

Learn & Play the coding with NEOBOT



# NEOPIA

This is the moment! To learn 'NEOBOT'

This is the day! To meet easy and comfortable 'EDUCATION'.

Join NEOPIA! The first training of Robot/Coding/AI.



100  
1010  
01



## WORKS



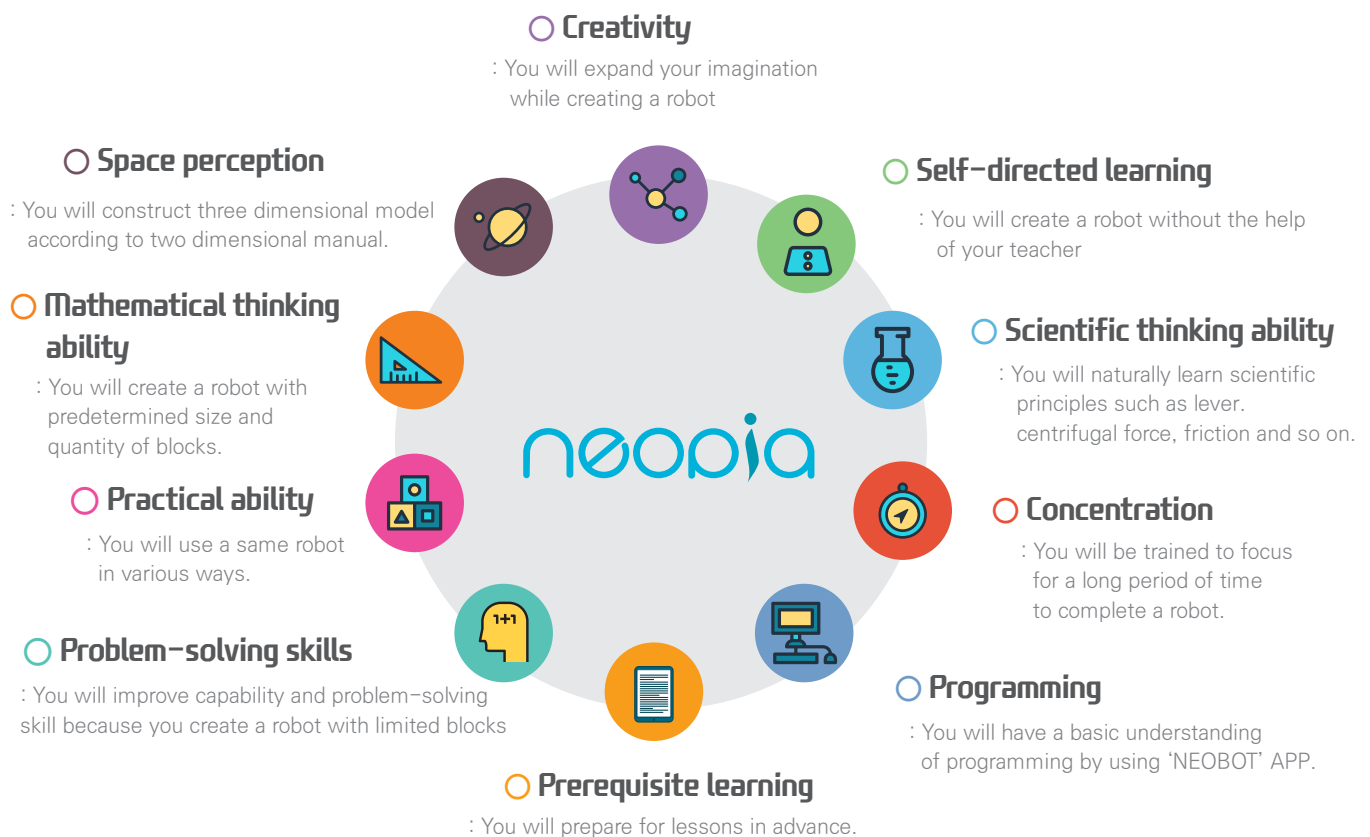
21<sup>st</sup> century will be dominated by creative talents who collaborate with various different ideas!

