

Nuendo 5

Essential Product Information

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Steinberg Media Technologies GmbH



Welcome

Welcome to Nuendo 5

First of all we would like to thank you for purchasing Nuendo 5. This document contains the latest information about installing and using Nuendo 5 as well as information about additional content that is located on the Nuendo 5 DVD. Please read the following text carefully and also take note of all additional Readme files which are located at important locations on the installation DVD.

The Steinberg Product Planning and Development team has put great efforts into investigating user requirements, developing and testing this product to meet your daily needs when working in audio and post production. As a result, Nuendo 5 gives you access to a rich set of new productivity features as well as many improvements for professional use of the software.

Nuendo 5 has been tested for several months in Steinberg's QA test center as well as in numerous professional post production and recording studios around the world and has proven to be stable, usable and functional. However, due to its complexity and the diversity of usage scenarios, there may be minor unforeseen instances. In the unlikely case that you encounter a problem using this software, do not hesitate to contact the Steinberg support center and report the problem. We are eager to address any issues that might prevent you from getting your job done.

For a list of known issues and practical workarounds, please browse to the folder \ReadMe Files on this DVD.

If you would like to suggest improvement and additions, please feel free to contact us. We're always happy to hear from you.

Documentation

We are proud to provide Nuendo customers with a comprehensive, approximately 700-page printed manual. In addition electronic documentation is available directly from within Nuendo 5. Apart from the electronic help system in the Nuendo software which provides great contextual help, all important PDF files are accessible from the help menu of the program.

In case you want to access PDF documentation in a language other than the default language of your operating system, please go to the Documentation folder under \Additional Content\ on this installation DVD.

Software licensing

Please read the Software Licensing Contract displayed on your screen when installing Nuendo 5. By installing the software you are declaring yourself to be in agreement with the conditions in the contract. If you want to read the Software Licensing Contract independently from the installation process, or if you want to print the contract, you'll find the text file on the DVD in theLicense folder under Additional Content/ on the DVD and open the file in your preferred language.

Installation

Attach the USB-eLicenser to a USB port on your computer.

Insert the installation DVD in your computer's DVD drive.

An interactive start screen is displayed. Click Install to launch the installation and follow the instructions on screen.

In case your computer's auto-start function is deactivated, browse the DVD content and double-click the "Start Center" file to launch the interactive start screen.

Should you experience any difficulties with your USB-eLicenser, visit www.elcc.eu to download the latest version of this software.

License activation

The Nuendo 5 ships with a USB-eLicenser that includes a 25-hour license. It allows you to use Nuendo 5 for 25 hours of non-consecutive operation time. The remaining time will be displayed each time you Start the software. Please note that you must activate your permanent Nuendo 5 license within this time frame.

More information is available at:

http://service.steinberg.de/goto.nsf/show/activate_gb

Operating system notes

Nuendo 5 64-bit version for Windows Vista / Windows 7 64-bit editions

Users of Windows Vista / 7 64-bit editions have the choice of installing either the 32-bit version and/or the native 64-bit version.

The key advantage of the Windows Vista/7 64-bit editions is their capability to address more than 4 GB of RAM and make it available to applications. In fact more than 128 GB can be utilized (depends on the used Vista/7 version) and the computational maximum amounts to 1 terabyte of main memory.

The 64-bit editions of Vista/7 also allow you to run 32-bit software applications. 32-bit programs are able to use up to 4 GB of RAM (instead of the maximum usable amount of 2 GB on Windows Vista/7 32-bit editions).

The VST Bridge for plug-ins and virtual instruments

The 64-bit version of Nuendo 5 for Windows Vista/7 64 contains VST Bridge capability, which allows you to run VST plug-ins and instruments, even if they're not (yet) available in 64-bit format. This is meant as a transitional aid until your favorite plug-ins are replaced by true 64-bit versions.

Virtually all plug-ins included with Nuendo 5 are installed as 64-bit versions and do not need to utilize the VST Bridge, thus saving performance by not operating in a bridged mode. By replacing bridged plug-ins through native VST3 plug-ins installed with Nuendo, you can see the great potential of 64 bit based processing.

All drivers for the hardware of your system have to be explicitly compatible with Windows Vista/7 64 bit editions. They should be digitally signed. The operation of unsigned drivers is possible but inconvenient and not recommended.

More information is available at:

[https://www.steinberg.net/de/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1\[keyword_search\]=64-Bit](https://www.steinberg.net/de/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1[keyword_search]=64-Bit)

(login at MySteinberg is required)

Apple Macintosh PowerPC

Nuendo 5 for Macintosh computers requires Intel-based CPU types. PowerPC CPU-based computers (G4 and G5 series) are no longer supported. However, you may have noticed that the Nuendo 5 application is still a Universal Binary and the software actually runs on PowerPC-based computers. We have preserved basic PPC compatibility in Nuendo 5 to allow a transition to up-to-date systems with no problems.

