NUENDO 4

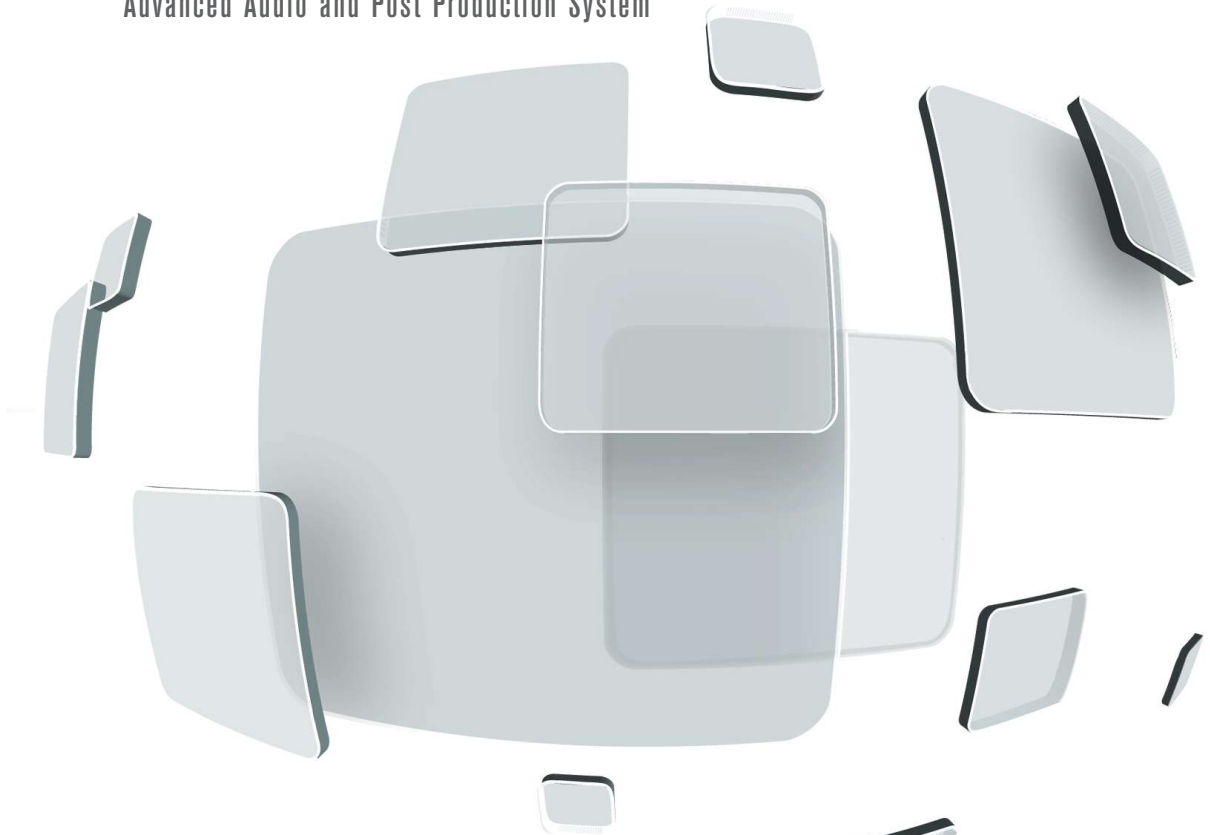### Advanced Audio and Post Production System

Delivering a next-generation audio production environment for audio post, studio production and live recording, Nuendo 4 empowers audio professionals by elevating creativity and productivity to new heights. Technologically advanced, yet extraordinarily intuitive and fully customizable, Nuendo 4 offers streamlined, precision tools that save time and boost creativity for audio professionals in today's media, recording and film industries.

