



**Connect and Delight.**

**MODI**



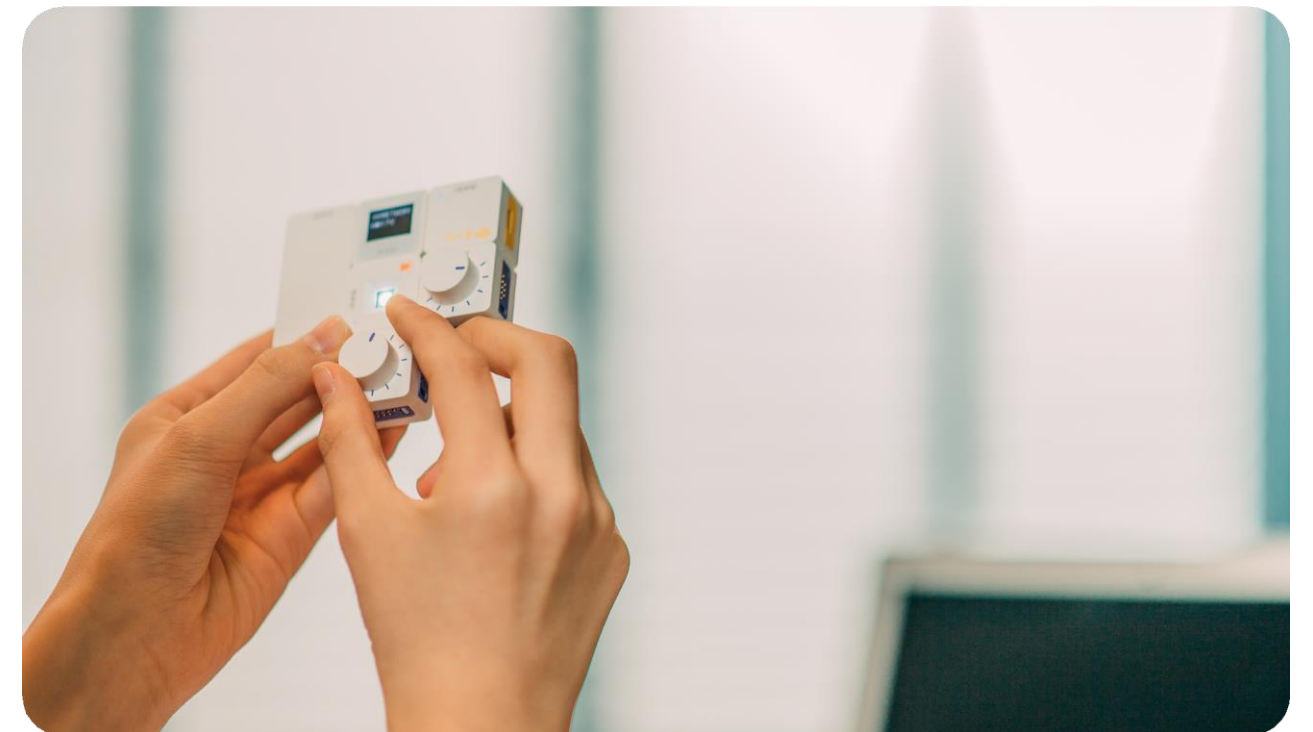


## The easiest and most intuitive way to learn coding.

MODI is a modular robotics kit professionally developed in-house at LUXROBO. Our two main products are our Hello IOT Kit and our Expert Kit. Each kit contains input, output and setup modules that allow learners to acquire key concepts across computer science and coding curriculums in a fun and engaging way. Through hands-on, project-based activities learners of all ages are able to tackle problems logically while developing their critical thinking and computational thinking skills. In combination with a STEAM curriculum, 3D printing, and LEGO, MODI classes really come alive!

## Aligned to CSTA and ISTE

Our professionally developed curriculum is aligned with key computer science and coding standards. During class time, learners cooperate with each other and work in groups. Group work helps students develop interpersonal and social skills. Through MODI projects, communication and collaboration are emphasized just as much as creativity and critical thinking. Making smart plants, LEGO creations, and 3-D printer projects allow students to express their creativity while solving real world problems and having fun. Coding has never been so fun or easy!



