DJI Video Receiver

User Guide 使用说明 使用説明 ユーザーガイド 사용자 가이드 Handbuch Guía de usuario Guide d'utilisateur Guida per l'Utente Gebruikershandleiding Руководство пользователя

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Disclaimer and Warning

Carefully read this entire document and all safe and lawful practices provided before use.

Introduction

The DJI[™] Video Receiver features DJI O3 Pro video transmission and receives video signals from the transmitter. In an environment without interference or obstruction, the video receiver provides video transmission with a maximum transmission range of 6 km*, a bitrate of up to 40 Mbps, and a minimum end-to-end latency of 70 ms. It supports multiple frequency bands in both Control and Broadcast modes and simultaneously outputs multiple video signals to display devices for remote monitoring. When used with the DJI Video Transmitter or DJI Ronin 4D Video Transmitter, the video receiver can meet the filming requirements of mediums such as movies, TV series, advertisements, and documentaries.

* Measured with the video transmission control system in Control mode (Broadcast mode in the transmitter device disabled) in an unobstructed environment free of interference with FCC compliance.



1. Detachable Antennas

Transmit the wireless signal.

2. Color Marks

Used to identify the receiver and transmitter. The receiver is identified by the red color marks. Users can also place the different colored stickers included in the package on the devices for identification.

3. Linking Status Indicator

Shows the connection status between the receiver and transmitter. Refer to the Linking section for more information on blinking patterns.

4. Video Status Indicator

Indicates if there is a video signal transmitted from the transmitter to the receiver. Solid green indicates there is a video signal transmission, while solid red indicates no video signal transmission.

5. SDI Output Ports

Output the video signal.

6. USB-C Port

Connect to the DJI Assistant 2 (Ronin Series) software using a USB-C cable for device activation and firmware updates. Connect headphones with a built-in mic for voice calls. It is required to set the Type-C function on the receiver before use. Refer to the Menu section for more information.

7. HDMI Port (Type A)

Outputs the video signal.

8. DC-in Port

Supplies power to the video receiver using the provided power cable. Voltage 6-18 V and max current 2 A.

9. M4 Screw Holes

Mount the battery adapter or other adapters for expansion.

10. Power Output Port

Supplies power to an external device.

11. Air Vent

12. Air Intake

• DO NOT cover the air vent, air intake, or both sides of the battery adapter if mounted. Otherwise, the performance of the device may be affected due to overheating.

13. Power Button

Press once to power on. Press and hold to power off.

14. Display Screen

Displays the device status and menu.

15. Menu Dial

Turn or press the dial to select or confirm settings in the menu. See details below.

Press once: enter the menu from the home screen, or confirm settings in the menu.

Turn: switch between options.

Press and hold: enter linking status (Control mode) or search for devices (Broadcast mode).

Press twice: in the home screen, select the channel (Control mode) or device number (Broadcast mode).

16. Back Button

Press to return to the previous screen of the menu.

17. 3/8"-16 Screw Hole

18. 1/4"-20 Screw Holes

19. External Power Input Port

Mount the battery adapter and compatible battery to supply power to the video receiver.

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Installation and Connection

Mounting the WB37 Intelligent Battery



Before first use, activate the WB37 battery by charging with the WB37 Battery Charging Hub (USB-C). Refer to the WB37 Battery Charging Hub (USB-C) User Guide for more information.

- 1. Mount the WB37 battery adapter to the back of the video receiver and tighten the three M4×12 screws.
- 2. Insert the WB37 battery into the battery compartment of the video receiver. Make sure that the battery release button pops up and the battery clicks into place.
- ▲ Make sure to use the WB37 battery within the operating temperature range. DO NOT disassemble or pierce the battery in any way. Otherwise, the battery may leak, catch fire, or explode. Refer to the WB37 Intelligent Battery Safety Guidelines for more information.

Press and hold the release button and push the battery in the opposite direction to remove it.

Mounting the NP-F Series Battery





- 1. Mount the NP-F battery adapter to the back of the video receiver and tighten the four M4×12 screws.
- 2. Insert the NP-F series battery into the battery compartment of the video receiver. Make sure that the battery release button pops up and the battery clicks into place.

