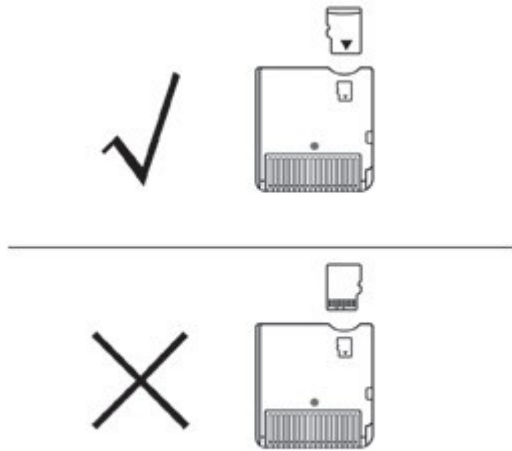


R4 SDHC Functionality

- 2nd generation storage device (no booting tool required)
- Flush fitting slot 1 card
- Uses MicroSD card, FAT16 or 32
- Supports any MicroSD card speed with no lag in game
- Supports Clean ROM, drag and drop. Works on any OS
- Built in NoPass
- Automatically detect save type
- Save directly to MicroSD card, not to onboard chip
- Supports Moonshell and other homebrew. Open I/O interface
- User friendly skinnable interface. Touchscreen or button operation
- Supports rumble pak and memory pak
- Supports the WiFi game, DS Rumble Pak, DS Browser
- Supports changes of the background of Operation Interface
- Support Skin DIY by setting background and font colors on Main Menu and Game Menu manually and automatically
- Supports 4-scale-lightness adjustment (DS Lite only)
- Supports the Soft Reset.
- Supports Action Replay cheat
- moonshell 1.6 support Software Reset function(Press START key back to the R4 menu)
- DLDI auto-patching
- Full download play support

R4 SDHC Manual

The front side of TF card should be matched with the back side of R4 when TF card (MicroSD card) is plugged into R4



1) Hardware Installation

Connect the TF card to PC with the card reader, then, go to the "/SYSTEM" directory on the disk.

A- Loading the game kernel: Copy the "_DS_MENU.DAT" at the directory of the simplified game kernel/ traditional game kernel to the root directory of TF card.

B- Loading the media kernel: Copy the "moonshl" folder and the "_DS_MSHL.NDS" file at the "moonshell" directory to the root directory of TF card;

C- Load the DIY interface: Copy all the folders "_system_" to the root directory of the TF card.

2) Unload TF Card

After finishing ROM added, then right click the removable disk icon on the right down corner of the screen; Draw out the TF card from card reader/writer.

3) Main Menu Operation

Connect the TF card to DS Slot-1 with the R4, turn on the power, the GUI will display in a few seconds. You can select ROMs or Media to run by the navigating keys or touch screen, press "A" button to enter the corresponding functions.

4) Game Menu Operation

- Choose the 'Game' to enter Game GUI; Press 'START' to go back to main menu.

-Press the 'SELECT' key to select the display mode in game interface ("File Display", "Game Display" and "eBook Display", Default is "Game Display"), "N files", "N game" and "N eBook" display at top bar on the top screen.

-Please be aware that the "SHELL,MOONSHL,_SYSTEM_"directory and the

"_DS_MSHL.NDS" file will be hidden under the "Show Games Only" mode; Any other directories or files with hidden attributes will also be hidden.

- You can choose the display model ("Display all" and "Only Display Game", default is "Only Display Game") by pressing "SELECT", and the top screen will display "N file" and "N Game".

Please be aware that the "SHELL,MOONSHL,_SYSTEM_" directory and the "_DS_MSHL.NDS" file will be hidden under the "Show Games Only" mode; Any other directories or files with hidden attributes will also be hidden.

4-scale-lightness adjustment is available to the DS Lite console by touching the sunny icon at the top left corner of game interface. (Not available to DS console, the sunny icon will turn to be gray if it is DS console.)

At the right top of the touch screen it is the "Soft Reset"; Red indicator means the "Soft Reset" function is off; Green indicator means the "Soft Reset" function is on. The users may point on the touch screen or press "R" button to switch the "Soft Reset" On/Off.

While the "Soft Reset" function is on, pressing "L+R+A+B+X+Y" can go back and forth to the game's main menu; Please do not do this while saving, as it will lead to malfunction, It is recommended to go back to main menu before you function the "Soft Reset".

