

# RETRO COMPUTER SHACK

Written By Ian Priddey - 03/05/2025 - v3.3 - email: rcs-sales@hotmail.co.uk

## RGB SCART TO HDMI VIDEO CONVERTER INFORMATION

Most countries outside Europe, didn't have Scart (Péritel) sockets fitted to their TV's, allowing connection of Composite Video and high quality RGB (Red Green Blue) video signals, which display a much better quality picture than Composite Video or S-Video signals. The Scart socket has now been omitted on most new TV's. This document explains how to connect an RGB Scart lead to a TV, with a HDMI input, **for those who don't have a TV with Scart input.**

### RGB SCART TO HDMI CONVERSION

**IT'S NOT JUST AS SIMPLE AS BUYING A SCART TO HDMI CONVERTER!** it needs to be compatible, and work with the 15Khz RGB video signal that most Retro Computers and Games Consoles output. There are lots of video converters on the market, but most won't work for this purpose, as they are designed to connect to more Standard equipment, such as DVD players, Video Cassette Recorders (VCR's) and Set-Top boxes etc.

### BASIC VIDEO SIGNAL INFORMATION

There are 3 main types of video signals found on Retro Computers & Games Consoles. **RF** (Radio Frequency) aerial lead connection, which needs a TV channel to be tuned into the correct frequency. **Composite video** (CVBS) and **RGB** (Red, Green, Blue). The latter two video types, just require the correct video input selecting on the TV, and don't require tuning.

**RF** gives the worst quality video, combining video (Luma and Chroma), Sync and sometimes Audio signals, all together.

**CVBS**, improves on this, by having one combined higher quality video and sync signal, and sometimes a separate audio signal, which produces a better quality, clearer picture. Terminated in Yellow, Red & White round RCA Phono type Plugs.

**RGB**, Improves even further, by providing separate Red, Green, Blue, and Sync signals, minimising interference between signals (crosstalk), thus producing the best quality, clear, sharp, steady picture, with vivid colours.

## PROFESSIONAL HIGH QUALITY RGB SCART TO HDMI CONVERTERS FOR THE SERIOUS ENTHUSIAST

### OSSC - OPEN SOURCE SCAN CONVERTER <http://junkerhq.net/xrgb/index.php?title=OSSC>

The OSSC, is a high quality advanced, very configurable, lag free (no noticeable delay between video input and output), professional video converter, scaler that's designed specifically for use with Retro Micro Computers and Games Consoles.

Aimed at the more knowledgeable, experienced enthusiast, who have lots of different Retro Games Consoles or Micro Computers, that need different settings to get the optimum picture quality. **Has RGB Scart, Component Video and VGA inputs**, with HDMI output. **Version 1.7 & v1.8 are now available in a superb! professional quality molded case.**

**Works with all my current RGB video leads.** Retail for around £140 **AND MY PERSONAL FAVORITE.**

The New OSSC Pro is now available from Video Game Perfection. Retail around £360



OSSC Available from Video Game Perfection (EU), Kaico (UK) and Amazon etc.

<https://videogameperfection.com/products/open-source-scan-converter/>

<https://kaicolabs.com/product-category/uncategorized/osscl/>

<https://www.amazon.co.uk/Source-Converter-SCART-Component-Gaming/dp/B07QF95QP3>

### RETRO TINK 2X SCART <https://www.retrothink.com/product-page/retrotink-2x-scart>

The RetroTINK 2x SCART, is a simple to use, high quality advanced, lag free RGB Scart to HDMI converter.

More suitable for enthusiasts with less knowledge of video signals, or have less complex video conversion requirements.

A high quality, advanced, yet simple to use converter with no settings and just one button. Simple plug and play operation.

RGB Scart in, HDMI out. **Works with all my current RGB video leads.** Retail for around £120



### RETRO TINK - 5X PRO <https://www.retrothink.com/product-page/5x-pro>

The RetroTINK-5X is a high quality advanced, very configurable lag free professional video converter, scaler designed specifically for use with Micro Computers and Games Console's. Aimed at the more knowledgeable, experienced enthusiast who have lots of different Retro Games Consoles or Micro Computers, that need different settings to get the optimum picture quality. **Has RGB Scart, Composite Video Scart, Component Video, Composite Video (CVBS), and S-Video inputs.**

**Works with all my current RGB video leads.** Changes to the default settings, are required for some of my Scart Leads.

Retail in the UK for around £350.



*Product Videos and Troubleshooting guides etc.*

[www.youtube.com/@RetroComputerShack](http://www.youtube.com/@RetroComputerShack)

**PLEASE TURN OVER FOR LOW COST VIDEO CONVERTER INFORMATION**

# LOW COST SCART TO HDMI CONVERTER USER MANUAL & TROUBLESHOOTING GUIDE

Written By Ian Priddey 14/05/2025 - v2.2

If you just simply want a low cost solution to connect your retro computer to a TV with a HDMI input, then this low cost solution should work fine for most (but not all setups).

