



KEEP THE IDENTITY.

GDC SKIN RETOUCH · COLOURIST GUIDE

Version 1.1.0 · GDC STYLE Client 2.10.0 · October 2026

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Three registers, always kept apart: **Verified function** (it exists and was verified, with numbers), **Instruction** (how to use it) and **Concept** (it does not exist). The Inspector stays in English, like the rest of Resolve; the guide explains every label and keeps the Resolve tool names.



01 · INTENT

Correct the skin. Keep the person.

What we keep

- The shape of the nose and the contour of the eyes.
- The fall of shadows and the volume.
- Freckles, moles, intentional detail.

What we adjust

- Texture that is too harsh: [Smooth](#).
- Small spots: [Spot Amount](#).
- Redness and colour blotches: [Color Amount](#).

Refinement does not mean the absence of detail. Look at the face in motion before you raise the strength.

VERIFIED FUNCTION

INSTRUCTION

02 · WHAT IS IN 2.10.0

Skin Retouch on four pipelines, new diagnostics, batch installation.

They install from GDC STYLE Client. Without a valid licence every instrument runs in the Demo edition, with a watermark; with a valid licence, in the Full edition. Existing instruments keep their previous default behaviour.

INSTRUMENT	TOOL VERSION	WHAT IT BRINGS
GDC Skin Retouch — ×4	1.1.0	its own node with a Mask input, on all four pipelines (internal ACEScct / AP1 computation); Metal
GDC Skin — ×4	1.3.0	optional Mask input; “Even out scale: Local” on all 4 pipelines; diagnostics in View
GDC Film · Cinema Style — ×4	1.4.0 · 1.2.0	skin protection in grain + Mask input; diagnostics in View
GDC Exposure + Balance — ×4	1.7.0	Printer light Master; View: Exposure Map · Zone Weights · Saturation Map
GDC Saturation + Hue · Tone · Color · Highlights + Gamut · Optics — ×4	1.1.0	diagnostics in View: Exposure Map · Saturation Map
GDC Look — ×4	1.3.0	diagnostics in View (after Result and Compare)
GDC Input Transform — ×4	1.3.0	display-referred inputs: Rec.709 Gamma 2.2 · Gamma 2.4 · sRGB (at the end of the list)
GDC DRT — ×4	1.2.0	Output encoding: Gamma 2.4 (default) · Gamma 2.2 · sRGB; display-referred diagnostic

Where to find them

- Resolve → Effects → OpenFX → the “GDC” group.
- Skin Retouch is in the same “GDC · [pipeline] · Instruments” group as the other instruments of your pipeline.
- In the Inspector, the **Version** row shows the version and the edition.

Requirements

- DaVinci Resolve Studio with OpenFX, on macOS 13 or later, Apple silicon.
- Skin Retouch on **○ ACES** · **◆ DaVinci** · **△ ARRI LogC3** · **▣ ARRI LogC4** — internal ACEScct / AP1 computation, Metal; no Windows, CUDA or OpenCL.
- Installation and licence: from GDC STYLE Client.

VERIFIED FUNCTION

03 · SKIN RETOUCH

Three tools, one result.



Same frame (RED Log3G10 → ACEScct/AP1), same 1:1 crop and same display. Settings: Mask Source Auto, Smooth 0.4, Spot Amount 0.5, Color Amount 0.5, Edge Protect 1, Amount 1. The visual judgement is the colourist's; the numbers are on the next page.

Smooth

Reduces fine texture variation while keeping edges. 0 = off; tested values 0.3–0.5.

Spots

Softens small isolated spots (1.5–8 px at 1080p). It does not remove large blemishes: Patch Replacer stays the tool there.

Color Evenness

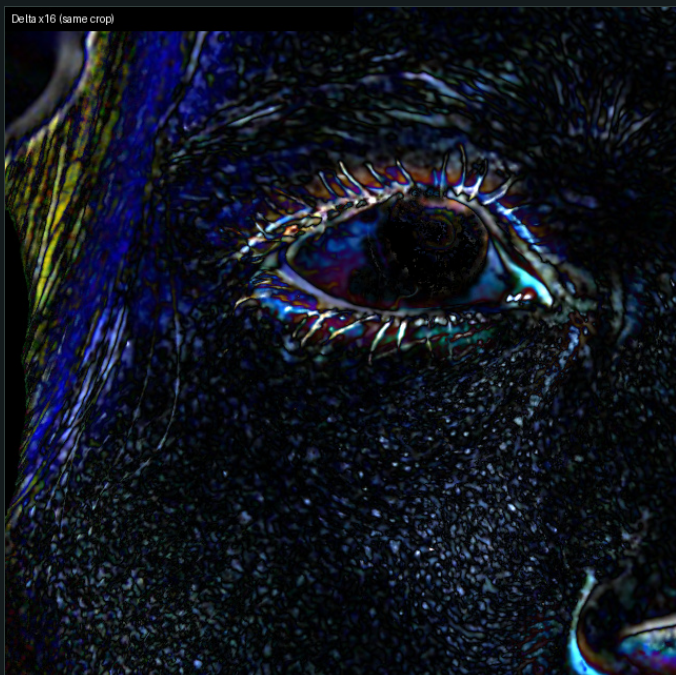
Evens out redness and colour blotches (8–40 px at 1080p) without touching luminance.

