

Analogue Television and Video

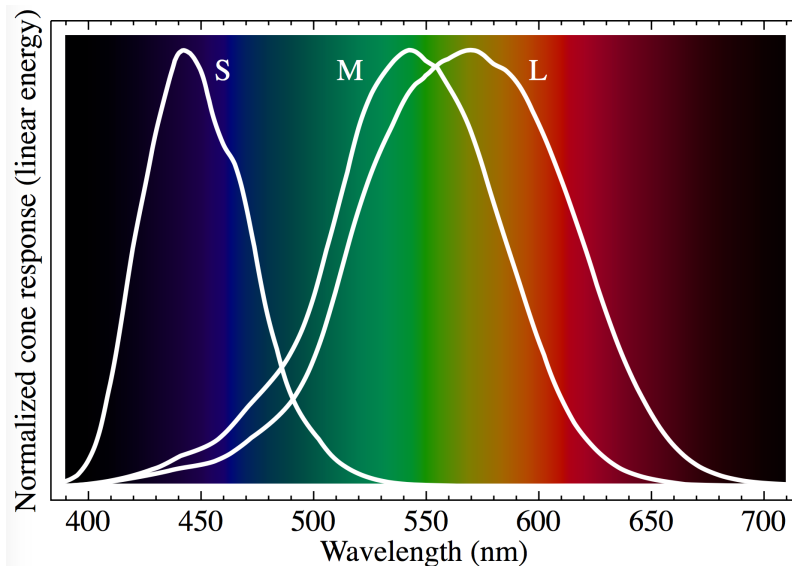
Reto Kromer • AV Preservation by reto.ch

On the Materiality of Audio-Visual Heritage

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Donostia (San Sebastián), Spain
17–20 October 2023

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



Medium and/or Carrier

- sound
- film
- television
- video
- files

Sound Recordings

- musical / music box
- phonautograph
- phonograph cylinder
- phonograph / gramophone record
- magnetic wire
- magnetic tape
- magnetic film

Photography

black and white:

