

**DVO**  
**SCRATCH TARGET**  
**USER GUIDE**

# WHAT DOES IT DO?

**DVO Scratch Target** processes vertical/continuous scratches.

These aren't typically detected by dust/dirt removers, which are looking for random defects in the picture. The process is fully automatic and has an advanced detection algorithm with a fill-in result far superior to the normal process of hiding the defect using information from both sides of the scratch.

**DVO Scratch Target** includes options which allow the user to add & remove columns to the image and then specify whether processing should be forced or bypassed on a per column basis. This will allow scratches that are not detected by the Auto setting to be removed. A paint tool can also be used for shorter scratches and a frame duration can be specified for each column.

# HOW DO YOU USE IT?

DVO Scratch Target works on the following platforms:



It's also coming soon to:



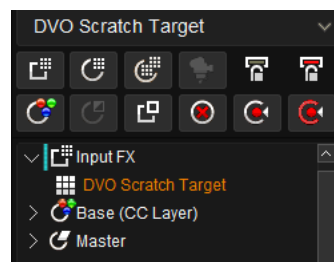
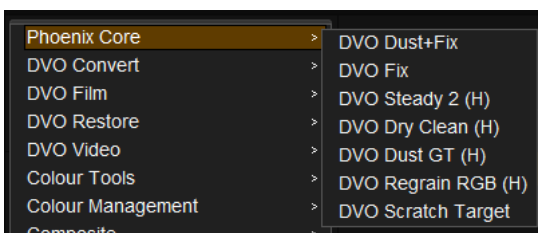
If you're already a Filmworkz veteran, you can jump right in and use **DVO Scratch Target**, however if you need a hand getting going, check out these QuickStart Guides:

[PHOENIX QUICKSTART GUIDE](#)

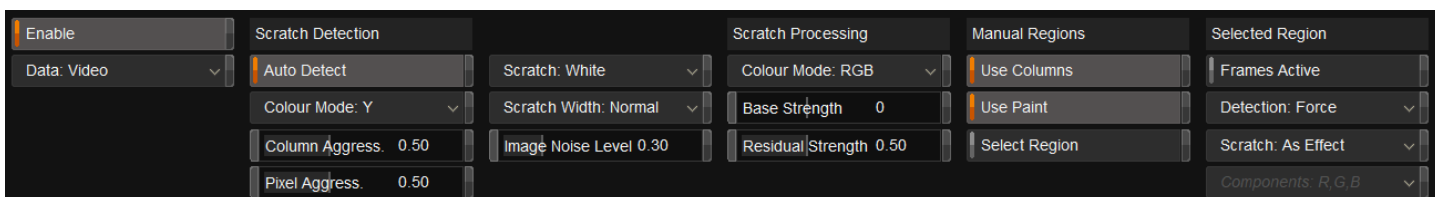
[NUCODA QUICKSTART GUIDE](#)

# 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 Scratch Target** tool.



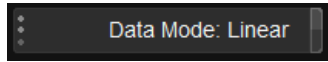
4. Click on it and the control panel under appears:



# CONTROL PANEL EXPLAINED

## BASIC SETTINGS

### DATA MODE

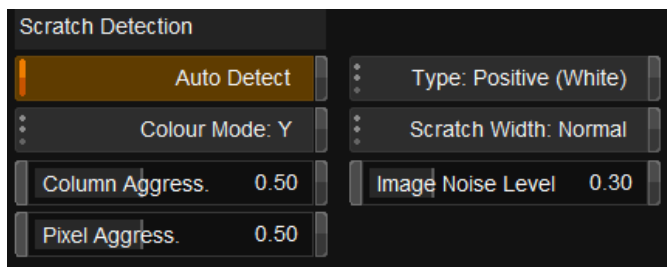


Select the data format of the image; video cameras typically use a Linear data format.

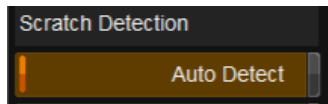
If the Data setting is incorrect, the result can be affected.

**Values:** Linear, Log (default follows the project setting)

## SCRATCH DETECTION PARAMETERS



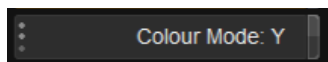
### AUTO DETECT



The tool will attempt to automatically determine the best settings for the shot.

You can use Auto Detect and Manual Regions (below) at the same time.

### COLOR MODE



This determines the image channels used for the detection. The options are:

**Y:** Luminance detection only. This is the **fastest**.

**R+G+B:** Separate detection in R, G and B channels. Processing of each channel is based on the combined result from the detection.

**R, G, B:** Separate detection in R, G and B channels. Each detection channel affects the corresponding processing channel.

**Values:** Y (default)

R+G+B

R, G, B



## COLUMN AGGRESSIVENESS

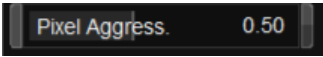


The first stage of the detection process determines what columns (and pixels) are selected as scratch candidates to be processed. The higher the setting, the more aggressive we are.

**Values:** 0 – 1.0

**Default:** 0.5

## PIXEL AGGRESSIVENESS

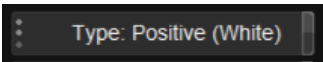


The second stage of the detection process, this is a modifier for pixel selection within the selected columns (from the first stage). The higher the setting, the more aggressive the detection is.

**Values:** 0 – 1.0

**Default:** 0.5

## TYPE



This is used to describe scratch characteristics. For moderate scratches, typically choose the specific scratch type evident in the material. In case of very heavy scratches, with emphasized edges, it can be advantageous to select Positive+Negative. The options are:

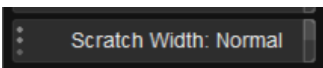
- **Positive (White):** For brighter (white) scratches
- **Negative (Black):** For darker (black) scratches
- **Positive+Negative (White+Black):** For a mix of bright and dark scratches.