Connecting the DC to P-Tap Power Cable

A battery with a P-Tap port can be used to provide power to the video receiver. Use the provided DC to P-Tap power cable to connect the P-Tap port of the battery and the DC-in port of the video receiver.



Activation

Activation is required when using the video receiver for the first time. Power on the video receiver and connect it to a computer using a USB-C cable. Launch DJI Assistant 2 (Ronin Series), click the corresponding device icon, and follow the on-screen instructions to activate the device.

Download the software from: https://www.dji.com/transmission/downloads

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Linking

The video receiver must be linked to the transmitter device before use. The video transmission system of the video receiver offers Control mode and Broadcast mode for connection between the video receiver and transmitter device, which use different linking methods. Refer to the following section for instructions and linking status indicator descriptions.

Control Mode

In Control mode (with Broadcast mode in the transmitter device disabled), the video transmission system has a longer transmission distance, stronger anti-interference, and more selectable channels. The transmitter device can also receive the control signal from the video receiver when connecting a DJI Pro accessory, such as the DJI Master Wheel to the video receiver for remote control.

1. Power on the video receiver. Press the menu dial on the video receiver to enter the menu.

- 2. Press the dial to enter the Connect menu, turn the dial to select Control in the menu, and press the dial to confirm. Select to set the video receiver to Control A or Control B and press the dial again to confirm. The display screen shows Linking and the linking status indicator blinks red and green alternately, indicating the device is linking.
 - If the video receiver is in Control mode and is set to the desired Control A or Control B, press and hold the menu dial directly to enter linking.
 - If two video receivers will be connected to the same transmitter device, link with the Control A video receiver first and then link with the Control B video receiver.
- 3. Using DJI Video Transmitter:

Power on the DJI Video Transmitter. Press and hold the menu dial on the video transmitter to enter the linking status. The linking status indicator on the video transmitter blinks red and green alternately, indicating the device is linking.

Using DJI Ronin 4D Video Transmitter:

To start linking, hold the link button on the Ronin 4D Video Transmitter or go to the menu on



the Ronin 4D High-Bright Main Monitor, tap Transmission, and then Link Device. The linking status indicator on the video transmitter blinks red and green alternately, indicating the device is linking.

4. When linking is complete, the linking status indicator on the video receiver turns solid green and the video receiver can communicate with the transmitter device.

Broadcast Mode

In Broadcast mode, an unlimited number of video receivers used as monitoring devices can connect to the transmitter device. In scenarios using multiple transmitter devices, video receivers in Broadcast mode can select the desired transmitter device quickly to achieve multi-channel monitoring.



- 1. Power on the video receiver. Press the menu dial on the video receiver to enter the menu.
- 2. Press the dial to enter the Connect menu, turn the dial to select Broadcast in the menu, and then press the dial to confirm.
- 3. Wait for the search results to be complete and select a device to connect.

• In Broadcast mode, press and hold the dial to refresh the search results.

Linking Status Indicator

Linking Status Indicator	Description
Solid red	Device started, not connected.
Blinks red and green alternately	Linking.
Solid green	Successfully linked in Control mode. Wireless video transmission is normal. Broadcast mode enabled.
Blinks red	Device malfunction. Contact DJI Support.

Display Screen Operations

Home Screen



1. Video Specifications

Displays the resolution and frame rate of the input from the transmitter device.

2. Power Supply Voltage

Displays the voltage of the battery or the DC-in power input.

3. Control Device

In Control mode, displays whether the video receiver is set to Control A or Control B.

4. Channel (Control Mode)

Displays the current channel in use and its signal quality. There are two statuses, including strong (green) and weak (red). Press the menu dial twice for quick channel switch.

5. Video Transmission Signal Strength and Bitrate

Displays the video transmission signal strength and bitrate. There are three statuses for the video transmission signal strength, including strong (green), moderate (orange), and weak (red).

