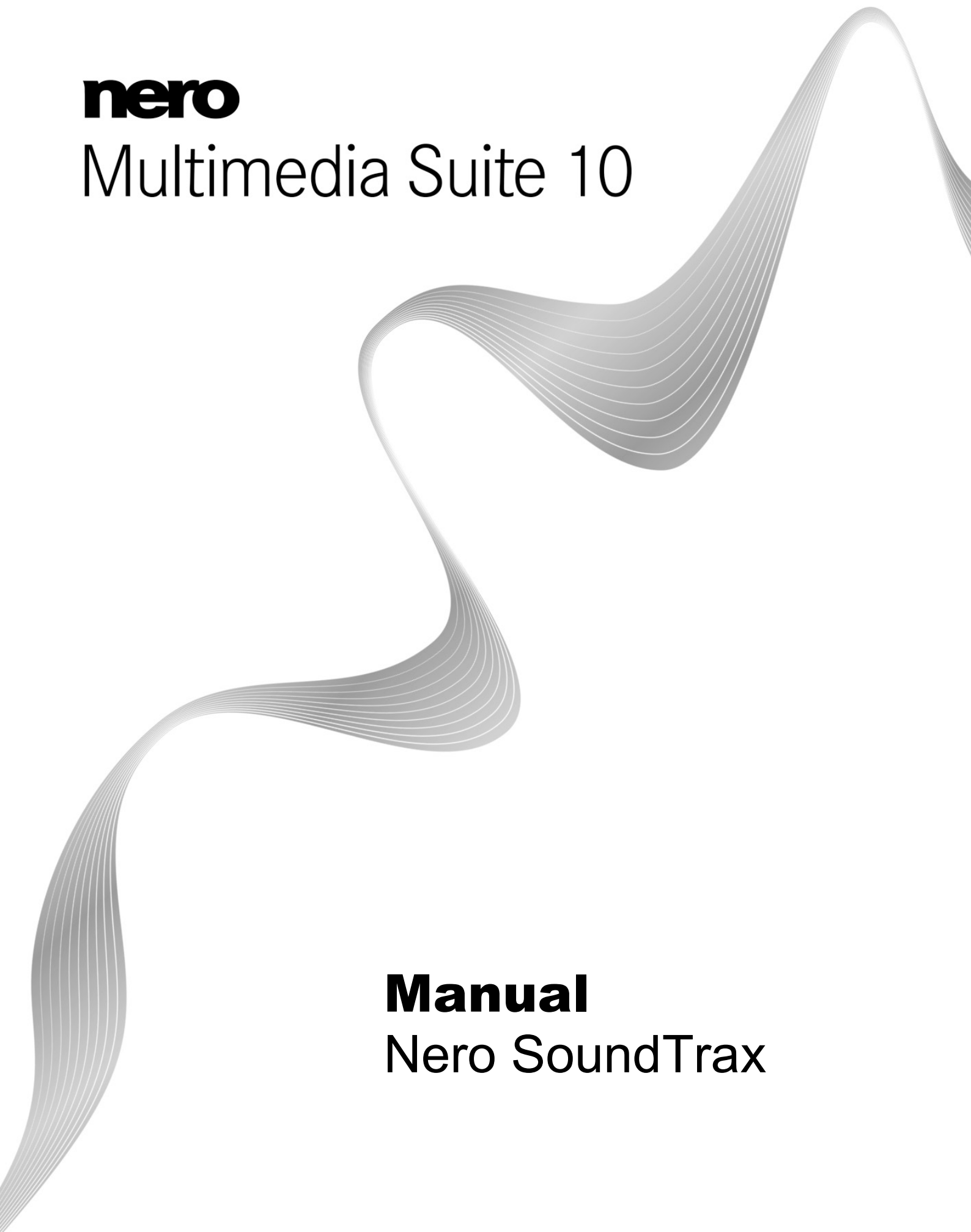


nero

Multimedia Suite 10

Manual

Nero SoundTrax



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Table of contents

1	Start Successfully	5
1.1	About the Manual	5
1.2	About This Application	5
2	Starting the Program	6
2.1	Terminology	6
2.2	Configuration	7
2.2.1	Project Settings	7
2.2.2	Preferences	10
2.2.3	Device Settings	16
2.2.4	Audio Format Settings	17
3	User Interface	21
3.1	Templates	21
3.2	Surround Projects	21
3.3	Main Window	22
3.3.1	Menu Bar	23
3.3.2	Toolbar	23
3.3.3	Master Track Area	24
3.3.4	Assignable Effects Area	26
3.3.5	Tracks Area	26
3.3.6	Project Area	26
3.3.7	Track Display Area	27
3.4	Effect Chains	27
3.4.1	Plug-ins	28
3.4.2	Tools	28
3.4.3	Effects	28
3.4.4	Enhancement	30
3.5	Nero SoundBox	30
3.5.1	Beat Editor	32
3.5.2	Sequencer	33
3.5.3	Text II Speech	34
3.5.4	Ambience	34
3.6	Nero ScratchBox	35
3.6.1	Turntables	35
3.6.2	Mixing Console	36
3.6.3	Tools Area	37
4	Importing And Recording	39
4.1	Recording Audio	39
4.1.1	Recording Console	39
4.1.2	Recording Audio File	40
4.1.3	Recording From Record or Cassette	41
4.2	Importing an Audio CD	45





5	Editing Track	47
5.1	Inserting Clips	47
5.2	Adding Sections to a Track	47
5.3	Applying Crossfades	48
5.3.1	Creating Crossfade	49
5.3.2	Editing Crossfade Properties	49
5.4	Applying Effects and Enhancement Options	50
5.5	Creating a Nero ScratchBox Clip	51
5.6	Creating a Volume Curve	53
5.7	Changing the Surround Sound Distribution	53
5.8	Creating a Pan Curve	54
5.9	Creating an Effect Chain	55
5.10	Creating or Using an Effect Chain Template	55
5.11	Creating an Effect Group	56
5.12	Adding an Effect Group Curve to The Track	57
6	Exporting And Burning	58
6.1	Exporting a Project to an Audio File	58
6.2	Burning a Project to CD	58
7	Technical Information	60
7.1	System Requirements	60
7.2	Formats Supported	60
7.2.1	Audio Formats and Codecs	60
8	Glossary	61
9	Index	62
10	Contact	66

1 Start Successfully

1.1 About the Manual

This manual is intended for all users who want to learn how to use Nero SoundTrax. It is process-based and explains how to achieve a specific objective on a step-by-step basis.

To make best use of this documentation, please note the following conventions:


	Indicates warnings, preconditions or instructions that have to be precisely followed.
	Indicates additional information or advice.
1. Start ...	The number at the beginning of a line indicates a prompt for action. Carry out these actions in the order specified.
	Indicates an intermediate result.
	Indicates a result.
OK	Indicates text passages or buttons that appear in the program interface. They are shown in boldface.
(see...)	Indicates references to other chapters. They are executed as links and are shown in red and underlined.
[...]	Indicates keyboard shortcuts for entering commands.

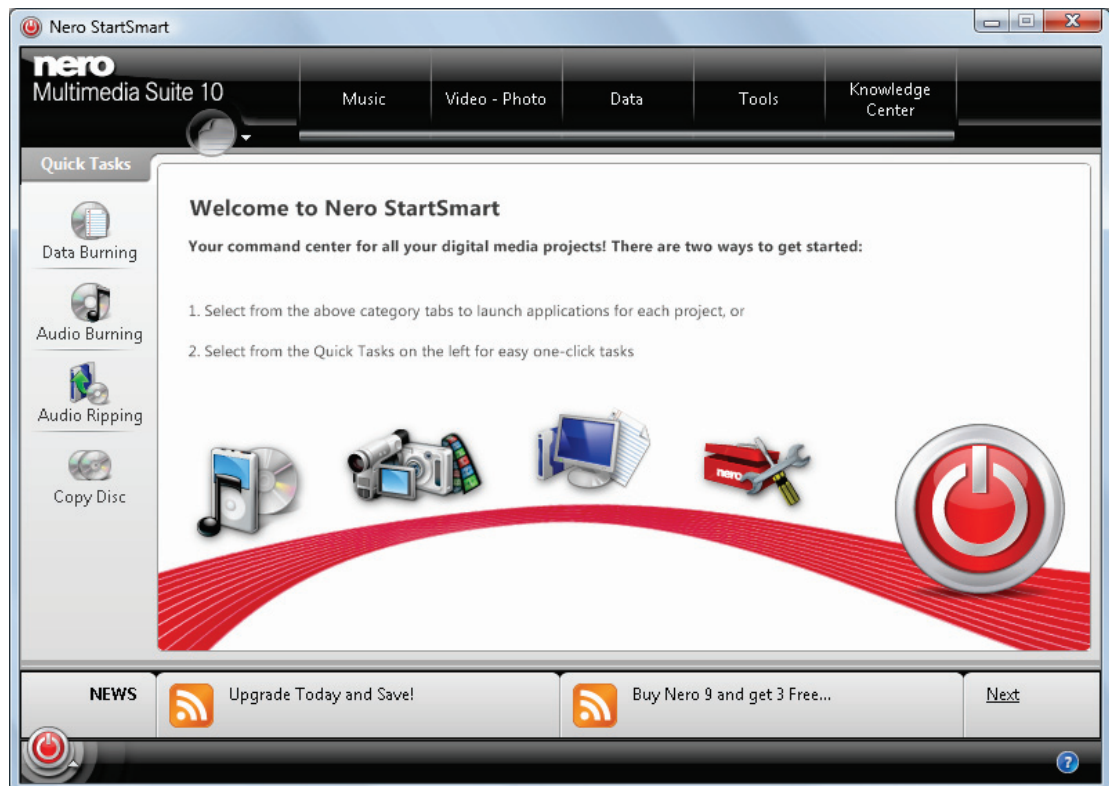
1.2 About This Application

Nero SoundTrax is a professional application for the creation of Audio CDs. Instead of simply compiling audio files into a playlist, you can now mix or change the contents of the audio files. A number of wizards are available to help you copy your LP records or cassettes to your computer in just a few steps. Thanks to the many templates, even demanding projects involving 5.1 Surround or 7.1 Surround are no longer a problem: simply select the template and Nero SoundTrax opens along with the relevant tracks. In addition, the integrated Nero ScratchBox provides user-friendly functions for mixing and scratching.

2 Starting the Program

To start Nero SoundTrax via Nero StartSmart, proceed as follows:

1. Click the **Nero StartSmart** icon.
→ The Nero StartSmart window is opened.
2. Click the  button.
→ The list of Nero applications is displayed.



Nero StartSmart window

3. Select the Nero SoundTrax entry in the selection list.
→ The Nero SoundTrax window is opened.
→ You have started Nero SoundTrax via Nero StartSmart.

2.1 Terminology

The following terms are specific to Nero SoundTrax:

- **Clip** refers to a single audio file.
- **Track** refers to a single audio track. A track can contain multiple clips in succession. Each track has its own settings for volume and effects.
- **Channel** refers to audio information that is contained in a clip, e.g. the left and the right channel.
- **Project** refers to the process of adding existing audio files, editing these files, and exporting them as a finished audio file. A project can be saved with all changes made in a project file, and it can be re-opened later. The project file has the extension *.npf (Nero project file). Project files themselves do not contain audio files, they only contain links to the used audio file, as well as mix and effect settings.



Summary

A project's goal is to create an edited audio compilation consisting of multiple tracks. These tracks in turn contain multiple clips in which audio is recorded in multiple channels.

2.2 Configuration

You can configure Nero SoundTrax to suit your needs. For this purpose the **Preferences**, **Project Settings**, **Device Settings**, and **Audio Format Settings** are available.

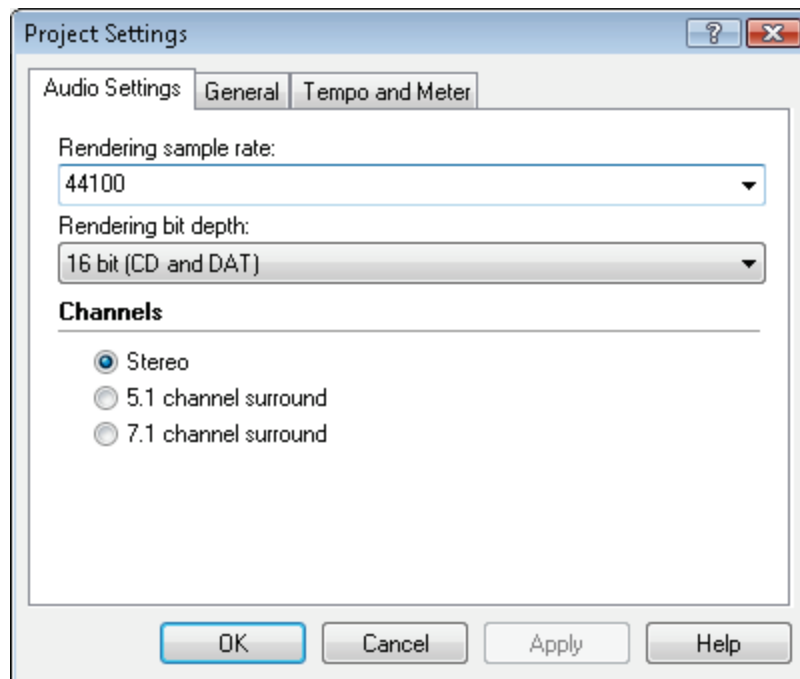
You can open the different setting windows via the **Options** entry in the menu bar.

2.2.1 Project Settings

In the Nero SoundTrax **Project Settings** window, audio and general settings such as project titles and the name of the artists can be defined on various tabs. In addition, it is possible to define the tempo and the beat of your music project.

You can open this window via the **Options > Project Settings** entry in the menu bar.

2.2.1.1 Audio Settings Tab



Audio Settings tab

The following setting options are available on the **Audio Settings** tab:

Drop-down menu Rendering sample rate	Specifies the <u>sampling rate</u> . The sampling rate is the frequency with which a signal is scanned per time interval. The default rate is 44100 .
Drop-down menu Rendering bit depth	Determines the <u>bit depth</u> . Bit depth indicates the precision with which a vibration will be captured. The default setting is 16-bit (CD and DAT) .

