

# DVO CLARITY GEX 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** is part of the Filmworkz OFX DVO Performance Pack, which runs on **Resolve**, **Mistika** and **Scratch** for Windows, Mac and CentOS.



It's also available as a single plugin in Adobe Premiere Pro.

Additionally, DVO Clarity is also available in the following Filmworkz platforms:





If you need a hand with anything, our friendly AI assistant <u>Juno</u> is your first port of call.

Whether it's access to the latest software versions, guidance with using DVO tools, more info on Filmworkz platforms or discovering best practices, **Juno**'s there for instant, accurate support, any time you need it – that's 24/7 because **Juno** never sleeps!

# **GETTING STARTED**

Just locate & enable the DVO OFX tools in your chosen platform; for ease, we're showing the screenshots from Resolve in this User Guide so consult your manuals for any alternative system you're using.

- 1. Launch Resolve on your workstation.
- 2. Open your project; to select the DVO effect, click on the Effects tab on the upper left side of the interface. On the Open FX section, open the Filters section and click on DVO.
- 3. To apply the effect, you can either double click or drag and drop on the selected clip(s) when using the Timeline tab. If you're in the Color page, select the effect using the Effects tab on the top left side of the interface and drag and drop on an existing node.
- 4. Click on the Effects section (or click on the grading node) and the control panel overleaf appears.

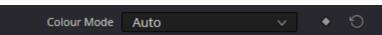


# **CONTROL PANEL EXPLAINED**

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Aggressiveness	•-		0.500	•	9
Speed vs Quality	Balanced		~	•	Ю
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Base Level	Auto		~	•	Ð
Preservation		•—	0.750	•	Ю
Sharpness			0	•	G

# **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

# PROCESSING

<ul> <li>Processing</li> </ul>				
Amount	•	0.750	•	Ю
Aggressiveness	•	0.500	٠	Ю
Speed vs Quality	Balanced	~	•	Ю

The Process parameters set 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

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

### **SPEED VS 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

## 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

# **DETAILS 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



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