

DaVinci Resolve Color Grading — Workbook

This workbook turns the course into a repeatable grading system you run on every project. Each section maps to a course module: you will set up a color-managed, scope-driven project, build a clean named node tree and primary balance, isolate skin and skies with qualifiers and Power Windows, and finish with a reusable look plus a broadcast-safe export that passes QC. Fill the templates as you grade real footage so that within a handful of projects you have a tested node-tree starting point, a shot-matching method, and a delivery checklist you trust, plus a record of which settings, looks, and presets actually hold up across screens.

Setting Up Resolve to Grade Like a Colorist

Lock your color management, your scope-reading habits, and a project setup so every grade starts from a neutral, measurable image.

Worksheet: Project Color-Management Setup

Fill this once per project before grading a single clip. Decide your color-management approach and your delivery space first, because they determine what the scopes mean.

Camera and recording format (e.g. Sony S-Log3 S-Gamut3.Cine, BRAVIA Film, H.264 Rec.709)

Color management method chosen (project-wide DaVinci YRGB Color Managed / per-clip Color Space Transform)

Input Color Space set to (match the camera)

Timeline + Output color space (Rec.709 Gamma 2.4 broadcast / Gamma 2.2 web)

Delivery target (broadcast / web / client review / HDR)

Monitor used for grading and whether it is calibrated (Y/N)

Scopes panel kept open at all times (Y/N)

Single biggest setup gap to fix next

Exercise: Read-the-Scopes Drill

Open one Log clip. Before grading, study only the scopes for two minutes: waveform, RGB parade, and vectorscope. Then make one correction and watch the scope move. Do not judge by the viewer.

- On the waveform, where do the deepest blacks and brightest highlights currently sit (in percent), and is anything crushing at 0 or clipping at 100?

- On the RGB parade, do the bottoms of the three channels line up, and if not, which channel sits high (what is the cast)?
- On the vectorscope, does the skin trace fall on the skin tone line, or does it drift toward green or magenta?
- After your one correction, which scope changed and did it confirm what your eye told you, or contradict it?

Checklist: Pre-Grade Project Setup Check

- Color science set (DaVinci YRGB Color Managed) or a CST node planned on clip one
- Input color space matches the camera's Log format
- Timeline and output set to the correct delivery space (Rec.709 Gamma 2.4 for broadcast)
- Log footage now reads as a neutral, normal-contrast image, not flat and gray
- Scopes panel open: waveform, parade, and vectorscope visible
- Grading monitor calibrated, or a clear decision to trust the scopes over the screen
- Stills gallery empty and ready to grab reference frames
- Project frame rate and resolution confirmed to match the footage

Node Trees and Primary Correction

Build a clean, named node tree and balance shots with lift, gamma, gain, and curves read off the scopes, then match every shot in a scene.

Worksheet: My Standard Node Tree

Define the starting node tree you will reuse on every clip. Keep one job per node and name each node. Save this as a PowerGrade still once it works.

Node 1 name and job (e.g. Normalize — CST Log to Rec.709)

Node 2 name and job (e.g. Balance — lift/gamma/gain + white balance)

Node 3 name and job (e.g. Look — S-curve + palette)

Node 4 name and job (e.g. Secondaries — skin/sky qualifier or window)

Node 5 name and job (e.g. Vignette/Finishing)

Final clamp / Broadcast Safe node included? (Y/N)

Saved as a PowerGrade or still for reuse? (Y/N and gallery name)

Node naming method used so future-you can read it

Exercise: Lift-Gamma-Gain Balancing Drill

On one unbalanced shot, balance it in the fixed order: black point, white point, midtone, then neutralize casts. Make each move while watching the named scope, not the image. Record your final values.

- Where did you set the black point with Lift on the waveform (target 0 to 5 percent), and did blacks crush?
- Where did the white point land with Gain (target near 90 to 100 percent), and did highlights clip?

- Where does the face now read on the luma waveform (target roughly 60 to 70 percent)?
- Which cast did you neutralize with the colored rings, and did the RGB parade channels line up at the blacks afterward?

Exercise: Shot-Match Wipe Drill

Grade your hero shot fully and grab a still. Load it as a split-screen wipe over a second shot from the same scene and match the new shot to it on the scopes until the wipe line disappears.

- Did you match the black point first, then the white point, then the midtone and skin balance?
- After matching, is the wipe line between the two shots still visible, and where does it still differ?
- Did Resolve's Shot Match give a usable starting point, or did you need to fix it heavily by hand?
- On the cut between the two shots played back, does the color jump, and what scope read led you to the fix?

Checklist: Primary-Balance Done Check

- Black point set so shadows touch but do not crush at 0
- White point set so highlights reach near 100 without clipping flat
- Midtones and skin sitting at a natural level (skin roughly 60 to 70 percent)
- RGB parade channels aligned at the blacks; no color cast remaining
- Skin trace sits on the vectorscope skin tone line
- A subtle S-curve adds contrast without crushing detail
- Every shot in the scene matched to the reference still
- Each node named for its single job

Secondaries: Isolating and Fixing What Matters

Use qualifiers, Power Windows, and tracking to make small, precise, invisible fixes to skin, skies, and key objects.

Worksheet: Secondary Isolation Plan

For one shot, plan each targeted fix before you build it. Decide whether each fix is color-based (qualifier), shape-based (window), or both, and keep every move restrained.