If the error occurs on running games, please try to turn off the "Soft Reset".

- The top screen displays the files under the directory, 'Up/Down' key for rolling, 'Left/Right' key for flipping. The current path and amount of the total files will show on the top, the scroll bar will show the location of the current file.

- The files under the directory will be sorted by file name, the directory (DIR) will display at the front. The (..) is the parent directory.

- The bottom screen display the details of the files and directory, the icon and title will be displayed if it is NDS/IDS game.

- Press 'A' button or touch screen to enter the corresponding functions or run the game, press "B" button to go back

5) Running Game

- Choose the game you like in the game menu; Press 'A' button or touch screen to run.

- It will ask whether to create the new archive if it is the first running, press 'A' button or touch the 'Confirm' to create then run the game; Press 'B' button or touch 'Cancel' to cancel; Press 'X' button or touch 'Ignore' to omit creating archive and run the game.

- You can check the modified time of the archive, as it will be edited automatically while

running the game.

- The file name of the archive is the same with the games, the extension is .SAV, can be backup or restored from PC at anytime.

Default.nds file runs automatically under TF directory, it maybe temporarily hidden in the main menu while pressing B key to turn DsLite on; Pressing X key to delete this file if there is unnecessary to have it run automatically.

6) Operation of action Replay Cheat

Choose the corresponding game, if the official database (cheat.dat files under the `_system_` folder) or the user database (usrcheat.dat files under the `_system_` folder) contains the action Replay Cheat, the below screen will show the "action Replay Cheat (Y)" button, press the Y key or that button to enter the set up interface of cheat.

If the two databases will contain an action replay cheat to the same game, there will be two "action replay cheat" buttons. The official database is on the left, the user database is on the right.

On the top line of the above screen shows the game name, the top line of the below screen shows how many cheat code currently be selected and the total amount of the cheat codes can be selected, the bottom line of the below screen shows the version and created date of the current cheat database.

The function of the six buttons on the below screen is described separately as below:

"select all" press this button to select all the cheat code under the cheat opened circumstance.

"delete all" press this button to delete all the selected cheat code under the cheat opened circumstance.

"game open/close" press this button to control the cheat switch of this game, the left frame will show the current status.

"cheat open/close" press this button to control the entire cheat function switch, the right frame will show the current status.

"preserve and exit" press this button to preserve the current modification, and exit, the same function as well as press the START button.

"discards and exit" press this button to not preserve the current modification, and exit, the same function as well as press the SELECT button.

Under the cheat opened circumstance, use up and down arrow to choose each cheat code one by one; if it's the cheat folder, press A to unfold/fold the directory.

Under the cheat-opened circumstance, use left and right arrow can go across 10 cheat codes.

If do not need the cheat function, delete the cheat.dat files under the `_system_` folder.

When the two databases will contain an action replay cheat to the same game, users can open the action replay cheat in the database to by their needs and another one would be close (close action replay cheat by turning master switch off, closing games or do not choose any action replay cheat), kernel will automatically choose the use of opened action reply cheat (Cheats in two databases opened to one game at the same time, then it will use the one in official database).

efore running game, under circumstance that a cheat has already been opened, in the process of running the game cheat can be temporarily closed by L+R+START+DOWN, you may press L+R+START+UP to open cheat.

6) Read the eBook

Select the eBook in the game menu, and open it by pressing 'A' key or touching the icon.

It will ask whether to create a bookmark if it is the first running. Pressing 'A' key or touching the 'Confirm' button will create and then open the bookmark; Pressing 'B' key or touching the 'Cancel' button will not run the process; Pressing 'X' key or touching the 'Ignore' will open the eBook without creating the bookmark (The bookmark's function is invalid).

Press 'START' key to exit the eBook mode and back to the main menu.

Click "SELECT" key to switch the character layout horizontally on dual screens, vertically on dual screens or on one screen (mostly used in Asian layout); Backlight turns off under one screen mode in order to save power.

Press the 'Up/Down' key can process the Row Up/ Row Down; Press the 'Left/Right' key can process the Page Up/Page Down.

Press 'A' key can open/close the intelligent-paragraph division function.

Press 'B' key to change the font (large, Medium, Small in rotation)

Press 'X' key to change the font color (27 color in rotation).

