March 3, 2015 PHANTOM 2 Flight Controller Firmware V3.12 released

What's new?

Major New Features

- 1. No-Fly Zones have been updated to include a 25km radius centered in Washington, DC.
- 2. The compass calibration program has been optimized to improve reliability. *
- **3.** When automatic landing is initiated, users can now continue to control the aircraft's position and altitude. During this process, the maximum speed of ascent is 1 m/s. **
- **4.** After an automatic landing has been completed and the motors have stopped spinning, users can immediately restart the motors and begin a new flight. **

Special Note

- * It is recommended that the compass be calibrated in an environment that is free from sources of potential interference. If you become aware of any source of potential interference, move to a different location and calibrate the compass again. Be aware that underground metal pipes may cause interference when the aircraft is close to the ground during compass calibration.
- ** These two features will not be available when S1 is manually switched to the "Failsafe" position and the aircraft is automatically returning to home. Refer to Naza-M V2 Quick Start Guide for more information about the operation during this period.

| Date : | January 30, 2015 |
|--|------------------|
| PHANTOM 2 Flight Controller Firmware Version : | 3.10* |
| PHANTOM 2 Assistant Version : | 3.8 |

January 30, 2015 PHANTOM 2 Flight Controller Firmware V3.10 released*

*The flight controller firmware v3.10 has been discontinued. Its updates have been optimized and included in the v3.12 update.

What's new?

Major New Features

- 1. No-Fly Zones have been updated to include a 25km radius centered in Washington, DC.
- 2. "Upgrade All" function added to the DJI Phantom Assistant.
- **3.** When automatic landing is initiated, users can now continue to control the aircraft's position and altitude. During this process, the maximum speed of ascent is 1 m/s.
- **4.** After an automatic landing has been completed and the motors have stopped spinning, users can immediately restart the motors and begin a new flight.

| | THATTOPT 2 Troduct Release Hotes |
|--|----------------------------------|
| Date : | November 28, 2014 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.2.10 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.08 |
| PHANTOM 2 Assistant Version : | 3.6 |
| PHANTOM RC Assistant Version : | 1.1 |
| | |

PHANTOM 2 Product Release Notes

November 28, 2014 PHANTOM 2 Central Board Firmware V1.0.2.10 released

What's new?

Major New Features

- 1. Improved the communication between the smart flight battery and the Phantom.
- 2. Fixed issues in communication between the smart flight battery (V2.0) and the compass.

| | PHANIOM 2 Product Release Notes |
|-------------------------------|---------------------------------|
| Date : | October 31, 2014 |
| DJI Smart Flight Battery | 2.6. |
| PHANTOM 2 Assistant Version : | 3.6 |

October 31, 2014 DJI Smart Flight Battery Firmware V2.6 released

What's new?

Major New Features

- 1. New auto-discharging feature to address to address the swelling problem of fully charged battery when it is stored for an extended period. Battery auto discharge The auto-discharging function will start automatically if the battery does not operate in 10 days.
- 2. New battery cell balancing feature to extend battery life.

Special Notes

- 1. Update DJI Smart Flight Battery firmware to v2.6 through Phantom Assistant v3.6.
- **2.** The new battery firmware v2.6.0.0 does not support battery with loader of v1.3.0.0 or firmware of v1.6.0.0.

| | PHANTOM 2 Product Release Notes |
|--|---------------------------------|
| Date : | October 28, 2014 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.2.7 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.08 |
| PHANTOM 2 Assistant Version : | 3.4 |
| PHANTOM RC Assistant Version : | 1.1 |

October 28, 2014 PHANTOM 2 Flight Controller Firmware V3.08 released

What's new?

Major New Features

- 1. To address the issue of fully charged battery swelled when it was stored for extended period.
- **2.** Battery cell damages detection feature added.
- 3. New battery cell balancing feature to extend battery life.
- **4.** Maximum descent speed set to 0.6m/s when the aircraft's altitude is less than 10m and descending automatically (for example in failsafe mode). The maximum speed of descent remains 2m/s in other flight conditions.
- **5.** Propulsion system performance enhancements.

| | PHANTOM 2 Product Release Notes |
|--|---------------------------------|
| Date : | July 29, 2014 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.1.32 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.06 |
| PHANTOM 2 Assistant Version : | 3.2 |
| PHANTOM RC Assistant Version : | 1.1 |

July 29, 2014 PHANTOM 2 Flight Controller Firmware V3.06 released

What's new?

