

Neat Video quick start guide

1. Installing the plug-in

When you installed Neat Video, Setup offered to install the plug-in into VirtualDub and you were asked to specify VirtualDub *plugins* subfolder for this purpose. In case the plug-in was not installed into the right folder, you still can manually install it into VirtualDub using the guidelines below.

To manually install Neat Video plug-in into VirtualDub

- ➔ Copy the *NeatVideo.vdf* file from the Neat Video installation folder (typically, *C:\Program Files\Neat Video for VirtualDub*) into the *plugins* subfolder inside the VirtualDub folder. Typically, the *NeatVideo.vdf* file should be copied to:
C:\Program Files\VirtualDub\plugins
Then re-start VirtualDub and find Neat Video in VirtualDub's filter list: Video | Filters... | Add... | Neat Video

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/files/testkit.zip> (2 MB). Having downloaded, unzip it to a new folder on the hard disk.

The test-kit contains a sample video clip: the *SampleClip.mpg* file. This clip is a part of typical video sequence captured by a digital camcorder. Detailed information about the sample clip is available in the *SampleClipInfo.txt* file.

Please start VirtualDub and go through the stages below to see how Neat Video can improve the clip.

2.1. Stage I. Open the sample clip

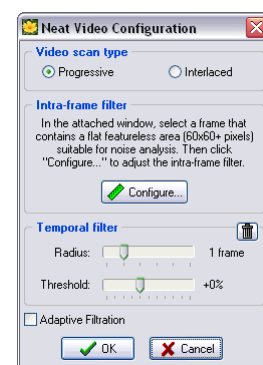
- ➔ Use the File | Open video file... menu in VirtualDub to open the *SampleClip.mpg* file

VirtualDub will open the sample clip and you will then see that there is strong noise in it. The task of Neat Video is to reduce this noise.

2.2. Stage II. Add Neat Video filter

- ➔ 1. Use the Video | Filters... menu item to open the list of used filters;
2. Click the Add... button to open the list of available filters;
3. Select the Neat Video filter in the list and click the OK button.

VirtualDub will add the Neat Video filter and will open the Neat Video Configuration window with an attached window showing the video clip.



2.3. Stage III. Configure Neat Video

1. Open Neat Video plug-in window


- ➔ In the Neat Video Configuration window, click the Configure... button (in the Intra-frame filter box) to open the main Neat Video plug-in window;

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

2. Open 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 video sequence. We have prepared such a noise profile in advance.

The profile is supplied with the test-kit in the *SampleProfile.dnp* file. Using the noise profile, Neat Video can efficiently reduce the noise in the video sequence.

- 1. Click  (blue disk) in the Device Noise Profile box on the right panel;
2. In the Open device noise profile dialog, navigate to the folder where the sample device noise profile has been unzipped and double click on the *SampleProfile.dnp* file.

The sample noise profile is now open and Neat Video is almost ready to filter the sample clip. Usually, you would adjust the filter settings at this stage. To make things easier for the first run of Neat Video, we have prepared a sample preset file that stores ‘good’ filter settings suitable for the sample clip.

3. Load filter preset

- 1. Switch to the Noise Filter Settings tab: 
2. Click  (pink disk) in the Filter Preset box on the right panel;
3. In the Open filter preset dialog, navigate to the folder where the sample filter preset has been unzipped and double click on the *SamplePreset.nfp* file.

Now the sample filter preset is open and the filter settings are adjusted to process the sample clip.

4. Apply the intra-frame filter settings

- Click  on the toolbar.

The Neat Video plug-in window will be closed and you will again see the Neat Video Configuration window.

- Click the OK button in the Neat Video Configuration window (keep the default values of the Temporal filter settings) and then in the Filters window.

Both Neat Video Configuration and Filters windows will be closed and you will see the main window of VirtualDub with two – ‘before’ and ‘after’ – versions of the sample clip (you may have to move the Trackbar to select another frame to update the ‘after’ version). The ‘after’ version will show the results will show the effect of applying the noise reduction to the clip.

2.4. Stage IV. Apply noise reduction to the clip

- Use the File | Save as AVI... menu item in VirtualDub.

This will automatically apply Neat Video noise reduction to the sample clip and save the result to a new video file on the hard drive. You will then be able to open this new file, evaluate the filtration results and adjust the filter settings if necessary.

Please note that the noise in the resulting clip will be significantly reduced while the true details will be 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 (this depends on VirtualDub’s compression settings, which can be adjusted using the Video | Compression... menu item).

The sample noise profile and sample filter preset supplied with the test-kit are suitable only for the sample clip and similar clips produced by the same capturing device working in the same or similar mode. Neat Video can perform similar noise reduction on 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. With Neat Video you can easily build these profiles yourself. The software can completely automatically build a profile once you give it a suitable frame from a clip.

Please also see the complete user guide (available by pressing F1 in the software) for more details on filtration and profiling processes.