

An Introduction to Television and Video

Reto Kromer • AV Preservation by reto.ch

Film Preservation and Restoration

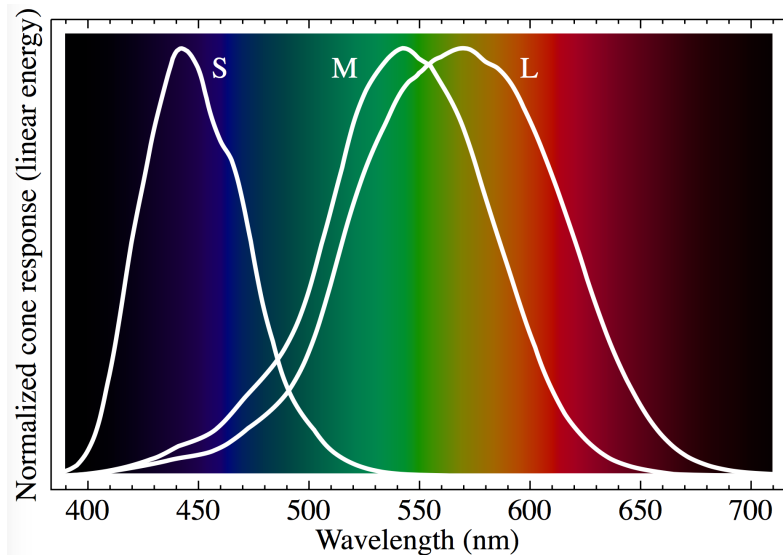
Hyderabad, India
8–15 December 2019

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Bibliography

- Diana Weynand and Vance Piccin with Marcus Weise: **How Video Works**. From Broadcast to the Cloud. Third Edition, Focal Press, New York NY and Oxon 2016

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Medium and/or Carrier

- sound
- film
- television
- video
- files

4

Sound Recordings

- Phonograph cylinder
- Gramophone record
- magnetic wire
- magnetic tape
- files

5

Photography

black and white:

- blue sensitive emulsion
- orthochromatic emulsion
- panchromatic emulsion

colour

- [...]

6

Magnetic Tape

- open reel
- cassette
- cartridge

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Common Magnetic Formats

Audio

- 2", 1", 1/2", 1/4"

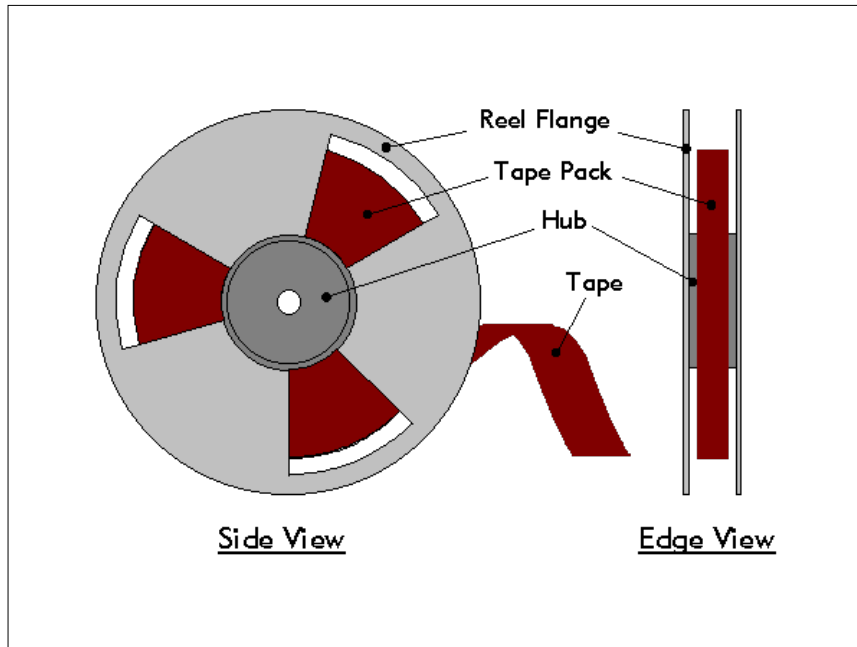
Cinema

- 35 mm, 17.5 mm, 16 mm

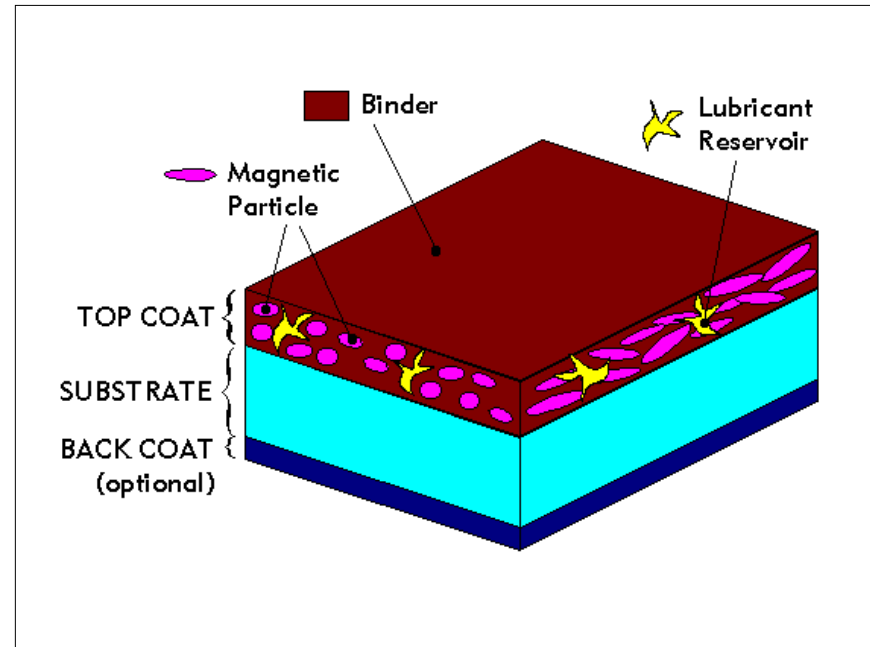
Video

- 2", 1", 3/4", 1/2"

