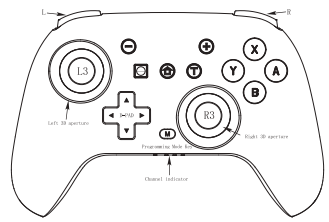
Wireless controller For NS
Model: WR-028

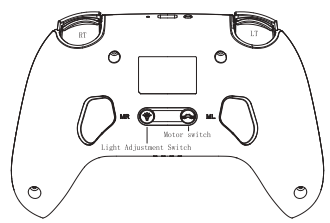
1. **product description:**

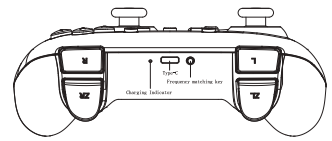
This product belongs to Switch Pro Bluetooth game controller, which connects to Switch host through Bluetooth communication and supports wired connection.

2. **Product features:**

(1) Contains all the keys and corresponding functions of the Switch original hand controller, adding the continuous firing speed, motor vibration and 3D rocker sensitivity adjustment function;
(2) Provide 4-channel LED status indication, with left and right 3D joystick aperture lamp effect;
(3) A dedicated Bluetooth "docking" key;
(4) Built-in double motor, high-precision 3D rocker;
(5) With 2 switch buttons on the back, you can switch the 3D aperture light and the motor function respectively;
(6) The handle "HOME" key can wake up the host, and any key can wake up the handle to connect back to the host;
(7) With a 6-axis gyroscope, to quickly and accurately lock the target;
(8) Compatible with PC host, support X_input mode.







3. **functional description**

(1) Handle connection to Switch host: ① wired connection, so that the USB data cable and Switch host connection.② Connect with the Switch host through Bluetooth communication;
(2) Bluetooth connection Switch host: for the first time, use the data cable to charge the handle, exit the "lock mode", press the handle "frequency" key for about 3 seconds, release the LED1-4 water lamp after flashing, open the Switch host to the matching interface, and conduct Bluetooth pairing. The functions of the handle to the normal use; if not paired, the handle will automatically sleep after 60 seconds;
(3) Wired guide Bluetooth docking function: After the handle connects to the Switch host through the USB data cable, press the handle with any key to wake up, unplug the data cable, and the handle automatically connects to the Switch host with Bluetooth;
(4) "Fency" button operation: press the "frequency" button for 3 seconds, the handle enters the host Bluetooth pairing state, LED1-4 state is the water light, the boot state short press the "frequency" button, the handle sleep;
(5) After the handle is connected to the Switch host, when the host enters the dormant state, press the "HOME" key of the handle to wake up the host;
(6) The handle is connected to the PC through the USB data cable, and the device display name is Xbox 360 Controller to realize the function of the Xbox 360 handle. In the Xbox 360 state, press the "screenshot" and the direction "DOWN" key at the same time to change the key value position of A, B, X, Y, switch to the Xbox 360 handle key layout, repeat the above operation or disconnect the PC, and restore the Switch PRO handle key layout;
(7) When some functions of the handle cannot be used normally due to the Switch host version upgrade, the handle needs to be firmware upgrade. The handle does not support the automatic upgrade of the Switch host. It needs to obtain the upgrade program and operation instructions, and connect to the PC for upgrade;
(8) **Key programming (mapping) mode operation steps:**

1. Press the M programming mode button for 2 seconds, and the left and right 3D aperture lights flash slowly, indicating that the handle has entered the programming mode;
2. Press any of the following buttons to be programmed (mapped): A / B / X / Y / LB / RB / L3 / R3 / D-PAD, left and right 3D aperture light flash;
3. Press any of the left and right programmable keys (left or right programming keys), and the left and right 3D aperture lights change from flash, indicating the success of button programming (mapping);Note: programming 16 keys; after 1 minute, automatically exit programming mode;
4. To program the next button, repeat the above 3 steps.

Note: The programming function is still valid after power failure.

Clear the programming (mapping) functionality:

1. Press the M programming button for 2 seconds, and the left and right 3D aperture lights flash slowly, indicating that the handle has entered the programming mode;
2. Press the programming key to clear ML and MR, and the left and right 3D aperture lights flicker and lengthen, indicating that all the programming (mapping) functions are cleared.

