

JACKSOFT LABS

DREAMCAST BIOS HACK

Back in 1998 SEGA released a 128-bit console called Dreamcast.

It was a really pretty console, slim and powerful, unfortunately dropped early by SEGA because a REALLY BAD marketing.

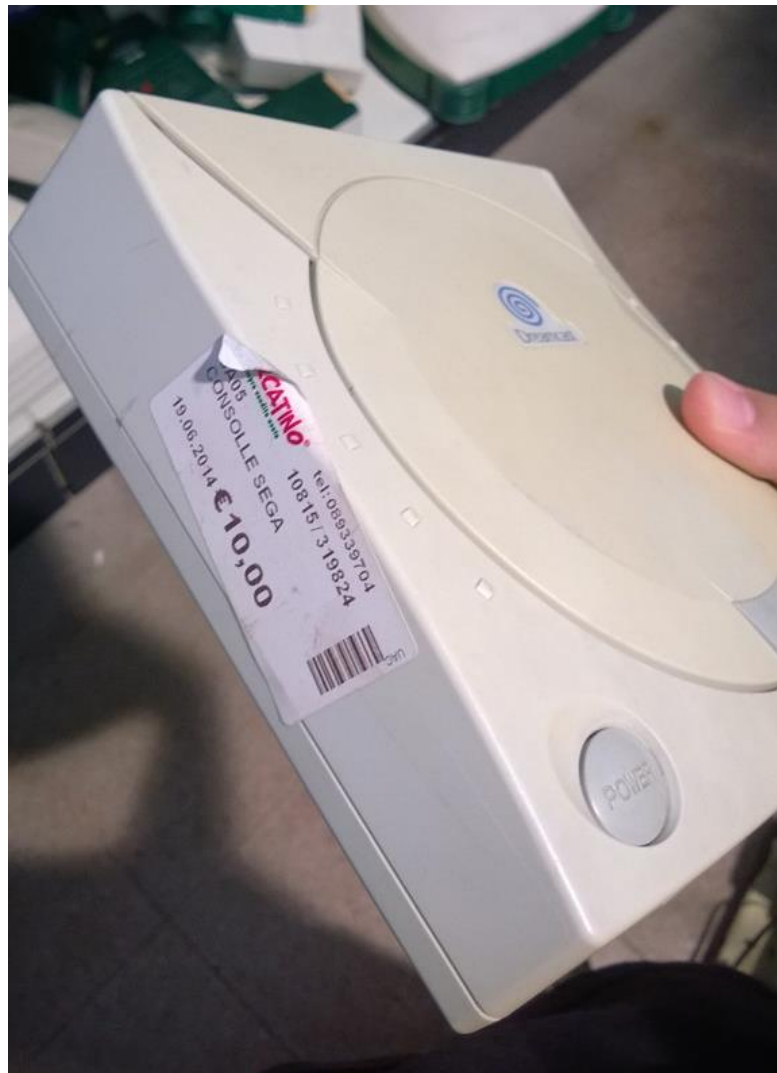
The Dreamcast is still one of the most favorite hardware by geeks, after the PSX, and one of the coolest hack around is the BIOS replacement.

The Dreamcast DevKit, in fact, have a more beautiful BIOS boot animation than the retail one. Some rumors affirms that SEGA had in plans to release an update for the retail Dreamcasts to replace the boot animation.

This never happened.

After the pretty failure some people had the luck to obtain a DevKit machine and dump the BIOS out. The DevKit BIOS is pretty the same, in size, as the retail one and seems it is stored in the same chip. The only differences, animation apart, it's region free and there are a bunch of bytes that after some hex edit permits it to run on the retail console.

