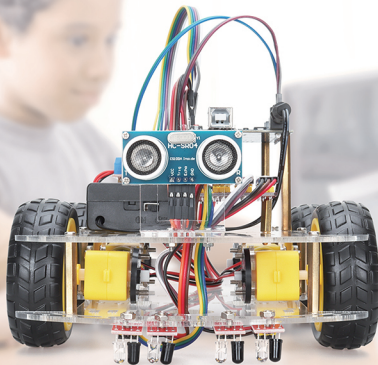




TSCINBUNY

PROGRAMMING SMART ROBOT CAR

Manual & Tutorial



产品零件/Product Parts



M1.6*8圆头螺丝*4
(M1.6*8 round head screws*4)



M1.6螺母*4
(M1.6 nuts*4)



M2*8圆头螺丝*2
(M2*8 round head screws*2)



M2螺母*3
(M2 nuts*3)



M3*8圆头螺丝*33
(M3*8 round head screws*33)



M3*30 圆头螺丝*8
(M3*30 round head screws*8)



M3螺母*17
(M3 nuts*17)



M3*15+6铜柱*2
(M3*15+6 copper pillar*2)



M3*30铜柱*8
(M3*30 copper pillar*8)



M3*50铜柱*3
(M3*50 copper pillar*3)



超声波模块支架*1
(Ultrasonic module bracket*1)



超声波模块*1
(Ultrasonic module*1)

产品零件/Product Parts



亚克力车板*2
(Acrylic car plate*2)



电机支架*8
(Motor bracket*8)



测速码盘*4
(Coded disc encoder*4)



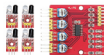
电机和轮子*4
(Motor & wheel*4)



电机驱动模块*1
(Motor drive module*1)



主板和数据线*1
(Motherboard & USB cable*1)



四路循迹模块*1
(Four-way tracing module*1)



电池盒*1
(Battery box*1)



公对公杜邦线10cm 2P
(M-M Dupont wire 10cm 2P)



公对母杜邦线10cm 4P
(M-F Dupont wire 10cm 4P)



公对公杜邦线20cm 8P
(M-M Dupont wire 20cm 8P)



公对母杜邦线20cm 15P
(M-F Dupont wire 20cm 15P)



公对母杜邦线30cm 2P
(M-F Dupont wire 30cm 2P)

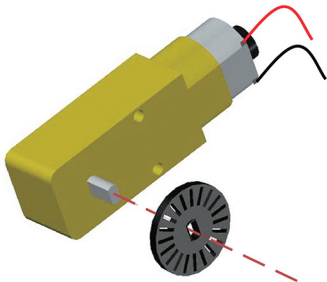
电机和测速码盘的组装 (Assembly of motor & coded disc encoder)



① 测速码盘*4
(Coded disc encoder*4)



② 电机*4
(Motor*4)



将测速码盘插入电机没有凸点的一面，其余三个同理。
Insert the coded disc encoder into the side of the motor without the bumps, and the same for the remaining three.

安装电机 (Installing the motor)



① M3*30 圆头螺丝*8
(M3*30 round head screws*8)



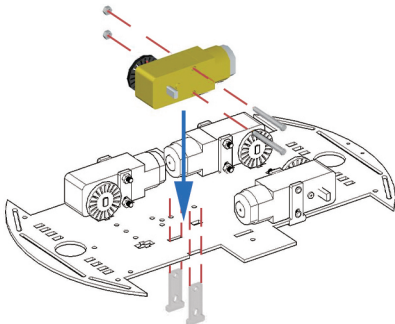
② M3螺母*8
(M3 nuts*8)



③ 电机支架*8
(Motor bracket*8)



④ 亚克力车板*1
(Acrylic car plate*1)



先将电机支架穿过亚克力车板，然后把电机固定在电机支架上，且电机有凸点的一面朝外。其余三个同理。

注意：使用前需撕掉保护膜。

First put the motor bracket through the acrylic car plate, then fix the motor on the motor bracket, and the motor has the bump side facing outward. The remaining three in the same way.

Note: You need to tear off the protective film before use.

安装寻迹模块 (Installing the tracing module)



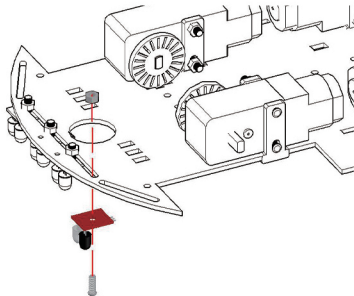
① M3*8圆头螺丝*4
(M3*8 round head screws*4)



② M3螺母*4
(M3 nuts*4)



③ 循迹模块*4
(Tracing module*4)



先将循迹模块固定在亚克力车板的下方，然后把接收器和发射器朝下。其余三个同理。

注意：模块与模块之间需要有间隔。

First, fix the tracking module under the acrylic car plate, then put the receiver and transmitter facing down. Same for the remaining three.

Note: Modules need to be spaced apart from each other.

