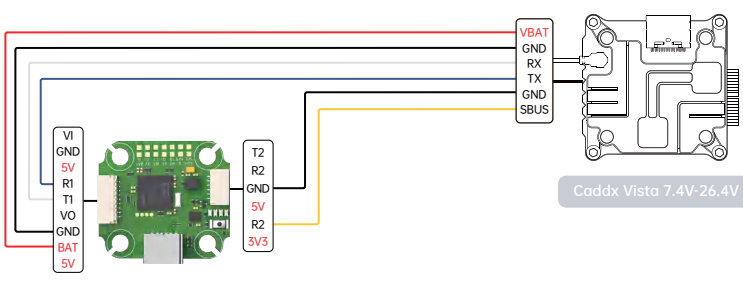




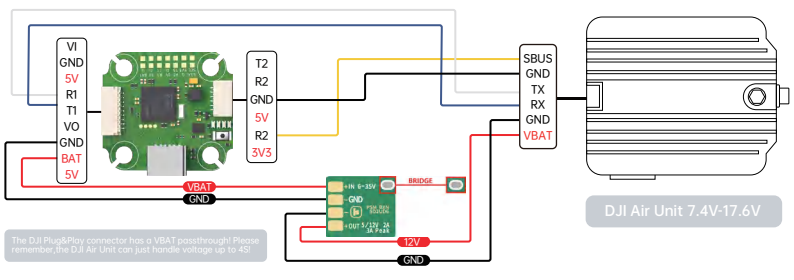


DJI Digital Transmiters

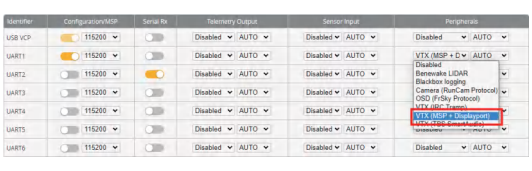
FC plug&play port and setup
compatible to DJI Air Unit and Caddx Vista

