YAHBOOM

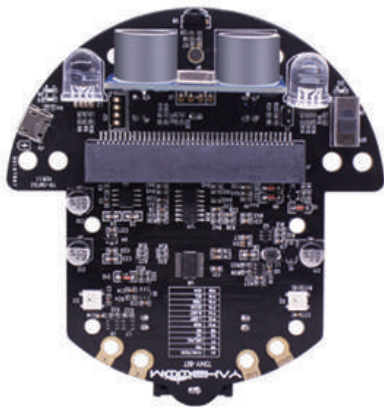# Manual

Tiny:bit smart robot

① Please carefully read this operation manual throughly before use

② Our company will reserve the right of interpretation for this manual

③ For product appearance, please refer to the actual product

④ Please keep properly the operation manual after you read

Shenzhen Yahboom Technology Co., Ltd.

Chassis-1

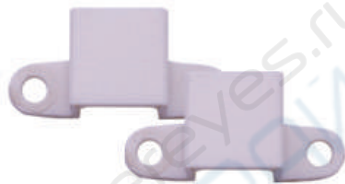Universal wheel*1

IR control*1
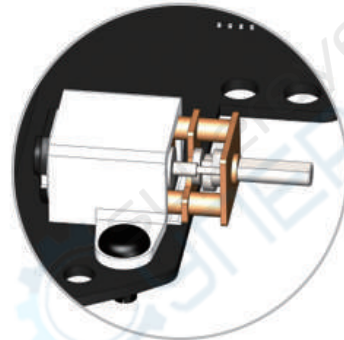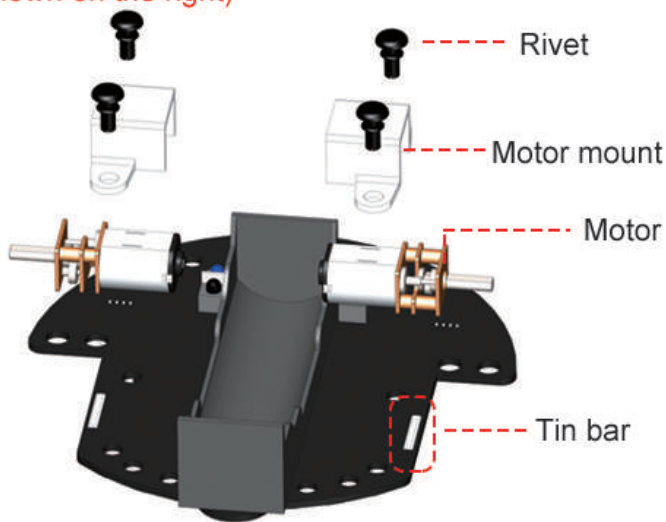
N20 motor*2

Li-po battery*1

USB cable*1

Motor mount*2

Tyre*2

Map*1

Plastic rivet package*1

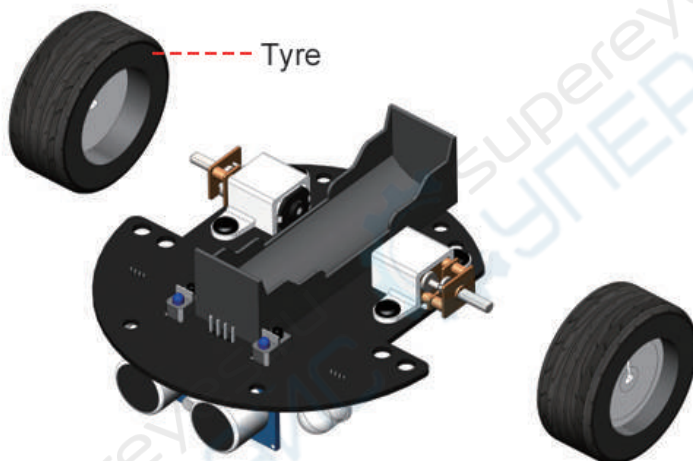## 1.Motor installation

Note: When installing the motor, note that the gearless side of the motor is aligned with the tin bar on the bottom plate (as shown on the right)

