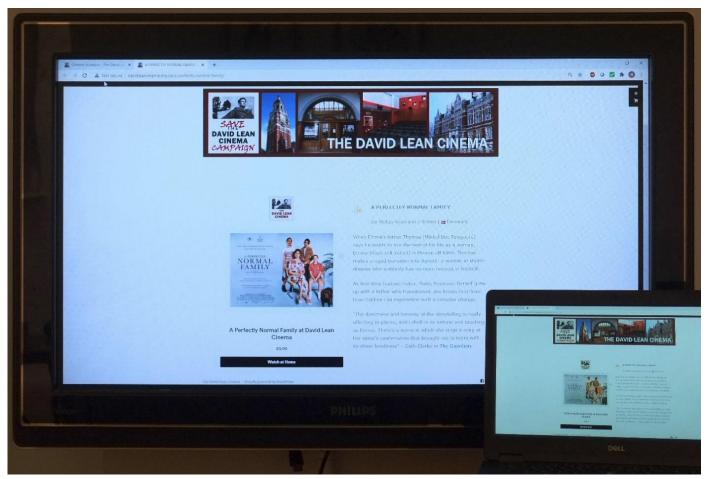
Getting the David Lean Cinema on your TV

Many movies are available on the internet and they can be viewed on an internet-connected PC, MAC, tablet, smartphone or "smart" TV. At the moment, many cinemas are closed because of coronavirus – and that unfortunately also includes the David Lean Cinema. It can be very useful viewing movies on a PC or phone while travelling, but the screen is small and the sound leaves an awful lot to be desired. Movies are produced to be experienced in a real cinema with a big screen and sophisticated sound system, but while that is not possible you can connect your computer to your TV – and also make use of any sound system that you already have.



The David Lean Cinema has many movies available on our website for viewing at home - the photo above shows one of them. One of the easiest methods of seeing this on your TV is to connect your PC or Mac to your TV. If you have a flat-screen TV, then the chances are that it has one or more HDMI sockets. You may already be using these if you have a Set-top box (eg BT, Sky or Virgin), Blu-ray player or gaming console (eg Xbox) connected to your TV. Unlike old CRT TVs, which were analogue, flat-screen TVs require a high-speed digital connection and just about all use HDMI (High Definition Multimedia Interface). That is the easy bit – unfortunately there is no single socket type available on all the different types of computer. Let's look at the more common options available.

For PCs, you may be lucky to have an HDMI socket, shown here on the left:



For comparison, on the right is a USB Type A socket, which is normally used for connecting peripherals like keyboards and mice. The HDMI socket is a little wider than the USB socket and it has two corners cut off at an angle. If you have an HDMI socket on your PC, all you need is an HDMI cable to connect your PC to your TV.

Older PCs might not have an HDMI connector, but may have a DisplayPort (DP) connector, shown here on the left:



The DP socket is noticeably wider than the USB socket (shown on the right) and has only 1 corner cut-off at an angle. In this case you will need an adaptor (or "dongle") to convert DisplayPort to HDMI. The conversion is pretty simple and so the adaptors are quite cheap, typically less than £10. DisplayPort to HDMI adapters are available from Amazon, Argos, PC World and many places on-line.

If you don't have either of these types of socket, you might have a DVI socket (shown below at approximately the same scale as the other sockets):



This was used on some older desktop PCs and laptops. DVI (Digital Video Interface) was a forerunner of HDMI and does not require signal conversion – you just need a DVI-HDMI cable, which is available at just under £20. Unfortunately, there is no audio connection in DVI, so you will need a separate audio connection to an audio system. DVI also lacks some of the automatic features of HDMI, so you might have to do some manual setting up on your PC.

All of the above are digital connections. If you don't have any of these, the last option is to use the VGA socket, shown here on the right, (along with a USB socket on the left):



If you have an old flat-screen TV, it might have a VGA input, in which case you just need a normal VGA-VGA cable. If not, there are a very few adaptors going from VGA to HDMI and they are quite expensive, around £50, because this adaptor also involves converting the old analogue VGA signal to a digital signal. When searching for these adaptors, be aware that there are a great many adaptors available at a reasonable price – but these are converting *from* HDMI to VGA (ie in the wrong direction) and will not work. VGA also does not carry audio, so you will need a separate audio connection to an audio system and you are quite likely to have to do some manual setting up on your PC.

