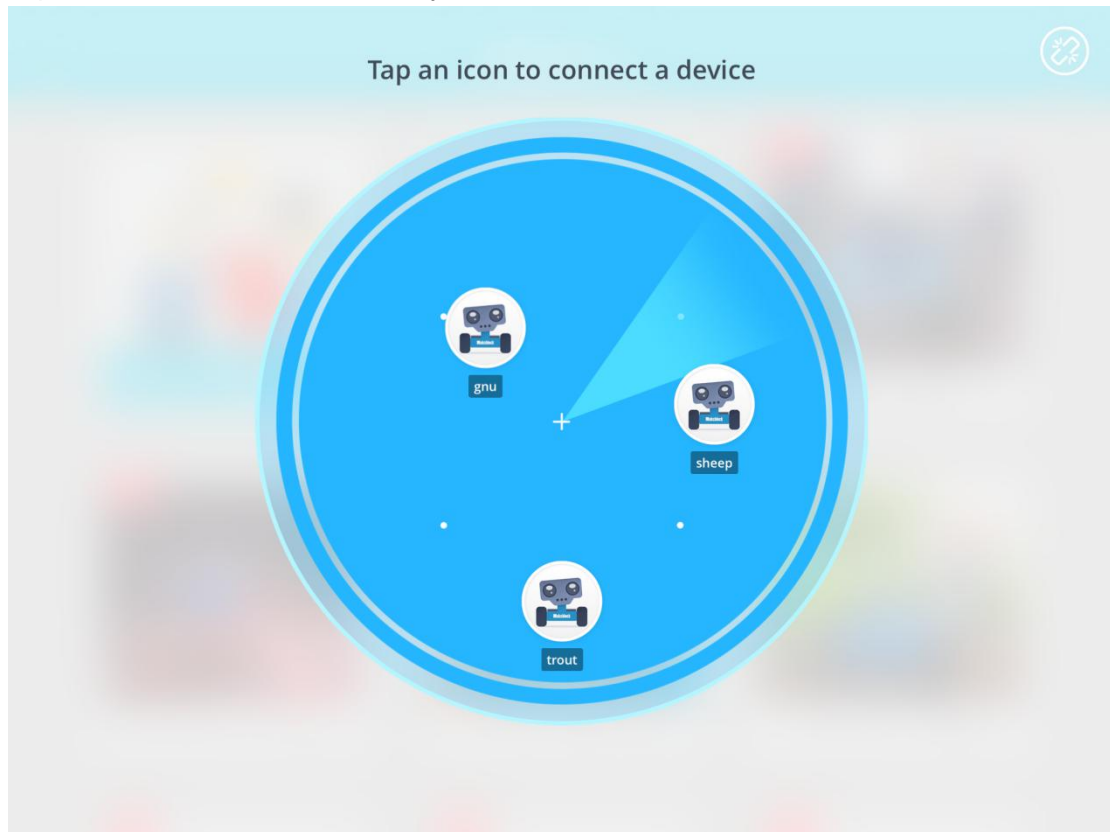


Getting Started: Makeblock HD

– Controlling your first robotics with fun &
Visual programming to define your STEAM toys

