

Instruction Manual







For use with 3DO[™] systems



About the 3DO BT

The 3DO BT is a low latency Bluetooth adapter that allows you to connect multiple Bluetooth controllers and devices to your 3DO game consoles.

Before using your adapter, please read this instruction manual carefully. Familiarize yourself with the proper use of the adapter and its features. Always operate your 3D0 BT according to these instructions.

- Features

- Low Latency
- · Use modern Bluetooth controllers and devices
- · Connect up to 7 devices
- · Flightstick support
- · Mouse support
- Robust button mapping feature
- · Apply Turbo to any button with varying speeds
- · Firmware updatable

Thank you for buying the 3DO BT adapter!

A big thanks to Jacques Gagnon "Darthcloud64" for creating the amazing BlueRetro project! A portion of the adapter cost was sent to Jacques to help continue support for the project.

BlueRetro GitHub

https://github.com/darthcloud/BlueRetro

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Physical Buttons

"R" Button: Resets the adapter

"P" Button:

- Short press (outside BT inquiry mode): Disconnect all Bluetooth devices from the adapter.
- Short press (BT inquiry mode): Cancel Bluetooth inquiry mode (new pairing).
- **3 sec hold:** Enable Bluetooth inquiry mode (new pairing). This is used to connect more than one device. (i.e. connecting more than one controller)
- **10 sec hold:** Factory resets the adapter to default configuration and clears BT pairing keys.

LED Status

- Solid: An error occurred (TIP: rebooting the adapter with the "R" button).
- Pulsing: Bluetooth inquiry mode enabled (new pairing).
- Off: No errors, Bluetooth inquiry mode disabled, controller connected.



Pairing Devices

When you power on the 3DO with the 3DO BT plugged in, the adapter will automatically be in "inquiry" mode with the LED pulsing, ready for pairing either an already paired device or new device.

Additional information can be found here:

https://github.com/darthcloud/BlueRetro/wiki/Controller-pairing-guide

Pairing Process



Power the console ON with the adapter plugged in.



- 2 The LED on the adapter will pulse indicating it's ready to pair to.
- (i) TIP: If this is the first time powering on the adapter, there may be a 30 second delay in seeing the LED pulse.



3 Put your device into pairing mode (use your device's manual to find out how to do this).

> The LED on the adapter will turn off once the device is paired to it.



Example: Initial pairing for PS5 DualSense -Press Share + PS button for several seconds until the touch bar LEDs flash rapidly

Pairing Multiple Controllers

- Press and hold the "P" button on the 3DO BT for 3 seconds or until the LED pulses. The 3DO BT is now in inquiry mode ready to be paired to.
- Put your device into pairing mode. The LED on the adapter will turn off once the device is paired to it.
- Repeat this process for each device.

Default Button Mapping

Use the below table to reference the default mapping between the 3DO and modern Bluetooth controllers. You can remap any of these buttons by following the guided "**Button Mapping**" section in this manual.

For more controller references, visit: https://tinyurl.com/bde43mbm



6 Button Controller Buttons

Dst	Source (Bluetooth Controller)				
3DO	PS5	XBOX	Switch Pro	8Bitdo M30	Retro-Bit Gen 6-btn
c i n	d e				
P	e			∎Þ	∎Þ
-	-		-	-	-
	-				
A		⊗	V	A	A
8	۲	ß	A	B	B
G	8	A	8	O	O
	L2	LT	ZL	L	L
(<u>î</u>)	L1	LB	L	۲	۲
R	R2	RT	ZR	R	R
(<u>Ř</u>)	R1	RB	R	0	0
(P)	OPTIONS	MENU	Ð	"Y" NEEDS TO BE MAPPED*	"Y" NEEDS TO BE MAPPED*
►/II [P]	OPTIONS	MENU	Ð	START	START
■ [X]	SHARE	VIEW	•	•	Ô

*The "Y" button on six button controllers doesn't map to anything by default. This is not an issue with the adapter or Web Config but rather how the 3DO handles controllers with 6 face buttons.