## MODI Studio, CODE Sketch & MODI Play

LUXROBO developed an intuitive drag-and-drop approach to coding that learners love. MODI blocks make it easy to bring any creation to life. Simply connect modules in any direction in any sequence and customize their behavior using **MODI Studio** or **CODE Sketch**. In MODI Studio just drag and drop the blocks and start to code even if you've never learned coding before. (Available for Windows and MacOS). **MODI Play** is an app for tablets and mobile devices. After coding with **MODI Studio** or **CODE Sketch**, use the **MODI Play** app to connect your modules to your tablet or phone wirelessly by Bluetooth. Try out the cool on-screen functions like the joystick, button, slider, dial, and timer. Now you can control your creations with just a tap or swipe.





# Hello IoT

**Ages | 6+**    **Number of Modules | 7**  
**Languages |** English, Korean, Chinese



## Setup



### Network Module

Supports USB, Bluetooth and Wi-Fi communication.



### Battery Module

Supplies power.

## Input



### Dial Module

Measures the rotation value and rotational velocity of the dial.



### Button Module

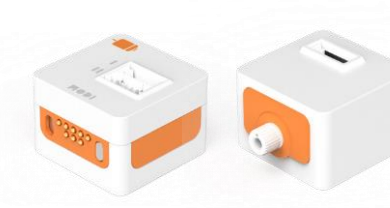
Detects clicks, double clicks, pressure status and toggle.

## Output



### LED Module

Emits light of different colors using an RGB value.

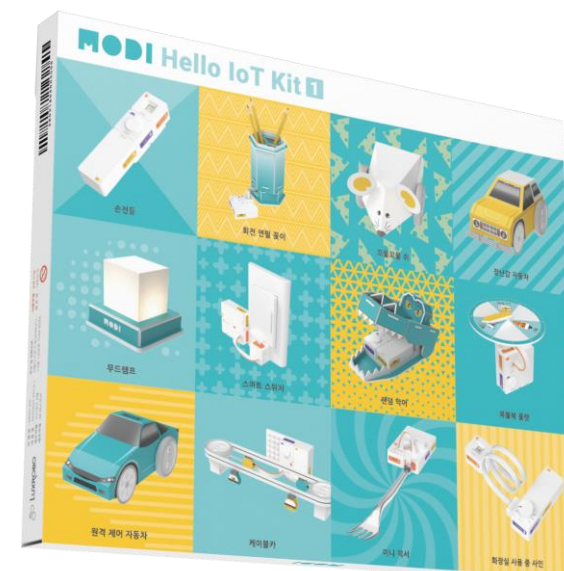


### Motor (2) / Motor Controller Module (1)

Outputs rotary movements according to specified angles, speeds, and forces. One motor controller controls up to two motors.

# Making Pack

**Ages | 6+**    **Number of Projects | 12**  
**Languages |** English, Korean, Chinese



## Available Resources



Videos



PPT files



Activity  
Sheets



User  
Manual



MODI Studio



MODI Play

Bring your MODI modules to life with the exciting accessories available in the Making Pack! Transform your MODI components with a few simple folds to create a car, a crocodile, a mouse, and more! Add in a bit of code to MODI Studio, and you can make a Wheel of Fortune! These are only some of the examples of the different things that engage kids and spark their coding creativity!





# Designer Kit (includes Making Pack Vol. 1)

**Ages | 6+**    **Number of Modules | 7**  
**Languages |** English, Korean, Chinese



## Setup



### Network Module

Supports USB, Bluetooth and Wi-Fi communication.



### AAA Battery Module

Supplies power.

## Input



### Dial Module

Measures the rotation value and rotational velocity of the dial.



### Button Module

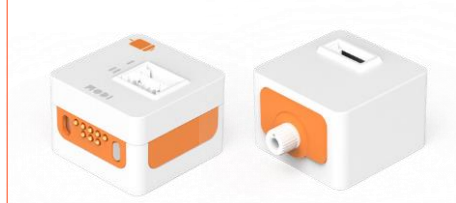
Detects clicks, double clicks, pressure status and toggle.

## Output



### LED Module

Emits light of different colors using an RGB value.



