

# **Bluetooth Handle Product Specifications**

## 1. Product description:

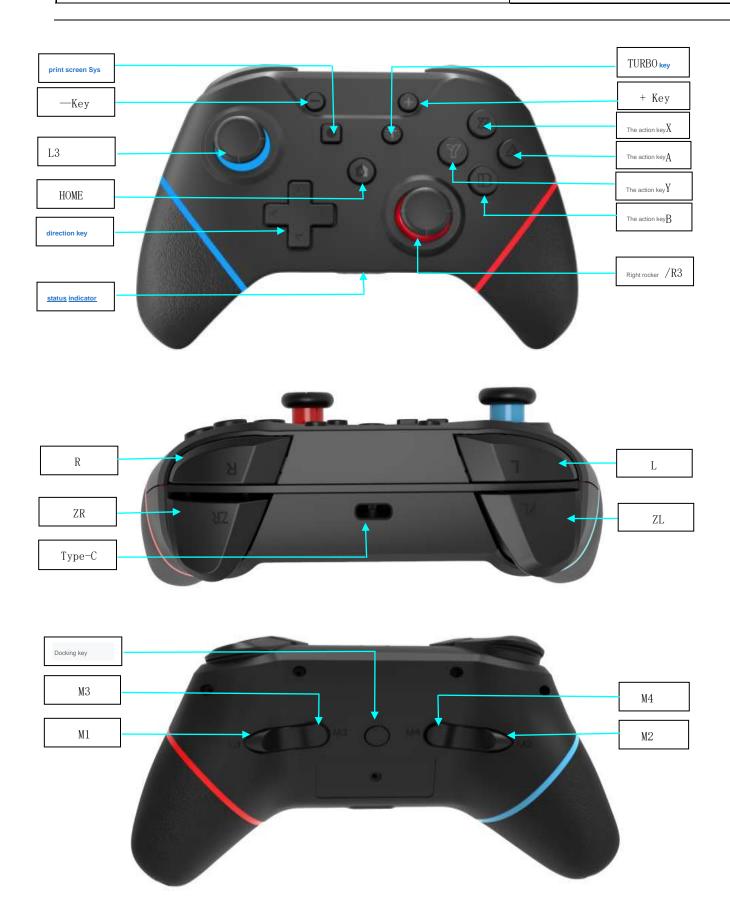
This product belongs to Switch Pro Bluetooth game controller. It is connected to Switch host through Bluetooth communication and supports wired connection.

- 2. Product Features:
- (1) Include all the buttons and corresponding functions of the original Switch handle, and increase the function of adjusting continuous speed and motor vibration strength;
- (2) Provide 4 LED status indicators;
- (3)20 function keys input, "docking" button to facilitate the first pairing and shutdown;
- (4) Built-in double motors, high precision 3D rocker;
- (5) There are 4 mapping keys M1, M2, M3 and M4 on the back, with two groups of functions to choose from;
- (6) Equip with 6-axis gyroscope, fast and accurate target locking;
- (7) Compatible with PC host and support X INPUT mode.



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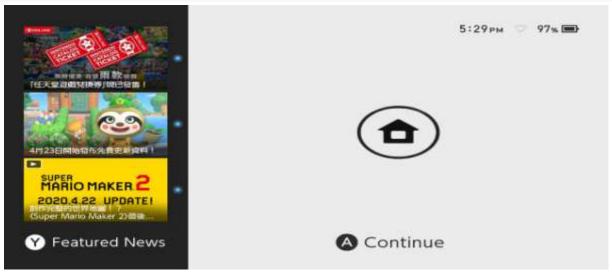
## 3. functional description