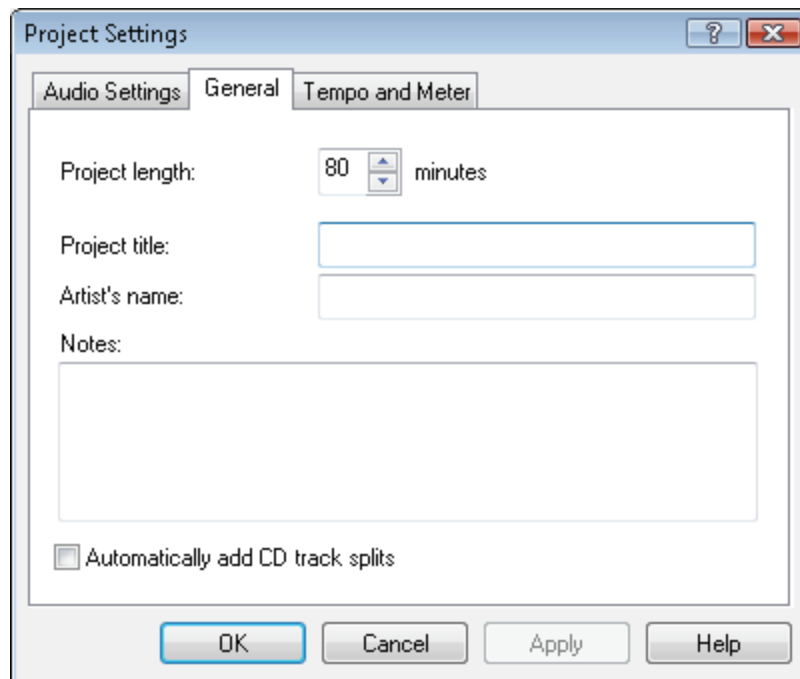
The **Channels** area specifies the number of channels available in the tracks area. The following option buttons are available:

Stereo	2-channel. This entry is selected by default.
5.1 Channel Surround	6-channel surround.
7.1 Channel Surround	8-channel surround.

See also

☰ Surround Projects → 21

2.2.1.2 General Tab

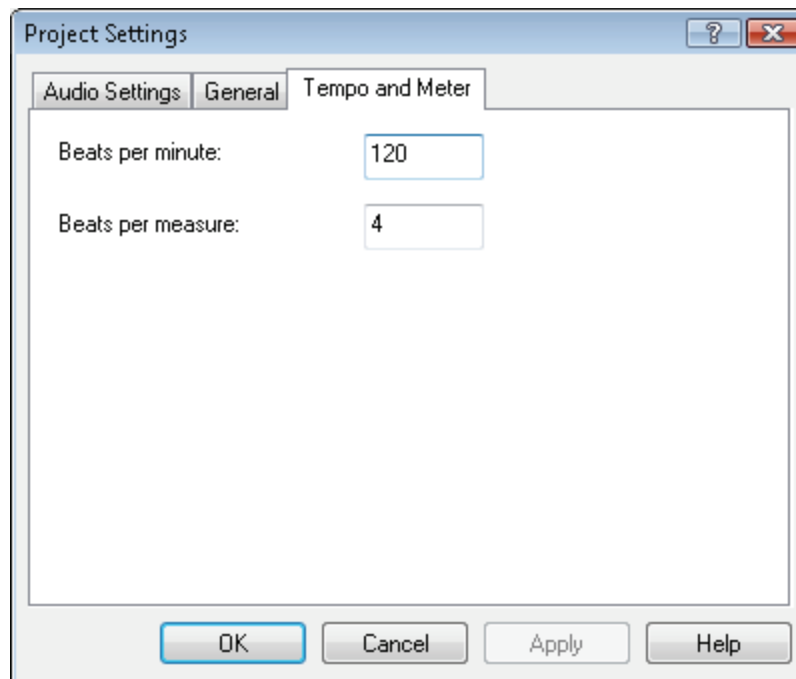


General tab

The following setting options are available on the **General** tab:

Input field Project length	Specifies the length of the project in minutes.
Input field Project title	Specifies the title of the project.
Input field Artist's name	Specifies the name of the artist.
Input area Notes	Specifies comments for the project.
Check box Automatically add CD track splits	Adds a short stop between two audio clips in the same track.

2.2.1.3 Tempo And Meter Tab



Tempo and Meter tab

The following input fields are available on the **Tempo and Meter** tab:

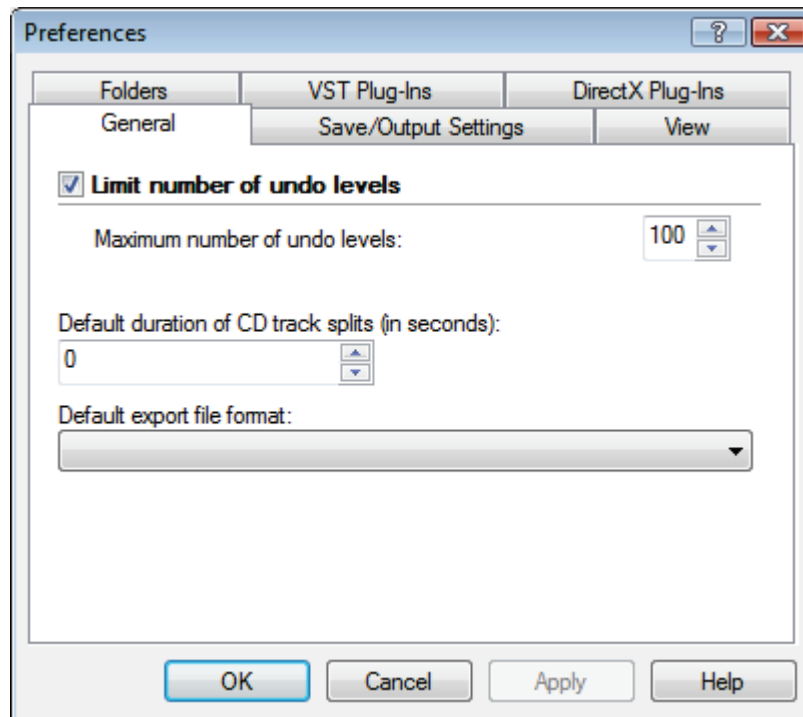
Beats per minute	Specifies the tempo of the project, i.e. the beats per minute.
Beats per measure	Specifies the beats per measure for the project.

2.2.2 Preferences

In the Nero SoundTrax **Preferences** window, you can define output and saving settings as well as determine aspects of display and plug-ins on various tabs. In addition general settings such as a standard export file format and folder in which the music files are saved can be defined.

You can open this window via the **Options > Preferences** entry in the menu bar.

2.2.2.1 General Tab

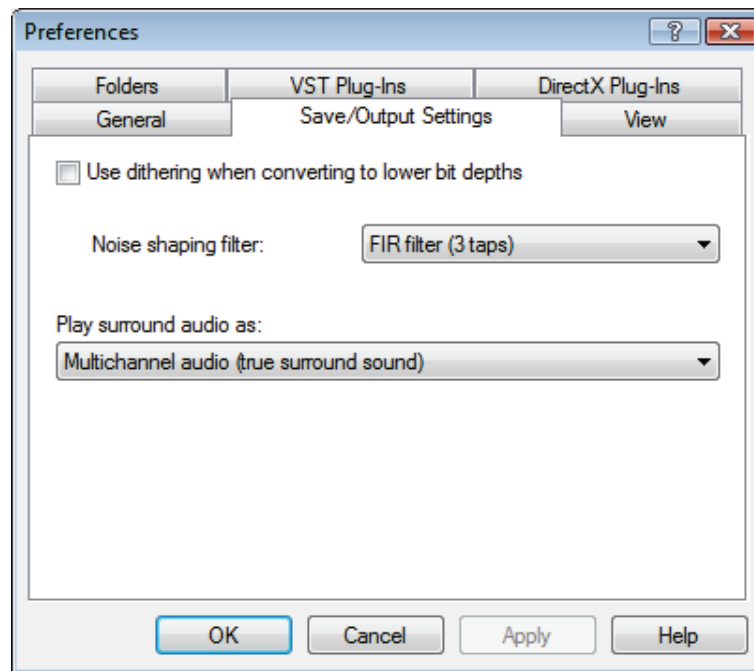


General tab

The following setting options are available on the **General** tab:

Check box Limit number of undo levels	Limits the number of steps that can be undone to the value specified in the input field.
Input field Maximum number of undo levels	Specifies the number of steps that can be undone.
Input field Default duration of CD track splits (in seconds)	Specifies the duration of the pause of new CD track splits.
Drop-down menu Default export file format	Specifies the file format in which Nero SoundTrax will export audio files in the default setting.

2.2.2.2 Save/Output Settings Tab



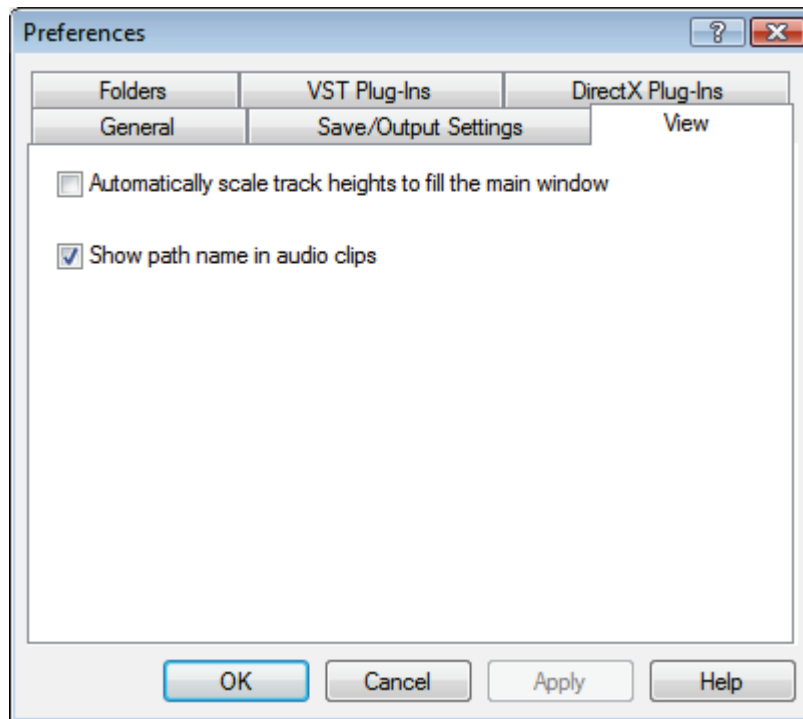
Save/Output Settings tab

The following setting options are available on the **Save/Output Settings** tab:

Check box Use dithering when converting to lower bit depths	Activates <u>noise shaping</u> , which ensures higher audio quality when converting.
Drop-down menu Noise shaping filter	Specifies the type of noise shaping. IIR filter (2nd order) : Infinite Duration Impulse Response. Uses <u>IIR filter</u> . IIR filters can provide an infinitely long and continuous impulse response. In general they achieve a better subjective audio quality than <u>FIR filters</u> do, however they have higher levels of interference energy outside of the audible range. Second order means that sound is attenuated by 12 dB. FIR filter (3 taps) : Finite Impulse Response filter. Uses FIR filters. FIR filters possess a pulse response with guaranteed finite length. This entry is selected by default.
Drop-down menu Play surround audio as	Specifies how surround audio is played. Multichannel audio (true surround sound) : Plays surround audio with all channels.

	<p>Stereo using Nero HeadPhone (Virtual Surround): Plays surround audio filtered down as stereo, with a virtual surround effect generated for headphones.</p> <p>Stereo with Nero VirtualSpeakers (virtual surround): Plays surround audio filtered down as stereo, with a virtual sound effect generated for speakers.</p>
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2.2.2.3 View Tab

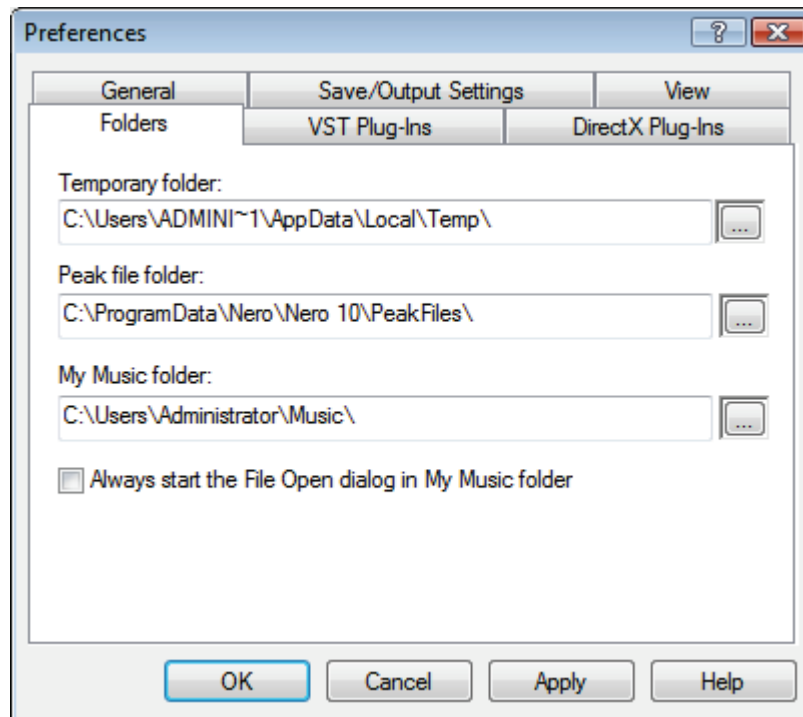


View tab

The following check boxes are available on the **View** tab:


Automatically scale track heights to fill the main window	Automatically enlarges the display of the track so that its height fills the main window.
Show path name in audio clips	Shows the clip path in the track display in addition to the file name.

2.2.2.4 Folders Tab

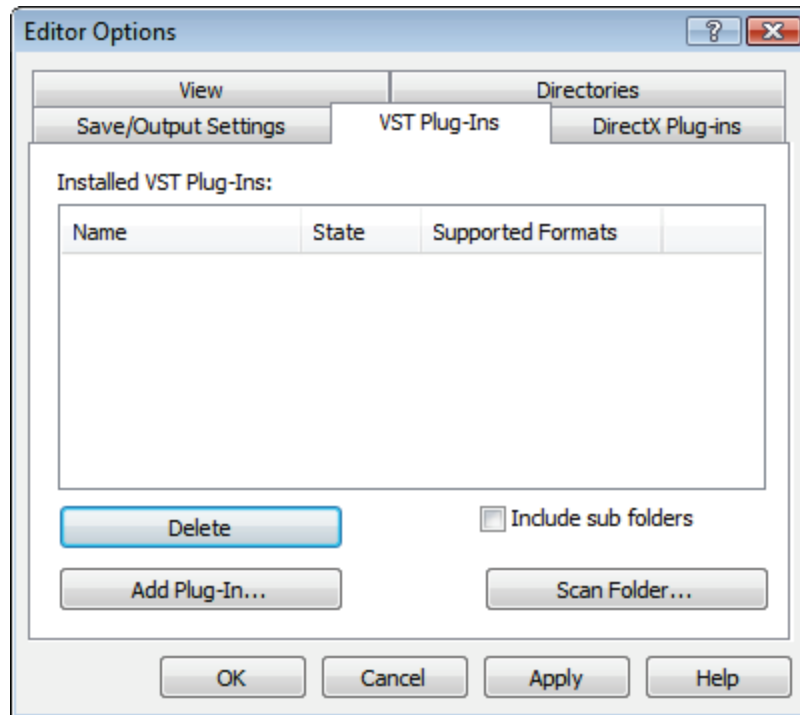


Folders tab

The following setting options are available on the **Folders** tab:

Input field Temporary folder	Defines the folder in which temporary files are stored. The folder should be located on a drive with enough storage space.
Input field Peak file folder	Specifies the folder in which peak files are stored. Peak files are cache files that Nero uses to open Nero SoundTrax audio files more quickly. The folder should be located on a drive with enough storage space.
Input field My Music folder	Specifies the My Music folder.
Button 	Opens a dialog box with which the folder can be selected for the respective files.
Check box Always start the File Open dialog in the My Music folder	When opening the Open dialog box, the system will always first show the folder that is specified in the My Music folder input field.

