nero Multimedia Suite 10 **Manual** Nero Express

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1 Start Successfully

1.1 About the Manual

This manual is intended for all users who want to learn how to use Nero Express. 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:

Å	Indicates warnings, preconditions or instructions that have to be precisely followed.
Ω	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.
\rightarrow	Indicates an intermediate result.
→	Indicates a result.
ОК	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 Nero Express

Nero Express provides all the performance and efficiency of Nero Burning ROM with a simplified user interface. Whether you are a beginner or an expert, Nero Express guides you quickly and easily through your desired burning tasks. The default settings are selected to automatically produce the best possible results. Using the program is remarkably easy: simply select the project to be burned, add the files, and start burning.

Using Nero Express you can save audio files from an Audio CD to the hard drive. In the process, the files are encoded, i.e. converted into a format that the computer can read. The Audio CD can be automatically identified with Gracenote. So called metadata such as title, genre, and track title are accessed by the Gracenote Media Database and associated to the tracks. That way you have audio files that are accurately and fully named after the encoding process.



Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information, please visit www.gracenote.com.



Nero Express

1.3 Versions of Nero Express

Nero Express is available in versions with different features. In addition to the full Nero Express version, there are other versions with restricted features.

Nero Express Essentials does not offer the following features:

- Creating labels with LightScribe (not included in the standard functions)
- Creating labels with Labelflash (not included in the standard functions)
- Burning SecurDisc discs (not included in the standard functions)
- Simultaneous burning with multiple burners
- Cross fade with previous track
- Music title recognition with Gracenote
- Support of Album art with Gracenote



Gracenote Plug-in

You will need the Gracenote Plug-in to identify single audio files and to display Album art.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.

In addition, the encoding and decoding formats in Nero Express Essentials are restricted. The mp3PRO Plug-in is included as a trial version.



mp3PRO Plug-in

You will need the mp3PRO Plug-in for unlimited MP3 and mp3PRO encoding/decoding.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.

1.4 Working with the Application

Basically, the user interface of Nero Express consists of the selection of a compilation type in the start screen. A compilation comprises the content of the disc. You then complete the task by navigating through the different steps where a separate window is displayed for each individual step. This generally requires four steps:

Choose compilation type

Select what you would like to do by moving the cursor over the menu item and clicking one of the tasks displayed. This manual contains a chapter for each task that describes all of the steps required for its completion.

Completing a task

Depending on the task you will have to go through various steps until you reach the end. Each individual step consists of a new screen.



Nero Express

Burning a compilation

Burning marks the end of the procedure. To burn, set the burn parameters and click the **Burn** button. Depending on the type of the task you are working on and the recorder connected to the system, a number of different entries are available for selection.

Options after burning

After burning is complete, you can decide what to do next: select the option to continue working with Nero Express or exit the program.



Nero Express

2 Starting the Program

To start Nero Express 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

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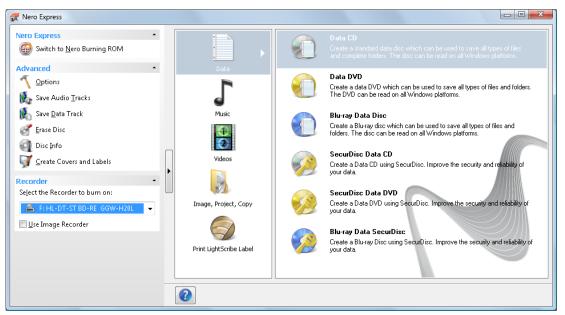
- **3.** Select the Nero Express entry in the selection list.
 - → The Nero Express window is opened.
 - → You have started Nero Express via Nero StartSmart.



3 Start Screen

The main screen in Nero Express is the starting point for all actions. Click here on the relevant menu icons to go to the desired screen where you can compile and work on your project. The selection is categorized into two areas: several formats or options are available for the single compilation methods.

Click the button in the left margin of the window to display an extended area with additional options and features.