- blue sensitive emulsion
- orthochromatic emulsion
- panchromatic emulsion

colour

Magnetic Tape

- open reel
- cassette
- cartridge

Common Magnetic Formats

audio

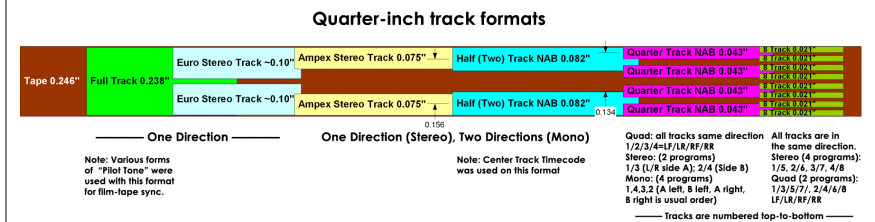
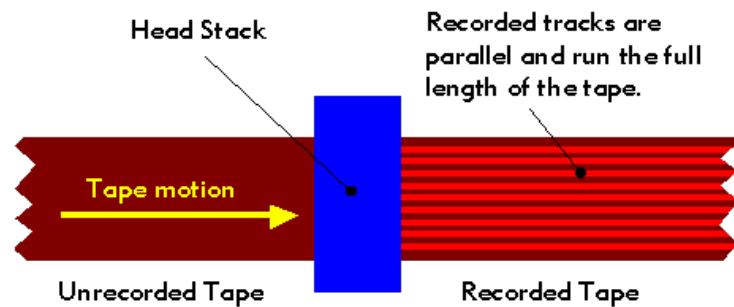
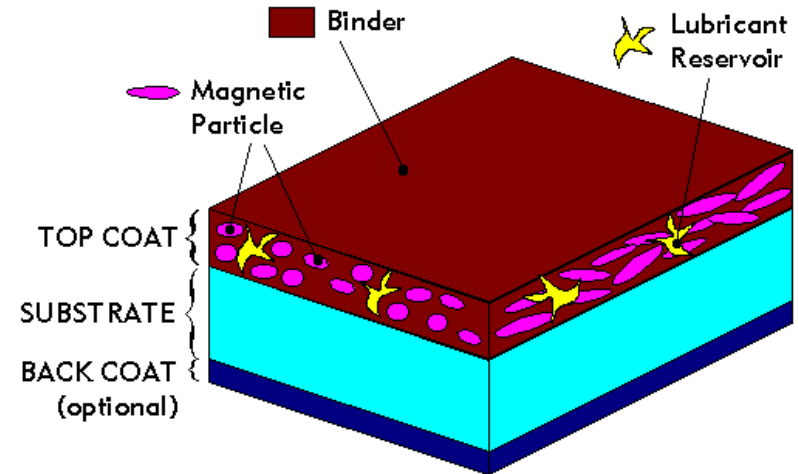
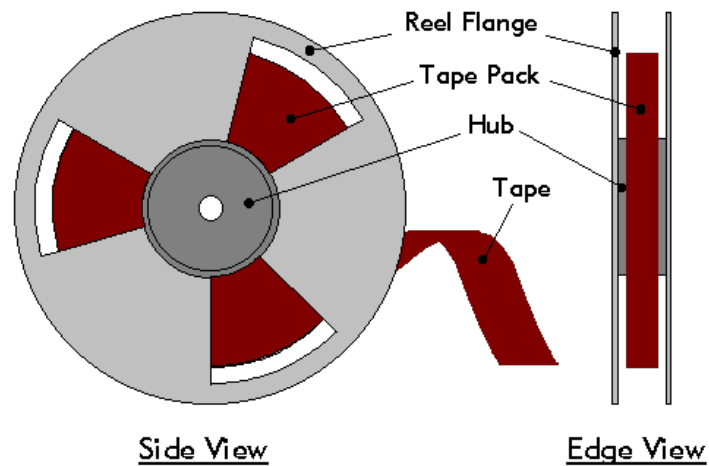
- 2", 1", 1/2", 1/4"

