

USER MANUAL · OFX PLUGIN FOR DAVINCI RESOLVE

KOLORKLINIC DENOISE

Clean images, never plastic.

KOLORKLINIC
FINISHING TOOLS FOR DAVINCI RESOLVE

PLUGIN VERSION 1.3
MACOS · WINDOWS · LINUX

INSIDE

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OVERVIEW

01 WHAT DENOISE DOES

Denoise removes video noise in two passes. The **temporal** pass lines up neighbouring frames with motion vectors and averages them, so noise goes and detail stays. The **spatial** pass cleans what is left with wavelets, with separate control for luma and colour noise.

NOISY ORIGINAL



DENOISE



Night street: noisy original and Denoise at default settings.

Pixels that don't match between frames are left out of the average, so fast motion doesn't ghost.

GETTING STARTED

02 INSTALL

Download the build for your system from the Denoise section on kolorklinic.com (Linux, Intel Mac, Apple Silicon Mac, Windows). Unzip it and drop the **KolorKlinicDenoise.ofx.bundle** folder into the OpenFX plugin folder, then restart Resolve.

System	Plugin folder
macOS	`/Library/OFX/Plugins/`
Windows	`C:\Program Files\Common Files\OFX\Plugins\`
Linux	`/usr/OFX/Plugins/`

macOS only: if Resolve does not load the plugin after copying, clear the download quarantine flag in Terminal:

```
sudo xattr -dr com.apple.quarantine /Library/OFX/Plugins/KolorKlinicDenoise.ofx.bundle
```

Find it in Resolve

- **Color page:** open the Effects panel, then OpenFX › KolorKlinic › **KolorKlinic Denoise**, and drag it onto a node.
- **Edit page:** Effects › OpenFX › KolorKlinic, then drag it onto the clip.
- **Fusion:** also available from the Effects library under OpenFX.

> **TIP** Put Denoise first in the node tree, before any grading or sharpening, so it sees the noise as shot.

ONE-TIME SETUP

03 LICENCE AND ACTIVATION

Denoise works straight away as a **free trial with a watermark**. Activate it once per machine to remove the watermark. Activation is offline: after it, the plugin never needs the internet.

1. Add Denoise to a clip. The panel shows a **Machine ID** (format `XXXX-XXXX-XXXX`).
2. Open `kolorklinic.com/activate`, enter your licence key (starts with `KKD-`) and the Machine ID, and click **Get activation code**.
3. Paste the code into **Activation code** in the panel. The **Licence** line confirms it and the watermark disappears.

Field	What it is
Licence	Read-only: trial or licensed, and for whom.
Machine ID	Identifies this computer. Copy it to the Activate page.
Activation code	Paste the code from the Activate page. Saved on this machine.

SEATS Each licence activates up to 3 machines. Moving to a new computer? Free a seat with Manage machines on the Activate page. Lost your key? Use the lost-key form there.

CONTROLS

04 THE PANEL AT A GLANCE



The Denoise controls, grouped top to bottom.

WORKFLOW

05 QUICK START

1. Add Denoise as the first node on the clip.
2. Set **Colour space** (first control) to match your timeline.
3. The image is untouched until you sample the noise: tick **Draw noise sample**, drag a box over a flat area, then click **Analyze noise in sample**.
4. Denoise starts. The defaults (2 temporal frames, strength 0.8, Luma and Chroma NR at 1) suit most footage.
5. If skin or flat areas look waxy, lower **Luma NR**. If colour blotches remain, raise **Chroma NR**.
6. Compare with **Split view**, then turn it off and render.

FRAMES OVER TIME

06 TEMPORAL NOISE REDUCTION

Control	Range (default)	What it does
Temporal frames	0-3 (2)	Frames used on each side of the current frame. 0 = spatial only. More frames = cleaner, but slower.
Temporal strength	0-1 (0.8)	How much the motion-compensated neighbours are blended in.
Motion threshold	0.25-4 (1)	Lower = safer on fast motion (less ghosting). Higher = stronger averaging on static shots.

TIP Ghosting on fast action? Lower Motion threshold first, then Temporal strength.