### Motor (2) / Motor Controller Module (1)

Outputs rotary movements according to specified angles, speeds, and forces. One motor controller controls up to two motors.

# Making Packs

**Ages | 6+**    **Number of Projects | 10**  
**Languages |** English, Korean, Chinese



## Available Resources



Videos



User  
Manual

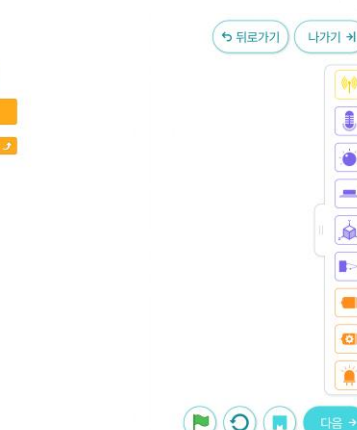


CODE Sketch



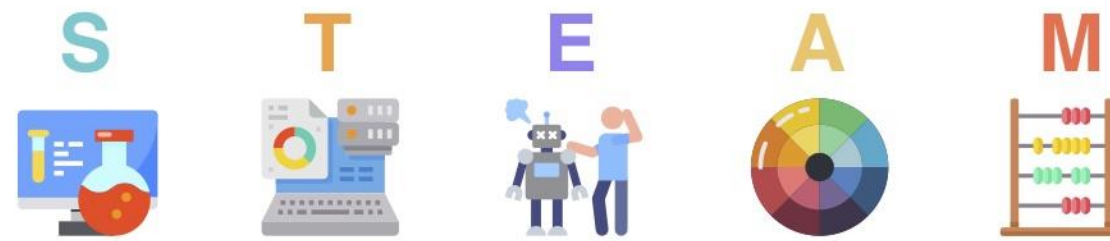
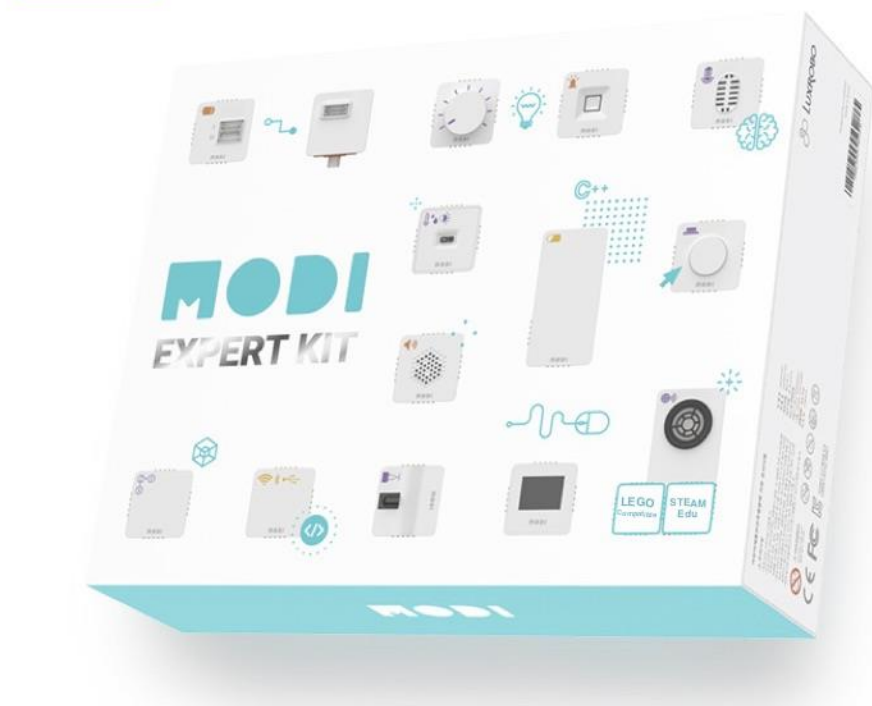
MODI Play

Bring your MODI modules to life with the exciting accessories available in the Making Pack! Transform your MODI components with a few simple folds to create a car, a crocodile, lighthouse, and more! Add in a bit of code to our CODE Sketch app, and you can make a helicopter! These are only some of the examples of the different things that engage kids and spark their coding creativity!











