

KitiBot for micro:bit

Assemble Manual

PACKAGE CONTENT

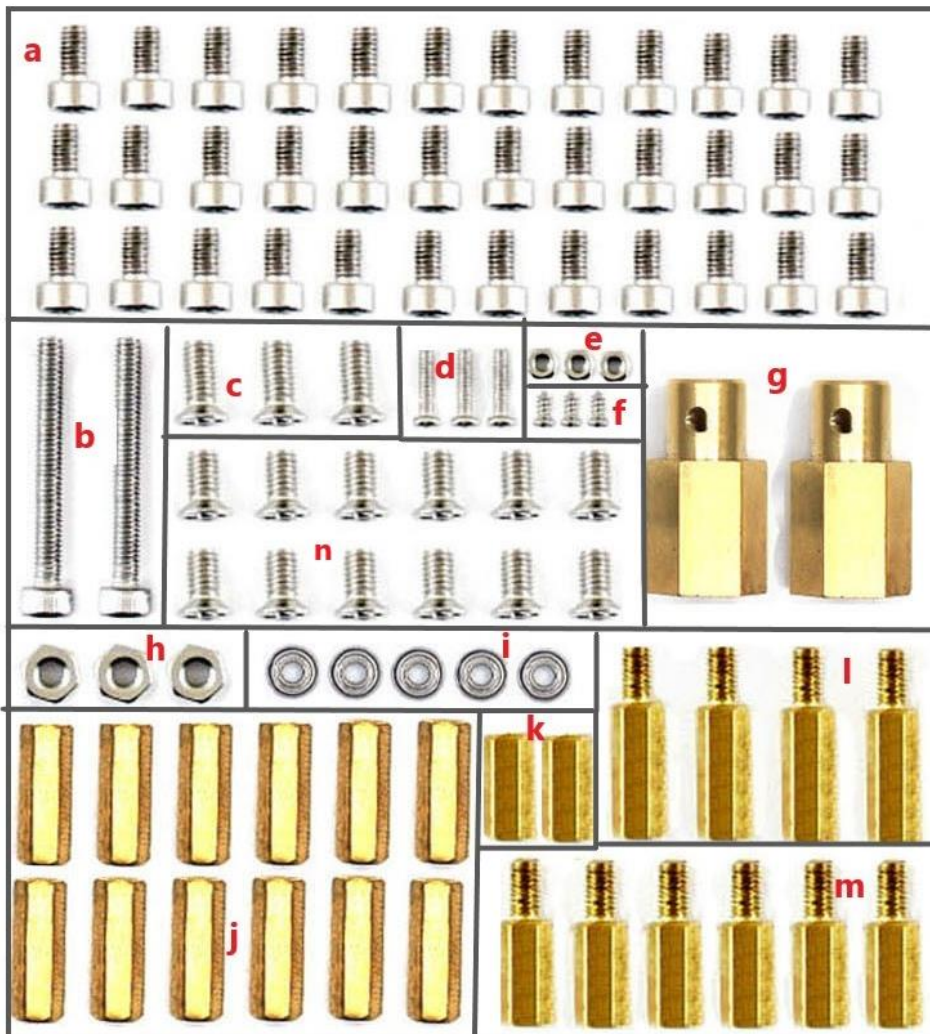


1. Metal box x1
2. Gears 8PCS x1
3. Caterpillar track 2PCS x1
4. KitiBot for micro:bit expansion board x1
5. Line tracking sensor x1
6. Ultrasonic sensor x1
7. KitiBot acrylic head x1
8. Servo x1
9. Servo mounting board x1

- 10. Ultrasonic adapter x1
 - 11. 370 coding motors 2PCS x1
 - 12. PH2.0 20cm 4Pin same side contact cable x1
 - 13. PH2.0 20cm 7Pin same side contact cable x1
 - 14. USB type A plug to micro B plug cable x1
 - 15. KitiBot for micro:bit T screws x1
 - 16. Screwdrivers 2PCS x1
- 【External components】**
- 1. micro:bit x1
 - 2. 18650 battery x1

SCREWS PACK

There are so many types of screws, please take care.



