Date : March 26, 2014

PHANTOM 2 User Manual Version: 1.06
PHANTOM 2 Main Controller Firmware Version: 2.00
PHANTOM 2 Central Board Firmware Version: 1.0.1.24
PHANTOM 2 Assistant Software Version: 2.00
PHANTOM RC Assistant Software Version: 1.1

## March 26, 2014 PHANTOM 2 Firmware V2.00 has been released

ZENMUSE H3-3D compatible with PHANTOM 2 is released.

### What's new?

#### Main Controller Firmware

- 1. Supported of iPad Ground Station and PC Ground Station functions. When using iPad Ground Station, the BTU firmware should be upgrade to V1.0.1.3 or above.
- 2. Added Flight Limits functions, including Max Height and Max Radius limits.
- 3. Added LED indicators warning, if non-DJI smart battery is detected, the LED flight indicators will be solid red.
- **4.** Optimized compass calibration algorithm to increasing its resistance to interferences.
- 5. Improved battery level detecting methods to make low battery level warning more precise.
- **6.** The maximum descending speed is limited to 3m/s.
- 7. Fixed the bouncing problems after landed.

#### **Central Board Firmware**

- 1. Supported of iPad Ground Station and PC Ground Station functions.
- 2. Supported of the H3-3D gimbal.

## **Assistant Software**

1. Added Flight Limits page in Phantom working mode.

# User Manual

- 1. Added connections when using Ground Station functions.
- 2. Added descriptions of flight limits.

#### **Notes**

1. Upgrade the main controller and central board firmware to the latest version using PHANTOM 2 Assistant Software V2.00 otherwise there will be malfunction caused by version mismatch.

#### **Apology**

At DJI, we strive to provide our customers with the best products. Due to continuous R&D, we had to delay the release of the Ground Station function support for Phantom 2, until now. DJI apologizes for such a delay, as we strived to ensure that Ground Station was in compliance with various regulations worldwide.

Date: February 20, 2014

PHANTOM 2 User Manual Version: 1.04

PHANTOM 2 Main Controller Firmware Version: 1.08

PHANTOM 2 Central Board Firmware Version: 1.01.19

PHANTOM 2 Assistant Software Version: 1.08

PHANTOM RC Assistant Software Version: 1.1

# February 20, 2014 PHANTOM RC Assistant Software V1.1 has been released

#### What's new?

### **Assistant Software**

- 1. PHANTOM RC Assistant Software V1.1 program framework has been optimized, no new function added.
- **2.** PHANTOM RC Assistant Software V1.1 now supports Mac OS X (10.6 or above), usages on Mac and Windows are exactly the same.

#### **Notes**

- 1. When launching for the first time on Mac OS X, please open the Assistant Software in the Finder. After the first successful launch, the application can be launched by double-clicking the PHANTOM RC icon in the Finder or using Launchpad.
- 2. Please download the application installer in DMG format from the download page of PHANTOM 2 on the DJI website.
- 3. The Assistant Software for Windows and Mac OS X will updated simultaneously in the future.

Date :	January 9, 2014
PHANTOM 2 User Manual Version:	1.04
PHANTOM 2 Main Controller Firmware Version:	1.08
PHANTOM 2 Central Board Firmware Version:	1.0.1.19
PHANTOM 2 Assistant Software Version:	1.08
PHANTOM RC Assistant Software Version:	1.0

# January 9, 2014 PHANTOM 2 Remote Controller firmware update

#### What's new?

#### **Firmware**

### Remote Controller firmware update to V1.0.1.11

1. Optimized output of the X1 channel on the Remote Controller to improve the user experience.

## Important Notes

- 1. For the users of PHANTOM 2 with H3-2D, must adhere to following steps to upgrade the Remote Controller firmware.
  - 1) Use the PHANTOM RC Assistant software to upgrade the Remote Controller firmware to V1.0.1.11.
  - 2) Calibrate the sticks and XI channel of the Remote Controller using PHANTOM RC Assistant software.
  - 3) Use the PHANTOM 2 Assistant software to upgrade the Gimbal IMU firmware to V1.8 on the Upgrade page.
  - 4) After upgrade completed, calibrate the X1 channel of Main controller using PHANTOM 2 Assistant software, then the PHANTOM 2 will work well with H3-2D.
- 2. For the users of PHANTOM 2 without H3-2D, conduct all the above steps except the third step to upgrade the Remote Controller firmware.

Date :	December 27, 2013
PHANTOM 2 User Manual Version:	1.04
PHANTOM 2 Main Controller Firmware Version:	1.08
PHANTOM 2 Central Board Firmware Version:	1.0.1.19
PHANTOM 2 Assistant Software Version :	1.08
PHANTOM RC Assistant Software Version:	1.0

# December 27, 2013 PHANTOM 2 Assistant Software for Mac Release.

#### What's new?

#### **Assistant Software**

1. Assistant Software released with support for Mac OS X 10.6(Lion) or above. Assistant Software usages on Mac and Windows are exactly the same.

### **User Manual**

1. Added installation and usage instructions for PHANTOM 2 Assistant Software on Mac OS X.

#### **Notes**

- 1. When launching for the first time on Mac OS X, please open the Assistant Software in the Finder. After the first successful launch, the application can be launched by double-clicking the PHANTOM 2 icon in the Finder or using Launchpad.
- 2. Please download the application installer in DMG format from the <u>download page</u> of PHANTOM 2 on the DJI website.
- 3. The Assistant Software for Windows and Mac OS X will updated simultaneously in the future.