6. Device Number

In Broadcast mode, displays the device number of the transmitter device. Press the menu dial twice to view the last recorded search results in Broadcast mode, and then switch between devices or refresh the search results.

7. Channel (Broadcast Mode)

Displays the channel in use. View the signal quality of each channel in the menu.

Menu

On the home screen, press the menu dial on the video receiver to enter the menu and perform the following configuration and operations. Turn or press the dial to select or confirm settings in the menu. Press the back button to return to the previous screen.

Connect	Select Control mode or Broadcast mode. When Control mode is selected, it is required to set the device in use to Control A or Control B.
Channel	In Control mode, view the signal quality of each channel and select the channel.
	In Broadcast mode, view the signal quality of each channel only to assist channel selection in the transmitter device.
Device Number	This menu will appear only in Broadcast mode. The last search results in Broadcast mode will be displayed after entering the menu. Switch between devices or refresh the search results.
Fan Mode	Set the fan mode to Standard or Low Noise.
	\dot{Q} : If Low Noise is selected, the fan mode will switch to Standard automatically when the temperature of the device is too high.
Type-C Function	Select USB when using the USB-C port for the firmware update in DJI Assistant 2.
	In Control mode, set the Type-C function on both the transmitter and receiver to Voice Call and connect headphones with a built-in mic to the USB-C ports to enable voice calls between the transmitter and receiver. Use the volume buttons on the headphones to adjust the volume for voice calls.
	☆ View the compatible headphones on the FAQ page of the product page on the official DJI website. Other 48kHz/16bit digital headphones are also supported.
Low Latency	When enabled, the frame rate is converted to 60fps.
Language	Select the system language in the language list.
Device Info	View information such as the device SN and firmware version.

Firmware Update

Update the video receiver using the DJI Assistant 2 (Ronin Series) software.

- 1. Power on the device. Make sure the Type-C function is set to USB on the menu. Connect the device to a computer with a USB-C cable.
- 2. Launch DJI Assistant 2 (Ronin Series) and log in with a DJI account.
- 3. Select the device and click Firmware Update on the left side of the screen.
- 4. Select the firmware version.
- 5. The firmware will download and update automatically.
- 6. The device will restart automatically after the firmware update is complete.

Specifications

Weight	Approx. 350 g (receiver only, excl. antennas)
Dimensions	127×87×26 mm (excl. antennas)
Operating Frequency ^[1]	2.4000-2.4835 GHz, 5.150-5.250 GHz, 5.250-5.350 GHz, 5.470-5.725 GHz, 5.725-5.850 GHz
Transmitter Power (EIRP)	2.4 GHz: <33 dBm (FCC), <20 dBm (SRRC/CE/MIC) 5.8 GHz: <33 dBm (FCC), <14 dBm (CE), <23 dBm (SRRC)
Power Consumption	9 W
Power Supply Voltage	6-18 V
Output Voltage	6-18 V
Battery Life ^[2]	3 hours 50 minutes
Output Video Format	 When used with the DJI Video Transmitter: 1080p: 23.98/24/25/29.97/30/50/59.94/60fps 720p: 50/59.94/60fps When used with Ronin 4D: 1080p: 24/25/30/48/50/60fps
Output Audio Format	SDI embedded, HDMI embedded
Video Transmission System	O3 Pro
Max Bitrate	40 Mbps
Latency	70 ms (1080p 60fps)
Video Coding Format	H.264
Max Transmission Distance	6 km (FCC), 4 km (CE/SRRC/MIC) (Unobstructed, free of interference)
Max Bandwidth	40 MHz
Operating Temperature ^[3]	-10° to 45° C (14° to 113° F)

 Due to local regulations, the 5.1/5.2/5.8 GHz frequencies are prohibited in some countries and the 5.1/5.2 GHz frequencies are only allowed for use indoors in some countries. 5.600-5.650 GHz is not used.

[2] Tested in a room temperature of 25° C (77° F) when powered by a fully charged WB37 Intelligent Battery and used with the DJI Video Transmitter.

[3] When using the WB37 Intelligent Battery, it is recommended to operate the device in a temperature above 0° C. Take measures to keep the battery warm when using in a temperature below 0° C.