ASSEMBLE

MOTORS

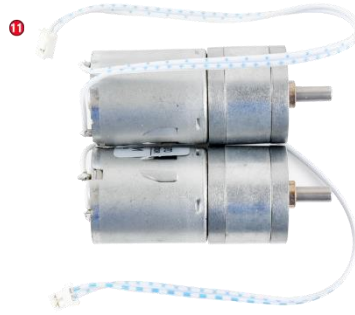
- Components

1: metal box x1

11. motor x2

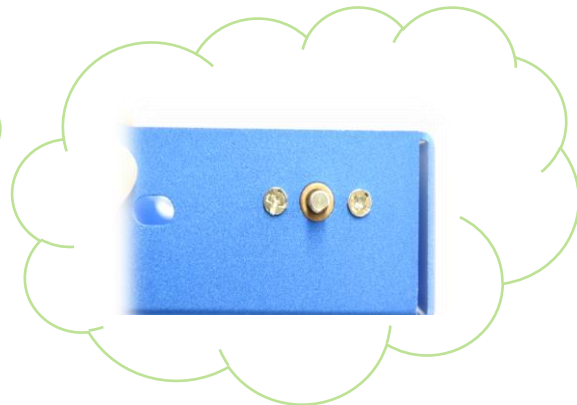
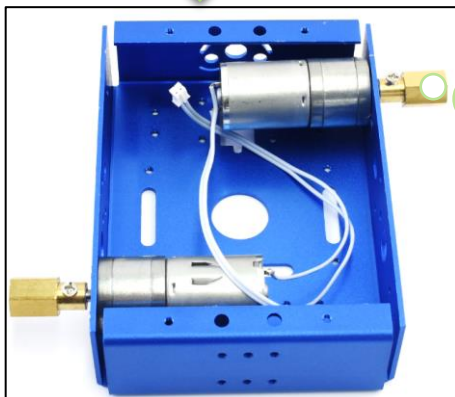
16-n: screw x6

16-g: screw x2



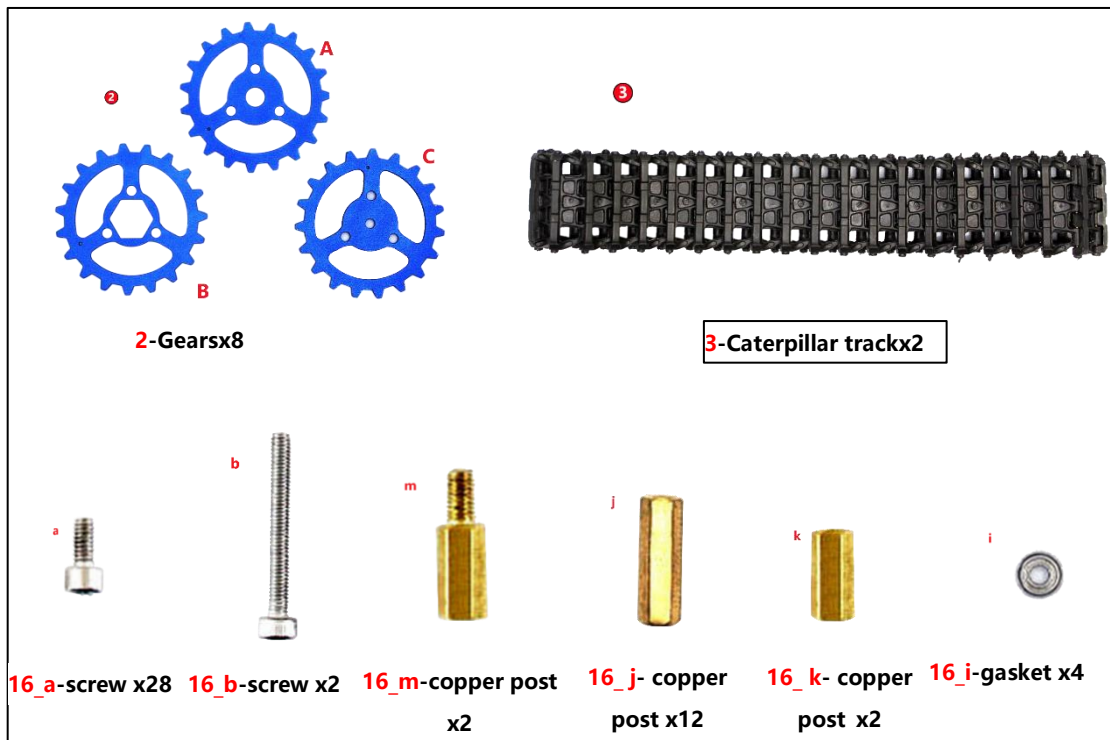
- Let shaft of motor through the side-holes of metal box, and fix it with screw (n).

mount the copper post to shaft with screw (n).