There is a new trend worldwide that many countries concentrate their efforts to make a fused educational model for cultivating creative talents.

So, toys are no longer just for playing, but it can be an educational tool and friend to enrich sense, intelligent, logical thinking, sociality, imagination, creativity, more skills, problem solving ability.

Therefore, NEOPIA products have become the standard education kit which combined fun and diverse range of educational contents to enhance children's ability by teaching for robot, computer coding, electronic circuit, information technology and basic artificial intelligence field.

## Educational Benefits



# LINE UP

## CODING & AI

(Cellular phone  
& Computer)

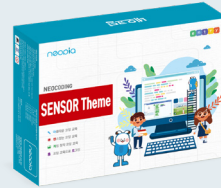
Age 10+



NEO THINK-CAR



ART THEME



SENSOR THEME

## SINGLE PRODUCT

Age 7+



NEOBOT Start



NEOBOT Home



NEOBOT Special

## ROBOT (Build up system)

Age 7+



NEOBOT S



NEOBOT T



NEOBOT B



NEOBOT C



NEOBOT D



NEOBOT E

## ROBOT & CODING

Age 10+



NEO SoCo

## ELECTRONIC



NEO Circuit Age 10+



NEO Sound Age 7+

\* Build up System? You have to finish the previous step to advance to the next step.

# NEO Think-Car

## NEO Think-Car

- Movements presented in the textbook may can be different depending on several factors such as road condition, obstacles, battery out-put, and motor characteristics. At this moment, the self-driving function can be completed by modifying the program to suit each environment.
- Can create and apply robot that fit the situation while understanding the characteristics of various sensors.
- Can be learned intensively essential contents in robot education in a short time.
- Convenient coding with a cellular phone application!
- Systematic coding using the 'Entry' platform operated by portal site 'Naver' in Korea!

A to Z of Self driving car : All about the self-driving car

# NEO Think-Car



## Neo Think-Car ADAS (Advanced Driver Assistance Systems)

Neo-ThinkCar is an educational product that helps students to learn robot/coding/AI while making a car with blocks and applying each function of 'Advanced Driver Assistance System (ADAS)' through coding.

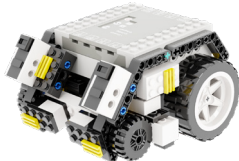
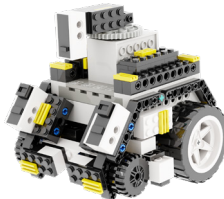

Experience everything about self-driving car with Neo-ThinkCar.

*cheers to great driving.*



## [Overview]

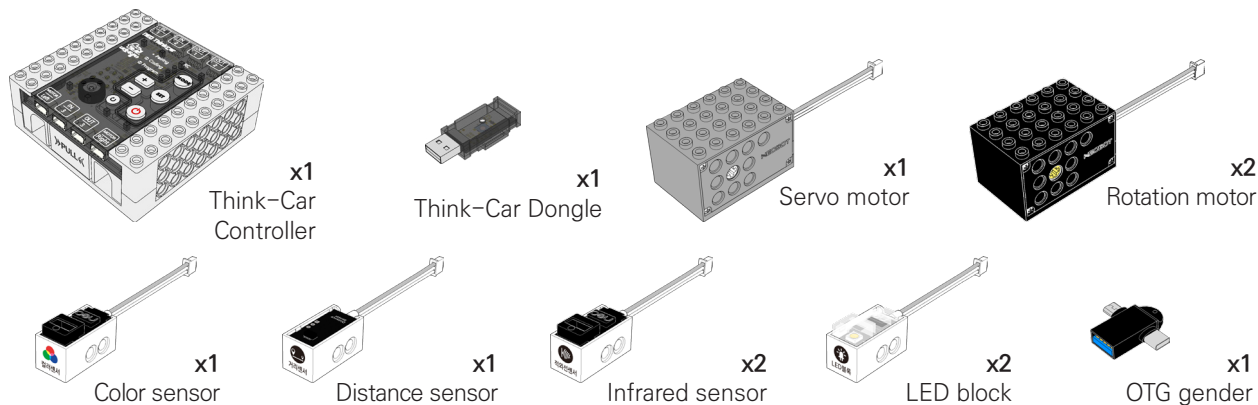
- ✓ **Neo Think-Car is a product that codes and experiences self-driving functions.**
  - Movements presented in the textbook may can be different depending on several factors such as road condition, obstacles, battery out-put, and motor characteristics. At this moment, the self-driving function can be completed by modifying the program to suit each environment.
- ✓ **Neo Think-Car has 3 types of self-driving mode, and each type has 3 to 5 self-driving contents.**
  - A-Type: Practice for speed and parking control by using color sensors based on lane recognition on 2D road.
  - B-Type : Steering control practice using servo motor and distance sensor based on obstacle recognition on 3D road.
  - C-Type : Practice for driver convenience specifications and AI content (notebook/webcam and microphone required) based on the face and voice recognition.
- ✓ **The content in each type has different practice hours or its difficulty, and one or more lessons can be produced to finish one content.**