The frame comes from a RED clip (Log3G10 / REDWideGamutRGB), converted to ACEScct/AP1 before the node; the images in this guide are rendered in ACES. On DaVinci, LogC3 and LogC4 the node converts internally to ACEScct/AP1 (normative conversion), retouches and brings the result back to your profile: the same thresholds, in the same domain.

VERIFIED FUNCTION

04 · WHAT CHANGED

See exactly what the effect touched.



Same crop, $|\text{result} - \text{original}|$ in ACEScct codes $\times 16$
(View → Delta). Bright areas are the ones that changed.

The same result at different resolutions

The radii follow the frame height. Gate fixed before measuring, on a real frame with synthetic defects, compared with the same scene at half resolution: Smooth 3.3–6.7% (limit 8%), Spots $\leq 6.2\%$ (8%), Color $\leq 3.9\%$ (5%), at 1080→540 and 4K→2K; in Resolve, the same scene at 1080p and 540p: Smooth 3.3–4.4%. Face size is not compensated: for close-ups or wide shots use [Detail Scale](#) (Advanced).

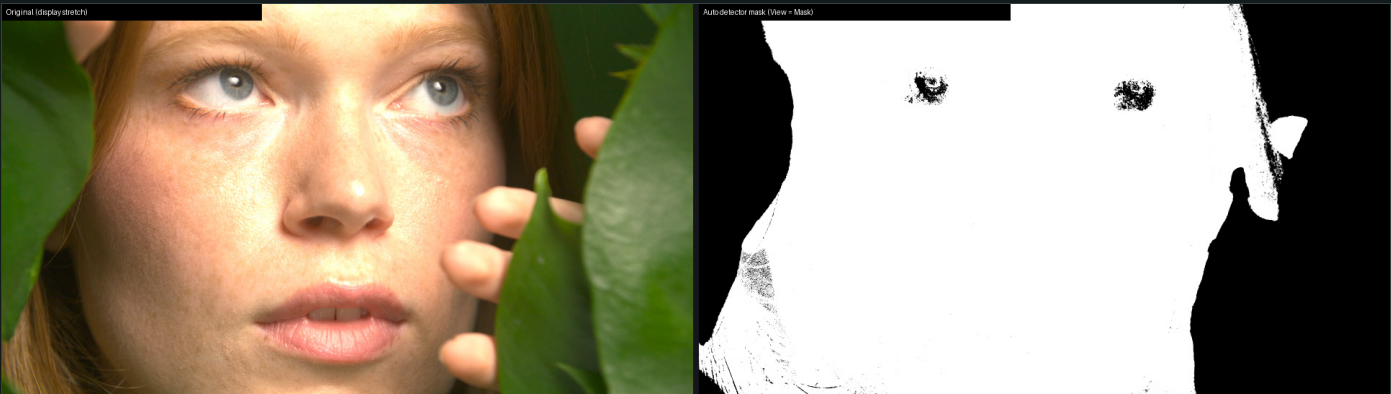
Numbers on the whole frame (1920×1080)

- RMS difference 0.0035 ACEScct code values; maximum 0.059.
- With [Amount](#) 0 or nothing active, the output equals the input (0.0 in Resolve).

Diagnostic views

- [Mask](#) — the effective mask
- [Delta \(amplified\)](#) — what changed
- [Spot Candidates](#) — what it takes for spots
- Not for delivery: go back to [Result](#).

Two ports, three sources, no hidden fallback.



Left: the frame. Right: the Auto detector mask (View → Mask). On this frame the mean mask is 0.69: the colour detector covers much of the frame, not only the skin.

MASK SOURCE	WHAT IT DOES
Second Input (Mask)	Your mask, on OFX input 2. The recommended path. With nothing connected: the image passes unchanged (bit-identical) and the Mask status row says “MASK MISSING”.
Key / full frame	No mask: the whole frame, no edge protection. A degraded path, chosen explicitly.
Auto (colour detector)	Skin from colour. A declared fallback: warm wood, sand or walls can be taken for skin (measured on two real sequences, 14 frames: outside the real mask it called 86% of pixels skin; correlation with the real mask 0.25 — use an external mask for precision).

