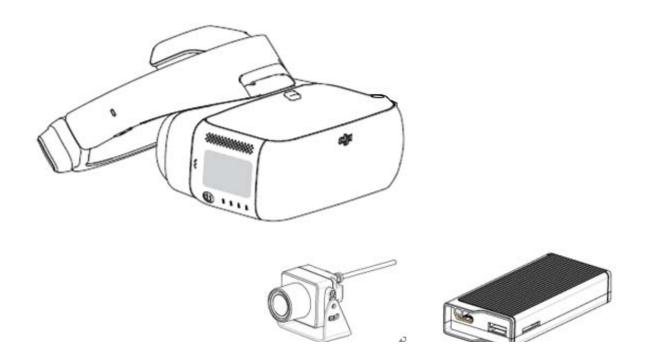
# **DJI GOGGLES**

# Racing Edition

Quick Start Guide

V1.0

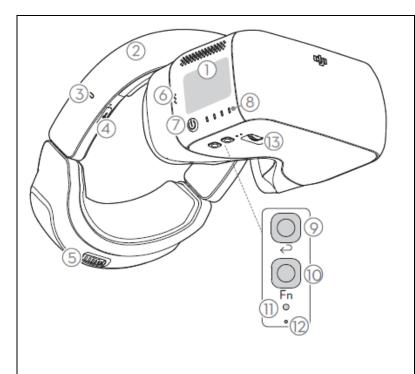




## **DJI Goggles Racing Edition**

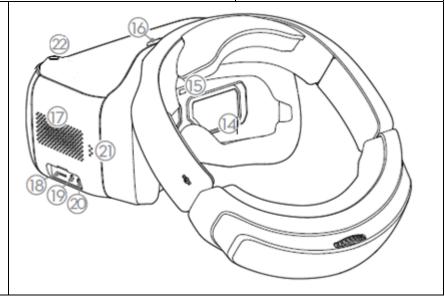
DJI Goggles Racing Edition (hereafter abbreviated as "DJI Goggles" )are equipped with high-performance displays and an ultra-low latency video downlink for use with DJI<sup>TM</sup> aircraft, giving you a real-time aerial First Person View (FPV) experience. DJI Goggles can also be used to display HD videos, bringing you an immersive high-definition viewing experience. DJI Goggles support head tracking, allowing aircraft and gimbal to be controlled using head movements, introducing a new style of flying.\*

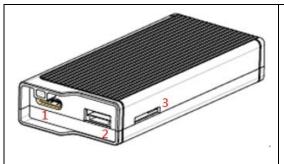
The DJI Goggles Racing Editionfeatures the advanced OCUSYNC<sup>TM</sup>video transmission, supporting both theAnalog Video Downlink and 2.4 / 5.8GHz dual-band Digital Video Downlink, providing a high video downlink performance with as low as 50ms latency and up to 2km transmission distance, a variety of Antennas can be usedfor more application scenarios. For third-party racing aircraft, DJI OcuSync Air Unit can be used directly with DJI Goggles to provide you with acamera, video transmission, controls and displays integrated, high-quality racing flight experience.



- 1. Touch Panel
- 2. Headband
- 3. Charging Status Indicator
- 4. Micro USB Port
- 5. Headband Knob
- 6. Speaker
- 7. Power Button
- 8. Battery Level Indicators
- 9. Back Button
- 10. Function Button
- 11. Link Button
- 12. Linking Status Indicator
- 13. IPD (Interpupillary Distance) Knob

- 14. Lens
- 15. Proximity Sensor
- 16. Headband Buckle
- 17. Heat Vent
- 18. Micro SD Card Slot
- 19. 3.5 mm Audio Port
- 20. HDMI Type-D Port
- 21. Speaker
- 22. SMAAntenna Port





#### 1. Camera Port

Connect with the DJI OcuSync Camera. Note that both this port and the camera connector plug are customize Type-C interface and they are not compatible with third-party equipment.

#### 2. SBUS Port

Connect with the 3 in 1 Cable(power, S.Bus, UART), and connect to power, flight controller and the OSD port based on the sequence below.

**RED: Power** 

**BLACK: Power GND** 

GRAY: UART RX(Connects toOSD)
WHITE: UART TX (Connects toOSD)

**BROWN: GND** 

YELLOW: SBUS(Connects to Flight Controller

RX)

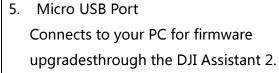
3. Micro SDCard Slot

Insert Micro SD Card to store the video recorded.

recorded.



Used to attach the Air Unit antennas.



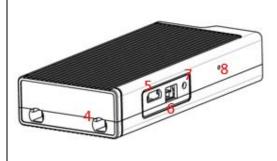


Connects to the aircraft's gimbal with the PPM Cable to control the aircraft or gimbal by DJI Goggles. (supported later)

7. Link Button

Press this button to link the DJI OcuSync Air Unit with the DJI Goggles.

