

FlipRobot E310

The Ultimate Robotic STEAM Learning Solution



actura

Learn STEAM through FlipRobot

Develop students' STEAM skills through FlipRobot challenges

Starting from the curriculum design, FlipRobot develops a complete architecture from CPBL robot to STEAM literacy learning, and clearly enables students to learn the key capabilities of the 21st century through robotics and cultivate the core competitiveness of STEAM.

透過機器人學玩 STEAM

在機器人的任務挑戰活動中培養 STEAM 素養能力

FlipRobot 由課程設計出發，發展出由 CPBL 機器人到 STEAM 素養學習的完整架構，清楚讓學生透過機器人專題學習 21 世紀的關鍵能力，培養 STEAM 核心競爭力。

透过机器人学玩 STEAM

在机器人的任务挑战活动中培养 STEAM 素养能力

FlipRobot 由课程设计出发，发展出由 CPBL 机器人到 STEAM 素养学习的完整架构，清楚让学生透过机器人专题学习 21 世纪的关键能力，培养 STEAM 核心竞争力。

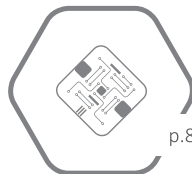


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组装



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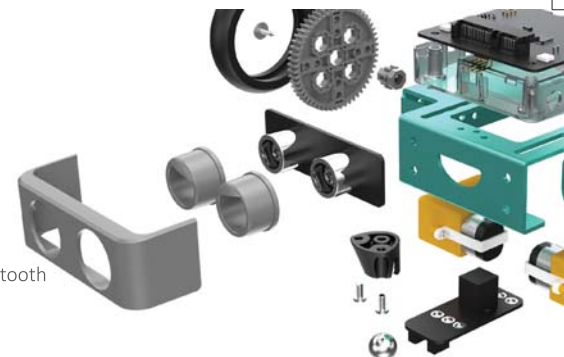
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Parts List

零件清單 / 零件清單



x2

Gear (Large)
齒輪 (大)



x2

Wheel Apron
輪胎膠圈



x2

Wheel Coupling
輪軸



x2

Caster Wheel
輔助輪支架



x2

Steel Ball
鋼珠



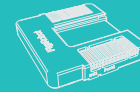
x2

DC Motor(L-Shape/190RPM)
直流馬達 (L 型 /190RPM)



E310 PLUS

Lithium Battery
鋰電池



Top Cover
主控板上蓋



Bottom Cover
主控板下蓋



FlipEye
眼睛組



Chassis
移動平台



E310

Battery Case
電池盒



E310

Battery Transfer
電池轉接盒



x2

Battery Fastener
電池盒扣釘

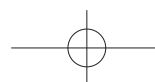


USB Type-C
USB Type-C



x2

M4*6mm Plastic Snap Rivet
M4*6mm 塑膠扣釘



E310 FlipBrain
E310 主控板



Variable Board
變數板



Ultrasonic Sensor
超音波感應器



Button Controller Module
按鈕操控模組



Infrared Sensor
紅外線感應器



RJ12 Cable (100cm)
RJ12 Cable (27cm)
RJ12 線路 (100cm)
RJ12 線路 (27cm)



