

For more add-on packs please visit:

<http://learn.makeblock.com/en/mbot-add-on-packs/>

For more information, please scan the QR code
bellow with your smart device:



mBot Servo Pack

**If you have any questions or concerns about our products,
please do not hesitate to contact us!**

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mBot Add-on Pack Contents (1:1)



M2 Nut



M4 Nut



M2.2x6.5mm Self-drilling Screw



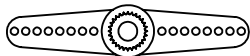
M2.2x8mm Self-drilling Screw



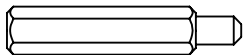
M2x10mm Screw



M4x8mm Screw



Servo Arm



M4x25mm Brass Stud



Any unknown parts can be checked here.

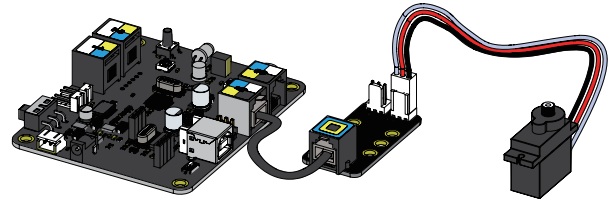
Construction Knowledge for the add-on pack

1. Adjust servo

You need to adjust the servo in order to make it rotate to a certain angle as precisely as you want. You can adjust it with mBlock, mBlockly and MakeBlock in three steps, as follow:

1.1 Wire connections

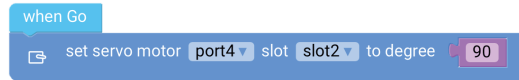
Before adjusting servo, you need to prepare mCore, RJ25 adapter module and the servo to be adjusted. Connect the wires as follows. Connect RJ25 adapter module to the Port4 of mCore and connect servo to the slot2 of RJ25 adapter module.



1.2 Adjust servo with software

① Adjust servo with mBlockly

Firstly, you should connect mBlockly to your mCore, then develop program as follow. After that, click "Go" to see the servo automatically rotate to 90°.



② Adjust servo with mBlock

Firstly, you should connect mBlock to your mCore, then develop program as follows. After that, click "Start"(the green flag) to see the servo automatically rotate to 90°.

when  clicked

set servo **Port4** **Slot2** angle **90**

③ Adjust servo with MakeBlock

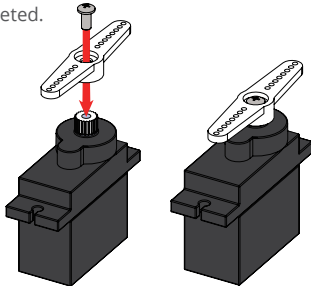
Firstly, you should connect MakeBlock to your mCore, then develop program as follow. After that, click button to see the servo automatically rotate to 90°.

when button pressed

set servo motor **port4** **slot 2** to degree **90**

1.3 Install servo arm

Intall servo arm to the servo as follows (pay attention to their angle). Then the adjustment is completed.



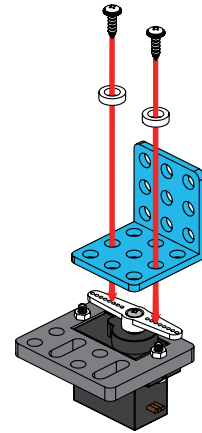
2.Install parts to servo

Insert self-drilling screws through the parts, then torque them into corresponding holes on servo arm to fix the parts.



Tip

If installing parts to the servo arm is difficult, you can torque the self-drilling screws into corresponding holes and then spin them out, so that to expand the size of the holes for easier installation.



3.Controlling and programming

You can use mBlock or Makeblock App to program your cat after the construction.

mBot also supports mBlock programming. We already prepared some examples for you. To download the examples please visit:

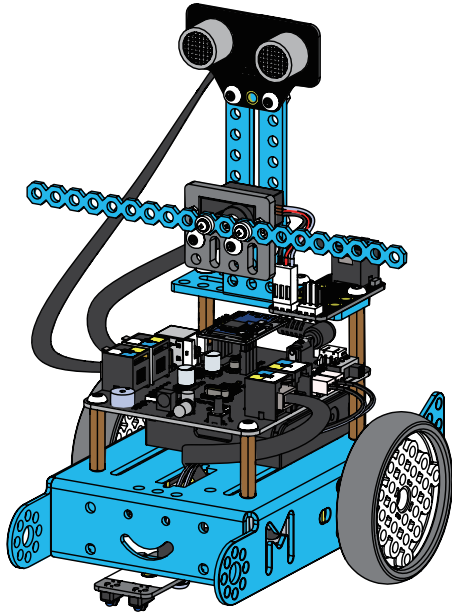
<http://learn.makeblock.com/en/mbot-add-on-packs/>