(9) The handle supports continuous firing function and continuous firing speed adjustment. Press a function button for "TURBO" and press the button; press the button again, or press the "TURBO" button for 3 seconds to clear the button; the handle will save the user's setting of the function. Press and hold the "TURBO" button of the handle, and operate the right 3D up and down at the same time, for continuous speed adjustment, fast, medium and slow three gear, default slow gear; (set the factory lock machine will also clear the continuous function of all keys)
(10) The handle supports any key to wake up (L3, R3, TURBO, M, light switch, except for motor switch), the controller and the LED1-4 is the water light flashing. If the handle matches with the Switch host, it will return to the Switch host (note: no Android and IOS devices before the handle is dormant);
(11) The key part of the handle consists of UP, DOWN, LEFT, RIGHT, A, B, X, Y, L, R, ZL, ZR, L3, R3, -, +, TURBO, HOME, M, ML, MR, screenshot, docking 22 function keys and light switch, motor opening key composition, equipped with left and right 3D joystick;
(12) The handle has vibration and vibration strength adjustment function. In the "Settings" option of the Switch host, the handle motor vibration function can be manually turned on or off. When the handle is connected, press and hold the "TURBO" button of the handle, while the left 3D upward and down operation, can enhance and weaken the vibration strength of the motor, after the operation, there will be 3 seconds vibration prompt, a total of 100% -70% -30% -0% four gears for users to choose, the default 70% gear;
(13) Press the light button on the back of the handle for 3 seconds to turn off the left and right 3D aperture light; press the motor button for 3 seconds to turn off the vibration function of the left and right motor.(Power-on is enabled by default)
(14) Light efficiency adjustment mode:

1. light key + R3: mode adjustment, 3 modes of order switch always bright, breathing horse racing, magic color.
2. Light key + L3: bright mode: switch color, breathing horse mode: no effect, magic color mode: fixed display current color / dynamic color switch
3. Press the 3D rocker L3 + R3 for 3 seconds to prompt the motor to set the color of RGB aperture for 1 second; press L3 button to switch RGB color (colorful breath cycle, blue, red, pink, orange, yellow, blue, purple, closed); when switching to the light color, press R3 button for 1 second; if not R3 button for confirmation, the handle will automatically confirm the motor vibration for 1 second
4. + and Turbo combination key, press at the same time for 3 seconds, the motor vibration, the way to restore the initial setting.

(14) The handle is connected to the Android and IOS system devices.① Bluetooth connection of Android device: open the Bluetooth Settings of the device (such as mobile phone, TV), press the "Y" and "docking" keys of the handle, the middle indicator (LED2, LED3) flash to enter the pairing state, the device search the Bluetooth device name "Gamepad", and click the pairing connection.② IOS system device Bluetooth connection: turn on the Bluetooth Settings of the device, press the "X" key and "docking" keys of the handle, both sides of the handle indicators (LED1, LED4) flash to enter the pairing state, the device searches for the Bluetooth device name "Xbox Wireless Controller", and click the pairing connection. After successful pairing, the next time you press any key to wake up the controller, you will return to the Android and IOS devices.

4. **Charging**

Plug in the adapter and the orange charging light is on. When fully charged, the orange charging light goes off.

5. **Low-power alarm**

When the handle battery voltage is lower than 3.3V, the light flash in the corresponding channel indicates that the handle is low power and the rival handle needs to be charged.

6. **Standby**

When the handle is in the boot state, press "frequency" the handle standby;
When the handle is in the paired state, 60 seconds after the code cannot be automatically standby;
When the handle is connected to the host, it will automatically standby for 5 minutes;

7. **Reset function**

When the handle is abnormal, it can be reset by long pressing the "HOME" key for 10 seconds.

8. **Receive distance**

The effective receiving distance of the handle is within 10M.

9. **Refer to current**

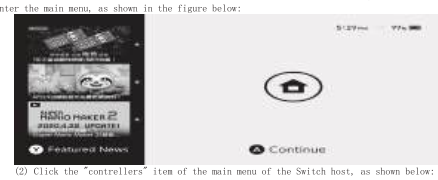
Sleeping current:≤15uA — Paired current:≤45mA
Operating current (with no vibration):≤40mA — Operating current (when shaking):≤250mA.

10. **Electrical specification of the handle**

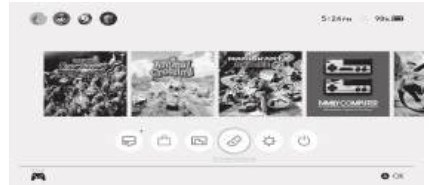
Power supply mode: built-in polymer battery — Use time: 8 hours
Battery capacity: 600 MAH — Charging time: 2.5 hours
Charging voltage: DC5V — Charging current: 250MA

11. **A Bluetooth connection to the Switch host by description**

(1) After the Switch host is turned up, click the "House" icon on the right side of the screen to enter the main menu, as shown in the figure below:



(2) Click the "controllers" item of the main menu of the Switch host, as shown below:



(3) Select the "change grip / order" item again, as shown below:

(4) Click "change grip / order" to enter, the matching interface below, then press the handle "docking" key for 3 seconds to match, 4 LED flow lights flashing, open the "docking" key, wait 5 to 30 seconds, the handle is connected to the host, the host screen handle icon, the host distribution channel light will be on.

