



MOD THAT CUBE

By Brakken

Modchip, BIOS & GameCube FAQ

<http://modthatcube.pxn-os.com>

-=(Version 4.0)=-

Featuring

- Viper GC Modchip
- Ripper 3 Modchip
- NinjaMod Modchip
- QOOB Pro & SX Modchips
- Region Free Mod
- Cobra BIOS
- Anaconda BIOS
- GCOS BIOS
- Ripper 3 BIOS
- NinjaMod BIOS
- QOOB BIOS
- USB/IDE Adapter

By brakken
April 2005 Edition



This comes from the same government body that sells you Fast Food, Prozac, Alcohol, Tobacco, Aspirin, Caffeine and Sport Cars.

FACTS
(USA Statistics Only)

Obesity – 330,000 deaths per year

Prozac – 2,500 deaths per year

Alcohol – 150,000 deaths per year

Tobacco – 440,000 deaths per year

Aspirin – 1,000 deaths per year

Caffeine – 10,000 deaths per year

Marijuana – 0 proven deaths per year (World Wide)

American Judge Francis Young studied all the evidence in 1988 and ruled that "marijuana is far safer than many foods we commonly consume."

Think about that before the next time you talk shit to a "pot-head".



NOTE: As of Version 3.0 the required files no longer come with the FAQ, but can be found at their respective locations below. This has been done to save bandwidth. This means wherever you see a reference to a file (something like \files\cobra10.zip) you will need to download the file(s) below to access the referenced file(s).

Mod That Cube Official Homepage

<http://modthatcube.pxn-os.com>

Mod That Cube FAQ v4.0

http://www.pxn-os.com/Viper_GC_GameCube_FAQ-brakken.zip

Mod That Cube Support Files for v4.0

http://www.pxn-os.com/Viper_GC_GameCube_FAQ_FILES-brakken.zip

Mod That Cube Emulation Support Files for v4.0

http://www.pxn-os.com/Viper_GC_GameCube_FAQ_FILES_EMU-brakken.zip

NOTE: These URL's are CASE SENSITIVE!

Thank you all for your much needed support! I have received many corrections, updates and suggestions via IRC! Also, to date more than 4,000 copies of the FAQ were downloaded by different people!

START DISCLAIMER

“Fuck Off”

END DISCLAIMER

CHANGELOG:

V4.0

- + NEW LOGO (thanks to raziel aka “raz”)
- + Added Disclaimer (above)
- + Updated Introduction (introduction, at the end of the FAQ, duh where the hell do you think it would be?)
- + Took a few more of my own non-branded pictures (entire FAQ)
- + Added “Modchip & BIOS Introduction & Comparison” (Part 0)
- + Updated Part 1 with info about Action Replay and DOL101 (Part 1)
- + Updated Part 1 with buying a “5/32 nut driver” instead of a GameBit (Part 1)
- + Updated Part 1 with buying the 5ft flexwire replacement cable (Part 1)
- + Added Part 1.4 – Installing and Flashing the “NinjaMod” Modchip (Part 1.4)
- + Added Part 1.5 – Installing and Flashing the “Qoob Pro & SX” Modchip
- + Added Information about the Cobra Devkit (Part 2)
- + Added the Cobra 1.0 BIOS (Part 2)
- + Added Screenshot Information on Cobra 1.0 Beta (Part 2)
- + Renamed “Anaconda” BIOS section to 2.0 (Part 2.0)
- + Moved Solutions to new “Softmod” Section (Part 2.1)
- + Updated SOLUTION 1 – PSO+BBA Method (Part 2.1)
- + Updated SOLUTION 2 – Action Replay + Normal Memory Card Method (Part 2.1)
- + Updated SOLUTION 3 – Action Replay + SD loader (Part 2.1)
- + Added SOLUTION 4 – MaxDrive Method (Part 2.1)
- + Added “Copying Softmod Memcard” (Part 2.1)
- + Added pictures for the home made SD Card Adapter (Part 2.1)
- + Updated the “GCOS” BIOS with how to STREAM DOL/ELF files (Part 2.2)
- + Updated the “GCOS” BIOS with more booting solutions (Part 2.2)
- + Finish the Ripper//GC BIOS section (Part 2.3)
- + Added the Memory Card Manager ISO for Ripper//GC (Part 2.3)
- + Added “STREAMING IMAGES USING BIOSes” (Part 2.9)
- + Updated DRE section with Ripper//GC opinion on DRE (Part 4)
- + Updated RIPPING IMAGES with GCOS information (Part 8)
- + Updated Copying Images with METHOD 3 (Variation 2) (Part 8)
- + Updated BURNING IMAGES with locations to buy Ritek G04 Media (Part 8)
- + Updated BURNING IMAGES with a location to buy Mini-DVDRW Media (Part 8)
- + Updated BURNING IMAGES with Important Note about other Software (Part 8)
- + Updated BURNING IMAGES with Buffer Underrun info (Part 8)
- + Updated BURNING IMAGES with GCFIX (Part 8)
- + Added List of Working N64 ROMS (Part 9)
- + Added GCOS v1.4 Pictures (Part 10)
- + Added Appendix A – GameCube “Scene” Links
- + Added Appendix B – Chip, BIOS and Software BUGS
- + Added Appendix C – Building your own USB/IDE replacement for the DVD Rom Drive
- + Added Appendix D – Converting Action Replay (AR) Codes to Cobra Format

INTRODUCTION

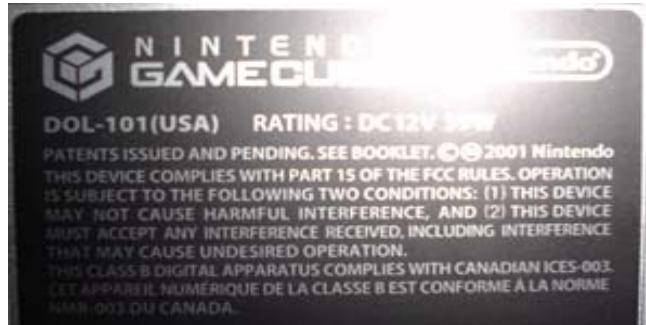
What the hell is a GameCube?



The GameCube is a video game console made by Nintendo. It's marketed audience is children, yet many adults who grew up with the big N have come to enjoy it.

Nintendo's Official GameCube Page - <http://www.nintendo.com/systemsgcn>

Currently there are four main retail versions of the GameCube. The “**DOL-001**”, “**DOL-002**”, “**DOL-101**” and the “**Panasonic Q**” Please see the BIOS COMPARISON CHART to see which BIOS(S) work on your system. Currently NO BIOS works on the Panasonic Q!



This is a picture of the infamous Panasonic Q. It's a combined DVD player with a GameCube in a really cool custom case.



<http://prodb.matsushita.co.jp/product/info.do?pg=04&hb=SL-GC10>

There is no BIOS support in Cobra v0.1-v0.4 or Anaconda for the DOL-101. Make sure the unit you have is DOL-001 if you wish to use either of these BIOS's. DOL-001 has *two AV ports* on the back (one analog and one digital).

NOTE: The DOL-002 version of the GCN is an exclusive version to Brazil. It was manufactured by a Brazilian company, Gradiente, due to a now dead partnership between Gradiente & Nintendo. Currently the only BIOS that will work on the DOL-002 is GCOS.

NOTE: Older versions of action replay, (1.08 for sure) doesn't work with DOL-101 (USA) model GameCubes. This is a problem with the AR disc itself and can only be remedied by purchasing the latest version or contacting Datel for a replacement.

Why FAQ? Simple, it's hard to find a solution to most of the problems associated with the Viper GC chip located in one easy to find and read resource.

Make sure to visit ...

<http://ps2banz.pxn-os.com>

To join the fight against PS2NFO

-≡(INDEXOR)≡-

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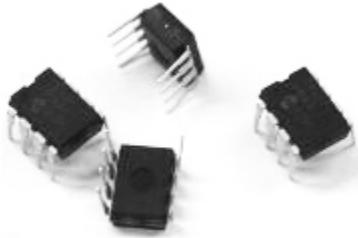
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(PART 0 – MODCHIP & BIOS INTRODUCTION AND COMPARISON)



There are currently four different Modchips either for sale or soon to be for sale on the market. It all started when the Viper GC chip was released in late 2004. This chip was the first of its kind to boot not only “homebrew” code, but also to boot DVDR backups of existing games!

With the advent of the Viper GC and with the release of the Cobra BIOS the GameCube “scene” which had been limited to booting releases via a very long and expensive process started to breathe again.

Webpages sprouted dev teams jumped on, forums came alive and I decided to write a FAQ. ☺ Below is a list of the current chips on the market and what BIOSs they can currently run. I have included SoftMods on the list because they too can run many BIOSs

| Name of Modchip | Manufactures WebPage | BIOS Supported |
|-----------------|---|-------------------|
| Viper GC | DMS / No Webpage | Cobra, GCOS, OS |
| Ripper///GC | http://www.ripper3.com | Custom |
| NinjaMod | http://www.ninjamod.com | GCOS, Open Source |
| QOOB Pro & SX | http://www.qoobchip.com | Custom, GCOS, OS |
| SoftMod | See Part 2.1 in this FAQ | GCOS, Open Source |

Each of these chips, their installation method and BIOSs usage is covered in this FAQ, but before you start reading you should get a general idea of what you can expect from each solution. Below is a comparison of the Modchips and their features followed by a comparison of the BIOSs (latest versions only).

Modchips are internal modifications you add to your GameCube by soldering them onto the motherboard. (<http://www.epemag.wimborne.co.uk/solderpix.htm> shows you how to solder/desolder correctly)

-=[MODCHIP COMPARISON CHART]=-

| Chip / Features | Viper GC | Ripper///GC | NinjaMod | QOOB Pro | QOOB SX |
|------------------------|-----------------|--------------------|-----------------|-----------------|----------------|
| EEPROM Size | 128k | 1 MB | 16 MB | 16 MB | ? |
| Flashable? | YES | YES | YES | YES | YES |
| Flash Using ... | DVD/Adapter | PCI Adapter | DVD/BBA | USB/BBA | USB/BBA |
| Flash Adapter Included | YES | NO | N/A | YES | YES |
| Flash BIOS w/o CUBE | NO | NO | NO | YES | ? |
| # Wires To Install | 4 | 5 | 7 | 6 | 6 |
| Other Installs | 2 Cables | Wire Loop | Wire Loop | Lid Plug | Lid Plug |
| Installation Rating | Easy | Moderate | Moderate | Easy | Easy |
| Memory Banks | 1 | 1 | 1 | ? | ? |
| DOL-001 / 101 | YES / YES | YES / YES | YES / YES | YES / YES | YES / YES |
| Panasonic Q | NO | NO | NO | NO | NO |
| PAL / JAP / USA | Y / Y / Y | Y / Y / Y | Y / Y / Y | Y / Y / Y | Y / Y / Y |
| Revisions A+B / C | YES / YES | YES / YES | YES / YES | YES / YES | YES / YES |
| Test Feature | NO | LED DIODE | NO | LED DIODE | LED DIODE |
| Av Price Per Unit | \$50 USD | \$35 USD | \$40 USD | \$50 USD | ??? |

-=[BIOS COMPARISON CHART]=-

| BIOS / Specific Features | Cobra v0.4 | Cobra v1.0 | GCOS v1.4 | Ripper///GC v1.0 | NinjaMod v1.0 | QOOB v1.0 |
|---------------------------------|-------------------|-------------------|------------------|-------------------------|----------------------|------------------|
| Supports DOL-001 | YES | YES | YES | YES | YES | YES |
| Supports DOL-002 | NO | NO | YES | NO | NO | NO |
| Supports DOL-101 | NO | YES | NO | NO | YES | YES |
| Supports Panasonic Q | NO | NO | NO | NO | NO | NO |
| Direct No Swap Booting | NO | YES | NO | NO | NO | YES |
| Direct No Swap DVD+R -R | NO | -R | NO | NO | NO | -R / +R |
| Direct Boot Media Detection | NO | YES | NO | NO | NO | YES |
| Boot Original BIOS (IPL) | YES | YES | YES | YES | YES | YES |
| Flashing BIOS w/Network | NO | NO | NO | NO | YES | YES |
| Flashing BIOS w/Media | YES | YES | NO | NO | YES | YES |
| On Board MP3 Player | NO | NO | NO | NO | NO | NO |
| Cheat Function | NO | YES | NO | NO | NO | NO |
| Load ISO from Media | NO | YES | NO | NO | NO | NO |
| Load ISO from Network | NO | NO | YES | NO | YES | YES |
| Backup Game via Network | NO | NO | YES | NO | YES | NO |
| Streaming Audio Fix | NO | NO | NO | NO | NO | YES |
| Multi-Disc Games Fix | NO | NO | NO | NO | NO | NO |
| Load DOL from Media | YES | YES | NO | YES | NO | YES |
| Load DOL from Memcard | NO | NO | NO | NO | NO | NO |
| Load DOL from SD Card | NO | NO | NO | NO | YES | NO |
| Load DOL from Network | NO | NO | YES | NO | YES | NO |
| DOL Loading Works 100% | NO | NO | NO | NO | NO | ? |
| Disc / Media Explorer | YES | YES | NO | YES | NO | YES |
| Idle Bug Fix | NO | YES | NO | NO | NO | YES |



(PART 1 - INSTALLING THE VIPER GC)

What exactly is the **Viper GC** for the **GameCube** console?

The **Viper GC** is the World's first **commercial solution** for the GameCube console, consisting of a set containing both a module chip (right) and also a programmer (left). It is available from Re-Sellers across the globe for around **\$70 US**

The Viper GC chip is based off a design created by “tmbinc” (<http://debugmo.de/gc/gc.html>) which was *stolen/used commercially without permission* and *modified* by the Viper GC team. I could care less if it’s stolen due to the fact I just want something that works.

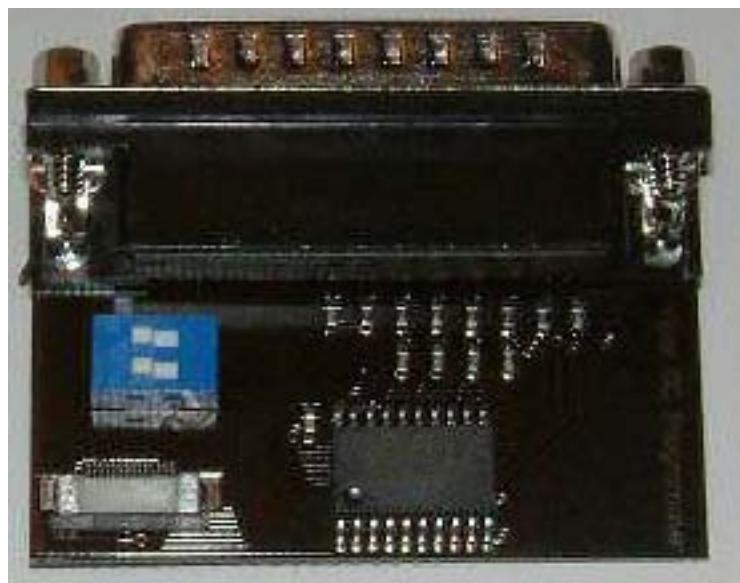


The Viper GC modchip comes with the programmer, wire install module with reset switch clips, cable (aka flexwire) to interface with the programmer and the modchip itself.

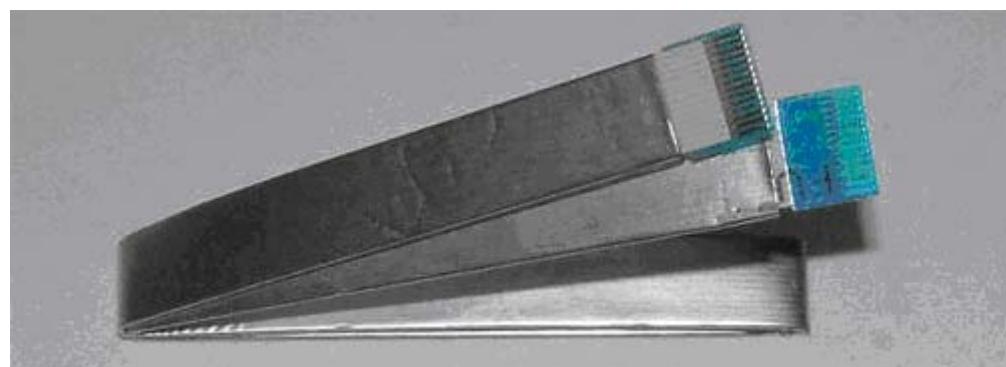
Viper GC Modchip



Programmer



Flexwire



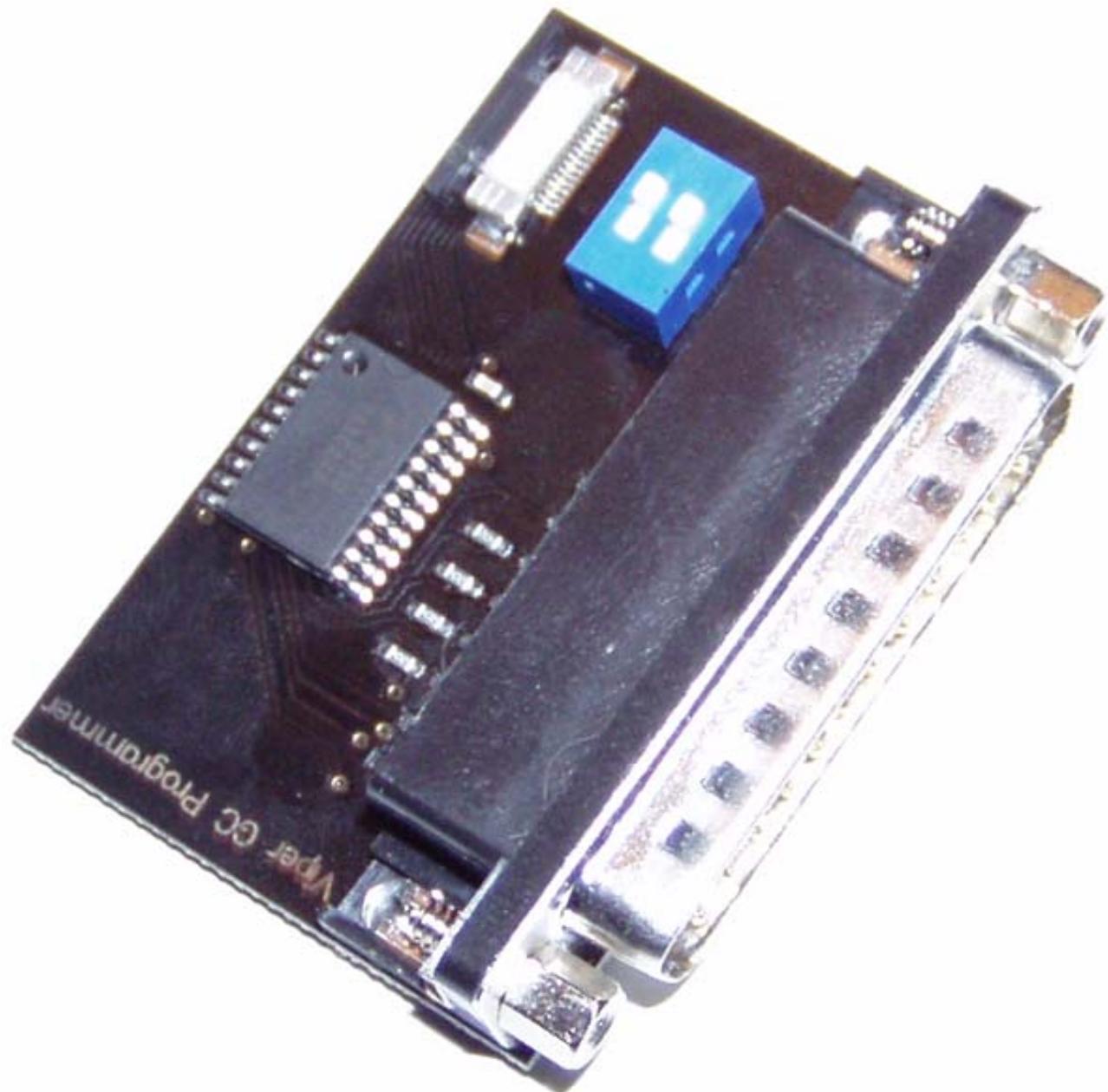
Reset Switch Cable



What supplies are recommended to install a Viper GC module?

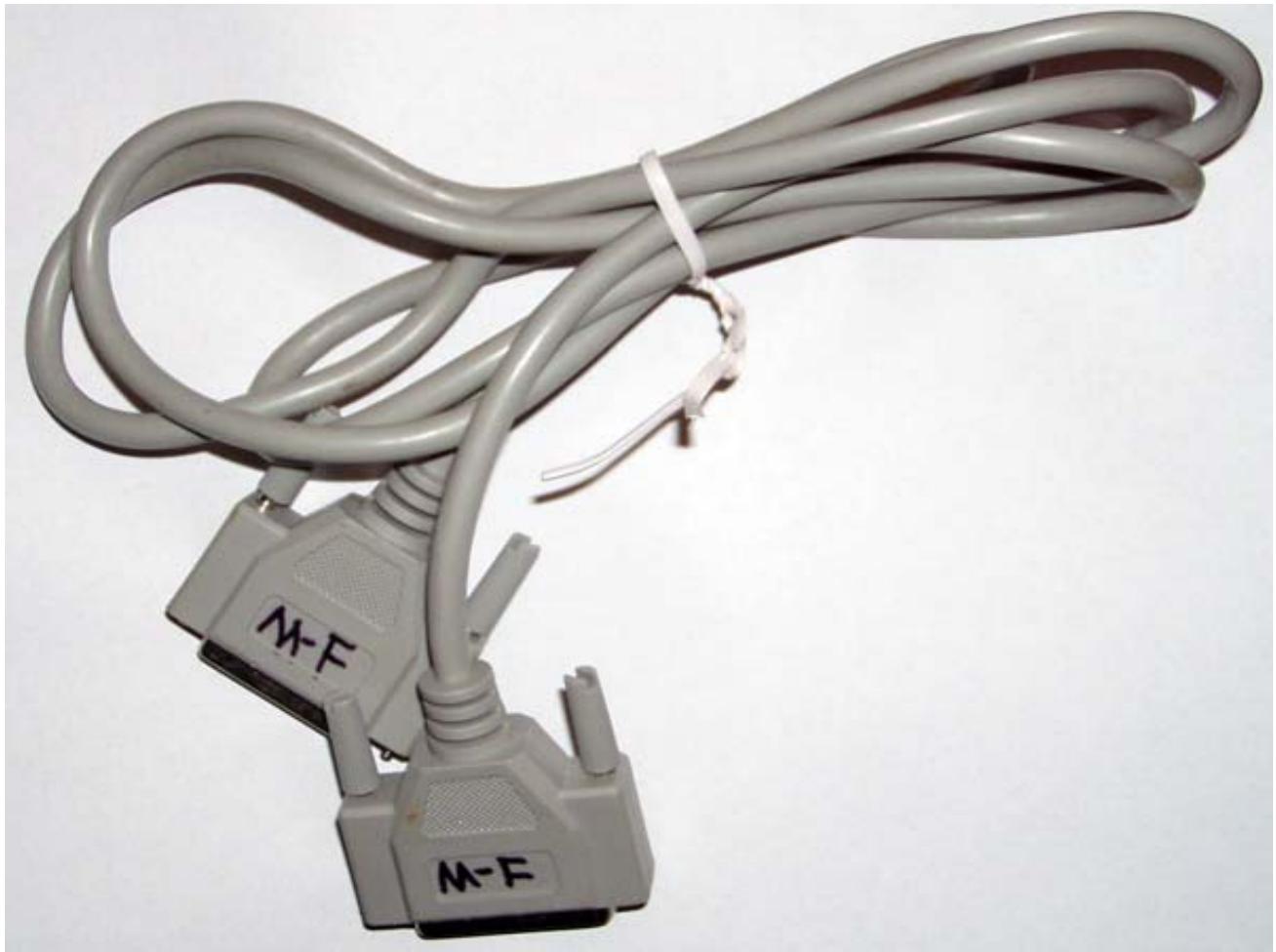
The installation is simple, and consists of soldering only **4 wires** and **1 bridge** (*bridge is optional if you own the BBA adapter*). Total installation time will range between 15-60 minutes based on your level of experience; however, in our opinion even those new to soldering can accomplish the task relatively easily by following the detailed guide below. PS2BANZ suggests following supplies for this task:

- Viper GC module (above) and the included programmer (above/below/everywhere!) Well no shit. I left this in here just to show how stupid PS2OWNZ can be.

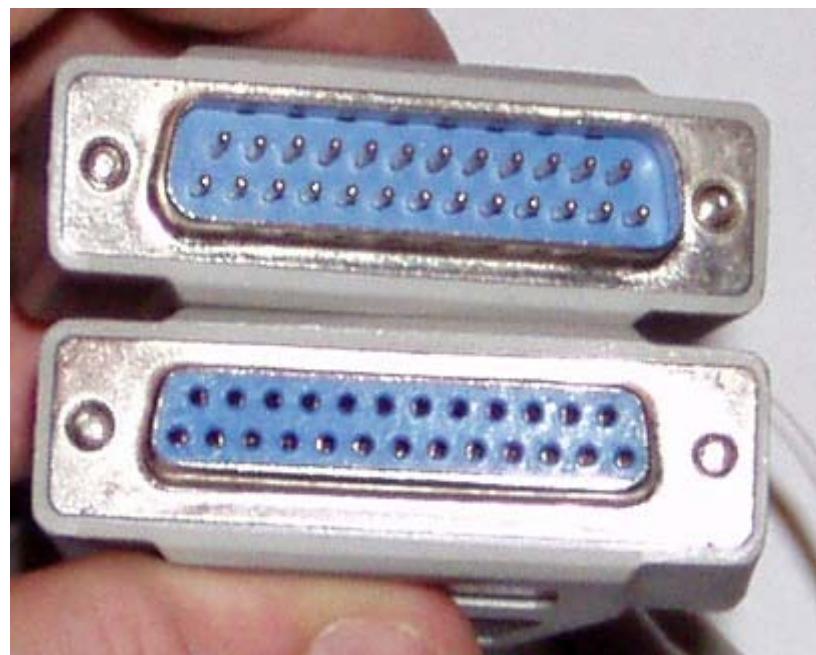


- PC Parallel Cable, useful, NOT required though. Some cables have problems, so be ready to unscrew the connector on the programmer and plug the bitch directly into the Parallel Port on the back of your computer.

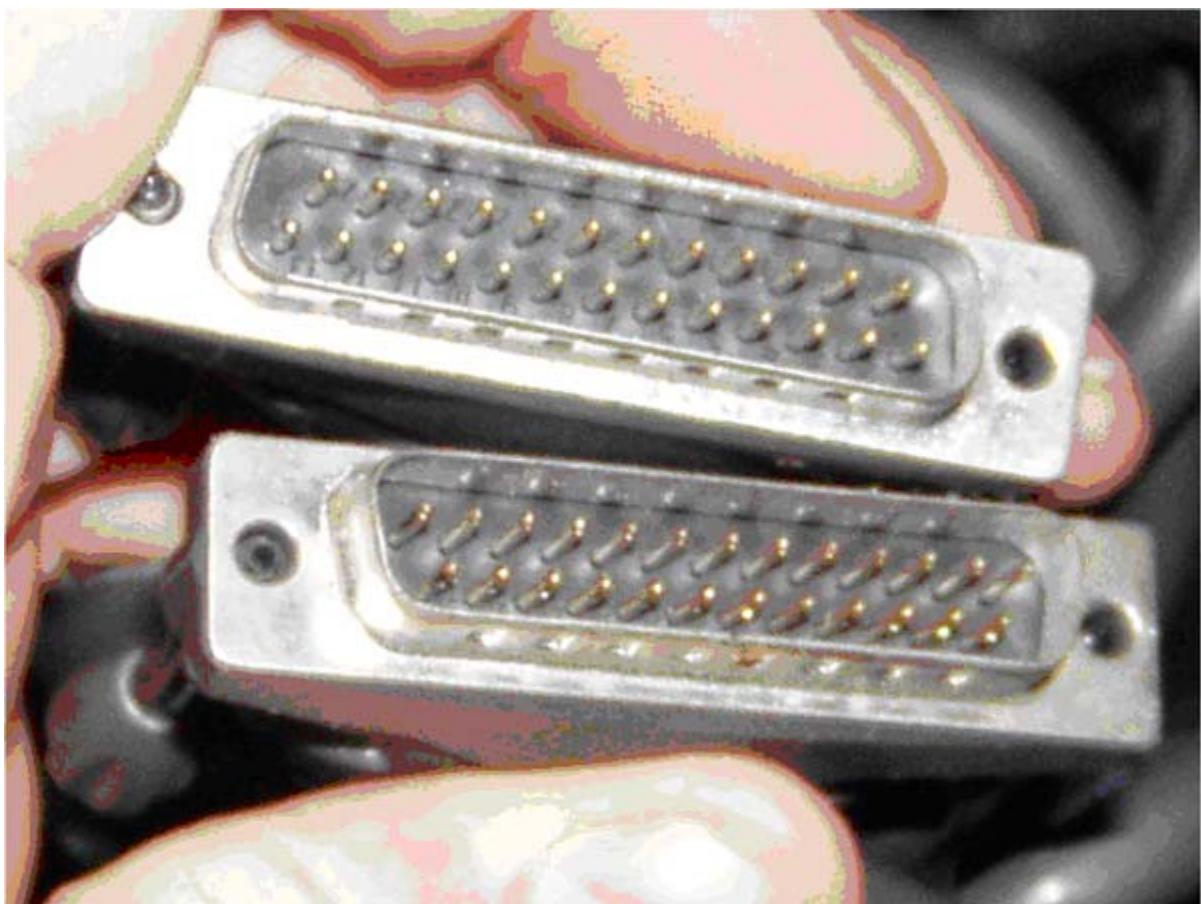
Cable



Close up of MALE/FEMALE ports



Make sure it's not a (male/male) "homosexual" cable (below)!



- **15-watt** Soldering Iron or similar or a BIC Lighter



This is a picture of my trusty “see-nin-poo” the second. Yes, I named my soldering iron after one of the nicknames I call my ten year old cat named Omni. I have soldered so many Playstations I lost count, over 200 PS2s, 200 Xboxs, 3 GameCubes and lots of other electrical equipment with the same iron and same tip for over 8 years now! Good old see-nin-poo!



- **60/40** standard Rosin-Core Solder **.032** diameter or similar. Doesn't really matter on the diameter, just use more if it's small.



- Flux-Pen (aids in bonding/re-work, not completely necessary). Well, I never use the shit.



- Digital Multi-Meter (DMM) is optional, aids in continuity testing. It's optional some GameCube's will not read backups off the bat, and will need adjusting. Also adjusting your GameCube Laser monthly can greatly increase the life of your unit (See Part 5 for more information). In my experience you *really need* one of these puppies.



- 4.5mm "GameBit" (right) or similar screw removal bit (left). Not necessary either, you can make your own using a CLEAR BIC PEN or purchase a "5/32 nut driver" from your local hardware store



- Magnifier Glass is optional, aids in checking for shorts after soldering. Didn't use this either.



- Pick Knife is optional, aids in removing shorts after soldering.



- Desoldering Braid & Solder Sucker (optional, for solder removal). If you suck at soldering, you need this I guess. Well, unless you're going to try to mod your cube with a lighter.





- Tip Tinner is optional, aids in cleaning/preparing your Soldering Iron. I've modded many PS1, 200 PS2, 100 XBOX and well 3 cubes I have never needed to clean the same iron I have been using since I borrowed it from Radio Shack.



- Heat Tape or a small piece of non-conductive electrical tape



- Micro Mini Screwdriver (Phillips Head) is required. Well, I used a normal sized Phillips head screwdriver and it worked fine, as where my micro-mini didn't



- **Hairdryer** is optional, may be used to aid in heat sink removal. I guess someone on their team likes crack rocks. Hairdryer? ROFL. Use a little force and flat head screwdriver!

With the above supplies and your **GameCube** console, you can begin work by carefully following the detailed instructions below!

How can I tell which version GameCube console I have exactly?

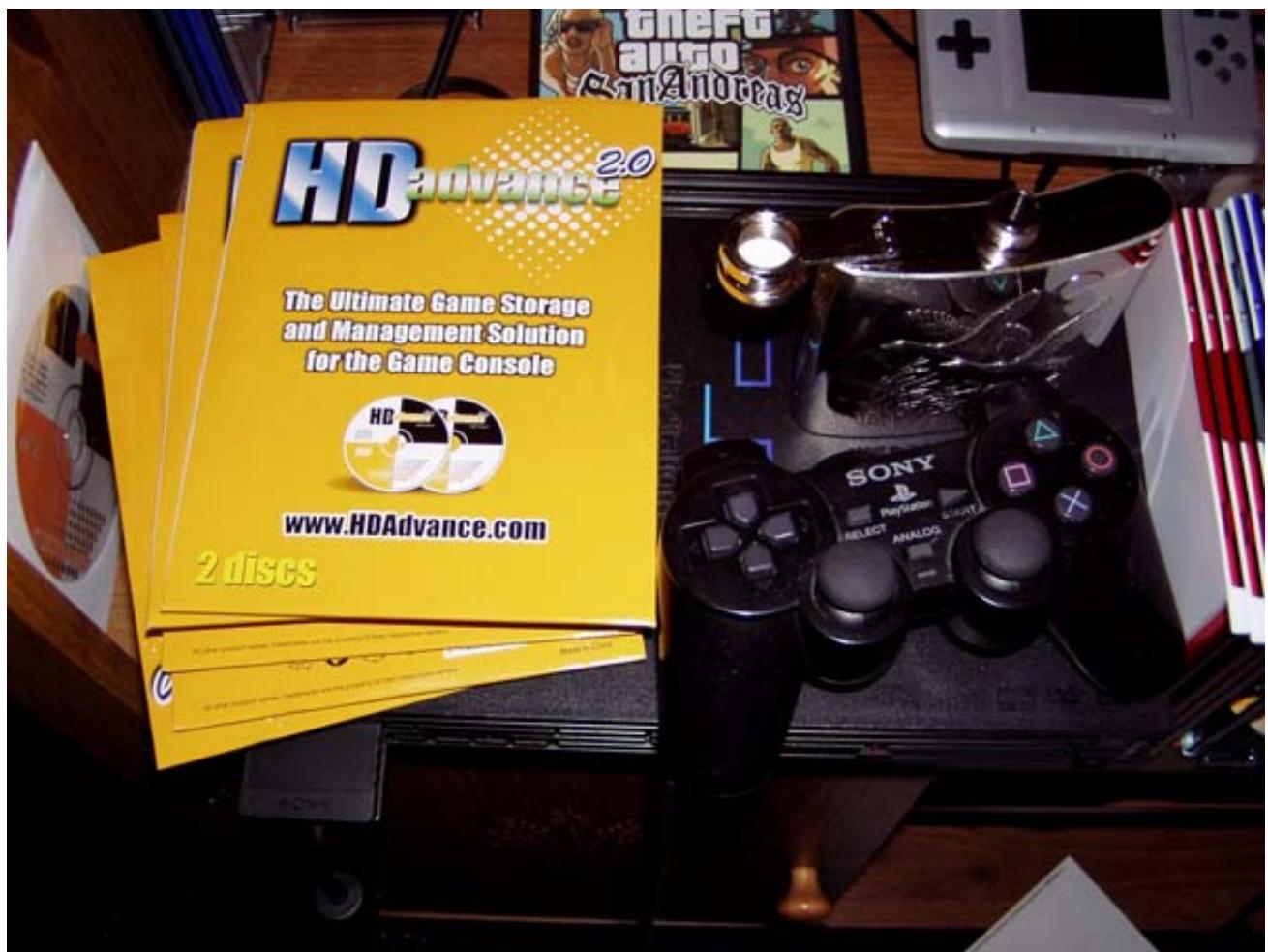
As far as **Viper GC** installation is concerned, there are currently (2) main board revisions of the GameCube console users should be aware of, namely revision A/B and C. In order to identify yours, you will need to disassemble the GameCube unit as detailed below to compare your main board to those pictured.

[Viper Manual – Located \files\Viper_Manual.zip]

The HI-RES original pictures of the Viper GC Installation Manual are located above.

How do I take my **GameCube** apart to install the **Viper GC** mod?

A) Begin by turning your GameCube console on its back, and then removing **the below 4 screws** using your 4.5mm "GameBit" tool as detailed above. This can also be accomplished by using a melted clear BIC pen, however, for assistance with the BIC pen method please refer to the NOTE directly below this step.



Oh shit, wait! That's not a damn GameCube! Guess that empty flask of booze got to my head. Blame it all on the Bacardi Rum (151 proof).



NOTE: Although you can't see them well while they are inside, the special GameCube screws look like the screw below.



To do the pen method, start with a CLEAR BIC PEN. I've tried the blue and white pens, and their plastic isn't hard enough. So take the pen by the **plastic barrel**, using it as your handle and heat the narrow end up with a heat gun, torch, or gas flame until it becomes very soft. It may catch fire, and if so let it burn a bit before blowing it out. Make sure you keep the pen pointed directly up as you do not want the melted plastic to sway to the left or right; this would make the pen not fit into the screw hole. Next, push the soft warm plastic onto the security screw, pushing hard enough so the plastic forms around the shape of the screw head. Hold for a few seconds. Now, remove the plastic pen barrel, and cool it down using very cold water, ice chunks and/or if available snow. Now you have a "homemade" **BIC GameCube screwdriver!** All that is left now is to **use it** to remove **the 4 screws**. I had to remake the screwdriver three times, as it will wear out very quickly. I talked to others and they had to do the same thing.

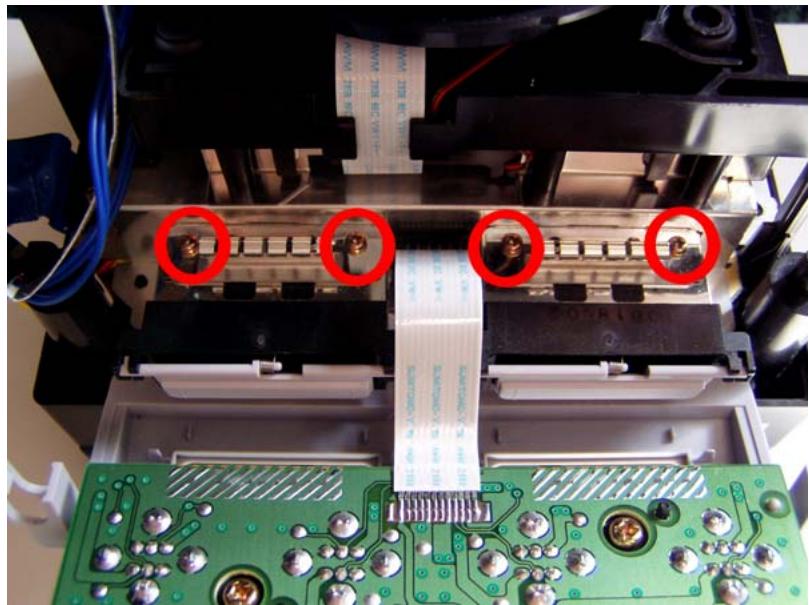




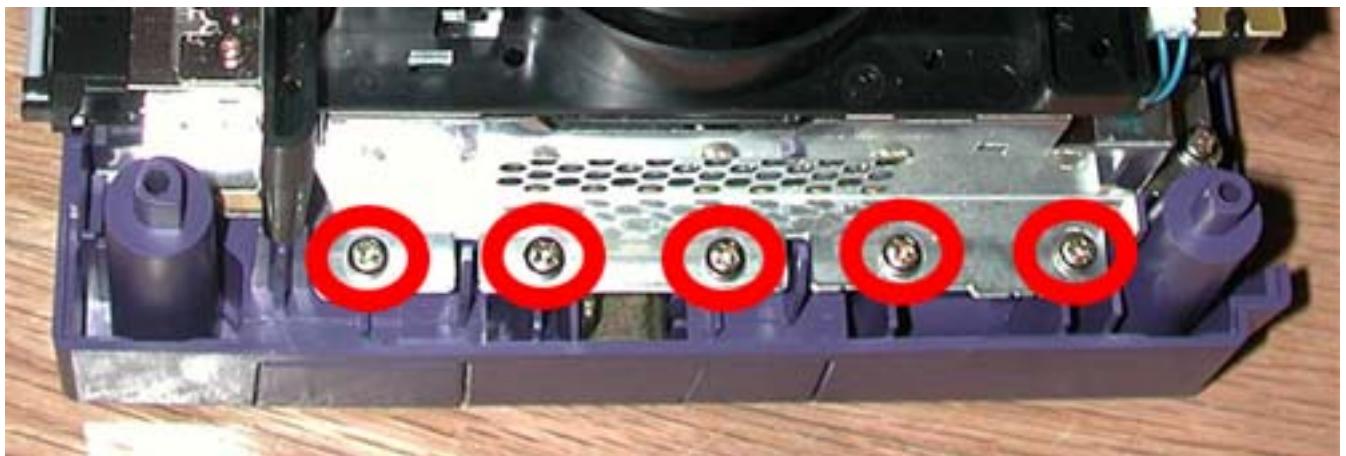
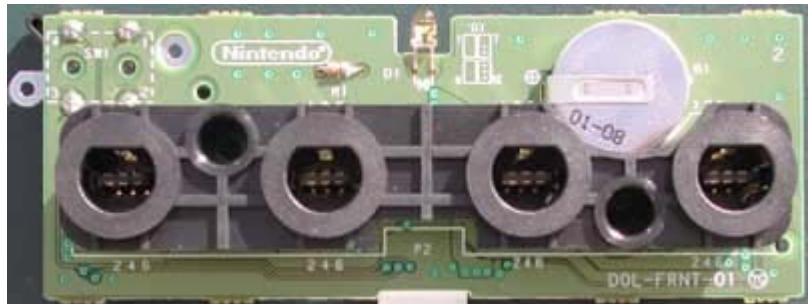
B) Carefully lift off the **GameCube top cover** after the 4 screws are removed.

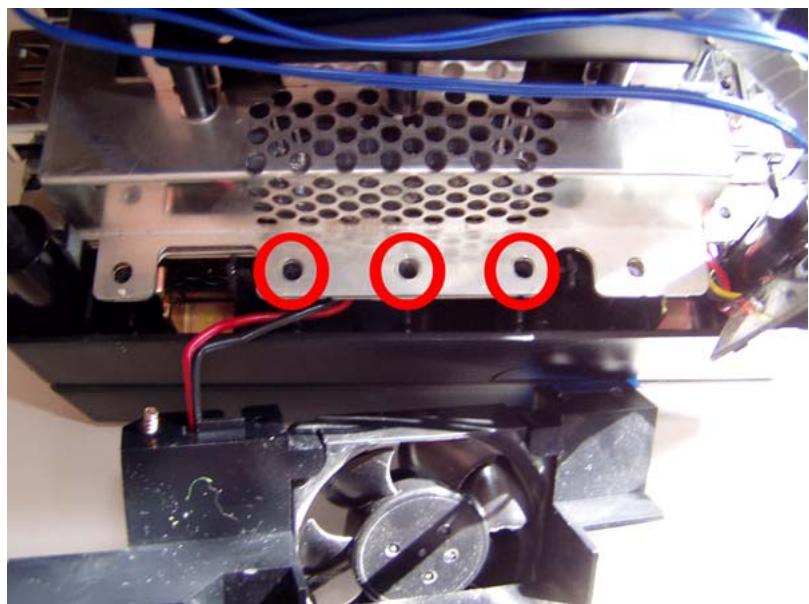
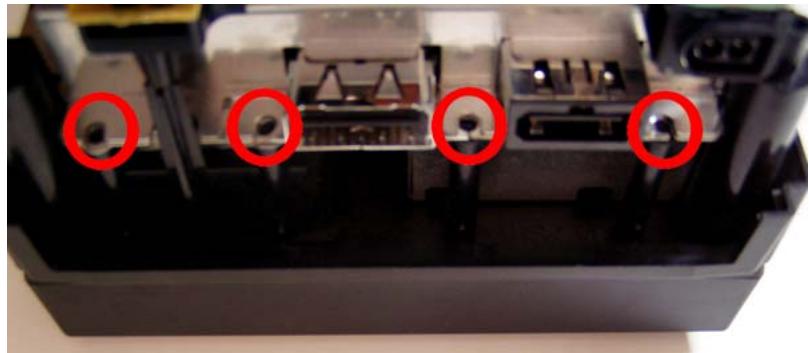


Now remove **the 4 screws** from the front of the console using your Phillips Head Micro Mini Screwdriver and remove the following screws as well: **5 right-side screws, 4 rear-side screws, 2 left-side screws**, and then carefully move the GameCube **fan assembly** they were securing away from the unit to access and remove **the 3 screws** located underneath it.