Mask Channel

- **Alpha (Key port)** — connect the key (window, qualifier, Magic Mask, Key Mixer) to the Key port of OFX input 2; the mask arrives unaltered.
- **Red (RGB port)** — a grey matte on the RGB port; the transport is exact.

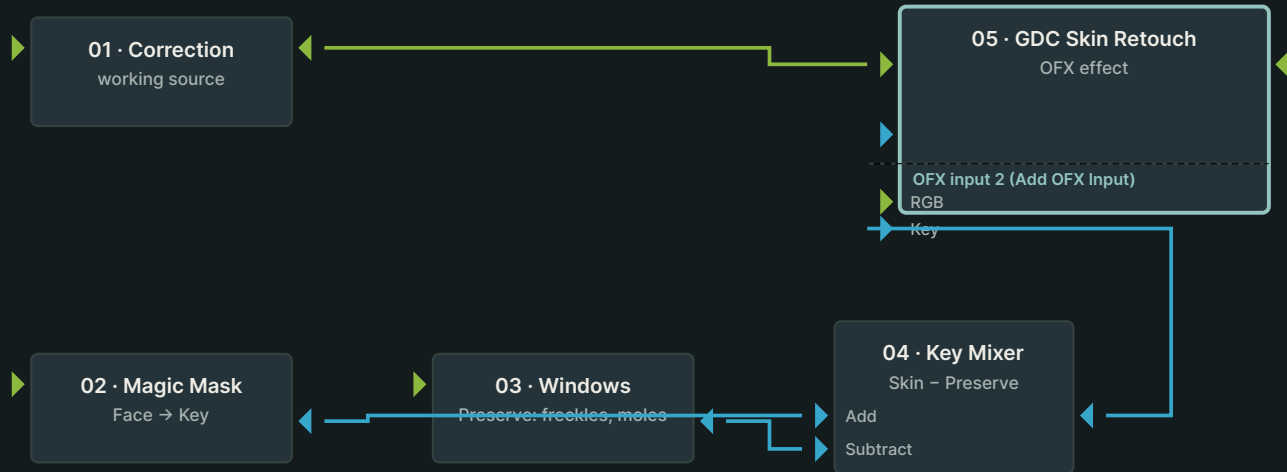
Careful

Connect **one** port only on OFX input 2. If you connect both, Resolve premultiplies RGB by the key and the Red channel becomes mask × key (measured exactly). With **Alpha** selected and only the RGB port connected, alpha is 1: the mask is the whole frame. If the CLIP carries its own alpha channel, Resolve premultiplies the image by it before the plugin (measured): use a node key, not the clip alpha.

INSTRUCTION

06 · NODE RECIPE

Skin Retouch in the Resolve graph.



Real order: 01 → 05 on the RGB port; 02 and 03 produce keys, 04 combines them, the key reaches the Key port of OFX input 2 on node 05. Mask Channel = Alpha (Key port). The key arrives unaltered; wire BOTH the RGB port (otherwise the mask reads as missing) and the Key port of OFX input 2.

▶ RGB port (image) ▶ Key port (mask) □ the GDC node explained

Green ports carry the image, blue ports carry the key. The key reaches the Key port of OFX input 2 on the GDC node.

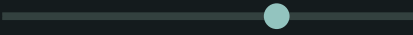
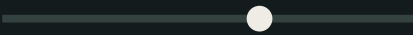
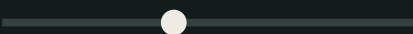
- 01 Put the base correction on a serial node.
- 02 Create a face mask with Magic Mask; use its Key output.
- 03 Draw windows on freckles and moles: they are the areas you keep.
- 04 Combine them in Key Mixer: skin with Add, the kept areas with Subtract.
- 05 Add GDC Skin Retouch, put the image on the RGB port and wire the key to the Key port of OFX input 2 (Add OFX Input); leave Mask Source → Second Input and Mask Channel → Alpha.
- 06 Check with View → Mask, then raise Smooth, Spot Amount and Color Amount gradually and compare with the original in motion.

Verified in Resolve 21.1.1.10 by script: the key wired to the Key port reaches the plugin exactly as it leaves the node that produces it (difference $\leq 1.2 \cdot 10^{-7}$). On two real 47-frame sequences, with a Magic Mask baked into a file, the mask reached the plugin exactly ($1 \cdot 10^{-6}$) and the output stayed stable across save, reopen and retime. The live Magic Mask graph was run in Resolve (points on frame 0, forward tracking, Magic Mask on a node BEFORE the plugin): the live key is binary and differs from the baked matte; retime on this graph did not render.

More or less light, without breaking the RGB balance.

