



Robotist

Double Dolphins

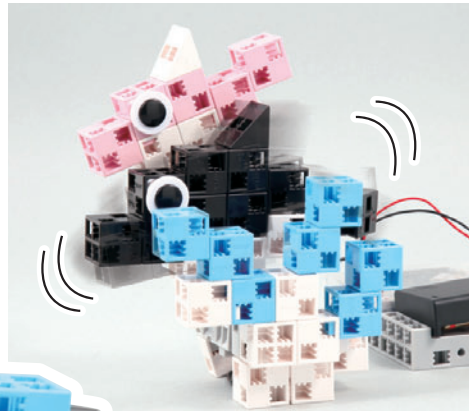
Assembly Instructions



Download software and guides from our homepage!
<http://www.artec-kk.co.jp/robotist>

Get instructions for even more robots!

Watch them surf the waves!



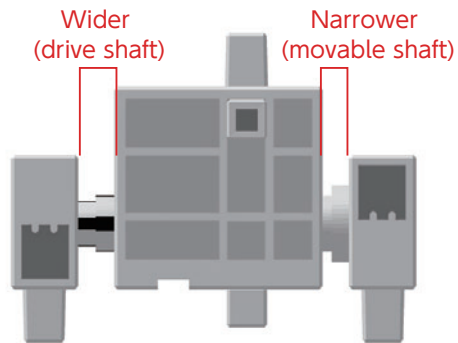
Age
8+

Handling the Servomotor

Orientation

1 The photo to the right shows the servomotor facing you. There are two shafts, the one with the wider space is the drive shaft and the one with the narrower space is the movable shaft.

★ When turning the drive shaft by hand, do so very slowly and gently. Excessive pressure when turning may cause damage to the servomotor.



Calibration and Setting Connector Numbers

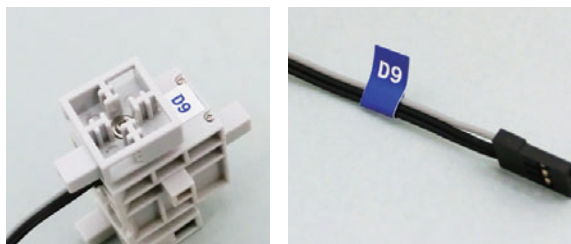
Before building your robot, read 6. Using Servomotors in the **Stduino Icon Programming Environment Guide** (download from <http://www.artec-kk.co.jp/robotist/>) for instructions on how to calibrate your servomotor.

Building your robot without calibrating your servomotor may cause damage or improper functionality.

★ Do not change the connector or the servomotor after calibration. Servomotor calibrations are unique to each servomotor.

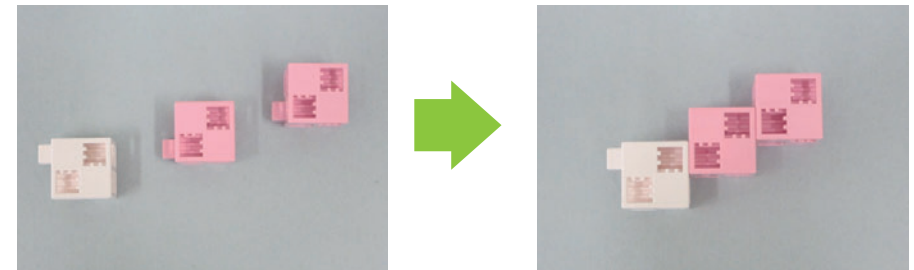
Attaching Number Stickers

After calibration, we recommend putting a sticker on the connector used for the servomotor so it can be easily identified.

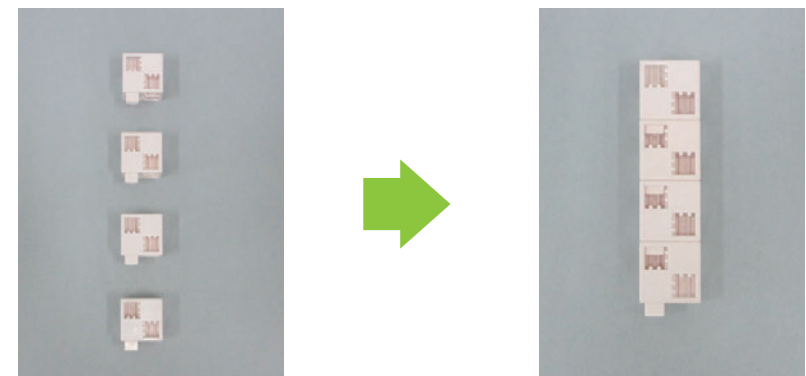


Make the Pink Dolphin!

