
PHANTOM VISION

User Manual V1.00

Range Extender

RE500

2013.0614Revision

Thank you for purchasing this DJI product. Please strictly follow these steps to use this product, including PHANTOM VISION and DJI VISION App.

Please regularly check the web page of PHANTOM VISION at our website www.dji-innovations.com, which is updated regularly. Product information, technical updates and manual corrections will be available on this web page. Due to unforeseen changes or product upgrades, the information contained in this manual is subject to change without notice.

This manual is only referenced for basic assembly and configuration; you can obtain more details and advanced instructions when using the Assistant software or DJI VISION App. To assure you have the latest information, please visit our website and download the latest manual and software.

If you have any problem that you cannot solve during usage, please contact your dealer.

Index

INDEX	2
DISCLAIMER & WARNING	3
TRADEMARK	3
CERTIFICATIONS	4
SYMBOL INSTRUCTION	4
IN THE BOX	4
PRODUCT INSTRUCTION	5
ASSEMBLY	5
AIRCRAFT RECOGNITION	5
TRANSMITTER RECOGNITION	6
BASIC USAGE OF AIRCRAFT AND TRANSMITTER	6
CAMERA RECOGNITION	7
RANGE EXTENDER RECOGNITION	8
CAMERA AND RANGE EXTENDER REBIND	9
DJI VISION APP	10
DOWNLOAD AND INSTALLATION	11
WI-FI NETWORK SELECTION	11
LOGIN	11
MAIN PAGE	12
CAMERA PAGE	13
CAMERA PAGE--CAMERA SETTINGS	14
ALBUM PAGE—ALBUM IN CAMERA SD CARD	17
ALBUM PAGE—ALBUM IN MOBILE DEVICE	19
NEWS PAGE	20
SETTINGS PAGE	20
APPENDIX	22
MC/PMU FIRMWARE UPGRADE	错误！未定义书签。
AUTOPILOT SYSTEM LED DESCRIPTION	23

Disclaimer & Warning

Please read this disclaimer carefully before using the product. By using this product, you hereby agree to this disclaimer and signify that you have read them fully. THIS PRODUCT IS NOT SUITABLE FOR PEOPLE UNDER THE AGE OF 18.

Despite the built-in autopilot system and our efforts in making the control as safe as possible, we strongly recommend users to remove all propellers when calibrating and setting parameters. Make sure all connections are good, and keep children and animals away during firmware upgrade, system calibration and parameter setup. DJI Innovations accepts no liability for damage(s) or injuries incurred directly or indirectly from the use of this product in the following conditions:

1. Damage(s) or injuries incurred when users are drunk, taking drugs, drug anesthesia, dizziness, fatigue, nausea and any other conditions no matter physically or mentally that could impair your ability.
2. Damage(s) or injuries caused by subjective intentional operations. Any mental damage compensation caused by accident.
3. Failure to follow the guidance of the manual to assemble or operate.
4. Malfunctions caused by refit or replacement with non-DJI accessories and parts.
5. Damage(s) or injuries caused by using third party products or fake DJI products.
6. Damage(s) or injuries caused by mis-operation or subjective mis-judgment.
7. Damage(s) or injuries caused by mechanical failures due to erosion, aging.
8. Damage(s) or injuries caused by continued flying after low voltage protection alarm is triggered.
9. Damage(s) or injuries caused by knowingly flying the aircraft in abnormal condition (such as water, oil, soil, sand and other unknown material ingress into the aircraft or the assembly is not completed, the main components have obvious faults, obvious defect or missing accessories).
10. Damage(s) or injuries caused by flying in the following situations such as the aircraft in magnetic interference area, radio interference area, government regulated no-fly zones or the pilot is in backlight, blocked, fuzzy sight, and poor eyesight is not suitable for operating and other conditions not suitable for operating.
11. Damage(s) or injuries caused by using in bad weather, such as a rainy day or windy (more than moderate breeze), snow, hail, lightning, tornadoes, hurricanes etc.
12. Damage(s) or injuries caused when the aircraft is in the following situations: collision, fire, explosion, floods, tsunamis, subsidence, ice trapped, avalanche, debris flow, landslide, earthquake, etc.
13. Damage(s) or injuries caused by infringement such as any data, audio or video material recorded by the use of aircraft.
14. Damage(s) or injuries caused by the misuse of the battery, protection circuit, RC model and battery chargers.
15. Other losses that are not covered by the scope of DJI Innovations liability

Trademark

DJI and PHANTOM VISION are registered trademarks of DJI Innovations. Names of product, brand, etc., appearing in this manual are trademarks or registered trademarks of their respective owner companies. This product and manual are copyrighted by DJI Innovations with all rights reserved. No part of this product or manual shall be reproduced in any form without the prior written consent or authorization of DJI Innovations. No patent liability is assumed with respect to the use of the product or information contained herein

Certifications

This product is approved with quality standards such as CE, FCC and RoHS.

Symbol Instruction



Forbidden(Important)



Cautions

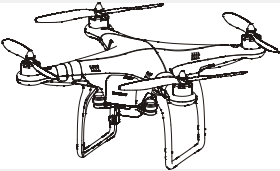











Tip



Reference

In the Box

PHANTOM Aircraft X1 	5.8GHz Transmitter X1 	Camera X1 
Range extender X1 	Charger X1 	Battery X1 
PropellerX8 	mobile device Mounting X1 	Guide X1 
	AC Adapter X3 	Sticker(Several)