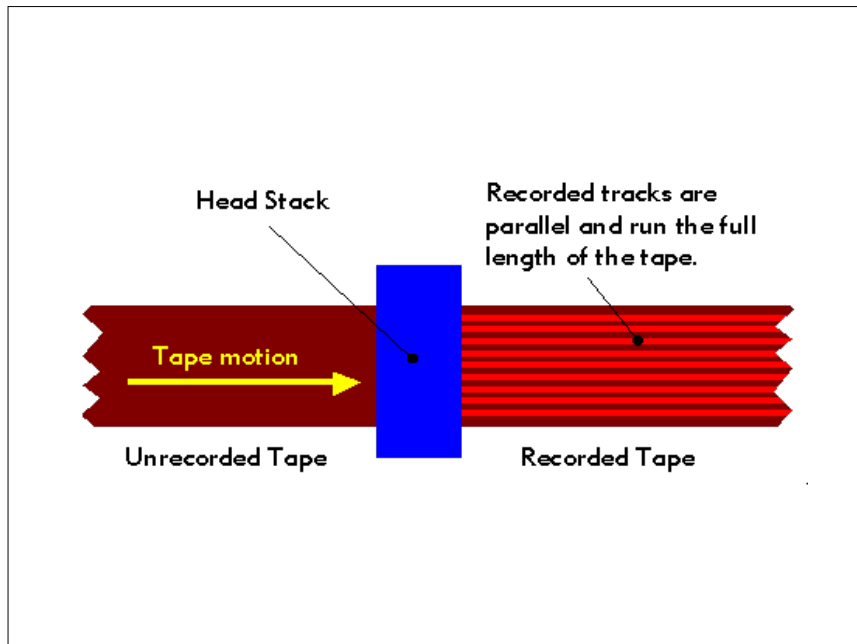
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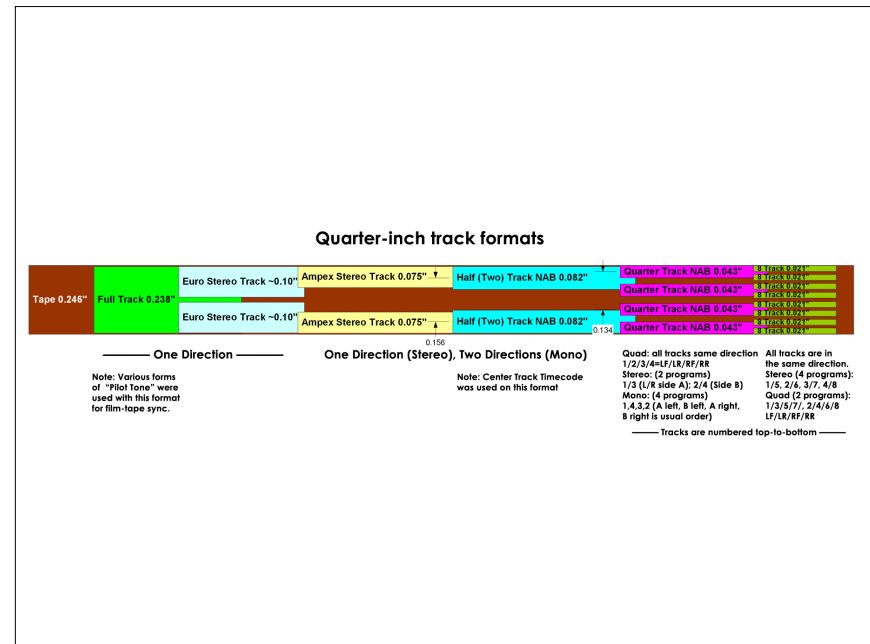
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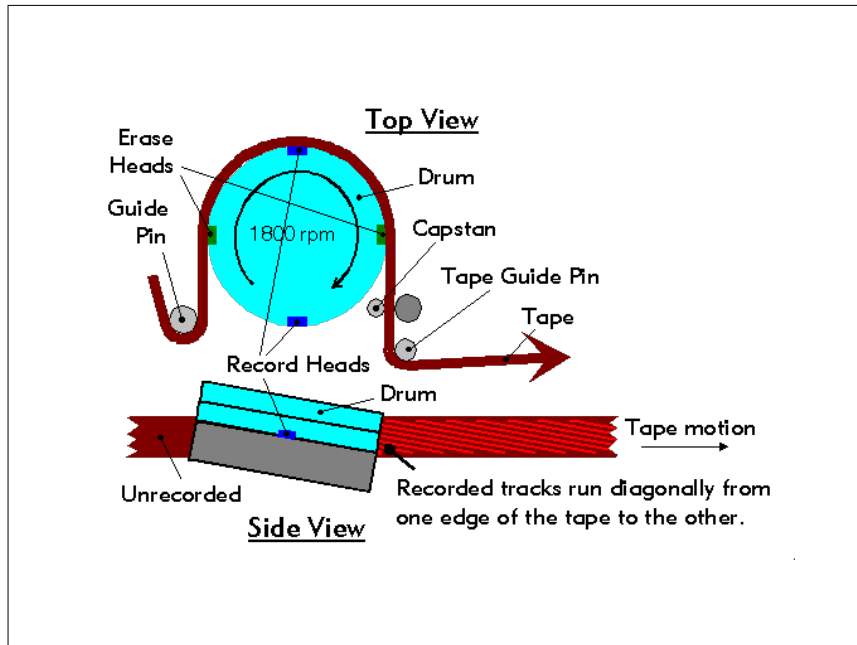
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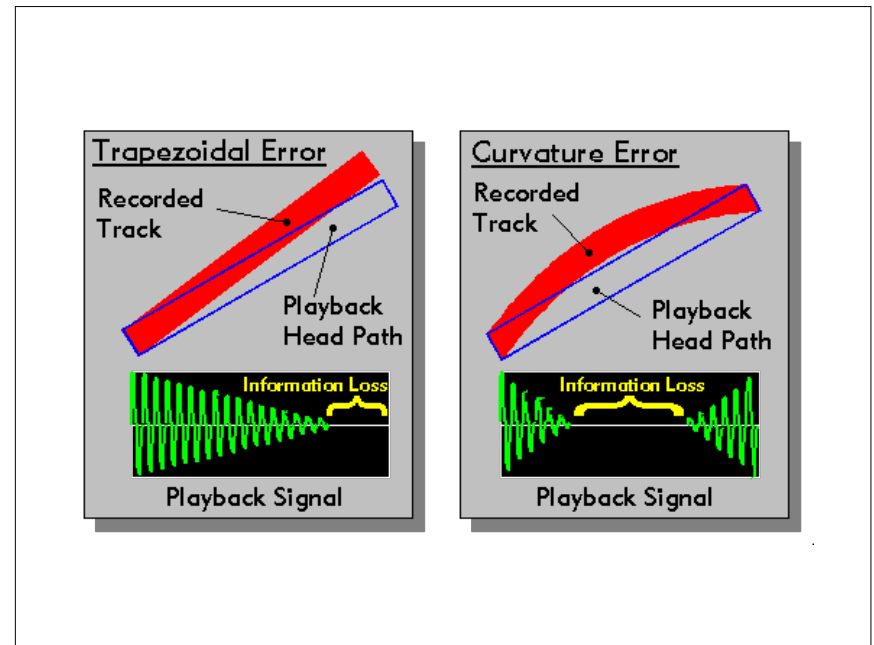
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Film