If you have a MAC you have fewer options, but you will need an adaptor. New MacBooks have USB Type C sockets on them:



The USB Type C socket (on the left below) has rounded sides and is smaller than the USB Type A (on the right):



Official Apple USB Type C to HDMI adaptors are expensive, around £75, but this does include other outputs. Adaptors from other companies are more reasonably priced at around £20. This type of adaptor may also be called a Thunderbolt 3 to HDMI adaptor using a USB Type C plug. Older MacBooks had a different socket, also called a Thunderbolt, shown on the right below (along with a USB Type A as well):



This is an almost square socket, with 2 cut-off corners. This is actually a Mini DisplayPort socket and Mini DisplayPort to HDMI adaptors are available at less than £20.

When buying cables and adapters, you will need to check that it is capable of supporting the video format you want. Most current TVs are HD (or "Full HD") and will support a resolution of 1920 pixels horizontally by 1080 vertically. Your computer may be able to provide higher resolutions than this, but the HDMI system has a negotiation between the computer and TV to identify the optimum common resolution. They will likely use the 1920 x 1080 resolution and a refresh (or "frame") rate of 30Hz, so your adaptor will need to support this resolution.

If you are just using an HDMI cable, you will need to have an "HDMI High Speed Cable". Because HDMI uses such high speeds (up to 18Gb/s for this type), it is not practical to have very long cables and still maintain a reliable connection. Cables are readily available up to around 5m long, but it's better (and cheaper) to have as short a cable as you really need. It is possible to buy 10m cables, but these are relatively expensive, thick and cumbersome. Anything longer than that generally requires professional equipment and fibre optics. Having said that, don't pay over the odds for cables – just look for the cables labelled as "HDMI High Speed Cable". If you are using a 4K format with the latest 4K or UHD (Ultra-high Definition) TV, you might be able to use an HDMI High Speed cable. However, it's better to use an "HDMI Premium High Speed Cable" for the most reliable results - this will work with HD as well. Note that there is also an "HDMI Ultra High Speed Cable" which is capable of 48Gb/s, but this really isn't needed for normal HD or UHD.

Having connected your computer, there are a couple of further steps you need to do to get a picture on the TV. First, you will need to manually select the relevant HDMI input on your TV. You will then have to enable screen sharing on your computer. At the very least, you will need to Duplicate the computer's screen on the TV, so both show the same picture – this is the mode used in the first photo. Note that your computer might automatically go to a screen sharing mode when it detects a second screen. If you don't manage to get a picture on the TV and you are sure you have followed these steps (select relevant input on TV; share screen on computer), you may have to unplug one end of the HDMI cable and re-connect it after a few seconds. This triggers a "Hot Plug" event so that the negotiation and connection process re-starts.

All the above make use of a computer and use a cable to connect to your TV. If you have an internet-connected smart TV, or a stick (such as Amazon Fire Stick, Apple TV, Chromecast, Roku) connected to your TV, you can receive streaming services like Netflix and catch-up services like BBC iPlayer and ITV Hub via your home WiFi. These devices are fine for streaming and catch-up, but they normally don't come with a web browser - and entering a long web address would be very difficult using just the remote control keypad. Far better is to use the browser on your phone or tablet to surf to the David Lean Cinema website as usual. Once you have navigated to the movie you want to see, you can then "cast" the movie via your WiFi to your smart TV or stick to see it on your TV. Casting involves sending information including the URL (Universal Resource Locator) and the current position in the movie to your smart TV or stick, which then takes over and streams the movie. If you have a Chromecast stick (or a TV which incorporates Chromecast) you can cast using Google Home, which may already be installed on your Android phone or tablet. For details of how to do this go to https://support.google.com/chromecast/answer/3228332, or search for "chromecast cast to tv". This page gives information on how to cast from an Android device, iPhone/iPad or a computer. It is also possible to cast to other sticks – just search for the relevant cast information online.

Now you can see the David Lean Cinema website on your TV, why not press that "Watch at home" button on the DLC website, then sit back and enjoy the movie? After all, the David Lean Cinema will benefit as well.

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