WooKong Multi Rotor Product Release Notes

Date	:	**23/08/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.14a_beta**
WooKong M software version	:	**1.32**
WooKong M User Manual	:	**3.3**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quad-rotor, Hexa-rotor, Y6-rotor, X8-rotor and Octo-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus and PPM Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control(IOC)

What's changed?

- Modify the Fail-safe mode: there is no intelligent go-home, and the input range of altitude go-home is 20m~300m.
- Adjust the aircraft landing speed during go-home, the higher the altitude, the faster the decline.
- Enhance the logical judgment for quitting from fail-safe mode.
- Attitude is controllable when one power output of X6 multi-motor is failed in Atti. Mode and GPS Atti. Mode.

Notices：

- For safety reason, do not use power battery during firmware upgrade.
- Make sure reconfigure all parameters after upgrading firmware.

Date	:	**20/07/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.12abeta**
WooKong M software version	:	**1.30abeta**
WooKong M User Manual	:	**3.1**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quad-rotor, Hexa-rotor, Y6-rotor, X8-rotor and Octo-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus and PPM Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control(IOC)

What's changed?

- Fix the M7 and M8 spinning up problem of octocopter with traditional receiver.
- Improve the gimbal control performance by reducing the gimbal irregular shaking, so as to make gimbal movement smoother.

Notices：

- For safety reason, do not use power battery during firmware upgrade.
- Make sure reconfigure all parameters after upgrading firmware.

WooKong Multi Rotor Product Release Notes

Date	:	**15/07/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.12**
WooKong M software version	:	**1.30**
WooKong M User Manual	:	**3.0**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quad-rotor, Hexa-rotor, Y6-rotor, X8-rotor and Octo-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus and PPM Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control(IOC)

What's changed?

- Fix the problem that Octocopter can't be used with traditional receiver in the firmware version 5.10.
- Fix the problem that assistant software version 1.28 will crash under some of win7 system.

Notices：

- Make sure reconfigure all parameters after upgrading firmware.

Date	:	**13/07/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.12**
WooKong M software version	:	**1.28**
WooKong M User Manual	:	**3.0**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quad-rotor, Hexa-rotor, Y6-rotor, X8-rotor and Octo-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus and PPM Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control(IOC)

What's changed?

- Fix the problem that Octocopter can't be used with traditional receiver in the firmware version 5.10.

Notices：

- Make sure reconfigure all parameters after upgrading firmware.

Date	:	**11/07/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.10**
WooKong M software version	:	**1.28**
WooKong M User Manual	:	**2.9**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quad-rotor, Hexa-rotor, Y6-rotor, X8-rotor and Octo-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus and PPM Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control(IOC)

What's changed?

- Enhance wind-resistance when hovering
- Enlarge gimbal servo limit
- Gimbal pitch stability while X3 is for stick monitor or switch go-home

What's new?

- PPM Receiver Supported
- Multi Gimbal Servo Output Frequency Supported
- Add Point Of Interest (POI) Function in IOC
- Add Intelligent Go-Home and Altitude Go-Home Functions in Fail-Safe mode
- Go-Home Switch

Notices：

- Make sure reconfigure all parameters after upgrading firmware.

WooKong Multi Rotor Product Release Notes

Date	:	**28/05/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.08**
WooKong M software version	:	**1.26**
WooKong M User Manual	:	**2.7**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quad-rotor，Hexa-rotor，Y6-rotor，X8-rotor and Octo-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control

What's changed?

- Elevate permissions for WKM:

  view->single waypoint;

  single waypoint ->5 waypoints;

  20 waypoints->50 waypoints.

What's new?

-

Notices：

- Make sure reconfigure all parameters after upgrading firmware.

WooKong Multi Rotor Product Release Notes

Date	:	**04/05/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.06**
WooKong M software version	:	**1.24**
WooKong M User Manual	:	**2.5**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quadrotor，Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control

What's changed?

- Optimize the GPS control mode; improve the control performance.

What's new?

- Five-level Motor Idle Speed adjustable in Motor Mixer.

Notices：

- Make sure reconfigure all parameters after upgrading firmware.
- Setting idle speed too low may affect motor(s) spool up. Setting idle speed too high may affect aircraft take off at lowest throttle position. Please refer to user manual for details.

Date	:	**10/01/2012**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.02**
WooKong M software version	:	**1.20**
WooKong M User Manual	:	**2.3**

Functions:

- Autopilot
- Auto Hover Fail-Safe）
- Return Home and Landing Fail-Safe
- Quadrotor， Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control

What's changed?

- Fix the X1 and X2 channels no output problem when you are using traditional receiver and Octo-rotor at the same time.
- Optimize the gimbal control; reduce the gimbal irregular shaking when GPS signal is weak.

Notice：

- 5.0 user do not need to upgrade to 5.02 if you are not using traditional receiver and Octo-rotor. But please download the user manual 2.3.

Date	:	**31/12/2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**5.0**
WooKong M software version	:	**1.14**
WooKong M User Manual	:	**2.2**

Functions:

- Autopilot
- Auto Hover Fail-Safe）
- Return Home and Landing Fail-Safe
- Quadrotor，Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- Intelligent Orientation Control

What's new?