M2.6 Hex Wrench
M2.6 小扳手



M3 Screwdriver
M3 螺絲起子



x4

M2.6 Nut
M2.6 螺帽



x4

M2.6*20mm Flat Head Screw
M2.6*20mm 皿頭螺絲



x2

M2.6*12mm Self-tapping Pad Screw
M2.6*12mm 墊片攻牙螺絲



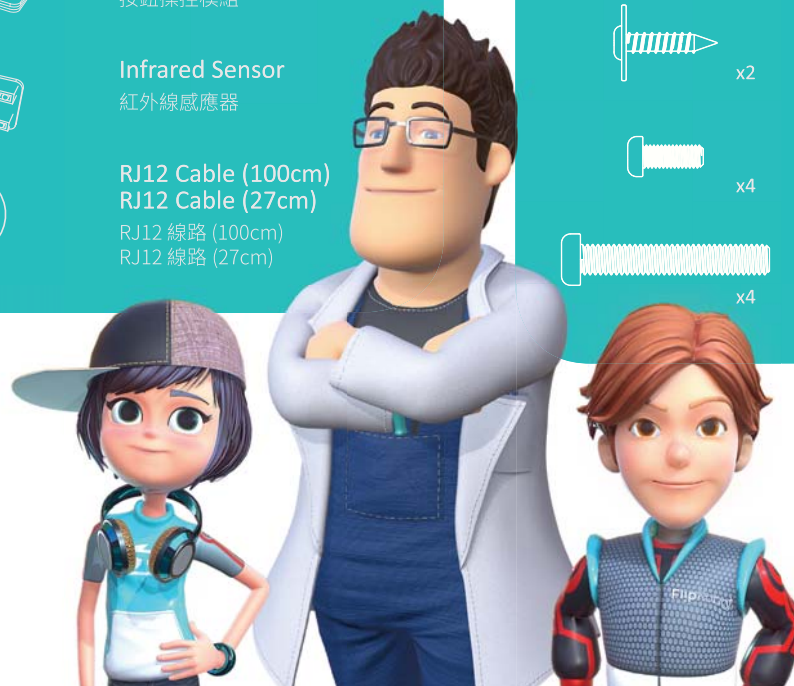
x4

M3*8mm Round Head Screw
M3*8mm 圓頭螺絲



x4

M4*25mm Round Head Screw
M4*25mm 圓頭螺絲



Parts List

零件清單 / 零件清單



x2

Gear (Large)
齿轮 (大)



x2

Wheel Apron
轮胎胶圈



x2

Wheel Coupling
轮轴



x2

Caster Wheel
辅助轮支架



x2

Steel Ball
钢珠



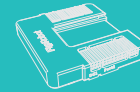
x2

DC Motor(L-Shape/190RPM)
直流马达 (L 型 /190RPM)



E310 PLUS

Lithium Battery
锂电池



Top Cover
主控板上盖



Bottom Cover
主控板下盖



FlipEye
眼睛组



Chassis
移动平台



E310

Battery Case
电池盒



E310

Battery Transfer
电池转接盒



x2

Battery Fastener
电池盒扣钉

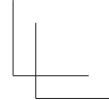


USB Type-C
USB Type-C



x2

M4*6mm Plastic Snap Rivet
M4*6mm 塑胶扣钉



E310 FlipBrain
E310 主控板



Variable Board
变数板



Ultrasonic Sensor
超音波感应器



Button Controller Module
按钮操控模组



Infrared Sensor
红外线感应器



RJ12 Cable (100cm)
RJ12 Cable (27cm)
RJ12 线路 (100cm)
RJ12 线路 (27cm)



M2.6 Hex Wrench
M2.6 小扳手



M3 Screwdriver
M3 螺丝起子



x4

M2.6 Nut
M2.6 螺帽



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M2.6*20mm Flat Head Screw
M2.6*20mm 皿头螺丝



