



Heber

Super Video Custard user manual and operational guide

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1 INTRODUCTION

Thank you for purchasing the Super Video Custard add-on cartridge for the MiSTer Multisystem.

The Super Video Custard adds high-quality S-Video, Composite Video and line-level stereo audio connections to the Multisystem. Choice of PAL and NTSC is supported, and the VGA or SCART output on the Multisystem can be used at the same time as the S-Video and/or Composite outputs. Super Video Custard is compatible with all cores supporting 15kHz video output.

This is a dedicated hardware solution for S-video and Composite video output, adaptor cables are not required, just the standard S-video cable or 3 phono cables for composite and audio.

The MiSTer Multisystem is brought to you by Heber Ltd and RMCretro. If you have any technical questions or need any advice on using the system, please do not hesitate to contact multisystem@heber.co.uk

Or visit the Heber website www.heber.co.uk

For orders and updates please see www.rmcretro.store



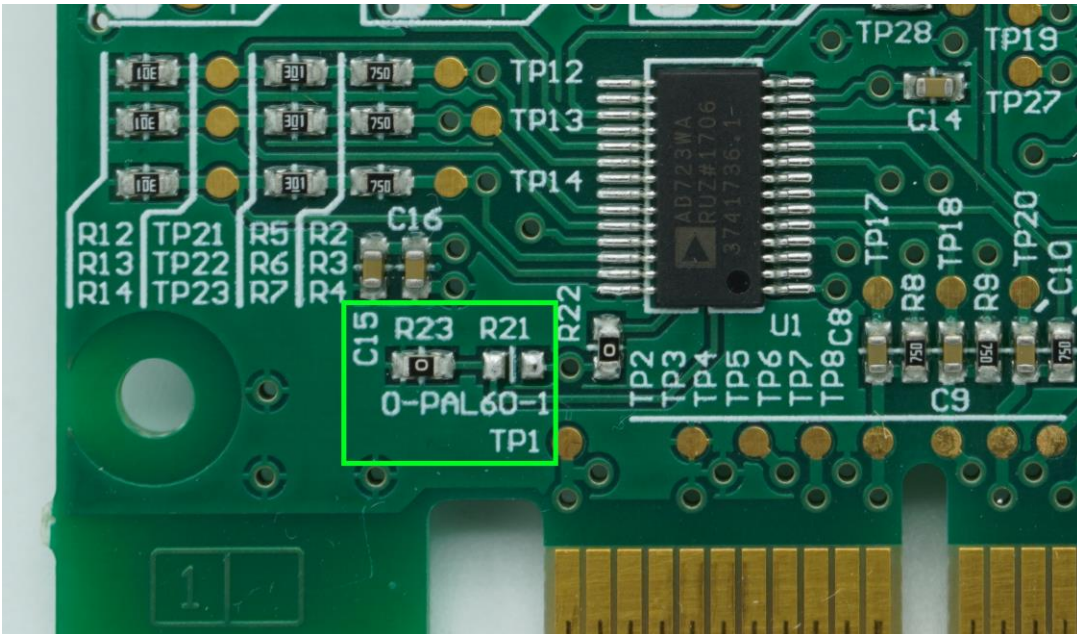
The Super Video Custard cartridge fitted into the MiSTer Multisystem console.

2 HARDWARE

The Cartridge has a set of outputs on the back and has the following general features. It's designed to be really easy to use and provides a high quality video output.



1. Stereo Phono Audio outputs
2. Composite Video output
3. S-Video output
4. Simultaneous VGA/SCART switch (Left switch)
Switches the RGB signal termination inside the Super Video Custard to allow connection of a VGA or SCART monitor to the Multisystem at the same time as the Super Video Custard. Move the switch to the left to allow simultaneous use or move the switch to the right when no VGA/SCART monitor is connected. Any VGA monitor used simultaneously with the Super Video Custard will need to support 240p/288p video, unless it is used via a converter on the HDMI output. The picture will be too bright or dim if the switch is in the wrong position.
5. PAL/NTSC switch (right switch)
Selects the video standard independently of the refresh rate used on the MiSTer. Some monitors which support both standards may have better colour rendition in one of the modes so it is worth experimenting with both modes.
6. PAL 60 jumper (internal to cartridge)
Enables the use of PAL with the NTSC subcarrier frequency for PAL-M displays. Use a soldering iron to move the zero-ohm resistor from R23 to R21 to enable this feature. (See image below)



PAL 60 Option - do not change unless you know this is what you require for PAL-M operation.



Left hand switch is the VGA/SCART

Right hand switch selects PAL or NTSC output



3 SETUP

Ensure the physical switch on the multisystem (sync on Green) 'SOG' is set to off.

If no MiSTer.ini file is in use, the default settings should be sufficient to produce a picture on any Composite/S-Video monitor which supports 240p/480i input.

Check the settings in the MiSTer.ini file on the MicroSD card and ensure the following settings are set as follows:

```
forced_scandoubler=0
ybbpr=0
vga_scaler=0
menu_pal=0 or 1 as appropriate
vga_sog=0
composite_sync=0 or 1
```

The Super Video Custard works with both these options for composite_sync, so this option can be set to suit the VGA monitor. The Multisystem has built-in circuitry to generate the composite sync for the SCART output so this setting will have no effect when using the SCART output.

As vga_scaler is set to 0, the video_mode setting will have no effect and can be set to a value convenient for a HDMI display device if it is desired to use one at the same time.

The *Scandoubler FX* option in each individual core must also be turned off if it has been turned on before. This can be done via the MiSTer menu for each core, which naturally requires the temporary use of another display device to be able to see the menus, but this setting should be off by default.

Ensure the Multisystem power switch is in the OFF position before installing or removing the Super Video Custard cartridge.

Connect appropriate video and audio cables to the Super Video Custard and insert it into the expansion slot on top of the Multisystem. Turn on the Multisystem and display, and the picture should now appear on the display.

Always turn the Multisystem off before removing the Super Video Custard.

We hope you enjoy using the Super Video Custard Cartridge with your Multisystem, If you have any technical questions or need any advice on using the system, please do not hesitate to contact multisystem@heber.co.uk