Please note that Nuendo 5 on PowerPC-based Macs has only been tested to a limited extent, and we do not recommend to use it for production systems.

Several Nuendo 4 plug-ins were not Universal Binary, but PowerPC versions only.

- Tonic,
- DeClicker
- DeEsser (SPL) (new DeEsser comes with Nuendo 5)
- DeNoiser
- SurroundDither

NEK plug-ins

- Embracer
- Monologue

In case you need one of these plug-ins for compatibility reasons, they can be downloaded at:

httpftp://ftp.steinberg.net/Download/Legacy_Plugins/

The PowerPC plug-ins will be connected to Nuendo via the

VST Bridge. This is to be considered as a transitional aid which will not be supported in future Nuendo releases.

“Rosetta”

Since the release of Mac OS X Snow Leopard, the OS component Rosetta is no longer installed by default. In case you are required to use PowerPC-only plug-ins, we recommend installing Rosetta before running Nuendo 5 for the first time.

More information is available at:

[https://www.steinberg.net/en/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1\[keyword_search\]=Snow%20Leopard](https://www.steinberg.net/en/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1[keyword_search]=Snow%20Leopard)

(login at MySteinberg is required)

Hardware integration

Steinberg MR816 CSX/X and CC121

Nuendo 5 requires updated drivers and components for your Steinberg hardware. Please make sure that the latest versions are installed before you start working with Nuendo 5.

For more details, please visit the corresponding download page of your hardware product at:

<http://www.steinberg.net/index.php?id=459&L=1>

Euphonix

Nuendo 5 is compatible with Euphonix MC-Pro, System 5-MC, System 5, MC Transport, MC Control and MC Mix. For operation you need an updated driver. Please visit www.euphonix.com for driver updates.

Advice for improving real-time audio processing performance (PC Windows only)

Steinberg recommends to check and adjust the following settings to improve the real-time audio processing performance of your system, especially when using low-latency ASIO settings:

Disable CPU Energy Saving: In Nuendo you can find this option in the menu > Devices > Device Setup > VST Audio System. This option is disabled by default. By enabling it, the currently active power scheme settings from Windows will be duplicated, settings which are relevant to improve the system performance will be modified in this copied power scheme and will be used as long as the application is running. Quitting the application reverts back to the last used power scheme in Windows.

BIOS setup "CPU C States": If the BIOS of your computer provides this option, we recommend to disable it, especially when your system is based on Intel i7 / i5 CPU models. This option is often described as "Disable CPU Idle State for Power Saving". If you are unsure where to look for this option, please contact your system manufacturer.

Video engine

The new, QuickTime-based video engine of Nuendo 5 utilizes picture buffering offered by modern graphic cards. This results in smooth navigation through video tracks with less impact on audio processing. To properly make use of this benefit, the graphic card of the computer must be state of the art.

For choosing the proper graphic card, please take care that it supports **OpenGL 2.0** (please note that practically all modern graphic cards do so).

Nuendo 5 has successfully been tested with these video devices.

Graphic cards

ATI Radeon (desktop)

- HD 2600, HD 3450, HD 3870, HD 4600, HD 4800, HD 4870, X 1900 Pro, X 1900 XT, 9600 AGP

NVIDIA GeForce (desktop)

- 6500, 6600 GT, 6600LE, 7300 GT, 7300 GT, 7400 GT, 7600 GT, 7800 GT, 8500 GT, 8600 GT, 8600 GTS, 8800 GT, 8800 GTS, 9400 GT, 9500 GT, 9600 GT, 9800 GTX, GT 120, GTX 260, GTX 280, NX 8600 by MSI, Quadro FX 1400, Quadro NVS 290

Matrox graphic cards

- Parhelia, M 912x, M 913x, M 914x, M 918x (Note that these cards have not passed our test criteria and are not recommended.)

Video playout cards

For professional connection with video studio devices, the following cards and devices have been tested for video playback with Nuendo 5:

AJA

- AJA Kona 3, AJA KONA LHi, AJA KONA LHe

Blackmagic

- BlackMagic Intensity PRO, BlackMagic Decklink, BlackMagic Decklink HD Extreme (PCIe), BlackMagic Decklink Extreme (PCI)

IEEE 1394 converters

- Terratec Cameo Convert
- Canopus ADVC-110

Please note that Apple QuickTime does not currently support video playout under Windows 64 bit. Steinberg is investigating a technology to compensate for this limitation.