x2

M2.6*12mm Self-tapping Pad Screw
M2.6*12mm 垫片攻牙螺丝



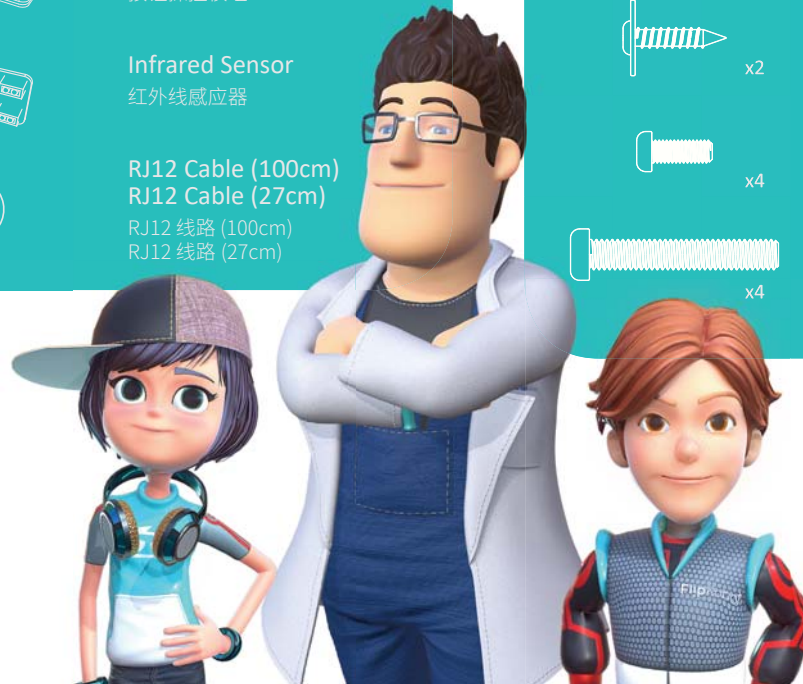
x4

M3*8mm Round Head Screw
M3*8mm 圆头螺丝



x4

M4*25mm Round Head Screw
M4*25mm 圆头螺丝

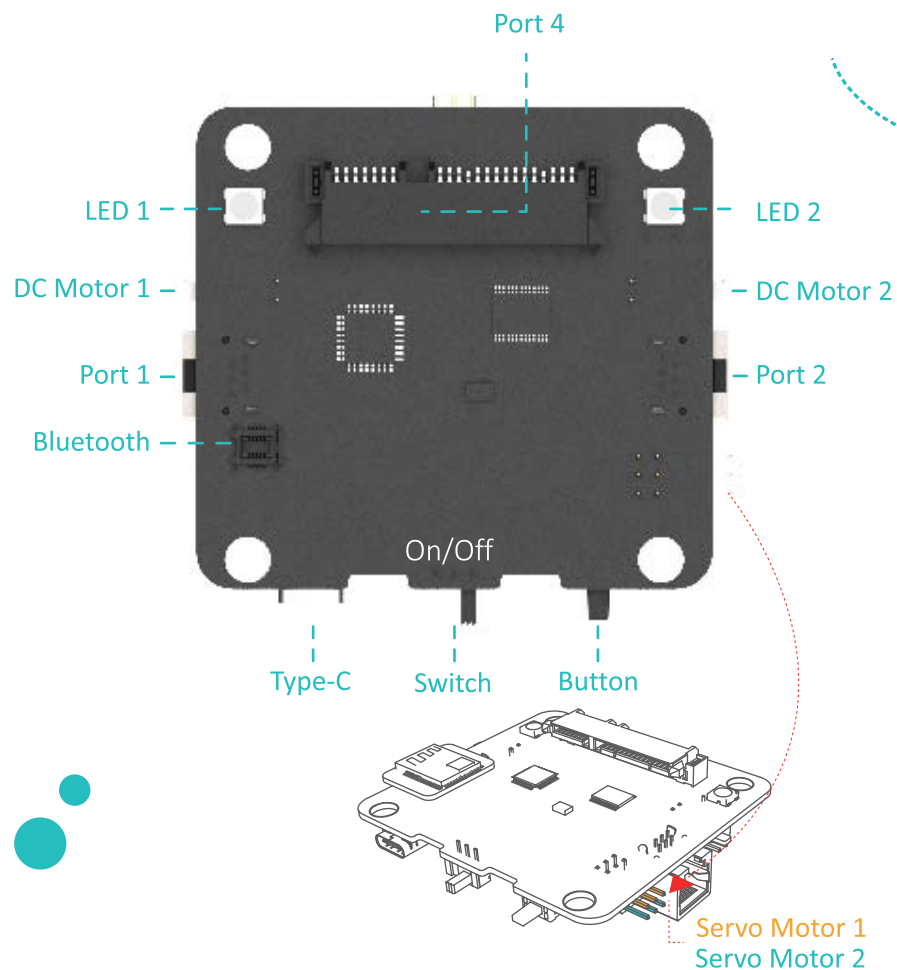


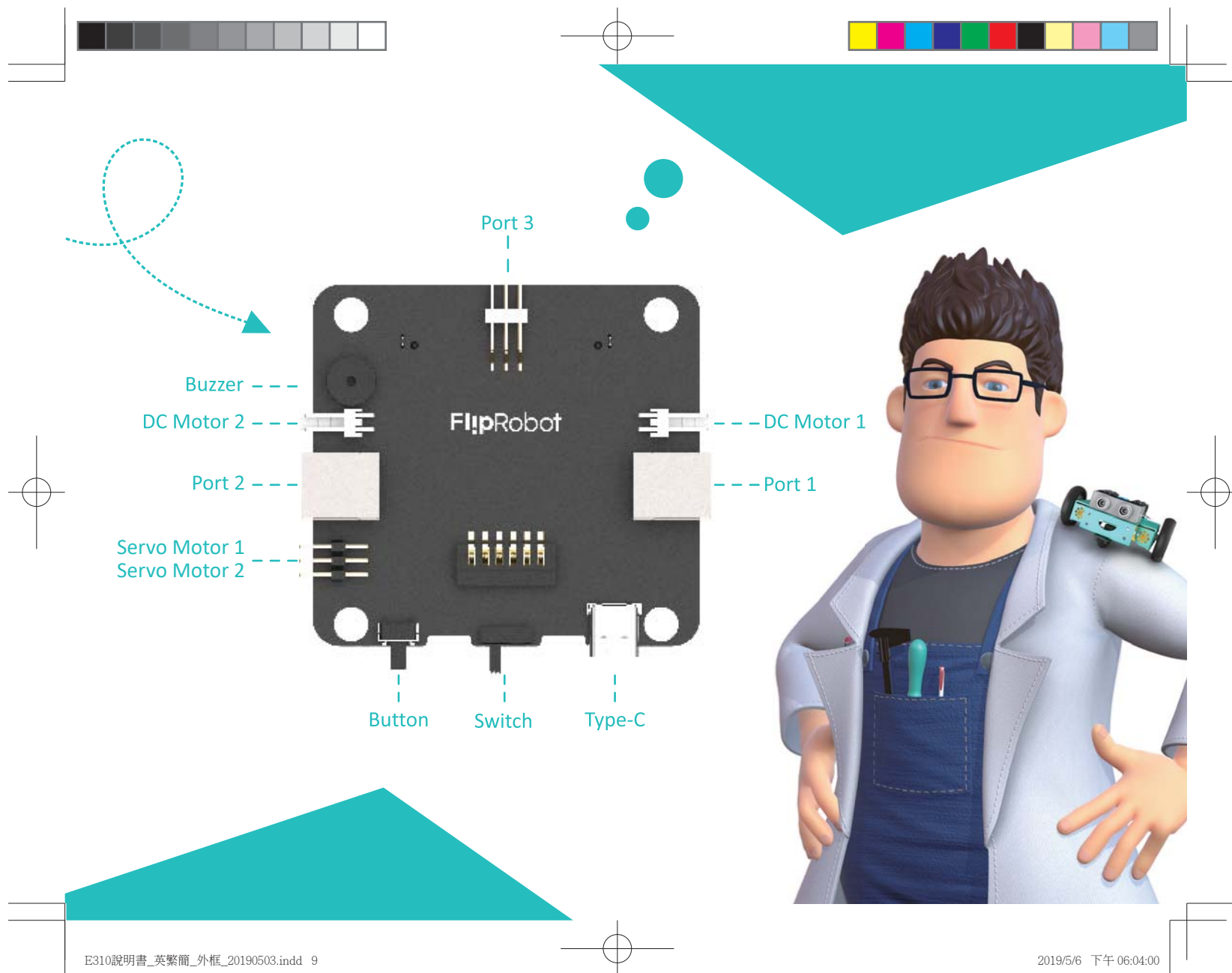


FlipBrain

主控板 / 主控板

Port 1	連接埠 1	端口 1
Port 2	連接埠 2	端口 2
Port 3	連接埠 3	端口 3
Port 4	連接埠 4	端口 4
Buzzer	蜂鳴器	蜂鸣器
DC Motor 1	直流馬達 1	直流马达 1
DC Motor 2	直流馬達 2	直流马达 2
Server Motor 1	伺服馬達 1	伺服马达 1
Server Motor 2	伺服馬達 2	伺服马达 2
LED 1	LED 燈 1	LED 灯 1
LED 2	LED 燈 2	LED 灯 2
Switch	電源開關	电源开关
Type-C	Type-C	Type-C
Button	模式切換鈕	模式切换钮
Bluetooth	藍芽連接埠	蓝牙端口