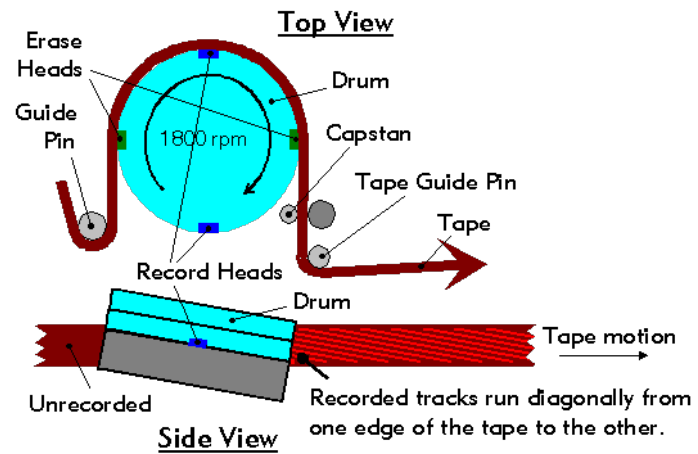
cinema

- 35 mm, 17.5 mm, 16 mm, 8 mm

video

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





Sound Film Production

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

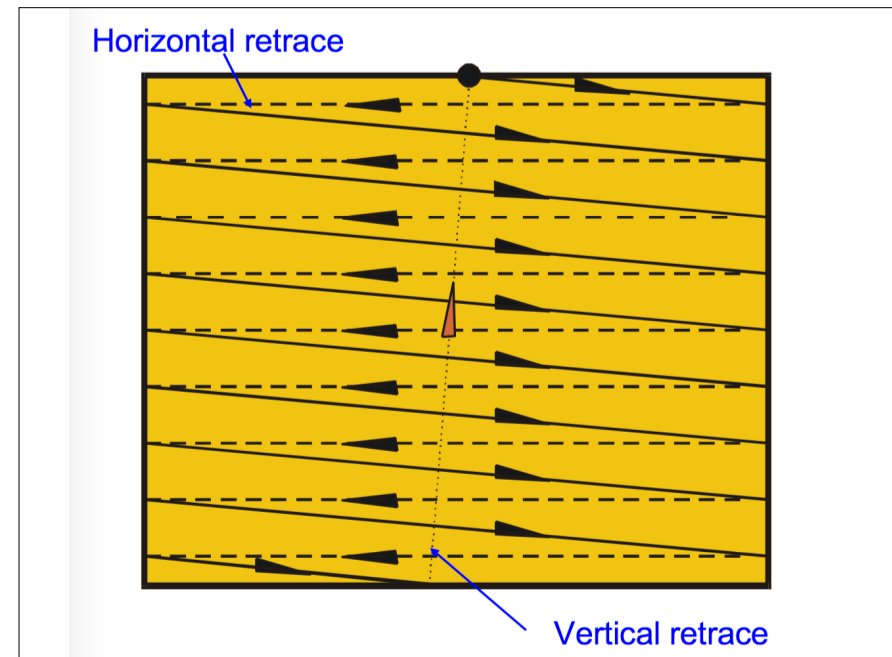
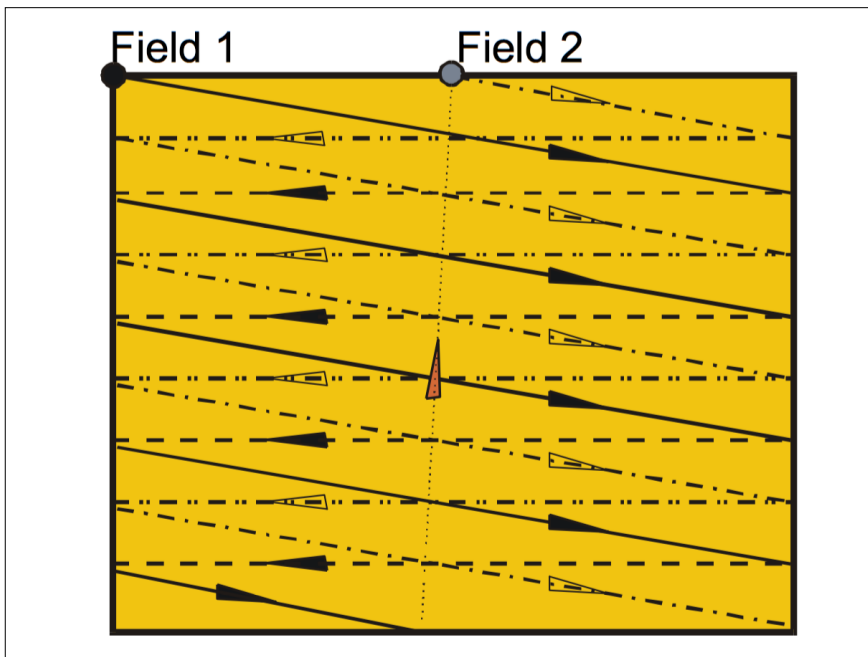
Television