Product Instruction

Assembly

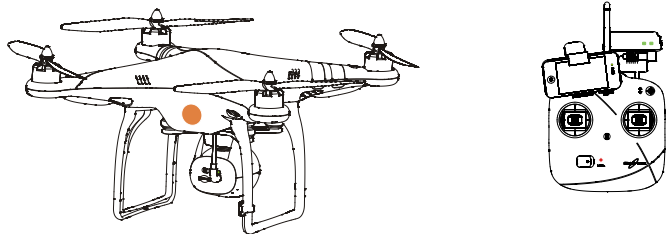
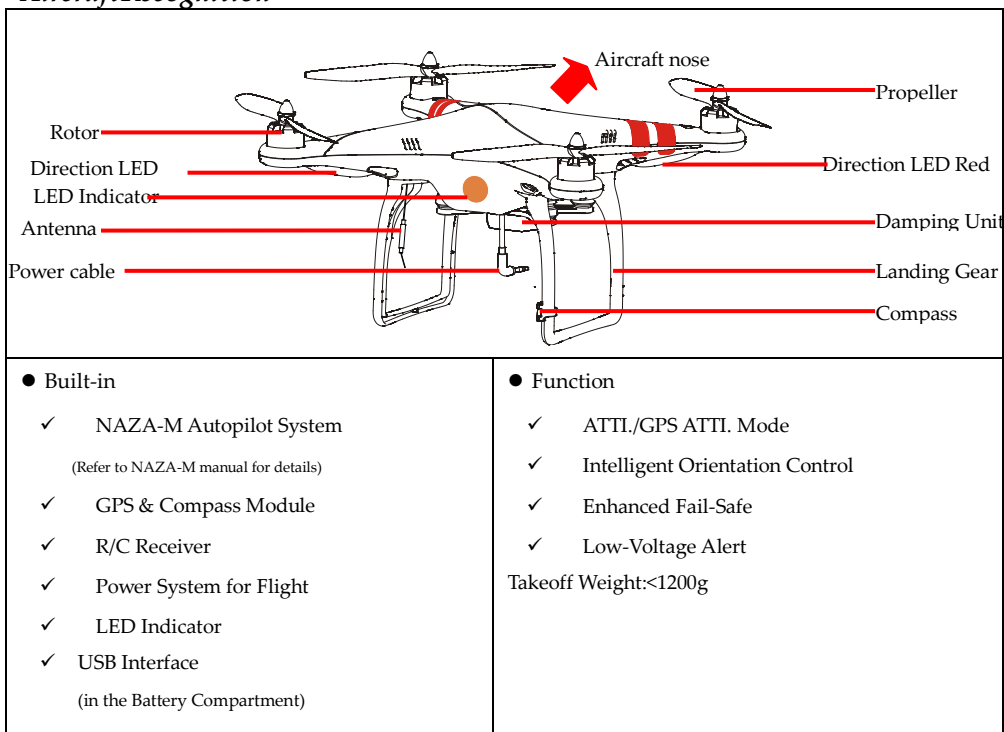
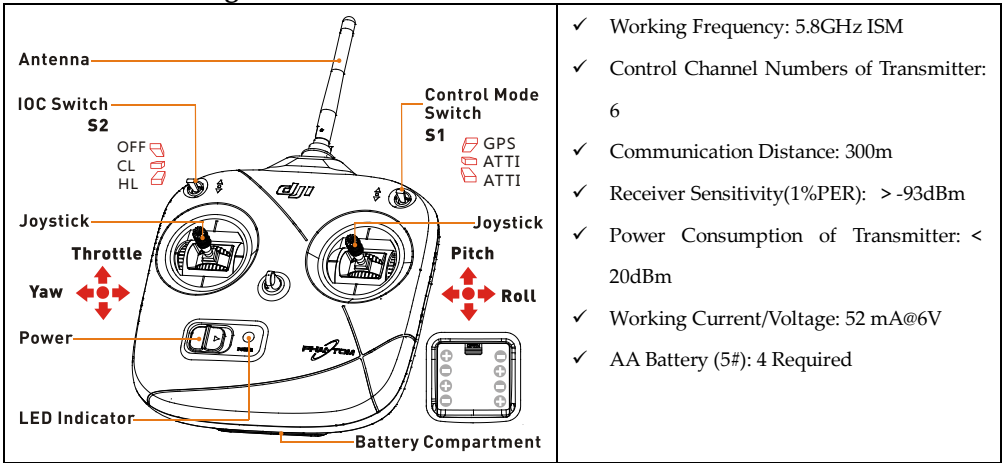


Fig.1: PHANTOM VISION Fig.2: Transmitter& iOS & Range Extender

Aircraft Recognition



Transmitter Recognition







- ✓ Working Frequency: 5.8GHz ISM
- ✓ Control Channel Numbers of Transmitter: 6
- ✓ Communication Distance: 300m
- ✓ Receiver Sensitivity(1%PER): > -93dBm
- ✓ Power Consumption of Transmitter: < 20dBm
- ✓ Working Current/Voltage: 52 mA@6V
- ✓ AA Battery (5#): 4 Required

Basic Usage of Aircraft and Transmitter

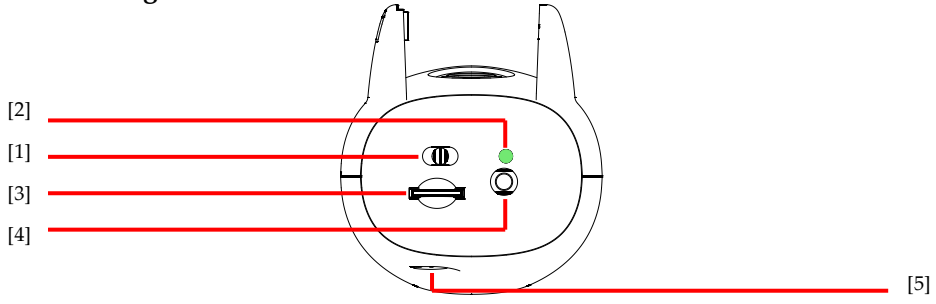
Definitions

- **Stick neutral position and stick released** means the stick of Transmitter is pushed to the central position.
- **Command Stick** means the stick of Transmitter is pushed away from the central position.

