USB

VIRTUAL BOY™

FLASHBOY
NINTENDO VIRTUAL BOY USB FLASH CARTRIDGE
PLUS

VUE-A-FB-2(WLD)

FLASHBOY+ MANUAL

Congratulations for purchasing the FlashBoy+! You are holding the world's first flashcard for the Nintendo Virtual Boy! Originally released back in 2007 and still going strong today! It just may be the longest running Flashcart in retro gaming history.

Let the Vintex64 re-manufactured FlashBoy+ deliver you many great moments for the years to come!

To purchase it or get further information please visit the www.Vintex64.com website.

GETTING STARTED

BEFORE YOU BEGIN, PLEASE MAKE SURE YOU HAVE:

- ✓ FlashBoy or FlashBoy+

- ✓ USB to USB Mini-B cable. The same cable used to charge a PlayStation 3 controller.

- ✓ Two Software: "flashboy-20101102.zip" & "Pad_VB.zip".
  https://www.vintex64.com/store/p273/FB.html

- ✓ Mirror for "flashboy-20101102.zip" only.
  https://www.virtual-boy.com/tools/flashboy/

- ✓ The digital file of game-backup/homebrew/rom you wish to load. Either a known good copy or ideally two copies from different sources.

- ✓ Minimal requirements: a windows-based computer with USB 2.0.

- ✓ Recommended requirements: Windows 10 with USB 3.0 port.

- ✓ Advance PC users can use open-source command-line software for windows & non-windows PCs.

  https://www.virtual-boy.com/tools/flashman/

  https://www.virtual-boy.com/tools/prog-vb/

HOW TO PAD A ROM FILE

You need to make sure the game/homebrew/rom size is 2,048KB in size.

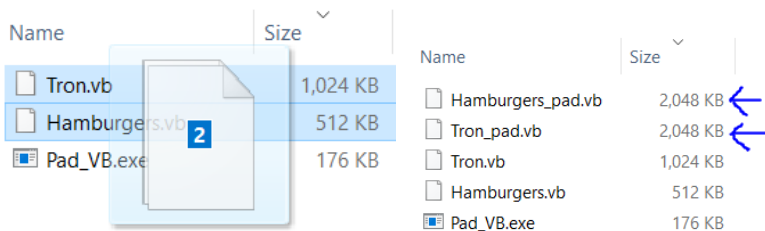| Name	Size
Wario Land.vb	2,048 KB
Waterworld 2MB.vb	2,048 KB

Files that are ready.

If your ROM is bigger, it will not fit on the FlashBoy+. If it is smaller, you simply need to do something called padding, which puts blank data inside the rom to fill up the file to fit 2,048KB in size.

Name	Size
Hamburgers.vb	512 KB
Tron.vb	1,024 KB

Files that need padding.

To pad a game:
   a. Simple hold down the "Ctrl" key
   b. Click on all the files you like to pad. You can choose more than one at the same time.
   c. Drag the selected ROM file over the "Pad_VB.exe" file.
   d. Wait a few seconds. It's working in the background.
   e. It will auto pad all files to 2,048. You will see them created in the same folder, as "XXXX_pad.vb".

Name	Size		Name	Size
Tron.vb	1,024 KB		Hamburgers_pad.vb	2,048 KB
Hamburgers.vb	512 KB		Tron_pad.vb	2,048 KB
Pad_VB.exe	176 KB		Tron.vb	1,024 KB
			Hamburgers.vb	512 KB
			Pad_VB.exe	176 KB

Hold down Ctrl key & drag files over the Pad_VB.exe program. When the process is completed you'll competed you'll have new files created that are 2,048 KB in size.

HOW TO CONNECT FLASHBOY+ TO WINDOWS

1. Plug in the USB Mini-B end to you FlashBoy+ and then plug the other end to your PC with windows installed.

2. If the first time give it 1 or 2 minutes to auto recognize it. Windows 10 should recognize it in a few seconds, showing a message on screen when it is ready. Older Windows like XP, Vista, or Win 7 may need a few minutes. Windows XP could take 10 minutes. You should hear a sound; when it is ready.