|                  | A-Type  | B-Type   | C-Type  |
|------------------|---|--|---|
| Car Type         |    |   |                                  |
| Practice Content | <b>[Self-driving on general road]</b><br>01. Lane Keeping Assist<br>02. Intelligent Speed Control Assist<br>03. Auto Lane Change<br><b>[Smart Parking Assist System]</b><br>08. Rear self-parking | <b>[Self-driving on general road]</b><br>04. Adaptive Cruise Control<br>05. Obstacle Avoidance Driving<br><b>[Alley(Maze) Self-driving]</b><br>06. Wall Detection Driving<br>07. Auto Alley Driving<br><b>[Smart Parking Assist System]</b><br>09. Parallel Self-parking | <b>[Convenience specifications and AI linkage technology]</b><br>10. Driver Easy Access<br>11. Driver's gaze steering |
| How to practice  | Utilize 2D road map   | Utilize 3D road map & obstacles  | Apply AI technology   |
| Coding Tool      | NEOBOT APPLICATION<br>(Cellular phone or Tablet PC)   | NEOBOT APPLICATION<br>(Cellular phone or Tablet PC)  | ENTRY<br>(Notebook/Webcam and Microphone required)  |

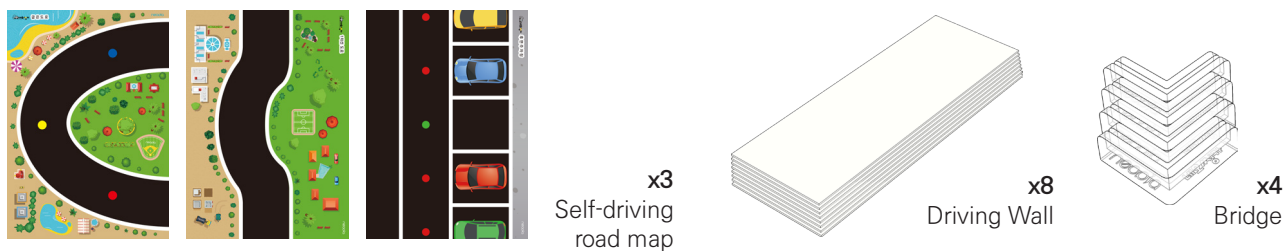


## NEO Think-Car Main Configuration

### [Electronic block]



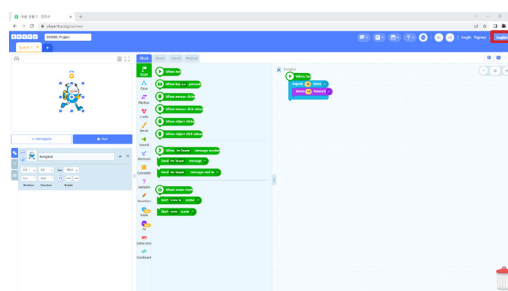
### [Accessories]



