

## Map

User can view the current flight route in a larger map view in this page. You can also perform Auto takeoff and Landing in the page. Ensure your mobile device has access to the Internet. Due to the map data required, Wi-Fi connection is recommended. Internet access is required to cache the map, if Wi-Fi is unavailable, mobile data service is required.

## Academy

Download user manual, view tutorial videos and practice your flight skills using the simulator in this page. You can also use FilmMaker to create and edit the video clips captured by the aircraft.

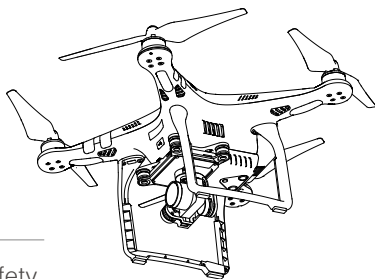
## User Center

You can sync the picture and videos to the mobile device, view the flight records and check your DJI account status in the User Center. Use the DJI registered account to login to the User Center.

# Flight

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This chapter describes the flight safety and flight restrictions.



# Flight

Once pre-flight preparation is complete, it is recommended to use the flight simulator in the DJI Pilot App to practice the flight skills and learn to fly safely. Ensure that all flights are carried out in a wide open area.

## Flight Environment Requirements

1. Do not use the aircraft in severe weather conditions. These include wind speed exceeding 10 m/s , snow, rain and smog.
2. Only fly in open areas. Tall and steel structures may affect the accuracy of the on-board compass and GPS signal.
3. Avoid approaching the obstacles, crowds, high voltage power lines, trees or bodies of water.
4. Minimize electromagnetic interference by not flying in the area with high levels of electromagnetism, including base stations or radio transmission towers.
5. Aircraft and battery performance is subject to environment factor such as air density and temperature. Be very careful when flying 19, 685 feet (6000 m) or more above sea level as battery and aircraft performance may be affected.
6. The Phantom 3 Professional cannot operate within the polar areas.

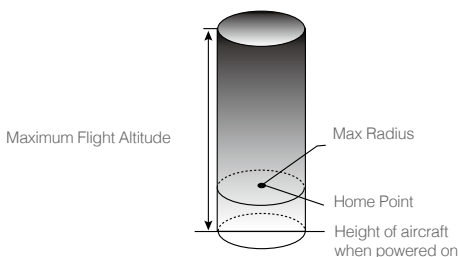
## Flight Limits and Flight Restriction Area



All unmanned aerial vehicle (UAV) operators should abide by all regulations from such organizations as the ICAO (International Civil Aviation Organization), FAA 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 limits, distance limits and No Fly Zones.


When operating in "P" Mode, height, distance limits and No Fly Zones work together to manage flight. In "A" mode only height limits work and flights cannot go higher than 1640 feet (500 m) .


### Maximum flight altitude & Radius Limits

Maximum flight altitude & Radius limit flying height and distance, and the user may change these settings in the DJI Pilot App. For Be aware that, the maximum flight altitude value cannot exceed 1640 feet (500 m). Once complete, your Phantom 3 Professional will fly in a restricted cylinder that is determined by these settings. The tables below show the details of these limits.



GPS Signal Strong  .....Blinking Green			
	Flight Limits	DJI Pilot App	Aircraft Status Indicator
Maximum Flight Altitude	Aircraft's altitude cannot exceed the specified value.	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 Signal Weak  .....Blinking Yellow			
	Flight Limits	DJI Pilot App	Aircraft Status Indicator
Maximum Flight Altitude	Flight height restricted to 1640 feet (500 m) and under.	Warning: Height limit reached.	None.
Max Radius	No limits		

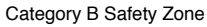
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- If you fly out of the limit, you can still control the Inspire, but cannot fly it further.
  - If the Inspire flies out of the max radius in Ready to Fly (non-GPS) mode, it will fly back within range automatically.

