

Cobra 2.1

for Viper GC and Viper GC Extreme

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1 Main features

Feature	Viper GC	Extreme	USB
Direct boot of backups, imports and originals	o	o	
Standalone cheat code system, action replay compatible	o	o	
Find and create your own cheatcodes (XtremeFinder)	o	o	o
Copy memory card content to/from PC (USBMemCard)	o	o	o
Support for user-provided drivecodes	o	o	
Backup your games (no extra hardware needed)	o	o	o
Skinnable GUI		o	
Put more than one game on one disc (Multiboot disc)	o	o	
Manage your onboard files and flash BIOS from PC	o	o	o
Store small executable (MP3 player, ISO ripper, GCOS) on modchip flash	o	o	
Store big executables (linux, games, GCOS) on modchip flash		o	
Create in-game screenshots	o	o	o
Interact with a game while it's running (write, read memory and more)	o	o	o
Flash BIOS from PC or from DVD	o	o	
Disc Explorer	o	o	
Enter cheats with on screen keyboard or load them from DVD	o	o	
View PC screen on TV	o	o	o
Work on all gamecubes from all regions	o	o	
Compatible with multi-disc games	o	o	
Stream ISO from PC (Beta)	o	o	o
Real time save, at any point in game (Beta)	o	o	o

New features since V1.6 on green background

This great video shows a small subset of new Cobra 2.1 features:

<http://www.youtube.com/watch?v=LgQvfqhHDKE> (courtesy of megaprodz)

2 General info

Cobra 2.1 is by far the most powerful unofficial gamecube BIOS. The following is needed in order to install Cobra on your gamecube:

- A Viper GC or Viper GC Extreme modchip
- This very flash file
- Some compatible media and a DVD burner

It allows you to run game backups, imports from any region, homebrew software and original discs. It allows you to create your own backups, find and use your own cheatcodes and much, much, much more.

Depending on your hardware it is possible to flash this BIOS from DVD, from USB or from parallel port. If you have a Viper USB Adapter, make sure both DIP switches are OFF after you've programmed the chip (you won't ever have to change them again as you can reprogram the chip with both switches OFF using CobraManager since Cobra 1.6). If you're using a parallel port flasher, disconnect it after use.

Here is a list of the different flash files provided in this package:

File	Description
cobra21.vgc	Cobra 2.1 BIOS
cobra21_drive20010608.vgc	Cobra 2.1 BIOS preloaded with GCOS external drivecode for drive 2001/06/08
cobra21_drive20020402.vgc	Cobra 2.1 BIOS preloaded with GCOS external drivecode for drive 2002/04/02
cobra21_drive20020823.vgc	Cobra 2.1 BIOS preloaded with GCOS external drivecode for drive 2002/08/23

3 Cobra usage

Turn on your GC with the disc you want to run and:

- Hold Y to go to Main Menu (if it's not your Default Boot mode)
- Hold X for the other boot mode (can be set in Config Menu)
- Don't hold anything for Default Boot Action

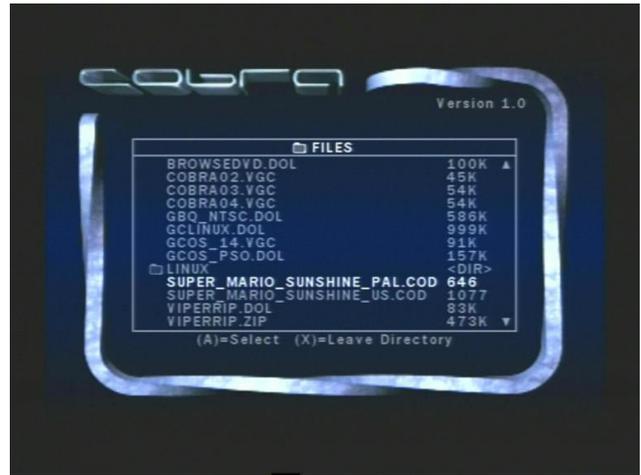
3.1 Main menu

Direct Disc Boot	Play a backup or an original GC game from any region
Original BIOS	Play an original game compatible with your GC region or enter GC BIOS menus
Configuration Menu	Change Cobra settings and view GC version info
Explorer	Browse the content of the disc or flash memory and load files
Cheat Codes	Manage cheat codes
Change disc	Change the disc without having to reset the GC
Plug-in	Execute the embedded Cobra Plug-in. Only available if a plug-in is loaded



3.2 Disc Explorer

The Disc Explorer lets you browse the content of the inserted disc. The following file systems are supported: ISO9660 (Level2 compatible no joliet) and FST (GC native file system).



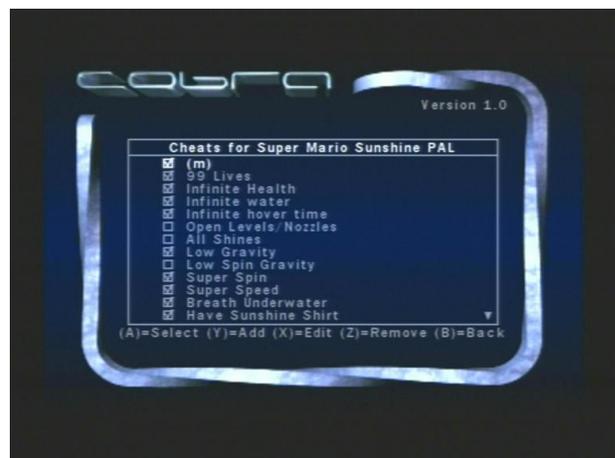
The files with following extensions can be selected, loaded or executed:

VGC	Viper GC flash file	Select this file to reprogram your Viper GC
DOL	Homebrew application	Select this file to execute it
COD	Cobra cheat codes	Select this file to load new cheat codes
CBP	Cobra plug-in	Select this file to load a plug-in
CTM	Cobra theme	Copy this file to flash then select it from flash explorer to change GUI skin (Viper GC Extreme only)
PCM	ADPCM audio file	Select this file to play (must be aligned)
ADP	ADPCM audio file	Select this file to play (must be aligned)

3.3 Cheat codes

If you want to use cheat codes, enter Cheat Codes menu, select a game, check the codes you want to use, exit the cheat selector and enable cheats.

To add new codes follow on-screen instructions. The codes are compatible with decrypted AR codes. You can decrypt AR codes using the great GCNCCrypt by Parayste. Never enter the first code of a given cheat code (validator code). You can also put .COD files on a DVD and load cheat codes from there, each file corresponds to one game. Cheat codes are working for backups and original games.



3.4 *MultiBoot discs*

The MultiBoot feature lets you put several games on one disc. You can use Viper_Multi_Boot_ISO_Creator by LoonyCube (latest version is 1.3b) to create MultiBoot discs easily.

3.5 *External drivecode*

The drivecode is the firmware code responsible for handling DVD media. Cobra contains its own drivecode which has improved a lot since its first release and is the best available in our opinion. Still, if you encounter some media issues such as DRE even after tweaking your pot, you might want to try another drivecode as it might handle disc slightly differently and help in some cases. This other drivecode can be injected into Cobra's BIOS file (VGC) and is then called External drivecode. In the configuration menu you could switch between this external drivecode and the built-in cobra drivecode.

In order to inject an external drivecode, you must use the InjectDrivecode command line tool.

Drivecodes from GCOS 1.X are provided as an example.

4 PC tools usage

4.1 *CobraBackup*

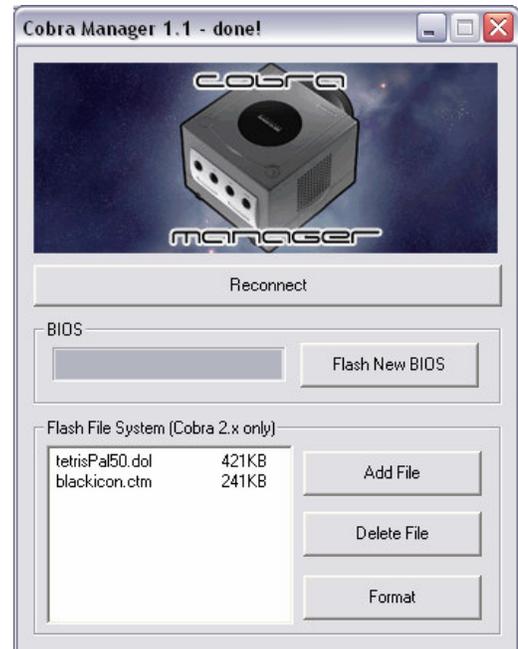
CobraBackup lets you create your game backups. Its usage is straightforward. The smart backup option is faster and works for 99% of all games.



4.2 *CobraManager*

CobraManager lets you flash a new BIOS on your chip using USB, without the need of changing Viper USB Adapter DIP switches.

It also lets you upload DOL executables and skins to be stored Viper Extreme's onboard flash.



4.3 *DOLSendUSB*

This command line tool lets you send and run a gamecube executable on the fly. If you don't know how to use command line tools, simply drag and the DOL file you want to send over the DOLSendUSB icon.

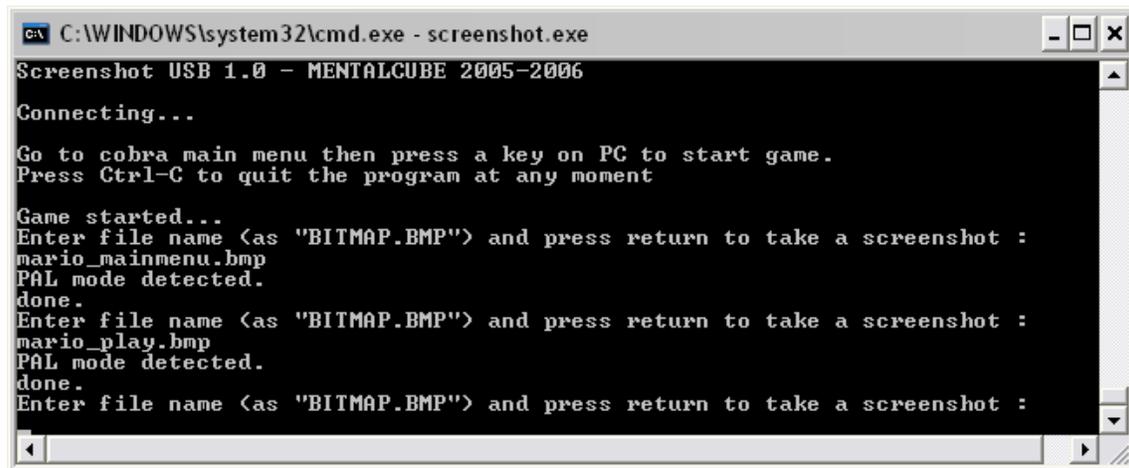
4.4 *CobraPCView*

This application lets you stream PC screen content to your TV. It is currently not suited for movies as frame rate is low (~10fps max).



4.5 *Screenshot*

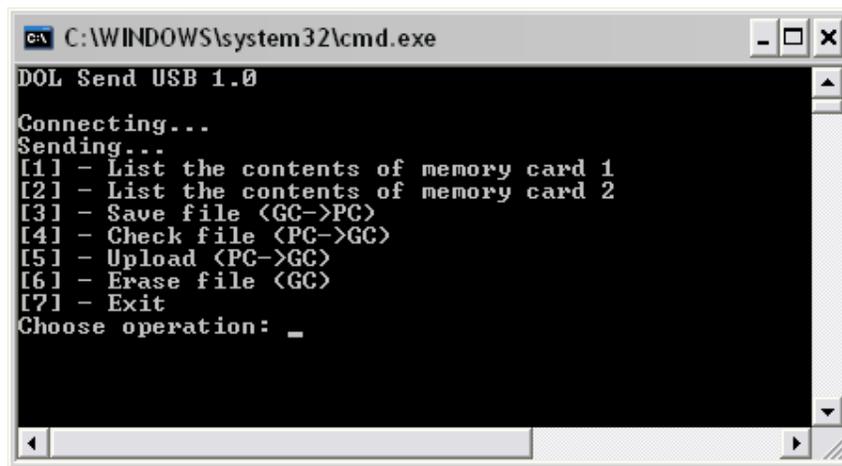
This application lets you take screenshots in games and save them as BMP pictures. While in cobra main menu, start *screenshot* application on PC and follow instructions. A command line version is provided aswell for advanced users.



4.6 *USBMemCard by Tactics*

We decided to package this awesome memory card manager written by Tactics in Cobra 2.1. It lets you copy memory card data from/to PC. While in cobra main menu, start *USBMemCardLauncher* application on PC and follow instructions.

Please read *readme.txt* and *libogc-license.txt* for more information about this program and its licence. Source code is included. For more info visit author's homepage given in *readme.txt*.

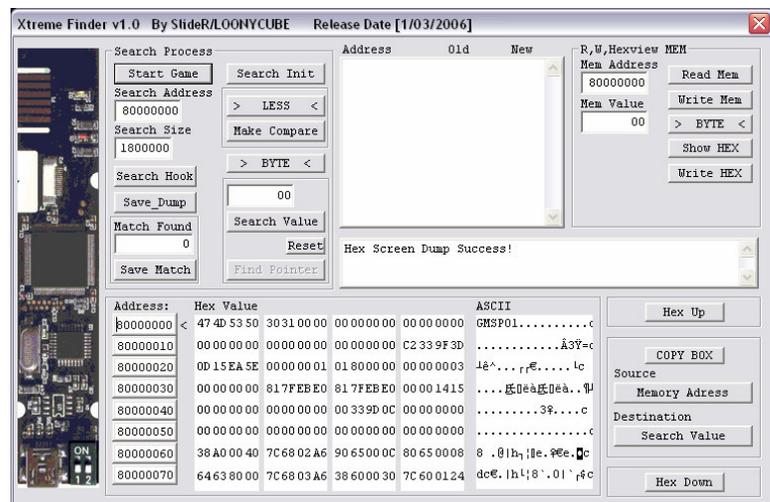


4.7 XtremeFinder

This cobra tool by Loonycube lets you find your own cheat codes. Here is a list of features:

- GUI with all interesting Cobra Remote features
- View and Edit memory in real time
- Find cheats automatically by comparing memory content at different times
- Create cobra compatible cheat codes, including master codes (*Search Hook* button)

You must be familiar with the process of cheat creation to use this tool. Hit "Start game" while in cobra main menu.



4.8 *MakeTheme*

This command line program is to be used by advanced users to create Cobra Themes (skins). A test theme is provided as an example. For great downloadable skins check <http://nintenskinz.tehskeen.com/>



4.9 *GameRemote*

This command line program is to be used by advanced users. It lets you interact with gamecube's memory while a game is running in order to modify or read game's content on the fly. It also allows you to freeze and unfreeze a game. XtremeFinder takes advantage of all of those feature with a more user friendly GUI.



4.10 *RealTimeStateSave (Beta)*

This command line tool (for advanced users only) lets you take and restore realtime saves at any point of any game. Imagine a certain game that won't let you save until you finish a level, now you can save at any point.

The saves are copied from/to PC using USB. This feature is currently very beta but should work on most of the games, most of the time. If the game crashes while restoring a save, try again, it sometime takes a couple of time.

4.11 *ISOStream (Beta)*

This command line tool lets you stream a game ISO from PC using USB. If you don't know how to use command line tools, simply drag and the ISO file you want to play over the executable icon.

The different executables lead to different results regarding speed or crashes. This feature is currently very beta, but might be useful on some occasions. It does not work at all on NTSC 1.0 systems (Cobra Bios supports it but PC application doesn't).

4.12 *InjectDrivecode*

This command line tool is for advanced user. It lets you inject a drivecode in Cobra 2.1 VGC file, that will be used as external drivecode (see configuration menu). External drivecodes are loaded in a similar way as open source cactus drivecode is.

4.13 *CobraPlugins*

CobraPlugin lets you create Cobra plugins from a DOL file. Make sure resulting CPB file is not bigger than 45056 bytes. It is possible to inject a plugin in Cobra 2.1 VGC file using a DOS prompt. The syntax is "copy /b cobra21.vgc+plugin.cbp output.vgc". Make sure that cobra21.vgc is 81920 bytes long before the copy operation.

A sample plugin is provided (MP3 player).