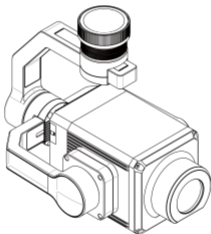


# IR10红外激光变焦云台灯说明书

IR10 Infrared Laser Zoom Spotlight User Manual

用户说明书 V2.0

2024.06.05





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# Reading Prompts

## Symbol Descriptions



Prohibited



Warning

### Precautions

1. After using the device, please put it into the safety box of IR10, and replace the desiccant in time to avoid lens fogging due to excessive environmental humidity. If the lens is fogged, the water vapor can usually dissipate after the device is turned on for a period of time. It is recommended that the relative humidity of the storage environment is less than 40% and the temperature is  $20 \pm 5^{\circ}\text{C}$ .
2. IR10 belongs to a kind of Class 4 non-visible light laser. When the laser light is turned on, it is strictly prohibited to look directly at the laser beam or observe the laser beam with optical instruments.
3. In normal use, flammable objects are strictly prohibited within 100cm in front of the lens to prevent the occurrence of a fire.
4. When cleaning the light-emitting lens, be sure to use a soft and dry cleaning cloth to wipe the surface of the lens, and never use alkaline cleaning agents for cleaning.

## I. Disclaimer and Warning

Thank you for purchasing czi products. The contents mentioned herein are related to your safety, legal rights and responsibilities. Before using this product, please read this document carefully to ensure that you have set up the product properly. Failure to follow and comply with the instructions and warnings in this document may result in injury to you and others, damage to the product or other surrounding items. This document and all related documents are subject to the final interpretation of czi. Updates are subject to change without notice. Please visit the official website at [www.czi.com.cn](http://www.czi.com.cn) for the latest product information.

### Warnings

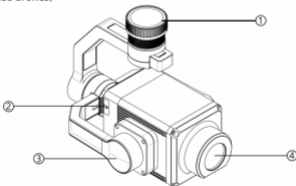
1. IR10 belongs to a kind of Class 4 non-visible light laser. When the laser light is turned on, it is strictly prohibited to look directly at the laser beam or observe the laser beam with optical instruments.
2. In normal use, flammable objects are strictly prohibited within 100cm in front of the lens to prevent the occurrence of a fire.
3. In case of hardware problems, please return to the factory for maintenance. Do not disassemble it without authorization, otherwise the adverse effects on the laser would be caused thereby, and the consequences need to be borne by yourself.

### Precautions

1. The installation method of the IR10 Infrared Zoom Spotlight is the same as that of other loads of DJI. Please confirm whether the adapter ring is installed correctly.
2. Before the takeoff of the drone, the power and zoom angle of the IR10 Infrared Zoom Spotlight will be limited to less than 50%; after takeoff, the power and zoom angle can reach 100%.
3. When the IR10 Infrared Zoom Spotlight is used with the DJI H30 series in a dual-gimbal configuration, it is recommended to install the IR10 first, and then install the DJI H30 series after the IR10 gimbal self-tests are completed to avoid collisions during the gimbal self-test process.

## II. Introduction of IR10

The czi IR10 Infrared Zoom Spotlight adopts a fiber optic homogenized laser, with an output power of up to 12W. The light Angle can be smoothly adjusted between 0.56-45°, the spotlight and floodlight can be flexibly scheduled and the maximum infrared light filling distance is more than 1000m. Combined with gimbal cameras such as the DJI H20 series or DJI H30 series with a night scene mode (IR mode), it can fill the light clearly throughout the process, with great picture quality and excellent effects of penetrating rain, smoke and fog. And the infrared light is not perceptible to the human eye, which can realize the night detection beyond the visual range. Through the DJI SkyPort V2.0 interface, it can be directly mounted on DJI Matrice 300 RTK, Matrice 350 RTK and other series of drones for use, providing users with nighttime insight beyond vision. Using the czi Assistant APP hovering dialogue window and DJI Pilot APP, you can easily turn on the night scene mode of the DJI H20 series, control the switch, adjust the zoom multiple, brightness and IR10 fine-tuning and other modes, and can automatically follow the rotation of the gimbal camera. The IR10 fan-less fuselage is a kind of fully sealed design with excellent waterproof and dustproof performance, and can work reliably under harsh weather conditions, making it the best partner of DJI M300 RTK and M350 RTK enterprise drones.



① Protection Cover of Gimbal

② Memory Card Slot

③ DJI xport Gimbal

④ Light Outlet

### III. Technical Parameter

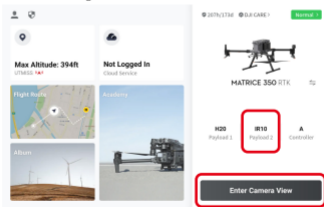
Model	IR10
Specification	186*128*158mm
Weight	800g $\pm$ 5g
Effective Distance	$\geq$ 1000m
Type of Laser	Optical Fiber Homogenized Laser
Luminous Wavelength	808nm
Light Output Power	12W $\pm$ 0.5W
Illumination Angle	0.56° ~ 45°
Operating Temperature	-20°C ~ +50°C

## (II) DJI Pilot2 APP

1. Click DJI Pilot2 APP to enter the main interface of the software.



2. Enter the main interface, and the words "IR10" are displayed in the lower left corner. The IR10 Infrared Zoom Spotlight load is successfully recognized, and click to enter the flight interface.



3.1. When using the DJI H20 series, turn on the gimbal linkage switch, switch the DJI H20 series to the zoom mode, click the camera settings menu, and click the night scene mode.



(Interface of DJI H20 series)

3.2. When using the DJI H30 series, turn on the gimbal linkage switch, switch the DJI H30 series to the zoom mode, click the quick switch, click the night scene mode, and click the infrared enhancement.



(Interface of DJI H30 series)

4. Click the PSDK load control interface, after clicking the light-on button, select the brightness switch and the zoom switch, and slide the progress bar to adjust the brightness and the zoom multiple. Click the hovering dialogue window to view device information such as the drive temperature, the light core temperature, the brightness, the zoom, etc.

⚠ When the laser light is turned on, it is strictly prohibited to look directly at the laser beam or observe the laser beam with optical instruments.



5. Click the fine-tuning icon to expand the fine-tuning interface, and then the position of the light spot can be adjusted.



6. When observing the target, if the camera is overexposed, the exposure button on the screen can be slid to adjust.



## V. Firmware Upgrade

### Using microSD card for upgrade

Before upgrading, please make sure that the IR10 has been installed on the aircraft and the aircraft power has been turned off, the microSD card has sufficient storage space and the aircraft's intelligent flight battery has been fully charged.

1. Please obtain the firmware upgrade package through the official channels;
2. Copy the firmware upgrade package to the root directory of the microSD card;
3. Insert the microSD card into the microSD card slot of the IR10 Gimbal Searchlight;
4. Turn on the power of the aircraft. At this time, the gimbal camera will start the self-test and automatically start to upgrade the firmware;
5. After the upgrade is completed, the program will start again. Please check whether the update is successful by observing the version number of the hovering dialogue window. To know about the firmware update status of the IR10 Infrared Zoom Spotlight or download the latest version of the firmware, please pay attention to the official website of czi: [www.czi.com.cn](http://www.czi.com.cn).

In case of the situation that the Infrared Zoom Spotlight can't work properly due to the drone firmware update, please contact the local agent or manufacturer in time.

ChengZhi Technical Support

[www.czi.com.cn](http://www.czi.com.cn)

If you have any questions or suggestions  
regarding the manual, please contact us at:

[czzn@czi.com.cn](mailto:czzn@czi.com.cn)

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