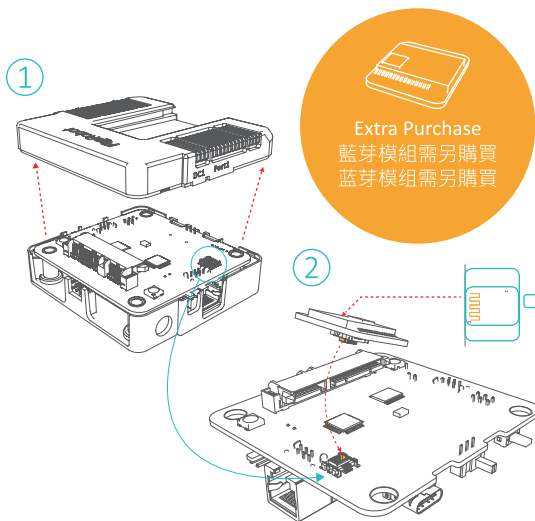
Bluetooth

藍芽 / 蓝芽

Bluetooth Module Installation

藍芽模組安裝

蓝芽模组安装



1. Dongle install/ 藍芽適配器安裝

Install the Bluetooth dongle to the USB port of your computer (Windows/mac).

將藍芽適配器安裝置電腦 USB 孔位 (Windows/mac)。

将蓝芽适配器安装置电脑 USB 孔位 (Windows/mac)。

2. How to initialize Bluetooth pairing / 藍芽如何連接

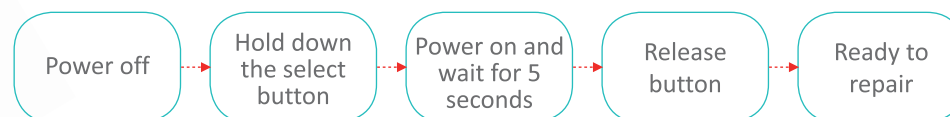
Search for FR_BLE_XXXX in the APP and tap to pair.

在軟體內搜尋 FR_BLE_XXXX，點按後即可配對。

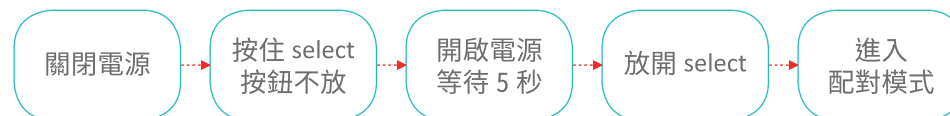
在软件内搜寻 FR_BLE_XXXX，点按后即可配对。

3. How to re-pair/ 如何重新配對

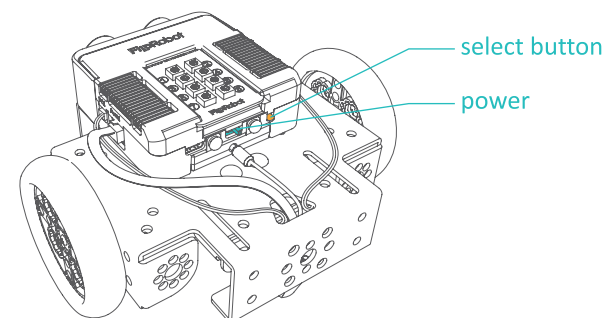
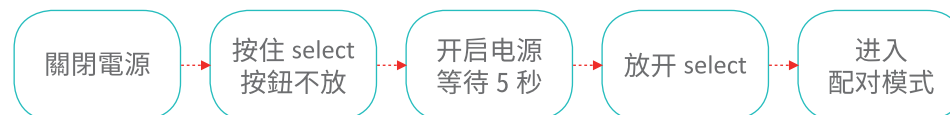
Re-pairing