# Expert Kit






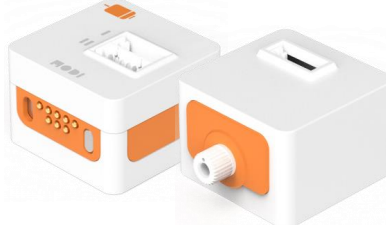

**Ages** | 6+  
**Languages** | English, Korean, Chinese  
**Number of Modules** | 21  
**Available Resources** |





## Input

 <b>Infrared Module (2)</b> Measures proximity. (0% to 100%)	 <b>Microphone Module</b> Measures the volume and frequency of sounds.	 <b>Environment Module</b> Measures temperature, humidity, illuminance and RGB brightness.
 <b>Gyroscope Module</b> Measures tilt angles, vibration level, acceleration, and angular velocity.	 <b>Button Module</b> Detects clicks, double clicks, pressure status and toggle.	 <b>Dial Module</b> Measures the dial's rotation value and rotational velocity.

## Output

 <b>LED Module</b> Emits light of different colors using an RGB value.	 <b>Display Module</b> Displays images and text on the screen.	 <b>Ultrasonic Module</b> Measures distance. (50cm to 450cm)
 <b>Motor (4) / Motor Controller Module (2)</b> Outputs rotary movements according to specified angles, speeds, and forces. One motor controller controls up to two motors.		 <b>Speaker Module</b> Outputs sounds in different notes and intensities.

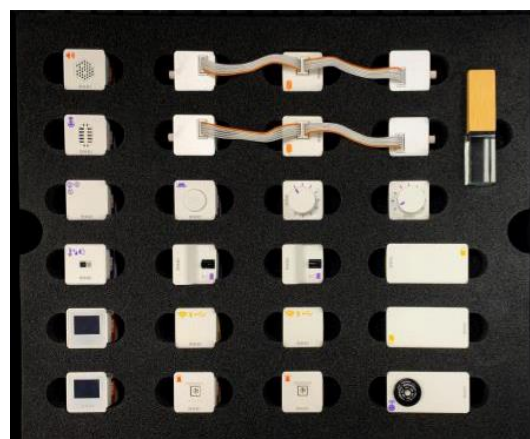
## Setup

 <b>Network Module (2)</b> Supports USB, Bluetooth and Wi-Fi communication.	 <b>Battery Module (2)</b> Supplies power.
---	---





# Master Kit



**Ages | Higher education**  
**Languages | English, Korean, Chinese**  
**Number of Modules | 24**  
**Added item | Contents book and guided USB**  
**Available Resources | 92 creations**

Made for professors & high school teachers

## Input



### Infrared Module (2)

Measures proximity.  
(0% to 100%)



### Microphone Module

Measures the volume and  
frequency of sounds.



### Environment Module

Measures temperature, humidity,  
illuminance and RGB brightness.



### Gyroscope Module

Measures tilt angles, vibration level,  
acceleration, and angular velocity.



### Button Module

Detects clicks, double clicks,  
pressure status and toggle.



### Dial Module

Measures the dial's rotation  
value and rotational velocity.

## Output



### LED Module

Emits light of different colors  
using an RGB value.



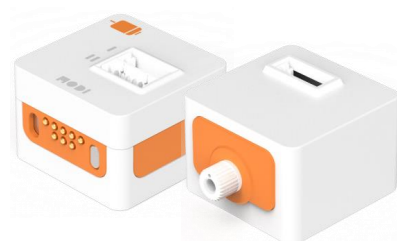
### Display Module

Displays images and text  
on the screen.



### Ultrasonic Module

Measures distance.  
(50cm to 450cm)



### Motor (4) / Motor Controller Module (2)

Outputs rotary movements according to specified angles, speeds,  
and forces. One motor controller controls up to two motors.



### Speaker Module

Outputs sounds in different  
notes and intensities.

## Setup



### Network Module (2)

Supports USB, Bluetooth  
and Wi-Fi communication.



### Battery Module (2)

Supplies power.