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 and no-drone zones, 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) A radius of R1 miles (km) around a designated safety zone is a no-fly zone, inside which takeoff is prevented. The value of R1 is determined by the size of the airport.
- (3) From R1 to R1 + 1 miles (R1 + 1.6 km) around restricted areas are altitude restricted, with maximum altitude going from 66 feet (20 m) at R1 miles to 1640 feet (500 m) at R1 + 1 miles (R1 + 1.6 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.



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- Diagram illustrating the layout of the Category B safety zone. The layout consists of a central dark gray area (No-fly zone) flanked by two hatched areas (Warning zone) and two light gray areas (Free zone). The central area is labeled "Category B safety zone" with a double-headed arrow indicating its extent. The width of the hatched areas is marked as 100m. The radius of the central circle is marked as R. The legend identifies the zones: No-fly zone (dark gray circle), Warning zone (hatched circle), and Free zone (light gray circle).

GPS Signal Strong  .....Blinking Green			
Zone	Restriction	DJI Pilot App Prompt	Aircraft Status Indicator
<div>No-fly Zone</div> 	Motors will not start.	Warning: You are in a No-fly zone. Take off prohibited.	<div> ..... Red flashing</div>
	If the aircraft enters the restricted area in A mode but P 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. (aircraft is entering the area within R1 radius)	
<div>Restricted-altitude flight zone</div> 	If the aircraft enters the restricted area in A mode but P mode activates, it will descend to a safe altitude and hover 15 feet (4.5 m) below the safe altitude.	Warning: You are in a restricted zone. Descending to safe altitude. (If you are between the range of R1 and R2 radius) Warning: You are in a restricted zone. Max flight height restricted to between 20 m and 500 m. Fly Cautiously.(If you are between the range of R1 and R2 radius)	
<div>Warning zone</div> 	No flight restriction applies, but there will be warning message.	Warning: You are approaching a restricted zone, Fly Cautiously.	
<div>Free zone</div> 	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.
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  - 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. Maintain line of sight of the aircraft.

## Preflight Checklist

1. Remote controller, Intelligent Flight Battery, and mobile device are fully charged.
2. Propellers are mounted correctly and firmly.
3. Micro-SD card has been inserted if necessary.
4. Gimbal is functioning as normal.
5. Motors can start and are functioning as normal.
6. DJI Pilot app connected to the aircraft.

## Calibrating the Compass

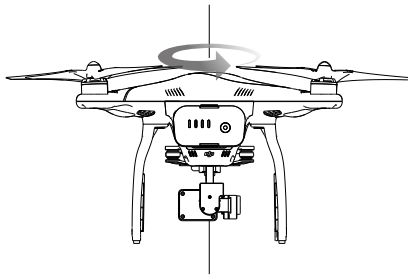
**IMPORTANT:** Make sure to calibrate the compass in every new flight location. The compass is very sensitive to electromagnetic interference, which can cause abnormal compass data leading to poor flight performance or even failure. Regular calibration is required for optimum performance.

- ⊗ • DO NOT calibrate your compass where there is a chance of strong magnetic interference, such as magnetite, parking structures, and steel reinforcements underground.
- DO NOT carry ferromagnetic materials with you during calibration such as keys or cellular phones.
- DO NOT calibrate beside massive metal objects.
- DO NOT calibrate indoors.

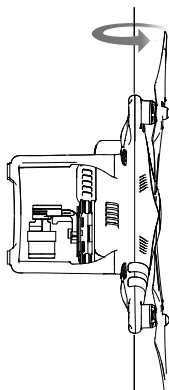
## Calibration Procedures

Choose an open area to carry out the following procedures.


1. 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 "MODE" in the app and select "Compass Calibration" to calibrate the compass. Then follow the on-screen instructions.
2. Hold and rotate the aircraft horizontally 360 degrees, and the Aircraft Status Indicator will display a solid green light.



3. Hold the aircraft vertically with nose pointing downward, and rotate it 360 degrees around the center axis. Recalibrate the compass if the Aircraft Status Indicator show solid red.