Web Config Overview

The 3DO BT allows you to customize and configure settings via a *Web Config* page. In order to connect to the Web Config, you will need:

- · Chrome on a computer or mobile device with Bluetooth capabilities.
- No device should be paired to the adapter while trying to access the Web Config.

A full technical guide for the Web Config can be found here: <u>https://github.</u> com/darthcloud/BlueRetro/wiki/BlueRetro-BLE-Web-Config-User-Manual

Web Config Index

The Web Config index has several links but this manual will focus on the following:

- BlueRetro Advance config This page is where you'll be able to change the output type, button mapping, and setup turbo for any button.
- BlueRetro Presets config This page is where you'll set presets like mouse support or predefined game presets.

• BlueRetro OTA FW update This page is used to update the adapter's Firmware.

BlueRetro Web config Index | View on GitHub BlueRetro System manager BlueRetro Advance config BlueRetro Presets config

BlueRetro OTA FW update

BlueRetro Files Manager

BlueRetro N64 controller pak manager

Global Config

System: [Auto Multitap: None Inquiry mode: Auto Memory Card Bank: Bank 1 Save

Output Config Select output: Output 1 v

Mode Accessorie GamePad V None V Save

Mapping Config BlueRetro v1.4+ mapping reference (legacy ≤ v1.3 map here) Select Bluetooth device: Device 1 v

Config Selection

Current config: Global

Switch to GameID

Mapping Config

This mapping expect that the Output Config mode accessory.

Output 1 V All V Default Mouse

🔊 BlueRetro OTA FW up

Index | View on GitHub

Connected to: BlueRetro_PARALL_FC72 (78:e3:60

Select firmware: Choose File No file chosen

Live Output

If a device is paired to the adapter, short press the "P" button to disconnect it.





Advanced Configuration Overview

The 3DO BT's Advanced Configuration area of the Web Config allows you to make functional changes to the adapter.

More in depth information can be found here: <u>https://github.com/darthcloud/BlueRetro/wiki/BlueRetro-BLE-Web-Config-User-Manual#2---advance-config-page</u>

🐢 BlueRetro V	/eb config × +			×
$\leftrightarrow \rightarrow c$	blueretro.io/index.html		\$	
	Global Config System: [Auto * Multita: [New *]			Â
	Inquiry mode: Auto Memory Card Bank: Bank 1			
	Save			
	Output Config Select output: Output 1 v			
	Mode Accessories [GamePad ▼] None ▼]			
	Save			
	Mapping Config			
	<u>BlueRetro v1.4+ mapping reference</u> (legacy ≤ <u>v1.3 map here</u>)			
	Select Bluetooth device: Device 1 👻			
	Src label: Default			
	Dst label: Default			
	Src Dest Dest ID Max Thres Deadzone Turbo Scaling Diagonal			
	GP: LX Left; GP: LX Left; Output 1 ♥ 100% ♥ 50% ♥ 0.0135% ♥ Disable Linear Passthrov ♥			
	GP: LX R v GP: LX R v Output 1 v 100% v 50% v 0.0135% v Disable v Linear v Passthrouv -			
	GP: LY D ▼ GP: LY D ▼ Output 1 ▼ 100% ▼ 50% ▼ 0.0135% ▼ Disable ▼ Linear ▼ Passthrot ▼ -			
	GP: LY U V GP: LY U V Output 1 V 100% V 50% V 0.0135% V Disable V Linear V Passthrou V			
	GP: RX L 🗸 GP: RX L 🗸 Output 1 🗸 100% 🗸 50% 🗴 0.0135% 🗸 Disable 🗸 Linear 🗸 Passthrou 🗸 -	-		
	GP: RX R ♥ GP: RX R ♥ Output 1 ♥ 100% ♥ 50% ♥ 0.0135% ♥ Disable ♥ Linear ♥ Passthrot ♥ -	-		
	GP: RY D V GP: RY D V Output 1 V 100% V 50% V 0.0135% V Disable V Linear V Passthrou V -			
1	Les municipas municipas de la companya de la			· · ·