# hello AI Kit



**Ages | 6+**  
**Languages |** English, Korean, Chinese  
**Number of Modules |** 7 optional modules

The **hello AI Kit** uses the Entry (similar to Scratch) block coding language to teach the basics of AI. Simply mount the MODI AI module on the included tripod or monitor mount, and students can experiment with AI. The MODI AI module has a camera, microphone, and speaker built-in opening up a world of possibilities. With the **hello AI Kit** and Entry, use your mic, speaker and camera to utilize Entry AI features that include face recognition, text recognition, audio detection, voice recognition, speech-to-text, and more. Curriculum also provided.

## Optional Modules

### Output



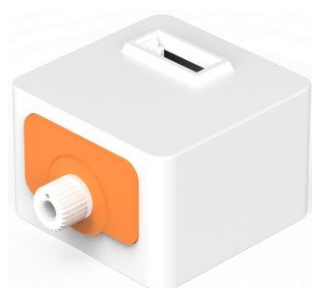
#### LED Module

Emits light of different colors using an RGB value.



#### Display Module

Displays images and text on the screen.



#### Motor (2) / Motor Controller Module (1)

Outputs rotary movements according to specified angles, speeds, and forces. One motor controller controls up to two motors.

### Setup



#### Network Module

Supports USB, Bluetooth and Wi-Fi communication.



#### AAA Battery Module

Supplies power.

