



# Obstacle Avoiding Unit



Product Manual



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# Introduction

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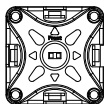
The obstacle avoiding module is one of extensions for LiteBee Wing drone, it can sense the obstacle of 5 directions(forward/backward/left/right/below). Combined with LiteBeeGo programming, the module enables the drone to avoid the obstacle and the following crash.

This module makes the knowledge application more interesting, allowing students to learn through play, and inspire their curiosity for exploring drones and AI.

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## 包装清单、参数

### Packing list



Obstacle avoiding unit \* 1



Connecting cable \* 1



Short bolt \* 1

### Specification

Mode: Y18-AI

Size: 40\*40\*9mm

Work voltage: 5V

Work current: 90mA

Work range: 3-200cm

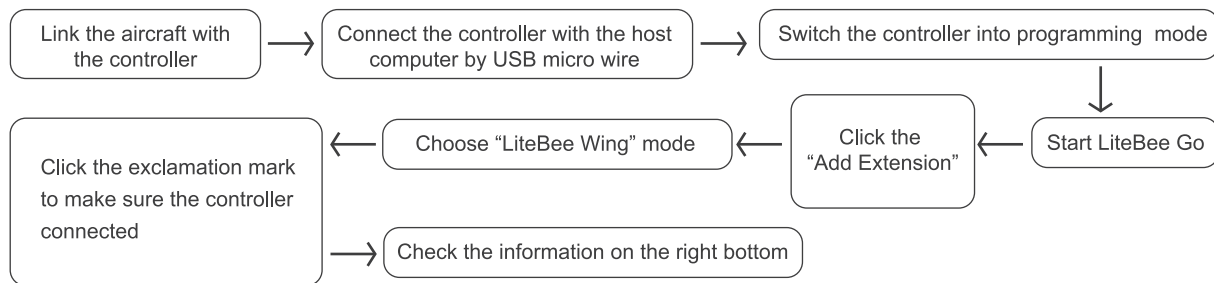
## PREPARATION

### Firmware version

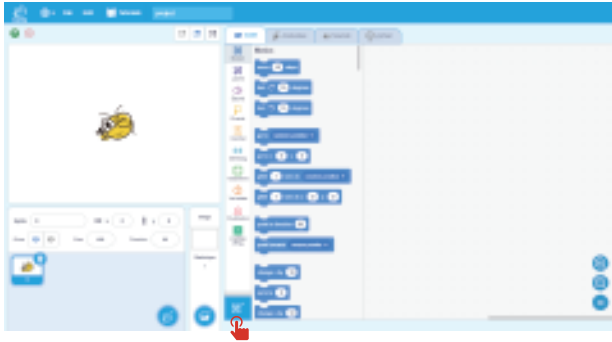
#### Note:

To apply this module, the version of firmware for aircrafts or controllers should be V1.1.0 (and up), the version of software should be LiteBee Go V0.2.1(and up).

#### How to check the version



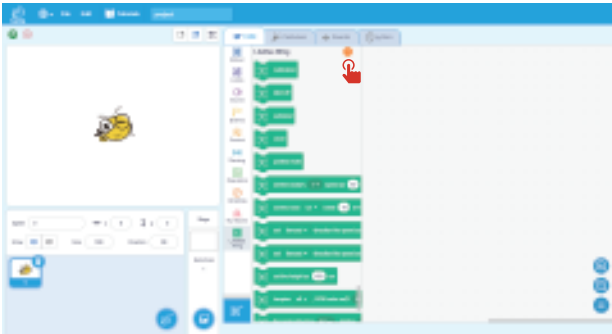
FV shows the version of the aircraft  
RV shows the version of the controller



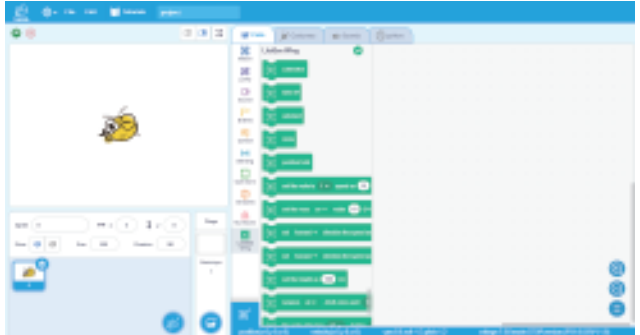
pic 1



pic 2



pic 3



pic 4

## How to update the firmware version

To download the corresponding document for firmware upgrading on LiteBee official web

Or, you can find relevant video for firmware upgrading on YouTube channel - LiteBee, search "Guide for firmware upgrade"

Official Website:<https://www.litebee.com/product/liteBeeWing/download>

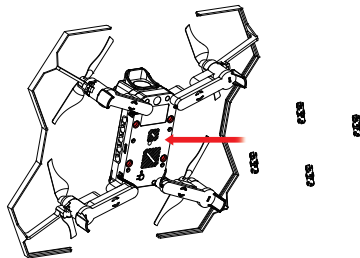
### DOWNLOAD





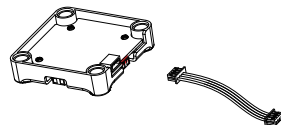
## INSTALLATION

1  \*4



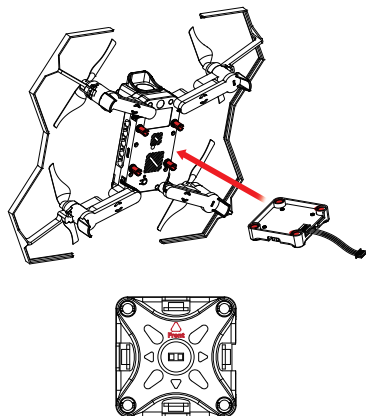
- Insert four short bolt into the bottom of the drone

2  \*1  \*1



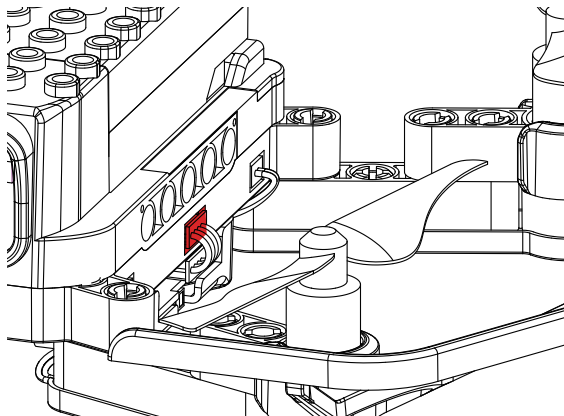
- Insert the connecting cable into the obstacle avoiding module

3



- Install the module in the bottom of the drone by short bolt
- Pay attention to side of the module

4



- Link the connecting cable to drone's 4-pin interface

# EXTENSION PROGRAMMING

## Step 1: Connect the aircraft with the host computer

Turn the drone on and link to the controller



Connect the controller with the host computer by connecting cable

## Step 2: Switch to obstacle avoiding mode

Start LiteBee Go

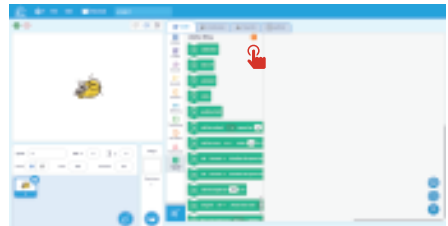
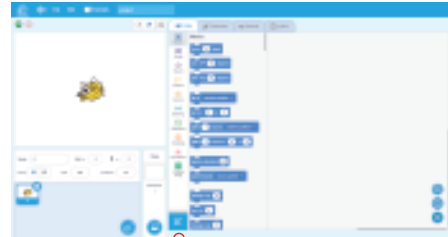


Click "Add extension"



Choose "Obstacle avoiding mode"

PS: Click the exclamation mark if the it isn't connected.



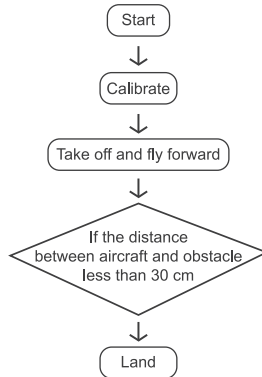
## Reference case

### Mission:

Let the drone take off and then fly forward, landing if meet any obstacle.

### Programming case

#### Mind map







**Manufacturer: Shenzhen Makerfire Technology Co., Ltd.**

Website: [www.litebee.com](http://www.litebee.com)

Tel: 44-830-2598

Email: [sales@litebee.com](mailto:sales@litebee.com)

Address: 25th Floor, A7 Building, Creative City, Liuxian Ave, Xili Street, Nanshan District, Shenzhen, China.