![DJI logo]

Inspire 1

User Manual

Inspire 1 User Manual V1.0
2014.8 First Draft

Congratulations on purchasing your new DJI product. Please read this manual carefully before using this product.

We recommend you to visit the Inspire 1 page at **www.dji.com** for news and updates on everything from product specs to manual updates. Due to ongoing development, information contained in this manual may change without notice.

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Disclaimer & Warning

Please read this disclaimer carefully before using this product. This product is not suitable for people under age of 18.

By using this product, you hereby agree to this disclaimer and signify that you have read it fully. You agree that you are responsible for your own conduct and content while using this product, and for any consequence thereof. You agree to use this product only for purposes that are proper and in accordance with local regulations, terms and any applicable polices and guidelines.

By reading this disclaimer, you also agree:

1. Any part of this disclaimer is subject to change without prior notice, refer to www.dij.com for the latest version.

2. DJI reserves the right of final interpretation of this disclaimer.

3. This disclaimer is made in various language versions; in the event of divergence among different versions, English version shall prevail.

Instructions

Please read international and domestic airspace regulations and rules before using this products, should never use this product in a way that infringes upon or contravenes international or domestic laws and regulations. You agree that you are solely responsible for your own conduct and content while using this product, and for any direct or indirect consequences caused by not following this manual, violate or disregard any other applicable local laws, administrative rules and social habits thereof.

This product is a flying camera that offers easy flight both indoors and out when powered normally and in a good working order.

1. This product woks most efficiently with genuine DJI accessories. DJI shall not be liable for any damage or legal responsibilities to this product and/ or accidents resulting from malfunctions of non DJI accessories.

2. This product features a built-in autopilot system and we have made its operation as safe as possible. However, it is good practice to remove all propellers before switching it on to for calibration and parameter setting.

3. Be sure to check all connections and keep children and animals a safe distance away during firmware upgrades, system calibration and parameter setting.

Cautions

Carry out each of the following steps carefully before every flight.

1. Fly safe. Stay away from obstacles, crowds, high-voltage lines and other possible sources of electromagnetic interference.

2. Check that you aren´t overloading the aircraft.

3. Check that the propellers and the motors are installed properly and firmly before each flight. Check that the

rotation direction of each propeller is correct. Do not get close to or touch working motors or propellers to avoid serious injury.

4.   Avoid interference between the remote control transmitter or on-board Wi-Fi device and other wireless equipment.

5.   Check that phone battery, flight battery, control battery and Wi-Fi extender are full.

6.   Switch on transmitter first, then power on the aircraft. Upon landing, power off the aircraft first, then switch off the transmitter.

7.   Check that all parts are in good condition. Do not fly with aging or damaged parts.

8.   Do not fly near areas with magnetic or radio interference. These include but are not limited to: high voltage lines, large scale power transmission stations, mobile base stations and broadcasting towers. Failing to do so may compromise the transmission quality of this product, cause remote control and video transmission errors and may affect flight orientation and location accuracy.

9.   Do not use in severe weather condition including rain, snow, heavy wind, hail, lighting, tornado or hurricane.

10.   Read and familiarize yourself with the quick start guide and the detailed user guide, as well as information available on the package and www.dji.com regularly.

Limitation of Liability

DJI accepts no liability for damage(s) , injuries or any legal responsibilities incurred directly or indirectly from the use of this product in the following conditions:

1.   Damage(s), injuries or any legal responsibilities incurred when users are drunk, taking drugs, under the influence of anesthesia, dizziness, fatigue, nausea and any other conditions both physical and mental that could impair your ability.

2.   Damage(s), injuries or any legal responsibilities caused by subjective intentional operations.

3.   Any mental damage compensation caused by accident.

4.   Damage(s), injuries or any legal responsibilities caused by flying in no-fly zones such as natural reserve.

5.   Failure to follow the guidance of the manual in assembly or operation.

6.   Malfunctions caused by refit or replacement with non-DJI accessories and parts.

7.   Damage(s), injuries or any legal responsibilities caused by using third party products or fake DJI products.

8.   Damage(s), injuries or any legal responsibilities caused by improper operation or subjective misjudgment.

9.   Damage(s), injuries or any legal responsibilities caused by mechanical failures due to product aging.

10.   Damage(s), injuries or any legal responsibilities caused by continued flying after low voltage protection alarm is triggered.

11.   Damage(s), injuries or any legal responsibilities caused by knowingly flying the aircraft in abnormal conditions (such as when water, oil, soil, sand or other unknown material are inside the aircraft, incomplete assembly, the

main components have obvious faults, obvious defect or missing accessories).

12. Damage(s), injuries or any legal responsibilities caused by flying in the following situations such as the aircraft in magnetic interference areas (such as high voltage lines, power stations, broadcasting towers and mobile base stations), radio interference areas, government regulated no-fly zones, if the pilot loses sight of the aircraft, suffer from poor eyesight or are otherwise not suitable for aircraft operation.

13. Damage(s), injuries or any legal responsibilities caused by use in bad weather, such as a rain, heavy wind, snow, hail, lightning, tornadoes and hurricanes.

14. Damage(s), injuries or any legal responsibilities caused when the aircraft is in the following situations: collision, fire, explosion, floods, tsunamis, subsidence, ice trapped, avalanche, debris flow, landslide, earthquake, etc.

15. Damage(s), injuries or any legal responsibilities caused by infringement such as any data, audio or video material recorded by the use of aircraft.

16. Damage(s), injuries or any legal responsibilities caused by the misuse of the battery, protection circuit, RC model and battery chargers.

17. Consequential damages, injuries or any legal responsibilities caused by any malfunction of an equipment or accessory, including memory cards, that result in the failure of an image or video to be recorded or to be recorded in a way that machine readable.

18. Any consequential damages, injuries or any legal responsibilities caused by operations that do not follow all instructions laid out in the quick start guide and detailed user guide or information included on the package or www.dji.com.

19. Operators disobey local laws or regulations.

20. Any legal responsibilities, personal or property damage or environmental damages caused by operator noncompliance with local laws and regulations.

21. Damages, injuries or any legal responsibilities caused by risky operator behavior without sufficient training.

22. Damages, injuries or any legal responsibilities caused by flying in the areas prohibited by laws, regulations, or related entities

23. Damages, injuries or any legal responsibilities caused by operating without following instructions or warnings found on www.dji.com, product instructions, product quick start guideline, or DJI disclaimer.

24. Other losses that not covered by the scope of DJI Innovations liability

Warning

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

This product complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation;

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this product. Such modifications or changes could void the user's authority to operate the product

NOTE: 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 interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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 harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged 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 circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

1. When using this product, ensure that the antenna of the device is at least 20 cm from any person. Due to the used enclosed material, this product shall only be connected to a USB interface of version 2.0 or higher. The connection to so called "power USB" is prohibited.

   CAUSTION: RISK OF EXLPOSION IF BATTERY IS REPLACED BY AN INNCONNECT TYPE. DISPOSE OF USED BATTERIES ACCRODING TO THE INSTRCUTION.

   DJI hereby declares that this product is in compliance with the essential requirements and other relevant provision of Directive 1995/5/EC.

2. Please note that this product is intended for personal use and should never be used in a manner that infringes upon or contravenes international or domestic law and regulations.

   You shall not use this product to:

   a) Defame, abuse, harass, stalk, threaten or otherwise violate the legal rights (such as right of privacy and publicity) of others;

   b) Photograph people on private property without their consent or photograph in areas where photography is prohibited without prior authorization.

   c) Use this product for any illegal or inappropriate purpose other than general personal use (such as spy, military operation , unauthorized investigation and unauthorized detection);

   d) Violate or disregard applicable local laws, administrative rules and social habits.

   Please be advised that in certain areas, the copying of images and videos from events, performances, exhibitions, or commercial properties by means of a camera may contravene copyright or other legal rights even if the image or video was shot for personal use. In addition, remote control aircraft are banned from conducting commercial activities in certain countries and regions.

If you have any problem you cannot solve during installation, please contact DJI authorized dealers.

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Using this manual

Legends

⊘	Warning
⚠	Important
💡	Hints and Tips
🔍	Reference

Declaration

Unless stated explicitly, all descriptions in this manual are for GPS mode.

Before Flight

The following tutorials and manuals have been produced to ensure you to make full use of your Inspire 1.

(1)   *Disclaimer*

(2)   *Inspire 1 Quick Start Guide*

(3)   *Inspire 1 User Manual*

Watching all the tutorial videos and reading the Disclaimer before flight is recommended. Afterwards, prepare your first flight using the Inspire 1 Quick Start Guide. Refer to this manual for more comprehensive information. Experienced users, particularly those with DJI products could skip to the Inspire 1 Quick Start Guide to begin preparing for flight.

Watch the video tutorials

Please watch the tutorial video below to learn how to use Inspire 1 correctly and safely:

http://xxxxxxxxxxxxxxxxxxxxxxx

Download DJI Inspire 1 App

Download and install the DJI Inspire 1 app before use. Scan the QR code below to download DJI Inspire 1 app.

1 Product Profile

The Inspire 1 is brand new quadcopter capable of capturing 4K video and transmitting in an HD video signal to multiple devices straight out of the box. Equipped with retractable landing gear, an unobstructed 360 degree view from the camera is made possible by simply moving the landing gear out of sight. The built-in camera has been integrated with a gimbal to minimize space and maximize weight efficiency. Optical Flow enhances the hovering precision when no GPS is available. The features of Inspire 1 includes:

Camera and Gimbal: Support 4K recording with resolution of 1200M pixel. Reserves mounting place for ND filter to reduce the overexposure. New quick release mounting lock design for the camera allow user to replace the camera with ease.

HD Video Downlink: Integrated with enhanced version of Lightbridge HD downlink that provides low latency HD video output.

Transformable Landing gear: Retract the landing gear in midair to create an unobstructed panoramic view from the camera.

DJI Smart Battery: Included standard 4500 mAh and optional 5400 mAh (coming soon) DJI Smart Battery that employs ATL battery cell and TI battery management system.

Flight Controller: Based on the A2 flight controller, a new generation of Ncore flight controller system provide a more reliable flight experience. New flight recorder feature stores the flight data for each flights. The Optical flow feature enhance the hovering precision when no GPS is available.

