

GP4258 Bluetooth Game Controller Specification

1. Product description

This controller is a three-in-one Bluetooth controller for P4/PC/Switch. It is compatible with multiple platforms such as PC (compatible with PC Xinput and Dinput games), iOS, Android, etc.; it has a 6-axis sensor function; the front of the controller is equipped with a pressable dual-point capacitive touchpad; it is equipped with a 3.5mm TRRS stereo jack that can connect headphones and microphones, and simultaneously receive and transmit audio, and has a built-in speaker; it is equipped with a Type-C port for data communication and for charging the controller.

2. Features

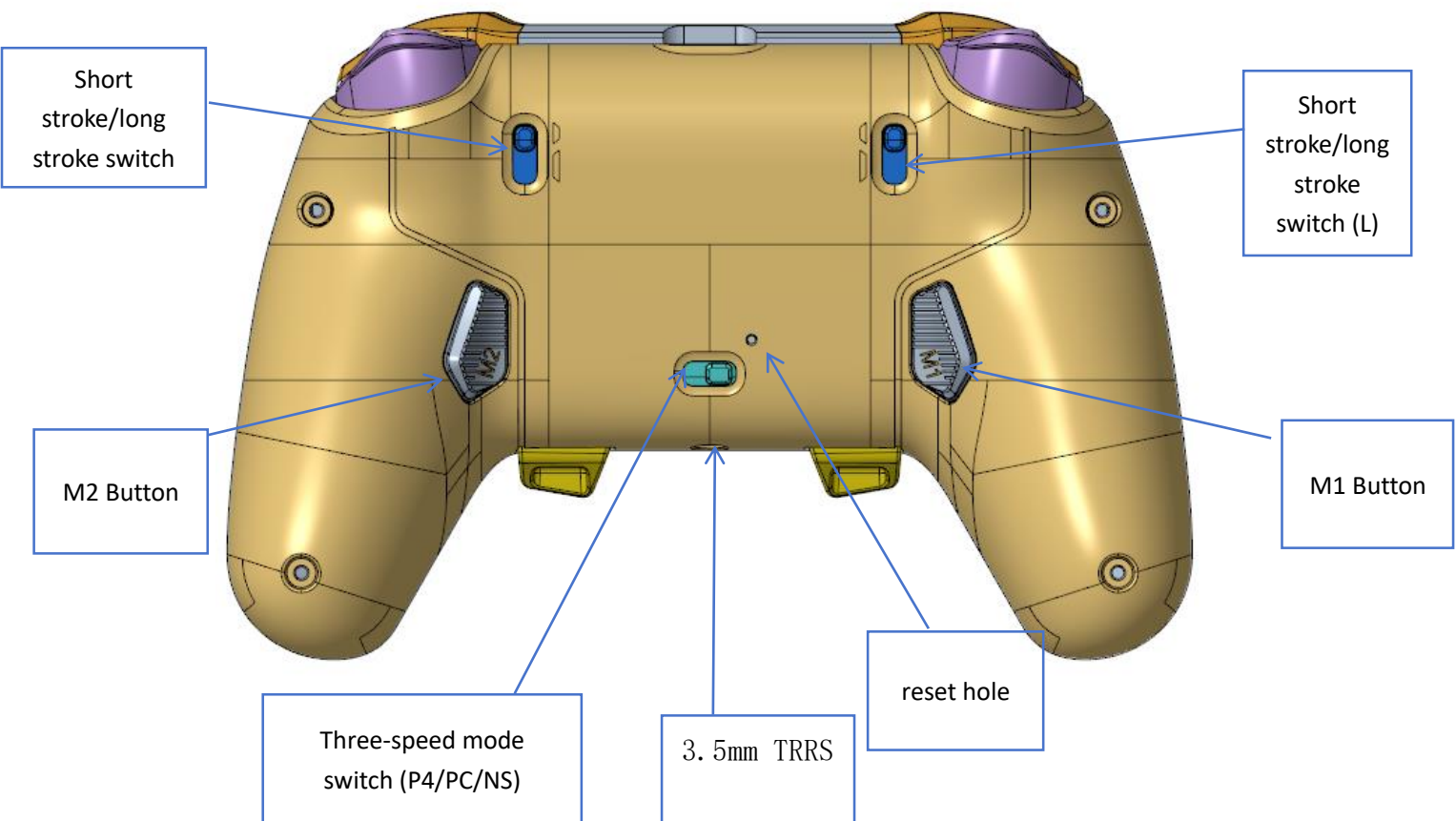
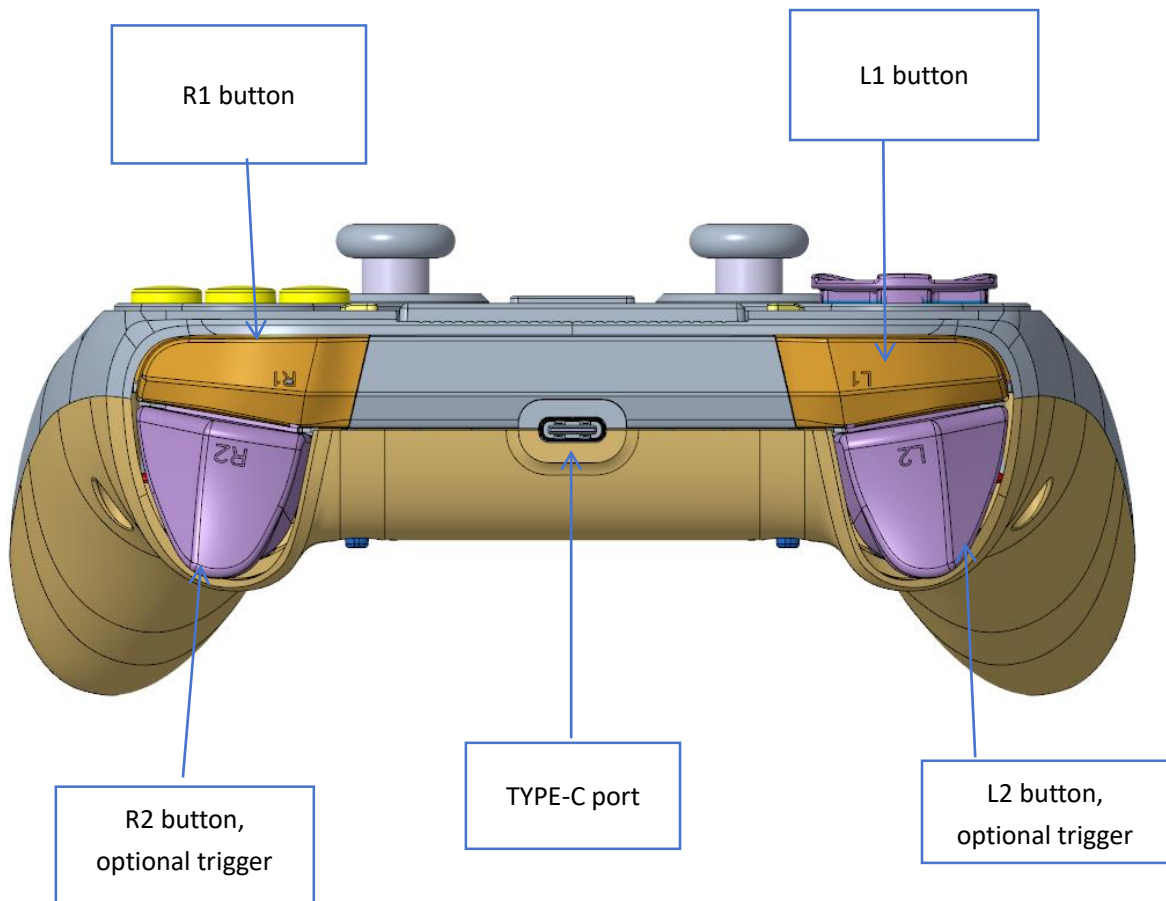
- (1) Buttons: PS, M, Share, Option, ↑, ↓, ←, →, ×, ○, □, △, M1, M2, M3, M4, L1, L2, L3, R1, R2, R3, RESET;
- (2) Supports any software version of the PS4 console;
- (3) The controller supports multiple platforms such as PS4, PC, Switch, iOS, Android, and is compatible with PC Xinput and Dinput games;
- (4) It has a 6-axis gyroscope sensor function;
- (5) It has a built-in large-capacity polymer lithium battery and supports charging via a Type-C port data cable;
- (6) It has a 3.5mm TRRS stereo jack for connecting headphones

and a microphone, and has a built-in speaker;

(7) It has a dual-point capacitive touch panel;

(8) It has a built-in dual motor vibration;





3. Product Functions

3.1 PS4 Platform Features

3.1.1 All game functions can be used on the PS4 console, and all button functions, motor vibration, touch functions, and sensor functions of the original PS4 controller are compatible.