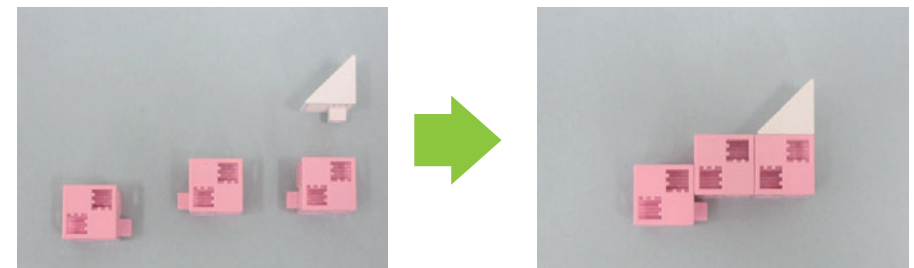
① Assemble the blocks as shown in the picture.



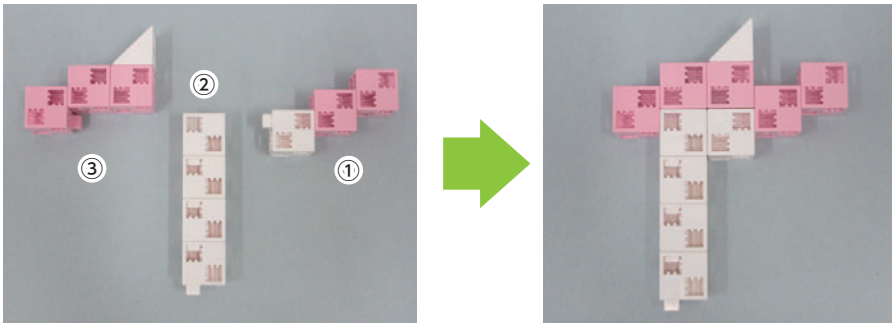
② Assemble the blocks as shown in the picture.



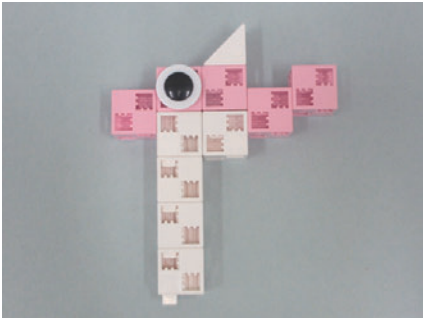
③ Assemble the blocks as shown in the picture.



④ Add part ② to parts ① and ③ as shown in the picture.



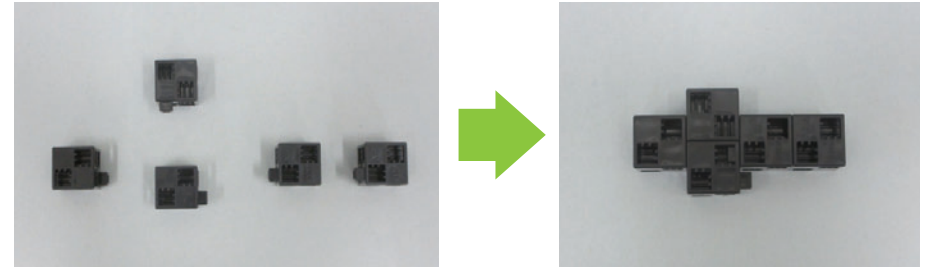
⑤ Add disk block to ④ as shown in the picture.



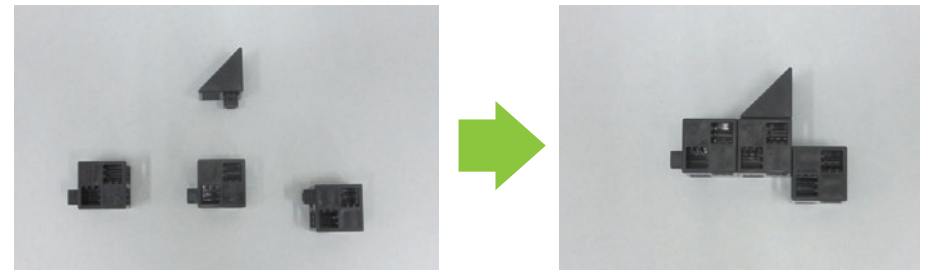
Finished!

Make the Black Dolphin!

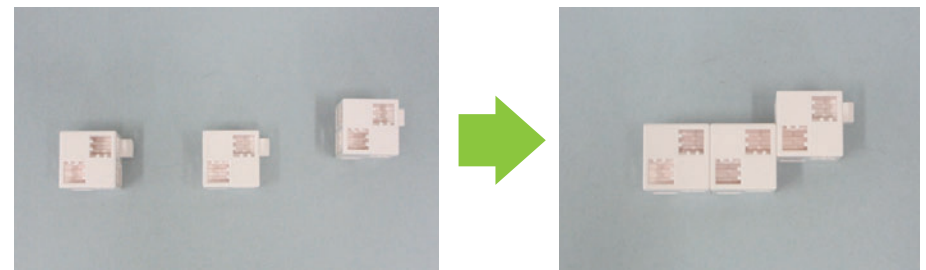
⑥ Assemble the blocks as shown in the picture.



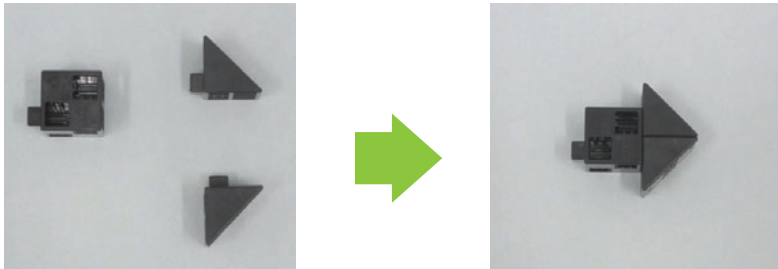
⑦ Assemble the blocks as shown in the picture.



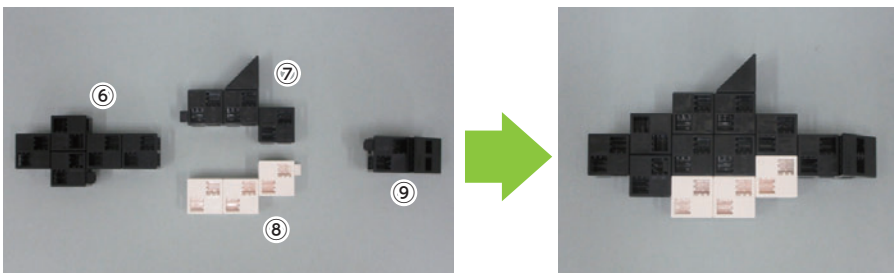
⑧ Assemble the blocks as shown in the picture.



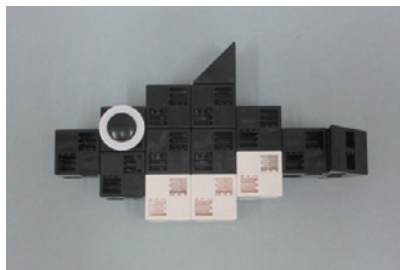
⑨ Assemble the blocks as shown in the picture.



⑩ Assemble parts ⑥, ⑦ and ⑨ as shown in the picture.



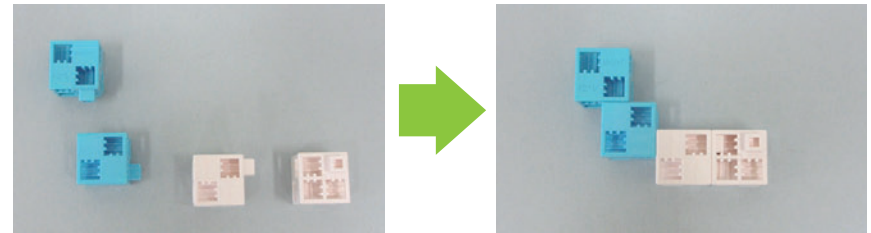
⑪ Add disk block to ⑩ as shown in the picture.



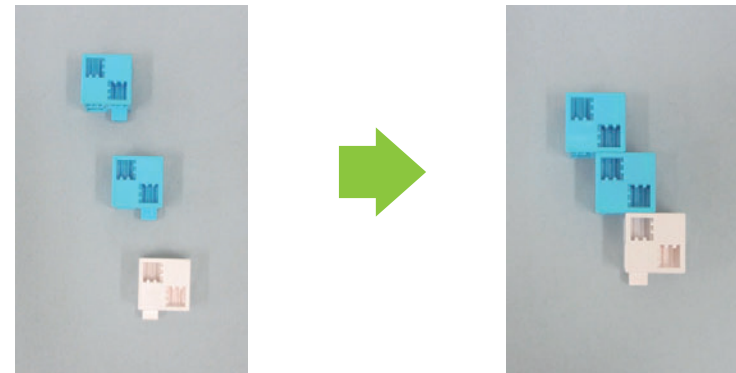
Finished!

Make the Waves!

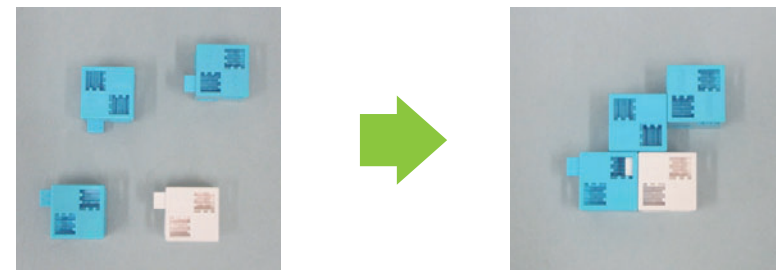
⑫ Assemble the blocks as shown in the picture.



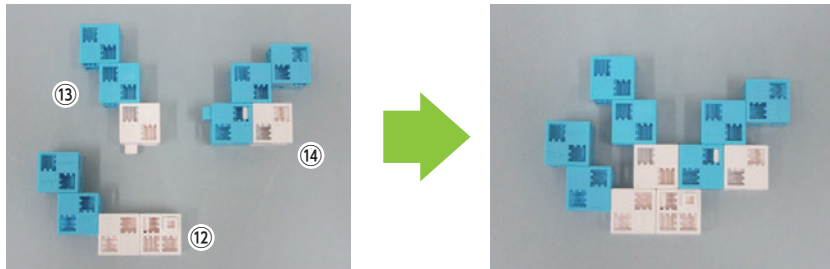
⑬ Assemble the blocks as shown in the picture.



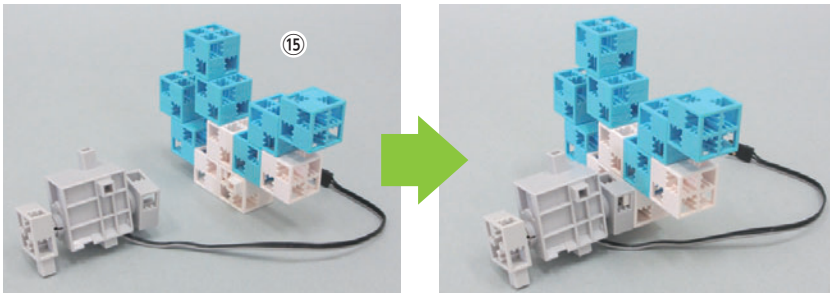
⑭ Assemble the blocks as shown in the picture.



⑮ Assemble parts ⑫, ⑬ and ⑭ as shown in the picture.



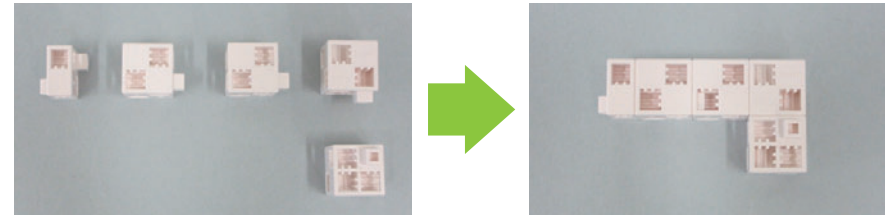
⑯ Add the servomotor to ⑮ as shown in the picture.



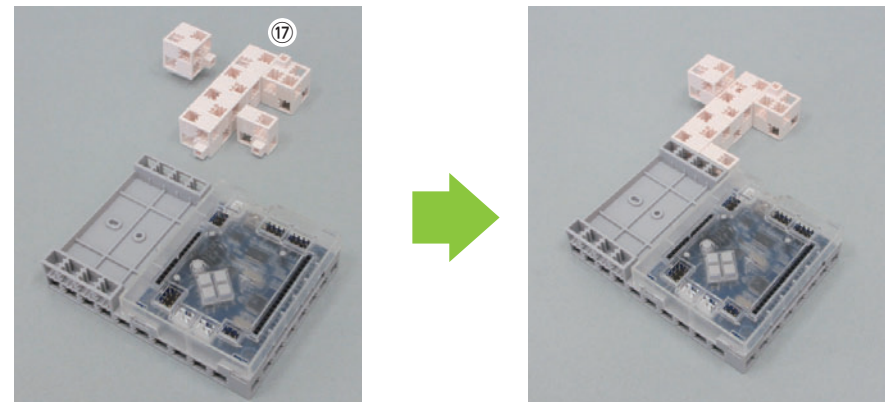
Finished!

Putting it Together

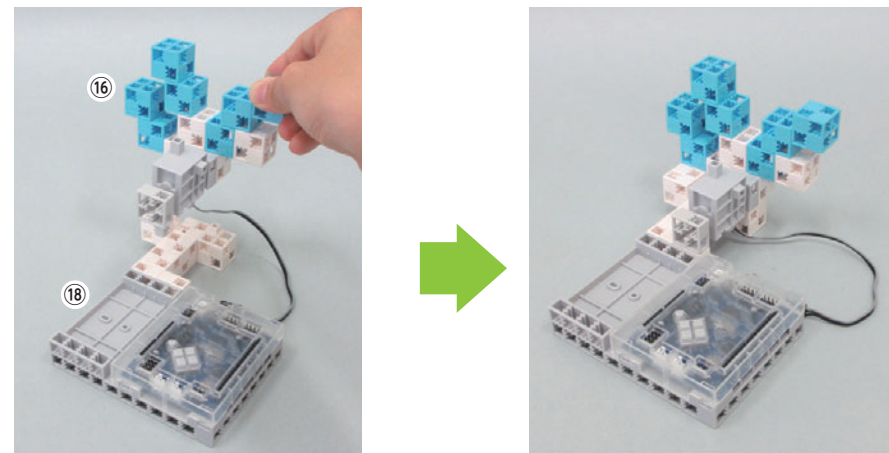
⑰ Assemble the blocks as shown in the picture.



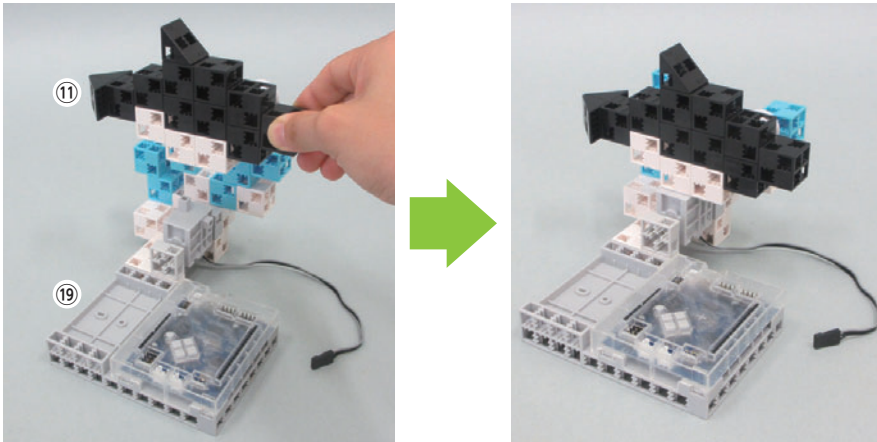
⑱ Assemble the blocks to the base as shown in the picture.



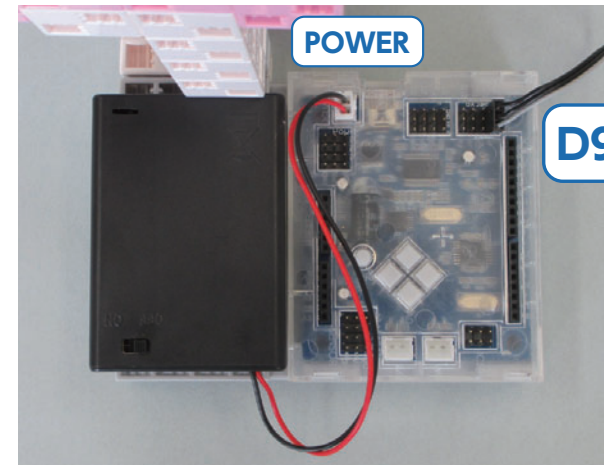
⑲ Assemble parts ⑯ and ⑱ as shown in the picture.



⑳ Assemble parts ⑪ and ⑲ as shown in the picture.

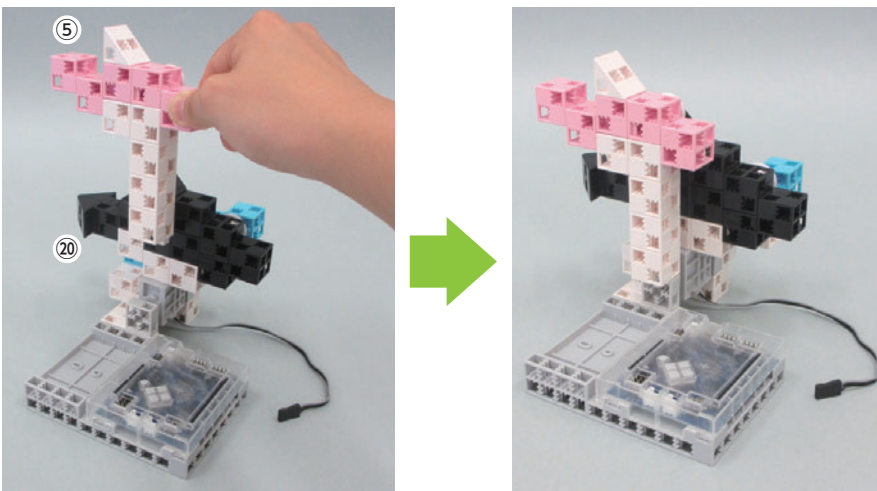


㉒ Plug your servomotor cable into D9 and your battery box cable into the POWER port on the circuit board.

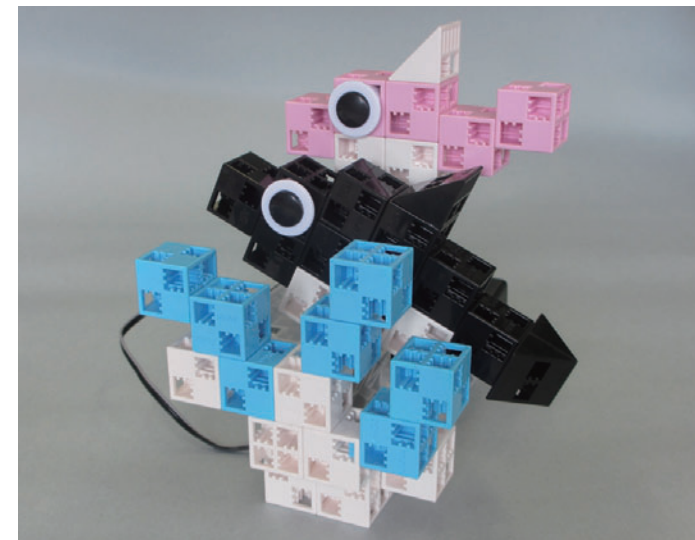


Gray servomotor wires should face inward as shown.

㉓ Assemble parts ⑤ and ⑳ as shown in the picture.



[Finished!] Turn the switch on and watch your robot move!



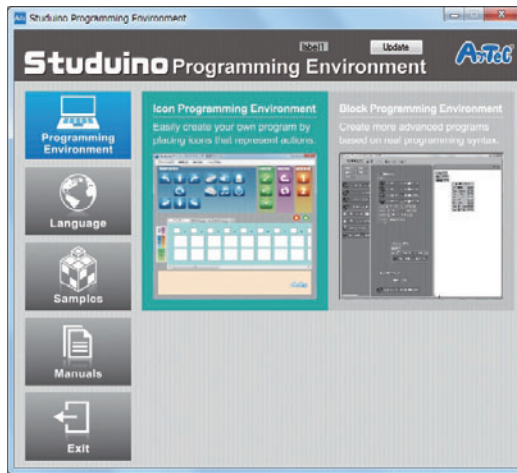
[Programming Your Robot]

Download your programming software from the Artec homepage.

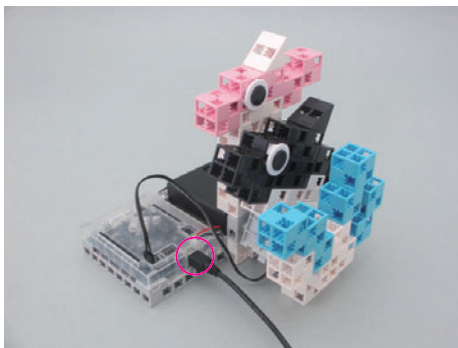
Studuino Programming Environment

URL: http://artec-kk.co.jp/studuino/download_en.html

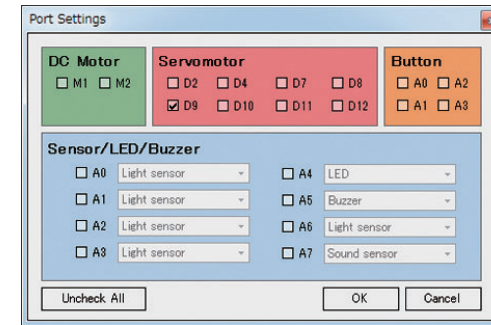
- Click on Start → Artec and open Studuino Programming Environment.
Choose Icon Programming Environment.



- Use a USB cable to connect your circuit board to your PC.



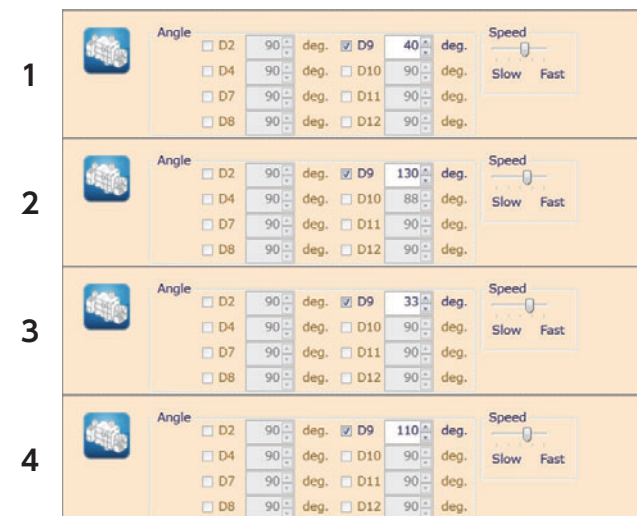
- Choose your port settings.
Tick the D9 servomotor box in the Port Settings window.



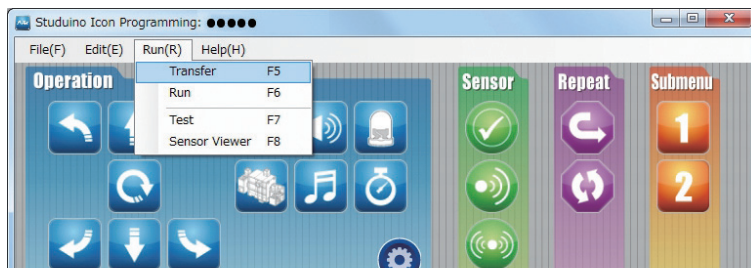
- Place the icons you see in the picture below.



Click Repeat indefinitely in the Repeat Settings dialog.



- ⑤ After sending the program to your Studuino, check that your robot is operating correctly by turning it on.



Having trouble?

- Check to make sure you've assembled your robot correctly.
- Make sure that the cables have been properly inserted.
- Read **6. Using Servomotors** in the **Studuino Icon Programming Environment Guide** (download from <http://www.artec-kk.co.jp/robotist/>) for instructions on how to calibrate your servomotor.

Building your robot without calibrating your servomotor may cause damage or improper functionality.

ArTec PAT.P

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