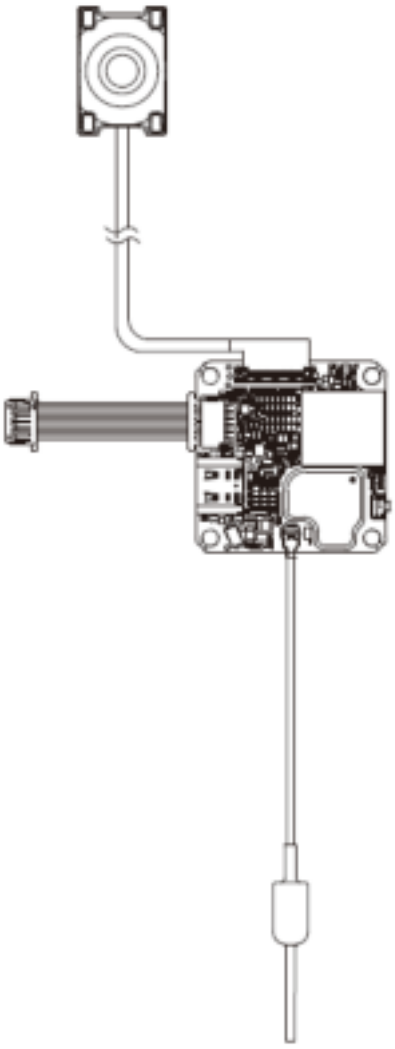
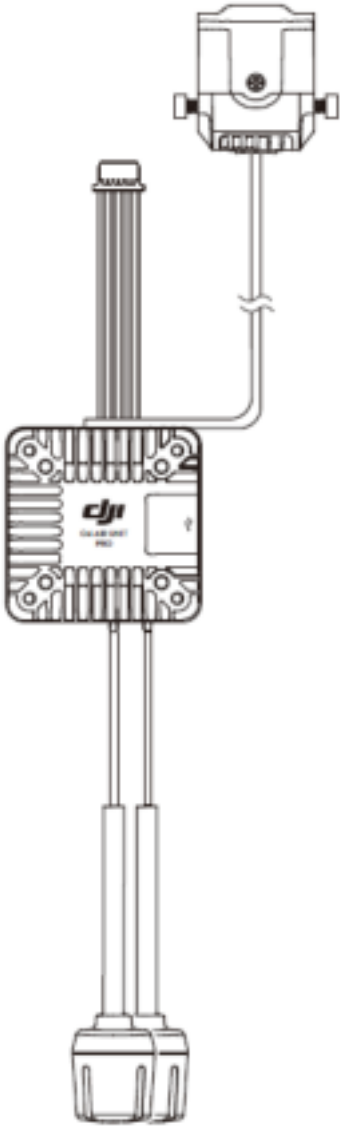
DJI O4

AIR UNIT / AIR UNIT PRO

Product Information



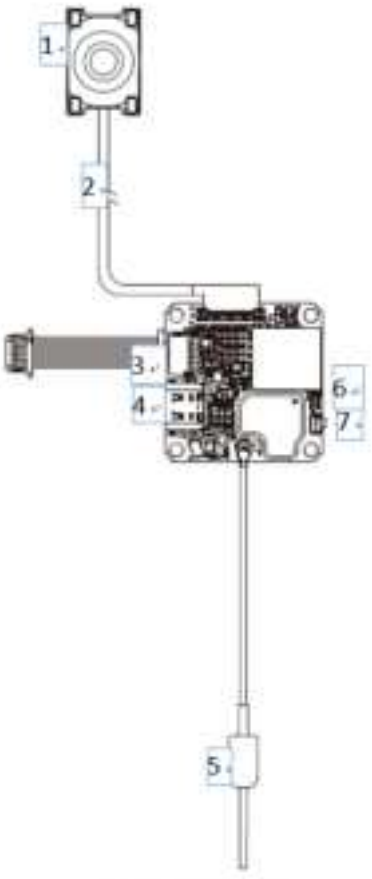


Safety at a Glance

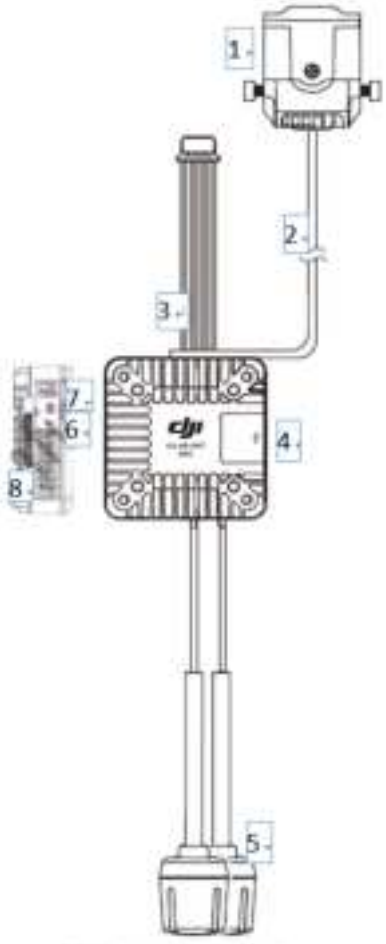
By using this product, you signify that you have read, understand, and accept the terms and conditions of this guideline and all instructions at https://www.dji.com/o4-air-unit EXCEPT AS EXPRESSLY PROVIDED IN AFTER-SALES SERVICE POLICIES AVAILABLE AT HTTPS://WWW.DJI.COM/SERVICE/POLICY, THE PRODUCT AND ALL MATERIALS AND CONTENT AVAILABLE THROUGH THE PRODUCT ARE PROVIDED "AS IS" AND ON "AS AVAILABLE BASIS" WITHOUT WARRANTY OR CONDITION OF ANY KIND.

Overview

DJI™ O4 Air Unit/DJI O4 Air Unit Pro is an advanced video transmission module. The air unit can be mounted on a racing drone and used with DJI goggles and a remote controller to transmit video, control signals, and flight controller information wirelessly.
The illustrations in this manual may vary from the actual product.



DJI O4 Air Unit



DJI O4 Air Unit Pro

1. Camera module
2. Camera coaxial cable
3. 3-in-1 cable
4. USB-C port
5. Antenna
6. link button
7. linking status indicator
8. microSD card slot

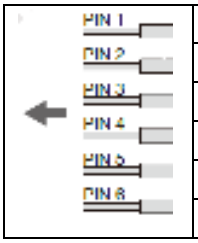
Installation Preparation

- DO NOT use the transmission module and camera module exposed to prevent from accidentally touching and causing burns. To avoid abnormal performance caused by overheating, make sure to mount the product in the aircraft with good ventilation and heat dissipation.

Installation and Connection

⚠	• When installing, tighten the screws with appropriate force to avoid screw stripping or product damage.

1. Use the proper screws to tighten the transmission module.
2. Use the proper screws to tighten the camera module and secure the camera coaxial cable.
3. Secure the antenna. To obtain the optimal transmission, keep the antenna away from any metal or carbon fiber structures, and more than 5 cm from the transmission module or camera module. Make sure that the antenna is not blocked by any frame structures.
4. Make sure to follow the wiring sequence instructions when connecting the 3-in-1 cable to your flight controller properly.

	Red: Power (Air Unit: 3.7-13.2 V, Air Unit Pro: 7.4-26.4 V)
	Black: Power GND
	White: UART_RX (Connects to flight controller OSD TX, 0-3.3 V)
	Gray: UART_TX (Connects to flight controller OSD RX, 0-3.3 V)
	Brown: Signal GND
	Yellow: DJI HDL (Connects to flight controller S.Bus, 0-3.3 V)

Activation

Power on the transmission module. Connect the air unit to a computer using the USB-C port, and run DJI ASSISTANT™ 2 (Consumer Drones Series) for activation.

Firmware Update

Use DJI Assistant 2 (Consumer Drones Series) to update the air unit, the goggles, and the remote controller separately. Restart each device after the firmware updates are complete.

Linking

The linking steps are based on the model of the goggles used. This manual uses DJI Goggles 3 as an example.

1. Make sure the distance between the devices is within 0.5 m.
2. Power on the air unit, the goggles, and the remote controller. Push the 5D button on the goggles to open the goggles menu, select Status, and then Switch to select O4 Air Unit.
3. Press the link button of the air unit and the goggles respectively. The linking status indicator of the air unit blinks red and the goggles start to beep continually.
4. Once linking is successful, the linking status indicator of the air unit turns solid green. The goggles stop beeping and the live view will be displayed.
5. Press the link button of the goggles. Press and hold the power button of the remote controller. The goggles start to beep continually. The remote controller starts to beep continually and the battery level LEDs blink in sequence.
6. Once linking is successful, the goggles stop beeping and the live view will be displayed. The

remote controller stops beeping.

