RGB2HDMI

*Amiga CPLD Flicker Free Video

A2000 Video Slot Edition

**CPLD enables full feature from the on-screen menu*

Initial Setup

You may see a shimmer or wavy effect. This is because the phase is set incorrectly and needs calibration, this is a one-off easy thing to do. If you have a static image such as the Kickstart 1.3 boot screen or Workbench with no mouse movement you can use the "Auto Calibrate Video Settings" option (it will require you to select twice to activate). Alternatively, you can go into the "Sampling" menu and change the "Sampling Phase" until the image looks correct. Typically, 0, 3 or 5 will work fine, but it could be different in each machine.

Once calibrated choose "Save Configuration" and this will be remembered for subsequent boots.

https://github.com/LinuxJedi/AmigaRGBtoHDMI/tree/main

The board is pre-flashed so physically you can just plug it into the video slot on your Amiga 2000.

Recommended: Raspberry Pi Zero 1 or 2

- Since the board has three buttons, you probably will want to enable three button mode (see next page).
- Be sure to place the Raspberry Pi's HDMI video slot facing out if you have a Pi Zero. You connect your monitor to it. *You may need a micro HDMI adapter depending on your monitor and the Pi you use.*
- Plug the Pi into the twenty-pin socket on the board and install into the Amiga.
- The small LED will notify you that the Raspberry Pi has power.

In three button mode, **the top button will access the on-screen menu and the two bottom buttons are up/down**.

If you have ECS chipset you can tryout the Super(1280) or productivity mode profiles located in the on-screen menu, but honestly I prefer having more colors from the standard mode.
These "profiles" are currently considered experimental and are not detected automatically.

From the on-screen menu you can also set the video output size or let it automatically detect it from your monitor. If for instance there is a mode on your monitor that displays better than the default.
If you play around with the settings, I recommend keeping a backup or just have the original settings handy in case you need to reset. I like to backup after auto-calibrate so I can easily revert to a good value.

On-Screen Menu Reference Guide: https://github.com/hoglet67/RGBtoHDMI/wiki/Reference-Guide

Pi Software Installation

The software on the Pi should be at least the latest release from the main tree or the latest IanSB beta release extracted onto a micro SD card in FAT32 format. The SD card can be a pretty small since the software doesn't take much space. You can verify the size of the latest release.

https://github.com/hoglet67/RGBtoHDMI/releases

You need to copy some canned profile files into place for the board:
- Amiga_2000_CPLD_Setup/profile_6-12_BIT_RGB.txt to the root of the SD card
- Amiga_2000_CPLD_Setup/Profiles/Default.txt to the Profiles directory

This resolves some issues with mode switching, particularly on NTSC machines.

If you wish to use three button mode, you then need to edit Profiles/Default.txt and set the option single_button_mode=0 (it is near the bottom of the file).

This RGB2HDMI is produced by LeapMaker, but is not a mass-produced product.
This product was produced for the Retro computing community.