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, display resolution, and color space. There are a number of analog and digital tape formats, though digital video files can also be stored on a computer file system 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 List of video connectors 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 DVB 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
- RS-343 (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 digital switchover to cease using these analog formats via terrestrial television 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.