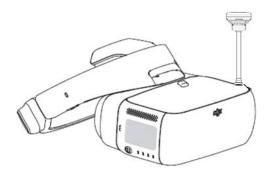
Linking Status Indicator
 Indicate the linking status of the DJI OcuSync
 Air Unit and the DJI Goggles.



## **Module Connections**

## **Analog Video Downlink**

Install the pagoda antenna (SMA interface) to the SMA Port of DJI Goggles directly.

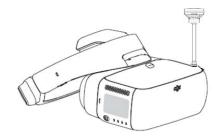


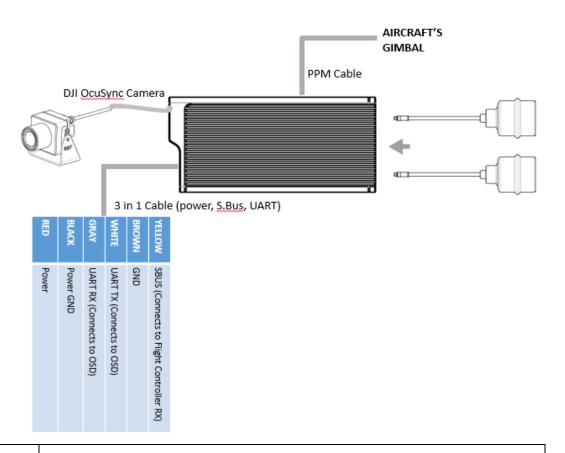


The provided pagoda antenna (SMA interface) also support two-way digital transmission. A directional antenna with higher gain can be used for better analogue transmission performance,.

## **Digital Video Downlink**

When using the Digital Video Downlink, In addition to install the pagoda antenna (SMA interface) to the SMA Port of DJI Goggles, you will also need to install the DJI OcuSync Air System on a third-party racing aircraft to work with DJI Goggles. Refer to the below connection illustration and then mount the modules onto the aircraft.







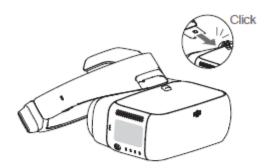
- It is recommended to use a lighter dipole antennawithin a short
  distance flight, while a pagoda antenna (SMA interface) or a
  cylindrical antenna is recommended when the flight distance is 100 m
  or more.
- It is recommended to mount the DJI OcuSync Air Unit with its screw side facing down.
- The SBUS Port and the PPM Port on the Air Unit are only used when transmitting the remote control signal, these ports are not need to be connected if only video downlink is used.



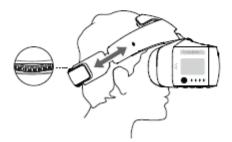
 Place the two antennas on the Air Unit in a mutually vertical manner and with at least 30mm apart. Note that avoidinggood conductor block at the antenna level, and keep the bottom of the antenna from the good conductor (cable, carbon fiber frame, battery and metal, etc.) at least 25mm.

You can connect the coach port of a third-party remote controllerand the audio port onDJI Gogglesthrough the coach cable to transmit the control signal to the racing aircraft when using the Digital Video Downlink

## **Installation and Wearing**



Insert the Headband Buckle into the slot above the DJI Goggles body.



Wear the DJI Goggles and adjust the Headband.



Adjust interpupillary distance.



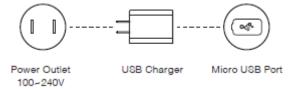
Flip the DJI Goggles body to see outside.

## **Check the Battery Level and Charging**



Press once to check the battery level.

Press once, then again and hold to turn on/off.



The Battery is fully charged when the Charging Status Indicator or the BatteryLevel Indicators turn off.

Charge time: ~ 4 hours Maximum run-time: ~ 6 hours

## **Activation and Connection**

First-time activation is required before using your new DJI Goggles.

Ensure all devices are powered on and that the Aircraft is linked with the Remote Controller. Make sure both are updated to the latest firmware versions.

MAVIC™Series	INSPIRE™ 2	INSPIRESeries	Video Play
	PHANTOM™ 4	PHANTOM 4 PRO+	Device
((i·	Series SPARK <sup>™**</sup>	PHANTOM 4 ADVANCED+	1
O CLICY/DICTM	A41 LICE LI	LIBART II	
OCUSYNC™	Micro USB cable	HDMI cable	HDMI cable
Press the Link	* Prepare an OTG	Live view only.	HDMI cable
			HDMI cable
Press the Link	* Prepare an OTG		НДМІ саріе
Press the Link Buttons on the	* Prepare an OTG cable and connect it		HDMI cable
Press the Link Buttons on the Mavic Pro and DJI	* Prepare an OTG cable and connect it to the Micro USB port		HDMI cable
Press the Link Buttons on the Mavic Pro and DJI Goggles, or enter	* Prepare an OTG cable and connect it to the Micro USB port of the remote		HDMI cable

Activate with

DJI GO<sup>™</sup> 4 App

Please update the app first.

