

# Nuendo 3.1

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**New Product Guide**

**May 2005**

\* This New product Guide is an addendum to the existing Nuendo 3 Product Guide which is appended at the end of this document for your convenience.

# **NUENDO 3**

MEDIA PRODUCTION SYSTEM

 **EuCon**  
connected

## New Product Guide

# Nuendo 3.1

### Product Name

“Nuendo 3.1”

### Tagline

*“Media Production System”*

### Positioning Statement

*“Very shortly after the initial release of Nuendo 3, Steinberg takes another step in enhancing Nuendo by adding important features for audio post production and further improving existing functionality. In addition Nuendo 3.1 brings to market the fruits of the strategic cooperation between Steinberg and Euphonix, a leading manufacturer of large format digital consoles as well as integrated digital audio workstation control surfaces.”*

### Product Summary

Nuendo 3.1 offers new features mainly targeted at post production for film and television. The Nuendo team has also taken suggestions from the existing worldwide user base and has incorporated a long list of improvements to functionality that has long been present in Nuendo. These range from more key commands and additional options/preferences granting an even better workflow to a range of detail enhancements and better stability. Additionally, this is the first version of Nuendo capable of interfacing with Euphonix hardware control surfaces opening new doors for Nuendo to high-end studios for film, television and music recording.

### Key Selling Points of Nuendo 3.1

- Nuendo 3.1 continues to provide sophisticated and specialized functionality tailored to professionals recording, creating, editing or mixing audio to picture.
- The fruitful cooperation of Steinberg and Euphonix gives clear evidence that Nuendo has conquered an important place in the professional audio market.
- With only 6 months having passed since the last major Nuendo release, Nuendo 3.1 again underlines Steinberg's agenda to offer a reliable and expanding solution for audio professional working in any of today's media industries.
- The fact that improvements play such a big role in the Nuendo 3.1 release clearly shows that Steinberg is listening closely to potential users just as well as to existing customers.

### Top-3 new features of Nuendo 3.1

1. The new **Audio Pull up/down** functionality allows the project to adapt to slowed down or sped up audio playback by 4% and 0.1%, plus combinations of these. This makes Nuendo the ultimate tool for audio post production whenever a Telecine process or transfer from NTSC to PAL is involved during the film or television production.
2. With HDTV becoming more and more important it is good to know that Nuendo is prepared to handle these formats by supporting the additional **HDTV Frame Rates** (23.9/24.9/59.9/60 fps).
3. The unique **Network Collaboration** feature set in Nuendo allowing several people to work on the same project simultaneously is taken even further with Nuendo 3.1. Support for **Marker Tracks** has been included as well as a new Transfer Status window, which can be used to monitor and control the transfer of data to or from the network. The new **Online-Merge** functionality enables users to quickly merge selected tracks between local projects and available network projects without having to fully join a network session.

## Substantial Improvements in Nuendo 3.1

*As a Nuendo power user, haven't you always loved those little things that speed up your daily workflow? Take the Nuendo key commands. A simple key stroke opens the Nuendo pool ready to search for files. But haven't you always wondered why you were not able to close that pool window by simply using that same key command you had just used for opening it? Now you can, and this is just one smaller example for the kind of things that were improved within Nuendo 3.1. For a complete list of all improvements please refer to the separate Nuendo 3.1 documentation PDF. The most important enhancements are listed here already for a quick overview:*

- 1.** A new option for the thumbnail video track has been made available allowing pre-calculating all thumbnail images and storing them on the hard drive. The result is a faster system response for e.g. zooming and scrolling when a video thumbnail track is in use.
- 2.** The existing auto save functionality which automatically saves your project file while working has been improved by allowing you to specify how many backup files will be created with the Autosave function. This way, a user definable stack of files representing a history of the current work is provided.
- 3.** Nuendo 3.1 greatly reduces the risk of your precious recordings getting lost due to system crashes. File headers are no longer finalized after you end a recording but instead at a regular interim. If your system crashes while you are recording (because of a power cut or other mishap), you will find that your recording is still available, from the moment when you started recording to the last time the file headers were completed (usually most of your recordings).
- 4.** In the new "Enlarge Selected Track" mode you will always be able to get a detailed view on you currently selected track in the Project window since it will immediately be enlarged to a user definable size. When this option is activated and you select another track in the Track list, this is automatically enlarged and the previously selected track is displayed in its previous size again.

