LiteBee Wing EDU Programmable Coding Drone Instruction Manual

Contents

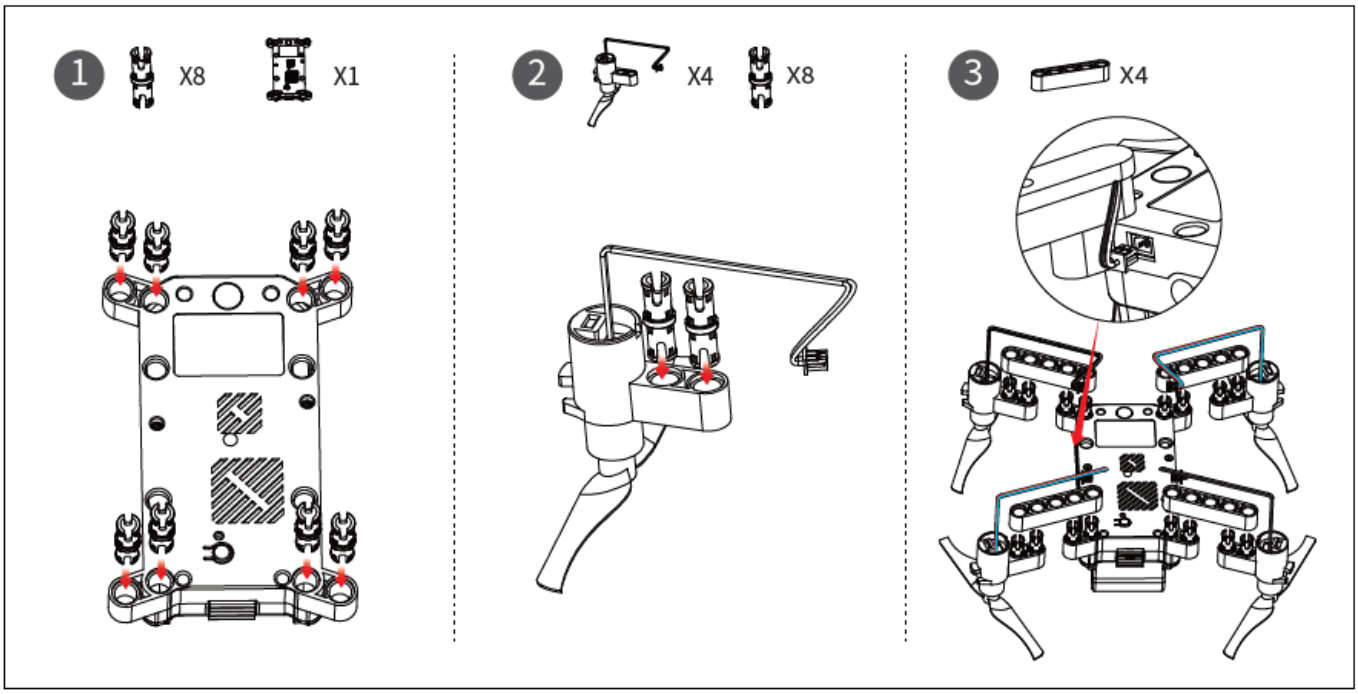
—

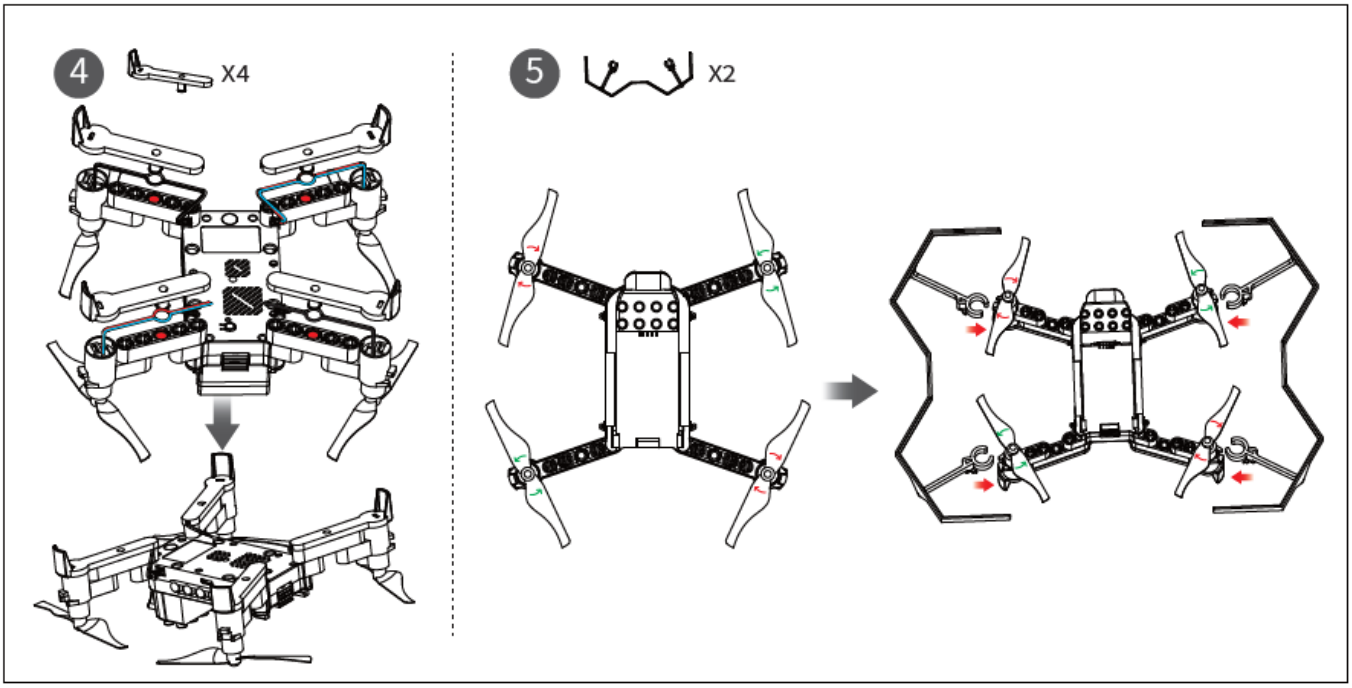
LiteBee Wing EDU Programmable Coding Drone

