# **Homebrew Launcher (Soundhax)**

The Homebrew Launcher has many different entrypoints, or methods of launching.

Soundhax is compatible with versions 9.0.0 through 11.3.0 in the EUR, JPN, KOR, and USA regions.

#### **What you need**

* The Homebrew [Starter Kit](http://smealum.github.io/ninjhax2/starter.zip)
* The latest release of [Soundhax](http://soundhax.com/) (for your device and region)
* The [otherapp payload](https://smealum.github.io/3ds/" \l "otherapp) (for your version and region)

#### **Instructions**

1. Power off your device
2. Insert your SD card into your computer
3. Copy the contents of the starter folder in starter.zip to the root of your SD card
4. Copy the Soundhax .m4a to the root of your SD card
5. Copy the otherapp payload to the root of your SD card and rename it to otherapp.bin
6. Reinsert your SD card into your device
7. Power on your device
8. Launch Nintendo 3DS Sound
9. Go through all of the bird tips, then close the app normally and relaunch it
   * Launching Soundhax immediately would cause these tips to appear on every launch of the Nintendo 3DS Sound until this is done
10. Go to /SDCARD, then play “<3 nedwill 2016”
    * This may take many tries
    * If it freezes, just force the console to power off by holding the power button, then try again
11. Your device should load the Homebrew Launcher

# **SafeCTRTransfer (Homebrew Launcher)**

#### **Overview of steps**

In this section, we will be flashing your device’s [CTRNAND](https://www.3dbrew.org/wiki/Flash_Filesystem" \l "CTR_partition) partition to 2.1.0 in order to take advantage of an oversight in 2.1.0 for the purpose of extracting the [OTP](https://www.3dbrew.org/wiki/OTP_Registers) unique to your device. This OTP file is required to install arm9loaderhax, and **cannot** be shared with other consoles.

This is accomplished by [installing a premade CTRTransfer image](https://www.reddit.com/r/3dshacks/comments/4zhe4a/) containing 2.1.0, copying your device specific files (such as moveable.sed and SecureInfo\_A) to it, then fixing the title databases.

#### **What you need**

* The latest release of [SafeCTRTransfer](https://github.com/d0k3/SafeCTRTransfer/releases/latest)
* The latest release of [safehax](https://github.com/TiniVi/safehax/releases/latest)
* The latest release of [udsploit](https://github.com/smealum/udsploit/releases/latest)
* The 2.1.0 CTRTransfer image for your device and region   
  (if your device is not from one of these regions, just pick one):
  + - [New 3DS or Old 3DS or 2DS 2.1.0 - EUR - CTRTransfer](magnet:?xt=urn:btih:89acc9c1b488b8b38251de0ddf07975d6bd354a1&dn=2.1.0-4E_CTRTransfer_o3ds.zip&tr=udp://tracker.coppersurfer.tk:6969/announce&tr=udp://tracker.opentrackr.org:1337/announce&tr=http://tracker.opentrackr.org:1337/announce&tr=udp://zer0day.ch:1337/announce&tr=udp://tracker.leechers-paradise.org:6969/announce&tr=http://explodie.org:6969/announce&tr=udp://explodie.org:6969/announce&tr=udp://9.rarbg.com:2710/announce&tr=udp://p4p.arenabg.com:1337/announce&tr=http://p4p.arenabg.com:1337/announce&tr=udp://tracker.aletorrenty.pl:2710/announce&tr=http://tracker.aletorrenty.pl:2710/announce&tr=http://tracker1.wasabii.com.tw:6969/announce&tr=http://tracker.baravik.org:6970/announce&tr=http://tracker.tfile.me/announce&tr=udp://torrent.gresille.org:80/announce&tr=http://torrent.gresille.org/announce&tr=udp://tracker.yoshi210.com:6969/announce&tr=udp://tracker.tiny-vps.com:6969/announce&tr=udp://tracker.filetracker.pl:8089/announce)
  + - [New 3DS or Old 3DS or 2DS 2.1.0 - JPN - CTRTransfer](magnet:?xt=urn:btih:3dbb9c9c85a33c6242f424dcbaebcacdd8a5912b&dn=2.1.0-4J_CTRTransfer_o3ds.zip&tr=udp://tracker.coppersurfer.tk:6969/announce&tr=udp://tracker.opentrackr.org:1337/announce&tr=http://tracker.opentrackr.org:1337/announce&tr=udp://zer0day.ch:1337/announce&tr=udp://tracker.leechers-paradise.org:6969/announce&tr=http://explodie.org:6969/announce&tr=udp://explodie.org:6969/announce&tr=udp://9.rarbg.com:2710/announce&tr=udp://p4p.arenabg.com:1337/announce&tr=http://p4p.arenabg.com:1337/announce&tr=udp://tracker.aletorrenty.pl:2710/announce&tr=http://tracker.aletorrenty.pl:2710/announce&tr=http://tracker1.wasabii.com.tw:6969/announce&tr=http://tracker.baravik.org:6970/announce&tr=http://tracker.tfile.me/announce&tr=udp://torrent.gresille.org:80/announce&tr=http://torrent.gresille.org/announce&tr=udp://tracker.yoshi210.com:6969/announce&tr=udp://tracker.tiny-vps.com:6969/announce&tr=udp://tracker.filetracker.pl:8089/announce)
  + - [New 3DS or Old 3DS or 2DS 2.1.0 - USA - CTRTransfer](magnet:?xt=urn:btih:1609ce9ee7b0ed9b6dea0b3e7cca4fc52dad6ff4&dn=2.1.0-4U_CTRTransfer_o3ds.zip&tr=udp://tracker.coppersurfer.tk:6969/announce&tr=udp://tracker.opentrackr.org:1337/announce&tr=http://tracker.opentrackr.org:1337/announce&tr=udp://zer0day.ch:1337/announce&tr=udp://tracker.leechers-paradise.org:6969/announce&tr=http://explodie.org:6969/announce&tr=udp://explodie.org:6969/announce&tr=udp://9.rarbg.com:2710/announce&tr=udp://p4p.arenabg.com:1337/announce&tr=http://p4p.arenabg.com:1337/announce&tr=udp://tracker.aletorrenty.pl:2710/announce&tr=http://tracker.aletorrenty.pl:2710/announce&tr=http://tracker1.wasabii.com.tw:6969/announce&tr=http://tracker.baravik.org:6970/announce&tr=http://tracker.tfile.me/announce&tr=udp://torrent.gresille.org:80/announce&tr=http://torrent.gresille.org/announce&tr=udp://tracker.yoshi210.com:6969/announce&tr=udp://tracker.tiny-vps.com:6969/announce&tr=udp://tracker.filetracker.pl:8089/announce)