Press 'Y' key to change the row spacing (From 1-8 point space in rotation).

eBook support the DIY background:

Create 2 BMP files (256X192 pixels, 8 bit or 24 bit colors), name them to be "bckgrd_1.bmp" and "bckgrd_2.bmp", and then save to the "`_system_/eBook`" directory of the TF card.

If the bookmark has been created, the features below will work:

Whenever you press the 'START' key to exit, it can memorize the location where you have read automatically, and it will go to the location directly next time while you open the eBook.

Press 'L' key to save the bookmark (3 positions available), press 'R' key to keep the previous bookmark (No any change).

7) Switch of the Skins

If the skin does not exist in the directory of `_system_` in TF/microSD, it automatically uses the Skin from formal Beta Edition;

There are 4 pictures at the directory "system/_system": `logo.bmp` ? `icons.bmp` ? `bckgrd_1.bmp` and `bckgrd_2.bmp`. They are the background of the R4 operation interface; they can be changed to fit your style.

`logo.bmp` - Background of the Top Screen of R 4' s startup.
`icons.bmp` -- Background of the Bottom Screen of R 4' s Startup.
`bckgrd_1.bmp` -- Background of the Top Screen of R 4' s Explorer.
`bckgrd_2.bmp` -- Background of the Bottom Screen of R 4' s Explorer.

Note:

Do not change the picture's name;
Make sure the picture is .bmp format, 8-bit/24-bit;
Make sure the picture is 253*192 pixels.

After finishing process on the pictures, copy the "`_system`" folder to the root directory of the CF card.

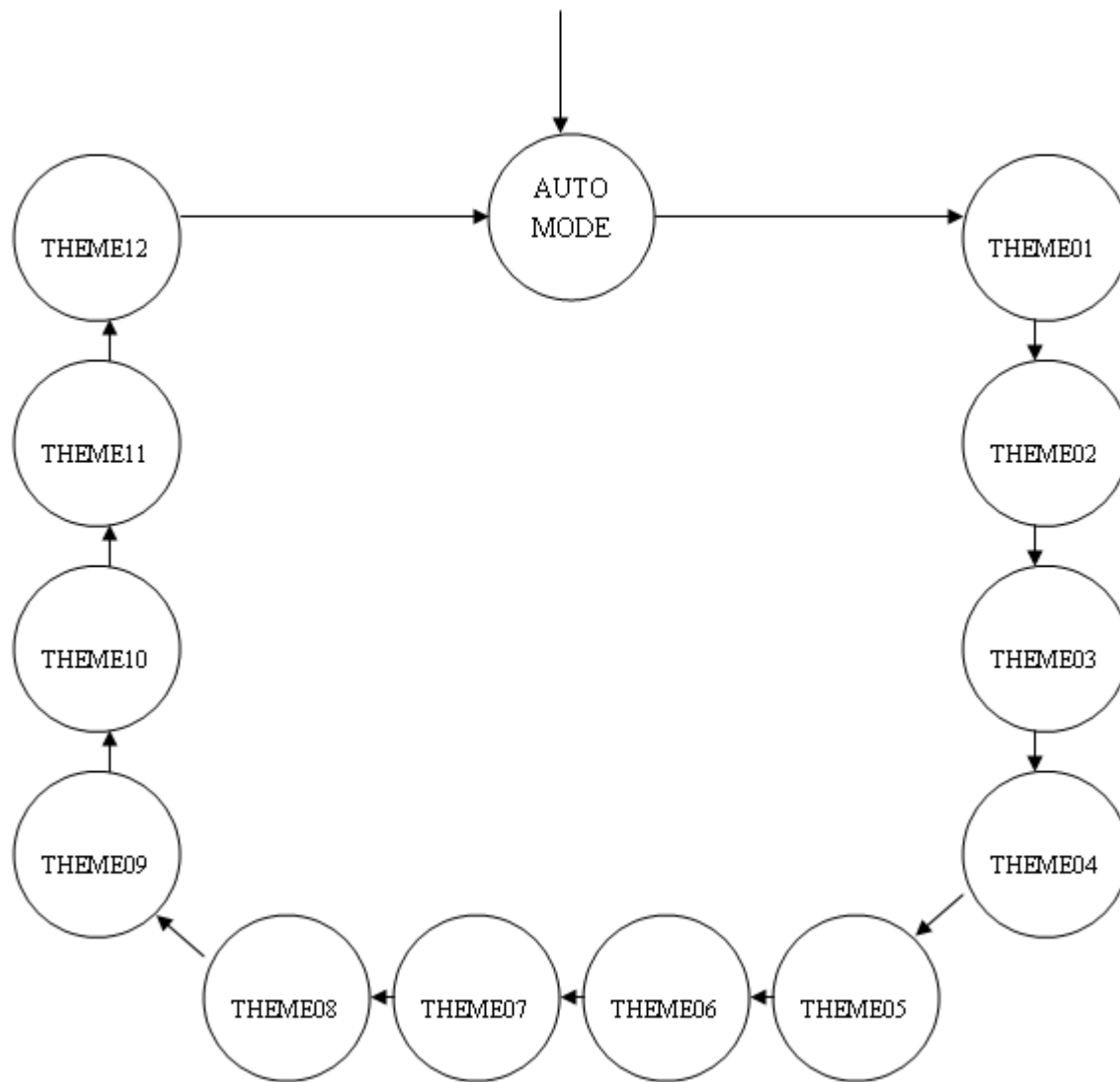
If the Skin exists in the directory of `_system_` in TF/microSD, it automatically enters multi Skins mode.