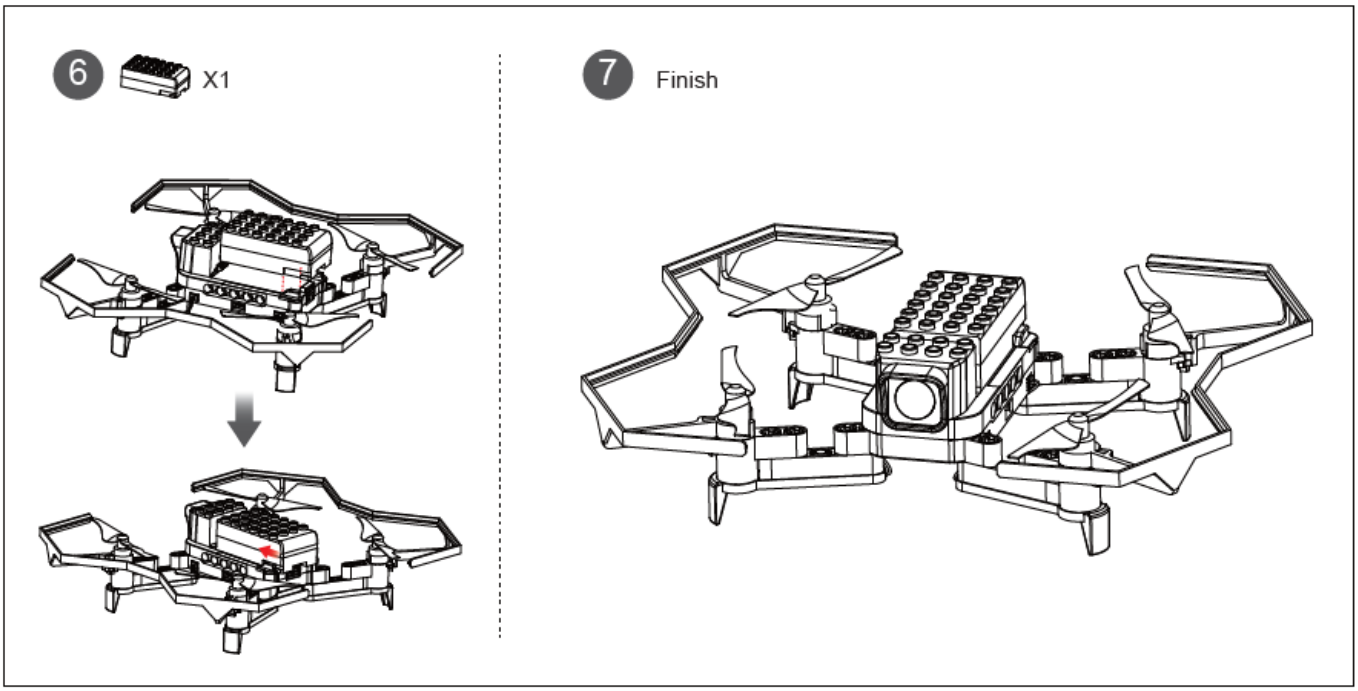
Introduction

Thank you for purchasing the Litebee Wing EDU Drone from Makerfire. Please read this instruction manual carefully before use. The information contained in this manual is subject to change without notice. Litebee Wing is designed for STEAM/STEM education, suitable for kids age over 8, best for home, middle school, high school, college, and summer camp, etc. For purchasing a classroom pack, please contact us by **sales@makerfire.com**.