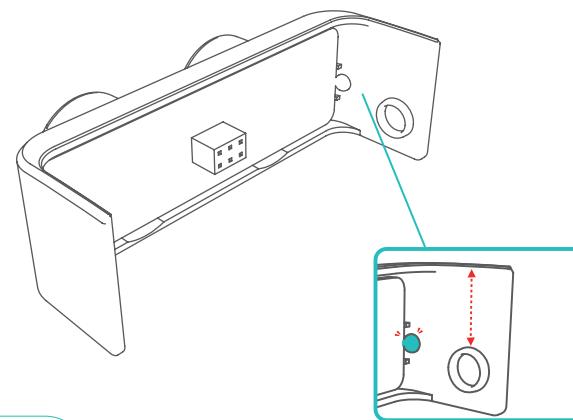
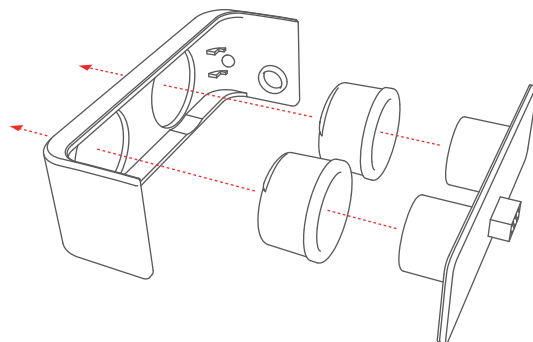
重新配對



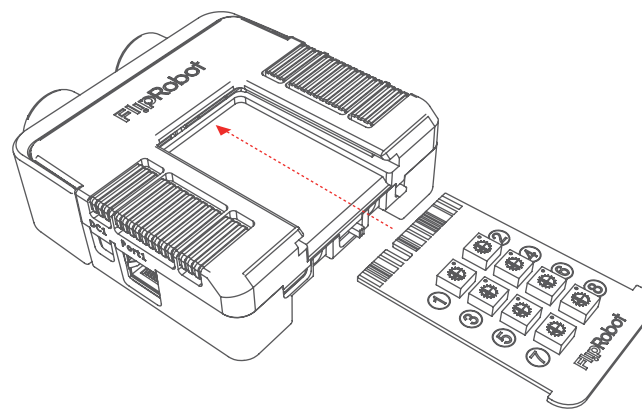
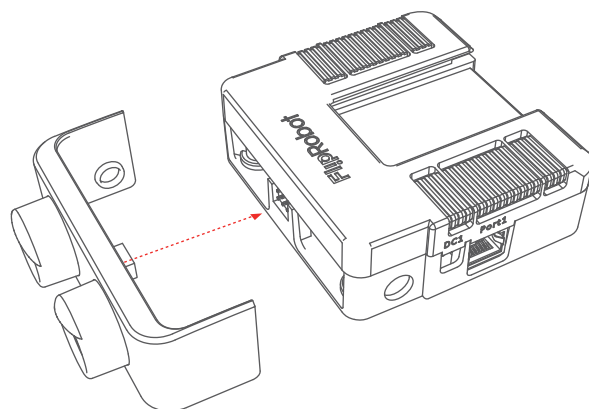
重新配對