**This also has the bonus of not only working with RGB Scart leads, but also with Composite Video Scart leads. This converter does have a small amount of lag, and is best suited for use with 8-BIT Micro Computers, where the lag isn't as noticeable when playing games), rather than 16-BIT Micro Computers, where the lag may be more noticeable.**



Retails Around £30

## IMPORTANT

Since testing this Low Cost Video converter in 2023, which worked fine, the manufacturers appear to have changed the design of the more recently manufactured units,

**! AND THESE NO LONGER WORK !**  
**with Retro Computer RGB Video Signals.**

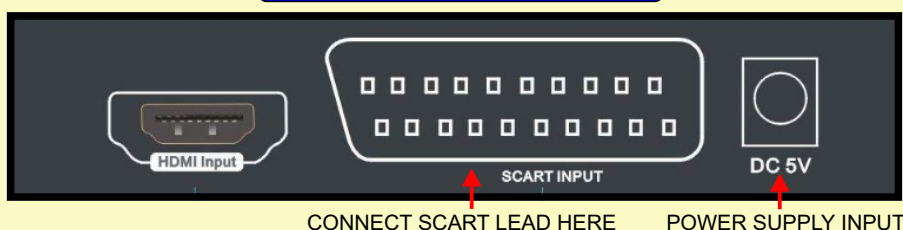
This is a generic unbranded (although some do have a brand name), Scart to HDMI video converter which works fine with all my current RGB Scart leads, and with most people's setups. it's available from Amazon, ebay, AliExpress etc.

**Not as good Picture quality or as reliable and compatible as the High Quality video converters but worth a try**

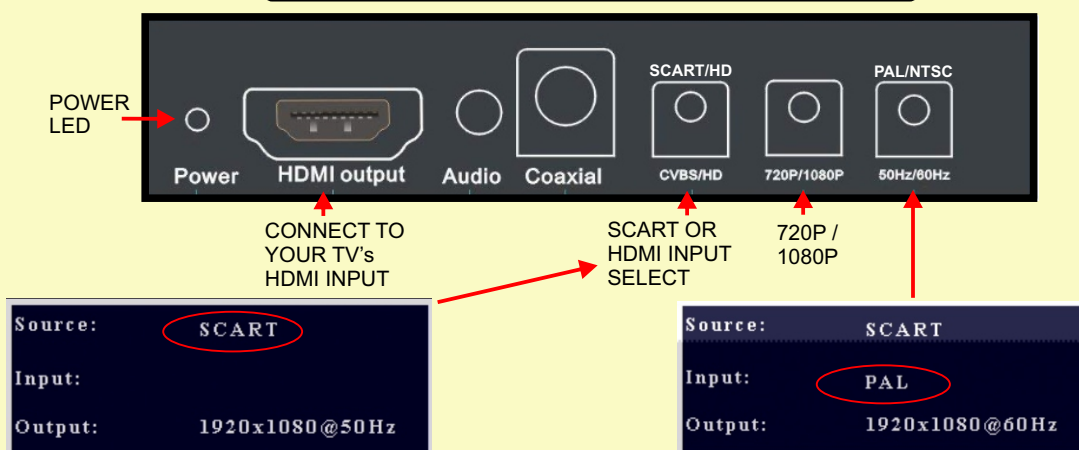
This Video converter works with PAL or NTSC video standards, and supports up to 1080p resolution. Also has a useful HDMI input (pass through) connector to connect a HDMI device, very handy, if you only have one HDMI input, on your TV.

**I CAN'T GUARANTEE IT WILL WORK FOR EVERYONE**, but it seems to work fine with most of my customers, worldwide.

### INPUT CONNECTIONS



### OUTPUT CONNECTION AND SETTINGS



Press button to select the **SCART** input

**720P/1080P Button.** Press this button the select the best picture resolution, supported by your TV.

PAL/NTSC button. Set to match your TV.

### TROUBLESHOOTING TIPS

- If you don't select the **SCART input** on the Video Converter, you will get a blank screen.
- If you don't select the correct video standard PAL/NTSC to match your TV. You will get a blank or Black and White screen. PAL console needs a PAL TV, NTSC console needs a NTSC TV etc.
- If you don't select the correct **HDMI input**, on your TV, You will get a blank screen.

### I DON'T RECOMMEND USING A PC MONITOR AS A DISPLAY

As most modern HDMI PC monitors are 16:9 aspect ratio (widescreen) so 4:3 aspect ratio can't be selected, thus will display an unusually stretched picture. Also may not be compatible with certain screen resolutions and may not work at all. **USING A TV WITH A HDMI VIDEO INPUT IS RECOMMENDED!**

<https://www.RetroComputerShack.com>