- 4. (2) Bluetooth connection to the Switch host: for the first use of the handle, long press the "docking" button of the handle for about 3 seconds, until the LED1-4 water light flickers after the handle is turned on, open the Switch host to the pairing interface for Bluetooth pairing, after the successful pairing, all functions of the handle can be used normally, the host allocation handle channel light is long on; If the match is not successful, the controller will automatically sleep after 60 seconds.
- 5. (3) Wired guided Bluetooth docking function: After the gamepad is connected to the Switch host via USB data cable, press any key of the gamepad to wake up, unplug the data cable, and the gamepad will automatically connect to the Switch host through Bluetooth;
- 6. (4) "Docking" button operation: long press the "Docking" button for 3 seconds in the hibernation state, the handle enters the Bluetooth pairing state with the host, LED1-4 state is the water light, and short press the "Docking" button in the startup state, the handle sleeps;
- 7. (5) The gamepad is connected to a PC through a USB cable, and the device display name is Xbox 360 Controller (the PC must have an Xbox 360 driver installed) to realize the function of Xbox 360 gamepad;
- 8. (6) Switch host upgrade function is not supported for the gamepad. To update the gamepad firmware, please download our company's program and upgrade it by connecting to PC. (If some functions of the gamepad cannot be used normally due to Switch host version upgrade, please contact our company to obtain the program and upgrade instructions for the gamepad firmware upgrade).
- 9. (7) The handle supports continuous sending function. After holding down A single function key (such as A, B, X, Y), press the "Turbo" key again, the function key has continuous sending function. If the continuous sending function of the key needs to be cancelated, repeat the above operation once. Press and hold the "Turbo" button of the handle to operate right 3D up and down at the same time. The speed of continuous firing can be adjusted in three gears: fast, medium and slow.
- 10. (8) The handle supports any key wakeup (except L3, R3, Turbo, M1, M2, M3, M4 keys). After wakeup, the handle enters the state of connecting back, LED1-4 is the flashing water light. If the handle is not matched with the Switch host before, it will connect back to the host.
- 11. (9) The button part of the joystick is composed of UP, DOWN, LEFT, RIGHT, A, B, X, Y, L, R, ZL, ZR, L3, R3, -, +, TURBO, HOME, screenshot, docking 20 function keys and 4 mapping keys M1, M2, M3, M4, equipped with LEFT and RIGHT 3D joystick;
- 12. (10) The handle is equipped with vibration function. In the "Settings" option of the Switch host, the motor vibration function of the handle can be turned on or off manually. The handle also supports the adjustment of vibration intensity. When the handle is connected, press and hold the "Turbo" button of the handle to conduct the left 3D up and down operation at the same time, which can enhance and weaken the motor vibration intensity. After operation, there will be a 3-second vibration prompt.
- 13. (11) There are four mapping keys M1, M2, M3 and M4 on the back of the handle, and there are four groups of states to choose from. The first three groups of states are mapping functions, the first group is M1-A, M2-B, M3-X, M4-Y, and the second group is M1-R, M2-L, M3-ZR, M4-Z. In the third group, both M1 and M3 were R3, and both M2 and M4 were L3. In the fourth group, M1, M2, M3 and M4 had no functional output. When connected to Switch host or PC, press and hold the "Turbo" button of the handle and then press the "-" button to Switch the four groups of states. When the handle leaves the factory, the function of the back mapping key defaults to M1-A, M2-B, M3-X and M4-Y.
- 14. 4. The charging



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- 15. The channel light flashes when the adapter is inserted, and then the channel light goes off when it is fully charged.
- 16. When the handle is charging on line, the corresponding channel light will flash slowly and light long after it is full.
- 17. 5. Low power alarm
- 18. When the battery voltage of the handle is lower than 3.6V, the light of the corresponding channel flashes to indicate that the power of the handle is low and it is necessary to charge the handle.
- 19. 6. Standby
- 20. When the handle is in the power-on state, press the "docking" button to stand by.
- 21. When the handle is in the pairing state, it will automatically stand by when the code cannot be adjusted after 60 seconds.
- 22. 7. Reset function
- 23. When the handle is abnormal, it can be reset by pressing the "butt" button.
- 24. 8. Receiving distance
- 25. The effective receiving distance of the handle is within 10M.
- 26. 9. Reference current
- 27. Sleeping current: less than 2uA;
- 28. Pairing current: less than 20mA;
- 29. Operating current (without vibration): less than 20mA.
- 30. 5. Electrical specification of handle
- 31. Power supply: Built-in polymer battery Duration: 8-10 hours
- 32. Battery capacity: 500mAh Charging time: 2.5 hours
- 33. Charging voltage: DC5V Charging current: 200mA
- 34. 6. Instructions for Bluetooth connection to Switch host
- 35. (1) Click the "House" icon on the right side of the screen to enter the main menu after switching on the host, as shown below:
- 36. 9. Reference current
- 37. Sleeping current: less than 2uA;
- 38. Pairing current: less than 20mA;
- 39. Operating current (without vibration): less than 20mA.