You set Red, Green and Blue for the cast you want; now the image only needs to be a little lighter or darker.

Printer light Master (points) moves the three channels at once and does not touch the differences between them.

Control in the Inspector		Effect per channel (points)		
Master		+4		
Red		+3	+7	= Master +4 +3
Green		+0	+4	= Master +4 +0
Blue		-2	+2	= Master +4 -2

The differences between channels stay; Master moves all of them equally.

Numeric example: Master +4, Red +3, Green 0, Blue -2 give +7 / +4 / +2.

How to use it

- Balance Red, Green, Blue first.
- Then raise or lower Master. One point = 1/8 stop on each channel (gain $2^{p/8}$); plus = lighter.
- At 0 the image is exactly what it was.

Verified in Resolve

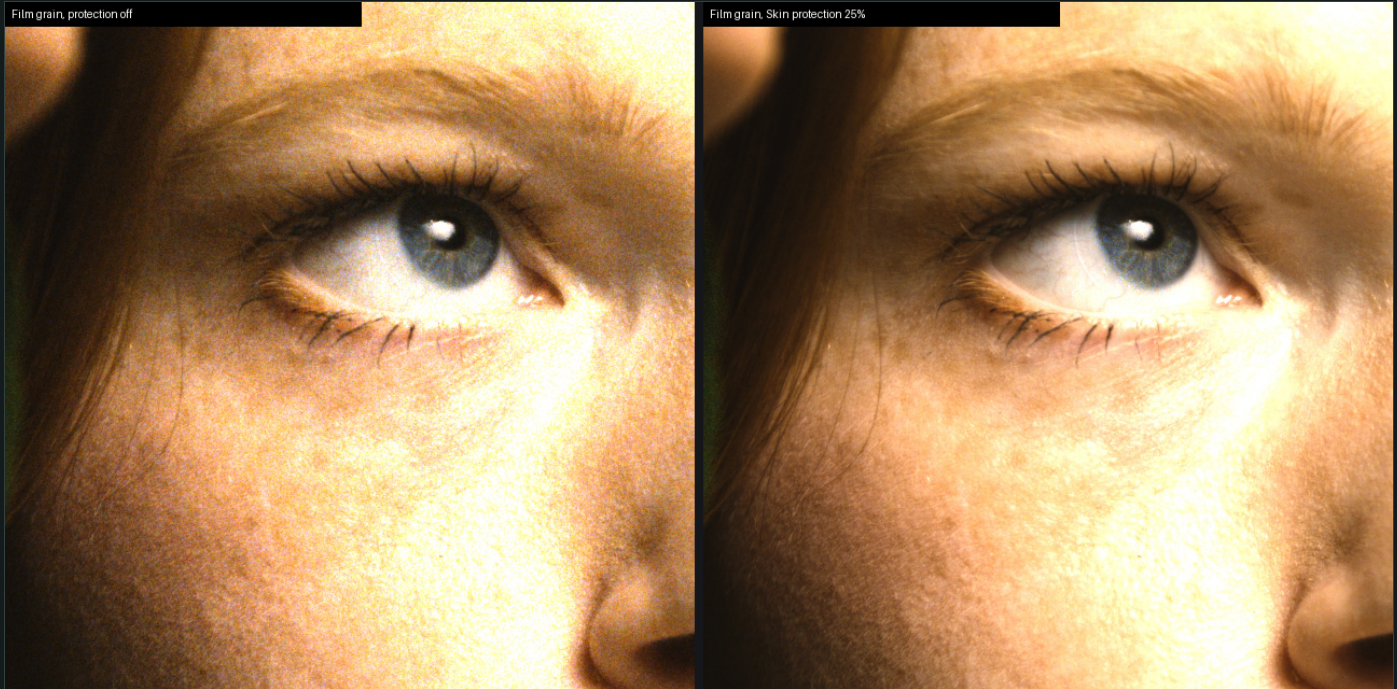
- Master +8 and Red = Green = Blue = +8 give the same image (difference 0.0).
- The node in its default state leaves the image identical to the input (0.0).
- Highlights can clip if you raise a lot. In *GDC Film* the control has another meaning: plus means a darker print.

VERIFIED FUNCTION

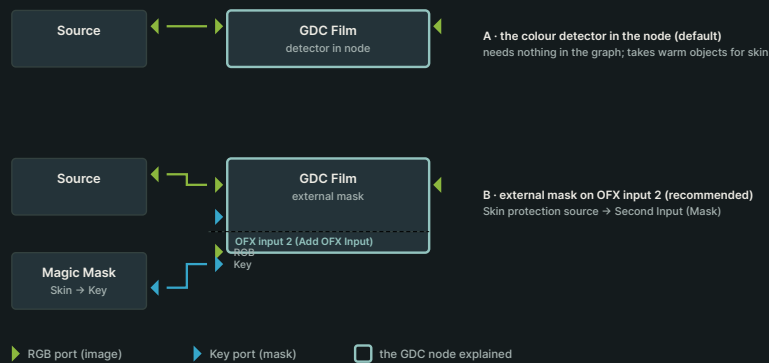
INSTRUCTION

08 · FILM · CINEMA STYLE

Less grain on skin, the base image untouched.