2.2.2.5 VST Plug-ins Tab

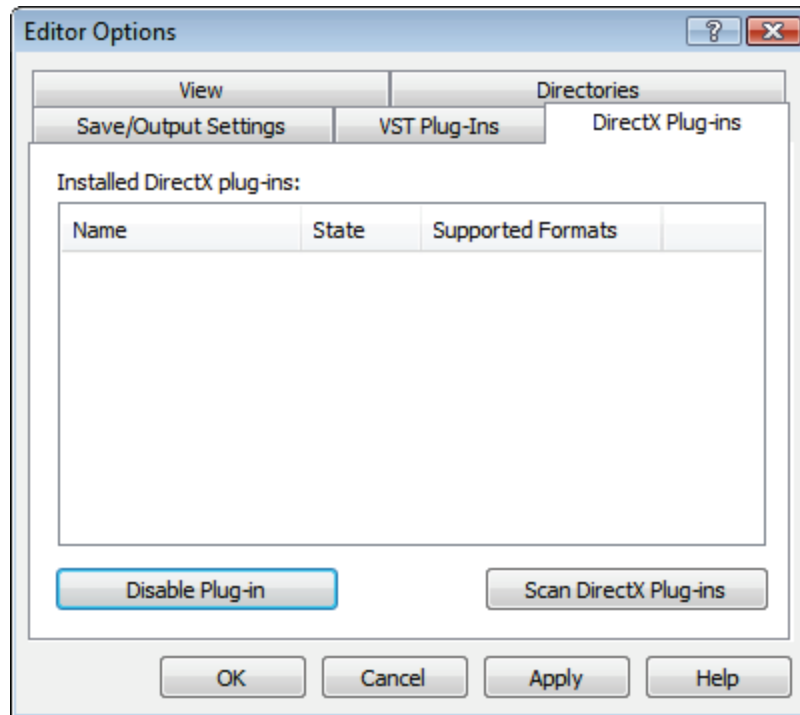


VST Plug-ins tab

The following setting options are available on the **VST Plug-ins** tab:

Display area Installed VST Plug-ins	Shows the currently installed VST plug-ins.
Button Delete	Deletes the selected VST plug-in.
Button Add Plug-in	Opens the Open dialog box. Installs a new VST plug-in.
Check box Include sub folders	Searches for new VST plug-ins in the specified folder and sub folders.
Button Scan Folder	Opens the Open dialog box. Searches for new VST plug-ins in the specified folder.

2.2.2.6 DirectX Plug-ins Tab



DirectX Plug-ins tab

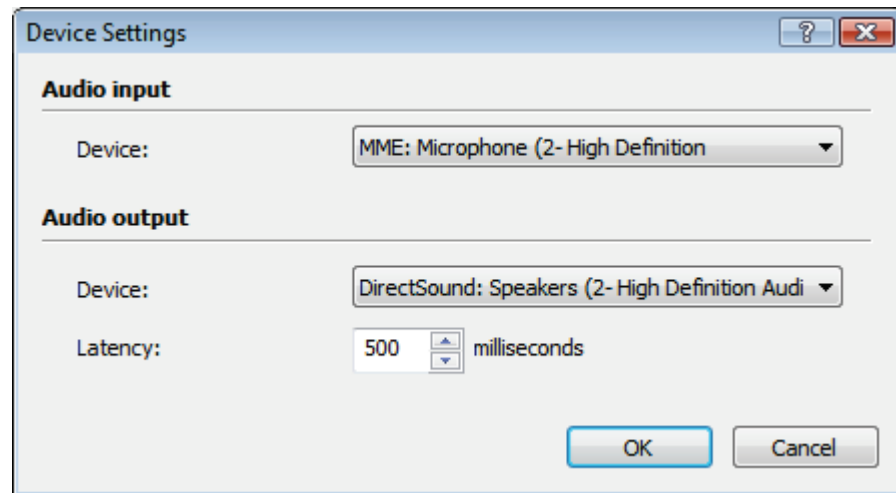
The following setting options are available on the **DirectX Plug-ins** tab:

Display area Installed DirectX Plug-ins	Shows the currently installed DirectX Plug-ins.
Button Disable Plug-in	Disables the marked DirectX Plug-in.
Button Scan DirectX Plug-ins	Carries out an intensive search for DirectX Plug-ins.

2.2.3 Device Settings

In the **Device Settings** window of Nero SoundTrax you can define settings for the audio input and output.

You can open this window via the **Options > Device Settings** entry in the menu bar.



Device Settings window

The following drop-down menu is available in the **Audio Input** area:

Device	Specifies the audio device for the audio input.
---------------	---

The following setting options are available in the **Audio Output** area:

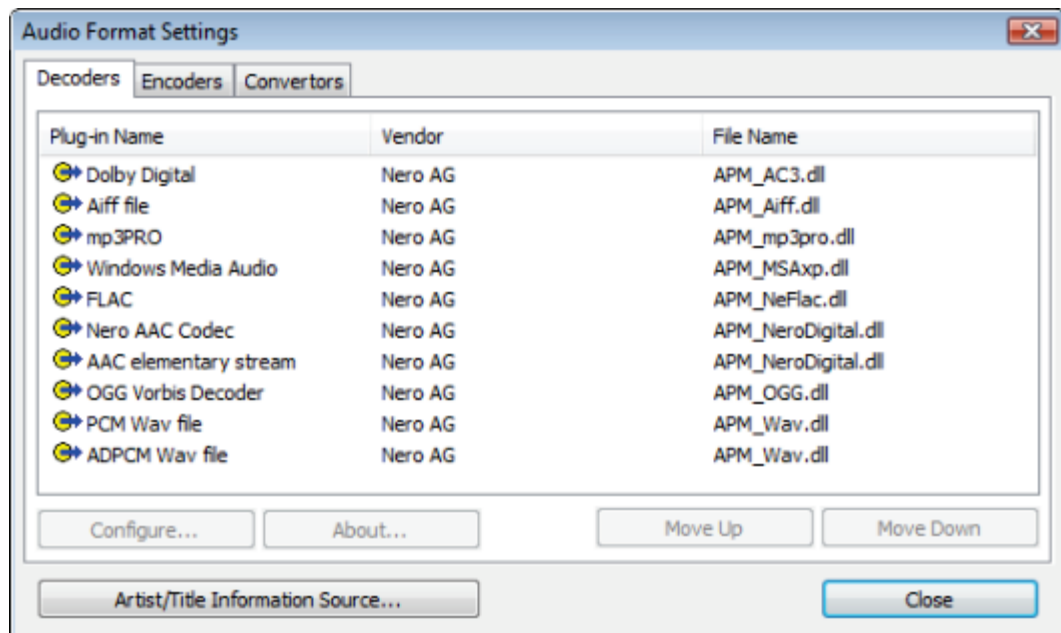
Drop-down menu Device	Specifies the audio device for the audio output.
Input field Latency	Specifies the delay time of the sound card to convert an audio signal from the input of the card to the output of the card.

2.2.4 Audio Format Settings

In the **Audio Format Settings** window from Nero SoundTrax you can set various definitions for decoders, encoders and converters on different tabs.

You can open this window via the **Options > Audio Format Settings** entry in the menu bar.

2.2.4.1 Decoders Tab

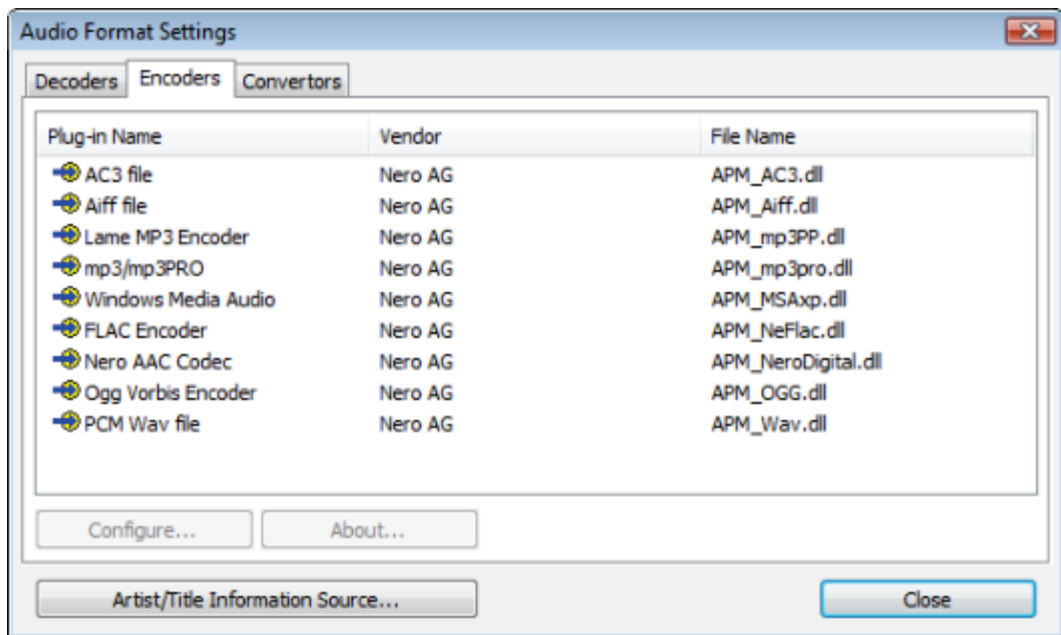


Decoders tab

The following setting options are available on the **Decoders** tab:

Display area Decoder Plug-ins	Shows the available decoders.
Button Configure	Opens a window where additional settings can be made for the selected decoder. This button is not available for all decoders.
Button About	Opens the About window where information about the selected decoder is displayed. This button is not available for all decoders.
Button Move Up	Moves the decoder up one entry.
Button Move Down	Moves the decoder down one entry.
Button Artist/Title Information Source	Opens the Get Artist / Title Information window where you can specify the source from which information relative to artist and title will be read.

2.2.4.2 Encoders Tab

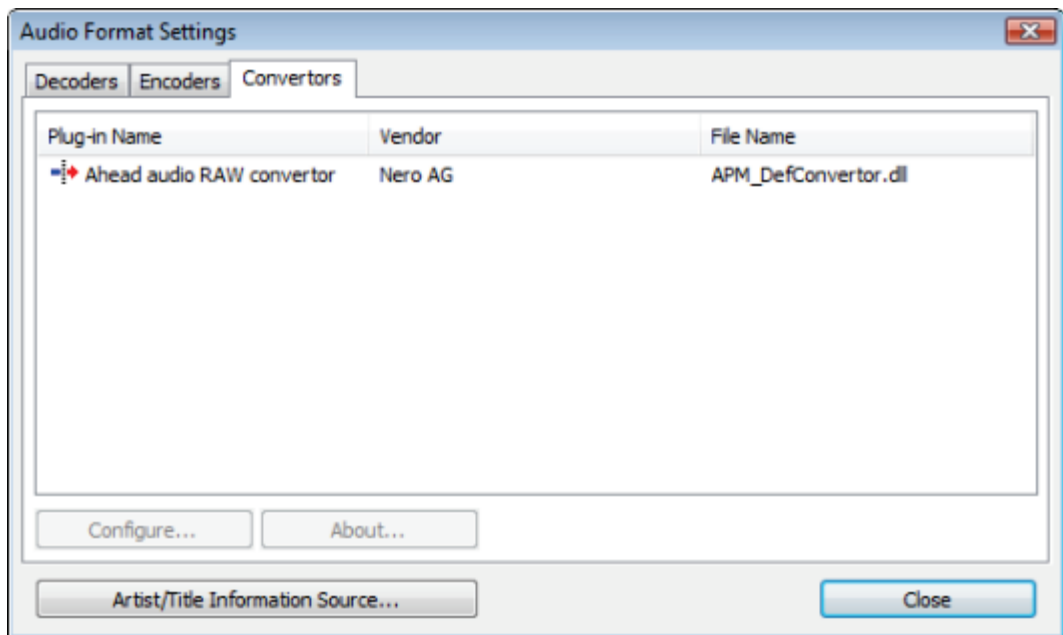


Encoders tab

The following setting options are available on the **Encoders** tab:

Display area Encoder Plug-ins	Shows the available encoders.
Button Configure	Opens a window where additional settings can be made for the selected encoder. This button is not available for all encoders.
Button About	Opens the About window where you can view information about the selected encoder. This button is not available for all encoders.
Button Artist/Title Information Source	Opens the Get Artist / Title Information window where you can specify the source from which information about artist and title will be read.

2.2.4.3 Converters Tab



Converters tab

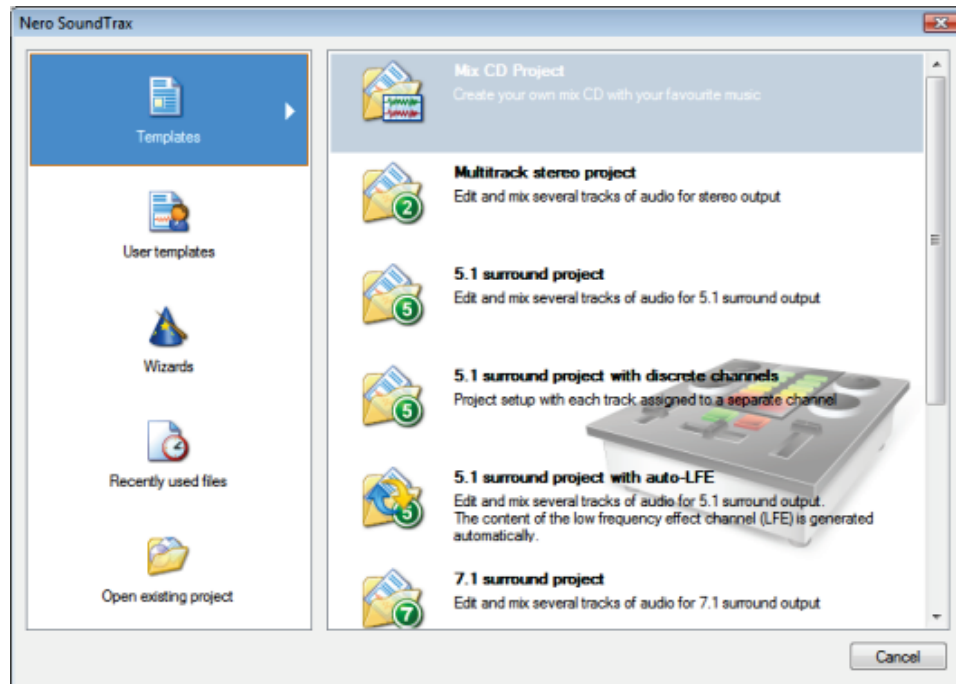
The following setting options are available on the **Converters** tab:

Display area Converter Plug-ins	Shows the available converters.
Button Configure	Opens a window where you can make additional settings for the selected converter. This button is not available for all converters.
Button About	Opens the About window where you can view information about the selected converter. This button is not available for all converters.
Button Artist/Title Information Source	Opens the Get Artist / Title Information window where you can specify the source from which information about artist and title will be read.