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 If the Aircraft Status Indicator blinks red and yellow after the calibration, move your aircraft to a different location to calibrate the compass.

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 Calibrate the compass before each flight. Launch DJI Pilot App, follow the on-screen instruction to calibrate the compass.

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### When to Recalibrate

1. When compass data is abnormal, and the Aircraft Status Indicator is blinking red and yellow.
2. When flying in a new location, or a location that is different from your last flight.
3. When the mechanical structure of the Phantom 3 Professional has changed.
4. When severe drifting occurs in flight, i.e. Phantom 3 Professional does not fly in straight line.

## Auto Take-off and Auto Landing

### Auto Take-off

Use auto take-off to take off your aircraft automatically if the Aircraft Status Indicator displays blinking green. Follow the steps below to use auto take-off:

1. Launch DJI Pilot app, enter "Camera" page.
2. Ensure the aircraft is in "P" mode.
3. Go through the pre-flight checklist.
4. Tap , and confirm flight conditions. Slide to confirm and take-off.
5. Aircraft takes off and hovers at 1.2 meters above ground.

### Auto-Landing



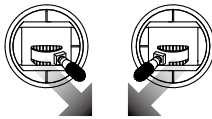
Use auto-landing to land your aircraft automatically if the Aircraft Status Indicator displays blinking green. Follow the steps below to use auto-landing:

1. Ensure the aircraft is in "P" mode.
2. Check the landing area condition before tapping "↓", to perform landing.

## 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.

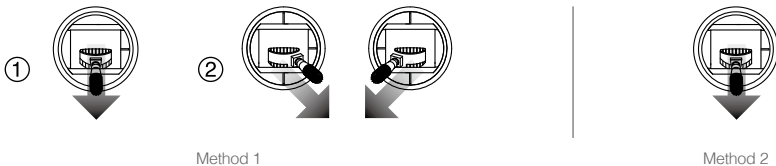


### Stopping Motors

There are two methods to stop the motors.

Method 1: When Phantom 3 Professional 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. The motors will stop after 3 seconds.



Method 1

Method 2

## 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 your mobile device, then the Intelligent Flight Battery.
3. Launch the DJI Pilot App and enter the Camera page.
4. Wait until the Aircraft Indicator blinks green. This means the Home Point is recorded and it is safe to fly now. If it flashes yellow, it means Home Point is not recorded, and you should not take off.
5. Push the throttle up slowly to take off or using Auto Take-off 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 slowly 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 Intelligent Flight Battery first, followed 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.
  - Watch video tutorials about flight for more flight information.
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### Video Suggestions and Tips

1. Go through the checklist before each flight.
2. Select desired gimbal operation mode in the DJI Pilot app.
3. Shoot the video when flying in P mode only.
4. Always fly in good weather, such as sunny or windless days.
5. Change camera settings that suit you. These include photo format and exposure compensation.
6. Perform flight tests to establish flight routes and scenes.
7. Push the sticks gently to make aircraft movements stable and smooth.

## FAQ

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# Troubleshooting (FAQ)

FAQ

# Appendix

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# Appendix






## Specifications

Aircraft	
Weight (Battery & Propellers Included)	1284 g
Max Ascent Speed	6 m/s
Max Descent Speed	2 m/s
Max Speed	16 m/s (ATTI mode, no wind)
Max Flight Altitude	6000 m
Max Flight Time	Approximately 24 minutes
Operating Temperature	0°C to 40°C
GPS Mode	GPS/GLOSNASS
Gimbal	
Controllable Range	Pitch - 90° to + 30°
Vision Positioning	
Velocity Range	Below 8 m/s (2 m above ground)
Altitude Range	5 cm-300 cm
Operating Environment	Brightly lit (lux > 15) patterned surfaces
Camera	
Sensor	Sony EXMOR 1/2.3" Effective pixels:12.4 M (total pixels: 12.76 M)
Lens	FOV 94° 20mm(35mm format equivalent ) f/2.8, focus at ∞
ISO Range	100-3200(video) 100-1600(photo)
Electronic Shutter Speed	8s -1/8000s
Image Max Size	4000 x 3000
Still Photography Modes	Single shoot
	Burst shooting: 3/5/7 frames
	Auto Exposure Bracketing (AEB): 3/5 bracketed frames at 0.7EV Bias
	Time-lapse
Supported SD Card Types	Micro SD
	Max capacity: 64 GB. Class 10 or UHS-1 rating required
Video Recording Modes	UHD : 4096x2160p24/25, 3840x2160p24/25/30
	FHD:1920x1080p24/25/30/48/50/60
	HD:1280x720p24/25/30/48/50/60
Max Bitrate Of Video Storage	60 Mbps
Supported File Formats	FAT32/exFAT
	Photo: JPEG, DNG
	Video: MP4/MOV (MPEG-4 AVC/H.264)
Operating Temperature Range	0°C to 40°C