3.2 PS4 Console Connection

3.2.1 Set the three-position mode switch to PS4. If the controller is not connected to the current PS4 console, use a Type-C data cable to establish wired communication with the PS4 console. The program will automatically pair the controller. Press the PS button to connect the controller wirelessly via Bluetooth.

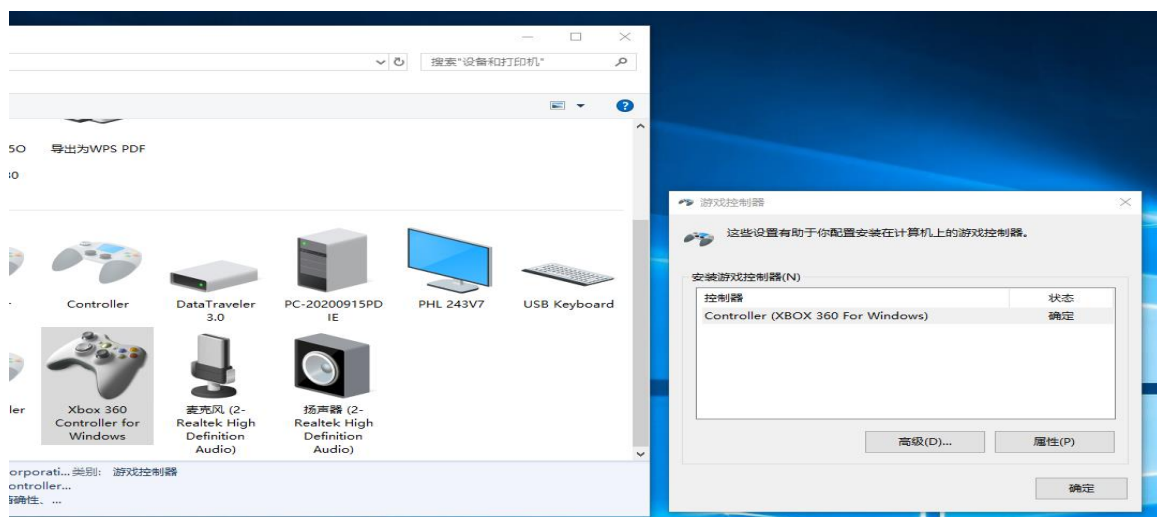
When wirelessly connected to the PS4 console, the RGB light will be blue.

3.2.2 You can simultaneously connect up to four controllers to the console and play games. Each controller has its own RGB light color (blue/red/green/pink) assigned by the console to distinguish between users. If a controller is not paired with the console, pressing the PS button will wake the console from sleep.

The RGB indicator light bar is linked to the game scene; for example, when a character's health is low, the red light will flash.

3.3 Connecting the controller to the PC

3.3.1 Switch the third-position mode switch to PC. Connect the controller to the PC via a data cable. Xinput is supported by default. The computer automatically installs the driver and displays the device name as Xbox 360 Controller for Windows, enabling Xbox 360 controller functionality. After a successful connection, the RGB indicator will illuminate steadily in yellow (slowly flashing when charging, and steadily illuminated when fully charged). The following display appears after a successful connection. Press and hold the PS button for 3 seconds to switch to D_INPUT mode. After a successful connection, the purple indicator will illuminate steadily (slowly flashing when charging, and steadily illuminated when fully charged).



3.3.2 The controller can be connected to the PC via Bluetooth. To do this, turn the third-position mode switch to the PC, open the laptop's Bluetooth settings, select Add Device, and simultaneously

press the SHARE and PS buttons on the controller for 2 seconds. The controller indicator light will flash blue quickly to enter pairing mode. "Xbox Wireless Controller" will appear in the computer's Bluetooth device column. Clicking this will automatically pair the controller with the computer, the RGB blue light will remain on, and the driver will automatically install.