Film, Grain 1.0, same 1:1 crop. Left: protection off. Right: Skin protection on, Grain on skin 25%, source the colour detector.



What it does

It lowers only the grain the node generates, where there is skin. It does not smooth, does not touch pores, does not remove grain that is in the source. Off (default) or at 100%, the result is bit-identical to before (0.0 in Resolve).

What was measured

Real external mask, 2 sequences (14 frames), reference = same image without grain: on skin the grain stays 0% / 25% / 100% at settings 0 / 25 / 100; off skin 100%; the detector also protected 86% of off-skin: for exact skin use
Skin protection source → Second Input (Mask).

The external-mask path (Alpha/Red, Invert) is verified in a simulated host and for transport in Resolve; the visual effect with a real skin mask was not rendered in this lot. Watch for: a visible step between skin and the rest, flicker at the threshold, warm non-skin areas without grain.

VERIFIED FUNCTION

INSTRUCTION

09 · GDC SKIN — ×4

Local colour evening.

Even out scale chooses how **Even out** works: **Global** (the existing behaviour) or **Local** (spatial), which evens out only diffuse colour blotches of 8–40 px at 1080p and keeps freckles, make-up edges and the natural tone.

On the real frame

- **Even out** = 1, Global: maximum difference 0.148 ACEScct code values.
- **Even out** = 1, Local: maximum 0.032, RMS 0.0019 — a much more discreet correction, as designed.
- Skin with **Skin mask source** → **Second Input only** and no mask connected: the edit stays off (difference 0.0), no hidden fallback.

Use it when

- Redness or colour blotches are wide and diffuse.
- You want to keep texture and freckles.
- Intentional make-up can be evened out: protect it with the mask.

Available on all four pipelines (ACES, DaVinci, ARRI LogC3, ARRI LogC4). On DaVinci, LogC3 and LogC4 the image is converted normatively to ACEScct / AP1, the correction runs there, and the difference is carried back into the pipeline encoding; with **Even out** = 0 or **Mix** = 0 the output stays unchanged. The figures above were measured on the ACES frame.

VERIFIED FUNCTION

10 · REFERENCE

Controls, defaults, limits.

Mask Source · Mask Channel · Invert Mask

See page 7. Default: Second Input, Alpha, off.

Invert uses $1 - \text{mask}$ (protects what you selected).

Smooth · Enable Smooth

Default 0 (no change). Tested values 0.3–0.5.

Spot Amount · Spot Sensitivity

Default 0 · 1.0. Spots 1.5–8 px at 1080p. Freckles are softened unless the mask protects them.

Color Amount · Color Sensitivity

Default 0 · 0.6. Areas of 8–40 px; luminance untouched.

Edge Protect

Default 1. Fades the effect near the mask edge (3–12 px at 1080p).

Amount

Default 1. Last in the chain.

View · Delta Gain

Result · Mask · Delta (amplified) · Spot Candidates. Delta Gain default 16.

Edge Sensitivity · Detail Scale

Advanced. 0.2 · 1.0. Detail Scale multiplies the radii (close-up → raise; wide shot → lower).

Printer light Master (points)

±50, step 0.5, default 0; added to R, G, B.

Skin protection · Grain on skin (%)

Off by default; 25% default when on. 100 = unchanged; 0 = no generated grain on skin.

Computation domain: ACEScct / AP1 (Skin Retouch and Skin Local run here on all 4 pipelines, after the normative conversion). Rendering: Metal on Mac; the engine's CPU reference is compared with Metal in tests. No CUDA and no Windows.

VERIFIED FUNCTION

LIMITS · UNVERIFIED

11 · WHAT IS VERIFIED

Numbers where they exist, limits where they do not.