#### **Instructions**

##### **Section I - Prep Work**

1. Remove your SD card from your device, leaving it on the Homebrew Launcher, then insert your SD card into your computer
2. Create a folder named CTRTransfer on the root of your SD card if it does not already exist
3. Copy the 2.1.0 .bin and .bin.sha from the CTRTransfer .zip to the /CTRTransfer/folder on your SD card
4. Copy safehax.3dsx to the /3ds/ folder on your SD card
5. Copy udsploit.3dsx to the /3ds/ folder on your SD card
6. Copy SafeCTRTransfer.bin from the SafeCTRTransfer .zip to the root of your SD card and rename SafeCTRTransfer.bin to safehaxpayload.bin
7. Reinsert your SD card into your device

##### **Section II - Launch SafeCTRTransfer**

1. Launch udsploit from the list of homebrew
   * You may have to scroll down to see this option
2. Once it has completed, press (Start) to exit udsploit
   * This may take several tries
   * If it freezes, just force the console to power off by holding the power button, then try again
3. Launch safehax from the list of homebrew
   * You may have to scroll down to see this option
   * If it freezes, just force the console to power off by holding the power button, then try again
4. If the exploit was successful, you will have booted into SafeCTRTransfer

##### **Section III - CTRTransfer**

1. Allow the SafeCTRTransfer initialization and safety checks to proceed automatically
   * If you get an error, ensure you have all files in the correct locations and that you have enough free space on your SD card as detailed in [Get Started](https://3ds.guide/get-started)
2. When prompted, input the key combo given to confirm CTRTransfer to 2.1.0
   * This process will take some time
   * This process will automatically create a backup of your device’s NAND at /ctrtransfer/<serialnumber>\_nand.bin
   * If you get a critical error, [follow this troubleshooting guide](https://3ds.guide/troubleshooting" \l "ts_transfer)
3. Once this process has completed, remove your SD card from your device to reboot
   * The reboot will take about 2 seconds to trigger
   * While on 2.1.0, your device will black screen on boot if your SD card is inserted before the home menu loads
   * Every time your device is rebooted on 2.1.0, you will need to take out your SD card before boot and put it back in after the home menu loads
   * For now, leave your SD card out as you will be copying files to it in the next page
   * This will be fixed once you restore your device in the next page

# **Installing arm9loaderhax**

The final Step of this guide is to install arm9loaderhax and setup Luma3DS to run just milliseconds into the boot. This is accomplished by using SafeA9LHInstaller by [AuroraWright](https://github.com/AuroraWright/).