Makeblock App have added new control panels for mBot servo pack, so now you can control your cat more quickly. To download Makeblock App please visit:

<http://learn.makeblock.com/en/makeblock-app/>

Dancing Cat

mBot Class mBot Add-On Pack



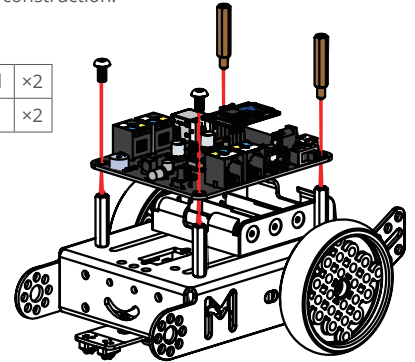
Dancing Cat

mBot Servo Pack- Dancing Cat

If your mBot already has an mCore case, please keep it for later construction.

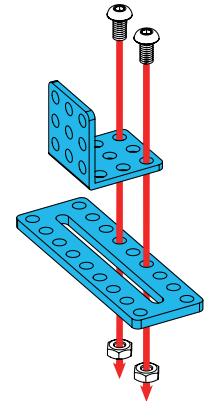
Step 1

M4×25mm Brass Stud	×2
M4×8mm Screw	×2



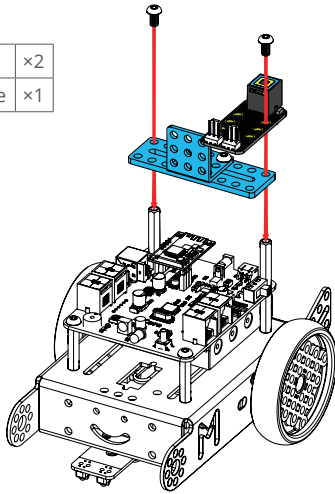
Step 2

Plate I1-Blue	×1
Bracket 3×3	×1
M4×8mm Screw	×2
M4 Nut	×2



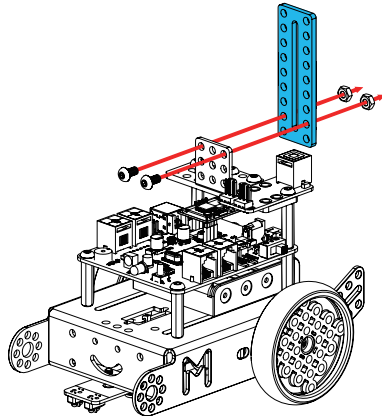
Step 3

M4×8mm Screw	×2
Me RJ25 Adapter Module	×1



Step 4

Plate I1-Blue	×1
M4×8mm Screw	×2
M4 Nut	×2



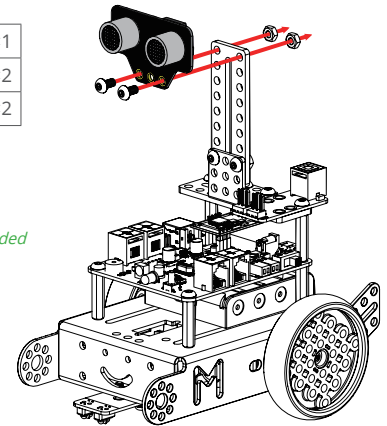
Step 5

Me Ultrasonic Sensor	×1
M4×8mm Screw	×2
M4 Nut	×2



Tip

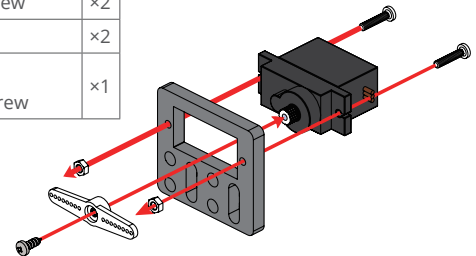
The ultrasonic sensor is included in mBot.



Step 6

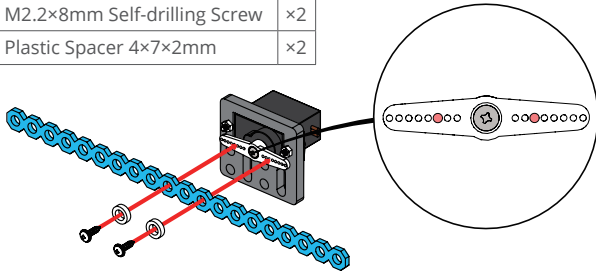
Firstly, you should adjust servo to 90 degrees with software, then install servo arm to the servo (pay attention to their angle).