VERIFIED (16 OCT 2026, DAVINCI
RESOLVE STUDIO 21.1.1.10 AND
LOCAL TESTS)

RESULT

RGB mask transport in Resolve	exact, difference 0.0
Key transport on the Key port	$\leq 1.2 \cdot 10^{-7}$ against the source key; Invert exact
Mask missing · Amount 0 · nothing active	output = input, difference 0.0
Metal ↔ CPU parity (1080p)	$\leq 2 \cdot 10^{-4}$ (diagnostic views and Auto); $\leq 5 \cdot 10^{-6}$ otherwise
Resolution invariance (gate fixed beforehand)	Smooth 3.3–6.7%, Spots $\leq 6.2\%$, Color $\leq 3.9\%$
Real mask in motion (2×47 frames)	exact transport; save/reopen bit-exact; retime; stable memory
Retime 50% / 200% on a live Magic Mask graph	the Skin Retouch effect map = the un-retimed one (mean difference $2.7 \cdot 10^{-4}$, equal to the retime alone without the plugin); 37–39% coverage in both
Interior relative to a robust LOCAL peak	an isolated pixel at 1.0 or another region with a higher peak: effect unchanged (before: wiped out); real masks: bit-identical output to the previous version
ACES · DaVinci · LogC3 · LogC4 profiles: Resolve ≡ simulated host	Skin and Exposure + Balance 0.0; Film $\leq 1.5 \cdot 10^{-3}$ (rms $3 \cdot 10^{-5}$); Input Transform $\leq 1.5 \cdot 10^{-8}$; DRT $\leq 1.9 \cdot 10^{-6}$
Rec.709 g2.2 / g2.4 / sRGB inputs and DRT g2.2 / sRGB outputs	against Colour 0.4.7: $\leq 1.7 \cdot 10^{-6}$ (inputs), $\leq 2 \cdot 10^{-7}$ (outputs); indices 0...24 and DRT g2.4 bit-identical to the officials
Printer light Master	default bit-exact; Master = R=G=B in Resolve, 0.0
Skin protection in grain	off = 100% (0.0); unchanged off-skin

Unverified / not validated

- The artistic quality of the retouch on diverse footage (here, a single RED clip): judge it on your own footage, not on the configurations shown in this guide.
- The full list of limits (live Magic Mask, Auto, real-time playback, Proxy, GPU, Windows, profiles): page 15.

The artistic result is judged on your own footage; the product does not promise a particular look.

12 · DIAGNOSTICS

When something does not look right.

Nothing changes

Possible cause · the Mask status row says “MASK MISSING” or the amounts are 0

Check · Mask status and View → Mask

Remedy · connect OFX input 2 or choose Auto/Key; raise Smooth, Spot Amount, Color Amount

The effect acts everywhere

Possible cause · Mask Channel = Alpha with only the RGB port connected (alpha = 1), or Key / Auto

Check · View → Mask

Remedy · match the channel to the connected port; one port only

The mask looks too weak (mask × key)

Possible cause · both ports connected: Resolve premultiplies RGB by the key

Check · View → Mask

Remedy · disconnect one of the ports

Skin looks smooth, “plastic”

Possible cause · Smooth

Check · compare with the original, in motion

Remedy · lower Smooth; protect textured areas with the mask

Freckles or moles vanish

Possible cause · they are not removed from the mask

Check · View → Spot Candidates

Remedy · draw windows on them and subtract them from the key (Key Mixer)

Less grain on wood or walls too

Possible cause · the colour detector takes warm objects for skin (here: 69% of the frame)

Check · Skin mask

Remedy · switch to Second Input (Mask) or lower the protection

13 · GLOSSARY AND PROVENANCE

Terms, images, status.

Printer light Master (points)	printer light — master	points are added to R, G, B
Smooth	smoothing with texture kept	reduces fine variation
Spot Amount	spots — amount	softens small isolated spots
Color Amount	colour evening	redness and blotches
Edge Protect	edge protection	reduced effect near the mask
Mask Source · Mask Channel	mask source · mask channel	OFX input 2; Key or RGB port
Skin protection	skin protection (in grain)	lowers generated grain on skin
Even out scale	scale of the evening-out	Global or Local
Key · Key Mixer	key · key mixer	selection mask (Resolve)
Qualifier · Power Window · Magic Mask	qualifier · window · Magic Mask	selection tools (Resolve)

Images

The photograph and all comparisons come from frame 77 of a licensed clip (RED Log3G10 / REDWideGamutRGB, 5760×3240), converted offline to ACEScct/AP1; identical display for every panel (not a DRT or grade). GDC holds the licence for this image and authorised its use in documentation; the authorisation does not extend to the rest of the clip's archive. The comparisons are rendered in DaVinci Resolve with GDC Skin Retouch; these four are the only ones in this guide. No AI-generated images were used.

Status

Guide for GDC Skin Retouch 1.1.0 in GDC STYLE Client 2.10.0. Fonts: Archivo and Inter, SIL OFL 1.1. The PDF pages were checked by scripts (layout, navigation, diacritics, fonts, contrast) and inspected visually.

VERIFIED FUNCTION

LIMITS · UNVERIFIED

14 · INPUT TRANSFORM · DRT

Material already “made” for display, and outputs for the delivery.

