

**DVO**

# **FRAME**

**USER GUIDE**

# WHAT DOES IT DO?

**DVO Frame** is a powerful frame reconstruction tool that utilizes the DVO Twister algorithm. It's designed to address the issue of missing or severely damaged frames in film and video sequences. When a video contains missing or corrupted frames, it can result in visual artifacts, discontinuities, or gaps in the playback.

The DVO Twister algorithm, which is the core technology behind **DVO Frame**, is an advanced algorithm developed specifically for frame reconstruction. It uses sophisticated techniques to estimate and reconstruct missing or damaged frames based on the surrounding frames in the video sequence.

See the following page for some of the most common use cases.

# HOW DO YOU USE IT?

DVO Frame works on the following platforms:



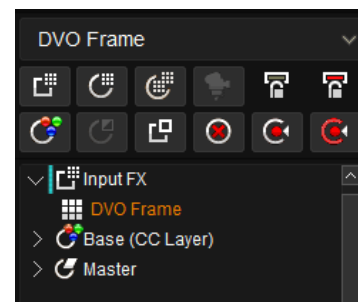
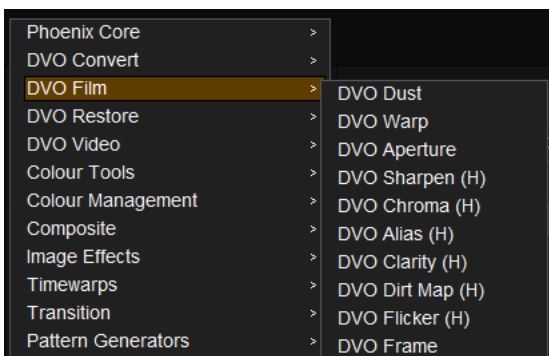
If you're already a Filmworkz veteran, you can jump right in and use **DVO Frame**, however if you need a hand getting going, check out these QuickStart Guides:

[PHOENIX QUICKSTART GUIDE](#)

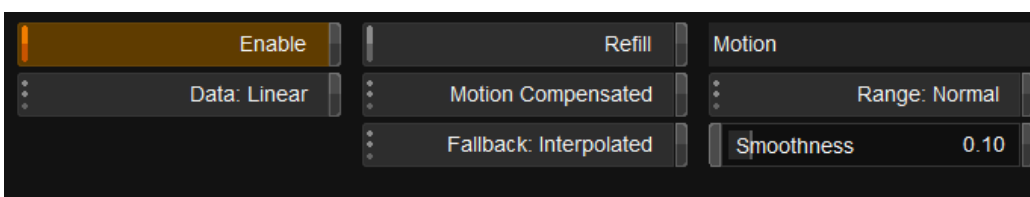
[NUCODA QUICKSTART GUIDE](#)

# 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 Frame** tool.



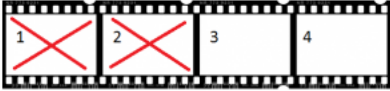
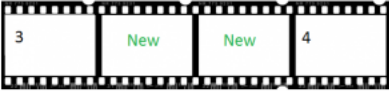
4. Click on it and the control panel under appears



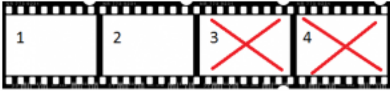
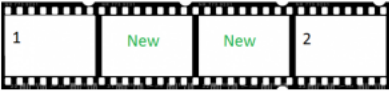
# FRAME REPLACEMENT SCENARIOS

These are some of the most common use cases:

## MISSING OR DAMAGED AT START

Missing or damaged frames at the start of a sequence:	The tool uses the first good frame of the clip as a start frame. It'll then calculate the missing frames until the second good frame of the clip:
	

## MISSING OR DAMAGED IN THE MIDDLE

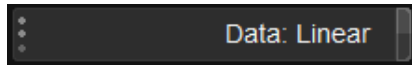
Missing or damaged frames at the end of a sequence:	The tool uses the last good frame of the clip as the end frame. It'll then calculate the missing frames between the last good frame and the second to last good frame of the clip.
	

For the start and end frames, there will be a slight change of temporal speed that can be noticed in scenes with high motion.



# CONTROL PANEL EXPLAINED

## 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 (default), Log

## SETTINGS

### REFILL

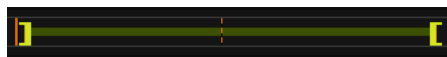


When enabled, the current frame (where play head is parked) will be reconstructed.

A maximum of **6 sequential frames** can be used, but multiple refill sections can be created per clip.

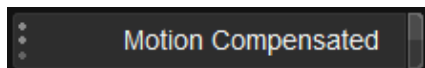
**Default:** Off

### STEPPED KEYFRAME RANGE



Using **Refill** will also enable a sliding range over the processed frames. The range can be stretched by dragging the edge brackets.

## MOTION MODE



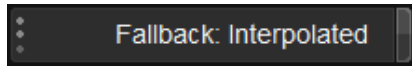
**Motion Compensated:** This allows the accurate recreation of fields and frames using the Digital Vision *Phame* motion vector algorithms. (default)

**Interpolated:** A simpler method that recreates correct target fields and frames by carefully mixing the input source. This method will often produce a lower-quality result than the motion-compensated approach. Try this if Motion Compensation doesn't produce acceptable results.

**Nearest:** Skipping or repeating frames to output the same clip duration



# FALLBACK

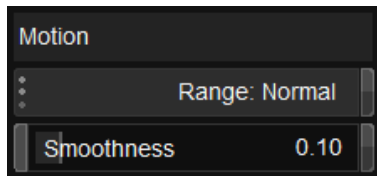


**Fallback** determines how images that are found **unsafe** in Motion Mode should be processed in the target format.

**Interpolated:** A simpler method that recreates correct target fields and frames by carefully mixing the input source. This method will often produce a lower-quality result than the motion-compensated approach. Try this if Motion Compensation doesn't produce acceptable results.

**Nearest:** Skipping or repeating frames to output the same clip duration

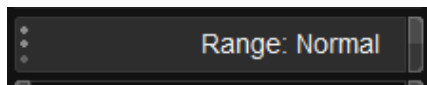
# MOTION



**Motion** sets up the motion analysis and its thresholds.

This setting only works if the Motion Mode is set to **Motion Compensated**.

# RANGE

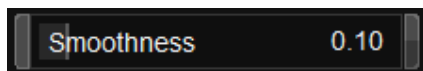


**Range** affects how motion is detected.

A larger mode can help with fast motion and larger images.

**Values:** Normal (default), Large, X-large

# SMOOTHNESS



**Smoothness** affects how the thresholds between **Motion Mode** and **Fallback** are managed to achieve a preferred blend.

**Range:** 0.0 - 1.0

**Default:** 0.1

**Tip:** **DVO Twister** can also be used to smooth the motion. If the start or end has fast motion, export a sequence of frames with handles and use DVO Twister to do a frame conversion so that the speed change will be less noticeable.



**WANNA KNOW**

# MORE?

**FORUM**

**WEBSITE**

**SALES**