3.4 Connecting the controller to the phone

Switch the third mode switch to PC to connect the controller to your phone via Bluetooth. Open the Bluetooth settings on your Android phone and simultaneously press the SHARE and PS buttons on the controller for two seconds. The indicator light will flash blue quickly to enter pairing mode. When your phone finds the Bluetooth device name "Xbox Wireless Controller," tap it and the phone will automatically pair with the controller, with the RGB blue light remaining solid.

3.5 Connecting the controller to the Switch

When the third-gear mode switch is turned to SW, the controller can be connected to the Switch via a wired connection or Bluetooth.

(1) Ways to connect the controller to the Switch console: ① Wired connection, connect to the Switch console via a USB data cable. ② Connect to the SWITCH console via Bluetooth

communication;

(2) Bluetooth connection to the Switch console: When using the controller for the first time, press the SHARE button and PS button on the controller simultaneously for 2 seconds until the controller turns on and the indicator light flashes light blue to enter the pairing state. Turn on the Switch console to the pairing interface and perform Bluetooth pairing. After successful pairing, the various functions of the controller can be used normally, and the light blue light of the controller assigned to the console will be on continuously;

(3) Wired guided Bluetooth docking function: After the controller is connected to the Switch console via a USB data cable, press any key on the controller to wake it up, unplug the data cable, and the controller will automatically connect to the Switch console via Bluetooth;

3.6 Sensor Calibration

Place the controller in sleep mode on a flat surface. Press and hold the "×" and "□" buttons, then press the "PS" button. Wait for the RGB light to flash red, then release it. The red light will turn off after about 5 seconds, completing sensor calibration.

If the controller cannot pair within 60 seconds while in pairing

mode, it will automatically go into sleep mode.

When the controller is awakened from sleep/power off mode, it will enter reconnection mode, with the controller indicator light flashing slowly. If it cannot pair within 30 seconds, it will automatically go into sleep mode. Press the PS button to wake the controller from sleep mode.

The trigger motor currently supports the Bluetooth Xbox mode only; vibration is not supported in other modes.

4. Button functions

4.1 Buttons List

serial number	Name	Functions
1	SHARE Button	Share button
2	PS Button:	Long press to power on/off. Short press to return to the home screen when connected
3	OPTION Button	Select button/Pause button in game
4	十字 Button	Controls the character's movement direction and selection between menu options
5	△ Button	Action button: Issues action commands (depending on the game's settings)
6	○ Button	Action button: Issues action commands (depending on the game's settings)
7	× Button	Action button: Issues action commands (depending on the game's settings)
8	□ Button	Action button: Issues action commands (depending on the game's settings)
9	Left 3D: LEFTANALOGAXIS (L3)	In-game character movement direction (press down to activate the function)
10	Right 3D: RIGHTANALOGAXIS (R3)	In-game character movement direction (press down to activate the function)
11	Left L1 Button	Action button: Issues action commands (depending on the game's settings)
12	Left L2 Button	Action button: Issues action commands (depending on the game's settings)
13	Right R1 Button	Action button: Issues action commands (depending on the game's settings)

		settings)
14	Right R2 Button	Action button: Issues action commands (depending on the game's settings)
15	touch screen	This function allows you to select special weapons in the corresponding game.
16	TOUTCH Button	Touch screen push button
17	M Button	Set motor vibration and burst fire
18	M1、M2、M3、M4 Button	User-defined function keys

4.2 Turbo Function Settings

4.2.1 While the controller is connected to a console, hold down the "M" button and press a function button (including X, ○, □, △, L1, L2, R1, R2). This button will be set to manual burst mode, and the red LED under the M button will light up. After releasing the "M" button, pressing the set button will enable burst mode, with the red light flashing at the burst rate. M1, M2, M3, and M4 will not function in burst mode.

4.2.2 Repeat the above steps for the button. This button will be set to automatic burst mode. You no longer need to hold down the button ; the set button will automatically fire in burst mode. Pressing the button during automatic burst mode will pause the burst mode.

4.2.3 Repeat the above steps for the button again. The burst function will be disabled and the red light will turn off. Press and hold the "M" button for 5 seconds. The blue light below the M button will flash twice, indicating that the burst function has been disabled

for all buttons.

4.2.4 To adjust the burst speed, press and hold the "M" button while simultaneously pressing the right 3D up or down arrow buttons to adjust the burst speed to fast, medium, or slow.

4.2.5 The burst function setting is not saved after the controller is powered off. Restart the controller and reset it if you need to use burst mode.

