How To Mod a DSi

Information and images from <u>dsi.cfw.guide</u>, <u>Alvaro Trigo's Blog</u> & <u>WikiHow</u>. The DSi obviously belongs to Nintendo.

DISCLAIMER: By modding any console, you risk bricking it. This guide has been tested and does work, but we are not responsible for what happens to your DSi.

This guide will do the following:

- Install TWiLight Menu ++
- Install Unlaunch via Memory Pit
- Backup NAND for a safe playing experience

Uses for a homebrewed DSi include:

- Run DS(i) games via dumping your own cartridges or downloading ROMS
- Run ROM hacks
- Launch DSiWare titles from your SD card.
- Remove region lock from your system
- Run various retro games using emulators
- Use normally incompatible flashcards
- Play homebrew games
- Boot into either the CFW or stock firmware
- Extensive theming capabilities

Important information (READ FIRST):

Make sure that your DSi is connected to power at all times while hacking to avoid unwanted bricks. What you need:

- 1. SD card
- 2. A computer (Chromebook will work, you just need an SD reader)

DSi compatibility:

You can use this guide for every DSi model (DSi, DSi XL).

Computer compatibility:

You can use any computer as long as you can download files online to an SD card.

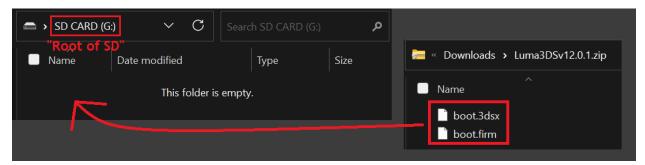
Disclaimer:

There is no need to use an SD card greater than 64 GB in size. You are able to fit 400+ DS games on just a 30 GB card alone. The DSi has no known limit in SD size, but the larger the storage capacity the slower the system gets.

Terminology:

File placement

It's important to put your files in the correct places so the DSi can properly read it. You'll quite frequently see the phrase "SD root" or "SD card root". The directory that opens when you open the SD card is the root.



You will also see folders written like /this/. The /slashes/ are used to tell you that this is the name of the folder. E.g. /folder1/ would be in the SD as folder1. There also may be a slash in between two folders such as /folder1/folder2/. This refers to /folder2/ being inside of /folder1/. The slashes are not in the name of the folder.



CFW

CFW stands for custom firmware.

You may also see text inside of angle brackets (<like this>). The brackets refer to system-specific identifiers in folders such as. For example, <ID0> refers to a specific identifier in the Nintendo 3DS folder. (This is only an example and does not apply to this guide)



Again, you'll see text in lines like |this|. This is a file and the file itself does not have the lines.

Downloading GitHub files



You'll soon copy files to the SD card. Most of these files come from GitHub. When you download files from GitHub, you shouldn't download the source code.

Unzipping and extracting files

You'll have to download files with the .zip extension. You must unzip them or else the DSi can't read the files, and when that happens, you can either double-click on the file or right-click then click "Unzip" or "Extract all". If you cannot do this, you can install a tool such as 7-zip.

File extensions

If you use Windows, file extensions may be turned off by default. You can enable them using <u>these</u> <u>instructions</u>.

Help

If you need help, go to <u>Nintendo Homebrew Discord</u>.

Guide

Step 1: Preparation

Make sure your SD card is <u>formatted correctly</u> before continuing this step.

- 1. Boot your DSi with the SD card inserted.
- 2. Turn off your DSi and put your SD card in your computer.
- 3. Download the most recent version of TWiLight Menu++
- 4. Download the most recent version of dumpTool
- 5. Copy the /_nds/ folder from |TWiLightMenu-DSi.7z| to your SD card root.
- 6. Copy |BOOT.NDS| from |TWiLightMenu-DSi.7z| to your SD card root.
- 7. Copy |dumpTool.nds| to the root of your SD card.

Step 2: Version Verification

- 1. Power on your console.
- 2. Open the Nintendo DSi Camera application.
 - a. Complete the tutorial if needed.
 - b. If the tutorial crashes, your camera hardware is likely damaged. Continue here and follow along with a different exploit on the website.
- 3. Open the album using the button on the right.

4. Take note if you have the Facebook icon next to the club, star & heart.



Step 3: Memory Pit

- 1. Download the Memory Pit files below:
 - a. If you DID have the Facebook icon
 - b. If you DID NOT have the Facebook icon
- 2. Navigate to /sd:/private/ds/app/484E494A/ on the SD card (/sd:/ is the root of the card).
 - a. These directories will only be created if you have opened the DSi Camera application. If they (or just /484E494A/) do not exist, relaunch the DSi Camera application.
- 3. Inside the /484E494A/ folder, rename |pit.bin| to |tip.bin|.
- 4. Place the Memory Pit |pit.bin| in place of the file you just renamed.
- 5. If there is a /DCIM/ folder in your SD card, back it up if you don't want to lose your photos.
- 6. Remove /DCIM/ from your SD card.

Step 4: Launching the Exploit

- 1. Put your SD card into your DSi.
- 2. Boot your DSi and open the Nintendo DSi Camera application.
- 3. Select the SD card icon on the top right.
 - a. If you receive a message saying your SD card isn't inserted, try using a different card.
 - b. If you receive a message saying your SD card cannot be used, the card may not be properly formatted.
- 4. Select the large album button on the right.
- 5. Your screen should flash magenta if Memory Pit was installed correctly.
 - a. If the top screen goes green, you don't have TWiLight Menu++'s |BOOT.NDS| on the SD root. Follow Step 1: Preparation again.
 - b. If you enter the album menu and nothing unusual happens, make sure you have properly installed the right Memory Pit version. Also ensure that the /DCIM/ folder is not on your SD card.
 - c. Taking photos via the Memory Pit will cause the exploit to stop working and you will have to copy it again.

