| Date                                     | : | May 8th, 2015 |
|------------------------------------------|---|---------------|
| A2 Controller Unit Firmware Version      | : | 2.5           |
| A2 IMU Firmware Version                  | : | 2.5           |
| A2 GPS PRO Firmware Version              | : | 2.6           |
| A2 GPS Module Firmware Version           | : | 2.6           |
| A2 Receiver Firmware Version             | : | 1.1           |
| A2 LED Firmware Version                  | : | 2.1           |
| A2 Assistant Software Version for PC     | : | 1.6           |
| DJI Assistant App Version for iOS Device | : | 1.1.24        |
| iOSD Mark II Firmware Version            | : | 3.02          |
| PC Ground Station                        | : | 4.0.11        |
| iPad Ground Station                      | : | 1.4.62        |
| A2 User Manual Version                   | : | 1.22          |

# **Updates:**

#### **Firmware**

- Added support for Zenmuse gimbal channel control, allowing users to control the aircraft and gimbal using a single remote.
- Modified Home Lock control mode that creates a no-fly zone of 10m radius around Home Point. This is to prevent the pilot from becoming disorientated.
- Added data recording for GNSS coordinates and aircraft attitude. Use the latest iOSD Data Viewer to export this data for post-processing.
- Fixed PC ground station display and waypoint related issues.
- Changed the default action for the first level voltage alarm from a flashing light to RTH.
- Fixed heading problem during initialization when using the GPS-COMP-PRO-PLUS module.

### Software

- Added a Zenmuse channel page to the PC Assistant.
- Display GPS SNR Health and SNR Fluctuation status in the DJI Assistant and iPad Ground Station.

# User Manual

- Added information on connecting the gimbal to the CAN2 port and relevant channel mapping.
- Added description of GPS SNR Health and SNR Fluctuation.

# Notes:

- (1) The gimbal's firmware should be updated as below:
  - a) H3-3D GCU V1.12 or above,
  - b) Z15-5D GCU V2.4 or above, IMU V1.8 or above,
  - c) Z15-5D  $\Pi$  GCU V2.4 or above, IMU V1.8 or above,
  - d) Z15-GH3 GCU V2.4 or above, IMU V1.8 or above,
  - e) Z15-GH4 GCU V2.4 or above, IMU V1.8 or above,
  - f) Z15-BMPCC GCU V2.4 or above, IMU V1.12 or above,
  - g) Z15-5N, Z15-GH2, Z15-7N and Z15-5R do not support connection with CAN2 port.
- (2) Backup parameters before each upgrade since the parameters may be reset during upgrade. When upgrade is complete, check the configuration of A2 controller unit then unlock the controller unit in A2 Assistant.
- (3) Once upgraded, calibration parameters saved in the A2 controller unit will be cleared. Recalibrating the IMU and the compass is required.

(4) Use with the latest version of the DJI A2 Assistant Software, Ground Station and gimbal firmware.

| Date                                     | : | November 14th, 2014 |
|------------------------------------------|---|---------------------|
| A2 Controller Unit Firmware Version      | : | 2.4 ml              |
| A2 IMU Firmware Version                  | : | 2.4                 |
| A2 GPS PRO Firmware Version              | : | 2.6                 |
| A2 GPS Module Firmware Version           | : | 2.6                 |
| A2 Receiver Firmware Version             | : | 1.1                 |
| A2 LED Firmware Version                  | : | 2.1                 |
| A2 Assistant Software Version for PC     | : | 1.4                 |
| DJI Assistant App Version for iOS Device | : | 1.1.21              |
| iOSD Mark II Firmware Version            | : | 3.02                |
| PC Ground Station                        | : | 4.0.11              |
| iPad Ground Station                      | : | 1.4.59              |
| A2 User Manual Version                   | : | 1.2                 |

# Firmware

- Removed fast start-up feature for self-tightening propellers.
- Solved the problem that the assistant software fails to cancel the flight limit in some airports.
- Improved GNSS positioning threshold to enhance the initial positioning stability.
- Optimized integrity monitoring for satellite receiver.

| Date                                     | : | November 7th, 2014 |
|------------------------------------------|---|--------------------|
| A2 Controller Unit Firmware Version      | : | 2.4                |
| A2 IMU Firmware Version                  | : | 2.4                |
| A2 GPS PRO Firmware Version              | : | 2.4                |
| A2 GPS Module Firmware Version           | : | 2.4                |
| A2 Receiver Firmware Version             | : | 1.1                |
| A2 LED Firmware Version                  | : | 2.1                |
| A2 Assistant Software Version for PC     | : | 1.4                |
| DJI Assistant App Version for iOS Device | : | 1.1.21             |
| iOSD Mark II Firmware Version            | : | 3.02               |
| PC Ground Station                        | : | 4.0.11             |
| iPad Ground Station                      | : | 1.4.59             |
| A2 User Manual Version                   | : | 1.2                |

### **Firmware**

- New "Cruise Control" feature where the aircraft will lock into its current horizontal speed when users release the control sticks. The cruise speed can be adjusted by the remote control at any time.
- New "Banked Turn" mode. The roll and yaw sticks are combined to help perform banked turns.
- Added a "Home Fence" feature that prevents the aircraft from entering the area directly around the Home point.
- Support for F-Channel and Action settings in the DJI PC Ground Station.
- Support for the Dropsafe system.
- Added the ability to control the aircraft during Return To Home procedures.
- Emergency position of the mode switch is set to Atti. Mode by default instead of Manual Mode.
- Added flight limits and airport No-Fly Zones.
- Obtain initial receiver coordinates more quickly, in cold starts, low satellite signal (foliage/canopy).
- Greater satellite tracking reliability in poor visibility conditions (urban canyon/tall buildings, bridges/underpasses, etc.).
- Home Lock and Point of Interest performance upgraded.

# **Assistant Software**

- "Cruise Control" function added to the IOC page.
- "Home Fence (H-Fence)" page and "Airport Limit" page in "Limits" tag added.
- "Parachute" tag added.

### Notes:

- Ensure controller unit firmware matches IMU firmware. Otherwise there is a potential aircraft damage risk.
- Upgrade GPS module to the latest version to enhance the GPS performance in harsh conditions.
- Upgrade gimbal firmware to the latest version (v2.0) to use with the latest A2 firmware (v2.4).
- Use with the latest version of the DJI A2 Assistant Software, Ground Station and gimbal firmware.
- Mac users should use the latest A2 Assistant software on Mac OS X 10.9 or above.
- When upgrade is complete, check the configuration of A2 controller unit then unlock the controller unit in A2 Assistant.
- Once upgraded, calibration parameters saved in the A2 controller unit will be cleared. Recalibrating the IMU and the compass is required.

| Date                                     | : | May 30th, 2014 |  |
|------------------------------------------|---|----------------|--|
| A2 Controller Unit Firmware Version      | : | 2.4            |  |
| A2 IMU Firmware Version                  | : | 2.2            |  |
| A2 GPS PRO Firmware Version              | : | 2.2            |  |
| A2 GPS Module Firmware Version           | : | 2.2            |  |
| A2 Receiver Firmware Version             | : | 1.1            |  |
| A2 LED Firmware Version                  | : | 2.0            |  |
| A2 Assistant Software Version for PC     | : | 1.3            |  |
| DJI Assistant App Version for iOS Device | : | 1.1.16         |  |

# Firmware

Removed airport flight restrictions.

| Date                                     | : | May 8th, 2014 |
|------------------------------------------|---|---------------|
| A2 Controller Unit Firmware Version      | : | 2.2           |
| A2 IMU Firmware Version                  | : | 2.2           |
| A2 GPS PRO Firmware Version              | : | 2.2           |
| A2 GPS Module Firmware Version           | : | 2.2           |
| A2 Receiver Firmware Version             | : | 1.1           |
| A2 LED Firmware Version                  | : | 2.0           |
| A2 Assistant Software Version for PC     | : | 1.3           |
| DJI Assistant App Version for iOS Device | : | 1.1.15        |
| A2 Flight Control System User Manual     | : | 1.16          |

# **Firmware**

- Propulsion allocation optimization and flight stability enhancements.
- New compass algorithm further reduces the impact of strong magnetic interference.
- Fixed gimbal servo travel limit.

# **Assistant Software**

- New IMU calibration function.
- "Upgrade All" button added.

# User Manual

• Instruction for IMU calibration.

Important: Upgrade GPS module firmware to the latest version for better GPS performance in harsh environment. Previous versions of DJI Assistant App were not compatible with the current A2 firmware. Upgrade to the latest version to ensure compatibility.

| Date                                     | : | December 27, 2013 |
|------------------------------------------|---|-------------------|
| A2 Controller Unit Firmware Version      | : | 2.1               |
| A2 IMU Firmware Version                  | : | 2.1               |
| A2 GPS PRO Firmware Version              | : | 2.1               |
| A2 GPS Module Firmware Version           | : | 20.1              |
| A2 Receiver Firmware Version             | : | 1.1               |
| A2 LED Firmware Version                  | : | 2.0               |
| A2 Assistant Software Version for PC     | : | 1.2               |
| DJI Assistant App Version for iOS Device | : | 1.1.14            |
| A2 Flight Control System User Manual     | : | 1.12              |

### **Firmware**

- 1. Enhanced performance of A2 flight control system in data loss situations that are caused by abnormal communications.
- 2. Optimized e control performance, if the command of Yaw control stick is zero, the command variation of Elevator, Roll and Throttle will not change the aircraft attitude around Yaw.
- 3. Optimized IOC function and POI algorithm to improve user experience.
- 4. Optimized communication protocol.
- 5. Support to upgrade A2 GPS Module.
- 6. Fixed the attitude jitters during Failsafe and Go Home.

### **Assistant Software**

- 1. Added RC status display.
- 2. 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 A2 Assistant Software on Mac OS X.
- 2. Added Failsafe settings for traditional receiver users.
- 3. Added RC status description.
- 4. Revised the control mode introduction.
- 5. Added trouble shooting list of motors start failures.
- 6. Added a note that if the second level low voltage alerts occur when the aircraft is during Failsafe and Go Home process or the aircraft is controlled by Ground Station, the aircraft will descend automatically.
- 7. Revised the recording conditions in IOC function.
- 8. Added a system error LED indicator shown in continuous 4 red blinks.
- 9. Revised the attitude status LED indicator, there is no blinks if the attitude status is good and continuous 3 white blinks if bad.
- 10. Added the note that when using with A2, the firmware of iOSD Mark II should be V3.0 or above and OSD Viewer should be V4.0 or above.

# Notes for Upgrade

- For safety reasons, do not use the power battery for power supply during firmware upgrade. Reconfigure all parameters in the Assistant Software after firmware upgrade.
- 2. When using the A2 flight control system firmware version V2.1, the firmware of other DJI products used in conjunction must be matched with the requirements in the table below.

| Other DJI Products | Firmware/Software Version (or above) | Assistant Software( use to upgrade) |
|--------------------|--------------------------------------|-------------------------------------|
| iOSD Mark II       | V3.0                                 | iOSD V4.0 & OSD Viewer V4.0         |
| iOSD mini          | V1.04                                | iOSD V4.0                           |

# A2 Product Release Notes

| Zenmuse H3-2D           | GCU V1.6 & IMU V1.6 & CMU1.0                                  | H3-2D V1.02                      |
|-------------------------|---------------------------------------------------------------|----------------------------------|
| Z15-GH3                 | GCU V0.12 & IMU V1.4                                          | Z15-GH3 V1.00                    |
| Z15-5D                  | GCU V0.12 & IMU V1.4                                          | Z15-5D V1.00                     |
| Z15-5N/7N/GH2/5R        | GCU V0.0.12 & IMU V1.0.18_beta                                | Z15 V1.4                         |
| 2.4G Bluetooth Datalink | The Ground end V1.0.1.5 & The Air End V1.0.1.1 & BTU V1.0.1.2 | 2.4G Bluetooth Datalink V1.0.0.6 |
| iPAD Ground Station     | V1.3.56                                                       |                                  |

- 3. 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 A2 icon in the Finder or using Launchpad.
- 4. Please download the application installer in DMG format from the download page of A2 on the DJI website.
- 5. The Assistant Software for Windows and Mac OS X will updated simultaneously in the future.

| Date                                     | : | 2013.10.25 |
|------------------------------------------|---|------------|
| A2 Controller Unit Firmware Version      | : | 2.0 Beta   |
| A2 IMU Firmware Version                  | : | 2.0        |
| A2 GPS PRO Firmware Version              | : | 2.0        |
| A2 Receiver Firmware Version             | : | 1.1        |
| A2 LED Firmware Version                  | : | 2.0        |
| A2 Assistant Software Version for PC     | : | 1.1        |
| DJI Assistant App Version for iOS Device | : | 1.1.13     |
| A2 Flight Control System User Manual     | : | 1.10       |

### **Firmware**

- Support of Ground Stations, providing 50 waypoints for use. To utilize the Ground Station function, please connect the Air end of the
  Datalink module either directly to the port labeled CAN2, located on the A2 Controller unit or the CAN port, located on any modules
  which are already connected to the CAN2 port using a CAN-Bus cable.
- 2. Support of a remote configuration feature by using the DJI Assistant App on iOS through Bluetooth, which requires the A2 LED firmware version 1.1 or above.
- 3. Support of the DJI Zenmuse H3-2D gimbal. (The firmware of the H3-2D should be upgraded, which is coming soon.)
- 4. Option to dedicate nose or tail direction to point towards Home Point while performing the Go-Home procedure.
- 5. A control mode indicator added to the system, the LED will blink blue when the aircraft is utilizing the Ground Station function.

#### **Assistant Software**

- Option to dedicate nose or tail direction to point towards Home Point while performing the Go-Home procedure on the Failsafe page.
   The tail of the aircraft points towards Home Point when performing Go-Home by default.
- 2. H3-2D channel added to the Channel Mapping page, specialized for the H3-2D gimbal pitch control.
- 3. Channel Mapping button added to every page for convenience.
- 4. Display RC STATUS in the bottom of the A2 Assistant Software page.

### User Manual

- 1. Add the connection of H3-2D and A2 Flight control system. To utilize the H3-2D gimbal, please connect the GCU module either directly to the port labeled CAN2, located on the A2 Controller unit or the CAN port, located on any modules which are already connected to the CAN2 port using a CAN-Bus cable.
- 2. Add the usage description of the H3-2D channels.
- 3. Add the description of DJI Assistant App on iOS device, including introduction, download, installation, and usage.
- 4. Revise the LED Indicator description; the control mode indicator will blink blue when the aircraft is utilizing the Ground Station function.
- 5. Add the descriptions of RC STATUS displayed on the bottom of the A2 Assistant Software page.

### Important:

- Must upgrade the iPad Ground Station to the version 1.3.56 when using with the A2 Flight control system and the firmware of A2
   Flight control system and 2.4G Bluetooth Datalink should be upgraded to the latest version.
- Please upgrade the firmware of A2 Flight control system to the latest version before using the DJI Assistant App on iOS device to configure.
- For safety reasons, do not use the power battery for power supply during firmware upgrade.
- Reconfigure all parameters in the Assistant Software after firmware upgrade.

| Date                                 | : | 2013.09.26          |
|--------------------------------------|---|---------------------|
| A2 Controller Unit Firmware Version  | : | 1.0                 |
| A2 IMU Firmware Version              | : | 1.0                 |
| A2 GPS PRO Firmware Version          | : | 1.0                 |
| A2 Receiver Firmware Version         | : | 1.1                 |
| A2 LED Firmware Version              | : | 1.0                 |
| A2 Assistant Software Version        | : | 1.0                 |
| A2 Assistant App Version for iOS     | : | 1.0 ( Coming soon ) |
| A2 Flight Control System User Manual | : | 1.08                |

# Receiver Firmware

Support DSM2 satellite Receivers used with all SPEKTRUM Transmitters, e.g. DX6I DX7S DX8 DX18 etc., as well as JR Transmitters,
 e.g. DXS9II DXS11

# **User Manual**

- Add the supported DSM2 Receivers and linking procedures
- Add the descriptions of the control mode configuration in the Assistant software

# Cautions:

- When using the DSM2 satellite Receivers, it is no need to enable the Failsafe function in the Transmitter. Once the Receiver loses the signals from the Transmitter, the controller unit will enter into Failsafe automatically, and the aircraft will hover or Go-home as configurations of the Failsafe in the Assistant software.
- For safety reasons, do not use the power battery for power supply during firmware upgrade.
- Re-configure all parameters in the assistant software after firmware upgrade.

| Date                                 | : | 2013.09.04          |
|--------------------------------------|---|---------------------|
| A2 Controller Unit Firmware Version  | : | 1.0                 |
| A2 IMU Firmware Version              | : | 1.0                 |
| A2 GPS PRO Firmware Version          | : | 1.0                 |
| A2 Receiver Firmware Version         | : | 1.0                 |
| A2 LED Firmware Version              | : | 1.0                 |
| A2 Assistant Software Version        | : | 1.0                 |
| A2 Assistant App Version for iOS     | : | 1.0 ( Coming soon ) |
| A2 Flight Control System User Manual | : | 1.00                |

### **Functions**

- Various configurations of multi-rotors supported
  - Quad-rotor ( I4 , X4 ), Hexa-rotor ( I6 , V6 , Y6 , IY6 ), Octo-rotor ( X8 , I8 , V8 )
  - Customized mixer
- Remote gain adjustment
  - From transmitter
  - From a mobile device via Bluetooth link
- One-key Go home
- "Height Limit" and "Distance Limit" function
- Voltage monitoring
  - 2 levels low-voltage protection
  - Automatic go home
  - Landing protection
- Fail-Safe protection
  - Hover
  - Auto Go home and landing
- Motor failure tolerance for Hexa-rotor
  - For Hexa-rotor IY6 or Y6 : Keep balance of attitude (roll, pitch and yaw)
  - For Hexa-rotor I6 or V6 : Keep roll and pitch attitude, possible with spinning
- Intelligent Orientation Control(IOC)
  - Course lock(CL)
  - Home point lock(HL)
  - Point of interest(POI)
- \$800 EVO Intelligent landing gear supported
- 2-axis gimbals supported
- iOSDMark II, and all series Z15 gimbals products Supported
- Receiver
  - Built-in Receiver DR16: Futaba FASST series Transmitter supported
  - External Receivers
    - ♦ S-bus Receiver
    - ◆ PPM Receiver
    - ♦ SPEKTRUM Satellite DX6I DX8 Receiver ( more DSM2 series receivers will be supported )

### Cautions:

- For safety reasons, disconnect the power battery during firmware upgrade.
- Re-configure all parameters in the assistant software after firmware upgrade.
- Power cycle procedures
  - Power off: Disconnect the USB cable first, and then disconnect the external power battery.