

## The definitive guide to 3DS custom firmware

## **Prep Work:**

1. R4i-B9S flashcard



2. Two SD cards (one is the source sd, another SD card has a recommended capacity of 16G for installing more games)





3. A magnet (It comes with R4I-B9S kit)





## Let's get started. (Total 24 steps)

- 1. Turn off the console.
- 2. Insert your SD card into your computer, Copy "InstallFirm.zip" to the root of your SD card and unzip it to the current folder. download link:

http://www.r4i-sdhc.com/down/b9s/installfirm.zip), re-insert the SD card into your console.



3. Insert flashcard (R4i-B9S) into the console; place the magnet at right position(below B button). Hold (Select) + (Start) + (X) + (Power) buttons for about 5 seconds, then release the buttons. The console should boot into safeb9sinstaller.

To test if a magnet will work, hold it on or around the (A)(B)(X)(Y) buttons while the device is powered on to see if it triggers sleep mode. If it does, both displays will go black as long as the magnet is held in that spot.



below B button (For old 3ds)



4. Wait for all safety checks to complete, when prompted, input the key combo given to install boot9strap (should take less than a minute)

```
All input files verified.

To install FIRM, enter the sequence below or press B to cancel.

To proceed, enter this:

<+> <+> <+> <+> <+> <A>
```

- 5. Once the SigHaxed FIRM installs, press A to continue. Always press "power" until the console power off (about 15-20 seconds).
- 6. Remove your SD card and insert into your computer, format SD card and Copy "NTRPack\_1.2 SD.zip" to the root of your SD card and unzip it to the current folder. download link: <a href="http://www.r4i-sdhc.com/down/b9s/ntrpack">http://www.r4i-sdhc.com/down/b9s/ntrpack</a> 1.2-sd.zip ), re-insert the SD card into your console.



ıld reboot into godmode9.



8. Once godmode9 boots, press home, go to "More...", then "Scripts...". Select "copy\_ntrboot", and accept any prompts that pop up.

```
HOME button pressed.
Select action:

Poweroff system
Reboot system
-> More...

(<A> select, <B> cancel)
```

```
HOME scripts... menu.
Select action:
-> copy_ntrboot

(<A> select, <B> cancel)
```

9. Once the script completes, press "R+B", then remove the source SD and replace with target SD (3DS ROM will be install inside this SD card)

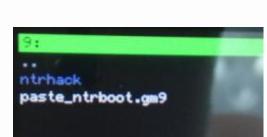
```
Copy successful!
Please eject SD (R+B) and replace with original,
Then run 'paste_ntrboot.gm9' in ramdrive

(<A> to continue)
```

10. Select "[9:] RAMDRIVE" to open it.

```
[0:] SDCARD
[1:] SYSNAND CTRNAND
[2:] SYSNAND TWLN
[3:] SYSNAND TWLP
[S:] SYSNAND VIRTUAL
[9:] RAMDRIVE
[C:] GAMECART
[M:] MEMORY VIRTUAL
[X:] NAND XORPADS
```

11. Scroll to "paste\_ntrboot.gm9", select it, then select "Execute GM9 script". Accept any prompts the show up. If any error occurs, it may be an SD card contact.



```
9:/paste_ntrboot.gm9

-> Execute GM9 script
Show in Hexeditor
Show in Textviewer
Calculate SHA-256
Copy to 0:/gm9/out

(<A> select, <B> cancel)
```



12. Once the script completes, press the start to reboot the system.

```
Copy successful!
Reboot to configure luma and continue.

(<A> to continue)
```