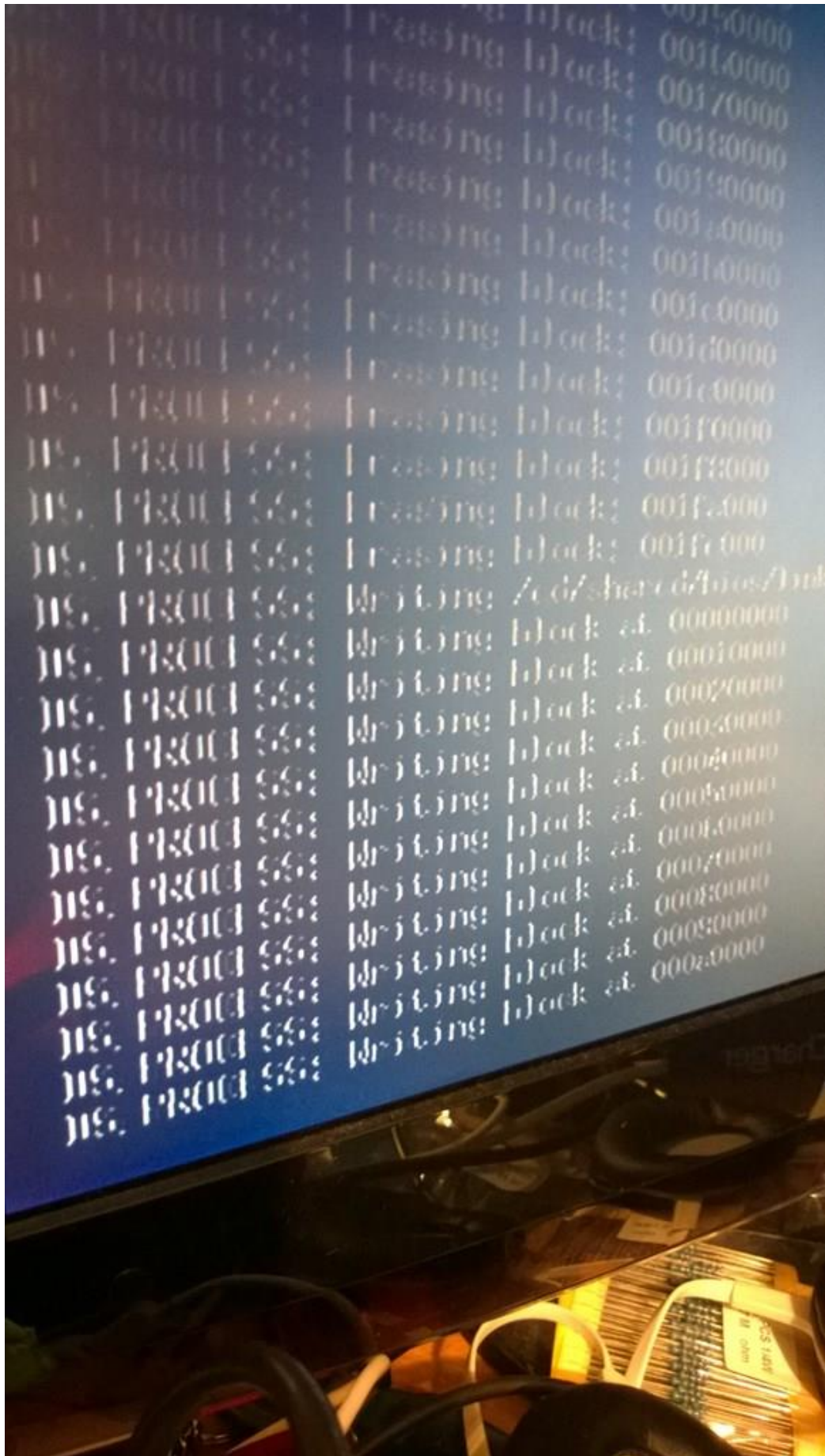
After founding a Dreamcast at the flee market for only 10€ (but without any cable) I decided to find an how-to guide to try this mod: <http://www.mmonkey.co.uk/sega-dreamcast-region-free-bios/>



I've bought the EEPROMS (MX29LV160TMC-90) on eBay, they're really cheap!
It wasn't hard to install the new chip over the older, like in the guide linked above. Just use a good soldering iron and a thin solder wire with a good flux, it REALLY helps!