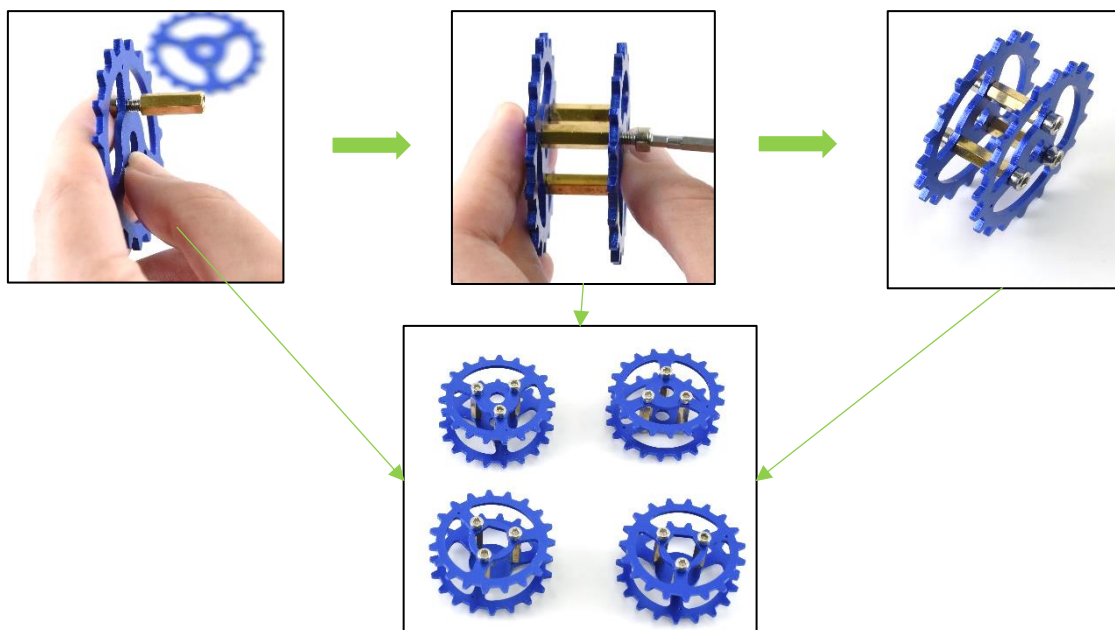


WHEELS

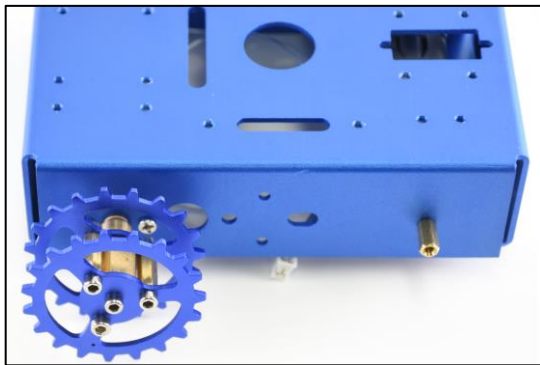
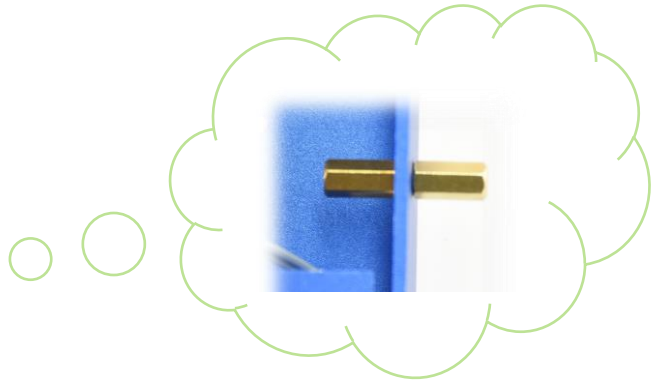
- Components