DJI Assistant 2 can also be used for activation.

Activate with

DJI ASSISTANT<sup>™</sup> 2

Download: www.dji.com/dji-goggles

DJI Assistant 2 supports Windows 7 (or later) or OS X 10.11 (or later).



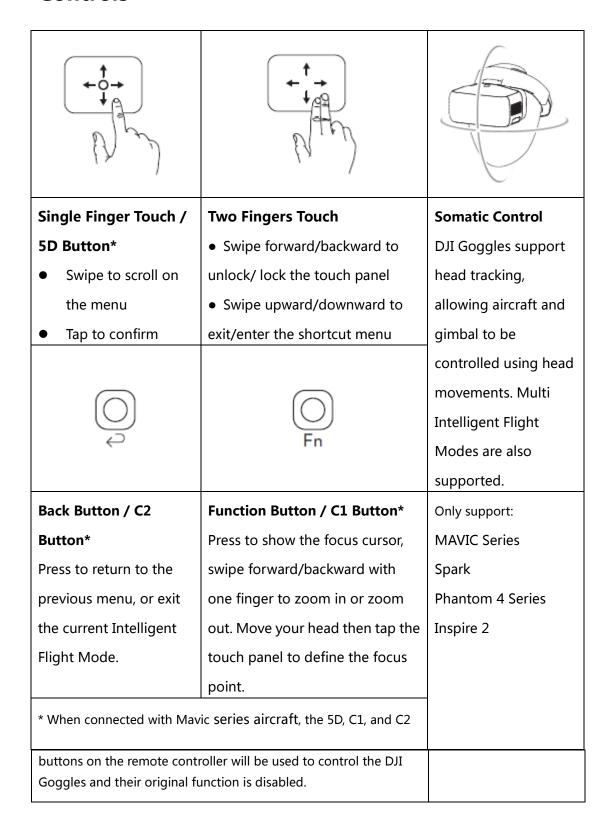
Connect DJI Goggles to your PC with Micro USB cable, then run DJI Assistant 2 to activate.

Follow the steps below to link with the third-party racing aircraft.

- Power on the DJI OcuSync Air Unit, press the link button on the air unit with an appropriate tool when the linking status indicator is solid green, the indicator will turn solid red when the air unit is waiting for linking.
- 2. Power on the DJI Goggles, directly press the link button with an appropriate tool in the main menu, or swipe downward with two fingers on the touch panel to enter the shortcut menu and select RacingDrone (Digital) > Linking Settings.

3. Make sure the distance between DJI Goggles and the Air Unit is within 2m, both the two linking status indicators will turn solid green when successfully linked, and the video will be normally displayed.

## **Controls**



## **Specifications**

Model	DJI Goggles:G1P ; DJI OcuSync Air Unit:OAS1
Weight (Typical)	DJI Goggles Body: 495 g
	Headband: 500 g
Dimensions	Lenses: 195×155×110 mm
	Strap(Folded): 255×205×92 mm
Screen Size	5 inch×2
Screen Resolution	3840 × 1080 (single screen: 1920 × 1080)
Communication Frequency	2.4GHz/ 5.8GHz
Transmitter Power (EIRP)	DJI Goggles
	2.4 GHz: 31 dBm (FCC); 19 dBm (SRRC)
	5.8 GHz: 26 dBm (FCC); 19 dBm (SRRC)
	DJI OcuSync Air Unit
	2.4 GHz: 26 dBm (FCC); 19 dBm (SRRC)
	5.8 GHz: 26 dBm (FCC); 23 dBm (SRRC)
Live View Modes	1080p30 , 960p50 , 720p60 , 480p50
Battery Capacity	9440 mAh
Operating Temperature Range	32° to 104° F (0° to 40° C)
Charger	Input: 100-240 VAC, 50 / 60 Hz, 0.5 A
	Output: 5 V=3 A / 9V=2A / 12 V=1.5 A

### **DJI OcuSync Air Unit CE freuency band:**

Operating Frequency Band (RF): 2.4G

10M: 2405.5-2477.5MHz(TX/RX) 20M: 2410.5-2472.5MHz(TX/RX)

5.8G

10M: 5730.5-5844.5MHz(TX/RX) 20M: 5735.5-5839.5MHz(TX/RX)

Max. Of Transmit power: 2.4G

10M: 18.72dBm 20M: 18.88dBm

5.8G

10M: 12.71dBm 20M:12.80dBm

## **Compliance Information**

SAR tests are conducted using standard operating positions accepted by the FCC/ISEDC with the goggles transmitting at its highest certified power level in all tested frequency bands, although the SAR is determined at the highest certified power level, the actual SAR level of the goggles while operating can be well below the maximum value.

