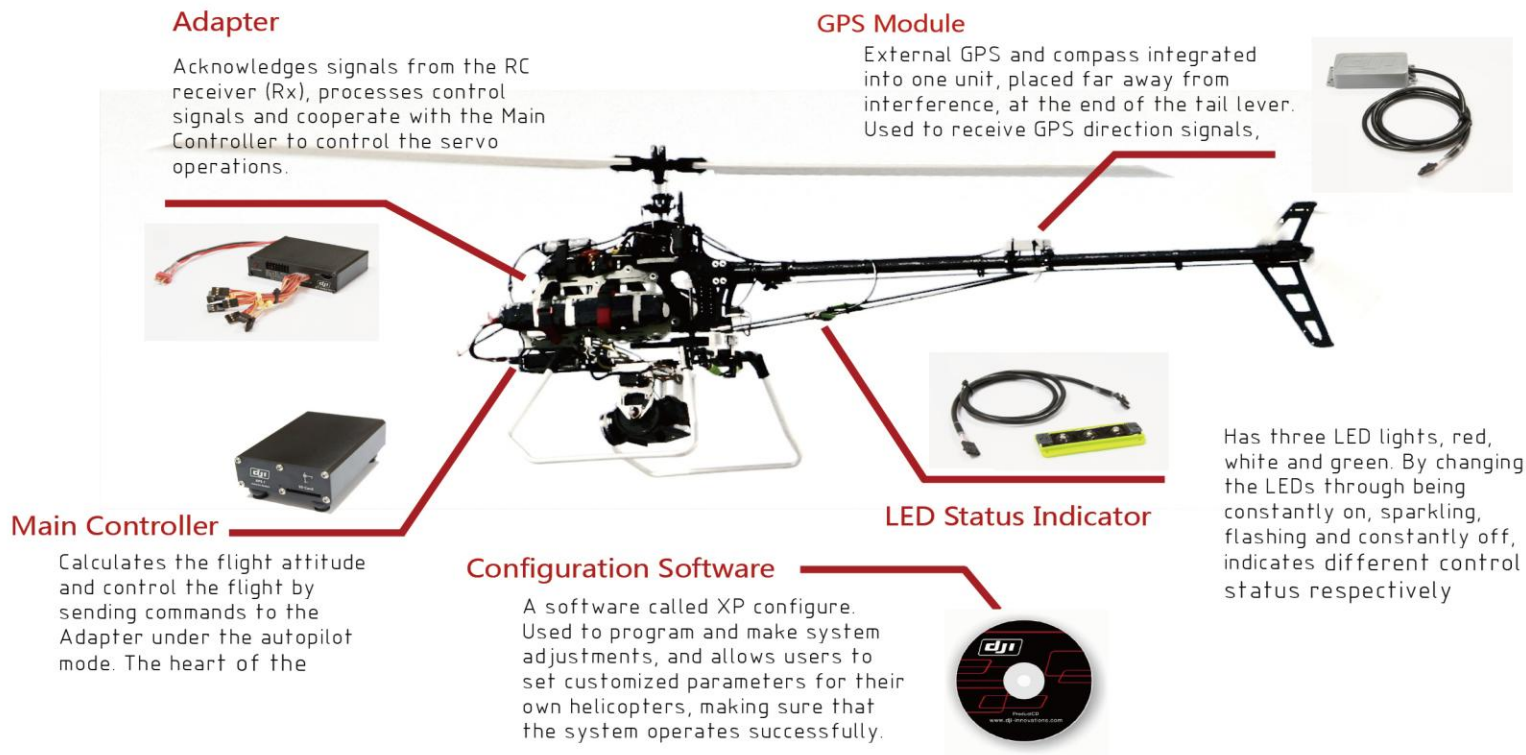




DJI XP3.1 Helicopter autopilot is a new generation product, being the first GPS/INS based helicopter autopilot developed for model market, by combining the high precision of positioning measurements of GPS and the environment independence and high update rate of INS. Its exceptional performances allow XP3.1 to meet the requirements of markets from hobby use to professional applications, and even accomplish some of the most demanding tasks.

By using MEMS technology, with DJI's highly automated facilities, XP 3.1 is provided with the same level of performance, at a much lower price compared with other similar products in the market.



## System Features

1. Automatically hover when RC signal is lost (enter the Fail Safe mode).
2. Fully automatic hovering with high precision. XP 3.1 Standard Edition (<2m cep), Professional Edition (<1m cep)
3. Automatically revise errors during hover and flight
4. Under the mode of locked-altitude, allows the user to control the helicopter to fly in a turn-coordinated way
5. Not restricted by altitude or terrains, and no frequent switching between various control modes needed, the helicopter can hover or fly in any directions, with error of flying speed controlled within 0.1 m/s
6. Allow user to control the flight in a fully automatic way (control of one joystick)

## Hardware

1. Separate DSPs (digital signal processor), calculate altitude and control algorithm, improve real-time performance of the controller
2. High performance 16-channel GPS receiver, provide superior position accuracy
3. Highly-reliable tri-axial gyroscopes and accelerometers of MEMS enclosed
4. Building algorithm can facilitate users to do the hard and soft iron magnetic field compensation to eliminate magnetic interference
5. Dedicated CPLD to decode and encode servo signal, achieve higher reliability and compatibility for most RC receivers

## Control Modes

### Autopilot Mode

Allow users to fly the helicopter in an easier way, even learn to control the helicopter in few minutes for first-time players.

### Attitude Control Mode

Ensure the helicopter's attitude consistency in a no GPS condition.

### Pure Manual Mode

The traditional manual mode. The helicopter being controlled as an ordinary RC helicopter.