1.2 Aircraft Diagram

Front

Rear

Bottom
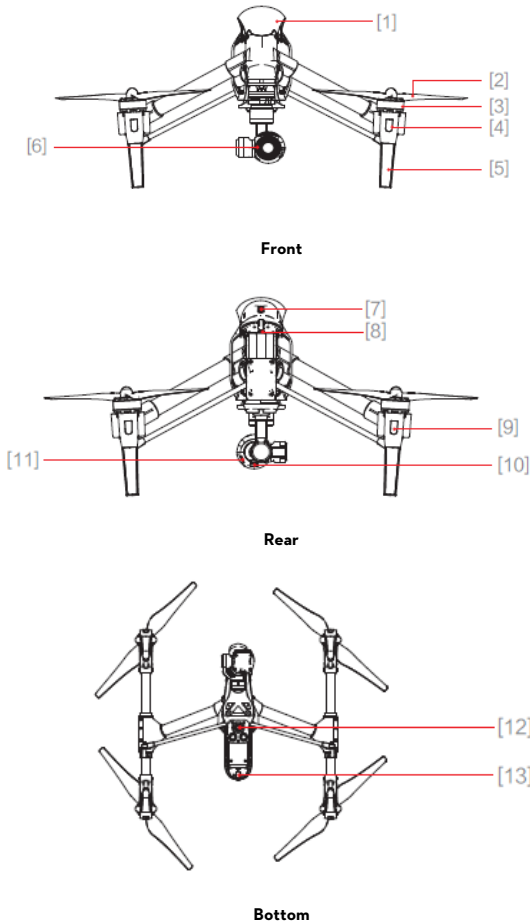
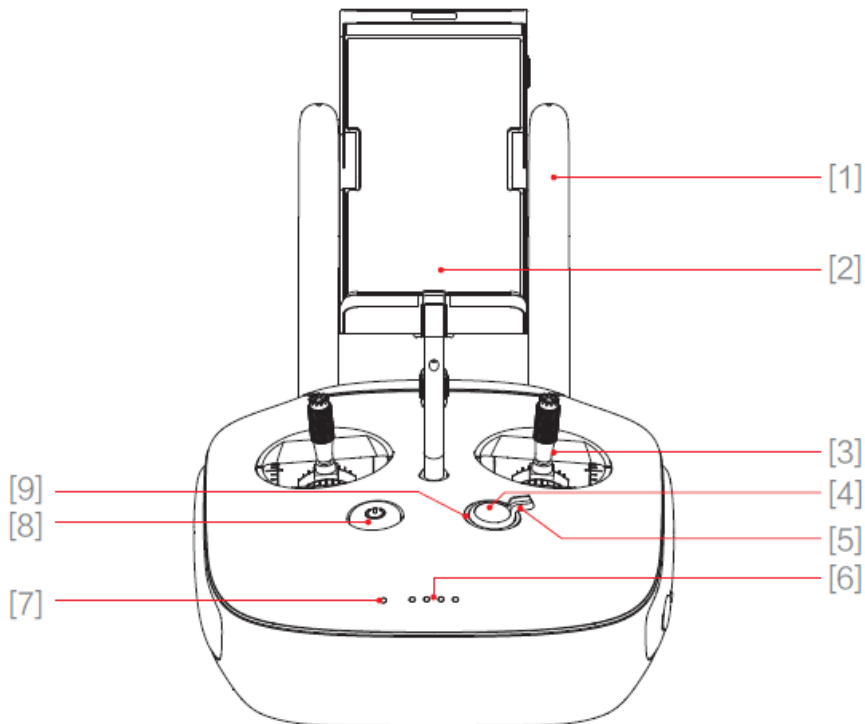|	
[1]	GPS
[2]	Propeller
[3]	Motor
[4]	Front LED
[5]	Landing gear
[6]	Gimbal and Camera
[7]	Smart Battery
[8]	Aircraft Micro-USB Port
[9]	Rear LED
[10]	Camera Micro-SD Card
[11]	Camera Micro-USB Port
[12]	Optical Flow Sensor
[13]]	Aircraft Status Indicator

1.3 Remote Controller Diagram

Remote Controller Front View

Figure 21

1.	Antenna	5.	Transformation Switch
2.	Mobile Device Holder	6.	Battery Level LEDs
3.	Control Stick	7.	Status LED
4.	Return Home(RTH)button	8.	Power Button

1. **Antenna**

   Relays aircraft control and video signal.

2. **Mobile Device Holder**

   Mounting place for the mobile device.

3. **Control Stick,**

   Aircraft orientation control.

4. **Return Home (RTH) Button**

   Press and hold the button to initiate Return to Home (RTH).

5. **Transformation Switch**

Toggle the switch up or down to raise or lower the landing gear.

6. **Battery Level LEDs**

   Displays the current battery level.

7. **Status LED**

   Displays the power status.

8. **Power Button**

   Used to power on or power off the remote controller.

9. **RTH LED**

   Circular LED around the RTH button to display RTH status.

Remote Controller Top View
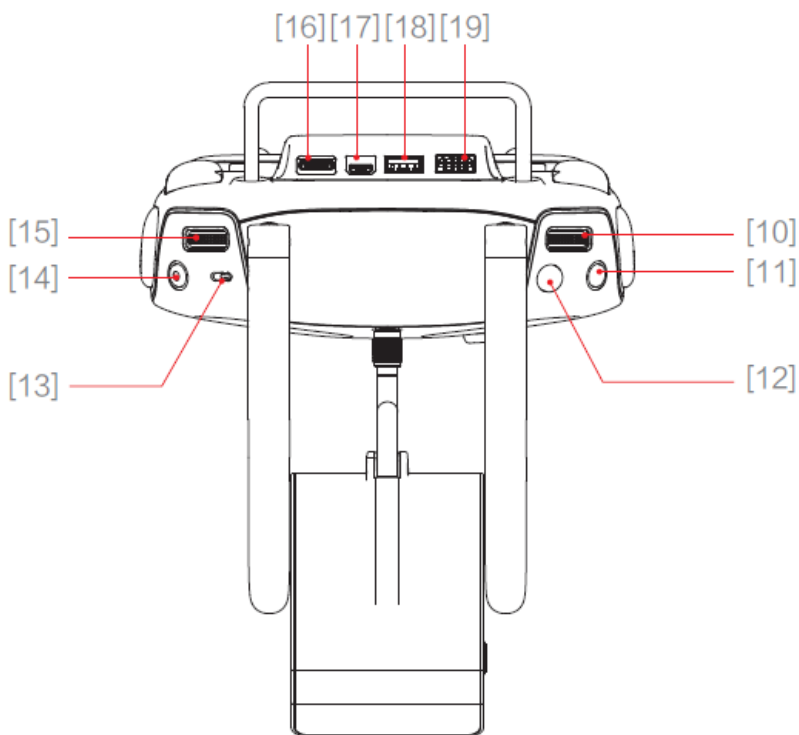
Figure 22

10.	Camera Settings Dial	15.	Gimbal Dial
11.	Playback Button	16.	HDMI Port
12.	Shutter Button	17.	Micro-USB Port
13.	Flight Mode Switch	18.	CAN Port

14. Video Recording Button	19. USB Port

10. Camera Settings Dial

Turn the dial to adjust camera settings. Only functions when the remote controller is connected to a mobile device running the DJI Inspire 1 app.

11. Playback Button

Playback the image or the videos.

12. Shutter Button

Press to take a photo. If in burst mode, the set number of photos will be taken with one press.

13. Flight Mode Switch

Used to switch between GPS, A and F mode.

14. Video Recording Button

Press to start recording video. Press again to stop recording.

15. Gimbal Dial

Use this dial to control the tilt of the gimbal.

16. Micro-USB Port

Connect remote control with your computer.

17. HDMI Port

Connect an HD compatible monitor to this port to get a live HD video preview of what the camera sees.

18. CAN port

Reserved for future use.

19. USB Port

Connect to mobile device to access all of the DJI Inspire 1 app controls and features.

Remote Controller Rear View
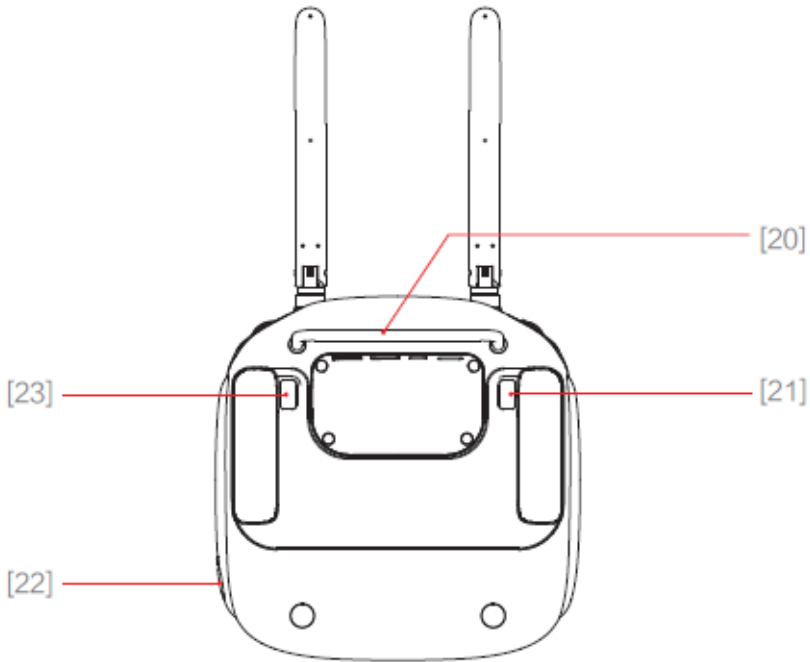
Figure 23

20. Handle Bar	22. Power Source Port
21. Back Left Button	23. Back Right Button

20. Handle Bar

Used to carry the remote controller or attach accessories.

21. Back Left Button

Reserved.

22. Power Port

Connect to a power source for to charge the remote controller's internal battery.

23. Back Right Button

Reserved.

2 Aircraft

2.1 Flight Controller

The Ncore flight controller is based on DJI A2 flight controller with several enhancements. Three flight modes are available to allow user to switch between GPS and non-GPS flight. Failsafe, Return Home and Dynamic Home Point features ensures the safe return of your aircraft when signal is lost. The new added flight recorder function stores the

crucial flight data for each flights.

2.2 Flight Mode

Three flight modes are available. The details of each flight mode is listed in the table below:

Flight Mode	GPS Availability	Remark
GPS	GPS enabled	GPS mode works best when GPS modules is enabled and more than 6 GPS satellites are available. Under GPS mode, there are three different statuses: P-GPS: Both GPS and Optical Flow signal are optimal, using both GPS and Optical flow to implement hovering. P-OPTI: Optical Flow sensor signal is optimal but GPS signal is not optimal, using only Optical flow to implement hovering. P-ATTI: Neither GPS or Optical Flow Sensor signal is optimal, using only barometer to stabilize aircraft′s attitude. The aircraft automatically switch between the status depending on signal of the GPS and Optical Flow sensor.
ATTI	GPS disabled	ATTI mode works when GPS is disabled and uses only barometer to stabilize the aircraft. Noted that Home Point is not recorded in this mode and aircraft automatically return home when signal is lost.
F	GPS enabled	F mode works when more than GPS satellite are available. Intelligent Orientation Control (IOC) is activated in this mode. User may use IOC to lock the orientation of the aircraft. For more information about the IOC, refer to "IOC".

2.3 Flight Limits

Flight limits such as height and distance is imposed on the Ncore flight controllers. The details of these flight limites are described in the following section.

All unmanned aerial vehicle (UAV) operators should abide by all regulations from such organizations as the ICAO (International Civil Aviation Organization) and their own national airspace regulations. For safety reasons, the flight limits function is enabled by default to help users use this product safely and legally. The flight limits function includes height, distance limits and No Fly Zones.

When operating in GPS mode, height, distance limits and No Fly Zones work together to manage flight. In ATTI mode only height limits work and flights cannot go higher than 120m.

Max Height & Radius Limits

Max Height & Radius limits flying height and distance, user may change these settings in the DJI Pilot App. Once complete, your Inspire 1 will fly in a restricted cylinder that is determined by these settings. The tables below show the details on these limits.

GPS Enabled			
	Flight Limits	DJI Pilot App	Aircraft Status Indicator
Max Height	Flight height must be under the set height.	Warning: Height limit reached.	None.
Max Radius	Flight distance must be within the max radius.	Warning: Distance limit reached.	Rapid red flashing ●●●●● when close to the max radius limit.