**5.** Nuendo 3.1 fully supports the Mac OSX Quartz 2D API ensuring that Nuendo benefits from all current and future Apple developments which aim at improving the graphic performance of all applications supporting Mac OSX Quartz 2D.

**6.** A new pan law "Equal Power" has been added to the project setup in addition to the already existing set of "Equal Gain" panning laws. This can be useful for smoother panning movements since the power of the signal will remain the same regardless of the pan setting.

**7.** New options have been made available for importing track archives. Single or multiple tracks from an existing archive can be selected for import, sample rate conversion can be forced or switched off and the user can decide whether media from the track archive shall be copied to the working directory or be referenced to the location where the track archive resides.

**8.** Not only has the Nuendo TimeBase Synchronizer received full Auto Edit functionality when being used as 9-Pin Device but also have adjustable Pre-roll and Post-roll values for the Auto Edit functionality of all 9-Pin devices been added to allow adapting the auto edit behavior to different external machines.

**9.** A new option to reduce the CPU performance during scrub actions has been implemented. When you activate this option, scrubbing will be less demanding on the computer's processing resources. This can be very useful when scrubbing in a large project, where the "normal" scrub behavior leads to processing overloads. When "CPU Saving Scrub Mode" is activated, the effects are disabled for scrubbing and the re-sampling quality is lower.

**10.** A faster workflow is achievable by the new settings which synchronize scrolling movements between the mixer window and the project window. This is very helpful when working on projects containing large track numbers since the focus now can automatically be kept the same for the mixer and the project page.

## Nuendo 3.1 – EuCon connected



Nuendo EuCon is the result of an ongoing cooperation between Euphonix and Steinberg. Euphonix, a leading manufacturer of large format digital consoles as well as integrated digital audio workstation control surfaces and Steinberg renowned provider of professional software products for audio production have combined their 37 years of experience to create what many professionals from the area of post production have long been waiting for: A perfect integration of professional hardware control surfaces with a software designed from ground up to meet the demands of commercial audio production. The combination of Euphonix hardware with Steinberg's Nuendo EuCon offers two separate hardware/software solutions tailored for music production and audio post: One for editors seeking an intuitive and efficient Edit Controller and another for those in the need for a perfectly integrated Digital Audio Mixing System dedicated to recording, editing and mixing. Both systems come into their own with the so called Nuendo EuCon Module, which has been developed by Steinberg and is distributed exclusively by Euphonix. This EuCon Module is used in combination with a regular Nuendo 3.1 (or higher) version to grant two-way communication between MC, System-5 MC and one or more regular Nuendo versions. This regular Nuendo version is continued to be distributed though the existing Nuendo distribution/dealer network.



**Euphonix MC**  
Intelligent Application Controller



The MC is packed with powerful professional features:

- Dual trackballs (which can be switched for mouse operation) each with a control ring. One Trackball can also be converted into a Jog-Shuttle wheel.
- Standard full-sized QWERTY keyboard with numeric keypad (which can be changed for a user preferable keyboard)
- 56 programmable SmartSwitches each with an integral LCD display to show their function
- 9 Soft Knobs for processor and plug-in control
- 4 faders (optionally dual joystick panners)
- 6 Strip Control buttons associated with the faders
- 4 buttons for selecting multiple workstations
- High-res touch screen for setup and control
- Surround monitoring including monitor matrix, speaker controls, solo and talkback mic
- Extensive connectivity including 1/4" footswitch jack, headphone thru jack, touch screen VGA out, standard keyboard and mouse ports, USB port, serial port and Ethernet. The MC connects to a host workstation computer, running an MC driver, via Ethernet. In its simplest form the workstation sees the MC as a normal keyboard and trackball. Most importantly the MC recognizes the active application – the one up front – and configures all its control to match the application whenever the user switches applications.