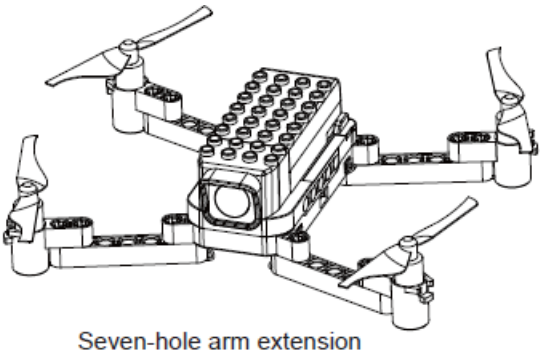
Installation



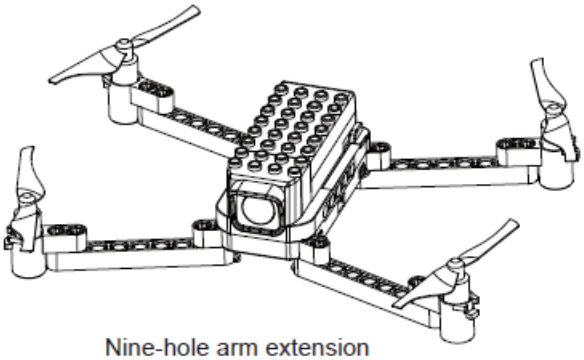




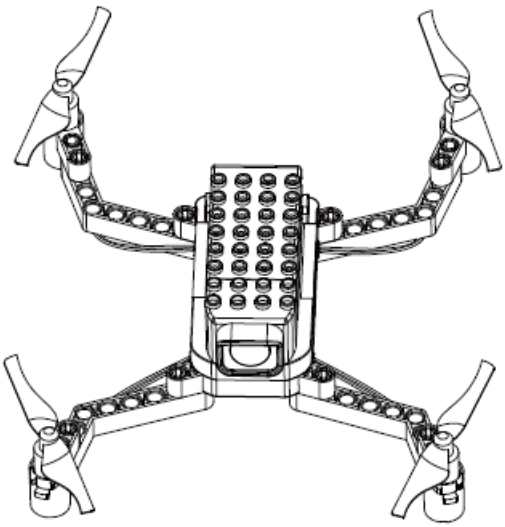
Arm Extension



Seven-hole arm extension

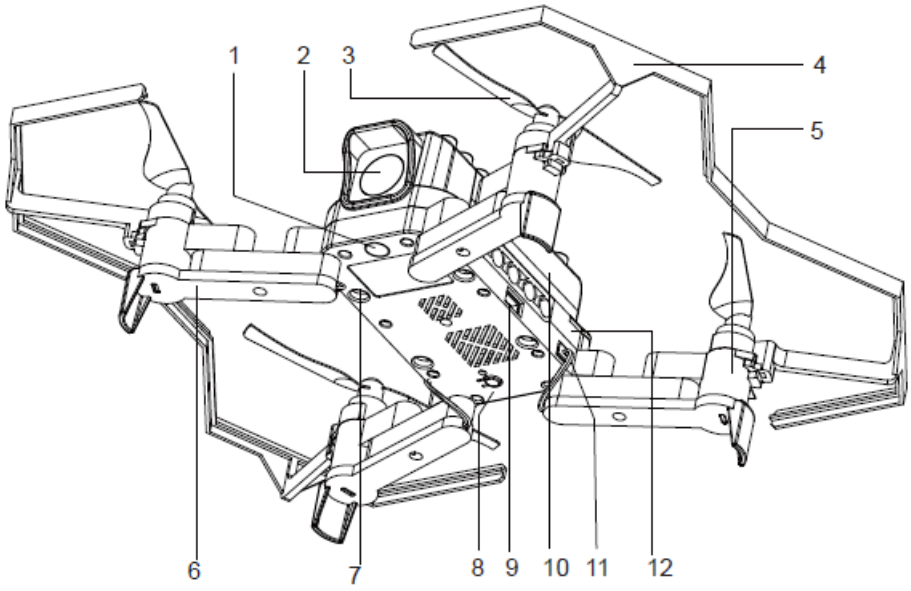


Nine-hole arm extension



Shape stretch arm extension

Aircraft Overview

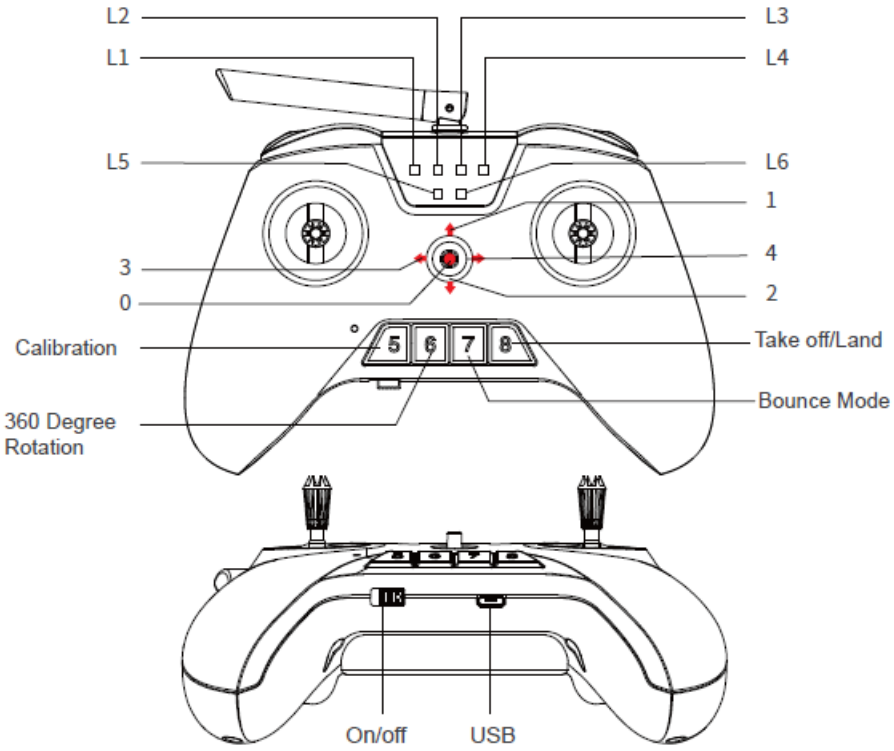


1. Optical Flow Camera
2. Front Camera
3. Propeller
4. Propeller Guard
5. Brushed Motor
6. Take off bracket
7. Extension Ports
8. Power Button
9. Extension Module Interface
10. Battery
11. Motor Connector

12. Antenna

On / **Off:** Long press 1 seconds Power Button to power on litebee Wing, long press 3 seconds to power off litebee Wing. (Long press the Power Button 1 second to power on LiteBee Wing, and long press 3 seconds to power off)

