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Drone-Sky-Hook LED SearchLight with Built-In Laser Pointer for DJI Phantom 4
Drone-Sky-Hook LED SearchLight with Built-In Laser Pointer for DJI Phantom 3

Model: DSH-LSL1-P4
Model: DSH-LSL1-P3

Installation and Operation Guide

V1.0





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Note:

Additional information can be found in the Frequently Asked Questions page at the following link: <https://www.droneskyhook.com/frequently-asked-questions>



Overview

Overview of the LED SearchLight with Built-In Laser Pointer for DJI Phantom 4 and Phantom 3

Revolutionary innovative design that perfectly fits your DJI Phantom 4 and Phantom 3 series drones.

Combine the LED Searchlight with Built-In Laser Pointer with Drone-Sky-Hook Release & Drop PLUS devices to enhance your DJI Drone night flight experience and see places in a different light at night!

Multiple Searchlight ON/OFF Control modes to best suit your application:

- Simple drone rotation (Self-contained. No linkage to the drone's front LED light is required).
- Use of C1 or C2 button on the DJI drone remote controller or DJI App (Linkage to the drone's front LED light is provided).
- Manual control.

Connect-And-Fly in seconds! No modification of any kind to the drone is required! No tools needed!

Quick Mounting and Locking Systems (QMLS). Perfectly fit the DJI Phantom 4 and Phantom 3 series drones.

Sensors Interference Avoidance System (SIAS). Will not interfere with the operation of the DJI Phantom 4 and Phantom 3 VPS sensors.

Unlimited operation range.

Small and light weight. Weighs only 8 oz (230 grams) . Allows you to lift additional payload.

Can be rotated to shine its bright light forward, downward in angles or straight down. Illuminate your DJI drone takeoff / landing area or other areas during your flight.

Over One hour of continuous operation on a single battery charge.

Built-in rechargeable battery and USB Charger. Can be charged from any 5V/1A mobile phone charger, USB jack on computers/Laptops or car battery.

Robust design. High quality aluminum and 3D printed lightweight ABS.

Note: Do not overload your drone with heavy or bulky payloads that it cannot safely carry.



Applications

Applications for the LED SearchLight with Built-In Laser Pointer for DJI Phantom 4 and Phantom 3

Use the Quick Mount Drone-Sky-Hook Release & Drop PLUS combined with the LED Searchlight with Built-In Laser Pointer to mark and illuminate points of interest on the ground.

Easily spot your DJI drone at night by using the Quick Mount Drone-Sky-Hook Release & Drop PLUS combined with the LED Searchlight with Built-In Laser Pointer. Have a better view of your DJI drone's position and orientation in the air under low light conditions or total darkness. Use the Searchlight as landing light during takeoff and landing.

Fish at night with the Drone-Sky-Hook Release & Drop PLUS combined with the LED Searchlight with Built-In Laser Pointer so you can lure the fish to the light while having a better view of your DJI drone's position and orientation in the air.

Search for a lost or missing person at night using the Quick Mount Drone-Sky-Hook Release & Drop PLUS combined with the LED Searchlight with Built-In Laser Pointer. Enhance the view of your search area with this powerful searchlight that shines bright light at night on objects as far as 330 feet (100 meter) away!

Before takeoff, rotate your LED Searchlight with Built-In Laser Pointer to shine its bright light forward, downward in angles or straight down. Illuminate your DJI drone takeoff / landing area or other areas during your flight. This powerful searchlight beam illuminates objects as far as 330 feet (100 meter) away!

Drone-Sky-Hook Release & Drop PLUS devices are required to control the LED Searchlight with Built-In Laser Pointer.

Drone Sky Hook strongly recommends that you follow all laws and regulations in your area, closely check your surroundings prior to takeoff and keep away from civilians, properties, trees, buildings electric poles etc.

Drone Sky Hook shall not be responsible and assume no liability for any loss, damage or injury.

IMPORTANT NOTE: Do not overload your DJI drone with heavy or bulky payloads that it cannot safely carry.



Installation

Please click on the following links to watch the installation instructions videos:

Installing the Drone-Sky-Hook LED SearchLight with Laser Pointer for DJI Phantom 4 and Phantom 3:

<https://youtu.be/bU9jmW959yA>

Installation of Drone-Sky-Hook LED SearchLight with Built-In Laser Pointer for DJI Phantom 4 and Phantom 3



Insert one side of the SearchLight mounting bracket into the Phantom 4/3 front landing gear and snap-on the other side



Insert one side of the SearchLight battery mounting bracket into the Phantom 4/3 landing gear and snap-on the other side



Locate the SearchLight battery plug. It is a polarized connector with a locking tab.



Observe the correct orientation of the SearchLight battery plug and plug it into the AUX jack on the Release & Drop PLUS Device. The plug should be locked to the AUX jack.

Move the battery cable towards the nearest landing gear and away from the view of the sensors located on the bottom side of the Phantom (VPS sensors).





