

iFlight BLITZ MINI F4 Wiring Diagram

DJI Digital VTX + Radio

5V BAT GND VO T1 R1 5V GND V1

BAT 5V GND T3 5V R3 GND T2 3V3 R2i SDA SCL

3V3 R2i 5V GND R2 T2

R6 CUR M4 M3 M2 M1 BAT GND

T4 R4 GND 5V

BUZ LED GND 5V

VI GND 5V R1 T1 VO GND BAT 5V

T2 R2 GND 5V R2i 3V3

VBAT GND RX TX GND SBUS

Vista: 7.4V-26.4V

DJI Air Unit 7.4V-17.6V

DJI O3 Air Unit 7.4V-26.4V

● Please check your protocols, otherwise your DJI Radio won't input signals!
DJI Goggle protocol and Betaflight protocol has 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

● The DJI Plug&Play connector has a VBAT passthrough! Please remember, the DJI Air Unit can just handle voltage up to 45! To fly up to 65 batteries, please use an additional BEC (Voltage regulator).

● For DJI O3 Air Unit, In to the Betaflight Configurator Cli, Set osd device to MSP : "set osd_displayport device = MSP" Specify the serial port of msp_displayport as 0 (the number in this place should be the serial port number minus 1): "set displayport_msp_serial = 0" then type "save" and exit

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

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

Various Receivers

5V BAT GND VO T1 R1 5V GND V1

VBAT GND RX TX GND SBUS

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

GND GND T3 GND T2 3V3 SCL

BAT 5V R3 5V R2 R2i SDA

T2 R2 GND 5V R2i 3V3

SBUS-OUT S.Port <5 5V

FrSky R-XSR (R9Mini, R9MM)

SBUS +S.port

If the DJI VTX is connected, you can connect the unused R2 for the receiver SBUS wire and connect S.Port to any free UART TX for Frsky telemetry functionality (example T3).

T2 R2 GND 5V R2i 3V3

SBUS XM+

T2 R2 GND 5V R2i 3V3

TBS Nano CRSF

ELRS CRSF

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

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

TELEMETRY TELEMETRY output

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

VTX/CAM

Identifier	Configuration/MSP	Serial Rx	Telemetry Output	Sensor Input	Peripherals
USB VCP	<input checked="" type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART1	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO
UART2	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Blackbox logging VTX (IRC Tramp) VTX (TBS SmartAudio) Camera (RunCam Protocol) Benewake LIDAR OSD (FrSky Protocol)
UART3	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	
UART4	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	
UART6	<input type="checkbox"/> 115200	<input type="checkbox"/>	Disabled AUTO	Disabled AUTO	Disabled AUTO

5V BAT GND VO T1 R1 5V GND V1

VIDEO GND 5V RX

5V GND VIDEO

camera

LED/Buzzer

Buzzer

5V GND LED BUZ

LED

Anti-Spark filter

GND VBAT

Esc

GND VBAT M1 M2 M3 M4 CUR TX

GND BAT M1 M2 M3 M4 CUR R6

Note: If not using iFlight electronics, please make sure the plug pinout is identical or the wire harness needs to be reordered.

GPS

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

SDA/SCL pads cannot be remapped to UARTs

GND GND T3 GND T2 3V3 SCL

BAT 5V R3 5V R2 R2i SDA

5V GND R4 T4

SCL SDA RX GND 5V

GPS

GPS for navigation and telemetry

Note: Remember to configure a Serial Port via Ports tab when using GPS feature.

UBLOX Protocol

Auto Baud

Auto Config

Use Galileo

Set Home Point Once

Auto-detect Ground Assistance Type

Status indicator

Start FC startup successful Blue LED is visible

3V3 3.3V & MCU available Red LED is visible

5V 5V BEC output available Green LED is visible

Bat Vbat is available White LED is visible

Note: Each LED indicates the status of your flight controller.