

BlueRetro

Wireless Controller Adapter For Nintendo SNES/SFC Console



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BlueRetro

This device is a wireless controller adapter for SNES/SFC console, compatible with the best-selling Bluetooth controllers on the market.

Based on the open source project [[darthcloud](#)] (<https://github.com/darthcloud/BlueRetro>), built-in the popular ESP32 chip.

Support PS3 / PS4 / PS5 / Xbox One S / Xbox Series X|S / Wii / Wii U Pro / Switch Pro / Switch Joycon / 8bitdo / Retro-Bit Wireless Controller, etc.

*This product can't support hot plugging. Please power off your console first, then install this device.

*This device maybe a little power thirsty, please do not using other power hungry accessories on your console same time.

Features

- 1) Only suitable for SNES/SFC console.
- 2) Support Firmware updatable and rumble.
- 3) Almost zero latency, the PS4 & PS5 controller less than 6ms of latency using BlueRetro.
- 4) Compatible Xbox One S / Xbox Series X|S / Wii / Wii U Pro / Switch Pro / Switch Joycon / 8bitdo / Retro-Bit PS3 / PS4 / PS5 Wireless Controller.
- 5) Supports Keyboard/trackball/mouse console accessories.
- 6) The key value of the buttons can be configured through the web Bluetooth port of the Google Chrome.

Instructions

Button Usage

- "BOOT" Button:
 - Under < 3 sec hold:
Disconnect all Bluetooth devices.
 - 3sec~6sec hold:
Start the new pairing.
 - 10 sec holds:
Restore to default configurations
and clear BT pairing keys.



"SYNC" LED Status

- "RED LED" FULLY ON: Bluetooth failure
- "RED LED" Pulsing: Searching wireless controller
- "BLUE LED" FULLY ON: Bluetooth connected successfully

Pairing with PS4 or PS5 controller

First time pairing

- 1) Boot up BlueRetro and make sure adapter is in inquiry mode ("SYNC" RED LED pulsing).
- 2) Hold down "Share" button (PS4) or "Create" button (PS5) and "PS" button of the controller simultaneously until the light bar flash blink.



Press and hold "Share" or "Create" & "PS" button
(Bluetooth Inquiry Mode Enable)

Successful pairing

- 1) For BlueRetro adapter: The "SYNC" BLUE LED fully on.
- 2) For PS4 or PS5 controller: The light bar fully on.



Reconnect

Simply hold down the "PS" button on the PS4 or PS5 controller until the Bluetooth function is activated. Then it will reconnect to BlueRetro adapter automatically.

Pairing with Xbox One S, Series X|S controller

As of v1.2.1 the minimum required Xbox FW for controller are:

Xbox One S: 4.8.1923.0 Adaptive: 4.5.1680.0 Series X|S: 5.9.2709.0

Update via the [Xbox accessories Win10 app](#).

(<https://apps.microsoft.com/store/detail/9NBLGGH30XJ3?hl=en-us&gl=US>)

For details of the update procedure, please visit on:

(<https://support.xbox.com/en-US/help/hardware-network/controller/update-xbox-wireless-controller>)

First time pairing

- 1) Boot up BlueRetro and make sure adapter is in inquiry mode ("SYNC" RED LED pulsing).
- 2) Power on controller via "Xbox" button and then hold the black "SYNC" button until the LED of "Xbox" button flash rapidly.



Press and hold Black "SYNC" button
(Bluetooth Inquiry Mode Enable)

Successful pairing

- 1) For BlueRetro adapter:
The "SYNC" BLUE LED fully on.
- 2) For Xbox One S, Series X|S
& Adaptive controller:
The LED of "Xbox" button
comes to constant.



Reconnect

Simply hold down the "Xbox" button on the controller to power on. Then it will reconnect to BlueRetro adapter automatically.

Pairing with Wii & WiiU Pro controller

First pairing

- 1) Boot up BlueRetro and make sure adapter is in inquiry mode ("SYNC" RED LED pulsing).
- 2) Press red "SYNC" button, then the four lights flash.
- 3) LEDs will stop blinking on controller once pairing is complete.



Press and hold red "SYNC" button
(Bluetooth Inquiry Mode Enable)

Successful pairing

- 1) For BlueRetro adapter:
The "SYNC" BLUE LED fully on.
- 2) For Wii & WiiU Pro controller:
The first light fully on.



Reconnect

Simply press power button on the controller. Then it will reconnect to BlueRetro adapter automatically.

Pairing with Switch Pro & Joycon

First time pairing

- 1) Boot up BlueRetro and make sure adapter is in inquiry mode ("SYNC" RED LED pulsing).
- 2) Press and hold the "SYNC" button on the top of the gamepad until the indicator on the underside of the pad starts flashing back and forth.