Nuendo 4 is the center of a scaleable, cross-platform, system that integrates fully with premier components by industry-leading plug-in and hardware manufacturers. Innovative Steinberg technologies provide unprecedented power, flexibility and speed, accelerating recording, mixing, editing and sound design workflows to an unprecedented level.

steinberg
Creativity First

MORE SPEED. MORE TIME. MORE CREATIVITY.
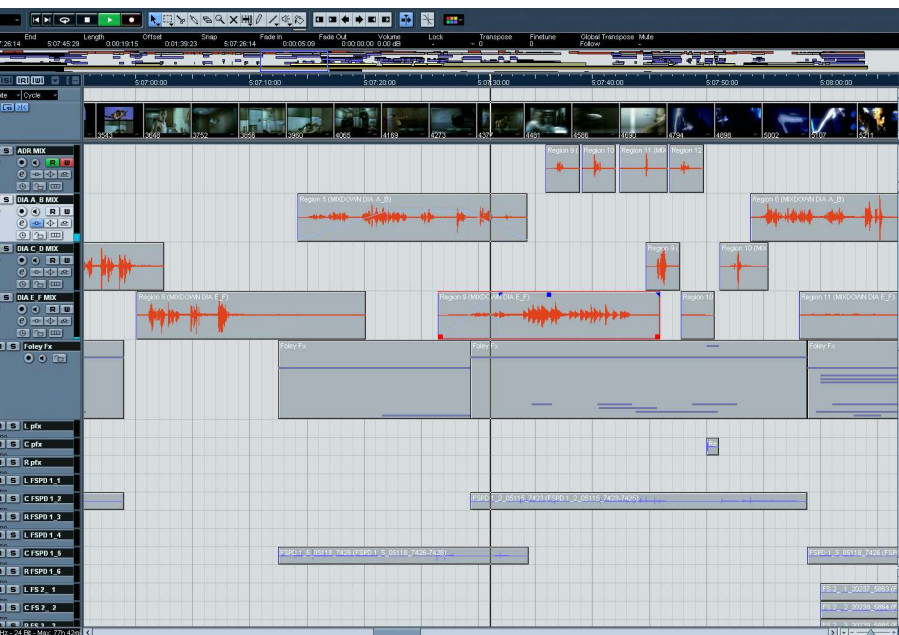
Since its inception in 2001, each generation of Nuendo has pushed back the limits of digital audio, introducing groundbreaking functionality with the power to revolutionize modern audio production.

Nuendo 4 offers a range of functionality engineered and refined over years that sets it apart from other products as a state-of-the-art audio production system. These include the **Network Collaboration** features, which breaks the traditional mould by allowing multiple users to work together on a single project across a standard Ethernet network. The unique **Control Room** environment integrates Nuendo into any hardware monitoring setup, allowing instant control of multiple stereo and surround speaker setups directly from within the software.

In developing Nuendo, Steinberg is also constantly striving towards new levels of openness and versatility. Support for a huge range of **interchange formats** such as OMF, AAF and OpenTL as standard are just as much a hallmark of this ethos as seamless integration of leading remote control units from first-class manufacturers such as **Euphonix** and **WK Audio**. The depth of functionality accessible through user-definable key commands is unequalled, with **user-configurability** also available for many key aspects of the user interface.

Nuendo 4 drastically enhances existing workflows for recording, editing and mixing, and includes new features specifically designed to speed up processes at every stage of production. That not only saves valuable time, but also gives back time to the audio professional for the most important thing of all: being creative…

Superlative new Automation System

The new dynamic automation is a perfect fusion of functionality found in traditional mixing consoles and the innovative possibilities of a modern, feature-rich DAW like Nuendo 4. The large, fully customizable automation panel provides access to all automation functionality and settings. A raft of new features such as Individual punch out modes per channel, Virgin Territories, a set of new Fill commands, Preview Mode, Automation Suspend and much more puts Nuendo on par with world-class automation systems. Additional unique features such as the Touch Collect Assistant and Punch Logs turn mixing with Nuendo into a comfortable and creative process.

Faster with new Post Editing Commands

Nuendo 4 includes a whole host of functions designed specifically for post professionals, and the new set of editing features is no exception. Accelerating editing workflows to new levels, the new editing commands and modifiers access new cutting and positioning tools that offer extremely fast and easy positioning of events for editors and FX specialists.
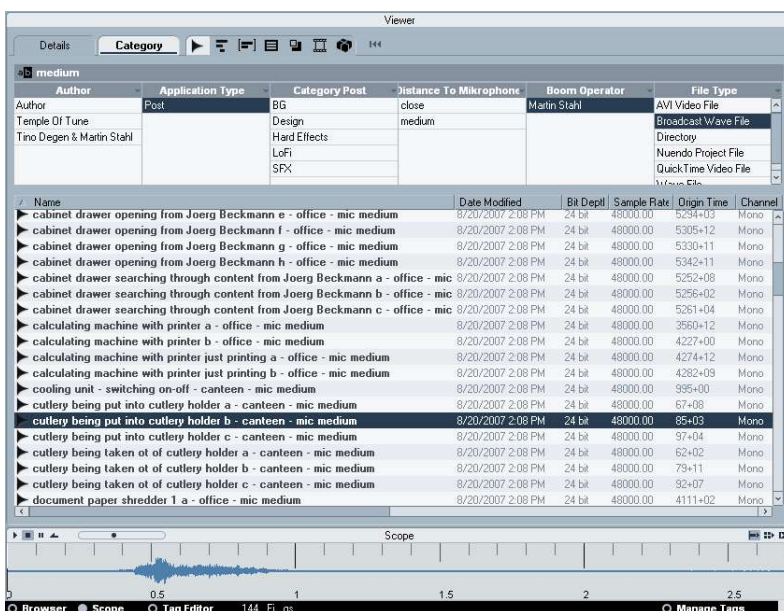
The Power of the MediaBay

MediaBay offers instant access to sample and FX libraries from within Nuendo, with lightning-fast browsing, searching and retrieving of media files, including audio and MIDI files, video data, project files as well as instrument and plug-in presets. Flexible search options and database-powered architecture allow instant filtering with keywords, tags and user-definable categories. MediaBay makes finding exactly the right FX sound or sample so easy that additional sample database software is often unnecessary.

The new generation:
VST3 Audio Effect Plug-ins

Nuendo 4 supports a new generation of plug-in technology. 38 surround-capable VST3 audio plug-ins deliver an remarkably powerful set of next-generation processing tools of the highest quality. Covering dynamics, spatial, filtering and modulation plug-ins, the outstanding VST3 plug-in suite is capable of replacing most 3rd party software effects. Engineered specifically for audio post, the Post Filter provides flexible tools for finding and removing unwanted noise, such as those often heard on location recordings. Among the wealth of other plug-ins available is a first-class 4-band parametric EQ built in to every channel. All VST3 effects feature native sidechaining for fast and easy setup of ducking effects, frequency-specific dynamic processing and many other creative uses.

Advanced Routing and Recording

Nuendo 4 introduces completely reengineered routing capabilities throughout the entire VST Mixer that allow unrestricted and free routing between group channels regardless of their order. Another major new feature is the ability to re-route signals of all summing objects such as buses, FX returns and groups directly into audio tracks, ideal for easy recording of stems. To prevent feedback loops that can damage equipment and hearing, Nuendo 4 automatically detects and disables routing combinations that can cause feedback loops.
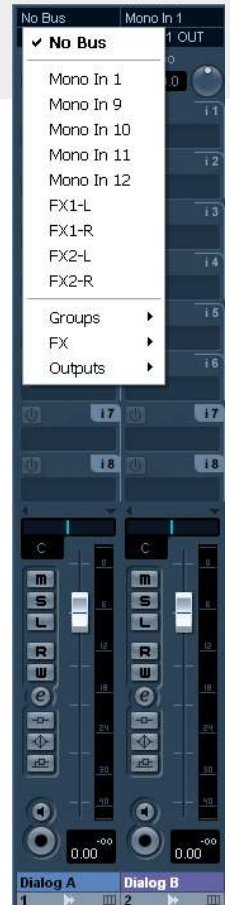
AUDIO POST PRODUCTION

Specialized audio post production tools for Film, Television, Game Sound and Multimedia

Nuendo 4 provides a compellingly feature-rich environment tailored to audio post professionals in TV, film, broadcast and sound design projects in general. The software is fully optimized for today's demanding audio post workflows and offers post-specific audio capabilities for recording, editing, premixing and mixing embedded in a technologically advanced audio production system that effortlessly integrates into audio post environments regardless of scale.

STUDIO PRODUCTION

Studio recording, editing and mixing for commercial production environments

Nuendo 4 is a future-proof studio recording, editing and mixing platform for recording bands, performers and orchestras on any scale. An unrivalled mixer environment with built in Control Room functionality, ultra-fast editing workflows, a maximum-control automation system and the crystal-clear audio engine provide capabilities far in excess of the daily demands of commercial production environments delivering to the music and media industries.

LIVE RECORDING

Stability and fidelity for mobile or installed recording environments

Nuendo 4 delivers a scalable, ultra-mobile and extraordinarily flexible recording system ideally suited to all forms of audio live recording. Be it on a single laptop plugged in to a FireWire interface or at a backend to a MADI equipped large scale recording console, Nuendo 4 combines outstanding stability with a crystal-clear audio engine to offer the highest levels of track count with fidelity and dependability essential to today's commercial mobile recording businesses.

NUENDO 4 FEATURE LIST

Recording

• Recording of 16 Bit, 24 Bit and 32 Bit float audio files
• Recording at various sample rates up to 192 kHz (depending on audio device in use)
• Advanced surround architecture for recording in standard and extended surround formats
• Recording of multiple channels of audio simultaneously per track, split or interleaved
• Record file formats: Broadcast Wave, AIFF, Wave and Wave 64 for extra long duration recordings
• Linear Record modes: Normal, Merge, Replace
• Cycle record modes: Keep Last, Stacked lanes, Mix (MIDI only), Overwrite (MIDI only)
• Online recording: record starts when a valid timecode signal is received
• Separate pre roll / post roll settings and separate activity displays in transport
• Multiple user-definable record destinations per track
• Adjustable audio pre-record up to 10 minutes

Import/Export

• Audio Import: AIFF, AIFC, Wave, Broadcast Wave, Wave 64, MPEG (MP2, MP3), Sound Designer II, OggVorbis, Windows Media Audio (PC only) and REX I & II files
• Video Import: QuickTime, AVI, MPEG, MPEG 2, MPEG 4, Windows Media Video (PC only)
• Built in CD audio grabbing
• Faster than real-time audio mix down with real-time option to Broadcast Wave, Wave, AIFF, AIFC, Wave 64, MP3 Surround, Windows Media Audio (PC) and OggVorbis
• Audio mix down to a mono or multi-channel file up to 12 channels
• Supported export sampling frequencies up to 384 kHz (Broadcast Wave, Wave, AIFF)
• Supported export bit depth up to 32 Bit float

Project Interchange

• AAF
• OMF 1 & 2
• Open TL 3.0
• AES31
• Nuendo Track Archives
• MIDI File

Editing

• Unlimited undo/redo with edit history list
• Edit mode for syncing events & fades to the picture
• Sync points available in events and regions, s-points scrub the audio
• Extensive event alignment tools
• Cut Head & Cut Tail commands
• Jog and scrub of the complete project and additional scrub tool
• Project shuttling via key commands
• Real-time non-destructive cross fades
• Advanced cross fade editor with pre & post roll
• Auto-fade and auto-cross fades with user definable fade times
• Volume envelope for events
• Sample editor with region list
• Detect & strip silence
• Hit point detection for loop editing and cue splitting
• Auto select event under cursor on selected track(s) function
• Zoom presets in the project window and part editor
• Zoom undo/redo
• Time stretch tool allows fast snap-based stretching of material
• Audio Warp real-time algorithm supports real-time time stretching and pitch shifting
• Time-Warp content tool allows for manual audio warping
• Optional event based automation layer
• Various options to lock events in size, fade-length, position etc.
• Integrated Track Sheet Printing functionality

Processing

• Integrated processes: Acoustic Stamp, Envelope, Fade In/Out, Gain, Merge Clipboard, Noise Gate, Normalize, Phase Reverse, Pitch-shift, Remove DC Offset, Reverse, Silence, Stereo Flip, Time Stretch, Re-sampling
• Event specific Offline Process History with the ability to modify, disable/enable or replace previous processes
• Batch processor: Offline Process History can be saved as a batch process
• All VST plug-ins can be processed offline

Mixing

• Channels for Audio Tracks, Groups, FX Returns, MIDI Tracks, VSTi's, Inputs and Outputs
• Unlimited amount of channels* and physical inputs and outputs supported **
• Unlimited amount of FX Returns, VSTi- and Group channels*
• Up to 12 speaker channels available for inputs, audio tracks, effects, groups and outputs
• Advanced surround architecture from input to output throughout the complete signal path
• Multiple output configurations for mono, stereo and surround formats at the same time
• Recording from busses functionality
• Plug-in delay compensation throughout the complete signal path
• Switchable dual mono panner, combined panner or stereo balance on stereo tracks
• 8 inserts on inputs channels, audio channels, effect return channels, group channels, VSTi, ReWire and output channels with global and individual soft-bypass
• 8 auxiliary sends per input, audio, VSTi and group channel with up to 12 channels
• Phase invert and gain change on all channels
• Solo in Place and AFL/PFL functionality
• Configurable Metering Fallback display, Pre/Post Fader Metering and Peak Hold
• Up to 4 mixers with user defined views available at the same time for perfect overview
• Track Sheet Printing directly from within Nuendo

Control Room

• Additional Control Room- and Headphone monitoring busses
• Up to four user specific Monitor Setups
• "Foldback" and "easy solo" functionality
• Up to six External Inputs like DAT, Tape, CD, DVD etc.
• Up to four separate Studio mixes for artists directly from within dedicated AUX Sends in mixer

Automation

• Multiple automation tracks for audio tracks, group channels, FX-returns, Input- and Output channels, FX plug-ins and VST Instruments
• Automation modes: Touch, Auto-Latch, Cross-Over and Trim
• Fill commands: To end, To start, To punch, Loop and Gap
• Automation Preview functionality with Auto Punch, Touch Collect Assistant and Punch Logs
• Extensive Automation Suspend options
• Optional Virgin Territory concept
• Optional linking of automation data to audio events
• Waveform display visible on automation background

Remote Control

• Support for Euphonix System 5, Fusion, System 5 MC and MC via optional EuCon adapter
• Support for WK-Audio ID and EDIT
• Built in support for remote controllers from various other 3rd parties
• Support for additional 3rd party controllers via Steinberg Remote Control protocol
• Generic Remote Control support for individually setting up any MIDI controller
• Apple Remote support

MediaBay

• Integrated database environment for sound effects libraries, sample databases, loop collections and presets
• Lightning-fast browsing, searching and retrieving of media files from networks or local storage
• Quick and easy organizing, tagging and finding of audio-, video-, project- and preset files
• Complex Detail Search for simultaneous searching in various attributes
• Intuitive Category Search for fast filtering/reducing of results
• Scope section with multiple previewing options for selected material
• Tag Editor to view, edit or newly create file attributes
• Quick transfer of media files into projects, Libraries or the Pool via drag and drop or multiple insert options

Pool

• Pool with project content overview and extensive file information
• Batch renaming functionality for events, parts, clips, regions
• Import and export of pool files
• Advanced search field with preview option
• Advanced file converter
• Offline processing from the pool
• Minimize function to delete silence & unused material from audio files
• Archive and backup functions
• Libraries can be created and opened including files, file references, regions, subfolders and sync points

Synchronization and Machine Control

• Sync to SMPTE Timecode, ASIO Positioning Protocol and MIDI Clock
• Output MTC or LTC (SMPTE Generator plug-in)
• Two SONY 9-pin transport device panels for controlling external machines
• User definable settings for optimum adoption to various 9-Pin devices
• MMC transport device panel for controlling external machines
• MMC slave with track arming support
• VST System Link for near sample accurate sync between multiple Nuendo systems

Video Playback

• Integrated video playback window (sizable) and video track with thumbnail preview
• QuickTime 7 video player
• DirectShow video player (PC only)
• DirectX video player (PC only)
• Playback of: QuickTime, AVI, MPEG, MPEG 2, MPEG 4, Windows Media Video (PC only)
• HDTV Frame Rates and supported
• Audio Pull up/down matches audio playback speed changes of 4 % and 0.1 %
• Additional 0.1 % video Pull up/down
• Audio extraction from video files, replace audio in video files
• Full Screen video option
• Support for DeckLink video cards
• FireWire video out (Mac only)
• Multi screen support with multi-head graphics cards

Networking

• Standard network access allows Nuendo to record, play back and copy files from dedicated servers, other workstations or library servers.
• Network collaboration feature set with online merge functionality and user chat window for direct communication
• Permission sets of users with individual read/write permissions allow hierarchical sharing of complete projects down to single tracks using TCP/IP
• VST System Link for sample accurate sync, audio and MIDI transport between multiple Nuendo systems

User Configuration

• Extensive user preferences with presets
• User definable key commands and macros
• Unused menu entries and key commands can be disabled
• Configurable Track Controls and Toolbars
• User configurable project templates store windows settings, layouts, track heights/sizes, project settings, channel settings, plug-ins and their parameters as well as folders and files in the pool
• Workspaces for managing window sets or entire desktops
• Colour coding for all tracks and mixer channels
• Device Maps and Device Panels provide access to external MIDI equipment (synthesizers, signal processors, digital mixers,etc.) as well as access to internal plug-in parameters
• User Panel for Track Inspector allows access to sections of Device Panels or specially designed user panels
• User-definable channel strip in VST mixer as part of Device Panel integration

Plug-ins

• Real-time support for VST plug-ins (may also be applied offline)
• Support for TC PowerCore and UAD-1
• External FX plug-in architecture to grant integration with external hardware signal processors
• Dummy plug-in replaces missing plug-ins when transferring projects to another system
• Side Chaining for all included VST 3 plug-ins
• Drag & Drop support for convenient moving/copying of plug-ins between different insert slots
• VST Plug-in Bridge supports PPC plug-ins on Intel based Macintosh computers
• Included plug-ins: MonoDelay, StereoDelay, PingPongDelay, ModMachine, ToneBooster, Distortion, AmpSimulator, SoftClipper, Compressor, Expander, Limiter, Gate, Maximizer, EnvelopeShaper, VSTDynamics, VintageCompressor, MultibandCompressor, StudioEQ, GEQ10, GEQ30, WahWah, DualFilter, Post Filter, StudioChorus, Chorus, Flanger, Phaser, Tremolo, Vibrato, AutoPan, Cloner, Rotary, MonoToStereo, StereoEnhancer, Roomworks, Roomworks SE, Octaver, UV 22 HR, Tuner, SMPTE Generator MultiScope, Mix6to2, Mix8to2, MixConvert, SPL DeEsser, DeClicker, DeNoiser, MatrixDecoder, MatrixEncoder, SurroundDither, MixerDelay, TestGenerator, SurroundPan, Metalizer, RingModulator, Chopper, Bitcrusher, Grungelizer, Tonic, Q, NuendoEQ2, MIDI Gate, DaTube, StepFilter, Tranceformer, VSTDynamics, Arpache 5 Arpache SX, Autopan, Chorder, Compress, Control, Context Gate, Density, MicroTuner, MidiControl, MidiEcho, Note 2 CC, Quantizer, StepDesigner, Track Control, Track FX, Transformer

MIDI

• MIDI Device Manager for naming and hiding MIDI devices
• MIDI Device Panels for controlling external MIDI devices directly from within Nuendo
• 64 VST instrument slots
• Key editor
• List editor
• Logical editor
• Drum editor (Optional Nuendo Expansion Kit)
• Score Editor (Optional Nuendo Expansion Kit)
• MIDI, ReWire and VSTi channels available in the mixer
• Freeze function for VSTi's and VSTi channels
• Tempo processing for fast and accurate tempo operations based on the project's tempo track

* Depending on your computer hardware
** Depending on audio hardware in use

MINIMUM SYSTEM REQUIREMENTS

The minimum system requirements state the minimal specification your computer must have to be able to use the software. A more powerful system may be required for certain tasks or larger projects. You can find more information about computer system specification and setup here: www.steinberg.net/daw

MACINTOSH

• Mac OS X Version 10.4
• Power Mac G4 1 GHz or Core Solo 1.5 GHz
• 1 GB RAM
• Display resolution 1024 x 768 pixels
• CoreAudio compatible audio hardware
• DVD-ROM drive
• USB component port for copy protection key*

WINDOWS

• Windows Vista, Windows XP Home / Professional with SP 2
• Intel Pentium / AMD Athlon 2 GHz
• 1 GB RAM
• Display resolution 1024 x 768 pixels
• Windows DirectX compatible audio hardware; ASIO compatible audio hardware recommended for low latency performance
• DVD-ROM drive
• USB component port for copy protection key*

* The Steinberg Key (USB copy protection device) required to run this product is only available in the full version.
Customers who are upgrading or updating from another version or product and who do not own a Steinberg Key must purchase one separately.
The same Steinberg Key copy protection device is then used for all Steinberg products that require it.

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