Start Screen

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The following compilation methods are available:

Data	Allows you to compile and burn all types of files and folders.
Music	Allows you to compile and burn audio files as Audio CD for example.
Videos	Allows you to compile and burn video files as DVD-Video for example.
Image, Project, Copy	Allows you to copy a source disc and to load an image file or a saved project.
Print LightScribe Label	Displays the Disc Label screen. This is where you can create or load a label in order to print on the label side of special CDs/DVDs in the recorder. A LightScribe recorder must be selected to enable the option.





The actual entries that are available and the actual disc types (e.g. **DVD**) to which can be written depend on the selected recorder.



You can find more information on Blu-ray support at www.nero.com/link.php?topic_id=416.

See also

- Loading a Disc Image or Saved Project → 41
- LightScribe → 42
- Data Disc → 14
- Music → 20
- \blacksquare Video \rightarrow 36

3.1 Extended Area (Start Screen)

You can access the additional options and features in the extended area of the start screen by clicking on the button in the left margin of the window. The extended area is available in all Nero Express screens.

The following menu icons are available:

Switch to Nero Burning ROM	Closes Nero Express and opens the start screen of Nero Burning ROM. Nero Burning ROM is able to open Nero Express compilation files and Nero Express is able to open Nero Burning ROM compilation files. This option is only available in the extended area of the start screen. If you decide to create a project with Nero Express, the option Saves the active project is displayed in all of the other windows at this point.
Saves the active project	Opens the Save As window to save your compilation. The file links and settings to be burned are saved.
Options	Opens the Options window to customize Nero Express to suit your requirements.
Save Audio Tracks	Opens the Copy Audio CDs to Hard Drive to copy audio files from CD to the hard drive.
Save Data Track	Opens the Select Track window in which you can save the track of a data disc as an image file.
Erase Disc	Opens the Erase Rewritable Disc window to erase data from a rewritable disc.



Start Screen

Disc Info	Opens the Disc Info window to display information about the inserted disc. The total capacity and available capacity are displayed, in addition to the tracks and sessions.
Create Covers and Labels	Opens Nero CoverDesigner. Nero CoverDesigner is used to create and print labels and booklets for burned discs. Please see the separate Nero CoverDesigner user manual for full instructions on how to make professional looking covers and labels.
SecurDisc Settings	Defines the settings for burning a SecurDisc disc.
Burn Label	Opens the Burn Label window, in which you can create or load a label in order to print a label and/or print directly on the data side of special discs in the recorder.
	Available with a Labelflash recorder only. The recorder must be selected to enable the option.
Recorder	Defines the recorder that you want to use for burning and/or the Nero Image Recorder.

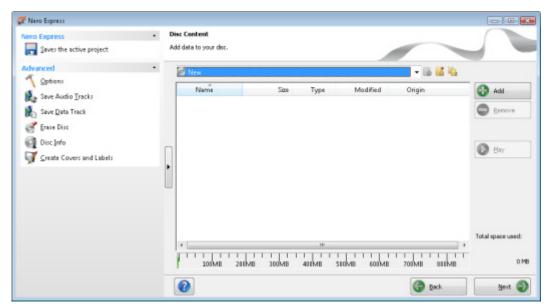
See also

- \blacksquare Configuration Options \rightarrow 65
- \blacksquare Copy Audio CDs to Hard Drive \rightarrow 31
- Erase Rewritable Disc Window → 62



4 Compilation Screen

You can access the Nero Express compilation screens by selecting the compilation type you want in the start screen. You can add data to your projects in the compilation screens and customize the directory structure on the disc to suit your requirements. The capacity bar near the bottom of the window indicates how much space is being used by the data on the disc. Essentially, all compilation screens have the same structure.