Successful pairing

- 1) For BlueRetro adapter: The "SYNC" BLUE LED fully on.
- 2) For Switch Pro & Joycon controller: The first light on the left fully on.



Reconnect

Simply press any button on the controller. Then it will reconnect to BlueRetro adapter automatically.

Pairing with 8bitdo controller

As of v1.2.1 the minimum required 8bitdo FW for controller are:

SF30: v1.37 Gbros adapter: v2.25

Update via the [8bitdo Win10 app](#).

(<https://apps.microsoft.com/store/detail/9NBLGGH30XJ3?hl=en-us&gl=US>)

For details of the update procedure, please visit on:

(<https://support.8bitdo.com/firmware-updater.html>)

First time pairing

- 1) Boot up BlueRetro and make sure adapter is in inquiry mode ("SYNC" RED LED pulsing).
- 2) Power up 8bitdo controller in Xinput mode, then LED 1 will start to blink. ("Start + X" button or set switch to X) **(Only supported in Xinput mode!)**.

Set switch to X
(Turn on Xinput mode)



- 3) Press and hold "SYNC" button until LED starts flashing back and forth.



Press and hold "SYNC" button
(Bluetooth Inquiry Mode Enable)

Successful pairing

- 1) For BlueRetro adapter: The "SYNC" BLUE LED fully on.
- 2) For 8bitdo controller: The first light on the left fully on.



Reconnect

Simply press start button on the controller. Then it will reconnect to BlueRetro adapter automatically.

Pairing with Retro-Bit controller

First time pairing

- 1) Boot up BlueRetro and make sure adapter is in inquiry mode ("SYNC" RED LED pulsing).
- 2) Power up Retro-Bit controller in Xinput mode ("Home + X"), then LED starts flashing back and forth. **(Only supported in Xinput mode!).**



Press and hold "HOME+X" button
(Bluetooth Inquiry Mode Enable)

Successful pairing

- 1) For BlueRetro adapter: The "SYNC" BLUE LED fully on.
- 2) For Retro-Bit controller: The LED fully on.



Reconnect

Simply press "Home" button on the controller. Then it will reconnect to BlueRetro adapter automatically.

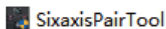
Pairing with PS3 controller

NOTE: Only official PS3 controllers are supported.

First time pairing

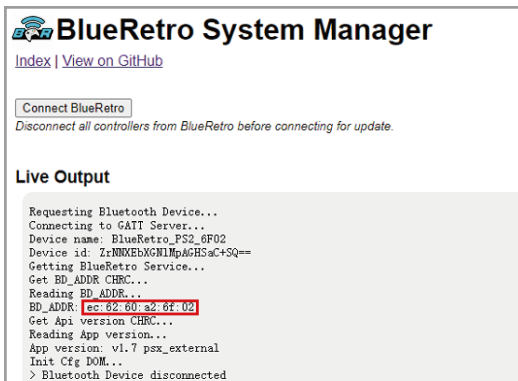
Windows

- 1) Download and install [Sixaxis Pair Tool](https://sixaxispairtool.en.lo4d.com/windows).
(<https://sixaxispairtool.en.lo4d.com/windows>)

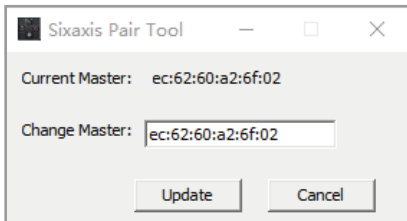


- 2) Connect the BlueRetro adapter to PC or phone to get BD ADDR (MAC address). (Make sure your converter is plugged into the console or connected to the USB cable for power)
 - Open (<https://blueretro.io>) in a chrome web browser. (Windows PC)
 - Navigate to "BlueRetro System Manager".
 - Click on "Connect BlueRetro".
(Make sure your PC had built-in Bluetooth compatibility or a Bluetooth dongle plugged in.)

- The BD ADDR of your BlueRetro will be displayed when connected. Write it down.



- 3) Use USB cable to connect your PS3 controller to PC .
- 4) Launch Sixaxis pair tool and enter BD ADDR into the Change Master.
- 5) Click update. (Once the update is complete the controller can be disconnected from the PC.)



- 6) Insert your BlueRetro adapter into your console to boot up BlueRetro. (Make sure adapter is in inquiry mode ("SYNC" LED pulsing)).
- 7) Hold down the "PS" button on your controller until the four red lights on top of the DualShock 3 flashing.



Press and hold the "PS" button
(Bluetooth Inquiry Mode Enable)

Successful pairing

- 1) For BlueRetro adapter: The "SYNC" BLUE LED fully on.
- 2) For PS3 controller: The four red lights on top of the DualShock 3 fully on.



