

























The top diagram illustrates the wiring for two LEDs. On the left, a 5-pin LED strip is connected to the Pi's GPIO pins. The red wire (VCC) connects to pin 1, the yellow wire (GND) to pin 6, the green wire (LED) to pin 13, and the blue wire (LED) to pin 19. On the right, another 5-pin LED strip is connected similarly, with red (VCC) to pin 1, yellow (GND) to pin 6, green (LED) to pin 13, and blue (LED) to pin 19.

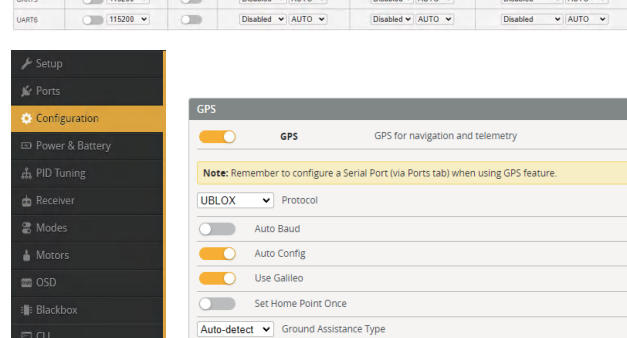
The bottom diagram shows the wiring for a buzzer. On the left, a USB-A to USB-B adapter is connected to the Pi's USB ports. The red wire (VCC) connects to pin 1, the yellow wire (GND) to pin 6, the green wire (LED) to pin 13, and the blue wire (LED) to pin 19. On the right, a buzzer is connected to the Pi's GPIO pins. The red wire (VCC) connects to pin 1, the yellow wire (GND) to pin 6, the green wire (LED) to pin 13, and the blue wire (LED) to pin 19.

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 Trans) ▾ Dead ▾ Blackbox logging ▾ VTX (IRC Trans) ▾ ATAK (USB-SmartAudio) ▾ Camera (RunCam Protocol) ▾ Benevake LIDAR ▾ OSD (FSky Protocol) ▾
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 ▾

The top diagram illustrates the connection of a Digital Airspeed Sensor to the Raspberry Pi 4. The sensor's pins are connected to the Pi's pins as follows: GND to GND, GND 1 to SCL, GND 2 to SDA, and 5V to GND.

The bottom diagram illustrates the connection of a GPS module to the Raspberry Pi 4. The GPS module's pins are connected to the Pi's pins as follows: GND to GND, DAT to SCL, RX to SDA, TX to TX, and TX to RX.

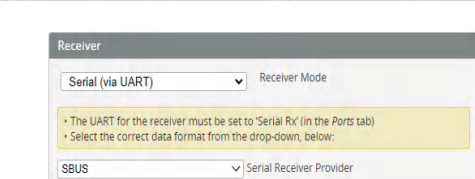
Location	Configuration	Send To	Security Level	Send Input	Procedures
USR VCA	115226		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO
USRT1	 115226		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO
USRT2	 115226		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO
USRT3	 115226		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO
USRT4	115226		Disabled - AUTO	GPS - 115226	Disabled - AUTO
USRT5	 115226		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO
USRT6	 115226		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO



The image displays five wiring diagrams for different DJI drone models, showing the connection between the main board and the motor assembly. Each diagram includes a photo of the main board on the left, a wiring diagram in the center, and a photo of the motor assembly on the right.

- DJI Inspire 1:** The wiring diagram shows connections for BATT (red), GND (blue), RX (yellow), TX (green), and VCC (purple). The motor assembly is labeled "Coded Vites 7.4V-26.4V".
- DJI Phantom 3 Professional:** The wiring diagram shows connections for BATT (red), GND (blue), RX (yellow), TX (green), and VCC (purple). The motor assembly is labeled "DJI Air Unit 7.4V-26.4V".
- DJI Phantom 3 Advanced:** The wiring diagram shows connections for BATT (red), GND (blue), RX (yellow), TX (green), and VCC (purple). The motor assembly is labeled "DJI Air Unit 7.4V-26.4V".
- DJI Phantom 3 Standard:** The wiring diagram shows connections for BATT (red), GND (blue), RX (yellow), TX (green), and VCC (purple). The motor assembly is labeled "DJI Air Unit 7.4V-26.4V".
- DJI Phantom 3 SE:** The wiring diagram shows connections for BATT (red), GND (blue), RX (yellow), TX (green), and VCC (purple). The motor assembly is labeled "DJI Air Unit 7.4V-26.4V".

