R4i Save Dongle from R4i-sdhc.com review

Introduction

With special dumping hardware, it is possible to backup original DS/DSi (and recently 3DS) game carts. However, this process also requires some experience in order to create a valid 1:1 ROMs out of those original carts. Luckily for DS/DSi and 3DS original game carts owners, 1:1 dumped ROMs are usually available to be downloaded off the internet, therefore, owners do not have to have the required hardware and skill to backup their original game carts. Unfortunately, that was not the case with game saves. Until recently, players were unable to backup/restore their save files from and into their own original game carts.

Team R4i-SDHC introduces a solution that enables end-users to use their PCs to backup and restore their save files from and to their original DS/DSi and 3DS game carts, the solution is the R4i Save Dongle. Team R4i-SDHC lists the features of their R4i Save dongle as follows:

- Full support of DS, DSi, and 3DS original game carts.
- Backup game saves from original game carts into PC.
- Restore game saves backups into original game carts from PC.
- Enables editing and sharing backup game saves.
- Firmware updated through USB to enable more features.
- User-friendly PC software compatible with Windows 98 and up.

In this review, I will test and verify those features and provide my comments on this useful solution from Team R4i-SDHC.

Contents

Team R4i-SDHC kindly sent 500 dongles to lucky users around the world, and I was one of those lucky winners. The dongle was sent from the Netherlands, so European users should expect a fast dispatch and short delivery times. The dongle came packaged in a nice red box. The box has all the features printed on the back, plus some instructions directing users to download the latest drivers and software from www.r4i-sdhc.com , and to encourage users to upload and share game saves from www.game-engine.com and www.save-mii.com . Team R4i-SDHC also provided the same information printed on a provided paper in three languages (Nederlands, English, and Dutch).

Hardware

The box contains the dongle, which is made of plastic and has a slot for the DS/DSi/3DS game carts, an LED indicator, a tiny upgrade button, and a USB interface to connect with the PC. The build quality is good, although the dongle is a bit large and could be hard to be inserted into the back of your PC case. However, a very easy solution to this could be using a front USB port or using a cheap USB extension cable.
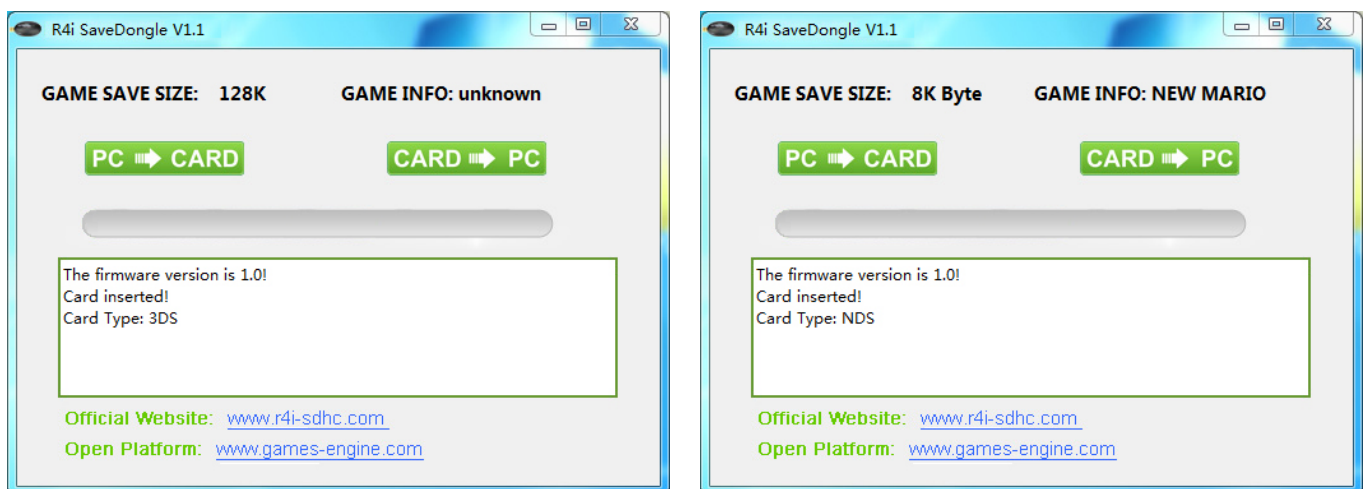

Software

The required software can be downloaded from www.r4i-sdhc.com, this includes:

- Drivers for the dongle 52.9 MB.
- R4i SaveDongle Software (latest version was V1.1) 213KB.
- SaveDongle Firmware (latest was version 1.0) 26.4KB and SaveDongle Firmware Uploader Software 205KB.
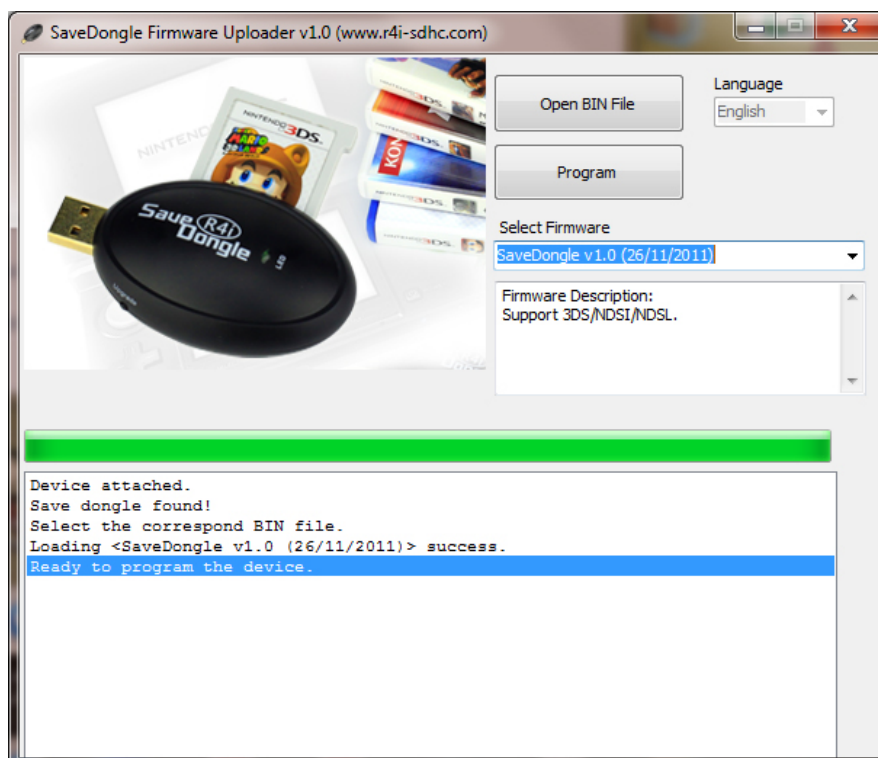- 3DSaveTool (latest was v0.2b-cred) 475KB.

Performance

The dongle was tested on a Windows 7 Ultimate X64 PC. After inserting the dongle into the USB port, Windows automatically detected the dongle and installed the related drivers without the need to use the downloaded ones.

R4i SaveDongle Software is the main software to be used in order to backup/restore save files from the inserted original cart. The software was able to correctly detect the inserted card type, save file size and game info for DS/DSi carts, however, it only detected the cart type and save file size for the 3DS carts, and displayed "unknown" for game info. That could probably be related to Nintendo's encryption of their 3DS carts. R4i SaveDongle Software is very easy to use, one click to backup save files to PC (CARD -> PC button) and one click to restore them back into the original cart (PC -> CARD). The process is very simple and straight forward with both the DS/DSi and 3DS carts and I was able to successfully backup and restore save files from all of my original DS/DSi and 3DS game carts.

Sharing DS/DSi save files is as simple as copying the new save file into the original cart, but 3DS save files are a bit more difficult to share as they are encrypted with a special encryption key. 3DSaveTool software can extract this key from a backup save file and then use it to encrypt and decrypt new save files before restoring them back into 3DS carts. Some users might find using this software a bit more difficult, because it is a console (DOS-based) application and does not have a GUI (Graphical User Interface), I think future releases might simplify the use of this software and introduce a GUI, but still, I personally found it easy to use for both extracting the key from a 3DS save file and then use this key to encrypt/decrypt 3DS save files.

The cart came preloaded with firmware version 1.0 so it is not required to perform a firmware update for now, but I decided to test the SaveDongle Firmware Uploader software for the sake of completion. After starting the program, you can change the interface language between English (default) and Chinese. Then the program asks you to put the dongle into "programming mode" this is done by pressing the "Upgrade" button on the dongle for a few seconds after inserting it into the USB. Windows then starts looking for the new "programming mode" drivers, and Windows 7 was able to detect and install those drivers automatically as well. Then you need to choose the new firmware bin file and press program. The software displays some basic information on the selected firmware such as its version number and main features.

Overall

The dongle is well-built, easy to use, and exactly does what it claims; inserting the dongle into a front USB port should be easy, while including an extension USB cable makes it much easier. The firmware update feature is also easy to use and makes the dongle future-proof for possible compatibility unexpected changes in future game carts. The only minor concern I had with the R4i SaveDongle was the 3DSaveTool, the software works well but requires some command-line experience which could be challenging for some users, but I think future releases might include a graphical interface which simplifies the use of this software, one last concern is that the software is for PC only and there is currently no MAC support.

Score 9/10