Led fully on

Reconnect

Simply hold down the "PS" button on the PS3 controller until the Bluetooth function is activated. Then it will reconnect to BlueRetro adapter automatically.

Firmware update

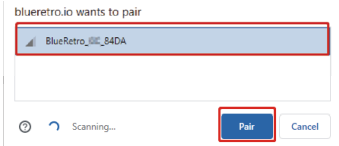
- 1) Plug the blueretro adapter into the console and power on the console.
- 2) Disconnect the controller that has been linked.
- 3) Turn on Bluetooth on your computer and type in the website (<https://blueretro.io>)
- 4) Select "BlueRetro OTA FW update" as instructed.



- 5) Click "Connect BlueRetro"



- 6) A window pops up to search for your blueretro device. When it's done, select your adapter and click Pair.



- 7) Once the connection is complete, select the latest firmware, then click the Update button, and the device will start updating automatically. (the latest firmware: <https://darthcloud.itch.io/blueretro>)

NOTE:

(To upload the latest firmware, just select the BlueRetro_SNES/SFC.bin file)

BlueRetro OTA FW update
[Index](#) | [View on GitHub](#)
Connected to: BlueRetro_..._A312 (c4:de:e2:2d:a3:12) [v1.8.2-]
Download latest FW v1.8.3 from [itch.io](#)
Select firmware: Retroscaler-B...2-Rumble.bin

Step 1

BlueRetro OTA FW update
[Index](#) | [View on GitHub](#)
Connected to: BlueRetro_..._A312 (c4:de:e2:2d:a3:12) [v1.8.2-15-g3c9f663-dirt]
Download latest FW v1.8.3 from [itch.io](#)
9%

Step 2

- 8) After the firmware update is completed, the connection will be disconnected automatically, and a message will be displayed indicating that the update has been completed. At this time, just switch on the power again and you can use it.

BlueRetro OTA FW update
[Index](#) | [View on GitHub](#)

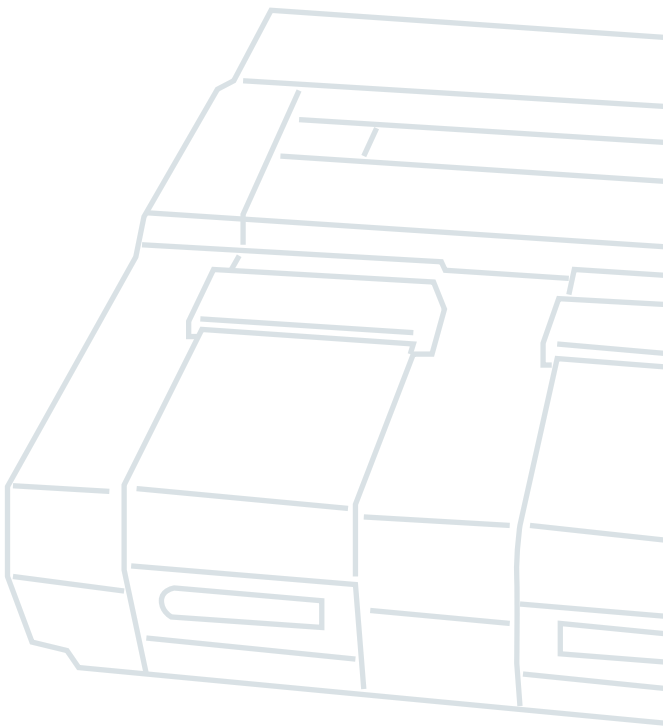
Disconnect all controllers from BlueRetro before connecting for update.
Live Output
Reading App version...
Requesting Bluetooth Device...
Connecting to GATT Server...
Getting BlueRetro Service...
Init Cfg DOM...
> Bluetooth Device disconnected

Buttons mapping reference


| SNES | PS3 | PS4/PS5 | Xbox One S/XS | Steam |
|-------------|-------------------|-------------------|-------------------|----------------------|
| | Left stick left | Left stick left | Left stick left | Left trackpad left |
| | Left stick right | Left stick right | Left stick right | Left trackpad right |
| | Left stick down | Left stick down | Left stick down | Left trackpad down |
| | Left stick up | Left stick up | Left stick up | Left trackpad up |
| | Right stick left | Right stick left | Right stick left | Right trackpad left |
| | Right stick right | Right stick right | Right stick right | Right trackpad right |
| | Right stick down | Right stick down | Right stick down | Right trackpad down |
| | Right stick up | Right stick up | Right stick up | Right trackpad up |
| D-pad left | D-pad left | D-pad left | D-pad left | Stick left |
| D-pad right | D-pad right | D-pad right | D-pad right | Stick right |
| D-pad down | D-pad down | D-pad down | D-pad down | Stick down |
| D-pad up | D-pad up | D-pad up | D-pad up | Stick up |
| | Mute | | | |
| | | | | |
| | | | | |
| Y | Square | Square | X | X |
| A | Circle | Circle | B | B |
| B | X | X | A | A |
| X | Triangle | Triangle | Y | Y |
| Start | Start | Options | Menu | Start |
| Select | Select | Share | View | Steam |
| | PS | PS | Xbox | Stick click |
| | | touchpad | Share | Analog LT |
| L | L2 | L2 | LT | LB |
| L | L1 | L1 | LB | Analog RT |
| | | | | RB |
| R | R3 | L3 | Left stick right | |
| R | R2 | R2 | RB | |
| R | R1 | R1 | | |
| | | | | |
| | R3 | R3 | Right stick click | |