Interface	Configuration/Mode	Serial Rx	Isometry Output	Sensor Input	Parameters
UART1_VCP	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled / AUTO
UART1	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	VTX_MSP + AUTO
UART2	115200	<input checked="" type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART3	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART4	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART5	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART6	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART7	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART8	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled
UART9	115200	<input type="checkbox"/>	Disabled / AUTO	Disabled / AUTO	Disabled

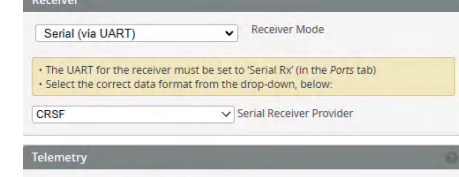
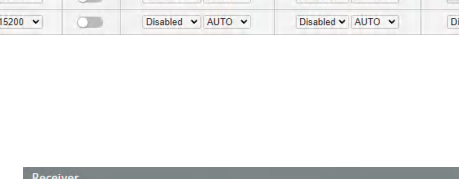


- To enable the air unit OSD under Betaflight 4.4 version, you need to select VTX (MSP+Displayport) in the peripheral port where the air unit signal is connected to the port interface.
- note: DJI FPV Remote Controller 2 is for DJI O3 Air Unit and DJI FPV Remote Controller is for DJI Air Unit and Vista
- Please check your protocols, otherwise your DJI Radio won't input signals!
DJI Google protocol and Betaflight protocol has to match!
For lower signallatency 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.

The image displays three wiring diagrams for the DSI03 Air Unit, which is a small green PCB with various components and a USB-C port. The diagrams show how to connect the Air Unit to different Raspberry Pi models:

- Top Diagram (Raspberry Pi 3):** Shows the Air Unit connected to the Pi's GPIO pins. The connections are:
 - Red wire: DSI03 Pin 1 to Pi Pin 1 (5V)
 - Blue wire: DSI03 Pin 2 to Pi Pin 2 (GND)
 - Blue wire: DSI03 Pin 3 to Pi Pin 3 (GND)
 - Blue wire: DSI03 Pin 4 to Pi Pin 4 (GND)
 - Blue wire: DSI03 Pin 5 to Pi Pin 5 (GND)
 - Blue wire: DSI03 Pin 6 to Pi Pin 6 (GND)
 - Blue wire: DSI03 Pin 7 to Pi Pin 7 (GND)
 - Blue wire: DSI03 Pin 8 to Pi Pin 8 (GND)
 - Blue wire: DSI03 Pin 9 to Pi Pin 9 (GND)
 - Blue wire: DSI03 Pin 10 to Pi Pin 10 (GND)
 - Blue wire: DSI03 Pin 11 to Pi Pin 11 (GND)
 - Blue wire: DSI03 Pin 12 to Pi Pin 12 (GND)
 - Blue wire: DSI03 Pin 13 to Pi Pin 13 (GND)
 - Blue wire: DSI03 Pin 14 to Pi Pin 14 (GND)
 - Blue wire: DSI03 Pin 15 to Pi Pin 15 (GND)
 - Blue wire: DSI03 Pin 16 to Pi Pin 16 (GND)
 - Blue wire: DSI03 Pin 17 to Pi Pin 17 (GND)
 - Blue wire: DSI03 Pin 18 to Pi Pin 18 (GND)
 - Blue wire: DSI03 Pin 19 to Pi Pin 19 (GND)
 - Blue wire: DSI03 Pin 20 to Pi Pin 20 (GND)
 - Blue wire: DSI03 Pin 21 to Pi Pin 21 (GND)
 - Blue wire: DSI03 Pin 22 to Pi Pin 22 (GND)
 - Blue wire: DSI03 Pin 23 to Pi Pin 23 (GND)
 - Blue wire: DSI03 Pin 24 to Pi Pin 24 (GND)
 - Blue wire: DSI03 Pin 25 to Pi Pin 25 (GND)
 - Blue wire: DSI03 Pin 26 to Pi Pin 26 (GND)
 - Blue wire: DSI03 Pin 27 to Pi Pin 27 (GND)
 - Blue wire: DSI03 Pin 28 to Pi Pin 28 (GND)
 - Blue wire: DSI03 Pin 29 to Pi Pin 29 (GND)
 - Blue wire: DSI03 Pin 30 to Pi Pin 30 (GND)
 - Blue wire: DSI03 Pin 31 to Pi Pin 31 (GND)
 - Blue wire: DSI03 Pin 32 to Pi Pin 32 (GND)
 - Blue wire: DSI03 Pin 33 to Pi Pin 33 (GND)
 - Blue wire: DSI03 Pin 34 to Pi Pin 34 (GND)
 - Blue wire: DSI03 Pin 35 to Pi Pin 35 (GND)
 - Blue wire: DSI03 Pin 36 to Pi Pin 36 (GND)
 - Blue wire: DSI03 Pin 37 to Pi Pin 37 (GND)
 - Blue wire: DSI03 Pin 38 to Pi Pin 38 (GND)
 - Blue wire: DSI03 Pin 39 to Pi Pin 39 (GND)
 - Blue wire: DSI03 Pin 40 to Pi Pin 40 (GND)
 - Blue wire: DSI03 Pin 41 to Pi Pin 41 (GND)
 - Blue wire: DSI03 Pin 42 to Pi Pin 42 (GND)
 - Blue wire: DSI03 Pin 43 to Pi Pin 43 (GND)
 - Blue wire: DSI03 Pin 44 to Pi Pin 44 (GND)
 - Blue wire: DSI03 Pin 45 to Pi Pin 45 (GND)
 - Blue wire: DSI03 Pin 46 to Pi Pin 46 (GND)
 - Blue wire: DSI03 Pin 47 to Pi Pin 47 (GND)
 - Blue wire: DSI03 Pin 48 to Pi Pin 48 (GND)
 - Blue wire: DSI03 Pin 49 to Pi Pin 49 (GND)
 - Blue wire: DSI03 Pin 50 to Pi Pin 50 (GND)
 - Blue wire: DSI03 Pin 51 to Pi Pin 51 (GND)
 - Blue wire: DSI03 Pin 52 to Pi Pin 52 (GND)
 - Blue wire: DSI03 Pin 53 to Pi Pin 53 (GND)
 - Blue wire: DSI03 Pin 54 to Pi Pin 54 (GND)
 - Blue wire: DSI03 Pin 55 to Pi Pin 55 (GND)
 - Blue wire: DSI03 Pin 56 to Pi Pin 56 (GND)
 - Blue wire: DSI03 Pin 57 to Pi Pin 57 (GND)
 - Blue wire: DSI03 Pin 58 to Pi Pin 58 (GND)
 - Blue wire: DSI03 Pin 59 to Pi Pin 59 (GND)
 - Blue wire: DSI03 Pin 60 to Pi Pin 60 (GND)
 - Blue wire: DSI03 Pin 61 to Pi Pin 61 (GND)
 - Blue wire: DSI03 Pin 62 to Pi Pin 62 (GND)
 - Blue wire: DSI03 Pin 63 to Pi Pin 63 (GND)
 - Blue wire: DSI03 Pin 64 to Pi Pin 64 (GND)
 - Blue wire: DSI03 Pin 65 to Pi Pin 65 (GND)
 - Blue wire: DSI03 Pin 66 to Pi Pin 66 (GND)
 - Blue wire: DSI03 Pin 67 to Pi Pin 67 (GND)
 - Blue wire: DSI03 Pin 68 to Pi Pin 68 (GND)
 - Blue wire: DSI03 Pin 69 to Pi Pin 69 (GND)
 - Blue wire: DSI03 Pin 70 to Pi Pin 70 (GND)
 - Blue wire: DSI03 Pin 71 to Pi Pin 71 (GND)
 - Blue wire: DSI03 Pin 72 to Pi Pin 72 (GND)
 - Blue wire: DSI03 Pin 73 to Pi Pin 73 (GND)
 - Blue wire: DSI03 Pin 74 to Pi Pin 74 (GND)
 - Blue wire: DSI03 Pin 75 to Pi Pin 75 (GND)
 - Blue wire: DSI03 Pin 76 to Pi Pin 76 (GND)
 - Blue wire: DSI03 Pin 77 to Pi Pin 77 (GND)
 - Blue wire: DSI03 Pin 78 to Pi Pin 78 (GND)
 - Blue wire: DSI03 Pin 79 to Pi Pin 79 (GND)
 - Blue wire: DSI03 Pin 80 to Pi Pin 80 (GND)
 - Blue wire: DSI03 Pin 81 to Pi Pin 81 (GND)
 - Blue wire: DSI03 Pin 82 to Pi Pin 82 (GND)
 - Blue wire: DSI03 Pin 83 to Pi Pin 83 (GND)
 - Blue wire: DSI03 Pin 84 to Pi Pin 84 (GND)
 - Blue wire: DSI03 Pin 85 to Pi Pin 85 (GND)
 - Blue wire: DSI03 Pin 86 to Pi Pin 86 (GND)
 - Blue wire: DSI03 Pin 87 to Pi Pin 87 (GND)
 - Blue wire: DSI03 Pin 88 to Pi Pin 88 (GND)
 - Blue wire: DSI03 Pin 89 to Pi Pin 89 (GND)
 - Blue wire: DSI03 Pin 90 to Pi Pin 90 (GND)
 - Blue wire: DSI03 Pin 91 to Pi Pin 91 (GND)
 - Blue wire: DSI03 Pin 92 to Pi Pin 92 (GND)
 - Blue wire: DSI03 Pin 93 to Pi Pin 93 (GND)
 - Blue wire: DSI03 Pin 94 to Pi Pin 94 (GND)
 - Blue wire: DSI03 Pin 95 to Pi Pin 95 (GND)
 - Blue wire: DSI03 Pin 96 to Pi Pin 96 (GND)
 - Blue wire: DSI03 Pin 97 to Pi Pin 97 (GND)
 - Blue wire: DSI03 Pin 98 to Pi Pin 98 (GND)
 - Blue wire: DSI03 Pin 99 to Pi Pin 99 (GND)
 - Blue wire: DSI03 Pin 100 to Pi Pin 100 (GND)
 - Blue wire: DSI03 Pin 101 to Pi Pin 101 (GND)
 - Blue wire: DSI03 Pin 102 to Pi Pin 102 (GND)
 - Blue wire: DSI03 Pin 103 to Pi Pin 103 (GND)
 - Blue wire: DSI03 Pin 104 to Pi Pin 104 (GND)
 - Blue wire: DSI03 Pin 105 to Pi Pin 105 (GND)
 - Blue wire: DSI03 Pin 106 to Pi Pin 106 (GND)
 - Blue wire: DSI03 Pin 107 to Pi Pin 107 (GND)
 - Blue wire: DSI03 Pin 108 to Pi Pin 108 (GND)
 - Blue wire: DSI03 Pin 109 to Pi Pin 109 (GND)
 - Blue wire: DSI03 Pin 110 to Pi Pin 110 (GND)
 - Blue wire: DSI03 Pin 111 to Pi Pin 111 (GND)
 - Blue wire: DSI03 Pin 112 to Pi Pin 112 (GND)
 - Blue wire: DSI03 Pin 113 to Pi Pin 113 (GND)
 - Blue wire: DSI03 Pin 114 to Pi Pin 114 (GND)
 - Blue wire: DSI03 Pin 115 to Pi Pin 115 (GND)
 - Blue wire: DSI03 Pin 116 to Pi Pin 116 (GND)
 - Blue wire: DSI03 Pin 117 to Pi Pin 117 (GND)
 - Blue wire: DSI03 Pin 118 to Pi Pin 118 (GND)
 - Blue wire: DSI03 Pin 119 to Pi Pin 119 (GND)
 - Blue wire: DSI03 Pin 120 to Pi Pin 120 (GND)
 - Blue wire: DSI03 Pin 121 to Pi Pin 121 (GND)
 - Blue wire: DSI03 Pin 122 to Pi Pin 122 (GND)
 - Blue wire: DSI03 Pin 123 to Pi Pin 123 (GND)
 - Blue wire: DSI03 Pin 124 to Pi Pin 124 (GND)
 - Blue wire: DSI03 Pin 125 to Pi Pin 125 (GND)
 - Blue wire: DSI03 Pin 126 to Pi Pin 126 (GND)
 - Blue wire: DSI03 Pin 127 to Pi Pin 127 (GND)
 - Blue wire: DSI03 Pin 128 to Pi Pin 128 (GND)
 - Blue wire: DSI03 Pin 129 to Pi Pin 129 (GND)
 - Blue wire: DSI03 Pin 130 to Pi Pin 130 (GND)
 - Blue wire: DSI03 Pin 131 to Pi Pin 131 (GND)
 - Blue wire: DSI03 Pin 132 to Pi Pin 132 (GND)
 - Blue wire: DSI03 Pin 133 to Pi Pin 133 (GND)
 - Blue wire: DSI03 Pin 134 to Pi Pin 134 (GND)
 - Blue wire: DSI03 Pin 135 to Pi Pin 135 (GND)
 - Blue wire: DSI03 Pin 136 to Pi Pin 136 (GND)
 - Blue wire: DSI03 Pin 137 to Pi Pin 137 (GND)
 - Blue wire: DSI03 Pin 138 to Pi Pin 138 (GND)
 - Blue wire: DSI03 Pin 139 to Pi Pin 139 (GND)
 - Blue wire: DSI03 Pin 140 to Pi Pin 140 (GND)
 - Blue wire: DSI03 Pin 141 to Pi Pin 141 (GND)
 - Blue wire: DSI03 Pin 142 to Pi Pin 142 (GND)
 - Blue wire: DSI03 Pin 143 to Pi Pin 143 (GND)
 - Blue wire: DSI03 Pin 144 to Pi Pin 144 (GND)
 - Blue wire: DSI03 Pin 145 to Pi Pin 145 (GND)