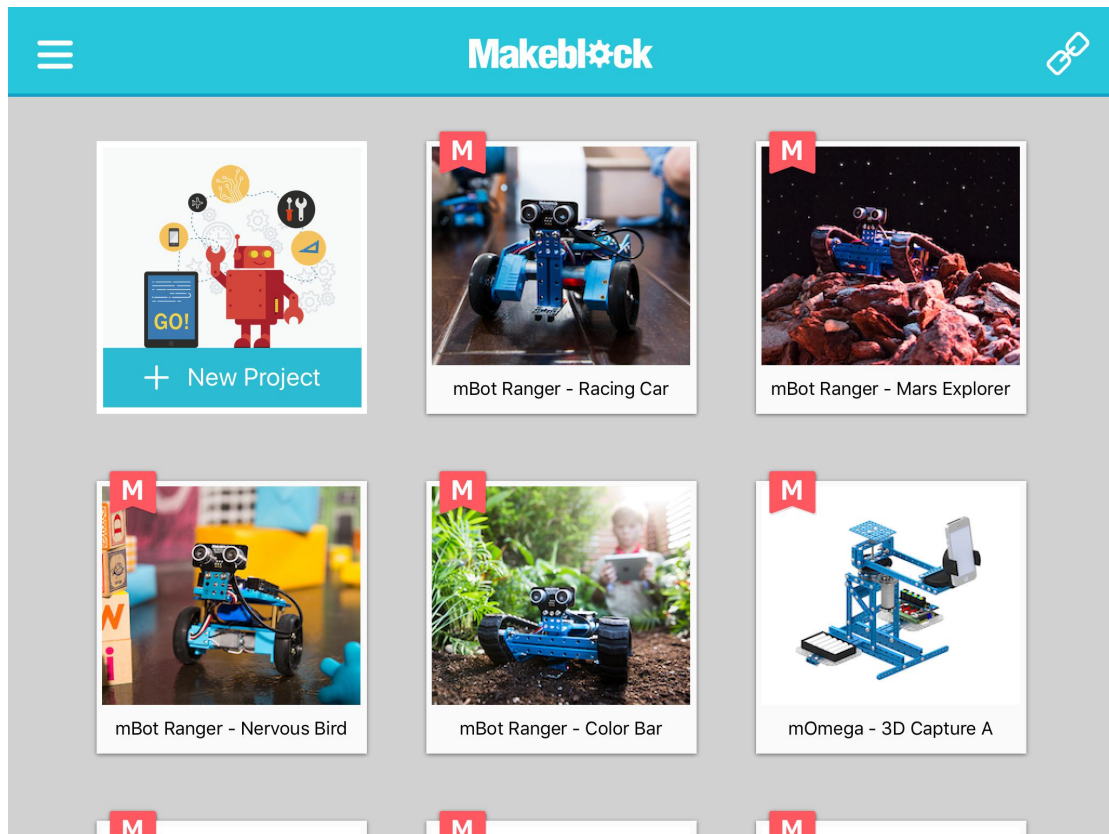
Step 1: Connect Your Robot

Tap the closest icon to connect you robot

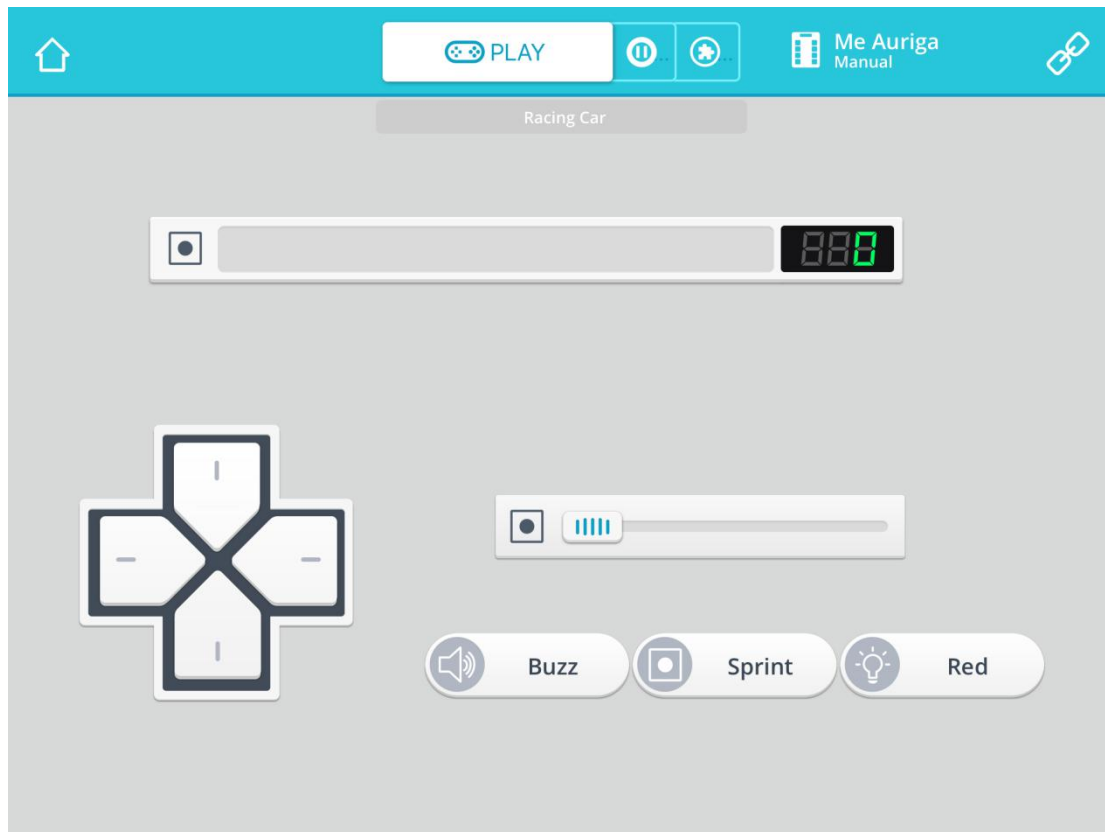


Step 2: . control your robot with a Control Panel

There are more than ten Control Panels, users can control Makeblock robots (including Ultimate Robot Kit 2.0, mBot Ranger, mBot, Starter Robot Kit, Ultimate Robot Kit and other robots utilizing Makeblock mainboards) easily via those Control Panels.



Therefore you should find control panels designed for your robot(eg. If your robot is mBot Ranger, you should play with control panels designed for mBot Ranger such as mBot Ranger - Racing Car/ Nervous Bird/ Mars Explorer)



Choose a Mode(Optional)

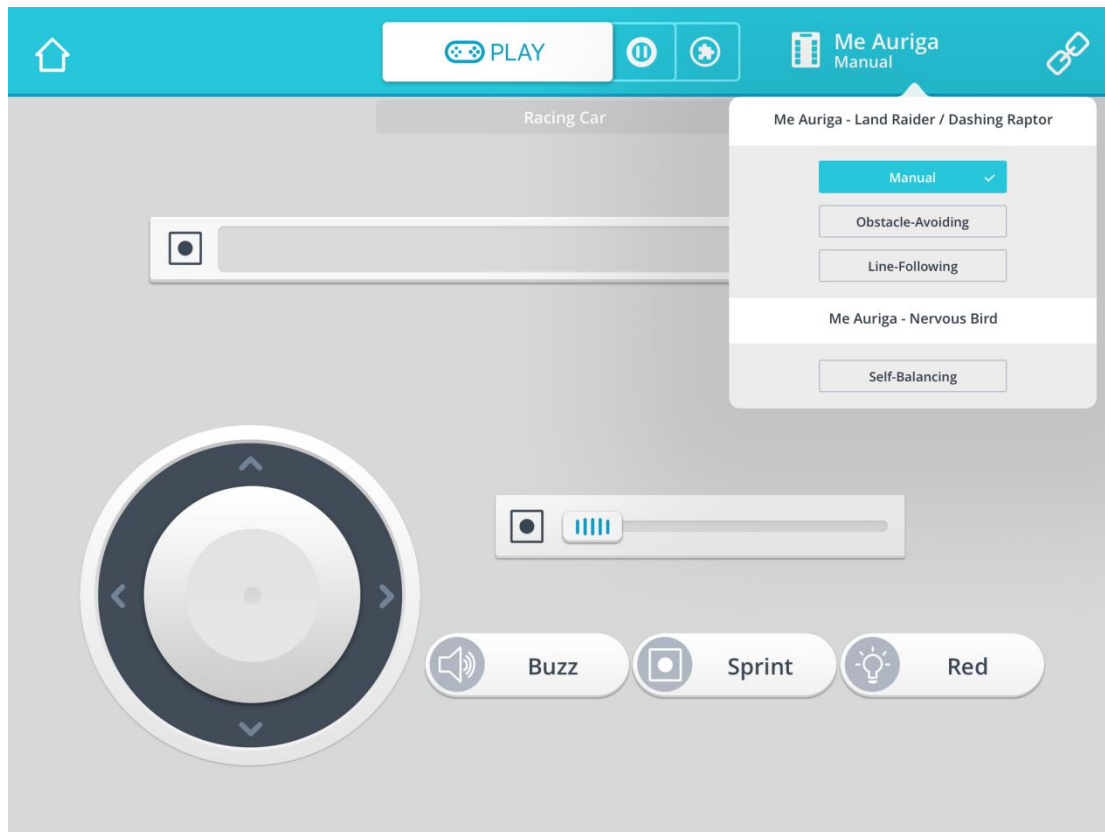
For mBot , mBot Ranger and Ultimate 2.0, those robots provide several modes for users. Users could choose a mode to play.