This will install [AuroraWright’s Fork](https://github.com/AuroraWright/arm9loaderhax) of arm9loaderhax.

We will also setup the ability to launch payloads from arm9loaderhax, giving us the ability to unbrick our SysNAND from situations that would normally brick us by restoring from backup.

To use the [magnet](https://en.wikipedia.org/wiki/Magnet_URI_scheme) links on this page, you will need a torrent client like [Deluge](http://dev.deluge-torrent.org/wiki/Download)

**You cannot use another console’s OTP or you will brick GUARANTEED.**

#### **Overview of steps**

In this section, we will go through the process that all the other steps have led up to: actually installing arm9loaderhax.

This is nearly the best possible kind of device exploit because it is permanently installable into the NAND firm partitions, and runs before most of the OS loads, allowing it to not only work on all versions once installed, but also protect itself and recover from most situations that would brick a non-A9LH 3DS such as a nonfunctional home menu or bad title install.

The file arm9loaderhax.bin is what is launched by arm9loaderhax itself after it finishes loading off of NAND, and can be any valid arm9 payload. This file can be replaced at any time, although Luma3DS allows for the launch of other arm9 payloads using the Luma3DS chainloader.

In this case, we use Luma3DS by [AuroraWright](https://github.com/AuroraWright/) to boot a patched SysNAND directly, allowing us to completely bypass the need for any kind of EmuNAND, vastly simplifying the usage of a hacked 3DS in addition to saving SD card space.

Once arm9loaderhax is installed and Luma3DS is setup with the correct options, we then restore our previous backup.

During this process, we also setup programs such as the following:

* **FBI** (installs CIA formatted games and applications)
* **Luma3DS Updater** (updates your CFW installation easily)
* **GodMode9** (multipurpose tool which can do NAND and cartridge functions)

#### **What you need**

* - [aeskeydb.bin](magnet:?xt=urn:btih:18b3a17f78e2376e05feaa150749d9fd689b25dc&dn=aeskeydb.bin&tr=udp://tracker.coppersurfer.tk:6969/announce&tr=udp://tracker.opentrackr.org:1337/announce&tr=http://tracker.opentrackr.org:1337/announce&tr=udp://zer0day.ch:1337/announce&tr=udp://tracker.leechers-paradise.org:6969/announce&tr=http://explodie.org:6969/announce&tr=udp://explodie.org:6969/announce&tr=udp://9.rarbg.com:2710/announce&tr=udp://p4p.arenabg.com:1337/announce&tr=http://p4p.arenabg.com:1337/announce&tr=udp://tracker.aletorrenty.pl:2710/announce&tr=http://tracker.aletorrenty.pl:2710/announce&tr=http://tracker1.wasabii.com.tw:6969/announce&tr=http://tracker.baravik.org:6970/announce&tr=http://tracker.tfile.me/announce&tr=udp://torrent.gresille.org:80/announce&tr=http://torrent.gresille.org/announce&tr=udp://tracker.yoshi210.com:6969/announce&tr=udp://tracker.tiny-vps.com:6969/announce&tr=udp://tracker.filetracker.pl:8089/announce)
* - [data\_input\_v3.zip](magnet:?xt=urn:btih:a1195c9f7ab650fa7c7bf020b51fc19ea8d9440c&dn=data_input_v3.zip&tr=udp://tracker.coppersurfer.tk:6969/announce&tr=udp://tracker.opentrackr.org:1337/announce&tr=http://tracker.opentrackr.org:1337/announce&tr=udp://zer0day.ch:1337/announce&tr=udp://tracker.leechers-paradise.org:6969/announce&tr=http://explodie.org:6969/announce&tr=udp://explodie.org:6969/announce&tr=udp://9.rarbg.com:2710/announce&tr=udp://p4p.arenabg.com:1337/announce&tr=http://p4p.arenabg.com:1337/announce&tr=udp://tracker.aletorrenty.pl:2710/announce&tr=http://tracker.aletorrenty.pl:2710/announce&tr=http://tracker1.wasabii.com.tw:6969/announce&tr=http://tracker.baravik.org:6970/announce&tr=http://tracker.tfile.me/announce&tr=udp://torrent.gresille.org:80/announce&tr=http://torrent.gresille.org/announce&tr=udp://tracker.yoshi210.com:6969/announce&tr=udp://tracker.tiny-vps.com:6969/announce&tr=udp://tracker.filetracker.pl:8089/announce)
* The latest fork of [SafeA9LHInstaller](https://github.com/Plailect/SafeA9LHInstaller/releases/latest) (the .7z file)
* The latest release of [arm9loaderhax](https://github.com/AuroraWright/arm9loaderhax/releases/latest) (the .7z file)
* The latest release of [Luma3DS](https://github.com/AuroraWright/Luma3DS/releases/latest) (the .7z file)
* The latest release of [hblauncher\_loader](https://github.com/yellows8/hblauncher_loader/releases/latest)
* The latest release of [GodMode9](https://github.com/d0k3/GodMode9/releases/latest)
* The latest release of [Luma3DS Updater](https://github.com/Hamcha/lumaupdate/releases/latest)
* The latest release of [FBI](https://github.com/Steveice10/FBI/releases/latest)

