SCART to HDMI Video Converter

Since the original replies regarding connecting a QL to video monitors were given in Quanta helpline columns, things have moved on a little.

Back in January 2014, Ian J on QL Forum announced he'd managed to connect a QL to a TV with a HDMI video input using a SCART to HDMI adaptor he'd bought off eBay.

Several people, myself included, purchased one of these and sure enough we now had a method of connecting the QL to a flat screen TV or monitor with HDMI input. The method was a bit clumsy looking – you needed a QL video plug to SCART plug adaptor (which can be bought on the internet for a few pounds) and a somewhat ungainly black box which then needed a HDMI lead from the monitor. But the main thing was, it worked, and worked well.

But it worked, and a nifty bonus was that the QL signal was automatically upscaled to fill the monitor screen without chopping off the usual few characters on either side of the picture (the QL screen is 85 characters wide in MODE 4 but usually most monitors would only display 80 of the 85 characters).

The particular video adaptor in question was offered on eBay by a company called City Skys, but this is no longer advertised.

However, other companies in the Far East offer equivalent devices – just search for "SCART to HDMI Converter" on sites such as eBay.

The original thread about this device is on QL Forum at http://www.qlforum.co.uk/viewtopic.php?f=2&t=770&hilit=upscaler



SCART to HDMI video converter unit

The TV or monitor in question needs to have an HDMI connection. HDMI (High-Definition Multimedia Interface) is a compact audio/video interface for transferring uncompressed video data and compressed or uncompressed digital audio data from a HDMI-compliant source device to a compatible computer monitor, video projector, digital television, or digital audio device (that definition from Wikipedia). Note that TV sets will not usually automatically switch over to the HDMI input when you connect the video source, there is usually a button on the remote control or a setting somewhere in the TV menus for manual switching.



Switches and output connectors

Cables

The simplest was an HDMI cable obtained from Poundland stores for just £1.00. The QL SCART lead took a little longer to find, but companies such as Retro Computer Shack on eBay and www.retrogamingcables.co.uk can supply ready made QL SCART cables.

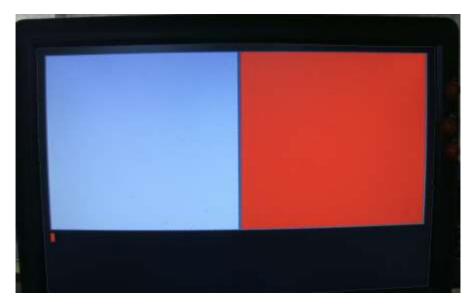


QL - SCART lead from Retro Computer Shack

If you feel like making your own cable and have the 8-pin DIN QL video plug and a SCART connector to hand, you can get the full wiring details from a page on fruitcake.plus.com

http://www.fruitcake.plus.com/Sinclair/Spectrum128/SCARTCable/Spectrum128SCARTCableQL.htm

Or from an article by Richard Cooke on ym website at http://www.dilwyn.me.uk/docs/hardware/index.html Once you have the cables, just plug everything in and after a while, once the video upscaler device has worked out the right way to adapt the QL video signal (it takes several seconds initially, but seems to remember the settings for next use), you should see a picture on the TV when you switch to the HDMI input:



Look! All 85 characters of QL Monitor Mode shown!

The particular unit I got for my QL has a variety of connectors and a few switches where you can manually alter settings. Most people seem to have managed to get things going just with the automatic settings. The device has both an HDMI and SCART input – you may have to manually switch between the two inputs using on of the front panel switches on the device.

The unit comes with the usual little power supply brick – 5volts/1 Amp.

The device will also connect to a NTSC TV (allegedly!)

Picture quality is perfectly acceptable, in fact I found it better than connecting the QL to the same TV via a SCART lead (connecting it that way lost a few characters at the edge of the screen, whereas the

SCART to HDMI unit correctly upsacled the video to show the full QL screen on the same Technika 17 inch TV!).



The picture above shows the SCART-HDMI device stood above the microdrives on my QL, not a good idea on a hot day as the device has no feet, so no room for cooling air to flow underneath (it got hot after a while) plus the cable gets in the way of typing. Better to sit it behind the TV out of the way.

This particular device measures about $10.3 \times 10.3 \text{cm}$, and about 2.5 cm deep.



Power supply, manual and SCART-HDMI unit

Other such devices are available, and while I haven't tried any of them I have no reason to think they would not be similarly compatible. Prices vary, from about 25 to 50 pounds.

The device seems to use a modern dedicated video upscaling chip, which takes the hard work out of reading, analysing and adapting the video signal to convert between the source and output device. They are not just for computers – some will work with DVD players, VHS, games consoles and the like, allowing you to view older devices on modern large and high definition screens.



Inside the device - picture by lanJ from QL Forum

So there we have it, a fairly straightforward and fuss-free method of connecting a QL to a TV or monitor with a HDMI connection – at last!