12. **Gyroscope sensor correction**

Place the handle on the flat desktop, press the "B", "-", "and" HOME "keys in the dormant state, the channel light up and from the flow light to flashing up and down, the handle into the gyroscope sensor correction mode, press the" + " key and release, the channel light after 1 second, the gyroscope sensor calibration is completed.

13. **The handle is set in "Lock machine mode"**

Handle under the boot state (connecting host or PC), long press "L1" and "L3" key for 3 seconds, 4 channel light for 1 second, and then press "connect" key after shutdown, the handle into the "lock mode" (handle "lock mode" closed all key function, can avoid the problem of battery power consumption caused by packaging and transportation button, the product should set the "lock mode" before delivery)

14. **Exit Lock Machine mode**

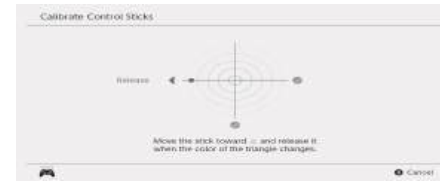
When the handle is in "Lock mode", all the buttons cannot be turned on to wake up the handle. Use USB data cable to reverse the "lock mode" and the function of the handle to normal.

15. **Use the SWITCH host to correct the handle gyroscope sensor**

Switch After the host is successfully connected to the handle, return to the main screen menu, click "Settings" to enter the Settings menu. Stroke the Settings menu down, click the item "Handle and Sensor", turn up the menu list expanded on the right, select "Fix gyroscope Sensor", and click "Calibrate Handle" in the pop-up menu. The host enters the calibration handle interface, first place the handle on the flat desktop, then operate according to the screen prompt, long press the "-" or "+" key of the handle to complete the gyroscope correction. The gyroscope correction interface is as follows:

16. **Use the SWITCH host to correct the handle 3D rocking lever**

Switch After the host is successfully connected to the handle, return to the main screen menu, click "Settings" to enter the Settings menu. Stroke the Settings menu down, click the item "Handle and Sensor", turn up the menu list on the right, select "calibration joystick", press the required calibration joystick prompted on the screen, enter the "calibration joystick" confirmation interface, press the handle "X" key, the prompt menu appears, and then press the handle "A" key to confirm the correction. After entering the "calibration joystick" calibration interface, please complete the joystick correction action up, down, left, right and circle action according to the screen prompts. The rocker correction interface is as follows:



17. **Key Linker application**

(1) Install KeyLinker APP: open the application market in the mobile phone or tablet, enter "KeyLinker" to search, select KeyLinker APP to complete the installation, or scan the QR code below for installation.

This product supports over-the-air Bluetooth OTA upgrade, please download the following APP to use.
This product supports Bluetooth Elite controller advanced Settings, please download the following APP to use the above text.
Choose one of the two based on the function
KeyLinker APP download

You can search "KeyLinker" in AppStore, Google play, 360 AppStore, Dandelion Xiaomi AppStore, Huawei AppStore, OPPO AppStore, Tencent AppStore and other platforms to download, or scan the above QR code to download

(2) Use KeyLinker APP: Air upgrade can be achieved through APP. KeyLinker APP will constantly update functions. Understand KeyLinker, click the menu in the upper right corner of APP, including update APP, Bluetooth Settings, user agreement and privacy policy. After connecting the handle, you can update the APP, upgrade the handle firmware, restore the factory, and press the button test. Click "Help" with detailed APP instructions.

18. **Upgrade the handle firmware with PC (also: support OTA upgrade mode, update the firmware through mobile KeyLinker APP)**

(1) When some functions of the handle cannot be used due to the host system upgrade or the opponent handle function needs to be updated, the firmware can be upgraded through the PC opponent handle. Double-click the upgrade program such as "2021-04-14-ZXD1234-SW002-V1.00" (the program date and Vx.x version number are for reference only).
(2) under the handle dormant state press hold left 3D (note that this operation can not touch other keys wake up the handle), use TYPE-C cable will connect the handle and PC, connect after release left 3D, then "Update Firmware" from gray to black, namely the connection is successful, click "Update Firmware" to upgrade (there will be a program version prompt dialog, can click to confirm).
(3) Keep the data line connection stable in the upgrade, and complete the upgrade after a few seconds.

FCC STATEMENT :

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.
Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

RF warning statement:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.