### Video formats

There are different layers of video transmission and storage, each with its own set of formats to choose from.

For transmission, there is a physical connector and signal protocol ("video connection standard" below). A given physical link can carry certain "display standards" which specify a particular refresh rate, <u>display resolution</u>, and <u>color space</u>. There are a number of analog and digital tape formats, though digital video files can also be stored on a <u>computer file system</u> which have their own formats. In addition to the physical format used by the storage or transmission medium, the stream of ones and zeros that is sent must be in a particular digital video "encoding", of which a number are available.

# [edit] Video connectors, cables, and signal standards

 See <u>List of video connectors</u> for information about physical connectors and related signal standards.

## [edit] Video display standards

#### [edit] Digital television

New formats for digital television broadcasts use the MPEG-2 video codec and include:

- ATSC USA, Canada, etc.; a DVB video standard
- Digital Video Broadcasting (DVB) European
- Integrated Services Digital Broadcasting (ISDB) Japanese; also a <u>DVB</u> video standard

#### [edit] Analog television

Analog television broadcast standards include:

- Field-sequential color system USA, Russia; obsolete
- Multiplexed Analogue Components (MAC) Europe, obsolete
- Multiple sub-nyquist sampling Encoding (MUSE) Japan, analog HDTV
- NTSC USA, Canada, Japan, etc.
- PAL Europe, Asia, Australia, etc.
  - PAL-M PAL variation. Brazil
  - PALplus PAL extension, Europe only
- <u>RS-343</u> (military)
- SECAM France, ex-USSR, Central Africa

An analog video format consists of more information than the visible content of the frame. Preceding and following the image are lines and pixels containing synchronization information or a time delay. This surrounding margin is known as a **blanking interval** or **blanking region**; the horizontal and vertical front porch and back porch are the building blocks of the blanking interval.

Many countries are planning a <u>digital switchover</u> to cease using these analog formats via <u>terrestrial television</u> broadcast. However, analog television sets expecting these older standards as input will be able to display standard definition digital signals if coupled with a converter box.