Specifications

Product Name	DJI O4 Air Unit	DJI O4 Air Unit Pro
Operating Temperature	-10°C to 40°C (14° to 104°F)	
Supported Flight Controller Firmware	Flight controller firmware that supports Betaflight 4.3.0 and later versions	
Power Input	3.7-13.2 V	7.4-26.4 V
Operating Frequency and Transmitter Power (EIRP) [1]	5.170-5.250 GHz: <23 dBm (CE) 5.725-5.850 GHz: <30 dBm (FCC), <30 dBm (SRRC), <14 dBm (CE)	5.170-5.250 GHz: <23 dBm (CE) 5.725-5.850 GHz: <33 dBm (FCC), <30 dBm (SRRC), <14 dBm (CE)

[1] Operating frequency allowed varies among countries and regions. Please refer to local laws and regulations for more information.

FCC Compliance Notice
Supplier's Declaration of Conformity
Product name: DJI O4 Air Unit , DJI O4 Air Unit Pro
Model Number: DF3L2904, DF3P2904
Responsible Party: DJI Research LLC
Responsible Party Address: 17301 Edwards Road, Cerritos, CA 90703
Website: www.dji.com
We, DJI Research LLC, being the responsible party, declares that the above mentioned model was tested to demonstrate complying with all applicable FCC rules and regulations.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.
The device complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20cm during normal operation.
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
This remote complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
The portable device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA).

The following antennas have been certified for use with this device.
Only antennas of the same type with equal or lower gain may also be used with this device
Other types of antennas and/or higher gain antennas may require the additional authorization for operation. The installer should use unique antenna connector and Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device. The manufacturer of device will inform installer to meet with the FCC part 15.203 in the warning part.

This radio transmitter SS3-DF3L290424 has been approved by Federal Communications Commission to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.
The concrete contents to check are the following three points.
1) Antenna type is a Dipole with no more than 1.50 dBi gain at 5.1G SRD and 5.8G SRD
2) Should be installed so that the end user cannot modify the antenna
3) Feed line should be designed in 50ohm
Fine-tuning of return loss etc. can be performed using a matching network.
The antenna shall not be accessible for modification or change by the end user.

Antenna No.	Frequency (MHz)	Antenna Type	Max Antenna Gain (dBi)
1	5157 ~ 5245	Dipole	1.50
1	5730.5 ~ 5844.5	Dipole	1.50

ISED Compliance Notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1)This device may not cause interference.(2)This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :(1)L'appareil ne doit pas produire de brouillage;

(2)L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Cet équipement est conforme aux limites d'exposition aux radiations CNR-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

The device for operation in the band 5150 – 5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

This radio transmitter [IC: 11805A-DF3L290424] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.
The concrete contents to check are the following three points.
1) Antenna type is a Dipole with no more than 1.5 dBi gain at5.8G SRD
2) Should be installed so that the end user cannot modify the antenna;
3) Feed line should be designed in 50ohm
Fine-tuning of return loss etc. can be performed using a matching network.
Le pr é sent é metteur radio [IC: 11805A-DF3L290424] a é t é approuv é par Innovation, Sciences et D é veloppement é conomique Canada pour fonctionner avec les types d'antenne é num é r é s ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est sup é rieur au gain maximal indiqu é pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l' é metteur.
Le contenu concret à v é rifier sont les trois points suivants.
1) Le type d' antenne est un Dipole avec pas plus de 1.5 dBi gain à 5.8G SRD
2) doivent ê tre install é s de façon que l'utilisateur final ne peut pas modifier l'antenne
3) La ligne d' alimentation doit ê tre conçue en 50ohm
Le r é glage pr é cis de la perte de rendement, etc. peut ê tre effectu é en utilisant un r é seau correspondant..

Antenna type and antenna gain:

Antenna No.	Frequency (MHz)	Antenna Type	Max Antenna Gain (dBi)
1	5730.5 ~ 5844.5	Dipole	1.50

EU/UKCA

EU Compliance Statement: SZ DJI TECHNOLOGY CO., LTD. hereby declares that this device (DJI O4 Air Unit(DF3L2904), DJI O4 Air Unit Pro(DF3P2904)) is incompliance with the essential requirements and other relevant provisions of the Directive 2014/53/EU.
A copy of the EU Declaration of Conformity is available online at www.dji.com/euro-compliance
EU contact address: DJI GmbH, Industriestrasse 12, 97618, Niederlauer, Germany GB Compliance Statement: SZ DJI TECHNOLOGY CO., LTD. hereby declares that this device(DJI O4 Air Unit(DF3L2904), DJI O4 Air Unit Pro(DF3P2904)) is in compliance with the essential requirements and other relevant provisions of Radio Equipment Regulations 2017.
A copy of the GB Declaration of Conformity is available online at www.dji.com/euro-compliance
This equipment complies with radiation exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be collocated or operating in conjunction with any other antenna or transmitter.