WEEEMAKE

GAMEPAD BLUETOOTH CONTROLLER

Introduction

This Weeemake remote controller adopts Bluetooth connection, with stable and reliable data transmission that is not prone to disconnection. It also features a gamepad design, making it easier to hold and providing a better user experience.

The controller is designed as a **master-slave device**, which means it can be connected to the Weeemake **Bluetooth module** to control the movement of the car robot, or connected to the Weeemake **Bluetooth dongle** for communication with a computer for Scratch programming and learning.

It comes with a built-in lithium battery pack, eliminating the need for frequent replacement of dry batteries, and has battery and Bluetooth indicators that allow users to easily check the battery level and connection status.

Introduction
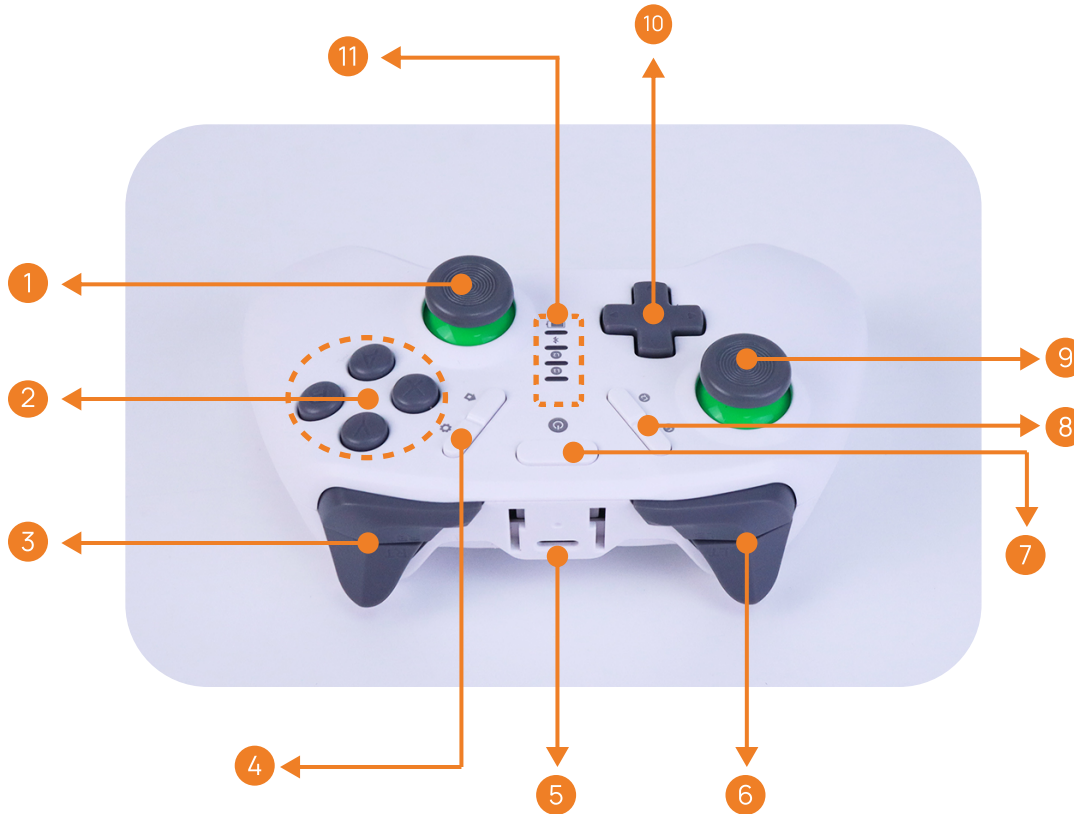
Buttons:

1. Right joystick (5 directions)
2. Button A/B/X/Y
3. Right buttons (Button RT/RB)
4. Home button / Setting button
5. Charging port
6. Left buttons (Button LT/LB)
7. Power
8. Button L1/L2
9. Left joystick (5 directions)
10. D-pad
11. Signal light