GPS Disabled			
	Flight Limits	DJI Pilot App	Aircraft Status Indicator
Max Height	Flight height restricted to 120m and under.	Warning: Height limit reached.	None.
Max Radius	No limits		

> ⚠️ (1) If you fly out of the limit, you can still control the Phantom, but cannot fly it further.
> (2) If the Phantom flies out of the max radius in Ready to Fly (non-GPS) mode, it will fly back within range automatically.

Flight Restriction of Restricted Areas

Restricted areas include airports worldwide. All restricted areas are listed on the DJI official website at http://www.dji.com/fly-safe/category-mc. Restricted areas are divided into category A and category B. Category A areas cover major international airport such as LAX and Heathrow, while category B areas includes smaller airports.

Category A Safety Zone

(1) The category A "safety zone" is comprised of a small "no-fly zone" and a range of "restricted-altitude zones". Flight is prevented in the "no-fly zone" but can continue with height restrictions in the restricted-altitude zone.

(2) 1.5 miles (2.4 km) around a designated safety zone is a no-fly zone, inside which takeoff is prevented.

(3) 1.5 miles (2.4 km) to 5 miles (8 km) around restricted areas are altitude restricted, with maximum altitude going

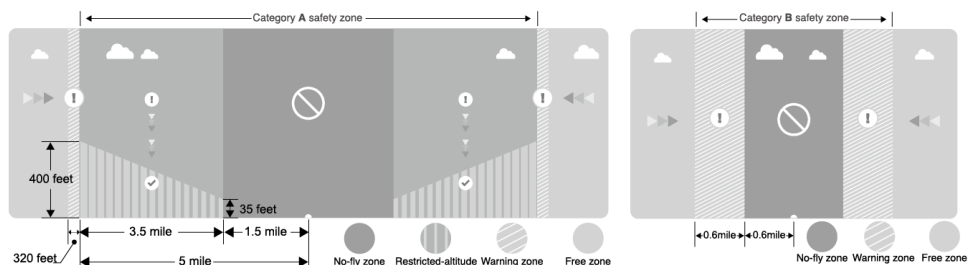from 35 feet (10.5 m) at 1.5 miles (2.4 km) to 400 feet (120 m) at 5 miles (8 km).

(4) A "warning zone" has been set around the safety zone. When you fly within 320 feet (100m) of the safety zone, a warning message will appear on the DJI Pilot App.

Category B Safety Zone

(1) Category B "safety zone" is comprised of a "no-fly zone" and a "warning zone".

(2) 0.6 miles (1 km) around the safety zone is a designated "no-fly zone".

(3) A "warning zone" has been set around the safety zone. When you fly within 0.6 miles (1Km) of this zone, a warning will appear on the DJI Pilot App.

GPS Enabled			
Zone	Restriction	DJI Pilot App Prompt	Aircraft Status Indicator
No-fly Zone	Motors will not start.	Warning: You are in a No-fly zone. Take off prohibited.	
	If the aircraft enters the restricted area in ATTI mode but GPS mode activates the aircraft will automatically descend to land then stop its motors after landing.	Warning: You are in a No-fly zone, automatic landing has begun. (If you are within 1.5 mile radius)	
Restricted-altitude flight zone	If the aircraft enters the restricted area in ATTI mode but GPS mode activates, it will descend to a safe altitude and hover 15 feet below the safe altitude.	Warning: You are in a restricted zone. Descending to safe altitude. (If you are between the range of 1.5 mile and 5 mile radius) Warning: You are in a restricted zone. Max flight height restricted to between 10.5m and 120m. Fly Cautiously.	●●●●●● Red flashing
Warning zone	No flight restriction applies, but there will be warning message.	Warning: You are approaching a restricted zone, Fly Cautiously.	

Free zone	No restrictions.	None.	None.

🔍	Semi-automatic descent: All stick commands are available except the throttle stick command during the descent and landing process. Motors will stop automatically after landing.
⚠️	When flying in the safety zone, aircraft status indicator will blink red quickly and continue for 3 seconds, then switch to indicate current flying status and continue for 5 seconds at which point it will switch back to red blinking. For safety reasons, please do not fly close to airports, highways, railway stations, railway lines, city centers and other special areas. Try to ensure the aircraft is visible.

2.4 Intelligent Orientation Control (IOC)

IOC allows user to have lock the orientation of aircraft in different fashions. There are three working modes for IOC and you may select the desired IOC modes from the DJI Pilot App. IOC only works under F mode, user must toggle the flight mode switch to position1 to activate IOC. Refer to the table below

Course Lock (CL)	Its forward direction is pointing to the nose direction when recording, which is fixed until you re-record it or exit from CL.
Home Lock (HL)	Record a Home Point (HP), push Pitch stick to control the aircraft far from or near to the HP.
Point of Interest (POI)	Point of Interest. Record a point of interest (POI), the aircraft can circle around the POI, and the nose always points to the POI.

2.5 Failsafe and Return Home

Failsafe and Return Home functions bring aircraft back to the Home Point when transmission signal is lost. Use these two functions to prevent aircraft from flying away. Aircraft will automatically return to the recorded home point during Failsafe and Return Home procedure, user may event control the orientation of the aircraft during Return Home procedure.

	Remote Control	GPS	Descriptions
🔍			

	signal		
Home Point	📶		Home point will be recorded when aircraft status blinks purple.
FailSafe	📶	GPS ≥ 6	Customize the failsafe to define what happens if remote control signal is lost. Choose from either auto hovering or returning to the home point.
Return Home (RTH)	📶		Press and hold the RTH button on the remote control to initiate RTH. Press the RTH switch again to regain control. RTH procedure is similar to the Failsafe with the exception that user may user control the aircraft's orientation during RTH.

1 Record Home Point (HP)	2 Confirm Home Point	3 Transmitter Signal Lost
Solid Purple.	Flashing Purple	Flashing Blue
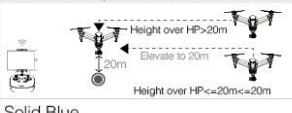
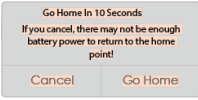| 4 Signal Lost Lasts 3secs.	5 Go Home(20m can be customized)	6 Landing after Hovering 15secs
Solid Blue	Solid Blue	Solid Blue

2.6 Low Battery FailSafe

Low battery level failsafe it triggered when the DJI smart battery is depleted to a point that may affect the safe return of the aircraft, Users are advised to land the aircraft immediately when they observe these warnings. The thresholds for these warnings are automatically determined based on the current aircraft altitude and its distance from the Home point. The battery level indicator is displayed in DJI Pilot App, the description of the battery level indicator is shown below:

Critical Low battery level warning(Red)

Low battery level warning(Yellow)

Sufficient battery level(Green)

Current battery level

Estimated remaining flight time

20min

Battery level indicator
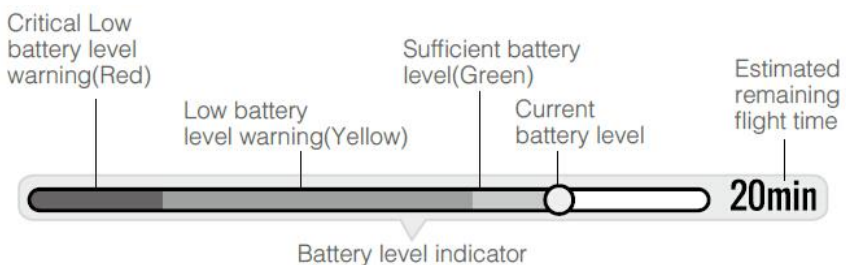
Battery Level Warning	Remark	Aircraft Status Indicator	DJI Pilot App	Flight Instructions
Sufficient battery level	Sufficient battery level	Green LED blinks slowly	No message prompts	Operating normally, no specific action needed

			Go Home In 10 Seconds If you cancel, there may not be enough battery power to return to the home point! Cancel Go Home	
Low battery level warning	The battery power is low. Please land the aircraft.	Aircraft status indicator blinks RED slowly.	Tap "Go-home" to have the aircraft return to the Home point and land automatically, or "Cancel" to resume normal flight. If no action is taken, the aircraft will automatically go home and land after 10 seconds. Remote controller will sound an alarm.	Fly the aircraft back and land it as soon as possible, then stop the motors and replace the battery.
Critical Low battery level warning	The aircraft must land immediately.	Aircraft status indicator blinks RED quickly.	The DJI Pilot App screen will flash red and aircraft starts to descend. Remote controller will sound an alarm.	The aircraft will begin to descend and land automatically.
Estimated remaining flight time	Estimated remaining flight based on current battery level.	N/A	N/A	N/A

☼	Color zones on the battery level indicator ▭▭▭▭ 20min reflect estimated remaining flight time and are adjusted automatically, according to the aircraft's current status. When the critical battery level warning activates and the aircraft is descending to land automatically, you may push the throttle upward to hover the aircraft and navigate it to a more appropriate location for landing.
⚠	When these warnings are triggered, please bring the aircraft back to the Home point or land to avoid losing power during flight.

2.7 Dynamic Home Point

Dynamic home point is useful in situations when you are in motion and require a Home point that is different from the takeoff point. Dynamic home point is only available to the GPS-enabled mobile device. Turn on GPS and data service to obtain higher accuracy of the mobile device position. The Home point will be reset to position of the mobile device

at specific time intervals. Select Dynamic Home Point from the "Camera" page in DJI Pilot App.

2.8 Flight Recorder

Flight data from the flight controller is automatically recorded to the SD card that inserted into the camera each time when aircraft is powered on and stops recording when aircraft is power off. These flight data is useful to analysis all previous flights.
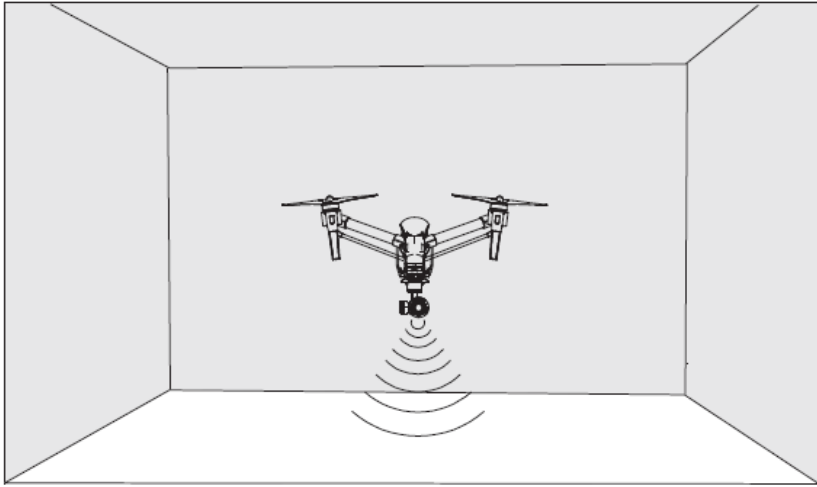
2.9 Optical Flow

DJI Optical Flow is a positioning system that uses ultrasonic and image data to help the aircraft identify its current position. With the help of hover assistant, your Inspire 1 can hover in place more precisely and fly indoors or in other environments where there is no GPS signal available. The main components of DJI Hover assistant are located on the bottom of your Inspire 1, including (1) two sonar sensors and (2) one monocular camera.
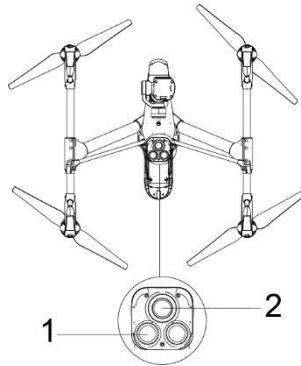
⊘	Keep your pets away from the aircraft when Optical Flow is activated as the sonar sensors emit high frequency sound that is only audiable to some pets.

