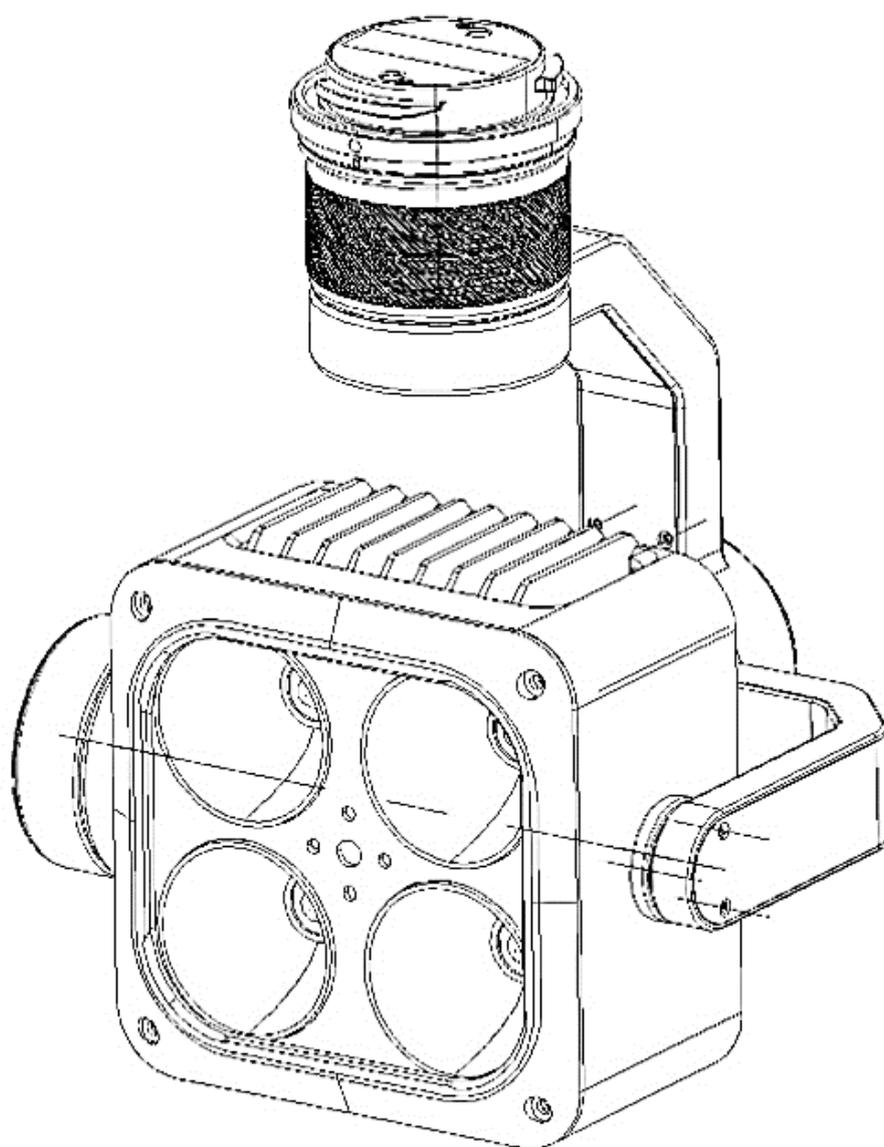


ALADDIN SPOTLIGHT

The user manual

V1.1 20190328



Precautions Before Use



LASER RADIATION
DO NOT STARE INTO BEAM
CLASS III R LASER PRODUCT

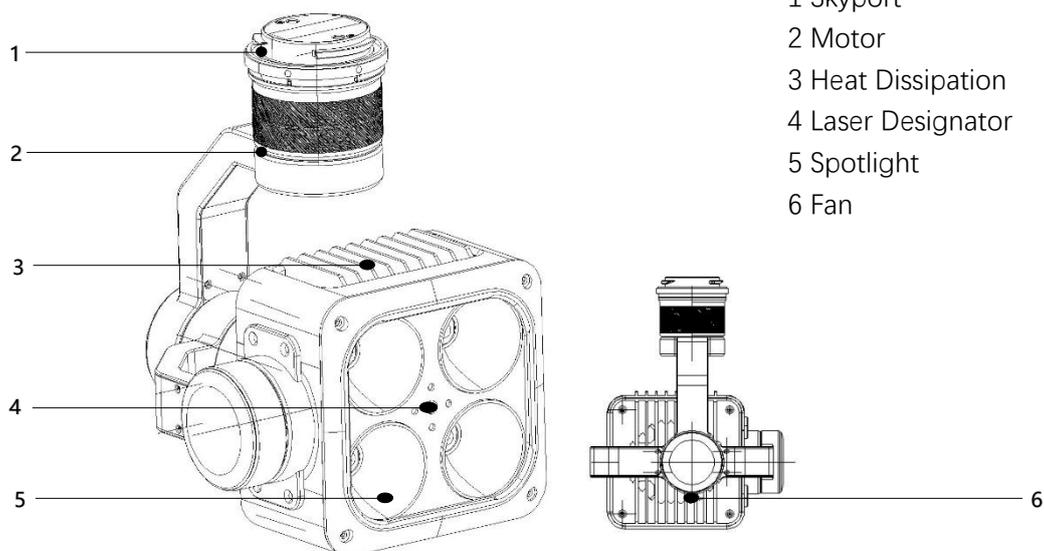
- Do not look directly at the spotlights and laser pointer.
- Do not block the cooling air inlet and vent;
- Do not interfere with the stability of the beacon.
- Do not touch the lamp holder body at work with bare hands.
- Please do your best to avoid using the equipment continuously for a long time in extreme environment to extend the service life of the equipment;
- Such as hanging in gimble M210 / M210RTK, please put this product on first gimbal port, average camera on second gimbal port;
- Please read the notes carefully;