Output Config

- Select Output: The Select output drop-box lets you select the active wired output for which the setting will be saved to.
- Modes:
 - GamePad: Controller
 - GamePadAlt: Flightstick
 - Keyboard: Not used
 - Mouse: Mouse
- · Accessories: No effect

Output Select outp	Config	1 🗸		
Mode	Access	sories		
GamePad	✓ None	~		
GamePad				
GamePadAl				
Mouse	0			
Jurahhin	y Con	ig		
BlueRetro v	1.4+ map	ping refere	ence (lega	acy ≤
Select Blue	tooth devi	ce: Device	1 🗸	
Src label: [Default	~	ļ	
Dst label: 1	Default	~]	
_			-	
Src	Dest	Dest ID	Max	Th
GP: LX Left;	GP: LX Let	ft; Output 1	✓ 100%	✓ 50

1 TIP: You need to save for each modified output setting

Using a Bluetooth Mouse

The 3DO BT supports using a Bluetooth mouse. If using a flash cart, it's recommended that you launch the game with mouse support first before switching to mouse mode in the Web Config.

Using a Mouse

Connect to the Web Config using the "Connecting to the Web Config" section above and use the "BlueRetro Presets config" link on the index.

Once connected, click the "select preset" drop-down menu in the "Mapping Config" section, select "Default Mouse", and then click the save button.

Switch to GameID
Mapping Config
This mapping expect that the Output Config mode accessory.
Output 1 V All V Default Mouse
Live Output

- Click the "index" link at the top of the page to return to the index. Click the "BlueRetro Advance config" link on the index.
- 4 Once connected again, scroll down to the "Output Config" section, click the "mode" drop-down, and select "Mouse" from the list.
- 5 Click the Save button. A message stating, "Config saved, power cycle BlueRetro adapter for Mode change to take effect" will appear under the section.
- Output Config Select output: Output 1 🗸 Mode Accessories Mouse None × Save

Mode	Accessories
Mouse 🗸	None 🗸
Save	
Config saved, po	wer cycle BlueRetro a
Mouse mode req	uire setting <default i<="" td=""></default>





6 Press the "R" button on the adapter. The adapter is now in mouse mode and ready for a Bluetooth mouse to be paired to it. Follow the "Pairing Devices" section in this manual if need be

Button Mapping

The 3DO BT have a robust button mapping feature that can be a little confusing at first but is actually not difficult once you understand it. You will want to familiarize yourself with the default mapping reference spreadsheet to help setup corresponding source and destination buttons: https://tinyurl. com/bde43mbm or follow the "Default Button Mapping" section above.

Remapping the Buttons

Connect to the Web Config using the "Connecting to the Web Config" section above and use the "BlueRetro Advanced Config" link within the Web Confia.

2 Once loaded, scroll down to the "Mapping Config" section of the page.

You will notice there are quite a few drop downs in this area of the page. We'll be focusing on the following:

Mapp BlueRetr Select B	ro v1.4+ mapp luetooth device	ig bing re be: De
Src labe Dst labe	l: Default l: Default	
Src	Dest	Dest

(i) TIP: Mapping Config Column Meanings

Src label: This represents the Bluetooth controller (i.e. 8Bitdo M30). **Dst label:** This represents the target controller (i.e. 3D0). Src: This column represents the various buttons from the Src Label controller. Dest: This column represents buttons from the Dest Label controller. Turbo: Speed settings based on frames if you want turbo on any given button.



Using the 8Bitdo M30 as the source controller, select "MD / Genesis" from the Src Label drop-down and "3DO" from the Dst Label drop-down.

Src label:	MD / Genesis	~
Dst label:	3DO	~

4 Let's say you wanted to change the M30's **Y** (unmapped by default) button to be the 3DO's P button.

In the **Dest** column, select the dropdown next to the ***Y** button in the Src column and select P.