Remote Control Overview



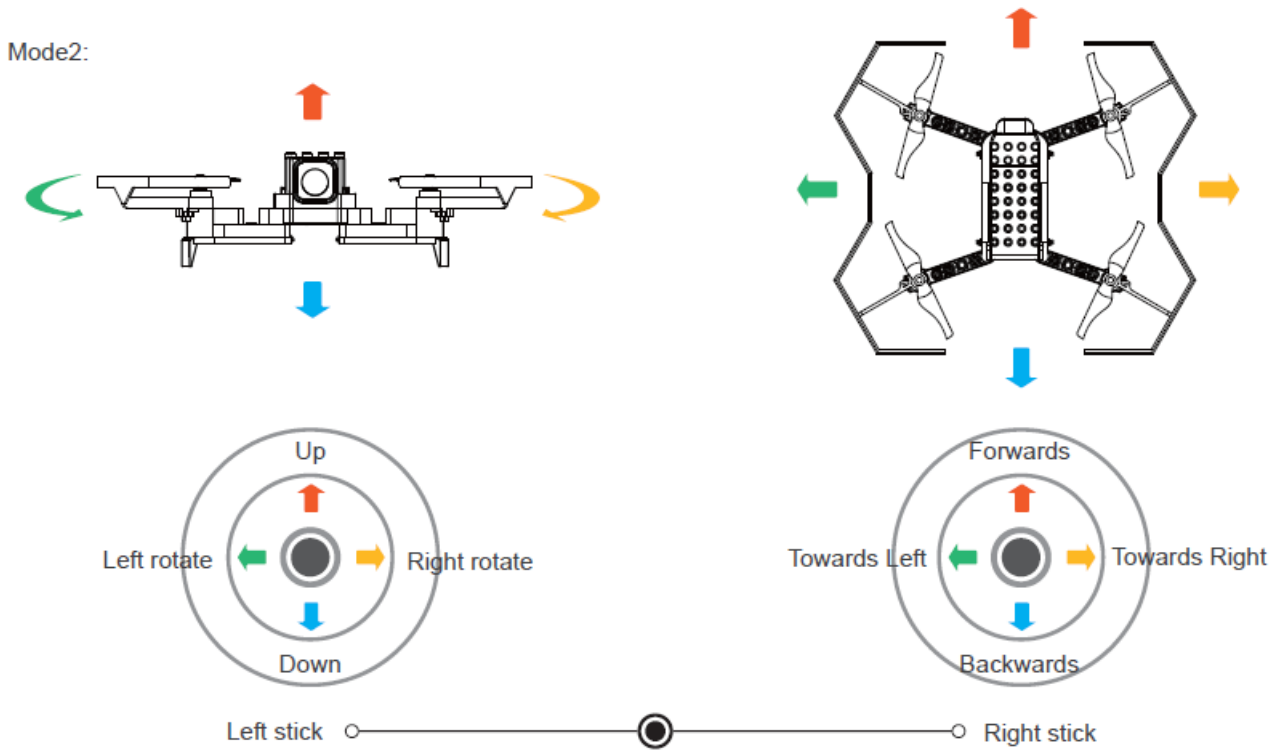
0: Programming Mode Switch

1/2 /3/4 Customized Programming Button

LED Indications:

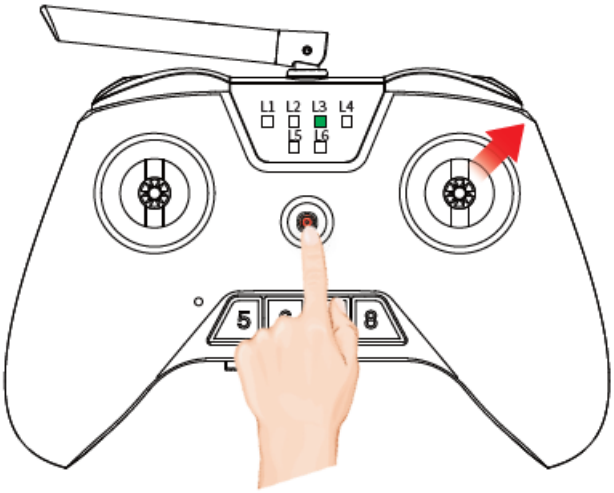
L1 Off: Left throttle/ Mode 2
L1 Solid Green: Right throttle/Mode 1
L2 Off: Success to connect with aircraft
L2 Solid Red: Not connect with aircraft
L3 Off: Not in Binding Mode
L3 Solid Green: Binding Mode
L4 Off: Operation Mode
L4 Solid Green: Programming Mode
L5 Off: Battery of aircraft is fully charged
L5 Solid Red: Low battery of aircraft
L6 Solid Green: Battery of radio transmitter is fully charged
L6 Solid Red: Low battery of radio transmitter

