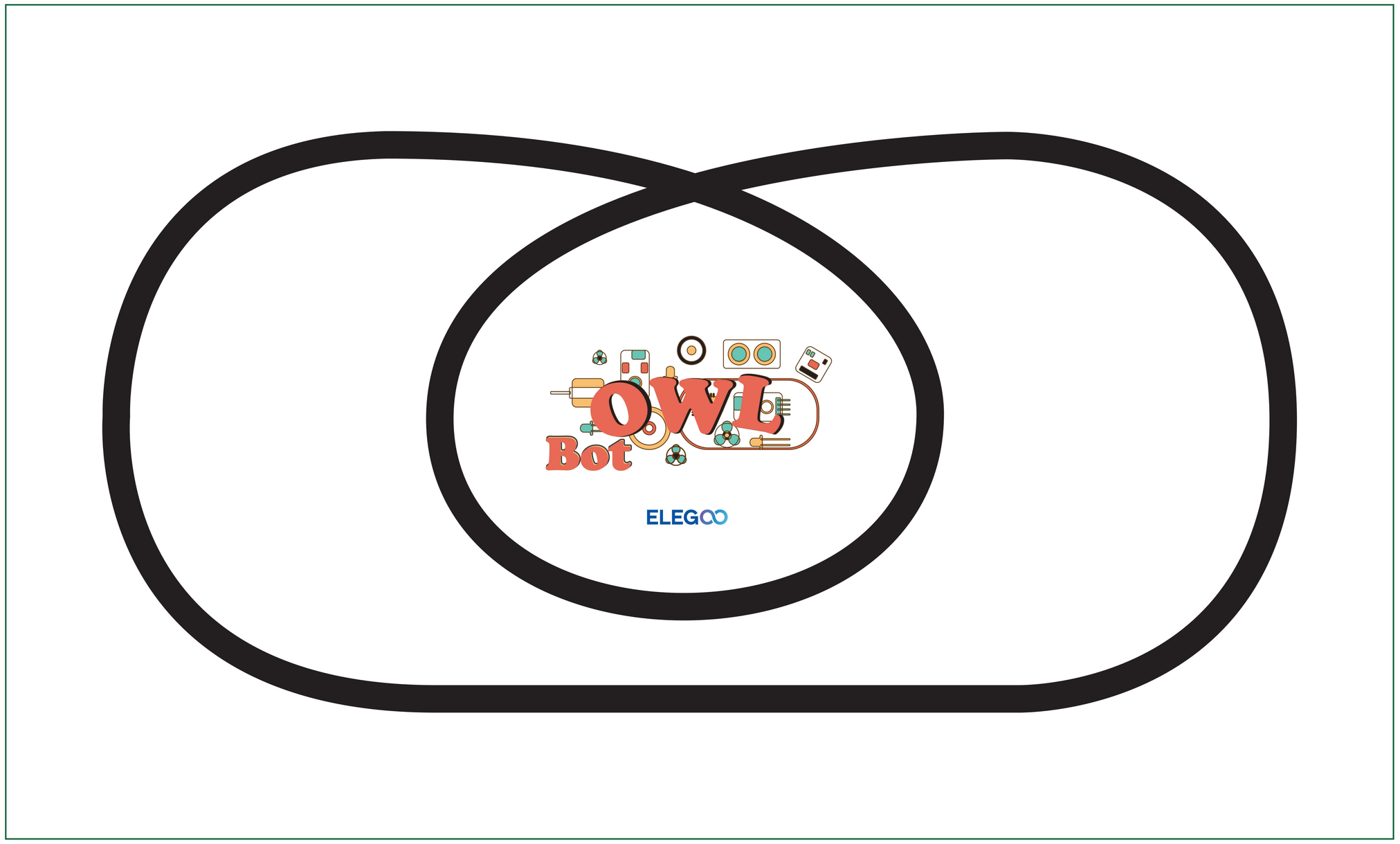
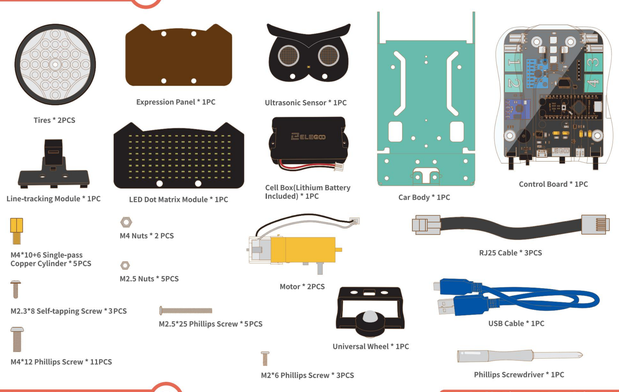
1000*600mm