Remote Controller	
Operating Frequency	2.400 GHz-2.483 GHz
Transmitting Distance	2000 m (Outdoor And Unobstructed)
Video Output Port	USB
Operating Temperature Range	0°C- 40°C
Battery	6000 mAh LiPo 2S
Mobile Device Holder	tablet and phone
Working Voltage	1.2 A @7.4 V
Charger	
Voltage	17.4 V
Rated Power	100 W
Intelligent Flight Battery ( PH3-4480 mAh-15.2 V )	
Capacity	4480 mAh
Voltage	15.2 V
Battery Type	LiPo 4S
Energy	68 Wh
Net Weight	370 g
Operating Temperature	-10°- 40°
Max Charging Power	100 W

## Aircraft Status Indicator Description

### Normal

 ..... Red, Green and Yellow Flash Alternately	Power on and self-check
 ..... Green and Yellow Flash Alternately	Aircraft warming up
 ..... Green Flashes Slowly	Safe to Fly (P mode with GPS and Vision Positioning)
 X2 ..... Green Flashes Twice	Safe to Fly (P mode with Vision Positioning but without GPS)
 ..... Yellow Flashes Slowly	Safe to Fly (A mode but No GPS and Vision Positioning)


### Warning

 ..... Fast Yellow Flashing	Remote Controller Signal Lost
 ..... Slow Red Flashing	Low Battery Warning
 ..... Fast Red Flashing	Critical Low Battery Warning
 ..... Red Flashing Alternately	IMU Error
 — Solid Red	Critical Error
 ..... Red and Yellow Flash Alternately	Compass Calibration Required

## Intelligent Orientation Control (IOC)





IOC allows users to 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, and user must toggle the flight mode switch to Position 1 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), and 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.

 \*Home Lock and Point of Interest feature are coming soon.

### Prerequisites of IOC

Use the IOC feature under the following condition:

Modes IOC	GPS enabled	GPS counts	Flight Distance Limits
Course Lock	No	None	None
Home Lock	Yes	 	Aircraft $\leftarrow \geq 10m \rightarrow$ Home Point
POI	Yes	 	Aircraft $\leftarrow 5m \sim 500m \rightarrow$ Point of Interest

### Using IOC

Toggle the Flight Mode Switch "F" mode and follow the instructions prompted on the DJI Pilot app to select the desired IOC features.



## FCC Compliance

### FCC Warning Message

Any Changes or modifications not expressly roved 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:

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. The W323B 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

The device complies with Industry Canada licence-exempt RSS standard (s). Operation is subject to the following two conditions: (1)The device may not cause interference, and (2)The device must accept any interference,including interference that may cause undesired operation of the device.

Le présent areil est conforme aux CNR d'Industrie Canada licables aux areils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'areil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'areil 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 W323B should be installed and operated with minimum distance 20cm between the radiator& your body.

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

### KCC Warning Message

“해당 무선설비는 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。

The content is subject to change.

**Download the latest version from**  
**<http://www.dji.com/product/phantom3>**



If you have any questions about this document, please contact DJI by sending a message to **DocSupport@dji.com**.