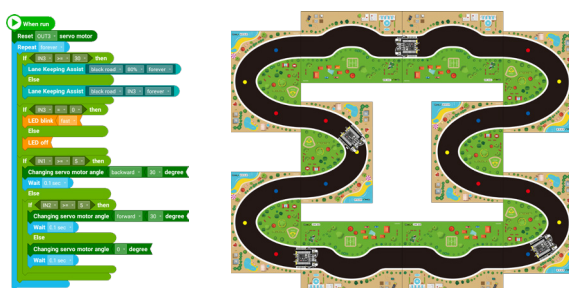
### Assembling robot



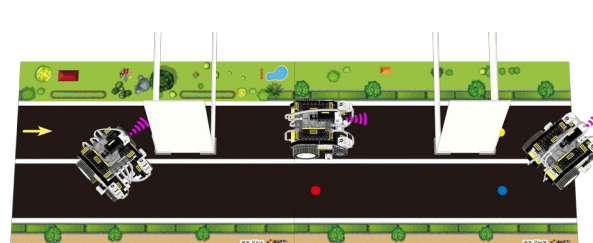
### Coding



### Apply Robot & Coding



### Understanding sensors & AI technology

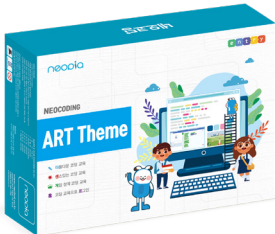


## NEOCODING

- A product to learn the coding with 2 individual themes.
- Each product has 12 coding content organized into fun scenarios.
- PC (Desktop or Notebook) is required.
- The coding platform uses 'ENTRY' by operated portal site 'Naver' in Korea.
- Each product can be utilized independently. (Do not need to use in order)

### ART Theme

Coding with a story



Have you seen this kind of Coding before?  
When you touch the artwork, a sound comes  
and it works.

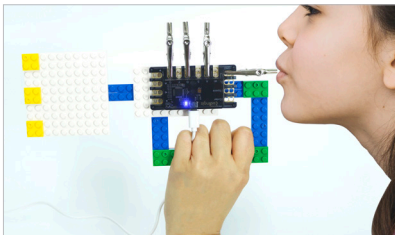


Children learn to code through fun activities such as assembling models and playing music, art, and games. (It is composed of 12 classes)

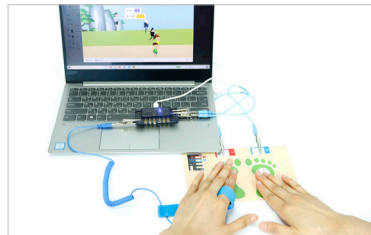
**Size** : 275 x 200 x 65 mm

**Weight** : 0.70kg

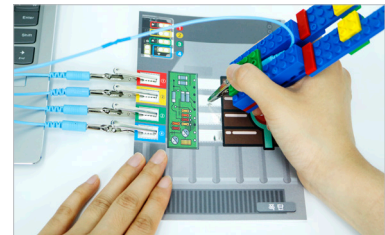
**Configuration** : Art board(Controller), Earthing, Crocodile Clip cable, Blocks  
Worksheet



Trumpet



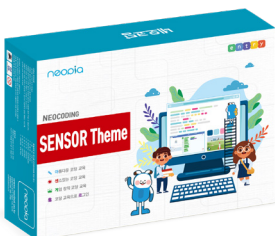
Olympics in our village



Dismiss the bomb

### SENSOR Theme

Coding with a story



Coding, How long have you been coding?  
What kind of coding have you ever been?



Children learn to code by controlling the character in the computer using sensors connected to the assembling model. (It is composed of 12 classes)

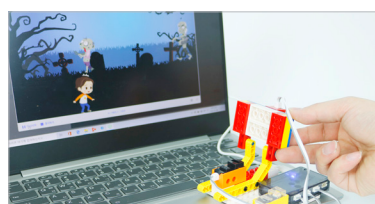
**Size** : 275 x 200 x 65 mm

**Weight** : 0.50kg

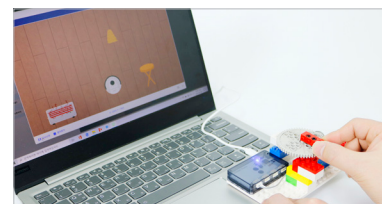
**Configuration** : Sensor board(Controller), IR sensor, Light sensor, Sound sensor  
LED block, Blocks