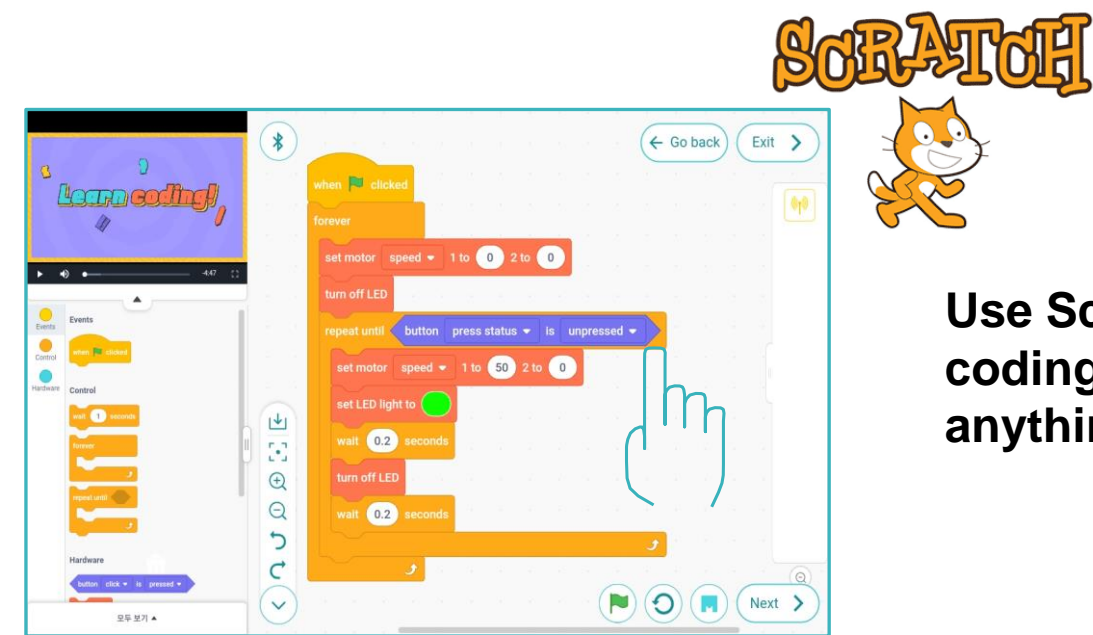




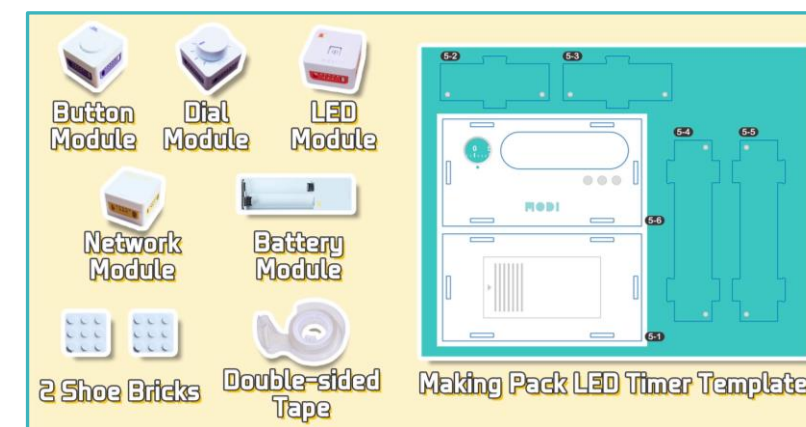
# Code Sketch



Code Sketch is an all-in-one app ideal for learners at home or school. It connects and programs MODI modules wirelessly using Scratch, the intuitive block-based visual programming language developed by MIT. Students can learn by trying out custom code or following along with fun educational videos for Making Pack creations. It's a breeze for first timers and experienced coders alike. Unlock student creativity and enhance learning with Code Sketch!



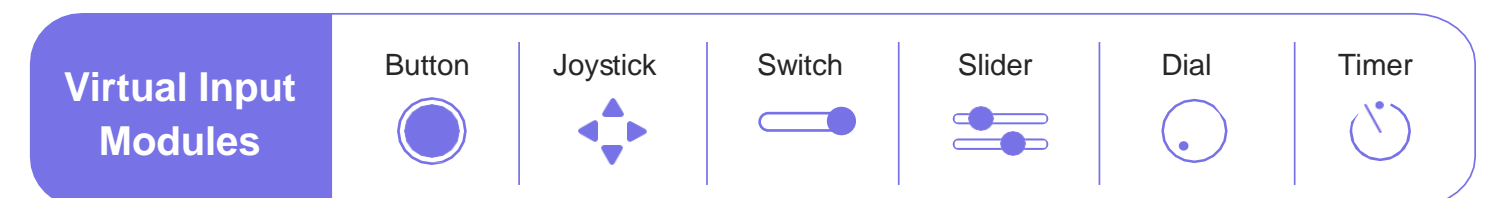
Use Scratch drag & drop coding to easily create anything you want.



Fun videos teach how to assemble and code the Making Pack creations.



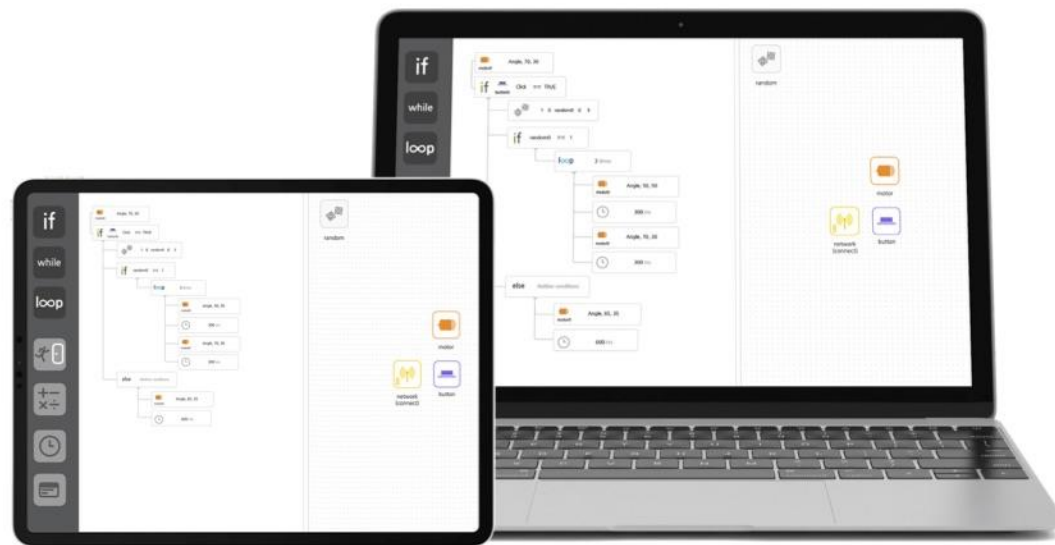
Connect wirelessly to MODI modules and see their input and output values in real time.



Your tablet can become the ultimate MODI module, with several features in one.