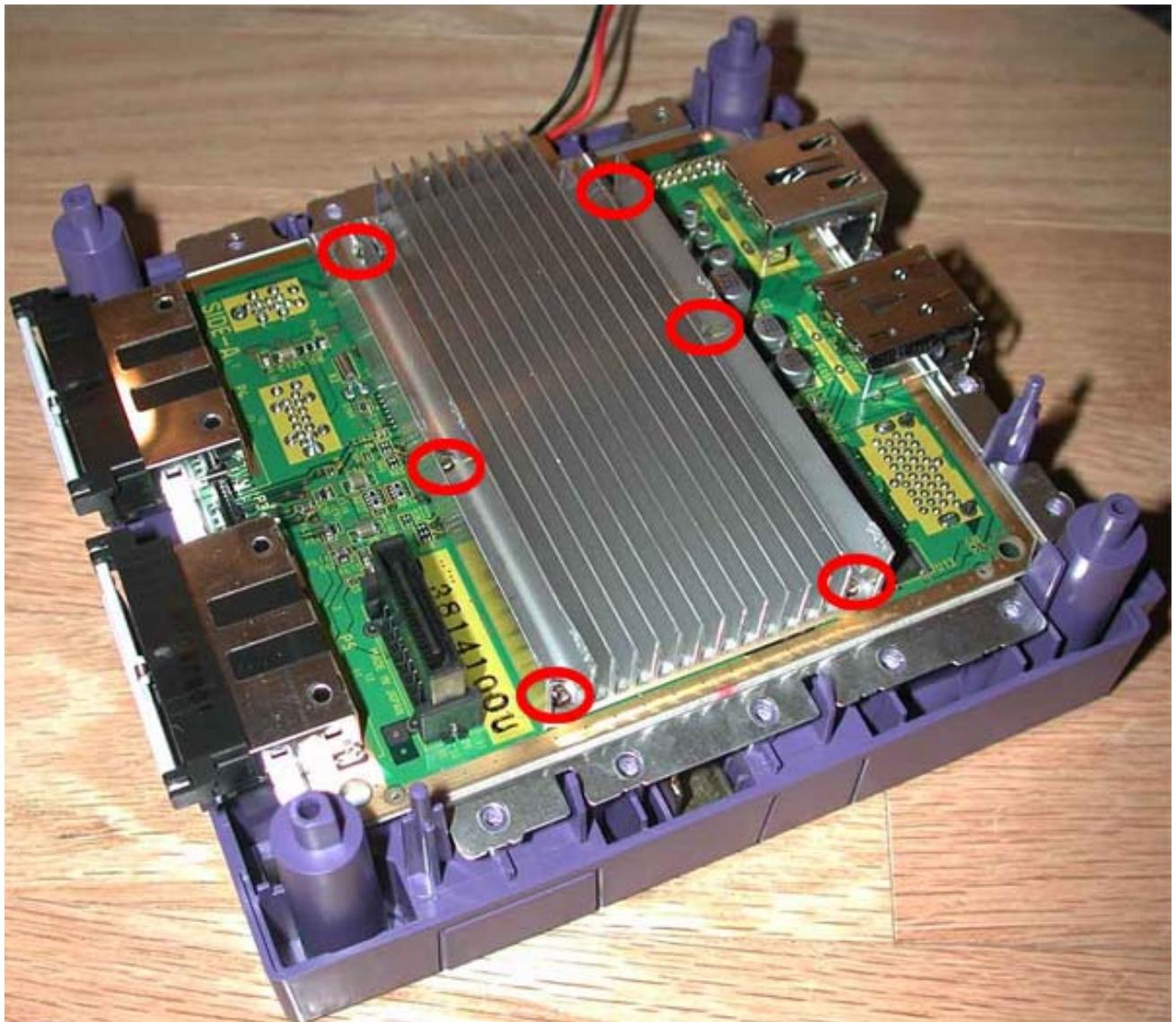
Here's what the inside of the controller assembly looks like. Just thought someone might want to know what's inside. The battery is the BIOS battery, so if it ever goes out you know how to replace it now

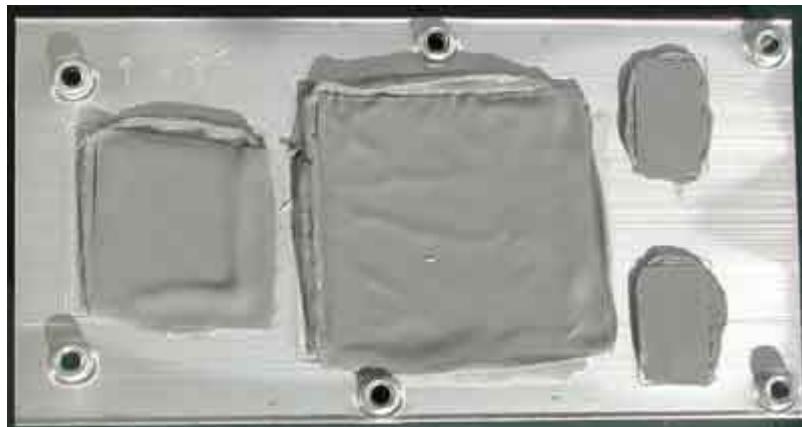




C) Carefully lift off the entire GameCube **laser drive assembly** and place it off to the side, and then using your Phillips Head Micro Mini Screwdriver or Normal Phillips Screwdriver carefully remove the **6 heat sink screws** and gently attempt to lift the

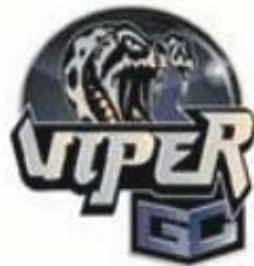
silver heat sink up and off. If, after removing the 6 heat sink screws, the heat sink will not lift off you can attempt to warm it up a bit (using a **Hairdryer**) as this will loosen the thermal paste underneath it. Well, not having any females that live with me, and not being some hair styling freak, I decided the take a flat head screwdriver and pry off the heat sink. Easy as 1-2-3.





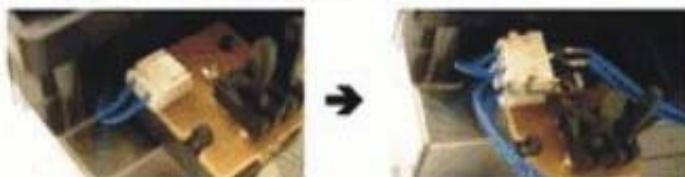
NOTE: Although not required, we recommend that installers carefully **unplug & detach** the **fan assembly** and **front/back panels** as it is useful and safe to keep them both out of your way when soldering to the main board later on in this Tutorial. Well other then the fan assembly, I had no choice in detaching the front/back panels; they just kinda fell off.

D) Okay time to solder. Begin by heating up your **soldering iron** for a few minutes, and NOW would be a great time to double-check the **revision** of your GameCube console to ensure you are going to solder to the correct solder points located on the GameCube main board. I don't see how you could not solder the right points, as they are clearly stated in the diagrams.



Viper GC - Wires installation

1. Find the board revision by looking at the pictures
2. Solder the 4 wires+bridge
3. Connect the two connectors to the lid sensor as a pass-thru



GC rev A & B

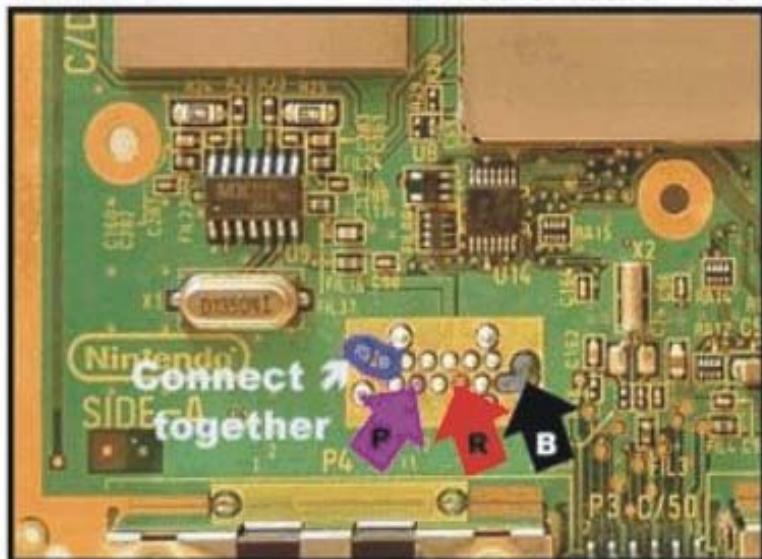
GC Motherboard - TOP

(the connector on the left may look different)



GC rev C

GC Motherboard - TOP

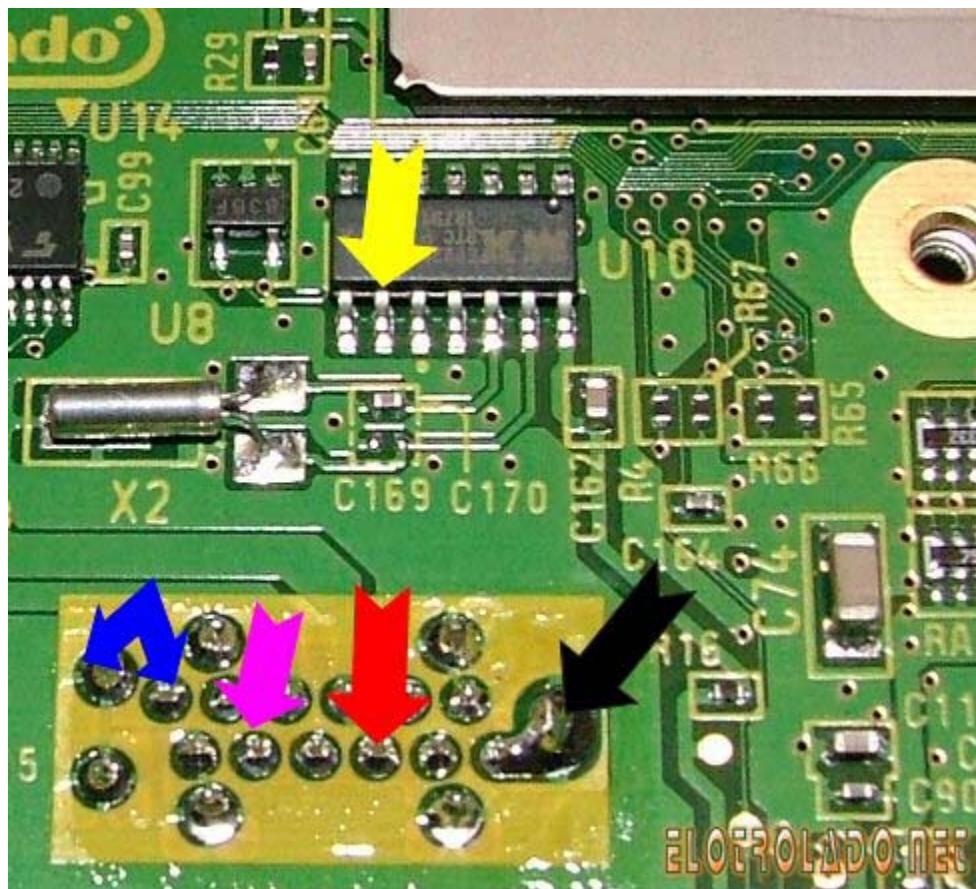


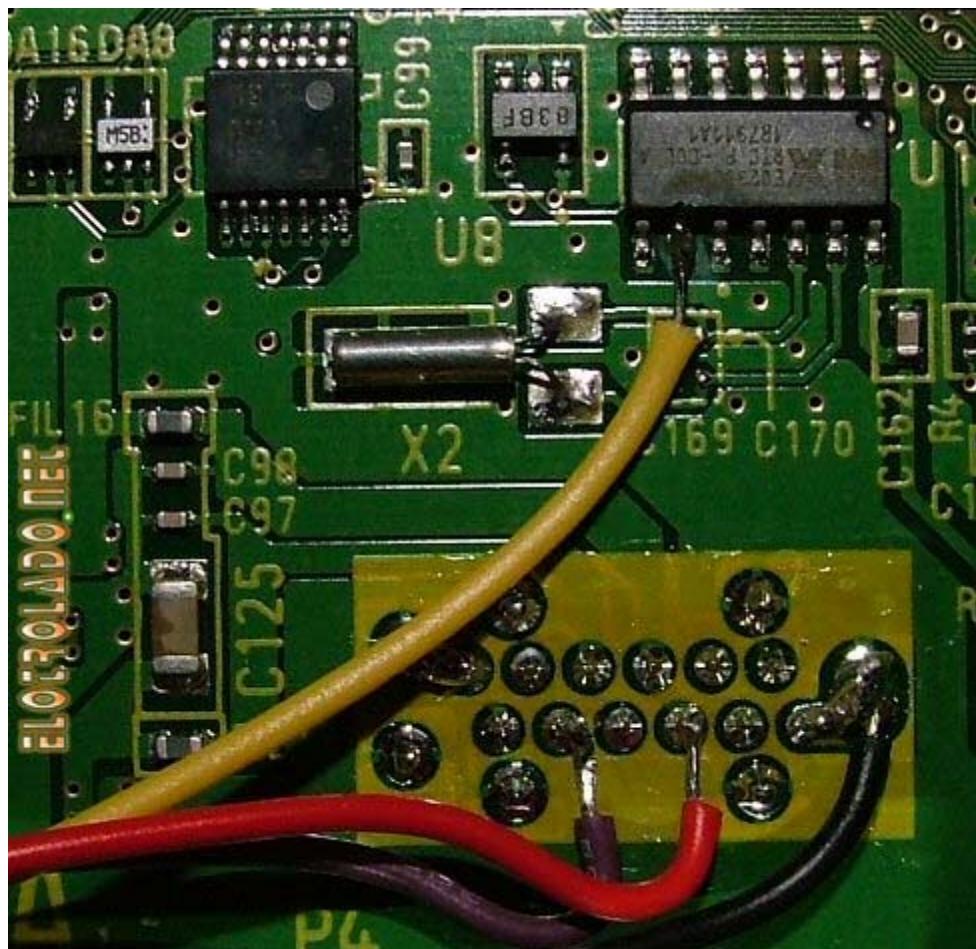
GC rev C

GC Motherboard - BOTTOM



It's easiest to start with the required **solder bridge** by melting a bit of solder between the 2 points circled in blue (the white text "**Connect Together**" points towards them). Next, proceed to solder the **4 wires** supplied from the **Viper GC** harness and if you have a revision **C** console notice that you will have to **remove the main board** to access the **BOTTOM side** to attach the Yellow wire.





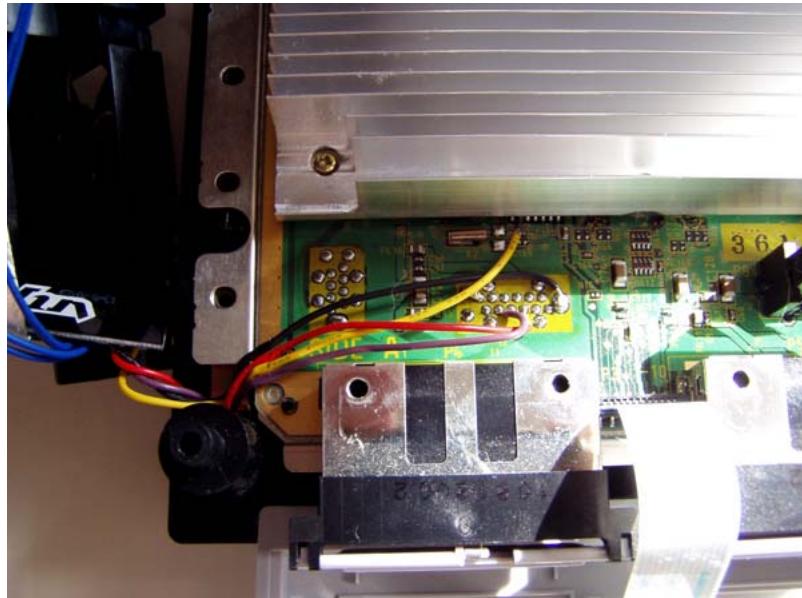
If you have a **Broad Band Adapter** you can opt not to install the bridge, as the chip will work fine. This can be handy for disabling the modchip without having to unsolder anything (simply just unplug the Broad Band Adapter).

NOTE: If you experience difficulty getting it to stick with the solder, try tinning the end of the wire with a dab of solder first, and then use a **Flux-Pen** on the IC leg prior to making the solder connection. Also, there are a few tiny vias (plated thru-holes) in front of the IC leg, so if your Yellow wire is routed over them it may be a good idea to place non-conductive **Heat Tape** or a small piece of electrical tape over them before connecting it.

E) Continue on soldering all 4 wires from the **Viper GC** harness to the main board, and then after all connections are secure (verify them with a **Digital Multi-Meter (DMM)** if you have one using the **Continuity** setting) replace the heat sink making sure to leave the sticky thermal paste underneath it in-place.

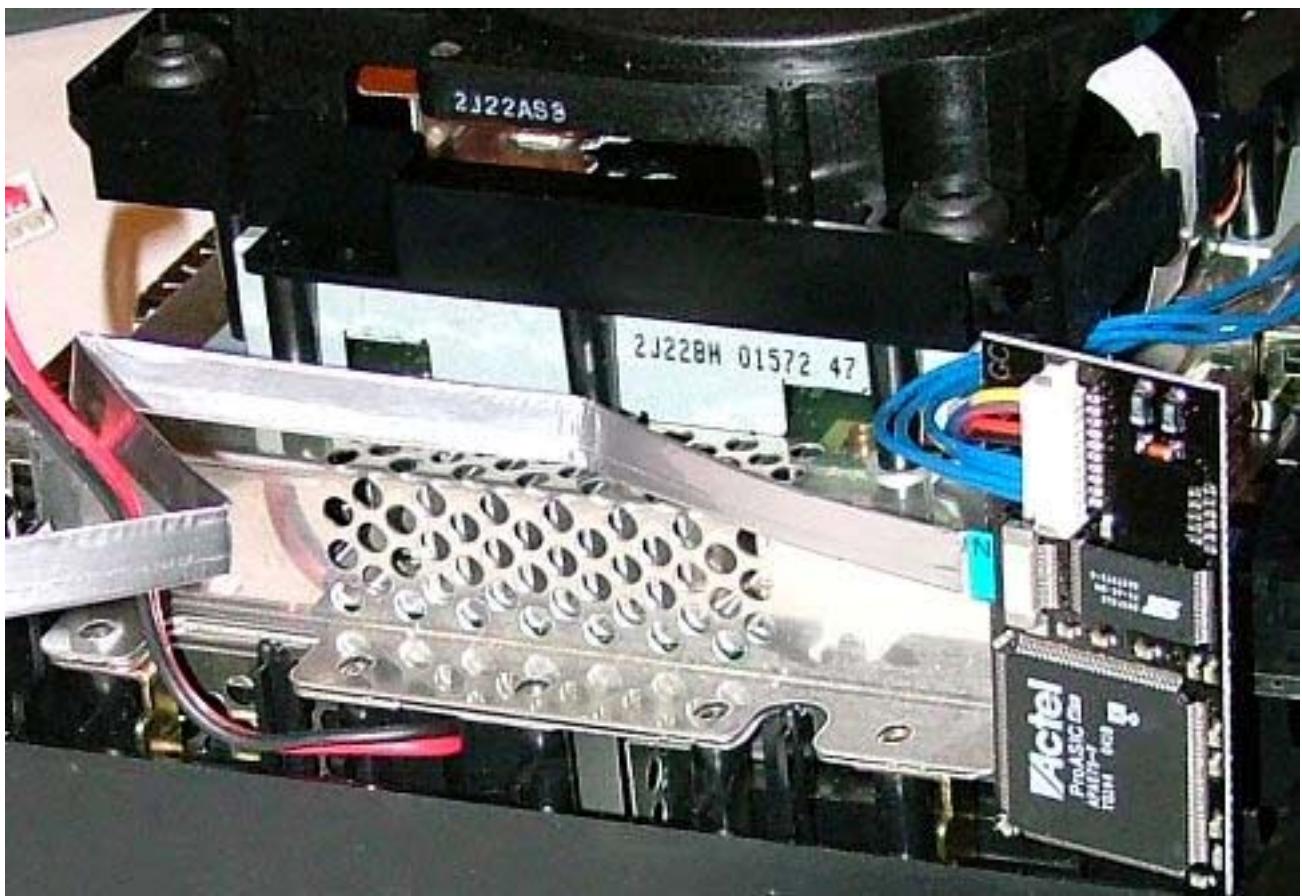
NOTE: To solder using Soldering Iron, simply dab some solder onto the tip of the iron, put the wire on the proper soldering point and touch the tip of the iron on top of the wire which rests on the point. The solder will move off the tip of the iron and secure the wire.

NOTE: To solder using the BIC lighter (or any other lighter for that matter) simply put the wire on the proper soldering point, put the solder in wire form over the point and heat the end until a small amount drops. If you're using this method it'll be a good thing to have that little knife around or a solder sucker, because if you miss you'll need to clean up after yourself.



F) When placing the DVD Assembly back on the cube, make sure the wires you have soldered are routed near the controller ports. Now, continue to reassemble your GameCube console following steps **C through A** in reverse order as necessary.

When you get to the below area you can put the 3 screws back in the case, and then connect and route the supplied **Viper GC flexwire** behind the black drive laser assembly and reattach the 2 **fan assembly** screws. Make sure when you set the **Viper GC** module in place, it is away from the GameCube black RESET lever switch as displayed below so operation is unaffected.



NOTE: Do NOT jam your **flexwire** into the **Viper GC** chip's white/brown wire receptacle or you may DAMAGE it! Instead, pull the brown part out with

your fingers, insert the **flexwire** in as **shown**, and then secure it closed by pushing in the brown part from both sides together simultaneously.

This is what happens when you're not careful with the flexwire. Poor wire! ☹ If you would like to order a replacement wire you can do so by using either of these webpages.

This site has the original cable, but you must order \$20 worth of products to have it sent.

<http://nz.farnell.com/jsp/endecaSearch/partDetail.jsp?SKU=3295011&N=0>

Ultra-high quality 5ft replacement cable! Expensive, but worth it!

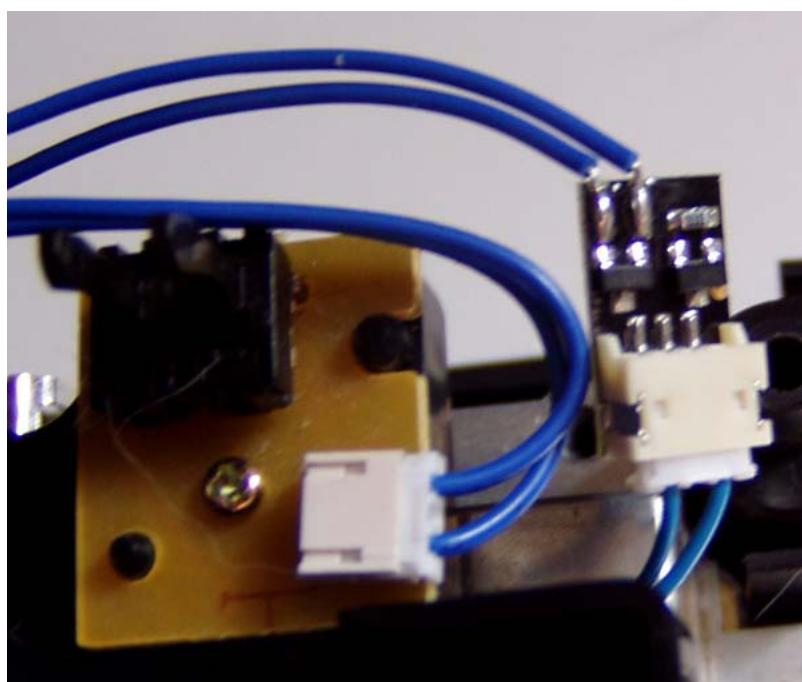
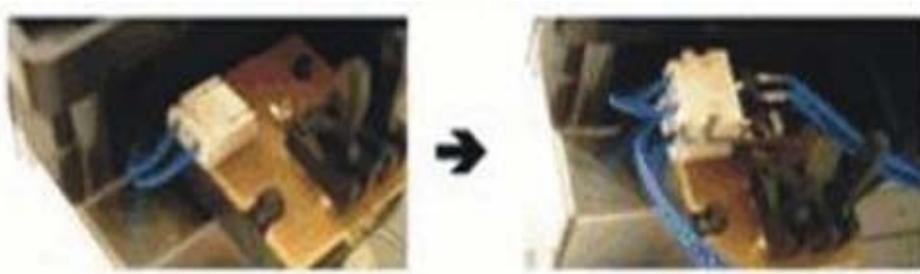
<http://www.digikey.com/scripts/dksearch/dksus.dll?KeywordSearch>

Search for "MC14H-5-ND"



G) Finally, connect remaining blue wires (attached to the plugs) from the **Viper GC** harness to the corresponding plugs the upper-left corner, so that your lid sensor plugs look like the picture below.

You will need to unplug the original wire harness from your unit, and then attach it to the **Viper GC** plug to bypass the sensor. Once the **Viper GC** module is active you will be able to open the lid undetected to swap for Import/LEGAL back-up game discs.

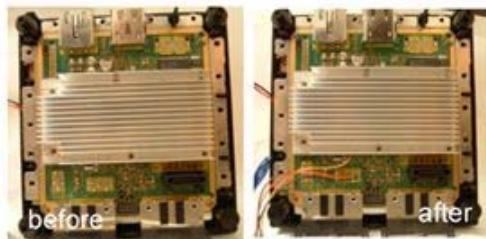


When reattaching the GameCube's back panel, be sure to route the **flexwire** as shown [HERE](#) through a slot in the back. This is the wire that gets hooked to your **Viper GC Programmer** when flashing the module with the latest Cobra third-party BIOS binary.

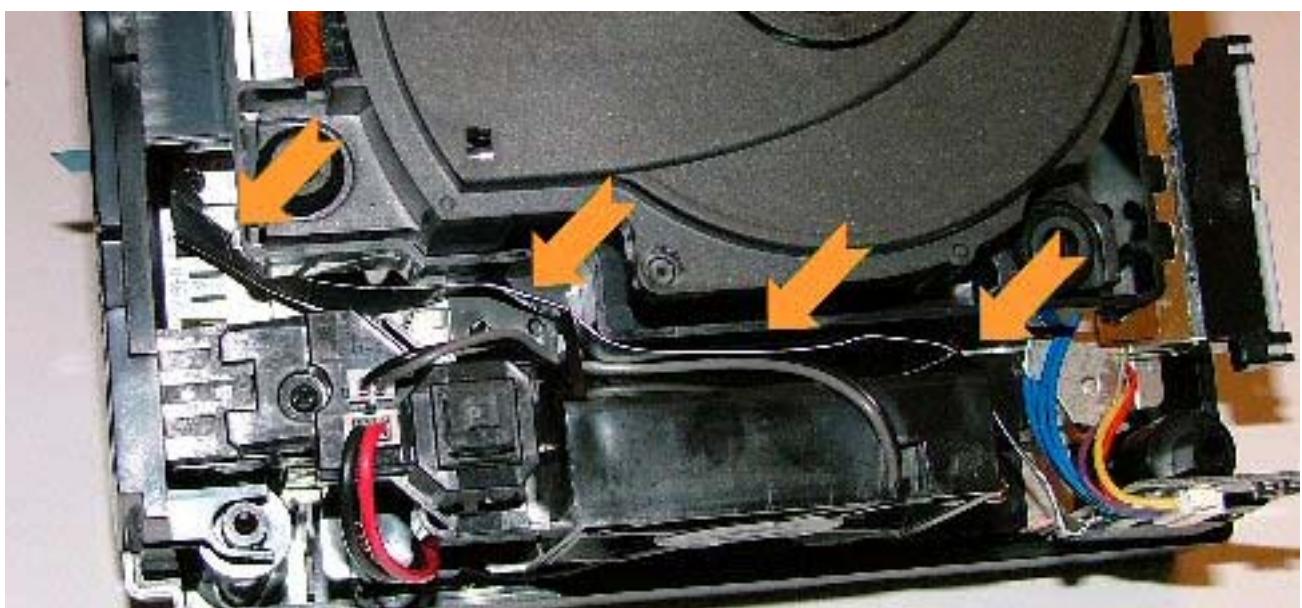


Viper GC - Installation example

WARNING: If you remove the heatsink, do it with care as you can damage the mainboard if you slide it too much.



the chip should not be too close to the reset switch



(PART 1.1 - FLASHING THE VIPER GC)

Quote from Acey of NES, N64 and the owner of www.64scener.com

“<Acy-> Well my GC has problems reading the backups, it hardly ever gets to the GC logo on boot-up
<Acy-> dunno what to think of the viper other than... "does it actually work?" :-)"

My **Viper GC** is installed, what BIOS's are available for me to use, and which one should I use?

There are currently three BIOS's to use which each have different versions. These BIOS's are the Cobra BIOS (v0.1-v0.4), the Anaconda BIOS (v1) and the GCOS BIOS (v1.0-v1.4). Most people stick with the Cobra BIOS, but a lot have been migrating to GCOS. GCOS has more features and is currently being updated a lot more often then the Cobra BIOS. Most people stay clear of the Anaconda BIOS simply because it has no GUI.

How do I program/flash it exactly?

- A) The official **Viper GC User Manual** can be viewed below, but below that is a Tutorial on how to do it as well.



Viper GC - User Manual

1. DIP Switches:

When the Viper GC Programmer is connected, the Viper GC is active when the switch 1 is OFF, and inactive (stealth mode) when the switch 1 is ON. The second switch can be used freely by GC programs. If the Viper GC Programmer is not connected, the Viper GC is always active.



2. Programming the chip:

- a. Run Viper Loader application
- b. Choose your parallel port address from the Parameters Menu
- c. Load the Viper GC Flash you want to use by using the File menu or drag'n'drop
- d. Connect the Parallel Port cable to the Programmer and turn on your Gamecube
- e. Click on the "Write" button. You can verify the write by clicking the "Compare" button.
- f. Turn off the GC, and unplug the Parallel Port cable. Your Viper GC is now programmed!

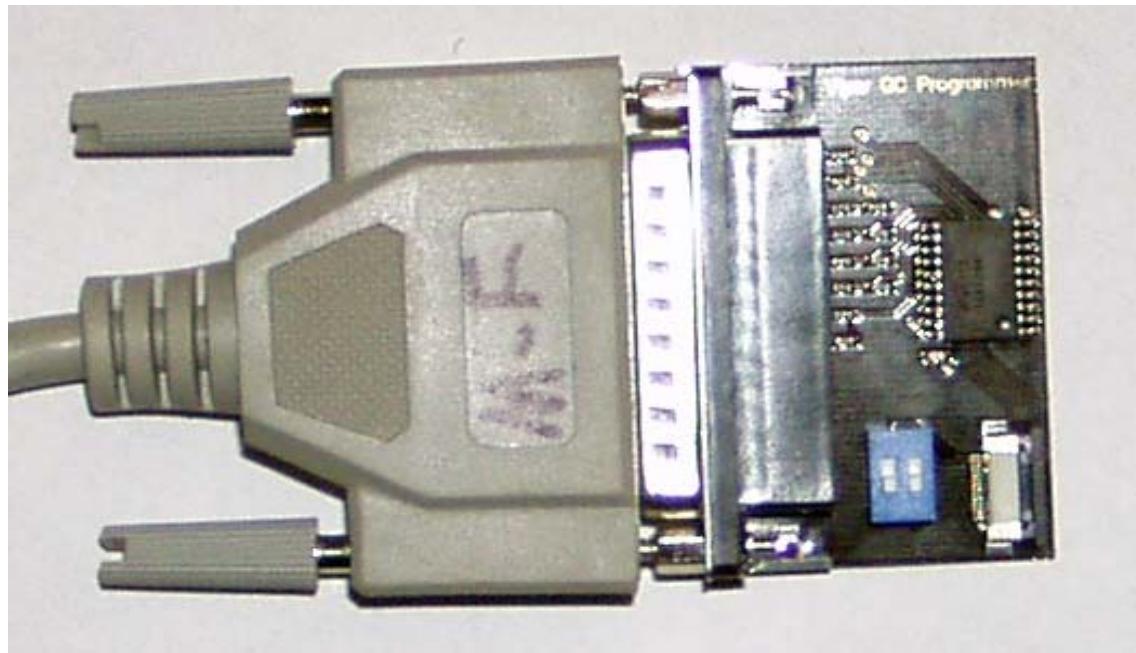


IMPORTANT: To avoid any problems, always remove the parallel port cable after programming. Please wait at least one second between a power off and a power on.

All trademarks are the property of their respective owners

B) Make sure your PC is turned off. Next take any standard male/female **PC Parallel Cable** and inserting it into your **Viper GC Programmer** as shown and plug the other

end into your PC. Now you can power on your PC. The PC must be shut down then turned back on for it to recognize that something is actually plugged into its parallel port.



Next, plug the other end into your PC securely, and ensure the **flexwire** is plugged in securely to your **Viper GC Programmer** like pictured below. It is also IMPORTANT that BOTH white switches on the **Viper GC Programmer** are in the down or OFF position as detailed in the above picture. Next **POWER ON** your GameCube console to program the chip.



NOTE: As mentioned above, if you don't have a **PC Parallel Cable** it is still possible to program your **Viper GC** module, however, you will have to plug it directly into your PC's Parallel port... as a result you will need to move the backside of your console VERY close to your PC to program the **Viper GC**, or simply use the **flexwire** to do it before putting the console back together. The Viper GC can be flashed without having the cube hooked up to your TV, so doing the direct connect thing really isn't that hard. You will also have to take out the two metal posts for the flasher to fit into your computers Parallel Port directly.



C) Next (with the GameCube powered ON) open **Viper Flasher 1.0** utility on your PC and you will see a prompt similar to the one below.



Click on **File** and then **Load BIOS...** and at the pop-up prompt navigate in Windows to the latest third-party BIOS. **Cobra BIOS** is what everyone is using. See the attached files below.

[Viper BIOS LOADER – Located \files\Viper_Loader.RAR]

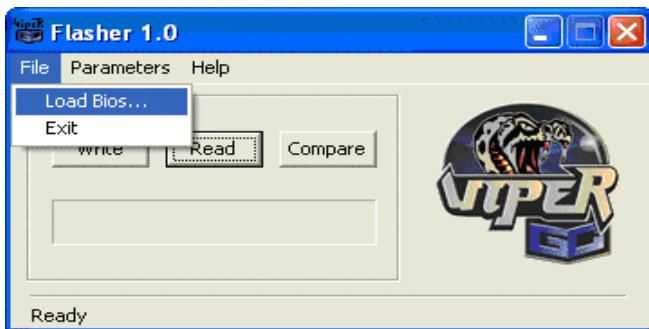
[Viper VFLASH – Located \files\hit-vflash-0.2.zip]

Here is a 3rd party flashing software with more features and the ability to run on Windows or Linux

Below is the location of the various versions of the Cobra and GCOS releases to date.

[COBRA BIOS v0.2 – Located \files\COBRA02.zip]
[COBRA BIOS v0.3 – Located \files\COBRA03.zip]
[COBRA BIOS v0.4 – Located \files\COBRA04.zip]
[COBRA BIOS v1.0 – Located \files\COBRA10.zip]

[GCOS BIOS v1.0 – Located \files\GCOS10.zip]
[GCOS BIOS v1.1 – Located \files\GCOS11.zip]
[GCOS BIOS v1.2 – Located \files\GCOS12.zip]
[GCOS BIOS v1.3 – Located \files\GCOS13.zip]
[GCOS BIOS v1.4 – Located \files\GCOS14.zip]



You should receive a **loaded successfully** prompt!



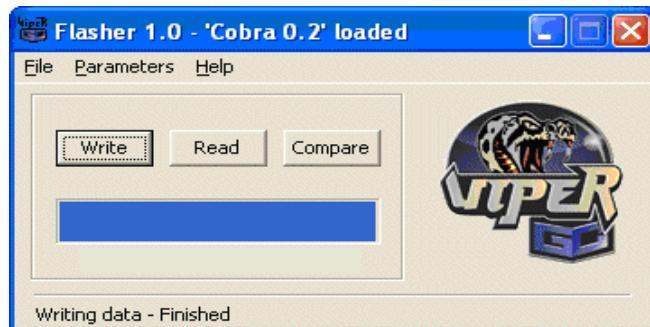
This is a good time to ensure your PC Parallel Port **Parameters** are correct and USE **SAFE MODE** (writes slower) is **enabled** also.



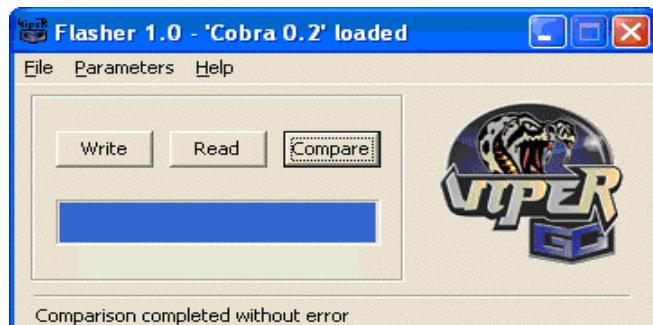
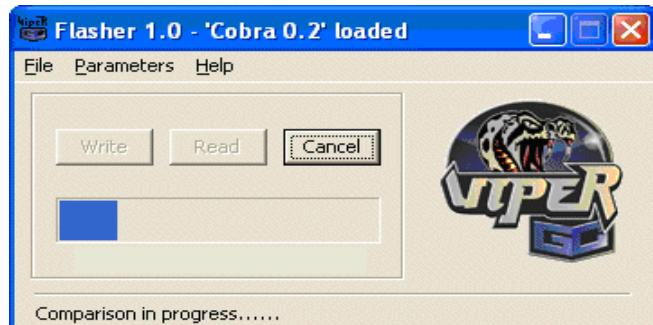
NOTE: If you are unsure which address your PC is currently set to, you can find this out by **right-clicking** on the "My Computer" desktop icon, selecting **Properties** from the menu and clicking the **Hardware/Device Manager** tab, followed by expanding **Ports** and **right-clicking** on the LPT **Properties** and finally selecting the **Resources** tab to view the current **I/O Range**.

NOTE 2: To change your Parallel Port address simply re-boot your PC and enter the BIOS screen at boot-up (usually by pressing F1 or ESC keys) Once there, navigate to find your Parallel Port transfer setting and be sure it is set to **ECP** mode with a **DMA** of either **1** or **3** while using the **Flasher 1.0**. Some people claim **ECP+EPP** mode works, but I had no luck with it.

D) Now, click the **Write** button on the **Viper Flasher** and you should briefly see an **Erasing the Chip** prompt, followed by another displaying **Writing Data**, and finally a **Finished** prompt. This is all you have to do to program the **Viper GC**, however, it is also a **VERY** good idea to now click on the **Compare** button to ensure the data you just flashed was not corrupted during the transfer!!



E) To check this, after clicking the **Compare** button you should see a **Comparison In Progress...** prompt, followed by a prompt. Click the **OK** button, and then if all is well a final prompt will pop-up stating **Comparison Completed Without Error** to confirm it. Congratulations- you're ready to use your Viper GC now!



(PART 1.2 – INSTALLING THE “RIPPER 3”)



I guess the Viper GC is going to have a little competition on it's hands. Here is the official press release of the specs of the chip from Ripper 3 team
(<http://www.ripper3.com>)

Ripper///GC



We are proud to present our latest product The Famous Ripper///GC modchip. The best design is, as always, brought to you by The Ripper Team.

The CORE of the Ripper///GC modchip is specially designed for the GC console. In order to fulfill the demanding and very high speed transmission over the serial interface we had to redesign the PCB to make it more compatible with the 32Mbit data stream. The GND plane on the back side of the Ripper///GC is redesigned and looks hashed. Please look at the images below. The GND plane redesign was a must to lower the capacitance of transmission lines and to provide an error free transmission. Also the impedance of transmission lines is precisely balanced. Our chip does not freeze. The Ripper///GC starts every time you press the power button and it does not freeze the console causing the laser unit of your GC to fail. It will NOT freeze your GC's laser with the laser diode ON:-)

- Only 7 wires to solder including power and ground.
- LED diode test feature for the proper chip functionality. You don't need to assemble the console, even the heat sink to test if everything is OK. You can check if you don't have a short circuit. You can power the motherboard for several seconds without aluminum heat sink before assembly. The LED diode also tests the CRC of the contents of the on board flash memory, ensuring you that everything is working perfectly. If the sophisticated CRC mechanism inside the FPGA discovers that something has been altered then the chip will be disabled.
- Every chip delivered is 100% guarantied to be operational by extensive jig testing of every device before shipment.
- Pb-free soldering process.
- We use Actel's low power, extreme secure, antifuse FPGA.
- 3.3V Actel low power technology with 2.5V digital core.
- 70ns 1Mb on board Flash memory. (Can be easily expanded to 4Mb).
- Fully static, ground bounce free technology.
- Extremely good timings and logic levels on the high speed GC bus.
- Ripper///GC has an excellent setup menu where you can make some choices and save them on the chip.
- Selectable default boot action (Main menu, Boot DVD, BOOT Original Bios, Boot Region Free).
- Selectable default boot action (Main menu, Boot DVD, BOOT Original Bios, Boot Region Free).
- Selectable default boot video mode (AUTO, NTSC, PAL50, PAL60).
- Users programmable X key definition during powering up your GC.
- You can press the Y button at any time to enter the configuration menu if another default boot option is selected and saved permanently on the chip.
- Special and unique chip disable feature by the DVD door switch state. For example if you want to boot an original game from your region, you don't need to do anything special. Simply close the GC's DVD cover and press the power button. Nothing else! The Ripper///GC will stay in the hardware reset state ensuring it will not interfere with the GC's electronics. If you want to boot any other DVD like an original DVD from another region, backup of your legally owned game or homebrew software you must power up your GC when the DVD cover is opened. This feature can be helpful in the future for online

gaming if some new games will have testing for the presence of the modchip enabled.

- The Ripper///GC is fully user reprogrammable. You can reflash it yourself but unfortunately not via DVD. We will supply special, free PCI-to-DIL adapters for all distributors listed in the section "distributors". All others will be able to purchase such adapters in a commercial manner for a small fee. You can use any eprom/3Vflash programmer for that such as the same programmer as you use for LPC memories. Normal programmers can flash many memory types. We use industry standard 29LV series of flash memory. The Ripper///GC is tested and in general there is no need to reflash it any more.
- We give you a warranty that our products are bug free from the beginning !
- The situation here is different then on the PS2 scene. The chip's firmware has nothing to do with future game releases like you experienced with PS2. We will be able to give you some updates with new features but for the most people the initial product will be enough.
- We decided to use the same PCB layout and almost the same components to reduce costs and to make the Ripper///GC available for everyone. The ability of the chip to be reprogrammed via DVD was sacrificed. It is nothing special to make a chip reprogrammable but it costs additional US dollars.

Okay, now that all of that is said and done, let's get to the good part. Here is how to install this bad boy using the instructions from the page.

NOTE: Due to the fact I have not installed a Ripper 3 myself, I am just using the instructions from the webpage to make this section with. In a few weeks when I receive my Ripper 3 I will update this section with hints and tips, more steps if they were necessary and will make a new section dealing with the Ripper 3 BIOS.

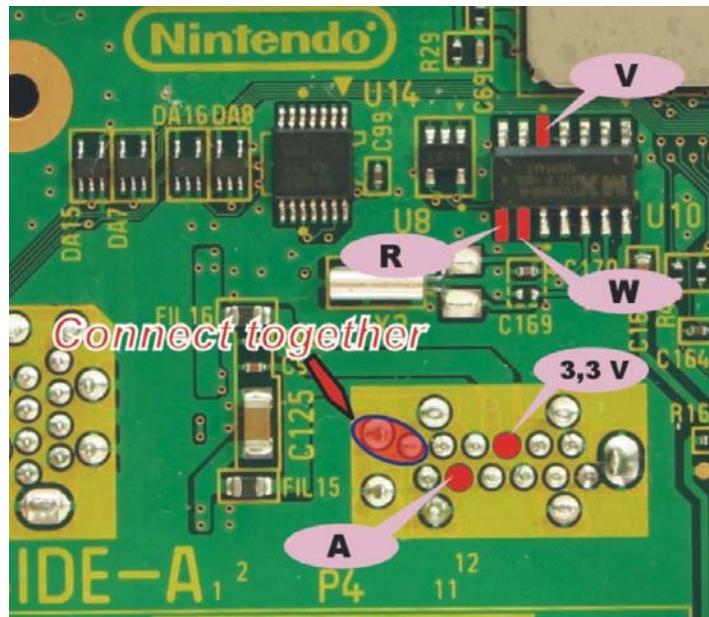
The installation is a little bit more complex then the Viper GC chip is due to the fact that there are a couple more wires you have to solder on.

Step A) Disassemble your GameCube. See Part 1 and follow steps A-D.