Manual Mode: Robots will not do anything until it receive commands from users via control panels.

Obstacle-Avoiding Mode : Robots will move and avoid obstacle by it self. Under Obstacle-Avoiding mode, users cannot control default motor (only for Tank or Car)

Line-Following Mode : Robots will follow a black line similar to a train moving through the track. (only for Tank or Car)

Self-Balance Mode : This mode is only for self-balance shape, robot will keep balance by it self and user could control moving direction by Joystick.



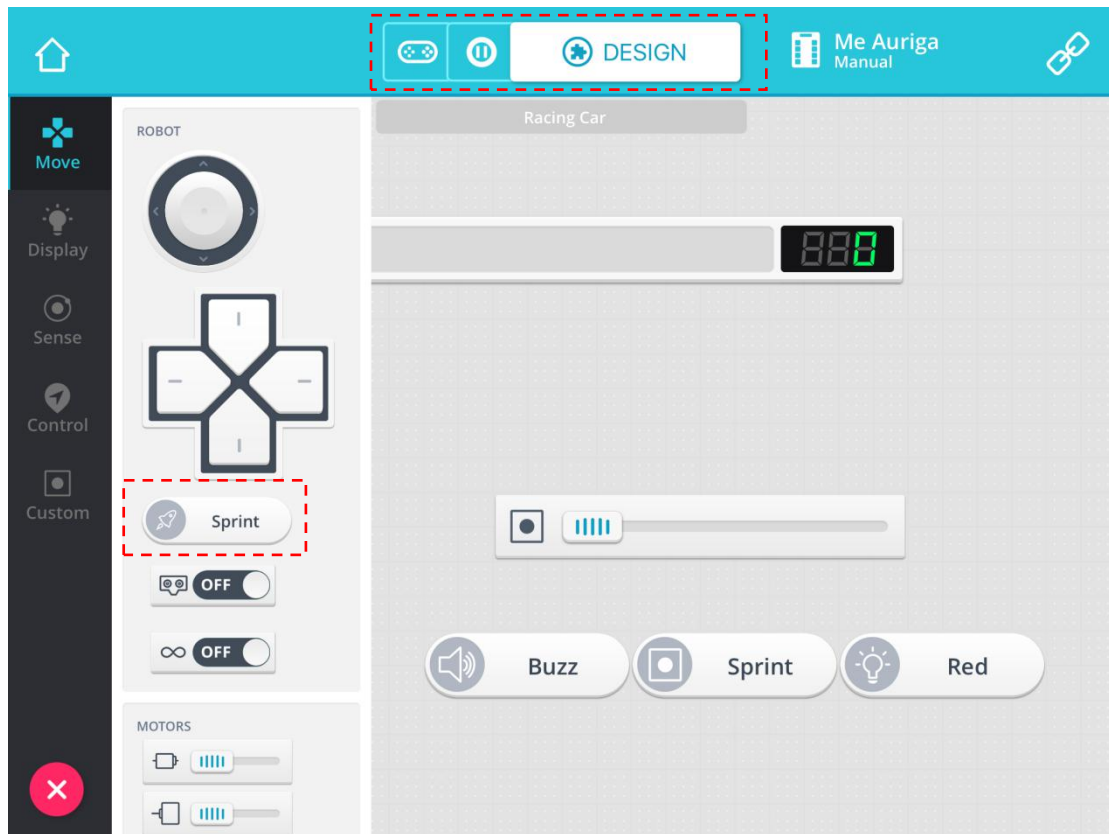
Step 3: Design your own Control Panel

For every mainboard, there are more than 30 predefined modules, which can control different sensors or execute various commands . Arrange those simple control modules and settings in any combination you choose, you can drive Makeblock robots as you wish. You may even create your own control panels.

