

LiteBee Y18 Obstacle Avoiding Unit User Manual

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Obstacle Avoiding Unit

Product Manual

Introduction

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 Al.

Packing list





Obstacle avoiding unit * 1 Connecting cable * 1



Short bolt * 1

Specification

Model: Y17-Al Size: 40*40*8mm

Working voltage/current: 5V/@80mA

Size of QR code: 24*30cm

Max load: 500g Actual load: 0-8g

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

Link the aircraft with the controller

Connect the controller with the host computer by USB micro wire

Switch the controller into programming mode

Start LiteBee Go

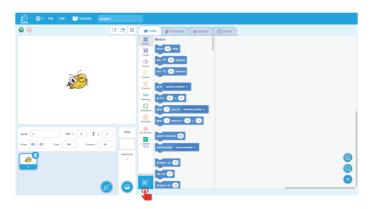
Click the "Add Extension"

Choose "LiteBee Wing" mode

Click the exclamation mark to make sure the controller connected

Check the information on the right bottom

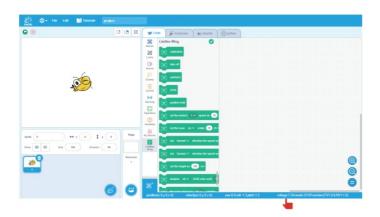
FV shows the version of the aircraft RV shows the version of the controller



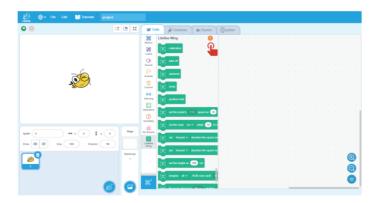
pic 1



pic 2



pic 3



How to update the firmware version

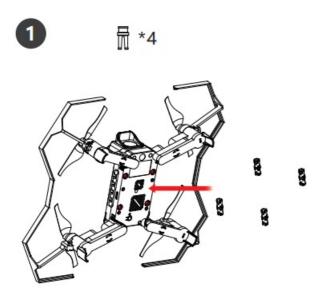
To download the corresponding document for firmware upgrading on LiteBee official web Or, you can find relevant video for firmware upgrading on YouTube channel – LiteBee, search "Guide for firmware upgrade" Official Website: https://www.litebee.com/product/liteBeeWing/download

DOWNLOAD

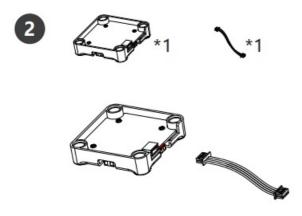


pic 5

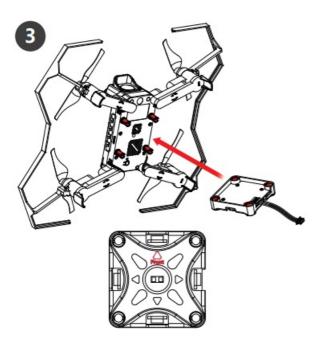
INSTALLATION



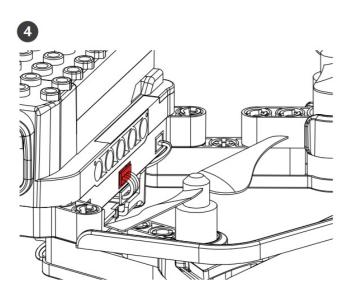
• Insert four short bolt into the bottom of the drone



• Insert the connecting cable into the obstacle avoiding module



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



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

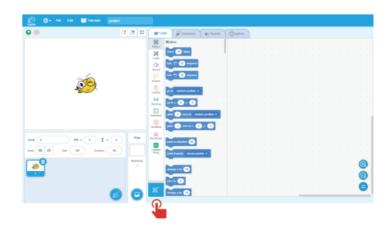
Step 1: Connect the aircraft with the host computer

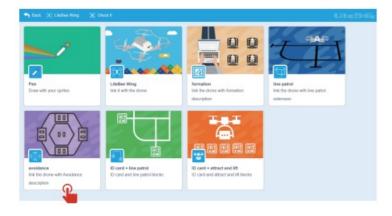
Turn the drone on and link to the controller $$\downarrow$$ Connect the controller with the host computer by connecting cable

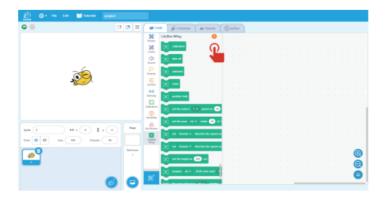
Step 2: Switch to obstacle avoiding mode

Start LiteBee Go
↓
Click "Add extension"
↓
Choose "Obstacle abvoiding mode"

PS: Click the excalmatory 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

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Start

Calibrate

Take off and fly forward

If the distance between aircraft and obstacle less than 30 cm

Land
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Statistics

| Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Statistics | Stat
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Documents / Resources



<u>LiteBee Y18 Obstacle Avoiding Unit</u> [pdf] User Manual Y18 Obstacle Avoiding Unit, Y18, Obstacle Avoiding Unit

References

- <u>LiteBee Kids Drones | Professional Programming Drone for Kids | Coding for Kids |</u>
- Educational drone Coding for Beginners | Support-litebee wing

Manuals+.