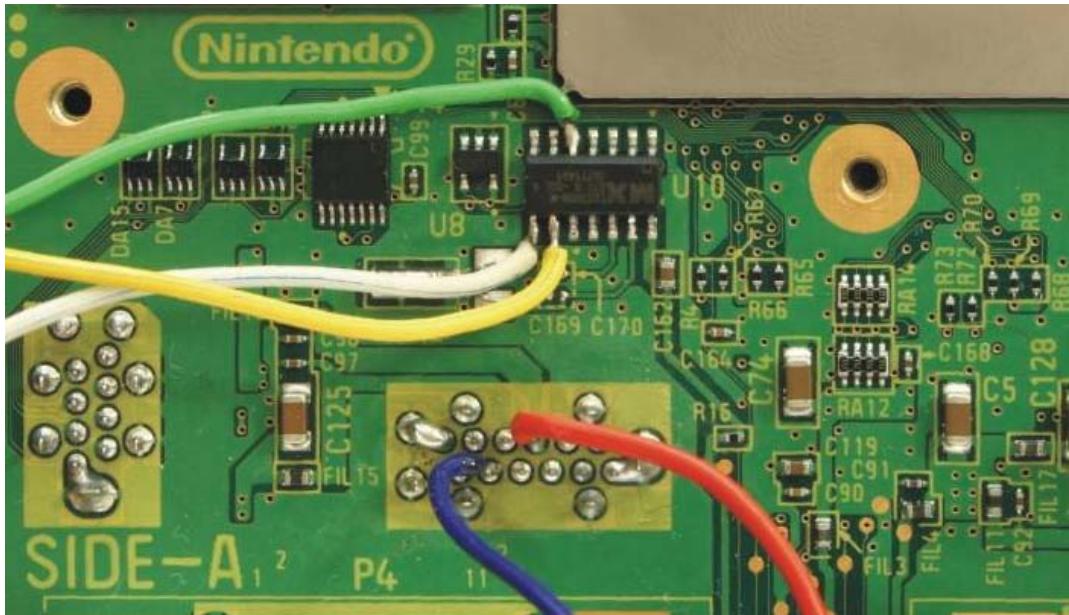
B) Close these three jumpers on the Ripper 3 Modchip



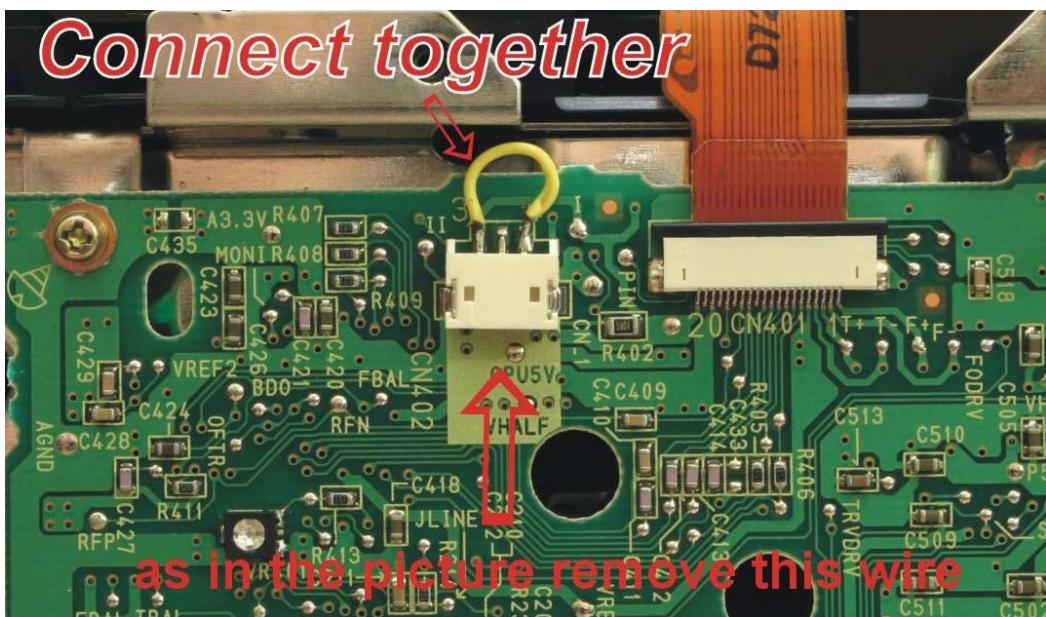
C) Using the lettered soldering pads on the chip, solder wires from the corresponding letter to it's position outlined in the picture.



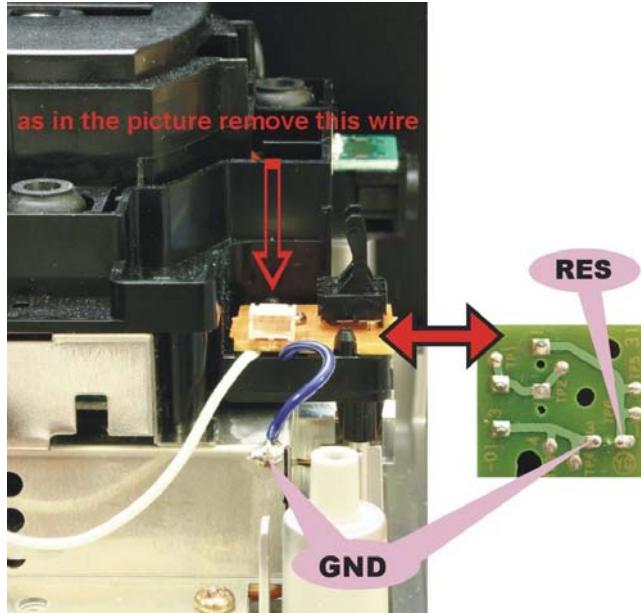
This is what it should look like after you have successfully completed the soldering of this section of the board. If you are using the revision C mainboard, you are going to have to solder points V, R and W on the opposite side of the mainboard.



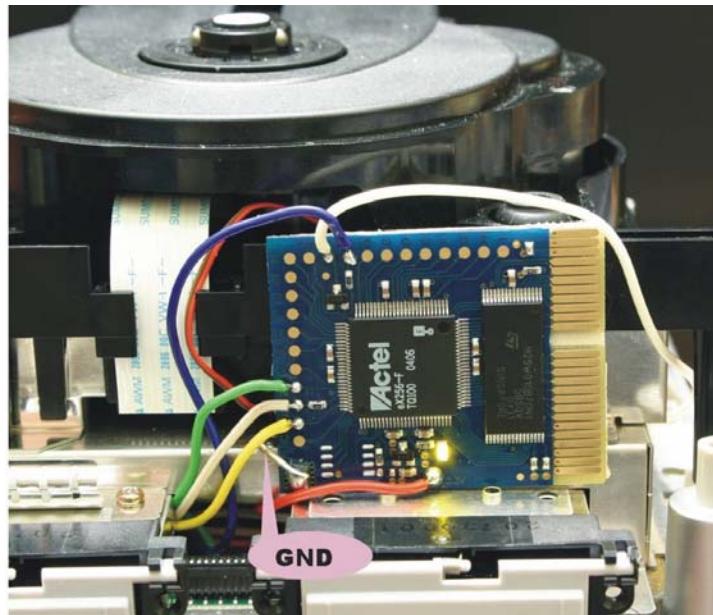
D) Connect the two points together outlined in the picture and remove the wire that is missing from the picture.

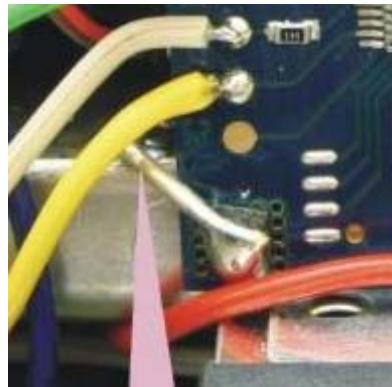


E) Remove the reset switch wire from the casing and then connect the RES soldering point from the Ripper 3 onto the RES point under the reset switch assembly. Also connect the GND (ground) point from the reset switch assembly to the metal casing.

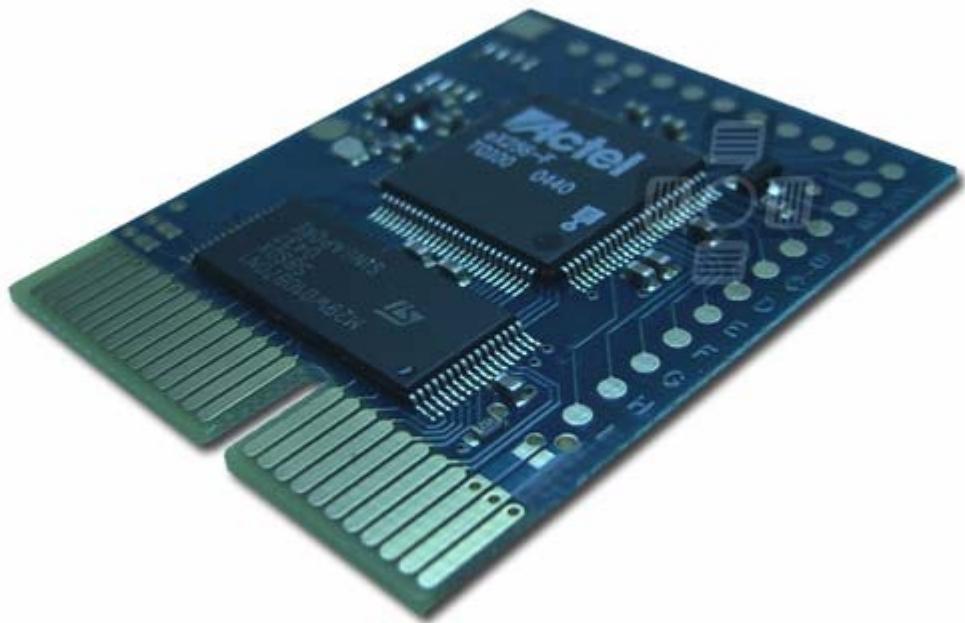


F) Finish up by connecting the ground point on the chip to the metal casing using a small wire.





G) Reassemble the Cube and refer to Part 2.3 “The ‘Ripper 3’ BIOS” for usage instructions



(PART 1.3 - FLASHING THE “RIPPER 3” MODCHIP)

The Ripper///GC is fully user reprogrammable. You can reflash it yourself but unfortunately not via DVD. We will supply special, free PCI-to-DIL adapters for all distributors listed in the section "distributors". All others will be able to purchase such adapters in a commercial manner for a small fee. You can use any eeprom/3Vflash programmer for that such as the same programmer as you use for LPC memories. Normal programmers can flash many memory types. We use industry standard 29LV series of flash memory. The Ripper///GC is tested and in general there is no need to reflash it any more.

Until more is known about the PCI-to-DIL adapter, this ends this section



(PART 1.4 – INSTALLING AND FLASHING THE “NINJAMOD” MODCHIP)

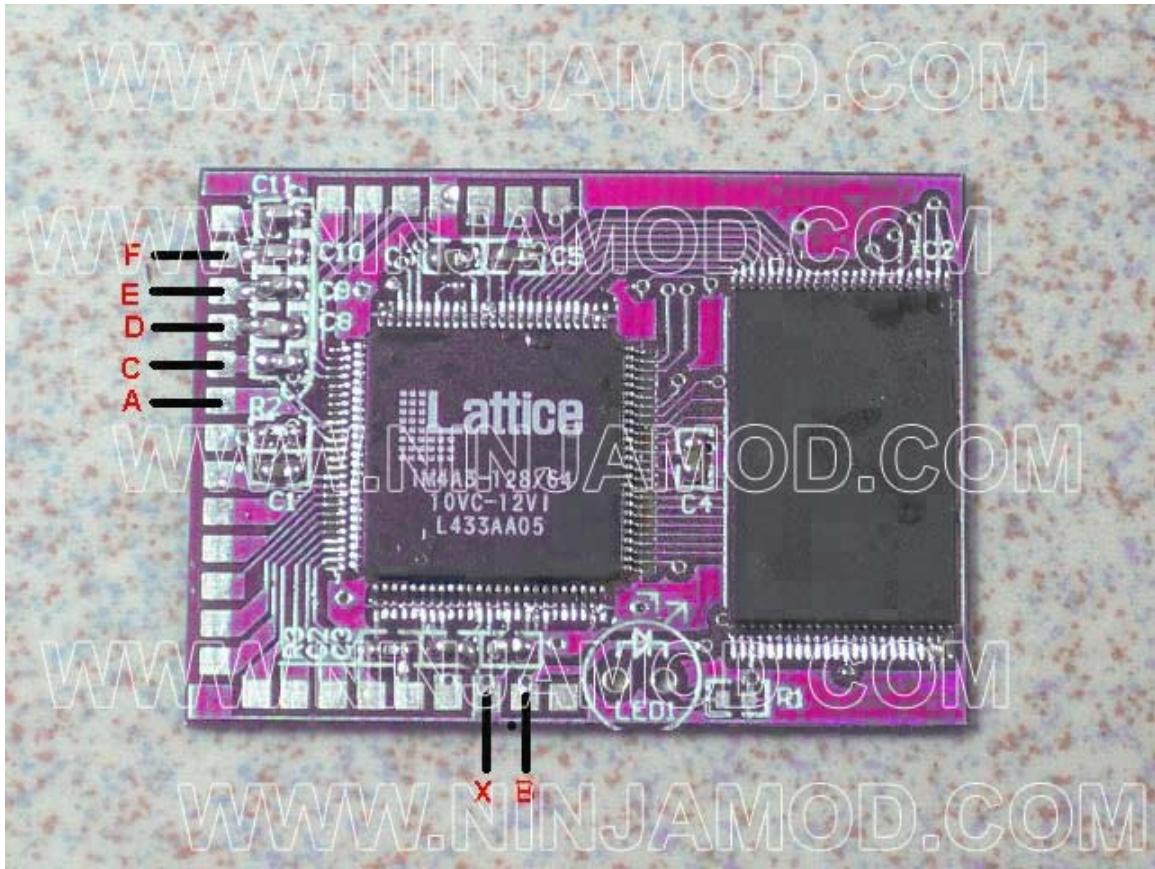
This new kid on the block has a pretty decent feature set including ...

- Supports all regions Versions PAL/JAP/USA...
- Very easy installing...
- Only 7 wires to solder...
- PAL/NTSC games Auto detection...
- Allows make backups to PC computer...
- Allows run original GAMECUBE Bios...
- Supports Open Source systems ...
- Mini/DVD-R +R Compatible, DVD+R better choice...
- 4Mbytes Flashrom (very nice for coders)...
- Supports Updates Flashing by DVD+R or BBA...
- Ninja Modchip comes with 2 Memory Banks , BANK 0 is Preflashed with Bootloader and BANK 1 is ready to flash with new firmware (nonswap, utils, mp3 player) or whatever includes in new firmwares, you have 3MB more to fill with stuff

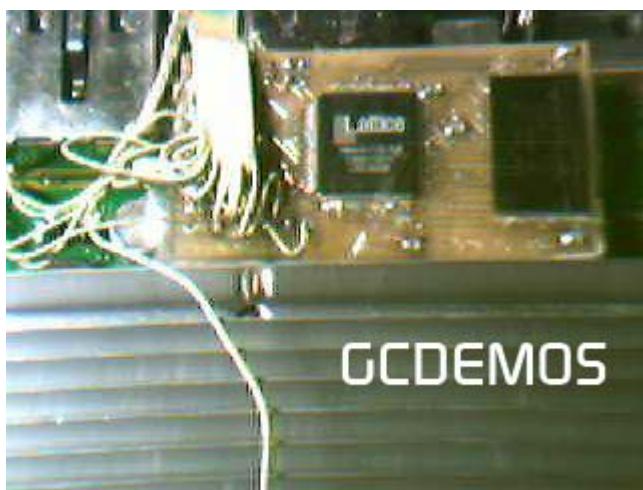
INSTALLATION –

First follow steps A-C in “Part 1” which basically entail you disassembling your Game Cube console.

Study the below image of the modchip closely so you know exactly where to solder the wires to.



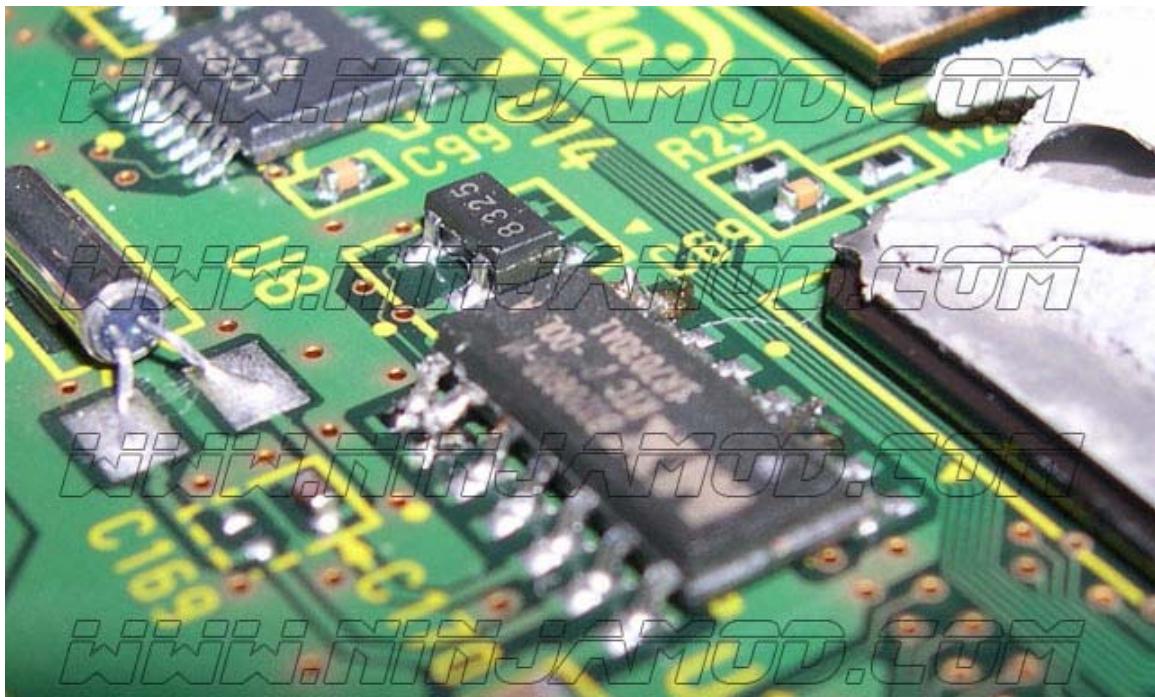
Now depending on which revision of Game Cube you have you're either going to have to do this next part on the top or bottom of your motherboard.



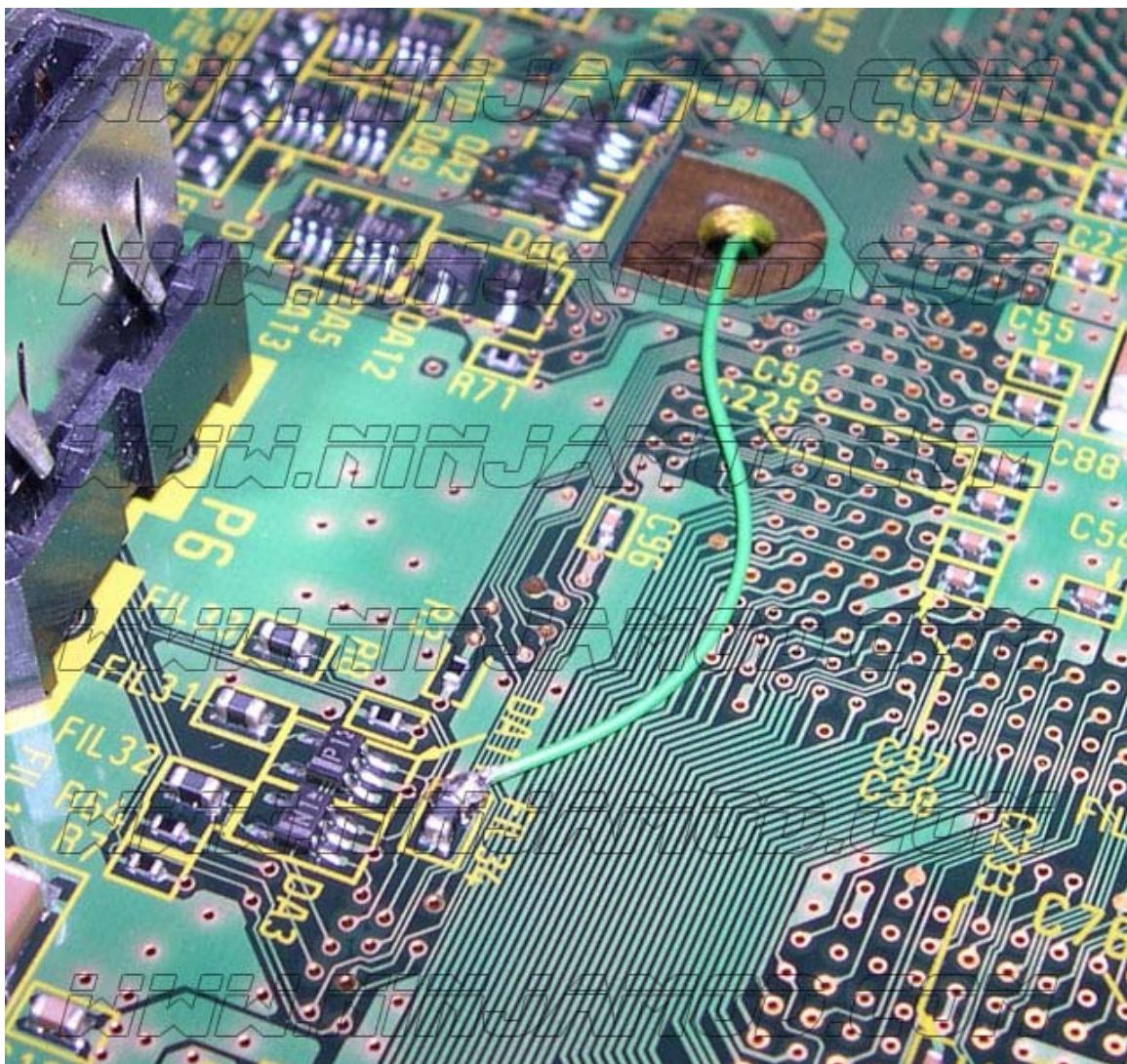
Notice the similarity between the chip pictured above and tmibinc's chip? Well it's the same exact design as the NinjaMod is just a copied and mass produced version of his homemade modchip. Tmibinc posted on Dextrose.com that he doesn't give a rats ass that they copied his design and could care less. More info on tmibinc's mod and how to make your own can be located at this "<http://debugmo.de/gc/gc.html>" location. Note that tmibinc's modchip has to be modified to boot

DVDr backups and tmblinc himself nor me have the slightest clue on how to do this. Basically the tmblinc chip is for homebrew only, but don't fret the NinjaMod will boot DVDr just fine!

Carefully LIFT UP (don't break) the pin 9 on the BIOS chip. You can do this easily using a little flux liquid. Apply iron solder and lift it up with cutter or small precision tool. This will connect via wire to point F on the modchip



Look for FIL34 component in bottom motherboard side (check in pictures for reference) which will be soldered to wire E point in modchip.



Next you will solder the wires to their corresponding locations below. Do not forget to solder the E and F wires.



Next locate the CD Sensor button as you are going to have to solder it into the “closed” position. You can do this like in the diagram below or make your own custom switch (not covered in this FAQ yet). It’s pretty simple, just connect the two points in the pictures below using a short wire.



Now you reassemble your GameCube and use the chip!

FLASHING –

This will be covered in the next version of the FAQ as the chip has not been released yet.



(PART 1.5 – INSTALLING AND FLASHING THE “QOOB PRO & SX” MODCHIP)

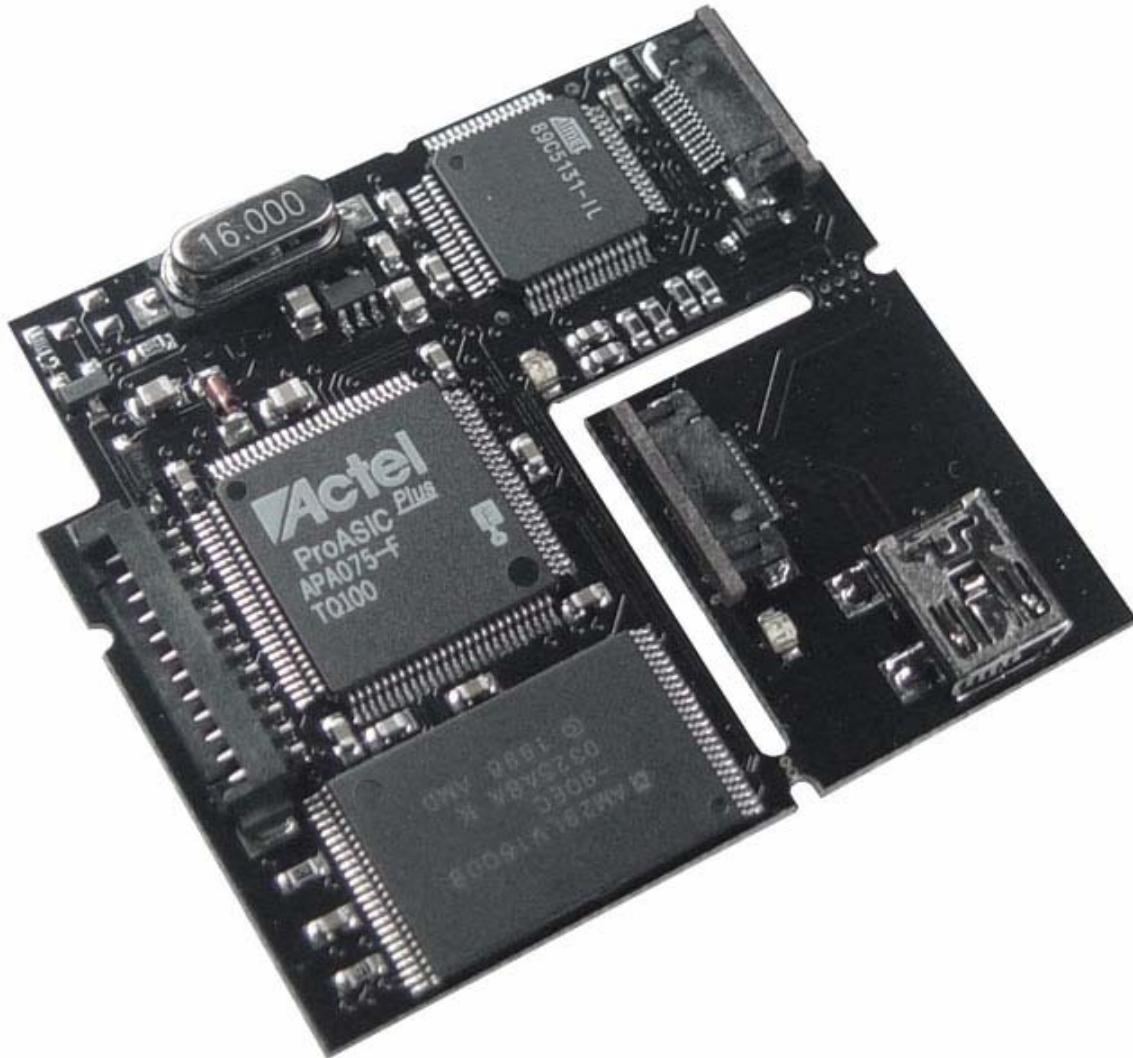
ABOUT THE QOOB –

The QOOB chip is set to make a wave in the GameCube scene. Its feature set is rich and is the first chip to support Direct Booting of DVD media.

The Cube PRO comes with the following parts ...



Here is a close up of the QOOB Pro Chip.



The QOOB Pro Chip features ...

- 1 = Installation wires connecter
- 2 = High speed - ultra secure Actel FPGA
- 3 = High capacity 16 MBit Flash
- 4 = Integrated Status LED
- 5 = Flex cable connector
- 6 = High speed USB controller
- 7 = USB connector board (removable)
- 8 = Mini USB B-type connector

The Qoob PRO main PCB is designed to fit perfectly into the GC inner spaces without

covering any ventilation holes ("L"-shape)

The QOOB has a variety of kickass features including ...

- + Direct boot of all media, without swapping!
- + Supports all regions PAL / USA / JAP
- + On-board MP3 Player included
- + Super easy USB upgrade system (USB transfer cable included)
- + DVD Disc upgradeable
- + Network (*) upgradeable
- + Bios selection/control supported
- + Supports all retail hardware (DOL-001 USA, JPN, EUR and DOL-101)
- + Fastboot of original discs
- + Comfortable easy to use Windows PC flash software (in download section)
- + Supports homebrew and open-source coding
- + Integrated media compatibility check (checks all sectors of inserted media)
- + Streaming Audio Fix
- + Integrated status LED
- + Easy Installation, only 6 wires (no soldering on Qoob chip, special cable included)
- + Multicolor graphical user interface for easy operation
- + Supports Mini/DVD-R, Mini/DVD+R
- + 16MBit on-board Flash to store homebrew applications
- + High secure - low power Actel FPGA
- + Packed in a stable cardboard box including wires, 3D Sticker and USB transfer cable
- + Compatible with "GCOS" and other IPL replacements, allowing homebrew development via SD card (**) and/or network (*)

(*) BBA required

(**) SD card adapter required

INSTALLATION –

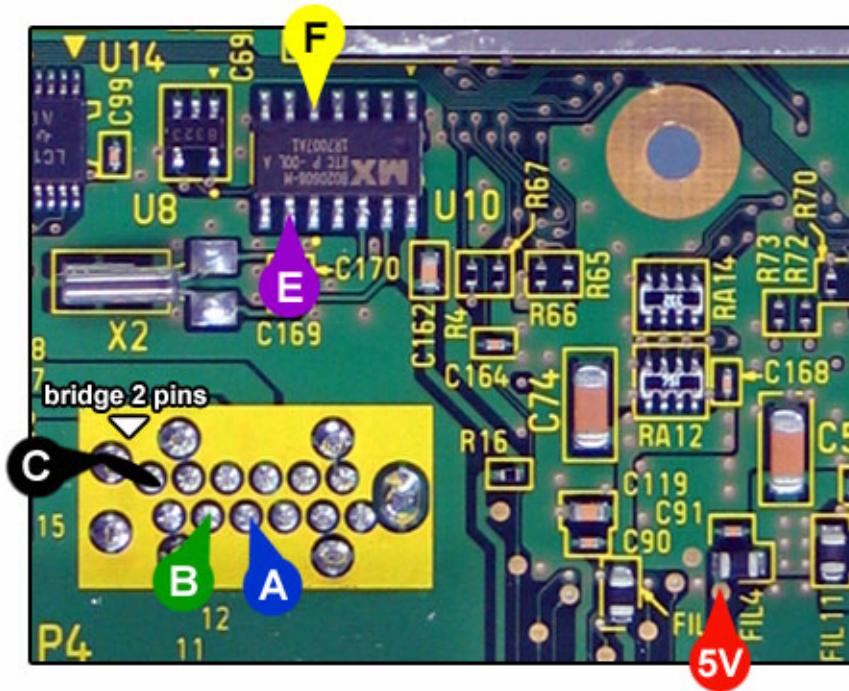
Simply follow the steps in “Part 1” from A-C to disassemble your GameCube. Next take a look at the two pictures below to make sure you’re installing the QOOB on the right version of your motherboard. Simply follow the diagrams below to solder the chip in, install the lid switch cable, run the flexwire, mount the USB adapter and then reassemble your Game Cube.

qoob PRO Installation - GC rev. A & B



INSTALLATION WIRES

| | | |
|---|---|--------|
| A | — | BLUE |
| B | — | GREEN |
| C | — | BLACK |
| | — | RED |
| E | — | PURPLE |
| F | — | YELLOW |

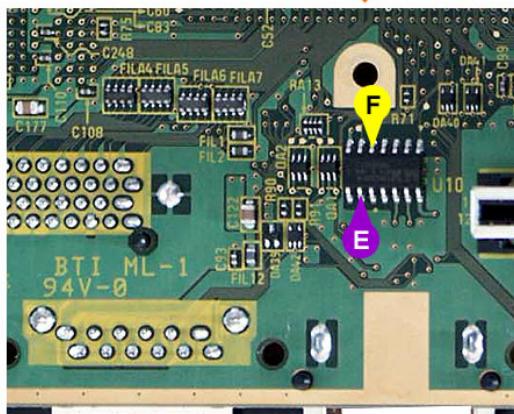
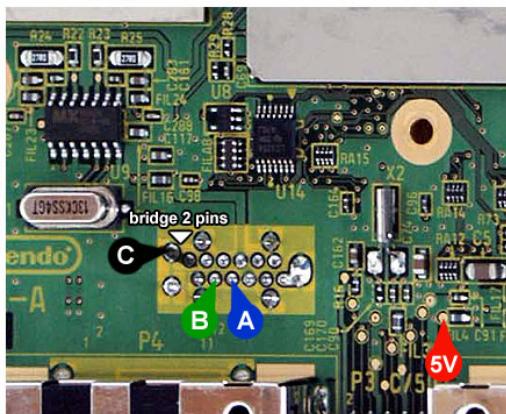


qoob PRO Installation - GC rev. C



INSTALLATION WIRES

| | |
|----|--------|
| A | BLUE |
| B | GREEN |
| C | BLACK |
| 5V | RED |
| E | PURPLE |
| F | YELLOW |

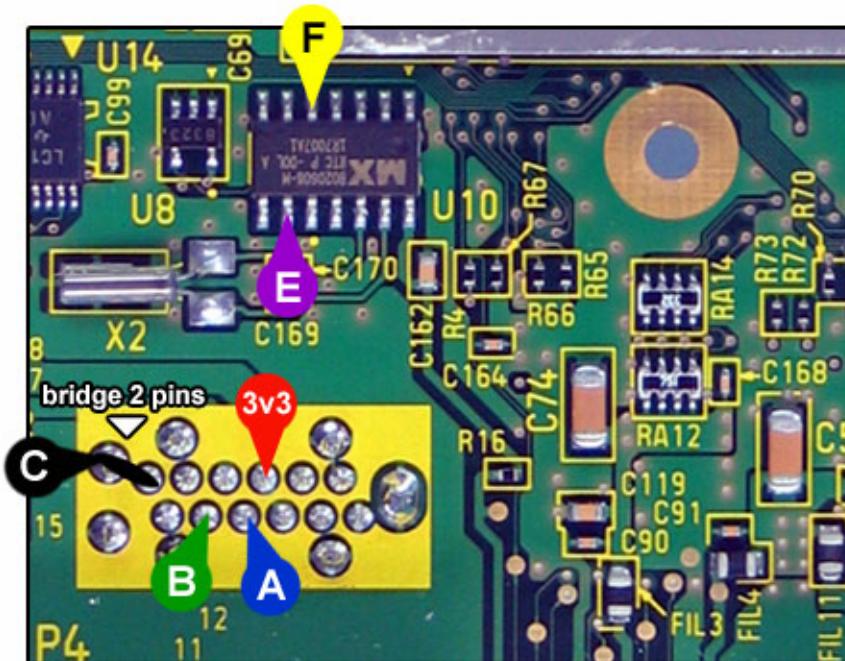


qoob SX Installation - GC rev. A & B

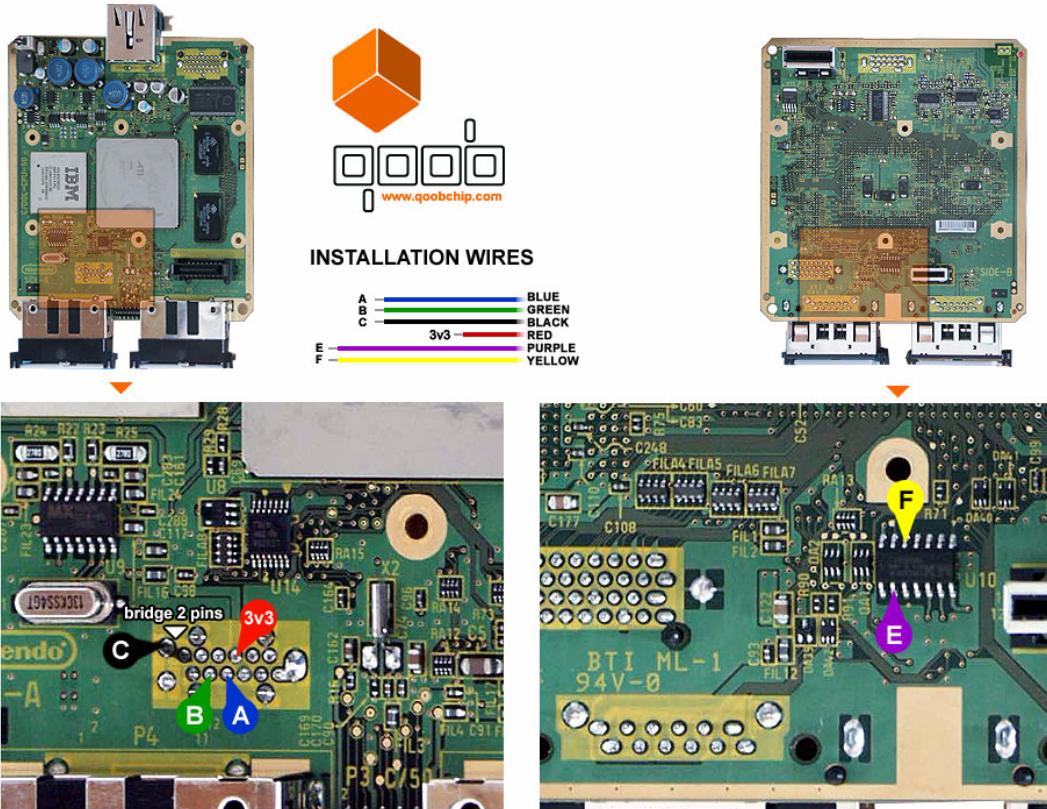


INSTALLATION WIRES

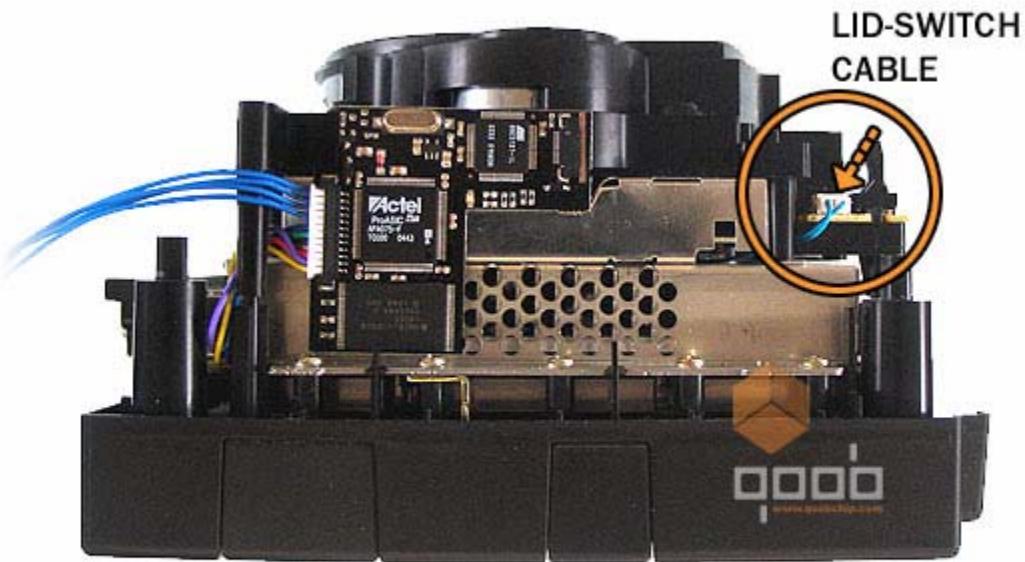
| | | |
|-----|---|--------|
| A | — | BLUE |
| B | — | GREEN |
| C | — | BLACK |
| 3v3 | — | RED |
| E | — | PURPLE |
| F | — | YELLOW |



qoob SX Installation - GC rev. C



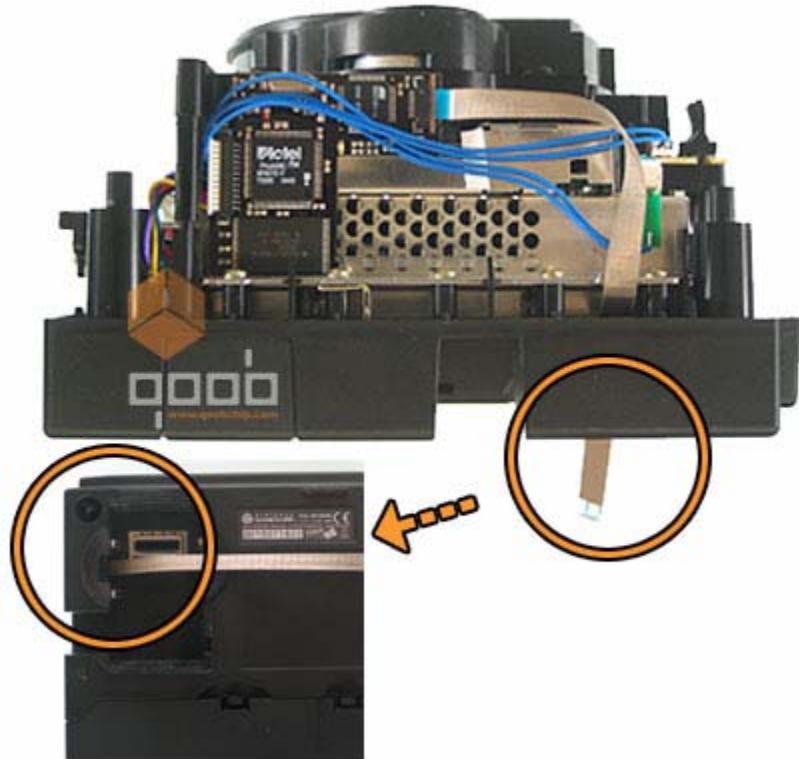
Next you will need to locate the LID Switch Cable (pictured below)



Remove the LID Switch Cable and attach the wires as pictured below.



Insert the flat flexcable as pictured below.



Attach the USB connector board with adhesive tape as shown below.

Alternative I



Alternative II



Alternative II



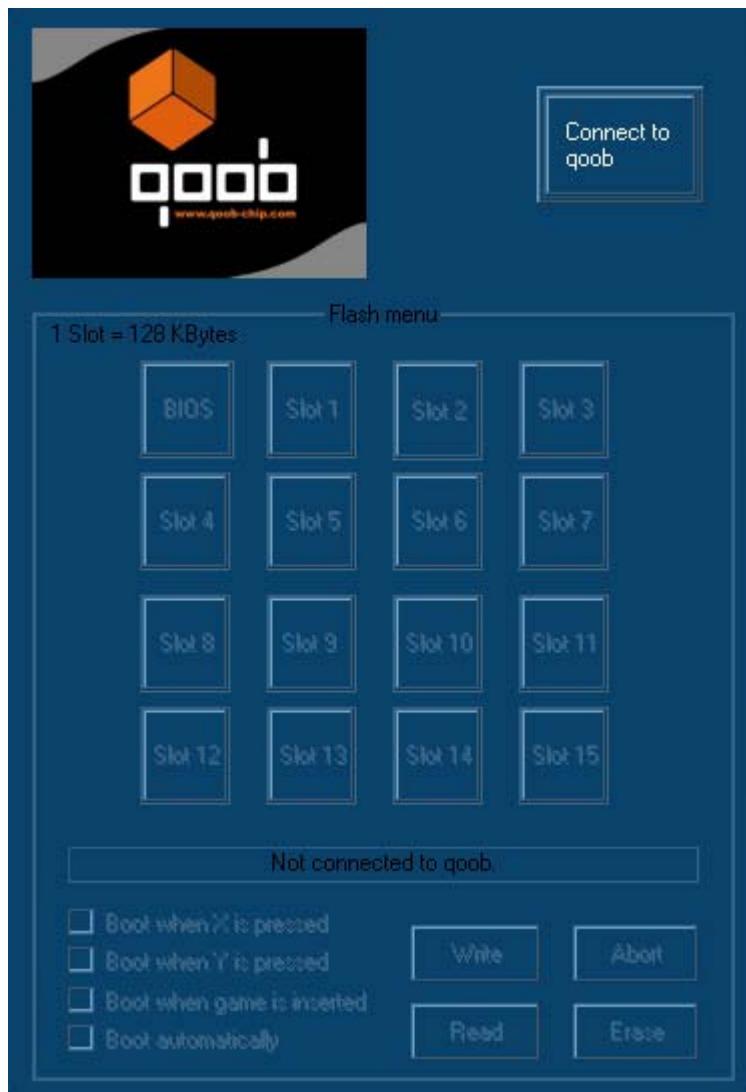
FLASHING –

Flashing your Qoob Pro chip is easy. You can either flash the chip before you install it (no GameCube required) or after you install it.

The BIOS files can be found below.

(Qoob Pro BIOS v1.0 rc 4 – files\ qoob_10rc4.zip)
(Qoob Pro BIOS v1.0 rc 4 – files\ qoob_10rc5.zip)

And the flashing program can be located at (\files\Qoob_Flash.exe)



The program is pretty much self explanatory. Simply connect to the Qoob Pro chip and you can pick which slot to write, read and/or erase.

NOTE: Applications and BIOS can span multi-blocks!