3 User Interface

3.1 Templates

When starting Nero SoundTrax, a window is opened in which you can select project templates.



Task selection window

The following menu icons are available:

Templates	Offers templates for frequently used projects such as CD mix, stereo, and surround projects.
User templates	Offers user-created templates for projects.
Wizards	Opens wizards for recording an LP record or a cassette. The Nero SoundTrax wizards allow you to record music from LP records and cassettes and burn it quickly and easily onto CD. The wizards offer filters that you can use to equalize disturbances such as scratches, thereby obtaining optimal recording quality.
Recently used files	Shows recently used files.
Open existing project	Opens the Open window that offers access to an existing project.

See also

📖 Recording From Record or Cassette → 41

3.2 Surround Projects

With Nero SoundTrax you can create 5.1 and 7.1 surround projects. These numbers correspond to playback with a surround system with 5 or 7 speakers plus subwoofer.

In addition to two different types of surround projects, Nero SoundTrax offers the selection of the number of speakers:

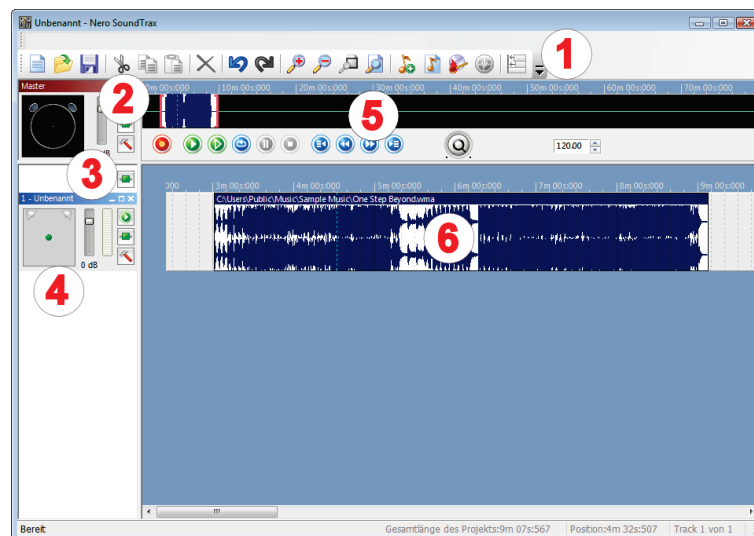
- Projects in which all speakers will be addressed with one sound track
- Projects in which all speakers will receive a separate channel

In addition you can insert an automatically generated LFE channel in the project.

You can edit individual tracks in a surround project exactly as any other track.

3.3 Main Window

The main window is opened after you have started Nero SoundTrax and selected a template. It is the starting point for all tasks that can be carried out with Nero SoundTrax.



Main window

The main window is divided into the following areas:

1	Menu bar and toolbar
2	Master track settings
3	Assignable effects
4	Tracks
5	Project
6	Track display





3.3.1 Menu Bar
















The following menus are available in the menu bar:

File	Opens the File menu which contains file functions such as opening, saving, and closing that you are already familiar with from Windows. In addition, templates can be inserted and opened, and CD tracks and the tracks created in Nero SoundTrax can be exported as audio files.
Edit	Opens the Edit menu which contains editing functions for the files in the track display such as cutting, copying, and deleting that you are already familiar with from Windows. In addition, you can chain the notes of the tracks created in Nero SoundTrax.
View	Opens the View menu which allows you to individually adjust the menu bar and toolbar, and enlarge or reduce the view of the project. In addition, you can change the time format of the project.
Insert	Opens the Insert menu which allows you to insert audio files, audio loops, and SoundBox and ScratchBox clips in tracks that have been created in Nero SoundTrax. In addition, you can import tracks from Audio CDs, generate an automatic LFE track, add effects in effect chains, and create assignable effect groups.
Audio	Opens the Audio menu which allows you to record, import, and play audio files.
Tracks	Opens the Tracks menu which allows you to insert and delete tracks. You can also add different effect curves to a track and change the track properties.
Tools	Opens the Tools menu which allows you to burn a CD, open other Nero applications, and select wizards to record analog audio tracks.
Options	Opens the Options menu which allows you to specify general and special settings for the project, for the connected devices, and for the audio format.
Help	Opens the Help menu which allows you to open the online help and view the version number and other registration data.

3.3.2 Toolbar

The following buttons are available in the toolbar:


	Creates a new project.
	Opens an existing project.
	Saves the project.
	Cuts out the selected section and saves it to the clipboard.




	Copies the selected section and saves it to the clipboard.
	Pastes the contents of the clipboard to the selected location.
	Deletes the selected clips.
	Undoes the last action.
	Restores the last action that you have undone.
	Zooms into the project.
	Zooms out of the project.
	Zooms into the project so that the selected section is displayed in a manner that fills the screen.
	Zooms out of the project in such a manner that the entire project is displayed.
	Inserts a new track after the selected track.
	Opens the Open window and inserts an audio file at the selected location.
	Burns the project to CD. This button is only available if the project contains at least one clip.
	Opens the selected clip for editing. If the clip is an audio file, then Nero WaveEditor will be opened. If the clip is a Sound-Box or ScratchBox clip, then the respective tool will open. This button is only available if a clip is selected.
	Aligns the selected clips at the same start position; the start position that is furthest to the left will be used. This button is only available if multiple clips are selected.
	Opens the Add or Remove Buttons menu which allows you to customize the toolbar by adding or removing buttons.

3.3.3 Master Track Area

The **Master** area allows you to define settings which apply for all tracks inserted into the project.

















The following setting options are available in the **Master** area:




Display area 	Shows distribution of the surround sound.
---	---

Slider 	Adjusts the volume of all tracks in the project.
Button 	Opens the Effect Chain Editor - Master window. This is where you can create an effect chain that can be assigned to all tracks.
Button 	Opens the Project Settings window.

3.3.3.1 Toolbar

The following buttons are available in the toolbar:


	Creates a new project.
	Opens an existing project.
	Saves the project.
	Cuts out the selected section and saves it to the clipboard.
	Copies the selected section and saves it to the clipboard.
	Pastes the contents of the clipboard to the selected location.
	Deletes the selected clips.
	Undoes the last action.
	Restores the last action that you have undone.
	Zooms into the project.
	Zooms out of the project.
	Zooms into the project so that the selected section is displayed in a manner that fills the screen.
	Zooms out of the project in such a manner that the entire project is displayed.
	Inserts a new track after the selected track.
	Opens the Open window and inserts an audio file at the selected location.
	Burns the project to CD. This button is only available if the project contains at least one clip.

	<p>Opens the selected clip for editing.</p> <p>If the clip is an audio file, then Nero WaveEditor will be opened. If the clip is a Sound-Box or ScratchBox clip, then the respective tool will open.</p> <p>This button is only available if a clip is selected.</p>
	<p>Aligns the selected clips at the same start position; the start position that is furthest to the left will be used.</p> <p>This button is only available if multiple clips are selected.</p>
	<p>Opens the Add or Remove Buttons menu which allows you to customize the toolbar by adding or removing buttons.</p>

3.3.4 Assignable Effects Area

In the **Assignable Effects** area you can create effect chains that can later be assigned to specific tracks.




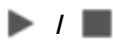


The following button is available in the **Assignable Effects** area:

	<p>Opens the Assignable Effect Groups window. Here you can create and edit the effect groups.</p>
---	--

3.3.5 Tracks Area

In the tracks area inserted tracks are displayed. You can also edit the track settings here.

The following setting options are available in the tracks area:













<p>Input area</p> 	<p>Changes the surround sound, i.e. volume distribution on the various channels/speakers.</p>
<p>Slider</p> 	<p>Adjusts the volume of the track.</p>
<p>Display field</p> 	<p>Visualizes the volume level.</p>
<p>Button</p> 	<p>Starts/stops track playback.</p>
<p>Button</p> 	<p>Opens the Effect Chain Editor - Track window. Here you can create and edit an effect chain for the track.</p>
<p>Button</p> 	<p>Opens the Track Settings window. Here you can edit the track settings.</p>

3.3.6 Project Area

The project area is divided into the frequency section and the toolbar.

In the frequency section the frequencies of all tracks are displayed. Here the display of the project can be altered with the red square brackets.

The following buttons are available in the project area:

	Opens the Recording Settings window.
	Plays the project from the point where the cursor is located.
	Plays the project from the beginning.
	Plays the project or the highlighted section in an endless loop.
	Pauses playback of the project.
	Stops playback.
	Sets the cursor at the beginning of the project.
	Moves the cursor back quickly.
	Moves the cursor forward quickly.
	Sets the cursor at the end of the project.
	Adjusts the volume.
	Specifies the tempo in the BMP unit.

3.3.7 Track Display Area

The track display area is where the channel frequencies of the inserted audio clips are displayed. The audio clips are displayed individually and in different colors.

Open the context menu by clicking the right mouse button within the track display.


Clicking an audio clip opens the clip's context menu. Here you can delete, select, copy, and cut clips. In addition, you can open Nero WaveEditor, select the output channels, and group clips.

Clicking the track opens the track's context menu. Here you can insert clips of various types, delete, copy, and deactivate them. In addition, you have the possibility of inserting effects and effect chains, track splits, CD indices, and labels.

3.4 Effect Chains

In Nero SoundTrax effects are organized in an effect chain. You can assign effect chains that consist of multiple effects to a specific track or to the master track. Effects are applied sequentially (e.g. noise reduction, volume change, reverb effect). Once an effect chain is created you can save it as an effect chain template.

It is also possible to define effect chains and to assign them to the tracks as an effect group curve. With the effect group curve you can adjust the intensity of the effect group over the length of the track.

When putting an effect chain together you can choose from plug-ins, tools, effects and enhancements. You can open the **Effect Chain Editor** window via the  button in the master and/or track area.

3.4.1 Plug-ins

The following setting options are available in the **Plug-ins** entry:

DirectX Settings	Opens the Preferences window with the DirectX Plug-ins tab.
VST Settings	Opens the Preferences window with the VST-Plug-ins tab.

3.4.2 Tools

The following setting options are available in the **Tools** entry:

Deesser	Automatically lowers the sibilance level in a voice or song recording.
Dynamic Processor	Corresponds to the physical term of loudness (loudness perception).
Equalizer	Equalizes sound frequencies and allows sound quality of bases and high notes to be modified (sound design).
Karaoke Filter	Filters out frequencies that are exactly the same on both tracks. Frequently in songs the vocal is the same on both tracks and is thus removed.
Noise Gate	Suppresses soft segments in the signal transmission. It is used to suppress background noise for example.
Pitch Tuning	Among other things pitch tuning is used to change the playback speed and the pitch.
Stereo Processor	Specifies settings for the left and right audio channel and generates artificial stereo.
Time Correction	Specifies settings for the playback speed.
Transpose	Changes the pitch of music passages and their playback speed.

3.4.3 Effects

The following setting options are available in the **Effects** entry:

Chorus	Adds several slightly distorted signals to the original signal.
Convolution Reverb	Uses convolution to convert depictions of real sounds into audio signals by a computer system.
Delay	Sends out one or more delayed copies of the input signal, thereby achieving an echo-like sound.
Distortion	Distorts the signal. Frequently used for electric guitars.
Doppler	Simulates a noise source passing by and the resulting special auditory features.
Flanger	Copies the input signal and returns the copy (phase-delayed) to the original. The main difference to the similar phaser effect is the feeding back of the copied signal to the input. The feedback can be finely adjusted.
Loudness	Describes the hearing-based volume. With this effect the perceived volume can be increased without exceeding the maximum permissible amplitude.
Low Fidelity	Simulates a low <u>sampling rate</u> , thereby generating a lower sound quality.
Modulation	Modulates the signal with a selectable control signal. Supports amplitude modulation as well as frequency modulation.
Multi-Tap Delay	Generates individual echoes or a single reflection and describes the number of simultaneously possible echoes. This is a delay effect based on taps.
Phaser	Copies and filters the input signal with a varying band-stop filter. Then the signal is reproduced phase-delayed to the original signal. It is similar to the flanger effect.
Pitch Bend	Changes the pitch over the length of the audio file with the help of a speed curve. The length of the audio file can be changed or retained.
Pseudo Reverse	Creates the impression that the file is being played backwards by reversing only fragments; in reality, however, the file is being played in the correct direction.
Re-analogue	Offers several effect options by inserting interference effects, such as artificial aging through noise.

Reverb	Gives a reverb effect to the file.
Stutter	Produces a stuttering effect through cut-outs or repetitions.
Surround Expansion	Offers expanded surround sound settings. Only available if you are editing a surround audio project.
Surround Reverb	Changes the room sound. A different environment can be artificially assigned to the music file. It is possible to specify the room depth, width, height, and surface as well as other parameters.
Voice Modification	Modifies the voice in a piece of music. You can change the pitch for example.
Wah-Wah	Is primarily used to influence the sound of electric guitars. The term wah-wah approximates the sound of the induced effect.

3.4.4 Enhancement

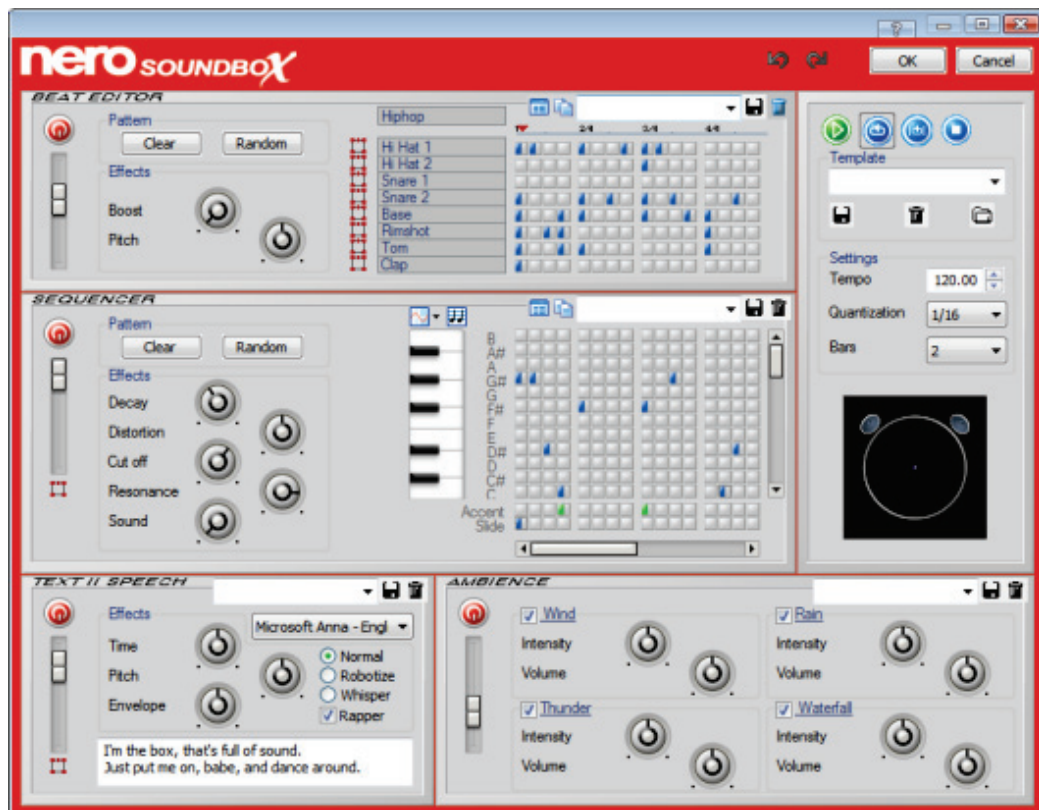
The following setting options are available in the **Enhancement** entry:

Band Extrapolation	Enables generation of high and low frequency harmonies.
Camera Denoiser	Removes (or reduces) the humming noises that frequently occur with video cameras with graphic view.
DC Offset Correction	Automatically removes DC components that can be harmful to speakers.
Declicker	Removes pops. The intensity can be adjusted manually.
Declipper	Removes parasitic noise and distortion that result from digital as well as analog saturation.
Dehum	Removes hum.
Filter Toolbox	Set of filters that suppress feedback and irregularities.
Noise Reduction	Reduces undesired noise when saving analog signals.

