

### General

- Support of ASIO, MME, DirectX, mLAN and CoreAudio
- Optimized multithreading: unlimited amount of processors supported, processor load is dynamically spread over all processors
- Support of Intel Hyperthreading Technology
- Timeline Formats: Timecode, Feet:Frames (16mm, 35mm), Seconds, Samples, Bars and Beats
- Multiple timelines showing various formats at once
- 1 user definable frame rate possible
- Extensive event display possibilities
- Complete user configurability: unused menu entries can be hidden, key commands can be disabled, preferences, key commands and the menu structure can be stored and recalled
- Toggle alternate key command sets
- 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
- Easily configurable window layouts
- Configurable track controls, toolbar and track inspector
- 2nd track list for fixed tracks

### Import Formats

- Audio: import of AIFF, AIFC, Wave, Broadcast Wave, Wave 64, MPEG (MP2, MP3), Dolby Digital AC-3 (with optional Nuendo Dolby Digital Encoder), Ogg Vorbis, WMA (PC only), WMA Pro (PC only), WMV (PC only), WMV Pro (PC only), REX I & II files, SD2, up to 384 kHz depending on the file format
- AES31
- Cubase SX project
- Open TL 3.0
- OMF 1 & 2, embedded audio or file references. Complete OMF revision in Nuendo 2.0
- Premiere Generic EDL
- Ability to convert interleaved multichannel file into multiple mono files on import
- CD audio grabbing (selection inside track possible)
- MIDI File import
- MPEG, AVI, DV AVI, WMV (PC only), WMV Pro (PC only) and QT movies video import
- Extract audio from video file
- Nuendo tracks including media files, mixer channel settings & automation

### Export Formats

- Mixdown to AIFF, Broadcast Wave, Wave, Wave 64, MP3, MP3 Pro, RealAudio G2, Windows Media Audio (PC), Windows Media Audio Pro (PC), SD2 (Mac), Ogg Vorbis, Dolby Digital AC-3 (optional encoder), DTS (optional encoder, coming soon)
- Supported export sampling frequencies up to 384 kHz (Broadcast Wave, Wave, AIFF), up to 32 Bit float.
- Audio mixdown to a mono or multi-channel file up to 12 channels
- AES31
- Open TL 3.0
- OMF 1 & 2, embedded audio or file references. Complete OMF revision in Nuendo 2.0
- MIDI File
- Track sheet printing, smart track sheet functions for better overview
- Real-time mixdown option
- Nuendo tracks including media files, mixer channel settings & automation

### Synchronization

- VST System Link for sample accurate sync, audio and MIDI transport between multiple Nuendo systems
- Sync to MTC, ASIO Positioning Protocol or send MTC and MIDI clock
- Send 9-pin & MMC machine control
- SMPTE Generator plug-in
- Fast locate and sync lock up
- Sample accurate sync with ASIO 2.0
- MMC slave with track arming support

### Recording/Playback

- Record of 16 Bit, 24 Bit and 32 Bit float audio files; all sample rates up to 192 kHz are supported, depending on the audio card
- Recording of multiple channels of audio simultaneously per track, split or interleaved
- Record of AIFF, Wave, Broadcast Wave and Wave 64 for long duration recordings.
- Jog and scrub of the complete project
- Project shuttling with fixed speeds, with custom editable key commands, and lock to zoom setting option
- Linear Record modes: Normal, Merge, Replace
- New cycle record modes: Mix (MIDI only), Overwrite (MIDI only), Keep Last
- 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

### File Management

- Pool with logical structure and extensive file information
- 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

### Editing

- Real-time non-destructive crossfades
- Advanced crossfade editor with pre & post roll
- Auto-fade and auto-crossfades with user definable fade times for smooth transitions into and out of audio events
- Sample editor with region list and sync point editing
- Unlimited undo/redo with edit history list
- Second tracklist with fixed tracks (always visible)
- Timestretch tool allows fast snap-based stretching of material
- Preset curve tools for automation editing
- Various options to lock events in size, fade-length, position and others
- Folder tracks for group-based overview
- Vertical view option for recording takes in the project
- Browser view allows all data (events, automation, etc.) to be edited numerically
- Edit mode for syncing events & fades to the picture
- Sync points available in events and regions, s-points scrub the audio
- Detect & strip silence
- Drag and drop regions from the sample editor to the project window
- Hit point detection for loop editing and cue splitting
- Autoselect event under cursor on selected track(s)
- Zoom presets in the project window and part editor
- Zoom undo/redo
- Analysis: statistics, FFT based spectral analyzer
- Automation data move with the audio events
- Range selection drawn on playback

### 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, Resampling
- 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 and DX plug-ins can be processed offline

### Video

- Video track with thumbnail preview
- Video playback with QuickTime™, DirectShow, DirectX or Video for Windows
- Audio extraction from video files, replace audio in video files
- Full screen Video option