9g Micro Servo	×1
9g Micro Servo Bracket	×1
Servo Arm	×1
M2×10mm Screw	×2
M2 Nut	×2
M2.2×6.5mm Self-drilling Screw	×1



Step 7

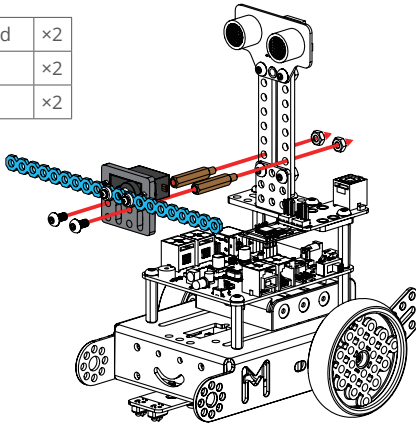
Cutttable Linkage-Blue	×1
M2.2×8mm Self-drilling Screw	×2
Plastic Spacer 4×7×2mm	×2



Tip
Please insert self-drilling screw through the hole marked red.

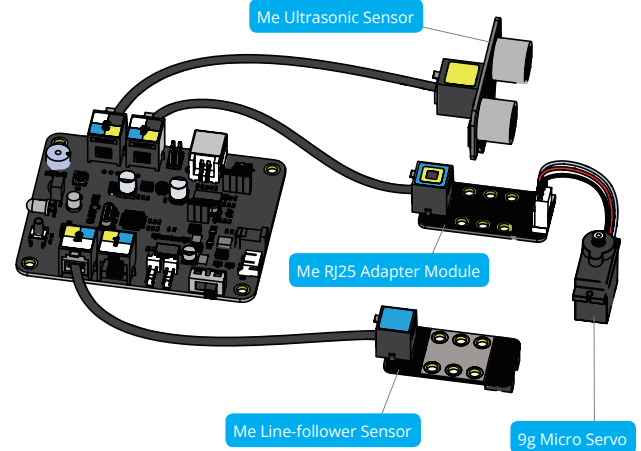
Step 8

M4×25mm Brass Stud	×2
M4×8mm Screw	×2
M4 Nut	×2



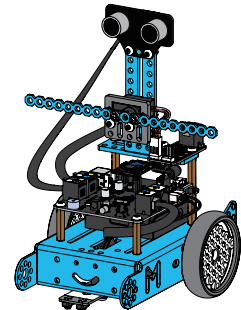
Step 9 Wire connections

This is the reference picture of wire connections in construction examples. You can also change the ports according to your own program.



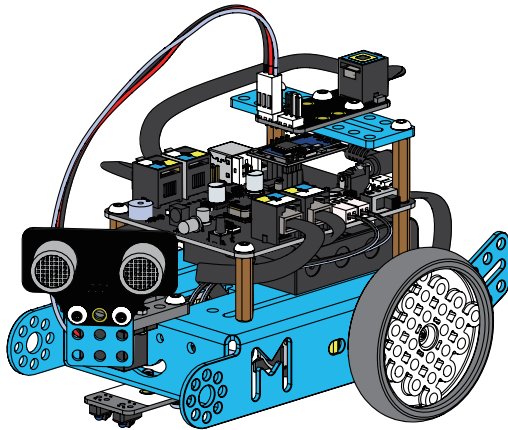
Good job !

You have finished the construction. Now you can control your Dancing Cat according to the constructions on page 5.



Head-Shaking Cat

mBot Class mBot Add-On Pack



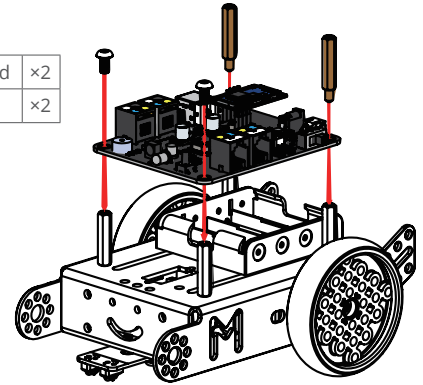
Head-Shaking Cat

mBot Servo Pack- Head-Shaking Cat

If your mBot already has an mCore case, please keep it for later construction.