# MODI Studio

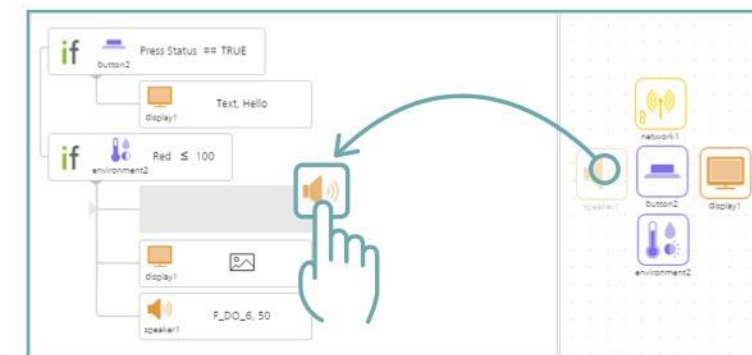


MODI Studio is an exclusive coding program, where your creativity can be shown.  
Easy for those who have never studied coding before!



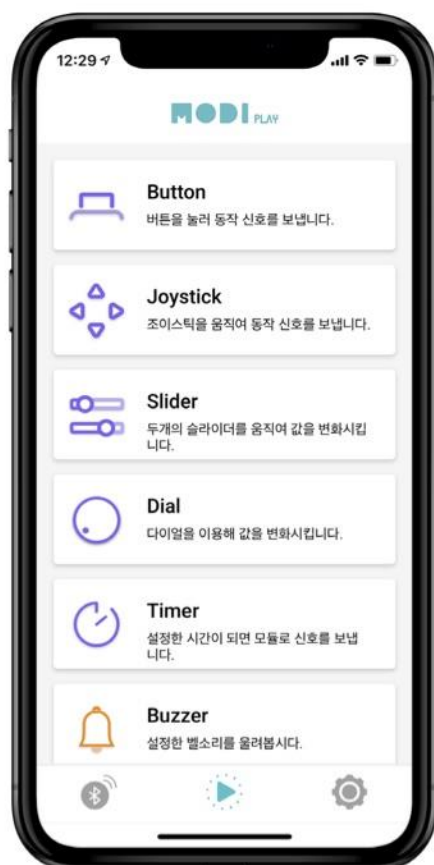
Block Coding instantly  
converts to a mainstream  
programming language  
(C++).

Input and output values can  
be monitored in real time.

