

R4i SaveDongle, the McHaggis review

By McHaggis

Introduction

I know **masterchan777** already wrote a review, but I thought it couldn't hurt to have a second objective opinion. He went over the features and posted some photos, so I'm just going to go over my own personal experience with the dongle. I was quite eager to participate in reviewing the R4i SaveDongle, not because backing up and restoring game saves is something I think I'll need, but because I've always been interested in hacking and I'm hoping that this will help me with the transition from software developer to hacker, assuming I have the time. Hacking game saves is something I have experience with, so I would like to apply that experience to my 3DS and DS games and see if I can have some fun.

Still, I was keen to see the other side of this product, uploading and sharing game saves is a great idea, as is downloading game saves when you don't have the time/ability to do everything yourself.

The hardware

Those of you with R4i flash cards will likely be familiar with the box design, which is much the same. The basic features are listed on the back with a diagram of system support on the side. The dongle itself is very similar to any USB flash drive, though longer and dome shaped. The card slot is on the right side, with the logo and a green LED – interestingly labelled '*LED*' – on the top. there is a button on the left side near the USB connector that says '*Upgrade*', which puts the dongle into service mode so it can be flashed with a newer firmware.

Inserting the card for the first time worried me a little, the card goes face down and the dongle offers a little resistance, but there's a tiny screech from stretching plastic/moving pins as you push on the card. It is possible to get the card into a position where it won't push in, so you may need to jiggle it around a little until you find the inner slot (that's what *she* said!).

The software

Installing the dongle was a breeze. The r4i-sdhc.com site suggests that you download "*drivers*", which are really just .NET and Visual C++ runtime files, and these were

already present on my Windows 7 x64 machine. The main GUI is very simple to use with only two options, *'PC to Card'* and *'Card to PC'*. When you insert a DS card, the game is detecting and the label shown. No game info is shown for a 3DS card, but that's easily remedied by looking at the card before you insert it into the dongle. A brief look at the firmware upgrading software suggests that is also very easy to use. After plugging the dongle into the USB port, simply push the button to upgrade and the device type is switched.

I had no problems backing up a couple of saves to my laptop, or subsequently restoring them. However, the software does consistently crash for me, if left open for an undetermined period of time. I found this a little annoying when spending a little time modifying the saves; by the time I returned to the main GUI to restore the modified saves, the application would hang and I'd need to restart it.

Also made available for download on the r4i-sdhc.com site was [Crediar's 3DSaveTool](#). This tool is vital if you want to attempt to modify any 3DS cart saves. Slightly more complicated to use than the GUI, it's a command line executable that allows you to extract the XOR key from a game save, which can then be used to decrypt or encrypt the aforementioned save. I was able to use this to decrypt and re-encrypt after slightly modifying a string within the save without any issues. Restoring the save to the game worked fine, too.

Brushing lightly on the subject of save sharing, the [Games Engine](#) site is also very simple to use. There's a forum for uploading game saves, and those that are uploaded are listed on the main page for downloading. Getting saves or sharing your own saves is pretty much a breeze.

Conclusion

Aside from the minor problems I had with the software, overall I'm rather pleased with how easy the device is to use. There's clearly room for improvement, like an option for automatically decrypting/encrypting saves as they are transferred, or a button to delete the cart's save data (for resale, perhaps), but it very much does what it says it does and that's all there is to it. I'd certainly like to see the bugs fixed, or the source code for the GUI would be nice.

If I had to give it a score, I'd go with 7 out of 10. Points lost for stability issues with the software and the minor hardware flaw I mentioned above. It's definitely worth buying if you're keen on sharing game saves, or you think a save game exploit might crop up in the future.