Flight Controller Firmware

- 1. When the battery level reaches a Critical Battery Level Warning, the aircraft will automatically land. The motors will power off after landing.
- 2. When the battery level reaches a Low Battery Level Warning, Auto Go Home will be activated.*
- 3. The speed of descent will be automatically adjusted based on current altitude.
- **4.** Minimum adjustable height limit set to 20m.
- 5. Magnetic declination value stored to improve flight course accuracy.
- 6. Various bug fixes.

Phantom 2 PC Assistant

1. Added Japanese as a supported language.

Notes*:

- 1. The flight controller firmware must be updated to v3.06 to use all of the above features.
- Be aware that aircraft will now automatically return to the Home point on Low Battery Level Warning. If you wish to
 disable the auto go-home feature, launch DJI Phantom Assistant, enter "Battery Settings" section and de-select the
 "Go-Home" option.

| | PHANTOM 2 Product Release Notes |
|--|---------------------------------|
| Date : | July 1, 2014 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.1.31 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.04 |
| PHANTOM 2 Assistant Version : | 3.0 |
| PHANTOM RC Assistant Version : | 1.1 |

July 1, 2014 PHANTOM 2 Central Board Firmware V1.0.1.31 released

What's new?

Central Board Firmware

1. Fixed iOSD compatibility issues.

Notes:

Ensure flight controller firmware has been updated to the latest version (v3.04) before you start to update the central board firmware

| | PHANTOM 2 Product Release Notes |
|--|---------------------------------|
| Date : | May 21, 2014 |
| PHANTOM 2 User Manual Version : | 1.1 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.04 |
| PHANTOM 2 Assistant Version : | 3.0 |
| PHANTOM RC Assistant Version : | 1.1 |

May 21, 2014 PHANTOM 2 Firmware V3.04 released

What's new?

Flight Controller Firmware

- **1.** Stability when carrying heavy payloads improved.
- 2. Flight restricted area database updated.

| | PHANTOM 2 Product Release Notes |
|--|---------------------------------|
| Date : | April 30, 2014 |
| PHANTOM 2 User Manual Version : | 1.1 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.02 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.1.25 |
| PHANTOM 2 Assistant Version : | 3.0 |
| PHANTOM RC Assistant Version : | 1.1 |

April 30, 2014 PHANTOM 2 Firmware V3.02 has been released

What's new?

Central Board Firmware

- **1.** Stability when carrying heavy payloads improved.
- **2.** Maximum descent speed restricted to 2m/s.

| | THAITON 2 TIOUdet Release notes |
|--|---------------------------------|
| Date : | April 7, 2014 |
| PHANTOM 2 User Manual Version : | 1.08 |
| PHANTOM 2 Flight Controller Firmware Version : | 3.00 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.1.25 |
| PHANTOM 2 Assistant Version : | 3.0 |
| PHANTOM RC Assistant Version : | 1.1 |
| | |

PHANTOM 2 Product Release Notes

April 7, 2014 PHANTOM 2 Firmware V3.00 has been released

What's new?

Flight Controller Firmware

- 1. Special area restriction
- 2. Compass data error notification
- 3. H3-2D and H3-3D support

Central Board Firmware

1. Gimbal and camera identification

Assistant

- 1. Special area section
- 2. H3-2D and H3-3D support

User Manual

1. New chapter about special area restriction

Notes

- Please be aware that this firmware version limits aerial systems from flying above restricted areas such as airports. For more information, please visit www.dji.com. Updating your firmware signifies you fully acknowledge and accept this function. DJI accepts no liability or damages or injuries incurred directly or indirectly from your refusal to update this firmware.
- **2.** Upgrade the flight controller and central board firmware to the latest version using PHANTOM 2 Assistant V3.0 otherwise there will be malfunction caused by version mismatch.

| Date : | March 26, 2014 |
|--|----------------|
| PHANTOM 2 User Manual Version : | 1.06 |
| PHANTOM 2 Flight 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?

Flight 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 flight 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 Flight Controller Firmware Version : | 1.08 |
| PHANTOM 2 Central Board Firmware Version : | 1.0.1.19 |
| PHANTOM 2 Assistant Version : | 1.08 |
| PHANTOM RC Assistant 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 Flight 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 X1 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 Flight 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 Flight 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

 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 Flight 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 Flight 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 2nd 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

- 1. Upgrade the flight 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.
- **2.** Upgrade iOSD mini, iOSD Mark II and H3-2D firmware to the latest version before using them with PHANTOM 2.
- 3. 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 Flight 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 Overviews

- **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.

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PHANTOM 2 Product Release Notes

- 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 .

| ltems 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 | V2.04 or above | iOSD | V3.02 |
| iOSD mini | V1.04 or above | iOSD | V3.02 |

*The iOSD Assistant Software is applied to both iOSD Mark II and iOSD mini.