#### **Instructions**

##### **Section I - Prep Work**

1. Insert your SD card into your computer
2. **If it exists, copy** <serialnumber>\_nand.bin **from the** /ctrtransfer/ **folder on your SD card to a safe location on your computer**
   * Make backups in multiple locations (such as online file storage)
   * This backup will save you from a brick if anything goes wrong in the future
3. Create a folder named cias on the root of your SD card if it does not already exist
4. Create a folder named files9 on the root of your SD card if it does not already exist
5. Copy the contents of the SafeA9LHInstaller .7z to the root of your SD card
6. Copy the a9lh folder from the data\_input .zip to the root of your SD card
7. Copy the contents of the arm9loaderhax release .7z to a9lh folder on your SD card
8. Copy hblauncher\_loader.cia from the hblauncher\_loader .zip to the /cias/ folder on your SD card
9. Copy lumaupdater.cia from the Luma3DS Updater .zip to the /cias/ folder on your SD card
10. Copy FBI.cia from the FBI .zip to the /cias/ folder on your SD card
11. Copy arm9loaderhax.bin from the Luma3DS .7z to the root of your SD card, overwrite existing files
12. Create a folder named luma on the root of your SD card
13. Create a folder named payloads in the luma folder on your SD card
14. Copy GodMode9.bin from the GodMode9 .zip to the /luma/payloads/ folder on your SD card and rename GodMode9.bin in /luma/payloads/ to start\_GodMode9.bin
15. Copy aeskeydb.bin to the /files9/ folder on your SD card

##### **Section II - Installing arm9loaderhax**

1. Reinsert your SD card into your device
2. You should be already on 2.1.0 and powered on
3. Go to URL http://2xrsa.3ds.guide in the browser of your device
   * If you get the error “This service is not available in your region”, use the System Settings to set your device’s country to match the NAND region you installed with 2.1.0 CTRTransfer
   * If you get another error, [follow this troubleshooting guide](https://3ds.guide/troubleshooting" \l "ts_browser)
   * If you get a glitched screen, [follow this troubleshooting guide](https://3ds.guide/troubleshooting" \l "ts_safe_a9lh_screen)
   * If you are on a 2DS or New 3DS and Wireless Communication is off, you can re-enable the wireless by removing the battery and unplugging the charger for several seconds then booting back up
4. Press (Select) to Full Install
5. The installer will now install arm9loaderhax on your device (this is very fast)
6. Power off your device by pressing any button
7. Insert your SD card into your computer
8. Copy your device specific otp.bin from the /a9lh/ folder on your SD card to a safe location on your computer and back it up to multiple locations (such as online file storage), then reinsert your SD card into your device
9. Reinsert your SD card into your device

##### **Section III - Configuring Luma3DS**

1. Boot your device while holding (Select) to enter the Luma3DS configuration menu
   * Make sure to start holding the button before pressing power
   * If you get a black screen, [follow this troubleshooting guide](https://3ds.guide/troubleshooting" \l "ts_sys_a9lh)
   * If you boot to SafeA9LHInstaller, [follow this troubleshooting guide](https://3ds.guide/troubleshooting" \l "ts_safe_a9lh)
2. Use the (A) button and the D-Pad to turn on the following:
   * **“Autoboot SysNAND”**
   * **“Use SysNAND FIRM if booting with R”**
   * **“Show NAND or user string in System Settings”**
3. Press (Start) to save and reboot
   * If you get a black screen, just continue to the next section
   * If you get a “Failed to mount CTRNAND” error, just continue to the next section

##### **Section IV - Restoring the System**

If, before following this guide, you already had an EmuNAND setup and would like to move the contents of your previous EmuNAND to your new SysNAND CFW, now is the time to [follow Move EmuNAND](https://3ds.guide/move-emunand) instead of doing the first four steps in this section.