Identifier	Configuration/MP	Serial Tx	telemetry Output	Serial Input	Peripherals
UART0	115200		Disabled - AUTO	Disabled - AUTO	Disabled - AUTO
UART1	115200		Disabled - AUTO	Disabled - AUTO	VITA (MP & D) - AUTO
UART2	115200		Disabled - AUTO	Disabled - AUTO	Benchmark LEADER Serial Logging
UART3	115200		Disabled - AUTO	Disabled - AUTO	Camera (RuCn Protocol) CPU (SPI) - AUTO
UART4	115200		Disabled - AUTO	Disabled - AUTO	UART0 - Disabled
UART5	115200		Disabled - AUTO	Disabled - AUTO	UART0 - Disabled



The diagram illustrates the connection of four Electronic Speed Controllers (ESCs) to a Raspberry Pi Zero W. Each ESC is connected to a motor. The wiring shows connections for power (V+, V-), ground (GND), and control signals (ESC1, ESC2, ESC3, ESC4). A separate section shows a servo motor connected to the Pi's servo pins (S1-S12).

Note: Please make sure to add a capacitor 470uF to protect your hardware.

Figure 1 illustrates the dimensions of the proposed system. (a) Top view: The PCB is square-shaped with dimensions of 50.7mm by 52mm. (b) Side view: The system has a total thickness of 16.8mm, with component heights of 5.8mm and 8.1mm indicated.