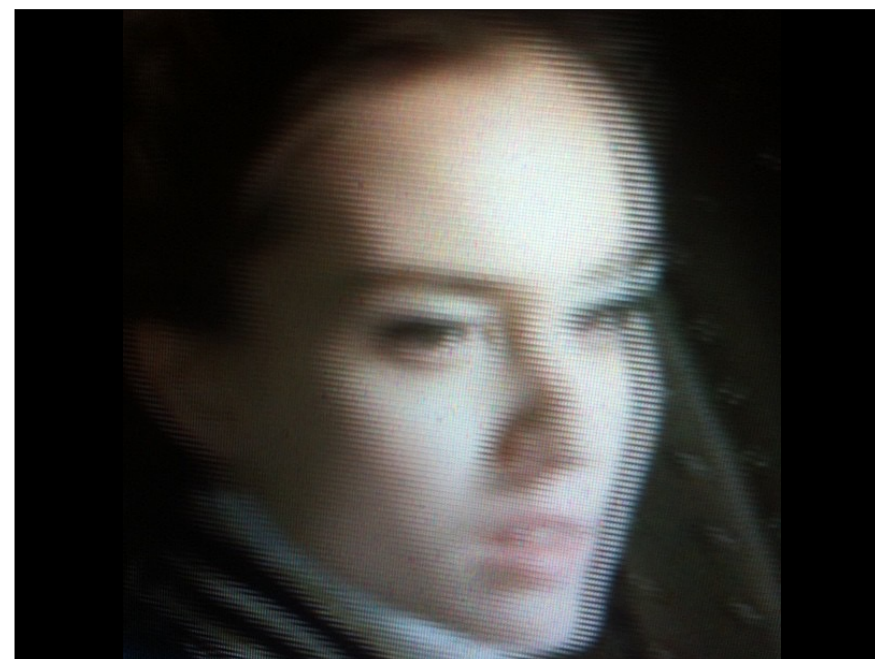
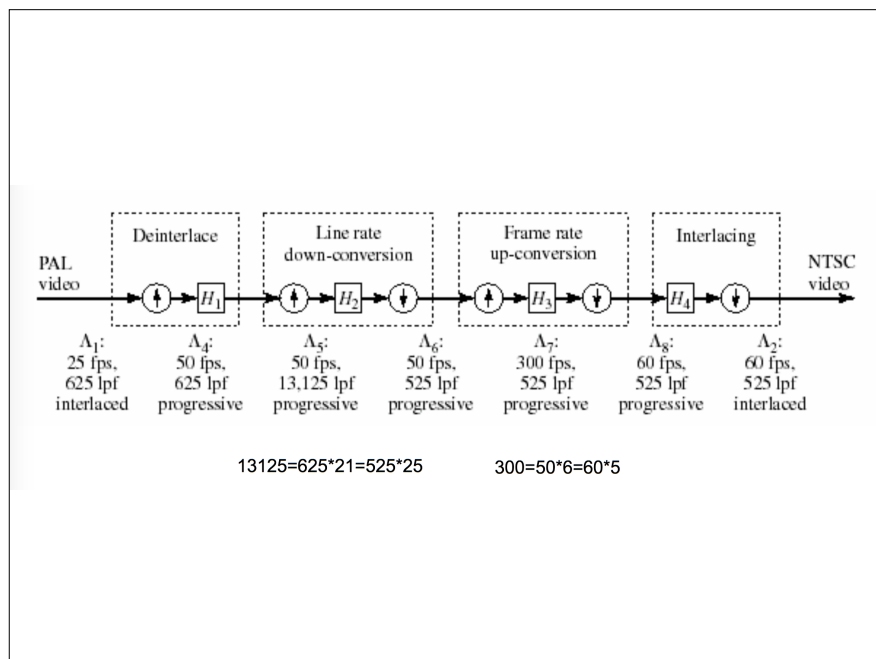
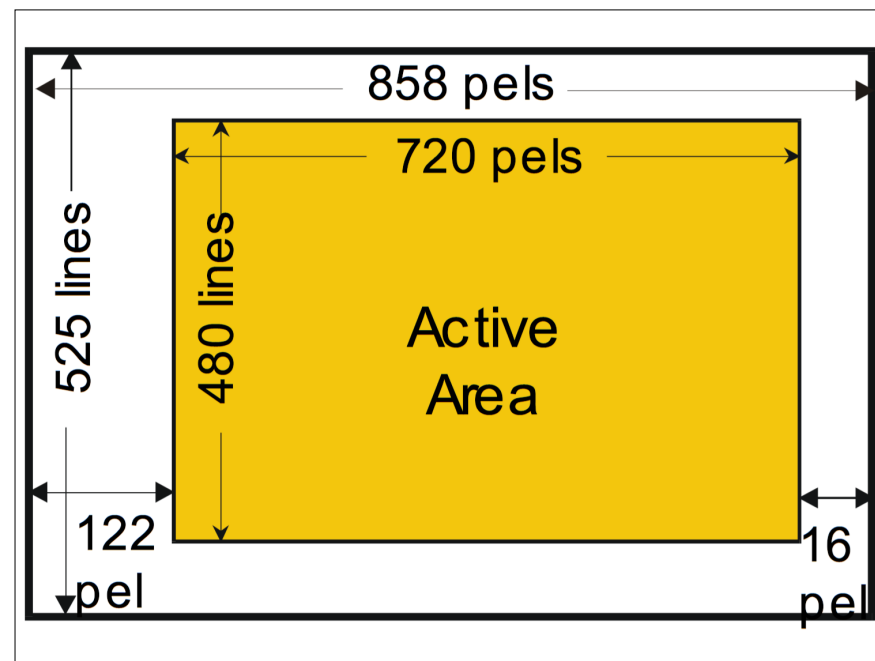
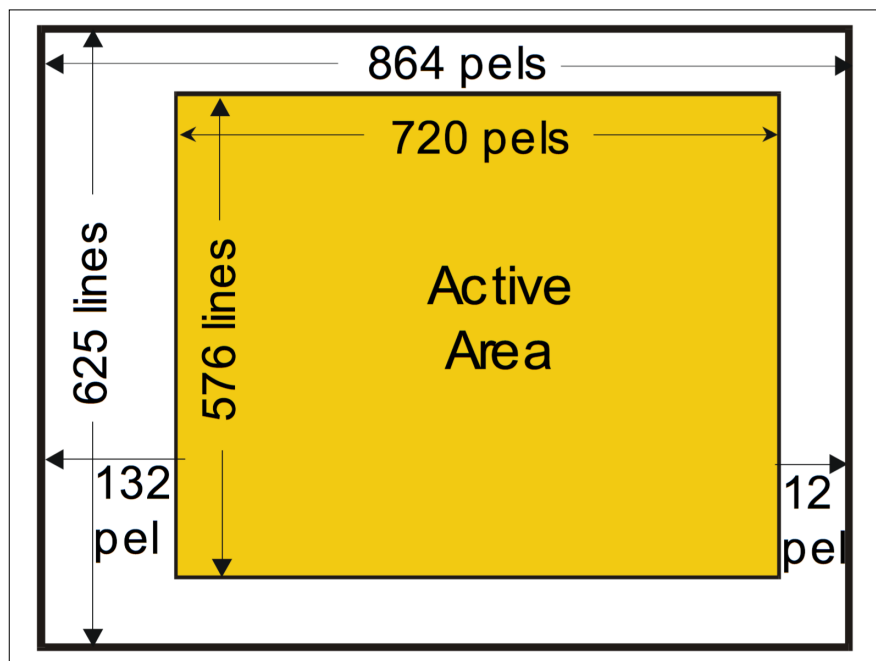
- film
- live
- film and live
- film, magnetic tape and live
- magnetic tape and live
- files and live