Operation Guide

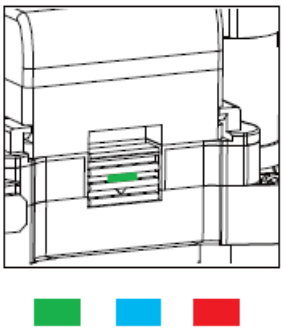


Binding

1. Power on the radio transmitter;
2. Press the key K0 while pushing the right throttle to the top right at 45°, the L3 is solid green.
3. Power on the aircraft, L3 light will be off after calibrate. (L3 light off indicates bind successfully)



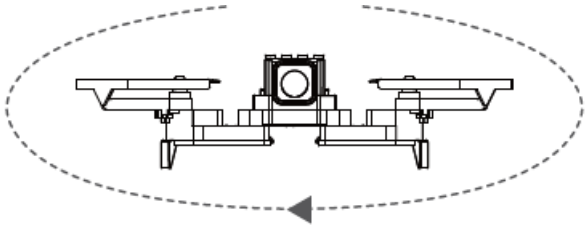
Flight Controller Indications



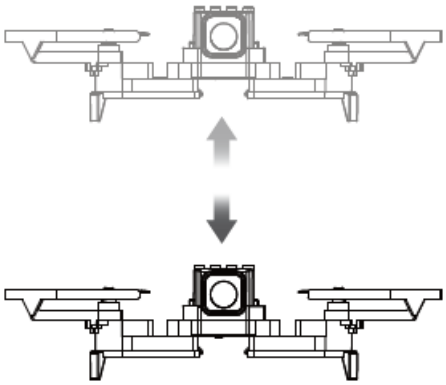
Solid green light: Ready to take off (altitude hold and fixed-point)
Slow blinking green light: One-key to take-off/land (aircraft moving status: fixed-point moving)
Blinking blue light once: Photo-taking mode
Slow blinking blue light: Record mode (video recording)
Slow blinking red light: Fail to connect (fail to connect with a radio transmitter or APP, not binding, lost signal)
Fast blinking red light: Low voltage alarm, aircraft land automatically
Solid red light: System crash/system failure
Blinking red and green light alternately: Sensor abnormal or error (Gyroscope/ optical flow/barometer abnormal)
Blinking blue and green light alternately: Gyroscope calibration
Blinking red and blue light alternately: Aerobatics Mode (one key to 360° rotation mode, bounce mode)

Aerobatics

One-key 360° rotation mode
Press the button”6”, aircraft rotate 360 °at the point slowly, then finish rotating automatically. (The aircraft will rotate 360 °clockwise then quit mode)



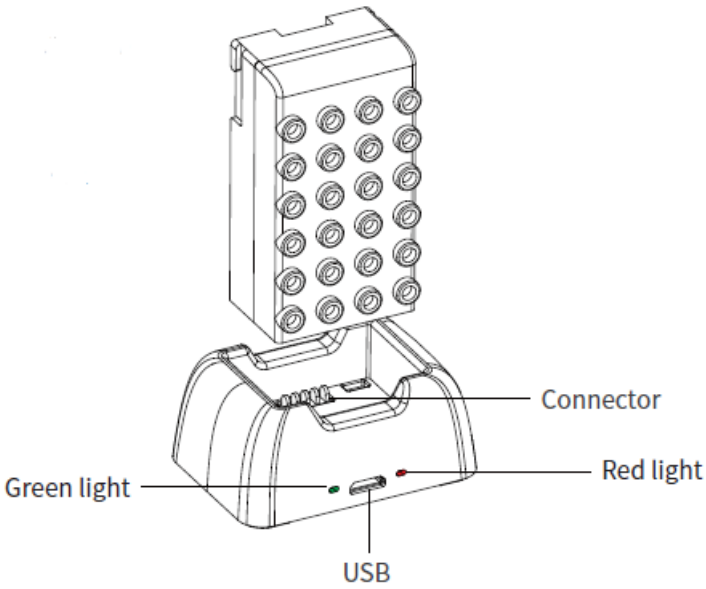
Bounce Mode
Press the button”7″ to enter bounce mode, aircraft bounce up and down between 1-1.5m from the takeoff point, press button “7” again to finish.



Charging

Put the battery into the battery holder, Use the micro USB cable to charge (Max input 8.4V,600mAh)
The fully charged time is about 1 hour with a 5V/2A charger.