3. There is no LED light on the FB+ so you cannot see a light indicating detection.

4. You cannot use "Safely Remove Device" icon to see it. This device does not show like a USB storage device.

5. To see it as a detected device by Windows, in Windows 10 you have to go to Windows>Settings>Devices here you should see the FlashBoy as a detected device.
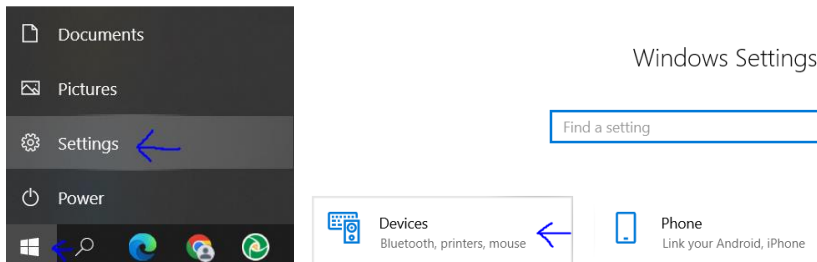
For Windows 10 click start>settings>devices

All models of FlashBoy or FlashBoy+ will show as only FlashBoy. This is normal your FB+ is still a FB+

Success, you have your FlashBoy+ detected on your computer!

HOW TO PROGAM THE FLASHBOY+

1. Open the software. Simply double click "FlashBoy 2010-11-02.exe" in Windows 10. For older Windows systems you may need to run the program as administrator.
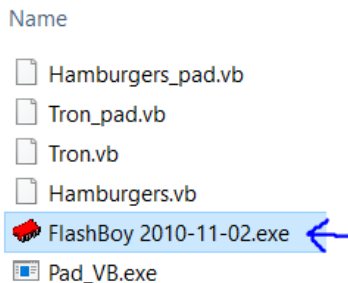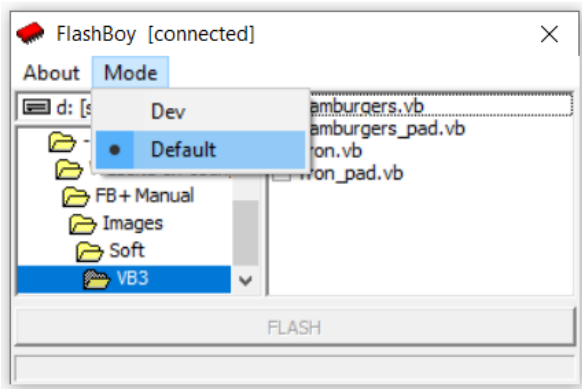

Opening the FlashBoy+ software

2. You should see a dialog box above. Note the "Connected" text nearby the FlashBoy Text program title.
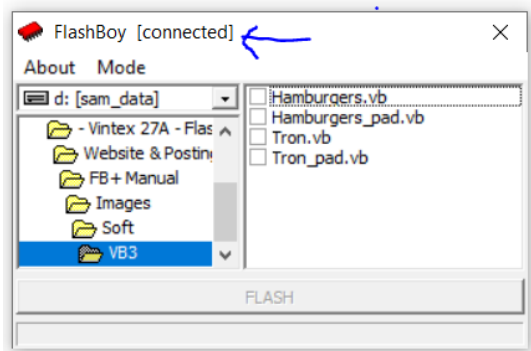
Note the "connected" text in program title

3. By default, you will be in "Default" mode. Debug mode is for developers who want to change a few lines of code.

Use "Default" mode to flash of a rom normally

4. Select your file. Hit the little check mark on its side. Make sure file size equals 2Mb=2,048Kb. If you padded the rom, you should see the "_Pad" text beside it. Click the "FLASH" button below to start flashing.
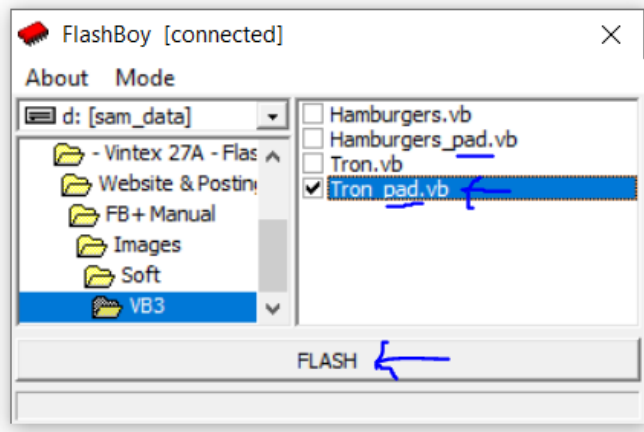
Check the 2,048Kb rom, then click "Flash"

5. Please wait a few minutes. It can take between 30 seconds up to 2 minutes, depending on the data in the game-backup/homebrew/rom.

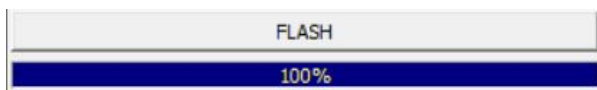6. You will see ERASING… then FLASHING… while the percentage bar fills up. When the bar reaches 100% wait a few seconds and then unplug the USB.
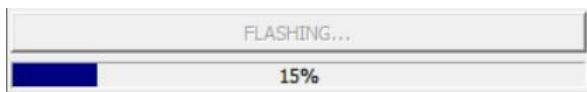
Allow the percent bar fills up

When at 100% wait few seconds and unplug USB

RUN THE FB+ IN VB

Simply place the FB+ inside your Virtual Boy & power it on.