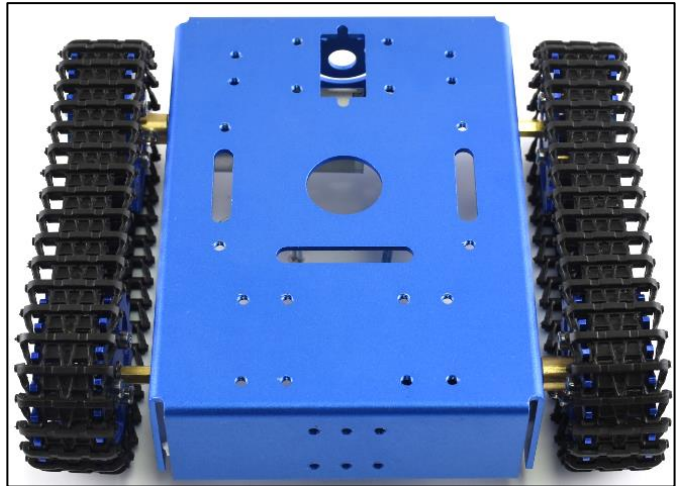
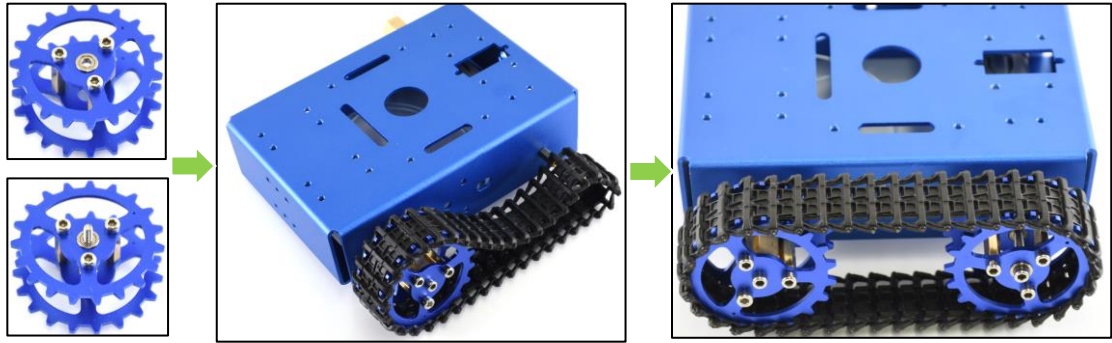
- There are three kinds of gears. A wheel is composed of two gears.(A+A, A+A, B+C, B+C). Let the holes of gear be coaxial with copper post (J), then use screws (16_a) to fix on the both sides.



- Assemble wheel (B+C) to motor, and fix with screw (a). Screwing copper posts (16_m) and (16_n) to another side for the rest wheels.



- Assemble the wheels and caterpillar track. For wheel (A+A), you should set gaskets (16_i) to both side of its center hole and fix it to motor with long screw (16_b)



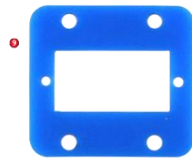
SERVO

- Components:



8-servo

13



9-servo holder



10 – ultrasonic
adapter



13-4PIN cable



16_d-screw x2



16_e- nuts x2

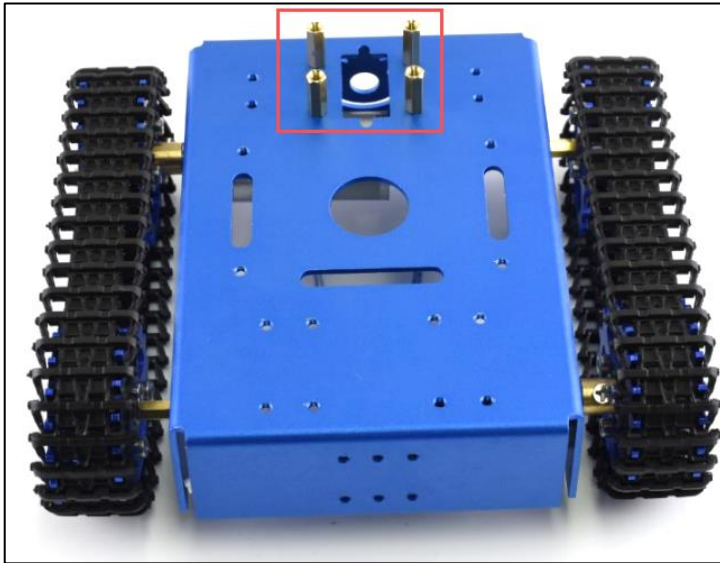


16_f-screw x3

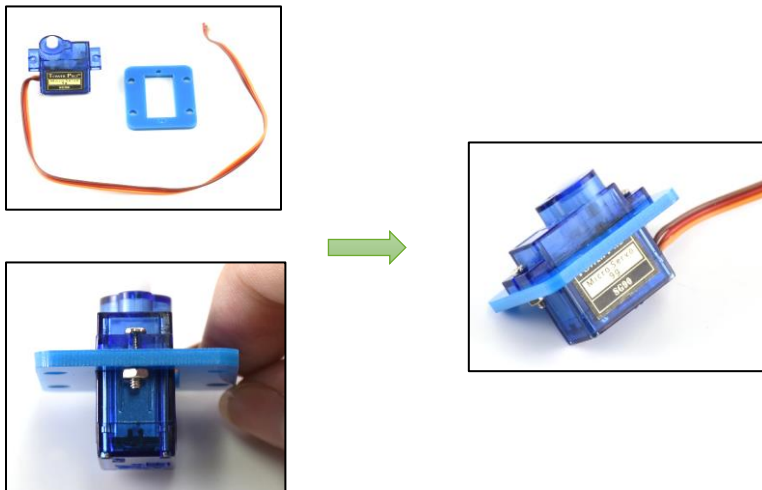


16_i-Copper post x2

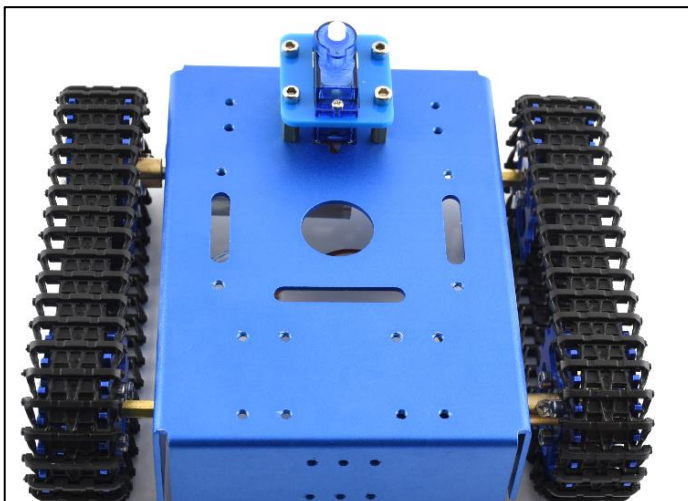
- Screwing copper post (i) to metal box



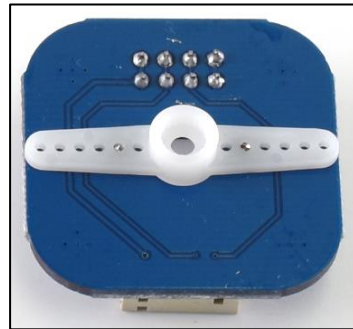
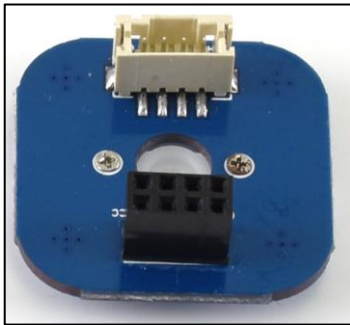
- Assemble servo to servo holder with screws (d) and nuts (e)