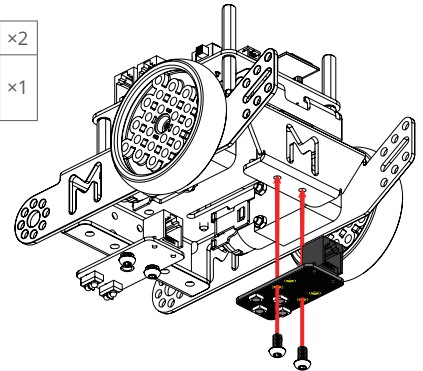
Step 1

M4×25mm Brass Stud	×2
M4×8mm Screw	×2



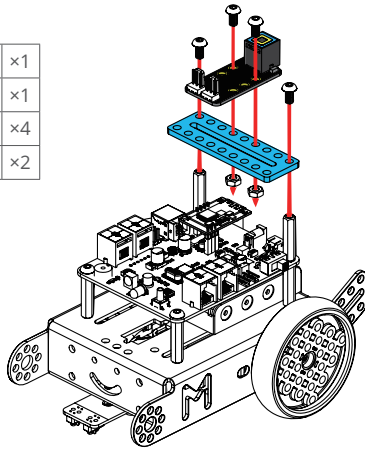
Step 2

M4×8mm Screw	×2
Me RGB LED Module	×1



Step 3

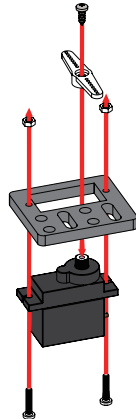
Plate I1-Blue	×1
Me RJ25 Adapter Module	×1
M4×8mm Screw	×4
M4 Nut	×2



Step 4

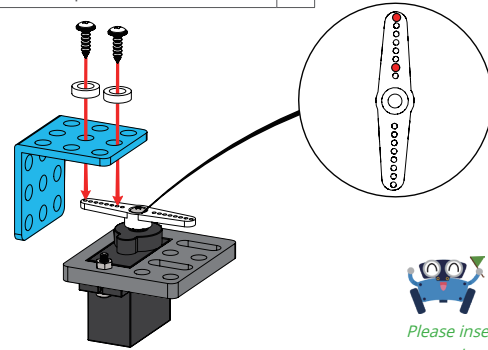
Firstly, you should adjust servo to 90 degrees with software, then install servo arm to the servo (pay attention to their angle).

9g Micro Servo	×1
9g Micro Servo Bracket	×1
Servo Arm	×1
M2×10mm Screw	×2
M2 Nut	×2
M2.2×6.5mm Self-drilling Screw	×1



Step 5

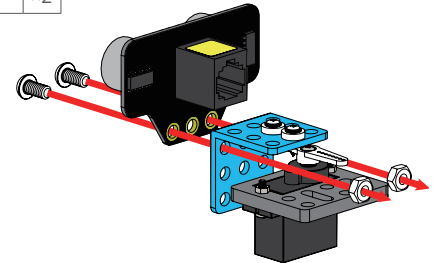
Bracket 3×3	×1
M2.2×8mm Self-drilling Screw	×2
Plastic Spacer 4×7×2mm	×2



Tip
Please insert self-drilling screw through the hole marked red.

Step 6

Me Ultrasonic Sensor	×1
M4×8mm Screw	×2
M4 Nut	×2



Tip
The ultrasonic sensor is included in mBot.