Flashing DevKit BIOS on the new chip with a modified DreamShell present on the same link...



Switch cables to select original or DevKit BIOS



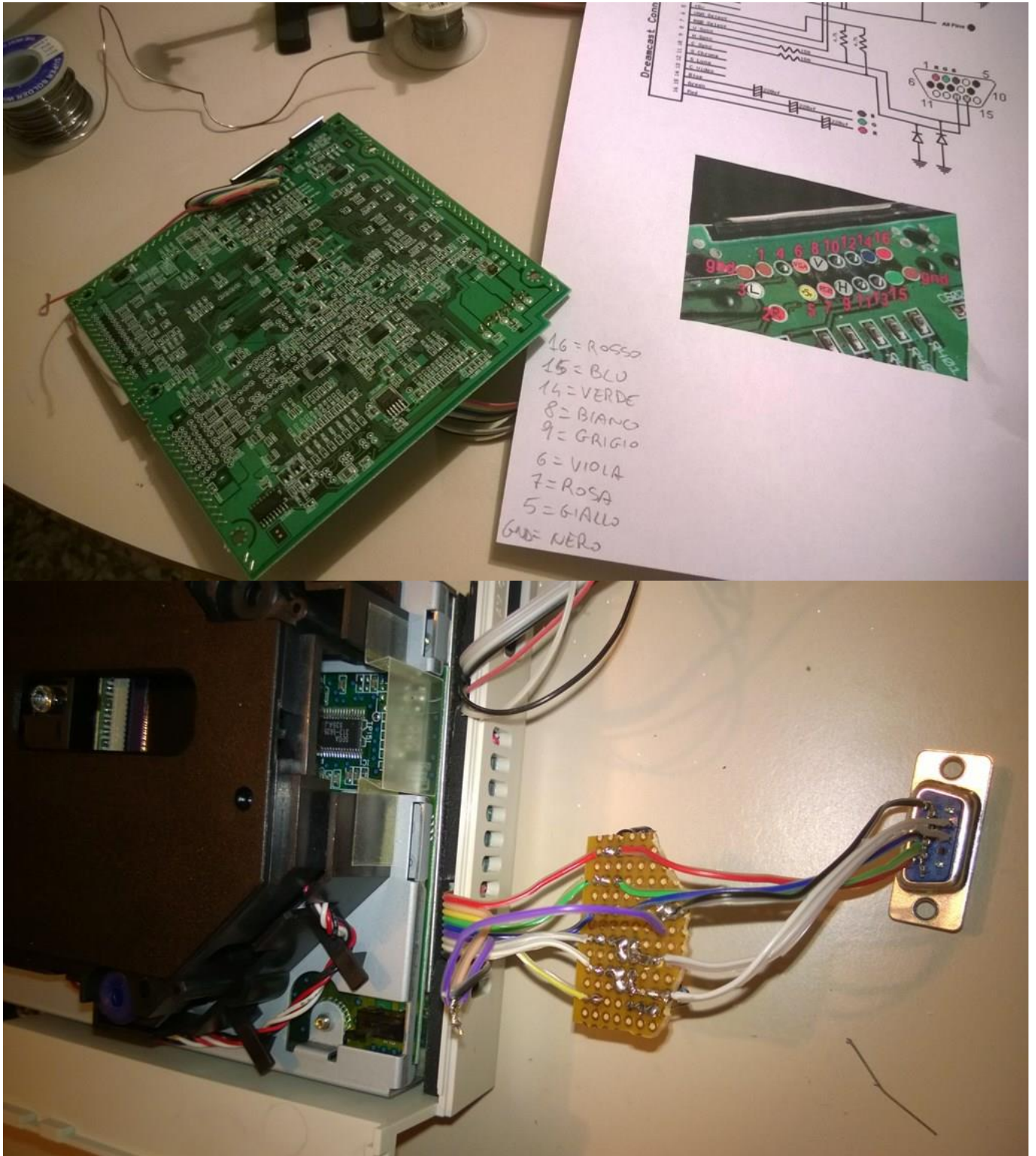
But...