Using Optical Flow

Hover Assistant is activated automatically when the Inspire 1 is powered on. No manual other action is required. Hover Assistant is typically used in the indoor environment where GPS is not available. By using the sensors on the Optical Flow system, Inspire 1 can performs precision hovering even when no GPS is available. Follow the steps below to use Optical Flow.

Place the Inspire 1 on a flat floor. Notice that the Optical Flow system cannot work properly on the floor surface that do not have pattern variations.

Power on the Inspire 1 and wait until the self-initialization is completed. The rear LED will display a quickly flashing purple light, which indicates the Optical Flow system is ready. Gently push the throttle up to liftoff, and the Inspire 1 will hover in place.

When Optical Flow system is in operation, you may check its status in DJI Inspire 1 App. A highlighted icon indicates that Optical Flow system is active, while a gray icon indicates that Optical Flow system is not activated.

⚠️	• Keep the sensors clean at all times. Dirt or other debris may adversely affect the effectiveness of the sensors.
	• The effective hovering altitudes of the aircraft is from 0 to 2.5 meters.
	• Optical Flow system may not function properly when the aircraft is flying over water.
	• Optical Flow system may not be able to recognize pattern on the ground in low light conditions (less than 100lux).
⊘	Keep your pets away from the aircraft when Optical Flow system is activated. The sonar sensor emits high frequency sound that is only audible to some pets.

2.10 Upgrading Firmware of Aircraft

Upgrade the firmware of the aircraft thought the camera´s SD card.

2.11 Attaching and Detaching the Propellers

Use only DJI-made propellers with your Inspire 1. The gray or black nut on the propeller indicates the rotation direction

of the propeller and where it should be attached. To attach the propeller properly, match the nut with the dots on the

motors of your Inspire 1:

Propellers

Propellers	Grey cap (1345)	Black cap (1345R)
Figure		
Attach On	Motors without a black dot	Motors with a black dot
Legends	Lock：Turn the propellers in the indicated direction to mount and tighten Unlock：Turn the propellers in the indicated direction to loosen and remove	

Attaching the Propellers

1. Read the instruction cards located on each of the four motors and remove them from the motor.
2. Attach the propellers with a gray nut onto a motor without a black dot and spin the propellers clockwise to secure them in place.
   Attach the propellers with a black nut onto a motor with a black dot and spin the propellers counter clockwise to secure its position.
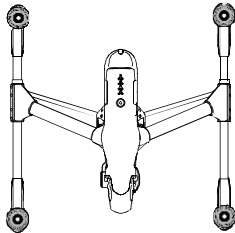
Figure 18   Figure 19
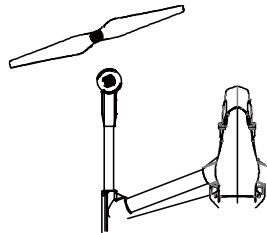
⊘	Propelller is designed as slef tighen. DO NOT use thread locker to secure its position.
⚠️	(1) Ensure propellers are attached to its corresponding motors, otherwise the aircraft cannot take off. (2) Wear glove when handling propellers.

Detaching the Propellers

Use included wrench to hold the motor still. Then spin the propeller in the unlock direction indicated on the propeller

itself.

⚠️ (1) Check that propellers and motors are installed correctly and firmly before every flight.

(2) Ensure that all propellers are in good condition before each flight. DO NOT use any ageing, chipped, or broken propellers.

(3) To avoid injury, STAND CLEAR of and DO NOT touch propellers or motors when they are spinning.

(4) ONLY use original DJI propellers for a better and safer flight experience.

2.10 DJI Smart Battery

The DJI Smart Battery has a capacity of 4500mAh, voltage of 22.2V, and smart charge-discharge functionality. It can only be charged with an appropriate DJI-approved charger.
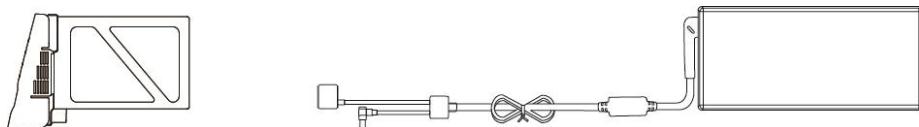
DJI Smart Battery Functions	
(1) Battery Level Display	LEDs display the current battery level.
(2) Battery Life Display	LEDs display the current battery power cycle.
(3) Auto-discharging function.	Battery discharges automatically to below 65% when it is idle for more than 10 days to prevent the battery from swelling. It takes around 2 days to discharge the battery to 65%, It is normal that you may feel moderate heat emits from the battery during the discharge process. Set the discharging thresholds in the DJI Pilot App.
(4) Balanced Charging	Automatically balances the voltage of each battery cell when charging.
(5) Over charge Protection	Charging automatically stops when the battery is fully charged.
(6) Temperature Detection	The battery will only charge when the temperature is between 0℃ (32°F) and 40℃ (104°F).
(7) Over Current Protection	Battery stops charging when high amperage (more than 10A) is detected.
(8) Over Discharge Protection	Discharging automatically stops when the battery voltage reaches 18V to prevent over-discharge damage
(9) Short Circuit Protection	Automatically cuts the power supply when a short circuit is detected.
(10) Battery Cell Damages Protection	DJI Pilot App shows warning message when damaged battery cell is detected.
(11) Battery Error History	Browse the battery error history from the DJI Pilot App.
(12) Sleep Mode	Sleep mode is entered after 10 minutes of inactivity to save power.
(13) Communication	Battery voltage, capacity, current, and other relevant information is

	provided to the aircraft´s to the main controller.

> ⚠️ Refer to disclaimer and battery warnings before use. Users take full responsibility for all operations and usage.
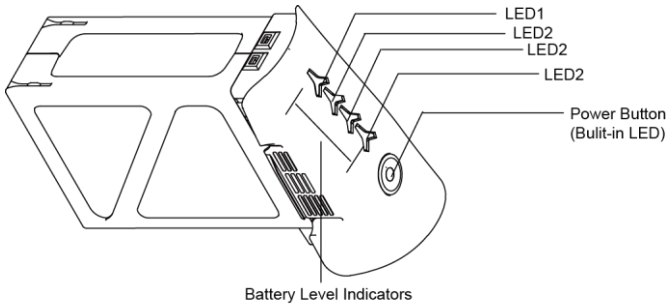
Using Battery

Figure 6

Powering On/Off

Powering on: Press the Power Button once, then press again and hold for 2 seconds to power on. The Power LED will turn red and the Battery Level Indicators will display the current battery level.

Checking the Battery Level

The Battery Level Indicators display how much remaining power the battery has. When the battery is powered off, press the Power Button once. The Battery Level Indicators will light up to display the current battery level. See below for details.

> 🔍 The Battery Level Indicators will also show the current battery level during charging and discharging. The indicators are defined below.
>
> ◁ : LED is on.   ● : LED is flashing.
>
> ◁ : LED is off.

Battery Level				
LED1	**LED2**	**LED3**	**LED4**	**Battery Level**
◁	◁	◁	◁	87.5%~100%
◁	◁	◁	●	75%~87.5%
◁	◁	◁	◁	62.5%~75%
◁	◁	●	◁	50%~62.5%

🟢<	🟢<	<	<	37.5%~50%
🟢<	🟢	<	<	25%~37.5%
🟢<	<	<	<	12.5%~25%
🟢	<	<	<	0%~12.5%
<	<	<	<	<0%

Battery Life

The battery life indicates how many more times the battery can be discharged and recharged before it must be replaced. When the battery is powered off, press and hold the Circular Power Button for 5 seconds to check the battery life. The Battery Level Indicators will light up and/or blink as described below for 2 seconds:

Battery Life				
LED1	LED2	LED3	LED4	Battery Life
🟢<	🟢<	🟢<	🟢<	90%~100%
🟢<	🟢<	🟢<	🟢	80%~90%
🟢<	🟢<	🟢<	<	70%~80%
🟢<	🟢<	🟢	<	60%~70%
🟢<	🟢<	<	<	50%~60%
🟢<	🟢	<	<	40%~50%
🟢<	<	<	<	30%~40%
🟢	<	<	<	20%~30%
<	<	<	<	20%

> ⚠️ When battery life reaches 0%, it can no longer be used.

> 🔍 For more information about the battery, launch DJI Inspire 1 App and check the information under the battery tab.

Charging the Smart Battery

1. Connect Battery Charger to a power source (100-240V 50/60Hz).
2. Open the Protection Cap and connect the Smart Battery to the Battery Charger. If the battery level is above 75%, turn on the battery before charging.
3. The Battery Level Indicator will display the current battery level during charging.
4. The Smart Battery is fully charged when Battery Level Indicators are all off.
5. Air cool the Smart Battery after each flight. Allow the Smart Battery´s temperature to drops to the room temperature before storing it for an extended period.
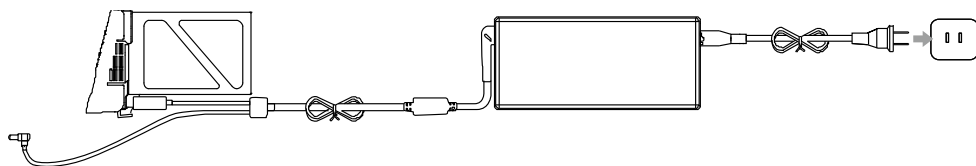
Figure 7

⚠️ Do not charge the Smart Battery and remote controller at the same time, otherwise the charger may overheat.

Battery Level Indicators while Charging				
LED1	**LED2**	**LED3**	**LED4**	**Battery Level**
🟢	‹	‹	‹	0%~25%
🟢	🟢	‹	‹	25%~50%
🟢	🟢	🟢	‹	50%~75%
🟢	🟢	🟢	🟢	75%~100%
‹	‹	‹	‹	Fully Charged

💡 The Smart Battery can only be charged with a DJI-approved charger. Contact your authorized dealer or DJI customer service for details.

⚠️
(1) DJI does not take any responsibility for damage caused by third-party chargers.
(2) If the current battery level is over 95%, the battery should be turned on before charging.

Charing Protection LED Display

The table below shows the battery protections and its corresponding battery LED displaying pattern.

Battery Level Indicators while Charging					
LED1	**LED2**	**LED3**	**LED4**	**Blinking Pattern**	**Battery Protection Item**
‹	🟢	‹	‹	LED2 blinks twice per second	Over current detected
‹	🟢	‹	‹	LED2 blinks third times per second	Short circuit detected
‹	‹	🟢	‹	LED3 blinks twice per second	Over charging detected
‹	‹	🟢	‹	LED3 blinks third times per second	Over-voltage charger.
‹	‹	‹	🟢	LED4 blinks twice per second	Room temperature is too long for charging

				LED4 blinks third times per second	Room temperature too low for charging
◄	◄	◄	🟢	LED4 blinks third times per second	Room temperature too low for charging

After any of the above mentioned protection issue is resolved, press Button to stop Battery Level Indicator from blinking. Unplug the Smart Battery from the charger and plug it back it to resume charging. Note that you do not need to unplug and plug the charger in the event of temperature protection occur, the charger will resume charging when the temperature falls within the normal range.