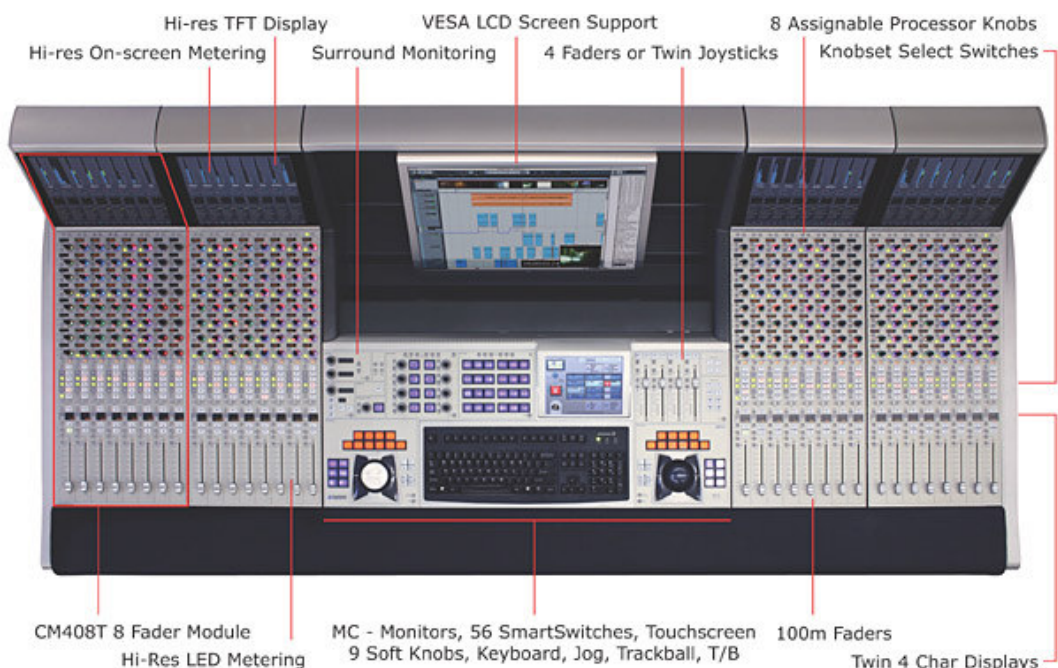
## Euphonix System 5-MC

Integrated DAW Digital Audio Mixing System



System 5-MC channel strips are operationally compatible with standard System 5 consoles including moving fader, 8 touch sensitive knobs and TFT displays.

- The 8 touch sensitive knobs may easily be switched to control EQ, dynamics, pan, routing or any plug-ins.
- High-resolution metering at the top of each channel on the TFT
- Long-throw 100mm touch sensitive moving faders
- High-resolution LCD metering next to each fader
- Additional channel modules may be added.
- Any track may be brought up to any channel strip on the surface and saved as 'Layouts' for easy recall – for example drums, vocals, sound effects.
- Surround sound sources such as a 5.1 track may be controlled from a single strip.
- Reverse Interrogate where all tracks feeding a bus can be brought up onto the surface.
- Full MC center section with twin joysticks.
- Studio Monitor Pro ASIO & WDM based monitoring software for surround sound monitor matrix, control room speakers, SLS and foldback outputs (all up to 7.1) with talkback.
- Steinberg's Nuendo EuCon featuring latest Nuendo software with EuCon communications protocol.



## System Requirements

### Macintosh

#### Required\*:

Power Mac G4 Dual 1 GHz  
512 MB RAM  
OS X Version 10.3 or 10.4  
CoreAudio compatible audio hardware  
DVD-ROM drive  
USB port for copy protection key  
Internet connection needed for updates.