Since the console is open, why not add more “hacks”?

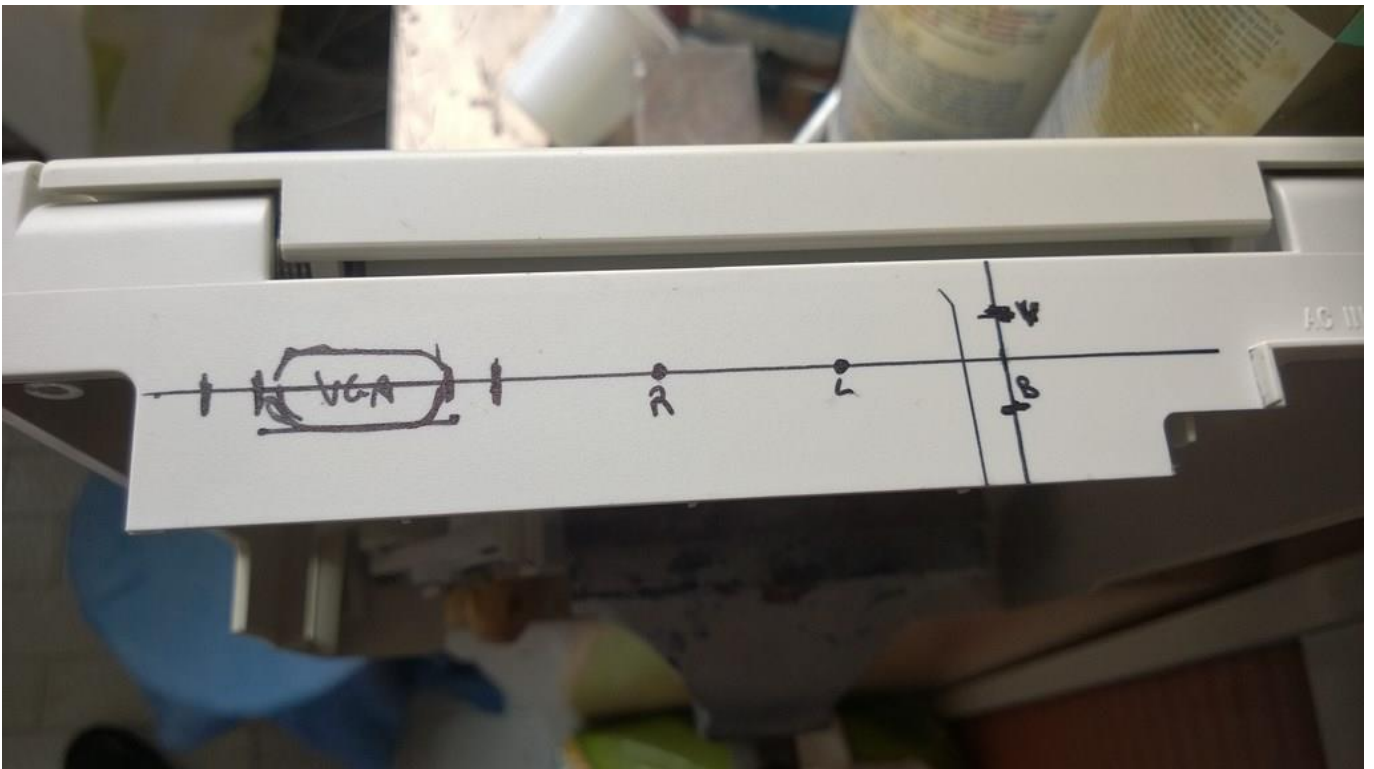
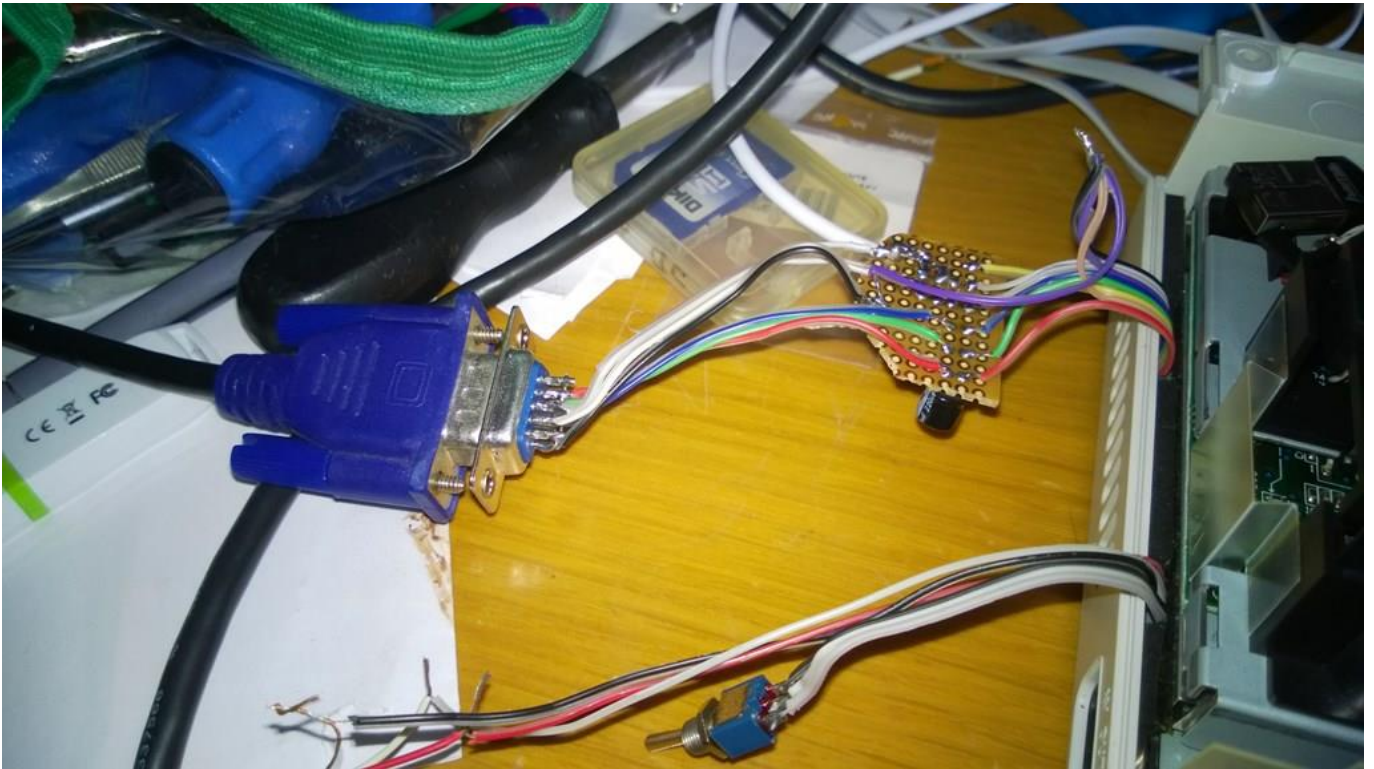
The Dreamcast was the FIRST console that supports VGA output natively (but games must be compatible, otherwise you’ll see only a black screen instead), so I’ve looked for a VGA hack guide.

There are on eBay also VGA cables, they should work really good and out of the box, but are very expensive (about 20€ actually). A VGA female port costs only 1-2€ and as well as a good pair of RCA female plug. Why RCA female plugs? Well to have stereo output to connect with an external amplifier! :D

On the same site I’ve found the schematic to install the VGA port, with the complete pinout to connect also the two audio channels: <http://www.mmmonkey.co.uk/dreamcast-internal-vga-mod/>



Some tests...



Yes there should be another switch there. It's to select "VGA out" and "Normal A/V out".



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