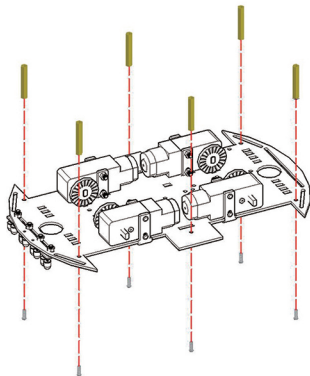
安装铜柱 (Installing the copper pillar)



① M3*8圆头螺丝*6
(M3*8 round head screws*6)



② M3*30铜柱*6
(M3*30 copper pillar*6)



将铜柱固定在亚克力车板的上方。
到这一步，已经完成了车的底部组装。

Fix the copper pillar on top of the acrylic car plate.
By this step, the bottom of the car has been completed assembly.

安装主板 (Installing the motherboard)

① M3*50铜柱*3
(M3*50 copper pillar*3)



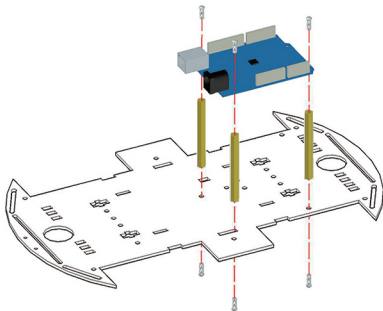
② M3*8圆头螺丝*6
(M3*8 round head screws*6)



③ 亚克力车板*1
(Acrylic car plate*1)



④ 主板*1
(Motherboard*1)



先将铜柱固定在亚克力车板上，再将主板固定在铜柱上。

注意：找对铜柱的孔位和主板的方向

First fix the copper pillar on the acrylic car plate, and then fix the motherboard on the copper pillar.

Note: Find the right hole position of the copper pillar and the direction of the motherboard.

安装电机驱动模块 (Installing the motor drive module)



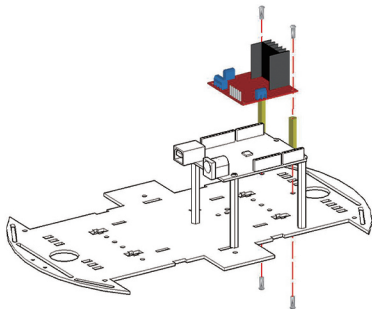
① M3*8圆头螺丝*2
(M3*8 round head screws*2)



② M3*30铜柱*2
(M3*30 copper pillar*2)



③ 电机驱动模块*1
(Motor drive module*1)



先将铜柱固定在亚克力车板上，再将电机驱动模块固定在铜柱上。

注意：找对铜柱的孔位和模块的方向。

First fix the copper pillar on the acrylic car board, and then fix the motor drive module on the copper pillar.

Note: Find the right hole position of the copper pillar and the direction of the module.

安装四路循迹控制板
(Installing the four-way
tracking control board)



① M3*8圆头螺丝*2
(M3*8 round head screws*2)



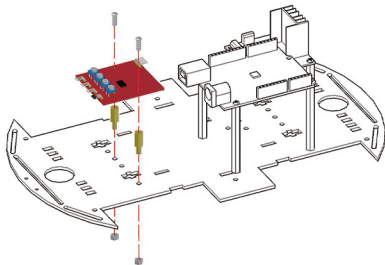
② M3螺母*2
(M3 nuts*2)



③ M3*15+6铜柱*2
(M3*15+6 copper pillar*2)



④ 四路循迹控制板*1
(Four-way tracing control board*1)



先将铜柱固定在亚克力车板上，再将四路循迹控制板固定在铜柱上。

注意：找对铜柱的孔位和控制板的方向。

First fix the copper pillar on the acrylic car plate, then fix the four-way tracing control board on the copper pillar.

Note: Find the right hole position of the copper pillar and the direction of the control board.

组装超声波模块和超声波模块支架
(Assemble ultrasonic module
& ultrasonic module holder)



① M1.6*8圆头螺丝*4
(M1.6*8 round head screws*4)



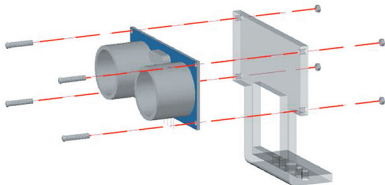
② M1.6螺母*4
(M1.6 nuts*4)



③ 超声波模块支架*1
(Ultrasonic module bracket*1)



④ 超声波模块*1
(Ultrasonic module*1)



将超声波模块固定在超声波模块支架上。

注意：找对模块的方向和支架的方向。

Fix the ultrasonic module on the ultrasonic module bracket.

Note: Find the right direction of the module and the direction of the bracket.

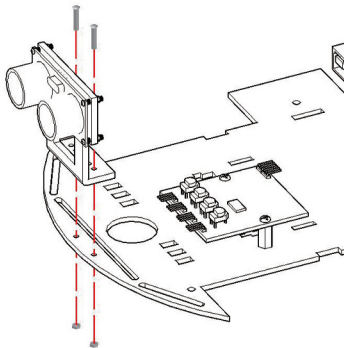
安装超声波模块支架
(Installation the ultrasonic module bracket)



① M2螺母*2
(M2 nuts*2)



③ M2*8圆头螺丝*2
(M2*8 round head screws*2)



将超声波模块支架固定在亚克力车板上。
Fix the ultrasonic module bracket
on the acrylic car plate.