3.5 Nero SoundBox

With Nero SoundBox you can create audio clips. Various rhythms, music types, and instruments are available in the **Beat Editor**, **Sequencer** and **Ambience** areas. You can also enter a text in the **Text II Speech** area which a computerized voice will speak in sync with the music, and add background noises to the audio clip.







You can open the Nero SoundBox window via the **Insert > SoundBox Clip** entry in the menu bar.














Nero SoundBox

General components are repeated in the various sections of the Nero SoundBox interface. In addition, general settings are available in the Nero SoundBox interface and are applicable in all areas within the Nero SoundBox.

The following setting options are available:

<p>Button</p> 	Switches the section on and off.
<p>Jog dial</p> 	Specifies the intensity of effects.
<p>Slider</p> 	Indicates the volume of effects.
<p>Display area</p> 	Indicates the surround sound allocation. This element is displayed when you click the  button.
<p>Drop-down menu</p> 	Provides different profiles and templates for selection.

Button 	Opens the complete pattern of the selected profile in a new window.
Button 	Copies content (rhythm, melody) of a measure into the selected measure.
Display area 	Specifies the rhythmic pattern. The pattern is divided into four measures.
Button 	Saves a template or a profile. This can be re-used at any time.
Button 	Deletes a template or a profile.
Button 	Starts playback of the Nero SoundBox clip.
Button 	Pauses playback of the Nero SoundBox clip
Button 	Repeats the entire Nero SoundBox clip.
Button 	Repeats only the active section of the Nero SoundBox clip.
Button 	Stops playback of the Nero SoundBox clip.
Input field Tempo	Indicates the tempo of the Nero SoundBox clip.
Drop-down menu Quantization	Subdivides the measure.
Drop-down menu Bars	Shows up to 4 bars in the pattern view which can then be edited. As a result, the same measure is not always played back in succession.
Display area 	Graphically shows the allocation of sound in the room.

3.5.1 Beat Editor

In the **Beat Editor** you can create the rhythms in various musical directions. The pattern specifies the beats of the individual percussion instruments per bar.

The following buttons are available in the **Pattern** area:

Button Clear	Clears a pattern.
Button Random	Randomly selects a pattern.

The following setting options are available in the **Effects** area:

Jog dial Boost	Indicates the intensity of the selected profile.
Jog dial Pitch	Influences the pitch of the profile.
Drop-down menu Musical direction	Specifies a musical direction. Depending on the musical direction the entries below the menu change. They will then show the percussion instruments that are typical for the selection. In the context menu of the individual percussion instruments you can replace a particular instrument with a different instrument.

3.5.2 Sequencer

In the **Sequencer** area the individual tones can be edited.

The pattern specifies the tones in the specific bars. In order to hear the tones before inserting them into the pattern, you can click the keyboard and listen to the tone.

In the **Accent** area of the pattern you can assign a tone with a single click on a box in the meter of the sample. Double-clicking turns the box green and causes the tone to change its frequency level linearly over the length of the tone rather than in a single step.

In the **Slide** area of the sample, you can give the tone its properties and adapt the basic tone to flow into the next tone to prevent a noticeable transition of the tone change. As a result, the end of the "sliding" tone pitch is the same as that of the next tone.

The following buttons are available in the **Pattern** area:




Clear	Deletes a pattern.
Random	Randomly selects a pattern.

The following jog dials are available in the **Effects** area:

Decay	Specifies the length of tones.
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Distortion	Distorts the tone and creates the impression that it seems louder.
Cut off	Designates the <u>frequency</u> up to which the tone will be generated. The higher the jog dial is set, the higher the frequencies will be in the generated tone.
Resonance	Gives the tone more resonance.
Sound	Changes the sound using various parameters.

The following buttons are available in the **Sequencer** area:

	Graphically represents the tones.
	Switches between polyphony and monophony. Polyphony plays multiple tones at the same time. Monophony selects one pitch per time unit.
	Opens a drop-down menu where wave files with characteristic instrument sounds can be selected. Bass, guitar, piano, flute, or saxophone are available.

3.5.3 Text II Speech

In the **Text II Speech** area you can enter text into the text box.

The following setting options are available:

Jog dial Time	Changes the playback speed.
Jog dial Pitch	Influences the pitch of speech.
Jog dial Envelope	Changes the formants of the voice without changing the pitch. The higher the jog dial is set, the higher the voice formants will be moved.
Option buttons Normal, Robotize, Whisper	Defines the playback volume.
Check box Rapper	Specifies the pronunciation type.
Input field I'm the box...	Specifies the text that will be converted to speech.

3.5.4 Ambience

In the **Ambience** area you can select profiles and introduce these as background noises in your sound.

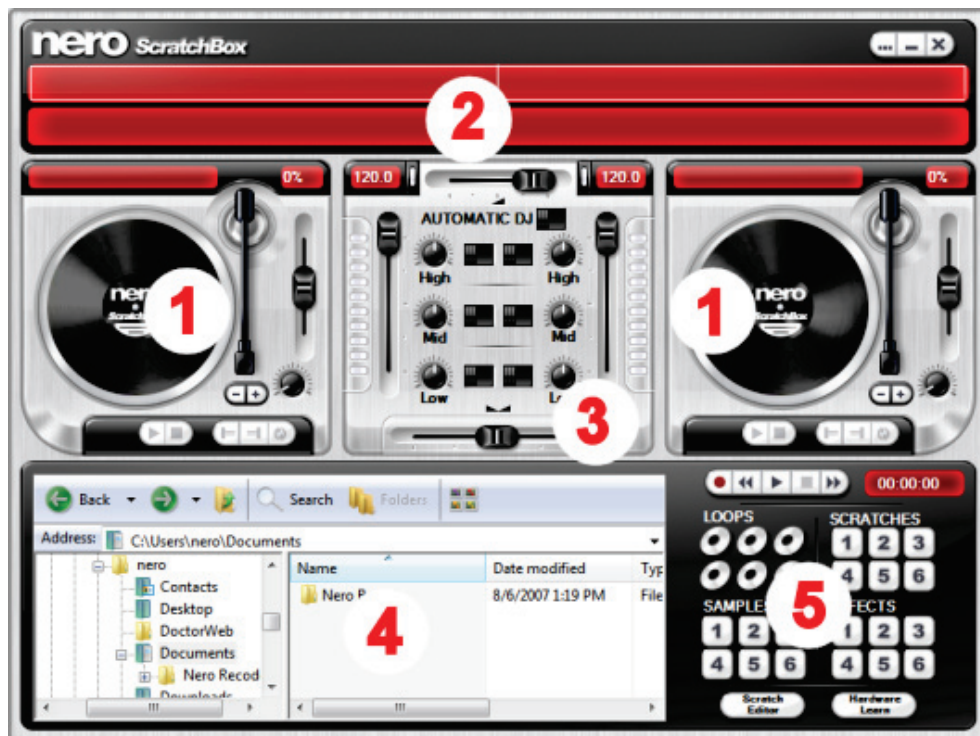
The following setting options are available:

Jog dial Intensity / Volume	Specifies volume and intensity of the background noises.
Drop-down menu	Selects an existing profile. The Intensity and Volume sliders are adapted to suit the imported profile.

3.6 Nero ScratchBox

With Nero ScratchBox you can insert an audio clip in the track. You can open the Nero ScratchBox window via the **Insert > ScratchBox Clip** entry in the menu bar.

Nero ScratchBox consists of two virtual turntables (1) on which audio files can be played. This means e.g. that you can professionally mix the audio files in the mixing console area (3), process the audio files with various effects in the tools area (5), and scratch the audio files.















Nero ScratchBox

You can select the files that you want to play on the turntables in the file selection area (4). The familiar Windows folder structure is shown here. In the peak file view (2) the audio file is displayed as peak file.

3.6.1 Turntables










You can play and edit audio files on the turntables. The following setting options are available:

Button 	Starts playback of the audio file.
Button 	Stops playback of the audio file.
Button 	Pauses playback of the audio file.
Button 	Specifies the starting point of a loop.
Button 	Specifies the end point of a loop.
Button 	Plays the specified loop in the audio file.
Jog dial 	Changes the playback speed when starting and ending the audio file.
Button 	Briefly slows playback. The function simulates the action of manually holding the LP record in place.
Button 	Briefly accelerates playback. The function simulates manual acceleration of the LP record.
Display field 	Displays the name of the audio file.
Slider 	Changes the playback speed of the audio file.
Display field 	Displays which percentage value is used to specify faster or slower playback of the audio file.

3.6.2 Mixing Console

On the mixing console you can change the playback of the audio files on the turntables.


The following setting options are available:






Slider 	Specifies the volume of the overall audio output.
Display field 	Indicates the "Beats per minute."
	Is illuminated when the meter of one audio file agrees with the meter of the other audio file and the two files can be mixed harmoniously.
Slider 	Indicates the playback volume of the respective turntable.
Scale 	Graphically displays the playback.
Button Automatic DJ 	Triggers an automatic crossfade from one audio file into another.
Jog dial 	Adjusts the intensity of highs, mid-range and lows.
Button 	Fades highs, mids, and lows out and in.
Slider 	Mixes the playback of both turntables.

3.6.3 Tools Area

In the tools area you can select sample effects and play them on the turntables. In addition you can record the playback of the turntables, post-edit the scratches added to the recording in the Nero ScratchEditor, and record actions on the mixing console.

The following setting options are available in the tools area:

Button 	Records the playback of both audio files. Each sound action that is executed after activating this button will be recorded.
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Button 	Fast forwards the recording.
Button 	Rewinds the recording.
Display field 	Indicates the temporal progress of the recording.
Button 	Displays a loop.
Button 	Displays sample sounds, scratches, and effects.
Button Hardware Learn	Establishes a connection between a control element on the DJ hardware and a control element in the ScratchBox. This button is only active if DJ hardware is connected.
Button ScratchEditor	Opens the Nero ScratchEditor window. In the Nero ScratchEditor you will see a curve for each turntable. At normal play speed the curve runs linearly at 100% of the y-axis. Scratches are displayed in the curve as deflections in the positive and negative % range. Negative deflections mean that the audio file is played in reverse for this time, positive deflections mean that the audio file is played faster. The x-axis therefore describes the point in time, and the y-axis describes the play speed of the audio file at this point in time.

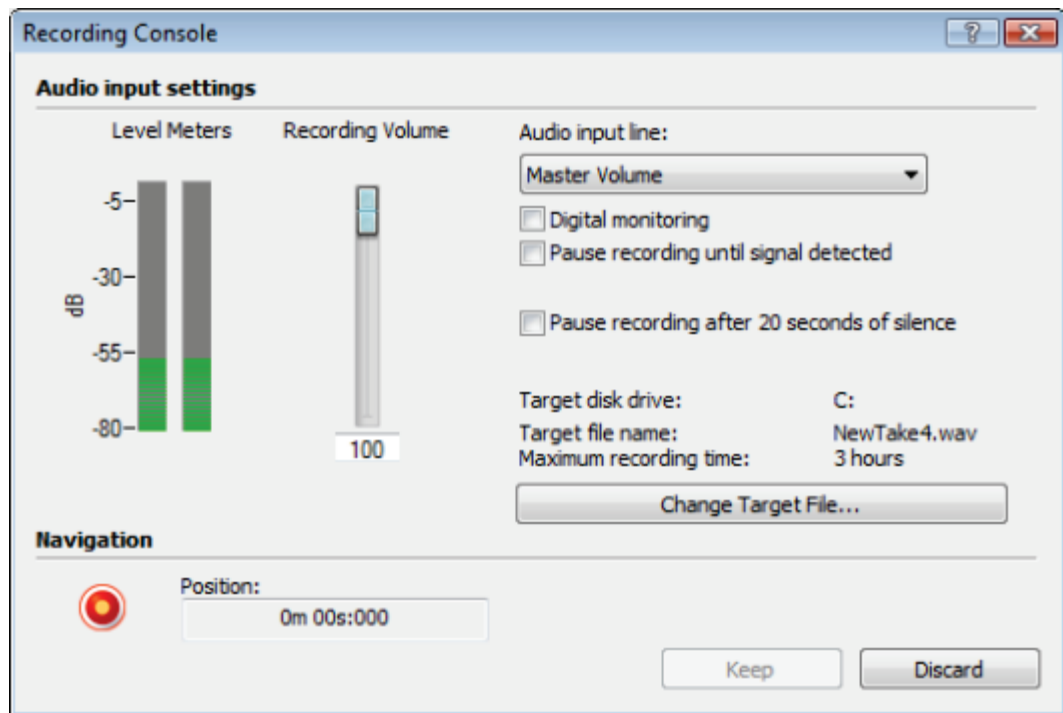
4 Importing And Recording

4.1 Recording Audio

Nero SoundTrax allows you to record audio from various external sources which are connected to your sound card (e.g. a microphone, a record player, or a cassette tape recorder). All recordings are monitored in the **Recording Console** window.

4.1.1 Recording Console

You reach the **Recording Console** window via the  button in the toolbar.




Recording Console window

The following setting options are available in the **Audio Input Settings** area in the **Recording Console** window:

Graph Level Meters	Shows the recording volume in dB.
Slider Recording Volume	Specifies the volume of the recording.
Drop-down menu Audio input line	Specifies the audio input.

Check box Digital monitoring	Turns on the sound of the audio source so you can hear what you are recording.
Check box Pause recording until signal detected	Pauses the recording until a signal is detected from the selected audio input.
Check box Pause recording after 20 seconds of silence	Pauses the recording after no signal has been detected from the selected audio input for 20 seconds.
Button Change Target File	Opens the Save as window which allows you to change the target disk drive, the target file name, and the target file format. Only available before starting the recording.

The following setting options are available in the **Navigation** area:



Button 	Records an audio file.
Display field Position	Shows the position of the recording.
Button Keep	Closes the Recording Console window and inserts the recording into the track display.
Button Discard	Closes the Recording Console window. Your recording will not be saved.



4.1.2 Recording Audio File

The following requirement must be fulfilled:

- ▶ A capture device, e.g. a microphone, is connected to the input of the sound card.

