

# Flash2Advance Ultra

A Guide from <http://www.flash2advanceultra.tk/>

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Update 1: 3 April 2005

Update 2: 25 April 2005 (New Tips and USB Writer update)



F2A USB Linker



F2A USB Writer



**NEW:**

## Package Contents:

**1x F2A Ultra CARD**

**1x USB Linker**

**1x CD-R** with latest drivers, GBA and GBC game demos, GBA Movie clips, GBA Movie Converter, VisualBoy Advance (GBA emulator, so you can play the game on your computer before installing it to the CARD), F2A Browser (database with game numbers and screenshots of games, so you can find the game you're looking for).

**1x CARD Case**



## Installation Guide

If you have just received your flash2advanceultra cart then this guide will help you with the installation. It is very easy!

Here are the things that you need to do. Follow the steps in this order:

- **Connect the USB linker with your GBA(SP) and your computer.**  
Windows will notice you: NEW HARDWARE FOUND.



Do not click anything on this dialog box, DO NOT cancel or proceed. Leave it as it is.

- **Secondly Install the drivers.**

The drivers are in a compressed file, named: **F2AUSBlinkerXPdrvSetup.zip** or in a folder in the CD-R that came with your F2A Ultra (CDROM: \f2ausbdriver\F2AUSBlinkerXPdrvSetup)

The compressed file (or folder) contains 4 files:

EZLoader.sys

Ezusb.inf

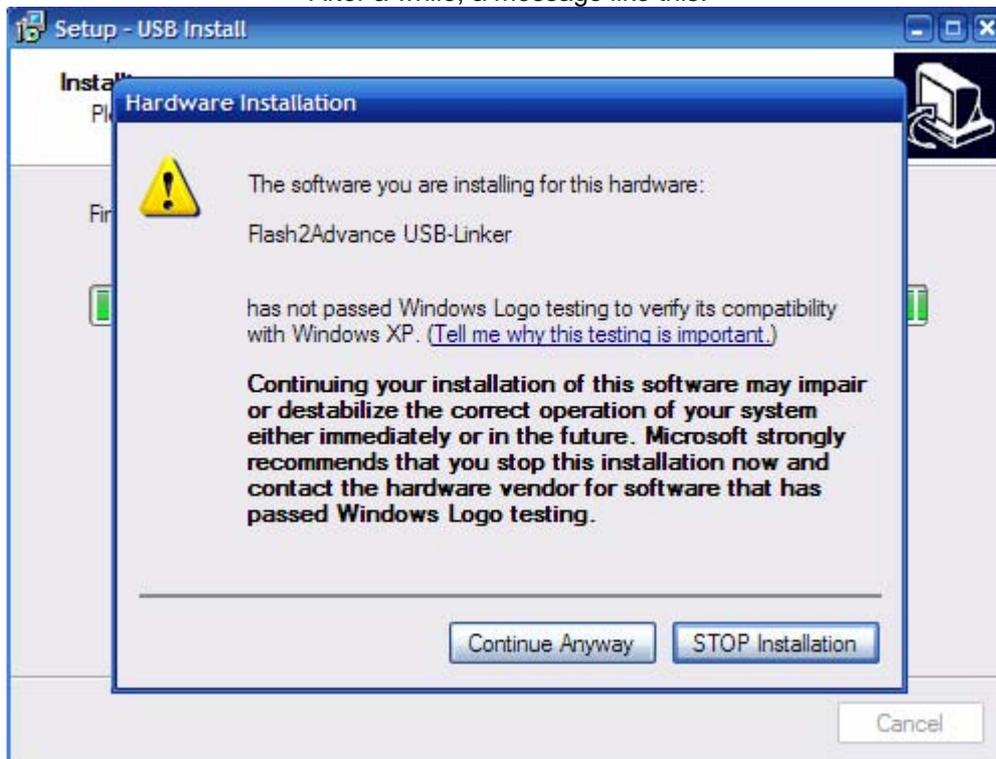
Ezusb.sys

Setup.exe

Double click Setup and the drivers installation will start.