1. Solid red light: in charging.
2. Solid green light: full charged.



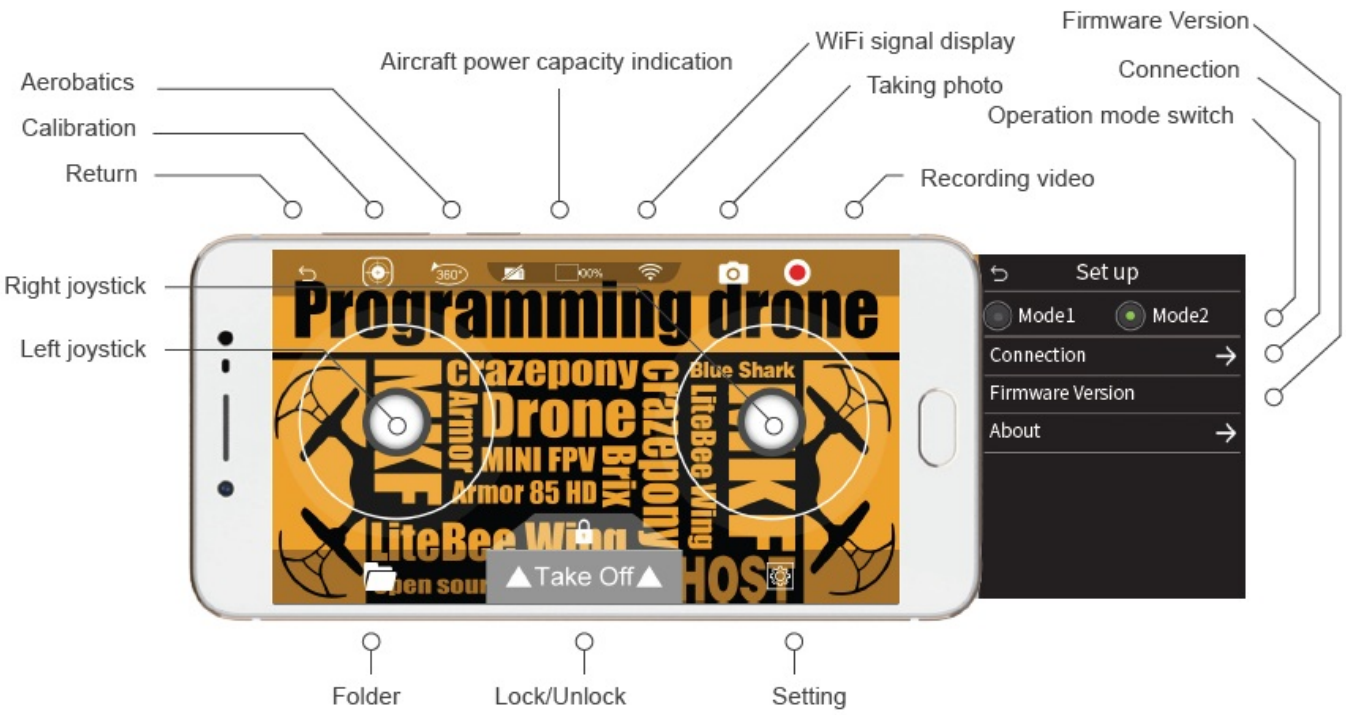
Note: Don’t charge the battery via the USB port on the aircraft.

APP Operation

1. Search “LiteBee” in Huawei, Baidu, Tencent, and 360 application market for Android system; Search “LiteBee” in IOS APP store, download the APP.
2. Open the App and click “LiteBee Wing” to enter into the operation interface.
3. The App control is based on WIFI communication, which supports operating and image transmitting.

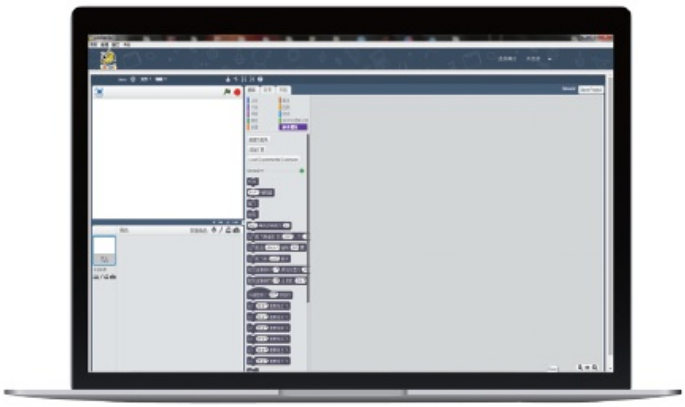
Connect WIFI: “LiteBee Wing_XXXX”,
Password: 12345678.

Note: App requires IOS 9.0 or up and Android 4.4 or up versions.