Do~ Re~ Mi Game



Invisibility Cloak



Robot Vacuum

# ROBOT (Single Product)

## NEOBOT START

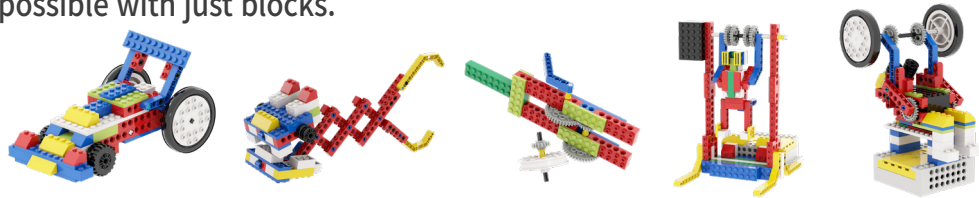


- A product that learns mechanical structure and scientific principles by using blocks without using a motor or remote controller.
- STEAM education is possible with just blocks.

### • Assembly models

12

Models



## NEOBOT HOME



- Can be experienced the block robot of neopia with an easy and fun way.
- It is consist of 10 models with a remote controller to learn the robot mechanism and movement.

### • Main Configuration



### • Assembly models

10

Models

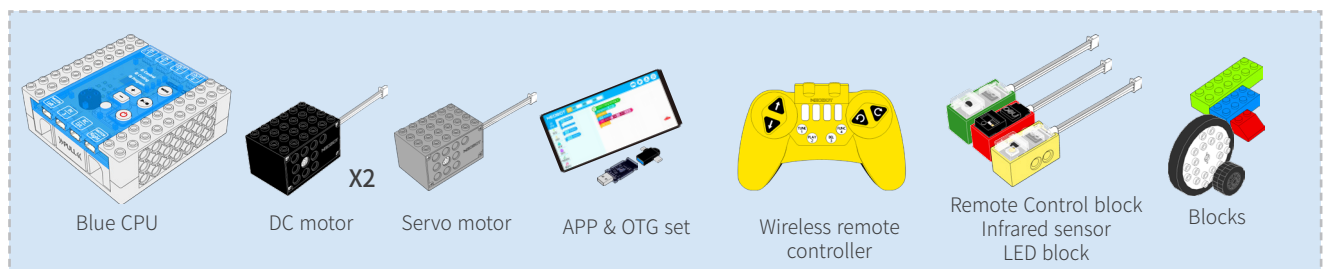


## NEOBOT SPECIAL



- It is an optimized product for understanding and learning the concept of robots prior to full-scale of robotics education.
- It offers robot control software(Built-in and coding program) with various frames and sensors

### • Main Configuration



### • Assembly models

12

Models





# ROBOT (Build up system)



- ‘NEOBOT’ means ‘robot’ created by ‘Neopia’ and uses a block frame.
- It is composed of 4 steps from A to D and over 48 different types of robot can be assembled.  
(It cannot be used without the previous product.)
- Non-harmful multi assembly blocks with controller can be assembled 12 models per each step.
- Provide abundant educational contents curriculum manual.

|  | S              | T              | B              | C              | D              | E              |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| <b>SIZE</b> (mm)                                 | 310 x 220 x 80 | 310 x 220 x 80 | 310 x 220 x 80 | 310 x 220 x 80 | 310 x 220 x 80 | 310 x 220 x 80 |
| <b>Weight</b> (kg)<br>(without textbook battery) | 0.75           | 0.60           | 0.80           | 0.75           | 0.60           | 0.55           |
| <b>Parts</b> (pcs)                               | 208            | 158            | 238            | 190            | 107            | 141            |

## Key features

1. As an educational robot using blocks, you can systematically learn robot & coding & AI.
2. The goal is not to complete a wonderful work , but to learn how to create a robot.
  - Learn how to create a robot through an iterative process of assembling and disassembling, rather than completing and exhibiting a wonderful work and 'watching' it.