INSIDE THE FRAME

07 SPATIAL NOISE REDUCTION

Control	Range (default)	What it does
Luma NR	0-2 (1)	Spatial luminance (brightness) noise reduction.
Chroma NR	0-2 (1)	Spatial colour noise reduction. Colour noise can usually go higher than luma without losing detail.
Protect edges and texture	on / off (on)	Edge-aware cleaning: flat areas are cleaned fully, edges, pores and fabric stay sharp. Off = the older, softer filter (a little faster).
Sharpen	0-1 (0.15)	Gentle luma sharpening after denoising. The little noise left is not boosted.
View	Final / Removed noise	Removed noise shows only what the filter took out (x4 around grey): any edge or texture you can see there is detail being lost - lower Luma NR or the coarse noise. It is rendered too: set back to Final before you render.
Fine / Medium / Coarse noise	0-2 (1)	How much of each noise size is removed: pixel-sized, 2-4 px clumps, and large blotchy (8-16 px) noise typical of low light and compressed footage. 0 = leave that size alone.

FILM SCANS

08 DUST & SCRATCHES

Control	Range (default)	What it does
Dust & scratches	on / off (off)	Removes specks and short scratches that appear on one frame only, using the motion-compensated frames before and after. Needs Temporal frames 1 or more.
Dust sensitivity	0-1 (0.5)	Higher catches fainter specks.
Show removed dust	on / off (off)	Paints every speck being removed in red over the denoised picture, to set the sensitivity. It is part of the image (Noise sample shows a warning): turn it off before you render.

TIP A very fast object that is visible on a single frame only can be taken for dust: lower the sensitivity or turn it off on that shot.

MEASURE YOUR NOISE

09 NOISE PROFILE

Denoise does nothing until you measure the noise once from a flat area. **Noise sample** at the top of the panel tells you whether a profile is active:

1. Tick **Draw noise sample** and drag a box over a flat, featureless area in the viewer (sky, wall, out-of-focus background).
2. Click **Analyze noise in sample**. The measured values fill Profile luma noise, Profile chroma noise R/B and G/M.
3. **Use noise profile** turns on and denoising starts. **Clear noise sample** (or unticking Use noise profile) passes the image through untouched again.

Sample check reports a quality % for the sample: it warns when the box is small (under 128 x 128 px; under 32 px it is refused), when one of the channels (Y, Cb, Cr) is not uniform (detail, dust, scratches, compression blocks or banding in the box) and when part of the box is clipped to black or white.

Control	Range (default)	What it does
Noise follows brightness	on / off (off)	Analyze also measures the noise in the shadows, mids and highlights of the whole frame: noisy shadows get more cleaning, clean highlights keep their detail.
Noise in shadows / midtones / highlights	0.25-4 (set by Analyze)	Noise in each zone relative to the sample. Adjust to taste.
Saved profile / Profile name	5 slots	Save profile to slot keeps the noise levels and brightness curve on this computer (shared by every project): one per camera / ISO. Load profile applies it without drawing a sample.

TIP Changing Colour space clears the profile, because noise measured in another colour space no longer fits. Draw and analyze again. Saved profiles only load in the colour space they were sampled in.



Draw the sample on an area without detail or texture.