Target 1 (e.g. skin) — qualifier / window / both, and the grade move

Target 2 (e.g. sky) — qualifier / window / both, and the grade move

Target 3 (e.g. eyes or a brand color) — qualifier / window / both, and the grade move

Which fixes need tracking because the subject or camera moves

Skin-protect node used (Outside node) so the look does not affect skin? (Y/N)

Matte softness / blur applied so edges blend (note values)

How you confirmed each fix is invisible (felt, not seen)

Any fix you had to pull back because it was too strong

Exercise: Clean-Qualifier Drill

Isolate one color (a sky or a shirt) with the HSL qualifier. Turn on the highlight matte view and refine Hue, Sat, Lum ranges plus softness and blur until the matte is clean and stable, then grade only that selection.

- Watching the highlight matte, was your first selection too tight and flickering, and how did loosening it help?
 - How much blur did you add to soften the matte edge so the grade blended?
 - Did the selection chatter on moving frames, and did denoise or a looser range stabilize it?
 - With the grade applied, can you see a hard cutout edge, or does the fix read naturally?
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Exercise: Track-a-Window Drill

Draw a soft Power Window around a moving subject (a face), feather it, then track it forward with the Tracker so the window stays locked through the whole clip. Grade inside the window only.

- Did the automatic Window track hold across the whole clip, or did it slip at a certain frame?
 - Where did you have to re-track or keyframe the window by hand, and why?
 - Does your grade stay locked to the subject through the motion, or does it bleed onto the background?
 - Combined with a qualifier inside the window, did the where-plus-what approach clean up the selection?
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Checklist: Secondaries Quality Check

- Each secondary lives on its own named node
- Qualifier mattes are soft-edged and stable, not buzzing or jagged
- Power Windows are feathered so boundaries are invisible
- Moving windows are tracked or keyframed and stay locked to the subject
- Skin protected on its own node so the look does not distort it
- Sky / foliage fixes keep a soft horizon edge and natural saturation
- No single secondary is obvious as an effect on playback
- Grade still matches the scene reference after all fixes

Looks, HDR, and Broadcast-Ready Delivery

Lock a reusable look, grade a basic HDR deliverable, keep the signal legal, and export masters plus trims that pass QC.

Worksheet: Look and Delivery Spec Sheet

Define the look you are applying and exactly what you will deliver, so the export is decided before you reach the Deliver page. Fill the numbers for your own project and platform.

Look description (e.g. subtle S-curve, teal shadows / orange highlights via Color Warper)

How the look is saved for reuse (still / group grade / generated LUT)

Creative LUT used, if any, and its applied strength (percent)

Master codec and wrapper (ProRes 422 HQ / DNxHR HQ / other)

Web/review codec and bitrate (H.264 or HEVC; e.g. 1080p ~16-25 Mbps)

Delivery color space + gamma (Rec.709 Gamma 2.4 / Rec.2020 PQ for HDR)

Data levels set to Video (not Full) for broadcast? (Y/N)

Deliverables required (master + web trim + HDR + matching SDR trim?)

Exercise: Legal-Levels QC Drill

On a finished, graded shot, add a Broadcast Safe or clamping node and verify on the scopes that the signal is legal. Pay special attention to saturated reds and blues and to highlights and deep shadows.

- Before clamping, did any waveform trace exceed 100 or fall below 0, and where (highlights, shadows)?
 - Which Broadcast Safe setting did you use (e.g. Rec.709 100 to 0), and did it limit gently rather than harshly clip?
 - On the RGB parade, did saturated reds or blues clip first, and are they now inside legal range?
 - After clamping, is every trace within 0 to 100, and did the image still look right?
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Exercise: HDR Brightness-Zones Drill

If you have HDR-capable output, set up a Rec.2020 PQ project, switch the Primaries to the HDR palette, and grade so diffuse white sits near 100 to 203 nits while only true highlights climb toward peak. Judge on HDR scopes in nits.

- Where does diffuse white (a white shirt or paper) sit in nits, and is it near the 203-nit reference?
 - Which specular highlights did you let climb toward the 1,000-nit peak, and did midtones stay natural?
 - Did you set MaxCLL and MaxFALL metadata for the HDR10 export?
 - On your derived Rec.709 SDR trim, does the tone-mapped image hold up on the scopes and on an SDR screen?
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Checklist: Master Export and QC Check

- Final clamp / Broadcast Safe node applied and signal verified legal on the scopes
- Master rendered in a high-quality codec (ProRes 422 HQ / DNxHR HQ)
- Resolution, frame rate, and color space match the timeline
- Data levels set to Video for broadcast delivery
- Web/review trim exported in H.264 or HEVC at a sensible bitrate
- HDR deliverable carries MaxCLL/MaxFALL metadata, with a matching SDR Rec.709 trim
- Exported file spot-checked on the scopes and on a second screen
- High-quality master archived; compressed versions derived from it, not the reverse

Your Action Plan

1. Set up color management for your project (DaVinci YRGB Color Managed or a CST per clip) so Log footage starts neutral in Rec.709.
2. Open the scopes and run the read-the-scopes drill until you can call exposure, balance, and skin from the waveform, parade, and vectorscope.
3. Build and name your standard five-node tree (Normalize, Balance, Look, Secondaries, Vignette) and save it as a PowerGrade.
4. Balance one shot in the fixed order: black point, white point, midtone, then neutralize casts, reading each move off the scope.
5. Grade a hero shot, grab a still, and match every other shot in the scene with a split-screen wipe

until the cut does not jump.

6. Build clean, soft-edged qualifier and Power Window secondaries for skin and sky, tracking any windows on moving subjects.
7. Protect skin on its own node and keep every secondary restrained so no fix is visible as an effect.
8. Lock a reusable look (S-curve plus palette) and save it as a still, group grade, or generated LUT.
9. Add a Broadcast Safe / clamping node and verify on the scopes that the signal is legal before delivery.
10. Export a high-quality master plus a web trim (and HDR with metadata and an SDR trim if required), then spot-check the file on the scopes and a second screen.