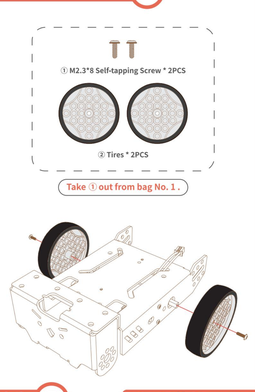


PANTONE 7626UP

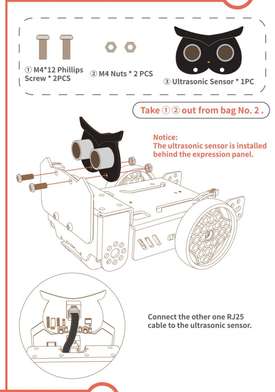
Material List 1



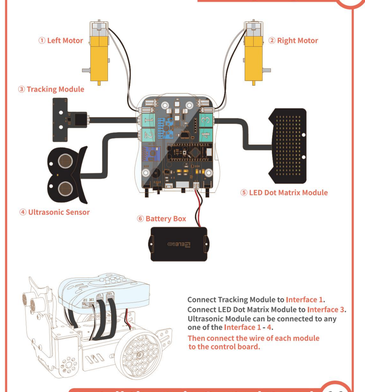
Install Tires 4



Install Ultrasonic Sensor 7



Wiring Diagram 10



Using Tutorial 14

Notice: We have uploaded some necessary programs before, thus you can skip uploading the programs. However, if you change the codes, you will need to reupload them.

First of all, please go to our website below to download the OwlBot tutorials: http://www.elegoo.com/download/
The factory program is located at "Lesson 8 OwlBot / OwlBot_Driver".
And then select the correct tutorial files based on the computer system you use.
For window system, please refer to "For Windows Lesson 0 Setting up development environment.pdf".
For OS system, please refer to "For Mac Lesson 0 Setting up development environment.pdf".

Function Introduction

• When the power switch is turned on, OwlBot must be placed steadily, so as to avoid the inaccurate initial check value of gy-521 module, resulting in poor straight-line performance of OwlBot.

Mode Switch Button
After the power switch is turned on, 5 RGB flash out the effect of a running light and ring out start-up music.

Line-tracking Mode
The first time you press the mode switch button, the RGB green light is always on, and the expression panel shows an expression indicating that it has entered the tracking mode and OwlBot will follow along the black track. When the sensor on the tracking module senses the black line, the expression panel displays another expression. When OwlBot is picked up under tracking mode, the wheel stops turning.

Obstacle-avoidance Mode
The second time the mode switch button is pressed, the RGB yellow light is normally on, the expression panel displays an expression, the OwlBot goes straight. And when there are obstacles within 25cm, the expression panel will display the other expression, and the OwlBot automatically avoids obstacle ahead, and looks for an obstacle-free route to continue moving forward.

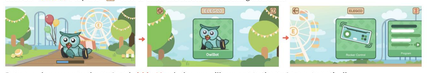
Standby Mode
Press the mode switch button for the third time to switch to the standby mode and the 8 default expressions are automatically switched.

Mobile Control

STEP1: Install the application.
You can download the latest version of the "ELEGOO Owl Robot" app on the App Store as well as Google Play.

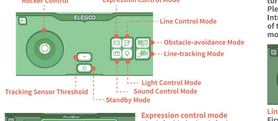
STEP2: Application Settings.
First of all, switch the "B/U" button on the OwlBot to "B".

Open the "ELEGOO Owl Robot" App. (Please turn on the mobile GPS when using the app).
Click on " OwlBot ". Tap the " " icon to enter the Bluetooth searching interface.



Put your phone near to the OwlBot (within 10cm), the app will connect to the OwlBot automatically.
You can also open the Bluetooth device list by tapping the menu icon " " in the upper left corner and select "ELEGOO BT16" to connect the OwlBot manually.
After the OwlBot is successfully connected, the Bluetooth status icon changes from red to brown.

Click on "Rocket Control" to enter the control interface.



Expression control mode
The left side is the default expression that has been set, or the various patterns that can be DIY. Click OK to display the corresponding pattern on the expression panel.

Light control mode
Select a color in the color ring, both the upper-left corner of the pop-up window and the RGB on the OwlBot can display the currently selected color, "-" and "+" adjust the brightness of the light.

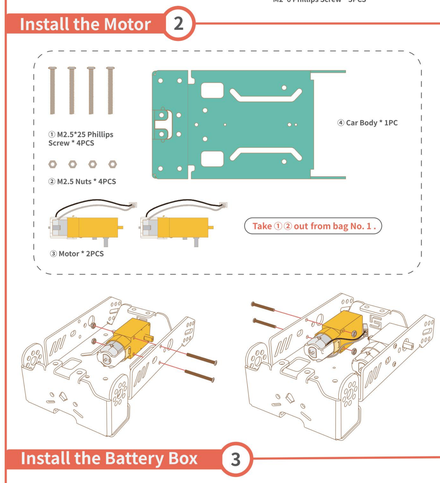
Tracking sensor threshold
Because the sensor is greatly affected by the environment, when using the line-tracking mode, you should sightly adjust the threshold of the sensor to make it perform correctly if the OwlBot run out of the runway or perform incorrectly. (The default factory threshold is 700.)

Rocket Control
Control OwlBot forward and backward, turn left and turn right.
Please refer to the previous "Function Introduction" for the specific performance of the obstacle avoidance mode, the tracking mode and the standby mode.