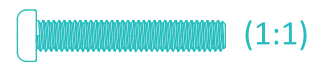
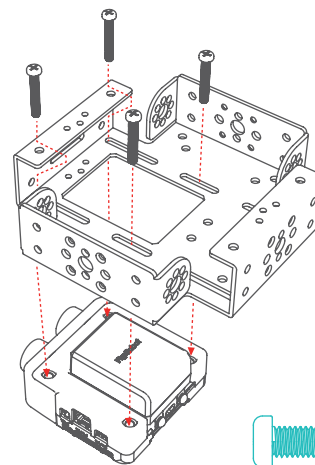
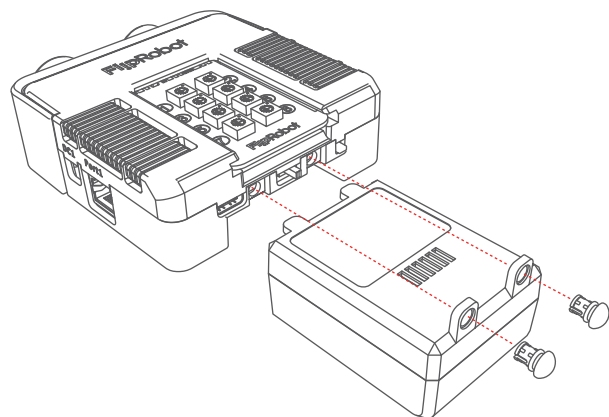
Assembly
組裝
组装



1 2
3 4



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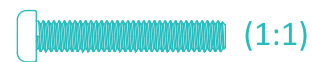
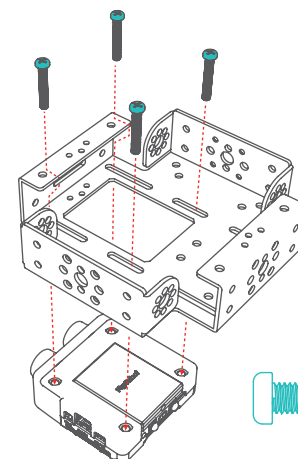
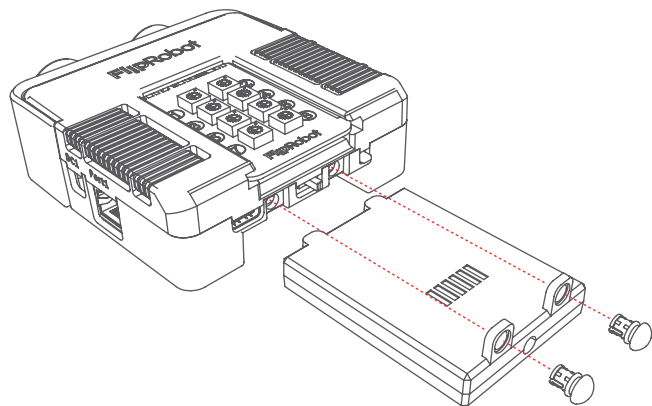


E310 PLUS

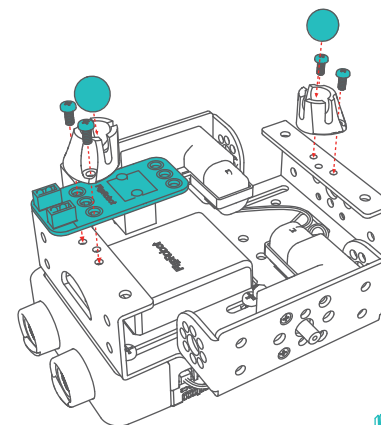
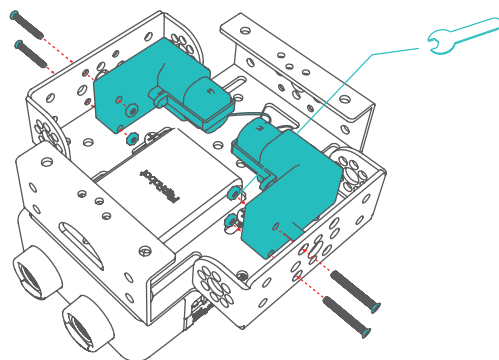
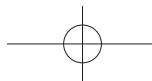
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E310