The Skins in multi Skins mode can be switched manually and automatically, it is automatically switched with the Skins by months.

The method of the Skin switch is: Click "SELECT" key in main menu, it switches between twelve manual modes and one auto mode, the chart is showed as below (It automatically skips if the Skin does not exist in the directory of themes):

If the users would like the switches of multi Skins while playing, they only need create the directory of themes in the directory of `_system_`.

For the method of adding more Skins, please view "DIY Manual of R4DS Skins"



Q: Create system files error

A: The system need to create a 4MB-temporary file, make sure the SD/TF has enough space. (It's better to run the R4 system to create this temporary file once you finish formatting the flash card, and do not delete it unless it is necessary)

Q: The system file is not correct.

A: Once the 4MB-temporary file which is create by the system was damaged, user can delete the file and run the system to rebuild; Or run the R4 system to create the 4MB-temporary file after finish formatting the flash card, and do not delete it unless it is necessary.

Q: How do saves work? Will I be able to backup my save-games?

A: Easy and without extra software , you can backup your saves bysimply dragging and

dropping them.

Q: Failed to create archive?

A: There are 2 possible reasons: One is the TF card has no enough space; Second: to the FAT16 OS, the root directory has a maximal file amount: 512(long file name will take more space), that means the surplus amount must be more than the amount that going to be created.

Q: Archive has been damaged?

A: There are 2 possible reasons also: First, the archive is damaged indeed; Second, If the archive is copy from the other type of flash card, it can't run directly before being converted via appointed software.

Q: Is the R4 Compatible with the Rumble Pack or Opera Ram Expansion?

A: Yes

Q: Will you support DS Homebrew Roms?

A: Yes

Q: What is the Battery Life?

A: Same as the Original carts, the R4 core components are chosen to maximize battery life.

Q: What about reading Speeds from the DS? Are they Equal to an original cart?

A: Original carts have various speeds, our hardware is designed to match the speed as close as possible. No problems to this date.

Q: Does Drag and Drop functionality work on a Mac and other Operating systems except Windows?

A: Of course Our device is fully mass storage spec compliant, and should work with any operating system which supports this standard

Q: Do I have to use patches and extra software to load files on the NDS?

A: Absolutely not.

Q: Will I need any other extra software or hardware to manage the R4?

A: Absolutely not.

Q: What colors are available from the R4 Adapter?

A: We are currently manufacturing White cart for first batch stock, we might consider other colors soon.

Q: Do I have to flash my DS firmware in order to operate the R4?

A: Nope! No firmware hacks or any nasty tricks are required to use the R4. If you change your firmware you lose your warranty!

Q: What languages does the R4 OS support?

A: English, Chinese and Japaness at present.

Q: Does it work on both DS and DS Lite?

A: Yes, every revision out and to come

Q: Are there any regional issues?

A: No, R4 works on every DS and DS Lite from around the world.

Q: How many files can I have on the R4?

A: R4 Adapter supports 128MB~4GB TF(MicroSD) card , 4GB=32Gbit

Q: Do I need a pass key device for the R4 to work or can I just put it in my DS?

A: Nothing is needed! Just place the R4 with the TF card into the NDS slot 1 and power-up your DS .

Q: Is the R4 OS/Firmware upgradable?

A: Yes! And the best part is that its DEAD EASY and SAFE to do it

Q: Is the OS skinnable?

A: Yes.