To record an audio file, proceed as follows:

1. Click the  button in the main window.
 - The **Recording Settings** window is opened.
2. Select the desired bit depth in the **Resolution** drop-down menu.
3. If you want to record in mono, disable the **Stereo recording** check box.
4. If you want to change the folder in which the recorded file will be stored, click the  button and select the folder in which you want to save the target file.

5. Click the **OK** button.
 - The **Recording Console** window is opened.
6. Select the recording input in the **Audio input line** drop-down menu.
7. If you want to hear how the sound quality is modified by changing the recording volume, enable the **Digital monitoring** check box.
8. Start playback on the capture device.
9. Move the **Recording Volume** slider until the display in the **Level Meters** is primarily in the yellow range.
10. If you want to pause recording until a signal is detected at the recording input, enable the **Pause recording until signal detected** check box.
If you want to pause recording if a signal has not been detected at the recording input after 20 seconds, enable the **Pause recording after 20 seconds of silence** check box.
11. If you want to change the target file, click the **Change Target File** button and select the folder where you want to save the audio file.
12. Click the  button.
 - The system starts recording.
13. Click the  button to stop recording.
14. Click the **Keep** button.
 - The recording is inserted into the track display.
 - You have recorded an audio file.

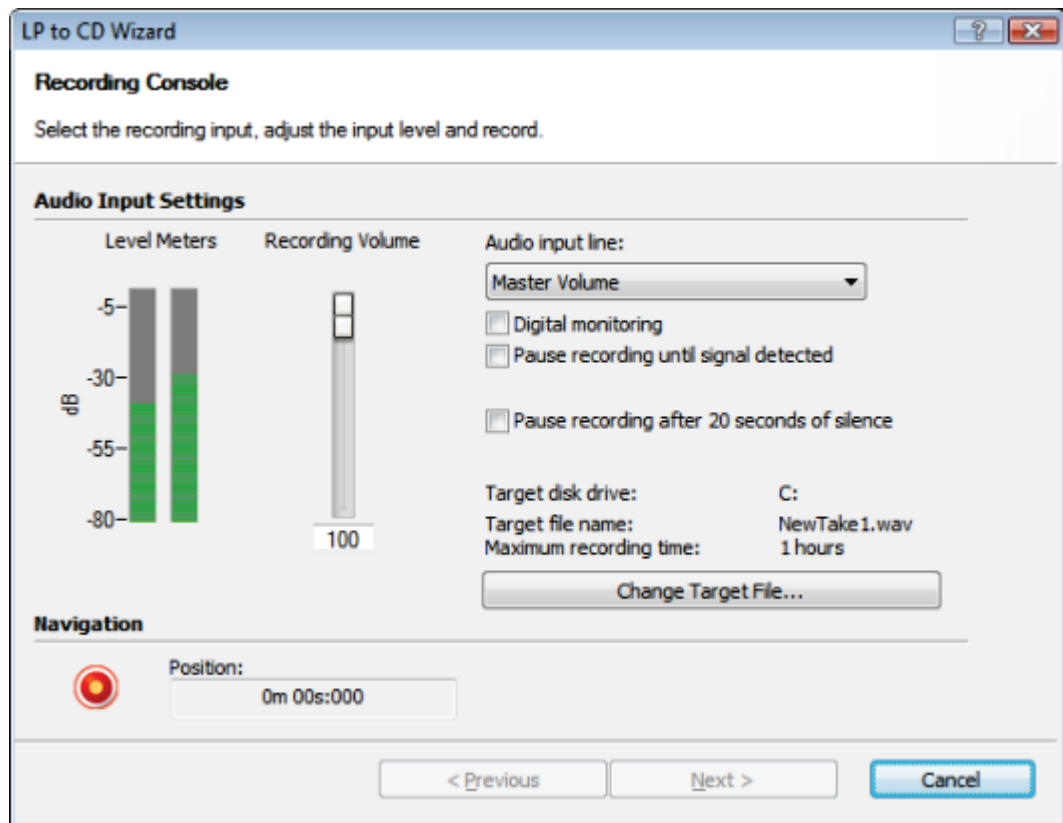
4.1.3 Recording From Record or Cassette

The following requirement must be fulfilled:

- ▶ A record player or cassette tape recorder must be connected to the input of the sound card.

To record from LP record or cassette, proceed as follows:

1. Click the **Tools > Wizards > LP to CD Wizard/Tape to CD Wizard** entry in the menu bar.
 - The **LP to CD Wizard** or **Tape to CD Wizard** window is opened with the **Recording Console** screen.




Recording Console screen

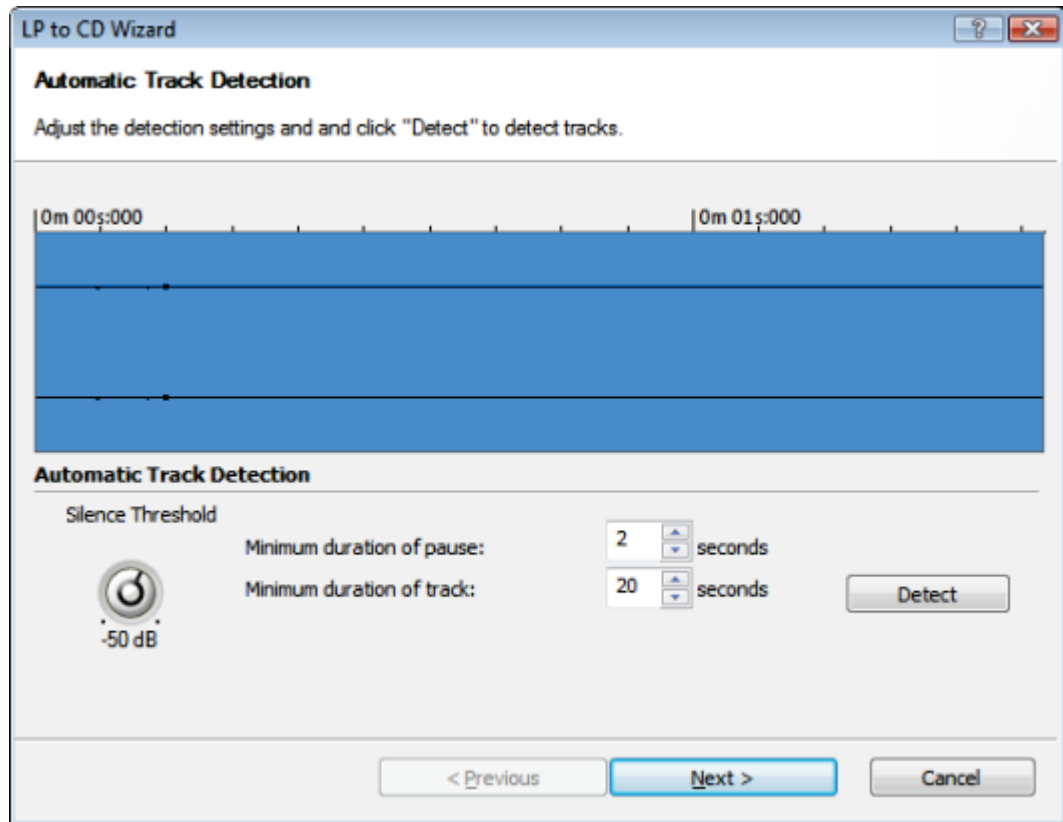
2. If you want to hear how the sound quality is modified by changing the recording volume, enable the **Digital monitoring** check box.
3. Start playback on the capture device.
4. Move the **Recording Volume** slider until the display in the **Level Meters** is primarily in the yellow range.



If the level meters are predominantly in the red range then the audio quality will be reduced.

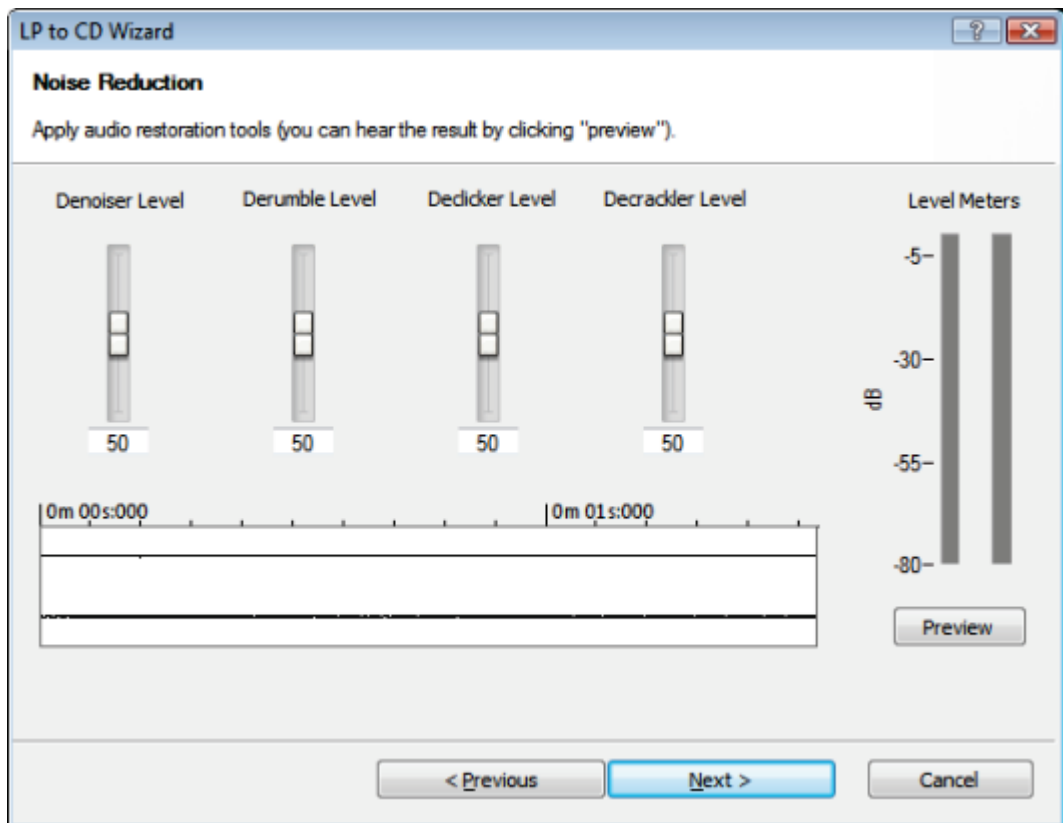
5. If you want to pause recording until a signal is detected at the recording input, enable the **Pause recording until signal detected** check box.
If you want to pause recording if a signal has not been detected at the recording input after 20 seconds, for instance because the cassette has reached the end of one side, enable the **Pause recording after 20 seconds of silence** check box.
6. If you want to change the target file, click the **Change Target File** button and select the folder in which you want to save the audio file.
7. Click the  button.
→ The system starts recording.

8. Click the **||** button to stop capturing.
9. Click the **Next** button.
 - The **Automatic Track Detection** screen is displayed.



Automatic Track Detection screen

10. Turn the **Silence Threshold** jog dial until the dB value of the pause is reached.
11. Enter the minimum duration of a pause in the **Minimum duration of pause** text box.
 - Nero SoundTrax detects passages in the audio file and automatically inserts a pause.
12. Enter the minimum duration that a track should have in the **Minimum duration of track** text box.
13. Click the **Detect** button.
 - The tracks in the recording are detected automatically. The detected tracks are displayed in the respective screen.
14. Click the **Next** button.
 - The **Noise Reduction** screen is displayed.



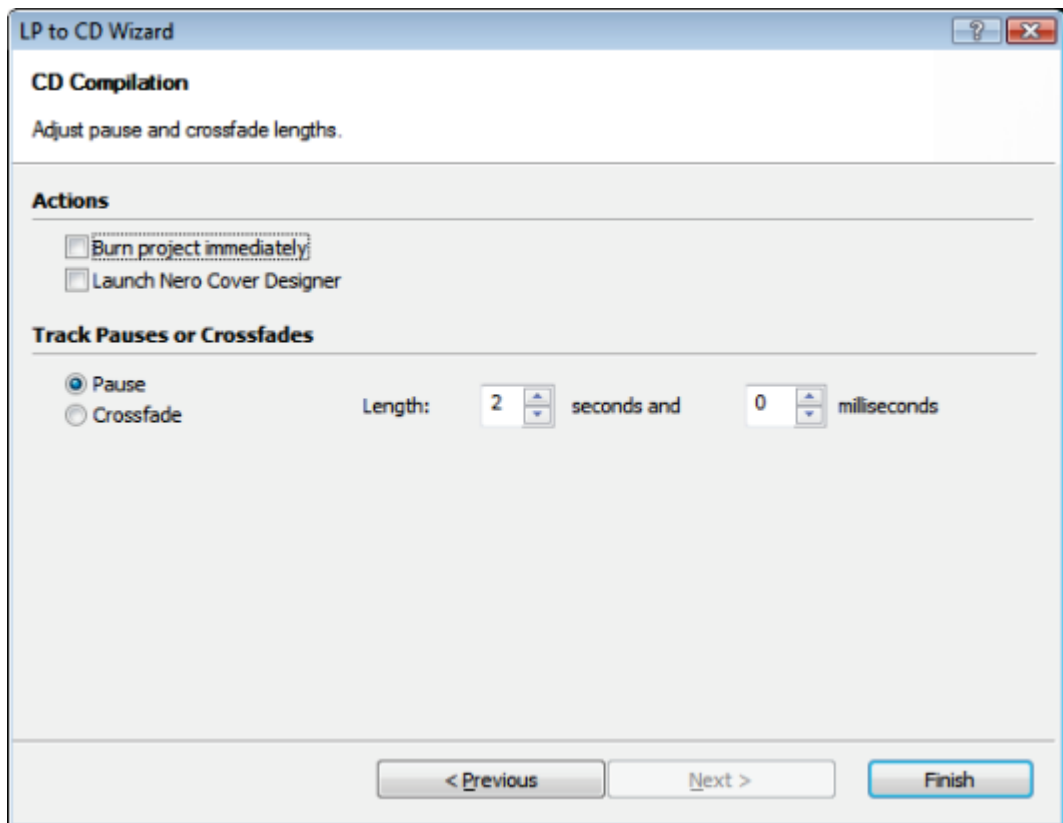
Noise Reduction screen.

15. Move the **Denoiser Level** slider until the desired threshold value for removing background noise such as hissing, crackling, and humming is reached.
16. Move the **Derumble Level** slider until the desired threshold value for removing low frequency signals that occur when recording LP records is reached.



The derumble filter can also erase bass frequencies that are part of the recording. Consequently do not set the threshold value of the slider too high.

17. Move the **Declicker Level** slider until the desired threshold value for removing clicks that occur when recording LP records is reached.
18. Move the **Decrackler Level** until the desired threshold value for removing background crackle that occurs when recording LP records is reached.
19. Click the **Preview** button.
 - The recording is played with noise suppression.
20. Click the **Stop** button to stop the preview.
21. Click the **Next** button.
 - The **CD Compilation** screen is displayed.




CD Compilation screen

22. If you want to burn the project immediately, select the **Burn project immediately** check box.
23. If you want to launch Nero CoverDesigner select the **Launch Nero CoverDesigner** check box.
24. If you want pauses between the individual tracks, select the **Pause** option button and enter the duration in seconds and milliseconds in the respective text boxes. If you want to have the tracks run into each other, select the **Crossfade** option button.
25. Click the **Finish** button.
 - You have recorded an LP record or cassette.