Specifications

| Parameter	Value/Description
Operating Voltage	DC 3.7V (built-in lithium battery pack 550mAh)
Charging Voltage	USB Standard 5V 200mAh
Charging Time	3 hours
Working Current	< 40mA
Bluetooth Version	4.1
Bluetooth Connection Indicator	Blue LED
Power Supply Indicator	RGB LED
Control Distance	20 meters (empty)
Joystick Quantity	2
Button Quantity	19

Connection

● **Work with Bluetooth Module - Master mode**

When the Bluetooth gamepad is connected to the Bluetooth module, the gamepad acts as the master device and the Bluetooth module acts as the slave device.
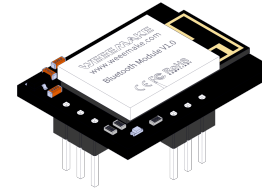
● **Work with Bluetooth Dongle - Slave mode**

When the Bluetooth module is connected to the Bluetooth Dongle, the gamepad acts as the slave device and the Bluetooth Dongle acts as the master device.
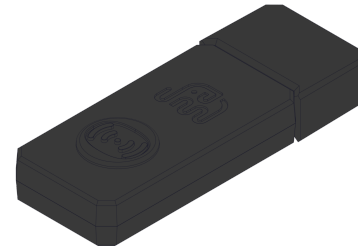
How to use

● **1. Turn on/off**

To power on the gamepad, press and hold the power button ⏻ for 3 seconds. The battery indicator light will turn on, and the Bluetooth status light will start flashing.

To power off the gamepad, press and hold the power button for 5 seconds.

After the gamepad is powered on, it will automatically power off in two different situations: (1) if the gamepad is not connected to Bluetooth and remains idle for 50 seconds; (2) if the gamepad is connected to Bluetooth and remains idle for 5 minutes.

On: press and hold for 3s
Off: press and hold for 5s

⏻

How to use

● **2. Connect Bluetooth module**

After the gamepad is powered on, it automatically enters the master device mode and searches for the last connected Bluetooth module.

To connect a new Bluetooth module, press and hold the Home 🏠 and Setting⚙ buttons simultaneously for 3 seconds. The gamepad will enter the search for new Bluetooth mode and will automatically connect to the Bluetooth module with the strongest signal.

Please ensure that the gamepad is close to the Bluetooth module you want to connect to, to avoid connecting to the wrong device.

Press and hold for 3s

🏠 **+** ⚙

How to use

3. Connect Bluetooth dongle

After powering on the gamepad, simultaneously press and hold the Home 🏠 and **L1** buttons for 3 seconds to enter the slave device mode and wait for the Dongle to connect. At this time, the Dongle also needs to enter pairing mode (press and hold the button on the Dongle until the signal light on the Dongle flashes rapidly). Place the gamepad near the Dongle, and after a few seconds, they will automatically connect. At this point, you can use serial port software on the computer to view the raw data sent by the gamepad.

Once connected, the Dongle will remember the gamepad's information, so the gamepad can be connected without pressing any buttons next time. However, the gamepad needs to enter slave device mode by pressing buttons every time it is powered on.

Press and hold for 3s

🏠 + **L1**

How to use

● **4. Joystick factory calibration**

When the joystick values appear abnormal, it may be because the joystick has not been factory calibrated. You can use the following method to calibrate it:

Simultaneously press and hold the **L1** button , ⚙, and 🏠 to enter calibration mode. The blue light will flash quickly. Then, move the joystick to **its maximum extent**, and when the blue light starts flashing slowly again, the calibration is complete.

● **5. LED indicator instruction**

The controller has a total of 4 LED lights: one Bluetooth status indicator light in blue color, two self-locking switch indicator lights, and one battery level indicator light.