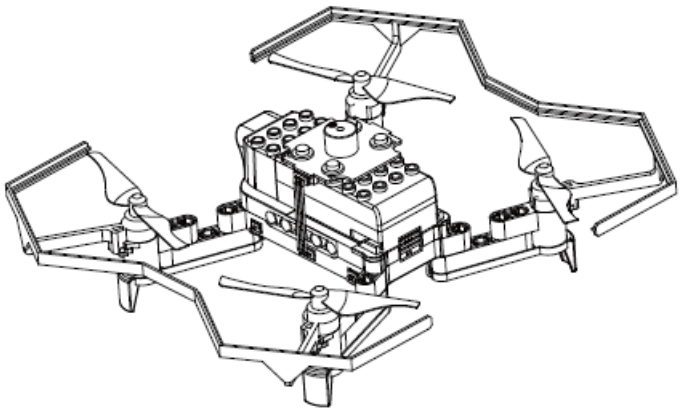
Programming

Computer Programming: Connect the radio transmitter to the computer with a USB cable, find the corresponding port on the computer, and then switch the radio transmitter to the programming mode.
Mobile phone programming: Search and connect with WIFI, and enter into the APP programming interface.

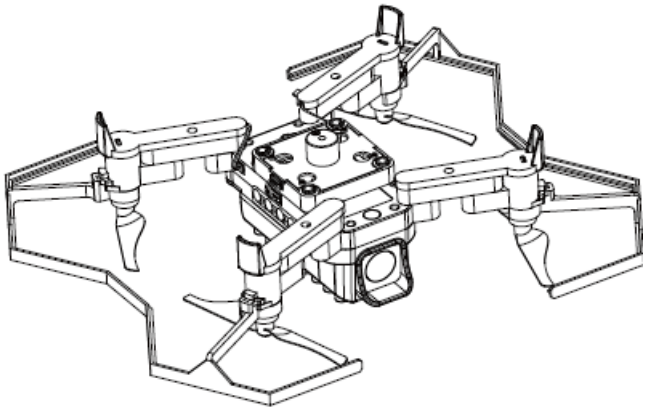


Expansion modules

LiteBee Wing supports expansion modules like LED, buzzer etc. for programming.



Top installation diagram for expansion module

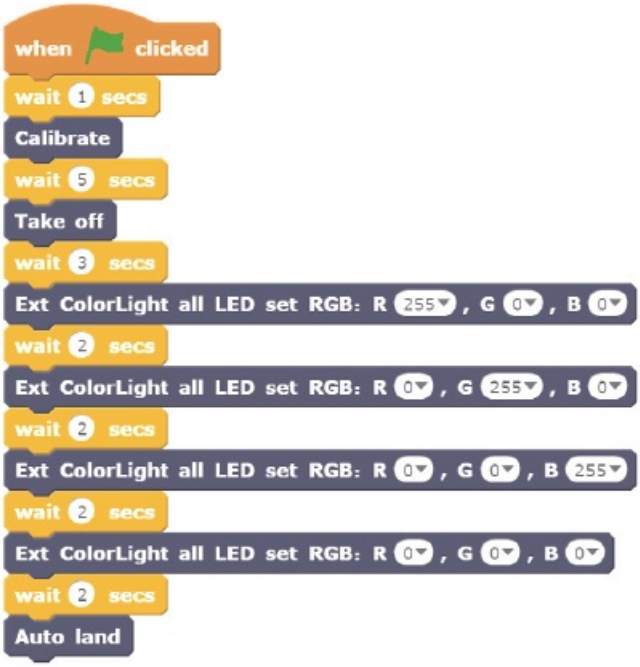


Bottom installation diagram for expansion module

Case1-LED module

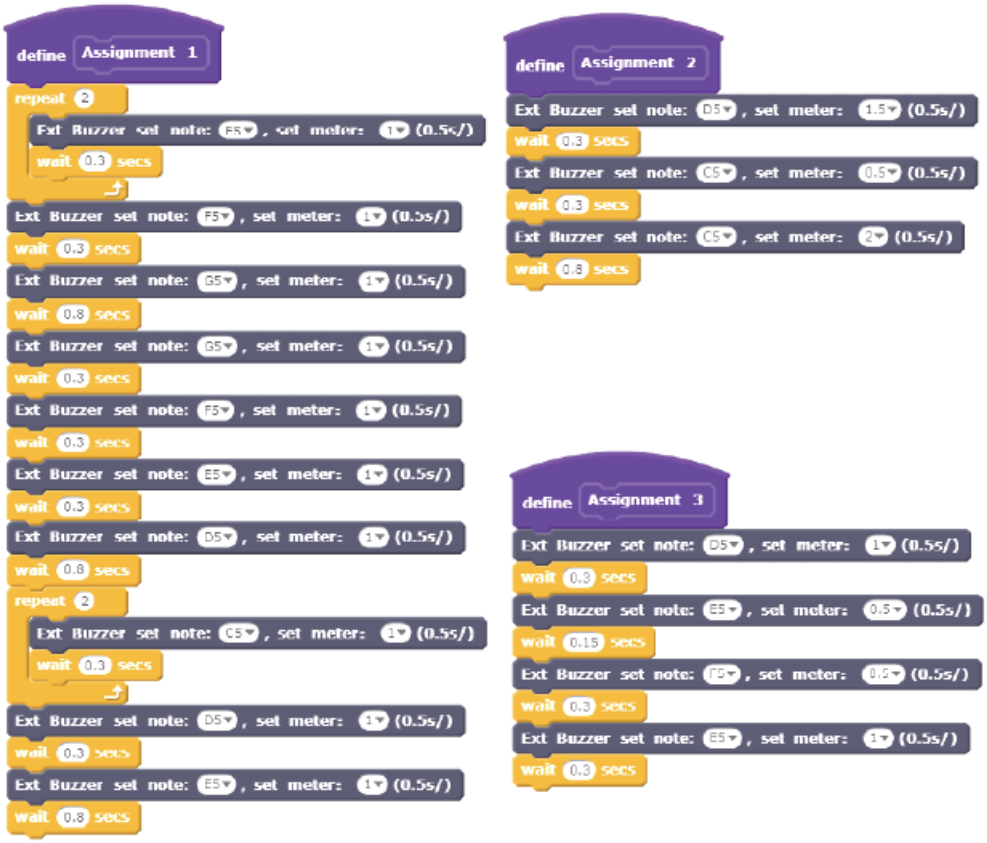
1. Start the program by click  (take 1 sec)
2. Calibrate the aircraft by 5 secs
3. Take off after finished calibration(take 3 secs)
4. Turn on the first LED to White(last 2 secs)