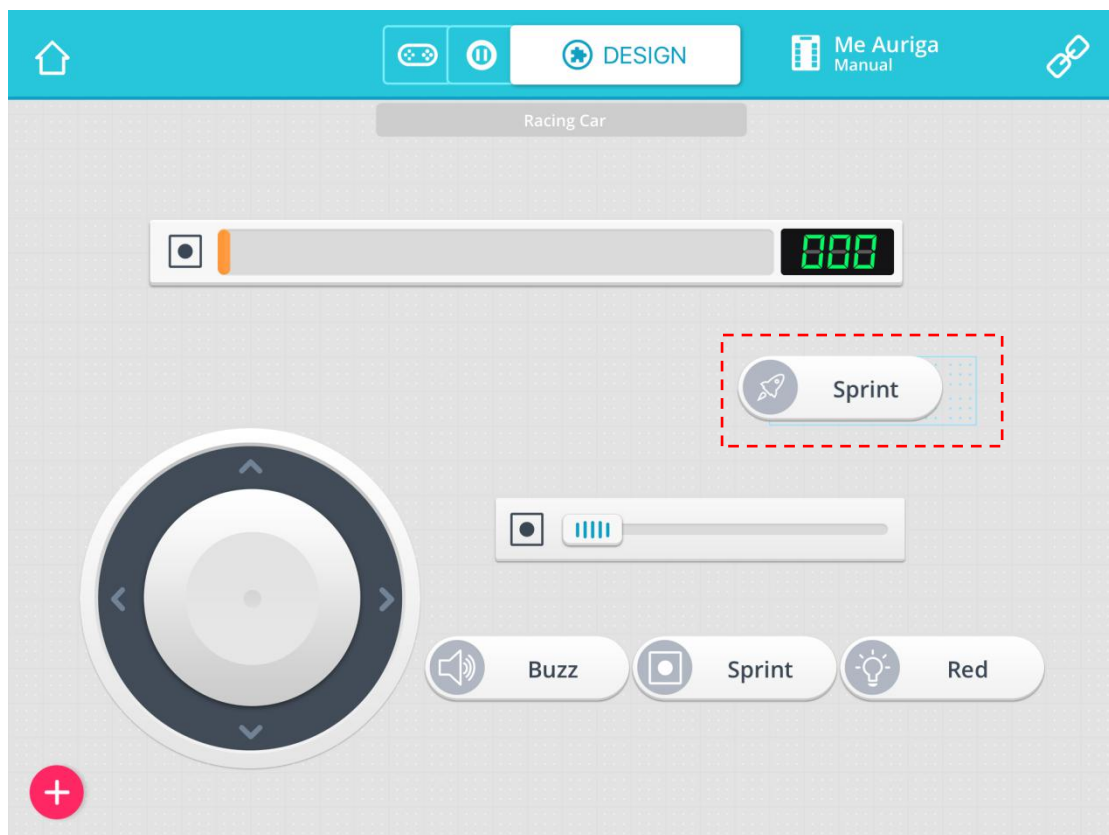
Remix

Users could remix a exiting Control Panel to create a new one.