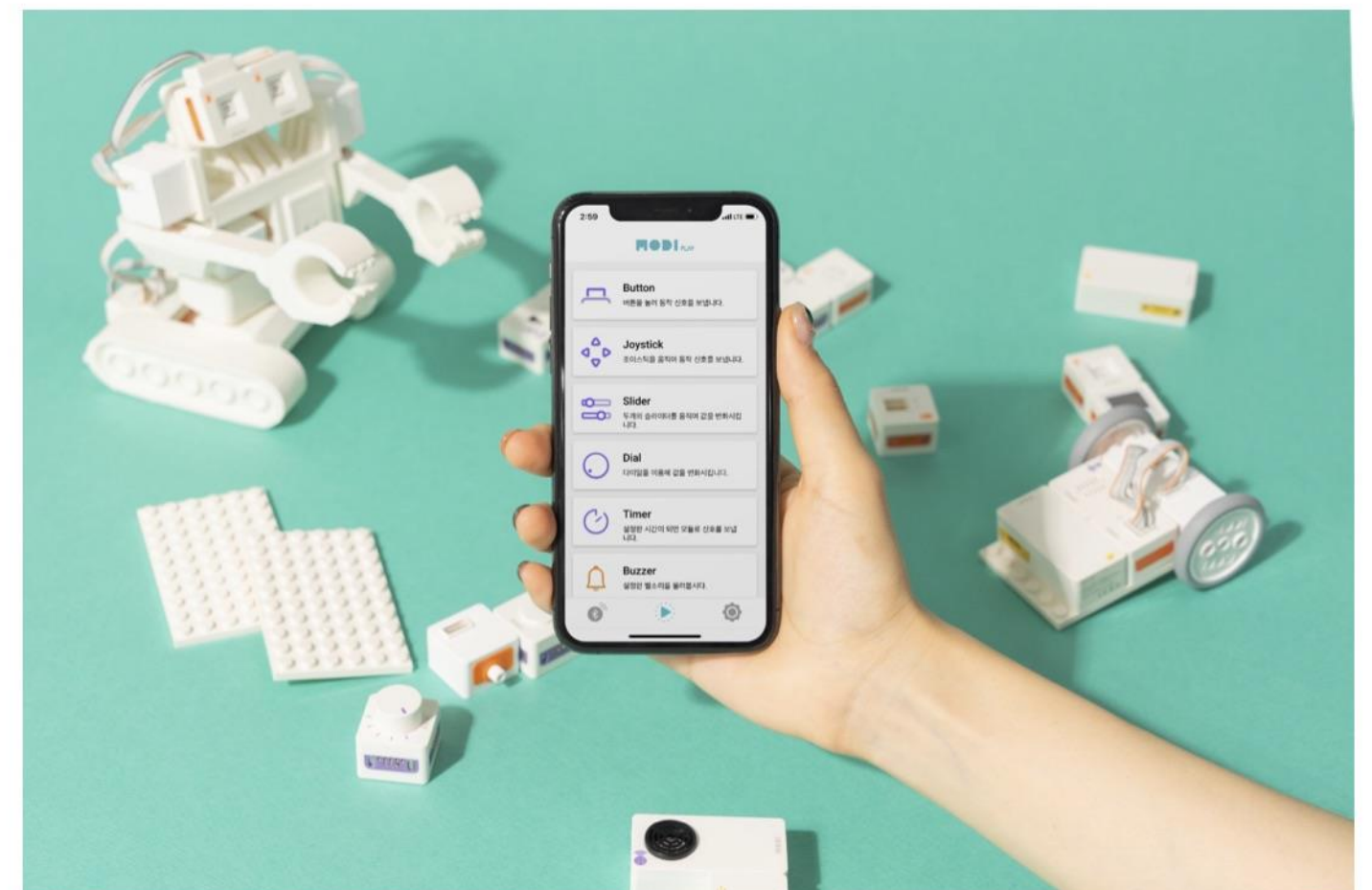
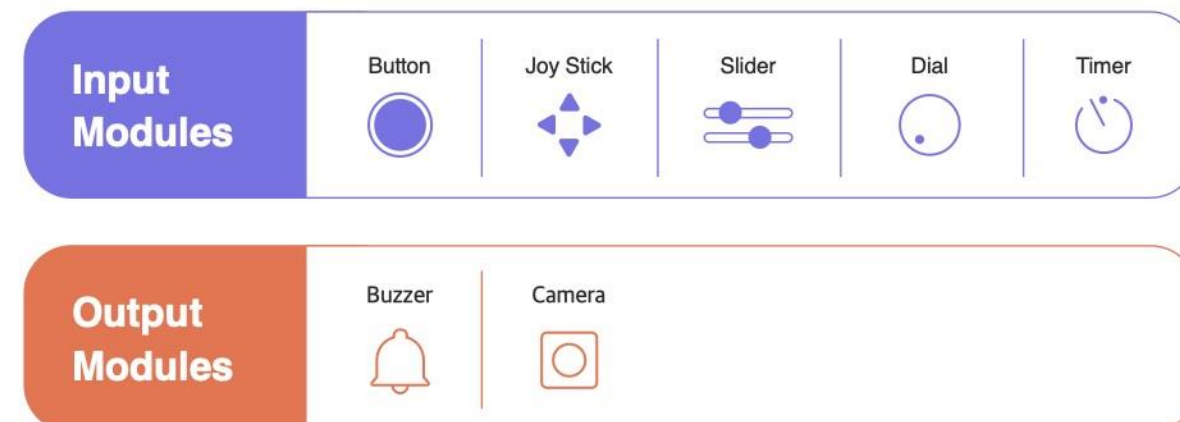


Drag and drop coding is  
quick and easy!

# MODI Play



MODI Play has a variety of functions and can be  
used on your smart phone or tablet.  
Install MODI Play and make infinite projects!



Using a Bluetooth connection, enjoy more than 10 different functions using a remote control!





[www.luxrobo.com](http://www.luxrobo.com)



1544-8260



13F (DreamPlus Gangnam), 311, Gangnam-Daero,  
Seocho-Gu, Seoul, South Korea