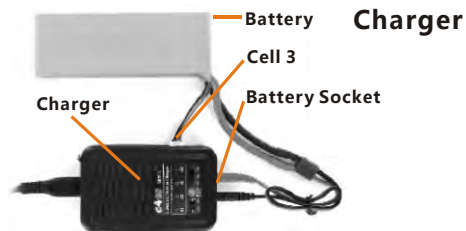
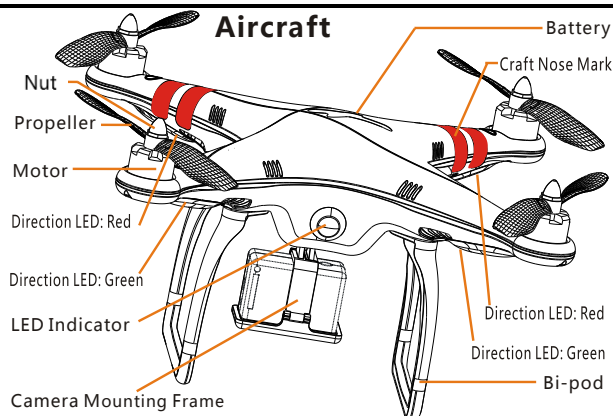


PHANTOM Quick Start Manual

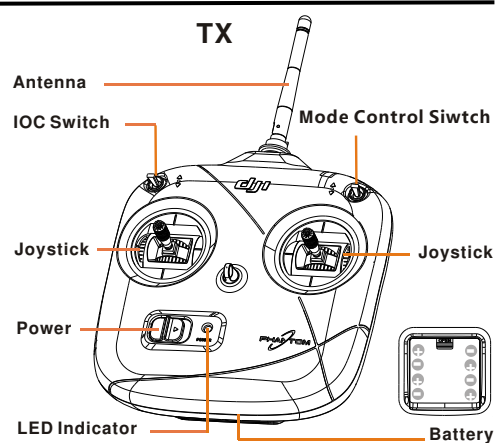
Introduction

The PHANTOM is an all-in-one small Quad Copter designed for multi-rotor enthusiasts. Before shipping from the factory, it has been configured and fully tested, which means you have no set-up or configuration to do.

- Built-in autopilot system
- Built-in R/C receiver
- High intensity LED lights
- Manual/ATTI./GPS ATTI. modes
- Intelligent Orientation Control Mode
- Low Voltage Protection
- Enhanced Fail Safe
- Frame for mounting a Camera (GoPro)



- AC Input: 100-240V
- Battery Type: LiPo
- Cell Count: 2-4 cells
- Current Drain for Balancing: 200mA



- Working Frequency : 2.4GHz
- Control Channel Numbers of TX :
- Communication Distance : 300m
- Receiver Sensitivity (1%PER) : > -93dBm
- Power Consumption of TX : < 20dBm
- Working Current /Voltage : 52 mA@6V
- AA Battery : 4 Required

Indicator	Function
B-----BB	The throttle stick isn't in the lowest position after turning on.
●●●●●●	Linking between the TX and the RX
■■■■■■	Normal Operation
BB.....	Low-battery Alarm

Flight Test

- 1) Make sure the LiPo battery is fully charged.
- 2) Lower the throttle stick to the bottom position, and turn on the TX.
- 3) After you have turned on the TX for 2sec, install the battery and connect it to the battery connector of the multi rotor to power on the PHANTOM.
- 4) Tx and Rx should now be linking. The LED indicator on the TX will change to blinking red (about 1 sec). When the linking is successful, the LED indicator on the TX will change to solid red.
- 5) Turn the Tx IOC mode to OFF. Switch the mode control switch on the Tx to make sure it works properly, refer to the LED indicator on the multi rotor.
- 6) Execute the CSC Command (see right) and raise the throttle stick slowly. Make sure the ESC's work properly and the rotation direction of the motors is the same as the marks. The direction LED lights indicate: nose is red and the tail is green, they will turn off if the motors stop.
- 7) Ready to fly.
- 8) Switch the Tx control mode switch to ATTI. Mode and then lightly move the Tx sticks in Roll, Pitch and Yaw to feel if the aircraft moves in the corresponding direction.
- 9) Take off the multi rotor in ATTI. Mode.
- 10) Finish and land the multi rotor.

Start and Stop Motors: You have to execute any one of the following four Combination Stick Commands (CSC)

Note : In Atti /GPS Atti. Mode, any one of the following will stop the motors: Not raising the throttle stick within 3 seconds after the motors start. Throttle stick under 10%, and after landing for 3 seconds. The angle of the multi-rotor is over 70°, and throttle stick under 10%.



ESC (motor controller) State

Ready: ♪1234567

Throttle stick is not at bottom: BBBBBB...

Input signal abnormal: B-----B...

Input voltage abnormal: BB---BB...

Note:

Please always switch on the transmitter first, then power on the quad-rotor before takeoff! Power off the quad-rotor first, and then switch off the transmitter after landing!

After powering on and before the motors start, if the multi rotor LED double blinks yellow without Tx stick movement, you should power cycle the multi rotor.

If the multi rotor LED flashes quickly Red then this indicates battery voltage is low, please land ASAP.

The multi rotor will automatically hover (or return home if in GPS mode) if the fail safe mode is active.

We recommend that you take off the multi rotor in ATTI. Mode. Manual mode is very sensitive.

Transmitter Control Description

Roll	Pitch	GPS ATTI. M O D E Manual
Throttle	Yaw	OFF IOC Orientation Locked Home Point Locked

GPS Flight Test

Carry out the compass calibration

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If you keep having calibration failure, it might suggest that there is very strong magnetic interference around the GPS & Compass module, please avoid flying in this area.

Flight Procedure

- After powering on and before the motors start, if the LED double flashes Green without Tx stick movement, you should power cycle the multi rotor.
- In GPS mode the multi rotor will go home if the fail safe mode is active.
- If the LED lights Red, please hover the aircraft until it turns off, so as to have better flight performance.

Multi Rotor LED Indicator

Control Mode LED	Manual	Atti.	GPS Atti.	IOC
GPS satellites < 5	● ● ●	● ● ● ●	● ● ● ●	● ● ● ● ●
GPS satellites = 5	● ●	● ● ●	● ● ●	● ● ● ●
GPS satellites = 6	●	● ●	● ●	● ● ●
GPS satellites >6	None	●	●	● ●
Attitude status bad	■ ■ ■ ■	■ ■ ■ ●	■ ■ ■ ●	■ ■ ■ ● ●
Others				
Tx signal lost	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●			
Low voltage / Other errors	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●			
System start and self-check	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●			
Do NOT move any command sticks during power up! Please contact us if the last four green blinks are abnormal.				