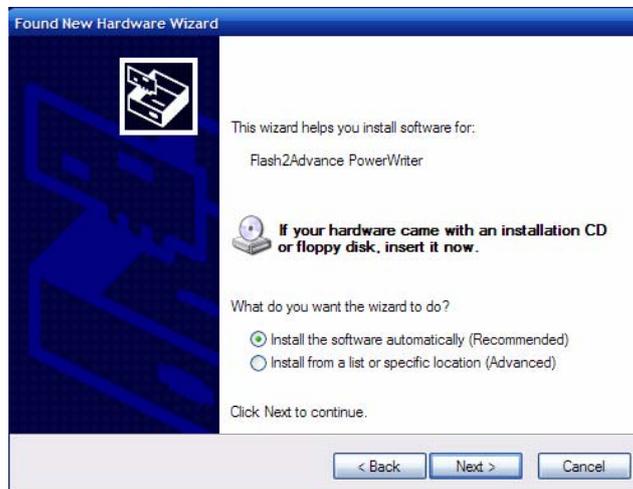
*Next > Next >*  
Do NOT unplug the USB Linker,  
Click on *Install*  
After a while, a message like this:



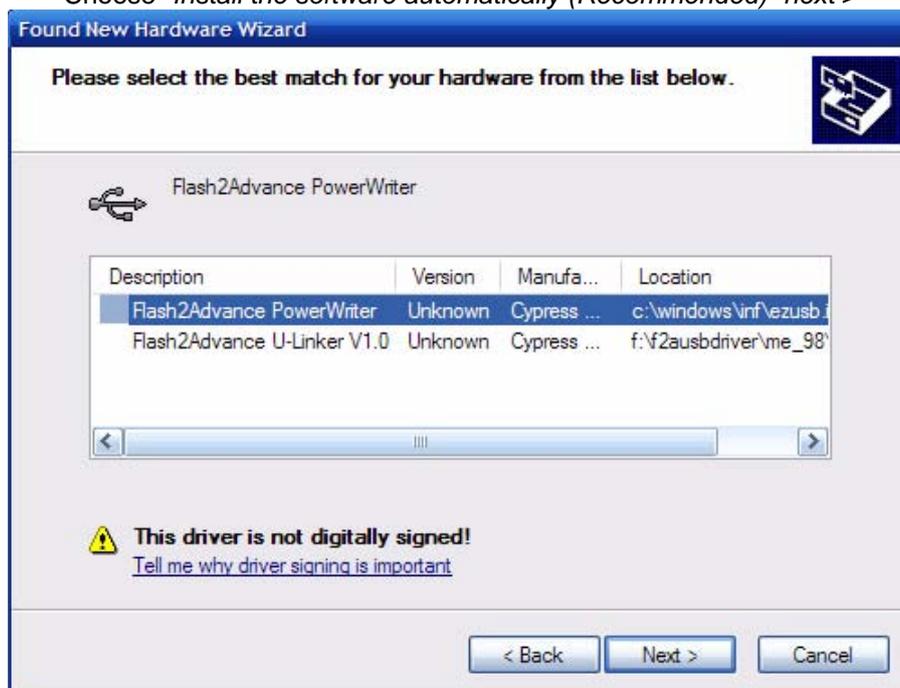
will appear. Just click on "Continue Anyway" to proceed with the installation.



The Found New hardware will appear for a second time. Click on Finish for the driver you just installed, and choose: “No, not this time” on the new window, and then next. USB Linker driver is installed at this stage, and we’re heading for the installation of PowerWriter transfer protocol. That’s the reason for the 2 New Hardware wizards.



Choose “Install the software automatically (Recommended)” next >



Choose **Flash2Advance PowerWriter** ; as you can see on the Location field, the *Flash2Advance U-Linker V1.0* is inappropriate here, because it's under the folder \me\_98\ on the CD, thus, it's for Windows Millennium and 98.

A second Digital Signature error message will appear, this time for the hardware: Flash2Advance PowerWriter. Click on *Continue Anyway* again, and then *Finish*.

You'll get this message, but just ignore it for now.