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Sound Film Production

image	sound
photochemical	photochemical
photochemical	magnetic
photochemical	digital
photochemical + digital	digital
digital	digital

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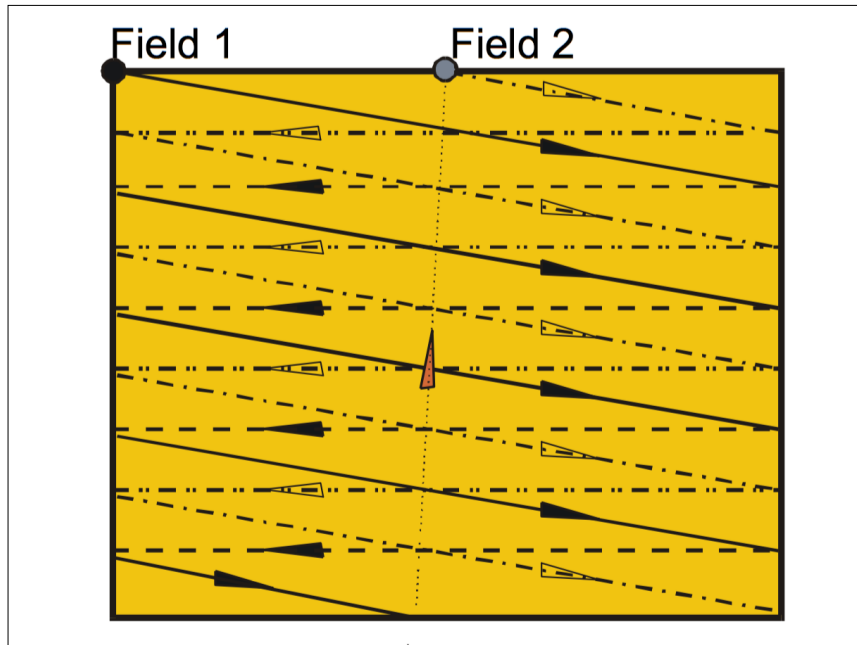
Television

- film
- live
- film and live
- film, magnetic and live
- magnetic and live
- files and live