4.3 Setting the motor vibration intensity

4.3.1 The controller also supports vibration intensity adjustment. When the controller is connected, hold down the "M" button on the controller and perform left 3D up and down operations to increase or decrease the motor vibration intensity. There are four gears for users to choose from: 100%-80%-30%-0%. (The current vibration is saved after powering off, and the default setting is 80% after restoring the factory settings)

4.4. M1, M2, M3, and M4 Back Button Settings

4.4.1 Macro Programming for the M1, M2, M3, and M4 buttons:
When the controller is connected to a computer, press and hold the M+M1 button (or M2, M3, or M4) for 3 seconds until the RGB red light illuminates steadily. This will enter programming mode. At this point, perform a sequence of operations, such as ×, ○, □, △, LB \ RB \ LT \ RT, for input. Then, press the M1 button (or M2, M3, or

M4). The RGB red light will flash three times, indicating that the button has been recorded and programmed successfully. Macro programming supports up to 24 buttons at a time. If more than the number of buttons are pressed, the RGB light will flash the current color to indicate the controller exits.

For example, to program a set of action buttons: ×-○-□-△-RB-LB to the M1 button, press and hold the M+M1 buttons for 3 seconds, then enter the buttons ×-○-□-△-RB-LB in sequence, and press the M1 button again to complete the setting. When using, press the M1 button and the controller will trigger the functions in the entered sequence: ×-○-□-△-RB-LB.

4.4.2 M1, M2, M3, and M4 button mapping: When the controller is connected to a device, press and hold the M+M1 button (or M2, M3, or M4) for 3 seconds until the RGB light turns solid red and the controller enters programming mode. Then, press a function button, then press the M1 button (or M2, M3, or M4). The RGB light flashes red three times, and the M1 button (or M2, M3, or M4) is mapped to a single function button.

4.4.3 Clearing the M1, M2, M3, or M4 button functions: Press and hold the M+M1 button (or M2, M3, or M4) for 3 seconds until the RGB light turns solid red and the controller enters programming mode. Press the M1 button (or M2, M3, or M4) again without

entering any function buttons to exit programming mode. The original function of the M1 button (or M2, M3, or M4) will be cleared, and the button will be disabled.

4.4.4 The programmable buttons on the controller are: ×, ○, □, △, Up, Down, Left, Right, L3, R3, LB, RB, LT, RT, and two simulated 3D joysticks.

4.4.5 The M1, M2, M3, and M4 buttons can be set with power-off memory: The settings described above for the M1, M2, M3, and M4 buttons on the controller will retain the previous settings after powering off and restarting the device. The factory default settings for the M1, M2, M3, and M4 buttons are M1 = ○, M2 = ×, M3 = △, and M4 = □.

4.5 Sleep

The factory default is 5 minutes to sleep. Pressing any other button restarts the timer. Press and hold the PS button for 5 seconds to enter sleep mode.

4.6 Trigger/Stick Calibration

Press and hold the △+○+PS buttons for 2 seconds to enter calibration mode. The PS button light will turn red and breathe. You will need to rotate the stick at least three times, press the trigger button three times, and then press the PS button. The PS button light will return to normal.

5. Controller charging and low battery prompt

5.1 When the controller is in sleep mode or not connected to a device, insert the adapter. The RGB light will slowly flash orange and turn off when fully charged.

5.2 When the controller is charging while connected to a device, the RGB light will slowly flash in the color of the current connection mode and turn solid when fully charged.

5.3 When the controller battery voltage drops below 3.6V, the RGB light will quickly flash in the color of the current connection mode, indicating that the controller needs to be charged.

5.4 Powering off a 3.3V controller

6. Resetting the Controller

6.1 If the controller experiences any anomalies, such as garbled buttons, freezing, or connection failure, you can try resetting it to resolve the issue. To reset: insert a thin object, such as a paper clip, into the small reset hole on the back of the controller and press the internal reset button.

6.2 After testing all functions and before packaging, you must perform a factory reset on the controller to prevent inconsistent function status. Simultaneously press and hold the L1+R1+PS buttons for 3 seconds. The RGB light will illuminate white, then turn off. This indicates factory default settings, and all settings will be

restored to their factory defaults.