Transmitter r	Aircraft (◀ is the nose direction)	GPS ATTI. Mode/ATTI. Mode
		Throttle stick is for aircraft up& down control. The aircraft will hold the height automatically if the stick is centered. You should Push the throttle stick to the neutral position to take-off the multi-rotor. Note that the stick returns to the central position when released for the transmitter V3.5. For the version below 3.5, the stick cannot hold the central position when released.
		Yaw stick is for aircraft rudder control. Command stick controls the angular velocity of the aircraft, with the maximum rudder angular velocity of 200°/s. Left stick command gives counter clock-wise rotation of the aircraft, & vice versa.
		Roll stick is for aircraft left/right control and Pitch stick is for front/back control. Command stick controls the angle of the aircraft. Stick neutral position is for 0, its endpoint is 35°. The roll and pitch sticks return to the central position when released.
		<ul style="list-style-type: none"> ● In GPS Mode, the aircraft will hover (hold horizontal position) when sticks released. ● In ATTI. Mode, the aircraft will keep attitude stabilizing without horizontal position (different from hover in GPS

		Mode).
	 <p>GPS ATTI. ATTI. ATTI. (Manual</p> <p>or</p> <p>Failsafe is selectable in software.)</p>	<p>3-position switch (S1) on the Transmitter for mode control. Only after Compass Module connection and Compass calibration, GPS ATTI. Mode is available. Otherwise, all switch positions are for ATTI. Mode. Pay attention because the GPS ATTI. Mode is dependent on the number of GPS satellites acquired by the main controller. Refer to the LED Indicator. When GPS signal has been lost for 3s, system enters ATTI. Mode automatically. You can enable the Manual Mode or Fail Safe (also known as One-key Go-home) in the assistant software->Basic->R/C->Control Mode.</p>
	 <p>OFF Course Lock Home Lock</p>	<p>3-position switch (S2) on the Transmitter for Intelligent Orientation Control (IOC). Set the switch to OFF in basic flight. This function is defaulted to off. If you want to use this function refer to the advanced manual, and enable it in the assistant software. Use IOC when you are familiar with basic flight.</p>

CameraRecognition





















[1]Power Switch(on the back of the camera)

Three steps:

- (1) OFF – Powered off
- (2) CAM ON – Power on, Wi-Fi off
- (3) WIFI ON –Power and Wi-Fi are both on

[2]LED Indicator (on the back of the camera)

LED	WIFI	CAMERA
 Solid on	OFF	Power On; Idle State

 Slow Blink (0.2s on, 1.8s off)	ON	Idle State
 Fast Blink (0.1s on, 0.3s off)	ON	Accessing photos and videos in the camera
 Solid on	OFF	Recording
 Blink Once(0.2s on, 0.3s off)	ON/OFF	making a single capture
 Blink 3 Times(0.1s on, 0.1s off)	ON/OFF	making a multiple capture,3 or 5 pictures per shot
 Fast Blink(0.1s on, 0.3s off)	ON/OFF	Firmware Upgrading
 (0.2s green, 1.8s amber)	ON	Recording
 Solid on	ON/OFF	Critical error
 Blink Slow (0.2s on, 1.8s off)	ON/OFF	Sensor error
 Blink Once(0.2s on, 0.3s off)	ON/OFF	Operation failed
 Blink 3 Times(0.1s on, 0.1s off)	ON/OFF	SD Card error
 Blink Fast(0.1s on, 0.3s off)	ON/OFF	Upgrade error
 (0.5s Green, 0.5s Amber, 0.5s Red, 0.5s Off)	ON/OFF	Camera overheat
 When camera temperature goes above 80°C, the LED indicator will blink  and the camera will automatically power off when the temperature goes above 85°C		
 Statuses including Red  is either error or malfunction		

[3]Micro-SD Card Slot(on the back of the camera)

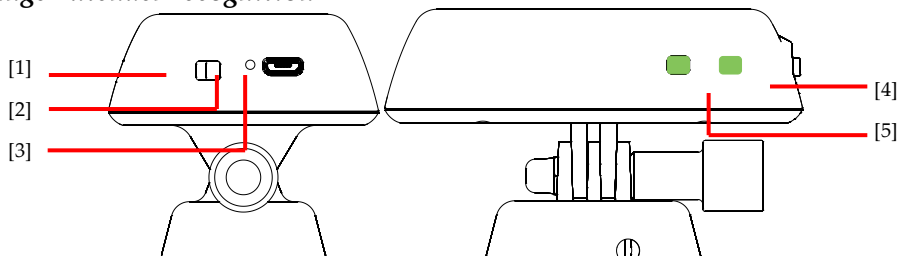
Make sure that the Micro-SD card is inserted before you take any pictures or make any videos.

[4]Power Plug(on the back of the camera)

[5]Function Button(on the bottom of the camera)

Camera in idle state	short press (<2s)	single capture
	long press (≥2s)	record
Camera in non-idle state	any press	back to idle state

Range Extender Recognition






[1]Switch: (1) OFF – Power off

(2)ON –Power on


[2]Rebind Button: press to rebind system.

[3]USB Port: for charge the Range Extender.

[4]Power Status Indicator

Power Indicator	Status	Description
 Green Solid on		The Range Extender is working normally.
 Red Solid on		Low voltage alert.
 Yellow Solid on		The Range Extender is charging.

[5]Wifi Indicator

Wifi Indicator	Description
 Green blink	The Range Extender system is working normally.
LED Off	The Range Extender system is working abnormally.

Camera & Range Extender & DJI App Rebind

In the condition that your camera or range extender has been repaired or replaced by a new one, you need to rebind camera and range extender to rebuilt a wifi-network, and use your DJI App to find the new wifi-network.

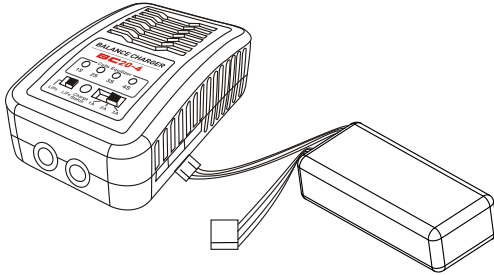
Step1: power on the camera and range extender, 10s later press the rebind Button on Range Extender with a cuspidal object, 5s later the wifi indicator is out.

Step2: wait patiently until the range extender restart automatically about 25s later, and the wifi indicator will blink green, which indicates camera and range extender are rebinded.

Step3:open DJI App on your mobile device .

Charger & Battery

Instruction



*If the charger is in Max Circuit Power condition, the charge circuit will be decided by 20W. For example, when 2A or 3A is selected for the 3S battery, the Charge Circuit is only $20W/11V=1.8A$ actually.

Battery : LiPo(2200MAH-20C - 11.1V)

Charger

AC Input: 100-240V

Charge Circuit : 1A/2A/3A Selectable

Current Drain for Balancing: 200mA

Circuit Power : MAX 20W

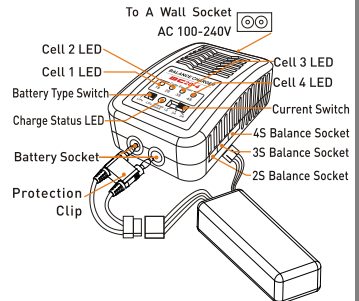
LED Indicator

Charge Status LED	●●●●	Ready to Charge
Charge Status LED	■	CC Mode
Charge Status LED	●●●●	CV Mode
Charge Status LED	■	Charge complete

Cell LED	■	Charging
Cell LED	●●●●	Discharging

Charging

1. Insert the AC power cord into the charger and AC cord into a wall socket (100-240V). The charge status LED will flash green.
2. Select the battery type LiPo and the charging current 2A.
3. Connect the battery main charge lead to battery socket and the battery balance wire to the 3S balance socket. Make sure the red lead to the red battery socket, and the black lead to the black battery socket
4. Start charging. The charge status LED and the 1S/2S/3S cell LED will glow constant red.
5. When the charge status LED glows constant red, it is charging in CC (Constant Current) mode and LED glows green & red blink is in CV (Constant Voltage) mode.
6. When the cell LED is flashing, it is discharging for balancing.
7. When the battery is fully charged, the charge status LED will glow constant green. Unplug the battery from the charger.




- Make sure to use the battery after fully charging.
- When the charger is in CV mode (with green and red LED blinking), the battery is over 80% charged.
- Please use the battery according to the attached sticker.
- Use the Protection Clip to keep the leads of the battery socket untouched, in order to avoid short circuit.

DJI VISION App

DJI VISION App is installed for remote control of Camera Setting, Capture and Recording, Camera Pitch Control, Aircraft Yaw Control, and GPS Assistant Orientation.

Download and Installation

Approach 1: Search "DJI VISION" in the App Store, download and install it on your mobile device. 

Approach 2: Scan QR code to get the DJI VISION App and install it on your mobile device. 

Wi-Fi Network Selection

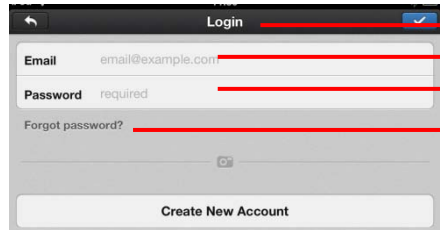
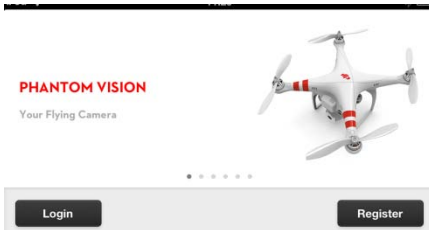


- 1) Turn on the WLAN of your mobile device and connect to the PHANTOM_XXXXXX (SSID) network for remote control by DJI VISION App.
- 2) Select a Wi-Fi network to the Internet if you want to share your photos or videos or read DJI news.

Note1: For the first time you open the DJI VISION app, Internet accessibility is necessary for you to finish login or new account creation.

Note 2: the SSID is unique for each Camera.

Login



[1] **Login** **LoginButton:**

The first time you use the DJI VISION App you should login in.


Note: (1) Internet accessibility is necessary.

(2) You can change your user/password in the App Settings

[2] **Register** **RegisterButton**

Create a new account if you do not have one already.

[3] [4][5] **Login Page**

Enter your registered email address and password here. And then click  to login.

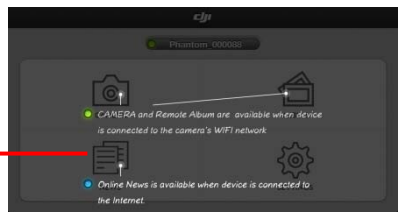
[6] **Forget Password**

If you do have an account, but forget the password, click to retrieve it.

[7] **Using Tips**

Using tips will display for welcoming your first entering into.








[7]



Main Page

After login you will come to the main page. In this page, you can see the current Wi-Fi connection, and four icons that represent the four functionalities of this App.

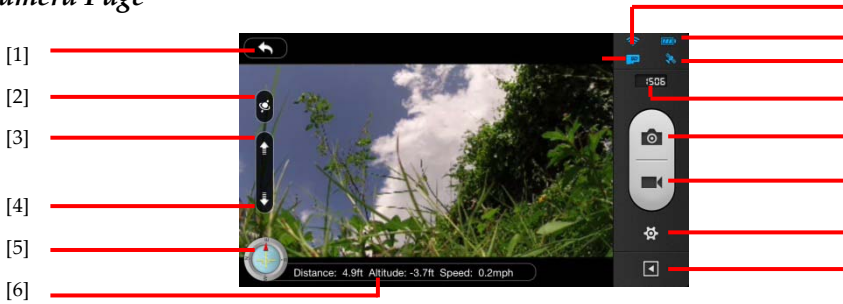


<p>Green Light</p> 	<p>Camera has been connected to, and the Camera and SD Card album are available.</p>
<p>Blue Light</p> 	<p>Internet has been connected, photos and videos can be shared and DJI news can be refreshed.</p>
<p>Gray Light</p> 	<p>No Wi-Fi connection</p>
 <p>Camera</p>	<p>Click to enter the camera preview page</p>
 <p>Album</p>	<p>Click to enter the Album page</p>
 <p>News</p>	<p>Click to enter the DJI news page</p>
 <p>Settings</p>	<p>Click to enter the App settings page</p>



