

DVO

CLARITY

USER GUIDE

WHAT DOES IT DO?

DVO Clarity is the fifth generation of our advanced noise and grain reduction tool. It aims to automate the configuration process as much as possible while delivering the highest quality output. The new algorithms employed by DVO Clarity prioritize the preservation of fine details and the retention of the original image sharpness, all while ensuring a lack of artifacts in the processed video.

DVO Clarity incorporates several notable features, including automated analysis of grain characteristics, an improved motion estimation engine, detail enhancement capabilities, and an enhanced spatial-temporal filter. These advancements contribute to its ability to effectively reduce grain and noise while maintaining image quality and – of course – **Clarity!**

HOW DO YOU USE IT?

DVO Clarity works on the following platforms:



It's also coming soon to:



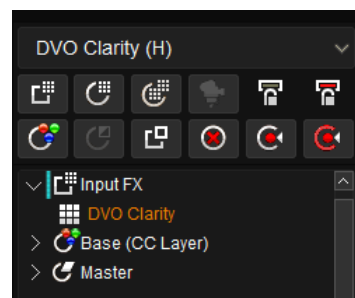
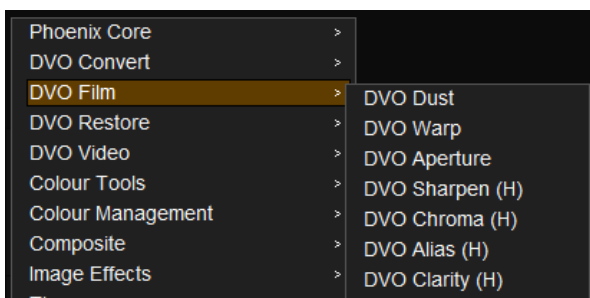
If you're already a Filmworkz veteran, you can jump right in and use **DVO Clarity**, however if you need a hand getting going, check out these QuickStart Guides:

[PHOENIX QUICKSTART GUIDE](#)

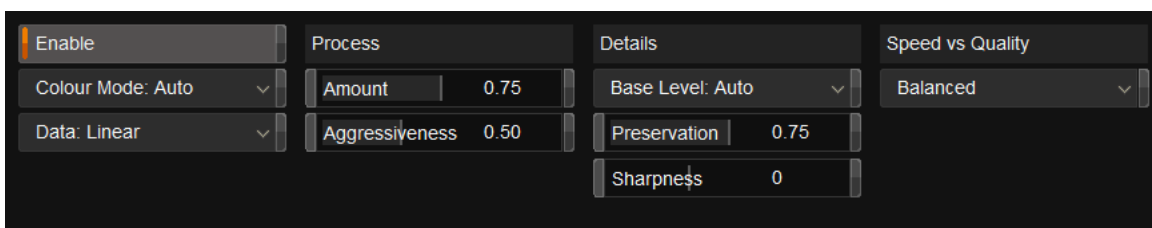
[NUCODA QUICKSTART GUIDE](#)

GETTING STARTED

1. Launch your platform on your workstation.
2. Locate the toolbar, (positioned on the left-hand side of the interface)
3. Scan the toolbar options until you find the **DVO Clarity** tool.



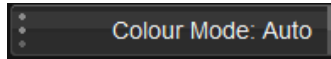
4. Click on it and the control panel under appears:



CONTROL PANEL EXPLAINED

BASIC PARAMETERS

COLOR MODE



The drop-down list allows the user to set RGB processing or single channel BW (black and white) processing.

The options available are:

Auto Analyze the clip to assign BW or RGB processing.

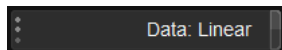
RGB Separate analysis and processing of the RGB channels

BW Only the Green channel is analyzed and used for all channels.

RGB > BW Converts RGB to a single channel, process and output the result as BW.

Default: Auto

DATA

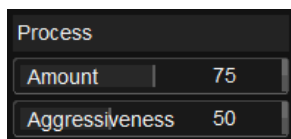


Select the data format of the image; video cameras typically use a Linear data format.

If the Data setting is incorrect, the result can be affected.

Values: Linear (default), Log

PROCESS



The *Process* parameters sets the basic processing for the **DVO Clarity** algorithms.

AMOUNT



The Amount parameter sets the overall level of noise/grain reduction.

Range: 0.00 - 1.00

Default: 0.75



AGGRESSIVENESS

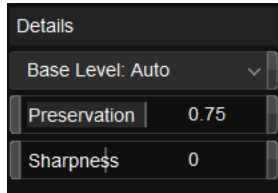
Aggressiveness 50

The parameter "Aggressiveness" determines the extent and strength of noise/grain reduction, taking motion into consideration. A higher value indicates a greater level of motion being disregarded during the noise reduction process. In other words, increasing the Aggressiveness value results in more emphasis on noise reduction, potentially overlooking subtle motion details in the image.

Range: 0.00 - 1.00

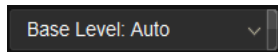
Default: 0.50

DETAILS



The Details group controls the level of *detail preservation* versus noise/grain reduction performed.

BASE LEVEL



The "Base Level" parameter establishes the general bias for preserving detail in the DVO Clarity algorithm. By default, when set to "Auto," the algorithm automatically adapts to the input. However, adjusting it to "Less" or "More" will modify the overall bias toward preserving detail in the following ways:

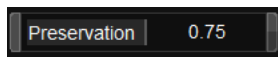
Less - try and preserve **less** detail.

More - try and preserve **more** detail.

By selecting either "Less" or "More," you can fine-tune the algorithm's behavior to suit your preference for detail preservation.

Values: More, Auto (default), Less

PRESERVATION



Using Base Level, the Preservation parameter will fine-tune detail preservation. Higher settings preserve more detail.

Range: 0.00 - 1.00

Default: 0.75

SHARPNESS



The latest Clarity includes an updated algorithm, resulting in an improved look that relates to a better-balanced sharpness:

+1 should correspond to previous versions of Clarity.

0 is the new default, and

-1 could be recommended for material with heavy grain or just for a softer look.

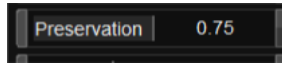


The different profiles may also influence grain/noise reduction. Impact/difference obviously depends on other parameters but should be clear if heavy grain reduction is applied.

Range: -1, 0, +1

Default: 0

DETAIL PRESERVATION WORKFLOW



When analyzing the shot and determining the appropriate settings for the "Details" parameters, it's necessary to observe and record the quantity and size of any noise artifacts present, such as grain size. Additionally, consider the level of detail captured in the shot. These observations will help in selecting optimal values for the "Details" parameters that effectively address the noise artifacts while preserving the desired level of detail in the image.

If the detail level is low and not apparent against the average noise/grain size use these settings:

Base Level: Less

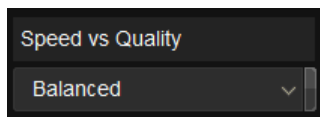
Preservation: 0

If the detail level is high and apparent against the average noise/grain size use these settings:

Base Level: More

Preservation: 100

SPEED AND QUALITY



By default, our approach aims to strike a balance between the quality of the output and the processing time required to generate it. The "Speed vs Quality" setting allows you to customize this trade-off according to your specific requirements.

Adjusting this setting allows you to prioritize either faster processing times or higher output quality based on your preferences.

Values: Speed, Balanced (default), Quality



WANNA KNOW

MORE?

FORUM

WEBSITE

SALES