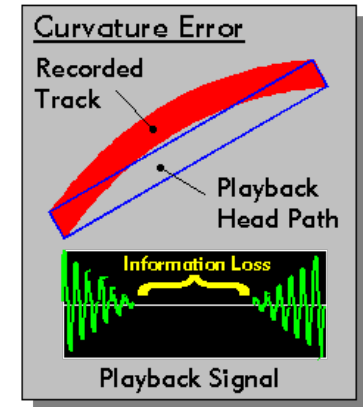
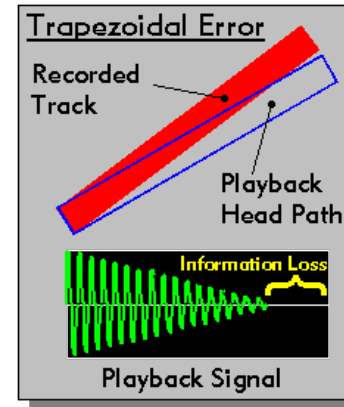
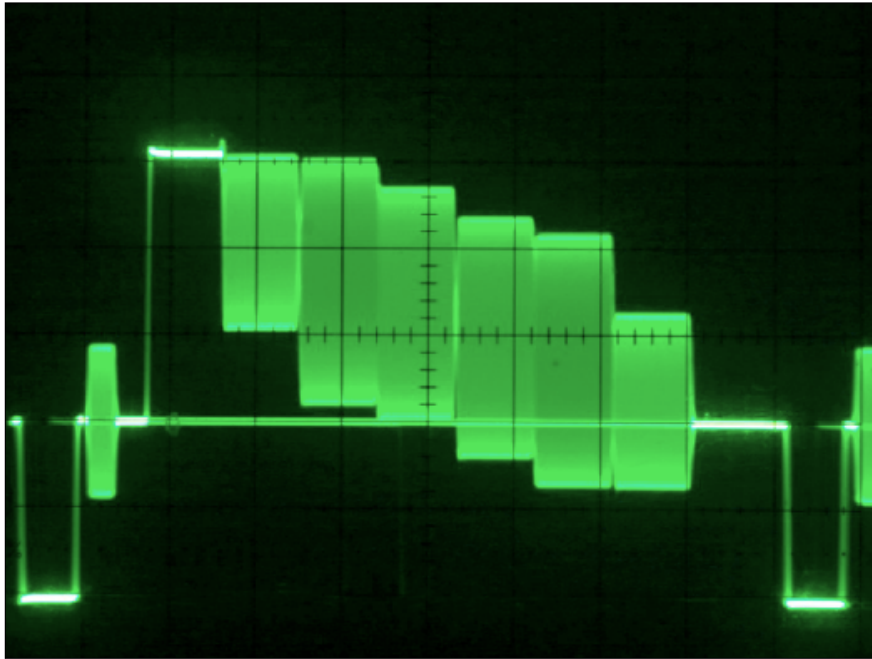