(1)Change to Design Mode

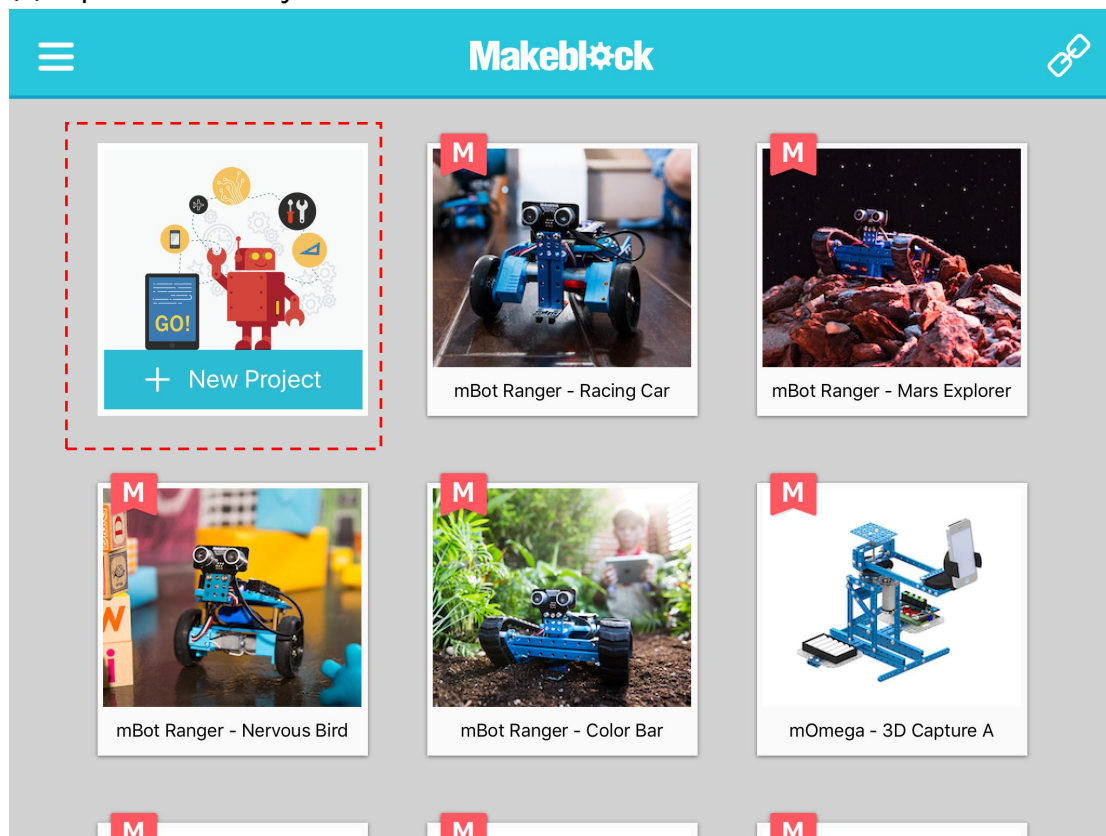


(2) Add new control modules

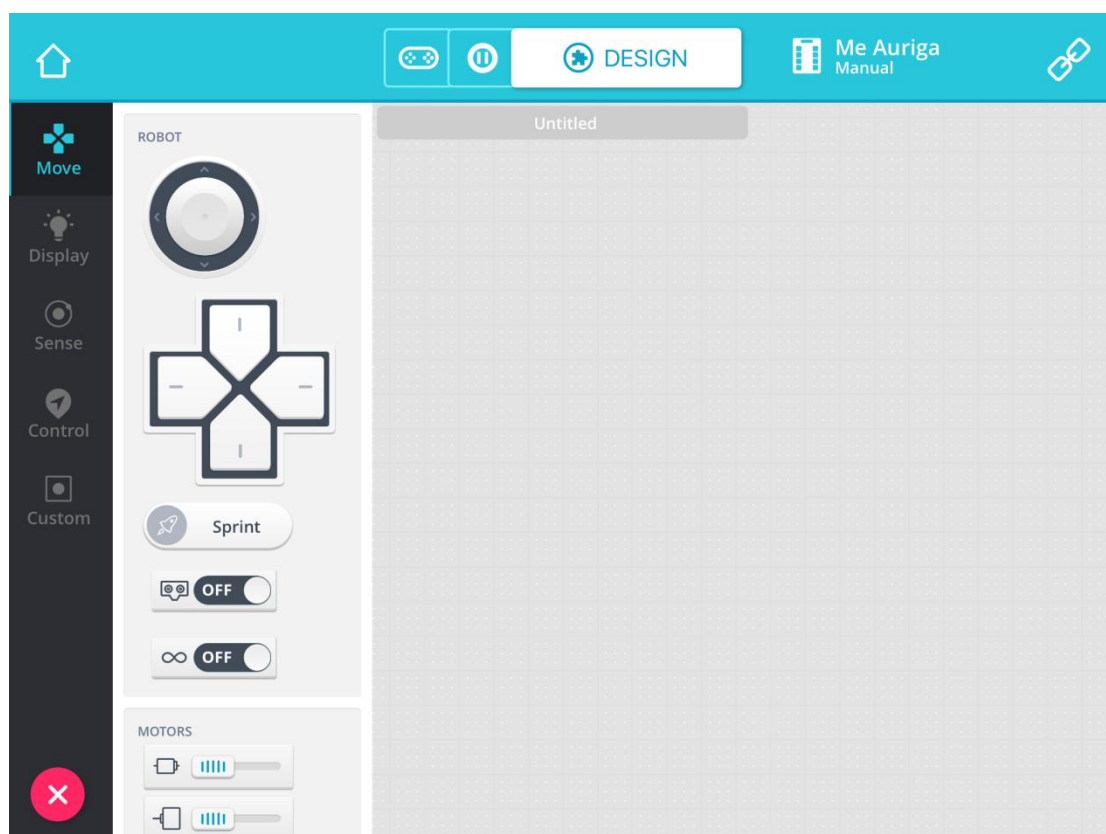


Create a New Project

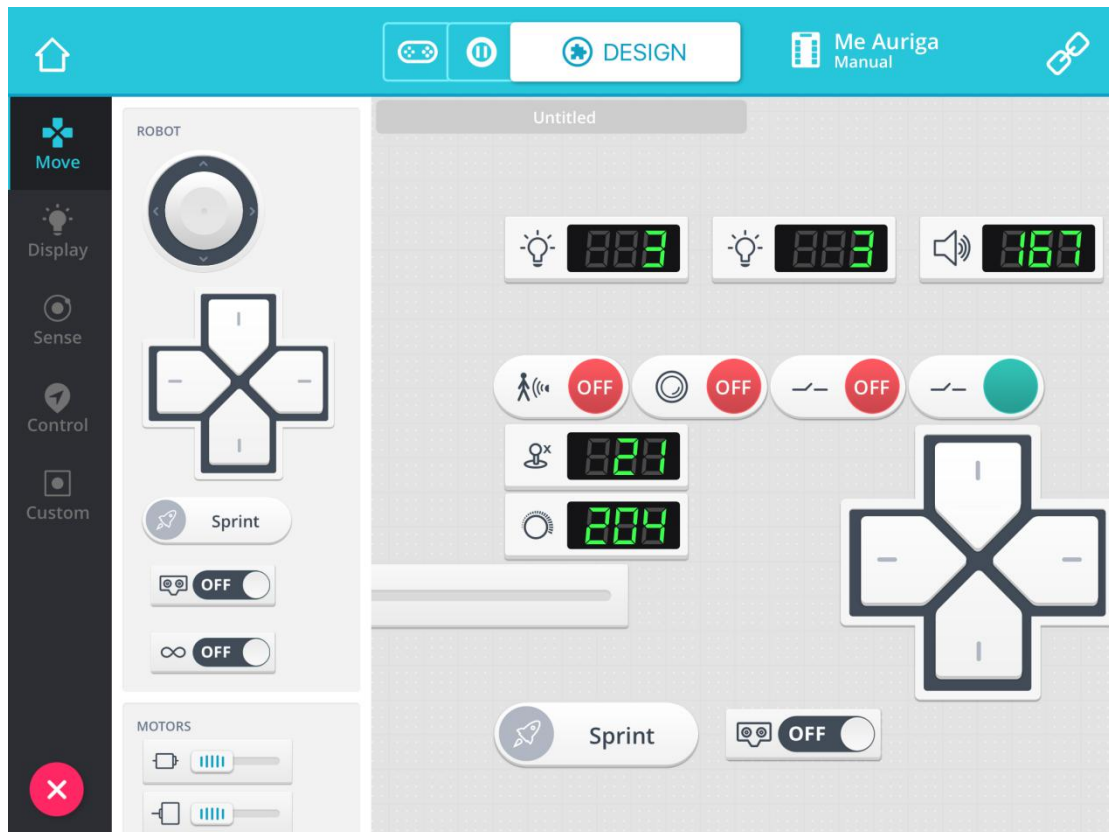
(1) Tap “+ New Project”