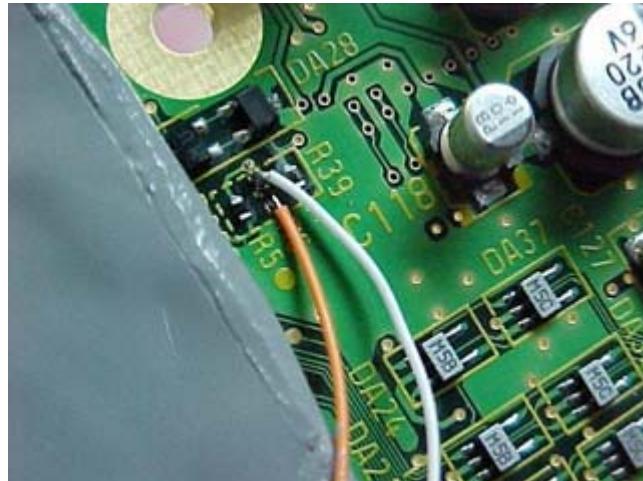
(PART 1.9 – INSTALLING AND OPERATING THE REGION FREE MOD)

The region free mod is a mod that you can do to your DOL-001, DOL-101 and Panasonic Q systems to let them boot original games from any region. This mod will not let you boot backup games!

First of all, after you take apart the GameCube console then connect the two wires to the center solder point pair at R6. If you have a JAP Cube then R39 is open on a JAP cube and can be left alone. If you have a USA Cube then R39 is closed on a USA cube (with the resistor) so to make a USA cube switchable you will need to open R39 (remove the resistor) and add then add the switch at R6.

You can use any switch for this though I don't know if the Cube has enough power to run a lighted switch? Anyway at any rate when R6 is closed the Cube is in "USA Region" mode and when R6 is open the Cube is in "JAP Region" mode.

NOTE: When using this MOD you will need a memory card for each region and trying to run a memory card in the wrong region will delete it. Any memory card will do as you don't have to buy one from Japan or the USA specifically.



(PART 2 - USING THE “COBRA” BIOS)



My **Viper GC** is successfully programmed with the Cobra BIOS... how do I use it now?

There are currently a few releases of the Cobra BIOS which I have covered in this section. Releases of v0.1 and v0.2 are basically the same so I only covered v0.2. Releases of v0.3 and v0.4 are basically the same so I only covered v0.4. Releases are covered with the newest release first.

NOTE: If you would like to see BETA screenshots of Cobra BIOS v1.0 please refer to the file **\files\cobra10betashots.zip**

USING THE V1.0 BIOS

Here is a list of what is new in this version of the BIOS straight from the NFO file included with it's release.

- Direct boot of all media, without swapping!

- Fixed compatibility problem with DOL-101 units
- Automatic Media Detection: Insert disc, turn on GC and play!
- Fixed Idle bug, you won't have any DRE if the drive is resting :-)
- Powerful Cheat Code System compatible with Action Replay codes, codes are stored in the Viper GC Flash so no memory card is needed!
- Cheat codes can be either entered using Cobra Menus or loaded from a file using the Disc Explorer
- Unique Multi-Boot feature: put several games on one single disc!
- A lot of fixes and low-level changes
- A Swap disc option was left in (called "Change Disc" as you could also replace a backup with another backup) to be totally backward compatible.

The “Menu Options for v1.0 are ...”

DIRECT DISC BOOT – This will boot the backup of your choice. Simply put in an backup. Note – Currently you cannot Direct Boot DVD+R media. Please use the “Change Disc” function.

ORIGINAL BIOS (REGION FREE) – This will boot up the original GameCube BIOS and let you boot any game from any region.

ORIGINAL BIOS – Same as above, but will only boot games for your region.

CONFIGURATION MENU – (has the following sub-options)

COBRA DISPLAY MODE – (has the following sub-options, note that these options only apply to the BIOS display, not the original/backup game you are going to by booting)

AutoDetect – AutoDetect TV display mode

NTSC – NTSC display mode

PAL 50 Hz – PAL 50Hz display mode

PAL 60 Hz – PAL 60Hz display mode

DEFAULT BOOT ACTION – (this is what will happen when the BIOS boots)

Display Main Menu – Displays Main Menu

Boot DVD – Goes directly to backup booting mode

Run Original BIOS – Like it says

Run Original BIOS (Region Free) – Like it says

(X) KEY BOOT ACTION – (what will happen when (X) key is pressed at boot)

Display Main Menu – Displays Main Menu

Boot DVD – Goes directly to backup booting mode

Run Original BIOS – Like it says

Run Original BIOS (Region Free) – Like it says

LID SENSOR BEHAVIOR IN ORIGINAL BIOS –

Passthru (if your GC is assembled) – Uses the pass-through cable to determine if the lid is closed or not

Closed (if your GC is disassembled) – Doesn't use the pass-through cable to determine if the lid is closed, tells the GC it is closed at all times

VERSION INFO – (displays various information about your cube)

Original BIOS Copyrights

Original BIOS Region/Revision

Drive Version & Date

Cobra Version and GC Version Codes

DISC EXPLORER – This will let you browse the contents of your DVD disc

Explore DVD – Browse the contents on an original or burnt DVD Disc

CHEAT CODES – This will let you manage and use your cheat codes.

Enable Cheat Codes – This will either enable or disable the cheat codes. When

enabled the string “Cheat Codes Enabled” will appear under the Version 1.0 text

Select/Edit Cheat Codes – Select, Add, Delete, Alter cheat codes

CHANGE DISCS – Changing Discs will let you change to another DVD, backup or original game without restarting the Cube. To boot DVD+R you will need to start the Cube with an original game in the system then use this option and swap with the backup.

Detailed Information on certain BIOS options –

DISC EXPLORER –

Using the DISC EXPLORER option to EXPLORE DVD you can run custom made GameCube executables (.DOL files), view images (JPEG), load cheats (.COD files) and/or update the BIOS (.VGC files). See (Preparing a DVDr readable by the GameCube) for more information.

NOTE: Due to the BIOS register issues (See Appendix B) loading DOL's using various methods may or may not work for you.

CHEAT CODES –

The first menu you come to in the Select/Edit Cheat codes option is the “Game Selection” menu. From here you can (Y)=Add, (A)=Select, (Z)=Remove or (B)=Quit. When quitting the codes are automatically saved; this is a nice feature.

If you pick ‘Y’ to add a game you will get a menu where you can input the name of the game. After adding the name or pressing ‘A’ to select a game you will come to a sub-menu where you can either (A)=Select, (Y)=Add, (X)=Edit, (Z)=Remove or (B)=Back.

Picking ‘A’ to select a code will either enable/disable it (look at the checkbox to confirm.) Picking ‘Y’ to add a code will let you put in the codes name then bring to the same screen you’ll get from picking ‘X’. From this screen you can (Y)=Add, (Z)=Remove, (L/R)=Move Up/Down or (B)=Back.

Selecting ‘Y’ will let you add a code. I guess they decided to not let you edit the code so make sure you add the right one!

To load pre-made cheat code files simply use the DVD browser and select and run the COD file you wish to merge with your database.

See Appendix D for converting Action Replay codes to Cobra readable codes and on how to make your own .COD (cheat code files).

(FLASHING THE BIOS USING DVDR MEDIA)

Using the DISC EXPLOER to update your BIOS is pretty easy. Just select the BIOS file (filename.vgc) and press (A) on it. It’ll ask you if you want to flash the BIOS. When flashing do not power off the system or you will have no choice but to flash it using the Parallel Port Flasher.

(MAKING AND BOOTING A MULTI-IMAGE DISC)

This option will allow you to burn a few images onto a DVD and then select which one you would like to boot. This is handy for booting multiple emulator .ISO/.GCM images!

FILE: \files\viper_multi_boot_iso_creator_v1.0b-loonycube.rar

Using the file above you can create a multi-image disc. This will not allow you to play two disc games, but will allow you to put more than one game/iso on a disc. Most images need to be size swiped before adding. Please see the file “GCMUtility.zip” which will size swipe any GameCube game.

USING THE V0.4 BIOS

The options are

BOOT DVD – This will boot the backup of your choice. Simply put in an original game, select this option. After a few seconds of loading the TOC from the original game the BIOS will ask you to swap it with an original. During this whole process your lid remains open, and can be closed once the swap is complete.

ORIGINAL BIOS (REGION FREE) – This will boot up the original GameCube BIOS and let you boot any game from any region.

ORIGINAL BIOS – Same as above, but will only boot games for your region.

CONFIGURATION MENU – (has the following sub-options)

COBRA DISPLAY MODE – (has the following sub-options, note that these options only apply to the BIOS display, not the original/backup game you are going to be booting)

AutoDetect – AutoDetect TV display mode

NTSC – NTSC display mode

PAL 50 Hz – PAL 50Hz display mode

PAL 60 Hz – PAL 60Hz display mode

DEFAULT BOOT ACTION – (this is what will happen when the BIOS boots)

Display Main Menu – Displays Main Menu

Boot DVD – Goes directly to backup booting mode

Run Original BIOS – Like it says

Run Original BIOS (Region Free) – Like it says

(X) KEY BOOT ACTION – (what will happen when (X) key is pressed at boot)

Display Main Menu – Displays Main Menu

Boot DVD – Goes directly to backup booting mode

Run Original BIOS – Like it says

Run Original BIOS (Region Free) – Like it says

LID SENSOR BEHAVIOR IN ORIGINAL BIOS –

Passthru (if your GC is assembled) – Uses the pass-through cable to determine if the lid is closed or not

Closed (if your GC is disassembled) – Doesn't use the pass-through cable to determine if the lid is closed, tells the GC it is closed at all times

VERSION INFO – (displays various information about your cube)

Original BIOS Copyrights

Original BIOS Region/Revision

Drive Version & Date

Cobra Version and GC Version Codes

DISC EXPLORER – This will let you browse the contents of your DVD disc

Explore GC Disc – Browse the contents on an Original GC Disc

Explore DVD – Browse the contents on a burnt DVD Disc

Using the DISC EXPLORER option to EXPLORE DVD you can run custom made GameCube executables (.DOL files), view images (JPEG) and/or update the BIOS. See (Preparing a DVDr readable by the GameCube) for more information.

NOTE: Due to the BIOS register issues (See Appendix B) loading DOL's using various methods may or may not work for you.

(FLASHING THE BIOS USING DVDR MEDIA)

Using the DISC EXPLORER to update your BIOS is pretty easy. Just select the BIOS file (filename.vgc) and press (A) on it. It'll ask you if you want to flash the BIOS. When flashing do not power off the system or you will have no choice but to flash it using the Parallel Port Flasher.

(HACKING THE COBRA V0.4 BIOS)

On Monday, February 21st, 2005 Dextrose (www.dextrose.com) released the fully unencrypted source code to the DVDr booting process from the Cobra v0.4 BIOS.

See this forum post for the specific details ...

http://www.dextrose.com/_forum/showthread.php?s=148973dd9c9c1d4c56bfecac7db781af&threadid=10437

The code can be found in the \files\ directory named “anaconda04-utp.zip”

Basically, having this code will let others release their own BIOS’s which can boot DVDr media. Hopefully others can work out the variable issues that plague the damn process.

Use this code at your own risk, no responsibility is taken for its functionality at your place or exploded/fucked up GCs, drives, vipers, users, computers, DVDs, hamsters, cats, dogs, lost wives and everything else that may happen :-)

NOTE: To get a funny onscreen message while running Cobra press and hold the “Z” trigger while booting the BIOS.

NOTE: If you would like to program stuff for the Cobra BIOS please see the recently added devkit in the archive located at \files\viper_dev.zip

USING THE V0.2 BIOS

Here is a detailed description on how to use the **Cobra BIOS v0.2**.

- A) Place any **ORIGINAL** retail (store-bought) GameCube game disc in your console and close the lid. Ensure the **Viper GC Programmer** is disconnected from the back of the unit’s **flex cable**, and then POWER ON the GameCube... a **PLEASE WAIT** screen will appear. As you can see this is for **BIOS v.02**.



NOTE: As mentioned on **THIS** screen, if you are trying to play a retail **ORIGINAL** GameCube game disc, you must **hold X** on your Player 1 controller before **POWERING ON** your machine (to skip the Cobra BIOS, and load the **ORIGINAL** game disc using the original/OEM GameCube BIOS instead).



(B) After 2-3 seconds a **2-digit number** will appear like **THIS** in the upper-right corner of the screen following the BIOS revision **V0.2/** (in the picture notice it is **26**). For your reference, this number correlates to your current GameCube motherboard/laser combination when discussing related issues with others here.

C) After the **numbers** appear, you will see a **SWAP DISC NOW** prompt. You now have 4-5 seconds to OPEN THE LID using the GameCube's Eject Button and replace (swap) the **ORIGINAL** GameCube game disc with your **LEGAL** GameCube back-up disc. Close the lid, and the console will now begin to load the game!



D) If your **Viper GC** module is functioning properly AND also if your back-up GameCube game disc is burned correctly the normal GameCube loading screen (minus the ghey ass branded ps2nfo.com text) screen will appear briefly... followed by **YOUR GAME** of course. Enjoy! =]





Okay, that's all good and dandy. What about BIOS v0.3 and v0.4?

Since v0.2 and v0.3 are outdated I am going to skip reviewing them, but have posted many pictures of new BIOS's at the end of the FAQ in the (PICTURES) section.

Since the menus in the v0.3 BIOS are exactly the same as the v0.4 BIOS menus, I have skipped writing about how to use the v0.3 and went on how to use the v0.4

(PART 2.0 – THE “ANACONDA” BIOS)



As stated somewhere above, Dextrose has hacked the Cobra BIOS and found out how it boots DVDr discs. After doing so they made their own BIOS which does nothing other than boot DVDr discs.

Here is the official post information retrieved from Dextrose's Forums (uncorrected)

>>> The story :

Some time ago the worlds first Gamecube Modchip called "Viper" was released, basically for the homebrew development scene to allow people to start their applications directly at power-on of the GC. Pretty fast an application called "Cobra" got available for it , which allows people to boot their DVD-Rs on the gamecube. Starting of version 0.2 this application reached version 0.4 upto now , running pretty stable on all available GC drives (04 , 06 and 08). This application uses a special , undocumented feature on the Modchip binding it "tight" to the Viper. Being sure that the possibility of booting DVD-Rs is not something special of the Viper we decided to find out whats going on inside this Cobra application. And here is the result - presented to you as open-source to allow the community to explore and use the possibilities without using the - in our eyes - too expensive modchip.

>>> The stuff :

The included file "Anaconda04.S" is a full documented application source which results in a run-able core for booting DVD-Rs. The steps it performs are as follows:

- Initialize the diskdrive into a reset state (by setting HW register cc003024)
- Unlock the drives' debug feature by sending two special commands named "ff 01 MATSHITA 02 00" and "ff 00 DVD-GAME 03 00"

- Sending some small codeblock into the drives' memory by using a command named "fe 01 01 00 <memoryoffset> <datalength> <data>"
- Starting this codeblock by hooking it into a system call within the drive resulting in the known (?) states of the bootphase of Cobra04 (laser off, motor off, delay to swap, motor on, laser on)
- Unlocking the drive by performing a ReadDisclD command (A8000040) to be able to read sectors
- Enable audio streaming depending on the setup of the DisclD
- Reading , parsing and starting the apploader of the swapped disc , resulting in booting the application on it

As stated above, this is a complete homemade recode of just the boot core, no videooutput or messages are delivered during the run. Except from the derived data within the "DriveCode" table this code is not affiliated with the original Cobra04 code. We decided to use the data in its original state, as the team around Mentalcube (the designers of the Cobra application) did a well job while choosing the neccesary patches within the drive. The patchcode is generic for all drive versions , so no need for different tables.

We leave it to the community to create some fancy GUI for it if they want, as we just did it for the proof-of-concept and to end the countless discussions around whats going on within the Cobra and Viper. We are even not familiar with tools like PSOLoad, SDLoad or whatever-Load as we are using our own technique to execute code on our GCs, but due to the simplyness of the code there should be no problem at all to run this snippet with those things.

>>> The instruction to do :

To assemble the code you can use the free and widely available DevkitPPC.

Simply perform those steps for generating an executable .bin file:

- powerpc-elf-gcc.exe -WI,-Ttext,0x81700000 -o Anaconda04.elf Anaconda04.S
- powerpc-elf-strip.exe --strip-debug --strip-all --discard-all
- o Anaconda04r.elf -F elf32-powerpc Anaconda04.elf
- powerpc-elf-objcopy.exe -I elf32-powerpc -O binary Anaconda04r.elf
- Anaconda04.bin

An example .bin file already assembled with those tools is included within this package. Upload this file to 0x81700000 and jump to this address. Other addresses can be easily used by changing the parameter to powerpc-elf-gcc. Please keep in mind that you have to bypass your lidswitch in some way (e.g. rubberband) to make the code work correctly.

>>> The final talking and teasing :

And now a few words to the Mentalcube crew (and those who are interested in some techstuff) :

At first, we "bow down" infront of you ! You did a well job, either by finding out all the neccessary steps and ofcourse for all the implemented crypting and obfuscating on both sides , GC and the drive 8]. Creating a loader by patching running code inside the drive, which then loads another loader to 0x8226 which finally loads the patchcode to 0x8502 by offsetting bytes inside the firmware is really a nice idea for obfuscation. And ofcourse you used the side-effect that the commands of the drive are bitwise interpreted, so you could easily hide them by putting alot of trash inside and around them. Even the idea to hide the two unlock commands by a backward-turned value - statemachine was pretty genious . Oh, and did you find out the Break 0 register functionality to patch the firmware on your own, or did you just read the right passage within the CPUs' manual ;-)

Finally , you did some "unluckily" flaws to the last states of your coding which allowed us to present this release today :

- The idea of forbidding to read back memory from the drive should have been done inside one of the loaders and not by sending direct offset mememorypatch commands - that allowed us to read the entire memory while stepping through the sent commands.
- the 8 bytes-from-expanded-(71)-inquiry-to-D4 & xor-stream-from-D8 vipercommand thingie was neat and we thought this will be a hellish thing to reverse ... but as you encrypt the sending of the offsets you had to do it backwards in the second loader which we just recoded - or even better - NOP out the xoring in the loader - voila - basically the last sent table gives what a (0x)BABE wants ;-).

Apart from this we say again , this was a really nice job done by Mentalcube. Too bad they tried to bind it to the Viper and still didnt open their code after this period of time. And we just want to clarify an important point : We dont take nor want any credits for the possibility of booting DVD-Rs on the GC, this was entirely made by the Mentalcube crew - we just opened this to the members of the community who dont have a Viper around (for whatever reasons) by de-obfuscating and recoding it into this piece of easy-to-use code. We decided to release this code now because we think its time that people see whats the mystery behind the Cobra code and give the chance to set up some nice projects based on this , like we are thinking about some sort of DVD-Player for the GC or other things.

Please keep in mind that playing copies of games you dont own is highly illegal and in no way meant as superior function of this code !

Use this code at your own risk, no responsibility is taken for its functionality at your place or exploded/fucked up GCs, drives, vipers, users, computers, DVDs, hamsters, cats, dogs, lost wifes and everything else that may happen :-) ... You can use this code freely in any way you like as long as you keep some credits inside to Mentalcube and Utopia.

(PART 2.1 – “SOFTMODS”)



Okay, there is currently a few ways to boot the Anaconda and GCOS BIOS using softmod methods.

| Method | Find Under |
|---|------------|
| Broad Band Adapter + Phantasy Star Online | Solution 1 |
| Action Replay + Nintendo Memory Card | Solution 2 |
| Action Replay + SD Card Reader | Solution 3 |
| Max Drive Pro | Solution 4 |

NOTE: Older versions of *Action Replay* (*1.08 for sure*) doesn't work with DOL-101 (USA) model Game Cube's

SOLUTION 1 – PSO+BBA Method



To get the job done you are going to need a few things.

- (1) Broad Band Adapter (BBA)
- (2) Phantasy Star Online 1 & 2 Game
- (3) PC with Ethernet Port
- (4) Either Crossover Ethernet Cable for Direct Connection or HUB/Router Setup
- (5) GameBit or BIC Pen
- (6) Electrical Tape (or something similar)
- (7) Memory Card

NOTE: If you are using GCOS you no longer need to TAPE DOWN the LID SENSOR. Instead just OPEN/CLOSE the LID when required to SWAP DISCS.

First take the Cube apart, going through steps A-B by using the instructions posted in (Part 1). Once there on the back on the Cube is a small “Lid Sensor” which is made of two small plastic levers that are pressed “down” when the lid is closed.



Simply put the electrical tape over them and tape them in the “down” position. This will allow you to open your Cube Lid to be able to swap games. Now reassemble the Cube if necessary.

Now comes the FUN part, actually loading the .DOL file from the PC. First one should understand how to load an executable from the PC -> GC. Below is a guide I *borrowed* from some guy named “malloc”.

How to load Gamecube games and or Homebrew over a LAN: V2.0

Files needed for the BBA+PSO boot process

PSUL 1.1

[Located \files\PSUL.EXE]

EUR-ACL1.EXE

[DVDINFOPRO – Located \files\ EUR-ACL1.ZIP]

EUR-ACL1.DOL

[DVDINFOPRO – Located \files\ EUR-ACL1.ZIP]

You will also need a .GCM/.ISO image of the Cube game you wish to boot

Files needed for the Anaconda boot process

Snake04.DOL

[Located \files\SNAK04.DOL]

If loading GCOS you will need the GCOS BIOS instead.

[Located \files\GCOS10.ZIP]

[Located \files\GCOS11.ZIP]

[Located \files\GCOS12.ZIP]

[Located \files\GCOS13.ZIP]

[Located \files\GCOS14.ZIP]

PSUL 1.1

[Located \files\PSUL.EXE]

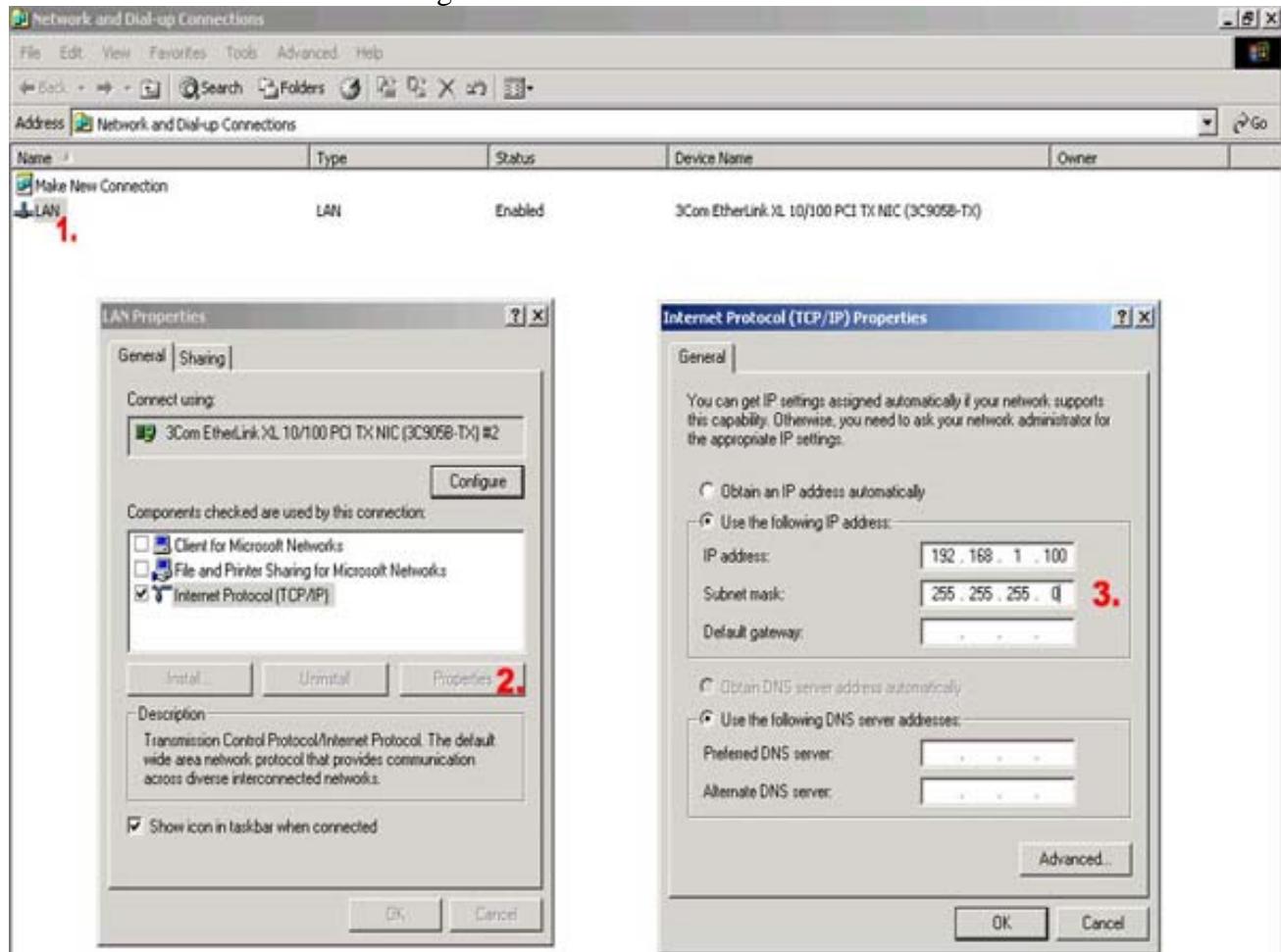
Initial Setup For NIC to Gamecube method:

Assuming you have already physically installed the pc network card and drivers head on over to the windows control panel and into "Network and Dial-Up Connections". Once there highlight the network card you just installed and choose properties.

After the properties dialog box appears highlight TCP/IP and then click on the properties button. Now you will be able to choose and have windows auto assign the IP address, DNS, and gateway for the NIC but you will need to choose "use the following ip address" and enter in 192.168.1.100 for the Ip address and 255.255.255.0 for the subnet. Don't worry about the gateway or DNS and just Click Ok.

Now connect one end of the crossover cable to the Gamecube Broadband adapter and the other end to your newly configured network card.

Proceed to the PSO network configuration.



Initial Setup for Router to Gamecube method:

=====

Using a router can be either tricky or painless depending on the type you have. I will use a Linksys router (befsx41) for this tutorial. To get into the router configuration menu open up your browser of choice and type http://192.168.1.1 into the address bar. You will be prompted for a username and password. If you have never done this before the default is admin/admin. Once in there click on the advanced tab and then DMZ Host. Choose "enable" and after that choose "specify and IP address behind DMZ host". Enter in 192.168.1.100 and hit apply then reboot your computer. After that is done connect one end of your Ethernet cable to the DMZ port of the router and the other end to the Gamecube Broadband adapter. Proceed to the PSO network configuration.

The screenshot shows the 'DMZ HOST' configuration page of a Linksys router. The top navigation bar includes tabs for Filters, Forwarding, Dynamic Routing, Static Routing, **DMZ Host**, MAC Clone, DDNS, and Setup. The 'DMZ HOST' tab is selected. The main content area has a black header with the text: 'DMZ (DeMilitarized Zone) Host enables you to set port 4 to DMZ or LAN. Any user on the Internet can access in/out data from the DMZ host without firewall protection. Select the IP address of the PC that you want to have exposed for special-purpose services. Click the help button for additional information.' Below this, on the left, is a blue sidebar with sections for 'DMZ Port:' and 'Current DMZ Host:'. The main panel contains the following settings:

- DMZ Port:** Radio buttons for Enable and Disable.
- DMZ Host Address:** Radio buttons for Assigned by the DMZ Port and Specify an IP Address behind the DMZ Port, followed by an input field containing '192.168.1.100'.
- Specify a MAC Address behind the DMZ port:** Radio buttons for Specify a MAC Address behind the DMZ port and PCs behind DMZ Port, followed by a series of six input fields for a MAC address (00 . 00 . 00 . 00 . 00 . 00).

At the bottom of the main panel are 'Apply', 'Cancel', and 'Help' buttons.

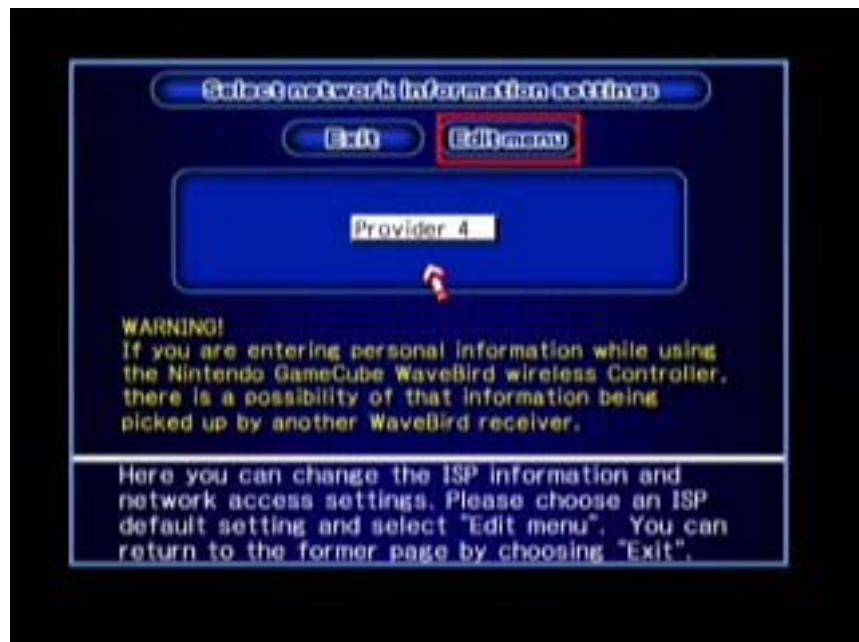
Initial Setup For Phantasy Star Online:

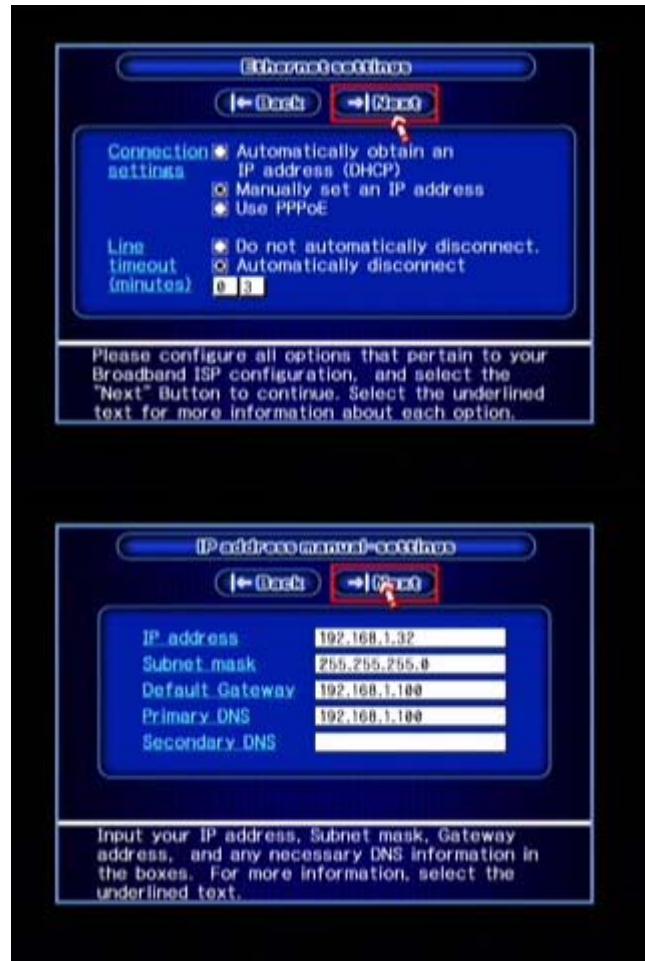
=====

Fire up your copy of Phantasy Star Online and head on over the to options menu. Choose network option, provider option, and then yes to go into the network configuration screen. When you are at the configuration screen select network setup and choose

"manually set an IP address". Press the next button and enter 192.168.1.32 for the IP address, 255.255.255.0 for the subnet mask, 192.168.1.100 for the default gateway, and finally 192.168.1.100 for primary DNS. After entering in the info press next and save your settings to memory card.





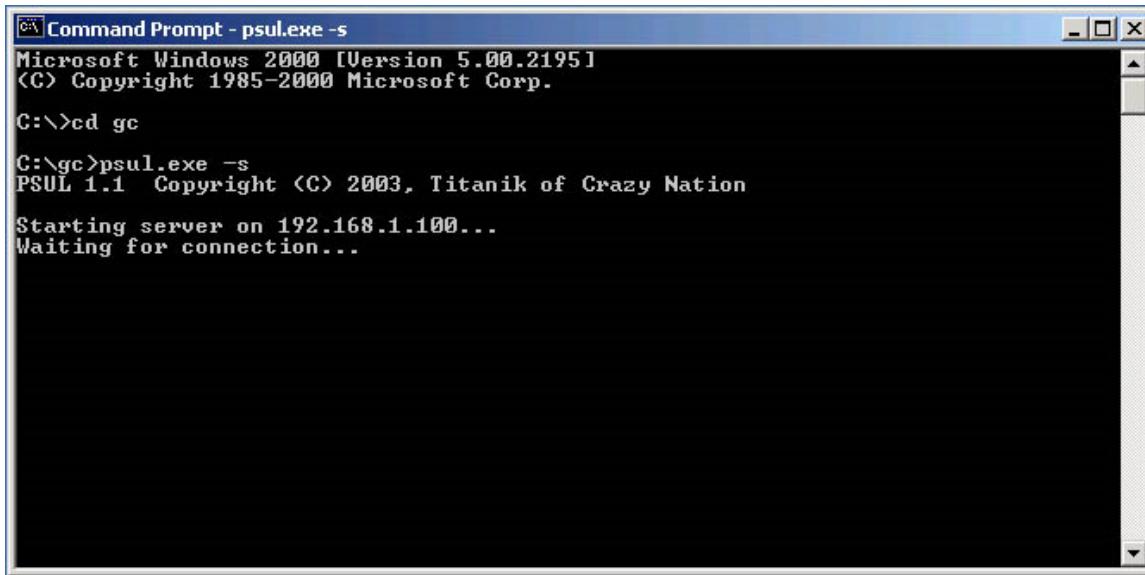


If you already have played this game online then this next step is not needed, however if you have not you will need to do this otherwise PSO will annoy you every time you try to connect for user registration data.

Saving Hunter Guild information:

=====

Lets assume you have all the files needed for this tutorial as well as your games and or homebrew apps in the following directory (c:\gc) Open up a windows command Prompt by typing cmd.exe in the run box. To change into the directory type "cd gc" and press enter. Next type "psul.exe -s" and you should see the following.



The image shows a Windows Command Prompt window titled "Command Prompt - psul.exe -s". The window displays the following text:
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.
C:\>cd gc
C:\gc>psul.exe -s
PSUL 1.1 Copyright (C) 2003, Titanik of Crazy Nation
Starting server on 192.168.1.100...
Waiting for connection...

Now on PSO choose the Online Game option at the title screen. Follow the onscreen directions and create your character. After you have created your character and saved it to the mem card and the game asks if you agree to the user terms say yes. The game will begin to load and you will see a warp hole type screen. At this point the game is initializing the Gamecube BBA for connection and you should pay attention to your command prompt screen to verify you have received the following message.

```
C:\ Command Prompt
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>cd gc

C:\gc>psul.exe -s
PSUL 1.1 Copyright (C) 2003, Titanik of Crazy Nation

Starting server on 192.168.1.100...
Waiting for connection...
Served DNS query from 192.168.1.32...
Connected <US>...
Saving user info on memory card...
Done...

C:\gc>
```

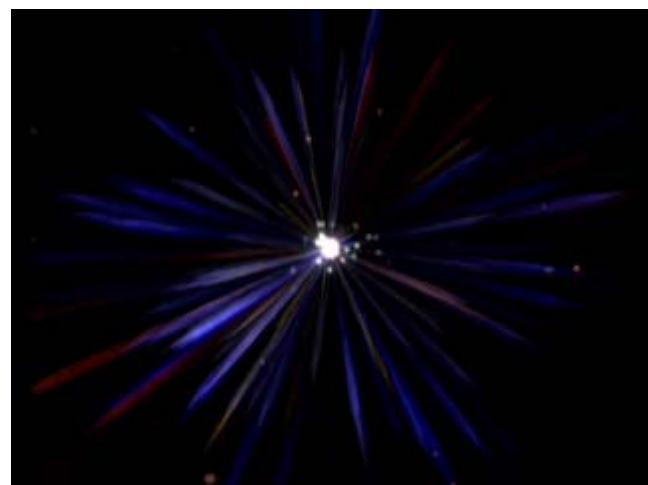
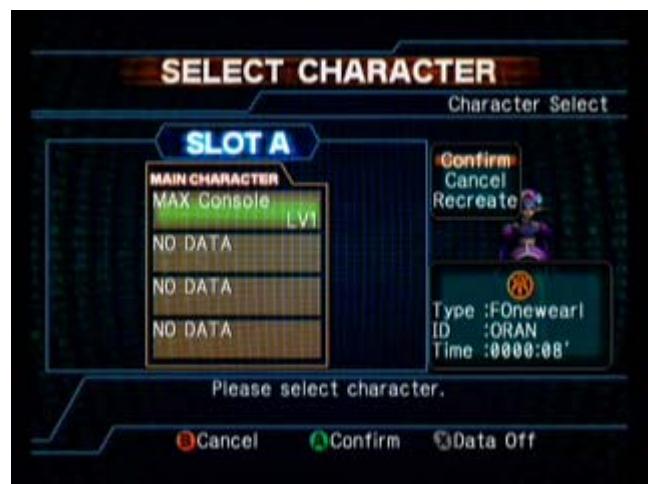
If you saw the following everything is setup and ready to go. If not start this tutorial over and bang your head on the desk.

To upload a Gamecube game or homebrew app:

=====

Lets assume you have all the files needed for this tutorial as well as your games and or homebrew apps in the following directory (c:\gc) Open up 2 command prompt windows by typing cmd.exe in the run box. Go into the directory where all the files are by typing "cd gc" and press enter. In the first command prompt window type "psul.exe eur-ac1.dol" and press enter. By doing this the Eurasia loader will be sent to the Gamecube once the connection has been made. In the second command prompt window type "eur-ac1.exe eur-acgc.gcm" and press enter. This will send the game/homebrew iso to the Gamecube after you have selected the boot method on the Eurasia loader screen and pressed start.

After putting both the loader and iso/gcm in standby mode boot up your Gamecube with PSO in. At the title screen choose Online game and agree to their terms of service. Again you will see the warp hole screen and the bba will once again initialize. At this point the Eurasia loader will be sent to your Gamecube and wait for you to make your selection. Select between boot mode A or B by pressing right or left on the controller d-pad. Use boot method A for animal crossing and boot method B for anything else.



```
Command Prompt
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>cd gc
C:\gc>psul.exe eur-ac11.dol
PSUL 1.1 Copyright (C) 2003, Titanik of Crazy Nation

Starting server on 192.168.1.100...
Waiting for connection...
Served DNS query from 192.168.1.32...
Connected <US>...
Sending file...
Running file...
C:\gc>_
```



```
Command Prompt - eur-ac1.exe eur-acgc.gcm
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>cd gc

C:\gc>eur-ac1.exe eur-acgc.gcm
Eurasia Animal Crossing GCM Loader For Nintendo Gamecube
Version 1.1 For DOS32 - (C) Aftermath/Parasyte
Initialising...OK
Waiting.....
```

On some systems the entire game will load in 1 minute and on other systems this process may take several minutes! Please be patient, As long as dots are filling the command prompt screen then Animal Crossing is loading.

If you are having problems with hanging, or the console is filling up with X's and or transfer rate is very slow, try using the delay switch to slow down transfer rate from PC.

To delay usage at the command prompt type "eur-ac1.exe eur-acgc.gcm -d10 -f16" delays 10ms every 16 packets.

If no -f switch is given the frequency of delay will default to every one packet which is far slower and perhaps no more reliable than of a given frequency value. Experiment with different values for both to find the best option that works best for your current set up.

Okay, now you got your BBA+PSO setup working you can send the Anaconda file over and boot it.

Place the psul.exe and snake04.dol files somewhere easy to access from the command line, personally I like C:\

At the command line type the following:

➤ psul.exe snake04.dol

If flashing GCOS replace “snake04.dol” with the GCOS BIOS.

You will see the following:

PSUL 1.1 Copyright (C) 2003, Titanik of Crazy Nation

Starting server on 192.168.1.100...
Waiting for connection...

Turn on PSO, start an online game with your settings, let the pretty screen come up, go towards the light ...

You will see the DOL file sent and run, the screen will go black, PSO will stop spinning, now swap PSO with your PROPERLY burnt iso file. The disc will start spinning again, and your game will load.

SOLUTION 2 – Action Replay + Normal Memory Card Method



To get the job done you are going to need a few things.

- (1) Broad Band Adapter (BBA)
- (2) Phantasy Star Online 1 & 2 Game
- (3) PC with Ethernet Port
- (4) Either Crossover Ethernet Cable for Direct Connection or HUB/Router Setup
- (5) Action Replay
- (7) Official Nintendo Memory Card

Files needed ... (can be found in \files\)

CTR-GCS (for transferring game saves)

PSUL

PSOload

1. First thing to do is pop in the official Nintendo memory card into slot B, boot up AR. Go down to options and choose update hardware, then reset hardware. This will install a database onto your Nintendo Memory card.
2. Put PSO in the cube and turn it on. Using psul load the included install.dol. This will install the boot loader created by Samson.
3. You may get a warning saying "wrong version" and that you need to find your own Master or "M" code. This is fine. You should also see "done" come on the screen.
4. Reset the GameCube and use CTR-GCS to transfer the Anaconda.gci (Used PSOload) If installing GCOS use the GCOS BIOS file instead.

5. This is an optional step, but if you plan to use the boot loader to only boot Anaconda then you can power on the GameCube and go into the memory card manager and delete ipl.dol. This will save you from scrolling down once when the boot loader menu pops up. This way you can just press A. (for all you lazy people)

6. Power on the cube with AR in it. Scroll down to "action Replay Codes" and you should see a code for Action Replay. Press A to go into the menu that will allow you to change or add codes. Hit button "A" on level1 to put a check on it. Now if you don't have AR version 1.06 then you will need to change the M code. You do this by hitting Y. Change the M code to ...

ADY0-WXRA-Q1MC4
3YHW-3R1E-4NPAQ
ZJHY-B1ZH-6P00G

Save the code and hit start.

7. The action replay will tell you to open the lid. Do this and then close it after a second or two. You will see brief flickering and then the boot loader menu will pop up. Choose Anaconda.dol. Wait for the disc to stop spinning then open the tray and insert a DVDr or mini DVDr. wait for the disc to stop spinning!! The game should now boot up.

Special Notes

- 1) Might be a good idea to keep your memory boot card in original condition by not saving on it. Use the AR memory card for everyday saving.
- 2) From my experience it is best to have a clean fresh memory card. Easiest way from what i hear is to write 00's to the .raw image and rewrite it back to the mem card. When you put it in the cube it will say its corrupt and reformat it for you. I've never tried it, but this is confirmed to work for people who have done it.
- 3) Try a different memory card. I could not get my 251 to work no matter what, but i did get my 51 to work.
- 4) Office depot (RiTak) Mini DVD-R work great for me burned at 2X, but it seems like some people have cube's with very picky drives. Keep that in mind.

UPDATE: ArcTheLad wrote a small article just for this FAQ with his experience getting this method to work. I would suggest reading the above then reading his article if you are having problems clarifying certain issues.

Ok, I've had so much trouble, and I didn't get much help in finding out! Me being a n00b myself, and getting this to work is really something...

Things you will need

- CTR-GC (For the Anaconda/GCOS GCI)

- Install.dol (Which All can be found in the AR Anaconda Archive)
- Phantasy Star Online and a Router and Ethernet cable, or cross over cable and BBA
- PSUL

START AR – GO TO OPTIONS – UPDATE HARDWARE, THEN RESET HARDWARE – and turn off your cube)

Ok, first off after you set your network settings unzip the AR Anaconda Guide; put your PSO screen on the Accept – Decline Screen. (One press of a button away from connect).

Next you open PSUL through the run, if you don't know how then you shouldn't be trying to play or even touch a GameCube. Start Psul with the install dol file, (psul.exe install.dol). Next rush to your GameCube and press accept, it will upload to a screen that says NOT CONNECTED, make sure there is an empty 59 NINTENDO GAMECUBE MEMORY CARD in the B slot and find ctr-gc in the cmd menu, command should look like this when you are in the correct folder, (ctr-gcs.exe b -r Anaconda.gci) or (ctr-gcs.exe b -r GCOS.gci)

After you launch that command, it should take about 10 seconds and it will be all on your memory card! Yes! The hardest part is over!

Next, put in Action Replay, go to Action Replay Cheats/Codes, and select action replay. Make sure to check the level boot loader, and press start. Follow instructions..."Open Lid, **KEEP AR IN**, Close Lid" – AR will load again and go right to the start menu and... "Open Lid, **KEEP AR IN**, and Close Lid" – Next it will boot up to a black screen, Select Anaconda04r/GCOS

If still using Anaconda listen to your GameCube, after it beeps and sounds like its gone silent, press open and swap it with your BACKUP then quickly close your GameCube, and watch it boot!

If you are using GCOS refer to the section in this FAQ dealing with how to use that BIOS.