Before a new model goggles is a available for sale to the public, it must be tested and certified to the FCC/ISEDC that it does not exceed the exposure limit established by the FCC/ISEDC, Tests for each goggles are performed in positions and locations (e.g. at the ear and worn on the body)as required by the FCC/ISEDC.

For body worn operation, this model goggles has been tested and meets the FCC/ISEDC RF exposure guidelines when used with an accessory designated for this product or when used with an accessory that Contains no metal.

Non-compliance with the above restrictions may result in violation of RF exposure guidelines.

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 interferencein a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the in structions, 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 harmf ul interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encour aged 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 ci rcuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For OcuSync Air Unit ,the equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

#### **RSS Regulatory Statement**

This device complies with ISEDC license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause interference, and
- (2) this devi ce must a ccept any interfer ence, in cluding interference that may cause undesired operation of the device.

Le présent appareil est conforme au x CNR d'Industrie 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, et
- (2) l'utilisateur de l'appareil doi t accepter tout brouillage radi oélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**EU Compliance Statement:** SZ DJI TECHNOLOGY CO., LTD. hereby declares that this device is in compliance with the essential requirements and other relevant provisions of the RED Directive.

A copy of the EU Declaration of Conformity is available online at www.dji.com/euro-compliance

**Declaración XY W a d']a ]Ybhc'l 9.** SZ DJI TECHNOLOGY CO., LTD. por la presentedeclara que este dispositivo cumple los requisitos básicos y el resto de provisiones relevantes de la Directiva.

Hay disponible online una copia de la Declaración de conformidad UE en www.dji.com/euro-compliance

**EU-verklaring van overeenstemming:** SZ DJI TECHNOL OGY CO., LTD. verk laart hierbijdat dit appara at voldo et aan de e ssentiële ver eisten en and ere relevante bepalingen vanRichtlijn.

**Declaração de conformidade da UE:** A SZ DJ I TECHNOL OGY CO., L TD. dec lara, atravésdeste documento, que es te dispositivo está em c onformidade com os requisites essenciais e outras disposições relevantes da Diretiva.

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**Dichiarazione di conformità UE:** SZ DJI TECHNOLOGY CO., L TD. d ichiara c he il presentedispositivo è conforme ai requisiti e ssenziali e alle altre disposizioni rilevanti delladirettiva.

Una Á&[] ãæ Áà^||æ Áà ã& @ãæ ঠæ ã[}^Áà ãÁ&[}-{|{ ãæ ÁNÒÁ-Áà ã\*][}ãà ã^^Á;}|āj^Áæ||Øjå åã ã:[Á Y^à,\_, Èà bãÈ&[{ £D`;|[Ë&[{]|ãæ}}&^

**Déclaration de conformité UE:** Par la p résente, SZ DJ I TECHNOLOGY CO., L TD declare que cet apparei I est confor me aux pr incipales exigences et au tres clause s pertinentesde la directive européenne.

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EU contact address: DJI GmbH, Industriestrasse. 12, 97618, Niederlauer, Germany.

#### **Environmentally friendly disposal**

Old electrical appliance must not be disposed of together with the residual waste, but have to be deposed of separately. The disposal at the communal collection point via private person is for free. The owner of old appliance is responsible to bring the appliances to these collecting point or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of tox ic substances.

#### **KCC Warning Statement**

(1)

이기기는가정용으로전자파적합등록을한기기로서주거지역에서는물론모든지역에서 사용할수있습니다.

(2) 당해무선설비는전파혼신가능성이있으므로인명안전과관련된서비스는할수없음。

#### **NCC Warning Statement**

根據 NCC 低功率電波輻射性電機管理辦法規定:

- (1) 第十二條經型式認證合格之低功率射頻電機,非經許可,公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
- (2) 第十四條低功率射頻電機之使用不得影響飛航安全及干擾合法通信; 經發現有干擾現象時, 應立即停用, 並改善至無干擾時方得繼續使用。

前項合法通信,指依電信法規定作業之無線電通信。

低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

### **NBTC Warning Statement**

เครื่องโทรคมนาคมและอปกรณ์นี้มีความสอดคล้องตามข้อกำหนดของกทช.

### **IFETELWarning Statement**

"La operación de este equipo está sujeta a la s siguientes dos condiciones: (1) es posible que este eq uipo o dispositivo no cause interfer encia per judicial y (2) este equipo o dispositivo debe aceptar cualquier i nterferencia, incl uyendo la que pu eda causar su operación no deseada."