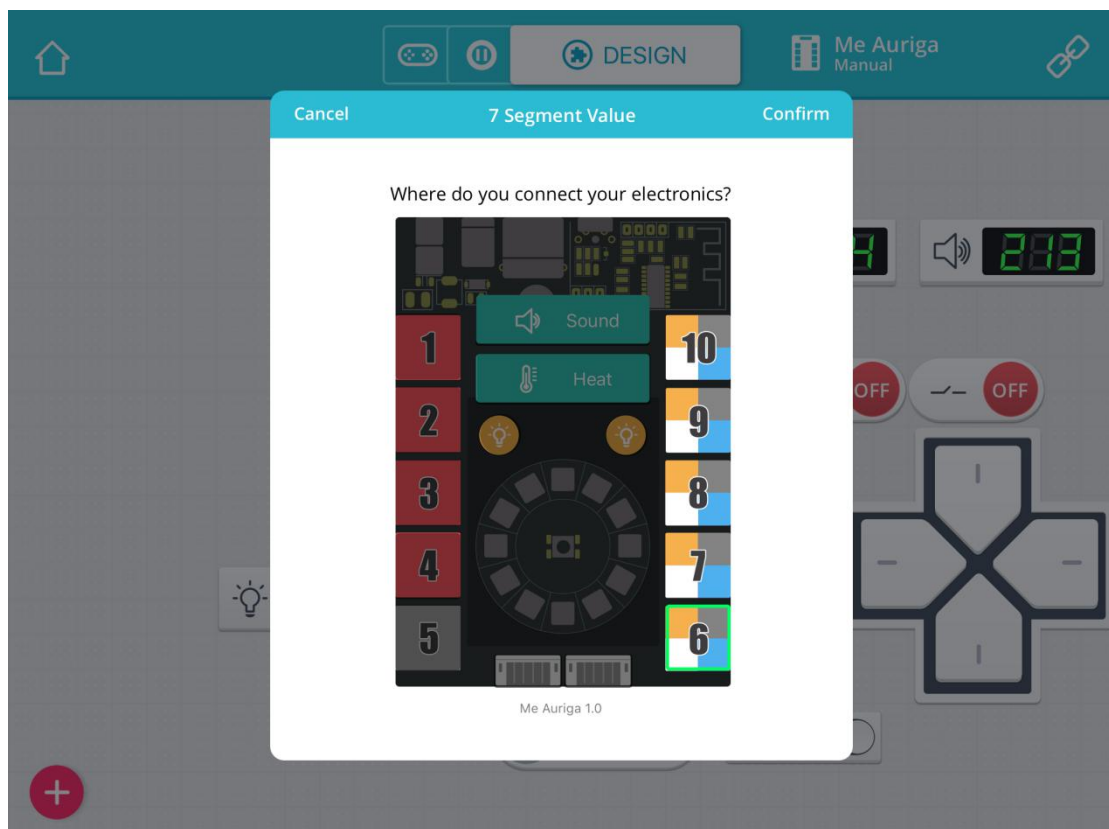
(2) Change to Design Mode



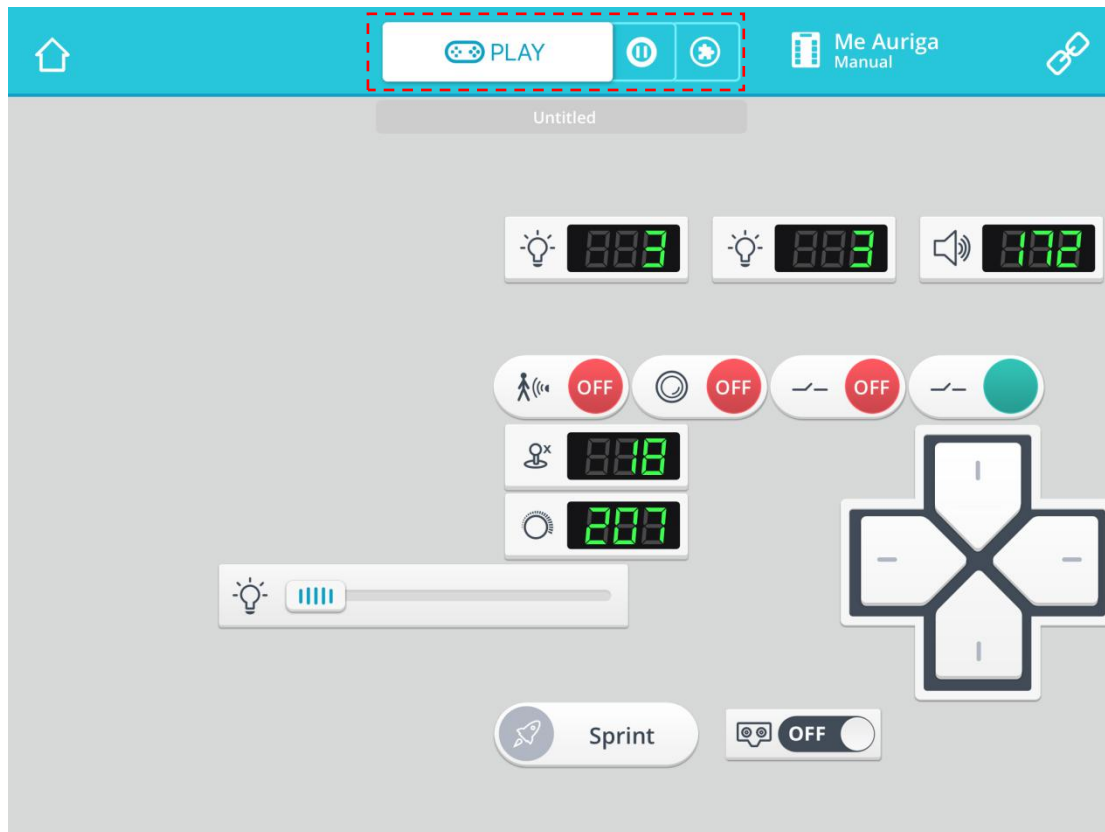
(3)Add new control modules



(4)Change Port of modules



(5)Change to Play Mode



Control Module: Control Modules are divided into five catalogs including "Move" , "Display" , "Sense" , "Control" and "Custom" .

Move —— Under Move category, you may find the motion Control Modules to control motors and servos.

Display —— Under Display category, you may find the sound and light Control Modules to control LED Strips, LED Panel , Buzzers and 7-segment display modules.

Sense—— Under Sense category, you may find Control Modules to display the detected value of sensors.