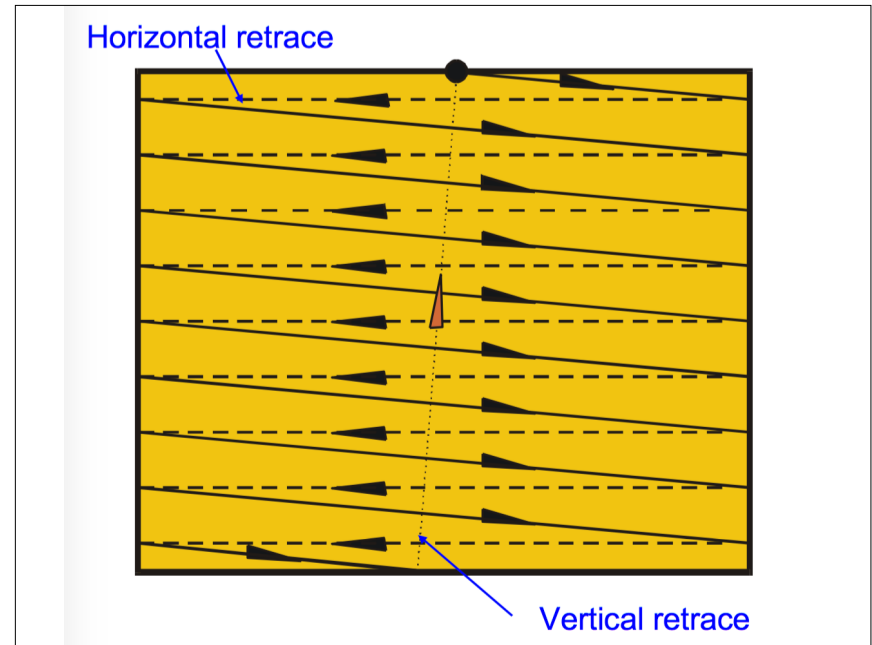
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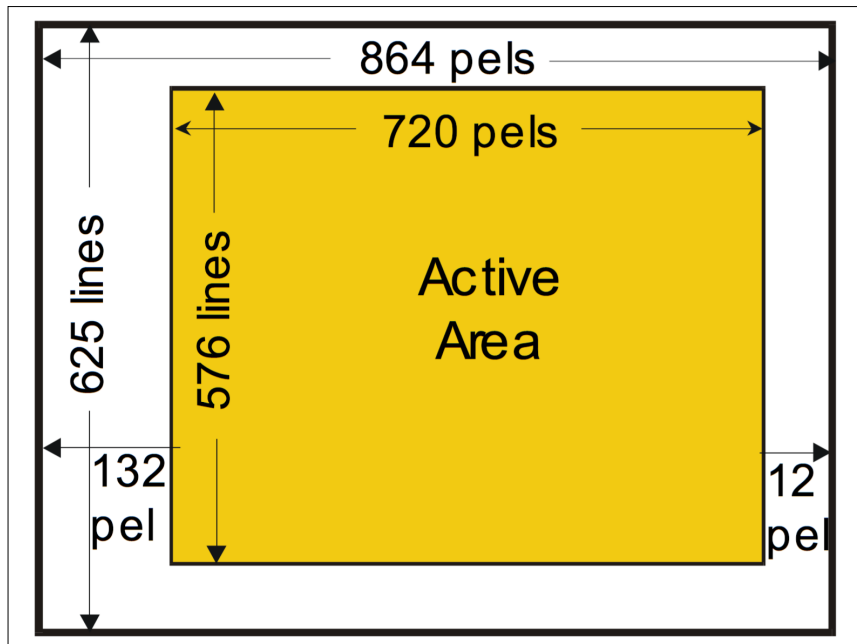
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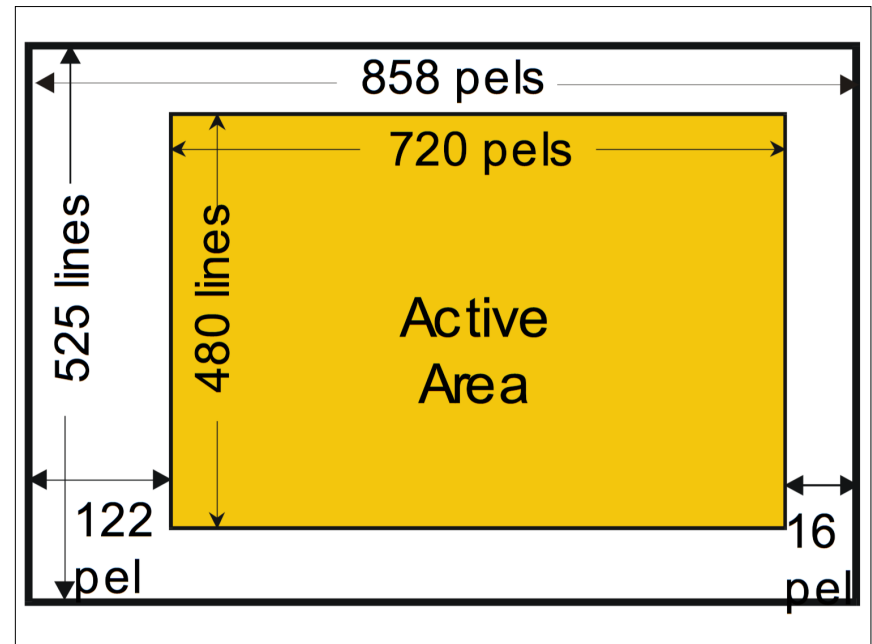
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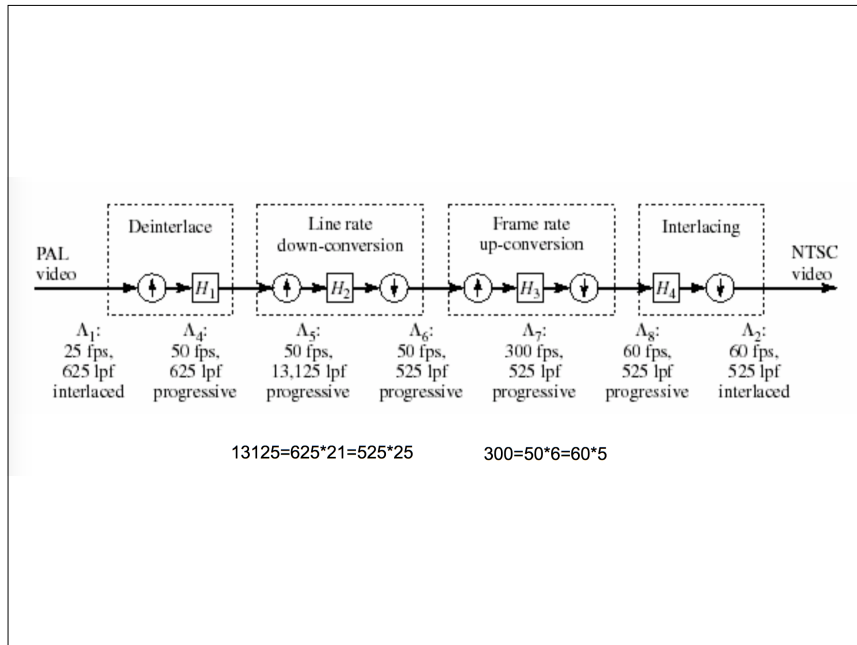