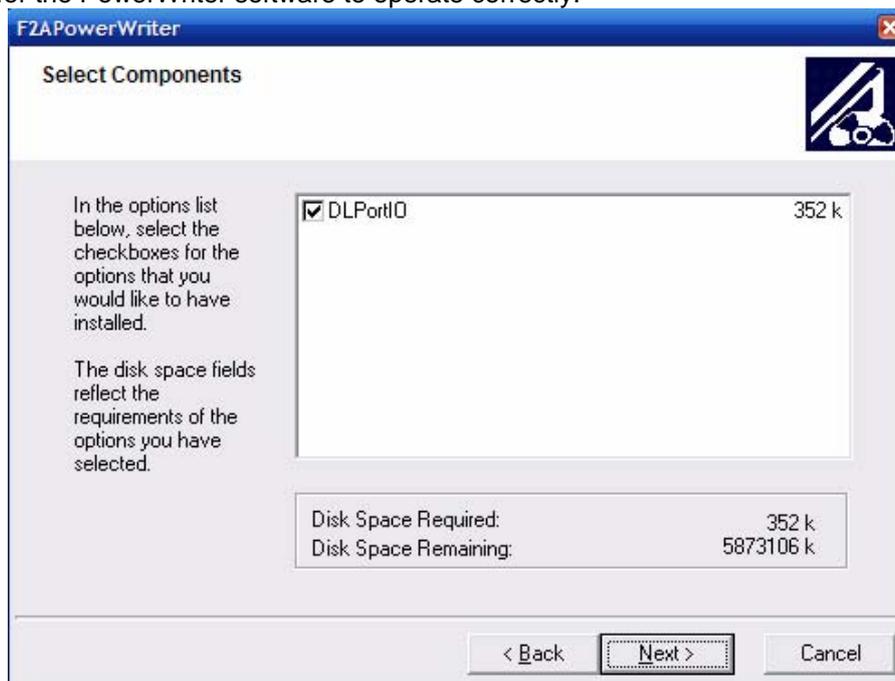


At this point, the first window that appeared when you plugged in the Linker, should have disappeared.

### • **Install PowerWriter**

Download latest version of PowerWriter software from [www.flash2advance.com](http://www.flash2advance.com)  
(The newest version when this guide was written, was 2.60)

Install PowerWriter to Default directory, or any directory you prefer, leaving the DLPortIO checked. This file is needed for the PowerWriter software to operate correctly.