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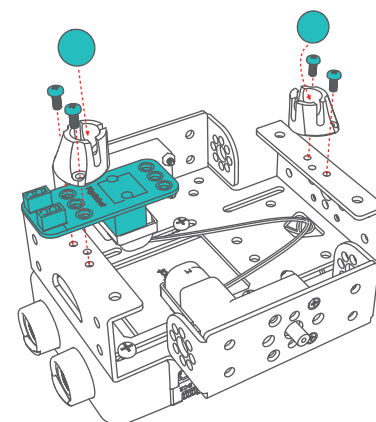
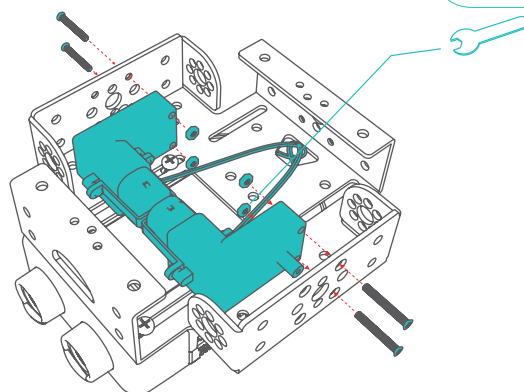
E310 PLUS



E310

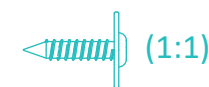
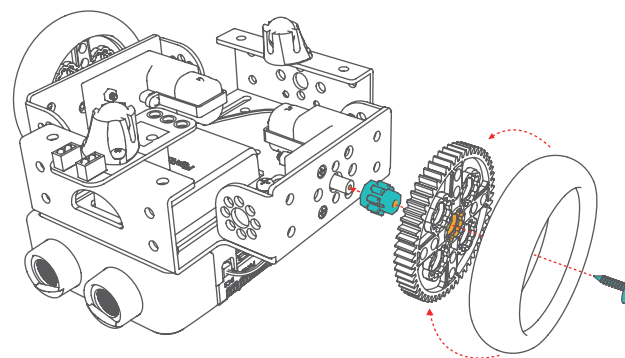
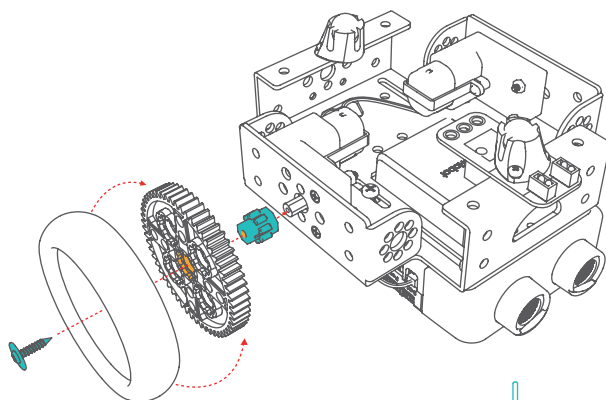
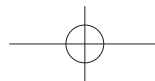
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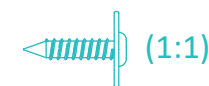
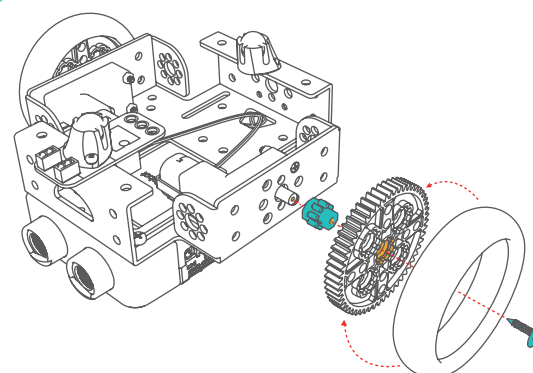
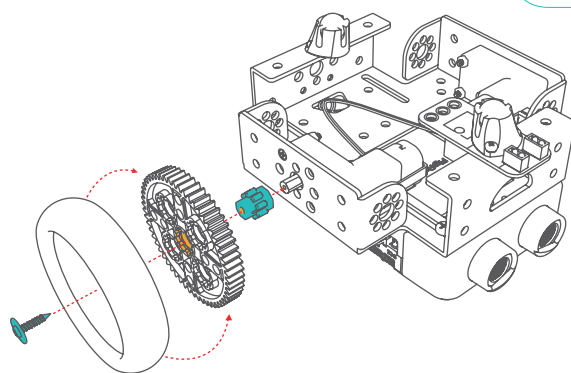
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