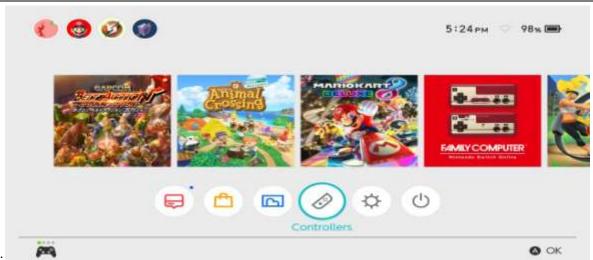


Click the "Contrellers" item in the main menu of Switch host, as shown



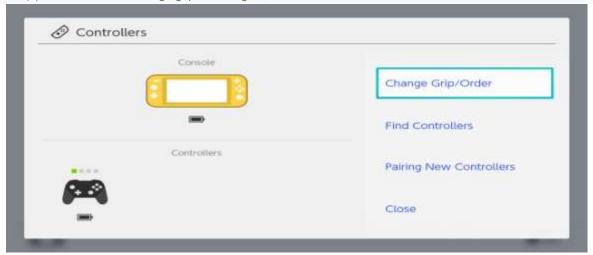
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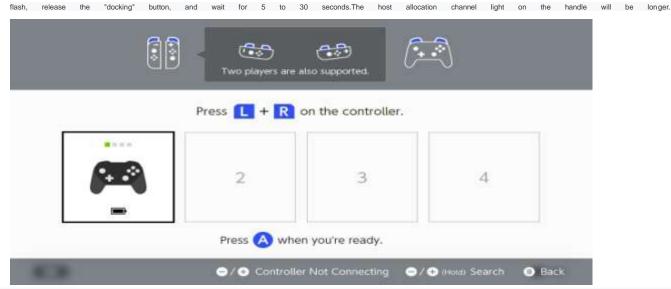


below:

(1) Select the item "Change grip/order" again, as shown below:



(1) Click "Change Grip/Order" to enter, and the matching interface as shown below will appear. At this point, long press the "docking" button of the handle for 3 seconds for pairing. Four LED water lights will



5: Factory calibration of handle gyroscope inductor



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In the joystick sleep state, first hold down the left 3D rocker (L3 key), and then press "R" key. The channel light will light up and flash left and right, and the joystick will enter the gyroscope sensor factory correction mode. Place the handle on a flat table and press the "+" button. After release, the 4 channel lights will light up and all will be off in 3 seconds. After the factory completes the calibration, the handle will return to the dormant state. (Before the product leaves the factory, the gyroscope sensor shall be corrected according to this operation)

#### 6. Factory mode setting of handle

When the handle is in hibernation state, hold down the left 3D rocker (L3 key) and the right 3D rocker (R3 key), and then press the "docking" key. All the channel lights will be on, and the handle will enter the factory mode. After releasing the "docking" button, the joystick returns to sleep state. Note that the "docking" button should not be pressed for more than 2 seconds during the setting process. (The wake-up function of any key is turned off in the factory mode of the handle, which can avoid the problem that the handle is often in the connection state caused by miscontact due to packaging and transportation.)

#### 7. Exit factory mode

When the gamepad is in factory mode, only the "butt" button can open the gamepad.Long press the "butt" button of the handle, and after successfully connecting the Switch host once, the handle will automatically exit the factory mode. After using the handle, it can wake up with any key.