3. Mainly use the ‘system block’ together with the ‘technique block’.
  - It is relatively easy to assemble and disassemble as it mainly utilizes system blocks.

\* ‘NEOBOT’ is a representative product of robot based on system blocks rather than technique blocks.

|               |                  |
|---------------|------------------|
|               |                  |
| System blocks | Technique blocks |

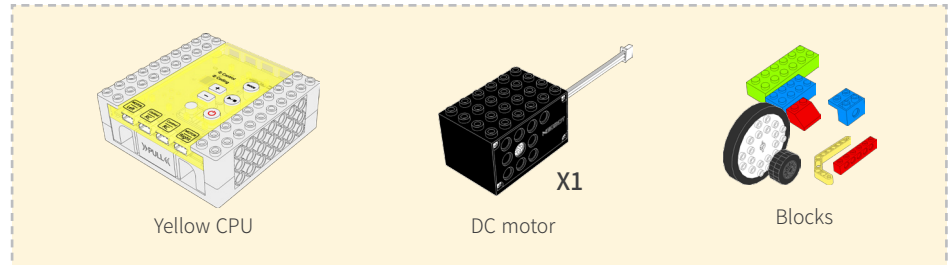
# ROBOT (Build up system)

## NEOBOT S



- A product that makes a robot and controls it with a wired remote controller.
- The basic level for adapting to assemble robot using blocks.

### • Main configuration



### • Assembly models

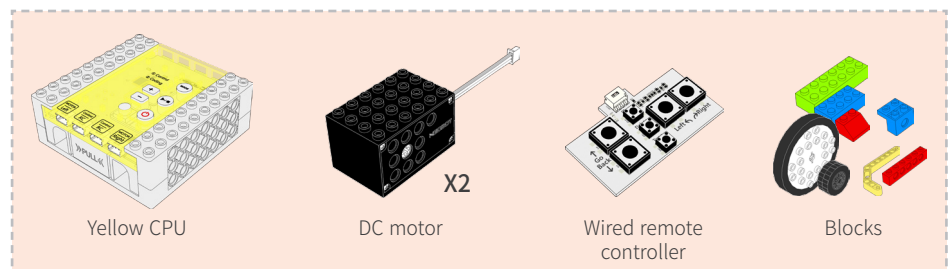
12  
Models



## NEOBOT T

- A product that makes a robot and controls it with a wired remote controller.
- The basic level for adapting to assemble robot using blocks.

### • Main configuration



### • Assembly models

12  
Models

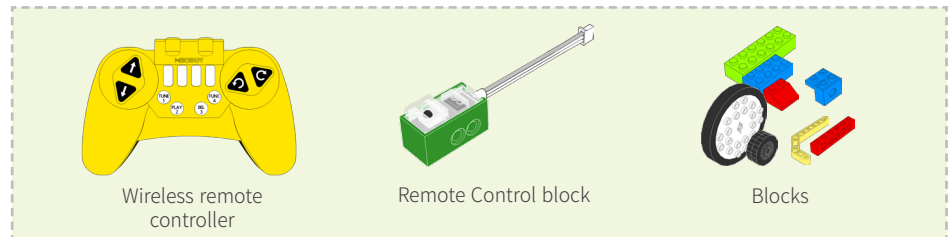


## NEOBOT B



- Can be controlled the robot with a wireless remote controller and 12 new contents are added.
- Can be possible to create new model freely, and it is a step in which robot movements can be sequentially coded.

