



# XP 3.1 Waypoint Specification

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## Graphical Flight Assignments Programming

<b>Multiple purpose waypoint</b>	Maximum 50 waypoints with independent assignment information
<b>Basic waypoint property</b>	Altitude, Latitude, longitude, Flight speed, Start waypoint
<b>Waypoint assignment</b>	Camera Shutter/ Gimbals control, Airdrop Control, General Purpose Servo Action
<b>Mission mode selection</b>	Patrol/ Single way from start point to end point
<b>Turning mode selection</b>	Independent turning mode for different waypoint: Stop and Turn/ Coordinated Turn

## Global Map Browser

Based on powerful Google Earth Geometry Information System (GIS), you can use our system in all over the world.

## Safety Strategies

Strictly AI control logic design, ensure your safety operation. Most of the potential hazards could be eliminated automatically. The system will auto-hover your helicopter when R/C Tx communication is unstable, Auto-navigate your helicopter back to pre-set home location when R/C Tx signal is totally lost.

## Electronics/ Electromechanical Airborne Equipments

- IMU
- GPS
- Pressure sensor
- Ultrasonic distance sensor\*
- Digital compass
- Wireless data-link
- Image processing unit\*
- Camera gimbals\*
- Airdrop platform\*
- General Purpose Servo
- Mobile signal repeater\*

## Communication System

<b>Hardware Interface</b>	RS-232	<b>Range(Outdoor)</b>	≤11km with dipole antenna
<b>Radio frequency</b>	900 MHz / 2.4 GHz (Optional)	<b>@ 115200 bps</b>	≤32km with high-gain antenna
<b>Data-Throughput</b>	≤ 11,5200 bps (Optional)		

## Electronics Flight Instruments

- GPS coordinate indicator
- General speed indicator
- Fuel meter\*
- Battery life indicator\*
- Attitude indicator
- Altitude indicator
- RF signal strength indicator
- Helicopter position tracker

## Multiple Aircraft Control Mode

- Manual Mode under transmitter control
- Attitude Control Mode under transmitter aided control
- Autopilot Mode
- Semi-Auto Mode under Joystick aided control

## Pre-Flight Simulation

Pre-Flight Simulation aims to help you get familiar with the Ground Station software in an virtual environment. You don't need to take off your real helicopter for the purpose to study the software operations.

## System Operation Environments/ Language Support

Microsoft Window XP Home Edition/ Professional Edition, Microsoft Window Vista, Microsoft Window 7

Chinese(Simplified), Chinese(Traditional), English, Germany\*

\* Some of the functions are about to release in 09/2010 Please refer to <http://www.dji-inovations.com> for details