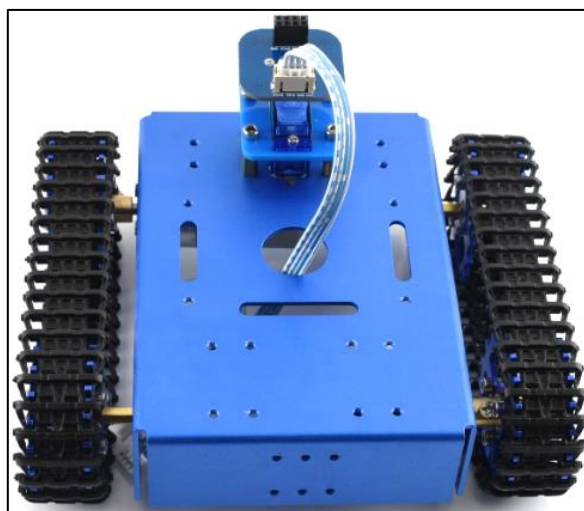
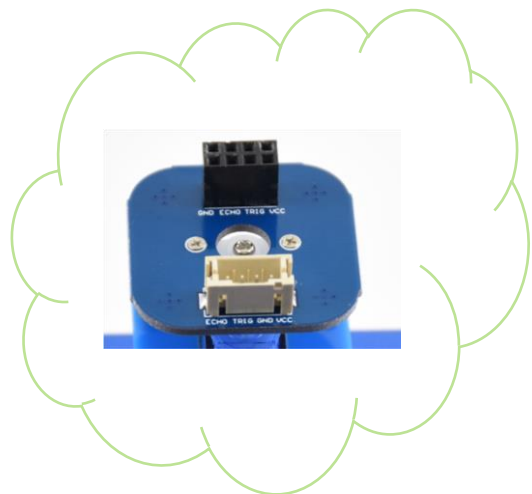
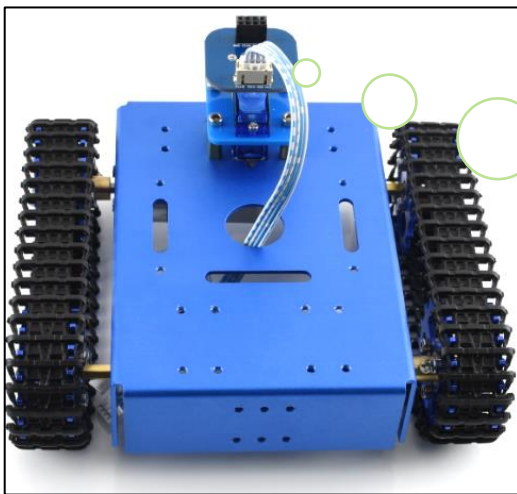
- Assemble servo to metal box, using screw (d) for fixing.



- Assemble servo arm to ultrasonic adapter (10) using screws (f).