- Intelligent Orientation Control: Yaw Lock; Home Lock.
- Open multi waypoints flight right by S/N: （internal code : door ; update num : 100 ; update key : 1231cf）

Date	:	**27/12/2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**4.26**
WooKong M software version	:	**1.13**
WooKong M User Manual	:	**2.1**

Functions:

- Autopilot
- Auto Hover Fail-Safe）
- Return Home and Landing Fail-Safe
- Quadrotor， Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection

What's new?

- In "Cut Off Type"-"Immediately" Mode: once motors started and throttle stick position is below 10%, motors will stop immediately, in last version, you need "Arm start type" to start motors, now, after motors stopped, you can move throttle stick to start motors within 5 seconds.
- In "Motor Mixer"-"Customize": in last version, F1 and F2 ports are unable to support gimbal servos control when customize a quad-rotor or hex-rotor, now, F1 and F2 can support gimbal servos control when customize a quad-rotor or hex-rotor.

Date	:	**18 November 2011**
Release Status	:	**Evaluation**
WooKong M Firmware Version	:	**4.22**
WooKong M Software Version	:	**1.12**
WooKong M User Manual	:	**2.0**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quadrotor， Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- View Option, Joystick & Keyboard Control and Click Go Functions Activable

Changes:

- Two types for cutting off motor: Immediately and Intelligent
- Optimize the performance of taking off when throttle is at center

What's new?

- Configuration import and export function

Date	:	**10 November 2011**
Release Status	:	**Evaluation**
WooKong M Firmware Version	:	**4.2**
WooKong M Software Version	:	**1.11**
WooKong M User Manual	:	**1.10**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quadrotor，Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- View Option, Joystick & Keyboard Control and Click Go Functions Activable

Changes:

- Fix X2 channel input jumping issue when using JR & Specktrum Rx

Date	**:**	**17 October 2011**
Release Status	**:**	**Evaluation**
WooKong M Firmware Version	**:**	**4.0**
WooKong M Software Version	**:**	**1.11**
WooKong M User Manual	**:**	**1.9**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home and Landing Fail-Safe
- Quadrotor，Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection
- View Option, Joystick & Keyboard Control and Click Go Functions Activable

Changes:

- Add a new throttle starting mode – Arm mode
- Add a new parameter in Autopilot page

What's new?

- View Option, Joystick & Keyboard Control and Click Go functions activable
- Add latest version checking function in PC configuration software

Date	:	**23 September 2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**3.6**
WooKong M software version	:	**1.9**
WooKong M User Manual	:	**1.7**

Functions:

- Autopilot
- Auto Hover Fail-Safe ）
- Return Home and Landing Fail-Safe
- Quadrotor，Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection

Changes:

- Motor will not stop when throttle stick is below 10%
- Increase the max vertical speed (both up and down) to 6m/s (depends on the aircraft)
- A new checking for compass working state
- Add connection checking and protection between receiver and controller

WooKong Multi Rotor Product Release Notes

Date	:	**15 September 2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**3.2**
WooKong M software version	:	**1.7**
WooKong M User Manual	:	**1.5**

Functions:

- Autopilot
- Auto Hover Fail-Safe ）
- Return Home and Landing Fail-Safe
- Quadrotor， Hexarotor，Y6-rotor，X8-rotor and Octorotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported
- D-BUS Port, S-bus Receiver Supported
- Voltage Monitor and Low Voltage Protection

Changes:

- Optimize gimbal output to make servo moving smoother
- Increase the max vertical speed (both up and down) to 4.5m/s
- Decrease hovering time from 30 to 15 seconds when fail-safe before landing.
- Add a gimbal switch

What's new?

- X8 and octorotor supported
- A new D-bus port which supports S-bus receiver.
- Power Management Unit（PMU）.
- Voltage monitor and low voltage protection. Users can set different warning voltage in 2 levels. Aircraft will have the LED warning, go-home and landing if voltage is below the warning level.

Date	:	**1 September 2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**2.0**
WooKong M software version	:	**1.4**
WooKong M User Manual	:	**1.4**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home Fail-Safe
- Return Home and Landing
- Quadrotor, Hexarotor, Y6-rotor Supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported

Changes:

- Delete "w damping" parameter in autopilot page of the software.

What's new?

- Y6-rotor Supported

Date	:	**25 August 2011**
Release Status	:	Evaluation
WooKong M firmware version	:	1.4
WooKong M software version	:	1.2
WooKong M User Manual	:	1.2

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home Fail-Safe
- Return Home and Landing
- Quadrotor and Hexarotor supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported

Changes:

- Modify the interface of Autopilot page. User can adjust the advanced parameters after advanced parameter box is enabled.
- Optimize the working state when power input is above 10V.

Date	:	**19 August 2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**1.2**
WooKong M software version	:	**1.1**
WooKong M User Manual	:	**1.1**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home Fail-Safe
- Return Home and Landing
- Quadrotor and Hexarotor supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported

Changes:

- Outputs to ESC are locked at the minimal position when system is successfully connected to the PC configuration software.

Date	:	**17 August 2011**
Release Status	:	**Evaluation**
WooKong M firmware version	:	**1.0**
WooKong M software version	:	**1.0**
WooKong M User Manual	:	**1.0**

Functions:

- Autopilot
- Auto Hover Fail-Safe
- Return Home Fail-Safe
- Return Home and Landing
- Quadrotor and Hexarotor supported
- Customized Motor Mixer
- Remote Gain Adjustment
- Two-axis Gimbal Supported