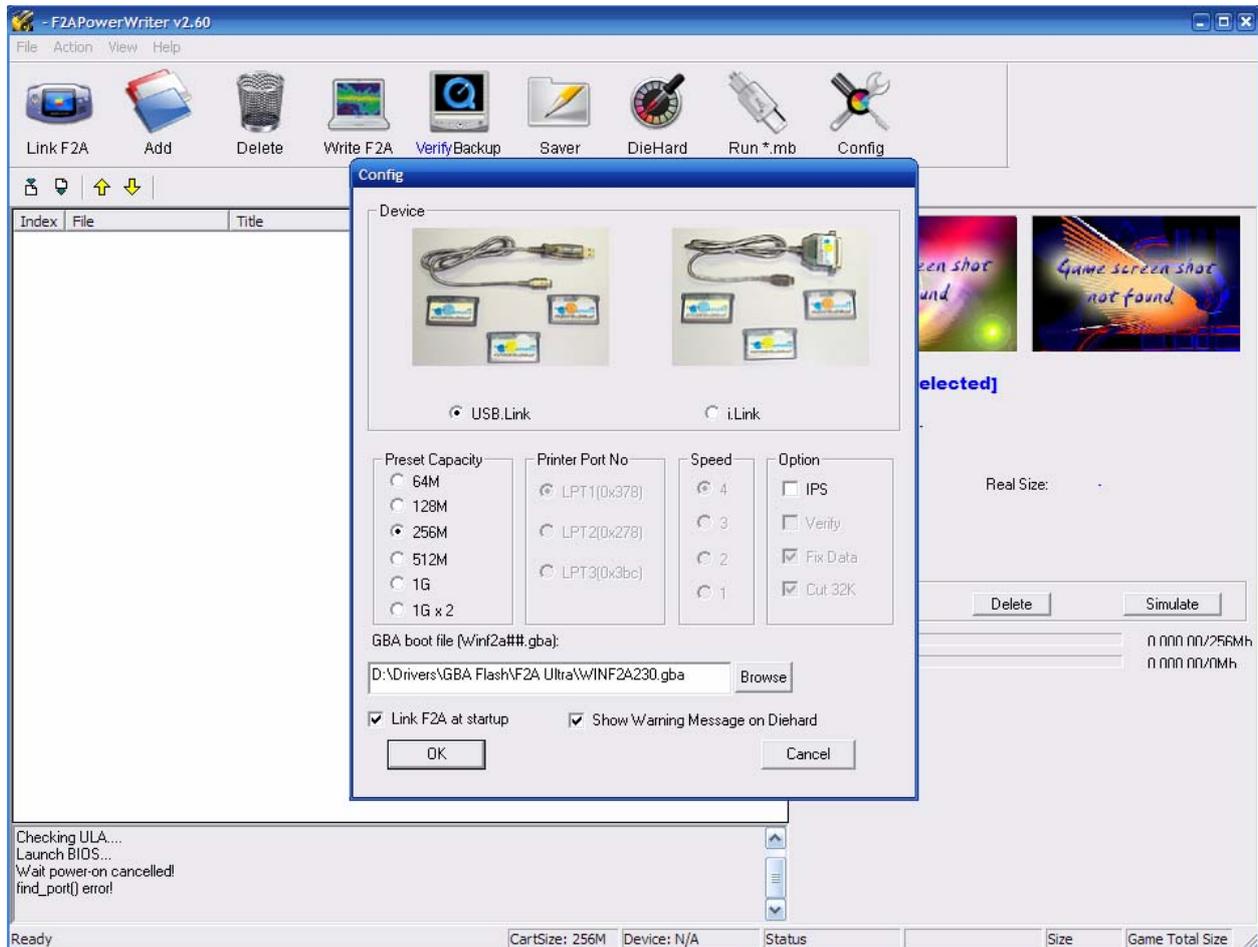


**Note:** Please Uninstall previous versions of PowerWriter before installing new ones. Perform *Historical Saver Backup* if you want to keep your backups on newer versions before uninstalling.

RESTART YOUR COMPUTER and you're ready.

Seems very easy doesn't it? In 5 min you will be writing cool games to you new GBA flash cart. The installation is just so easy with this installation guide ☺

# PowerWriter



## Step 1:

Connect the USB Linker to the USB port you installed earlier.

**NOTE:** If you connect the linker to another USB port, you need to reinstall the drivers for this port too.

Choose the cartridge and linker cable you're using, and download a boot file from <http://www.flash2advanceultra.tk/> (you'll find bootloaders and other files you might need under Downloads link).

winf2a230.gba is the newest stand-alone version as of now, v2.30 (don't confuse it with PowerWriter which is version 2.60 now).

## What is a bootloader?

Bootloaders are something like Operating Systems for the Gameboy and they provide functions such as reading eBooks, playing movie and audio files, emulating NES allowing NES games to play, etc. F2A is trying to make the best Bootloader file for all of us to enjoy new features on the GBA console, and it's a very important part of the Flash2Advance, so keep an eye for any updates, and don't hesitate to install the newest bootloader available.

“Just like the old burning software, there is a loader program residing at the beginning of the Flash Cart to allow user to choose a game. In F2A Ultra series, the loader program is re-named as “winf2aXX.gba” (“XX” is the version number, i.e. “10” will stand for version 1.0). As “winf2aXX.gba” will upgrade to be a windows-like program, so the program itself will be much bigger in size than the pure game loader

program. The space being occupied by “winf2aXX.gba” will increase from 256K bit (32K byte) to 2M bit (256K byte).”

*From F2AUltra User's Guide*

F2A Ultra User's Guide was written before Winf2a230.gba was released and probably before any v2.x loader was released. Winf2a230.gba is one of the “new” loaders that occupies 2Mbit on your F2A Card if you have more than one game. (If you only have 1 game in the cartridge, the loader is not needed at all).

“F2APowerWriter will support the GBA and GBC mixing function in its later versions.