### • Main configuration



### • Assembly models

12  
Models

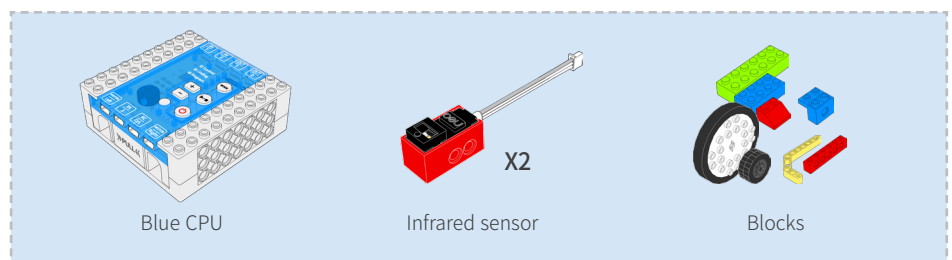


## NEOBOT C



- The robot can be controlled using sensors and make it possible to run it more fun activity.
- There is a controller with built-in program to run the robot for each content.

### • Main configuration



### • Assembly models

12  
Models





# ROBOT (Build up system)

## NEOBOT D



- Can be possible to code directly the robot's movement using a cellular phone(Android series) APP.
- Most functions for robot coding can be implemented even without a computer.

### • Main configuration



### • Assembly models

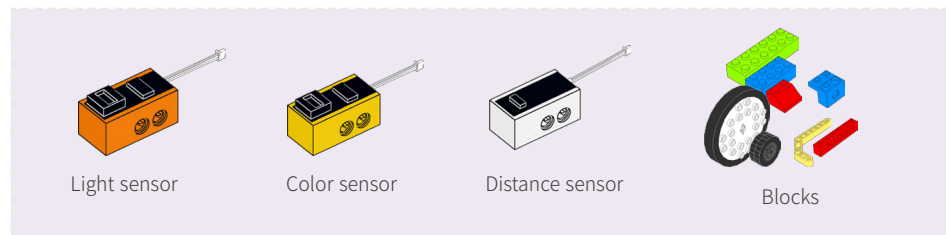
12  
Models



## NEOBOT E

- Can be controlled the robot with a wireless remote controller and 12 new contents are added.
- Can be possible to create new model freely, and it is a step in which robot movements can be sequentially coded.

### • Main configuration



### • Assembly models

12  
Models





## NEOSOCO



New software coding  
**NEO SoCo**



### Robot! Coding! AI! Kit to learn all SW education!

**Size** : 285 x 205 x 70 mm

**Weight** : 1.1kg

**Configuration** : Programming controller, OTG, Dongle, Motor, Distance sensor, Infrared sensor, Sound sensor, Light sensor, LED block

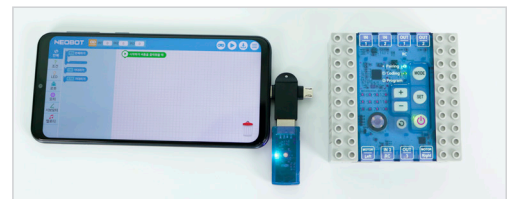
**Coding Tool** : Can be possible to code directly the robot's movement using a cellphone (Android series) APP

#### 1. Auto connect and Auto pairing!

Just plug the dongle into your cellphone or tablet pc and turn on the power to automatically connect!  
Can be assembled 11 models and to code movement!



① Connect OTG dongle



② Turn on the power of controller

#### CONTENTS

##### PART 1 What is sensors [APP Coding]

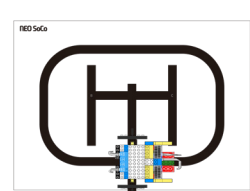
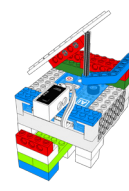
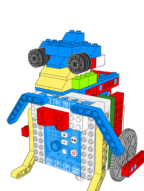
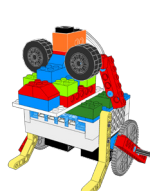
It can be easily and accurately learned the principles of robot and sensor.

- 01 Learning distance sensor and buzzer [Neocar]
- 02 Learning LED Block [Kobibot]
- 03 Learning the sound sensor [Barami]
- 04 Learning the light sensor [Neo Beagle]
- 05 Learning the infrared sensor [Penguini]
- 06 Applying the light sensor [Neo Cleaner]
- 07 Applying infrared sensor [Line Tracker]

##### PART 2 IoT & AI [Entry Coding]

It can be learned a IoT and AI with fun from voice control to machine learning.