Operation

Battery Charging of the Drone-Sky-Hook LED SearchLight with Built-In Laser Pointer for DJI Phantom 4 and Phantom 3

Charging

Plug the provided USB cable to the Searchlight batteries box. Connect the other end of this cable to a standard 5V / 1A USB charger (like a mobile phone charger or other 5V / 1A charger. The specified charger output current should be no less than 1A and no more than 2.1A).

Charge the Searchlight batteries overnight (12 hours) for maximum battery capacity. **IMPORTANT:** Disconnect it from the charger after 12 hours.

Do not charge the batteries when the ambient temperature is below 32 degrees Fahrenheit (0 degrees Celsius) or above 104 degrees Fahrenheit (40 degrees Celsius).

Charging the SearchLight batteries during storage

Verify that the Searchlight is completely turned OFF and the Red light on its batteries box is OFF. This will prevent continuous battery drain due to the Searchlight's standby current.

To completely turn OFF the Searchlight and prevent continuous battery drain, verify that the AUX Channel is ON and then turn OFF the Searchlight by pressing its pushbutton multiple times until the Red light on its batteries box turns OFF.

NOTE: The Searchlight draws standby current from its batteries even when the AUX Channel is OFF. Follow this procedure to completely turn OFF the Searchlight and prevent continuous battery drain.

Charge the Searchlight batteries overnight (12 hours) every 4-6 months to maintain maximum battery capacity. **IMPORTANT:** Disconnect it from the charger after 12 hours.

Do not charge the batteries when the ambient temperature is below 32 degrees Fahrenheit (0 degrees Celsius) or above 104 degrees Fahrenheit (40 degrees Celsius).



Operation

Please click on the following link to watch the use of the drone Remote Controller C1/C2 button to control and set the Drop Wheel and Searchlight. These videos are applicable for Mavic Pro, Mavic Pro Platinum, Phantom 4 and Phantom 3 together with Drone Sky Hook Release & Drop PLUS models only and a SearchLight.

<https://youtu.be/bG4IBDKNdKE>

<https://youtu.be/l9lDXQcLWKQ>

Operation of the LED SearchLight with Built-In Laser Pointer for DJI Phantom 4 and Phantom 3

Connect the Searchlight to the AUX Channel jack on the Release and Drop PLUS device.

Turn ON the AUX Channel and then select the Searchlight desired light output mode by pressing the Searchlight pushbutton multiple times.

When the Searchlight is turned ON, the Red light on its batteries box will be illuminated.

See operation video in the product support page.

At the end of the Searchlight operation you must completely turn OFF the Searchlight to prevent continuous battery drain. Verify that the AUX Channel is ON and then turn OFF the Searchlight by pressing its pushbutton multiple times until the Red light on its batteries box turns OFF.

NOTE: The Searchlight draws standby current from its batteries even when the AUX Channel is OFF. Follow this procedure to completely turn OFF the Searchlight and prevent continuous battery drain.

Press the SearchLight pushbutton to turn it On or Off and to change the SearchLight operation modes.

Press the pushbutton multiple times to select the desired operation mode or function.





SearchLight operation modes



Before takeoff loosen the rotation knob, rotate your LED Searchlight to the desired angle and tighten the rotation knob



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Operation

Drone-Sky-Hook Release & Drop Device (PLUS models only) – Control Modes of the AUX Channel to Turn the SearchLight On or Off

DSH Models: Single Release & Drop PLUS / Dual Release & Drop PLUS

Operation Mode 1 – Drone Rotation

Remote Controller (Mode 2) LEFT STICK	Operation
	<p>Quickly Rotate (YAW) the drone two complete turns clockwise to command the AUX Channel to turn ON.</p> <p>Quickly Rotate (YAW) the drone again two complete turns clockwise to command the AUX Channel to turn OFF.</p>

Operation Mode 2 – Drone Remote Controller C1/C2 Button and/or DJI App

Note: Use the DJI App to assign C1 or C2 button to Turn On/Off front LEDs

Remote Controller C1 / C2 Button	Operation
	<p>Press C1 or C2 three times in quick succession (while maintaining about 0.5-1 second between each press) to command the AUX Channel to turn ON.</p> <p>Press C1 or C2 three times again in quick (while maintaining about 0.5-1 second between each press) to command the AUX Channel to turn OFF.</p>
DJI App	Operation
<p>Settings – Main Controller Settings – Advanced Settings</p>	<p>In the App menu switch the drone's front LEDs ON, then OFF and then back ON or OFF, then ON and then OFF. (Total of one ON-OFF-ON or OFF-ON-OFF cycle) to simulate the operation of the C1 or C2 buttons on the drone's remote controller (see above).</p> <p>Maintain about 0.5-1 second idle duration between each switch operation.</p>

Operation Mode 3 – Manual – FUNC button on DSH unit

DSH Release & Drop unit	Operation
	<p>Press three times the device's FUNC button to simulate the operation of the C1 or C2 buttons on the drone's remote controller (see above).</p> <p>Maintain about 0.5-1 second idle duration between each operation of the FUNC button.</p>

IMPORTANT NOTE: At the end of each operation wait 3 seconds for the execution your command and before the initiation of the next command (False Command Avoidance Algorithm (FCAA)).