

# DJI Phantom 3 Pre-Flight Checklist

## Before Departing for Site Check

- Aircraft (AC) and Remote Controller (RC) batteries fully charged
- Tablet fully charged
- Portable Radio for communicating with manned AC fully charged
- Ensure SD card has free space and is inserted into the camera
- Ensure Firmware is updated on AC and RC(s)
- Cache location maps into all DJI Pilot app devices
- Check for frequency (FX) used by local manned AC ([Skyvector.com](http://Skyvector.com))
- Check if flight location is in No-Fly Zone (Check here: [airmap.io](http://airmap.io))
- Program local FX into portable radio
- Check for NOTAMs at desired flight location ([FAA.gov/notamSearch](http://FAA.gov/notamSearch))
- Check weather
  - Precipitation less than 5-10%
  - PWinds under 20kts
  - Cloud layer above 500' (152M)
  - 1 statute mile visibility
  - KP index is 5 or less (Check here: [UAVforecast.com](http://UAVforecast.com))
  - Check Sunrise, Sunset, Moonrise, Moonset
- Comprehensive maintenance after 200 flights or 50 flight hours. ([Maintenance Manual](#))

## Location On-Site Check

- Check flying area free of overhead obstructions
  - Wires, low flying AC, trees, tall buildings
  - Antennas that may interfere with compass and GPS reception
- Weather meets conditions

- Winds under 20 kts (23 MPH or 10 meters per second)
- Clouds above 500' (152M)
- Visibility for 1 statute mile
- KP index 5 or less
- Confirm flight plan with camera operator and/or spotter  
*Note: Still perform step if by oneself, it adds clarity to decision making.*

### **Physical Aircraft Check**

- Desired ND filter attached to camera
- Camera locked in place
- SD card in camera
- Motors clear of Foreign Object Debris (FOD)  
*Note: FOD may cause motor burnout and complete AC inversion on take-off*
- Check propellers for any melting, misshapen, or cracks
- Propellers hand tight
- Prop locks firmly attached or
- Quick Release plastic base has no cracks or fissures.

### **Remote Controller Check**

- QAntennas oriented Properly  
*Note: The broad side should face the AC and they should not touch each other.*
- Switch to P-GPS mode
- Landing gear switch oriented down
- Check battery level of RC for minimum 75%

## DJI Pilot App Check

- Maximum Flight altitude set  
*Note: 121 Meters = 400'*
- Failsafe Mode, Set for 10M Clearance above lowest obstacle in flight plan  
*Note: 1 Meter = 3.3'*
- RC Signal Lost set to Return-to-Home
- Set Adaptive Landing Gear  
*Note: Preferred setting is "on"*
- Check Sensors
  - Gyroscope between "-1.0 to +1.0"
  - Acceleration between "-1.0 to +1.0"
  - Compass MOD between "1400 - 1599"
  - Check IMU
- Image Transmission Channel set  
*Note: Watch channels for 30 seconds to ensure selected channel is indeed stable*
- Battery Cells all 4.28V or greater
  - At least 98% battery
  - Ensure no greater than .2V between battery cells
- Adjust Gimbal Role to make level
- Ensure enough Satellites are locked (recommend 16)
- Set Camera Orientation mode  
*Note: Recommend "Follow-mode" for solo and "free-mode" with camera*
- Turn all devices to airplane mode
- Face AC into the wind  
*Note: This allows AC to float back to operator in case of emergency.*
- Check heading of Aircraft  
*Note: Ensure nose heading of red paper airplane is close to nose heading of actual aircraft.*

- Start Video recording
- Start Propellers using a Combined Stick Command (CSC)
- Ensure blue dot representing RC is accurately located on map
- Ensure home point is accurately set on map

Please check all boxes

### Aircraft LED Status

Normal		
R G Y ..... Red, Green and Yellow Flash Alternately		Turning On and Self Diagnostic Testing
G Y ..... Green and Yellow Flash Alternately		Warming Up
G ..... Green Flashes Slowly		Safe to Fly (P-mode with GPS and Vision Positioning)
G X2 ..... Green Flashes Twice		Safe to Fly (P-mode with Vision Positioning but without GPS)
Y ..... Yellow Flashes Slowly		Safe to Fly (A-mode but No GPS and Vision Positioning)
Warning		
Y ..... Fast Yellow Flashing		Remote Controller's Signal Lost
R ..... Slow Red Flashing		Low Battery Warning
R ..... Fast Red Flashing		Critical Battery Warning
R ..... Red Flashing Alternately		IMU Error
R — Solid Red		Critical Error
R Y ..... Red and Yellow Flash Alternately		Compass Calibration Required

### RC LED Status

Status LED	Alarm	Remote Controller Status
R — Solid Red	♪ Chime	The remote controller is disconnected from the aircraft.
G — Solid Green	♪ Chime	The remote controller is connected to the aircraft.
R ..... Slow Blinking Red	D-D-D.....	Remote controller error.
R G / R Y ..... Red and Green/ Red and Yellow Alternate Blinks	None	HD downlink is disrupted.
RTH LED	Sound	Remote Controller Status
W — Solid White	♪ Chime	Aircraft is returning home.
W ..... Blinking White	D . . .	Sending Return-to-Home command to the aircraft.
W ..... Blinking White	DD . . . .	Return-to-Home procedure in progress.