- 01 Self- driving [Smart Car]
- 02 Biometrics [Face ID Door]



# NEOCIRCUIT



NEO  
CIRCUIT



**14**  
Models

## Make a electronic circuit by blocks!

## Block type breadboard, the world's first developed and patented product

**Size** : 225 x 165 x 55 mm

**Weight** : 0.45kg

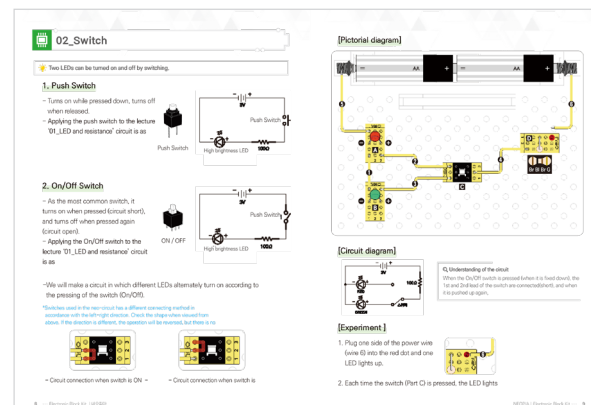
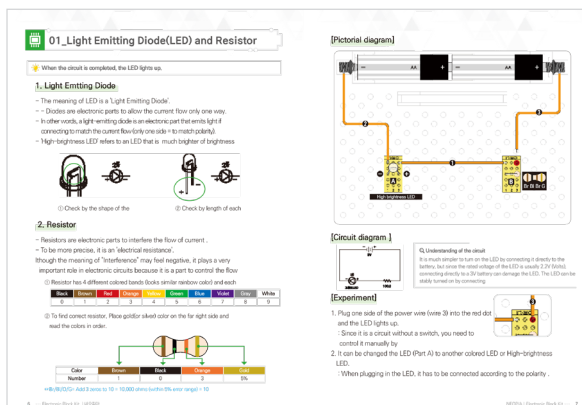
**Configuration :** Electronic block, LED, Switch, Speaker, Resistor, Cds, Melody IC Transistor, Capacitor and so on.



## Key features

- Neo circuit can easily understand electronic circuits by describing circuits with the flow of current.
- Neo circuit is a block type to assemble easily, and it can be modified at any time and can be used repeatedly.
- Neo circuit has a pictorial diagram which marked parts and wire connections in order, which is convenient for group classes.

## 1. Textbook Composition



# NEOSOUND



# Neo Sound



## Let's assemble the Bluetooth speaker with blocks!

## Easy and fun Circuit education

**Size** : 120 x 95 x 140 mm

**Weight** : 0.4kg

**Configuration :** Bluetooth module, Electronic blocks, Speaker(5W),

Assembly drawing, Battery Power cord, blocks(68ea)



## Key features

- No tools required (non-soldered, block type)
- A circuit configuration using the patented electron block.
- Easy wires connection by processing the ends of wires specially.
- Excellent sound quality (5W), various expandability.

Assemble easy alone **DIY!**

Exciting made with blocks **Making!**

Excellent sound with high-performance speakers **Sound!**

Learn to electricity and electron  
Education! Education!

# HISTORY

## History of Neopia!

1999

- NEOPIA is established in 1999
- NEOPIA holds 4 technology patents, 7 design patents, and 6 trademark patents in the field of robotics and coding.
- NEOPIA is a certified technology company that has successfully completed the technical development projects of the Ministry of Knowledge Economy of Korea since it was established through “the new technology start-up project(TBI)” and “next-generation digital leader training business”.
- NEOPIA products are currently being used in after-school and robot club activity classes in more than 15 years in primary, middle, and high schools in Korea.
- NEOPIA products have been using in primary and middle school government textbooks in Korea as a teaching materials for a robot, electronic, and coding education fields.



## NEOPIA products are selected in Korea school text book



2002 ~ 2009

2009 ~ 2011

2011 ~ 2017

2017 ~ Present

Elementary School



Middle School



Learn & Play the coding with NEOBOT

**NEOPIA**