Battery Installation

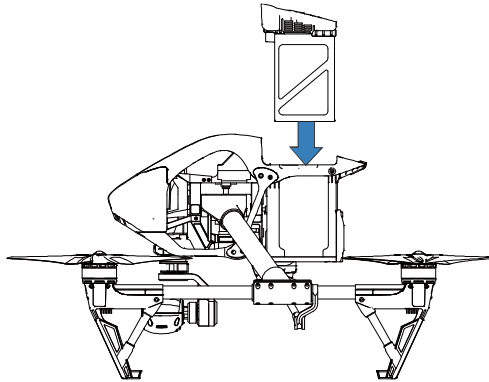Plug Smart Battery into the Battery Compartment as shown in the figure shown below:

Figure 8

⚠ Failure to securely install the Smart Battery into the Battery Compartment may cause serious malfunction or failure. Always ensure the Smart Battery is securely installed.

How to discharge your Smart Battery:

● **Slow**

Place the Smart Battery into the Inspire 1′s Battery Compartment and power it on. Leave it on until there is less than 8% of power left, or until the battery can no longer be turned on. Launch the DJI Inspire 1 app to check battery levels.

● **Rapid**

Fly the Inspire 1 outdoors until there is less than 8% of power left, or until the battery can no longer be turned on.

3 Remote Control

3.1 Remote Controller Profile

The Inspire 1 remote control is a multi-function wireless communication device that integrates the video downlink ground system and aircraft remote control system. The video downlink and aircraft remote control system operate at 2.4 GHz The remote control features a number of camera functions, such as taking and previewing photos and video and controlling gimbal motions. The remote control is powered by 2S rechargeable battery. The current battery level is displayed by LEDs on the front panel of the remote control.

Compliance Version: The remote control is compliant with both CE and FCC regulations.

Operating Mode: Control can be set to Mode 1 , Mode 2, or Mode 3

Mode 1 : The right stick serves as the throttle.

Mode 2 : The left stick serves as the throttle.

Mode 3 : The right stick serves as the throttle and roll control.

Power on the remote control before powering on the aircraft. Then power off the landed aircraft before powering off the remote control.

3.2 Remote Controller Operations

**Powering on and off the Remote Controller**

The Inspire 1 remote controller is powered by a 2S rechargeable battery with a capacity of 6000mHA. The battery level is indicated by the Battery Level LEDs on the front panel. Follow the steps below to power on your remote controller:

1. When powered off, press the Power Button once and the Battery Level LEDs will display the current battery level.
2. Then, press and hold the Power Button to power on the remote controller.
3. The remote control will beep when it powers on. The Status LED will blink green rapidly, indicating that the remote controller and receiver are linking. The Status LED will show a solid green light when linking is completed.
4. Repeat step 2 to power off the remote controller after finish using it.
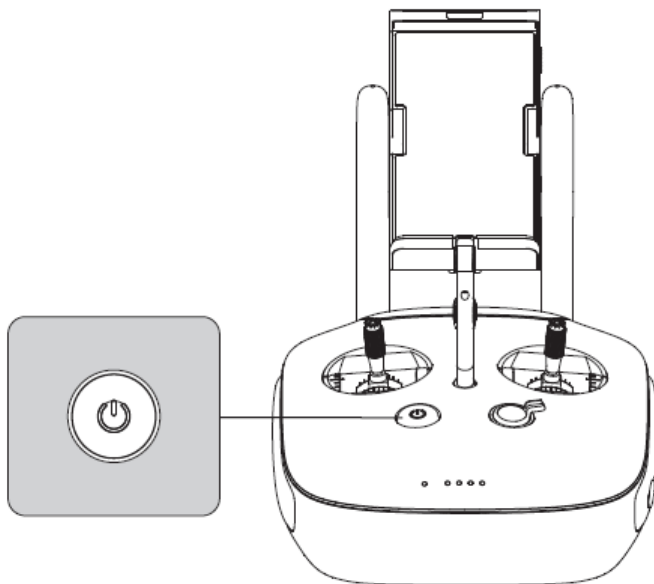
Controlling Camera

Shoot videos or images and adjust camera settings via the Shutter Button, Camera Settings Dial, Playback Button and Video Recording Button the remote control.
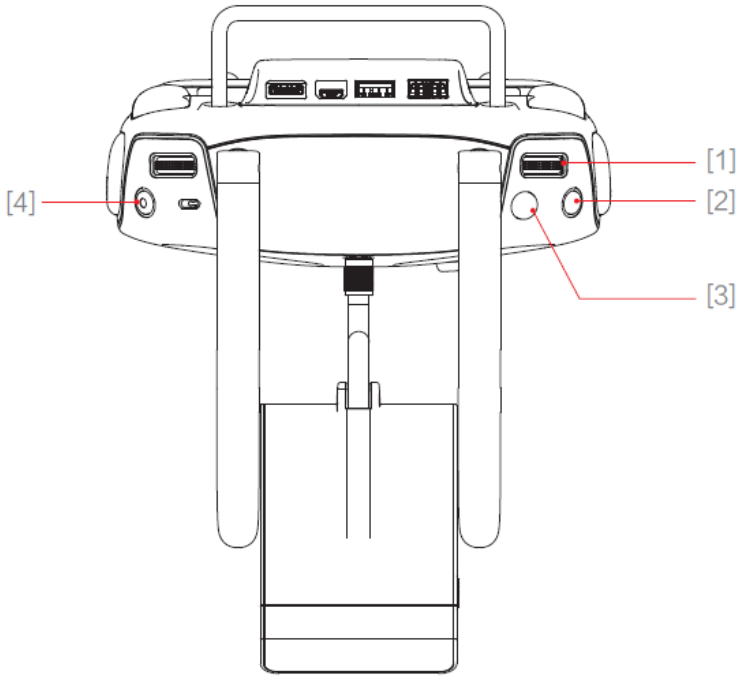
[1] Camera Settings Dial

Turn the dial to quickly adjust camera settings such as ISO, shutter speed, and aperture without letting go of the remote control. Move the dial button to left or right to select your preferred settings.

[2] Playback Button

Press to view the images or videos that have already been captured

[3] Shutter Button

Press to take a photo. If burst mode is activated, multiple photos will be taken with a single press.

[4] Recoding button

Press once to start recording video, then press again to stop recording.
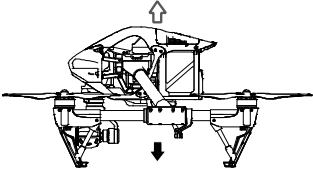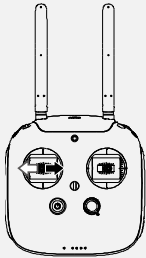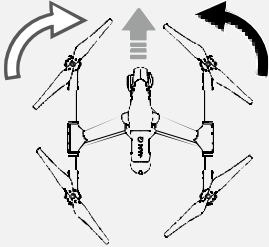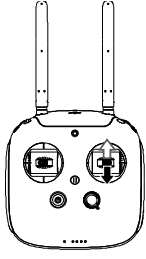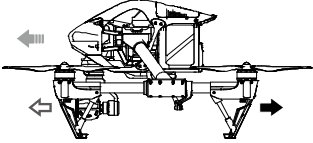
Controlling Aircraft
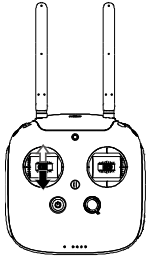
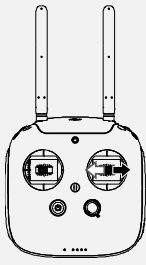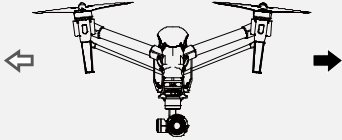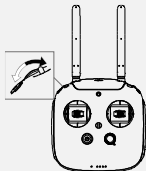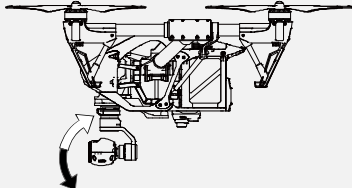This section explains how to use the various features of the remote controller.

The Remote Control is set to Mode 2 by default.

📖	Stick Neutral/ mid point: Control sticks of the Remote Control are placed at the central position.

	Move the Stick: The control stick is pushed away from the central position.

Remote Control (Mode 2)	Aircraft (indicates nose direction)	Remarks
		Moving the left stick up and down changes the aircraft´s elevation. Push the stick up to ascend and down to descend. Push the throttle stick up to takeoff. When both sticks are centered, the Inspire 1 will hover in place. The more the stick is pushed away from the center position, the faster the Inspire 1 will change elevation. Always push the stick gently to prevent sudden and unexpected elevation changes.
		Moving the left stick to the left or right controls the rudder and rotation of the aircraft. Push the sick left to rotate the aircraft counter clock-wise, and push the stick right to rotate the aircraft clockwise. If the stick is centered, the Inspire 1 will stay facing its current direction. The more the stick is pushed away from the center position, the faster the Inspire 1 will rotate.
		Moving the right stick up and down changes the aircraft's forward and backward pitch. Push the stick up to fly forward and down to fly backward. The Inspire 1 will hover in place if the stick is centered. Push the stick further away from the center position for a larger pitch angle (maximum 35°) and faster flight.

		Moving the right stick control left and right changes the aircraft's left and right pitch. Push left to fly left and right to fly right. The Inspire 1 will hover in place if the stick is centered. Push the stick further away from the center position for a larger pitch angle (maximum 35°) and faster flight.
		Gimbal Dial: Turn the dial to the right, and the camera will shift to point upwards. Turn the dial to the left, and the camera will shift to point downwards. The camera will remain in its current position when dial is static.

Aircraft Operation

Adjust aircraft flight modes, control the landing gear, and initiate Failsafe mode using the following features of the remote controller.

Flight Mode Switch

Toggle the switch to select the desired flight mode. You may choose between; GPS mode, OPTI mode and ATTI mode.

Position	Flight Mode
 位置1	**F mode**
 位置2	**ATTI mode**
 位置3	**GPS mode**

For the details information regarding the difference between each flight mode, refer to "**2.2 Flight Mode**" on page 19.

Transformation Switch / RTH Button

The Transformation Switch / RTH Button combination serves two functions. Toggle the switch up or down to retract or lower the landing gear. Or, press the button to activate the Return to Home (RTH) procedure.
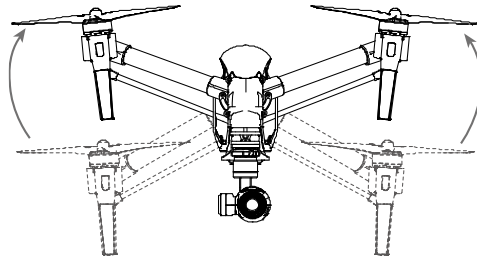
Transformation Switch

This switch has two positions. The effect of toggling the switch to any of these four positions is defined below:

1) Raise, 2) Lower.
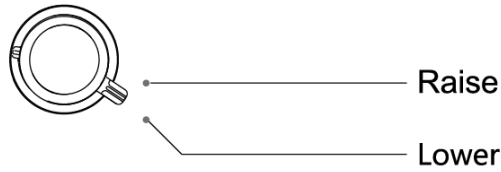
Raise

Lower

1)   Raise: Raise the landing gear to its upper most position. Landing gear is raised automatically when user selects Auto Takeoff option in the DJI Pilot App.