- Input Transform (new inputs, end of the list)

 - Rec.709 Gamma 2.2 (display-referred) / Rec.709
·
Rec.709 Gamma 2.4 (display-referred) / Rec.709
· sRGB (display-referred) / sRGB
 - The primaries (Rec.709 / D65) are separate from the function: g2.2 and g2.4 are pure powers; sRGB has the linear segment of IEC 61966-2-1. They are not synonyms and not the BT.709 camera curve.
 - **Role of the mode** · the image already carries a look, tone mapping and clipping. Decoding gives display light (white = 1.0 linear); it does NOT rebuild the scene and applies no inverse tone mapping.
 - **Levels** · the plugin receives full-range normalised code; full/video is set in Resolve (clip attribute). No hidden compensation in the plugin.
 - Negative / above-1 values: odd extension (sign kept), no clipping.
- DRT (new output: Output encoding)

 - Rec.709 Gamma 2.4 (default) · Rec.709 Gamma 2.2 · sRGB
 - Profile sets the rendering (tone mapping, colour); Output encoding only RE-CODES the same display light: $L = code^{2.4}$, then the target function. The primaries stay Rec.709; no power is stacked on an already coded result.
 - Default = Gamma 2.4, bit-identical to the official DRT; existing projects do not change.
 - Neutrals stay exactly neutral; channel order on saturated colours is kept; monotonic, 0→0 and 1→1. An sRGB file shown on a g2.4 monitor looks lighter in the shadows: choose by display / delivery.
 - The exported file’s colour tags (metadata) are set in Resolve, not here; sRGB is not a universal remedy for display differences.

VERIFIED	RESULT
Inputs against Colour 0.4.7 (Rec.709 → 4 profiles, Bradford)	$\leq 1,7 \cdot 10^{-6}$
DRT outputs against the reference re-coding	$\leq 2 \cdot 10^{-7}$
Real Resolve ≡ simulated host (24 combinations)	$IT \leq 1,5 \cdot 10^{-8} \cdot DRT \leq 1,9 \cdot 10^{-6}$
Input Transform indices 0...24	identical to the installed official (difference 0)
Skin “Even out scale: Local” on ACES · DaVinci · LogC3 · LogC4, Resolve ≡ simulated host	$\geq 99.9\%$ of pixels · effect ratio 0.99–1.00 · neutral at Even out = 0
Animated Film grain, ACES, 15 real frames in Resolve	reproducible (difference 0) · frames differ · skin protection constant across frames (0 / 25 / 100%)

The artistic look of these modes is judged on your own footage.

LIMITS · UNVERIFIED

15 · COMPATIBILITY AND LIMITS

What you can rely on, what is on trial, what was not verified.

Supported and verified

- Skin Retouch (Smooth, Spots, Color) on ACEScct / AP1 with an external mask: RGB + Key ports, Mask Channel = Alpha; Resolve $\equiv$ simulated host $\leq 1.5 \cdot 10^{-6}$.
- Skin Retouch on DaVinci · LogC3 · LogC4: the output brought back to ACEScct = the ACES output ($\leq 2.3 \cdot 10^{-6}$); Metal $\equiv$ CPU reference; nothing changes outside the mask (bit for bit).
- In Resolve: Skin Retouch on the four profiles (the Full edition installed through the Client, no watermark) and Exposure / Saturation Map in 11 instruments (Demo edition, 54 cases) $\equiv$ simulated host; outside the “DEMO” labels the error is 0.
- Baked matte and live Magic Mask key (node upstream); retime 50% / 200%; save / reopen; reduced-resolution rendering (thumbnails, renderScale 0.1–0.3, no errors).
- Skin, Film, Exposure + Balance, Input Transform, DRT on ACES · DaVinci · LogC3 · LogC4: Resolve $\equiv$ simulated host; coloured signals verified.

Experimental

- Mask Source = Auto (colour detector): over-protects; use it only for tests.
- Display-referred inputs and DRT g2.2 / sRGB outputs: numerically verified, not artistically validated.
- Skin protection in grain on LogC3 / LogC4 / DaVinci: verified in the simulated host.

Unverified

- Playback Proxy mode and optimized media; real-time playback; any GPU other than Metal; Windows.
- Skin Retouch on DaVinci · LogC3 · LogC4 with real footage from those cameras (the test frame is RED Log3G10 converted to the profile); material with strong real defects; cameras other than RED Log3G10 in the full flow.

Recommended mask flow

- Skin included; eyes, lips and hair removed from the key where needed (windows / Magic Mask on them, subtracted with Key Mixer). In the test the output inside the holes = input exactly, and the rest of the skin changes by 0.2%.
- Detail is kept through the amount: **Smooth 0.5** (Moderate) keeps 72–78% of the fine band and $\approx 50\%$ of the pores; **Strong (1.0)** keeps 59–68% and $\approx 30\%$. Do not assume a Magic Mask is right just because it tracks: check it in **View → Mask**.