Analogue Colour Television

- PAL
- NTSC
- SECAM







Workflow

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

Open Source Tools

- vrecord
- QCTools, qcli
- FFmpeg
- MediaInfo, MediaConch

Identification

Format Identification

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

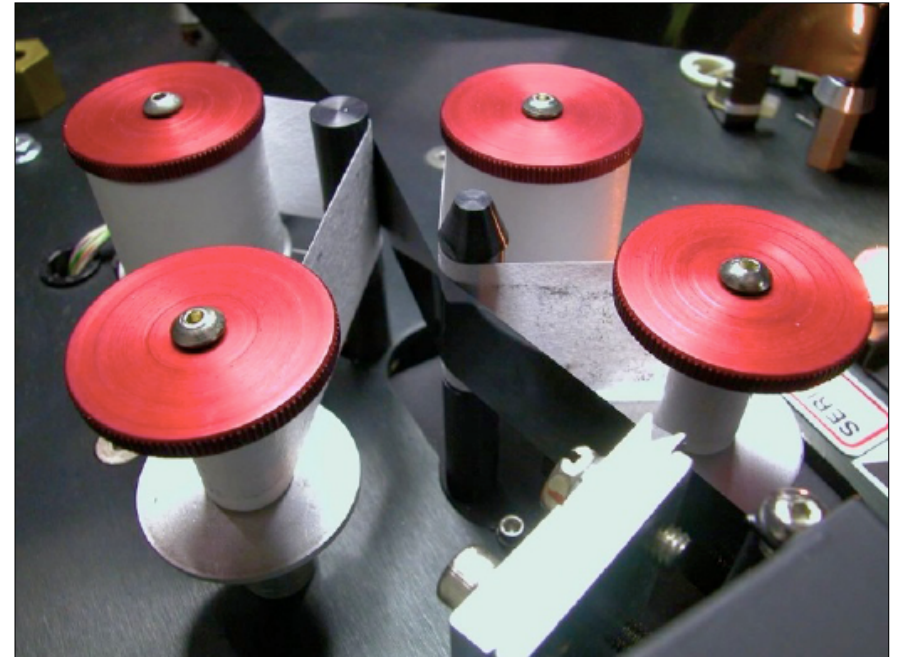
→ www.arts.texas.gov/wp-content/uploads/2012/04/video.pdf