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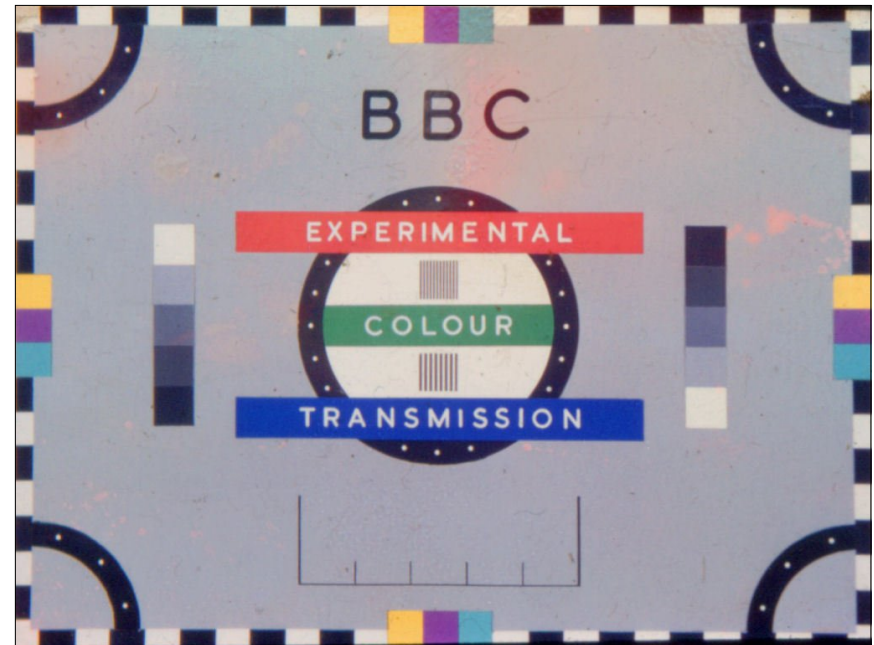
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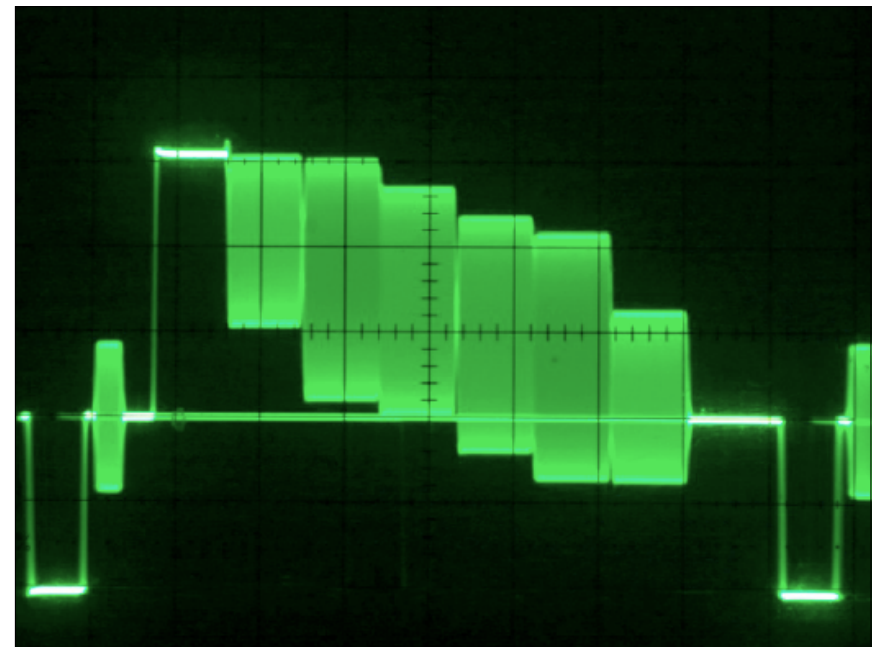
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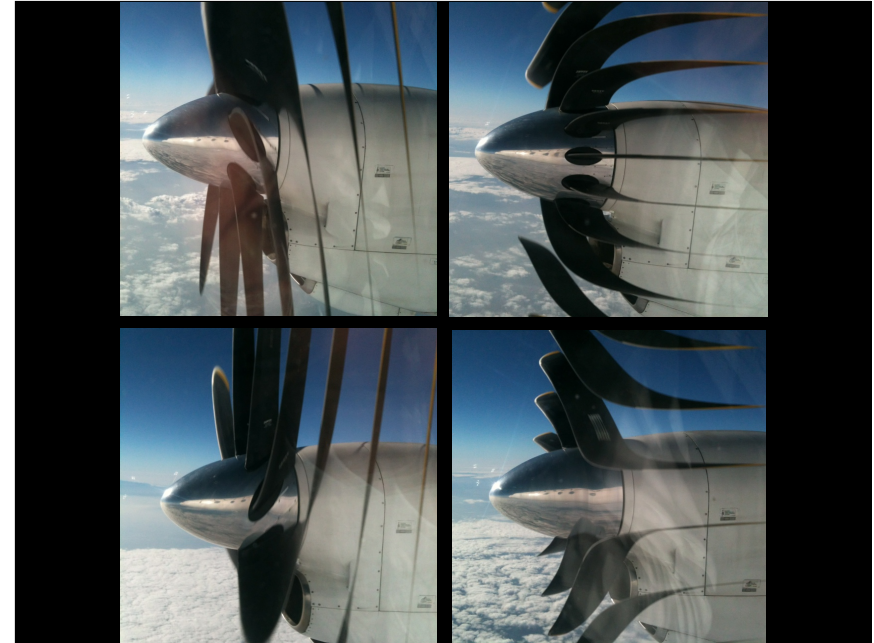
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Files