Press and hold simultaneously

L1 + 🏠 + ⚙

How to use

5.1. Bluetooth status

When the controller is in the unconnected state as a master device, the Bluetooth status light flashes slowly at 1 Hz.
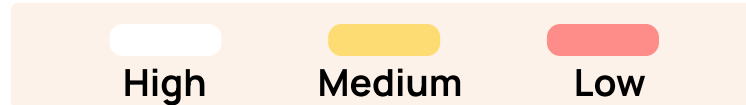
When it is in active search mode for Bluetooth, it flashes rapidly at 10 Hz.

When it is connected to a dongle as a slave device, it flashes twice rapidly, waits for 0.5 seconds, and then repeats this cycle.

Once connected successfully, the light stays on continuously.

5.1 Battery power indicator
Power level: White > Yellow > Red

High	Medium	Low

When the light shows red, please recharge the controller in time.

● 6. Charging instruction

When the controller needs to be charged, simply plug in the Type-C cable to start charging. This Type-C port is for charging only and cannot be used for data communication.
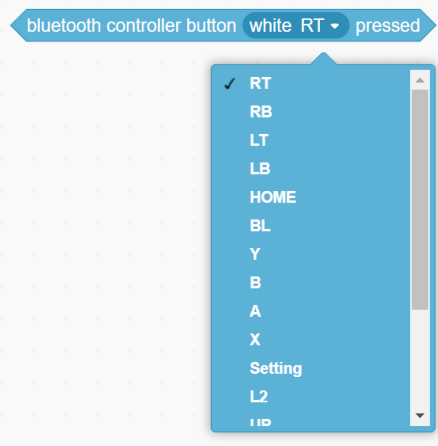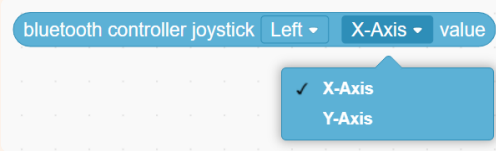
Macro definition for buttons/joysticks

Macro Name	Value	Graphical Programming	Description
WeJOYSTICK_LY	1	——	Left Joyistick Y axis
WeJOYSTICK_LX	2	——	Left Joyistick X axis
WeJOYSTICK_RY	3	——	Right Joyistick Y axis
WeJOYSTICK_RX	4	——	Right Joyistick X axis
WeBUTTON_RT	5	RT	Button RT
WeBUTTON_RB	6	RB	Button RB
WeBUTTON_LT	7	LT	Button LT
WeBUTTON_LB	8	LB	Button LB
WeBUTTON_HOME	9	HOME	Button HOME
WeBUTTON_BL	10	BL	Button BL
WeBUTTON_Y	11	Y	Button Y
WeBUTTON_B	12	B	Button B
WeBUTTON_A	13	A	Button A
WeBUTTON_X	14	X	Button X
WeBUTTON_Setting	15	Setting	Button Setting
WeBUTTON_L2	16	L2	Button L2
WeBUTTON_UP	17	UP	D-pad UP
WeBUTTON_DOWN	18	DOWN	D-pad DOWN
WeBUTTON_LEFT	19	LEFT	D-pad LEFT
WeBUTTON_RIGHT	20	RIGHT	D-pad RIGHT
WeBUTTON_L1	21	L1	Button L1
WeBUTTON_BR	22	BR	Button BR

WeeeCode Program

● Work with Bluetooth module: offline (upload) mode

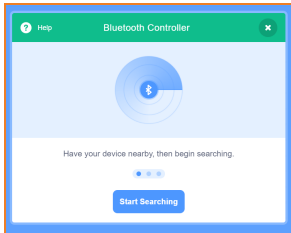| Description	Parameter	Block
Detect if the button selected is pressed (Boolean) for offline programming (connect to robot Bluetooth module).	(One Parameter) Select Button.	bluetooth controller button white RT ▾ pressed ✓ RT RB LT LB HOME BL Y B A X Setting L2 UP
Return to analog value (0-255) of joystick for offline programming (connect to robot Bluetooth module).	(Two Parameter) Select joystick and axis.	bluetooth controller joystick Left ▾ X-Axis ▾ value ✓ X-Axis Y-Axis