Preparation

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



Digitisation

AMIA Open Source

vrecord

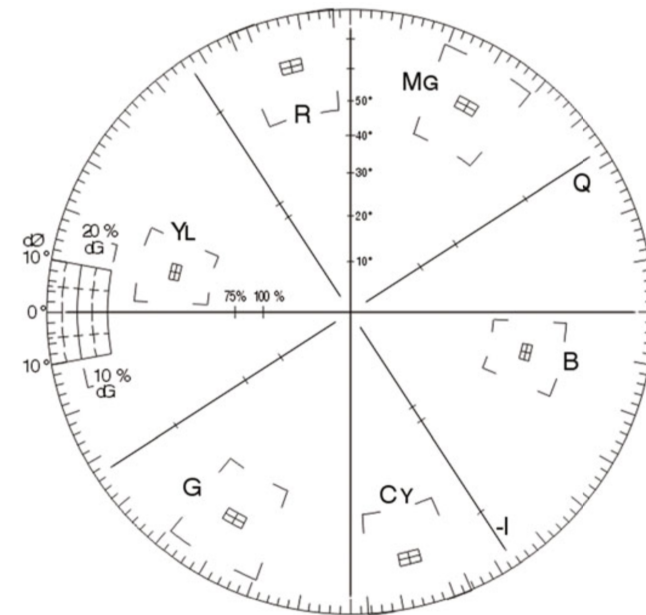
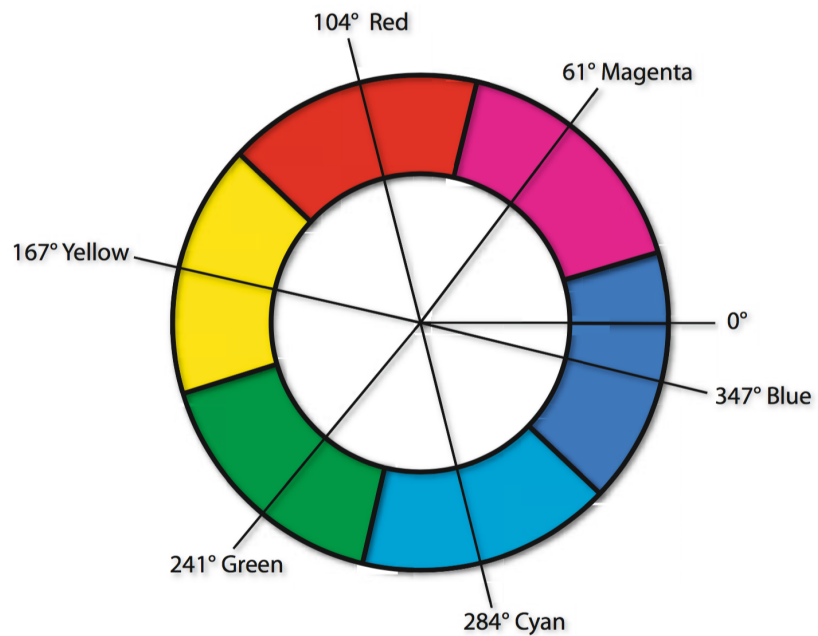
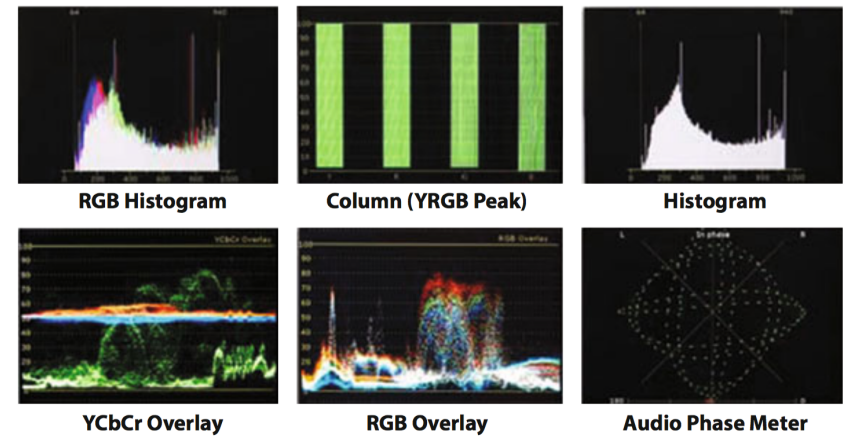
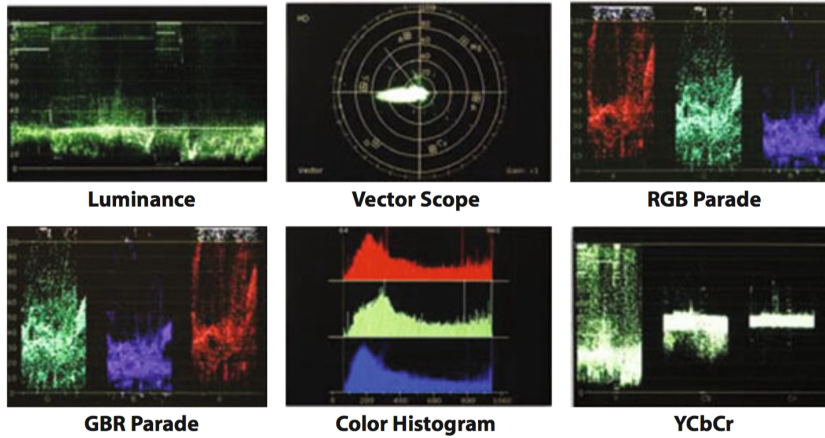
→ github.com/amiaopensource/vrecord

