

Connecting Apple TV V2 & V3 to a SCART / S-Video / Composite input.

A technical briefing by J. S. Technology.

Introduction.

Connecting Apple TV V2 or V3 to a standard TV is easy! You just need a video converter from J.S. Technology. Here we introduce the **HDMI to SCART** and **HDMI to S-Video and Composite** converters for just that job. Connecting via SCART is certainly the easiest method, but S-Video has the advantage that it will give a better picture quality over that of standard SCART, which is composite only. (SCART can also carry S-Video which can be confusing).

This technical briefing aims to show how to get the best Apple TV picture for your TV. Using the right converter for the TV does make a difference and this document will explain how to choose the right converter for your needs and how to use it to connect Apple TV to a standard TV.

The Connections.

		
<p>Apple TV V2 with HDMI output, and digital audio.</p>	<p>Standard SCART equipped TV.</p>	<p>S-Video mini-DIN, composite and audio connections.</p>

Apple TV only has the HDMI output which transports the video signal but can also carry audio. There is also an optional Optical Audio output for digital audio, often called TOS-Link, which is ideal for connecting audio to an external surround sound amplifier.

SCART can carry a variety of signal types covering RGB, S-Video and composite, but not all SCARTs can accept every type of signal. For example, the middle image above shows two SCART sockets on a standard TV but only the right hand connector can accept S-Video. It is important to check that your TV can accept S-Video input on SCART before trying to use this connection method. The ability for your TV to accept S-Video via SCART should be detailed in the TV's user manual. Usually it is possible to determine if you TV can take S-Video via SCART by scrolling through the inputs on the TV using the remote or adjusting the type of input from a menu setting on the TV.

More commonly S-Video is carried on a mini-DIN type connector, which is the black connection in the right hand image above. Composite video can also be found on a phono connector similar to that of the audio connectors. These are to the right of the S-Video connector, yellow is for composite video, with left and right audio being white and red respectively.

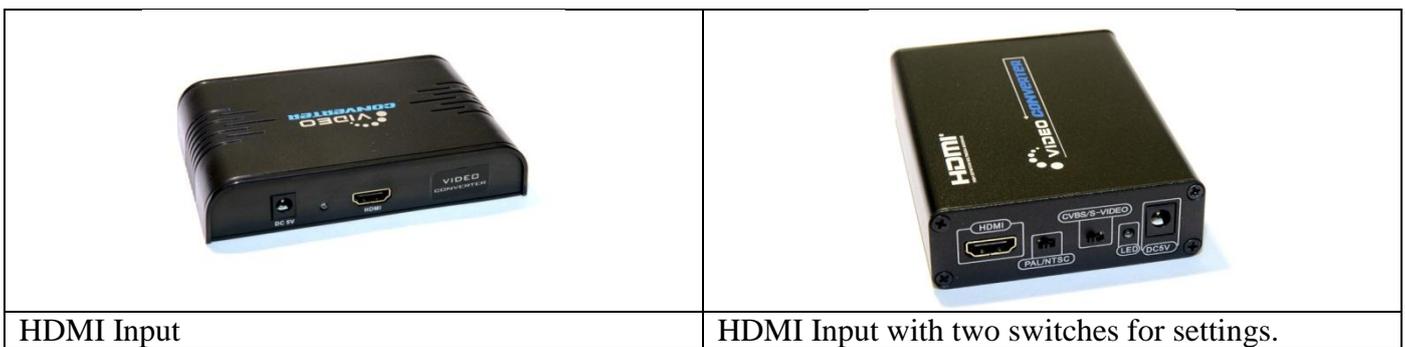
The Converters.

There are two converters suitable for converting Apple TV's output to a normal TV:

- HDMI to SCART.
- HDMI to S-Video and Composite.



