

Delivery & QC Checklist

COLOR GRADING
COURSE
LEVEL 3 ·
EXPERT

IMF/DCP basics, legal ranges, and the QC pass a master has to survive before it ships.

A grade isn't finished when it looks right — it's finished when it **passes**. Package for the destination, then QC against a written spec: color encoding, legal ranges, and safety checks.

IMF — the streaming master

SMPTE-standardized, **componentized**: video/audio/subtitles as separate track files, assembled by a **CPL** (Composition Playlist). A **PKL** inventories every file; an asset map links IDs to filenames.

PAYOFF

A QC fix delivers a new CPL + a short insert, not the whole program. A new language swaps audio + only the shots with on-screen text.

DCP — the cinema master

JPEG 2000-compressed, wrapped in MXF, its own CPL/PKL, often encrypted (a KDM key unlocks it for a screen + date window).

COLOR ENCODING

X'Y'Z' (from CIE XYZ) — device-independent, so any projector maps it into its own P3 gamut consistently.

Legal ranges

For 10-bit: code values roughly **64 (black) to 940 (white)**, headroom/footroom reserved above and below. Push past the ceiling or crush under the floor and automated QC flags it.

TOOL

Broadcast-safe scope limits / the Broadcast Safe clamp in project settings.

Harding (PSE) test

Scans for flashing and spatial patterns that can trigger seizures. Many broadcasters and territories (UK Ofcom notably) require a passing report before air.

YOUR JOB

Flag risky content early (strobing scenes, hard flash cuts, lightning) and soften rather than risk a full bounce.

The QC gauntlet — three parts

Technical / automated

Legal ranges; resolution / frame rate / codec; audio config; HDR metadata (MaxCLL/MaxFALL or Dolby Vision XML); color primaries & transfer characteristic (MediaInfo).

Content

Dead pixels, boom mics in frame, dropped frames, sync — the defects IMF's insert mechanism exists to fix cheaply.

Compliance

Harding, most importantly — a legal and ethical gate, not an optional nicety.

Pre-delivery checklist

- Container / codec matches the spec exactly
- Resolution & frame rate match the spec
- Color space & transfer characteristic correct (verify in MediaInfo)
- Legal range / broadcast-safe throughout
- HDR metadata present & correct, if applicable (MaxCLL/MaxFALL or DV XML)
- Audio configuration correct
- Harding-checked — risky flashes flagged or softened
- Filename matches the delivery naming convention