You can now use TWiLight Menu++!

1. Select your language and region. This information does not have to match your console and may be configured later, so pick what you prefer.

Step 5: NAND backup (Optional)

This step will ensure a safe playing experience and may help set up some emulators and CFW. Make sure your SD card has at least 250MB of storage or you will run into errors!

This step is optional but highly recommended in case of a brick.

Part 1: Install dumpTool

Skip this part if you've already installed dumpTool.

- 1. Download dumpTool.
- 2. Place |dumpTool.nds| anywhere on your SD card.

Part 2: Dumping NAND

- 1. Find and launch dumpTool from TWiLight Menu++.
- 2. Ensure that your system is connected to power and press A.
 - a. This process takes around 7 minutes. It is safe to shut the system at this time, but do not power it off!
- 3. Wait for the process to complete, then press START to exit dumpTool.
- 4. Power off your DSi.
- 5. Insert your SD card back into your computer.
- 6. Store the backup file somewhere safe, preferably across multiple different devices. Once you have backed up and stored the file, it is safe to delete it from the SD card.

Step 6: Installing Unlaunch (Optional)

There is a minor chance of bricking your system while installing Unlaunch. If this is a concern, please select a different exploit here and continue the guide from the external website.

Memory Pit on its own is quite limited when it comes to homebrew. Unlaunch can circumvent this limitation.

If you do not have a Windows, Mac or Linux computer, then do not perform this step. These systems are required to fix some issues after Unlaunch's installation.

Ensure your system is charging while performing this step to avoid damage! Unlaunch is incompatible with DSi development consoles.

- Download |unlaunch.zip|
- 2. Extract |UNLAUNCH.DSI| from |unlaunch.zip| and place it anywhere on your SD card.
- 3. Verify that you still have TWiLight Menu++ installed.
- 4. Put your SD card in your DSi and boot into TWiLight Menu++,
 - a. If this is your first time installing Unlaunch on said DSi, launch TWiLight Menu++ via the exploit (for this guide you go into DSi Camera, then SD Card, Album.) you used.
 - b. If Unlaunch is already installed and you're looking to update it, boot into it by holding the correct button combination while turning on your system (A + B by default).
 - i. If several options named *TWiLight Menu++* exist, select the one that shows *BOOT.NDS* on the bottom screen. This happens because of an outdated version, and so it's recommended to <u>update your installation</u>.
- 5. Launch the settings page.
 - a. If you have not changed your theme yet, press *SELECT* and select the small DS icon at the bottom of the touch screen. In other cases, view the TWiLight Menu++ manual.
- 6. Press L/R or X/Y to navigate to the *Unlaunch settings* page.
- 7. Unlaunch's default background is creepy to say the least, so you can select *Background* to change it.

Extras

Read these if you are unsure how to do something. If this section does not answer your question, go to Nintendo Homebrew Discord.

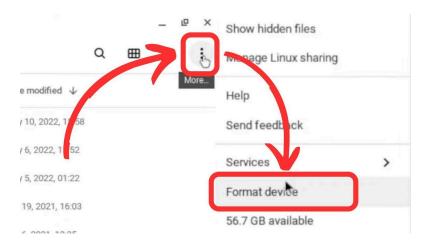
Button Combos:

a.

How to format an SD card to FAT32 on Chromebook:

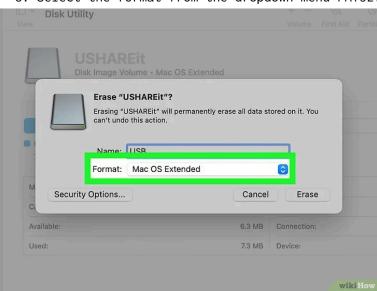
WARNING: Do not have any files on your SD as formatting it will erase them.

- 1. Open your SD card directory
- 2. Select More
- 3. Select Format device
- 4. The name of the card does not matter. Select FAT32 from the dropdown menu.
- 5. Select Erase and Format.



How to format SD card to FAT32 on Mac:

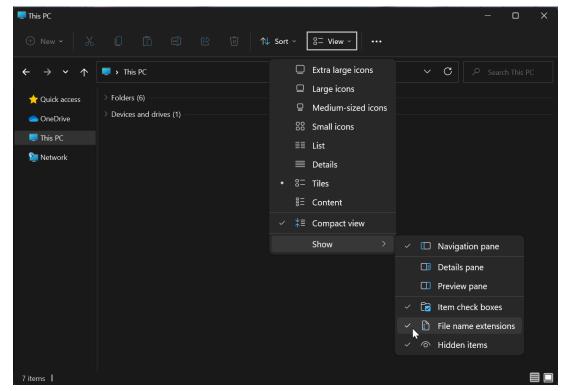
- 1. Insert SD Card
- 2. Open DISK UTILITY or Press Command + Spacebar
- 3. Select SD Card In the Left Menu
- 4. Press ERASE Button
- 5. Select the format from the dropdown menu FAT32.



How to enable file extensions (Windows only) Windows 11:

1. Open your file explorer.

- 2. Click "View" in your toolbar.
- 3. Click "Show".
- 4. Click "File name extensions"



Windows 10, 8.1, 8

- 1. Open your file explorer.
- 2. Click the "View" option on the ribbon menu
- 3. Check the box "File name extensions"

