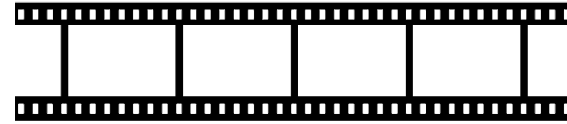


TV and Video by Giles Godart-Brown

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What is Video?



- A video is simply a sequence of still images, just like on a cine film. Each image or frame consists of rows of coloured dots called pixels. An HD TV is 1920 pixels wide by 1080 high.
- Each frame is compressed by similar techniques as those for still images, and they are also compressed inter-frame – only the pixels that are different from the previous frame are stored
 - Compression is VERY efficient, only about 2% of the data captured in a TV camera ends up being used!
 - Compression is very compute intensive, even today it causes about a 2 second delay on TV signals
- Each video is compressed at several rates, the lower the rate the worse the quality
- When you start a stream it uses the lowest rate, then hops over to a faster rate if the network you are using can support it.

Who are the big players?

Free

BBC – iPlayer
ITV - ITVx (replaces ITV hub)
All 4
My5
YouTube
Sky News

Pay

Sky Go
NowTV
Sky Sports
BT Sport
Amazon Prime
Netflix

AppleTV
Paramount+
Disney+
Discovery+
Britbox

What do you need to view these.

- Ideally a Wi-Fi network. Streaming video over the 3/4G network will quickly use up your monthly bandwidth allowance
- Pay services will require you to have an account, some are monthly (e.g. Britbox), some are pay as you go (e.g. NowTV)
- An App or a web page running on a suitable device
 - PC/Mac
 - Smartphone
 - Tablet
 - Modern smart TV
 - External device e.g. Amazon Fire stick

Options for watching on the TV

- Free services can usually be watched by connecting your PC to the TV via HDMI. Pay services will often not work.
- Some TVs support 'casting' or 'mirroring' from a smartphone or tablet, again this may not work for Pay services
- Most Set top boxes (Freeview Play, FreeSat, Sky) have many of the Apps built in and also support pay services
- The Amazon Fire stick is a good solution for Amazon Prime customers



Do you need a TV license?

- If you watch or record shows as they're being shown on TV in the UK ('live TV'), you need to be covered by a TV licence irrespective of the device you are using.
- You also need one if you use BBC iPlayer regardless of the device you're watching on.
- In other words, most probably you need a license.