1. Boot your device while holding (Start) to enter GodMode9
2. Navigate to SDCARD -> ctrtransfer
3. Press (A) on <serialnumber>\_nand.bin to select it, then select “NAND image options…”, then select “Restore SysNAND (safe)”
4. Press (A) to unlock SysNAND overwriting, then input the key combo given
   * This will not overwrite your arm9loaderhax installation
5. Input the key combo given to unlock SysNAND (lvl1) writing
   * This process will take some time
6. Press (A) to continue once it has completed
7. Press (Start) to reboot your device
   * If you get a black screen, [follow 9.2.0 CTRTransfer](https://3ds.guide/9.2.0-ctrtransfer)
   * It is now safe to put New 3DSs in sleep mode again
8. If your backup was of a version between 3.0.0 and 4.5.0, your device will not boot until you manually download the required firmware:
   * Download [this file](http://nus.cdn.c.shop.nintendowifi.net/ccs/download/0004013800000002/00000056) and rename it to firmware.bin
   * Download [this file](http://nus.cdn.c.shop.nintendowifi.net/ccs/download/0004013800000002/cetk)
   * Copy firmware.bin and cetk to the /luma/ folder on your SD card
   * Delete both of these files after updating your device
9. Update your device by going to System Settings, then “Other Settings”, then going all the way to the right and using “System Update”
   * **Note that, as 11.4.0 is very recent, some Luma3DS bugs exist on it (DS and GBA games will not launch). Additionally, NTR CFW is not yet compatible with 11.4.0. You may choose to delay updating for now until a new Luma3DS version is released that fixes these bugs.**
   * Updates while using A9LH + Luma (what you have) are safe
   * The warning about never updating a New 3DS from 2.1.0 does not apply after restoring your NAND backup.
   * If this gives you an error, set your DNS settings to “auto”
   * If this still gives you an error and your NAND is below 9.2.0, [follow 9.2.0 CTRTransfer](https://3ds.guide/9.2.0-ctrtransfer)

##### **Section V - Injecting FBI**

1. Reboot holding (Start) during boot to launch GodMode9
2. Navigate to SDCARD -> cias
3. Press (A) on FBI.cia to select it, then select “CIA image options…”, then select “Mount image to drive”
4. Press (A) on the .app file, then select “NCCH image options”, then select “Inject to H&S”
5. Press (A) to unlock SysNAND (lvl1) writing, then input the key combo given
6. Press (A) to continue
7. Press (Start) to reboot your device
8. If you still launch to the stock Health & Safety app and have downgraded with Gateway in the past, [follow this troubleshooting guide](https://3ds.guide/troubleshooting" \l "gw_fbi)

##### **Section VI - Installing CIAs**

1. Launch Health and Safety (which is now FBI)
2. Navigate to SD -> cias
3. Select “<current directory>”
4. Select the “Install all CIAs” option, then press (A) to confirm
5. Press (Home) to exit FBI

##### **Section VII - Restore Health and Safety**

1. Reboot holding (Start) during boot to launch GodMode9
2. Press (Home) to bring up the action menu
3. Select “More…”
4. Select “Restore H&S”
5. Press (A) to unlock SysNAND (lvl1) writing, then input the key combo given

##### **Section VIII - CTRNAND Luma3DS**

1. Navigate to SDCARD
2. Press (Y) on arm9loaderhax.bin to copy it
3. Press (B) to return to the main menu
4. Navigate to SYSNAND CTRNAND
5. Press (Y) to paste arm9loaderhax.bin
6. Select “Copy path(s)”
7. Press (B) to return to the main menu
8. Hold (R) and press (B) at the same time to eject your SD card
9. Remove your SD card from your device
10. Press (Start) to reboot your device with your SD card removed
    * Booting your device at least once with your SD card removed will allow you to configure the CTRNAND based Luma3DS installation
11. Use the (A) button and the D-Pad to turn on the following:
    * **“Show NAND or user string in System Settings”**
12. Reinsert your SD card into your device
13. Press (Start) to save and reboot