- [7]
- [8]
- [9]
- [10]
- [11]
- [12]
- [13]
- [14]
- [15]

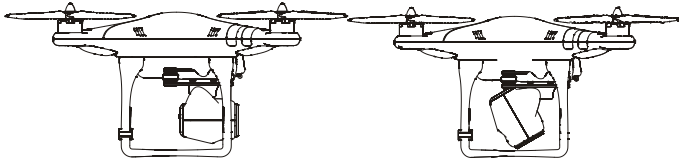
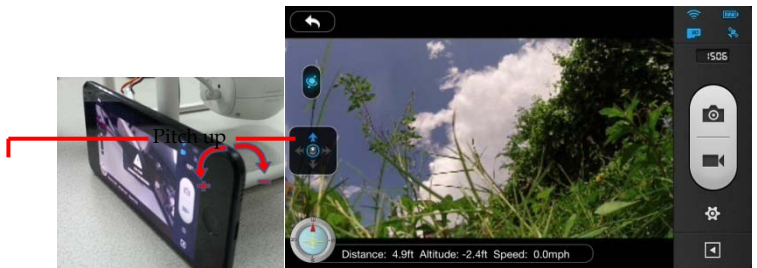
Camera Page



[1] Return to the preview page

[2] Camera gimbal control switch

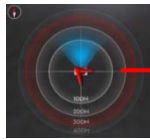
- 1) In normal state: the camera gimbal is controlled by the **upward arrow [3]** and **downward arrow [4]** on the preview page. Press to turn up the camera, and to turn down the camera.
- 2) In high light state (blue): the camera gimbal is controlled by the iOS's gyroscope sensor and gravity sensor.



Camera Original State Camera Pitch Down

[5] Flight attitude

Click it to obtain the Pitch, Roll and Yaw information, which can help you find the aircraft if the aircraft fly far away from you. It is also known as the Radar function.



[17]

[6]Flight parameters

If the connection between the camera and the NAZA is ok, these “N/A”s should be meaningful digits

[7] SD Card Status

Highlighted when a valid SD card is inserted, otherwise, grayed out.

[8] Wi-Fi Signal Intensity

The Camera is connected to the Range Extender correctly and Wi-Fi is working normally.

[9] Aircraft Battery Level

- 3 grids: > 11.80V
- 2 grids: 11.30V to 11.80V
- 1 grid: 11.20V to 11.30V (should fly back)
- 0 grid: <= 11.20V (should land immediately)

[10] Aircraft GPS status

Highlighted when more than 6 satellites are found, otherwise, grayed out.



[11] Remained shots

It is calculated based on the current selected photo size. Zero if SD card is not inserted

[12] Camera Capture Button

Capture Button is disabled during the process of recording.

[13] Camera Record Button

A red dot  blinks when the camera is recording, and the time elapsed  is displayed on the top right corner of the preview screen.

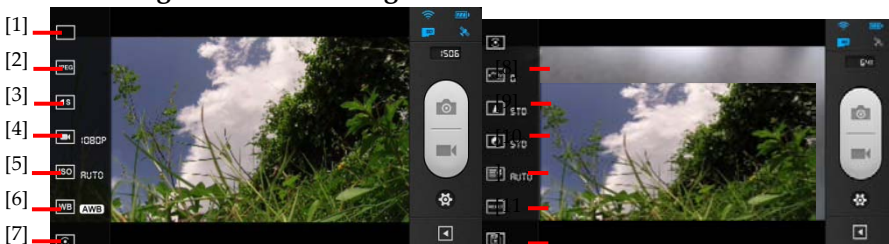
[14] Hide or show camera settings

Click to enter camera settings, and click again to exit.

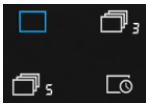





[15] Hide or show flight parameters.

Click to hide flight parameters, and click again to show flight parameters.




Camera Page--Camera Settings



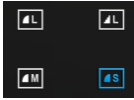




[1] Capture Mode

	 Single Capture. One picture per shot.
	 Multiple Capture. 3 pictures per shot.
	 Multiple Capture. 5 pictures per shot.
	 Continuous Capture. Also needs to select: <ol style="list-style-type: none"> Intervals between two shots (1-60 seconds) Number of shots (2-254, or infinite shots)
Note: Capture Button changes accordingly. 	


[2] Photo Format

	 JPEG
	 Raw (one *.jpg and one *.raw will be generate simultaneously per shot when this option is selected)
Note: raw photo format is not supported by multiple capture mode or continuous capture mode.	

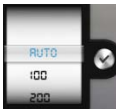
[3] Photo Size. Below options are supported.


	 Large: 4608 x 3456, 4:3, 16MP
	 Sub-large: 4384 x 3288, 4:3, 14.4MP
	 Medium: 4384 x 2922, 3:2, 12.8MP
	 Small: 4384 x 2466, 16:9, 10.8MP


[4] Video Resolution. Below options are supported.

	1920x1080 60i, 16:9
	1920x1080 30p, 16:9
	1280x960 30p, 4:3
	1280x720 60p, 16:9
	1280x720 30p, 16:9
	640x480 30p, 4:3 (VGA)

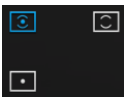
[5] ISO. Below options are supported.


	AUTO
	100
	200
	400
	800

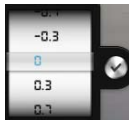
[6]  **White Balance.** Below options are supported.


	AWB (auto)
	Sunny
	Cloudy
	Indoor

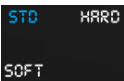
[7] **Exposure Metering.** Below options are supported.


	Center
	Average
	Spot

[8]  **Exposure Compensation.** Below options are supported.

	-2.0	2.0
	-1.7	1.7
	-1.3	1.3
	-1.0	1.0
	-0.7	0.7
	-0.3	0.3
	0	

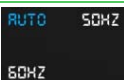
[9]  **Sharpness.** Below options are supported.

	Standard
	Hard
	Soft

[10]  **Contrast.** Below options are supported.

	Standard
	Hard
	Soft

[11]  **Anti-flicker.** Below options are supported.

	Auto
	50Hz

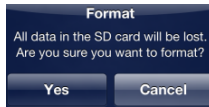
[12]Restore Default Settings



Note:

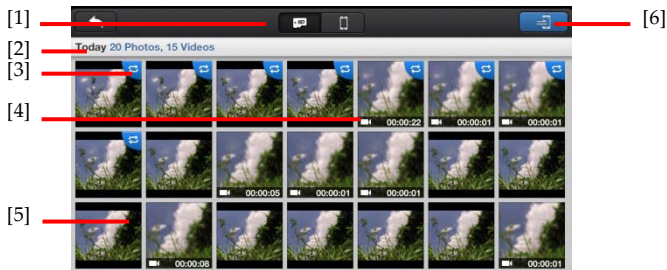
- 1) Reboot is needed to make it take effect.
- 2) Restore default settings are recommended after each firmware upgrade.

[13]Format SD Card



Note: all data in the SD card will be lost after format operation, so be sure to do data backup before doing it.


Album Page—Album inCamera SD Card



[1]In Camera SD CardAlbum

You can browse all photos and videos in the SD card, view a selected picture or play a selected video.

[2]Photos and Videos are listed and grouped by date.

[3]All those photos and videos that had been synchronized to the mobile device are identified .


[4] Video thumbnails, with a recorder token and time duration on them. Click a video thumbnail to **play** a **single video**. A play progress bar appears at the bottom of the screen.



[5]Photo thumbnails that hasn't been synchronized to the mobile device. Click a Photo thumbnail to **view** a




single picture. You can slip left or right to view the previous or next picture.

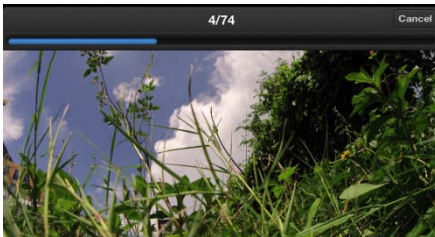


[6]**Synchronize Button**  Click this button to enter synchronize mode.



In Synchronize Mode

- (1) A synchronization progress bar (1) appears in this mode with a “tick”  on the right.
- (2) You can select photos or videos and then click , the synchronization process then begins.
- (3) You can exit synchronize mode by a click on  button (3).
- (4) You can synchronize single picture or video, or synchronize and pay a video at the same time.

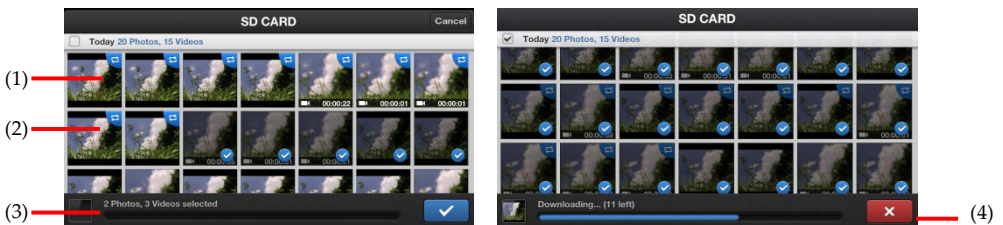


Synchronize a picture




Synchronize and pay a video

You can also synchronize multiple pictures or videos at a time.

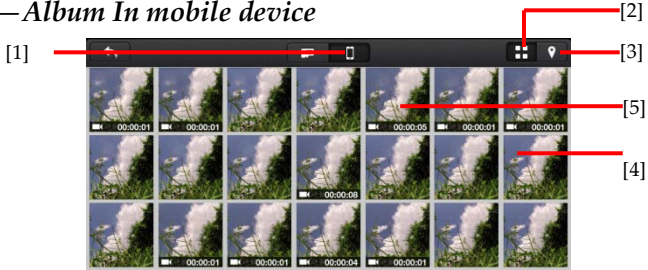


- (1) Click thumbnails to select photos or videos to synchronize to your mobile device. The thumbnails identified by this to ken are successfully selected.

- (2) Or you can select one or more groups to be synchronized.
- (3) The number of photos and videos that have been selected is displayed here.
- (4) **Synchronizing...**

You can click  to stop the synchronization process. Those photos and videos that have been copy to your iPhone in this synchronization process will remain there as a result.

Album Page—Album In mobile device



[1]Album In mobile device

You can browse all photos and videos in the album created by the App on your mobile device, view a selected picture or play a selected video.

[2]Sorted by capture time Pictures and videos are listed in thumbnail style

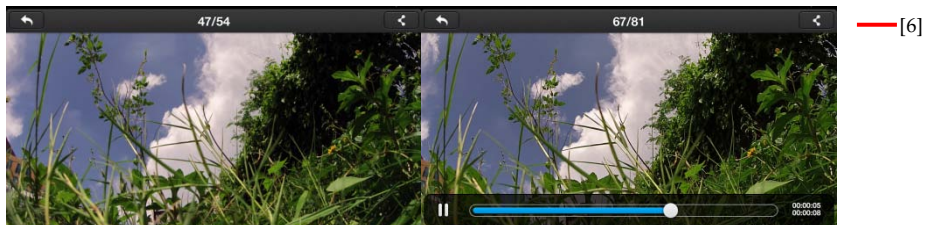
[3]Sorted by places .GPS information is embedded into the pictures and videos.

Note: Accessibility to the Internet is necessary for it to refresh the map.



[4] Click any picture to view a single picture. You can slip left or right to view the previous or next picture.