- 13. The console will boot into Luma3DS configuation. Check these options(press A) then press start:
  - -"Show NAND or user string in System Settings"
  - -"Patch ARM9 access" required for 3dsx versions of homebrew like FBI

```
Luma3DS v8.1.1 configuration
Press A to select, START to save

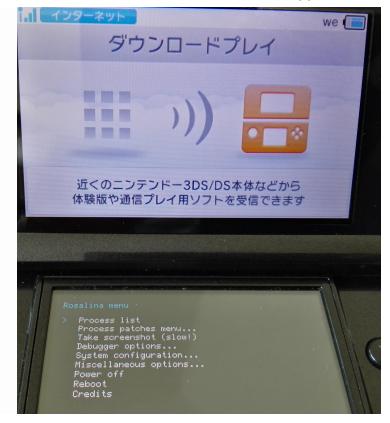
Default EmuNAND: 1(x) 2( ) 3( ) 4( )
Screen brightness: 4(x) 3( ) 2( ) 1( )
Splash: Off(x) Before( ) After( ) payloads
PIN lock: Off(x) 4( ) 6( ) 8( ) digits

( ) Autoboot EmuNAND
( ) Use EmuNAND FIRM if booting with R
( ) Enable loading external FIRMs and modules
( ) Enable game patching
(x) Show NAND or user string in System Settings
( ) Show GBA boot screen in patched AGB_FIRM
(x) Patch ARMS access
( ) Set developer UNITINFO
( ) Disable ARM11 exception handlers
```

Download Play



15. Press "L+Down+Select" to open Rosalina. Go to "Miscellaneous options...", then select "Switch the hb. title to current app."

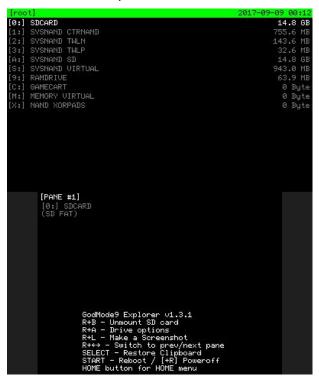


- 16. Once that completes, press "B" and select "Save settings", then press "B" twice to exit rosalina menu.
- 17. Press home, close download play, then re-open it.
- 18. You should now be met with a blue screen with "DSP1 zoogie" at the time. Let it run until it completes. Instead of pushing Start or B when prompted, press home, close the app then power off the 3ds.

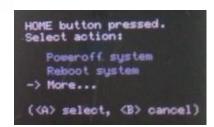




19. Hold start and power on the console to boot into godmode9.



20. Once godmode9 boots, press home, select "More...", then select "Scripts..."



```
HOME more... menu.
Select action:

SD format menu
Build support files
Set RTC date&time
-> Scripts...

(<A> select, <B> cancel)
```

21. Select "finalize" and follow any prompts or instructions it gives, accepting them all.

```
HOME scripts... menu.
Select action:

Backup EmuNAND
Backup SysNAND
-> Finalize

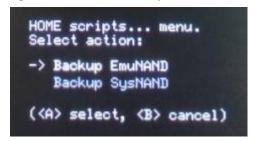
(<A> select, <B> cancel)
```

22. When asked to "relock", accept.

```
Write permissions were changed.
Relock them?
(<A> yes, <B> no)
```



23. If you wish to make a nand backup (some users may not have enough space to do so), go back to the "Scripts..." once more and run "Backup SysNAND"



24. Press start to reboot the console, open download play, you will find the console can run the 3ds CFW now.



9

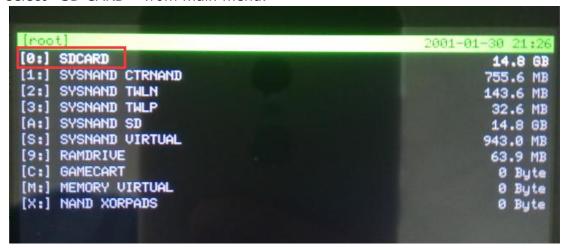


## How to Install and Play 3DS ROM

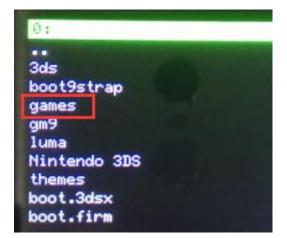
1. Download 3DS ROM and copy into target SD card (copied to root or create a directory named "games" for ease of management).