When first time writing game files onto the Flash Cart, or the new “winf2aXX.gba” version is newer than the one in the Flash Cart, F2APowerWriter will first write a specified “winf2aXX.gba” file onto the Flash Cart at its first 2M bit (256K byte) memory, then start to write the game files. If there is no “system.cfg” file residing at the same hard disk folder as F2APowerWriter program, F2APowerWriter will use an embedded “winf2aXX.gba” data to write to the Flash Cart (The embedded data is exactly the same version with the “winf2aXX.gba” file coming with the released F2APowerWriter). If user uses F2APowerWriter's “config” function to specify an external “winf2aXX.gba” file, F2APowerWriter will use this specified file as the loader software, and the configuration information will be saved in the “system.cfg” file, together with other configuration information.”

*From F2AUltra User's Guide*

## **CIZ 2.60**

**UPDATE 1:** This was something I didn't notice when I wrote the 1<sup>st</sup> version of this guide.

As of PowerWriter 2.60, the statement above is not exactly correct. If you don't use any separately downloaded bootloader and leave that box empty on *Config*, PowerWriter will write the new, integrated bootloader, and that's Version 2.60. **CIZ 2.60.**

It is recommended that you leave PowerWriter to write CIZ 2.60 to the F2A Ultra cartridge, as it seems to be the version with the least problems on normal saving and DieHard saving.

“If user uses F2APowerWriter's “config” function to specify an external “winf2aXX.gba” file, F2APowerWriter will use this specified file as the loader software, and the configuration information will be saved in the “system.cfg” file, together with other configuration information.”

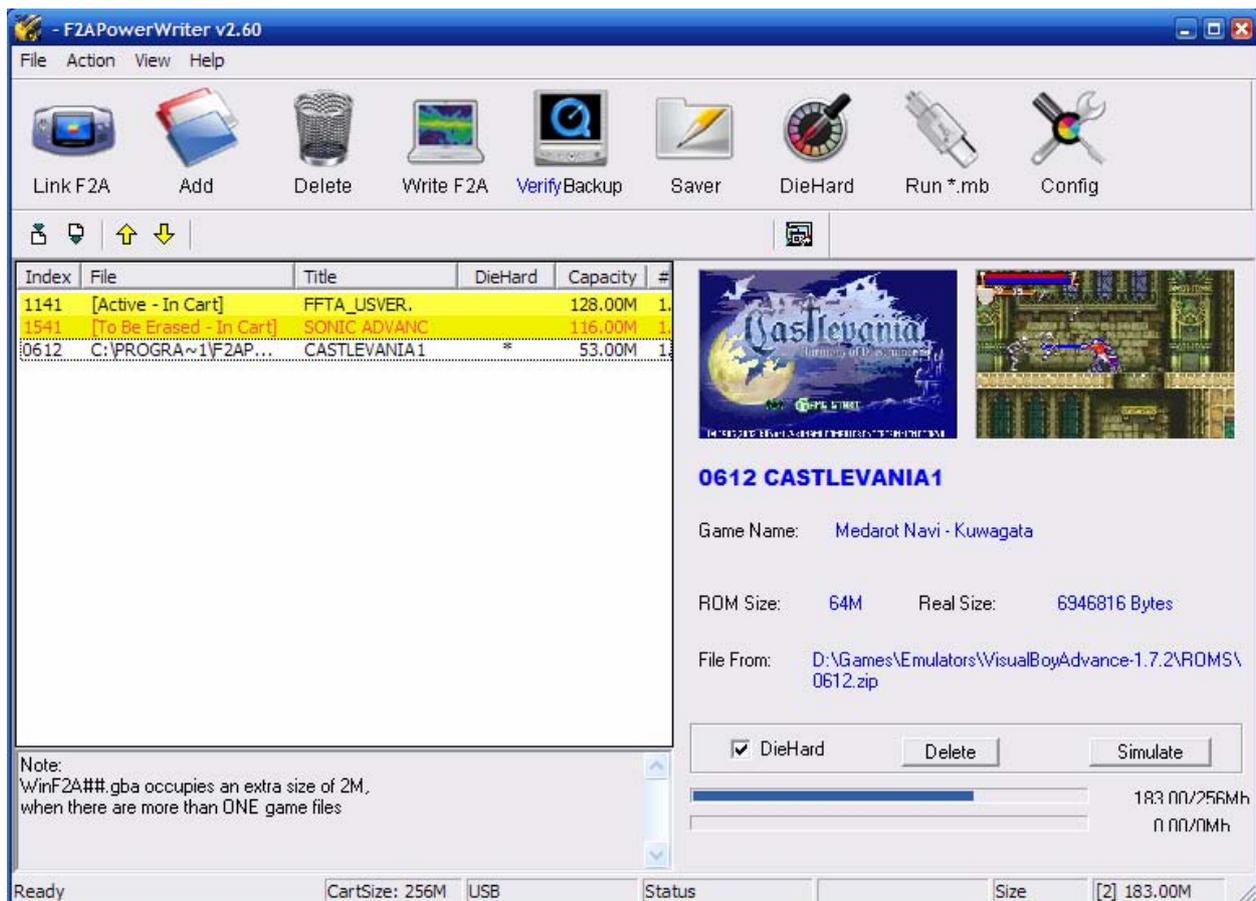
Well, once you install CIZ 2.60 to the Card, it's not that easy to revert to CIZ 2.30. Specifying winf2a230.gba to the *Config* will **not** do the job. If you try that, you'll get the message: *No newer version of bootloader found*, and CIZ 2.60 will remain to the Card.