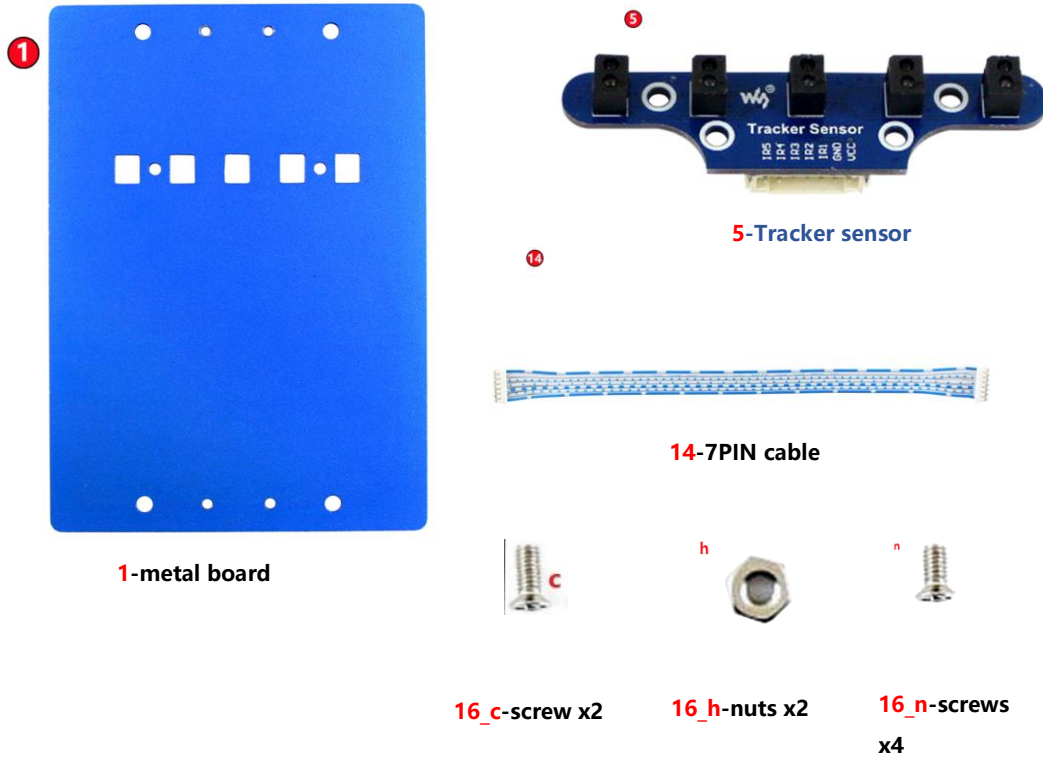


- Assemble adapter to servo and fix it with screw (f), then insert the 4pin cable (13)