SOLUTION 3 – Action Replay + SD loader



GameCube Action Replay SD Loader V1.00. Copyright 2005. by Costis
(costis@gbaemu.com) and Parasyte . http://www.gcdev.com

INSTALLATION GUIDE

Things You Need

- Action Replay (ANY version!!!)
- SDLOAD (LOCATED \files\sdload.zip)
- Nintendo SD Adapter (or make your own [see below])
- SD Card (Any size)
- SD Card Reader/Writer for PC and Windows XP, NT, or 2000 (or a way to run code on GC.)

Installation

NOTE: SDLoad works with ALL versions of the Action Replay by Datel!

1. Ensure that your SD reader creates a virtual drive (Example: F:\) and that you can read and write files to the card without any problems. Your SD card must also be formatted with FAT16 (FAT12 and FAT32 are NOT supported.) To format the SD Card using DOS see below.

`format f: /fs:fat /a:512`

The h: is the drive letter of my SD Card drive. Replace h: with your drive letter.

2. Run sdpatch.exe, passing the SD reader drive letter on the command line. (Example: sdpatch.exe F:\)

This program will install the boot driver to the SD card. The boot driver will only have to be installed once, and will have to be installed on each SD card you wish to use with SD Loader. This is just the initial driver, and NOT the menu program, so it will never have to be changed!

Be assured that the file system of the card will remain COMPLETELY intact after you have run the sdpatch.exe (or alternatively sdpatch.dol) program! They have advanced error checking, so there really is NOT any possibility for the file system on your card to become corrupted.

NOTE: If you do not have a computer with Windows XP, NT, or 2000 installed, or you

cannot get sdpatch.exe to work for some reason and you already have a means of uploading code to your GameCube (such as PSO), then you can install the boot driver to the SD card by booting sdpatch.dol to your GC and following the on-screen instructions.

3. Copy SDLOADER.BIN to the root directory of the SD card. This is the DOL file selection menu that boots up after the Action Replay and lets you select what DOL to boot from the card. Since it's simply a file on the SD card, upgrading or replacing it is as easy as overwriting the file with a newer version in Explorer!

You may also copy any DOL files you want to the SD card, at this point. Try the included testdemo.dol file, as it's guaranteed to work! The SD boot menu supports subdirectories as well, so your DOL's can be arranged inside any directories you want.

SDLOADER.BIN, however, MUST be copied to the root directory in order for the boot driver to locate it.

4. Additionally, the SD Loader Menu system can setup the BBA for you and allow NETWORK BOOT support. This means that just like PSOload, you can upload DOL or binary files from your computer through the network to your GameCube. If you want this functionality, create a new file named SDIPDATA.CFG containing the following text:

```
ON 192.168.0.4 9002 192.168.0.254 1234
```

The format is "ON PCIP PCPORT GCIP GCPORT" and must NOT contain any additional spaces or blank lines. Currently, due to a limitation of the current version of PSOload released, the GC IP address must end in 254 (xxx.xxx.xxx.254) and the GC port must be 1234. You must set the PC IP to your PC's IP address and the PC port to any free UDP port.

If you do not need network boot functionality, you can leave the SDIPDATA.CFG file off of the SD card, or change the first word of the file to "OFF". Both SDLOADER.BIN and SDIPDATA.CFG must be in the SD card's root directory.

You can tell that the SD boot menu has recognized the network configuration file if you see "INITIALIZING BBA..." at the top once it is running. Refer to the "Using SD Loader" section for information on how to use the network boot feature.

5. After installing the boot driver to your SD card, place the card and SD adapter into your GameCube's memory card slot A. Insert the Action Replay card or a standard memory card into slot B and start up the Action Replay. From the AR main menu, select Action Replay Codes. Select the USA flag, then ADD NEW GAME. Enter "SDLOAD" as the game name and push the "done" key. Now enter "(m)" as the code name. Enter the following code:

```
7YPR-RKZZ-MH6W5 D26A-PE4J-1XX2W ZJHY-B1ZH-6P00G
```

Next, select ADD NEW CODE and name the code "SDLOAD". Enter the following

code:

AF4H-JPF5-H1B5J
MVAB-7TQE-ABZPB
V2CK-QQ1A-Y6P72
M5N6-CMMH-9EURT
0JFM-3A6C-VZ6VK
KYV8-0JGV-0GR1N
2EGU-HVKF-NDMCN
7AH0-J9JZ-HHGNJ
4MHU-G8XT-ZRYCJ
9474-KF41-8KG34
QMEV-G90N-A8RV0
KD4G-5QHV-74D46
V97K-652Q-Y4TEY
6M4W-9GPT-E99NG
QPFY-DJAF-E01FV
2Z6E-P2WY-24WV4
6NHW-G3NH-HP31Y
A2KF-MCKN-D645J
K5V8-EF9W-7GFQC
XTU3-269T-VH5NE
H9GP-C4PP-6FGF9
HF77-R45C-ZXPDV
22Y3-D98C-50AJM
WTWZ-EC88-U5ZTV
36G1-UGDG-J2G84
DUMT-15KR-DXJ8K
JV55-6VF5-2Z02T
D4R8-MVJ5-QGR21
1G3C-APD7-1CUVD

Finally, select the code named "SDLOAD" and press A to enable it. (The check box next to the code name will be filled when the code is enabled.) Press START and open/close the lid when asked.

6. The SD Loader main menu will now be shown on the screen. At this point, you can select from all dol files you have written to the SD card. You can also pull the SD card out and write new files to it. Just reinsert the SD card when ready and the SD Loader menu will refresh the card contents. If you have written the configuration file for network boot, you can also boot a GC executable with it at any time of your choice.

Using SD Loader

Many versions of Action Replay contain a bug that will keep newly entered codes disabled. The second time you use SD Loader, you must enable the code from the code list. After this has been done, the enabled code will be saved to the card in slot B.

You can then get into the SD Loader menu by simply selecting START from the AR main menu and open/close the disc cover when asked. That's right! All it will take from this point on to boot back into the menu is simply turning on your GC, pressing A, and opening\closing your GameCube's cover once!

Some newer versions of Action Replay may disallow booting their own discs. The Japanese "Pro Action Replay" is especially sensitive. If you are unable to get the SD Loader menu to show up (if the GameCube hangs after closing the disc lid, for example) then you may be required to swap discs when the AR asks. Any game disc will work, so long as the GameCube can read it properly. To do this, select START from the AR main menu, as usual. Open the disc cover and replace the AR disc with another disc. For example, Super Smash Bros. Melee or Pikmin (whatever games you have). After closing the disc cover, the SD Loader menu will show up!

To use the network boot functionality with PSO Loader v2.0, the GC's IP address must be x.x.x.254, and the GC's Port must be set to 1234. (See the installation notes above) Use psoload's -r switch to send dol files. For example:

```
psoload.exe -r -u9002 testdemo.dol
```

DOL Reloading

SD Loader supports DOL reloading in the same way as PSO Loader. To add reload support to your own DOL files, jump to address 0x80001800 in GameCube memory. You can achieve this in C by either using function pointers, or by using some inline assembly:

```
asm ("lis 3, 0x8000"); asm ("ori 3, 3, 0x1800"); asm ("mtlr 3"); asm ("blr");
```

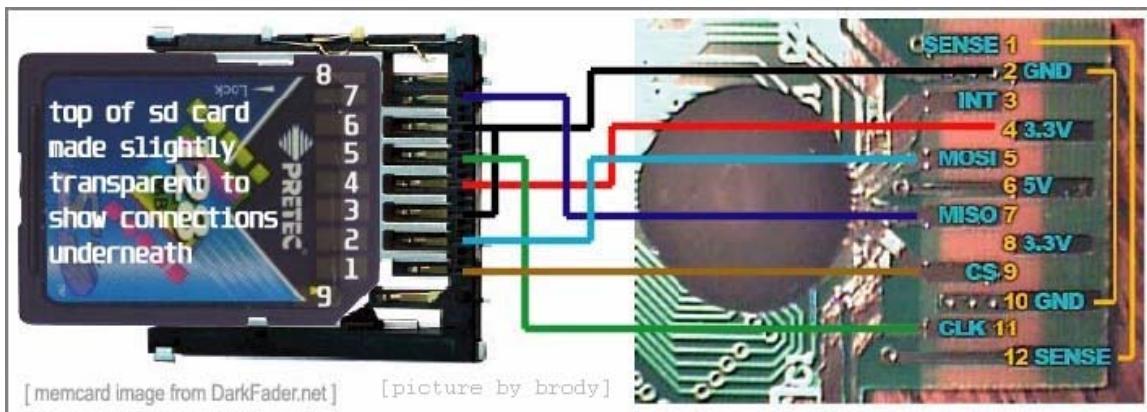
Once the reloader has been invoked, the SD card browser menu will be reloaded and you will be able to network boot again or select another DOL file from the card to load.

Known Issues

A few DOL files which rely on Phantasy Star Online may not work well with SD loader.
- The SD Loader Menu will not show up if the SD card Adapter is removed or

inserted while in the Action Replay menu. The SD card adapter CAN be removed to change cards or make changes to the current card while in the SD card boot menu, however!

- PC IP must be correct in the SDIPDATA.CFG file if you choose to use it. Otherwise the menu code may hang.

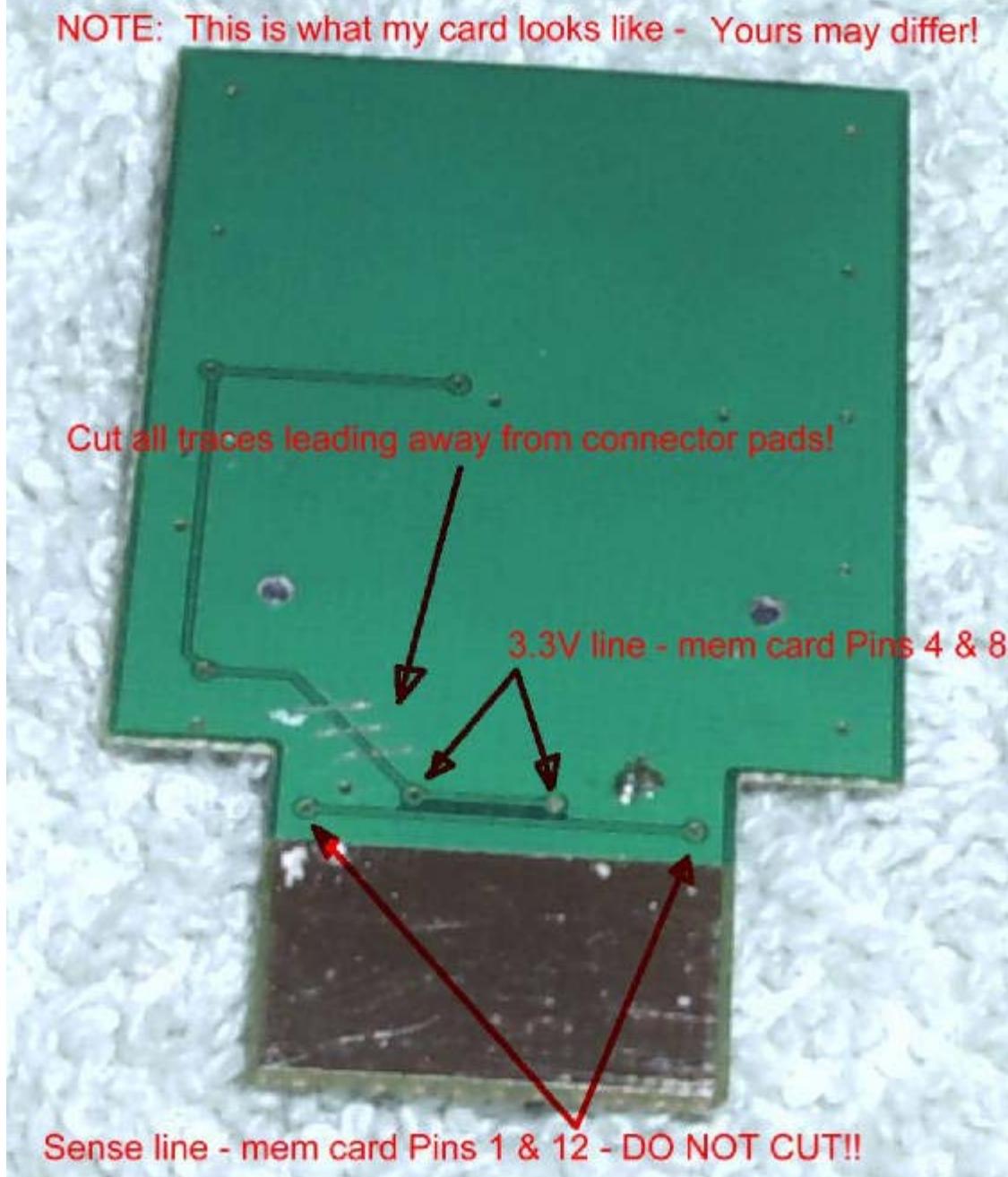


| SD Card | | | | Mem Card | | Wire Color |
|---------|----------|----------------|----------------------------|----------|--------|------------|
| Pin | Name | Fcn (SD Mode) | Fcn (SPI Mode) | Pin | Name | |
| 1 | DAT3/CS | Data Line 3 | Chip/Slave Select (SS) | 9 | CS | WHT |
| 2 | CMD/DI | Command Line | Master Out Slave In (MOSI) | 5 | MOSI | BLU |
| 3 | VSS1 | Ground | Ground | 2* | GND | BLK |
| 4 | VDD | Supply Voltage | Supply Voltage | 4 or 8# | 3.3V | RED |
| 5 | CLK | Clock | Clock (SCK) | 11 | CLK | YEL |
| 6 | VSS2 | Ground | Ground | 10* | GND | BLK |
| 7 | DAT0/DO | Data Line 0 | Master In Slave Out (MISO) | 7 | MISO | GRN |
| 8 | DAT1/IRQ | Data Line 1 | Unused or IRQ | | Unused | |
| 9 | DAT2/NC | Data Line 2 | Unused | | Unused | |

*Ensure Mem Cards trace connecting 2 & 10 is left intact, otherwise a jumper must be added

#Assumeing 4&8 are jumpered on Mem Card

NOTE: This is what my card looks like - Yours may differ!



Above is how to directly wire an SD card into the cube, so you don't need to buy an SD Card adapter.

SOLUTION 4 – Max Drive Pro Method



NOTE: This only works when loading GCOS. I know I know, it should have been under the GCOS BIOS section, but it fit well here with it's cousins.

REQUIRED –

Max Drive Pro (Action Replay Evo Edition includes the Max Drive Pro) GCOS BIOS

NOTE: You can purchase either the Max Drive Pro or the Action Replay Evo Edition directly from <http://www.codejunkies.com/>. You will notice that both of these items are “always” on backorder. Just order the unit and it will be shipped to you shortly as these items “are always listed on backorder”.

IMPORTANT NOTE: It has been reported to me that Code Junkies no longer ships the Max Drive Pro with the Action Replay EVO Edition. I left the info in because they seem to change this frequently. Please take a close look at the description of the “EVO Edition” before you order it. If you order an “EVO Edition” with only the normal Max Drive and not the Max Drive Pro you’ll be shit out of luck!

The only difference between the regular MaxDrive and the Pro version is that the Pro can execute/launch a .dol directly without first needing to load the MaxDrive GameCube disk. This is done using a special DVD that does not come with the normal MaxDrive.

Transfer the GCOS.DOL (or other BIOS) to the MaxDrive using the PC software supplied. After moving the .DOL onto the MaxDrive disconnect it from your PC and plug it into the GameCube. Then load the MaxDrive software for the GameCube. This will list everything on the MaxDrive memory card, all you need to do is select the .DOL you want to load and press the Start/Pause button to execute/launch the .DOL file.

Just to make things a little clearer, the Evo pack come with 3 software disks.

1st – Action Replay / Freeloader disk for GameCube

2nd – Max Drive Pro disk for GameCube

3rd – Max Drive Pro disk for PC

4th – Max Drive GC/USB Memory Card

NOTE: You do not need to purchase the Evo Pack. You just need to purchase the Max Drive Pro

Once you have the .DOL on your MaxDrive you can run it really quickly as you only need to boot the MaxDrive GameCube disk and then select the .DOL you want to execute/launch.

Boot Method

- 1) Put maxdrive pro in mem slot A
- 2) Put maxdrive pro disk in the Cube
- 3) Turn on Cube
- 4) Max drive disk boots, click A to continue
- 5) If you changed the contents of the max drive since last load it does a quick 10 second config of some kind on the maxdrive pro
- 6) You can then choose the DOL file you want to boot
- 7) rest is the same as any GCOS install, although you can use the maxdrive disk as the boot disk (ie- you don't need to put an original game disk in)

Copying Softmod Memcard

This is useful if you already have a Memory Card setup with a softmod BIOS and you would like to create another. This method does not require the use of CTR-GS.

This method will copy a Memory Card for AR with the AR Database + lvl2 + lvl3 + GCOS (+other files if needed) by just copying those files from slot A -> B using the GameCube's Memory Card Manager.

To do this you will need –

- Formatted or brand new) card in SLOT B
- Working Memory Card for booting AR -> GCOS in SLOT A

All you do is just copy all the files starting with Action replay then LVL2, LVL3, GCOS to SLOT B.

NOTE: Before you do this the Memory Card you have in SLOT A (the one with all the files on it) needs to have 1 file patched before you create it.

The LVL2 boot loader file can't normally be copied using the GameCube's Memory Card explorer.

So first before you try to copy you need to alter some data in the LVL2 file using a normal Hex Editing Program. I would recommend using UltraEdit.

Simply open the file and locate “offset 34” and you will see “1C” (hex 11100) which needs to be changed to “00100” (hex). After doing this you’re all set to copy using the method above.

NOTE: This has tested this with an official memcard 59 and memcard 251.
It has not been able to tested with a non-Nintendo brand

Special thanks to “**quicksilver**” for informing me of this method.

(Part 2.2 – The “GCOS” BIOS)



The GameCube Operating System or “GCOS” for short was created using the recently released Anaconda BIOS. GCOS has quickly become a favorite of the scene because it packs in more compatibility and usage than the Cobra currently does.

GCOS boots more games with less DRE’s on more GameCube models. It even works on the DOL-002, the DOL-101 and soon will add support for the Panasonic Q GameCube.

The “Official GCOS” forum is hosted on MaxConsole (URL Below)

<http://forums.maxconsole.com/forumdisplay.php?s=&forumid=75>

The “Official GCOS” chat room can be located on IRC/EFNET in #gcmods

The GCOS can be booted using *seven* different methods which are ...

| Boot Method | How-To |
|------------------------------|-----------------------------------|
| Viper GC Chip (onboard BIOS) | See Part 1.1 |
| Viper GC Chip + Cobra BIOS | Flash “GCOS.VGC” from DVD Browser |
| Cobra BIOS | Load “GCOS.DOL” from DVD Browser |
| PSO + BBA | See Part 2.1 – Solution 1 |
| AR + Memory Card | See Part 2.1 – Solution 2 |
| AR + SD Card | See Part 2.1 – Solution 3 |
| Max Drive Pro | See Part 2.1 – Solution 4 |

Below is an excerpt from the v1.4 info file ...

Finally a .DOL with all the features!

With the aid of Anaconda, we now finally have an open source way to boot all region Game backups regardless of whether you have a Viper GC!

Features

Play backups and originals from every region!

Backup Games using your BBA and any Internet Browser

Upload and execute .DOL and .ELF using NETCAT (port 4000)

Using the GCOS BIOS is quiet simple as explained below.

When you boot up you are greeted by a main menu, which has no submenus. Under the logo there is information about your GameCube drive revision and the IPL revision. Remember, when booting a game you can press "X" to force PAL, "Y" to force NTSC mode, or use "A" for auto-detect.

The menu options are (version 1.4)...

Help (New For Wavebird)

Help about using the wireless controller

Backup Game

To backup a game your Cube must be networked to your PC. After picking this option you will put in an original game then press "A". After this there will be information onscreen, this is when you type in "<http://gamecubeip/nameofgame.iso>" in your web browser of choice. If you are using a download manager only download 1 thread at a time. An example of the HTTP command is "<http://192.168.1.10/zeldaww.iso>"

Boot Original IPL

Will boot the Cube using the original factory BIOS

Boot Game Backup

Like always, put in an original, wait for the laser to go out and swap with your backup of choice.

Boot Game DVD

This option is to boot region free for import games

IP Address of GameCube

Here you can change your GameCube's IP Address

Subnet Mask of GameCube

Here you can change your GameCube's Subnet Mask

Gateway of GameCube

Here you can change your GameCube's Gateway Address

Apply Settings

Of course, this will save the settings you have just changed.

Boot from SD

Boot file(s) from the SD card.

Credits

Should be self explanatory

To send a DOL or ELF file from your computer to GCOS bios simply use netcat (located \files\nc.zip)

To use type “nc (ip_address) 4000 -q 0 < filename.dol” from CMD prompt

Example -> nc 192.168.1.32 4000 -q 0 < Super_Metroid.dol

NOTE: Due to the BIOS register issues (See Appendix B) loading DOL's using various methods may or may not work for you.

NOTE: There is a modified version of GCOS that will let you browse your computer to stream media. It includes a nice menu and works well. See \files\gcos-rlsv1.rar for more information!

(Part 2.3 – The “Ripper 3” BIOS)

The Ripper//GC BIOS is a modified version of the Cobra v0.4 BIOS. The only difference between the two is that you cannot flash the BIOS via disc.

Please refer to the Cobra BIOS section (Part 2) on how to use the Ripper//GC BIOS.

This BIOS does not fix the audio bug, the multi disc bug or any bugs that are present in the Cobra BIOS.

For a picture of the Ripper//GC BIOS see Part 10.

Ripper//GC Team has released a memory card manager that can be run via the Ripper//GC chip. It can be located in the “\files\r3navi.rar” archive. Burn it using the method in Part 8.

NOTE: The Ripper//GC team has informed me they are working on a no-swap version of their chip and will send me a product to review as soon as it’s done.

(Part 2.9 – STREAMING IMAGES USING BIOSes)

Don't have any media to use for your legal backups, home brew images and/or isos created by the various emulators out there? Don't fret, using a tool named GCSIM you can still stream files to your Cube without the need of PSO.

Set your PC IP address to 192.168.1.100
Set your NGC IP address to 192.168.1.32

Now you need to get the GCSIM (located \files\ s3-gesim.zip) and extract the DOL file from the archive and load it using any of the various methods listed below.

| Streaming Method | How-To |
|------------------------|-----------------------------------|
| Cobra BIOS | Load DOL from DVD Media |
| GCOS BIOS | Stream DOL to GCOS |
| PSO + BBA (old method) | Stream DOL to PSO |
| AR + SD Card | Put DOL on Card and execute |
| AR + Max Drive Pro | Put DOL on USB Device and execute |

Once you have your DOL running you simply run the exe and select the NGC/ISO image to play then you could also select the BBA speed with left and right on the D pad.

NOTE: This method works at 100mbit other then the PSO 10mbit method.

NOTE: Due to the BIOS register issues (See Appendix B) loading DOL's using various methods may or may not work for you.

(PART 3 - PREPARING A DVDR READABLE BY THE COBRA\GCOS BIOS)

NOTE: The GCOS BIOS currently **DOES NOT** support loading DOL files from DVDr, but should in the future.

Using the Cobra BIOS you can browse a DVDr to load jpegs, a new bios and/or execute .DOL executables. **This method is not how you burn a Backup/Copied Game Image.**

Using NERO Burning ROM select “**NEW**” and pick **DVD-ROM**. Make sure under **MULTISESSION** it is set to **“No Multisession”** and then under ISO it’s set to **“ISO 9660 only”** with **“Max. of 11 = 8 + 3 chars”** and **“ISO 9660 (standard ISO CD-ROM)”**



Also make sure there are no **relaxed restrictions**.

If you are burning only a small amount of files, make sure you put at least 100 megabytes of garbage files on there with them.

Always remember to **“finalize the session”** when burning!

(PART 4 – DRE, KNOWN CAUSES AND SOLUTIONS)

Great! Welcome to the world of trial and error. Booting DVDr media is a delicate process which depends on certain variables including the ...

GameCube Version
GameCube BIOS revision
DVD Drive Version
DVD Drive POT
Modchip/Softmod BIOS Version
DVD Writeable Media Type
DVD Writeable Media PI
Selected Game Backup
Selected Original Boot DVD
DVDR Drive / Write Speed / Options

Here are some other problems which maybe occur that are not variables, but fixable problems none the less.

DVD Drive Loses Sync
Screen is in Black & White and flickering
Backup Needs Rebuilding

Some examples are games not working on GameCube version A&B, but working on C. Some games do not work on certain DVD Drives and work on others. Some games that work under Cobra BIOS v0.3 boot fine, but wont boot under v0.4, and so on

What needs to be done is for the BIOS to be able to determine all of these variables and provide a proper solution for booting the game(s).

Some of the possibilities with possible solutions could be

Viper GC Installed Incorrectly

Check all of the wires you soldered. Sometimes incorrect soldering and the reassembling of the cube will knock the wires off their points

DVD Drive POT Too High/Low

See (SMOKING, UM I MEAN ADJUSTING THE POT). At first my POT was 650, and I couldn't read the Ritek G04 Mini-DVDRs, but after adjusting the POT to 200 everything for the most part read fine. *Adjusting the POT will *not* ruin your laser, well unless you do it wrong.*

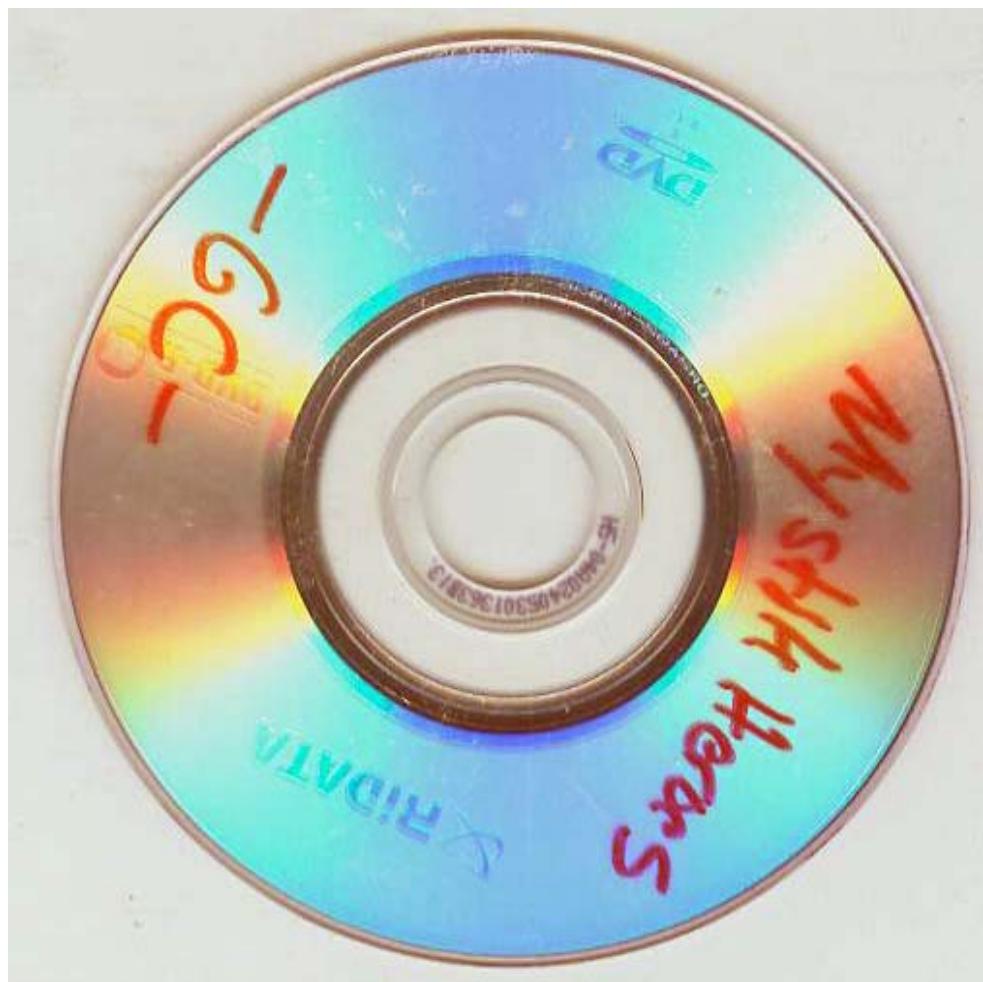
Cobra BIOS Version Lacks Support

This is one of the hardest things for people to comprehend, but let me explain it in terms you can understand by giving any example. Currently I have legally made backups *cough* of all of my 50 originally store purchased GameCube games. Good thing too! A damn house fire killed my originals! Okay, at any rate, all but 15 of the games will boot on Cobra BIOS v0.4, but I take those same 15 games and 8 of them boot fine using v0.3. Now, how can this be a media/source burning drive issue if the damn thing works in one and not the other? Simply put, there is something wrong with the BIOS! Try changing BIOS's and testing all your games to see which BIOS boots the most or find out which BIOS boots the game(s) you want to play the most.

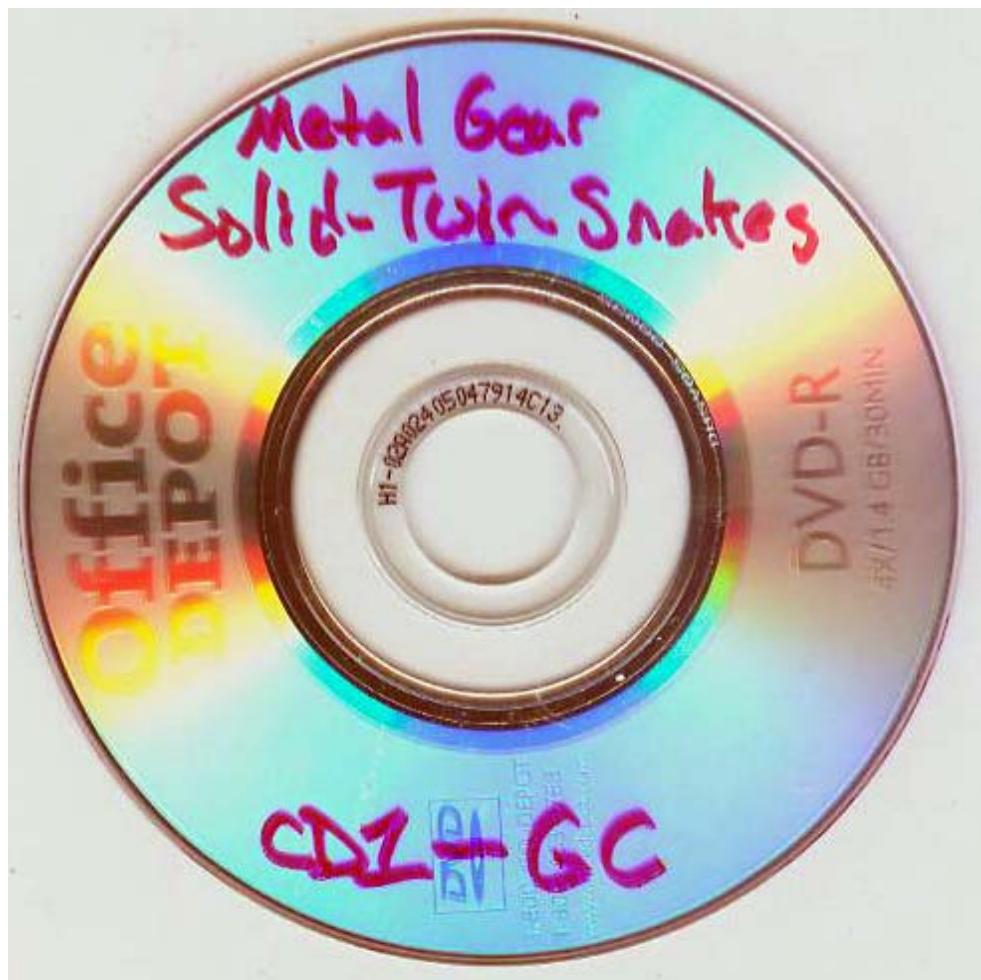
DVD Media Sucks

A lot of name brand media and non-name brand media just don't work on the cube. Be it full sized DVD+R/-R/RW and/or mini sized DVD+R/-R. I know for a fact that Ritek G04 full sized and mini sized works perfectly! Ritek G04 can be found using www.google.com or visiting Office Depot who currently use Ritek G04 as their own store named brand of media. Ritek G04 has three brands of media that I have personally used, named "Ritek", "Office Depot" and "RiData". All three are identical other then their labeling.

There is a list of media that works and doesn't work, it's under the section (MEDIA ISSUES).



RiTek G04 "RiData" Mini-DVD-R



RiTek G04 "Office Depot" Mini-DVD-R

DVD Writeable Media PI Too High

After burning your media, you can test the PI Peak level of your burn. My sources tell me that having a PI Peak of over 500 will result in many Data Read Errors or the game not booting at all. The PI reads the quality of your burn. To get a better PI you can try writing at a higher/lower speed, using different media, using another burner, closing all programs when burning and/or not using Intel's Application Accelerator.

NOTE: Even though your disc(s) PI will be well in the clear, the DVD drive of the Cube still might not be able to read it.

Below is a program called DVDInfoPro which will allow you to test the PI of your burned game(s). It requires a serial number to install, I found using that using the serial number for v3.49 worked fine on the below install. Get that serial or any other serial for that matter at <http://www.serials.ws/>.

[DVDINFOPRO – Located \files\dvdinfopro.msi]

PI error is defined as a row in an ECC block having 1 byte or more containing errors. And that the sum of PI errors in 8 ECC blocks after each other should not exceed 280 PI errors.

A row is 182 bytes long where the last 10 bytes contain PI (Parity Inner) information. An ECC block is 208 rows long where the last 16 rows contains the PO (Parity Outer) information. This gives us a maximum possible PI error amount of 208 errors per block and for 8 blocks after each other this sum is of course 8 times higher giving a maximum possible amount of 1664 PI errors. In practical use we have found that a disc with 1664 PI errors is unreadable.

PO is the Parity Inner uncorrectable errors, meaning errors left after PI correction. If a row of an ECC Block as defined in 13.3 contains more than 5 erroneous bytes, the row is said to be "PI-uncorrectable".

In general, a "perfect" burned DVD should have a smooth reading curve, very low PI errors and zero (0) PO error rates.

THEN UNDERSTAND THIS: ALL COMMERCIAL DVD PLAYER WAS MADE TO TOLERATE ANY AMOUNT PI ERRORS, BUT GC DVD NOT!

This is key to understand how to make a DRE free GameCube game backup. Most of DVD burners were designed to burn media with zero PO error, or near of zero, because this type of error is not acceptable for any common DVD readers. Otherwise thesees DVD players can handle relative amount of PI errors. The problem is the GC DVD DRIVE was design to reader very good quality disc with very low PI errors that only high quality DVD BURN can reproduce it.

The Backup Just Doesn't Boot

Some games no matter what you do "JUST DO NOT WORK YET"

The Original DVD's TOC is fucked

The TOC aka Table of Contents is read from the original game, hacked in memory and then applied to the backup. Sometimes it is incompatible. A solution is to try another original game to boot with.

The TOC is pulled from the boot code of the original game and then the Cobra BIOS uses it like a boot disc to load the copy.

DVD Drive Loses Sync

A bug exists in all versions of the Cobra BIOS (v1-v4) that will give a read error when the DVD laser loses sync (aka stops reading.) Quite a few games are

affected by this, some stop reading as soon as the GameCube logo disappears, and others will stop randomly during game play. The Cobra team is aware of this and is working on a fix, but has not made any promises.

Screen is in Black & White and flickering

This happens when you are trying to run a PAL game on a NTSC system. If your television supports 60 kHz signals, your solution is to hold down (B) when you see the GameCube Boot Logo. Soon after that you will get a menu to select either 50 kHz or 60 kHz. The screen may still be flickering at this time, so what you do is press "RIGHT" on the direction stick and then press (A). NOTE: Some PAL games do not support 60 kHz mode at all.

Yes I realize this has nothing to do with DRE, but I couldn't find any other place to stick it

DVDR Writer / Write Speed / Options

Some writers do a pretty horrible job at writing the media. Try speeding up or lowering your burn speed. My Memorex DVD+RW/-RW Tru8Xi burner will write my Ritek G04 media without erroring at 4x, but when I boot the game I get lots of DRE or the game wont boot at all. So I simply burn my media at 2x and they work fine. Also try burning with the "Buffer Underrun Protection" turned OFF, it seems to help some people.

Backup Needs Rebuilding

Thanks to GCIntel (you can find him on the www.maxconsole.com) discussion forums

I have made a small tutorial on how to create a new iso out of a existing one that may be giving lots of people trouble, DRE's is the main problem in games like Mario tennis and Mario golf and a few others, ready? here we go!

tools you will need:

iso/gcm

GC-tool (located \files\gctool12.rar)

GC iso creator (located \files\gcic.rar)

KEKSi FSTFIX GUI (located \files\fstfix_gui.rar)

Nero 6 ultra

if you can't find these tools, I have them attached on this thread and 2 more following threads of the 3 apps needed for your downloading pleasure, Nero

you can get at the homepage

1 open up GC-tools, click file, then open iso, when browsing for a iso or gcm choose "all files" in the "files of type drop down arrow and then choose your iso or gcm image.

2 go to the iso tab and select "extract whole iso" a window should pop up with a few options, put a check mark in "also extract header, apploader, dol and TOC" then click on the "extract" button and the program will extract the contents of the iso in a folder called "root" in the same directory as the GC-tool app, be sure that GC-tool is in the C: directory as it won't work properly on the desktop, this will cause crashing of the program.

3 click exit on the extract window then file on the GC-tool window, then close GC iso and finally file and exit, now that you have your data files for the new iso you are about to make from the folder named "root" we can now open up GC iso creator, you will be presented with a wizard, here it will guide you through every step on how to create a new iso from an existing one that may be giving you trouble,

4 click next on the GC creator window, put a check in "recover header information from iso" then click the browse button" choose "all files from the "files of type" drop down arrow, browse for your iso/gcm source image.

click next, now this can be a tricky thing if you don't use the drop down box once you browse for the application loader and the main program, click on the browse button on application loader section, browser in the root folder, then go to "&&SystemData" folder, now be sure to choose "all files" in the "files of type" drop down list, now you see all the files, choose the "apploader.Idr" file.

now do the same with the main program and choose the "start.dol" file and click next.

5 now in base directory, click find and browse for the "root" folder that you made with GC-tool, now choose a directory where the rebuilt gcm will be located once it's done along with a name of the game, be sure not to place the gcm file in the &&SystemData folder as this will be the default folder that pops up when you browse for a directory to put the rebuilt gcm image.

the "maximize iso file size" option is already checked but you may uncheck it if it doesn't meet your needs, some may want to experiment with smaller file sizes as it may be better for your GC lens to read the game on a mini DVD-r or full size DVD-r as some say that GC lens start to DRE at the beginning of the disc and that causes the game to DRE, this option I leave up to the person making the rebuilt gcm image but for the purpose of this tutorial, I will choose the "maximize iso file option".

6 when you click next on the following screen, you will see a summary of all the files that will make your new gcm image, review if you wish and then click next, wait until you see a message that says "The base contains file names longer than the standard 8.3 are you sure you want to add those files" always click yes to this message as selecting no as this will bring you back to the "base directory" screen where you would have to browse for the "root" folder once again.

7 it begins to build the new gcm file from the data files in the folder named "root" from your existing iso that you extracted to the "root" folder in the directory you choose earlier.

8 when you see "done" in the window, click exit, now you should have a new gcm image in the directory you choose.

9 now open up KEKSi FSTFIX GUI, it has to be this particular gcm wiper/fixer because some don't allow you to wipe or fix a full size gcm/iso image if it's the correct size but this one will warn you about the gcm size being correct but it still lets you wipe or fix it if you wish.

open up KEKSi FSTFIX GUI and choose the language of your choice, German or English, now click on file, then open, you don't have to fool with the "files of type" drop down within this program, it shows gcm and iso files alike, choose your new rebuilt gcm and click open, based on the file size you choose within GC iso creator, you will be prompted with either "image ok, your choice" if you choose "maximize iso file size" or "image wiped, should be rebuild! if you chose for a smaller file size, again, I'll leave this option up to you as it fits your needs.

put a check mark in "tweak align method(force all files on a 32k" check the option "auto detection and fix streaming files" for games with audio issues, if a game isn't known for audio issues, don't check this option as it may cause problems than fix them, click 3gb if your burning the image to a full size DVD-r or 1.4 if you are burning to a mini DVD-r, I made a full iso image from within GC iso creator so i will choose the "1.4 GB image as i only burn 1.35gb size images to RiTek mini DVDRs, KEKSi FSTFIX GUI begins to fix and or resize the new gcm file you created.

10 once KEKSi FSTFIX GUI is done creating the new rebuilt fixed gcm file you can close it, now you have 2 choices, you can either stream it to see if it works like i did and it did stream fine,(the game is wario world by the way)or just burn it to a mini or full size DVD-r, use Nero as the burning app, install Nero ultra 6 if you don't already have it on your PC

I am going to show you a easier and faster way to launch Nero into the burning window as this is more reliable as some people that are not nero savvy as others

rename the now fixed gcm image to .iso"

DON'T LAUNCH NERO BY CLICKING ON THE EXE ON YOUR DESKTOP"

Simply right click on the iso and you will see a menu pop up, if Nero isn't in the list which it probably isn't because you didn't associateisos with Nero, just select "open with" then "choose program" then browse for the " Nero burning rom exe in C:\programs\ahead\nero\nero.exe

you should now see Nero burning rom in the list now, you can put a check mark in "always use this program to open this kind of file "if you wish but you don't have to.

now click ok, if Nero doesn't launch with the burn window open and ready to burn, just right click on the iso once again, select "open with" and choose "Nero burning rom" and Nero will launch the burning window all ready to burn

the image, the only thing you need to do here is put a check mark in "finalize DVD (no further writing possible) and select your burn speed, I'll leave this up to you as well.

make sure you have your DVD burner drive selected, some if not most people have more than 2 drives in their pc so you have to change between the 2 within Nero if you are to burn a DVD-r or a cd-r, if you don't have the correct drive selected, Nero will reject the image and won't let you burn the iso, if you don't have the correct drive selected, click cancel on the burn window, on the top of the Nero window, click on the "recorder tab" then select "choose recorder" and click ok, you should be able to burn your iso.

Here is a word on Data Read Errors (DRE) from the Ripper///GC team.

Before we start talking about GC's DRE we must come back a little bit into the PS2's burning coil issue.

PS2 has Disc Reading Errors but you don't get an explicit message on the screen. All what you need to do is to adjust the laser's potentiometer, to clean the lens or to adjust horizontal alignment of the mechanics. It can't be corrected with software patch or any other miracle software manipulation. If the laser is poor then reading is poor.

Disc Reading Errors on PS2 look as choppy sound and video but you don't get a message on the screen. PS2 tries to read, read and read and finally it increases voltages supplied to the laser diode and coils until it burns. Here is the problem!

Especially PSTwo behaves not properly. It tries to read even when it doesn't see the disc's surface, it tries to focus the lens at any cost causing well known metallic sound and then smelt of burnt insulation :-)

GC has some kind of protection against PS2 syndrome built in. When GC can't read then it rejects media immediately not causing lens oscillations and finally not making you feel the very known smelt :-)

If somebody is planning to disable this protection mechanism he will contribute to your new headache ... burnt GC laser :-)

Please note that both power circuits which are driving coils, sled and spindle are very small, without heat sinks. If you let them to read unreadable media you will dissipate some unwanted watts and you will burn the device.

If you Google a little bit you will find plenty of official forums. If you read them carefully you will learn that many brand new GC machines have reading problems of new and not scratched DVD's. Many people are fooled by forums belonging to the so called "scene". GC laser simply doesn't like DVDR media. If somebody says that the tenth update will cure DREs he is not telling the truth. He can only make you sick of returned machines with characteristic smelt. Prepare yourself for mass BA/LA/RS or whatever replacements :-) The Ripper Team will monitor the situation very carefully and will issue the flash update for the Ripper///GC when it is necessary and if it is

necessary. Until now our chip is bug free. Try it as many others did it already.

We don't want to tell you too much but we know something for certain. We can give you one advice. Please read our specification carefully and one sentence particularly: "Extremely good timings and logic levels on the high speed GC bus". Try to use the scope and compare The Ripper///GC with others, and finally try to finish that sentence :-) We love to give such puzzles to our students :-)

We strongly forewarn you against experimenting with untested anti DRE solutions on your customers. Remember, you sell pre modified machines to the end users. They will flash their chips without reflection, blindly believing that new solution will cure something. What will happen if they start returning dead and burnt lasers? Please don't play with laser protection :-)

The Ripper///GC is not easy reprogrammable but it obligates us to make a good product from the beginning. Both The Ripper///GC and The Ripper3.1 can be reprogrammed by external flash programmer with help of small PCI-DIL adapter. Updates are dangerous in general. Also original products can be cloned by analyzing differences in software updates so we prefer to make bug free product from the beginning. If we recall the history of software updates of some well known chips we can say that updates has finished as fast as they appeared! Some of them were giving you updates almost every week, repairing endless bugs and creating others. How do you resellers can live with it? What do you say to your customers, end users? Do you say them that you sell not working product which will be updated in the unknown future or what?