You have to do a FULL ERASE to your Card and then write your games, using winf2a230.gba.

### **Step 2:**

Connect the USB Linker to your GBA (or GBA SP), having the console turned off. You will be prompted to switch the GBA on and press **SELECT + START** buttons simultaneously.

If the console is turned on, you will be prompted to switch it off and on again and then press **SELECT + START** buttons simultaneously, no harm done.



You can add any GBA rom you like, the bar on bottom right will inform you on how much space is free in your cartridge.

If you want to enable **DieHard** function to a game, you should check the DieHard checkbox on the bottom right.

If you write only one game to the Card and later you want to add another game, the 1<sup>st</sup> game will get replaced by the new game, and you have to add it again. That happens because the bootloader was absent when there was only one game. Adding a second game needs the bootloader to be added as well. The loader has to occupy the first blocks of the card, and to do so, the game that previously occupied the first blocks has to be deleted.

### Step 3:

Nothing is written (or deleted) from the Card yet, **in order to save your changes** (meaning to write or delete a ROM from your Card), **you have to click on Write F2A button from the toolbar.**

**NOTE:** If the game you wrote doesn't work and all you get is black (or white) screen, then it's probably the DieHard function. It's not compatible with this game. Delete it, and write it again, this time leaving DieHard unchecked.

Saver button from the toolbar opens a dialogue box that allows you to copy the Saves from your Card to a file in the computer, or from the computer to your Card's memory. So, before messing with commands you don't know, or doing anything that you don't know what will do, backup your saves or you might lose all the progress you've made in the games you're currently playing.

I just did this myself (and lost 2 hours of gameplay of Final Fantasy tactics ☹), take my word of advice and make backups.

**Backup Current Saver:** writes to the hard disk only the last save of the game you most recently played.

**Write Current Saver to GBA:** copies a saver from your hard disk to the GBA

**Start Saver Virtual Disk:** Can be used to backup/restore the whole F2AUltra SRAM

## TIPS & TRICKS

### FULL ERASE:

If you want to revert your Cartridge to its original state, (that's delete ALL contents, ROMS and Saves): Just start PowerWriter connected to the GBA and let it link, then push **select+A** on your Gameboy, you'll get a menu, then push 'down', it will ask you if you're sure, then you push 'A' , and everything gets deleted (also savegames!)

*Thank BlackDragon from [www.flash2advanceultra.tk](http://www.flash2advanceultra.tk) forums for this*

Do not mess with this menu if you don't want to delete everything. All I did was a *Quick Test* and my Card was erased. That was when I lost the 2 hours of gameplay of Final Fantasy tactics, and that's why I suggest you should keep backups regularly ☺

### ERASE SAVES ONLY:

Start your Gameboy normally (not connected) and when the Bootloader is loaded, press **B**. You'll see how many saves there are and you can press **R** to delete your saves.