### Mixing

- Configurable mixer, showing selected channels and channel strip sections at wish
- Up to 4 mixers available at the same time, for more overview for groups, VSTi's etc.
- Unlimited amount of channels\*
- Unlimited amount of physical inputs and outputs supported\*\*
- Unlimited amount of effect returns, VSTi & group channels\*
- VST Connection window: ASIO & master bus routing with preset management
- Up to 12 speaker channels available for inputs, audio tracks, effects, groups and outputs
- Multiple output configurations for mono, stereo and surround formats at the same time
- Plug-in delay compensation throughout the complete signal path
- Interleaved surround recording and playback
- Switchable dual mono panner, combined panner or stereo balance on stereo tracks
- Flexible effect or dry recording from any physical input to any audio track
- 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 on all channels
- Access to internal effect plug-ins or external effects patched via the audio hardware
- Automation tracks for each audio track, group channel and for plug-ins
- Waveform display visible on automation background
- Automation modes Touch, Autolatch and X-Over for all parameters
- Automation modes Overwrite and Trim for volume
- VST 2.3 support: improved I/O routing of plug-ins
- Copy and save/load channel settings is possible

### Plug-ins

- Real-time support for VST plug-ins (may also be applied offline)
- Real-time support for DirectX plug-ins (may also be applied offline)
- STEREO PLUG-INS : Flanger, Phaser, Overdrive, Chorus, Symphonic, Reverb A, Reverb B, QuadraFuzz, SPL DeEsser, Double Delay, ModDelay, Dynamics, DaTube, Chopper, Transformer, Metalizer, Rotary, Vocoder, StepFilter, Bitcrusher, Ringmodulator, Grungelizer, MIDI Gate, UV22 (Apogee), UV22 HR (Apogee), MultibandCompressor, TheScope, Test Generator, DeNoiser, DeClicker
- SURROUND PLUG-INS: MatrixDecoder, MatrixEncoder, Mix8To2, Mix6To2, SurroundPan, Multidelay (distance compensation), TheScope

### Remote Control

- Steinberg Houston, JL Cooper MCS-3000, JL Cooper CS-10, Mackie Control, Mackie HUI, Mackie Baby HUI, Roland MCR-8, Yamaha O1V, Yamaha DM2000, Yamaha O2R96, CM Automation Motormix, Radikal SAC-2K, Tascam US-428, Tascam US-224
- Additional remote controllers & digital mixers can be supported by the Generic Remote Module

### Surround

- Surround architecture: mixer is fully multi-channel based, in every aspect, up to 12 speaker channels
- Plug-In based surround panning
- Surround encoding: downmix plug-in for fast monitoring in other multi-channel formats
- Submixer and distance compensation plug-in
- Matrix Encoder/Decoder for LCRS or 3/2 encoding
- Optional Dolby Digital Encoding/Decoding
- Optional DTS encoding (coming soon)

### Network

- VST System Link for sample accurate sync, audio and MIDI transport between multiple Nuendo systems
- Peer to peer collaboration with track-locking over TCP/IP LAN
- Permission sets of users with individual read/write permissions allow hierarchical sharing of complete projects down to single tracks using TCP/IP
- Update and commit functionality for each user sharing projects over TCP/IP
- Standard network access allows Nuendo to record, play back and copy files from dedicated servers, other workstations or library servers. A regular TCP/IP LAN is sufficient

### MIDI/Music

- Tempo-lock option is available on tracks to allow events to maintain their relative bar and beat position as the tempo changes
- MIDI Device Manager for naming and hiding MIDI devices
- 64 VST instrument slots
- MIDI, ReWire and VSTi channels available in the mixer
- User definable PPQ display resolution
- Key editor
- List editor
- Logical editor
- Drum editor
- MIDI step recording
- Multiple controller lanes in MIDI editors
- Beat calculator
- Audio & MIDI metronome
- Rewire 2

\* Depending on your computer hardware

\*\* Depending on used ASIO hardware

## System Requirements

### PC - Minimum

Pentium / Athlon 650 MHz, 256 MB RAM  
Windows 2000, Windows XP  
USB Port required  
Supports ASIO 2 specification for high-end multichannel audio  
Supports Windows MME / DirectSound specification for standard soundcards  
Display resolution 1024 x 768 pixels

### - Recommended

Pentium / Athlon 1.4 GHz or faster, 512 MB RAM  
Display resolution 1152 x 864 pixels, dual monitor setup

### Mac - Minimum

Power Mac G4, 384 MB RAM  
Mac OS X  
USB Port required  
Supports ASIO 2 specification for high-end multichannel audio  
Supports Mac OS X specification for compatible soundcards  
Display resolution 1024 x 768 pixels

### - Recommended

Power Mac G4 733 MHz or faster, 512 MB RAM  
Mac OS X, Version 10.2  
Display resolution 1152 x 864 pixels, dual monitor setup