

Neat Video quick start guide

1. Installing the plug-in

When you install Neat Video using its standard installer, the installer should automatically install the plug-in into Pinnacle Studio. In case the plug-in has **not** become available in your plug-in host (the plug-in should appear as *Neat Video* in the list of available effects when you choose to Add Video Effect), you can manually install it using the guidelines below.

To manually install Neat Video plug-in into Pinnacle Studio

- ➔ Copy the *NeatVideoPN.fex* and *NeatVideoPN.xml* files from the Neat Video installation folder (typically, *C:\Program Files\Neat Video for Pinnacle Studio*) into the *\Plugins\RTFx\NeatVideo* subfolder inside the Pinnacle Studio folder.

Typically, the above two files should be copied to:

C:\Program Files\Pinnacle\Studio 1x\Plugins\RTFx\NeatVideo

Re-start Pinnacle Studio and find *Neat Video* in the list shown when you choose to Add Video Effect. After that, the Neat Video can be used in Pinnacle Studio projects.

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 Pinnacle Studio and go through the stages below to see how Neat Video can improve the clip.

2.1. Stage I. Add the sample clip to the project

1. Configure a new project in Pinnacle Studio

- ➔ Create a new project in Pinnacle Studio.

Then click the OK button and Pinnacle Studio will open the new project with the Timeline, Video Preview and other windows.

2. Add the sample clip file to the project

- ➔ Use the Show videos panel in the Edit tab in Pinnacle Studio to find and select the *SampleClip.mpg* file from the test-kit.

3. Add the sample clip to video track

- ➔ Drag-n-drop the sample clip to the empty video track in My Movie 1 window and then enable the Timeline view in that window.

Select any frame in the clip and you will then see that there is strong noise in it (see the Video Preview

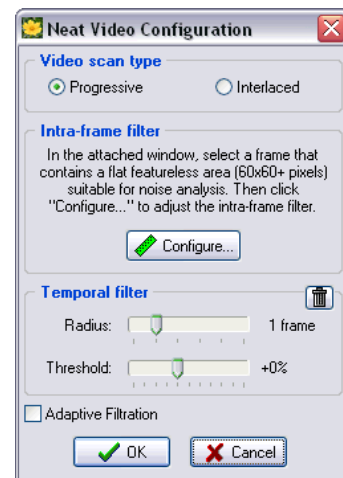
window). The task of Neat Video is to reduce this noise.

2.2. Stage II. Add Neat Video

- ➔ 1. Go to the Toolbox menu and select the Add Video Effects command to open the empty list of currently used Video Effects and the list of available effects in the Add Video Effect list;
- 2. Select Neat Video in the Add Video Effect list and press the OK button.

Pinnacle Studio will add Neat Video and will show the Neat Video Noise Reduction settings panel with the only button in it: Edit Neat Video Noise Reduction settings.

Click that button to open the Neat Video Configuration window (see the picture on the right).



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);

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

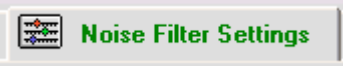

2. Open noise profile

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.

- ➔ Keep the default values of the Temporal filter settings in the Neat Video Configuration window for now and press the OK button.

2.4. Stage IV. Apply noise reduction to the clip

- ➔ Use the Make Movie tab in Pinnacle Studio and the set of controls in that tab to render the whole clip. The clip will be filtered by Neat Video in this process.
- ➔ Then check the rendered clip using your video player to evaluate the results of noise reduction.

Please note that the noise in the filtered 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 Pinnacle Studio' output compression settings).

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.