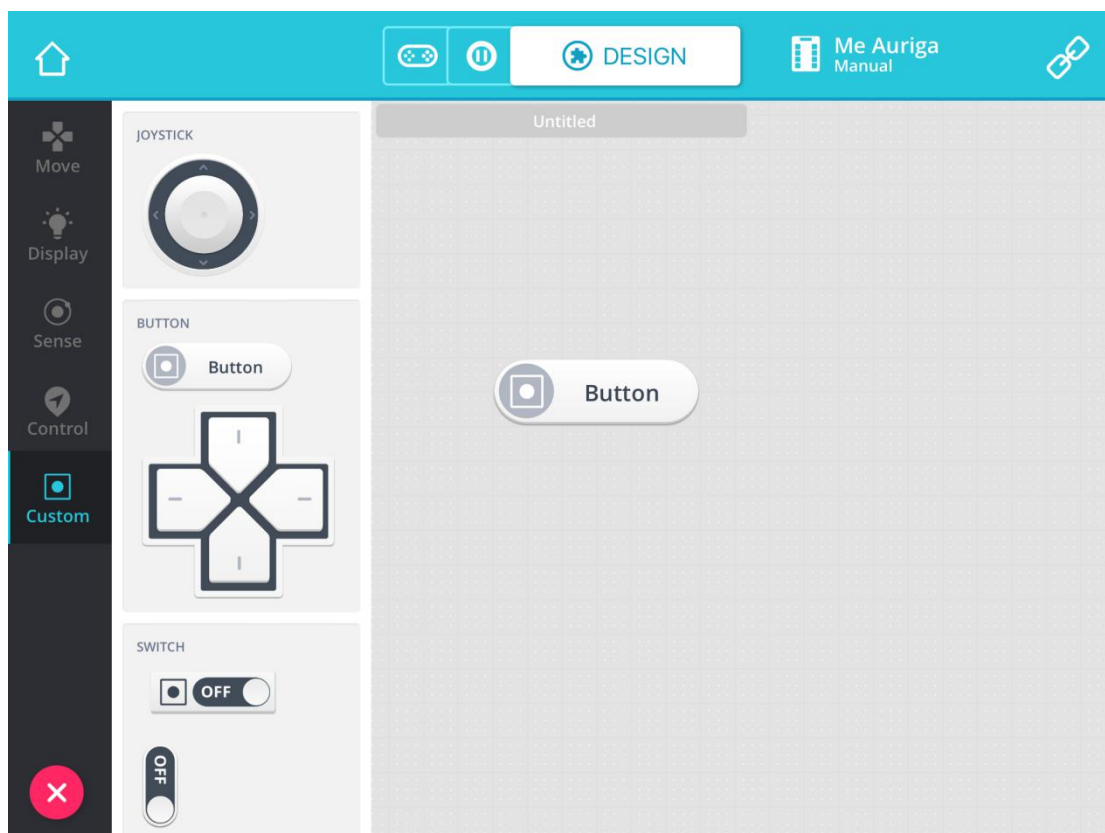
Control—— Under Control category, you may find Control Modules to display the detected status of control sensors.

Custom—— Under Custom category, you may find all shapes of control modules without any function. User could define their own control module with blockly.

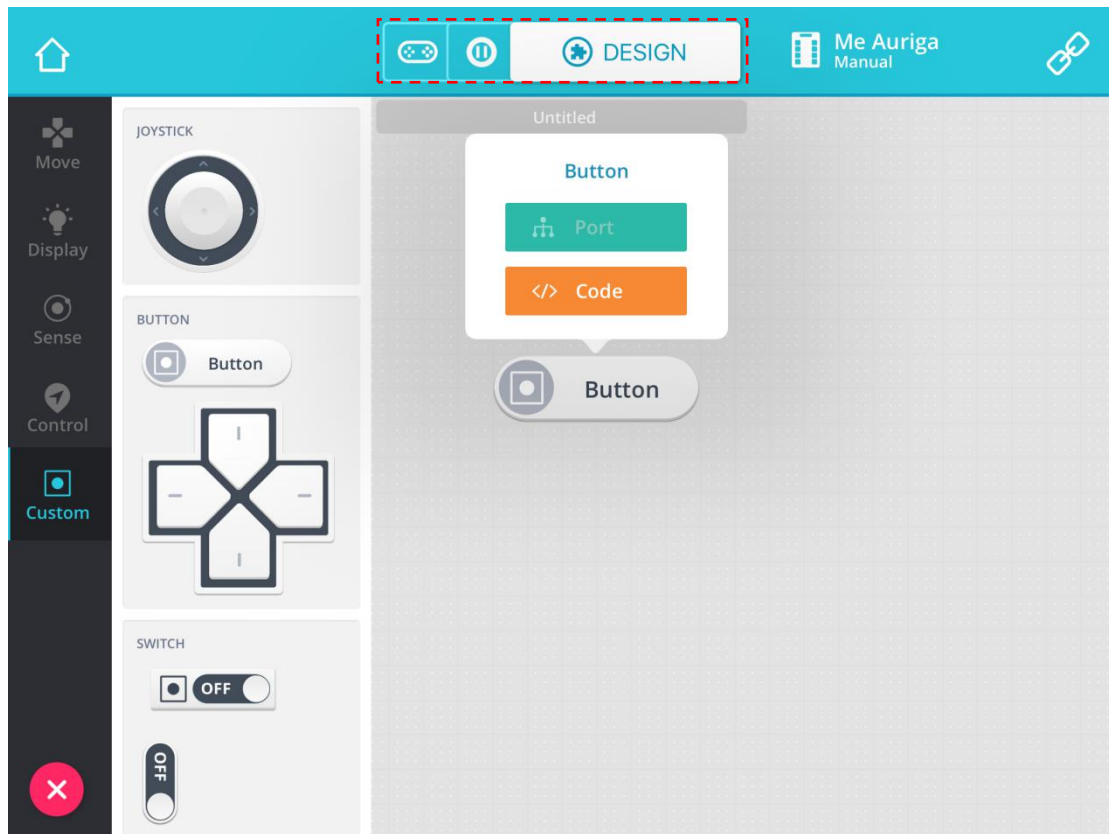
Step 4: Create your own module

Users can customize their own control modules to control different sensors or execute different commands with mBlockly (Drag-and-drop style programming similar to Scratch). Makeblock HD makes programming robots as easy as using building blocks.