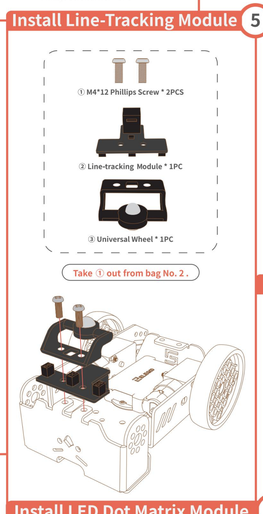
Line control mode
First click the start icon"", then click a point on the screen and click another point to make them connected into a line, then the car will follow the direction of the line.
When you operate this function, Turn the OwlBot's head to the right, keeping it parallel to your phone.

Sound control mode
You can make the car sound of basic syllables just like playing the piano.

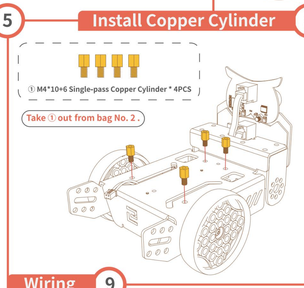
Install the Motor 2



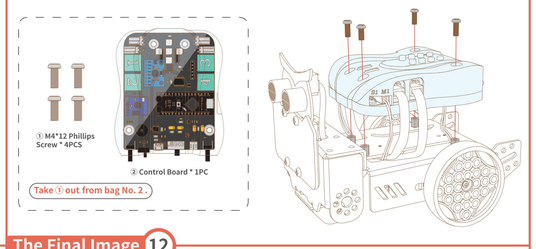
Install Line-Tracking Module 5



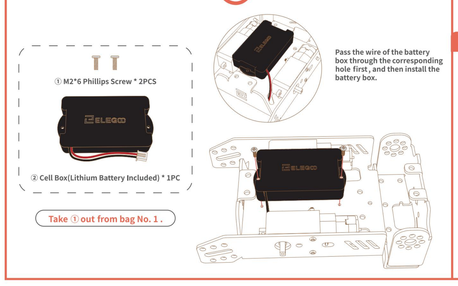
Install Copper Cylinder 8



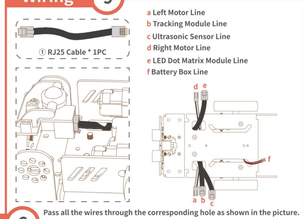
Install the Main Control Board 11



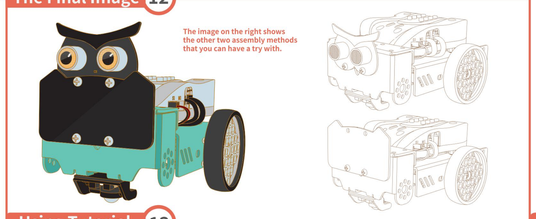
Install the Battery Box 3



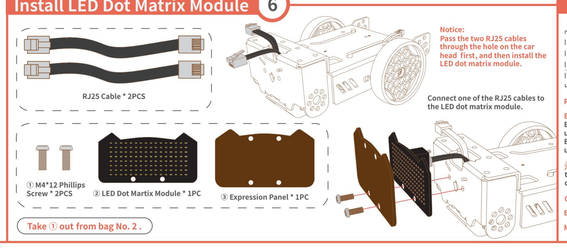
Wiring 9



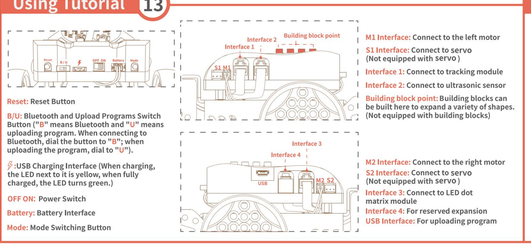
The Final Image 12



Install LED Dot Matrix Module 6



Using Tutorial 13



Graphical programming 15

- Motion: Graphic modules for controlling the movement of the car.
- Voice & Light: Graphic modules for controlling the sound and light.
- Sensing: Graphic modules for sensor type electronic components.
- Variable: Graphic modules for variable operation.
- Math: Graphic modules for Mathematical operations.
- Control: Graphic modules for controlling program flow.

16 Precautions

- The battery should be fully charged before using. The 5 RGBs will flash red when the battery is low. You can charge the battery through the USB cable.
- OwlBot cannot be used in areas where sunlight or light is strong. Infrared ray will have an effect on the sensors on tracking module.
- Under OwlBot obstacle avoidance mode, the lighter the color of obstacles, the better the effect of obstacle avoidance.

If you find it is difficult to assemble the OwlBot, please check the assembling tutorial video from https://www.elegoo.com/download/ or https://www.youtube.com/elegooofficial/.

If you have any questions during assembling or testing, please feel free to contact us at service@elegoo.com (North American customers) or euservice@elegoo.com (European and Asian customers).

ELEGOO Team

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that
interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

The devices has been evaluated to meet general RF exposure requirement， the device can be used in portable exposure condition without estriction