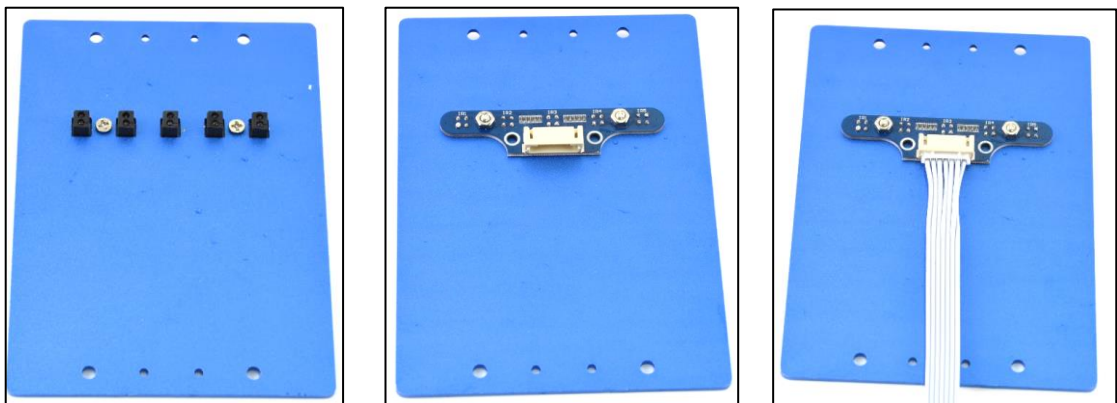


TRACKING SENSOR

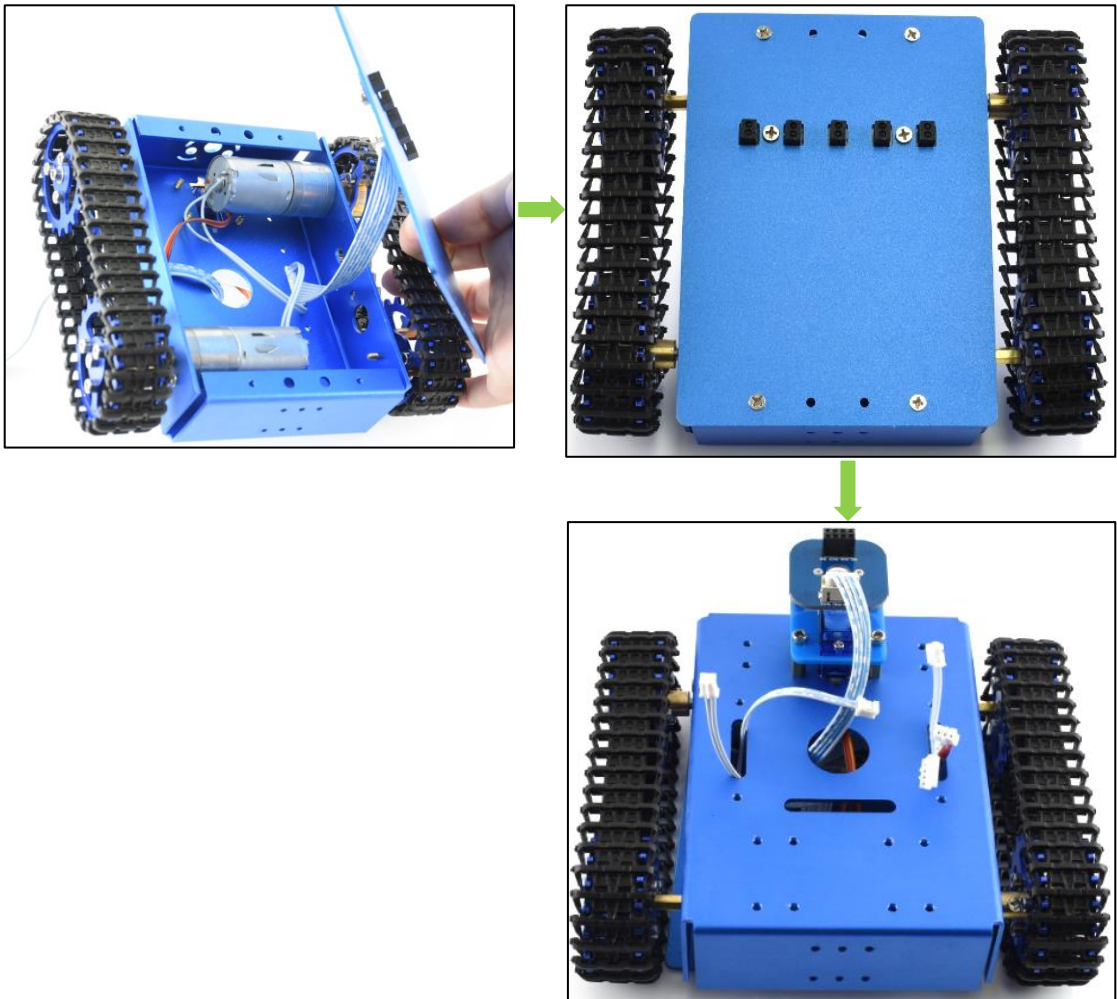
- Components



- Using screws (16_c) to assemble tracker sensor (5) to metal board, then insert the 7PIN cable



- Let cable through metal box and close the box with screws (16_n)



KITIBOT FOR MICRO:BIT EXPANSION BOARD

- Components:



4-micro:bit expansion board

12



12-18650 battery

m



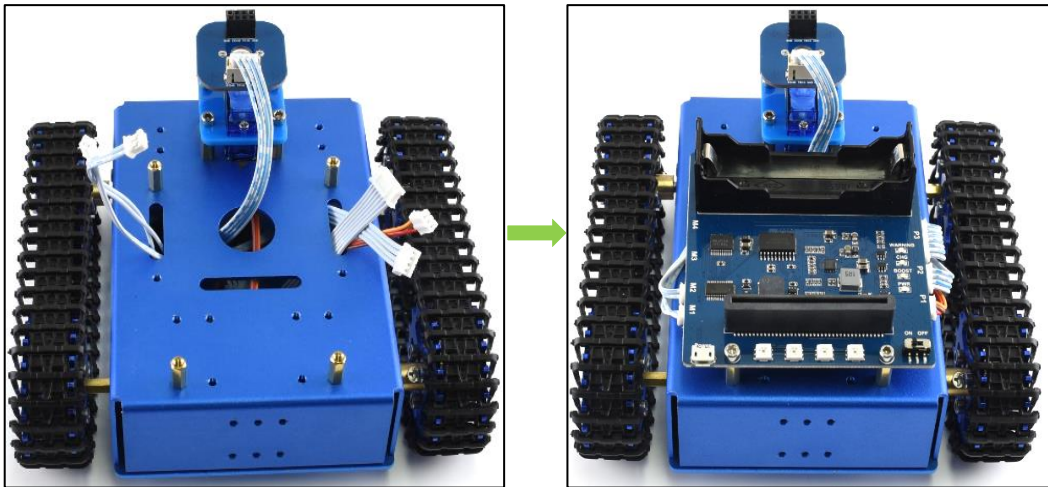
16_m-copper post x4

a



16_a-screw x4

- Screw copper post (16-m) to metal box. Assemble kitibot expansion board with screws (16_a). Inserting cables to corresponding interfaces.



ULTRASONIC SENSOR

- Components



6-Ultrasonic sensor



7-Acrylic head

- Assemble the ultrasonic sensor and battery