[5] Click any video to play a single video. A play progress bar appears at the bottom of the screen.



[6] Share your pictures and videos to social network sites.

Note1: Accessibility to the Internet is necessary to share pictures or videos.

Note2: video sharing is not available currently, but it will be ready in the near future, including youtube,



vimeo.

News Page

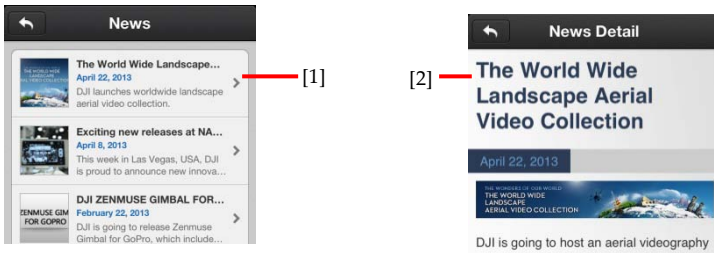
[1] News List

- (1) Scroll up to update
- (2) Scroll down to load more

Note: need connection to the Internet.

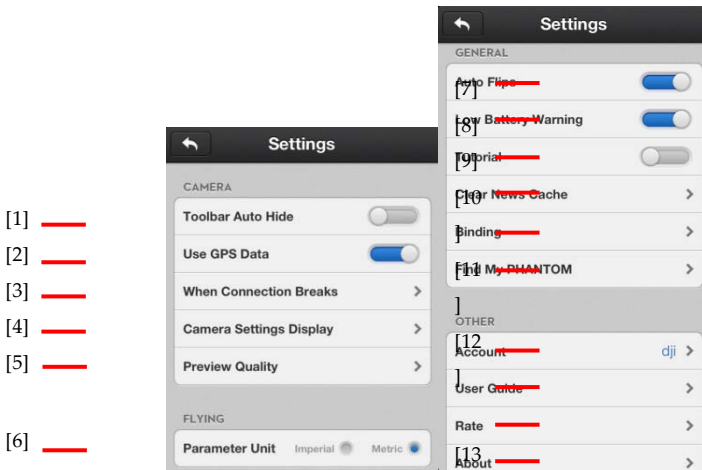
[2] News Detail

Click any item of news list to get news detail.

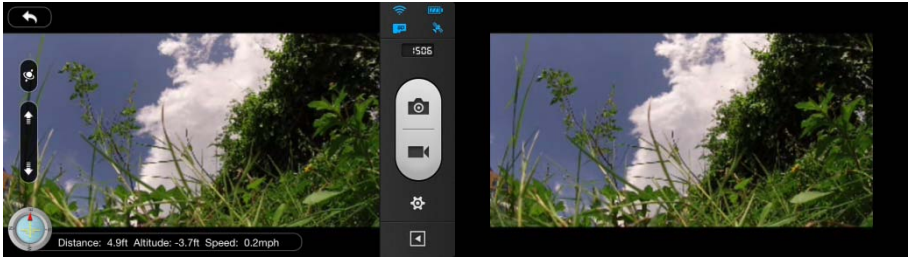


Settings Page

Turn the switch from left to right to enable it.



[1] **Toolbar Auto Hide.** Turn the switch from left to right to enable it.

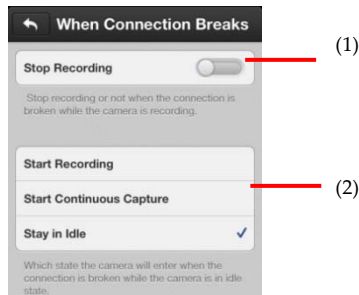


Auto HideDisabledAuto Hide Enabled

[2]Use GPS Data. Turn the switch from left to right to enable it.

When this option is enabled, your mobile device will send its own GPS information, if it has, to the camera upon its connection establishment to the camera. So the camera can have an initial GPS information in case the PHANTOM GPS module could not find enough satellites (>6). This initial GPS information may be overridden by the GPS information got from the PHANTOM GPS module by the camera afterwards.

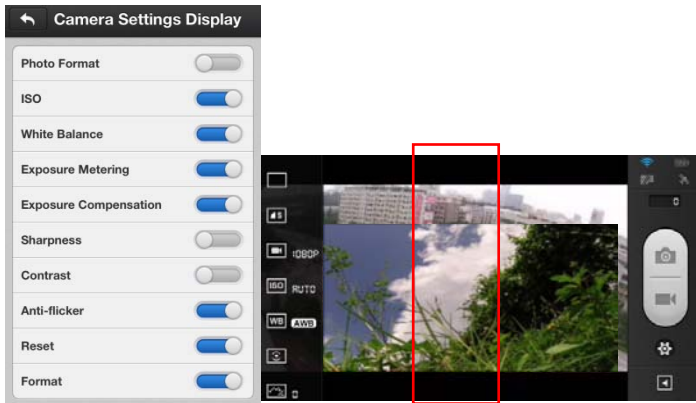
[3]When connection breaks. Click this item to enter the detailed page.



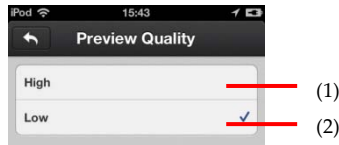
- (1) If enabled, the camera stops recording when the connection between your iPhone and the camera breaks while the camera is in recording state. If disabled, the camera keeps recording when the connection between your iPhone and the camera breaks while the camera is in recording state.
- (2) Here you can select what the camera to do when the connection between your mobile device and the camera breaks while the camera is in idle state. This is for those cases that the connection is lost but you don't want to miss the scenes that should have been taken by this flight.

[4]Camera Settings Display. Click this item to enter the detailed page.

These options determine which camera parameters will be shown in the camera parameter list in the camera preview page. For example, here disable the Photo Format item, and then it is hidden.



[5]Preview Quality. Click this item to enter the detailed page.



