

Neat Video quick start guide

1. Installing the plug-in

To install the Neat Video plug-in into Final Cut (Mac)

1. Close Final Cut;
2. Download one of the DMG packages that matches your version of Final Cut;
3. Double-click the downloaded file to mount the DMG volume;
4. In the mounted volume, double-click *NeatVideoFC.Intel.pkg* (or *NeatVideoFC.PowerPC.pkg*) to start the installer;
5. Follow the steps of the installer wizard to complete the installation process; (you may be prompted to enter the Name / Password of the OSX administrator account);
6. Start Final Cut and find in the Effects > Video Filters menu: Neat Video > Reduce Noise. (or in Motion, in the panel Library > Filters > Neat Video > Reduce Noise).

If Neat Video has **not** become available in Final Cut 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 MPEG1 readable by FCP 7) or <http://www.neatvideo.com/files3/testkit-mp4.zip> (9 MB, MPEG4; readable by FCP X). 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 Final Cut, create a new project and go through the stages below to clean the clip:

2.1. Stage I. Add the clip to the project

1. Adjust the settings of a new sequence in the project

- ➡ Use the Sequence > Settings... menu item in Final Cut to open the Sequence Settings dialog. Select the HDV/HDTV 720p 25 preset or manually set: Frame Size: **1280x720** pixels; Editing Timebase: **25 fps**; Pixel Aspect Ratio: **Square**; Field Dominance: **None**. Then press OK to apply.

2. Add the sample clip file to the project

- ➡ Use the File > Import > Files... menu in Final Cut to import the *SampleClip.mpg* file into the project.

3. Add the sample clip to the sequence

- ➡ Select the sample clip in the project panel in the Browser window and drag-n-drop the clip into the sequence in the Timeline window.

You will see that there is noise in the sample clip (see the clip preview in the Canvas window). The task of Neat Video is to reduce this noise.

2.2. Stage II. Add Neat Video effect to the clip

- ➡ 1. Select the sample clip in the Timeline window (double-click the clip there);
2. In FCP 7/6: use the Effects > Video Filters > Neat Video > Reduce Noise... menu item

in FCP X: use the panel Effects > Neat Video > Reduce Noise
to add the Neat Video effect to the clip;
3. Open the Filters panel in the Viewer window in Final Cut (in FCP X: go to Inspector > Video > Effects)
to see all filters added to the clip. You will see that Reduce Noise has been added there.

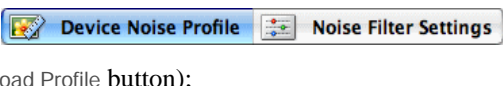
2.3. Stage III. Configure Neat Video

1. Open Neat Video plug-in window

- ➔ Open the Neat Video plug-in window using the Options... button in the Reduce Noise section in the Filters or Effects panel (in FCP X: use the Options window popup menu);
The Neat Video plug-in window will open and show the currently selected frame from the clip.

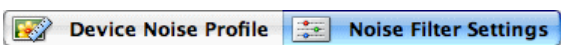
2. Load noise profile

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:

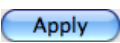
- ➔ 1. In the Device Noise Profile tab:  (the Load Profile button);
2. In the Load Device Noise Profile dialog, navigate to the folder where the sample device noise profile has been unzipped and select the *SampleProfile.dnp* file.

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 settings

- ➔ 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 2 or higher in the effect's settings panel.
This will apply stronger temporal filtration to the clip.

2.4. Stage IV. Render the clip

- ➔ Use Final Cut controls to render the clip (for example, the menu Sequence > Render Selection > Both).

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 (provided you use the same video codec in both cases).

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.