Some other discoveries...

1. The Propeller blade effect

Before you burn particular DVDR please inspect the disc visually. GC drive is sensitive on "propeller blade effect" of DVD media. Before you burn it please put blank DVDR into opened GC and look horizontally if your particular blank disc rotates smoothly. Look at the outer edge of the disc if there is up and down movement or not. You can make a simple test. Find the blank DVDR with the huge propeller effect and burn 2 discs with the same image. You will notice that smoothly rotating DVD works but the second one doesn't even start. Some new original games from the shop are distorted from the beginning and not modified consoles can't read them properly.

2. You can make another test. Disconnect the cooling fan from your GC. You will notice that after some minutes you will get one big DRE. We assume that laser unit is overheated causing poor Signal to Noise ratio. You have the oven just below the laser.

If the cooling is not adequate then it can cause DVD to distort (propeller blade effect). It explains why DVDs, even silver originals, stop being read properly after some time of using it. So we come back to the focus coil failures on PS2 when the lens must move up and down to balance the propeller blade effect. By disabling protection mechanism you will probably kill the laser coils and the coil driver and you will need another summOne plus some tons of

replacement parts :-)

Try to use DVD+R because in our opinion they work better. Use Verbatim or TDK only and test them for distortion. Remove DVD just after you stop playing.

Conclusion

GC drive has some reading problems in general. It has too slow processor for tracking the distortion of DVD media but it has excellent protection mechanism against laser failure :-)

All rumors regarding the possibility of correcting DRE in software are only rumors and we call it La Guerre des Puces :-)

(PART 5 - SMOKING, UM I MEAN ADJUSTING THE POT)

Light it up then fuck it fellows!



When I first installed my Viper GC chip, no games on Ritek G04 media would boot. I was soon told that if I try adjusting the laser POT it might solve the problem. Well it did. My original POT was 650 and now it's 200!

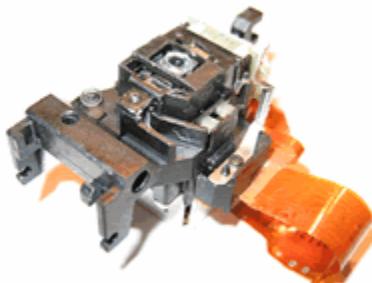
Will adjusting my **Potentiometer (POT)** ruin or decrease the life of my DVD assembly? Depends. Adjustments like these are made on various other devices regularly depending on usage and do not ruin them (simply Google to verify this claim). When you are adjusting your POT you are actually changing the size of the laser beam itself.

Now, though if your POT is TOO LOW you run the risk of the DVD assembly dying. The GC POT has an issue, where it automatically lowers itself over time. Say you get a GC from the factory and you do not adjust the POT, it might start out at 650 like mine, but over time it will lower, eventually killing the unit. So, monthly maintenance on the

POT will actually keep your unit alive longer. Just don't go and set the POT to less then I'd say "80 OHMZ" and you'll be fine.

So adjusting the pot correctly with monthly maintenance will increase the life of your cube, though if you lower it too much you'll kill it.

NOTE: The POT will decrease after around 10 minutes of using your Cube. If you have having problems with DRE's only after around 10 minutes of use (this is when the Cube is heated up) you should INCREASE your POT by 10 ohms.

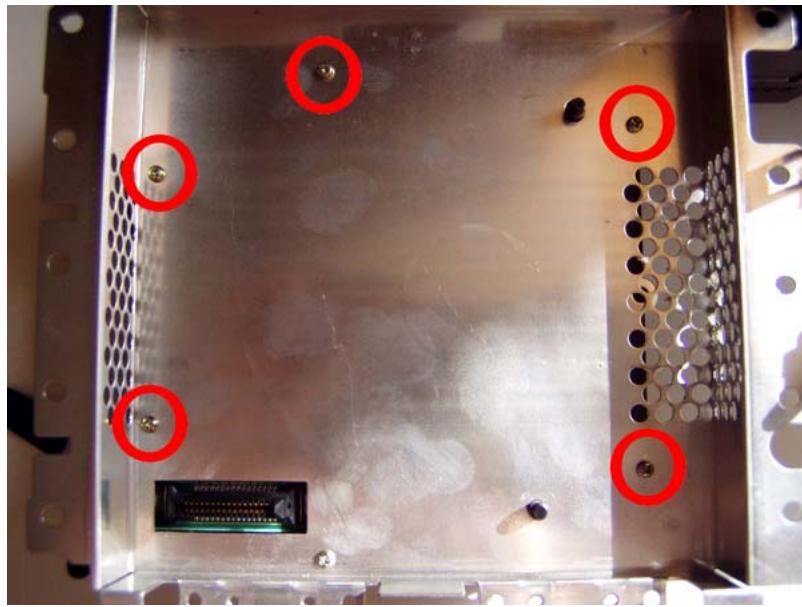


How to adjust my GameCube laser POT to fix "DISC READ" errors?

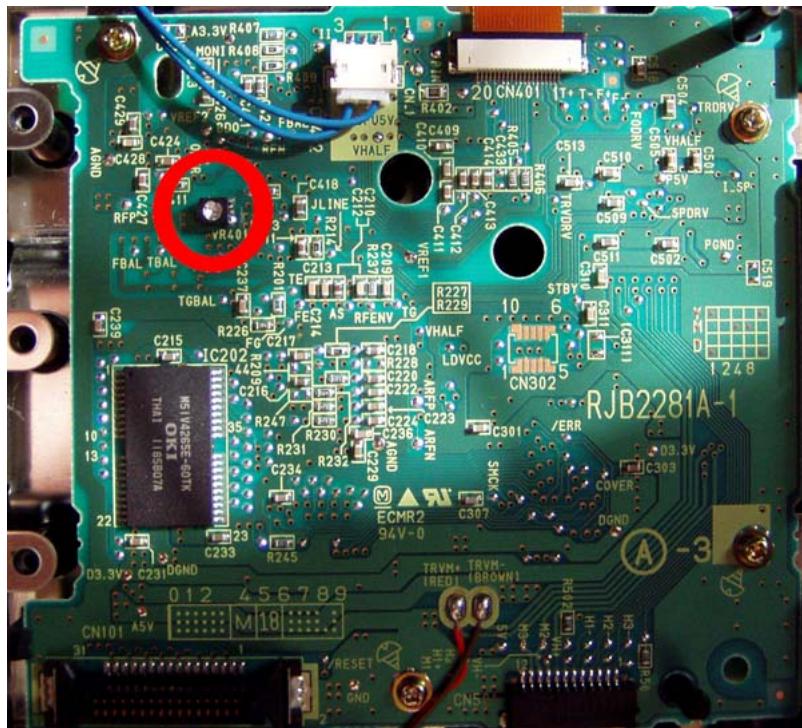
A) If after you swap the copy stops spinning, clicks or doesn't load or if you receive either of these ERROR prompts after swapping discs, when you PAUSE your back-up game, or randomly while playing at certain parts then you may need to adjust your unit's GameCube laser. Common Error Prompts include the following: "**An error has occurred.**" or "**The disc could not be read.**"

Step B-C. PS2nfo must be smoking. If you're adjusting the laser you should already know how to take the damn machine apart! Sheesh!

D) Now, lift the laser drive with the metal plate beneath it off of the GameCube and turn it on its back. Next, remove **these 6 screws** with your Phillips Head Micro Mini Screwdriver. Then separate the **metal plate** from the laser drive.



E) Take notice of the **Laser Adjustment Potentiometer** screw location. Next, reference these two **Laser Probe Points** and turn your **Digital Multi-Meter (DMM)** dial to point at the **2K Ohms** resistance setting as shown here by the Yellow Arrow. Place the **RED & BLACK DMM** probe on their **matching points** on opposite sides of the **POT** Adjustment screw in order to take a measurement reading as indicated on the **DMM** screen.





F) If your laser measures outside of the recommended range of **170-210 Ohms** then you may need to adjust it by carefully turning the **Adjustment Screw** counter-clockwise



NOTE: If you have a multimeter like above, set it to the “RX1KΩ” setting.

VERY little using your Phillips Head Micro Mini Screwdriver once again. After making a slight adjustment **counter-clockwise** turn of 1/16" to 1/32" only then re-check the Laser POT Value again. Repeat this process until it is within the desired range... it may take a few times due to the sensitivity of the Laser POT.

G) All that is left now is to reassemble your GameCube console following steps D through A in reverse order as necessary.

There, now you have some “*happy POT*”!



(PART 6 - MEDIA ISSUES)

As stated elsewhere in this FAQ (go read the whole fucking thing god damnit) the type of media used greatly affects your booting capability.

Here is a list of known media and its working condition. If you have media and you're not sure what brand it really is (don't trust the labels) try using the DVDIdentifier utility.

DVDIdentifier retrieves and interprets the pre-recorded information that is present on all single/double layered DVD media and DVD-RAM media. This information contains a variety of parameters such as disc manufacturing information and supported write speeds. Even though this information is usually printed on the packaging, the brand name may differ from the actual manufacturer.

You can also use "DVD Info Pro" which is located above.

[DVD Identifier v3.6.2 – Located \files\dvd_identifier.zip]

Below is a list of working/nonworking DVDr media; be it small or large. This list was stolen from ps2ownz. The list itself is limited do to the fact that it has been compiled without including the various variables that will actually make or break the Cube's ability to read the media correctly. This list is still a good reference, even though it can be very wrong in certain situations depending on the variables mentioned above.

Stolen on February 18th, 2005

| Media Brand | Media ID | Speed | Rated Speed | Size | Working? |
|-------------------------------|--------------|-------|-------------|----------|----------|
| 3t-pro | MCC 01RG20 | 4X | 8X | Full DVD | Yes |
| Anwell Precision Technology | DVD-R: AN31 | 4X | 4X | Mini DVD | No |
| Arita DVD+R | RICOHJPN R01 | 4X | 4X | Full DVD | Yes |
| Azo | Yi Jhan 001 | 2X | 4X | Full DVD | No |
| BeAll Developers Inc. (DVD-R) | BeAll G40001 | 2X | 4X | Full DVD | Yes |
| Budget | SKC | 4X | 4X | Mini DVD | Yes |
| Bulkpaq | TYG02 | 4X | 8X | Full DVD | Yes |
| Bulkpaq | prodiscs03 | 4X | 4X | Mini DVD | Yes |
| Bulkpaq | ProdiskS03 | 4X | 4X | Mini DVD | Yes |

| | | | | | |
|--------------------------------------|-----------------------------------|----|----|----------|-----|
| Bulkpaq | prodiscG02 | 1X | 1X | Full DVD | Yes |
| Bulpaq | DVD+R | 2X | 4X | Full DVD | No |
| CompUSA | PRINCO | 1X | 1X | Mini DVD | No |
| CompUSA | PRINCO | 2X | 1X | Mini DVD | Yes |
| data-on | aml | 1X | 2X | Mini DVD | Yes |
| Dataright | FUJIFILM03 | 2X | 8X | Full DVD | Yes |
| Datasafe | PREMIUM Datasafe CMC/MCC 8x Speed | 8X | 2X | | |
| Datasafe | PREMIUM Datasafe CMC/MCC 8x Speed | 8X | 2X | Full DVD | Yes |
| DataSafe 8x DVD-R Full Face Prinable | prodiscs03/04 | 4X | 8X | Full DVD | Yes |
| Datatrack | R1.4 | 1X | 1X | Mini DVD | No |
| DataTrack | EuroDig-Disc | 1X | 2X | Mini DVD | No |
| Datawrite | General Purpose | 1X | 1X | Mini DVD | Yes |
| Datawrite | FUJIFILM03 | 4X | 8X | Full DVD | Yes |
| Datawrite | PRINCO | 4X | 4X | Full DVD | No |
| DATAWRITE | RITEKG04 | 4X | 4X | Full DVD | Yes |
| Define | DEFINE | 4X | 4X | Mini DVD | Yes |
| Dotcom | AML | 2X | 2X | Mini DVD | Yes |
| E-Blue EDR021B | SKC Ltd. | 1X | 4X | Full DVD | No |
| e3 works | gsc001 | 4X | 4X | Mini DVD | Yes |
| Fujifilm | W11 | 2X | 2X | Full DVD | Yes |
| Fujifilm DVD+RW | 1-4 X HIGH SPEED | 4X | 4X | Full DVD | Yes |
| Fujifilm DVD-RW | Version 1.1 / 2x | 2X | 2X | Full DVD | Yes |
| GQ (Great | LEADDATA | 1X | 2X | Mini | No |

| Quality) | | | | DVD | |
|----------------------------|--------------|----|----|----------|-----|
| Hyundai | VDSPMSAB 01 | 4X | 4X | Mini DVD | Yes |
| Hyundai | AN31 | 2X | 4X | Mini DVD | No |
| imation | dvd-r | 2X | 8X | Full DVD | Yes |
| Imation 2x DVD-RW | OPTODISCW002 | 2X | 2X | Full DVD | No |
| Imation DVD+R | CMC MAG | 2X | 4X | Full DVD | Yes |
| Intenso | MCC 01RG20 | 1X | 4X | Full DVD | Yes |
| Interaxia AG | VDSPMSAB 01 | 4X | 4X | Mini DVD | Yes |
| JVC Camcorder | mini dvd-rw | 1X | 2X | Mini DVD | Yes |
| Laser DVD-r 8cm | DVD-L-R8 | 1X | 2X | Mini DVD | No |
| Lead Data Inc. | LEADDATA | 2X | 2X | Mini DVD | Yes |
| Legacy (GigaStorage Corp.) | GSC002 | 2X | 4X | Full DVD | Yes |
| Matrix (Shop4Tech) | LONGTEN 001 | 1X | 2X | Full DVD | No |
| Maxell | MXL RG01 | 1X | 1X | Mini DVD | No |
| Maxell | MXL RG01 | 1X | 1X | Mini DVD | Yes |
| Maxell | MXL RG03 | 1X | 8X | Full DVD | No |
| Melody | prodiscs03 | 1X | 4X | Mini DVD | No |
| Melody | Ritekg05 | 1X | 2X | Mini DVD | No |
| Memorex | Ritek | 1X | 4X | Mini DVD | yes |
| Memorex | prodiscs03 | 4X | 4X | Mini DVD | Yes |
| Memorex | CMC MAG. AE1 | 2X | 8X | Full DVD | No |
| Memorex | RITEKG04 | 2X | 4X | Mini DVD | Yes |
| Memorex | MBI | 1X | 4X | Full DVD | Yes |
| Memorex | prodisc03 | 2X | 8X | Full DVD | Yes |
| Memorex | DVD+R | 2X | 4X | Full DVD | Yes |

| | | | | | |
|----------------|-----------------|----|----|----------|-----|
| Memorex | RITEKG05 | 8X | 8X | Full DVD | Yes |
| Memorex | 32025597 | 8X | 8X | Full DVD | Yes |
| Memorex | CMC MAG-E01-000 | 2X | 8X | Full DVD | No |
| Memorex DVD +R | F01 CMC MAG | 4X | 2X | Full DVD | Yes |
| Memorex DVD+RW | 1X-2.4X | 2X | 2X | Full DVD | Yes |
| Memorex DVD-RW | CMCW02 | 1X | 2X | Mini DVD | No |
| Mitsumi | AN30 - 03115106 | 2X | 4X | Full DVD | Yes |
| MMORE DVD+R | R03 | 4X | 4X | Full DVD | Yes |
| Mr Data DVD-RW | DVD_RW | 2X | 2X | Full DVD | No |
| Msonic | Prodiscf01 | 4X | 8X | Full DVD | Yes |
| Nashua | OPTODISCK001 | 2X | 2X | Full DVD | Yes |
| Nashua | AN31 | 2X | 4X | Full DVD | No |
| NASHUA DVD+R | MPOMEDIA040 | 4X | 4X | Full DVD | Yes |
| network dvd+r | DAXON AZ1 | 1X | 4X | Full DVD | Yes |
| Octron | Ritek G05 | 1X | 4X | Full DVD | No |
| Octron | Ritek G04 | 4X | 4X | Full DVD | Yes |
| Octron (DVD-R) | Ritek G04 | 4X | 4X | Full DVD | Yes |
| Office Depot | RITEKG04 | 4X | 4X | Mini DVD | Yes |
| Office Depot | RITEKG04 | 2X | 4X | Mini DVD | Yes |
| Office Depot | RITEKG04 | 1X | 4X | Mini DVD | Yes |
| Office Depot | RITEKG04 | 4X | 4X | Mini DVD | Yes |
| Optodisc | OPTODISCR004 | 4X | 4X | Mini DVD | Yes |
| Optodisc | OPTODISCR004 | 1X | 4X | Mini DVD | No |
| Optodisc | OPTODISCR004 | 4X | 4X | Mini DVD | No |
| Optodisk | OPTODISCR004 | 2X | 4X | Mini DVD | Yes |

| | | | | | |
|-----------------------------------|---------------------|----|----|-------------|-----|
| Philips DVD+RW | DVD+RW | 4X | 4X | Full DVD | No |
| PIOData | RITEKG04 | 4X | 4X | Full DVD | No |
| Platinum 4x DVD+RW | RITEKW04 | 2X | 4X | Full DVD | No |
| Platinum 4x DVD+RW | RICOHJPNW11 | 2X | 4X | Full DVD | No |
| Platinum 4x DVD-RW | RITEKW04 | 2X | 4X | Full DVD | No |
| Princo | PRINCO | 4X | 1X | Full DVD | No |
| Princo | Princo | 1X | 1X | Full DVD | Yes |
| Princo (Write Once) | R4.7 | 2X | 1X | Mini DVD | Yes |
| Princo DVD-R | Princo | 2X | 4X | Full DVD | No |
| Princo write once | package from 100 | 1X | 1X | Full DVD | No |
| Printable Ritek | Ritek G04 | 1X | 4X | Full DVD | Yes |
| Prodisc (Silver Non-printable) | prodiscs03 | 4X | 4X | Mini DVD | Yes |
| Prodisc (White Printable) | prodiscs03 | 4X | 4X | Mini DVD | Yes |
| Prodisc Technology, Inc. | ProdiscS03 | 4X | 4X | Mini DVD | No |
| Quentin | AML | 1X | 4X | Full DVD | No |
| Quixo | Auvistar | 1X | 2X | Full DVD | Yes |
| Quixo | Auvistar | 1X | 2X | Full DVD | Yes |
| RiData | RITEKG0401 | 4X | 4X | Mini DVD | Yes |
| Ridata | Ritek G05 | 8X | 8X | Full DVD | Yes |
| Ridata | RITEKG05 | 8X | 4X | Full DVD | Yes |
| RIDATA (DVD+R) | RICOHJPN-R01- 02 | 4X | 4X | Full DVD | Yes |
| Ridata (White Printable) | ridata-g04 | 4X | 4X | Full DVD | Yes |
| RiDisc | Ritek-g04 | 4X | 4X | Full DVD | Yes |
| Ridisc | Ritek G04 | 4X | 4X | Full DVD | Yes |
| Ritek (Ridata) | ritekg05 | 4X | 8X | Full | Yes |

| Branded) | | | | DVD | |
|-------------------------|---------------|----|----|----------|-----|
| RiVision (Blue) | Ritek G04/05 | 2X | 4X | Full DVD | Yes |
| Samsung | BEALL G40001 | 4X | 4X | Full DVD | Yes |
| Samsung (General) | R4.7 | 2X | 4X | Full DVD | Yes |
| Samsung DVD+R 8x | OTC+R881006NB | 2X | 8X | Full DVD | Yes |
| Samsung DVD-R 4X | OPTODISCR004 | 4X | 4X | Full DVD | Yes |
| Smac DVD-RW | OPTODISCW002 | 2X | 2X | Full DVD | Yes |
| Sonic (Shop4Tech) | AN31 | 1X | 4X | Full DVD | No |
| Sony | DMR47N2 | 2X | 4X | Full DVD | Yes |
| Sony (AccuCORE) | 10DMR47A3 | 2X | 8X | Full DVD | Yes |
| Sony Accurate | SONY08D1 | 2X | 8X | Full DVD | No |
| Sony Handicam | TDKG02000000 | 1X | 1X | Mini DVD | No |
| Sony Handicam | | 2X | 2X | Mini DVD | Yes |
| Sony Handicam | mini dvd-rw | 1X | 2X | Mini DVD | Yes |
| Sony Handicam | | 1X | 1X | Mini DVD | Yes |
| Sony Handicam | TDKG02000000 | 1X | 2X | Mini DVD | Yes |
| Takahashi | AN32 | 1X | 4X | Full DVD | No |
| TDK CORP. | TTH01 | 8X | 4X | Full DVD | Yes |
| TDK data/video | TTG02 | 8X | 4X | Full DVD | Yes |
| TDK Datawrite printable | TTG01 | 1X | 4X | Full DVD | No |
| TEON DVD-R 8x | CMC MAG. AE1 | 4X | 8X | Full DVD | Yes |
| Traxdata DVD-R | RITEKG04 | 4X | 4X | Full DVD | Yes |
| Universal | LEADDATA | 2X | 2X | Mini DVD | No |
| Verbatim | MCC 01RG20 | 4X | 4X | Full DVD | No |
| Verbatim | MCC 00RG200 | 1X | 2X | Full DVD | No |

| | | | | | |
|--|-------------------|----|----|----------|-----|
| Verbatim | MCC 02RG20 | 1X | 8X | Full DVD | No |
| Verbatim | prodiscs03 | 1X | 4X | Mini DVD | Yes |
| Verbatim | SONY08D1 CMC MAG. | 1X | 2X | Full DVD | No |
| Verbatim | MCC-002-000 | 2X | 8X | Full DVD | No |
| Verbatim 2x DVD-RW | RICOHJPN-W01-01 | 2X | 2X | Full DVD | No |
| Verbatim Double Layer DVD+R 8.5 GB | 2.4X 240min | 2X | 2X | Full DVD | Yes |
| Verbatim DVD+RW | 2.4X | 2X | 2X | Full DVD | Yes |

(PART 7 - LIST OF WORKING/NON-WORKING GAMES)

Here is a list of currently working/non-working games.

The list was stolen from www.ps2ownz.com on February 18th, 2005. Can't fuck with anonymous proxy servers and hacked email accounts! Please don't bitch to me if you find a game on the list that is listed twice, once as working and other time as not working. This list is primitive and does not include the various variables that are present at time of booting. Maybe someone should make a list that includes the various variables. (See DRE issues for the list of known variables)

| Name | Working? |
|---|----------|
| Yu_Gi_Oh_Falsebound_Kingdom_USA_NGC-STARCUBE | Yes |
| Midway Arcade Classics 2 | Yes |
| 007: Everything or Nothing (NTSC) | Yes |
| 007_Everything_Or_Nothing_PAL_MULTI_NGC-FuSeD (on PAL cube) | No |
| 1080 Avalanche (NTSC/USA) | Yes |
| 1080 Avalanche (PAL) | Yes |
| Alien Hominid | Yes |
| Amazing Island (NTSC/USA game on NTSC Cube) | Yes |
| animal crossing | Yes |
| Animal Crossing (NTSC/USA game on NTSC Cube) | Yes |
| Army_Men_Sarges_War-USA-GAMECUBE-DAGGER (on pal gc) | No |
| Backyard_Baseball_REPACK_READNFO_USA_NGC-MOONCUBE(ntsc GC) | No |
| Baten Kaitos Disc 1(NTSC USA/NTSC cube) | Yes |
| Beach Spikers NTSC off. Rel. (NTSC on PAL GC) | No |
| Beyond good and evil (NTSC) | Yes |
| Billy Hatcher And The Giant Egg (NTSC/USA on NTSC GC) | Yes |
| Biohazard 1 (JAP/NTSC) (HOLYCUBE) | Yes |
| Biohazard Zero (JAP/NTSC) (HOLYCUBE) | Yes |
| Biohazard [NTSCJ] (ISO) - iNFERNAL | Yes |
| Black_And_Bruised_Pal_Ngc-HOLYCUBE (on PAL cube) | Yes |
| Blowout (NTSC/USA Game on PAL Cube) | No |
| Bomberman Generation (NTSC/USA game on NTSC Cube) | Yes |
| Bomberman Generation PAL (Mooncube) | Yes |
| Burnout 2 PAL off. Rel. (PAL on PAL GC) | Yes |
| BustAMove 3000 | Yes |
| Capcom VS Snk 2-PAL (Pixel) | Yes |
| Capcom_vs_SNK_2_EO_JAP_NGC-STARCUBE on PAL 16 | Yes |
| City Racer (NTSC/USA game on NTSC Cube) | Yes |
| City_Racer_USA_NGC-STARCUBE (Pal GC) | No |

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|---|-----|
| Crash Bandicoot and the Wrath of Cortex | Yes |
| Custom Robo (NTSC/USA game on NTSC Cube) | Yes |
| Def Jam - Fight for N.Y. | Yes |
| Def Jam Fight For NY NTSC on PAL cube | No |
| Def Jam Fight For NY NTSC SBS ISO on PAL cube | Yes |
| Die_Hard_Vendetta_USA_NGC-MOONCUBE | Yes |
| Disney's Extreme Skate Adventure_NGC-S3=(GC NTSC)cob 04 | No |
| Disneys Magical Mirror Featuring Mickey Mouse | Yes |
| Dokapon DX JAP (Dnl) | Yes |
| Donkey Konga 1 PAL (Exp) | Yes |
| Donkey Konga 2 (NTSC/JAP) | Yes |
| Donkey_Konga_PAL_NGC-MRN | Yes |
| Donkey_Kong_Jungle_Beat_Pal_Ngc_RARE | Yes |
| Doshin Giant | Yes |
| Dragonball_Z_Budokai_2_USA_NGC-REACTOR | No |
| Dragonball_Z_Budokai_2_USA_NGC-REACTOR | Yes |
| Eternal Darkness : Sanity's Requiem (NTSC/USA) | Yes |
| Eternal_Darkness_PAL_NGC-HOLYCUBE (on Pal cube) | Yes |
| F-Zero GX | Yes |
| F-Zero GX (NTSC/USA on PAL cube) | No |
| F-Zero GX USA NGC - STARCUBE on pal 16 | Yes |
| FIFA 2004 (PAL) | Yes |
| FIFA 2004 (PAL) | Yes |
| FIFA_2005_PAL_NGC-MRN | Yes |
| Final Fantasy Crystal Chronicals (NTSC on PAL Cube) | Yes |
| Final Fantasy Crystal Chronicles PAL (Cubesoft) | No |
| Final Fantasy:Crystal Chronicles | Yes |
| Final Fantasy:Crystal Chronicles | Yes |
| Gladius | Yes |
| Goldeneye Rogue Agent (PAL on PAL Cube) | Yes |
| Harry Potter and the Chamber of Secrets (USA) | Yes |
| Harry Potter And The Prisoner Of Azkaban USA GC iSOSPHERE | No |
| Harvest_Moon_A_Wonderful_Life_USA_GC-iSOSPHERE (on PAL cube) | Yes |
| Homerun King | Yes |
| Hulk.Usa.Full.GC-LOONYCUBE | Yes |
| I-Ninja_GC-TRIFORCE (NTSC/USA game on PAL cube) | Yes |
| Ikaruga (STARCUBE - NTSC on PAL GC) | Yes |
| Intellivision Lives! (ntcs) | Yes |
| James Bond - 007 Nightfire | No |
| jkgjkg | No |
| Kirby Air Ride - Nomis - USA (Not Working On Pal GC) - See Comments | No |
| Kirby's Air Ride (jap on pal gc) | Yes |
| Kirbys Air Ride | No |
| Kirby_Air_Ride_PROPER_USA_NGC-STINKYCUBE | Yes |
| Kirby_Air_Ride_PROPER_USA_NGC-STINKYCUBE(on ntsc gc) | No |

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|--|-----|
| Knockout.Kings.2003.PAL.NGC-SCiENCE | Yes |
| Kururin Squash | Yes |
| Legend of Zelda Four Swords | Yes |
| Legends of Wrestling 2 | Yes |
| Lord_Of_The_Rings_The_Third_Age_USA_NGC-STARCUBE [ON PAL] | Yes |
| Luigi's Mansion | Yes |
| Luigi's Mansion (NTSC/USA game on NTSC Cube) | Yes |
| Luigis Mansion (PAL) | Yes |
| Luigis_Mansion_USA_PROPER_NGC-STINKYCUBE | Yes |
| m3 - 1080 Avalanche | Yes |
| Mario Golf (PAL) | Yes |
| Mario Golf NTSC off. Rel. (NTSC on PAL GC) | No |
| Mario Kart | Yes |
| Mario Kart : Double Dash (NTSC/USA on NTSC/USA GC) | Yes |
| Mario Kart Double Dash | No |
| Mario Kart Double Dash (PAL) | No |
| Mario Kart Double Dash (PAL) | Yes |
| Mario Kart Double Dash NTSC/USA | Yes |
| Mario Kart Double Dash!!(PAL) | Yes |
| Mario Party 4 | Yes |
| Mario Party 5 | Yes |
| Mario Party 6 | Yes |
| Mario Party 6 NTSC off. Rel. (NTSC on PAL GC) | Yes |
| Mario Power Tennis (iOSPHERE - NTSC on PAL GC) | No |
| Mario Power Tennis (NTSC) | No |
| Mario Power Tennis (NTSC/USA) | Yes |
| Mario Power Tennis NTSC off. Rel. (NTSC on PAL GC) | No |
| Mario Power Tennis USA_NGC-iOSPHERE ON PAL 16 COBRA 0.4 | Yes |
| Mario Sunshine | Yes |
| Mario Tennis | Yes |
| Mario Tennis GC (JAP/NTSC) (iOSPHERE) | Yes |
| Mario Toadstool Golf | Yes |
| Mario.Golf.Toadstool.Tour.PAL_NGC_CPS ON PAL GC 16 Cobra 0.4 | Yes |
| Mario_Golf_Toadstool_Tour_PAL_NGC-MRN | Yes |
| Mario_Golf_Toadstool_Tour_USA_NGC-XWaR(ntsc) | No |
| Metal Gear Solid: The Twin Snakes | Yes |
| Metriod Prime 2 : Echoes (USA/NTSC) (STARCUBE) | Yes |
| Metroid : Echoes reactor (NTSC on PAL) | No |
| Metroid Prime | Yes |
| Metroid Prime | Yes |
| Metroid Prime 2 (PAL on PAL Cube) | Yes |
| Metroid Prime 2 (PAL) | Yes |
| Metroid Prime 2 Echoes (Reactor) | No |
| Metroid Prime 2 Echos - Starcube Rip (NTSC on Pal) | No |
| Metroid Prime 2: Echoes | Yes |
| Metroid Prime 2: Echoes | Yes |

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|--|-----|
| Metroid Prime PAL ON PAL GC | Yes |
| Metroid Prime Rare | No |
| Metroid_Prime_2_Echoes_Pal_Multi_Gc-GCP On PAL | Yes |
| Metroid_Prime_2_Echoes_USA_GC-USA | Yes |
| Metroid_Prime_PAL_NGC-HOLYCUBE (on PAL cube) | Yes |
| Micro Machines (PAL) | Yes |
| Midway_Arcade_Treasures_USA_GC-RARE (on pal gc) | No |
| Minority_Report_USA_NGC-MOONCUBE | Yes |
| Mobile Suit Gundam Gundam Versus Z Gundam [NTSCJ] (GCM) - STARCUBE | Yes |
| Mortal_Kombat_Dead_Alliance_PAL_GC-RARE (on PAL Cube) | Yes |
| Mystic Heroes | Yes |
| Naruto Gekitou Ninja Taisen 3 [NTSCJ] (GCM) - UBD | Yes |
| Naruto: Gekido Ninja Taisen 2 Jap | Yes |
| Naruto: Gekido Ninja Taisen 2 Jap/Ntsc on Usa/Ntsc | No |
| Naruto: Gekitou Ninja Taisen 3 (NTSC/JPN on NTSC/USA GC) | Yes |
| Nascar_2005_Chase_for_the_Cup_USA_NGC-STINKYCUBE | Yes |
| NBA Live 2005 PAL | Yes |
| NBA_Street_Vol_3_USA_NGC-STARCUBE on PAL (16) v 0.4 | No |
| NBA_Street_Vol_3_USA_NGC-STARCUBE on PAL (16) v 0.4 | Yes |
| Need for Speed Underground (PAL on PAL Cube) | Yes |
| Need For Speed Underground 2 (NTSC/USA on NTSC/USA GC) | Yes |
| Need for Speed Underground 2 PAL | Yes |
| Need For Speed Underground 2 USA | No |
| Need_for_Speed_Underground_2_PAL_GERMAN_NGC-DARKFORCE | Yes |
| NGC.Star.Fox.Assault.USA.ISO.FULLDVD | Yes |
| NHL_2005_USA_GC-SHiBUYA | Yes |
| nomis-The_Urbz_Sims_in_the_City | Yes |
| P.N.03 PAL | No |
| P.N.03 PAL off. Rel. (PAL on PAL GC) | Yes |
| Paper Mario 2 | Yes |
| Paper Mario 2 | No |
| Paper Mario 2 US On PAL Cube | Yes |
| Paper Mario NTSC (NTSC on PAL GC) | Yes |
| Paper Mario: tyd | Yes |
| Paper_Mario_The_Thousand_Year_Door_USA_NGC-STARCUBE | No |
| Phantasy Star Online 1-2 (PAL) | Yes |
| Pikmin | Yes |
| Pikmin | Yes |
| Pikmin 2 (NTSC/USA) | Yes |
| Pikmin2 NTSC | No |
| Pikmin_2_PAL_MULTI_NGC-GP (on PAL cube) | Yes |
| Pikmin_2_USA_NGC-STARCUBE | Yes |
| Pokemon Colosseum | Yes |
| Pokémon_Colosseum_USA_NGC-BrasCube | Yes |
| Pool Paradise (NTSC Game on PAL Cube) | No |

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|---|-----|
| Prince of Persia : Warrior Within (NTSC/USA) | Yes |
| Prince Of Persia :Sands Of Time | Yes |
| Prince.of.Persia.Warrior.Within.PAL.MULTI6.GC-PiraTes | Yes |
| Pro Rally 2002 (NTSC/USA game on NTSC Cube) | Yes |
| Rare-Super Smash Brothers Melee | Yes |
| residen evil 4 ntsc on jap | No |
| Resident Evil (PAL) | Yes |
| Resident Evil 2 | Yes |
| Resident Evil 2 NTSC off. Rel. (NTSC on PAL GC) | Yes |
| Resident Evil 3 - Nemesis | Yes |
| Resident Evil 3: Nemesis | Yes |
| Resident Evil 4 | Yes |
| Resident Evil 4 (DEMO USA) | Yes |
| Resident Evil 4 NTSC | Yes |
| Resident Evil 4 NTSC -with Trainer Patch on PAL-CUBE | |
| Resident Evil 4 NTSC -with Trainer Patch on PAL-CUBE | Yes |
| Resident Evil 4 Preview Disc | Yes |
| Resident Evil Code Veronica X USA MRN | Yes |
| Resident Evil Code: Veronika X (PAL) | Yes |
| Resident Evil Zero (PAL) | Yes |
| Resident_Evil_3_Nemesis_USA_NGC-BrasCube | Yes |
| Resident_Evil_4_Preview_Disc_USA_NGC-NOMIS | Yes |
| Resident_Evil_4_READ_COUGH_NFO_USA_NGC-WEEDCUBE | Yes |
| Resident_Evil_4_READ_COUGH_NFO_USA_NGC-WEEDCUBE | Yes |
| Resident_Evil_4_READ_COUGH_NFO_USA_NGC-WEEDCUBE | No |
| Resident_Evil_4_USA_NGC_NoMiS_And_PerPetRatOrS | Yes |
| Resident_Evil_4_USA_NGC_NoMiS_And_PerPetRatOrS (on NTSC Cube) | Yes |
| Resident_Evil_4_USA_NGC_NoMiS_And_PerPetRatOrS (on PAL cube) | Yes |
| Road Trip (NTSC/USA game on NTSC Cube) | Yes |
| Road_Trip_Usa_GC-RARE (on pal gc) | Yes |
| Rocket_Power_Beach_Bandits_USA_NGC-NOMIS | Yes |
| Rocky_USA_NGC-NOMIS | Yes |
| s3-Resident_Evil_3 | Yes |
| Scaler | No |
| Scorpion.King.MULTI.PAL.NGC-MOONCUBE (Pal GC) | Yes |
| Second_Sight_PAL_NGC-STARCUBE (on PAL cube) | Yes |
| Serious Sam Next Encounter (PAL) | Yes |
| Skies of / | |
| Skies of arcadia | No |
| Skies of Arcadia | Yes |
| Sonic Adventures 2 Battle_NGC-S3 us | Yes |
| Sonic Mega Collection | Yes |
| Sonic Mega Collection (PAL) | Yes |
| Sonic Mega Collection (PAL) | Yes |
| Sonic.Heroes.Usa.NGC.Rockstar.by.acbmlinux on pal16 cbr0.4 | Yes |

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|--|-----|
| Soul Calibur 2 (JAP on PAL Cube) | No |
| Soul Calibur 2 (NTSC on PAL Cube) | Yes |
| Soul Calibur 2 (PAL) | Yes |
| Soul Calibur 2 PAL off. Rel. (PAL on PAL GC) | Yes |
| Soul Calibur II (NTSC/USA game on NTSC Cube) | Yes |
| Soul_Calibur_2_Pal_GC-RARE pal GC 16 cbr04 | Yes |
| Space Raiders (NTSC/USA game on NTSC Cube) | Yes |
| Speed_Kings_USA_NGC-NOMIS (Tested on NTSC Cube) | Yes |
| Sphinx & Cursed Mummy NTSC | Yes |
| Sphinx and the Cursed Mummy (on PAL cube) | No |
| Sphinx_and_the_Cursed_Mummy_PAL_NGC_PROPER_READ_NFO-QUBISM (on PAL cube) | No |
| Spider.Man.2.USA.NGC-RARE (on PAL cube) | No |
| Spiderman 2_NTSC | Yes |
| Spirits & Spells (NTSC/USA game on NTSC Cube) | Yes |
| Splinter_Cell_Pandora_Tomorrow_USA_GC-SHiBUYA (Pal GC) | Yes |
| Spongebob Squarepants - The Movie (PAL on PAL Cube) | Yes |
| SSX3_Pal_Ngc-HOLYCUBE (on PAL cube) | Yes |
| SSX3_USA_NGC-GRIDLOCK (on PAL cube) | Yes |
| Star Fox Adventures (NTSC/USA on PAL GC) | Yes |
| Star Wars Rebel Strike NTSC off. Rel. (NTSC on PAL GC) | No |
| Star Wars Rogue Squadron 2: Rogue Leader (NTSC/USA game on NTSC Cube) | Yes |
| Star Wars Rogue Squadron 3: Rebel Strike (NTSC/USA game on NTSC Cube) | Yes |
| Star Wars: Rogue Squadron 2 | Yes |
| Star Wars: Rogue Squadron 2 | No |
| Star Wars: Rogue Squadron 2 Pal | Yes |
| Starfox : Adventures (NTSC/USA on NTSC GC) | Yes |
| Starfox : Adventures (NTSC/USA on NTSC GC)audiofix | Yes |
| Starfox Adventures | Yes |
| starfox adventures pal multi gcp (pal on pal gc) | Yes |
| Starfox Assault | Yes |
| Starsky & Hutch (USA) MOONCUBE | Yes |
| Starsky & Hutch USA (Mooncube) | No |
| Star_Fox_Assault_USA_NGC-NOMIS | Yes |
| Star_Fox_Assault_USA_NGC-NOMIS ON PAL 16 GC COBRA 0.4 | Yes |
| Star_Fox_Assault_USA_NGC-NOMIS=gc ntsc | No |
| Star_Fox_Assault_USA_NGC-NOMIS=gc ntsc | Yes |
| StinkyCube-Kirby_Air_Ride | Yes |
| Super Bobble Pop | Yes |
| Super Mario Sunshine (NTSC USA/NTSC cube) | Yes |
| Super Mario Sunshine (NTSC) | Yes |
| Super Mario Sunshine (NTSC/USA on NTSC/USA GC) | No |
| Super Monkey Ball (NTSC/USA on NTSC/USA GC) | Yes |
| Super Monkey Ball 2 NTSC off. Rel. (NTSC on PAL GC) | No |
| Super Robot Taisen GC JAP | Yes |

| | |
|---|-----|
| Super Smash Brothers Melee | Yes |
| Super_Mario_Sunshine_PAL_MULTI_NGC-MOONCUBE | No |
| Super_Monkey_Ball_PAL_MULTI5_NGC-MOONCUBE (on PAL cube) | Yes |
| Super_Smash_Brothers_Melee_PAL_NGC-MOONCUBE (on PAL cube) | Yes |
| Tales of Symphonia | Yes |
| Teenage Mutant Ninja Turtles 1 (NTSC/USA Game on PAL Cube) | Yes |
| Terminator3 Redemption (NTSC on Pal) | No |
| The Legend Of Zelda Four Swords (JAP/NTSC) (TRiFORCE) | Yes |
| The Legend Of Zelda: Collector's Edition | Yes |
| The Legend of Zelda: Wind Waker PAL | Yes |
| The Legend of Zelda: Windwaker Bonus Disk | Yes |
| The Simpsons Hit & Run (PAL) | Yes |
| The Sims PAL (Rare) | Yes |
| the urbz sims in the city ntsc gc | No |
| The.Legend.of.Zelda.Four.Swords.Adventures.PAL.MULTI5.GC-PiraTes | Yes |
| The.Legend.of.Zelda.Four.Swords.Adventures.USA-ISOSPHERE on pal 16 cbr0.4 | Yes |
| The_Incredibles_USA_GC-iSOSPHERE (NTSC on PAL Cube) | Yes |
| The_Legend_Of_Zelda_The_Wind_Waker_USA_NGC-STARCUBE | Yes |
| Tonka_Rescue_Patrol_USA_NGC-MOONCUBE (on pal gc) | No |
| Tony_Hawks_Underground_2_USA_NGC-STARCUBE | No |
| True Crime (PAL) | Yes |
| Tube Slider (NTSC/USA game on NTSC Cube) | Yes |
| Turok Evolution (NTSC) | Yes |
| Turok Evolution (PAL) | Yes |
| Ty_The_Tasmanian_Tigger_Pal_Ngc-HOLYCUBE (on PAL cube) | No |
| usate quixio tutto a posto | Yes |
| Viewtfull Joe | Yes |
| Viewtiful Joe | Yes |
| Viewtiful Joe 2 NTSC off. Rel. (NTSC on PAL GC) | No |
| Viewtiful Joe 2 USA NGC on PAL 16 COBra04 READ COMMENT | Yes |
| Viewtiful_Joe_2_USA_NGC-STARCUBE | No |
| Viewtiful_Joe_2_USA_NGC-STARCUBE | Yes |
| Virtua Striker 3 Ver. 2002 (JAP/NTSC) (DNL) | Yes |
| Wario Ware Inc (NTSC/USA) | Yes |
| Wario World | Yes |
| Wario World (NTSC/USA game on NTSC Cube) | Yes |
| Wario World USA NGC - STARCUBE on PAL16 cbr0.4 | Yes |
| Wave Race (PAL) | Yes |
| Wave Race Blue Storm (PAL) | Yes |
| Wave Race Blue Storm (STARCUBE - NTSC on NTSC GC) | Yes |
| Wave Race Blue Storm (STARCUBE - NTSC on PAL GC) | Yes |
| Wave Race NTSC on PAL | No |
| Wave_Race_Blue_Storm_USA_NGC-BrasCube | Yes |
| Worms 3D (PAL on PAL Cube) | Yes |

| | |
|---|-----|
| WWE Day of Reckoning NTSC off. Rel. (NTSC on PAL) | Yes |
| WWE Wrestlemania 19 | Yes |
| X3_Extreme_G_Racing_Pal-RARE (on Pal Cube) | Yes |
| Zelda: Wind Waker | Yes |
| Zelda_Ocarina_Of_Time_PAL_GC-RARE | Yes |

(PART 8 - HOW TO FIND, DOWNLOAD, RIP AND BURN “HOME BREW” IMAGES)

FINDING & DOWNLOADING “HOMEBREW” IMAGES

Various sources can be used to find images to burn. These sources include but are not limited to ...

NOTE: Downloading image(s) for games you don't own is illegal. Only download images that you do own that you don't feel like ripping yourself. Also feel free to download any “homebrew” images. Whenever the word(s) *game* or *backup* is mentioned in this section, it is only referring to legally made “homebrew” games, pressed in HK or burnt onto DVDr media.

Torrents (TOR)
P2P Networks (P2P)
WebPages (WWW)
Internet Relay Chat (IRC)
File Transfer Protocol (FTP)
Usenet Newsgroups (USENET)
Bulletin Board Systems (BBS)

Torrents (TOR)

Torrents are similar to P2P networks. They are single files you find around the internet which connect you to a group of other people who are downloading the same file. Check out <http://btsites.tk/> for more information and to snatch up torrent files.

P2P Networks (P2P)

Same as torrents, but may require you to create a user account and will probably come bundled with lots of spyware. Google for “sharedonkey” or “kazaa”.

WebPages (WWW)

I hope to god I don't have to explain this one, but for all your GC ISO needs visit www.ps2ownz.com and spam the hell out of them.