#### 8. Calibrate the handle gyroscope inductor with Switch host

After the Switch host is successfully connected to the gamepad, return to the main menu of the screen and click "Settings" to enter the Settings menu. Scroll down the setting menu, click the item "Handle and Sensor", scroll up the menu to expand to the right, select "Calibration Gyroscope Sensor", and click "Calibration Handle" in the pop-up menu. The host enters the calibration handle interface. First, place the handle on a flat desktop, and then follow the instructions on the screen. Long press the "-" or "+" button of the handle to complete the gyroscope calibration. Gyroscope correction interface is as follows:



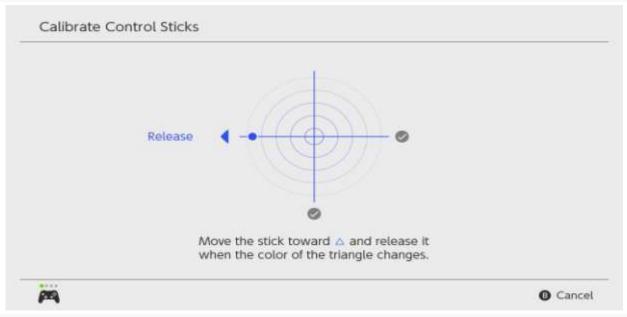
#### 5. Use Switch host to calibrate the 3D joystick

After the Switch host is successfully connected to the gamepad, return to the main menu of the screen and click "Settings" to enter the Settings menu. Drag down the setting menu, click the item "Handle and Sensor", scroll up the menu list on the right, select "Calibration Rocker", press the rocker to be calibrated on the screen, enter the confirmation interface of "Calibration Rocker", press the "X" button of the handle to appear the prompt menu, and then press the "A" button to confirm the calibration. After entering the "Correction Joystick" correction



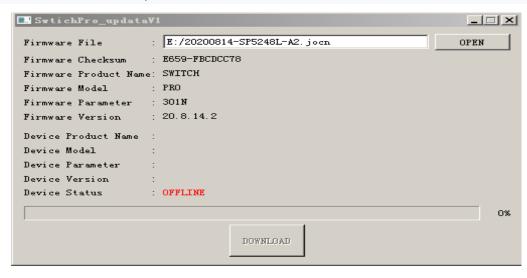
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interface, please follow the instructions on the screen to complete up, down, left, right and circle correction actions. The joystick correction interface is as follows:



#### Handle firmware upgrade

(1) If some functions of the gamepad cannot be used or the functions of the gamepad need to be updated due to the upgrade of the host system, you can upgrade the firmware of the gamepad through PC. Double click "SwtichPro\_Updatavx.x.exe" (Vx.x is the current version number of the application program) to OPEN the application tool, and then click "Open". Select Add Handle Program File, such as "20200814-SP5248L-A2.jocn", as shown below:

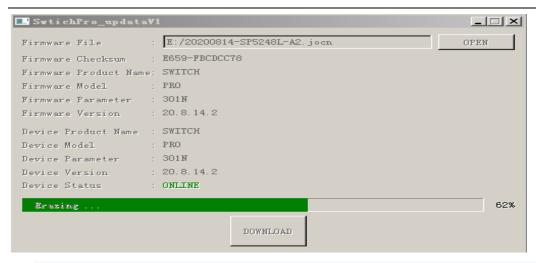


5.

(2) Press the left and right 3D to hold in the phone's sleep state (note that you should not touch other buttons to wake up the joypad by mistake), connect the joypad to PC with Type-C data cable, release the left and right 3D after connection, at this time, "Download" turns from gray to black, that is, the connection is successful, click "Download" to upgrade. The diagram below:

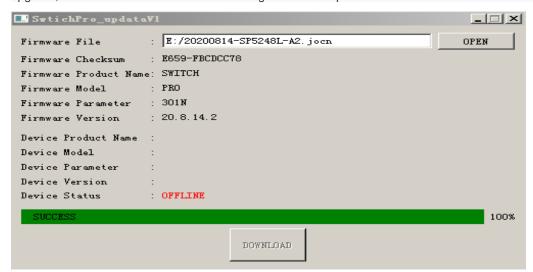


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During the upgrade, keep the connection of data cable stable. After a few seconds, the upgrade will be completed. After the upgrade,

the following picture will be displayed:



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. This equipment can be used in portable exposure condition without restriction.