Date :	December 19, 2013
PHANTOM 2 User Manual Version:	1.02
PHANTOM 2 Main Controller Firmware Version:	1.08
PHANTOM 2 Central Board Firmware Version:	1.0.1.19
PHANTOM 2 Assistant Software Version:	1.08
PHANTOM RC Assistant Software Version :	1.0

# December 19, 2013 PHANTOM 2 Firmware V1.08 Release.

#### What's new?

### **Firmware**

#### PHANTOM 2 Main Controller Firmware V1.08

- 1. In Phantom 2 mode, users can set a new home point once Ready to fly, as long as a home point has already been recorded automatically.
- 2. In a Failsafe situation, if less than 6 GPS satellites are found for more than 20 seconds, descent will begin automatically.
- **3.** Fixed a glitch that prevented descent after the 2<sup>nd</sup> level low battery capacity warning occurs when in Naza-m mode

#### **Assistant Software**

1. PHANTOM 2 and PHANTOM 2 VISION will share the PHANTOM 2 Assistant Software.

### **User Manual**

- 1. Added the 8-Pin port sequence on AVL58 connection diagrams.
- 2. Added an important note: Keep the wireless video transmission module and other communicating devices away from the compass during installation and connection to avoid interference.
- **3.** Added a note about automatic descent when GPS satellites are found less than 6 for more than 20 seconds while in Failsafe.

### **Upgrade Notes**

- 2. Upgrade the main controller and central board firmware to the latest version using Assistant Software V1.08. Be sure the central board firmware is V1.0.1.19 or above, otherwise there will be malfunction caused by version mismatch.
- 3. Upgrade iOSD mini, iOSD Mark II and H3-2D firmware to the latest version before using them with PHANTOM 2.
- 4. If you have any problems during upgrade, please contact your dealer or DJI Customer Service.

Date :	December 16, 2013
PHANTOM 2 User Manual Version:	1.00
PHANTOM 2 Main Controller Firmware Version:	1.06
PHANTOM 2 Assistant Software Version:	1.08
PHANTOM RC Assistant Software Version:	1.0

# December 16, 2013 PHANTOM 2 Launched.

#### **PHANTOM 2 Overview**

- **1.** PHANTOM 2 is ready to fly without configuration.
- 2. Built-in NAZA-M V2 flight control system offers enhanced flight reliability, hover stability and easy operation.
- **3.** Built-in DJI intelligent battery offers up to 25 minutes of flight time.
- 4. 9 inch self-tightening propellers allow up to 1.3kg lift off weight.
- **5.** 2.4GHz remote control system with a separate gimbal control channel.
- **6.** Reserved gimbal port for the Zenmuse H3-2D gimbal, allows plug and play installation.
- 7. Control Zenmuse H3-2D pitch.
- 8. Pre-installed powered video output cables for wireless video transmitter devices.
- 9. Reserved CAN-Bus for DJI iOSD mini, iOSD mark II, 2.4G Bluetooth Datalink and other accessories.

#### **New Product Features**

# 1. Easily adjustable, ready-to-fly quad-rotor

#### Functions

- 1) Multiple control modes: GPS flight mode and ATTI. flight mode.
- 2) On-demand manual flight and Failsafe activation.
- 3) Intelligent orientation control (IOC), enabled using the PHANTOM 2 Assistant Software.
- 4) Enhanced Failsafe mode.
- 5) Intelligent battery protection system.
- 6) PC ground station and iPAD ground station compatible (coming January 2014).

#### Built-in

- 1) NAZA-M V2 flight control system (GPS, compass, 2.4GHz receiver).
- 2) Flight propulsion system.
- 3) Gimbal's GCU module.
- 4) Micro-USB port for PHANTOM 2 Assistant Software configuration and online upgrade.

# 2. 2.4GHz Transmitter

- 1) Working in the 2.4GHz frequency bandwidth with maximum communication distance of 1000m.
- 2) 5 proportional channels with a total of 7 channels.
- 3) Quick controller mode switching via PHANTOM RC Assistant Software: Model, Mode2.
- 4) Automatic control stick centering.
- 5) Slide lever for gimbal pitch control.

### 3. Intelligent battery

- 1) 5200mAh, ultra-large capacity battery for up to 25 minutes of flight time.
- 2) Intelligent charge and discharge protection for battery safety.
- 3) Battery level indicator.
- 4) Protective shell for safety.

### 4. Extended functions

- 1) Built-in port for Zenmuse H3-2D gimbal for easy plug and play functionality.
- 2) Pre-installed powered video output port for wireless video transmitter devices.
- 3) Built-in extension port for iOSD mini allows easy expansion for a better flight experience.
- 4) Built-in extension port for iOSD mark II allows a better flight experience and additional flight data recording.
- 5) Built-in extension port for 2.4G Bluetooth Datalink for ground station capability.

#### **Notes**

Before using PHANTOM 2 with other DJI products, users should connect the products correctly and upgrade the firmware as requirements below.

Items to be upgraded	Firmware versions required	Assistant Software for upgrading	Assistant Software version
P330CB (built-in central board)	V1.0.1.19 or above	PHANTOM 2	V1.08
Zenmuse H3-2D	CMU V1.0, IMU V1.6 or above	PHANTOM 2	V1.08
iOSD Mark II	V2.O4 or above	iOSD	V3.02
iOSD mini	V1.04 or above	iOSD	V3.02

<sup>\*</sup>The iOSD Assistant Software is applied to both iOSD Mark II and iOSD mini.