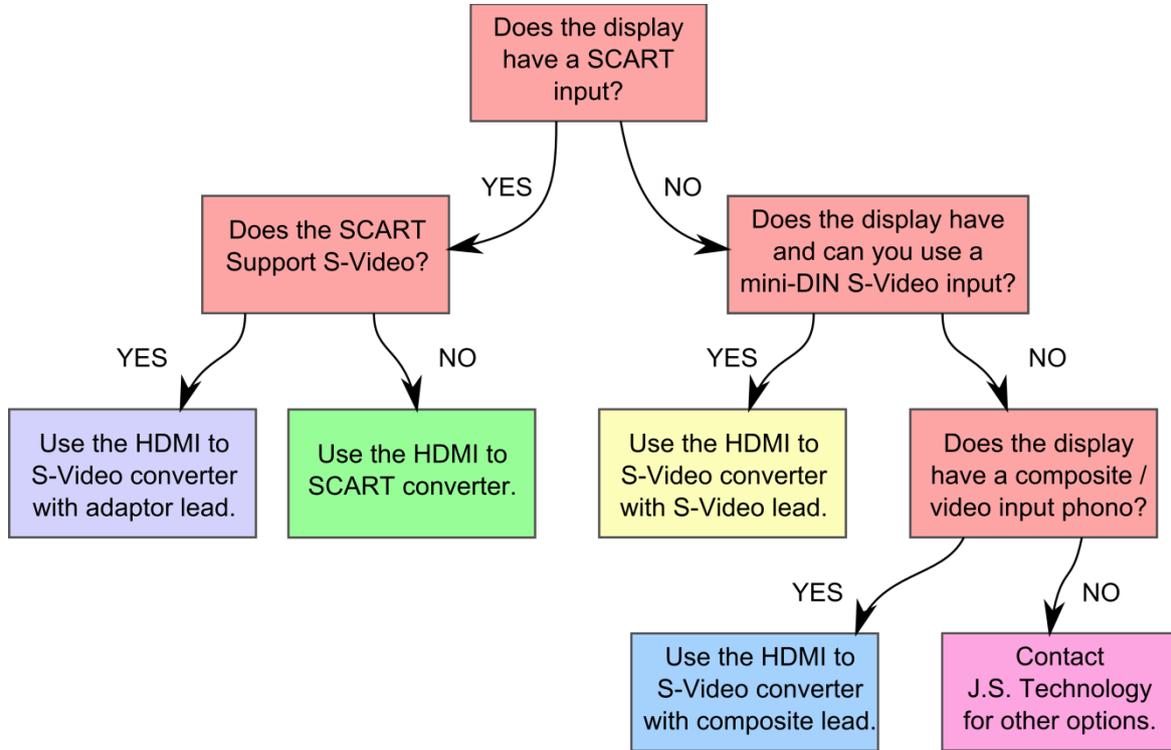
Both of these converters have the HDMI input connector, as shown below.



The HDMI to S-Video and Composite converter has two switches which need to be set by the user. The first switch is to select S-Video or Composite video output depending on which is most suitable for your TV. The second switch is for the video format and is either PAL or NTSC. PAL is for UK and Europe and should be selected. NTSC is primarily used in the USA.

Which Converter to Use?

This is the most important decision to make and the answer is simply which is the best quality input on the TV? S-Video is better quality, and therefore the preferred option if possible. This you can use either on a compatible SCART connector or the mini-DIN connector. SCART is the most convenient, and therefore HDMI to SCART may be the easiest choice.



Making the Connections.

Each option from above will now be detailed. For clarity power connections are not shown, and should be added after all video and audio connections have been made. The HDMI connection should also be made to the Apple TV source.



Each option will require that the Apple TV source is connected via the HDMI connection as per the above picture. In some systems the digital audio output and network interface will also be used and more information on these connections can be found on the Apple TV user guide.

Use the HDMI to SCART converter.

		
<p>HDMI from Apple TV to the converter.</p>	<p>SCART output from converter.</p>	<p>SCART connection in to the rear of the TV.</p>

Use the HDMI to S-Video converter with adaptor lead.

			
<p>HDMI from Apple TV to the converter.</p>	<p>A typical S-Video to SCART lead. This example has a switch to change to SCART to S-Video too.</p>	<p>Connect the S-Video and Audio outputs from converter.</p>	<p>SCART connection in to the rear of the TV.</p>

Use the HDMI to S-Video converter with S-Video lead.

		
<p>HDMI from Apple TV to the converter.</p>	<p>Connect the S-Video and Audio outputs from converter.</p>	<p>S-Video to the mini-DIN S-Video connection, plus audio.</p>

Use the HDMI to S-Video converter with composite lead.

		
<p>HDMI from Apple TV to the converter.</p>	<p>Connect the composite and audio phonos from the converter.</p>	<p>Input on TV for composite and stereo audio.</p>

Contact J.S. Technology for other options.

There are also converters for HDMI to YUV / YPbPr (component) video and also HDMI to VGA. Please visit the J.S. Technology website for further details.

www.js-technology.com

Configuring Apple TV.

When Apple TV starts up from new it should work with the converter. If no picture is visible it may be advantageous to reset Apple TV.

Resetting Apple TV V2.

From <http://support.apple.com/kb/HT3180>

Aluminium Remote:

Hold “Menu” and “Down” on the remote control for approximately 6 seconds.

White Remote:

Hold “Menu” and “Menu Down / Scroll” on the remote control for approximately 6 seconds.

Version: 1.00
 Release Date: 03/2012
 Author: Dr John Sim

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