免责声明和警告

使用本产品之前,请仔细阅读并遵循本文及与本产品相关的所有安全与合规操作指引。

简介

DII[™] 图传接收器采用 DII O3 Pro 图传技术,接收发射端视频信号。在无干扰和无遮挡环境下, 可实现最大可达 6 千米 * 地面端通信距离与 40 Mbps 码流高清图传,端到端延时低至 70 ms。 支持多种频段,具备控制模式和广播模式,可同时输出多路视频信号到显示设备,实现远程监看。 配合 DII 图传发射器或 DII Ronin 4D 图传发射器使用时,可满足广电、影视剧、广告、纪录片 等各类题材的拍摄需求。

* 无线图传控制系统切换至控制模式(发射端广播模式关闭),在 FCC 标准无干扰环境下测得。



1. 可拆卸天线

传输无线信号。

2. 色标

用于区分接收器和发射器。接收器此处为红色圆圈。用户亦可将包装内附带的不同颜色贴 纸粘贴在设备上进行区分。

3. 对频状态指示灯

指示接收器和发射端的连接状态。指示灯描述见对频章节。

4. 视频状态指示灯

显示发射端是否有视频信号传输至接收器。绿灯常亮表示有视频信号传输,红灯常亮表示 无传输。

5. SDI 输出接口

用于输出视频信号。

6. USB-C 接口

使用 USB-C 线连接至 DJI Assistant 2 (Ronin 系列) 调参软件以激活设备、升级固件。亦可 插入自带麦克风的耳机进行语音通话。使用前需在接收器的 Type-C 功能设置中切换接口用 途。详见菜单栏章节。

7. HDMI 接口 (A口)

用于输出视频信号。

8. DC-IN 电源输入接口

可通过标配的供电线实现对图传接收器的供电。供电电压 6-18 V, 电流最大 2 A。

9. M4 螺纹接口

用于安装电池转接板以及各类转接件的扩展。

10. 对外供电接口

对外部设备进行供电。

- 11. 出风口
- 12. 进风口

▲ •使用时请勿遮挡出风口及进风口或电池转接板的两侧(若已安装),以免设备温度 过高影响性能。

13. 电源按键

短按开机、长按关机。

14. 显示屏幕

显示设备状态及菜单。

15. 菜单拨轮

可通过转动和按压拨轮进行选择及确认等,以操作屏幕菜单。具体功能如下。

短按:由主界面进入菜单栏;在菜单栏中确认选择。

- 转动: 切换选项。
- 长按:进入对频状态(控制模式)或搜索设备(广播模式)。
- 双击:在主界面选择信道(控制模式)或机位号(广播模式)。
- 16. 返回按键

控制屏幕菜单返回上一级。

- 17.3/8"-16 螺纹接口
- 18.1/4"-20 螺纹接口
- 19. 外部电源输入接口

通过连接不同的电池转接板以安装电池,用于为接收器供电。

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安装连线

安装 WB37 智能电池



首次使用需通过 WB37 充电管家(USB-C)为 WB37 电池充电以激活电池。详情参阅《WB37 充电管家(USB-C)使用说明》。

- 1. 将 WB37 电池转接板安装至图传接收器背面并旋紧 3 颗 M4 × 12 螺丝。
- 2. 将 WB37 智能电池置入电池插槽,按下电池并将其推至底部,直到 RELEASE 按键弹起并发出"咔"的一声,确保安装稳固。
- ▲ ・务必在工作环境温度范围内使用 WB37 电池。禁止以任何方式拆解或用尖利物体刺破电池。否则将会引起电池着火甚至爆炸。详情参阅《WB37 智能电池安全使用指引》。

按住 RELEASE 按键沿安装反方向用力即可取出电池。

安装 NP-F 系列电池





- 1. 将 NP-F 电池转接板安装至图传接收器背面并旋紧 4 颗 M4×12 螺丝。
- 2. 将 NP-F 系列电池置入电池插槽,按下电池并将其推至底部,直到 RELEASE 按键弹起并发出"咔"的一声,确保安装稳固。