Scaling

Tests have shown that video playback performance through playout cards can significantly be optimized by avoiding unnecessary scaling which takes up extra CPU cycles. To achieve best playback performance, please make sure to run

the video card at the native video size rather than the monitor size. For example, if you play SD video through a Blackmagic Intensity Pro, but view on a HD screen, set the resolution to SD format and have the attached TV monitor or beamer scale the picture.

Video formats

The Nuendo 5 video engine is compatible with any codec supported by Apple QuickTime. However, not all video compression codecs have been designed for video playback alongside extensive audio processing and editing in a digital audio workstation, such as Nuendo. Therefore, for DAW work, a codec which doesn't require all of the computer's CPU for decoding is preferred.

Quality setting

The Nuendo 5 video engine's "Quality" parameter offers 4 different options that allow for setting a proper balance between picture sharpness and fluent movements. The default value is 75% and will provide suitable image in most cases. Increasing the value to 100% is only recommended for playback of DV video tagged with the QuickTime "high quality" flag. Decreasing the value leads to a more pixelated display, but allows for more fluent images in CPU-critical scenarios. For codecs with high compression rates, such as H.264, or the Apple ProRes, or Avid DNx, particularly in combination with an HD-size picture format, the CPU consumption for decoding and scaling may be too high, resulting in video stutter. To solve this, set the video quality to a lower value.

Windows Media Video

Since the video playback in Nuendo 5 is based on Apple QuickTime, Microsoft Windows Media Video (WMV) format is natively not supported. However, there are user reports about successfully using third-party extensions to enable Nuendo 5 WMV playback via QuickTime, such as Flip4Mac.

Please note that this combination has not been fully tested and is not officially supported by Steinberg.

MPEG video

The new Nuendo 5 video engine is now based on Apple QuickTime as playback device. This offers the benefit of utilizing a reliable, approved technology. The new implementation offers the Steinberg development team better maintainability and possibilities to add features and extend the functionality. However, issues due to the Apple QuickTime decoder also affect the Nuendo video engine.

The new video engine has been tested quite extensively for accuracy, performance and compatibility. Whereas improvements could be measured in almost all aspects, QuickTime's ability to handle MPEG coded videos (MPEG1 and DVD-MPEG2 respective VOB) has turned out to be problematic. Our investigations have shown that there are only very little possibilities to work around this problem from the Nuendo software point of view. Symptoms are jerky video

playback and instability.

As a result, we have to recommend not to work with MPEG-coded video files. We are aware that there are situations where you have to deal with the data delivered by your clients. In such cases, please convert them to more suitable formats for editing like DV or JPEG-based codecs.

Notes for Nuendo 4 users

Change of location of user VST3 presets (PC Windows only)

With Nuendo 5, the application stores VST3 user presets at a new location. These presets are now stored in a folder named VST3 Presets within the (My)Documents folder of the user account currently in use. This change simplifies finding, sharing or backup of VST3 presets.

For details on how to migrate VST3 presets stored in the original location, please follow this link which requires you to log in to MySteinberg:

https://www.steinberg.net/en/support/knowledgebase_new/show_details/kb_show/VST3-Presets-location-changed

MediaBay

The MediaBay of Nuendo 5 uses a new database format. Databases created by previous program versions won't be re-used. Users updating from a previous Nuendo version need to re-define (scan) their scan locations. Media files may need to be re-tagged with attributes in the case where metadata was only stored in the database of the previous version. This affects, for example, attributes of ReCycle files, any write-protected files or user assigned ratings of the factory content (which is write-protected as well).

Compatibility between Nuendo 4 and Nuendo 5 surround projects

Projects from Nuendo 4 open up in Nuendo 5 with the standard surround panner. You can change to the SurroundPanner V5, but the automation data as well as the routing is not compatible in all cases. If you are in the middle of a mix session, it is not recommended to change to the SurroundPanner V5 unless you're setting up the routing from scratch for the channels to be panned. Please note that this may also affect the panning of Aux Sends.

Projects created in Nuendo 5 can be loaded into Nuendo 4.3. Also in this case, please be aware that if you've been using the Nuendo SurroundPanner V5, panning will not be compatible in Nuendo 4.3.

Unicode text encoding

Nuendo 5 uses Unicode for all text encodings, like track names, media names and metadata. This allows for data created in Nuendo 5 to retain readability and compatibility when projects are exchanged between Mac and Windows-based workstations, even when special characters are used.

As Nuendo 4.3 is not Unicode capable, data created in

Nuendo 5 using special characters may cause erratic results when loaded into Nuendo 4. If your project is supposed to be opened in Nuendo 4 at a later stage, please avoid using special characters when naming items.