Some games will give sound right upon boot up like Water World. In others, you will have to wait a few seconds to see something, just like in Space Invaders.

TROUBLESHOOTING

GENERAL

- ✓ Try reading the full instructions.
- ✓ Ask someone you know to try/read the instructions for you.
- ✓ Take a break, sleep on it, or come back to it another time.
- ✓ Don't overdo it. If it's not working, it could be a bad FB+ cartridge. Just get in contact with the Vintex 64 team for your free replacement.
- ✓ The Vintex 64 team answers every email inquiry.
- ✓ The Planet Virtual Boy website has a dedicated forum for FB+ support. Other community members often share their support. https://www.virtual-boy.com/forums/f/flashboy/

MY PC CANNOT DETECT THE FB+

- ✓ Try another USB Mini-B cable.
- ✓ Restart the PC.
- ✓ Try another USB port or try another PC.
- ✓ Try to add some finger pressure on the female USB socket on the actual FlashBoy+ by pressing up, or down in a separate test, with the cable inside. Sometimes the USB socket gets loose and may need re-soldering or replacement USB socket. This test will determine if that is the case.

CANNOT FLASH A GAME OR HOMEBREW

- ✓ Try another game/homebrew or one that has 2Mb size already.
- ✓ Try another copy of the game/homebrew. Ideally, downloading it from another web or file location.
- ✓ If the bottom text above the Bar reads "ERROR" it normally an issues with internal circuit not speaking/connecting to the Sharp data-storage chip. This will need a re-soldering of Sharp chip.
- ✓ If the bottom text above the Bar reads "FLASHING" but doesn't go past 0% it is normally because of an issues with internal microchip. The Vintex 64 team will need to replace the microchip or re-flash the firmware.

TIP:

Vintex 64 will exchange older FB or FB+ for new ones at discounted rate.

REPAIR TIP:

If you know someone with experience in electronics soldering or can locate someone in your local area, request them to do a re-soldering (re-flow) of all pins. A common Vintex 64 fix is simply re-solder (re-flow) all the main chips and parts inside on new FB+.

VINTEX64 FB+ MANUAL

VERSION B

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Info@Vintex64.com

www.Vintex64.com

GAME NOT SAVING:

- ✓ Make sure the backup-game, homebrew, or rom actually supports save feature. For example the Space Pinball actually has no save feature even though it seems to keep your score. Some newer homebrews may be coded for the HyperFlash save chips which has not the same save capacity as the FB+.

- ✓ Make sure you have a "FlashBoy+" model. A regular "FlashBoy" model has no save features. Look at PCB and see if it has the Battery cage. If there's no Battery cage it's a regular FlashBoy non-save model.

- ✓ Inside the battery cage you have a little coin battery. After 5-10 years may need replace it. It's easy, simply push the little battery out via pick at closed side. It may take some force to get out. It sometimes is a bit tight.

- ✓ The little coin battery p/n is BR1225 or BR1220 or CR1225 or CR1220. They are cheap on Amazon or local electronic store.

- ✓ Remove the FB+ cover, prepare a multimeter, place one probe on top of battery cage (do not over press the cage), this is POS, and then put other probe on last PCB pin, either side fine, this a GND pin. You should see 3V if working, and 0 if no power.

- ✓ While inside the FB+, sometimes, the contact-pressure-pins from the top battery cage are not making good contacts. Simple remove battery and push/bend the two pins all the way down. Then re-install battery. This have two pins better contact the battery.

MY VB SHOWS NOTHING ON SCREEN:

- ✓ Look carefully at the flashing stage you are at and try it again.
- ✓ Leave it powered on for a full minute. Then re-start. This may re-set the electronics inside.
- ✓ Try another working VB game. Ensure the VB is alright.
- ✓ Try fresh batteries or use VB wall adapter. The FlashBoy+ need more power than regular cards.
- ✓ EXPERIMENTAL: If you have a high-quality cable and high quality USB power adapter, try powering the FlashBoy+ with the USB cable while in the VB, then turn controller on, if not on already. This will create two power sources into the FB+: the standard controller method + the USB.
- ✓ IMPORTANT: This is not recommended as permanent solution. But yes, you're reading this right: You can power your Virtual Boy by your FlashBoy + without controller power pack. Just don't do this long term or at own VB hardware life-span risk!