INSTRUCTION

16 · EXISTING PROJECTS

What happens to your projects.

Existing instruments do not change their default behaviour, and the OpenFX identifiers stay the same when moving from Demo to Full: the nodes in your projects keep working. The new controls are optional and start neutral.

Verified

CHECK	RESULT
Input Transform: options 0...24 on the 4 profiles	bit-identical to the previous version
Linear to Log, DRT (default Gamma 2.4)	bit-identical
Camera list indices	unchanged; new entries are at the end of the list

If a node does not process

- If Resolve logs “Plugin [...] is not available”, the product of that node is not installed: reinstall it from GDC STYLE Client. The node does not process until then.
- A node without its product leaves the image undecoded in the rest of the chain and looks different in colour and tone; it is not a change in the maths.

17 · PIPELINES

Choose the variant of your pipeline.

Every instrument exists in four variants, one per pipeline. You choose the pipeline once for the project; the variant you put on the node is the one of the pipeline, not of the camera.

PIPELINE · WORKING ENCODING	GROUP IN RESOLVE	SKIN RETOUCH PACKAGE
○ ACES · ACEScct / AP1	GDC · ACES · Instruments	GDC Skin Retouch — ACES
◇ DaVinci · DaVinci Intermediate / DaVinci Wide Gamut	GDC · DaVinci · Instruments	GDC Skin Retouch — DaVinci
△ ARRI LogC3 · LogC3 / ARRI Wide Gamut 3	GDC · ARRI LogC3 · Instruments	GDC Skin Retouch — ARRI LogC3
□ ARRI LogC4 · LogC4 / ARRI Wide Gamut 4	GDC · ARRI LogC4 · Instruments	GDC Skin Retouch — ARRI LogC4

Technical names and trademarks (ACES, DaVinci, ARRI, LogC3, LogC4) are not translated. The marks are text only: they do not suggest a certification or an official association.

Node position

- Skin Retouch is a log stage with its own node and a Mask input: after Skin, before Highlights + Gamut (the recipe, page 8).
- The signal at the node must be in the log encoding of the chosen pipeline, at input and output.
- If you are unsure, the [Input profile](#) row in the Inspector shows the profile of the variant on the node.

What Skin Retouch does in each

- It computes internally in ACEScct / AP1: on DaVinci, LogC3 and LogC4 it converts normatively, retouches and brings the result back to the pipeline encoding. The thresholds are the same (page 5).
- External mask: two ports, the Alpha or Red channel, no hidden fallback (page 7). [Auto](#) is only a declared fallback.
- “Even out scale: Local” in Skin exists on all four pipelines (page 11); it is not Skin Retouch.

VERIFIED FUNCTION

LIMITS · UNVERIFIED

18 · DIAGNOSTICS, INSTALLATION, LIMITS

See what the image does. Install only what you use.

Exposure Map · Saturation Map

- New options at the end of the [View](#) list in the V3 instruments (not in the [View](#) of Skin Retouch, which keeps Result · Mask · Delta · Spot Candidates).
- **Exposure Map**: stops from middle gray (18%) of the instrument's OUTPUT. **Saturation Map**: saturation of the output against the reference gamut; 1.0 = the gamut edge (one channel at zero).
- Controls: [Scale position](#) (Bottom · Top · Left · Right), [Saturation reference](#) (Working gamut · Rec.709 · Rec.2020), [Saturation scale max \(%\)](#).
- Diagnostics, not for delivery: with [View = Result](#) the image does not change.
- **GDC DRT is display-referred**: the “stops” are against 18% of DISPLAY light (the Rec.709 g2.4 / g2.2 / sRGB code), not against the scene.

Install and remove

- In GDC STYLE Client, the [Instruments](#) page → [Manage...](#): an instrument × pipeline matrix.
- Tick a cell, a whole instrument or a whole pipeline; [Install selection \(n\)](#) and [Remove selection \(n\)](#) work as one batch, with one confirmation and one administrator password.
- Removal touches only the selection. States: ✓ up to date · needs update · ○ not installed.

Performance and platforms

- Measured on Apple M2 Pro, Metal test host, Smooth · Spots · Color = 0.5, Mask Auto: ≈ 66 ms/frame at 1080p and ≈ 208 ms at UHD (best of 8–12 runs). Not real-time playback: render or use the cache.
- Validated: DaVinci Resolve Studio 21.1.1, macOS, Apple silicon, Metal. Not validated: Windows, CUDA, OpenCL, any GPU other than Metal.