4.2 Importing an Audio CD

To import CD tracks from an Audio CD, proceed as follows:

1. Insert the Audio CD in a CD drive.
2. Click the **Audio > Import from Audio CD** entry in the menu bar.
 - The **Audio CD Import** window is opened.
3. Select the drive in which you have inserted the Audio CD from the **CD-ROM device** drop-down menu.

4. If you want to specify the target folder in which the imported audio files will be stored, click the  button and choose the folder in which you want to store the imported CD tracks in the directory tree.
5. Select all CD tracks that you want to import in the list box.



You can select multiple entries in a selection list by keeping the shift key held down while clicking them.

6. Click the **OK** button.
→ You have imported CD tracks from an Audio CD.

5 Editing Track

Nero SoundTrax allows you to edit tracks by inserting audio clips and applying various effects and enhancement options.

The following requirement must be fulfilled:

- You have inserted a track in the track display area and changed the track properties as desired, thereby preparing the track for further modification.



One track is inserted by default in the track display area. If this track has been deleted or if you want to insert additional tracks in the track display area, click the **Tracks > Insert Track** entry in the menu bar.

5.1 Inserting Clips

To insert a clip into the track, proceed as follows:

1. If you want to insert an audio clip or audio loop into the track:
 1. Open the context menu in the track display area and click the **Insert Audio File(s) / Insert Audio Loop(s)** entry.
 - A window is opened.
 2. Select the audio file that you want to insert.
 3. Click the **Open** button.
 - The audio file is inserted in the track as a peak file.
2. If you want to capture an audio file and immediately insert it in the track as an audio clip:
 1. Open the context menu in the track display area and click the **Record Audio Clip** entry.
 2. Make the desired settings and click the **Keep** button after recording is finished.
 - The audio clip is inserted in the track automatically.
3. If you want to insert a ScratchBox or SoundBox clip:
 1. Open the context menu in the track display area and click the **Insert ScratchBox Clip / Insert SoundBox Clip** entry.
 - The respective window is opened.
 2. Create the clip and close the window.
 - The clip is inserted in the track automatically.
 - You have inserted a clip into the track.

5.2 Adding Sections to a Track

With Nero SoundTrax you can add sections to your audio tracks by inserting CD track splits, CD indexes, and labels. These options are especially helpful if you want to create individual audio files from your project and burn them to a CD instead of saving or burning the project as one large audio file.

To add sections to a track, proceed as follows:

1. If you want to insert a CD track split:
 1. Define the position where you would like to insert a CD track split by clicking the respective location in the track display area.
 2. Right-click the track display area to open the context menu and click the **Insert CD Track Split** entry.
 - The CD track split is inserted in the track.
 3. If you want to edit the CD track split properties, right-click the CD track icon and click the **Properties** entry.
 - The **Track Split Properties** window is opened.
 4. Define the exact position of the track split and the pause length before this CD track as desired, and enter the **Title** and **Artist** information in the respective input fields.
 5. Click the **OK** button.
 - You have edited the CD track split properties.
2. If you want to insert a CD index:
 1. Define the position at which you would like to insert a CD index by clicking the respective location in the track display area.
 2. Right-click the track display area to open the context menu and click the **Insert CD Index** entry.
 - The CD index is inserted in the track.
 3. If you want to edit the CD index properties, right-click the CD index icon and click the **Properties** entry.
 - The **Index Properties** window is opened.
 4. Define the exact position of the CD index.
 5. Click the **OK** button.
 - You have edited the CD index properties.
3. If you want to insert a label:
 1. Define the position at which you would like to insert a label by clicking the respective location in the track display area.
 2. Right-click the track display area to open the context menu and click the **Insert Label** entry.
 - The **Label Properties** window is opened.
 3. Define the exact position of the label and enter a title in the **Title** input field.
 4. Click the **OK** button.
 - The label is inserted in the track.
 - You have added sections to the track.

5.3 Applying Crossfades

Nero SoundTrax allows you to create a crossfade between two audio files (i.e. to combine these audio files without interrupting their sound). Crossfades create a smooth transition between the audio files and are therefore a great method for creating audio mixes.

5.3.1 Creating Crossfade

To create a crossfade between two audio files, proceed as follows:

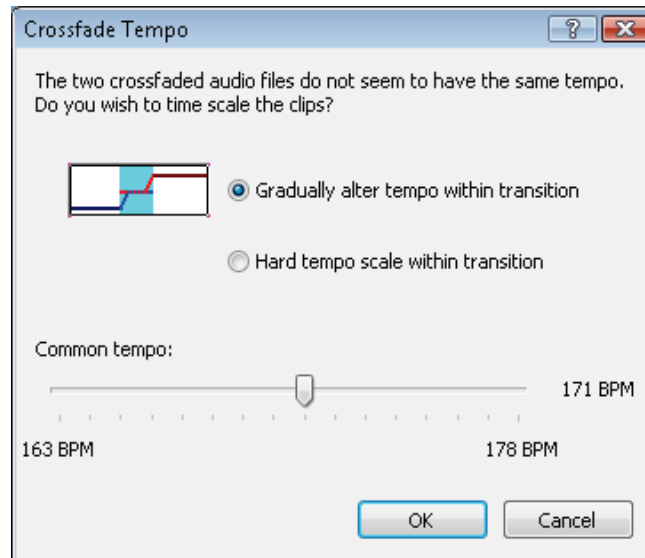
1. Right-click the track display area to open the context menu and click the **Insert Audio File(s)** entry.
 - A window is opened.
2. Select the audio file that you want to insert.
3. Click the **Open** button.
 - The audio file is inserted in the track as a peak file.
4. Insert a second audio file in the same track as described above.
5. Drag the second audio file over the first one.
 - A red X appears in the area in which the two audio files overlap.
 - You have created a crossfade between two audio files.

5.3.2 Editing Crossfade Properties

After creating a crossfade, you can edit the properties of the crossfade area (i.e. the area in which the two audio files overlap).

To edit the crossfade properties, proceed as follows:

1. Right-click the red X in the crossfade area.
 - A context menu is opened.
2. If you want to apply a certain crossfade method, click the desired crossfade method.
3. If you want to match the tempos of the two audio files for the crossfade area:
 1. Click the **Match Tempos** entry.
 - The **Crossfade Tempo** window is opened.



2. If you want to create a smooth transition between the two audio files, select the **Gradually alter tempo with transition** option button.
3. If you want to create a rather harsh transition between the two audio files, select the **Hard tempo scale within transition** option button.
4. If you want to manually define the tempo (in bpm) for the crossfade area, move the **Common tempo** slider to the desired position.
5. Click the **OK** button.
 - You have edited the crossfade properties.

5.4 Applying Effects and Enhancement Options






To apply effects and enhancement options, proceed as follows:



1. If you want to insert a volume curve or pan curve in the track:
 1. Click the **Tracks > Add Volume Curve / Add Pan Curve** entry in the menu bar.
 - The curve is inserted in the track.
 2. Continue to edit the curve.
2. If you want to insert a sound change in the track:
 1. Click the **Edit the effect chain** button in the tracks area on the left.
 - The **Effect Chain Editor** window is opened.
 2. Add the desired sound change to the effect chain.
3. If you want to edit the effect chain for the track:
 1. Right-click the track display area to open the context menu and click the **Edit Track Effect Chain** entry.
 - The **Effect Chain Editor - Track** window is opened.
 2. Edit the effect chain for the track.

4. If you want to add an assignable effect group curve to the track:
 1. Right-click the track display area to open the context menu and click the **Add Assignable Effect Curve** entry.
 - The **Add Effect Group Curve** window is opened.
 2. Select one of the effect group curves and click the **OK** button.
 - The effect group curve will be inserted in the track.
5. If you want to disable the track, right-click the track display area to open the context menu and click the **Deactivate Track** entry.
 - The track will be disabled. The peak file will be hidden.
 - You have edited the track.

5.5 Creating a Nero ScratchBox Clip

To create a Nero ScratchBox clip, proceed as follows:

1. Select an audio file in the file system in the lower left corner of the Nero ScratchBox.
2. Drag the file onto one of the turntables.
 - The name of the audio file is displayed in the display field above the turntable.
3. If you want to define a loop in the audio file:
 1. Start playback of the audio file.
 2. Click the  button at the desired starting point of the loop.
 3. Click the  button at the desired end point of the loop.
 4. Click the  button to play the defined loop.
4. If you want to briefly reduce or accelerate the playback speed, click the **Minus** or **Plus** button on the turntable.
5. If you want to continuously accelerate the playback speed, move the slider on the turntable up.
 - The speed increase is shown in the red field above the slider as a percentage value.
6. If you want to permanently slow down the playback speed, move the slider on the turntable down.
 - The reduction in speed is displayed as a percentage value in the red field above the controller.
7. If you desire a slow fade-in and fade-out at the beginning and end of the audio file playback, turn the slider on the turntable to the right.
8. If you want to completely filter highs, mid-range, or lows out of the audio file, push the  switch for the respective tone to the right.
 - The switch will be illuminated red.
9. If you want to automatically crossfade from one audio file to another, slide the **Automatic DJ**  slider on the mixing console to the right.
10. If you want to manually crossfade from one audio file to another, move the lower slider on the mixing console in the direction of the desired turntable.
11. If you want to change the volume of one of the playbacks, move the vertical slider on the respective side.
12. If you want to change the volume for both audio files, move the slider on the mixing console.
13. If you want to play a loop from the tools area, drag the loop icon onto the turntable.
14. If you want to use a sample scratch from the tools area, click the desired numbered button.
 - Scratches 1 - 3 will be used on the left turntable, scratches 4 - 6 will be used on the right turntable.

15. If you want to use a sample sound or effect, click the desired numbered button in the lower left or lower right of the tools area.
16. If you want to record a playback, click the  button and start playback of the audio file(s).
 - All actions that you execute during the recording will also be recorded.
17. If you want to stop the recording, click the  button.
18. If you want to postprocess the scratches in your recording:
 1. Click the **Nero ScratchEditor** button in the tools area.
 - The **Nero ScratchEditor** window is opened.
 2. Change your scratches by clicking the playback curve of the respective turntable and then moving the handles that appear due to scratching.
 3. Close the **Nero ScratchEditor** window.
 - The changes are accepted.
 - You have created a Nero ScratchBox clip.

5.6 Creating a Volume Curve

A volume curve allows you to vary the volume over the length of the track.

To create a volume curve, proceed as follows:

1. Select the track for which you want to change the volume.
2. Click the **Tracks > Add Volume Curve** entry in the menu bar.
 - The volume curve is displayed in the track. On the left border of the track a percentage scale from 0 to 100 is displayed for the volume.
3. Move the starting point of the curve, i.e. the square box at the left corner, to the desired initial volume.
4. Click the volume curve where you want a volume change and move the square box up or down.
5. Repeat the previous step until you have specified all desired points of the volume curve.
6. If you want to delete a specific curve point, right-click the curve point and select the **Remove Curve Point** entry in the displayed context menu.
7. If you want to define the settings for a curve point more precisely:
 1. Right-click the curve point and select the **Edit Curve Point** entry in the displayed context menu.
 - The **Edit Curve Point** window is opened.
 2. Enter the desired position of the curve point in the **Min.** and **Sec** input fields in the **Time Line Position** area.
 3. Enter the desired volume in decibels in the **Volume** text box in the **Value** area.
 4. Click the **OK** button.
 - You have created a volume curve and added it to the track.

5.7 Changing the Surround Sound Distribution

Nero SoundTrax allows you to allocate different output levels to the speakers during playback of a track. This changes the sound center of the room so that the sound "migrates". For this key points are created in the track so that the movement of sound can be re-used in subsequent playbacks.

To change the surround sound distribution, proceed as follows:



In general: The farther you move the dot away from a speaker the softer the sound in that speaker will be. The nearer you move the green dot to the speaker the louder the sound will be.

The sound from the right speaker becomes louder when the dot is moved to the right; the sound from the left speaker becomes louder when the dot is moved to the left.

If you place the dot in the corner above one of the speakers then only that particular speaker will provide sound; the other speaker will be completely muted. You can achieve the same effect by double-clicking on one of the speakers to turn it yellow.

1. Click the green dot in the **Surround Sound Distribution** field located in the track section, keep the mouse button pressed, and move the dot.
 - The dot movement is marked by key points in the track display area. These key points consist of a dotted line and a diamond at the top of the line.
2. If you want to move a key point in the track, click the diamond at the top of the key point and move it to the right or left.
3. If you want to delete a key point in the track, click the diamond at the top of the key point and press the **Delete** key on your keyboard.
 - You have changed the surround sound distribution of the track.

5.8 Creating a Pan Curve

A pan curve allows you to vary the volume in the individual channels over the length of the track. For example, for stereo you can initially make the left channel louder than the right channel, thereby simulating a movement.

To create a pan curve, proceed as follows:

1. Select the track for which you want to change the volume distribution.
2. Click the **Tracks > Add Pan Curve** entry in the menu bar.
 - The pan curves are displayed in the track. On the left border of the track a percentage scale from 0 to 100 is displayed for the volume. The starting point of the curve is at 0, which represents consistent volume allocation.
3. Move the starting point of the curve, i.e. the square box in the left corner, to the desired initial distribution.
4. Click the volume curve at the location for which you want to change the volume distribution and move the square box up or down.

5. Repeat the previous step until you have specified all desired points of the pan curve.
6. If you want to delete a specific curve point, right-click the curve point and select the **Remove Curve Point** entry in the displayed context menu.
7. If you want to define the settings for a curve point more precisely:
 1. Right-click the curve point and select the **Edit Curve Point** entry in the displayed context menu.
 - The **Edit Curve Point** window is opened.
 2. Enter the desired position of the curve point in the **Min.** and **Sec.** input fields In the **Time Line Position** area.
 3. Enter the desired pan in percent in the **Pan** text box in the **Value** area.
 4. Click the **OK** button.
 - You have created a pan curve and added it to the track.

5.9 Creating an Effect Chain

To create an effect chain, proceed as follows:

1. If you want to create an effect chain for all tracks, click the **Insert > Effect Into > Master Effect Chain** entry in the menu bar.
2. If you want to create an effect chain for a specific track, click the **Insert > Effect Into > Track Effect Chain** entry in the menu bar.
 - The **Effect Chain Editor** window is opened.
3. Click the **Add** button and choose the desired effect from the displayed menu.
 - Different control elements are displayed depending on the selected effect.
4. Define the other settings as desired.



The subsequent settings differ depending on the selected effect and are not described in further detail.

5. Repeat the preceding steps until you have added all desired effects.
6. Click the **Close** button.
7. If you want to delete the effect chain, right-click in a free area of the track, whose effect chain you want to delete, and select **Edit track effect chain** in the displayed context menu.
 - You have created an effect chain.

5.10 Creating or Using an Effect Chain Template

To create your own effect chain template or to use a predefined one, proceed as follows:

1. If you want to create an effect chain for all tracks, click the **Insert > Effect Into > Master Effect Chain** entry in the menu bar.
If you want to create an effect chain for a specific track, click the **Insert > Effect Into > Track Effect Chain** entry in the menu bar.