WeeeCode Program

● Work with Bluetooth dongle: online (live) mode
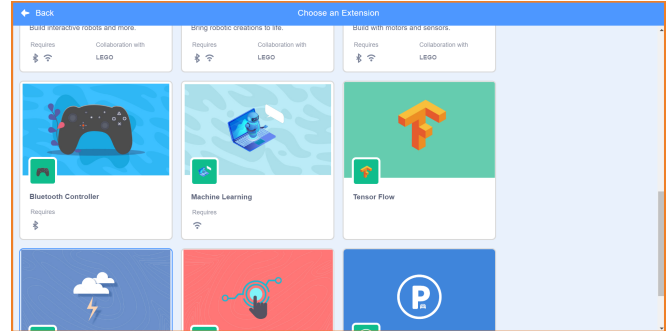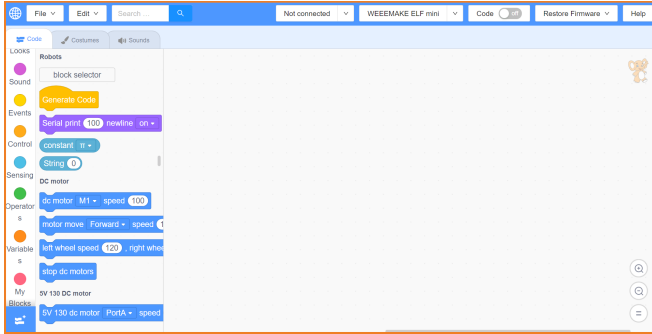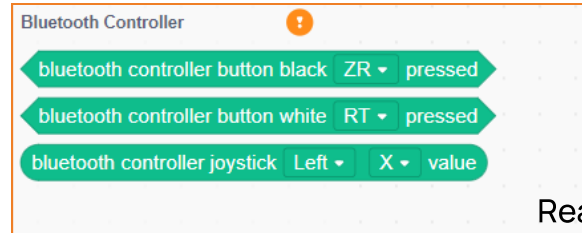

Step 1. Click the left down corner on WeeeCode to add extensions.

Step 2. Select Bluetooth controller extensions.

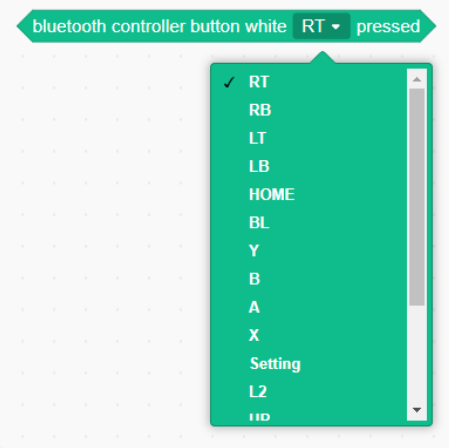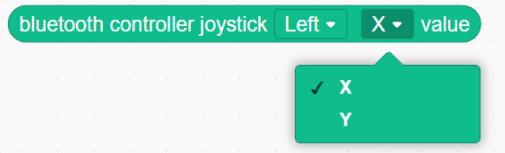**Step 3.** Follow the guide, connect the Bluetooth controller to dongle.

Ready!

WeeeCode Program

● Work with Bluetooth dongle: online (live) mode

Description	Parameter	Block
Detect if the button selected is pressed (Boolean) while connecting with Bluetooth dongle for online programming.	(One Parameter) Select Button.	bluetooth controller button white RT ▾ pressed ✓ RT RB LT LB HOME BL Y B A X Setting L2
Return to analog value (0-255) of joystick while connecting with Bluetooth dongle for online programming.	(Two Parameter) Select joystick and axis.	bluetooth controller joystick Left ▾ X ▾ value ✓ X Y

WEEEMAKE

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