MY FLASHBOY+ DOESN'T WORK EVERYTIME I TRY, BUT SOMETIMES IT DOES WORK?

- ✓ May have loose solder pin inside or a loose USB socket pin. May need soldering reflow. Some local electronics shop can do this.

- ✓ If your FB or FB+ is very old or has been heavily used some of the parts could be getting weak.

- ✓ Are you using your FB+ near heavy electrical, Wi-Fi, or radio interference? Try new location.
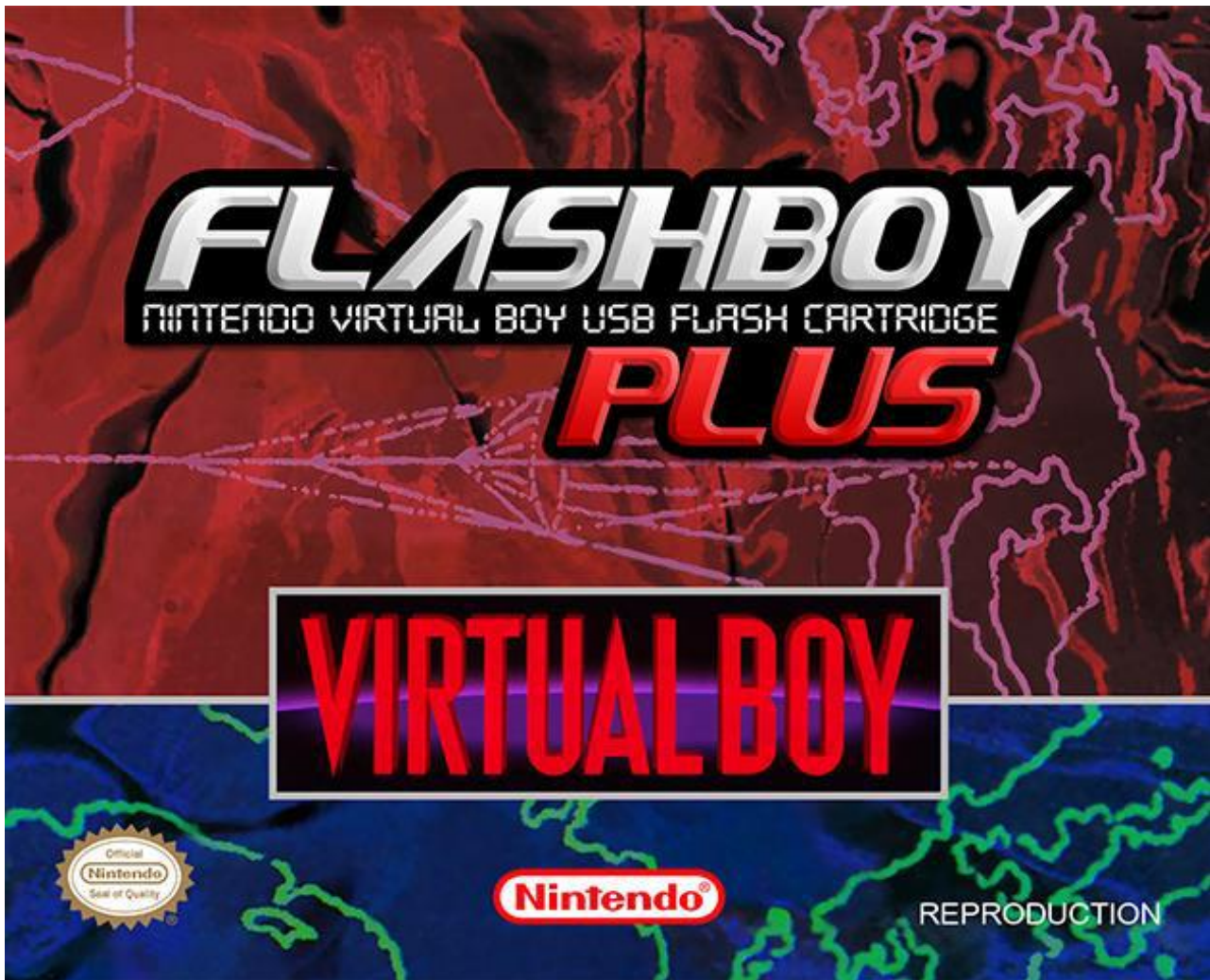
FINAL THOUGHTS

Thank you for reading this manual to the very end. Remember, your opinion matters! If you have suggestions to improve this manual or noticed any errors, please let us know!

Special thanks go to Richard the original inventor of the FlashBoy & FlashBoy+ for sharing his work with the Vintex 64 team.