

RETRO COMPUTER SHACK

VIDEO LEAD TROUBLESHOOTING GUIDE

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GENERAL CHECKS

- Check the plugs at both ends of the video lead, are firmly pushed in.
- If using an Atari ST Lead, check the video plug is the correct way round, label and notch, to the top. (Will fit both ways).
- Check the Scart plug, to see if any pins are bent.
- Check you have selected the correct A/V channel input on your TV.
- Connect directly to the TV's Scart Socket, and not via a Scart switch box, video converter or adaptor etc.
- Try a different Scart socket (if more than one), on the TV, only one is usually RGB compatible.
- Check the Scart socket, is set to "RGB" and set to the correct video standard, PAL or NTSC, in the TV's menu options. Both Computer/Console and TV need to be set to the same standard.
- Check the TV is set for 4:3 (Normal) aspect ratio, and not 16:9 (Widescreen). None of the Consoles or Computers, I sell video cables for, output a 16:9 picture, they are all 4:3 (Standard Definition).
- Try a different TV, ideally an old style CRT type TV, they will always provide the best compatibility, and picture quality with Retro Computers & Games Consoles. My video leads have been designed and refined over many years, to be as compatible as possible with modern TV's, however, **some makes and models of LCD and Plasma TV's may not display as good a picture, or may not work at all.**

COMMON DISPLAY AND SOUND ISSUES

DISPLAYING A NORMAL BRIGHT, CLEAR BUT BLACK AND WHITE (B&W) PICTURE, AND SHOULD BE COLOUR

The video cable doesn't determine if you receive a Colour or Black & White (B&W) picture. This is down to the TV and Console. Usually caused when the Console, and TV's video standards (PAL or NTSC) don't match. If your console is PAL, then your TV's video input must also be set for PAL. When using an RGB Scart lead, this can also be caused by using a Scart Socket, that isn't RGB compatible, or set for Composite Video (CVBS) or S-Video, instead of RGB, in the TV's menu options, or when using a Video Converter or adaptor.

DARK AND/OR BLACK AND WHITE PICTURE WITH "GHOSTING (SLIGHT GREY SHADOWING)"

TV isn't switching to RGB mode. Usually caused when connecting via a Scart Socket, that isn't RGB compatible, or set for Composite Video (CVBS) instead of RGB, in the TV's menu options. Usually only one Scart socket is RGB compatible, so try them all. **This is most common with The Sinclair Spectrum +128K (toastrack) +2, +2A, +2B & +3, and Atari ST computers. Please see note below for more info.**

PICTURE JUMPING, FLICKERING INTERMITTENTLY (PICTURE SYNC ISSUES)

This problem is apparent with some LCD TV's, mainly when connecting an Atari ST, or Sinclair Spectrum Computer. Using a different Scart socket on the TV or using a different TV, may cure this problem, Please see Computer specific notes below for more information.

AUDIO BUZZ, HUM AND GENERAL AUDIO ISSUES

The video lead simply sends the audio from the console/Computer to the TV. If you are getting excessive buzz or low frequency hum etc, this is most likely to be caused by the Computer or Console itself, power supply or other surrounding equipment. **All my RGB Scart leads are made from good quality, overall foil screened cable**, and provide good shielding against normal video and audio interference, and are thoroughly tested before dispatch. **Audio issues are most common with the Sega Mega Drive 1&2, consoles, Atari ST, Commodore C64, & Neo Geo consoles. Replacing the Electrolytic capacitors in these Consoles, Computers and power supplies (PSU's) are a common fix for audio issues. In the Commodore 64, the SID chip is also a common source of audio buzz.** There is lots of information on the internet about resolving audio problems with these and other Computers and Games Consoles.

NOT DISPLAYING A PICTURE AT ALL

Check the correct AV channel on the TV has been selected. Check everything is switched on, and powers up. Check power lights etc.

NOTE: SINCLAIR SPECTRUM COMPUTERS DISPLAY PROBLEMS

If after going through all the above checks, you still have the same problem, usually with a dark, ghosting or flickering picture, there are mods(modifications) to the Spectrum computers, to resolve this, details of which, can be found on my website.

NOTE: ATARI ST COMPUTERS DISPLAY PROBLEMS

If after going through all the above checks, you still have the same problem, usually with a flickering picture, there is a mod to the Scart lead, that may resolve this issue when used with your TV, details of which, can be found on my website. **The Atari ST Computer, is the least compatible with RGB Scart connection, as the video signals were specifically designed, for connection only to the Atari Monitors.**

JAILBARS - FAINT NARROW VERTICAL BANDS, DOWN THE SCREEN

Only a problem, when using an LCD TV, not a problem when using a CRT type TV. Usually a Problem, mainly with the Sega Mega Drive 1, 2, and Master System consoles. My RGB Scart leads for these consoles, already use the CSYNC signal for picture sync, and are coupled by a 220uF electrolytic capacitor and the signal level attenuated by a 470Ω resistor, and so are already optimised to reduce or eliminate Jailbars, but if you still see them, mods to the consoles can be carried out. There is plenty on the internet about this problem.

As the RGB video signals of all Retro Computers and Games Consoles, differ slightly, it's quite common, that one Computer or Console, will work with a specific TV, and another won't, however **I have designed and refined my video cables, over many years, to be as compatible as possible, with modern TV's** and sold many thousands of them, all over the world.

USING SCART TO HDMI VIDEO CONVERTERS

IT'S NOT JUST AS SIMPLE AS BUYING A SCART TO HDMI CONVERTER!, it needs to be compatible, and work with the 15Khz 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. Please see my Scart to HDMI Solutions document, for more detailed information.

<https://www.retrocomputershack.com/PDF/Scart-To-HDMI-Solutions.pdf>