Product Overview

Introduction

ALADDIN is a uav searchlight designed based on DJI PAYLOAD SDK. It integrates a triaxial stabilized cradle head and a laser pointer, which can be directly mounted to the cradle head interface. It supports the DJI industry uav dual cradle head linkage, and can provide multi-angle illumination and laser indication for the target object. Can be widely used in fire, military police and emergency rescue departments and other night lighting and instructions;

Part Name



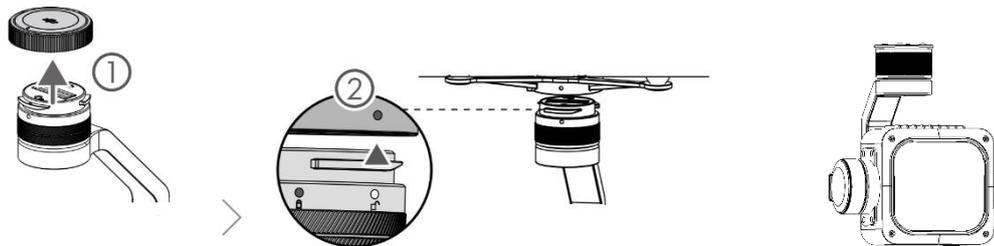
The Installation

Installation preparation

1. Support model: M200 series; M200 V2 series;
2. Please upgrade the aircraft equipment to the latest firmware;
3. Please ensure the normal state of the aircraft before use;

Installation

4. Remove protective cover; Put the horizontal roller and pitching axis of the cloud lamp in the correct direction, as shown in figure;
5. Align the white point of the cradle head interface with the red point of the aircraft interface, and then embed the cradle head;
6. Rotate the interface of the cradle head camera to the locking position and align the red dots to fix the cradle head;



Control Operation

Remote Control Operation

Dial the wheel around

Left wheel control pitch right wheel control translation



Shortcut keys

- One-click back to center (professional version remote control should be set by yourself)
- More shortcuts open with the DJI Pilot update

DJI PILOT Control

Connect to DJI Pilot APP

1. Open the aircraft and remote control, ground mobile equipment;
2. When the connection is successful, DJI PILOT displays the "ALADDIN Spotlight" load name.



The Function Menu



Load setting page:

- Laser indicator switch (Laser control)
- Laser indicator mode
- Searchlight switch :(Led control)
- Searchlight mode :(Led mode)
- Gimbal return head
- Gimbal speed
- Gimbal set offset
- Panel information display
- Temp protect

Functional Specifications

Gimbal

One key back to the cradle head: the cradle head rotates to the forward position relative to the aircraft;

Follow mode: the cradle head follows the course of the aircraft;

Offset calibration: calibrate the initial middle position of the cradle head;

Speed adjustment: adjust the rotation speed of the dial wheel or the cradle head on the touch screen;

Light Control

Laser indicator mode: select indicator laser flicker mode, which are long light and flicker respectively;

Searchlight mode: select the flashing mode of the searchlight, which are long light, explosion flash and SOS.

Panel information display: searchlight information panel switch;

Temperature protection switch: when the temperature is more than 80 degrees, high temperature protection, and turn off the searchlight, but retain the laser pointer;

Double Head Linkage

Synchronizing the control attitude of two cradle head;Support X4S, X5S, Z30 X7;

The cloud desk lamp must be mounted in position 2 when linkage, namely the left side of the official head; 1 position mounted main head camera;

It is absolutely forbidden to mount two cloud lamps and light them at the same time, which will lead to power overload of the uav. Currently, dual light mounting function is not supported for the model.

Notes:

- The cradle head supports the two modes of hanging down and hanging up. During installation, the cradle head needs to be placed in the right direction for connection, otherwise the cradle head will be blocked or work abnormally.
- It is normal that the cradle head will have a slight swing or the level is not enough.
- Dji pilot occasionally appears abnormal display and other phenomena, can be solved by restarting the software;
- High frequency abnormal sound and vibration or vibration occur in the cradle head shaft. If the heat is serious, please do not use it and contact the after-sales staff to return to the factory for maintenance.

Parameters

Population parameter

The product name	Aladdin spotlight
Electrical interface	Average SKYPORT
size	100 * 110 * 150 mm
weight	470 g
Rated power	48 w

LED lights,

The LED type	CREE XHP50.2 / copper substrate
System voltage	6 v
power	40 w
Luminous flux	10200 lm
Reflective cup	Vacuum sputtering silver-plated reflective cup; The mirror
FOV	15 °
Look into the distance	150 m
Flood area	Flight altitude: 1863m @ 120m; Flight altitude 323m @ 50m
Actual illumination measurement	4LUX @120m flight altitude;11 lux @ 60 meters;47LUX@30 m flight altitude

Laser indicator

Laser power	5 mw
Laser eye safety rating	Class 3 a
The wavelength	620 + 10 nm
FOV	1 mrad
color	red

Gimble

Number of shaft	Three axis
Angular jitter	+ / - 0.01 °
Way to install	detachable
Control point of view	Pitch: + 90 ° to 90 °, Yaw: + 170 °
Maximum control speed	Pitch: 60 ° / s, Yaw: 60 ° / s

The cooling system

Heat sinks	is
fan	is

The environment temperature

Operating temperature	- 10 °C to 50 °C
Storage temperature	- 20 °C to 60 °C