7. The controller is factory-set to "Lock Mode."

To enter "Lock Mode," press the "L3+R3+PS" keys for 3 seconds. This will reset the controller to factory settings. After the factory reset is complete, the RGB light will flash red four times, and the motor will briefly vibrate once. (In "Lock Mode," all buttons are disabled to prevent battery drain from accidental button presses during packaging and shipping.)

Note: After testing all functions and before packaging, select "Reset Controller" or "Lock Mode" based on customer needs.

8. Exiting Lock Mode

When the controller is in Lock Mode, all buttons will not work to wake it up. You must charge the controller using a USB cable to exit Lock Mode and restore normal functionality.

9. Electrical parameters

(1) Electrical parameters (All voltages are referenced to GND, ambient temperature is 25° C)

Item	Symbol	Conditions	Min.	Typ.	Max	Unit
Working voltage	V_o	Complete machine	3.3		4.2	V
Working current (when the speaker and motor are not turned on)	I_o	Complete machine		45	60	mA
Sleep current	I_{sp}	Complete machine			20	uA
Motor current	I_m	Size	80		160	mA

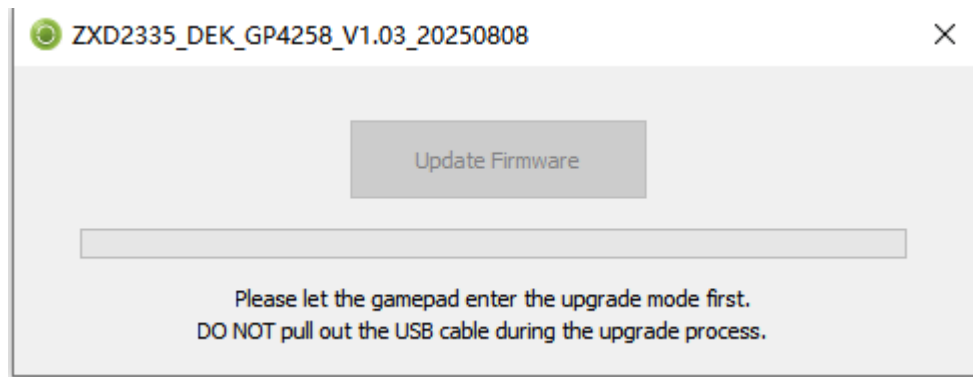
(2) Battery parameters (All voltages are referenced to GND, ambient temperature is 25° C)

Item	Symbol	Parameter	unit
Rated capacity	C	1200	mAH
Nominal voltage	BAT_V	3.7	V
Charging current	BAT_ I_{IN}	590—0	mA
Battery life	BAT_ H	7-20 (Different usage scenarios lead to different usage times)	H

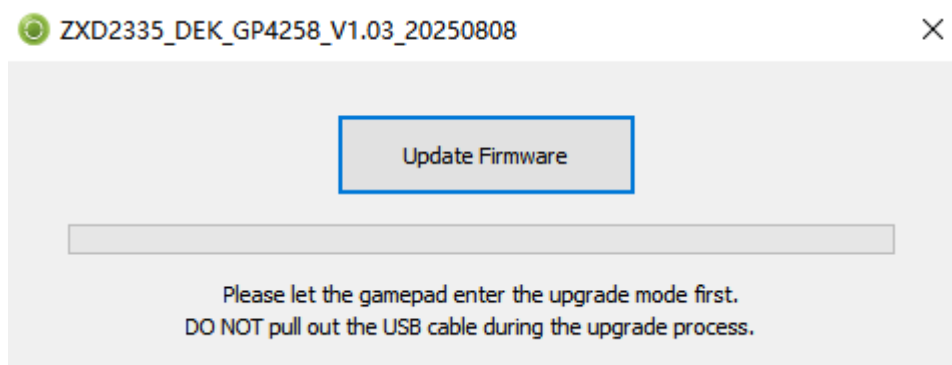
10. Firmware Upgrade

When the user needs to upgrade the host system or update the controller function during use, the controller can be connected to the PC via the USB data cable for upgrade.

(1) Double-click the upgrade program file, such as: After opening, the upgrade interface is as follows



(2) When the controller is in standby mode, press and hold L3 (left 3D push button) and connect the controller to the computer using a Type-C data cable. The controller program will then enter the upgrade state. Click Update Firmware to enter the upgrade, and then click Yes (Y) to upgrade as shown in the figure.



FCC Warning:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement.