## Cortex Amiga Floppy Emulator

<u>3 FÉVRIER 2014</u> PAR <u>HERVEMESSINGER</u>

# Transform the Gotek Floppy Emulator into an Amiga Floppy emulator

**DISCLAIMER :** 

No software from Gotek System was used or reversed to make this new firmware. Informations and softwares on this page are provided in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

The author will not be held liable for any loss, damage or failure or any incident related to the use of this software and informations.

It is not a commercial work and had been done at my free time so don't expect instant support or warranty. The informations and softwares provided on this page can't be sold directly or indirectly into a preflashed device.

<u>Warning – be aware :</u>

*The Gotek drive with this firmware can now be found for sale on several places. Be careful with these resellers, they are generally omitting some important things:* 

- I am not affiliated with any of these resellers !

- The actual firmware is in beta version and still updated : The serial cable is strongly recommended to update the drive !

- The price of a normal Gotek drive is around 27\$, shipping included ! The serial cable/adapter cost only some dollars.

- No, really, flashing the drive is not so hard...

*– I will not do any support for the resellers account. If you have any problem with a preflashed drive, please contact your reseller.* 

*– Any accident ? Data lost ? Damaged hardware ? Please contact your reseller. Thanks for your understanding.* 

Some time ago i bought one of these very low cost USB floppy emulator from ebay to play some ADF files on my Amiga. Unfortunately these drives was unable to support/emulate the Amiga sectors encoding scheme and couldn't work on Amiga computers... But now all of this is past...



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_2.jpg)

After some hours of coding the the Gotek firmware can now be replaced by an Amiga compatible firmware. This firmware allows to load any ADF file present on the USB key and play it on the Amiga !

A special boot ADF file allows to select the game or demo to start.

The Gotek Floppy emulator working on an Amiga 600 running the State Of The Art Demo :

Gotek floppy emulator as Amiga Floppy Drive !



Actual main features of this firmware :

- Read & Write 880KB ADF Files.
- USB Key support.
- FAT12, FAT16 & FAT32 support, Subfolder support.
- Amiga software to select the ADF files on the USB key.
- Tested on A500 & A600. Should work on all Amiga.

## HOW TO USE IT ?

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This is quite simple : You have just to copy all your favourite ADF files on the USB Key.

On the Amiga you can select the ADF files thanks to a special ADF file (SELECTOR.ADF). Once done the Amiga restart on the first image selected. In the actual version you can select up to <del>30</del> 999 images (position 001 up to <del>030</del> 999 on the 7-segments display). By this way multi-disks games can be played without problem.

The 7-segments display on the emulator shows the actual disk number selected. You can change the disk with the two buttons present on the front of the emulator.

To start again the special ADF you have just to select the position "000" and restart your Amiga. The menu appears in less than 10 seconds. In the software you can use the joystick or the arrows + enter at the keyboard to choose the images and save the selection.

## WHERE TO GET THIS EMULATOR ?

The Gotek floppy emulators can be found everywhere. Since all Gotek drives are based on the same hardware, any version should be compatible.

For reference i got the drive for 24.5Euros/33\$ (Shipping included) on Ebay (<u>Link to the Ebay page here</u> (<u>http://www.ebay.com/itm/NEW-3-5-Floppy-Disk-Drive-to-USB-emulator-Simulation-1-44MB-for-Musical-/251360060639</u>)

I also bought a different model, without the 7- segments display & buttons from another place to check if there is some differences. There is no difference and the firmware is working on both models without any modification.

## OK I HAVE THE EMULATOR, HOW TO « TRANSFORM » IT ?

To do this you need :

- Any serial RS232<3.3V TTL adapter or USB to serial cable. I used an FTDI TTL-232R-3V3, but anything providing a 3,3V signal level is ok. TX & RX support is enough to reflash the MCU (no hardware handshake needed). (Some places to get this kind of cable : <u>https://www.adafruit.com/products/954</u> (<u>https://www.adafruit.com/products/954</u>), ebay 1 (<u>http://www.ebay.com/itm/USB-TTL-Adapter-with-Cables-3-3V-5V-Dual-Voltage-Prolific-PL2303HX-Chip-/180987191148</u>), ebay 2 (<u>http://www.ebay.com/itm/USB-auf-RS232-TTL-UART-PL2303HX-Konverter-Adapter-Kabel-CP12005-F44-/271361620831</u>))
   (EDIT : Since the STM32 serial port pins are 5V tolerant, a 5V version of the cable/adapter should be fine too.)
- The STMicroelectonics Flash loader software : <u>stsw-mcu005.zip (Click on the download button)</u> (<u>http://www.st.com/web/en/catalog/tools/PF257525</u>)</u>
- The new firmware HEX file : <u>cortexamigafloppyemulator\_v105a.docx</u> (<u>https://cortexamigafloppydrive.files.wordpress.com/2014/03/cortexamigafloppyemulator\_v105a.docx</u>) (Change the file extension .docx to .zip !)

The progamming port can be found at the rear of the emulator. Most of time you don't even need to open it :



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/prgcnts21.jpg)

Here is the list of connections to do :

- Connect BOOT0 to 3.3V : This will put the device in programming mode at power up.
- Connect TX to the RX wire of the 3.3V serial cable.
- Connect RX to the TX wire of the 3.3V serial cable.
- Connect VSS to the ground wire of the serial cable.
- Connect the 5V to a 5V source. I just used the 5V coming from the FTDI cable.

Note: The above picture shows you the actual pinout of the programming port, not where to plug the wires: Don't forget to cross connect the TX and RX lines between the adapter and the usb drive (adapter TX on USB drive RX and adapter RX on USB drive TX).



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/progwconnect.jpg) Once done, connect the cable to the computer and start the "Flash Loader Demo" software.

🎓 Flash Loader Demonstrator	
STMicroelectronics	
Select the communication port and set settings, the connection. Common for all families © UART Port Name COM4  Parity Baud Rate 115200  Echo Data Bits 8  Timeout(s)	en click next to open
Back Next	Cancel Close

(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl1.jpg) Select the right COM port and press Next.

NOTE (26/02/14) : If you have some difficulties to make the connection between the device and the software, you can try to issue a reset to the emulator. To do this connect during 1 second the « RST » signal (present at the right of the RX signal) to the ground. Don't disconnect the RX/TX & Power wires during this operation. Once done start again the software.

Also to make sure that your serial adapter is working correctly, you can try a loopback test : use a terminal software and connect the rx & tx wires of the adapter together : if you get an echo of what you send to the terminal, the loopback test is working !

If the connection to the device is working you will get this screen :

rator		_ 🗆 🗙
electron	ics	
you click "Remo II data will be lost	ve Protection" the flas	h will be
in adra win periose.		
	Remove	protection
Next	Cancel	Close
	you click "Remo Il data will be lost.	Plectronics Pour click "Remove Protection" the flass Il data will be lost. Remove Next Cancel

(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl2.jpg)

Since the Gotek firmware is protected against the read, the software ask you to remove the protections. This will erase the flash and the firmware shipped with the device will be lost. Please note that this operation cannot be reverted !

## Press "Remove Protection"



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl3.jpg) Press « OK »



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl4.jpg) Press "Next".

STN	licroele	ctronic	s	
Please, select ;	your device in the	target list		
Target S	TM32_Connectiv	/ity-line_128K		-
PID (h)	418			
Version [2	2			
Flash mapping				
Name	Start address	End address	Size	R W 🔺
Sector Page0	0x 8000000	0x 80007FF	0x800 (2K)	66
🔷 Page1	0x 8000800	0x 8000FFF	0x800 (2K)	66
🎭 Page2	0x 8001000	0x 80017FF	0x800 (2K)	66
🎭 Page3	0x 8001800	0x 8001FFF	0x800 (2K)	66
🔦 Page4	0x 8002000	0x 80027FF	0x800 (2K)	66
👒 Page5	0x 8002800	0x 8002FFF	0x800 (2K)	66
🎭 Page6	0x 8003000	0x 80037FF	0x800 (2K)	66
👒 Page7	0x 8003800	0x 8003FFF	0x800 (2K)	66
🛸 Page8	0x 8004000	0x 80047FF	0x800 (2K)	66
Appendix Page 9	0x 8004800	0x 8004FFF	0x800 (2K)	66
Page10	0x 8005000	0x 80057FF	0x800 (2K)	66
Page11	0x 8005800	0x 8005FFF	0x800 (2K)	
Legend :	🛅 Prote	cted [	UnProtected	1
	Back	Next	Cancel	Close

(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl5.jpg) Press "Next".

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<u>(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl6.jpg)</u> Select the firmware HEX file and correct the settings according to this screenshot (if needed).

Then press "Next" -> The flash process begin (Take 1/2 minutes).



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/fl10s.jpg)

Once you got this last window, the device is ready : You can disconnect all wires and connect the emulator into your Amiga.

Don't forget to move the jumper to the « S0 » position to replace DF0.

## BUT HOW THIS IS POSSIBLE ? TELL ME MORE ! WHAT IS INSIDE THESE DRIVES ?

The Gotek drives use a powerful Cortex ARM based STM32 MCU working at 72Mhz with lots of timers with DMA support, which make the job somewhat easy. For instance, this MCU only need 0.5 ms (500us) to MFM-encode an Amiga sector, with all the parity checksums computation. DMA and timers are used to stream out the MFM flux so almost no MCU time is used for this task. The MCU is free to do others job in the same time (prepare the next sector). Thanks to this, all is done in realtime and no extra buffer is needed to precompute/generate the track.

The write process also use DMA and a timer block to capture the incoming flux. Once captured some functions find the sectors into the flux, decode and check the sectors (parity checking) and write back the data to the ADF on the USB stick (if the parity is good ).

As many ARM based MCU this one have a bootloader in ROM allowing the Flash programming through various interfaces, which make this project possible.

Regarding the firmware, less than the half of the Flash space is actually used.

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(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_usb\_floppy\_emulator\_schematic\_resized1.jpg) FULL RESOLUTION SCHEMATIC HERE.

(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_usb\_floppy\_emulator\_schematic1.jpg)

PCB – TOP side



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_pcb\_top\_resized.jpg) FULL RESOLUTION TOP PCB HERE.

(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_pcb\_top.jpg)

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## PCB – BOTTOM side



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_pcb\_bottom\_resized.jpg) FULL RESOLUTION BOTTOM PCB HERE. (https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_pcb\_bottom.jpg)

Inside the BOX :



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_inside\_resized.jpg)
FULL RESOLUTION HERE. (https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_inside.jpg)

As you can see there is a lot of possible further hardware and software development with these devices !

## **I WANT TO SEE THE DRIVE WORKING !**

Ok, here is some pictures :

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(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_1.jpg)



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_3.jpg)



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_4.jpg)



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_5.jpg)



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_6b.jpg)

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(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_11.jpg)



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_12.jpg)



(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_ide\_hdd.jpg) A USB Stick is not enough ? Then go for a IDE/SATA Hard Disk

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(https://cortexamigafloppydrive.files.wordpress.com/2014/02/gotek\_a600\_cf\_adapter.jpg) SD Card ? , Compact Flash ?, xD card ?, MS card ? -> Just use the right adapter !

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(https://cortexamigafloppydrive.files.wordpress.com/2014/03/gotek\_cpc\_1.jpg)
Work in progress

## DOWNLOAD

– The STMicroelectonics Flash loader software : <u>stsw-mcu005.zip</u> (<u>http://www.st.com/web/en/catalog/tools/PF257525</u>)

– The new firmware HEX file : <u>cortexamigafloppyemulator\_v105a.docx</u>

(https://cortexamigafloppydrive.files.wordpress.com/2014/03/cortexamigafloppyemulator\_v105a.docx) (Change the file extension .docx to .zip !)

1.0a – Initial release

1.01a 2K14/02/15 – Interrupts priorities changed, I/O latency reduced -> Better stability.

1.02a 2K14/02/15 – I/O latency reduced (again).

1.03a 2K14/03/02 – Up to 999 images pre-selection support, some graphicals glitches corrected, keyboard delay is now timer driven, Amiga MFM encoding corrected, Index timing corrected, track length corrected, disk change delay set to 4seconds, Firmware version printed at startup.

Note :Both selector.adf and firmware need to be updated !

1.04a 2K14/03/05 – 2 digits/74HC164 based 7 segments display support added. 4 seconds disk change delay disabled at power up and at the selector exit.

1.04b 2K14/03/08 Selector.adf update : Floppy Emulator auto-detection : Can now control the emulator on DF0/DF1/DF2/DF3...

1.05a 2K14/03/30 Selection problem with fast machines corrected, archive flag issue corrected, Spurious track step workaround added, Fast forward image selection : keep the button pressed to speed up the increment/decrement. Press both buttons to jump to the selector.adf / « 000 » image.

H.M

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Vous pouvez la mettre en favoris avec ce permalien.

## 847 réflexions sur "*Transform the Gotek Floppy Emulator into an Amiga Floppy emulator*"

## oissery | <u>30 mai 2014 à 17 h 18 min</u>

To complete my previous post, i have read again some comments. My problem is maybe linked to issues for copying or formating disks but i m not sure. My dump of the ram seems to be corrupted after being copied to a blank disk formated with the gotek.

## <u>Répondre</u>

## xAD of Nightfall | 2 juin 2014 à 13 h 23 min

Short review and Test of the Gotek (Cortex) USB Floppy Disk Drive Emulator.

http://www.nightfallcrew.com/01/06/2014/gotek-cortex-usb-floppy-disk-drive-emulator/

Thanks Herve Messinger you have made a nice works!

## <u>Répondre</u>

## Daniel Martinho (@camurso\_) | 2 juin 2014 à 15 h 37 min

Hi guys, I have a question. What must I do in order to play a 2 disk game that only works using df0? I mean, Armour-Geddon is a 2 disk game and it asks for disk 2 and only uses df0. How can I switch disks whitout having to reboot the Amiga?

## <u>Répondre</u>

## Solo761 | <u>3 juin 2014 à 13 h 58 min</u>

That's what buttons on the front are for. With selector app set adf 1 to i.e. slot 1, and adf 2 to slot 2, save and reboot, now when game asks for floppy two press the button until there's 2 on LCD display (or whatever slot you set adf 2 to be) and gotek will switch to that ADF.

## <u>Répondre</u>

Mark | <u>12 octobre 2014 à 20 h 19 min</u>

Hey guys I came here to ask the exact question as Daniel except I'm already doing this solution with no luck. I've tried with many multi-disk games but when I switch to the next position for disk 2 I hit the « Retry » dialogue over and over but it never detects the switch of disks. I can boot fine on any selector number it's just the in-game disk swap that doesn't seem to register.

## Daniel Martinho | 8 janvier 2015 à 16 h 36 min

In Goal! That does not work.

I tryed all available TOSEC versions and when the game asks me for disk 2 I change it but nothing happens...

## FalloutBoy | 2 juin 2014 à 16 h 34 min

Hi, I'm having problems reading the entry system for your site but here goes. Firstly I hope I'm not posting this twice – 2ndly Keep up the good work Some questions 1) Is there any free code space left on the m3 with your firmware? 2) have you considered replacing the display board with an LCD that displays the current image name selected? (thought for future hack project) 3) By the looks of it your firmware doesn't need the 999 partitions created on the USB drive is that correct? 4) when you flash the firmware are you using a USB to serial converter or can a simple serial cable (apart from the 3.3v issue) be used? Cheers in advance.

**Répondre** 

## Morebits | <u>3 juin 2014 à 20 h 07 min</u>

Is it possible to somehow create a much larger .adf file that could be used like a hard drive for storing and accessing more files on the amiga? I realize this would be quite slow, but it would be especially handy for transferring files to an amiga with a scsi hard disk rather than floppy by floppy, or Zip drive, or serial transfer.

## <u>Répondre</u>

## AmiFan | <u>4 juin 2014 à 8 h 50 min</u>

Welcome. During start-up pops sys:SELECTOR Program failed (error 80000003) I have PPC and kick3.9 when you turn off PPC its ok. How to fix it?

## <u>Répondre</u>

## tomsetomse | 5 juin 2014 à 14 h 48 min

Try installing the newest 68060 or 68040 libraries to the disk. The selector disk works fine on my csppc without any changes.

## <u>Répondre</u>

## HiBit | <u>4 juin 2014 à 18 h 10 min</u>

At first: Thanks man this is a revolution. It's great to stop handling the old disks.

Wishes for your project:

Is it possible to edit the content of the selector « offline » on my USB stick and @ my pc?

I found the ADFs listet in the SELECTOR.ADF but i don't unterstand how to add and/or sort the content with an hex editor.

I ask because it's very slow to scroll hundred of adf files up and down and add them to the list.

Really great would be if anyone can write an editor for Windows oder Linux. Or if all the content is stored in an readable and writeable format.

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Also it would be great if we can select files by pressing the a letter on the keyboard. I mean if i press w the SELECTOR.ADF goes to the first ADF with « w », if i press a it goes to the first ADF with « a » and so on.

Regards, HiBit

PS: Sorry for my bad english

## <u>Répondre</u>

## Emiliano | <u>5 juin 2014 à 15 h 19 min</u>

Hi, very great job for Amiga... any news about CPC version?

## <u>Répondre</u>

## arvenius | <u>5 juin 2014 à 16 h 23 min</u>

love this project. any updates on the ETA of the atari st firmware?

## <u>Répondre</u>

## <u>Sajdor | 5 juin 2014 à 18 h 15 min</u>

Hello

I have Clean Amiga 600 with Gotek Floppy Emulator. Kickstart 37.300 and... When i try to run demo « State of the Art » i have only WHITE screen and loading forever Same with game « SuperFrog » after CRYSTAL demoscene, i've got RED screen and nothing i can do ...

gotek version 1.05a using Sandisc Cruze 4GB /FAT32 (same problems with FAT16)

other games works fine ...

## <u>Répondre</u>

## e5frog | 9 juin 2014 à 10 h 34 min

Do these games work with a plain drive? It's possible they may not work on a A600 at all.

## <u>Répondre</u>

## ferix | 9 juin 2014 à 15 h 31 min

Hmm... Same configuration here, and It works. Can you check your ADF images? Have you tried another USB device?

## <u>Répondre</u>

## af0l | 16 juin 2014 à 10 h 01 min

I have a clean Amiga 600 and \*nothing\* works for me... You should consider yourself lucky

## <u>Répondre</u>

## <u>af0l | 17 juin 2014 à 16 h 42 min</u>

Eh, a serious case of RTFM for me... I « forgot » to move the jumper, everything works splendid now... A big thank you to the author!

#### riptide666 | 10 juin 2014 à 21 h 40 min

Hi, I'm having an issue my newly flashed drive, selector starts to load gets to init DF0 then shows Cortex FE init error. Jumper is set to S0 and I have tried numerous flash drives/cards/adapters but the same response every time. Selector adf is visible under workbench when booted from HDD.

## <u>Répondre</u>

## ferix | 12 juin 2014 à 8 h 42 min

Hmmm... It sounds like you're using a bad firmware and selector image combination.

Please, ensure you're using the right selector image (just the one that comes with the firmware file you've put into the gotek emulator).

I've also noted that the firmware sometimes get confused and tends to use « erased » files even if you've created a new one (fat implementation bug?), so I always do a proper cleaning when I need to reformat the USB drive (just writing ones (0xFF) to the entire drive or partition).

## <u>Répondre</u>

#### Adrian Chiang | 16 juin 2014 à 10 h 50 min

I have a question... If I booted up from a HDD (CF actually) and had the GOTEK with v1.05a installed. How do I go about selecting the disks?

#### <u>Répondre</u>

#### tomse | <u>19 juin 2014 à 18 h 34 min</u>

Press the 2 buttons on the GOTEK, one is next image, and one is previous image. after using the selector disk ofc. for more info, read the original post.

## <u>Répondre</u>

#### solo761 | 19 juin 2014 à 18 h 49 min

You go to 000 on gotek to mount SELECTOR.ADF and run selector from workbench. It works fine. Only downside is that it doesn't have exit function so when you finish selecting ADFs you'll have to choose save & reboot option as usual and that will reboot amiga.

## <u>Répondre</u>

#### Ikonsgr | <u>16 juin 2014 à 17 h 16 min</u>

For anyone who might want this:

I tried an adapter for using the gotek with the external floppy drive connector of an amiga 500. You can find the pinout here:

http://www.ianstedman.co.uk/Amiga/designs/Floppy\_Adaptor\_V2/floppy\_adaptor\_v2.html

And maybe if you don't connect any of the sel1,sel2,sel3 signals and jumper gotek as ds0,it might be possible to have the gotek work like « internal » drive through the external drive connector!

This way you will have gotek as df0 without needing to open you amiga at all!

## <u>Répondre</u>

#### e5frog | 19 juin 2014 à 18 h 28 min

I don't think the signal for df0 goes to the external port, you have to change the sel-signals on the IC. One suggestion is to move all one step so you'll have df1 as df0, df2 turns to df1, then you'll have your df0 externally.

## <u>Répondre</u>

## Amiga Boss | <u>17 juin 2014 à 14 h 02 min</u>

Ciao, I really would like to donate some bucks for beer to you! How can i do ? —

IASBDM

## <u>Répondre</u>

## e5frog | 19 juin 2014 à 18 h 33 min

I tried as well, but he explained he'd get in trouble and need to pay tax so he didn't want anything. I think he could open an American PayPal account and we could send some money there.

## <u>Répondre</u>

## tomse | 19 juin 2014 à 18 h 38 min

The question has been asked before by other friendly people, and the answer from Herve was something like this: due to some government things he'd have to pay taxes from your gifts. So he'd perfer not. Though I can't remember if it's possible to buy as a gift on Amazon. That would be a nice alternative.

## <u>Répondre</u>

## Rene | 19 juin 2014 à 1 h 59 min

Hello guys, i'm Renix from http://www.retronia.cl - Chile

Do you know the real differences between 720K and 1.44M Gotek Floppy emulator versions...

Nice job with this firmware...

Bests,

René

## **Répondre**

## tomse | 19 juin 2014 à 18 h 32 min

The preinstalled firmware is the difference. behind all their splendor, they're all the same. except some have 27segment LEDs, and some have 37segment LEDs.

## <u>Répondre</u>

## Vicente Jose Gimeno Franco | 22 juin 2014 à 21 h 39 min

Hi, I have just received as a gift one Floppy emulator, the board is this:

Is this floppy compatible with the firmware? The drive has 2 digits only, but i don't know if it is hardware based on Gotek drives. I didn't find so much info about pinout, only this: <u>http://www.ipcas.com/download/products/usb-floppy/usb-floppy-emulator-v2-and-slimline-manual\_v1.4.pdf</u>

Seems like this one, but motherboard is not the same, but pin headers looks like the red one.

Can somebody help me with this?

Thanks!

## <u>Répondre</u>

## tomse | 27 juin 2014 à 15 h 37 min

The chip doesn't look like it's the same, so quick answer is no, it's not compatible as it is. But with a compiler and the source code it can be.

## <u>Répondre</u>

## e5frog | 27 juin 2014 à 16 h 52 min

Looks like it's using some other processor – which means you can't use this firmware.

## <u>Répondre</u>

## GV | <u>28 juin 2014 à 18 h 45 min</u>

Hello,

It appears that your USB>TTL cable has 6 wires.

Is a USB>TTL cable with 4 wires like in the link below good enough aswell?

