

Neat Video quick start guide

1. Installing the plug-in

When you install Neat Video, Setup asks you to specify VirtualDub *plugins* subfolder to install the plug-in there. 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

If you install the 64-bit version of Neat Video, please make sure you specify the *\plugins* folder of the 64-bit version of VirtualDub. For the 32-bit Neat Image specify the *\plugins* folder of the 32-bit version of VirtualDub.

Then re-start VirtualDub and find Neat Video in VirtualDub's filter list: Video | Filters... | Add... | Neat Video

If Neat Video has **not** become available in VirtualDub 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 VirtualDub and go through the stages below to make Neat Video clean the clip:

2.1. Stage I. Open the sample clip

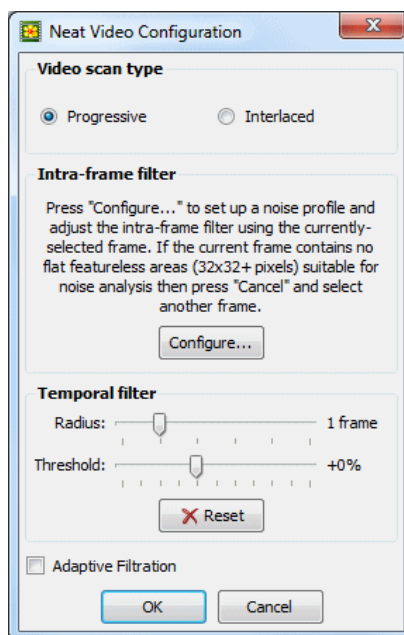
- ➔ Use the File | Open video file... menu in VirtualDub to open the *SampleClip.mpg* file

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


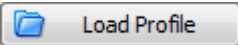
1. Open Neat Video plug-in window

- ➔ 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. 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  **Device Noise Profile** 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  **Noise Filter Settings**

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

5. Adjust the temporal filter

- ➔ Adjust the **Temporal filter radius** setting from 1 to 5 in the **Effect Controls** window. This will apply stronger temporal filtration to the clip.
- ➔ Click the **OK** button in the Neat Video Configuration 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 need 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. Render the clip

- ➔ Use the **File | Save as AVI...** menu item in VirtualDub and proceed to render the clip.

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.

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

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.