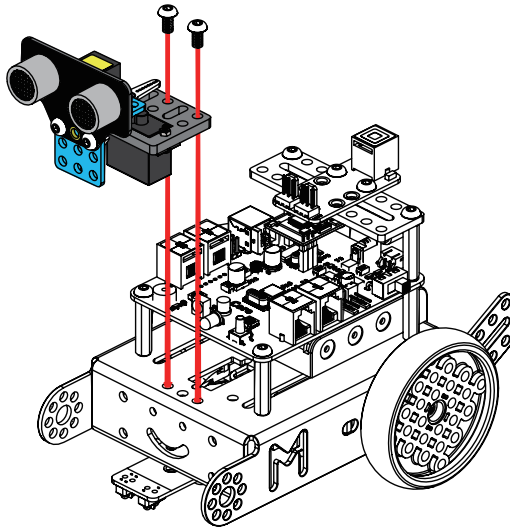
Step 7

M4×8mm Screw ×2



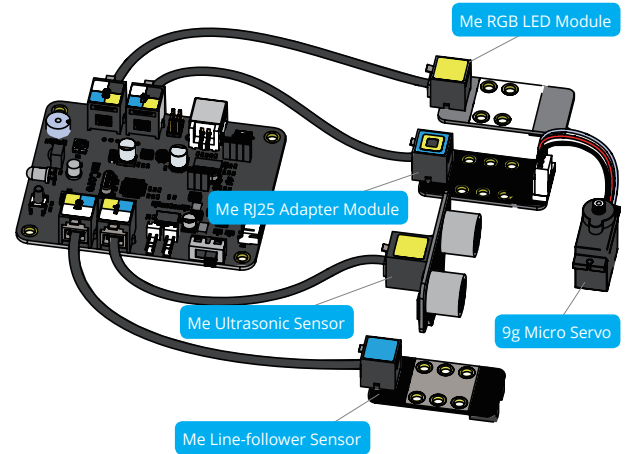
Tip

If these two holes on your mBot are without thread, please fix the parts with M4 nuts.



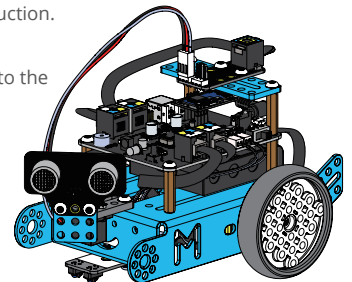
Step 8 Wire connections

This is the reference picture of wire connections in construction examples. You can also change the ports according to your own program.



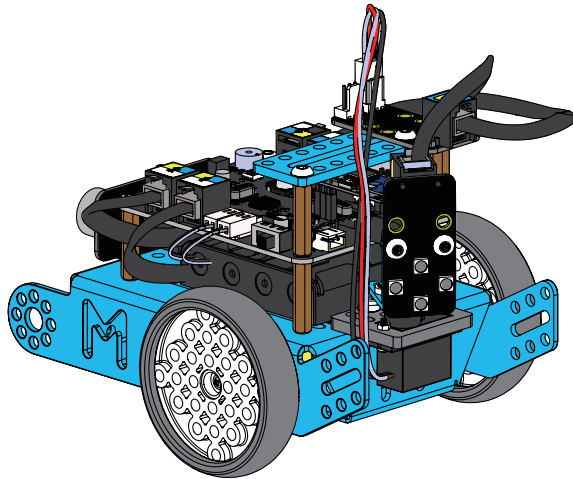
Good job !

You have finished the construction. Now you can control your Head-Shaking Cat according to the constructions on page 5.



Light-Emitting Cat

mBot Class mBot Add-On Pack



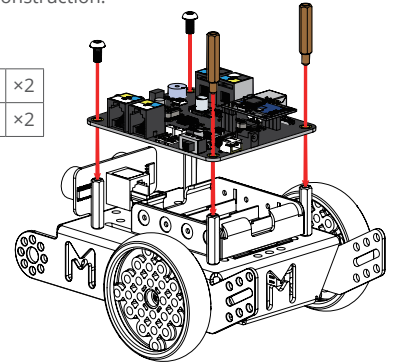
Light-Emitting Cat

mBot Servo Pack- Light-Emitting Cat

If your mBot already has an mCore case, please keep it for later construction.

Step 1

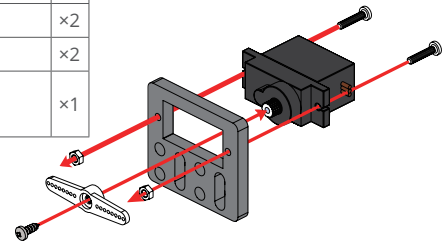
M4×25mm Brass Stud	×2
M4×8mm Screw	×2



Step 2

Firstly, you should adjust servo to 90 degrees with software, then install servo arm to the servo (pay attention to their angle).

9g Micro Servo	×1
9g Micro Servo Bracket	×1
Servo Arm	×1
M2×10mm Screw	×2
M2 Nut	×2
M2.2×6.5mm Self-drilling Screw	×1



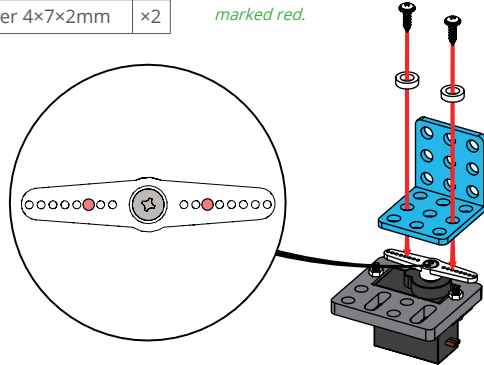
Step 3

Bracket 3×3	×1
M2.2×8mm	×2
Self-drilling Screw	×2
Plastic Spacer 4×7×2mm	×2



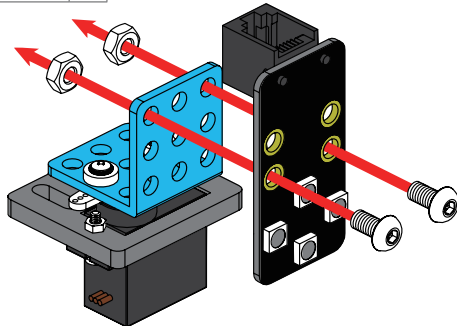
Tip

Please insert self-drilling screw through the hole marked red.



Step 4

Me RGB LED Module	×1
M4×8mm Screw	×2
M4 Nut	×2



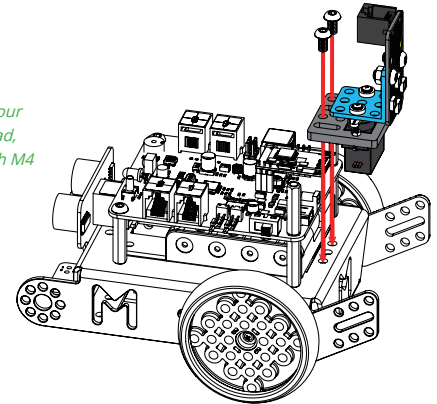
Step 5

M4×8mm Screw	×2
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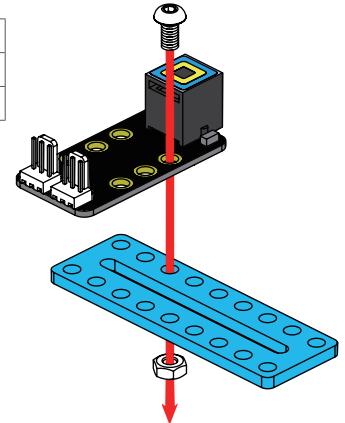
Tip

If these two holes on your mBot are without thread, please fix the parts with M4 nuts.



Step 6

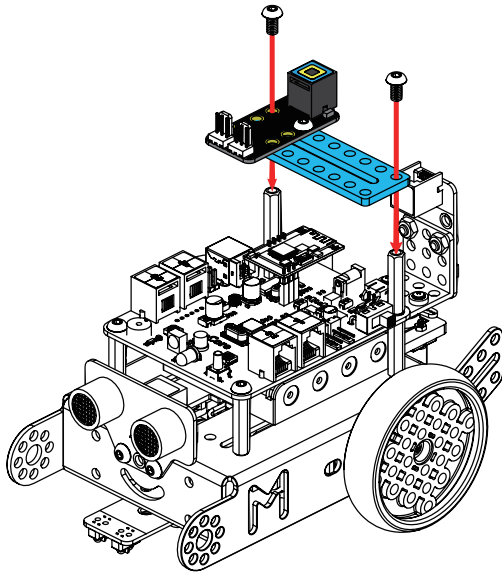
M4×8mm Screw	×1
M4 Nut	×1
Me RJ25 Adapter Module	×1



Step 7

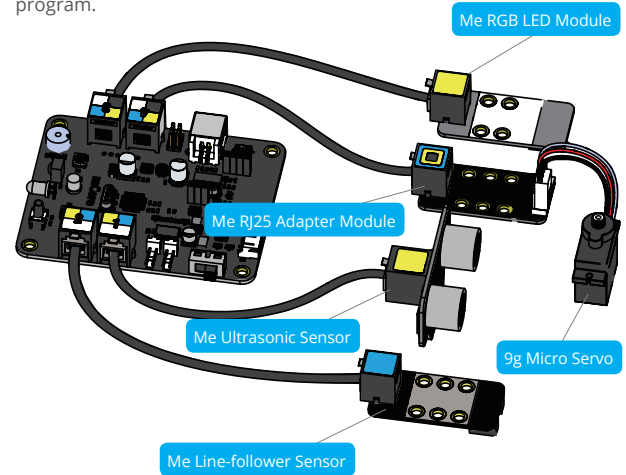
M4×8mm Screw

×2



Step 8 Wire connections

This is the reference picture of wire connections in construction examples. You can also change the ports according to your own program.



Good job !

You have finished the construction. Now you can control your Light-Emitting Cat according to the constructions on page 5.