| SNES | Wilmote | Wilmote + Classic | Wilmote + nunchuck | WiU Pro | Switch Joycon |
|-------------|-----------------|-----------------------|---------------------|-------------------|------------------|
| | | [C] Left stick left | [N] stick left | Left stick left | Stick left (H) |
| | | [C] Left stick right | [N] stick right | Left stick right | Stick right (H) |
| | | [C] Left stick down | [N] stick down | Left stick down | Stick down (H) |
| | | [C] Left stick up | [N] stick up | Left stick up | Stick up (H) |
| | | [C] Right stick left | | Right stick left | |
| | | [C] Right stick right | | Right stick right | |
| | | [C] Right stick down | | Right stick down | |
| | | [C] Right stick up | | Right stick up | |
| D-pad left | D-pad left (H) | [C] Right stick up | [W] D-pad left (V) | D-pad left | |
| D-pad right | D-pad right (H) | [C] Right stick up | [W] D-pad right (V) | D-pad right | |
| D-pad down | D-pad down (H) | [C] D-pad down | [W] D-pad down (V) | D-pad down | |
| D-pad up | D-pad up (H) | [C] D-pad up | [W] D-pad up (V) | D-pad up | |
| | | [W] D-pad left (H) | | | |
| | | [W] D-pad right (H) | | | |
| | | [W] D-pad down (H) | | | |
| | | [W] D-pad up (H) | | | |
| Y | 1 | [C] Y | [W] 1 | Y | B or D-pad up |
| A | B | [C] A | [W] 2 | A | X or D-pad down |
| B | 2 | [C] B | [W] A | B | A or D-pad left |
| X | A | [C] X | | X | Y or D-pad right |
| Start | "+" | [C] "+" | | "+" | "+" or Capture |
| Select | "-" | [C] "-" | | "-" | "-" or Home |
| | Home | [C] Home | | Home | |
| | | [W] B | | | |
| L | | [C] Analog L | [N] Z | ZL | SL |
| L | | [C] ZL | [N] C | L | L or R |
| | | [C] Digital L | | | |
| R | | [W] 1 | | Left stick click | Stick click |
| R | | [C] Analog R | [W] B | ZR | SR |
| R | | [C] ZR | | R | ZL or ZR |
| | | [C] Digital R | | | |
| | | [W] 2 | | Right stick click | |

| SNES | Switch Pro | Switch NES | Switch SNES | SW MD/Genesis | Switch N64 |
|-------------|-------------------|-------------|-------------|---------------|-------------|
| | Left stick left | | | | Stick left |
| | Left stick right | | | | Stick right |
| | Left stick down | | | | Stick down |
| | Left stick up | | | | Stick up |
| | Right stick left | | | | C-Left |
| | Right stick right | | | | C-Right |
| | Right stick down | | | | C-Down |
| | Right stick up | | | | C-Up |
| D-pad left | D-pad left | D-pad left | D-pad left | D-pad left | D-pad left |
| D-pad right | D-pad right | D-pad right | D-pad right | D-pad right | D-pad right |
| D-pad down | D-pad down | D-pad down | D-pad down | D-pad down | D-pad down |
| D-pad up | D-pad up | D-pad up | D-pad up | D-pad up | D-pad up |
| | | | | | |
| | | | | | |
| | | | | | |
| Y | Y | B | Y | A | B |
| A | A | A | A | C | |
| B | B | A | B | B | A |
| X | X | X | X | Y | |
| Start | "+" | Start | Start | Start | Start |
| Select | "-" | Select | Select | Mode | |
| | Home | | | Home | Home |
| | Capture | | | Capture | Capture |
| L | ZL | L | L | Z | Z |
| L | L | | ZL | X | L |
| | | | | | |
| | Left stick click | | | | |
| R | ZR | R | R | Z | ZR |
| R | R | | ZR | | R |
| | | | | | |
| | Right stick click | | | | |





 RetroScaler

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