

ONLY CARRY OUT THIS MOD IF YOU ARE SUITABLY EXPERIENCED IN BASIC SOLDERING AND ELECTRONICS REPAIR

This Modification will usually cure a flickering (Picture sync issue), ghosting or very dark picture, when using an RGB Scart Lead with some LCD TV's, by disconnecting the Composite video signal on pin 1 of the Spectrums video socket, and replacing it with +12V, which with attenuation, provides the correct blanking signal voltage on pin 16, of the Scart plug, thus switching the TV into RGB mode. This is basically changing the video out link settings, from Standard to Péritel mode.

1. Open the Spectrum case, taking care not to damage the keyboard ribbon cable. Remove the keyboard, Heatsink, voltage regulator, and circuit board.
2. **Issue 1** board, remove LINK 4 (LK4) and fit into LINK 2 (LK2) position. Replace R9 (1K Ω) resistor, with a 470 Ω ¼ watt resistor.
3. **Issue 3** board Remove LK4, and fit into LK2 position. Fit a 470 Ω ¼ watt resistor (R9).

The impedance of R9 (470 Ω), combined with the 75 Ω input impedance of the blanking signal on pin 16 of the Scart plug, forms a voltage divider circuit, which will supply a voltage of about 1.5v DC on pin 16 of the Scart plug, which will now switch the TV into RGB mode, and should fix all the issues mentioned above. Without this mod the Spectrum +2, uses the Composite video signal to supply the blanking signal voltage, and on some TV's this won't be enough to switch the TV into RGB mode, so will switch to Composite video (CVBS) mode instead, and display the symptoms above.
Blanking signal Specs - CVBS (Composite Video) mode 0-0.4V RGB mode 1-3V.

R9 AND LINKS ARE ALL SITUATION JUST BELOW THE RGB VIDEO CONNECTOR