5. Turn on all LED to Red(last 2 secs)
6. Turn on all LED to Green(last 2 secs)
7. Turn on all LED to Blue(last 2 secs)
8. Turn off all LED, 2 secs later, land automatically



Case 2-Buzzer module

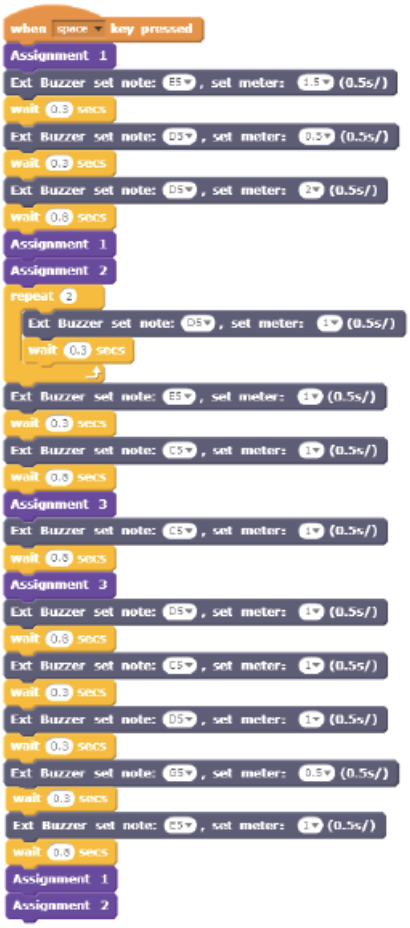
Musical Note: a symbol used to record processing of different length notes. Most common notes: Whole note, half note, quarter note, one eighth note, and one sixteenth note. Musical note consists of three components: Head, Stem and Tail. It is also divided by beats, such as: Whole Note is four beats; Half Note is two beats, etc.



The number: 1, 2, 3, 4, 5, 6, 7 in musical symbols is pronounced: do, re, mi, fa, sol, la, si, Correspondence to: C,

D, E, F, G, A, B.

Case 3-Buzzer module



For more programming guide, pls. feel free to contact us by **sales@makerfire.com** or visit **www.litebee.com**.

FAQ

Q1 Motor does not work?
A1 Check if the motor wire is well connected; Whether the propeller is over-pressed and stuck to the motor; Check if there is large resistance by turning the motor by hand. If the motor is damaged, replace the motor in time.

Q2: Litebee Wing can't fly?
A2: Check the motor installation; Check the battery power capacity. Calibrate the Litebee Wing before flying.

Q3:LiteBee Go programming can not recognize the radio transmitter?
A3:Install the radio transmitter driver in LiteBee Go for the first-time use, after finishing the installation, select the corresponding device ports.

Q4: How to switch the radio transmitter from Mode2 to Mode1?
A4:Connect the radio transmitter to the computer via the USB cable, and download Mode1 program on Litebee Go software.

Q5: LiteBee Wing's propellers fall off in high frequency?
A5:Replace with new propeller.

Q6:How much weight can LiteBee Wing carry?

A6:Recommended under 10g.

Disclaimer
Litebee Wing is a multi-rotor drone. Children over 8 years are recommended. Children under the age of 8 are required to be accompanied by adults. Please be careful when operating the product in the presence of children. The product provides an easy flight experience when the power supply is working properly and the components are not damaged. Please be sure to know your legal rights, responsibilities, and safety instructions before using it, and be clear about that using the product may bring property damage, safety accidents, and personal safety hazards. By using the product, you are deemed to have read, recognized, and accepted all terms and conditions of this statement. The user is committed to being responsible for his non-compliant operations and the consequences thereof; the user undertakes to use the product solely for legitimate purposes and agrees to these terms and any relevant policies or guidelines that may be developed by us. We are not liable for any direct or indirect personal injury or property damage caused by the failure to use this product under the safety guidelines.

Caution:

orbidden for children under 3 years old.

It contains small parts, please prevent children from swallowing.

Documents / Resources

	LiteBee Wing EDU Programmable Coding Drone [pdf] Instruction Manual Wing EDU Programmable Coding Drone, Programmable Coding Drone, Coding Drone, Wing EDU Drone

References

- LiteBee Kids Drones | Professional Programming Drone for Kids| Coding for Kids