Internet Relay Chat (IRC)

IRC, USENET, FTP and the BBS methods are other protocols like WWW, which have actually been out long before the WWW existed. Using an IRC client like mIRC (www.mirc.com) you can connect to various IRC Servers and Join various IRC chat rooms and download from various DCC/XDCC fileservers/bots. There are a lot of tutorials on how to use IRC Servers/Channels/Fileservers out there, so Google the shit if you don't know what I'm talking about.

Here are some various SERVERS with GameCube ISOS on them.

EFNET – RIZON – UNDERNET – IRCHIGHWAY - ZEROLIMIT

File Transfer Protocol (FTP)

Using an FTP client like FLASHFXP you can login to someone's computer and access file(s) from certain directory(s). Some FTP's might require you to upload a certain amount of games and will give you credit in return to download certain amount of games. FTP site addresses, ports, usernames, passwords, authentication methods (what you need to login to a site) can be found using the WWW, IRC, USENET and/or BBSs. Google for FTP if you want to learn how to use one.

Usenet Newsgroups (USENET)

Usenet is another server that you can login to, which has message boards which contain various images for various console systems, including XBOX, PS2 and/or GameCube. Most ISP's allow limited USENET access. If you want unlimited access, you're going to have to pay. Check out <http://news.astraweb.com> for unlimited downloads for \$15 a month. Use a client like "Newsleecher" to access USENET with. Google to learn how to use USENET.

Bulletin Board Systems (BBS)

These are mad old school. They require a program called a "terminal program" to access their server like TELNET. Good luck getting on one of these, are they are hidden like a mofo. You know the drill, Google to find out more.

RIPPING IMAGES

Ripping an image is simply backing up (copying) an original GameCube DVD using the GameCube and/or your PC's DVD drive(s) as the source medium. There are three main methods of doing this. The first method is using the BBA adapter, which has three known variations, the second method is using a hacked firmware for your computer's DVD drive and finally the third method is using Nero to copy a copy.

[RIPTOOL.DOL – Located \files\RIPTOOL.DOL]
[viper ripper multi VERSION – Located \files\viperripmulti.zip]
 [Phoenix – Located \files\cbs-p245.rar]
[Game Cube Server – Located \files\gamecubeserver_1_0_0_30.zip]
 [For sending DOL's via GCOS see the GCOS BIOS section]

METHOD 1 (Variation 1) - GC-ISO Grabber

You'll need a few things to accomplish this

Broad Band Adapter (BBA)
Original Game (No shit!)
Memory Card in Slot 1
Viper GC with Cobra v0.4 BIOS or GCOS BIOS
Gc-iso grabber (v0.9 in my case)
riptool.dol and/or viperripmulti.dol – Program loaded via BIOS

- 1:** Cobra: Burn riptool.dol on a working DVDr
GCOS: Have riptool.dol ready to stream
 - 2:** Set network-Pc: Go to network setting, set your net card IP to 192.168.1.100 then mask to 255.255.255.0 then select the 10 semi-duplex mode value.
 - 3:** If using **Cobra** Boot your GameCube with original then select DVD browser (bottom of menu) then swap DVD with your riptool DVD. Select riptool.dol. If using **GCOS** stream the DOL (see GCOS BIOS) After this a red screen will appear after that you'll know if you set your network properly, because says network start or something, if not working then its stay at running.
 - 4:** Now when disc stop spinning, swap with the one you want to backup, you have around 10 seconds to swap.
 - 5:** Now go to your pc and start gc-iso grabber then enter iso filename then hit start ripping and enjoy your rip
- Rip about 350k for a safe mode
- 6:** Now you have (filename.gcm), rename it to (filename.iso) then burn it with Nero or your favorite software without any special trick! If the file size falls short and does not burn without having to adjust sector information in Nero, you need to run GCFIX on it. See GCFIX below for more information.

If you are getting a "connection failed" or screen jams, close all antivirus and/or firewall software and try again.

METHOD 1 (Variation 2) – Phoenix

You'll need a few things to accomplish this

Broad Band Adapter (BBA)
Original Game (No shit!)
Memory Card in Slot 1
Viper GC with Cobra v0.4 BIOS or GCOS BIOS
Phoenix (CBS-P245.RAR above)
riptool.dol and/or viperripmulti.dol – Program loaded via BIOS

- 1)** Cobra: Extract and burn the attached riptool.dol to an iso format DVD.
GCOS: Have riptool.dol ready to stream
- 2)** Make sure your PC IP is 192.168.1.100 subnet 255.255.255.0
- 3)** Boot GameCube with original disc and go to disc browser- browse DVD.

4) Cobra: Swap disc for burned DVD containing riptool when prompted. Start Riptool.dol. **GCOS:** Steam Riptool.dol (see GCOS BIOS section) When the red screen appears on your TV, quickly start your ripping tool on the PC (use phoenix 2.50 below, which when started also starts a dos box with psul, CLOSE THE DOS BOX.)

5) Click Begin on the phoenix rip screen.

6) Swap discs on the GameCube when prompted. An hour or so later your game is ripped

METHOD 1 (Variation 3) – GameCube Server

You'll need a few things to accomplish this

Broad Band Adapter (BBA)

Original Game (No shit!)

Memory Card in Slot 1

Viper GC with Cobra v0.4 BIOS or GCOS BIOS

GameCube Server 1.0.0.30

riptool.dol and/or viperripmulti.dol – Program loaded via BIOS

1) Start the server, kill the PSOL screen.

2) **Cobra:** Start GC with original, Choose Browse Disc, Swap Original with DVD with Riptool.dol, Load Riptool.dol

GCOS: Stream Riptool.dol

3) Swap DVD with original when asked

4) Run the GameCube Server program and RIP

METHOD 2 – Hacked Firmware

Excerpt from PS2BANZ

“We have known about modified firmware (reads the GC Disc TOC properly) that allows end-users to use virtually any PC DVD drive for quite some time to image GC originals”

If this is true, it would be a great alternative to using the BBA method. Though, I highly doubt anyone has created a hacked firmware that works on every single PC DVD drive due to the fact that every single firmware for different drives is different!

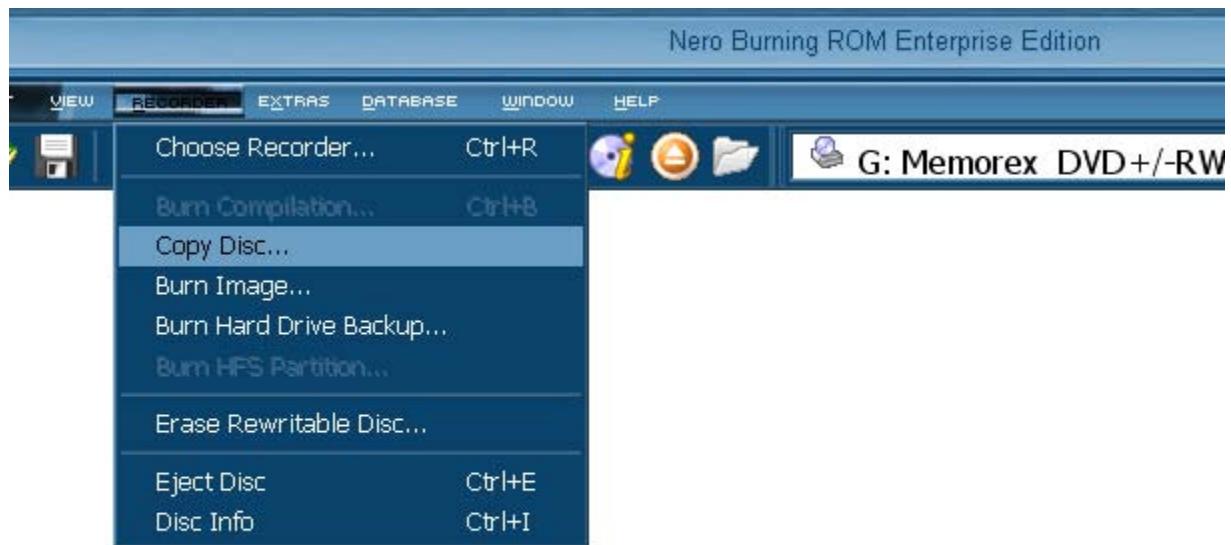
I've included the method because there have been rumors about it before PS2BANZ ever came into existence.

I have now learned that the firmware only works on a certain model of Panasonic DVD-ROM drive's. PS2BANZ was wrong again.

(MORE COMING SOON!)

METHOD 3 (Variation 1) - Copying a Copy with Nero

This can be done using Nero's ability to make a Disc Copy, just like you would copy a normal disc. Of course, you don't have to use Nero to accomplish this with. Other programs you can use are Record Now MAX or CDRWIN.



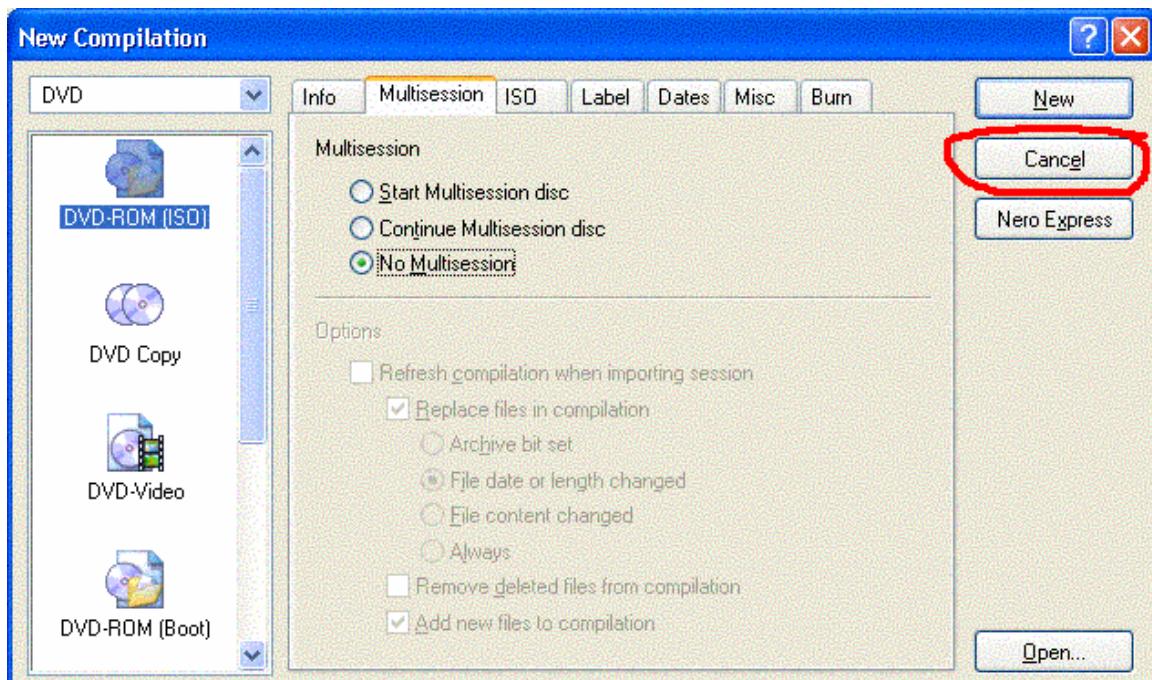
METHOD 3 (Variation 2) - Copying a Copy with Nero (Alt Method)

I heard a lot of people say they can't make backups of a copied game, for example, it doesn't even start ripping or giving you a black screen once you boot the copy. So I decided to take a look at it and quickly noticed I couldn't back it up using either DVD Decrypter or CloneDVD. But now I found a way you can back up your copies and they work 100%.

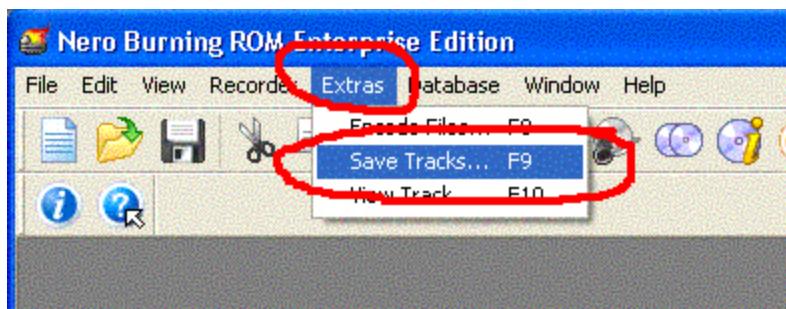
1. Start Nero Burning ROM

Go to the start menu and launch Nero Burning ROM, note that you should not launch Nero Express or Nero SmartStart.

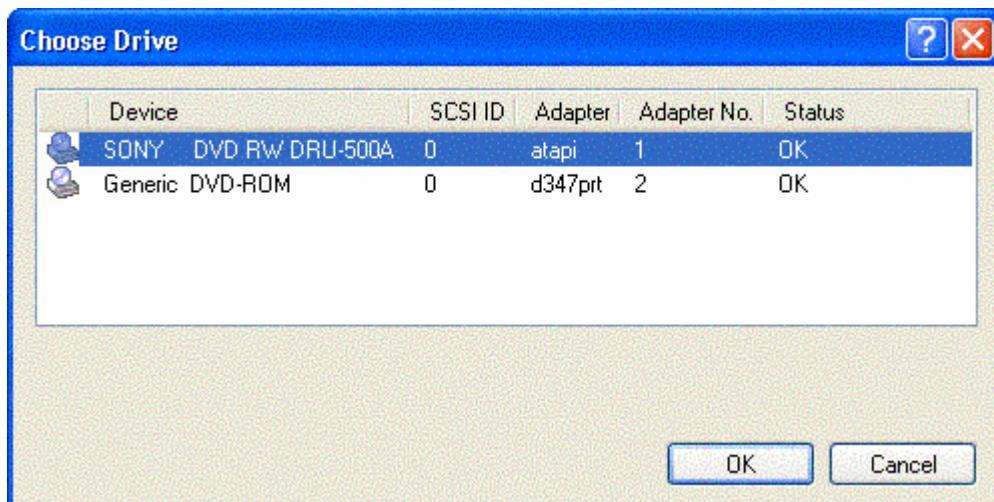
2. Now you will see a window that looks the same like the picture below, just click cancel.



3. Go to Extra's --> Save Tracks or just press F9.

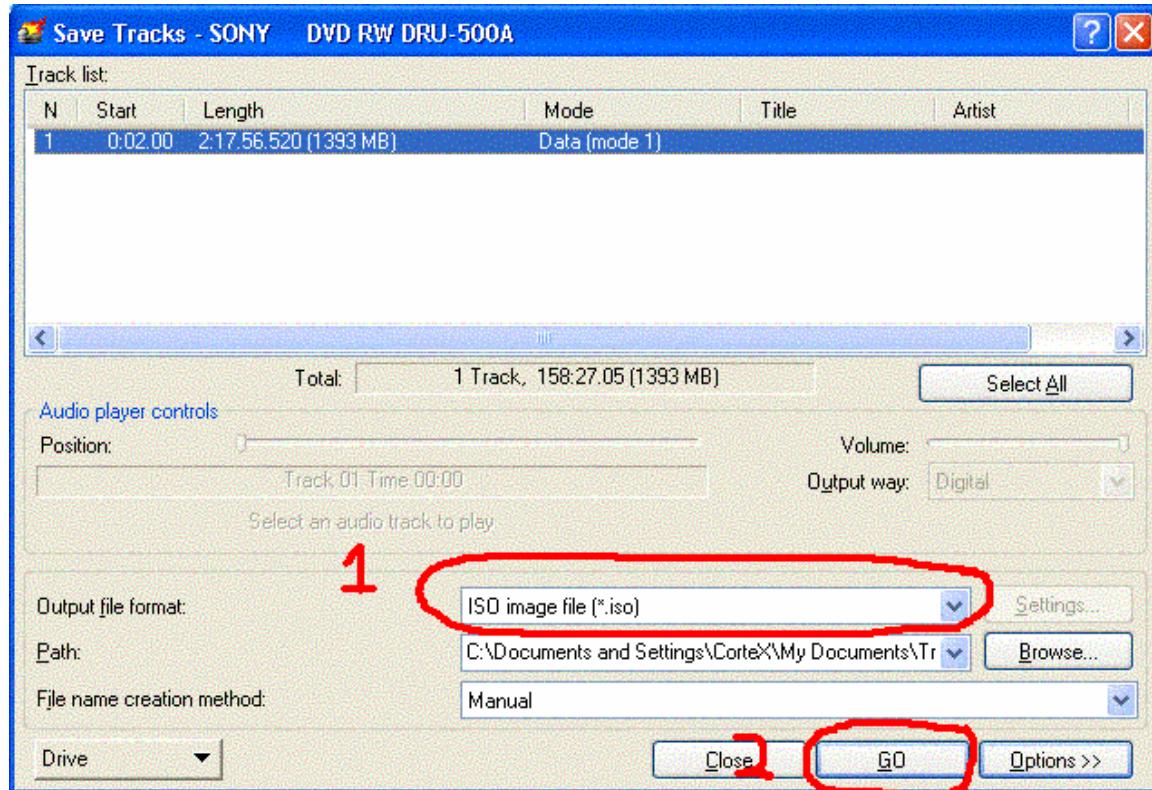


4. Now select the recorder where you inserted your copied GameCube game.

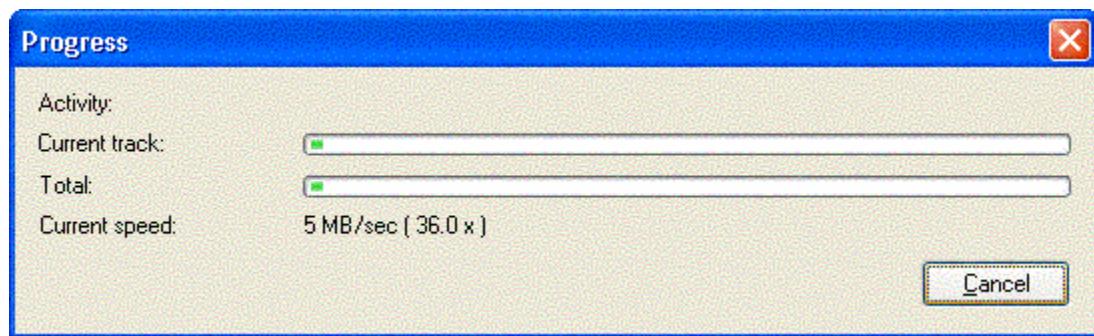


5. Change the output file format to ISO.

(Optional) Click the browse button to specify where you want to save it. Then press GO.



6. It starts ripping now 😊 and after that you will have a 100% working valid ISO!



BURNING IMAGES

Using Nero Burning ROM, one can easily burn GameCube ISO/GCM images to DVDR media.

You can use compatible DVD-R, DVD+R FULL SIZED OR MINI MEDIA to boot software on your Game Cube. I recommend using Ritek G04 (stay clear of G05) full sized or mini media. Ritek G04 can be purchased from the following links.

<http://store.yahoo.com/cdrdvdrmedia/> - Ritek G04 Mini

<http://www.meritline.com/> - Ritek G04 Mini

<http://www.meritline.com/micdjecacrfo.html> - Mini CD/DVD Jewel Cases

<http://www.blankmedia.ca/proddetail3.asp?id=318> – Mini DVD-RW (see note below)

NOTE: I have found an online store that sells Mini-DVDRW Media, but I have not tested it yet. If someone wants to take the chance at testing this media and get back to me that would r0x!

Of course, you don't have to use Nero to accomplish this with. Other programs you can use are Record Now MAX or CDRWIN, but I am only going to show you how to use Nero to do this with in this version of the FAQ.

Simply start Nero, pick "**Burn Image**" and select the ISO image you would like to burn. If you have a .GCM image, simply rename it to .ISO. Always make sure to select "**Finalize the Disc/Session**" before burning.

HINT: Some people get better results when turning "**Buffer Underrun**" protection **OFF**. If you're going to try this make sure you don't touch the computer while the disc is burning, because if the buffer underruns you get a nice coaster.

If you get this error message, "**The entered block size does not correspond to the image length. The block size may be wrong. Do you want to correct or ignore the problem?**" it means that the ISO is corrupt.

NOTE: If you receive this error message in CloneDVD, CloneCD, Alcohol 120%, Record Now MAX or any other software at that fact you should try loading it into Nero before burning (even if your burner isn't supported by Nero). You do this because the programs listed above "**will always bitch about the block size**". So if Nero doesn't bitch then simply ignore the warning in the above programs and burn anyway.

You will need to rebuild the ISO using GCFIX. Do not use anything other "**GCFIX v1.1b Wiped GCM Fixer by SlideR/LOONYCUBE!**" as newer version will randomly screw up your ISO. Yes, this means even the newest version 1.5b screws things up, even though it claims it doesn't.

NOTE: The file "wiped_gcm_fixer_v1.5f-loonycube.rar" contains the newest version of the fixer which is 1.5f and it works 100%. If you haven't been using GCFIX or are new to this please use this file instead of GCFIX (it works the same as GCFIX.)

[GCFIX – Located \files\GCFIX(REAL).RAR]

NOTE: I accidentally gave the wrong version of GCFIX in version 1-3 of this FAQ.
Sorry guys! Please see the above archive as I have fixed the error and included the right version.

To use GCFIX, go to a DOS prompt and change to the directory of the ISO image, then run “FIX.EXE (gamenname.iso) f”

Eh, for lamers who don’t know WTF DOS is, here’s a quick tutorial.

- 1) From Windows pick the START button, pick RUN, and then type in “CMD”
- 2) This will bring you to a DOS prompt, erm, COMMAND PROMPT for the politically correct assholes who hate M\$
- 3) Type in “F:” where the F would be the letter of the hard drive the ISO is located on
- 4) Next type “CD\ZELDA” where ZELDA would be the directory/folder the ISO is located in
- 5) Make sure you have copied FIX.EXE and along with it’s file(s) to the ZELDA folder
- 6) Now type “FIX ZELDA.ISO f” where ZELDA.ISO is the name of the ISO file
- 7) If all went well, you’ll have a new ISO file in less then 15 minutes
- 8) Burn the fucker!

```
C:\WINNT\system32\cmd.exe
Microsoft Windows 2000 [Version 5.00.2195]
<C> Copyright 1985-2000 Microsoft Corp.

C:\Documents and Settings\Administrator>f:
F:>cd\zelda
F:\zelda>fix zelda.iso f
```

(PART 9 - EMULATORS)

Though there are various emulators out there, I have found that they can be broken down into two categories.

Category 1 – Emulators that require BBA loading

Category 2 – Emulators that DO NOT require BBA loading

I will NOT be covering Category 1 emulators, nor will plan on doing so in the future. This FAQ mainly deals with the loading of DOL/ISO using the Viper GC modchip and various BIOS.

I will NOT cover how to load a DOL in this section, as I have already covered doing so in **Part 2.1 – “Softmods”** and in the various “**BIOS**” sections. Please refer to that section when you have successfully created a DOL you would like to load.

NOTE: Due to the BIOS register issues (See Appendix B) loading DOL’s using various methods may or may not work for you.

Okay, what I will be covering are the various emulators that do create either a .DOL file or .ISO file and how to use them accordingly.

As of this FAQ version there are quite a few emulators that do create DOL/ISO files.

| Emulator Type | Emulator Name | Emulator Filename |
|------------------|--------------------|-----------------------------|
| Nintendo 64 | CubeSoft Phoenix | cbs-p245.rar |
| Nintendo 64 | N64 EMU V1 | pdx_gc64.zip |
| Nintendo 64 | N64 EMU V2 | exp-n64v2.rar |
| Game Boy Advance | GBA EMU 2 | gbaemu2.zip |
| Sega Genesis | Genesis Plus! V1.1 | GCNGenesisPlus1.1-Win32.zip |
| NES | CubeSoft Phoenix | cbs-p245.rar |
| Super NES | SNES9XGC beta 2 | SNES9XGC-Beta2.zip |

All these emulators can be found in the file below.

Viper_GC_GameCube_FAQ_FILES_EMU-brakken.zip

This file can be downloaded from the URL below.

http://www.pxn-os.com/Viper_GC_GameCube_FAQ_FILES_EMU-brakken.zip

With the advent of Cobra BIOS 1.0 it is possible to make a DVD with many ISO/GCM images on it. *Even though this feature was included it unfortunately does not boot any of the Phoenix ISO/GCM or GBA ISO/GCM images at this time.* This means you won’t have to burn one emulator to one DVD. Please see “Part 2.0” on instructions on how to do this.

Nintendo 64 – Primer

List of Working Roms

| | |
|------------------------|--------------------|
| Animal Forest | Milo's Astro Lanes |
| Banjo Kazooie | Panel de Pon |
| Blast Corps | Paper Mario |
| Body Harvest | Pilotwings |
| Cruise'n USA | Pokemon Stadium |
| Dr. Mario | Star Soldier |
| ISS Soccer | Starfox |
| Legend of Zelda OOT | Yoshi's Story |
| Legend of Zelda OOT MQ | Wave Race |
| Mace the Dark Ages | Mace the Dark Ages |
| Mario 64 | Mario Kart 64 |
| Mario Kart | ISS Soccer 64 |
| Mario Party 1 | Star Soldier |
| Mario Party 2 | |
| Mario Party 3 | |

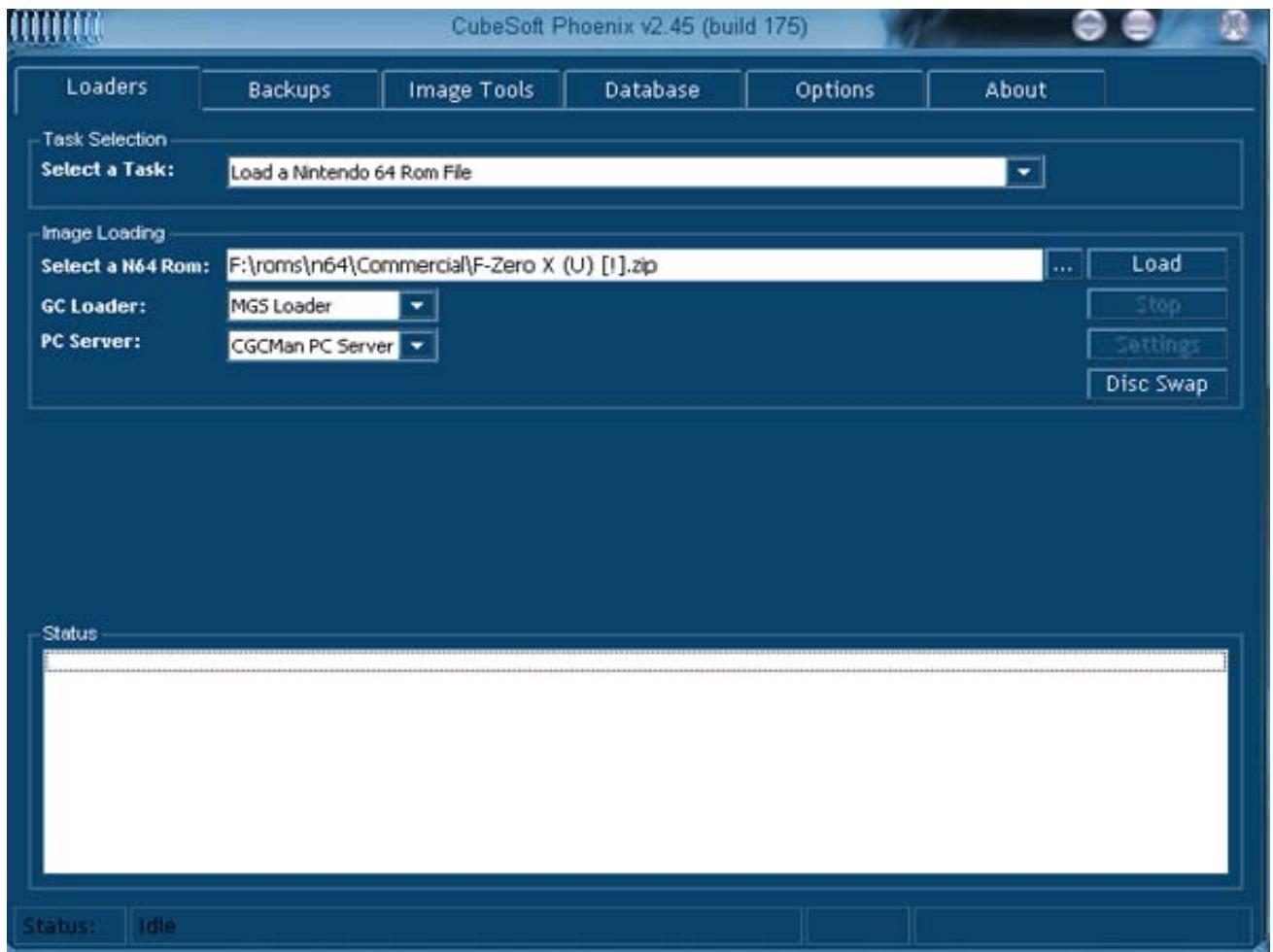
Nintendo 64 – CubeSoft Phoenix

Creates ISO image

This emulator uses emulators extracted from original cube games, and then injects another rom file into it. To say the least, this method doesn't work too well, as many games do not function correctly.

To use this emulator simply follow the instructions below.

- (1) Install Phoenix
- (2) From the top menu pick “Loaders”
- (3) Under TASK SELECTION pick “Load a N64 rom file”
- (4) Select a rom image by selecting “...”
- (5) Pick “Load” and wait for two windows to open
- (6) Pick “Stop” and leave the program open
- (7) Located the file “N64.ISO” (hidden file) created in your Phoenix install directory
- (8) Burn (or stream) and enjoy

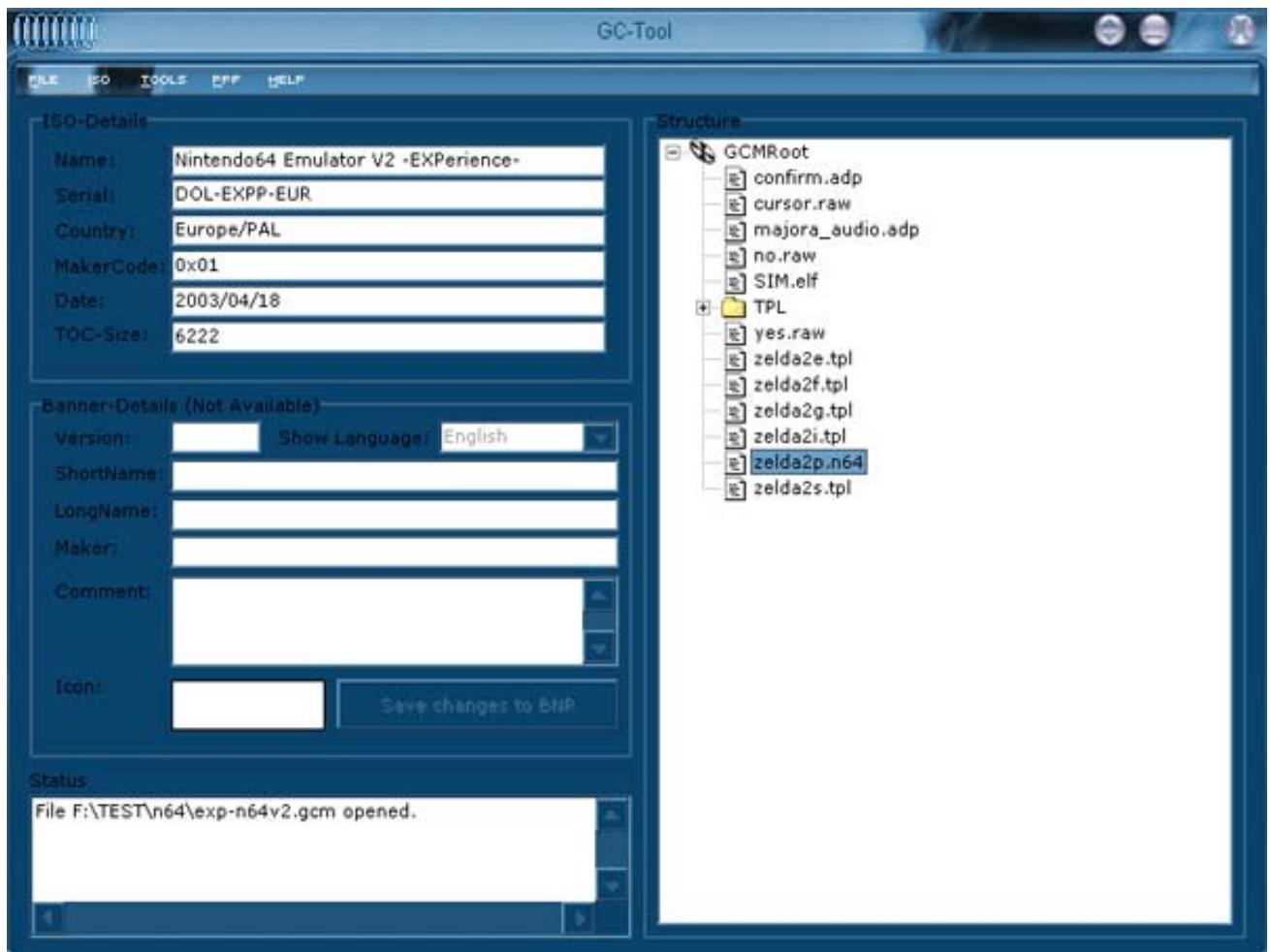


Nintendo 64 – N64 EMU v1 & v2

Creates ISO Image

This emulator is much better than the above one because it has more compatibility and better sound emulation. This emulator is in PAL video mode, so it might not work on some NTSC displays. If you are using GCOS press and hold "Y" button when booting to force NTSC mode. To use this emulator follow these instructions.

- (1) Extract the EMU and Paradox GC Tool (located \files\gc-tool12.rar)
- (2) Open GC Tool and using it Open the "n64emu.gcm" image (v1) or expand "n64v2.gcm" image (v2)
- (3) V1 – On the right hand side there are two N64 rom images. Simply replace the second one with the rom you wish to use.
- (4) V2 - On the right hand side of the screen locate the file "zelda2p.n64" and replace it with another N64 rom image (32MB MAX)
- (5) Pick "NO" when it asks to change the file size of the TOC
- (6) Close the image and program, rename the .GCM to .ISO and burn (or stream)

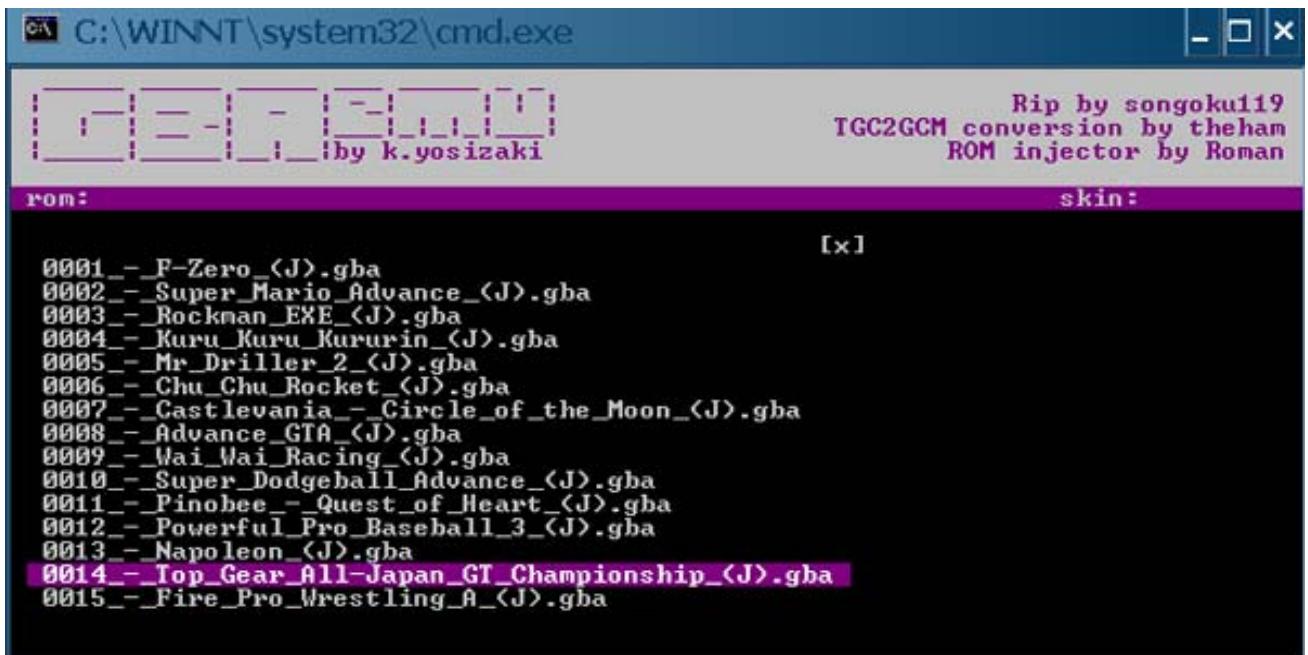


Game Boy Advance – GBA EMU 2

Creates ISO Image

This emulator works pretty damn well. Directions are below.

- (1) Extract the emulator using original directory structure
- (2) Put uncompressed GBA roms in the \roms\ directory
- (3) Run the GBAemu.bat file
- (4) Select which ROM to convert
- (5) Rename GBAEMU.GCM to .ISO
- (6) Burn (or stream) and enjoy!



Sega Genesis – Genesis Plus! V1.1

Creates DOL File

This emulator works pretty really *fucking* well.

The emulator features ...

- Fullspeed emulation
- Sound
- Unlimited Game Genie code support
- Configurable Controller Setup
- 2 Player support

There is NO saving support in this release. To configure and use the second controller, go to the controller Config screen, and press start on the second controller. Music in a few of the Sonic games (and possibly some others) does not play at the correct speed.

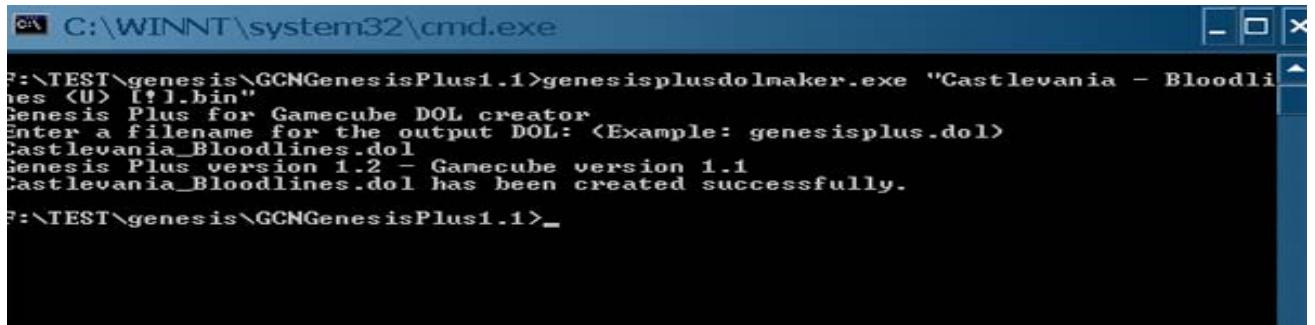
During game play you can return to the main menu at any time by pressing down on the C-stick. You can then reconfigure your controller, Add Game Genie codes, or Reset the emulator. Pressing Start resumes the game.

To use the emulator simply follow the instructions below.

- (1) Uncompress emulator and put one or more roms in the directory
- (2) Go to a command prompt and then to the directory of the emulator
- (3) Type “genesisplusdolmaker.exe (nameofgame.bin)” Example -> ‘genesisplusdolmaker.exe “sonic the hedgehog 3 (U) [!].bin”’

- (4) It will ask you for a filename of the DOL you wish to create. Your filename cannot have “SPACES” in it, so replace all spaces with underscores “_”
- (5) Once you have the DOL file either burn it onto a DVDr and load using the Cobra/GCOS bios, or stream it using the various methods outlined in this FAQ
- (6) Enjoy!

NOTE: You cannot compile the emulator using .SMD format Sega Genesis game images.



```
C:\WINNT\system32\cmd.exe
F:\TEST\genesis\GCNGenesisPlus1.1>genesisplusdolmaker.exe "Castlevania - Bloodlines <U> [!] .bin"
Genesis Plus for Gamecube DOL creator
Enter a filename for the output DOL: <Example: genesisplus.dol>
Castlevania_Bloodlines.dol
Genesis Plus version 1.2 - Gamecube version 1.1
Castlevania_Bloodlines.dol has been created successfully.
F:\TEST\genesis\GCNGenesisPlus1.1>
```

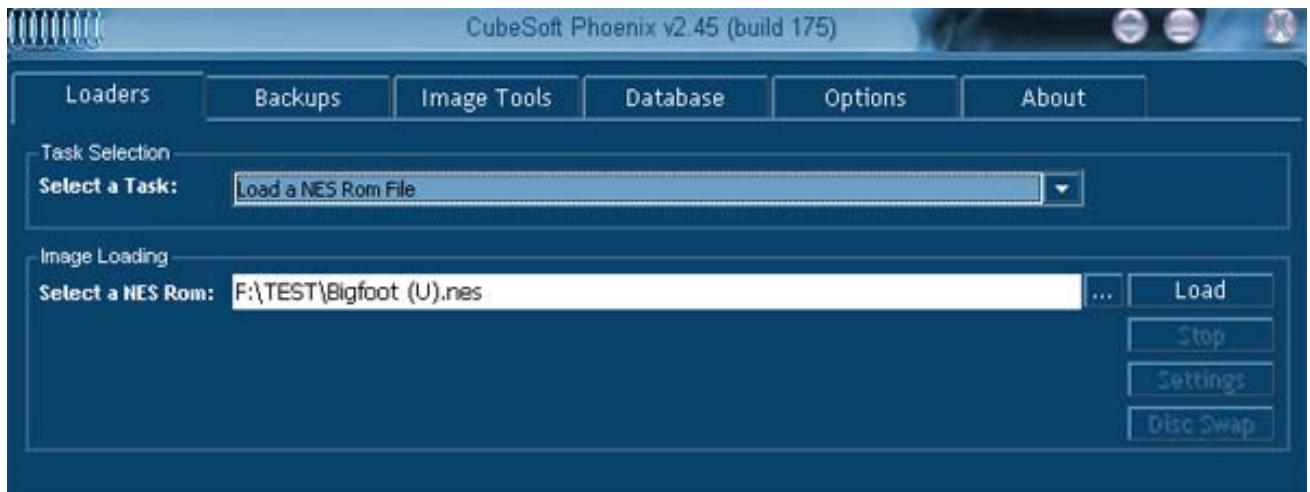
Nintendo Entertainment System (NES) – CubeSoft Phoenix

Creates DOL file

This emulator uses emulators extracted from original cube games, and then injects another rom file into it. To say the least, this method doesn't work too well, as many games do not function correctly. To make matters worse, it only has limited mapper support. Someone port a better NES emu damnit!

To use this emulator simply follow the instructions below.

- (1) Install Phoenix
- (2) From the top menu pick “Loaders”
- (3) Under TASK SELECTION pick “Load a NES rom file”
- (4) Select a rom image by selecting “...”
- (5) Pick “Load” and wait for two windows to open
- (6) Pick “Stop” and leave the program open
- (7) Located the file “NESL.DOL” (hidden file) created in your Phoenix install directory
- (8) Burn (or stream) and enjoy



Super Nintendo Entertainment System (SNES) – SNES9XGC beta 2 Creates DOL file

The mother of all emulators comes to the Cube! And best of all you don't have to make ISO files either! I really prefer a REAL EMU and DOL files over some injected horseshit ISO files.

NOTE: Even though this emulator creates .DOL files, I have been unable to load them from the Cobra BIOS successfully. Hopefully this will be cleared up in a future release. On a more positive note, GCOS has no problems booting this emulator.

Usage

- (1) Unzip and copy roms into the same directory
- (2) Go to a CMD prompt and change to the directory with the emulator
- (3) Type in “s9xinject.exe (nameofgame.SMC) (nameofgame.DOL)” Example ->
‘s9xinject.exe “Super Metroid (U).smc” “Super Metroid.dol”’
- (4) Burn (or stream) and enjoy!

NOTE: I have included a MS DOS Batch File named “snesmakedol.bat” which will convert all of the GoodSet USA SNES ROMS into DOL files. To run this bat file, simply place it in the directory you uncompressed the emulator into and then make sure all the original ROMS are in a subdirectory named \o_roms\ then run the BAT file and wait ☺

```
C:\WINNT\system32\cmd.exe

Directory of D:\Temp\Uiper_GC_GameCube_FAQ\emu\SNES9XGC-Beta2
03/08/2005  03:37a      <DIR>        .
03/08/2005  03:37a      <DIR>        ..
06/18/1999  03:04p          4,194,816 Mortal Kombat 3 <U> <Beta>.smc
03/04/2005  08:02p            2,376 README
03/04/2005  05:53p          971,144 s9xbeta2.bin
03/04/2005  08:02p            5,152 s9xinject
03/04/2005  01:18p          18,812 s9xinject.exe
                           5 File(s)    5,192,300 bytes
                           2 Dir(s)   31,316,324,352 bytes free

D:\Temp\Uiper_GC_GameCube_FAQ\emu\SNES9XGC-Beta2>s9xinject "Mortal Kombat 3 <U> <Beta>.smc" "Mortal Kombat 3 <U> <Beta>.dol"
Loading ROM file into memory... OK!
Reading Part 1... OK!
Writing Part 1... OK!
Injecting ROM into DOL... OK!
Padding DOL.....OK!
Reading Part 2... OK!
Writing Part 2... OK!
DOL created successfully!

D:\Temp\Uiper_GC_GameCube_FAQ\emu\SNES9XGC-Beta2>
```

(PART 10 - PICTURES)

This section deals with various pictures of the BIOS and other things. These pictures would have taken up too much space in their proper sections, but can be viewed below.

The “MAIN MENU”



“SWAP DISC NOW”



“CONFIGURATION MENU”





“BROWSE DVD”



Flashing the BIOS



Cobra v0.4 - Main Menu





Cobra v0.4 - Exploring a DISC



Cobra v0.4 - Display Mode



Cobra v0.4 - Lid Sensor



Cobra v0.4 - SWAP DISC NOW





Cobra v0.4 - Version Info (2/2)



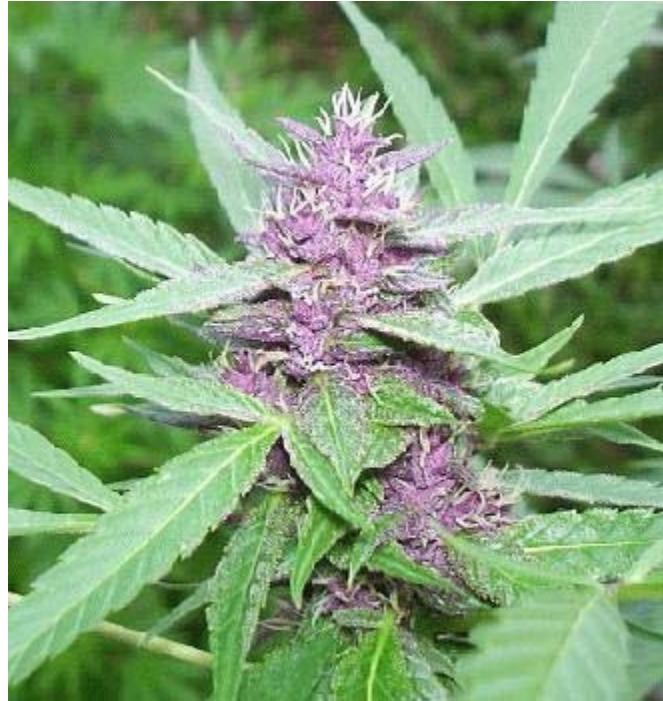
Playstation 2, Flask of Booze, GameCube, DS and lots of burns!



My 10 year old cat named “Omni” nickname(s) “see-nin-poo”, “poo-see-nin”, “purrs”,
“shits” and “son-of-bitch”.



Good weed can be purple too!



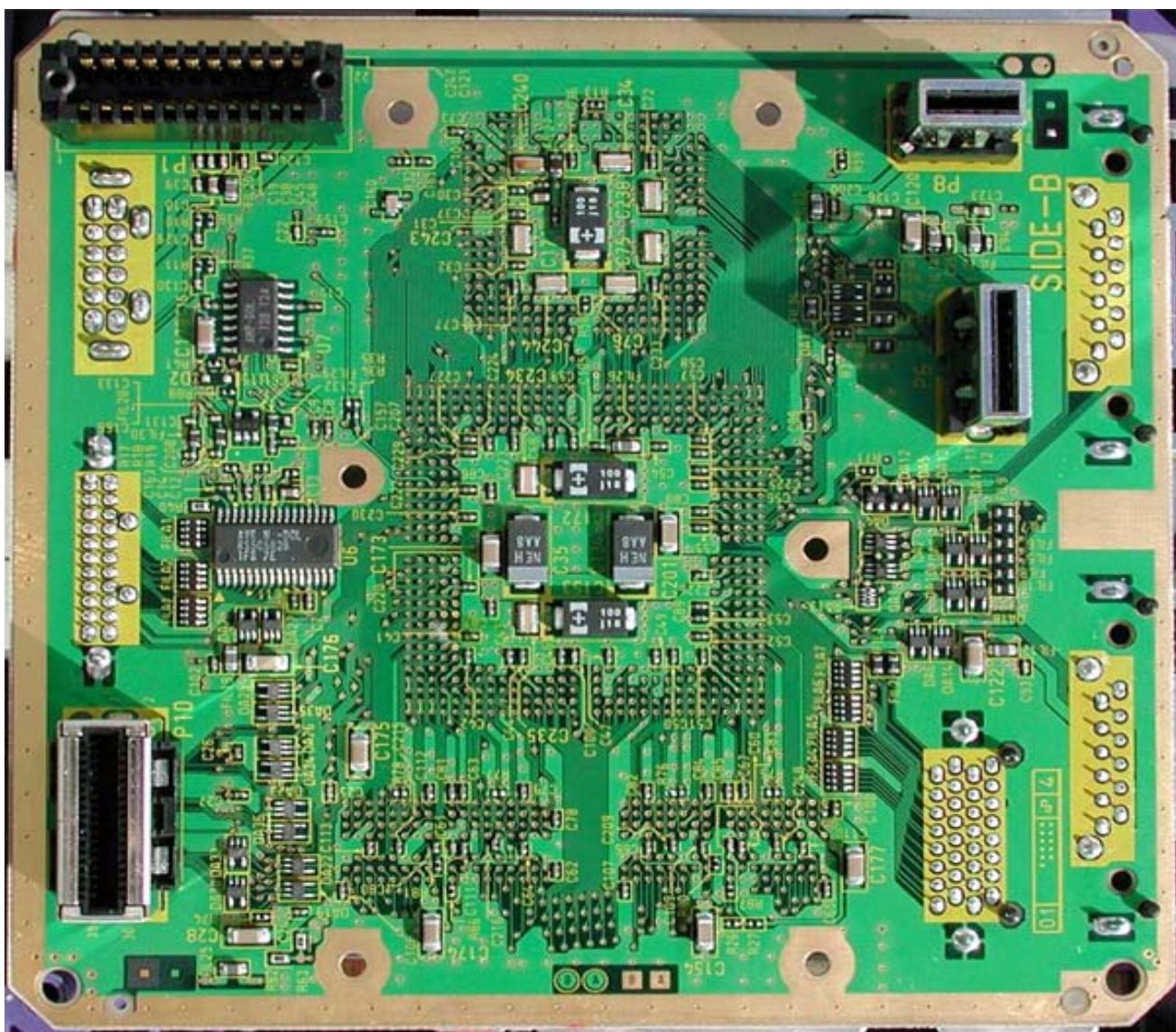
Controller Sex



State of Mind

```
SaiyDrEaM has joined #gemods
<Pepse> So when the hell is someone going to release a replacement lid? :(
* GrafeX has quit IRC (Ping timeout: 501 seconds)
* SaiyDrEaM has left #gemods
<BlueCop> i want one
<brakken> wonder why #ps2banz hasn't had a news article about the anaconda?
<Pepse> what a bunch of jerks.
<_Luke> because they suck nutz
<Alchemy> they did, they called it garbage
<Pepse> They are homosexuals.
<Alchemy> yea
<_Luke> yer, the remaining members are geting ass raped right now.
* strongbob has joined #gcmods
```

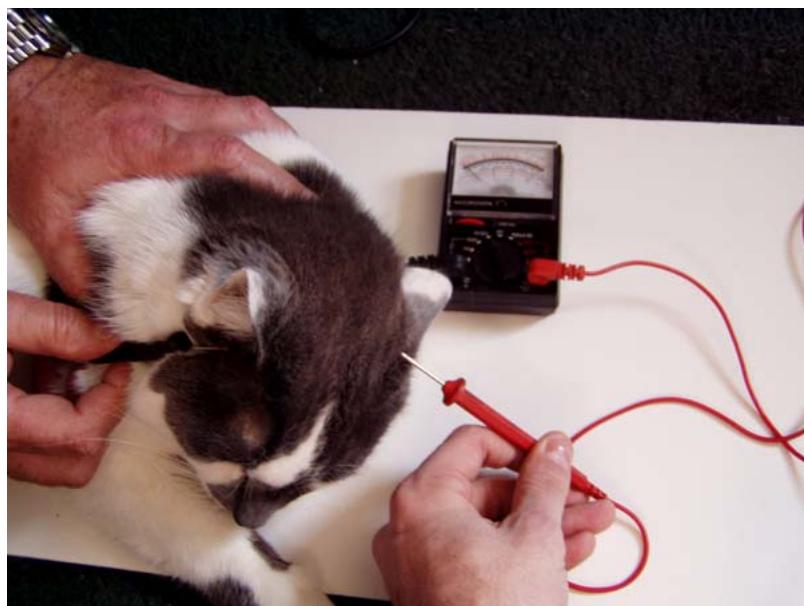
Inside t3h Cube



Inside the cube some mmore



What not to do with a multimeter



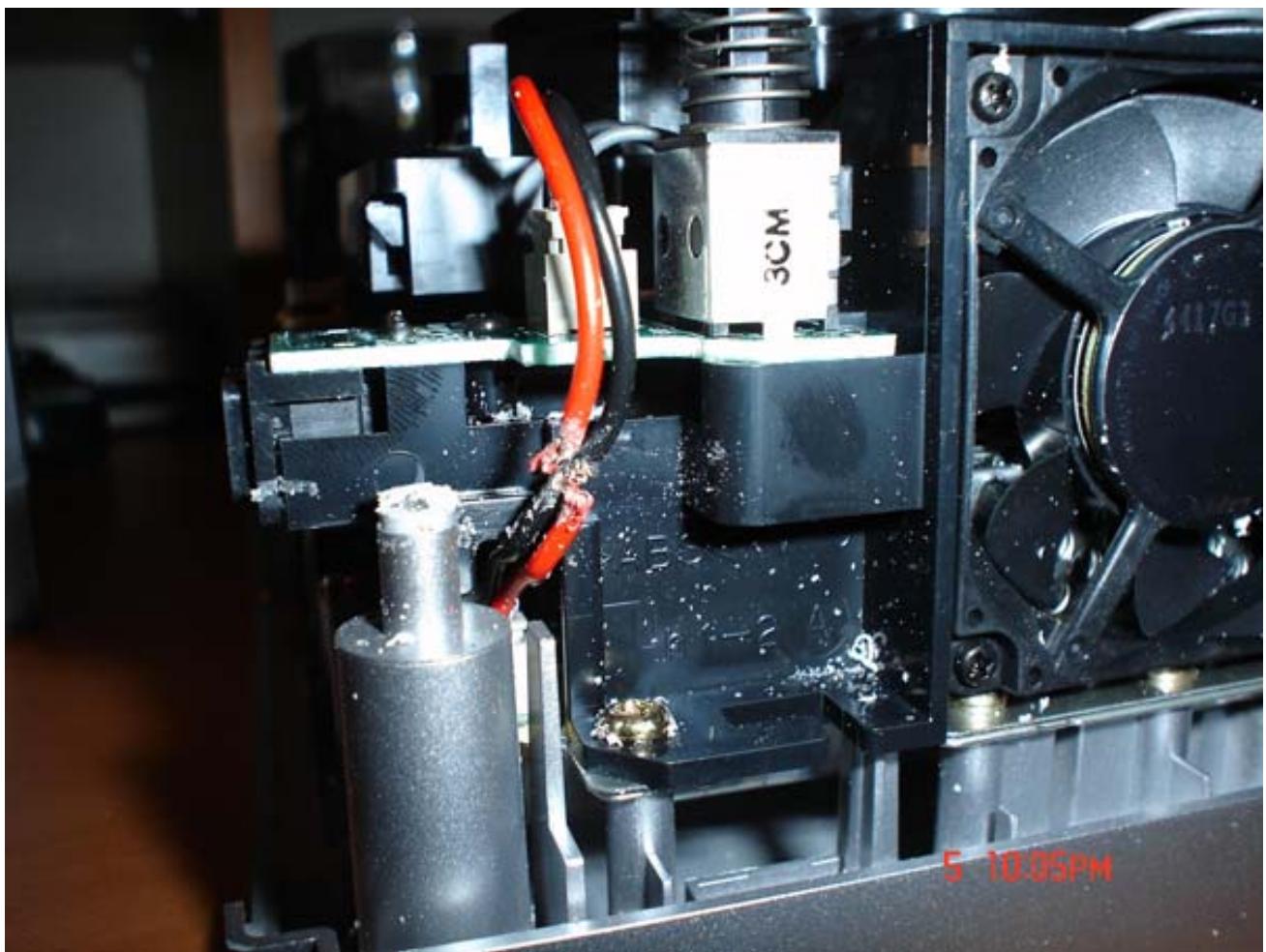
This guy decided he couldn't open the Game Cube using conventional methods, so he decided to cut the case off of it. In doing so he accidentally cut a couple of important wires, but like any good modder he simply had to resolder them.





S 10:01PM

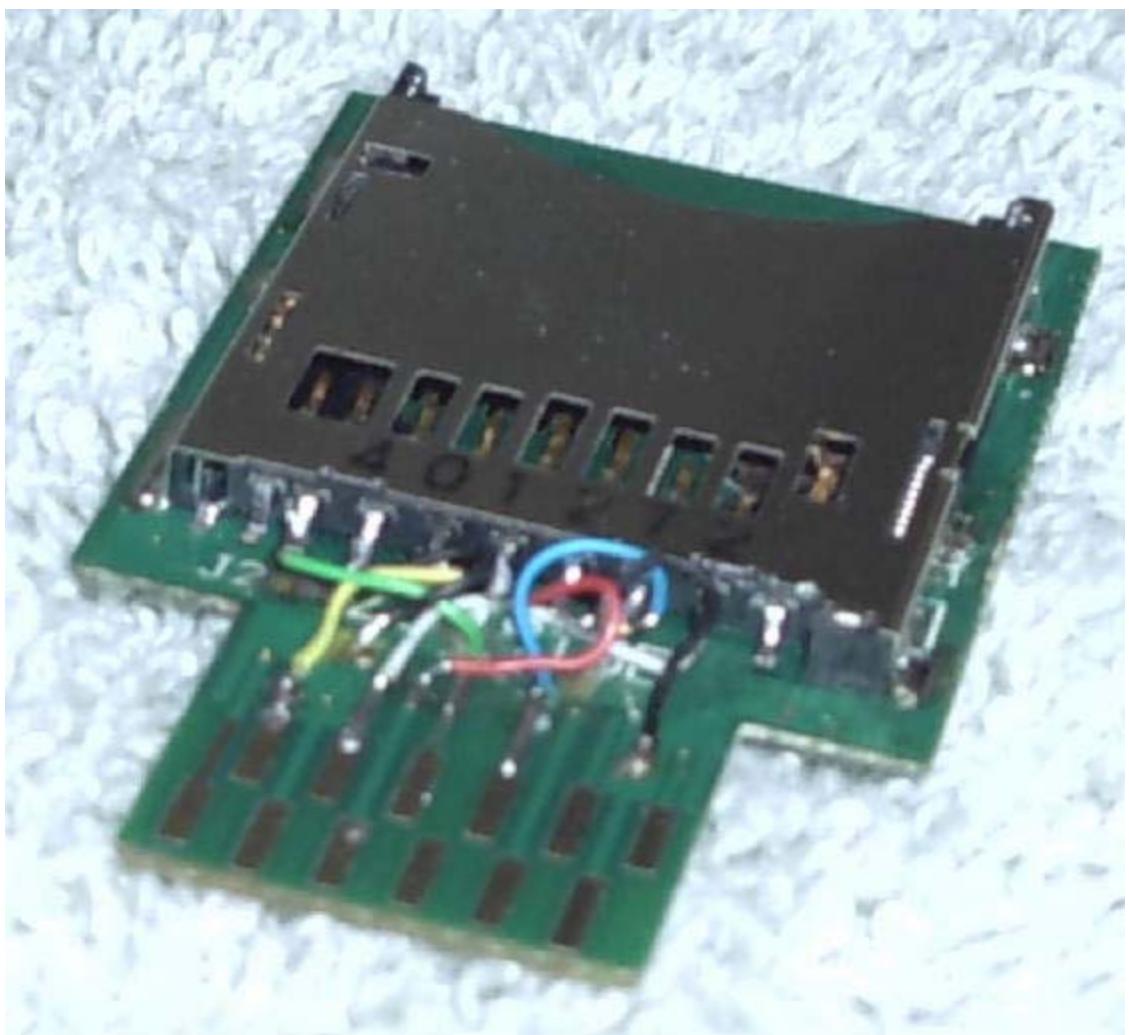


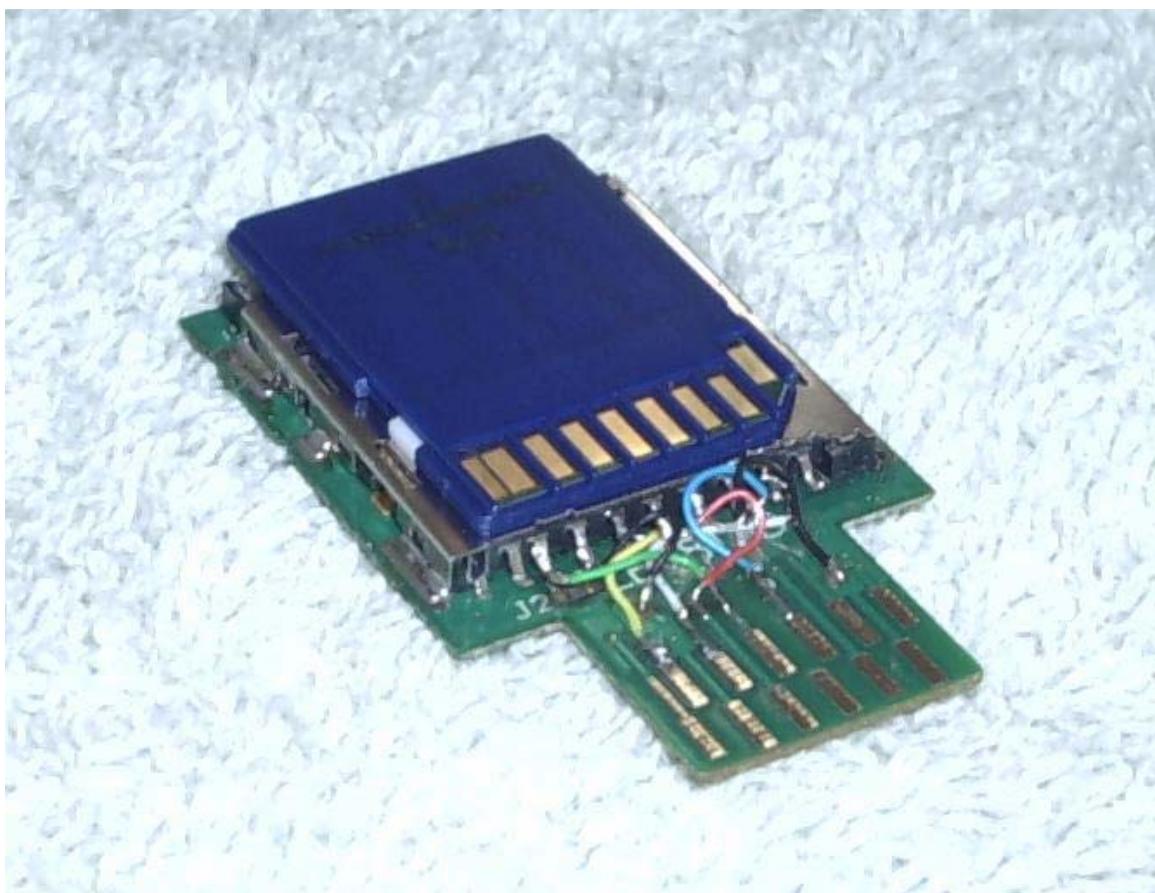
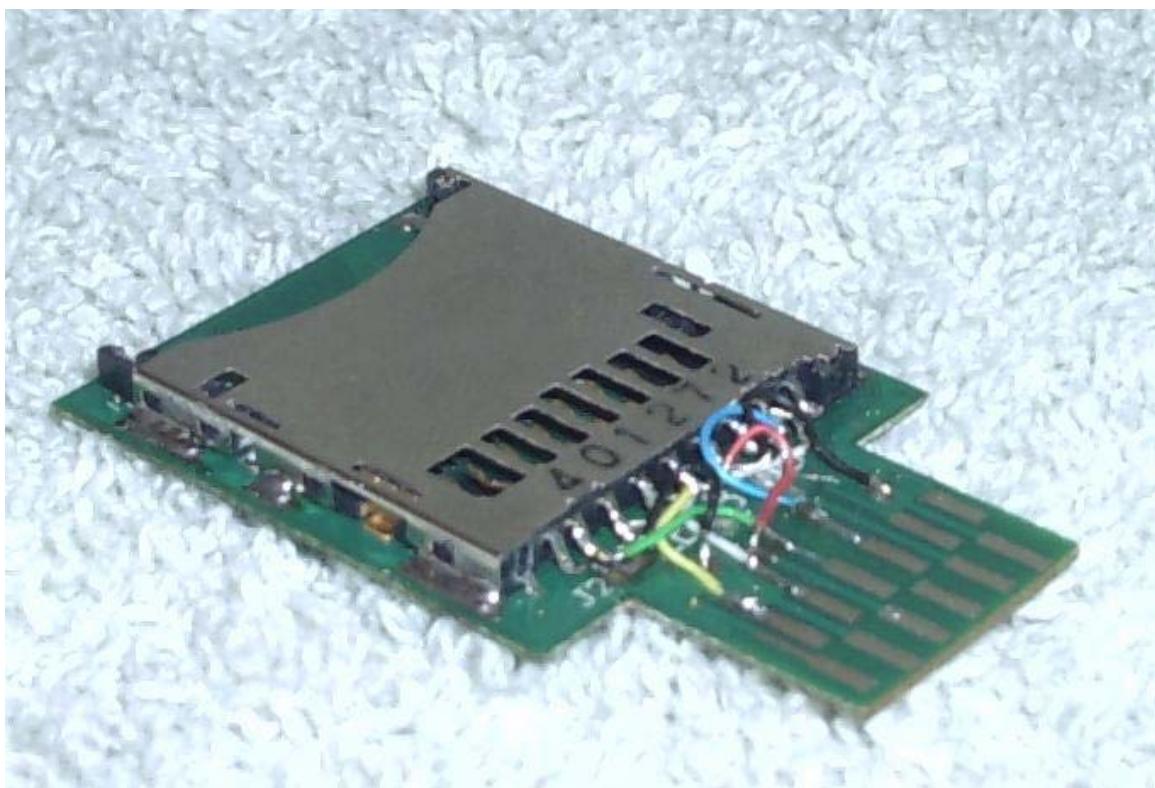




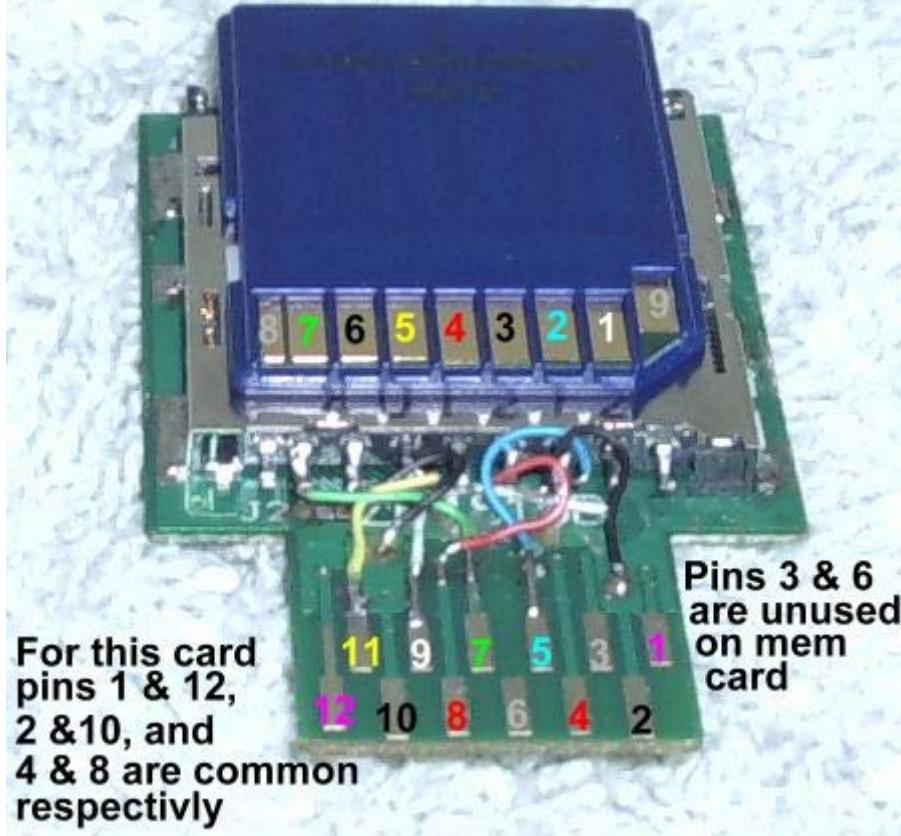








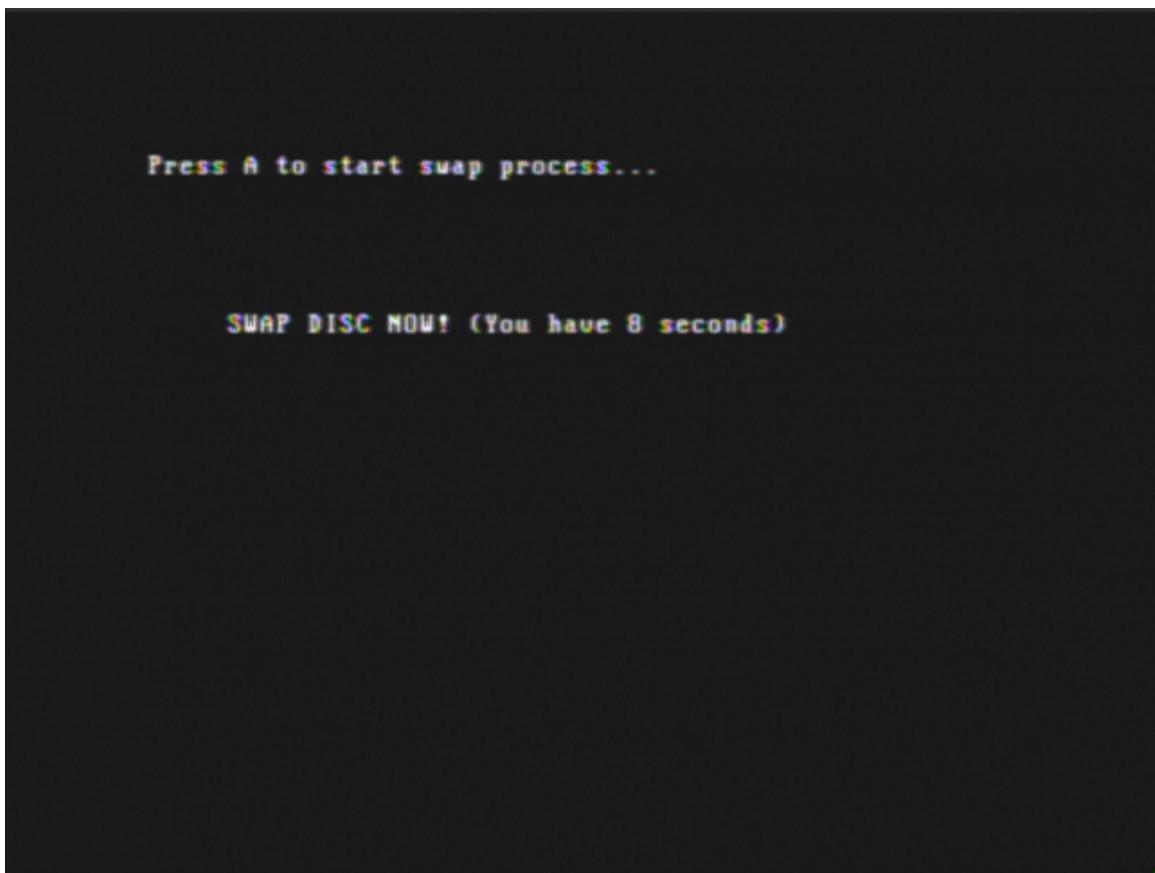
Pins 8 & 9 are unused on SD card



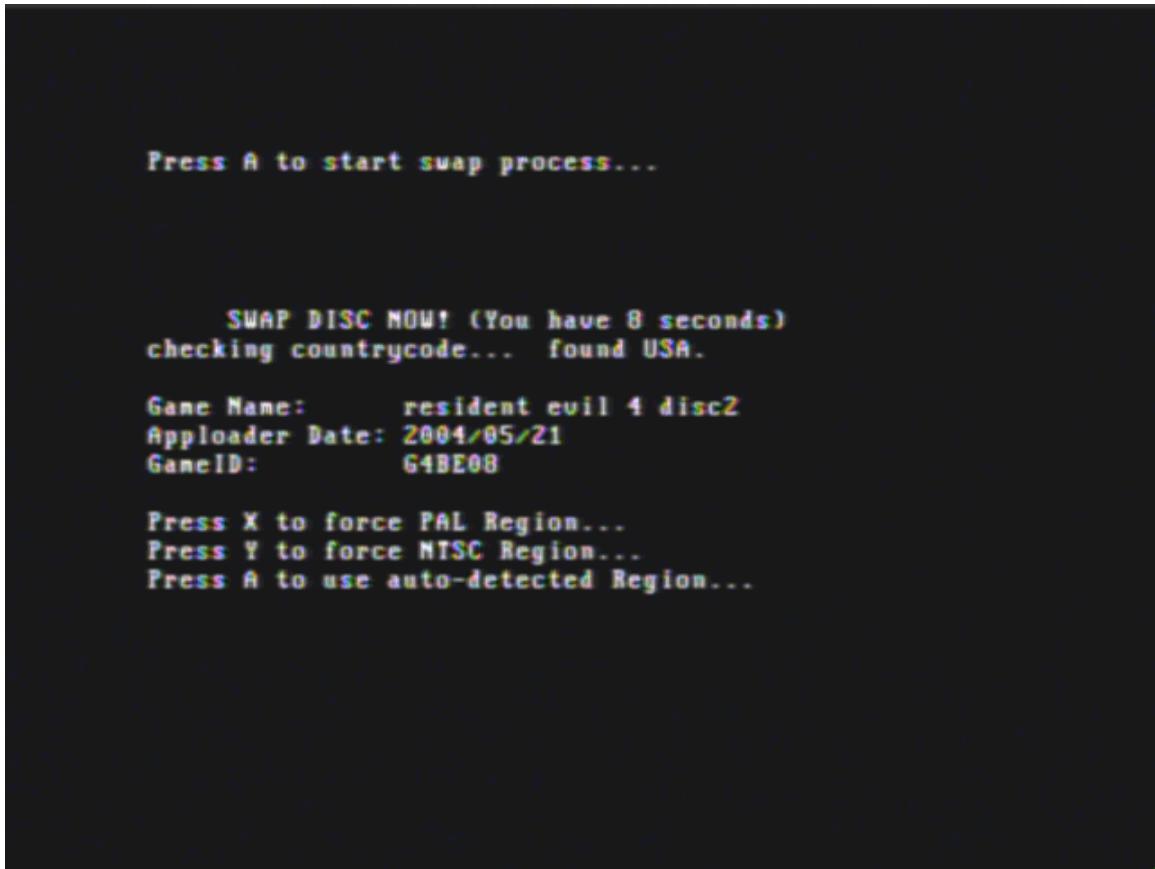
GCOS v1.4 – Main Menu



GCOS v1.4 – Boot Process Part 1



GCOS v1.4 – Boot Process Part 2



Ripper//GC Main Menu



Here is a picture of the Official Nintendo GameCube Development System. This is basically a GameCube that can accept Hard Drives as media.



Below is the device that is used to transfer games to and from the removable hard drive.



This is what happens when you led your children get “stoned”.



Ufos85's SD-Adapter





Team Xecuter sent me a picture of their newest GameCube project. The 8" floppy diskette on the top left is their choice of media for their project! Stay tuned for more info!

Appendix A – GameCube “Scene” Links

Here is a collection of “scene” links dealing with various aspects of the Nintendo Game Cube. If you would like to have your site added in the next version of the FAQ contact “brakken” on IRC/EFNET.

| | | |
|--------------------|--|--|
| Nintendo | www.nintendo.com | Official site of the Cube. I really hope you knew this already, I really do. |
| Game Spot | www.gamespot.com | Cube previews, reviews, pictures, cheats, guides and FAQ's (free) for EVERY game that exists |
| GameFAQs | www.gamefaqs.com | FAQs, message boards, review links and cheats for EVERY game that exists |
| GC-Compat | www.gc-compat.com | Cube compatibility list and forum |
| MaxConsole | www.maxconsole.com | Best forums for Cube mods out there. Includes many tutorials. Home of the *official* GCOS forum |
| Cube Hacker | www.cubehacker.com | Cube scene news site |
| NGC Dev | www.ngcdev.com | Dev site for the Cube |
| Sixty Four Scener | www.64scener.com | Cube scene news and release list |
| PS2 Scene | www.ps2-scene.org | Mainly PS2 site, but deals with Cube console news which is stolen daily by PS2nfo |
| Dextrose | www.dextrose.com | The “mother” of all scene sites |
| Nintendo Max | www.nintendomax.com | Scene news site with forums. In Spanish! |
| PS2NFO aka PS2OWNZ | www.ps2nfo.com | Formerly known as “PS2ownz”. They changed their name to avoid new people learning the truth about them. Stay clear of these assholes! |
| GameCubeScene | www.gamecube-scene-germany.de | Cube scene site in German |
| Necrotoad | www.necrotoad.com/sdload | Home made SD adapter pictures |
| Xlink Kai | www.teamxlink.co.uk | Play GameCube Online for FREE! |
| Warp Pipe | www.warppipe.com | Play GameCube Online for FREE! |
| Ahead Games | www.aheadgames.com | Top Half Cases for Full DVD-R |
| Xtender | www.teamxtender.com | Full Case Replacement for Full DVD-R |
| Decal Girl | www.decalgirl.com | Skins/Decals for your GameCube |

Appendix B – Chip, BIOS and Software Bugs

This section will deal with the various bugs found in various versions of the various Modchips and various BIOSs floating around and various fixes for the various Modchips and various BIOSs which happened to be used by various consumers and downloaded from various webpages.

Cobra BIOS v1.0

No Swap Booting – Currently you can only boot DVD-R not DVD+R with the “no swap” feature. Also many people report Full Sized DVD-R not booting properly either which is due to the time the GC drive takes to speed up before it boots.

Audio Sync – Due to improper loading of CDDA audio tracks the audio in CDDA games will stutter, skip and sound like crap. There are programs out there to FIX the audio to work with the current versions of the unfixed BIOS. These programs are bugged and will produce sound with scratches, beeps and/or bad bass. Please do not “dirty” fix your games with these programs.

Multi-Disc Games – Due to the way the boot loading works multi-disc games that require you to swap from disc to disc without saving first cannot be played. Multi-disc games that will let you save before swapping can be played by simply saving then powering off your Cube then booting the next disc required for playing and loading your save.

Multi-Boot Images – Even though the Cobra 1.0 read-me file claims that this works 100% it doesn’t. Around 35% of the wiped GCM images do not work. Also the Phoenix N64 emulator and the GBA emulator do not also work under multi-boot.

DOL Loading – Some DOL files when loaded do not work at all or do not work correctly when used with certain Modchip & BIOS combinations. This is due to the fact that the BIOS uses certain “memory registers” that need to be used by the DOL itself. The only fix to this problem is to reprogram the DOL in question (pretty hard to do if you do not have the source code) to avoid using these registers. An example of a DOL that doesn’t work using Cobra v0.4 and the Viper GC chip is SNES9XGC b2.

Emulator Support – Cobra v1.0 breaks the support for the Phoenix N64 emulator and for the GBA EMU v2 emulator. Also when using the N64 EMU v1/v2 many games that would boot under Cobra v0.4 will not boot under v1.0. Sadly due to the DOL loading problem (above) SNES9X GC b2 still does not work either.

Multisession Discs – Cobra v1.0 will not load Multi-Session discs under its “Disc Explorer”

Cobra BIOS v0.4

Audio Sync – Due to improper loading of CDDA audio tracks the audio in CDDA games will stutter, skip and sound like crap. There is a program out there to FIX the audio to work with the current versions of the unfixed BIOS, but I have been warned that using

your FIXED images with a FIXED BIOS will result in messed up audio again so I have decided not to include the program in this FAQ.

Multi-Disc Games – Due to the way the boot loading works multi-disc games that require you to swap from disc to disc without saving first cannot be played. Multi-disc games that will let you save before swapping can be played by simply saving then powering off your Cube then booting the next disc required for playing and loading your save.

DOL Loading – Some DOL files when loaded do not work at all or do not work correctly when used with certain Modchip & BIOS combinations. This is due to the fact that the BIOS uses certain “memory registers” that need to be used by the DOL itself. The only fix to this problem is to reprogram the DOL in question (pretty hard to do if you do not have the source code) to avoid using these registers. An example of a DOL that doesn’t work using Cobra v0.4 and the Viper GC chip is SNES9XGC b2.

Bootup – There is a random bug that affects the Bootup of the BIOS. If you ever turn your GC on with an original game in the drive and don’t get the Cobra BIOS screen simply turn off the GC wait 10 seconds and turn it back on.

Booting – There are a few random bugs in the booting process of DVDr media. The first one occurs when the onscreen prompt tells you to “swap disc now” and the DVD-ROM drive either doesn’t stop spinning or the laser doesn’t stop reading. The second bug is that after booting the game in question you either get the GC logo then a black screen or a black screen with no logo. To remedy this simply turn off the GC wait 10 seconds and turn it back on and try booting the game again. Sometimes you’ll have to try this 3-4 times before the game will boot.

Idle in BIOS – If you let your Cube sit a while before trying to boot a backup or browse a DVD when you go to do so the process will fail. Try do to this within the first 30 seconds of booting your Cube.

Idle Game Bug – During game play if the GC laser stops reading when it tries to read again the game will stop. This is said to be fixed in Cobra v1.0

GCOS v1.4

Audio Sync, DOL Loading, Multi-Disc Games, Idle Game Bug – Please see Cobra v0.4 bugs (above) for an explanation as the bugs are the same for both GCOS and Cobra v0.4.

Apply Settings – Sometimes the settings aren’t applied.

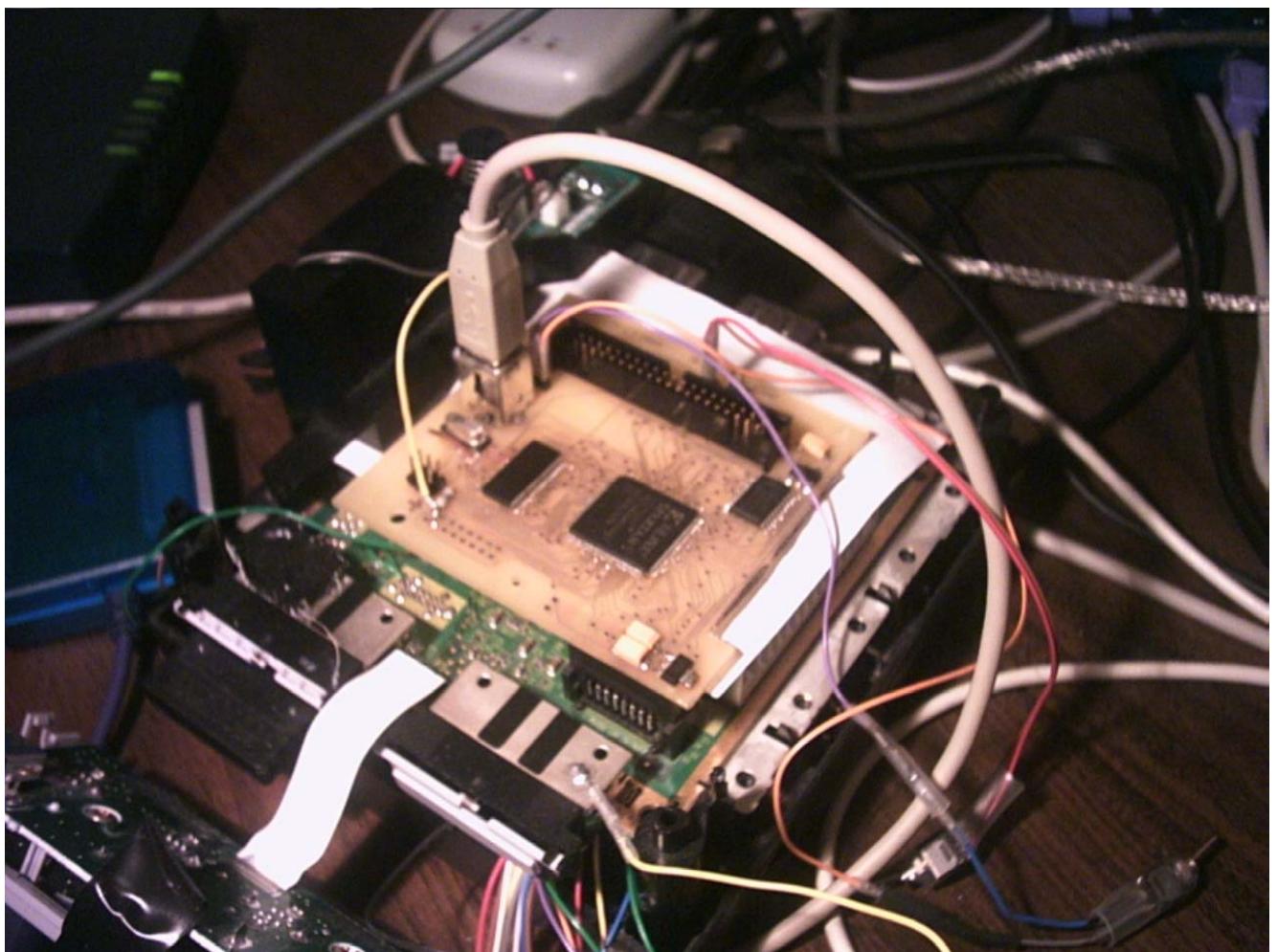
Real Time Clock – The real time clock for the NGC BIOS does not work.

Progressive Scan – Sometimes there is color swapping in progressive scan games between red and blue when you enable progressive scan, and in other games if you choose progressive scan it just freezes (like Viewtiful Joe 2, and occasionally Metroid Prime 2.)

Memory Card – Removing or inserting a Memcard 59/251 shows some kind of exception/bug on the GCOS menu screen. This only happens when you're in the GCOS BIOS and NOT DURING GAMEPLAY.

Random Reset – The GameCube will randomly reset when loading GCOS.

Appendix C – Building your own USB/IDE replacement for the Game Cube DVD-ROM Drive



As you can see above CZN has managed to make their own functional IDE/USB replacement for the DVD ROM drive. I suggest if you're going to make your own replacement board you know a helluva lot about electronics as you will have to etch your own PCB, program your own chips and do a lot of troubleshooting. This isn't for the faint at heart. The original CZN page about this can be found at ...

<http://www.crazynation.org/GC/Interface.htm>

A copy of this page and the files located in the page can be found in the **|files|ideusb.zip** archive.

Appendix D – Converting AR Codes to Cobra v1.0+ Codes

This process is pretty simple and I don't see why it wasn't included in the Cobra v1.0 release (the first version of Cobra BIOS to support cheat codes). You will first need some codes and then a tool called GCNcrypt which is of course located in the archive below.

(GCNcrypt LOCATED @ \files\GCNcrypt-v1_1.zip)

You can get many codes from either www.gamefaqs.com, www.gamespot.com and/or www.jokejunkies.com.

Once you have a code you simply remove the first line and then put the code into the DOS until above and it'll output the new code. The first line of the code IS NOT NEEDED!

So say you got an original code like this ...

6BUE-CTGY-M9VB5
RUVW-AT9M-05YVU

So get rid of the first code and you'll be left with this to decrypt ...

RUVW-AT9M-05YVU

Then run GCNcrypt which will give you ...

04323EA8 0000FF00

That is what you put into Cobra BIOS!

Making Your Own Cheat Code Database Files (.COD) for Cobra BIOS v1.0+

Cheat code files are simply a text file renamed .COD with a certain format inside them. The format is pretty easy to follow.

EXAMPLE –

SUPER MARIO SUNSHINE USA

(m)
C435EE58 0000FF00

Infinite Health
042438EC 60000000

Infinite Air
0424F79C 60000000
0424F7A0 D03D012C

Infinite Water Supply
0426B824 60000000
0426C1CC 60000000

Infinite Hose
0426B9C8 60000000

Infinite Jetpack
0426C330 60000000

So as you can see the first line of the text file is the name of the game, then two lines down is the (m) or master code, then every two lines down after that is the name of the code with the code itself following under it. Remember to always skip a line between codes!

NOTE: When using Cobra v1.0 cheat codes do not work with any original games only backups.

NOTE: Someone has made over 600 game code compilations for you to enjoy. This compilation is located in \files\cobracodes.zip . ENJOY!

-=[t3h eNd]=-