2)   Lower: The landing gear will lower to its lowest position for landing. Landing gear automatically is lowered when user selects Auto Landing in the DJI Pilot App.
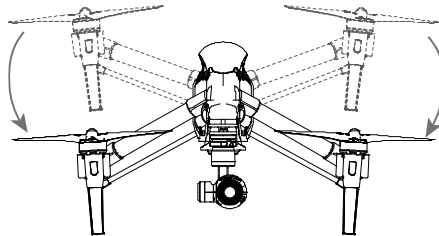
⚠️   Do not raise the landing gear when the aircraft is on the ground. Ensure the landing gear is lowered before landing.

RTH button

Press and hold this button to start the Return to Home (RTH) procedure. The LED around the RTH Button will blink white to indicate the aircraft is entering RTH mode. The aircraft will then return to the last recorded Home Point. Press this button again to cancel the RTH procedure and regain the control of the aircraft.

Connecting Mobile Device

Tilt the Mobile Device Holder to the desired position. Press the button on the side of the Mobile Device Holder to release the clamp, and then place your mobile device into the clamp. Adjust the clamp to secure your mobile device. Then connect your mobile device to the remote controller with a USB cable. Plug one end of the cable into your mobile device, and the other end into the USB port on the back of the remote controller.
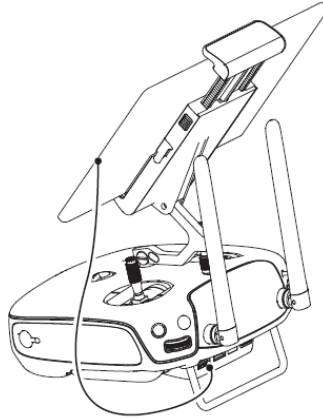
Remote Controller Antennas Orientation

Ensure the antenna´s position is perpendicular to the body of the remote controller for optimal transmission quality.

⚠️   Do not use other 2.4GHz devices at the same time, to avoid signal interference.
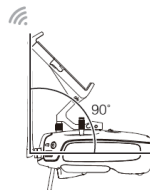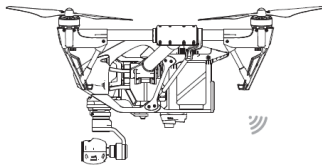
Multi Remote Controllers Connection

More than one remote controller can connect to the same aircraft in Master-and-Slave mode. Under Master-and-Slave mode, the "Host" remote controller operator can control the orientation of the aircraft, while the "Slave" remote controller can control the pitch and pan movement of the gimbal and also control the camera operation.

Setting Up Master-and-Slave Mode

Master-and-Slave mode is disabled by default. User must enable this feature on the "Host" remote controller by launching the DJI Pilot App and go to the remote controller setting page to enable and set up the connection password for the "Host" remote controller. The "Slave" remote controller must use this connection password to establish the connection to the "Host" remote controller. Follow the steps below to set up:

For "Host" Remote Controller:

1. Connect to the mobile device and launch the DJI Pilot App.

2. Go to Camera page, tap   to enter remote controller settings window.

3. Tap "Activate Master/Slave Mode" to enable Master-and-Slave mode.

4. Enter the connection password for other "Slave" remote controllers.

For "Slave" Remote Controller:

1. Connect to the mobile device and launch the DJI Pilot App.

2. Go to Camera page, tap   to enter remote controller settings window.

3. Select "Slave" in the "Set RC State" section.
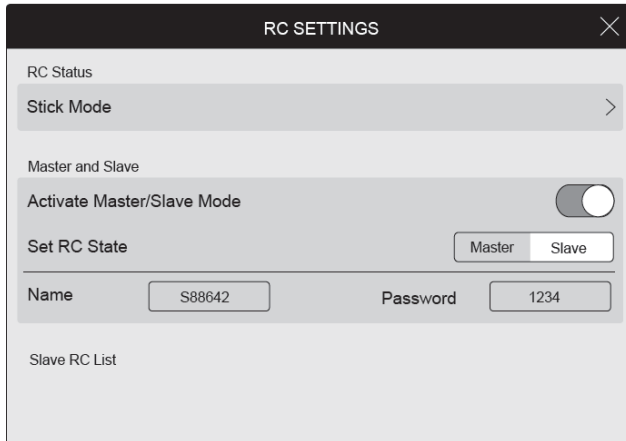
4. Tap "Searching" to search the available "Host" remote controller.
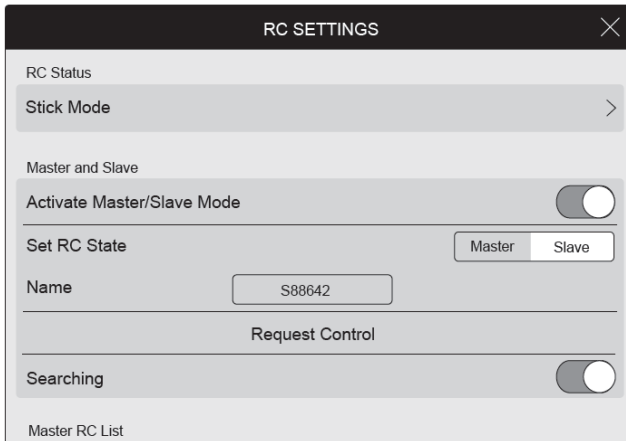
5. Select the "Host" remote controller that you wish to connect and then enter the connection password for the "Host" remote controller.

> ⚠️ The "Host" remote controller Status LED will blink solid green when it is connected to the aircraft. The "Slave" remote controller Status LED will blink solid yellow when it is connected to the aircraft.

Remote Controller Status LED

The Status LED reflects connection status between remote control and aircraft. The RTH LED shows the return to home status of the aircraft. The table below contains details on these indicators.

Status LED	Alarm	Remote Controller Status
▬▬▬ Solid Red	None	The remote controller is functioning normally but is not connected with the aircraft.
▬▬▬ Solid Green	None	The remote controller is functioning normally and is connected with the aircraft.
● ● ● ● Slow Blinking Red	B-B-B......	Remote controller error.
Solid Yellow		Set as the slave remote control
RTH LED	**Sound**	**Remote Controller Status**
Blinking White	B......	Sending Return to Home command to the aircraft.
	BB......	Aircraft Return to Home in progress.
Solid White	BBB--BB	Aircraft is returning home.

⚠️ The Remote Controller Power LEDs will blink red, sound an alert, and then automatically power off after 3 seconds when the battery level is critically low. If this occurs during flight, your Inspire 1 will enter Failsafe Mode and Return to Home, which cannot be interrupted.

Linking the Remote Controller

The remote controller is linked to your aircraft before delivery. Linking is only required when using a new remote controller for the first time. Follow these steps to link a new remote controller:

1. Ensure both the remote controller and aircraft are powered off.

2. Power on the aircraft. Locate the Linking Button on the front of the aircraft, as shown in the figure below. The adjacent LED will blink red when linking is required.
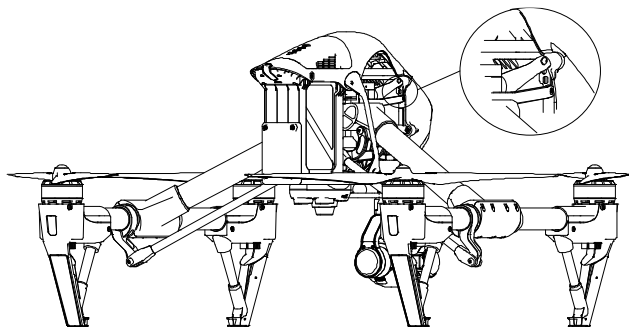
3.   Press and hold the Linking Button with a pin or other small object to start the linking process. The adjacent LED will blink red to indicate the aircraft is ready to link to a new remote controller.

4.   Power on the new remote controller. Place the remote controller next to the aircraft. The Status LED on the remote controller and the LED on the aircraft will both turn solid green to indicate that the link is established.

Remote Controller Compliance Version

The remote controller is compliance with both CE and FCC version.

Upgrading Remote Controller

Connect the remote controller to the computer via the Micro-USB port and launch the RC Assistant to upgrade the firmware of the remote controller.

4 Camera and Gimbal

4.1 Camera Profile

The on-board camera supports 4K video capture up to 4096x2160P24. You may export the video in either MOV or MP4 format for post editing. Available picture shooting modes include burst, continuous, and timer mode. A live preview of what the camera is seeing before you shoot videos and pictures is supported through the DJI Inspire 1 App. See the table below for the technical specification of the included camera:

Camera Specification	
CMOS size	1/2.33"
Image resolution	4000x3000 in 4:3 mode, 4000x2250 in 16:9 mode
Video Resolution	Max at 4096x2160 p24
FOV	94° FOV

4.1.2 Camera Micro-SD Card Slot

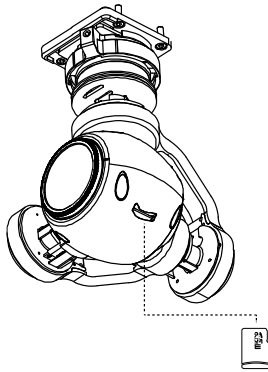To store your photos and videos, plug in the micro-SD card into the slot shown below before powering on Inspire 1.

Figure 16

The Inspire 1 comes with a 4GB micro-SD card and supports up to a 2TB micro-SD card. A UHS-1 type micro-SD card is recommended, because the fast read and write capability of these cards enables you to store high-resolution video data.

> 🚫 Do not remove micro-SD card from the Inspire 1 when it is powered on.

4.1.3 Camera Data Port

Power on the Inspire 1 and then connect a USB cable to the Camera Data Port to download photos or videos from the camera to your computer.
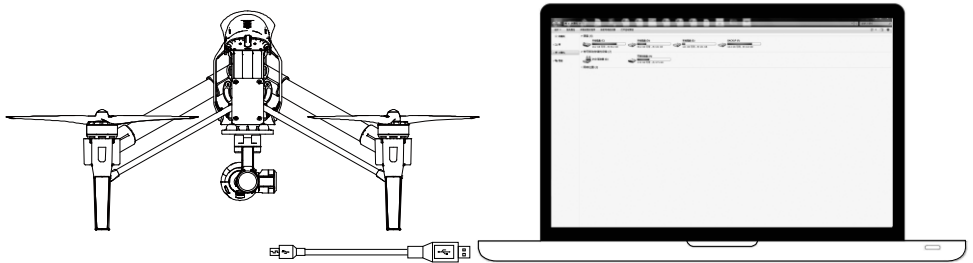
Figure 17

> ⚠️ Power on the aircraft before attempting to download the files.

4.2

4.2.1 3-Axis Gimbal

The 3-axis Gimbal provides a steady platform for the attached camera, allowing you to capture stabilized images and video from the air. The Gimbal can tilt the camera up to 90 degrees and rotate it up to 330 degrees. Both pitch and yaw movement can be controlled via the included remote controller (refer to the Remote Controller section for more

detail).
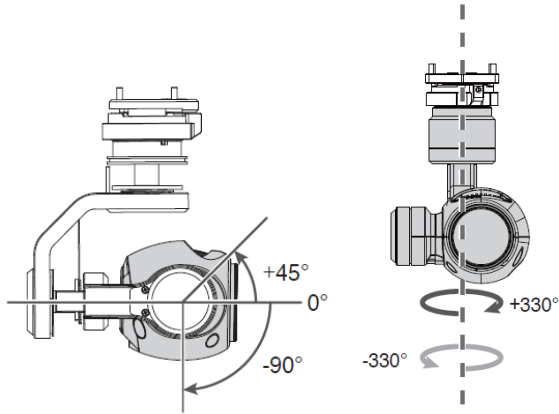
Figure 14   Figure 15

⚠️   * The pitch movement of the gimbal can be controlled by the remote controller by default. While the pan movement of the camera can only be controlled through the "Slave" remote controller under Master-and-Slave mode.