- The **Effect Chain Editor** window is opened.
- 2. Click the **Add** button and choose the desired effect from the displayed menu.
 - Different control elements are displayed depending on the selected effect.
- 3. If you want to use a predefined template, select the desired template in the drop-down menu in the lower left corner of the window.
- 4. If you want to create your own template:
 1. Define the other settings and the effect as desired.
 2. Enter a template name in the drop-down menu in the lower left corner of the window.
 3. Click the **+** button.
 - You have saved an effect template.
- 5. If you want to delete a template:
 1. Select the template in the drop-down menu in the lower left corner of the window.
 2. Click the **-** button.
 - You have deleted the template.
 - The settings of the selected template will be accepted when you close the **Effect Chain Editor** window.
 - You have created your own effect chain template or chosen a predefined one.

5.11 Creating an Effect Group

To create and edit an effect group, proceed as follows:

1. Click the **Insert > Effect Into > Assignable Effect Groups** entry in the menu bar.
 - The **Assignable Effect Groups** window is opened.
2. Click the **Add Group** button.
 - The new group is displayed in the table.
3. Select the newly created group.
4. Click the **Edit Chain** button.
 - The **Effect Chain Editor - Track** window is opened.
5. Click the **Add** button and choose the desired effect from the displayed menu.
 - Different control elements are displayed depending on the selected effect.
6. Define the other settings as desired.



The subsequent settings differ depending on the selected effect and are not described in further detail.

7. Repeat the preceding steps until you have added all desired effects.
8. Click the **Close** button.

9. If you want to delete an effect group, select the desired effect group in the table and click the **Remove** button.
 - You have edited an effect group.

5.12 Adding an Effect Group Curve to The Track

The following requirement has to be fulfilled:

- ▶ An effect group must already be created.

To add an effect group to a track, proceed as follows:

1. Select the track to which you want to assign the effect group curve.
2. Right-click the track display area to open the context menu and click the **Tracks > Add Assignable Effect Curve** entry in the menu bar.
 - The **Add Effect Group Curve** window is opened.
3. Select the desired effect group.
4. Click the **OK** button.
 - The effect group curve is displayed in the track. On the left border of the track a percentage scale from 0 to 100 is displayed for the volume.
5. Move the starting point of the curve, i.e. the square box at the left corner, to the desired initial distribution.
6. Click the effect group curve at the location for which you want to change the effect and move the square box up or down to the desired intensity.
7. Repeat the previous step until you have specified all desired points of the effect group curve.
8. If you want to delete a specific curve point, right-click the curve point and select the **Remove Curve Point** entry in the displayed context menu.
9. If you want to define the settings for a curve point more precisely:
 1. Right-click the curve point and select the **Edit Curve Point** entry in the context menu.
 - The **Edit Curve Point** window is opened.
 2. Enter the desired position of the curve point in the **Min.** and **Sec.** input fields in the **Time Line Position** area.
 3. Enter the desired volume in decibels in the **Volume** text box in the **Value** area.
 4. Click the **OK** button.
 - You have added an effect group curve to the track.

6 Exporting And Burning

6.1 Exporting a Project to an Audio File

To save a project as an audio file, proceed as follows:

1. Click the **File > Export to Audio File** entry in the menu bar.
→ The **Save As** window is opened.
2. Select the folder in which you want to save the audio file.
3. Enter the desired file name in the **File Name** input field and select the audio format in which the file will be saved.



The subsequent settings differ depending on the selected effect and are not described in further detail.

4. If you want to define additional settings for the audio format:
 1. Click the **Options** button.
→ A window is opened.
 2. Define the other settings as desired.
 3. Click the **OK** button.
5. Click the **Save** button.
→ You have saved the project as an audio file.

6.2 Burning a Project to CD


To burn an Audio CD, proceed as follows:

1. Click the **Tools > Burn to CD** entry in the menu bar.
→ The **Audio CD Recorder** window is opened.
2. Insert a writable CD in the disc burner.
3. Select the disc burner into which you have placed the writable CD in the **Device** drop-down menu.



You can also save the project as a disc image if you do not want to burn it to a CD immediately. In this case, select the **Image Recorder** entry instead of a disc burner in the **Device** drop-down menu. You can then burn this disc image later with Nero Burning ROM or Nero Express.

4. If you want to perform a simulation to verify whether the disc burner can burn the CD, select the **Simulate before recording** check box.
→ Prior to burning, the program verifies that all files selected for burning are available.
5. If you want to run a speed test prior to burning, select the **Test maximum speed before burning** check box.

- Prior to burning, the program verifies whether the disc burner is capable of burning the session with the selected writing speed.
- 6.** If you do not want to normalize the volume, select the **Do not normalize** option button in the **Volume Level Normalization** area.
If you want to normalize the volume of the individual CD tracks individually, select the **Normalize each track separately** option button
If you want to normalize the volume of the whole CD, select the **Normalize globally** option button.
- 7.** If you have selected a normalization method, move the **Normalization level** jog dial until the desired decibel value is reached.
- 8.** If you want to add CD text, enter the desired title and artist in the **Title and CD TEXT** area.
 -  With CD players that support CD text, the title of the CD, the name of the audio file as well as the name of the artist appear in the display.
- 9.** If you want to add the same artist information to all tracks:
 1. Click the **Select All** button.
 2. Click the **Properties** button.
 - The **CD Track Properties** window is opened.
 3. Enter the joint artists of the CD track in the respective input field.
 4. Click the **OK** button.
- 10.** If you want to add titles and artist to specific tracks:
 1. Select the desired track in the **CD Track List** area.
 2. Click the **Properties** button.
 - The **CD Track Properties** window is opened.
 3. Enter the title of the CD track in the respective input field.
 4. Enter the artist of the CD track in the respective input field.
 5. Click the **OK** button.
 6. Repeat these sub-steps for each track to which you want to add title and artist.
- 11.** Click the **OK** button.
- 12.** If you have selected the Image Recorder as destination, the **Save As** window is opened:
 1. Select the desired folder and enter the desired file name in the **File name** input field.
 2. Click the **Save** button.
 - The **Burn Progress** window is opened and burning is started. You can now follow the progress of burning on the progress bar.
- 13.** If you would like to save or print a log file for the burning process, click the **Save** or **Print** button.
If you do not want to save or print a log file for the burning process, click the **Discard** button.
 - You have burned an Audio CD.

7 Technical Information

7.1 System Requirements

Nero SoundTrax is installed along with its suite. Its system requirements are the same. You can find more detailed information on the system requirements under www.nero.com.

- 16-bit Windows compatible sound card and speakers or headphones
- Optional: CD recorder



Installation of the newest WHQL certified drivers is recommended. WHQL stands for Windows Hardware Quality Labs and means that the device driver certified by Microsoft is compatible with Microsoft Windows and the relevant hardware.

7.2 Formats Supported

7.2.1 Audio Formats and Codecs

- Advanced Audio Coding (AAC) - import only
- Audio Interchange File Format (AIFF, AIF)
- Dolby Digital (AC3) - import only
- MP3 / mp3PRO (MP3)
- Moving Picture Experts Group-1 Audio Layer 3 (MP3)
- Moving Picture Experts Group-4 (MP4)
- Nero AAC Codec, Nero Digital (MP4)
- OGG Vorbis (OGG, OGM)
- Resource Interchange File Format WAVE (WAV, WAVE)
- Windows Media Audio (WMA)
- Nero WaveEditor File (NWF)
- Nero SoundTrax Project File (NPF)

8 Glossary

Bit Depth

Bit depth indicates the precision with which an oscillation vibration will be captured. The greater the value, the more accurate is the acquisition and the better is the audio quality.

FIR Filter

A filter is a system that links an input signal with a transmission function and makes this changed signal available at its output. With a filter with finite pulse response (FIR filter) the output signal is made up of several partially buffered values of the input signal.

Frequency

The frequency denotes the oscillations per second of an electrical or magnetic field. With audio files this means that the frequency increases with rising pitch. The unit is Hertz (Hz). The highest magnitude of oscillation is called the amplitude.

IIR Filter

A filter is a system that links an input signal with a transmission function and makes this changed signal available at its output. A filter with infinite pulse response (IIR filter) uses the input values as well as buffered values of the output signal.

LFE channel

A Low Frequency Effect channel is used for transmitting low frequency sound via a special low frequency channel that is specially reduced in its bandwidth. The bandwidth is limited to the bases and thus to frequencies between 20 Hz and 100 Hz. The LFE channel is used in various multi-channel sound systems. Because of its limited bandwidth it is not counted as a full channel in the designation of multi-channel sound systems but as a suffix marked as "1"(e.g. 5.1).

Noise shaping

Noise shaping is a process in which the noise of a digital signal is more strongly concentrated in certain frequency ranges. The noise is thus displaced into frequency ranges that are irrelevant for further signal processing. These frequency ranges can subsequently be damped with the aid of various filters and in this way the noise is suppressed.

Sample Rate

The sample rate indicates the frequency with which a signal is sampled per interval of time. It is measured in sampling values per second. The higher the sample rate the more precise the measurement, and the better the audio quality.

9 Index

- Accent..... 33
- Add
 - Effect group curve57
- Ambience..... 30, 35
- Amplitude..... 29
- Assignable effect groups 26
- Assignable effects 22, 26
- Audio CD
 - Burn58
 - Importing.....45
- Audio file 7
 - Capturing40
 - Export 58
- Audio Format Settings 7, 17
 - Convertor20
 - Decoder18
 - Encoder19
- Audio input..... 17
- Audio output..... 17
- Audio settings 8
- Audio track..... 7

- Band Extrapolation..... 30
- Beat Editor 30, 33
- Beats per measure 10
- Beats per minute 10
- Bit depth..... 8, 12
- Burn
 - Audio CD58

- Camera Denoiser 30
- Capturing
 - Audio file40
 - Cassette41
 - LP41
 - Record41
 - Tape.....41
- Cassette
 - Capturing.....41
- CD index 48
- CD text..... 59
- CD track split..... 48

- Channels7, 54
- Chorus.....29
- Clip..... 7
 - Nero ScratchBox..... 52
- Components
 - General 31
- Configuration 7, 10, 16, 17, 23
 - Audio Format Settings 7, 17
 - Convertor 20
 - Decoder..... 18
 - Device settings 7, 16
 - Encoder 19
 - Preferences..... 7, 10
 - Project settings 7
- Conventions, manual 5
- Convertor20
- Convolution Reverb29
- Create
 - Effect chain 55
 - Effect chain template56
 - Effect group.....56
 - Nero ScratchBox clip52
 - Pan curve.....54
 - Volume curve.....53
- Curve point
 - Edit53, 55, 57
 - Remove53, 55, 57

- DC Offset Correction30
- Deactivate
 - Track 51
- Declicker30
- Declipper30
- Decoder..... 18
- Deesser28
- Dehum.....30
- Delay29
- Derumble filter44
- Device settings7, 16
 - Audio input 17
 - Audio output..... 17
- Digital monitoring.....41, 42
- DirectX plug-in..... 16
- DirectX Plug-ins.....28
- DirectX settings28
- Distortion29

Dynamic Processor	28	Importing	
Edit		Audio CD	45
Curve point	53, 55, 57	Insert	
Effect group	56	CD index	48
Key point	54	Label	48
Effect chain	26, 50, 56	ScratchBox clip	47
Effect chain template	28	SoundBox clip	47
Create	56	Karaoke Filter	28
Remove	56	Key point	
Effect chains	28, 30, 55	Edit	54
Create	55	Remove	54
Effects	28	Label	48
Enhancements	28	LFE channel	22
Plug-ins	28	LFE track	23
Remove	55	Loop	36, 38, 47, 52
Tools	28	Loudness	29
Effect group	56, 57	Low Fidelity	29
Create	56	Main window	22
Edit	56	Manual, conventions	5
Remove	57	Master	24
Effect group curve	28, 51, 57	Master track	24
Add	57	Master track settings	22
Effect groups	26	Menu bar	22, 23
Effects	26, 28, 29	Mixing console	35, 37
Encoder	19	Modulation	29
Enhancements	28, 30	Monophony	34
Equalizer	28	Multi-Tap Delay	29
Export		Musical direction	33
Audio file	58	Nero Scratch Editor	37, 38
File format	11	Nero ScratchBox	35, 47
Filter Toolbox	30	Clip	52
FIR filter	12	Nero ScratchBox clip	
Flanger	29	Create	52
Frequency	27, 33	Nero ScratchEditor	53
General components	31	Nero SoundBox	30, 47
General settings	31	Nero SoundTrax	5
Hardware Learn	38	Noise Gate	28
Help	23	Noise Reduction	30, 43
IIR filter	12	Noise shaping	12
Image Recorder	58		

- Noise shaping filter..... 12

- Online help..... 23
- Open project 21
- Options 7, 10, 16, 17, 23

- Pan curve..... 50, 54
 - Create..... 54
- Peak file..... 35
- Peak file folder 14
- Peak file view 35
- Percussion instruments 33
- Phaser 29
- Pitch..... 33
- Pitch Tuning..... 28
- Playback speed..... 52
- Plug-in 28
- Plug-ins
 - DirectX..... 28
 - VST..... 28
- Polyphony 34
- Preferences..... 7, 10
- Program
 - Starting the program 6
- Project 22, 27
 - Open..... 21
- Project settings..... 7, 25
- Project templates
 - Select..... 21
- Pseudo Reverse..... 29

- Re-analogue 29
- Record
 - Capturing..... 41
- Recording Settings..... 40
- Remove
 - Curve point 53, 55, 57
 - Effect chain..... 55
 - Effect chain template 56
 - Key point..... 54
- Reverb 29

- Sample rate..... 8, 29

- Sample sounds..... 38
- Save/Output Settings..... 12
- Scratch Editor..... 38
- ScratchBox..... 35, 47, 52
- ScratchEditor..... 37, 53
- Scratches 38, 52
- Scratching 35
- Select
 - Project templates 21
 - Templates 21
- Sequencer 30, 33
- Settings 7
 - General 31
- Sound allocation..... 54
- Sound center point..... 54
- SoundBox..... 30, 47
- Start 6
- Stereo 54
- Stereo Processor..... 28
- Stereo recording..... 40
- Storage space 14
- Stutter 29
- Surround projects 22
- Surround Reverb 29
- Surround sound 13, 24, 26, 31, 54
- Surround sound distribution 54
- System requirements..... 60
 - Other 60

- Templates
 - Select 21
- Tempo and meter 10
- Temporary folder 14
- Terminology..... 7
- Text II Speech 30, 34
- Time Correction..... 28
- Toolbar..... 22, 23, 25
- Tools 28, 35, 37
- Track 7
 - Deactivate 51
- Track display 22
- Track display area 27
- Track split..... 48

Tracks.....	22, 26
Transpose.....	28
True surround.....	13
Turntables.....	35, 52
User templates.....	21
Virtual surround.....	13
Voice Modification.....	29
Volume curve.....	50, 53
Create.....	53
VST plug-in.....	15
VST settings.....	28
VST-Plug-ins.....	28
Wah-Wah.....	29
Wizards.....	21, 23, 41

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