## Feb 12 2023

Dear customer,

Thank you for purchasing USB-NES Lite. Please visit usbnes.com for more info.

## Quick Start Guide

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- 1. Open the dust cover door on USB-NES and plug a clean NES cartridge into the slot.
- Plug the unit into a host computer using the micro USB cord included.
  A red lamp on the console will light up; this indicates the unit has power.
  A green lamp will also momentarily illuminate; this is USB-NES auto-detecting the cartridge boardset.
- 3. Open your favourite NES emulator and under the FILE menu, select OPEN ROM...
- 4. Navigate to the USB-NES root directory and select the ROM.NES file to load the game. At this point a green lamp on the console will light up indicating the cartridge is powered up and being read by the host.
- 5. Once the ROM.NES file loads, the green lamp turns off and it is then safe to remove the cartridge from USB-NES.
- 6. To play the next cartridge game just pop it into USB-NES and read/open the DETECT.TXT file. Accessing the DETECT.TXT file causes USB-NES to re-identify the boardset in the cartridge, which occurs automatically when the unit is plugged into the host initially. Once the DETECT.TXT data is read out, the next cartridge ROM.NES file is ready to load into the emulator.

## Notes

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- USB-NES will detect if your game has a functioning save RAM system, and expose the data (usually 8KB) as a ROM.SAV file in the root directory of USB-NES that can be read or overwritten.
- You \_may\_ assign the SAVE RAM path in your emulator directly to the USB-NES drive and this will work to give the emulator seamless access to the battery-backed save RAM on the cart. However if you do this, be careful to NOT change the game cartridge out before the end of your game session or you may end up writing the save data to the wrong cartridge inadvertently when quitting. Generally, the emulator writes to the ROM.SAV file once, usually when quitting the ROM emulation.
- The save RAM detection used in USB-NES is still a work in progress. It may identify a cart to have save RAM but have no actual battery in it, which is mostly harmless. However if it can't identify any save RAM on a cart you know should have it, you will probably have to replace the battery inside the cart to fix the issue.
- USB-NES has a lot of features, including the ability to augment the unit with custom mapper override scripts that can be programmed into the auto-detection sequence. Mapper override scripts provide a way to teach USB-NES how to read unsupported boardset types. (see "Map Overrides" and "Cart Compatibility" sections of the website for details)
- Most mapper identification tests are built-in to the USB-NES firmware but the BCMTABLE.BIN file contains the entire listing of bus-conflict mapper types supported by USB-NES. It may be edited or customized by the user to support other unknown or uncommon boardset types with bus conflicts. Note this is strictly a binary-formatted file, so you will need to use a hex editor to edit the BCMTABLE.BIN file if desired. (see the "BCMTABLE Documentation" section of the website for details)
- Please refer to our Troubleshooting and Forums section of the website if you have problems using USB-NES.

Sincerely,

Brad Taylor Proprietor BTTD Group