ORGANIC FINISH

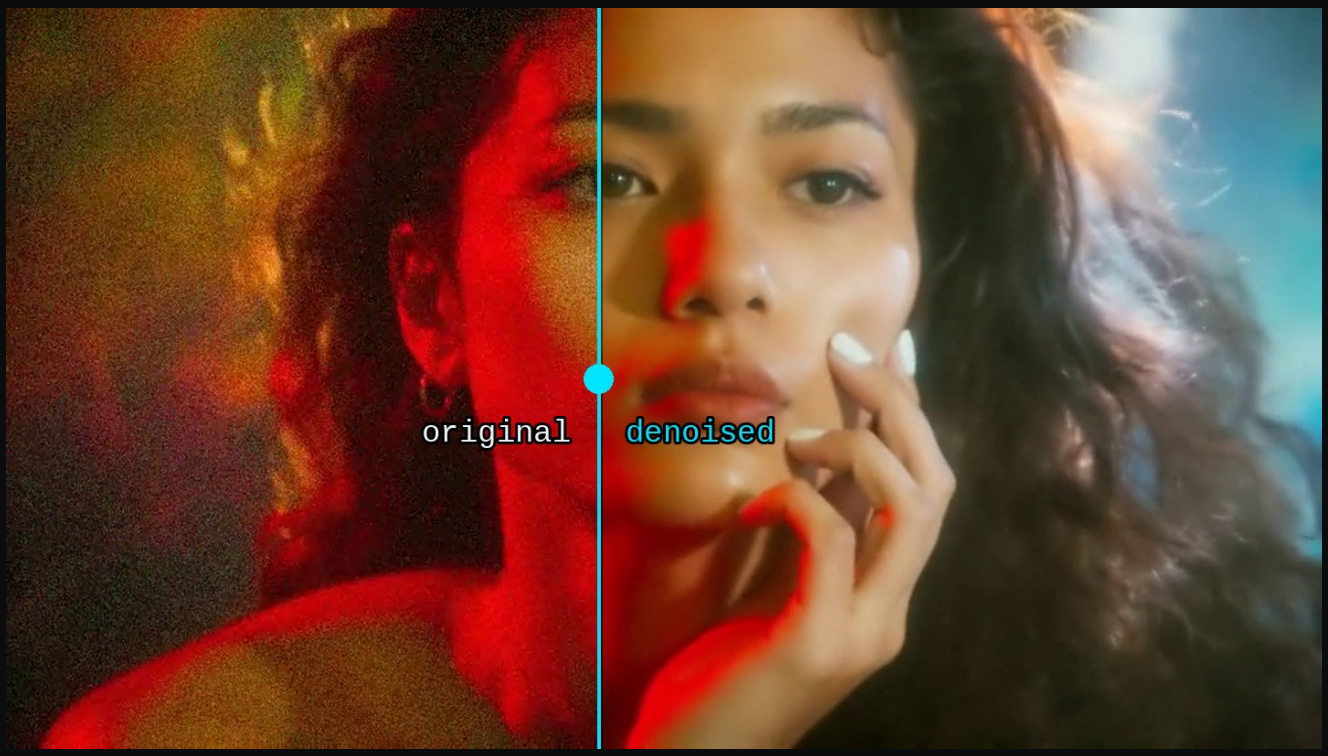
10 GRAIN

Control	Range (default)	What it does
Keep original grain	0-1 (0)	Mixes back part of the removed fine luma noise for an organic look.
Film grain amount	0-1 (0)	Adds synthetic, animated film grain (luma, weighted to the midtones).
Film grain size	1-4 (1.5)	Grain clump size in pixels.
Film grain softness	0-1 (0.5)	Softens the grain.

COMPARE

11 SPLIT VIEW

Tick **Split view** to see the original left of a divider and the denoised image right of it. Drag the divider in the viewer, or set **Split position** (0 = left edge, 1 = right edge). **Show split line** toggles the thin guide line.



Split view: original left, denoised right.

> **RENDER** Turn Split view off before you render, or the split is rendered too.

COLOUR MANAGEMENT

12 COLOUR SPACE

Set **Colour space** to match your timeline (Project Settings › Color Management). The plugin then works on the image in the right light and gamma, so strengths behave the same in every project.

Timeline	Choose
Standard Rec.709 project	Rec.709 / Gamma 2.4
ACES, ACEScct working space	ACEScct
ACES, ACEScc working space	ACEScc
ACES linear AP1	ACEScg (linear AP1)
ACES linear AP0	ACES2065-1 (linear AP0)
DaVinci Wide Gamut	DaVinci Wide Gamut / Intermediate

PERFORMANCE

13 SPEED AND GPU

The plugin runs inside Resolve's own GPU memory, so frames never round-trip through the CPU. Every engine runs the same maths and gives the same result, fully offline.

Control	What it does
Quality	Best uses all temporal frames. Fast playback uses 1 frame each side, re-uses motion from the previous frame and a lighter search, for scrubbing.
Processing	Auto runs on Resolve's GPU (Metal / CUDA / OpenCL) when GPU processing is on, otherwise on our own GPU or all CPU cores. CPU only forces the CPU path.
Device	Read-only: which GPU or CPU engine is processing the image.
Show render time	Times every frame (waiting for the GPU), so playback can be a little slower while on. Each frame is also logged to render_timing.csv in the KolorKlinic folder.
Refresh render time	Updates the Render time line in the panel.

HELP

14 TROUBLESHOOTING

Symptom	What to do
Watermark in the image	The plugin is in trial. Activate it (chapter 03).
Ghosting or smearing on motion	Lower Motion threshold, then Temporal strength, or reduce Temporal frames.
Waxy, plastic skin	Lower Luma NR, add a little Keep original grain.
Colour blotches remain	Raise Chroma NR or draw a noise sample and Analyze.
Playback too slow	Quality › Fast playback while you work, Best for the render. Check Device shows a GPU.
Result looks different in ACES	Set Colour space to your timeline's working space.

QUESTIONS

15 FAQ

Does it need the internet?

No. After activation everything runs offline on your machine.

Where should it go in the node tree?

First, before grading, sharpening or any other effect.

Does it work in ACES and DaVinci Wide Gamut?

Yes: pick the matching Colour space.

Which GPUs are supported?

Metal on Mac, CUDA on NVIDIA, OpenCL elsewhere, with an automatic fallback to all CPU cores.