

Subject: Obtaining video feed from a Sinclair Spectrum + 2 on a US TV with PC-In Capability

1 March 2012

Overview: These instructions will detail a method of obtaining a video feed on a US television set with PC-In capability, specifically using a VGA input, from a *Sinclair Spectrum +2*. The procedures below were successfully tested on a Spectrum +2 *gray*, so whether or not the same procedures would meet with success for other Sinclair systems is unknown.

Computer Power Supply: It is assumed that the US-based user has located a feasible power source for his Spectrum, using either a 110-volt adapter, or a step-up transformer for use with the original power supply.

Video Converter: The purpose of the video converter is to translate the RGB input from the Spectrum to a VGA output. The device that proved successful for such was the Arcade Game RGB/CGA/EGA/YUV to VGA Video Converter, which can be found here:

<http://www.jammaboards.com/store/cga-ega-yuv-to-vga-arcade-hd-converter-pcb-gbs-8220-gbs-8220.html>



The same and similar items can be found on both Ebay and Amazon for around \$32. Additionally, you will need the following:

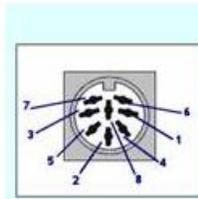
- 5 volt, 2 Amp power supply (Radio Shack carries those)
- VGA TO VGA cable
- DIN Male plug connector
- TV with "PC-In" capability (VGA connector) – a monitor with VGA-in should also work

Connection: The adaptor doesn't come with instructions, but you can download them here:

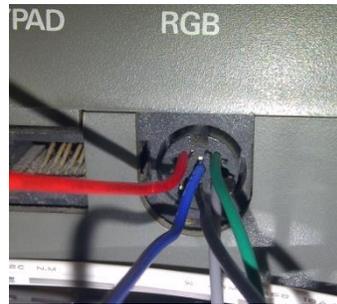
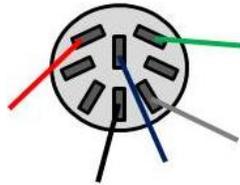
http://www.jammaboards.com/arcade_manuals/GBS-8220_CGA_to_VGA_HD-Converter.pdf

Only five wires will be used to connect to the DIN connector from the graphics board. Below you can see some diagrams showing how they are wired, and more information can be found here:

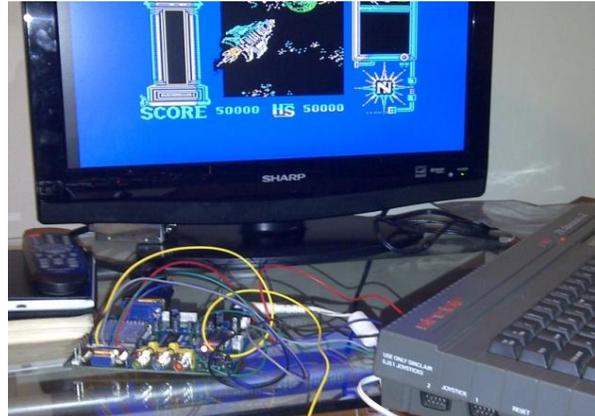
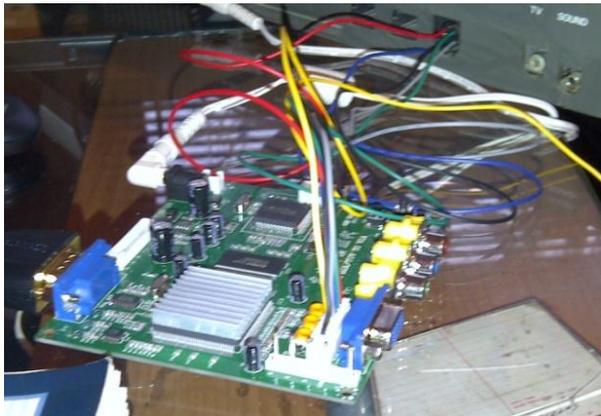
<http://www.fruitcake.plus.com/Sinclair/Spectrum128/SCARTCable/Spectrum128SCARTCablePlus3.htm>



Pin	Signal	Level
1	-	+12V
2	0 Volts DC	0V
3	Audio Out	200mV pk-pk
4	Composite Sync	1.2V
5	-	+12V
6	Green	5V
7	Red	5V
8	Blue	5V



You'll have to go to the bottom menu choice on the converter to switch over to English. Make sure to set the video to **RGBS**. When complete, your setup should look something like this:



At the time I wrote this, I'd not yet received my DIN plug, which is why you see wires just stuck into the Spectrum's CGA socket.