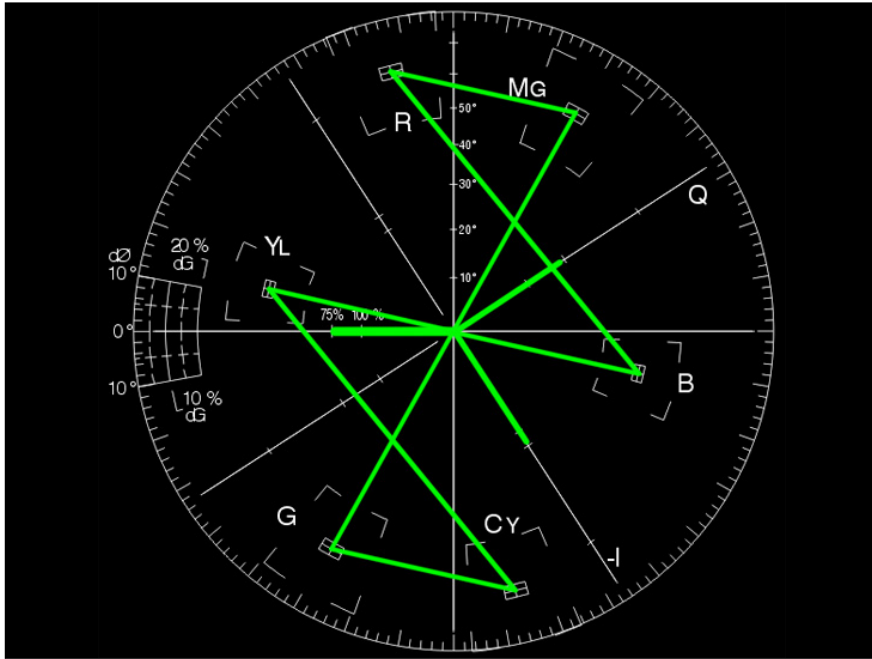
audiorecorder

→ github.com/amiaopensource/audiorecorder

LTOpers

→ github.com/amiaopensource/ltopers





Quality Control

FFmpeg

ffmpeg, ffprobe, ffplay

→ ffmpeg.org/

Cookbook for Archivists

→ avpres.net/FFmpeg/

ffmprovisr

→ amiaopensource.github.io/ffmprovisr/

BAVC

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

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

AV Artifact Atlas

→ bavc.github.io/avaa/

MediaArea

MedialInfo (GUI, CLI)

→ mediaarea.net/MedialInfo

MediaConch (GUI, CLI, web)

→ mediaarea.net/MediaConch/

Cataloguing

[...]

- [...]
- technical metadata

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