4.2.2 Gimbal Operation Modes

Four Gimbal operation modes are available. Switch between the different operation modes on the Camera page of the DJI Pilot App. Note that your mobile device must be connected to the remote controller for changes to take effect. Refer to the table below for details:

Follow Mode - : The angle between Gimbal's orientation and aircraft's nose remains constant at all times. One user alone can control the pitch motion of the Gimbal, but a second user is required to control the roll motion using a second remote controller.

FPV Mode - : The Gimbal will lock to the movements of the aircraft to provide a First-Person-View flying experience.

Free Mode- : The Gimbal's motion is independent of the aircraft's orientation. One user alone can control the pitch motion of the Gimbal, but a second user is required to control the roll motion using a second remote controller.

Re-alignment : Tap to force the Gimbal orientation to re-align with aircraft's orientation by panning from gimbal's current orientation. Pitch angle will remain unchanged during the re-alignment.

4.2.3 Gimbal Error Warnings

Before the aircraft takes off, if a gimbal motor error is detected or the gimbal clamp is not removed, there will be a warning prompt on the camera page of the DJI Pilot App. This will disappear after the problem is resolved.

⚠️	(1) Remove gimbal clamp before powering on flight battery.
	(2) Gimbal motor error may occur in these situations: (1) Gimbal is placed on uneven ground. (2) Gimbal has received an excessive external force, e.g. a collision. Please take off from flat, open ground and protect the gimbal after powering up.
	(3) Flying in heavy fog or cloud may make the gimbal wet, leading to a temporary failure. The gimbal will recover when it dries out.

4.2.4 Gimbal Installation

Remove the Gimbal Cover.
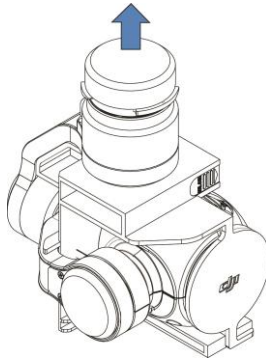
① Ensure the white mark on the gimbal is aligned with the white mark on the left of the Gimbal Lock. ② Insert the gimbal into the Gimbal Lock. ③ With the gimbal in place, turn the Gimbal Lock to the left (when you are facing the nose of the Inspire 1) until it locks into position
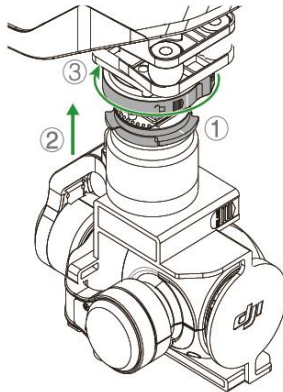
Figure 3

Remove the Gimbal Clamp from the camera after it is mounted.
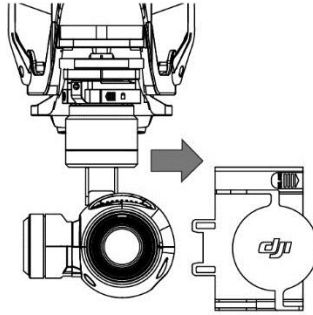
> Detach the gimbal from Inspire 1 when storing for a long period of time or transporting over long distances. Also replace the Gimbal Clamp and Gimbal cover.

5 DJI Inspire 1 App

The DJI Inspire 1 app is a new mobile app designed specifically for your Inspire 1. Use this app to control the gimbal, camera and other features of your flight system. The app also comes with Aircraft Assistant and a User Center, for configuring your aircraft and sharing your content with friends.

DJI Inspire 1 App GUI

The GUI of Inspire 1 app GUI consists of four pages and a checklist button. In addition, local weather information is also displayed on the main GUI.
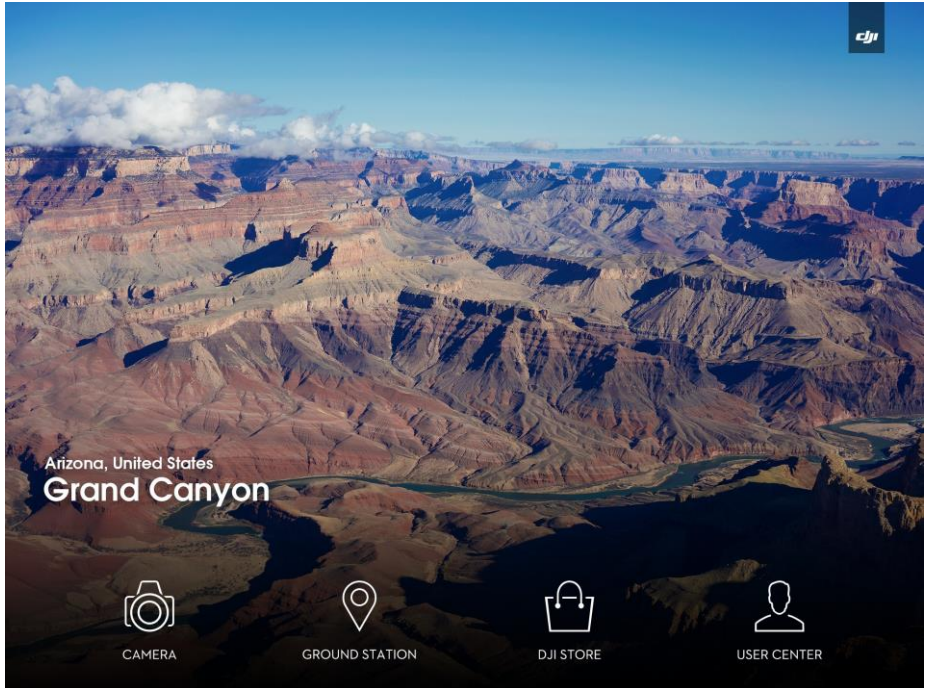
Camera

Camera enables user to preview live HD video feed from the Inspire 1. In addition, it also allows instant playback of the image from the camera. User can also configure various camera parameters from the camera page.
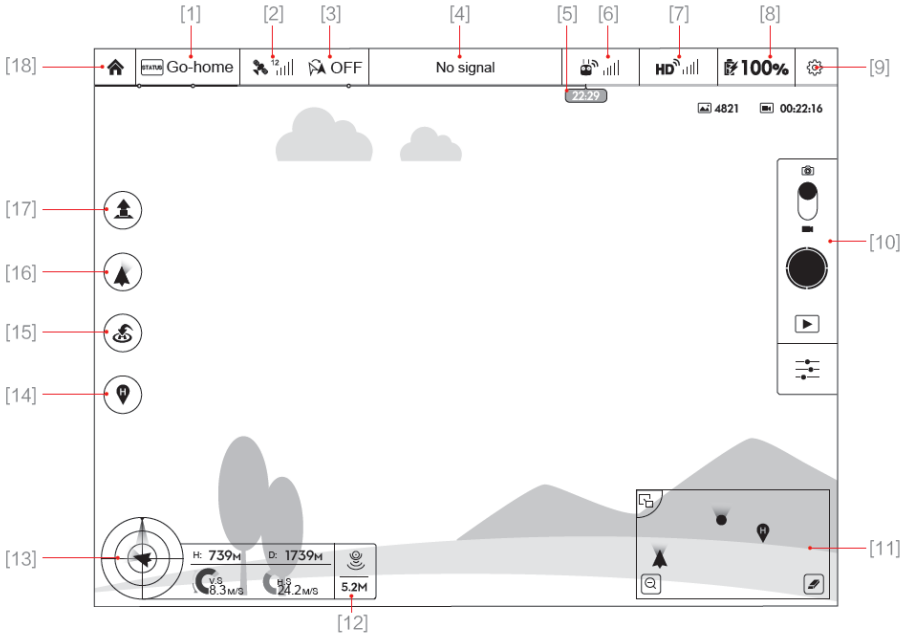
1. Flight Mode

STATUS : : This icon shows the current flight mode.

Tap to enter MC (master controller) settings. Modify flight limitation value, perform compass calibration and set the gain values in this section.

2. GPS Signal Strength

: This icon shows the current strength of GPS signals. Green bars indicates there are adequate GPS strength to support safe flight.

3. IOC Settings

OFF : This icon shows which IOC setting that the aircraft has entered.

Tap to enter IOC setting menu and select Course Lock, Home Lock or Point of Interest Lock.

4. System Status

Safe fly(non-GPS) : : This icon shows the current aircraft system status, such as GPS signal health.

5. Battery Level Indicator

22:09 : The battery level indicator dynamically displays the battery level. The

color zones on the battery level indicator represents different battery status.

6. Remote Control Signal

📡100%: This icon shows the strength of remote control signal.

Tap this icon to enter RC setting page as shown below:
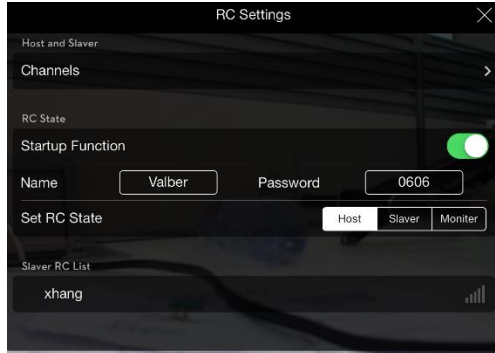
User may chose throttle controlling mode from "Channels" section in this page. User may also set up Host and Slave mode in this page. Follow the steps to set up host and slave mode:

For Host RC:

a) **Set up Host Password:** Tap and input the password for Slave RC in the input box shown below:

Slave RC operator must use this password to apply for the access to the aircraft.

For Slave RC:

a) **Select Mode:** Select "Slave" in the "Set RC State" section to confirm the RC is working in "Slave" mode.
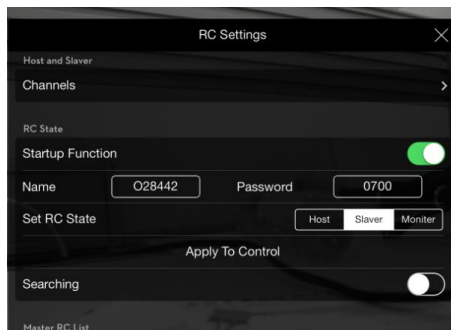
b) **Search Host:** Tap "Searching" button in the "Apply To Control section" to search the available Host RC around the slave RC.
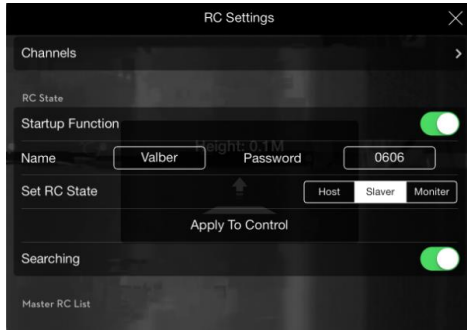
c) **Enter Host Password:** Enter the Host password to establish connection to the Host RC.

d) **Done:** When connection is made to the Host. The slave RC will be able to control the gimbal on the aircraft that linked to the Host RC.

7. **HD Video Link Signal Strength**

    HD 100%: This icon shows the HD video downlink signal between the aircraft and the remote control.

8. **Battery Level**

    100%: **This icon shows the current smart flight battery level.**

9. **General Settings**

    : Tap this icon to enter general setting page. User can select parameter unit, reset camera, enable quick view feature, trimming gimbal rolling value and enabling flight routes display in this page.