安装电池盒 (Installing the battery box)



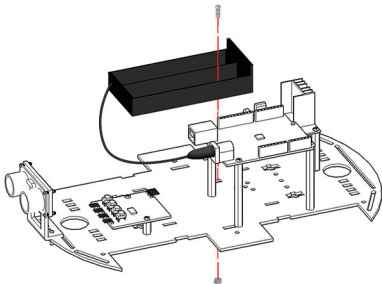
① M3螺母*1
(M3 nuts*1)



② M3*8圆头螺丝*1
(M3*8 round head screws*1)



③ 电池盒*1
(Battery box*1)



先将电池盒固定在亚克力车板上，接着把电源线插在主板的电源接口上。

注意：找对电池盒的位置和方向。
到这一步，已经完成了车的顶部组装。

First fix the battery box on the acrylic car plate, then plug the power cord into the power socket on the motherboard.

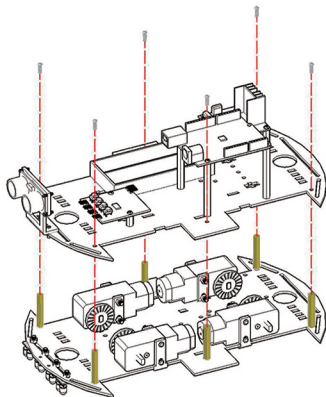
Note: Find the right position and direction of the battery box.

By this step, the top of the car has been completed assembly.

车的顶部部分和底部部分的组装
(Assembly of the top part
and bottom part of the car)



① M3*8圆头螺丝*6
(M3*8 round head screws*6)

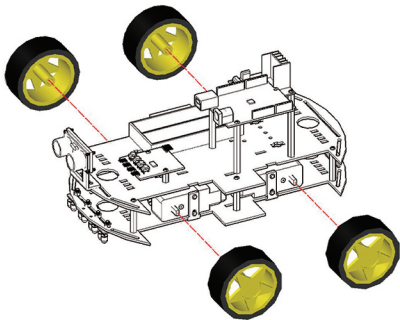


将车的顶部部分固定在车的底部部分上。
Secure the top part of the car to
the bottom part of the car.

安装车轮 (Installing the wheels)



① 车轮*4
(Wheel*4)

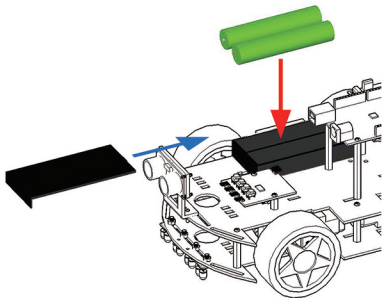


将轮子对准电机，并固定在电机上。
Align the wheel with the motor
and secure it to the motor.

安装电池 (Installing the battery)



① 电池盒盖*1
(Battery box cover*1)



对好电池的正负极，然后放进电池盒中。

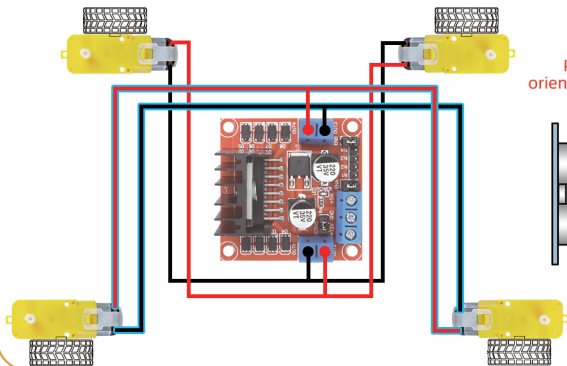
注意：该产品不包含电池，需自备2节3.7V 18650电池。

Align the positive and negative terminals of the battery, and then put it into the battery box.

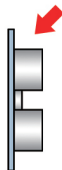
Note: The product does not include batteries, you are advised to prepare two 3.7V 18650 batteries yourself.

接线/Wiring

电机的接线
Wiring of motors

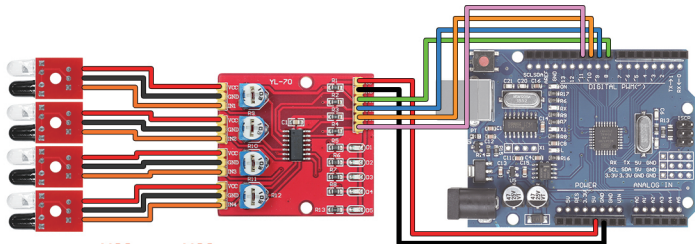


注意超声波的朝向
Pay attention to the orientation of the ultrasound



接线/Wiring

四路循迹模块的接线
Wiring of the four-way tracking module



VCC — VCC
GND — GND
OUT — IN1/4

VCC — 5V
GND — GND
OUT1 — 8
OUT2 — 9
OUT3 — 10
OUT4 — 11

接线/Wiring

超声波模块和电机驱动模块的接线

Wiring of ultrasonic module and motor drive module