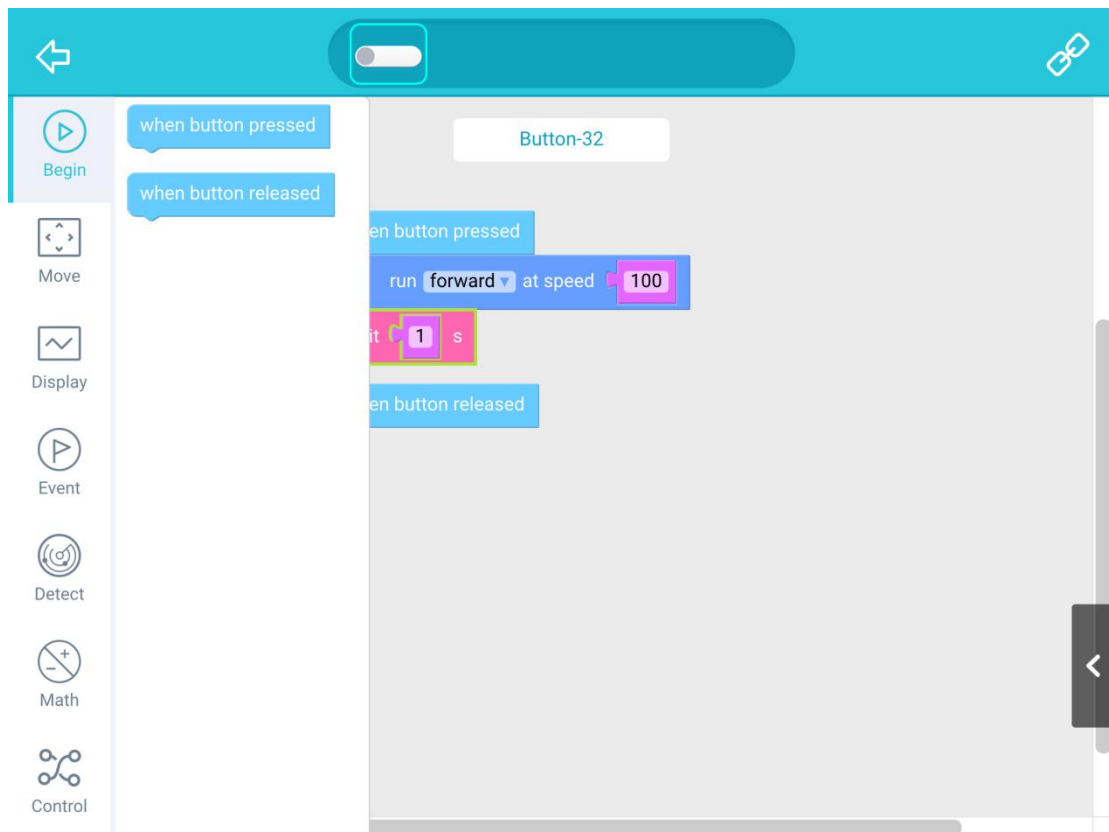
(1) Tap “Custom” to add a blank module



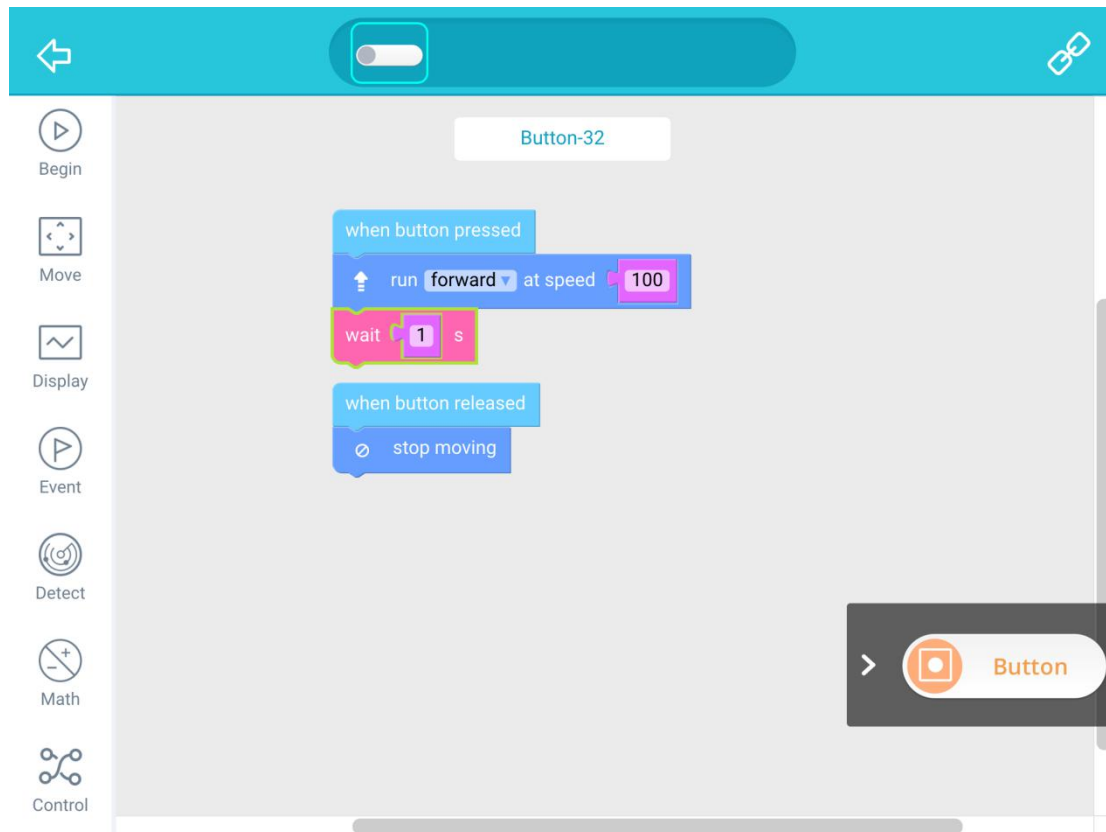
(2) Tap the selected module to code



(3) Coding with blockly



(4) Testing Program under Coding Mode



Notice :

For Android Tablet, Creating a new control panel is limited, but it will released soon.

For Android smart phone, coding is not available.