### Change DieHard settings:

Start your Gameboy normally (not connected) and when the Bootloader is loaded, select a game and press **A**. If this game was patched you will see a menu with the settings for DieHard. You can choose to set Save to the right or left Card Button (GBA or GBA SP) or you can disable the DieHard. If the game was not patched, you'll see: DieHard (INVALID) in the menu.

1-key (GBA SP): Left key saves, right key loads on a GBA SP console

1-key (GBA): Left key saves, right key loads on GBA console

Combo: Left key + L saves, Right key + R loads on GBA console (I haven't tried that on GBA SP)

### View Card Info:

Start your Gameboy normally (not connected) and when the Bootloader is loaded, press **SELECT + B**. You'll see your Card type, size, total games, current page number and total pages (each page holds up to 9 items, item being a game or an emulator).

### ???????

Start your Gameboy normally (not connected) and when the Bootloader is loaded, press **SELECT + A**. This function is unknown yet. It seems to refresh the screen twice, but I don't know what it does. One speculation is that has something to do with the archiving and compressing of idle saves.

My speculations are based on this statement from F2A Ultra User's Guide:

“8M SRAM will keep 2.5M space as RAM Disk block. RAM Disk block is used to store compressed save information, allow user compress the data in save block and archive the data. Based on general compress ratio, the RAM Disk block should be big enough to store 8M or bigger un-compressed save information.”

### DieHard

It doesn't work correctly all of the times. Avoid saving in busy areas, try saving after you PAUSE the game. Remember: PowerWriter is getting better with every new version, and we're not far from the perfect version. You're holding one of the best cards available, and soon you'll have the best software too.

**DieHard keeps only one save to your card.** If you DH save SONIC and then play and DH Save MARIO, the SONIC DH Save will be replaced by the MARIO DH Save. There have been some attempts for multi DH saves, but the project has been abandoned either because it had too many bugs or because it would occupy too much space on the SRAM memory.

### Saver Button

AVOID using Backup Current Saver, because it copies only the latest save state from the most recently saved game, and the Write Current Saver to GBA doesn't always work. Instead, you should use Saver Virtual Disk. Press **Import <-F2A**, enter a filename and all saves will be copied to your hard disk. Then you can add more saves from your VisualBoy played games or delete un-needed saves, and **Export -> F2A** to save changes to the Card.

## Self Diagnostics Test:

"Starting from PowerWriter v2.40, there is a cart test tools built-in the PowerWriter to GBA control program. You just use the PW's 'Link F2A' to link up GBA with F2A to computer, then the control program will be sent to and running on GBA. You just input the special command by press the GBA's 'Select' + 'A' buttons and enter the cart test menu.

In cart test menu, you can choose 'Full test' by corresponding button to fully erase the content of the F2A cart."

(from [www.flash2advance.com](http://www.flash2advance.com))

## ⚠ THIS FUNCTION WILL ERASE YOUR CART'S CONTENTS (GAMES AND SAVES) ⚠

It's normal to see "Error" on SRAM before you start the test. It says "error" because it hasn't tested it yet. Seeing an error during or after the diagnostics test should make you worry.

## How to get a saver from the Cart, and play on VisualBoy Advance

### Step-by-step:

1. Connect the Cart,
2. read the cart (well, once you connect it, it will be read),
3. open Saver,
4. start Saver Virtual Disk,
5. press Import <- F2A,
6. choose a NEW filename for my SVD file (let's say: MarioWario4Sonic3\_save02.svd on C:\Emulators\GBA\),
7. choose a saver/a game from the list and
8. press extract.

PowerWriter will write the .sav file to this directory:

C:\Program Files\F2APowerWriter\saver\_svd\

Just rename your .sav to match your rom's name and move it where your rom is located and you can play on VisualBoy advance.

(It works on Final Fantasy and Shifting Gears - Road Trip, I guess it works for all games)

And vice-versa. If you have a save from your emulator, after reading the saves list from your GBA, instead of Extract, you'll do ADD, choose your save, associate the save with the right game and then do: Export -> F2A.