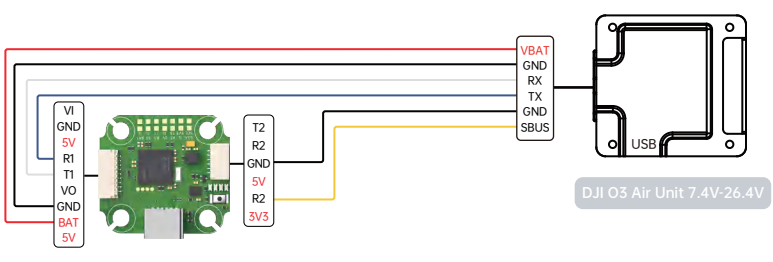


Caddx Vista 7.4V-26.4V

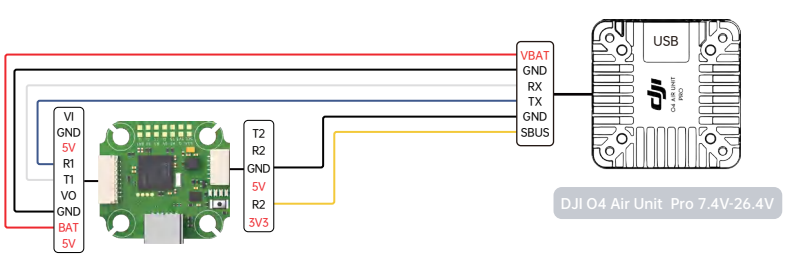


DJI Air Unit 7.4V-17.6V

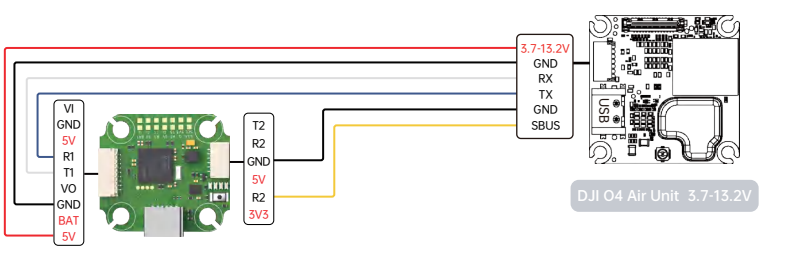




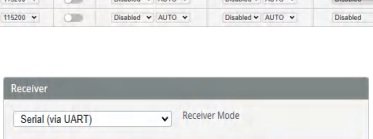
DJI O3 Air Unit 7.4V-26.4V



DJI O4 Air Unit Pro 7.4V-26.4V



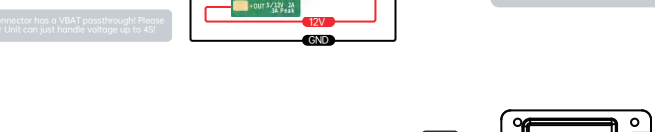
DJI O4 Air Unit 3.7-13.2V



- 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

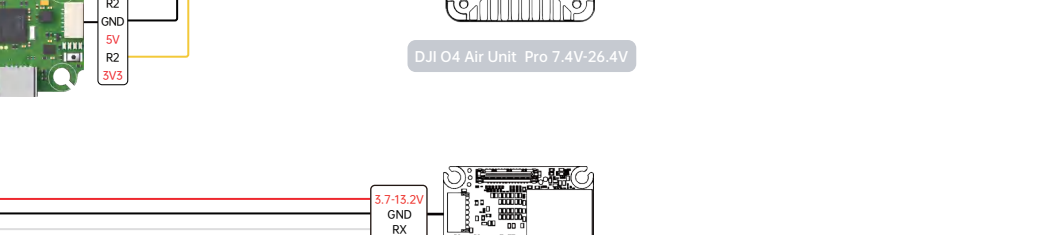
DJI O3 Air Unit 7.4V-26.4V



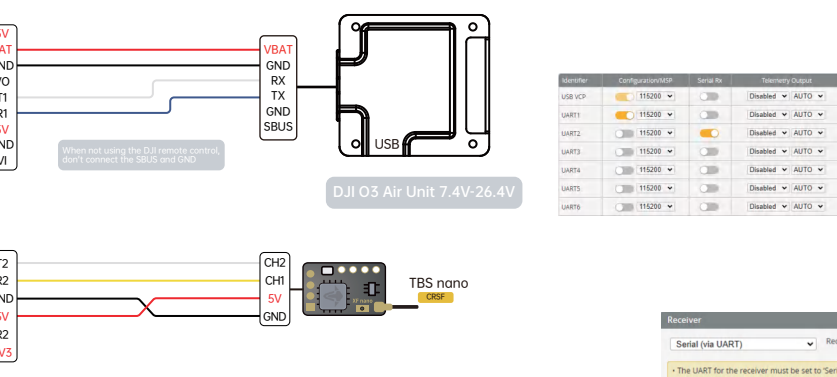
VTX/CAM

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	VTX (IRC Tran AUTO
UART2	115200		Disabled AUTO	Disabled AUTO	
UART3	115200		Disabled AUTO	Disabled AUTO	
UART4	115200		Disabled AUTO	Disabled AUTO	
UART5	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART6	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO

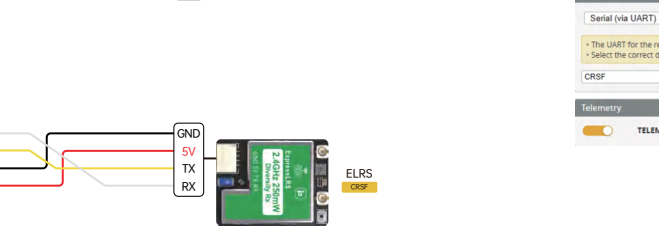
Disabled
Blackbox logging
VTX (IRC Tramp)
VTX (TBS SmartAudio)
Camera (RunCam Protocol)
Benewake LIDAR
OSD (FrSky Protocol)



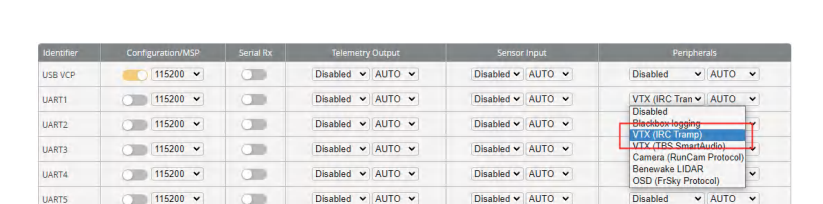
LED/BUZZER



ESC



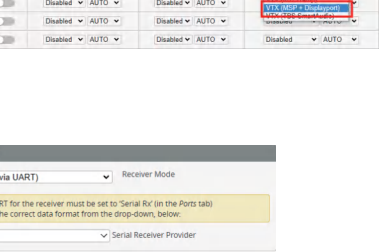
Anti-Spark filter



GPS

SDA/SCL pads can not be remapped to UARTs

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	GPS 115200	Disabled AUTO
UART5	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO
UART6	115200		Disabled AUTO	Disabled AUTO	Disabled AUTO



Dimensions/Mounting pattern