#### Recommended:

Power Mac G5 Dual 2 GHz or faster  
1024 MB RAM  
Display Resolution 1152 x 864 pixels,  
dual monitor setup

### Windows

#### Required\*:

Pentium / Athlon 1.6 GHz  
512 MB RAM  
Windows XP Home and XP Professional  
Windows MME compatible audio hardware  
ASIO compatible audio hardware  
strongly recommended  
DVD-ROM drive  
USB port for copy protection key  
Internet connection needed for updates.

#### Recommended:

Pentium / Athlon 2 GHz or faster  
1024 MB RAM  
Display Resolution 1152 x 864 pixels,  
dual monitor setup

\* Nuendo is proven to run on less powerful computers with less RAM and slower CPUs. These system requirements are meant to provide system specifications which allow for working in a reasonably professional matter.

## Nuendo 3.1 – Complete List of New Features

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### Video

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Audio Pull up / Pull down  
Support for HDTV frame-rates  
Thumbnail Pre-Cache option

### Network Collaboration

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Support for markers  
Online merge functionality  
Transfer status window

### Mixing

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Mixing and Monitoring of External Instruments in VST Mixer

Copy/Paste channel settings for multiple selected channels in one go

New Panner Mode: Equal Power

Panner Bypass Function

New Key Command Set for Mixer functions

Command Target filters for Mixer functions

Inspector sub-section for MIDI Tracks routed to a VST Insert Plug-in

### Files and Formats (Import and Export)

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Exclude Media when exporting Tracks as Track Archive

Select individual Tracks when importing a Track Archive

### Recording and playback

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Smart controller reset after recording

Recovery of audio recordings after system failure

New precount options, sensitive to tempo and time signature changes

Optional Sample-Rate Conversion when importing Tracks

### Studio Connections

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Studio Connections Audio Integration

### Remote

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Access Mixer Device Panels from Hardware Remote Controllers

### Editing

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Freeze Function for External Instruments and FX

Glue multiple parts with single mouse-click

Glue all following parts on selected track

New Crosshair-Cursor option

Process Bars in Tempo Track

Duplicate Track option

Freeze MIDI Track Play Parameters

Optimize Display when dissolving Parts

Apply Legato to selected notes only

Select equal Pitch > all Octaves/same Octave for all Positions

### Project/General

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New "External Instruments" options in VST Connections

External Instruments added to VST Instrument Rack

Associated External Instruments Track Inspector added to MIDI Track Inspector

Associated Audio Track Inspector added to MIDI track inspector routed to VST Insert Plug-in

External FX/Instruments Favorites

Advanced CPU-saving scrubbing mode

Automatic Track Coloring

Incremental Auto-Save

Track Folding: Toggle Selected Track

Track Folding: Fold/Unfold Tracks

Track Folding: Flip Fold States

Resize Tracks without selecting

OSX Performance Optimization: integrated support for MacOSX Quartz 2D graphics system

Safe Recovery of corrupt projects after system failure

### MIDI & Music

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MIDI Output Delay Compensation for External Instruments

Associate MIDI Device to External FX

Associate MIDI Device to External Instruments

Option to convert MIDI Controller Lane volume data to Track Automation volume data

### Various

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New preference: Use Up/Down Navigation Commands for selecting Tracks only

New Preference: Default Track Time Type (Audio and MIDI)

New Preference: Auto Track Color Mode

New Preference: Sync Project and Mixer Selection

New Preference: Deep Track Folding

New Preference: Enlarge Selected Track

New Preference: Select Channel/Track on Solo

New Preference: Select Channel/Track on Edit Setting

New Preference: Maximum Backup Files

New Preference: Insert Reset Events after Record

New Preference: Chase Events – Chase not limited to Part Boundaries

New Preference: Option to export warnings as text file

New Preference: Warn on Processing Overloads

New Preference: global Tail value for External Instruments and FX

New Preference: Map Input Bus Metering to Audio Track (in Direct Monitoring)

Single Key command to open and close Pool Window

New Key Command to open Device for selected Track

Appearance: User-definable intensity for active drum lane

New Key Command to toggle status of "Select Channel/Track on Edit Settings"