10. **Camera Operation Bar**

    Shutter

    : Tap this button to take a single shoot. Long press this button to enter camera settings.

    Record

    : Tap once to start recording, tap again to stop recording. Notice the microphone icon adjacent to the recoding button shows that DJI Inspire 1 app is also recording sounds from the

microphone of the mobile device. Notice that you can press the recording button on the remote control to achieve the same result.

Playback

▶: Tap to enter playback page. User can playback the photos or videos.

Camera Settings

: Tap to enter camera settings page.

11. **Map**

: The window shows the current flight route that started from the home point. The ⊛ represents the home point and ⏚ denotes the location of the photos or the videos are taken.

12. **Optical Flow**

: This icon shows whether the Optical Flow is in operation.

13. **Flight Parameters**
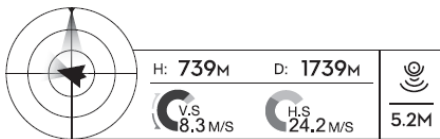
14. **Home Point Settings**

: Tap this button to reset the current home point. You may set the aircraft take off location as the home point or set the remote controller´s coordinate as current location.

15. **Return Home (RTH)**

 : Initiate RTH home procedure. Aircraft returns to the latest home point.

16.   **Gimbal Working Mode.**

Follow Mode - : The angle between Gimbal´s orientation and aircraft´s nose remains constant at all times. One user alone can control the pitch motion of the Gimbal, but a second user is required to control the roll motion using a second remote controller.

FPV Mode - : The Gimbal will lock to the movements of the aircraft to provide a First-Person-View flying experience.

Free Mode- : The Gimbal´s motion is independent of the aircraft´s orientation. One user alone can control the pitch motion of the Gimbal, but a second user is required to control the roll motion using a second remote controller.

Re-alignment : Tap to force the Gimbal orientation to re-align with aircraft´s orientation by panning from gimbal´s current orientation. Pitch angle will remain unchanged during the re-alignment.

17.   **Auto Takeoff/Landing**

 : Tap to initiate auto takeoff or landing.

18.   **Back to Home.**

Tap to return to the main GUI.

6 Flight

Once pre-flight preparation is complete, it is recommended to carry out the tasks in the Pilot Training Guide to prepare for more complex flight maneuvers and learn to fly safely. Ensure that all flights are carried out in a suitable location.

6.1 Flight Environment Requirements

(1) Do not use the aircraft in severe weather conditions. These include wind speed exceeding category 4, snow, rain and smog.

(2) Fly in open fields as high buildings or steel structures may affect the accuracy of the onboard compass.

(3) Keep the Phantom away from obstacles, crowds, high voltage power lines, trees or bodies of water when in flight.

(4) Reduce the chance of electromagnetic interference by not flying in areas with high levels of electromagnetism, including base stations or radio transmission towers.

(5) The Phantom cannot operate within the polar areas.

(6) Do not fly the aircraft within no-fly zones specified by local laws and regulations.

6.2 Preflight Checklist

(1) Remote Control, smart battery, Range Extender and smartphone are fully charged.

(2) Propellers are mounted correctly.

(3) Gimbal clamp has been removed.

(4)   Camera lens cap has been removed.

(5)   Micro-SD card has been inserted if necessary.

(6)   Gimbal is functioning as normal.

(7)   Motors can start and are functioning as normal.

(8)   DJI Pilot App can connect to the camera.

6.3 Calibrating the Compass

IMPORTANT: Make sure to calibrate the compass in every new flight location. The compass is very sensitive to electromagnetic interference, which can cause abnormal compass data leading to poor flight performance or even flight failure. Regular calibration is required for optimum performance.

🚫	(1) DO NOT calibrate your compass where there is a chance of strong magnetic interference, such as magnetite, parking structures, and steel reinforcements underground. (2) DO NOT carry ferromagnetic materials with you during calibration such as keys or cellular phones.

	(3) DO NOT calibrate beside massive metal objects.

6.3.1 Calibration Procedures

Choose an open space to carry out the following procedures. NOTE: Ensure the compass is calibrated. If you did not calibrate the compass in the Checklist, or if you have changed your position since last calibrating it, tap STATUS in the app and select "Compass Calibration" to calibrate the compass. Then follow the on-screen instructions.

1. Hold and rotate the aircraft horizontally for 360 degree, the Aircraft Status Indicator shows solid green.
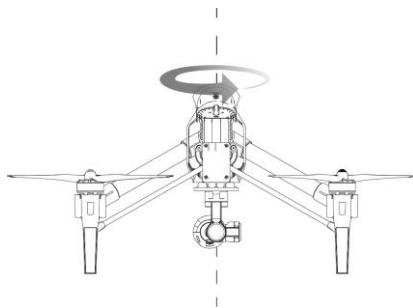
2. Hold the aircraft vertically with nose pointing downward, rotate 360 degree around the center axis until the Aircraft Status Indicator shows solid purple.
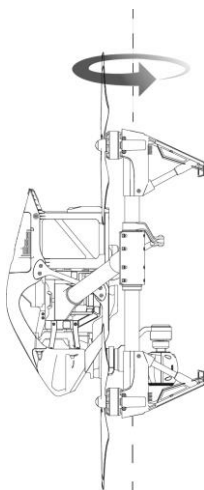
6.3.2 When to Recalibrate

(1) When compass data is abnormal, the Aircraft Status Indicator will blink red and yellow.

(2) Flying in different location to last flight.

(3) Mechanical structure of the Phantom has changed, i.e. changed mounting position of the compass.

(4) Severe drifting occurs in flight, i.e. Phantom does not fly in straight lines.

Starting/Stopping the Motors

Starting Motors

A Combination Stick Command (CSC) is used to start the motors instead of simply pushing the stick up. Push both sticks to their bottom corners to start the motors. Once the motors have spun up, release both sticks simultaneously.

Stopping Motors

There are two methods to stop the motors.

Method 1: When the Phantom has landed, push the throttle down, then conduct CSC. Motors will stop immediately. Release both sticks once motors stop.

Method 2: When the aircraft has landed, push the throttle down and hold. Motors will stop after 3 seconds.

🚫	Do not execute CSC during normal flight. This will stop the motors and cause the aircraft to drop without control.
🔍	Conduct the CSC as neatly as you can. Release the sticks once motors start/stop. Pull down the throttle stick to descend. The stick will lock into place and the aircraft will descend steadily. Push the throttle stick upward to release throttle lock.

6.4 Flight Test

Take off/Landing Procedures

(1) Place the aircraft on open flat ground with battery indicators facing towards you.

(2) Power on the remote controller and mobile device, then the Smart Flight Battery.

(3) Launch the DJI Pilot App and start link it with your mobile device then enter the Camera page.

(4) Wait until the Aircraft Indicator blinks purple. This means the Home Point is recorded and it is safe to fly now. If it flashes yellow, it means no Home Point is recorded, user should not take off the aircraft.

(5) Push the throttle up slowly to take off.

(6) Shoot photos and videos using the DJI Pilot App.

(7) To land, hover over a level surface and gently pull down on the throttle gently to descend.

(8) After landing, execute the CSC command or hold the throttle at its lowest position for 3 seconds or more until the motors stop.

(9) Turn off the Smart Battery follow by the Remote Controller.

⚠	When the Aircraft Status Indicator blinks yellow rapidly during flight, the aircraft has entered Failsafe mode.
	A low battery level warning is indicated by the Aircraft Status Indicator blinking red slowly or rapidly during flight.
	View tutorials about flight for more flight information.

Video Suggestions and Tips

(1) Work through the check list before each flight.

(2) Select desired gimbal working mode in the DJI Pilot App.

(3) Aim to shoot when flying in GPS mode only

(4) Always fly in good weather, such as sunny or windless days.

(5) Change camera settings to suit you. These include FOV, photo format and exposure compensation.

(6) Take flight tests to establish flight routes and scenes.

(7) Push the sticks gently to make aircraft movements stable and smooth.

7 Troubleshooting (FAQ)

Appendix

Specifications

Aircraft	
Weight（battery included）	2935g
Hovering Accuracy（GPS mode）	vertical 0.5m , horizontal 2.5m
Max Angular Velocity	pitch: 300°/s ; yaw 160°/s
Max Tilt Angle	30°/s
Max Ascent　Speed	5m/s,
Max Descent Speed	4m/s,
Max Speed	22m/s
Diagonal Distance	559mm(landing gear lowered); 581mm(landing gear raised)
Gimbal	
Operating Current	Station：750mA
	Motion：900mA
Control Accuracy	±0.03°
Controllable Range	Pitch： -90° to +45°,

	Pan： ±330°
Max Controllable Speed	Pitch： 120°/s
	Pan： 180°/s

Battery

Model （Standard)	TB47
Voltage	22.2V
Energy	99.9Wh
Net Weight	570g

Charger (Standard)	
Output Power	100W
Charging Time	85min for 4500mAh

Camera

Operating Temperature	0℃ to 40℃
Resolution	1240M
FOV （Field of View）	94°
CMOS	1/2.3"
Lens	F/2.8（21mm equivalent）
	Anti-distortion filter
Shooting Mode	Single shoot
	Burst shoot（BURST：3/5/7 frames per second，AEB：3/5 frames per second，0.7EV Bias）
	Time lapsed
HD Recording Mode	UHD：4096x2160p24/25，3840x2160p24/25/30
	FHD：1920x1080p24/25/30/48/50/60
	HD：1280x720p24/25/30/48/50/60
Supported File Format	FAT32/exFAT
	Photo format：JPEG，DNG
	Video format：MP4/MOV（MPEG-4 AVC/H.264）
Support SD Card Types	SD/SDHC/SDXC Micro SD

Remote Controller

Operating Frequency	5.728 GHz~5.08 GHz (Remote Controller to Remote Controller)
	2.420GHz~2.483GHz (Remote Controller to Aircraft)
Transmitting Distance（outdoor and unobstructed）	2km or above
Receiver（1%PER）	-93dBm
EIRP	10dBm@900M，8dBm @5.8G，20dBm@2.4G

Working Current / Voltage	1.2A@7.4V
Battery capacity	6000mAH
Optical Flow	
Sensor Frequency	50HZ
Velocity Range	<8m/s (2m above ground)
Altitude Range	5cm-500cm
Operating Environment	Rich pattern surface with adequate lighting (Lux > 15)
Operating Range	0-2.5m

FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's

authority to operate the equipment.

Compliance Information

FCC Warning Message

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

This 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. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: 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 interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, 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 harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged 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 circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

IC RSS warning
This device complies with Industry Canada licence-exempt RSS standard (s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference,including interference that may cause undesired operation of the device.
Le présent appareil est conforme aux 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 doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC Radiation Exposure Statement:

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

KCC Warning Message

"해당무선설비는 운용 중 전파혼신 가능성이 있으므로

인명안전과 관련된 서비스는 할 수 없습니다."

"해당 무선설비는 운용 중 전파혼신 가능성이 있음"

NCC Warning Message

低功率電波輻射性電機管理辦法
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。
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。

Administrative Regulations on Low Power Radio Waves Radiated Devices warning:

Article 12
Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter

original characteristic as well as performance to an approved low power radio-frequency devices.

Article 14

The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; If found, the user shall cease operating immediately until no interference is achieved.

The said legal communications means radio communications is operated in compliance with the Telecommunications Act.

The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.