Src		Dest	
*Y	~	*Trigger	~
Start	~	Р	~
Changes to			
*Y	~	Р	~

5 Make sure to click the **save** button beneath the Mapping Config section. The new button mapping is immediately updated on the adapter once you click the save button.

Turbo / Autofire

The 3DO BT has a robust turbo feature. It allows for 50 possible turbo options where you can choose the rate and duty cycle.

The rate is based on the console's controller polling rate which is most likely 60hz. Here's a few examples. Selecting "1/2 frames" pulses the button at 30Hz, so 1 frame on, 1 frame off. Selecting "2/4 frames" pulses a button at 15Hz, so 2 frames on, 2 frames off.

You can also select the duty cycle. "1/4 frames" will still provide a button pulsing at 15Hz but it will be 1 frame on and 3 frames off. This allows you to tweak the turbo to work well in any game.

You can also set the turbo on an axis, in this case the axis will toggle between it's neutral value (off) and it's current position (on).

You can map the same buttons multiple time with different turbo settings as well.

Setting up Turbo

Using the PS5 DualSense as our source controller example and the 3DO as our destination controller example, let's apply Turbo to \Box (**A**) and \bigcirc (**C**).

Mapping Config BlueRetro v1.4+ mapping referen Select Bluetooth device: Device 1 Src label: PS4 / PS5 Dst label: 3DO Src Dest Dest ID



 $oldsymbol{2}$ Set the turbo speed for \Box and \bigcirc (A and **C**) by selecting a rate from the drop down. Choose one for each button.

TIP: Remember the rate is based on the console's controller polling rate which is most likely 60hz. Here's a few examples. Selecting "1/2 frames" pulses the button at 30Hz, so 1 frame on, 1 frame off. Selecting "2/4 frames" pulses a button at 15Hz, so 2 frames on, 2 frames off.



Once you've set the Turbo rate, make sure to click the save button after any changes. You can now pair your controller and your turbo rate is set on the buttons you've mapped.



Updating the Firmware (OTA)

The 3DO BT adapter is updatable via the Web Config. The process is very simple but takes around 5 - 10 minutes on a computer and much longer on a mobile device, so we recommend using a computer.

Downloading the firmware package



First, we'll need to download the latest update firmware package from: https://darthcloud.itch.io/blueretro

2 Click the "Download Now" button. A pop up will appear where you can either donate to Jacques Gagnon, the creator of BlueRetro or click "No thanks, just take me to the downloads" to be taken to the download page.



3 Select the latest firmware package with **"HW1**" in the name.

4 Once downloaded, unzip the package somewhere you'll remember.

Flashing the OTA bin file

Connect to the Web Config using the "Connecting to the Web Config" section above for reference and click the "BlueRetro OTA FW update" link within the Web Config.



8 Now click the "Update Firmware" button and allow the firmware to update. This typically takes around 5 - 10 minutes on a PC and much longer on a mobile device.

Your adapter firmware is now updated!

Problem	Possible Solution
8bitdo controller D-Pad isn't working	 Press select + D-Pad Up to put the controller into "D-Pad" mode. Please read the controller's user manual for full macros.
"Y" button not working on 6 button controller.	 The "Y" button on six button controllers doesn't map to anything by default. This is not an issue with the adapter or Web Config but rather how the 3DO handles controllers with 6 face buttons. Map the "Y" button manually in Web Config
LED is solid when powering on the console.	 Hit the "R" button on the adapter. If the LED is still solid, unplug and plug the adapter back into the console.
The Web Config displays "Argh! NetworkError"	 Try connecting again. Hit the "R" button on the adapter and try connecting again. This may take a few tries.
Issues connecting to the Web Config	 Make sure you're using Chrome browser. Hit the "R" button on the adapter and try connecting again.
Buttons are acting strange in [game title]	 Some games poll the controller differently, which can cause issues for the adapter. Please open a ticket on the BlueRetro GitHub so we can track and possibly fix the issue.

If you have issues not listed here, please use our website's contact form for support.

You can also discuss issues on the BlueRetro GitHub: https://github.com/darthcloud/BlueRetro/discussions











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