Do not use Positive+Negative as a default setting as it will sometimes process too much in the picture.

**Values:** Positive (White), Negative (Black), Positive+Negative (White+Black)

**Default:** Positive (White)

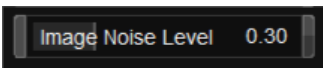
## SCRATCH WIDTH



Sets the width-profile for scratches. If detection/processing is insufficient in areas which have many close scratches, a Wide setting is recommended.

**Values:** Thin, Wide, Normal (default)

## IMAGE NOISE LEVEL



Characterizes the level of noise in the image. Image noise will affect the accuracy of detection.

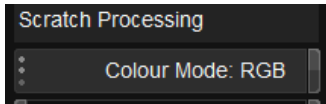
**Values:** 0 – 1.0

**Default:** 0.3



# SCRATCH PROCESSING PARAMETERS

## COLOR MODE



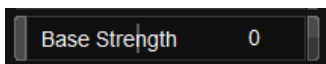
This determines the color mode of scratches we detect and process. The options are:

- **RGB** - used for color scratches
- **YUV** - used for monochrome

YUV processing mode cannot be used when using detector mode R, G, B.

**Values:** RGB (default), YUV

## BASE STRENGTH

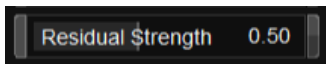


Determines the base strength of the process. This affects properties such as smoothness (as might be noticed in wide scratches).

**Values:** 0 – 3

**Default:** 0

## RESIDUAL STRENGTH

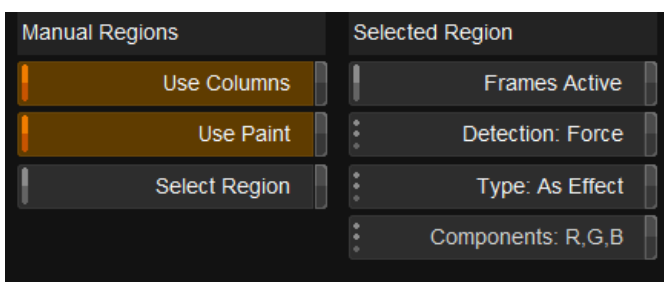


Determines the strength of processing the "residuals" e.g., a very jagged scratch may need additional processing.

**Values:** 0 – 1.0

**Default:** 0.5

# MANUAL REGIONS



The Regions tool lets you define areas manually for specific processing requirements. You can manually define processing regions to augment the Auto Detect function or use them as an alternative.

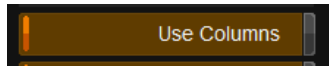
Until a region is chosen, the right-hand side of the interface element will be empty.

Regions can be defined using:

- **Columns** - Use Columns button active
- **Painted Areas** - Use Paint button active

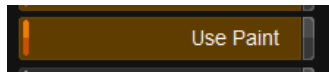


## COLUMN MODE



Column mode is active by default when left clicking and dragging.

## PAINT MODE

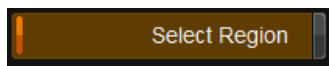


To create a region using a brush, use the following shortcuts:

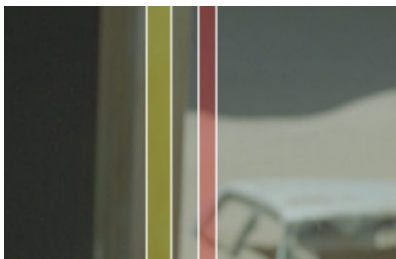
- **Paint:** ALT + left click
- **Size Brush:** SHIFT + ALT+ mouse drag
- **Constrain Stroke:** CONTROL + ALT + mouse drag

# VIEWING AND EDITING REGIONS

To make defined regions **visible**, enable the Select Region button.



You cannot create regions when Select Region is active, only edit or delete them.



Two processing columns defined

*Left-hand column has "Medium" detection set, shown in yellow.*

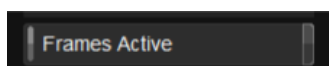
You can click and drag the outline of a selected region to edit it.

Press the *delete* key to remove it

# REGION SETTINGS

Selected regions can be setup in different ways using the following options:

## FRAMES ACTIVE



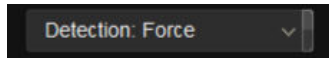
With a region selected, selecting this option will process only the selected frame. You can also move to a different frame and, by selecting *Frames Active* a second time, will set a range for processing. Regions that are shown as dotted lines are not active at the current frame.

The active range is shown in the keyframe bar.

By default, the whole clip is processed.



# DETECTION



Applied to the selected region, this selects the sensitivity of the scratch detection tool for that region.

Detection can also be:

- Force - Always process this area
- Safe Force - Always process this area but be more cautious
- Deselected - Do **not** process the area

Regions are color coded per detection setting used:

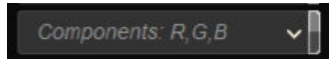
Light	Green	
Medium	Yellow	
Heavy	Orange	
Force	Red	
Safe Force	Purple	
Force Deselect	Blue	

# TYPE

Select the scratch type to use (see Type under **Scratch Detection Parameters** above).

**Default:** As Effect

# COMPONENTS



Choose components to process. To enable this option, set *Color Mode* to R, G, B in the Detection Parameters.

- Values:**
- R
  - G
  - R, G
  - B
  - R, B
  - G, B
  - R, G, B (default)



**WANNA KNOW**

# MORE?

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