按住 RELEASE 按键沿安装反方向用力即可取出电池。

连接 DC 转 P-Tap 供电线

可使用含有 P-Tap 接口的电池给图传接收器供电。使用标配的 DC 转 P-Tap 供电线连接供电电池的 P-Tap 接口及图传接收器的 DC-IN 电源输入接口。



激活

全新的图传接收器需要激活后方可使用。开启图传接收器,使用 USB-C 线将其连接至计算机并运行 DJI Assistant 2 (Ronin 系列) 调参软件,登录 DJI 账号,点击设备图标按照提示进行激活。 调参软件下载地址: https://www.dji.com/transmission/downloads

对频

图传接收器需与发射端设备对频后方可使用。接收器与发射端设备的连接模式分为控制模式和 广播模式,其对频方式略有不同。详见以下操作说明及对频状态指示灯描述。

控制模式

控制模式下(发射端设备广播模式关闭),图传系统的传输距离更远,抗干扰能力更强,可设 置信道更多。同时,发射端设备可接收到图传接收器的控制信号,如接入 DJI 大师摇轮等专业配 件进行远程控制。



- 1. 图传接收器开机状态下,按压图传接收器的菜单拨轮进入菜单。
- 按压拨轮进入连接模式菜单,转动拨轮在连接模式中选择控制模式,按压拨轮进行确认。选 择图传接收器为控制 A 或控制 B,再次按压拨轮进行确认。屏幕显示配对中,对频状态指示 灯红绿交替闪烁,表示已进入对频状态。
 - ☆ ・若图传接收器已处于控制模式且已设置为所需的控制 A 或控制 B,则直接长按菜单 拨轮即可进入对频状态。
 - •若两个图传接收器同时连接至同一发射端设备,则需先对频设置为控制 A 的图传接收器,然后再对频设置为控制 B 的图传接收器。

3. 使用 DJI 图传发射器:

开启 DJI 图传发射器,长按图传发射器上的菜单拨轮以进入对频状态,此时图传发射器上的 对频状态指示灯红绿交替闪烁。

使用 DJI Ronin 4D 图传发射器:

在 Ronin 4D 的机身高亮监视器菜单中选择图传设置 > 配对,或长按 Ronin 4D 图传发射器 上的对频按键以进入对频状态,此时图传发射器上的对频状态指示灯红绿交替闪烁。

4. 对频成功后,图传接收器的对频状态指示灯显示绿灯常亮,可与发射端设备进行通信。

广播模式

广播模式下,图传接收器作为监看设备,其连接数量不设限制。在有多个发射端设备的场景, 以广播模式连接的图传接收器可快速切换发射端机位,实现多路监看。



1. 图传接收器开机状态下,按压图传接收器的菜单拨轮进入菜单。

2. 按压拨轮进入连接模式菜单,转动拨轮在连接模式中选择广播模式,按压拨轮进行确认。

3. 等待搜索, 然后选择连接的设备。

♡ • 在广播模式下,长按菜单拨轮可刷新搜索结果。

对频状态指示灯

对频状态指示灯	描述
红灯常亮	设备已启动,未连接
红绿灯交替闪烁	正在对频
绿灯常亮	控制模式对频成功,无线图传正常连接 广播模式已开启
红灯闪烁	设备内部故障,请联系 DJI 技术支持

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屏幕操作



1. 视频规格

显示当前发射端输入源的分辨率及帧率。

2. 供电电压

显示接收器供电电池电压或 DC-IN 电源输入的电压。

3. 控制设备

控制模式下,显示接收器当前设置为控制 A 或控制 B。

4. 信道(控制模式)

显示当前信道及信道质量。信道质量显示包括信号强(绿色)及信号弱(红色)。双击菜单 拨轮可快速切换信道。

5. 传输信号强度及传输码率

显示当前传输信号强度及传输码率。传输信号强度显示包括信号强(绿色)、信号中等(橙色)、 信号弱(红色)。

6. 机位号

广播模式下,显示发射端设备的序号。双击菜单拨轮显示上一次广播模式的搜索结果,可切 换机位或刷新搜索结果。

7. 信道(广播模式)