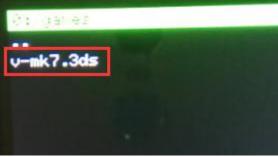


- 2. Convert 3DS ROM format to CIA. If download 3DS ROM was CIA format then skip this step.
  - **a.** Turn off the console. Hold START + POWER few second to restart console, select "SD CARD" from main menu.



**b.** Explore the "SD CARD" and select the copied 3DS ROM file.





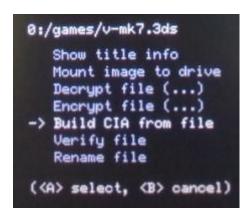


**C.** Press A to select "NSCD Image option" and choose "BUILD CIA from File" to convert 3DS ROM to CIA format. It will take couple of minutes depend to file size. If 3DS ROM format is CIA, skip step 2.

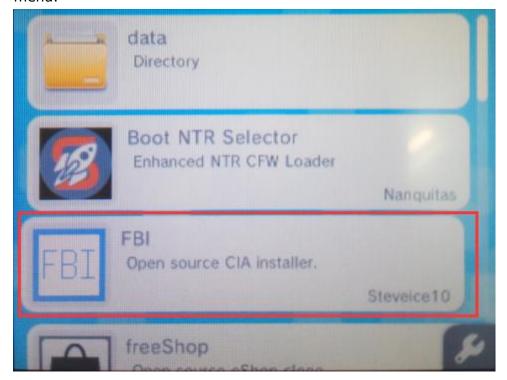
```
0:/games/v-mk7.3ds

-> NCSD image options...
Show in Hexeditor
Calculate SHA-256
Copy to 0:/gm9/out

(<A> select, <B> cancel)
```

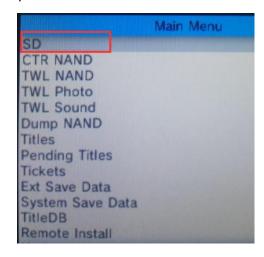


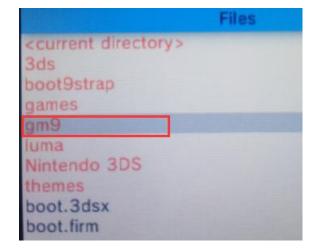
- 3. Install and play CIA format 3DS ROM.
  - **a.** Power up console normally, open "down play". Launch "FBI" homebrew from menu.

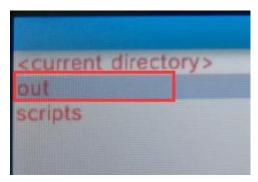


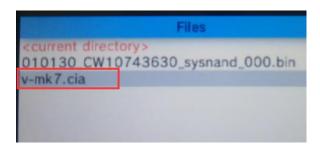


**b.** First time launch of FBI homebrew need to configure the file path. Recommend using default path. Generate CIA file locate at "gm9/out". Select the CIA file and press A to enter.

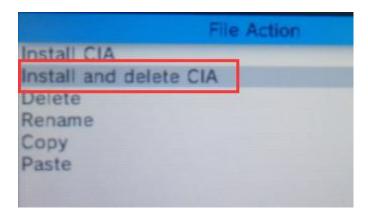






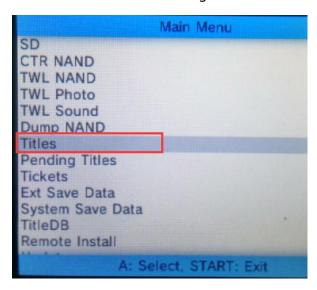


C. If select "Install CIA", CIA file will be keep after installation. If select"Install and Delete CIA" the CIA file will be automatic delete after installation. After convert to CIA, original 3DS ROM file can be deleted. This can be done by using FBI or using laptop PC. To save space of SD card default was "Install and Delete CIA"





**d.** Press "B" twice to FBI main menu after CIA installation, select "Title" and choose "launch" the installed 3DS games.



**e.** Press HOME return to device main menu, installed games icon will be shown.