Or will it then be missing the 3.3V for the upper pins? Or is the 5V > 3.3V convertion done on the drive pcb already?

http://www.aliexpress.com/item/F04879-New-PL2303HX-USB-Transfer-to-TTL-RS232-Serial-Port-Adapter-Cable-Module-PL2303-Console-Recovery/1734869563.html

## <u>Répondre</u>

## Deeko | <u>29 juin 2014 à 13 h 43 min</u>

## Hi

Can someone pleased advise on which windows driver version is best for the TTL adapter? I have tried a few versions and only get 'unrecognized device – please reset your device and try again'. I have tried resetting the emulator by shorting RST and ground as advised. I have since found out there may be a driver issue with the STM software. I am using the following adapter:

http://www.amazon.co.uk/gp/product/B00F26T9AO/ref=oh\_details\_003\_s00\_i00?ie=UTF8&psc=1

Any help would be appreciated!

## <u>Répondre</u>

## Daniel Martinho (@camurso\_) | 30 juin 2014 à 14 h 33 min

Anyone tryed to create a save disk in order to use it on Sensible World Of Soccer? I downloaded a adf file called blank\_disk. Entered the game, formated the disk, create a save file and saved it on the blank disk.

After rebooting the Amiga, I try to load the game and get an error saying the disk isn't recoginzed as a save data disk...

## <u>Répondre</u>

## Tryphon | <u>30 juin 2014 à 17 h 52 min</u>

Hello,

I have a working Gotek flashed drive with the last firmware. Thnak you for this amazing work.

I can clearly get and reproduce a conflict between the Gotek drive and the X-Surf 100 (or the Roadshow software).

When I plug the Gotek drive, the X-Surf 100 cannot connect to the network. If I unplug the Gotek, the local network connection is ok.

I don't see the relation between an emulated floppy drive and my network card (or Roadshow, I don't know where is this conflict exactly) and I don't know what to do.

Any idea ?

Thank you.

A2000 rev 6.2, Kickstart 3.1, 2 MB chip RAM, TekMagic 060, 128 MB, Picasso IV X-Surf 100 OS 3.9+Roadshow 1.11,

## <u>Répondre</u>

## <u>ferix | 4 juillet 2014 à 11 h 59 min</u>

It looks to me like a power issue. Too noisy power supply, or too weak.

## <u>Répondre</u>

## Tryphon | <u>9 juillet 2014 à 2 h 36 min</u>

Thanks to Jens Schönfeld, I replaced the 040 driver by the 020 one and this issue went away. I recently changed the power supply with a 400 W one. Thank you.

## mckrisbo | 5 juillet 2014 à 16 h 24 min

Hi. Did anyone know if a version of this could be adapted to get these floppy emulator working with an Ensoniq EPS sampler? They use an 800K DD floppy.

Thanks,

Kris

## <u>Répondre</u>

## <u>mckrisbo</u> | <u>6 juillet 2014 à 11 h 36 min</u>

The floppy format is 80/2/10×512 if that helps.

## <u>Répondre</u>

## tomse | 6 juillet 2014 à 12 h 13 min

Well seing that Herve made it possible, to use for the Amiga, it should very well be possible, to use for any machine, that use the Shugart interface.

## mckrisbo | 6 juillet 2014 à 12 h 27 min

Gee I hope so. There would be a whole swag of guys using these machines who would be his greatest fan if he could. How do I ask him directly in case he doesn't see my comment?

## hervemessinger | 6 juillet 2014 à 12 h 44 min

i don't have any ensoniq here to try. do i really need to work on this ? i have see some others solutions after a quick googling.

## mckrisbo | 6 juillet 2014 à 12 h 29 min

Didn't realise that both the Amiga and the Ensoniq use Shugart interface. Could it possibly work just like this if I use a Windows 98 tool to format the partitions correctly?

#### hervemessinger | 6 juillet 2014 à 12 h 45 min

no.

#### mckrisbo | 6 juillet 2014 à 12 h 51 min

I did find two solutions in my search for info but only in the form of far more expensive floppy emulators. I'd be happy to test for you!

#### hervemessinger | 6 juillet 2014 à 13 h 02 min

well, it still lot of work to do on the write support side to make it reliable, so this may take a while.

#### mckrisbo | 6 juillet 2014 à 13 h 06 min

Don't stress out about it. If it's something you'd like to do, I'd be your biggest fan. If not, that's fine too. I won't hate

#### Solo761 | <u>7 juillet 2014 à 8 h 13 min</u>

Wouldn't it be possible to use gotek as is with ensoniq? Using gotek tool to transfer it's floppies to USB partitions and so on?

#### <u>Répondre</u>

#### tomse | 7 juillet 2014 à 11 h 33 min

probably.. I don't know what the ensoniq is, but look at what it supports. if it supports ms-dos disks then most likely.

#### HiBit | <u>11 juillet 2014 à 16 h 14 min</u>

Look @ Ebay, there are ensoniq compatible gotek drives.

#### MANU | <u>6 juillet 2014 à 17 h 28 min</u>

It's hollidays but here some photos of my Amiga 500, Atari 1040 STe and Amstrad CPC 6128 with the Gotek.

## <u>Répondre</u>

#### Frank | <u>6 juillet 2014 à 20 h 40 min</u>

@manu: nice work... but is this work only building the floppy in the machines? ...or can you load (and perhaps save) on the AtariST and the CPC? If you can load diskimages, please let us know, how you managed that...

BR

ForD68

## <u>Répondre</u>

## MANU | 7 juillet 2014 à 11 h 17 min

Of course the Atari and Amstrad need to be flashed with the future firwmares.

## svenluebke | 7 juillet 2014 à 11 h 26 min

Hallo Herve!

I bought the Gotek emulator as well. Thank you for your good work!

I even started to develop on this hardware just for fun. Did you get the I2C interface of the display working via bit banging or using the I2C interface of the STM32 ? I tried latter, but the I2C seems to stay busy. According to the datasheet of the TM1651, the protocol is not completely compatible to I2C (i.e. no address byte should be sent). Is this, what you found out?

Thanks for your information and best regards, Sven

## <u>Répondre</u>

## svenluebke | 11 juillet 2014 à 15 h 03 min

OK, in case somebody is interested in this topic: Gotek swapped the SDA and the SCL pins of the I2C which doesn't allow to use the STM32 internal interface. According to the schematics, even the pull-ups seem to be missing. So the only solution is two fix these two small bugs (I2C signal swapping is possible without soldering, pull-ups can be easily soldered to the small PCB of the 3-digit LED display) or do bit-banging like Gotek or Herve did it...

## <u>Répondre</u>

## hervemessinger | 13 juillet 2014 à 14 h 00 min

In fact this is not an i2c device. these display chip use an pseudo i2c protocol.

## oregister@gmail.com | <u>13 juillet 2014 à 13 h 52 min</u>

Is there any chance that Gotek will get a IBM PC compatible firmware that doesn't suck? I would like something similar to Amiga firmware but for PC.

## <u>Répondre</u>

## hervemessinger | 13 juillet 2014 à 13 h 55 min

?

Look at ebay there is zillion pc compatible gotek models. do i miss something?

## <u>Répondre</u>

## Chris Hardee | 15 juillet 2014 à 1 h 25 min

Hi there, is there anyway to reset the memory on the cortex drive? I loaded in a disk image and set it to disk 03 but now it won't load and the buttons are unresponsive. I believe I loaded in an image with too many characters or something, I'm not sure

## <u>Répondre</u>

## Chris Hardee | 15 juillet 2014 à 1 h 41 min

Never mind I figured it out, you write the memory to the Selector.adf so if one deletes that from the usb stick and uploads a fresh copy, everything goes back to normal.

## <u>Répondre</u>

## e5frog | 15 juillet 2014 à 16 h 29 min

I'd replace the SELECTOR.adf first, that has crashed for me a few times, as well as the image that was causing it.

## <u>Répondre</u>

## Chris Hardee | 15 juillet 2014 à 5 h 04 min

Is there any reason why it wouldn't work on an Amiga 3000? When I save and reset it will just go to a black screen and freeze. Restarting will just lock the drive and the amiga will boot into workbench. It only goes back to normal when I delete and reupload the selector.adf

Frustrating.

## <u>Répondre</u>

## Sergio | 15 juillet 2014 à 21 h 30 min

I'm having a strange problem.

Flashed the unit without problems, put it on mi A600, booted and the selector appeared, but it's stuck where it says — Init DF0 —.

I've tried with 4 pendrives, 2Gb, 8Gb and 16Gb and two SD card readers, using fat or fat32.

The only one who works is the 16Gb one, but it only gets there, I can't select any file, it doesn't show anything besides that.

The boot disk is shown in workbench when the pendrive is inserted.

I've tried disabling all other units, with same results.

Any ideas?

## <u>Répondre</u>

## Sergio | 15 juillet 2014 à 22 h 26 min

Now tried with another one, an old 128Mb one, nothing happened, the same as the other ones except for the 16Gb one.

## <u>Répondre</u>

## Sergio | 16 juillet 2014 à 9 h 59 min

Aaaaand just bought another 8Gb usb drive, this one with an activity led.

The led keeps blinking while the selector says - Init DF0 -, so I think I'ts trying to read it but it can't for some reason still unknown to me.

## <u>Répondre</u>

## <u>Sergio</u> | <u>17 juillet 2014 à 12 h 56 min</u>

Forget about it, or maybe not.

The floppy emulator is working just fine right now.

The problem was a bad solder on my cia.

The strange thing is that the original disk drive worked just fine, but the gotek refused to work where the original one did.

<u>Répondre</u>

## <u>Олег Толкачев | 17 juillet 2014 à 10 h 00 min</u>

Hi, i reflash stm32 with usb cabel (male-male), by short Rx Tx pins using DfuSe\_Demo.

## <u>Répondre</u>

## Den24 | <u>19 juillet 2014 à 17 h 27 min</u>

Hi, I have a strange problem (New to this kinda stuff). I re-programmed a gotek drive with this firmware (the program said all is ok – done). I plugged up the drive as s0 via external drive cable to my Amiga 500 & turned on the machine, it reads the workbench disk off the internal floppy drive and once on the desktop i get this:

DF1:BAD RAM FloppyEmulator WorkBench1.3

I cant load the selector, adf, any help?

Thank-you in advance

<u>Répondre</u>

## Den24 | <u>20 juillet 2014 à 19 h 27 min</u>

Fixed.. i changed the jumper to s1 , Thank you anyway!

<u>Répondre</u>

## morebits | 21 juillet 2014 à 16 h 28 min

Is this still being actively updated? Can't wait for the Atari version.

## <u>Répondre</u>

## hervemessinger | 25 juillet 2014 à 7 h 44 min

Many people are doing shit with the firmware (-selling it on ebay, amibay and other commercial places) and don't get any respect at all for the work done here... I even got some insults from the one selling it on amibay... You should contact him directly for the future update since he seems to believe to own all the rights over the firmware...

i think that you understand that i am not very motivated to work for these peoples.

This is not the end of the project, but I have to found another way for it to avoid such abuse.

## <u>Répondre</u>

## Sergio | 25 juillet 2014 à 8 h 29 min

Maybe a form of registration for the firmware files?

Or maybe contacting the manufacturer and making an offer to work with them as there seems to be a huge demand for this disk drive along with your firmware.

This way, you can avoid these disrespecteful bunch if people can buy the drive already flashed from the manufacturer.

I have flashed units for my friends, but always for free, I don't think I have the right to sell something that isn't my work as others do and, in fact, I'm happy to « steal » some units that would be sold by them charging for a job that costs no more than 2€ for the programmer and 2 minutes of my time, I saw the thread on amibay and what he said about asking you for permission and it, in fact, did sound... well... not really good.

Also, I don't think anyone have the right to ask for more than all you have already done, it was a hobby project, you decide when to pause, when to resume your work and when to completely stop it, so... It all depends on you and your desire to keep giving your time to the community, I did it in the past, for the gamepark gp2x community and I can say it can become stressful.

I am really grateful, and not only me, a lot of people are, and they respect you and your work, I'm sure they will understand any decission you make about this.

You can even release the source code if you feel like it and let other people continue your work, make forks, alternative firmwares, alternative selectors...

You can do whatever you want, it's yours, your work, your decission.

But I can say that what you have already done, is more than enough, think about it, take your time and do whatever you feel you have to do.

But whatever it is, I can only say THANKS, from the bottom of my heart, from a neighbour from Spain that love what you did here.

## xAD of Nightfall | 25 juillet 2014 à 10 h 01 min

You are absolutely right about who sells your « firmware ».

I have also had problems in the past about these things, not completely resolved.

I advise you to put a warning in 4 different languages (English / German / French / Italian) with a RED background on bootup of your LOADER on Amiga and other computers (CPC/Atari).

Obviously trying to find an easy way because this cannot be changed.

Respect.

## lurbi | <u>25 juillet 2014 à 22 h 51 min</u>

Herve your work is VERY much appreciated!! I already bought an Atari 1040 STFM. And 2 days ago I bought a CPC 6128 (not yet here) I hope that you do not loose your enthusiasm. You have our full support!

## solo761 | 26 juillet 2014 à 13 h 35 min

I suspected that was the reason why there hasn't been any updates. And I completely understand, I've even saw them on ebay for 70+ euro. It would piss me off too. One gotek drive on ebay goes for 20-25\$, I would understand if someone adds 5\$ to that price and sell them preflashed. But what some people are doing is beyond words.

As I mentioned before one option could be to add warning text to selector to say if you paid more than 30\$ for it you've been ripped off as it's free. But I guess that would just make this kind of people to stay on older versions...

## Mark Payne | 15 octobre 2014 à 22 h 58 min

Hi Herve.

I want to say thank you for this wonderful work of coding. As a retro enthusiast I love all kinds of way that these systems can be preserved. I'm sorry that some people are greedy dicks and are profiteering from your work. I am in the process of making a video on my youtube channel showing how to flash and use your firmware and selector in an effort to take people away from the ebay/amibay scammers. I hope you find a way to continue work on your other system projects, but I support your decision either way 100%!

## porga | 31 octobre 2014 à 15 h 22 min

@hervemessinger As much I respect your work and knowledge, I must tell you that you do not have right to get angry about this. You made great work and published it without restriction. That means you did not expect anything in return, but praise.

However, when you found out that someone else makes money with the firmware that you programmed, that wasn't so pleasing for you?

There are lots of us who like « Do It Yourself – DIY » way. But others do not have skills and knowledge to do so, and want to buy preinstalled pieces. That is why they are ready to pay way more. If you wanted to earn money from this project you should (and still can) offer preinstalled version, here or on e-bay.

I do not know if you can charge firmware for the device which was never meant to be run on legally?

But, I have idea how you can charge for your work hours. Simply make a donation deposit box. Users who appreciate your work, and users who would like to see next firmware version will donate. When donation reaches specified amount you decide – you can publish next firmware version. Of course, nothing stops anyone to donate purely for the fact that he admires your work.

You could also add link to your page in the firmware (as some sort of water mark). So everyone will know where it comes from.

Those are my thoughts. I hope you will not drop down your support, for the sake of retro machine users, who simply like to use old machines. They are not guilty for actions of one or two morons.

## SMF | 22 juillet 2014 à 13 h 16 min

Is anyone using the cortex with an A500 rev 3?

I have som trouble with writing to disks with that combination.

I have no problem writing when a real diskdrive i connected to the internal floppy connector but the cortex fails most of the time. The behavior is just like it doesn't get the Write Enable signal so it behaves just like it's writing but nothing happends. When using the selector software it often writes nothing when saving or the filenames get scrambled.

This video about A1200 describes how it behaves pretty good. <u>https://www.youtube.com/watch?</u> <u>v=Uoi9VXIIGF0</u> but i must have that write enable signal since real floppy drives works.

The cortex is working good in two other amigas and one very strange thing is that writing on the cortex seems to work 100% if i have an real external floppydrive connected at the same time as the cortex.

<u>http://www.bigbookofamigahardware.com</u> has one thing to say about the rev 3 motherboards. « Very buggy, avoid if possible » and i can avoid using it but it would be fun if i could get it to work with the cortex without having the external drive connected.

## <u>Répondre</u>

## MANU | <u>26 juillet 2014 à 13 h 21 min</u>

Hi Hervé, I see you can't release the ST version because of people who makes easy money. That's a pain for you and everyone here at least. I hope there's a solution but I don't see one by myself. It would takes more than a simple hobby to control the project and it would also be not good for it's future. (stay a great device with open and free spirit, hundred of tools from Gotek fans) Sad!

Now there are more and more sellers, but I don't think they sell 30 Gotek's per day.

I'm pretty sure that many failed to flash the Gotek. Maybe it's there things could change.

2/26/2016

#### Transform the Gotek Floppy Emulator into an Amiga Floppy emulator – Cortex Amiga Floppy Emulator

Perhaps a website for true n00b that explain how to flash the Gotek with photos and youtube video, something really really crystal clear and avoid every technical words. And also where to buy for cheap the stuff with links that always refresh and with a 100% garanty to work (especially the USB adapter !). Explain how it's simpler to buy some dupont cables, pins etc. It should reduce tha lalala-bay traffic. Well it really need to be wrote by someone who isn't technical at all.

It became something easy to do only when it works, the Gotek can be a true bitch to flash otherwise. When the software (flasher) just freeze... It's really @X!!!fuuuuu

For exemple I found myself that if I didn't connect the 3,3V power pin from the USB flasher to Gotek (a n00b will understand) on that required « bridge » (where to buy a jumper, again!) that connect Boot0 and 3,3V pins together (clearness :p) it won't work at all.

From every photos or videos and forums I never see that. (I bought 3 differents adapters until I managed to make it work, I was stressy then :P)

## <u>Répondre</u>

## hervemessinger | 26 juillet 2014 à 17 h 32 min

>Hi Hervé, I see you can't release the ST version because of people who makes easy money. That's a pain for you and everyone here at least. I

>hope there's a solution but I don't see one by myself.

>It would takes more than a simple hobby to control the project and it would also be not good for it's future. (stay a great device with open and

>free spirit, hundred of tools from Gotek fans)

There is a solution -> Redirect all this money to my pocket . Serioulsy since some people are ready to pay 70 euros for this, i can sell it myself

>Now there are more and more sellers, but I don't think they sell 30 Gotek's per day. I count about 500 euros of gain per seller, and probably even more.

## <u>Répondre</u>

## José M. | <u>27 juillet 2014 à 13 h 17 min</u>

An idea to avoid these sellers:

You could keep your work putting a counter on the firmware and when you reach that counter (10 times on/off gotek?) stop working.

At practical effects this would not make sense to be sold.

Meanwhile the followers of this project could try and report errors, enjoy and have fun. In the future you could decide if release a version without restrictions.

## hervemessinger | 27 juillet 2014 à 21 h 46 min

yes i have got the same idea, but this is quite easy to hack/crack.

## e5frog | 27 juillet 2014 à 22 h 21 min

A built in counter would prevent people that doesn't understand it and can edit and recompile the code again from selling new versions. Intentional bugs could be added perhaps... It won't prevent people from selling what's already out there though, that ship has sailed. Offering something better at a lower price perhaps might be an idea, iron out all bugs, add new features – maybe ask people here for ideas how they would like to use it. I'm thinking work on selector and prevent files from being crashed (maybe automatically make a copy instead and work with the copy – if it's trashed the original is still unharmed on the card). I think that's the only real problem I've had, selector.adf getting trashed and have to recopy – I now keep a copy of selector.adf on the card just to be able to restore it easier.

## e5frog | 26 juillet 2014 à 18 h 46 min

You should sell these yourself, if the code can be protected – do so with the new firmware and only sell programmed drives or have a programming service. Maybe a selection of trusted beta testers as well to try out new things.

I think a lot of us would have loved to show our appreciation with money and many of us would have loved not having troubles programming, if someone that has good equipment does it all would have been a lot easier. So improve on software, sell new one only programmed into chips, then these opportunists can try selling the old version with it's known bugs and less good selector program (as you'd improve on that as well). You could have a few poeple doing this for you, if you don't want the work load yourself.

## <u>Répondre</u>

## hervemessinger | 27 juillet 2014 à 21 h 51 min

yes there is some good points here. let me think about it.

## <u>Répondre</u>

## Sergio | 28 juillet 2014 à 17 h 24 min

Is there any way to partially flash the firmware?

I've been thinking about this lately.

This way, you may be able to sell them pre-flashed and then release partial updates of the firmware, not the full thing, only the changes to be flashed by the users.

No one besides you would have the full firmware needed to flash the drive the first time, only partial updates, that would be useless if you don't have the fully flashed unit that, of course, they can only buy from you.

To avoid leaving behind people who already have flashed their unit with current firmwares, a « full flashing » service should be offered too.

This way, we can send the drive to you to flash the new full version of the firmware and then, we can flash the updates by ourselves.

As I said before, you should think about selling them directly, with new and improved versions of the firmware, somehow incompatible with the current ones, made to support the partial updates that would be incompatible with old versions of the firmware.

## Sergio | 28 juillet 2014 à 17 h 41 min

Thinking further.

You can have a part of the firmware that always stays the same, that would NEVER be given with the partial updates.

This part can be anything, even some data that does nothing, or only acts as a « keyfile », but needed to make it work, making the firmware check if this part is present, maybe checking if there is a certain string written in a certain point of the flash memory.

This way, no matter how many updates you release, no one could be able to take bits from these updates to assemble a full firmware.

## john | <u>29 juillet 2014 à 12 h 47 min</u>

just sue the french guy on AmiBay for selling your work. and report him to the tax office.

## hervemessinger | 2 août 2014 à 14 h 28 min

very tempting... but i still hope that i will not have to do this.

#### lurbi | <u>22 août 2014 à 9 h 55 min</u>

## Hi Herve

I hope that you will make a CPC and Atari ST version. Could you maybe give an insight what the outcome of your thinking was?

I really hope that you will not give up this project!

## hervemessinger | 23 août 2014 à 8 h 17 min

https://cortexamigafloppydrive.wordpress.com/2014/02/03/transform-the-gotek-floppy-emulator-intoan-amiga-floppy-emulator/comment-page-5/#comment-775

## Brotboxfan | 28 juillet 2014 à 7 h 28 min

Hi herve, I think you need a registration like whdload. You did a good job and you should get your part of the selling. It is difficult to find a way against hackers and profiteers.

## <u>Répondre</u>

## Luzie | <u>28 juillet 2014 à 14 h 02 min</u>

> and you should get your part of the selling.

If I understand Herve right, he doesn't want anything for his work. And when it get to « selling » he too doesn't want this because then he have to pay taxes etc.!

What can be most helpful with this is to right to those sellers and point out that they are killing future updates of this project with their offers.

Luzie

## <u>Répondre</u>

## EvilCensor | 29 juillet 2014 à 23 h 46 min

Those users having trouble trying to flash a Gotek USB drive with the Cortex firmware replacement using a (Prolific) PL2303HX USB to RS232 TTL should lower Baud, not use Windows 8.1 and probably most importantly use a USB 2.0 port (not a hub or USB 3.0 – which seemed to be my problem). Also take time to check the circuit board – found a fair amount of solder bridges on tracks.

Many thanks to the author of the new firmware - we need Amiga 1000 support!

## <u>Répondre</u>

## EvilCensor | 1 août 2014 à 7 h 34 min

On bootup – I get the starfield and tex display – but no firmware version is displayed and at the bottom of the screen it says « Emulator Not Found! » – this is on a US NTSC A500 Kickstart 1.2 with only 512kb RAM.. anyone have any suggestions?

## <u>Répondre</u>

## EvilCensor | <u>1 août 2014 à 21 h 52 min</u>

Yes, Jumper is on S0, SELECTOR.ADF on USB key and other ADFs are on the key also – with no limited access permissions.. suggestions welcome

## <u>e5frog</u> | <u>2 août 2014 à 14 h 58 min</u>

I have a suggestion, try another machine. Then hope and pray that Hervé wants to any more updates and try and fix it. How about swapping Kickstart and see if it helps, then add 512kB, perhaps it's not working under KS1.2...? Has anyone else used an old unexpanded NTSC A500 like this with this firmware?

## Rinku | <u>30 juillet 2014 à 19 h 40 min</u>

Thanks for such wonderful effort. I am not a very good programmer but want to replace a very old format . Can i download the code and give sectors and track info to read my floppy.

## <u>Répondre</u>

## Amibayer | <u>31 juillet 2014 à 9 h 29 min</u>

Many people would never use Gotek drives with your firmware in their Amigas because they simply have no idea how to inject your firmware in Gotek drives, even when they got step by step instructions. If Ltac did not sell them on amibay, I would have bought different emulator from Lotharek. I understand you are p\*\*\*ed off about sellers who sell Goteks for ridiculous money but Ltac's profit is just few Euros for all the work (ordering emulators, flashing emulators, packacking etc) and plenty of Amiga users are happy thank to him and of course, thank to you. How much Euros go into his pocket when he sells one Gotek unit for 31 Euros \*including\* shipping costs? You yourself state that regular Gotek emulator unit costs 27\$! He did a great service for retro computing enthusiastics just for few euros, it's like paying a friend couple of beers for his help. When Ltac does not offer them on amibay anymore, people will buy them from some parasite who make \*real\* profit out of your work and you are fool if you think you can stop them. And no, I am not Ltac or his friend.

## <u>Répondre</u>

## tomse | 2 août 2014 à 15 h 08 min

LTAC charges the same as most ppl selling this item on eBay that is around \$42, the price of a GOTEK drive with free shipping costs around \$29 and has done so for a very long time. The lowest price I've seen is down to \$19 with free shipping. Thats a huge income. But respectfully LTAC has changed his sales post to reflect that the drives will not be shipped with the firmware unless Hervé has accepted that sale to that individual.

When there is open source, there are always some people who'll try and exploit that. here's a good example: <u>http://www.ebay.com/itm/UFO-AI-Enemy-Unknown-Xcom-Type-Game-Software-Computer-Program-/121174032997?pt=AU\_PC\_Video\_Games\_Games&hash=item1c36890265</u>

this game can be downloaded from <u>http://ufoai.org/wiki/News</u>

Sorry that was a little off-topic.

@Hervé I think I mentioned this earlier, but the comments list is huge ;-P have you considdered making an <u>amazon.fr</u> wishlist of stuff? then people can buy you books, music etc as gifts. Is that legal there?

## <u>Répondre</u>

## hervemessinger | 2 août 2014 à 15 h 31 min

for sure (you can see it on some pictures) he is reselling stuff from i889900 twice the price : <u>http://www.ebay.fr/itm/3-5-1-44MB-USB-SSD-FLOPPY-DRIVE-EMULATOR-E100-0-Black-color-3-digits-Version-/231004353057?pt=UK\_Computing\_FloppyDiskDrives\_SM&hash=item35c8eeb221</u> 15 Euros

## hervemessinger | 2 août 2014 à 15 h 12 min

he is making profit from this. 1\$ or 100\$ of profit per device is the same : He take other people work to sell it without asking any permission, and without mentioning where he take the firmware.

And even more: this seller insult me and threaten me when i try ask some explanations.

To you and to all these sellers : take your wares and excuses and go away. This is not a commercial project and i didn't give the authorization to sell it. Your behaviour will just kill this project and probably many others free projects.

i don't need you and people don't too either. i already know that there are tons of commercials projects, this is just not the purpose of this one.

## <u>Répondre</u>

## <u>solo761</u> | <u>3 août 2014 à 13 h 21 min</u>

I have few questions for you. Why do you « bother » with retro computing if you're not going to learn some basic computer stuff? Why do you want to have some, let's say, advanced stuff on your retro computers if you're not willing to learn at least something about it? And using serial connection is rather basic

P.S.

So far I've bought three goteks, two are in my A500s and one was supposed to go to Atari 1040STFM. I paid around \$20 for each, that's around 15€. From where I live shipping (with tracking) to whole Europe would be around 6€. Bubble envelope is around 1€ if you buy it in post office, or 20 cents if you buy 10 packs in store, possibly even cheaper as I didn't exactly research the thing. Soft packing he got for free with his gotek, chinese seller shipped it that way. So, he probably earns 9-10 euros per piece. Not bad considering his biggest part of the effort is taking the package to post office and sending it...

## <u>Répondre</u>

## Crawford | 2 août 2014 à 0 h 08 min

Herve,

I've gotten this floppy emulator to work with old Dec PDP-11's. Do you think it would be possible to write a menu system for them? Would you consider releasing any of the source code for others to modify for other platforms?

Thanks, Crawford

## <u>Répondre</u>

## tomse | 2 août 2014 à 15 h 33 min

I've tested the gotek in an external drive enclosure. It works perfectly on an A1200, but the A500 causes problems. The list in the selector disk is messed up with weird signs for names. I've tried using Kick 3.1, 2.04 and 1.3

When using Kick 1.3 I've used Action Replay to boot to DF1

## <u>Répondre</u>

## EvilCensor | 2 août 2014 à 16 h 12 min

Swapped out a Kickstart 1.2 (which makes me sad) for a new-fangled 1.3 (yuck!) and still have the same issue – starfield, credits and « Emulator Not Found! ». As with Kickstart 1.2 when I try and perform any disk-ops with Action Replay 2 it just locks up the AR2.

If it truly is a firmware issue I hope the author can find and spend some of his precious time making this solution work with KS 1.2 and 512Kb.

As for the issue of people selling these drives on eBay – they should do the decent thing and send the author some royalties.

## <u>Répondre</u>

## EvilCensor | 2 août 2014 à 16 h 20 min

Placing it in an external enclosure and booting from that still gives the « Emulator Not Found! » message – sadly I don't have a memory expansion for the A500 so can't see if that's part of the issue.

## <u>Répondre</u>

## tomse | 2 août 2014 à 17 h 11 min

I tested mine with both AR2 and AR3 on an A500 with no mem expansion.. I have no problems getting into the selector screen other than when saving it'll make garbled file listing, so I need to add a new selector disk. this is tested with Kick1.3 on an A500 (can't say which revision motherboard sorry) Doing the same with mem expansion makes no difference.

Are you sure you're running the latest firmware and latest selector?

## <u>Répondre</u>

## EvilCensor | 2 août 2014 à 17 h 19 min

Hi, yes I am. Thanks for the info regarding the A500 memory – either I have a faulty Gotek (but it does boot up to the credits.. not sure if it would get that far if it was faulty).. or the 5 different USB keys and SD card to USB adapter and/or the 3 different SD cards I've tried aren't completely compatible.

I think the next step is to try it in my A2000.. I'm more of an A1000 and early A500 user though.

## e5frog | 2 août 2014 à 17 h 35 min

I've had that problem as well, I did all sorts of things and then it worked again, poor cables (reinsert a few times), re-download and reflash (in case something was wrong), glitching button on external housing etc etc.

Someone wrote earlier they had problems with Action Replay, try redoing everything from the beginning and see if there's still problems. There's a lot that can go wrong that has nothing to do with the firmware. Some USB-memory just won't work, try all you have, I use a pair of really cheap microSD USB readers, works fine. I had one or two USB memory sticks that wouldn't work but most of my units have.

## <u>Répondre</u>

## <u>e5frog</u> | <u>2 août 2014 à 17 h 38 min</u>

Remember to only use the selector.adf that came in the same package as the firmware you have flashed.

## Marcelo Pires | <u>2 août 2014 à 18 h 19 min</u>

I've seen a fair amount of people saying they can't flash the firmware, or have strange behaviour during use. So i want to share my experience:

Most of us are using cheap programmers, based on the prolific chipset. Most of these devices have « fake » chips, and i believe this is the problem.

In my case, i could only flash the firmware reliably if i set the COM port speed at 14kbps or less. As the firmware is small, this don't take too much time, and i never had problems with the emulator on any of my Amigas.