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INTERNATIONAL
STANDARD

ISO
18943

“The integrity of raw, uncorrected data on HDDs shall be checked periodically. If the error rate has increased significantly, the data shall be copied onto a different disk.”

Imaging materials — Magnetic hard drives used for image storage — Care and handling

Matériaux d'imagerie — Disques durs magnétiques utilisés pour le stockage d'images — Soins et manipulation

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Workflow

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Workflow

- identification
- preparation
- digitisation
- quality control (QC)
- cataloguing

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Identification

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Format Identification

Videotape Identification and Assessment Guide. Texas Commission on the Arts, 2004

→ www.arts.texas.gov/wp-content/uploads/2012/04/video.pdf

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Preparation

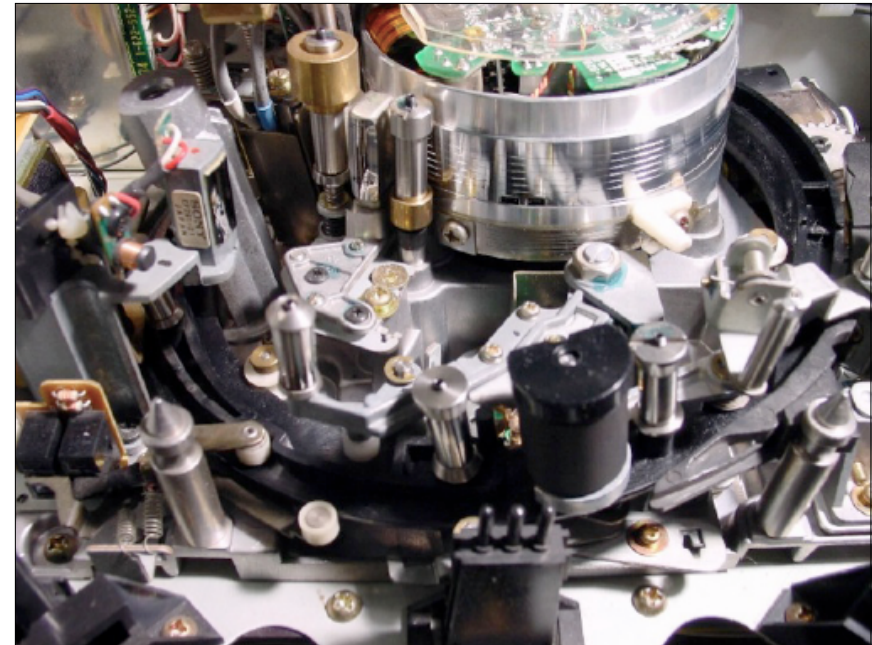
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Storage and Handling

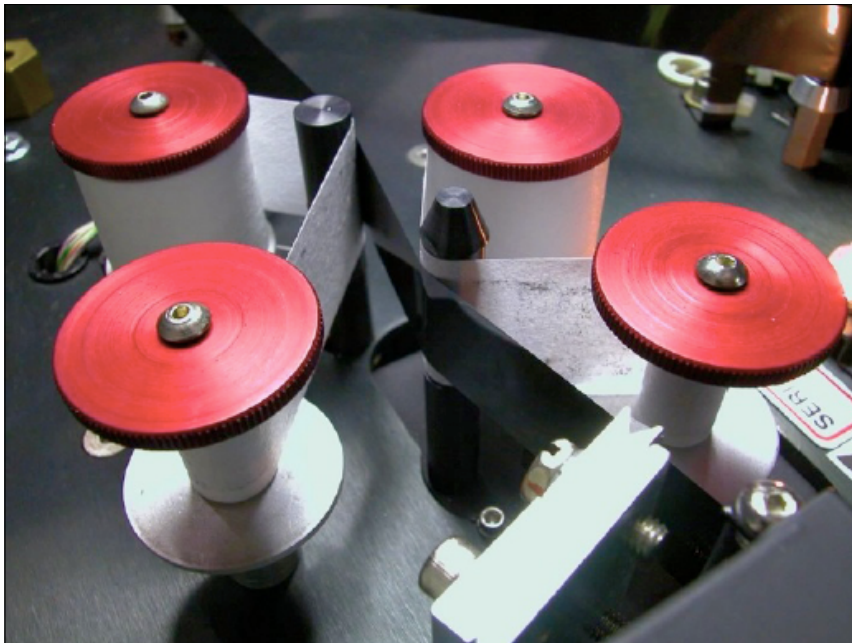
John W. C. Van Bogart: **Magnetic Tape Storage and Handling. A Guide for Libraries and Archives.** Commission on Preservation and Access, Washington DC; National Media Laboratory, St. Paul MN June 1995