**SVD is in BETA and still has some problems such as: "I just copied my saver and when I started the game on VisualBoy Advance, I saw that the save was not the latest".**

I don't know how's that possible, or when and why does this happen. If you follow the saving process again, you might or might not get the latest saver. Try deleting all files from C:\Program Files\F2APowerWriter\saver\_svd\ before starting PowerWriter. I usually get the latest saves on the 2nd attempt.

⚠ This doesn't happen on all games. ⚠

You might be lucky enough to never get an old save from the backup process.

## How to use sRAM-it (and patch games that can't save otherwise)

Since CiZ 2.60 / PowerWriter 2.60 it's highly improbable to have a game that won't save. It's improbable but not impossible, so if you encounter a game that needs patching, open sRam-it (I'm using v2.3),

- 1: click "Browse" button next to "Source File" box, and choose the game you want to patch.
- 2: click "Browse" button next to "Output File" box, and choose the new name for the patched file.
- 3: Click File menu -> Auto Detect Save Type

You might get a message that this game doesn't need patching. There is nothing you can do in this case.

Or, the program will choose the right patcher (either SRAM or Flash512k)

**4:** choose your Cart type (Flash 2 Advance Ultra or F2A if you have a non-ultra cart), and

**5:** press "Patch" button.

 The patch type is only required if SRAM Patch is selected. If Flash512k is selected, you don't need to follow step 4.

© sRAM-it is a tool made by dark420bishop, and has nothing to do with the developers of F2A or the unofficial support team ([www.flash2advance.com](http://www.flash2advance.com) and [www.flash2advanceultra.tk](http://www.flash2advanceultra.tk)).

You can download this tool from the following site: <http://www.filespace.org/dark420bishop/>

### **F2A USB Writer Issues**

It's clear that some functions on the PowerWriter software require a monitor. An example is the Self Diagnostics test which gives a feedback on the GBA screen, displaying whether the Cart is good or bad. Obviously you can't run a diagnostics test (or a Full Erase) to a Cart connected through a USB Writer, as the cart is connected to the Writer and not on the GBA.

We hope that this issue will be addressed and resolved on a latter version of PowerWriter.

## ***Appendix A – DieHard Incompatible Games***

<b>Incompatible game's name</b>	<b>Bootloader version</b>	<b>PowerWriter version</b>
Final Fantasy Tactics*	2.30	2.60
Sonic Advance 3*	2.30	2.60
Spyro Fusion Orange	2.60	2.60

\* Games with a "\*" mark are compatible with bootloader 2.60 and may or may not need patching (see Appendix 2)

Note that this list is incomplete and is being completed by your additions and comments on the [www.flash2advanceultra.tk](http://www.flash2advanceultra.tk) forums.

## ***Appendix B – Games that need patching***

<b>Incompatible game's name</b>	<b>Save type</b>	<b>Compatible after version</b>
Advance Wars 2	Flash	N/A
ESPN Final Round Golf	Flash	N/A
Final Fantasy Tactics Advance	Flash 512k	N/A
Fire Pro Wrestling 2	Flash	N/A
Golden Sun	Flash	N/A
Golden Sun II - The Lost Age	Flash	N/A
Guilty Gear X	Flash	N/A
Mario Kart Super Circuit	Flash	N/A
Mario vs Donkey Kong	Flash 512k	N/A
Premier Manager 2003-04	Flash 512k	N/A
Shining Soul	Flash 512k	N/A
Shining Soul II	Flash 512k	N/A
Sonic Advance	Flash	N/A
Sonic Advance 2	Flash 512k	N/A
Sonic Advance 3	Flash 512k	N/A
Sonic Battle	Flash 512k	N/A
Sonic Pinball Party	Flash 512k	N/A
Sword of Mana	Flash 512k	N/A
Tactics Ogre	Flash	N/A
Yu-Gi-Oh! Dungeon Dice Monsters	Flash	N/A
Zone of Enders	Flash	N/A

For more information and latest news regarding F2A Ultra software and hardware, please check the website: <http://www.flash2advanceultra.tk/> and their forums.

**Acknowledgements:**

The images used in this guide and some comments and instructions are courtesy of <http://www.flash2advanceultra.tk> and <http://www.flash2advance.com>