

ATARIMAX Ultimate SD ADAM Workaround Instructions

Later versions of firmware that ship with the ATARIMAX Ultimate SD cartridges cause issues with ADAM when still left plugged in during ADAM side operation. I find this very annoying and don't like the unnecessary wear and tear of constantly inserting and removing the cartridge all the time. This procedure explains how to install the last known version that properly worked with ADAM. I have no idea what changes in firmware were made after this version or what might be effected. I seem to recall the way resets were handled had changed.

Last known working version:

core_boot 2/7/15

core_firmware 8/2/18

core_hardware 8/2/18

Perform this procedure at your own risk. I will not be held responsible for anything that goes wrong and bricks your ATARIMAX Ultimate SD during this procedure

Power must be off whenever inserting the ATARIMAX Ultimate SD cartridge or SD card itself

Remove any self-booting ADAMnet media/devices so SmartWRITER can boot as default to avoid any conflicts during this procedure

This procedure is NOT an official document by ATARIMAX and comes with no guarantee of accuracy or success

It is strongly recommend that you back up your entire SD card contents before performing this procedure

If you agree to these terms, proceed with this document

Step 1

Create a directory in the root of your Ultimate SD card called "RECOVERY". This directory must be in the root directory of the SD card, not in the "Coleco" folder.

Step 2

Copy this single file to the "RECOVERY" directory on your SD card from this archive:

core_firmware.bin

Step 3

Insert the recovery SD card into the Ultimate SD cartridge and turn on the console.

The LED on your cartridge will blink rapidly as it performs the following steps automatically:

Internal SRAM Read/Write pattern tests.
CPU Firmware Self-Update.

During this process, just let SmartWRITER stay idle.

Each step will take 5-10 seconds and does not require any interaction from you. Just wait until the LED display settles down into one of the blink codes described below. DO NOT power off or otherwise interrupt the firmware recovery process once it has started.

Step 4

Upon completion of the internal re-programming in Step 3, the cartridge will display a blink-code to notify you of the outcome.

The cartridge LED will blink rapidly during programming, but the final blink code will be a steady display of a blink code, a pause of a few seconds, then the blink code will repeat, forever.

The blink codes you might see after a firmware upgrade are:

3 blinks - Recovery process completed OK.
10 blinks - Internal RAM pattern test failure

For example, the 3-blink "OK" code would be seen as:

BLINK-BLINK-BLINK - LONG PAUSE - BLINK-BLINK-BLINK - LONG PAUSE... and so on, forever.

Once you receive a final blink code, it is safe to turn off the console and remove the SD card.

If you received the 3-blink "OK" code, you can proceed to step 5.

If you receive another code, perform the procedure from the beginning again. If you still have issues, contact ATARIMAX at classics@atarimax.com. Good luck, their customer support is pretty bad and letting them know that the current version does not work correctly with ADAM for the last year and a half just gets ignored.

Step 5

Place the SD card back in the PC and erase the "core_firmware.bin" file from the "RECOVERY" directory.

The "RECOVERY" directory should still exist on the card, but is now empty.

Step 6

Copy these files to the "RECOVERY" directory on your SD card from this archive:

core_hardware.bin
core_boot.rom

Step 7

Insert the recovery SD card into the Ultimate SD cartridge and turn on the console.

The LED on your cartridge will blink rapidly as it performs the following steps automatically:

Internal SRAM Read/Write pattern tests.
Boot ROM Flash Update.
Hardware JTAG Programming.

During this process, just let SmartWRITER stay idle.

Each step will take 5-10 seconds and does not require any interaction from you. Just wait until the LED display settles down into one of the blink codes described below. DO NOT power off or otherwise interrupt the firmware recovery process once it has started.

Step 8

Upon completion of the internal re-programming in Step 7, the cartridge will display a blink-code to notify you of the outcome.

The cartridge LED will blink rapidly during programming, but the final blink code will be a steady display of a blink code, a pause of a few seconds, then the blink code will repeat, forever.

The blink codes you might see after a firmware upgrade are:

3 blinks - Recovery process completed OK.
6 blinks - Boot flash programming failure
8 blinks - Hardware programming failure
10 blinks - Internal RAM pattern test failure

For example, the 3-blink 'OK' code would be seen as:

BLINK-BLINK-BLINK - LONG PAUSE - BLINK-BLINK-BLINK - LONG PAUSE... and so on, forever.

Once you receive a final blink code, it is safe to turn off the console and remove the SD card.

If you received the 3-blink "OK" code, you can proceed to step 8.

If you receive another code, please perform this procedure from the beginning and try again. If you still have issues, contact ATARIMAX at classics@atarimax.com. Good luck, their customer support is

pretty bad and letting them know that the current version does not work correctly with ADAM for the last year and a half just gets ignored.

Step 9

Place the SD card back in the PC and erase the “RECOVERY” directory and its contents.

If you fail to completely remove the “RECOVERY” directory, the onboard CPU will try to re-program the cartridge hardware again when you insert this card into the console, so be sure to remove it before proceeding.

Step 10

Go into the “Coleco” folder on your SD card and delete the “cvsdos.sto” file, which is the menu software.

Replace this file with the one from this archive.

Put the SD card back into the cartridge and power on the console and pull the ColecoVision side reset button.

Step 11

Verify cartridge successfully boots to the on screen menu.

Press '*' on the controller to enter the on screen configuration menu.

Verify that the versions of all components now match the version numbers listed below:

Hardware: 20180802

Boot Flash: 20150207

Menu: 20190606

Firmware: 20180802

If any versions listed do not equal those shown above, repeat the procedure.

Done!