→ www.clir.org/pubs/reports/pub54

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Digitisation

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AMIA Open Source

vrecord

→ github.com/amiaopensource/vrecord

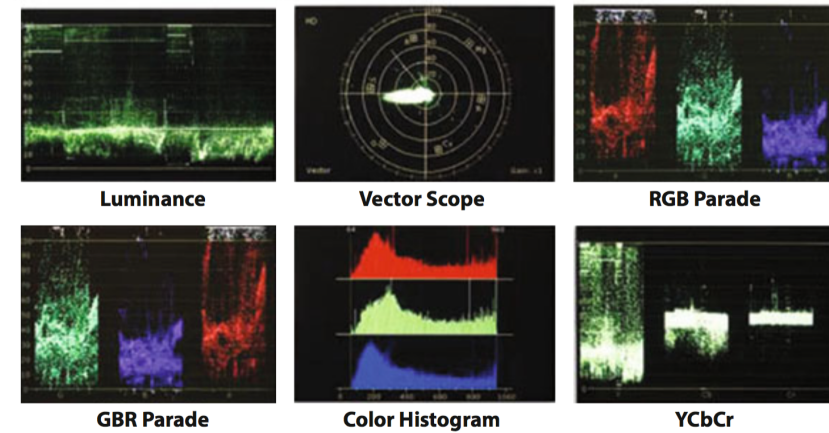
audiorecorder

→ github.com/amiaopensource/audiorecorder

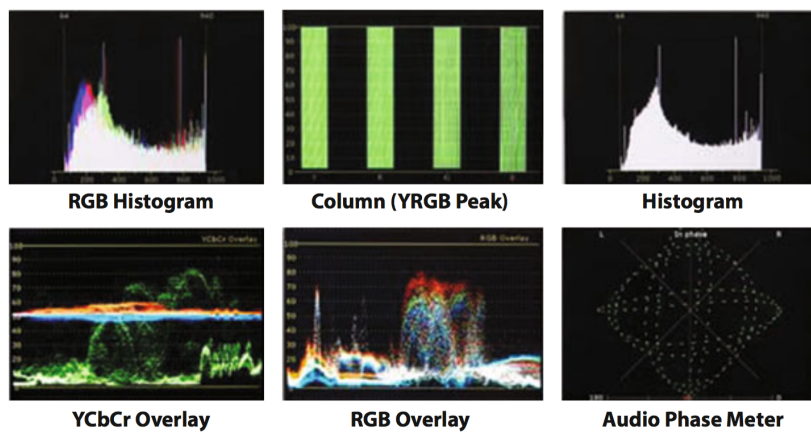
LTOpers

→ github.com/amiaopensource/ltopers

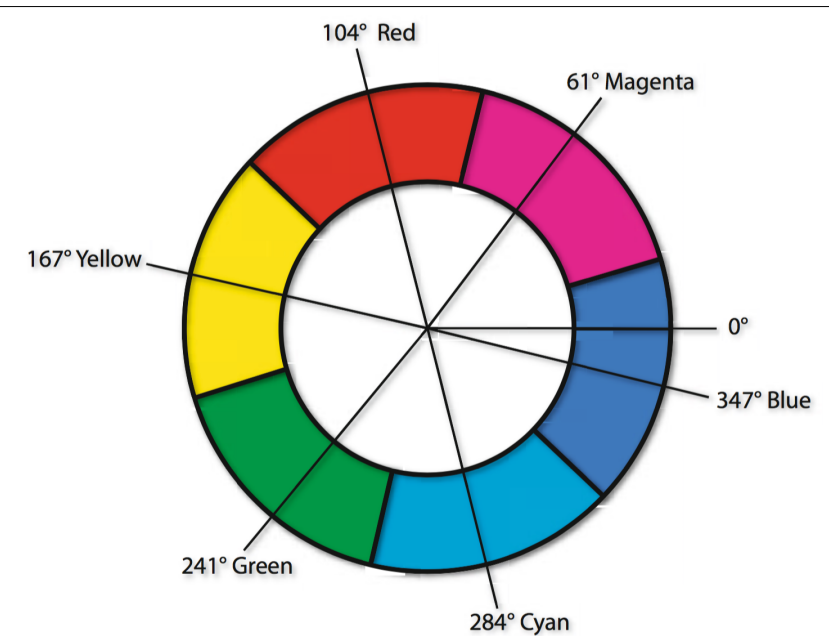
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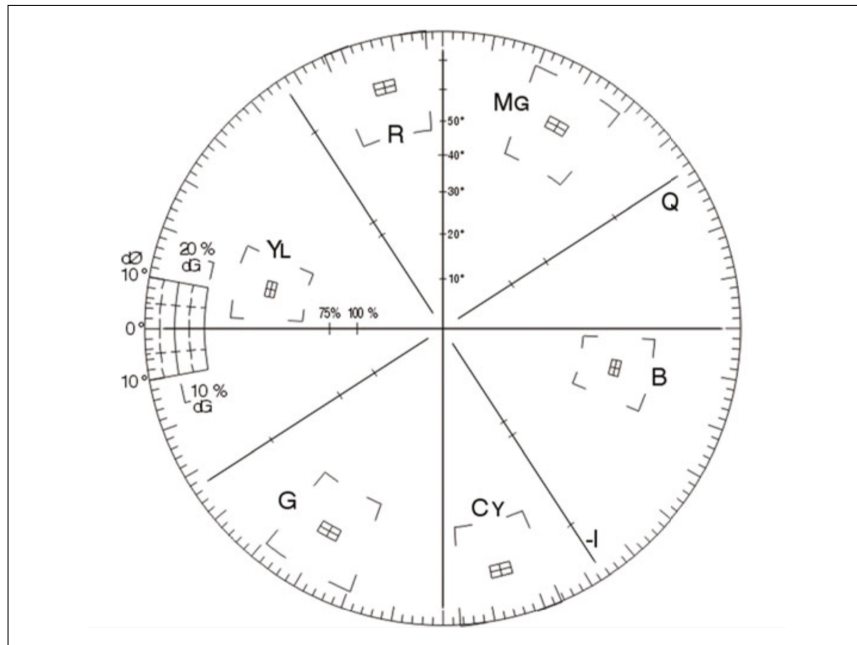
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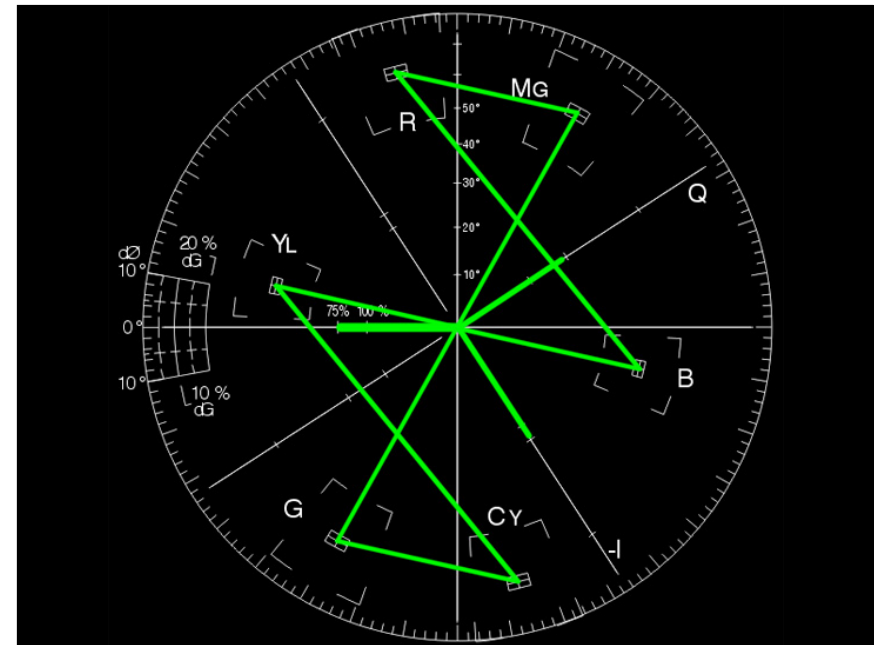
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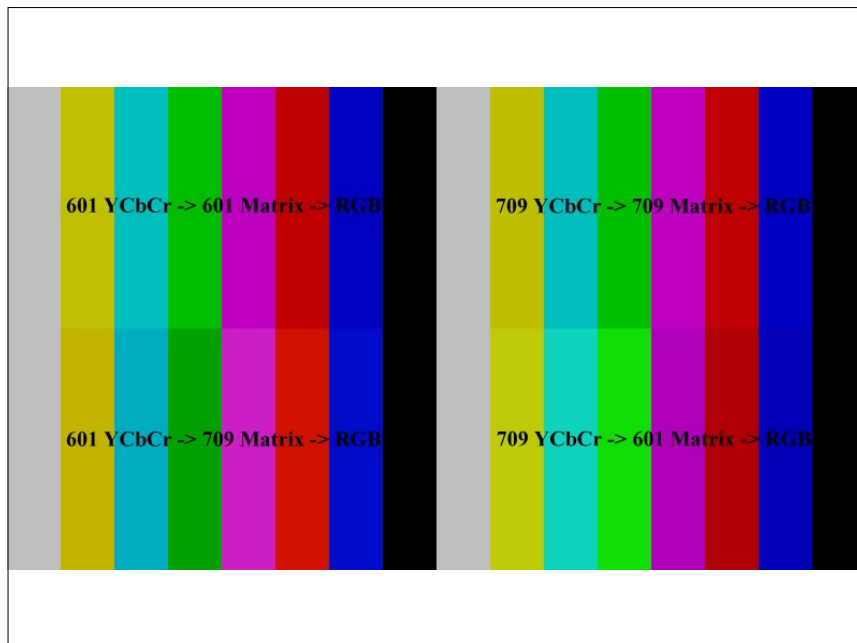
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FFmpeg

ffmpeg, ffprobe, ffplay

→ ffmpeg.org/

Cookbook for Archivists

→ avpres.net/FFmpeg/

→ amiaopensource.github.io/ffmprovisr/

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Quality Control

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BAVC

QCTools (GUI), **qcli** (CLI)

→ bavc.org/preserve-media/preservation-tools

AV Artifact Atlas

→ bavc.github.io/avaa/

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MediaArea

MediaInfo (GUI, CLI)

→ mediaarea.net/MediaInfo

MediaConch (GUI, CLI, web)

→ mediaarea.net/MediaConch/

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AV Preservation by reto.ch

chemin du Suchet 5
1024 Écublens
Switzerland

Web: reto.ch
Twitter: @retoch
Email: info@reto.ch



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