(1) High: 320x240@30fps

(2) Low: 320x240@15fps, recommend to be used under weak Wi-Fi signal condition.

Note: may add an option of 640x480@30fps in the future.

[11]Binding

[12] Find MY PHANTOM



Fig.1 : Satellite mode



Fig.2 : Standard mode

Appendix

Assistant software& MC/PMU Firmware Upgrade

Before upgrade, make sure your computer is connected to the Internet and close anti-virus software and firewall during the firmware upgrade. Please follow below steps to update software and firmware.

1. Open your PC, power on PHANTOM VISION and connect it to PC with USB extender. DO NOT break connections until firmware upgrade is finished.
2. Run the Assistant software and confirm MC is connected.

3. Click "Info" to view your current software version, if there has updates you can down and install.
4. Click "Upgrade" to view your current firmware version, if there has updates you can down and install.
5. Wait until the Assistant software shows "finished" and power cycle. Up to date OK.

Note: If firmware upgrade failed, the system will enter waiting for firmware upgrade status automatically, please try again with above steps.

Autopilot System LED Description

System Status	LED Flashing
System start and self-check	
IMU abnormal data or need advanced calibration*	
Warm up after power on	
The aircraft is moved or bias of sensors too big	
Compass error too big, need recalibration.	
Transmitter (TX) signal lost, enter the FailSafe.	
TX stick(s) mid point error too big	
Low voltage alert or other abnormal alert* (e.g. Configuration error, TX data error, Enable low voltage protection without PMU, S/N error or Compass abnormal work.)	
Record forward direction or home point	
Control Mode Indicator	Manual Mode**: None ATTI Mode: (stick(s) not at center) GPS Mode: (stick(s) not at center) IOC Mode**: (stick(s) not at center)
GPS Signal State Indicator (GPS/Compass Module is necessary)	GPS Signal is Best(GPS Satellite number > 6): None GPS Signal is Well(GPS Satellite number = 6): GPS Signal is Bad (GPS Satellite number = 5) : GPS Signal is Worst (GPS Satellite number < 5):

*You can figure out the error by connecting the autopilot system to the Assistant Software.

**Should be enabled on the Assistant Software.

Specification

General	
Features	Aircraft and camera integration, less weight,

multi-functions

Camera remote-controlled by DJI VISION app on mobile device

WIFI communicating distance enlarged to 300m by Range Extender

Built-in anti-vibration gimbal

High safety by Low-voltage alert and forcing landing

Auxiliary GPS locating for disappearing aircraft

Electrical & Mechanical

Working Voltage Range(Aircraft with camera)

Power Consumption(Aircraft with camera)

Operating Temperature

Weight Aircraft (With gimbal & camera) :
Transmitter
iOS Equipment Mounting
Range Extender

Aircraft (Flight parameters can be effected by mechanical performance and payloads)

Supported Battery 4400mAh Lipo Battery

Flying Load <1200g

Hovering Accuracy (GPS Mode) Vertical : $\pm 0.8m$; Horizontal : $\pm 2.5m$

Max Yaw Angular Velocity 200°/s

Max Tilt Angle 35°

Max Ascent / Descent Speed $\pm 6m/s$

Max Flying Speed 10m/s

wheelbase 350mm

Tilting Range of Gimbal 0°-60°

Transmitter

Operating Frequency 5.8 GHz ISM

Channel Numbers 6

Communication Distance (open outside) 300m

Receiver Sensitivity (1%PER) > -93dBm

Transmitting Power < 20dBm

Working Current/Voltage 60 mA@6V

Battery	4 AA Batteries (5#)
Camera	
Operating Temperature	0°C~40°C
Resolution	14 Mega Pixels
FOV	140 ° / 120° / 90 °
Sensor size	1/2.3'
Functions	Remote-controlled and parameter set by mobile device Support multi-capture, continuous capture and timed capture Recording supports HD,1080p30,1080i60 Single capture supports RAW and JPEG
Range Extender	
Operating Frequency	2412-2472MHz
Operating Temperature	0°C~40°C
Communication Distance (open outside)	200m
Transmitting Power	<=17dBm
Power Consumption	1.5W
DJI VISION App	
mobile device Supported	iOS 6.0 vision or above(iPhone recommended)
Functions	Camera parameters setting FOV scene real-time display Remote-control aircraft and camera Auxiliary GPS locating

Warning Notes

1. Try to avoid interference between the remote control transmitter and other wireless equipment.
2. The fast rotating propellers will cause serious damage and injury. Always fly the multi-rotor 3m or above away from you and unsafe conditions, such as obstacles, crowds, high-voltage lines, etc. FLY RESPONSIBLY.
3. All parts must be kept out of the reach of children to avoid CHOKE HAZARD; if a child accidentally swallows any part you should immediately seek medical assistance.
4. Please always keep the compass module away from the magnet. Otherwise it may damage the compass module and lead the aircraft to work abnormally or even be out of control. Do Compass Calibration as much as possible.
5. When charging, please place the device in an environment that has a normal room temperature and good ventilation. It is recommended to charge the device in an environment with a temperature that ranges from 0°C~35°C.

6. CAUTION RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

7. When using the device, ensure that the antenna of the device is at least 20cm away from all persons.

FCC statement

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

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.

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

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

Disclaims

Please strictly follow the manual to assemble and use the product. The manufacturer and seller assume no liability for any resulting damage or injury arising from the operation or use of this product.

This manual is only for basic assembly and configuration; you can obtain more details and advanced

instructions when using the NAZA-M Assistant Software and the PHANTOM VISION User Manual. To assure you have the latest information, please visit our website and download the latest manuals and software version.

Please regularly check the web page of corresponding product at our website www.dji-innovations.com, which is updated regularly. Product information, technical updates and manual corrections will be available on this web page. Due to unforeseen changes or product upgrades, the information contained in this manual is subject to change without notice. If you have any problem that you cannot solve during usage, please contact your authorized dealer.

Hereby, SZ DJI TECHNOLOGY Corporation declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

CE 0700