

What is new in DIAMANT-FILM Restoration V11?

The major innovations of this release compared to the previous V10 are described in the following and targets experienced users of the DIAMANT-FILM Restoration Suite.

In addition to this printed section, we also offer a YOUTUBE channel with video tutorials. There are tutorials for general usage as well as for specific repair and filter parameters:

<https://www.youtube.com/user/hsartdigital>

ProjectManager

The main visible innovation in V11 is the new ProjectManager. This application substitutes the MovieManager that has been in place since the very first days of DIAMANT-Film. It is the last component that has been completely new implemented by learning from customer feedback and experiences in the past 10 years!

In the ProjectManager we kept the well-established concept of Generations, but we made it simpler and the dependency of the different generations is now much more intuitive.

Renaming of projects is now possible and the folder structure is not fix any more. A new search function completes the new ProjectManager.

A Flatten function has been introduced which allows the free the intermediate cached files.

Wie arbeiten aufgrund der Allgemeinen Bedingungen für den Verkauf und die Lieferung von Software - Support Leistungen, sowie für Dienstleistungen in der Informationsverarbeitung durch Rechenzentren und den Verkauf und die Lieferung von Organisations-, Programmierleistungen- und Werknutzungsbewilligungen von Softwareprodukten - empfohlen vom Fachverband Unternehmensberatung und Datenverarbeitung sowie vom Bundesministerium des Maschinenhandels, Berufsgruppe Büromaschinenhandel und bei uns zur Einsicht liegenden Fassung.

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Shortcuts

The default setting for toggling between A and B views is now not only the <TAB> key. As an alternative the <0> on the NumPad could also be used.

Presets

The path to the preset directory is now configurable to allow better sharing of presets between users. This also allows to copy presets between machines.

Timeline

It is now possible to create Tool Tracks on any position in the timeline. Use “Add ToolTrack Above” or “Add ToolTrack Below” from the filter selection panel. This allows to fix some issues on single frames before any filter is applied and can save a generation.

This feature is specifically important if after some interactive repair operations in the ToolTrack another automated filter should be used in the same generation.

Copy&Paste

The copy&paste function has been improved. A new “Paste Advanced” function makes it simpler to decide what should be pasted (Parameter, ROIs, Filters)

Reference Images

Since the very early days of DIAMANT-Film, Reference images have been associated to the timeline like Cut information. However, this is a disadvantage if different Reference image dependent filters are used in the same timeline above each other. In such cases it was so far necessary to open different generations. Since V11 the Reference images are bound to the filter (as filter parameters). Therefore different reference dependent filters such as DFlicker, DFlickerFlow and DWarp can be used in any combination. References can be determined independently for each of the filters.

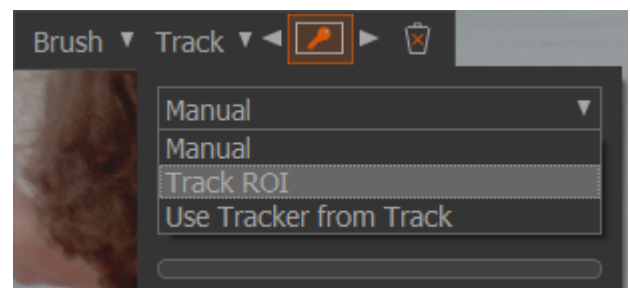
Tutorial Clip

A new tutorial clip is now part of the V11 Setup files. This clip is more typical and consists of 2 shots from different film sources. Besides that, a sample project is distributed and installed, that shows how to work best on such material.

The tutorial clip is the same for DustBuster+ and DIAMANT-Film Suite, but the project is different as DIAMANT-Film Suite offers far more possibilities to restore the film damages.

Tracking ROIs

The tracking of ROI's (Track ROI) has been slightly changed. Now the tracking content focuses on the inner parts of a selected ROI, making the tracking result far more reliable.

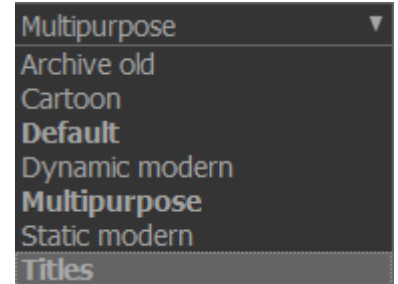


Dust Filter

The Dust filter behaviour and quality very much depends on proper and correct detection of the moving objects. As the optimal choice of a moving object method depends on some film characteristics, some new Dust Filter presets are included as Factory Settings. Please use them to get started, as they might give significantly better results in terms of artefacts and defect detection.

Currently the following factory presets are available:

- **Archive old**: starting point for old b/w film material for non-aggressive repair of damaged archive film.
- **Cartoon**: starting point for cartoons and similar film sources.
- **Dynamic modern**: starting point for moderately damaged film sources with considerable moving objects. Typically for film materials from the 1970s up to now.
- **Multipurpose**: a revised and optimised setting for multi-purposes. Is usually better than the Default setting.
- **Static modern**: starting point for moderately damaged film with low object motion. Typically for film materials from 1970s up to now.
- **Titles**: starting point for extremely static scenes like intertitles, etc.



Interpolate Tool

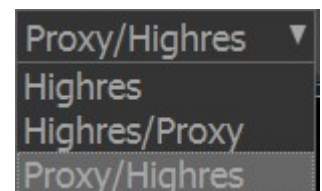
A new tool has been made for Interpolate. It substitutes the pre-existing one, that is now for compatibility kept in the group of **Outdated** tools.

Parameters and details are kept identical, but the mathematic algorithm has been significantly improved.

Proxies

The concept of proxies is now also supported in DustBuster+. So far it was only available in DIAMANT-Film Suite.

For ultra-high resolutions, the stepping and playback process is now automatically using proxies (**Proxy/Highres**). If this is not wanted, the traditional modes (**Highres**, **Highres/Proxy**) can also be selected.



Mac OS X

DustBuster+ V11 is also available on Mac OS X 10.8 or higher. **OpenCL** is used instead of **cuda**, thus providing full functionality apart from the ExinPaint-Tool.

A demo version can be download from

<http://www.hs-art.com/index.php/solutions/dustbusterplus>

StabAuto Filter

In V11, the StabAuto Filter is back! This used to be a successful filter in earlier times. However, the Stabilize filter has substituted it since generation V8. The new StabAuto in V11 combines the advantages of the old StabAuto with those of Stabilize in one single new filter.

StabAuto behaves much better on camera pans, provides correction also for rotation and zoom, supports fast rendering and is very efficient.

ReShake Filter

This new filter is able to bring back some natural camera movement that was lost during the restoration process. It is possible to take a snap-shot of the original camera movement, then do the restoration on the stabilized scene and finally re-apply the original camera movement (eventually without extreme jumps).

On the other hand, still images can be added with moderate camera shake, thus contributing to a correct and authentic restoration process.

Annotations

Annotations can in V11 be automatically inherited from previous generations. Alternatively import of annotation data from other projects is possible.

A convenient new feature is also the possibility to sort annotation types in case of having a long list of different types.

Project Settings

Settings for Blanking, Safe Areas and the View Guides are now also part of the project settings rather than a global setting.

Video Output

It will be possible to set a LUT and aspect ratio also for the video output.

File Format Support

Added ProRes 4444 XQ support