Broadcast Wave metadata that contain special characters or umlauts may not be displayed correctly by the Nuendo 5 MediaBay. We recommend avoiding special characters for BWF discriptions.

Key commands

Custom key commands for certain functions that have been defined in Nuendo 4 may not work in Nuendo 5. For a list of functions that may be affected, please go to:

[https://www.steinberg.net/en/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1\[keyword_search\]=Key%20Commands](https://www.steinberg.net/en/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1[keyword_search]=Key%20Commands)

(login at MySteinberg is required)

Removed features

Due to technical constraints, some features have been removed in Nuendo 5

- Nuendo EQ2 plug-in
- Scrub while adjusting Sync Point in the Sample Editor and scrub while trimming an event (this feature is planned to return in a later version)

Nuendo SyncStation (Windows 7 only)

The Steinberg Nuendo SyncStation will not be recognized by Nuendo 5 if Nuendo 4 was previously installed.

To enable Nuendo SyncStation on Windows 7 for Nuendo 5, please make sure that Nuendo 5 does not read the Nuendo 4 no preferences files when running for the first time. This can be achieved by temporarily renaming the Nuendo 4 Preferences folder.

https://www.steinberg.net/en/support/knowledgebase_new/show_details/kb_show/removing-cubase-and-nuendo-preferences/

(Login to MySteinberg required)

AAF

In Nuendo 5, you have the option to read media files of imported AAF projects directly from an embedded AAF container, without automatic extraction into the project folder. This option is useful since it saves time on importing the AAF data and does not require additional disk space.

Since the resulting media paths in the Nuendo project refer to a location inside the AAF container, the following file based operations in Nuendo do not create individual files, but still refer to the original AAF container path:

- Prepare Archive

- Backup Project
- Export another AAF from the project
- Upload of tracks using the Nuendo Network functions

In case you want to use the above functions, or if you need to have the media files consolidated in the project folder for other reasons, please first use the Convert function from the Media menu to convert to WAV format. This will create individual files in the project folder and remap the media paths. Also note that for embedded AAF containers, there is no option to relink media once the path is changed, e.g. by a changed folder structure. Unless you are certain that the AAF container location relative to the project will not change, it may be preferable to use the Extract option when importing an AAF project with embedded files.

AAFs that are to be loaded into DAWs other than Nuendo must not contain 32 bit audio files. On export, please make sure to select explicitly either 16 bit or 24 bit. The option "Same as project" may create unwanted 32 bit audio files.

XSend

The XSend functionality for Pinnacle Liquid NLE is not compatible with Nuendo 5. Nuendo 4 users who need to exchange data using XSend should keep their Nuendo 4 installation and use it for the transfers. Afterwards the project can be loaded into Nuendo 5 for further editing.

Bug Fixes

Due to redesigned functions, many problems and bugs of Nuendo 4.x versions do not occur anymore in Nuendo 5. A compilation of particularly important issues can be found in the folder \ReadMe Files on this DVD.

Third-party and legacy software

Virtual Katy

Virtual Katy 3.0 is incompatible with Nuendo 5. Please visit www.virtualkaty.com and check for an updated version.

Support for ReCycle files (Mac OS X only)

If you want to use REX files with Nuendo 5 for Mac OS X, please install the Propellerhead REX component manually. This is only necessary if you have not already installed the Propellerhead ReCycle or Reason application.

The latest version can be downloaded at:

<http://www.propellerheads.se/download>

Nuendo AC3 EncoderNuendo DTS Encoder

The Nuendo AC3 Encoder and Nuendo DTS Encoder are discontinued products and are incompatible with Nuendo 5. However, there are adapted product versions which will be available at www.steinberg.net to provide basic functionality with Nuendo 5. Please note that these are unsupported versions that will not be developed further, but may help you

finish your productions during the transitional phase.

Legacy plug-ins

While Nuendo 5 does not include all the legacy plug-ins from earlier versions on the DVD, they are provided for you on the Steinberg website, should you require them. Steinberg also offers a variety of Patch Name Scripts, Device Panels, Drum Maps and more for Nuendo, which you can download from the Steinberg website.

ftp://ftp.steinberg.net/Download/Legacy_Plugins/

Support for ReCycle files (Mac OS X only)

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The latest version can be downloaded at:

<http://www.propellerheads.se/download>

Additional resources

Upmix / Downmix matrix

The new Direct Routing feature provides automatic up and down mixing if the channel width of source and destination channel differ.

You can find a chart of the levels applied for each possible upmix and downmix case at:

[https://www.steinberg.net/en/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1\[keyword_search\]=Direct%20Routing](https://www.steinberg.net/en/support/knowledgebase_new/kb_keyword_search.html?tx_p77sbknowledgebase_pi1[keyword_search]=Direct%20Routing)

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