显示当前信道。在菜单中可查看各信道质量。

菜单栏

主界面下短按图传接收器上的菜单拨轮,进入菜单栏,可进行以下各项设置及操作。通过转动 和按压拨轮进行选择及确认,以操作屏幕菜单,短按返回按键返回上一层菜单。

连接模式	选择控制模式或广播模式。若选择控制模式,需设置所使用的设备为控 制 A 或控制 B。
信道	控制模式下可查看各信道质量及选择信道。
	广播模式下仅可查看各信道质量,用于辅助发射端选择信道。
机位号	仅广播模式下显示此菜单。进入菜单后将显示上一次广播模式搜索结果, 可切换机位或刷新搜索结果。
风扇模式	选择风扇模式为正常或低噪音。
	☆ 低噪音模式下,若设备温度过高,则风扇模式自动切换至正常。
Type-C 功能	设置为 USB 时,连接 USB-C 接口至计算机,可使用 DJI Assistant 2 调 参软件。
	控制模式下,当发射端与接收端均设置为语音通话时,将自带麦克风的 耳机插入 USB-C 接口,可实现发射端与接收端的实时语音传输。使用 耳机自带的音量键可调节语音通话的音量大小。
	☆ 在 DJI 官网产品页面的常见问题中查看耳机兼容列表。亦可使用 48kHz/16bit 的数字耳机。
低延时模式	若开启,帧率将转换为 60fps。
语言	在语言列表中选择界面语言。
设备信息	查看设备码、版本号等信息。

固件升级

使用 DJI Assistant 2 (Ronin 系列) 调参软件可对图传接收器进行升级。

- 1. 开启设备。确保屏幕菜单中的 Type-C 功能设置为 USB, 然后使用 USB-C 连接线连接设备 至计算机。
- 2. 启动 DJI Assistant 2 (Ronin 系列) 调参软件,使用 DJI 账号登陆并进入主界面。
- 3. 点击设备图标, 然后点击左边的固件升级选项。
- 4. 选择并确认需要升级的固件版本。
- 5. 调参软件将自行下载并升级固件。
- 6. 升级完成后,设备将自动重启。

规格参数

重量	约 350 g (裸机, 不含天线)
尺寸	127×87×26 mm(不含天线)
工作频率 [1]	2.4000-2.4835 GHz, 5.150-5.250 GHz, 5.250-5.350 GHz, 5.470-5.725 GHz, 5.725-5.850 GHz
发射功率(EIRP)	2.4 GHz: <33 dBm (FCC), <20 dBm (SRRC/CE/MIC) 5.8 GHz: <33 dBm (FCC), <14 dBm (CE), <23 dBm (SRRC)
功耗	9 W
供电电压	6-18 V
输出电压	6-18 V
续航时间[2]	3 小时 50 分
输出视频格式	 搭配 DJI 图传发射器: 1080p: 23.98/24/25/29.97/30/50/59.94/60fps 720p: 50/59.94/60fps 搭配 Ronin 4D: 1080p: 24/25/30/48/50/60fps
输出音频格式	SDI 内嵌,HDMI 内嵌
图传方案	O3 Pro
最大编码码率	40 Mbps
图传延时	70 ms (1080p 60fps)
视频编码格式	H.264
最大图传距离	6 km (FCC), 4 km (CE/SRRC/MIC) (无干扰、无遮挡)
最大通信宽带	40 MHz
工作环境温度[3]	-10至45℃

[1] 部分地区不支持 5.1/5.2/5.8 GHz 频段,部分地区 5.1/5.2 GHz 频段仅限室内使用,详情请参考当地法律法规。5.600-5.650 GHz 频段未使用。

[2] 通过满电的 WB37 智能电池供电并且配合 DJI 图传发射器使用,在室温 25℃环境下测得。

[3] 如使用 WB37 智能电池,建议工作环境温度在 0℃以上。在 0℃以下使用时,请采取电池保温措施。