## tomse | 2 août 2014 à 17 h 42 min

sometimes the selector disk can cause problems.. so try copying it again to the USB drive

<u>Répondre</u>

## EvilCensor | 2 août 2014 à 17 h 52 min

Sadly I have tried all those things with the same result.. I will try it in an A2000 later and see if there is any difference.

## <u>e5frog | 2 août 2014 à 17 h 55 min</u>

Yes, I forgot about that detail, trashed adf-files and trashed selector.adf has happened to me along with the other problems a lot of times. Now I have a « copy of selector.adf » on the USB memory so I can quickly reset if it crashes.

## john | <u>3 août 2014 à 10 h 19 min</u>

i read that there are problems on v3 motherboard.

i cant find any schematics,

but i suspect it's something small like missing or added resistors on the floppy signals.

if you have time, get the schematics to the v6 or higher board and compare it to your amiga.

## <u>Répondre</u>

## Sergio | 18 août 2014 à 8 h 17 min

I have a rev 3 board and the emulator is working, but the first time, just after a power on, it throws me an error that says « - Cortex FE Init Error ! - »

I have to do a soft reset and then it works flawlessy.

But as I said, not before a soft reset, is not really annoying, but...

The problem is on the amiga, the same emulator works without problems in my A600 and A1200.

## Marcelo Pires | 2 août 2014 à 17 h 01 min

Herve, you may remember my comment, several months ago. I think i was the first one to offer you a donation to give you incentive to continue the development, and also to express my gratitude for your work. I still think you should receive some kind of payment for your work, as you really deserve it.

For everyone that says the people selling it are « helping » people that don't know how to do, i totally agree with Herve. You should go away with your lame excuses! I'm positive that a lot of these people that can't do live near someone who can, and would do this at no costs, or maybe at the postage costs.

Back on the money subject, Herve, i really recommend you that you do some research on receiving money, paying taxes to your government, or accepting gifts from a wishlist, as someone else suggested before.

Maybe you could start a kickstart project? If a fair amount of money (that you decide) is reached, you provide the source code for the firmwares. And you can do a kickstart project for each version, for each computer, or you can do only one for all of them. I don't know. These details you'll have to elaborate. But you have to find a way to get the money you deserve so much!!

I have the Lotarek emulator. I also have Atari STs and an Amstrad CPC, as well as lots of Amigas. They all work with the commercial solution available today, but i barely use the CPC or Atari ST, because i hate to use diskettes. Your solution is perfect, because it's simple, and affordable. I can have one for each computer, instead of having to share the Lotarek emulator among them, everytime i want to use them.

I will pay you money for continued development (at least until we have CPC and Atari ST, and maybe others, versions that are as good as the last Amiga version) of the firmware, as soon as you figure a way to receive it!! Thank you very much once again for the work you've done so far!

## <u>Répondre</u>

## EvilCensor | 2 août 2014 à 18 h 13 min

Okay works on my A2000 (8MB, KS2).. so at least I know the Gotek isn't at fault and the memory key is fine (at least for this Amiga).. wish I could have this working on my A500 and A1000.. they're the poor Amigas crying for an upgrade.

<u>Répondre</u>

## e5frog | 2 août 2014 à 20 h 57 min

Try reconnecting the cable a few times, in case there's oxidation. Do you know the revision of motherboard of your KS1.2 Amiga?

## <u>Répondre</u>

#### john | <u>3 août 2014 à 12 h 18 min</u>

o.k. i think i have a possible fix. some changes have been made on the a500 between r3 and r6. find a resistor called R305 and make sure it's 1k and not some lower value. then find resistor-array RP501 and make sure it's 10k and not 4k7

let us know if that fixes the problem.

## <u>Répondre</u>

#### EvilCensor | 7 août 2014 à 5 h 13 min

Revision 5 Board, R305 is 10 Ohms, RP501 is 10K Ohms. Not sure if I need to change anything.

#### extended adf | 19 décembre 2014 à 5 h 30 min

to all: Be also aware to connect the floppy power connector in the right way around on the amiga mainboard. it's not the same in A600 compared to A500 (it's swapped). if you connect the gotek with the 12V pin only once by mistake, it will destroy some logic IC on the gotek resulting in « gotek fe init error » every time. so before connecting, make sure you found the correct 5V pin on the amiga.

## <u>Répondre</u>

#### HvdAa | <u>3 août 2014 à 15 h 28 min</u>

@ H.M.

Congratulations on your achievement of creating a working floppy drive emulator for the Amiga. This initiative is much appreciated among the Amiga community. Good luck with future updates and/or projects.

Best Regards,

#### <u>Répondre</u>

#### jgilcas | <u>4 août 2014 à 17 h 54 min</u>

@H.M.

Thank you very much for the firmware you have done for Gotek Drive, I

Forget the people who takes advantage of the work without permission, unfortunately there are people like that everywhere.

If you release source code thanks and if you decide not to release it, thanks anyway.

Greetings.

## <u>Répondre</u>

## Salvo | 4 août 2014 à 22 h 21 min

Just did it. It worked flawlessly. One suggestion to people. Check the floppy cable , it must be inserted in the right direction or it won't work. Also don't forget to put the jumper on DS0. Out of 3 USB thumbdrives that I tried, only one worked. Thanks for your efforts and for this howto!

## **Répondre**

#### <u>mckrisbo</u> | <u>5 août 2014 à 12 h 00 min</u>

Out of interest, does anyone here happen to know where I can find the 720KB Gotek firmware? I purchased the 1.44MB thinking it was 1.44MB/720KB compatible.

#### <u>Répondre</u>

#### tomse | 6 août 2014 à 10 h 30 min

If you want the MSDOS firmware you might want to try and google it. or ask the vendor you bought it from. The firmware in the download link above is for the Amiga.

#### <u>Répondre</u>

#### Sergio | <u>18 août 2014 à 8 h 04 min</u>

The 1,44Mb version is compatible, in fact, is what I have, 3 of them.

#### <u>Répondre</u>

#### Bob | <u>5 août 2014 à 19 h 42 min</u>

@H.M. You rock!

#### <u>Répondre</u>

#### tomse | <u>6 août 2014 à 10 h 33 min</u>

@Hervé Of all the USB pendrives I've tried, the Kingston Datatraveler II DTI/1GB doesn't work. This one. <u>http://www.newegg.com/Product/Product.aspx?Item=N82E16820189033</u> perhaps you could make a matrix with which ones doesn't work and which ones work? (well ultimately fix the code so it'll work but thats an other matter )

## <u>Répondre</u>

## KaosOverride | 7 août 2014 à 9 h 42 min

H. M. great work, really

I'm sorry the situation that has formed around this issue, unfortunately always ends up happening either « raspberrys with MAME preconfigured », « DVDs with free software », « hard drives with 4,000 games installed » etc sold without permission or gain for the original authors.

I hope you find some way to mark or sign with any serial number each firmware and control the software. If the Cortex M3 had some kind of hardcoded serial number, you could use a « selector + key » system against that serial. All units will be able to be obtained from anywhere, but each will have to need a custom selector, by you...

If there is no hardcoded, you could generate firmware with serial numbers at certain offset of the firm, and selector.adf with your key and registration name encrypted with the unit serial, at the style of WHDLoad, which is displayed in the program selector the name / nick registered user. That would curb a little abuse of mass distribution.

On the other hand, I hope your work in the CPC (and the Atari, but I'm not user) reaches the public and we enjoy your effort.

In the meantime I'll have to continue with the original firmware Gotek 720kb and .DSK to .IMG converter, limited to use single files on images with IBM CPC format (As seen in the video I posted here a while ago)

The good thing about having tried the original firmware is that we have discovered some tricks in the CPCs file system, like getting the original AMSDOS to 250kb overloading the file table, recording 3.5 « disks to USB drives (limited to IBM CPC format ), etc

## <u>Répondre</u>

Créez un site Web ou un blog gratuitement sur WordPress.com. | Thème Misty Lake.