

Neat Video quick start guide

1. Installing the plug-in

To install the Neat Video plug-in

1. Download from the Neat Video website one of the install packages: *NeatVideoOFX.Intel64.tgz* or *NeatVideoOFX.Intel32.tgz*, select the one that matches your system, 64-bit or 32-bit version of Linux and host application;
2. Double-click the downloaded package to open the archive and extract the installer from it (*NeatVideoOFX.Pro.Intel64.run* or *NeatVideoOFX.Pro.Intel32.run*).
3. Start the installer (you may be prompted to enter the password of the administrator account) and then follow the wizard to complete the installation process.
4. Restart the host application and find Neat Video | Reduce noise in the list of video effects / filters.

If Neat Video has **not** become available in the host application after restart, please contact Neat Video support for assistance.

2. Running Neat Video on a sample video clip

There is a test-kit prepared to help you start using Neat Video. You can download the test-kit from the Neat Video web page: <http://www.neatvideo.com/files3/testkit.zip> (6 MB). Having downloaded, unzip it to a new folder on the hard disk.

The test-kit includes a sample video clip: the *SampleClip.mpg* file. This is a typical video clip captured by a digital video camera in high-gain mode. Technical information about the sample clip is available in the *SampleClipInfo.txt* file.

Please start the host application and go through the stages below to make Neat Video clean the clip:

2.1. Stage I. Create a new project with sample clip

1. Create a new project

- ➔ Use the host tools to set up a HDV 720p25 project and/or sequence with the following parameters (when the corresponding settings are adjustable):
 - Frame size: 1280x720 pixels
 - Frame rate: 25 fps
 - Field order: Progressive scan
 - Pixel aspect ratio: 1.0 (square pixels)

2. Add the sample clip file to the project

- ➔ Use the host tools to import the sample clip and insert it into the timeline.

3. Check the sample clip in preview

- ➔ Use the host preview window to check how the clip looks like.

You will see that there is some noise in the clip. The task of Neat Video is to reduce this noise.

2.2. Stage II. Add Neat Video to the clip

- ➔ Use the host tools to add the Neat Video (Reduce Noise) effect to the sample clip in the timeline.

2.3. Stage III. Configure Neat Video

1. Open Neat Video plug-in window

- ➔ Open the Neat Video plug-in window using the Options button in the effect's settings panel.

The Neat Video plug-in window will open and show the currently selected frame from the clip.

2. Load noise profile


To reduce noise in this frame and in the whole clip, Neat Video generally needs a noise profile describing the noise properties of the clip. We have prepared such a noise profile in advance. The profile is supplied with the test-kit in the *SampleProfile.dnp* file. Load it into plug-in:

- ➔ 1. In the Device Noise Profile tab:  click  (the Load Profile button);

2. In the Load Device Noise Profile dialog, navigate to the folder where the sample device noise profile has been unzipped and select the *SampleProfile.dnp* file.


Neat Video will load the noise profile and will then be ready to filter the sample clip.

3. Check intra-frame preview

- ➔ Switch to the Noise Filter Settings tab: 

You will notice that the intra-frame filter has already applied some filtration based on default filter settings and the preview shows a clearly visible difference. However, this is not the final result yet.

4. Apply the changes

- ➔ Click  in the bottom of the plug-in window.

The plug-in will close its main window.

5. Adjust the temporal filter

- ➔ Adjust the Temporal filter radius setting from 1 to 5 in the effect's settings panel. This will apply stronger temporal filtration to the clip.

2.4. Stage IV. Render the clip

- ➔ Use the host tools to render the whole clip.

This will automatically apply Neat Video noise reduction to the whole sample clip to help you evaluate the filtration results and adjust the filter settings if necessary. You will see that the noise in the resulting clip is significantly reduced while details are preserved. You can also find that the resulting noise-free clip can be compressed better (the file size is smaller) than the original noisy clip.

The sample noise profile supplied with the test-kit is suitable only for this clip and similar clips produced by the same capturing device working in the same or similar mode. Neat Video can apply similar noise reduction to video clips captured or acquired by any other devices working in any mode. To be able to do that Neat Video needs device noise profiles that describe the noise characteristics of those devices. Using Neat Video's Auto Profile function, you can easily build these profiles yourself. Auto Profile can automatically build a profile once you give it a suitable frame from a clip.