- - - - Rivet

- - - - Motor mount

- - - - Motor

- - - - Tin bar

Design Sketch

2.Tyre installation

- - - - Tyre

Design Sketch

3.Universal wheel installation

Rivet - -

Universal wheel - - - -
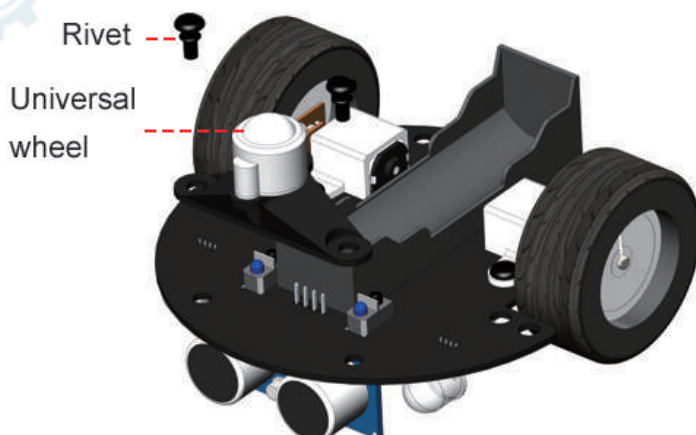
Design Sketch

4.Battery installation

Li-po battery

Design Sketch

5.Micro:bit installation

Micro:bit

Design Sketch

6.Installation finished

Download

Link: www.yahboom.net/study/Tiny:bit

Download the program file "Bluetooth Remote Control.hex". Connect the computer and micro:bit with the micro usb cable, and the computer will display the micro:bit hard drive.

MICROBIT (G:)

8.04 MB 可用，共 8.05 MB

Copy the downloaded program file "Bluetooth Remote Control.hex" to the micro:bit hard drive. At this time, the micro:bit dot matrix displays an "S" pattern, which is Bluetooth unconnected.

iOS/Android mobile APP remote control

1. Android Please use the browser to scan the following QR code to download and install; Apple please use the camera to scan the QR code to enter the App Store to download and install or search for "Mbit" in the App Store.

IOS

Android

2.APP connection

Open the Bluetooth and the installed APP software on the phone. Turn the power switch on the expansion board to "ON".

When the phone close to the micro:bit, Bluetooth will automatically connect; if it is not connected, you can click "CONNECT". After connecting, the APP interface will jump to the remote control interface, as shown below.

The dot on the micro:bit shows the "mouth" pattern and the Bluetooth is connected.

If the dot matrix on the micro:bit shows a "cry face" pattern, it means that Bluetooth is disconnected.

3.APP use

Note: APP remote control needs to wait for [ultrasonic] and [temperature] data to be stable before remote control.

（1）Basic function

[Ultrasonic] shows the obstacle distance, [Temperature] is displayed as the current micro:bit chip temperature value (temperature value may be slightly higher than room temperature).Below is a remote control button for the robot to rotate left and right, turn left and right.

（2）Music

Click the piano button and the buzzer will play different tones.

（3）Car light

Change the color of the lights

（4）RGB light page

Switchable RGB light color and lighting mode

（5）Mode

① Tracking mode:

put the robot on the black line of the patrol track, then click the "tracking mode", and the robot starts to patrol. You can quit this mode until you click "tracking mode" again.

② Avoid obstacle mode:

click on the "avoid obstacle mode", the robot goes forward, when confronted with obstacles, turn left to avoid. You can quit this

③ Following mode:

click on the "following mode", when the current obstacles exist,

the robot moves forward. You can quit this mode until you click

the "avoid obstacle mode" again.

Tutorial Link

Link: www.yahboom.net/study/Tiny:bit

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Shenzhen Yahboom Technology Co., Ltd.

Web: www.yahboom.net

Email:market@yahboom.com

Company address:No.306,Block C,Guanlong Rd.,

Xili St.,Nanshan Dist.,Shenzhen,China