Compilation screen

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The following setting options are available in the compilation screen:

<u> </u>	
Button Add	Opens the Add files and folders window.
Button Delete	Removes the selected file.
Button Playback	Plays a selected audio or video file.
Button Back	Returns to the start screen.
Button Next	Switches to the Final Burn Settings screen.
Button Properties	Opens the Audio Track Properties window for Audio CDs. Available for Audio CDs only.



Check box Normalize all audio files	Enables a filter that brings the volume of the audio files to be burned into line with one another. This is recommended particularly if the files originate from different sources. Available for Audio CDs only.
Check box No pause between tracks	Establishes that the audio files merge into one another without a pause. If the check box is cleared, a pause of two seconds is inserted between the files. We strongly recommend using the disc-at-once burn mode. Otherwise the zero pause length may not be supported by all recorders and/or a very short clicking noise may be heard between tracks. Available for Audio CDs only.
Selection list DVD9 (8152MB) / DVD5 (4483MB)	Allows you to expand or shrink the capacity bar according to the type of DVD you are going to burn. Choose the DVD9 (8152 MB) option for a double layer DVD (DVD DL) and DVD5 (4483 MB) for a single layer DVD. Available for all DVD compilations.
Selection list BD DL (47732MB) / BD (23866MB)	Allows you to expand or shrink the capacity bar according to the type of Blu-ray Disc you are going to burn. Choose the BD DL (47732MB) option for a double layer Blu-ray Disc (BD DL) and BD (23866MB) for a single layer Blu-ray Disc. Available for all Blu-ray Disc compilations except BD-Video.



You can find more information on Blu-ray support at www.nero.com/link.php?topic_id=416.

See also

☐ Compilation Settings → 66



5 Data Disc

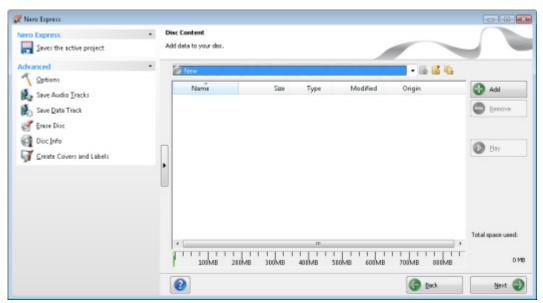
5.1 Compiling Data Disc

With Nero Express you can compile and burn all types of files and folders. If a Blu-ray recorder is installed on your computer you can burn data CDs, data DVDs and data Blu-ray Discs. If you have a CD recorder you can only burn data CDs. The procedure for all data compilation methods is identical.

A data disc is particularly useful for storing files on a disc and for burning backups.

To create a data disc, proceed as follows:

- 1. Click the **Data** menu icon in the Nero Express start screen.
 - → The data disc options are displayed.
- 2. Click the option you require: Data CD, Data DVD, or Data Blu-ray Disc.
 - → The **Disc Content** compilation screen for data discs is displayed.



Disc Content compilation screen

- 3. Click the Add button.
 - → The Add files and folders window is opened.
- **4.** Select the files that you want to add to the compilation and click the **Add** button.
- 5. Repeat the previous step for all files that you want to add.
- 6. Click the Close button.
 - → The files are added to the compilation and displayed in the compilation screen.
- 7. Click the **Next** button.
 - → You have successfully compiled a data disc and can now burn this compilation.



5.2 Compiling SecurDisc disc

SecurDisc is a technology developed by Nero and HLDS with which you can create discs with special protection properties. SecurDisc refers to both a software technology and a special hardware technology.

Discs that are created with Nero Express and the SecurDisc compilation type include data integrity and reconstructability. Additional SecurDisc features include the possibility to protect the data on your SecurDisc disc against unauthorized access using a password, to digitally sign the disc, and to configure the data redundancy. In combination with a SecurDisc supported drive (e.g. from HLDS/LG) PDF files can receive additional copy protection when burned to a DVD.

To be able to view or access the content of a SecurDisc disc you will need a special application named SecurDisc Viewer, which can be downloaded free of charge at www.securdisc.net. The SecurDisc Viewer is also burned automatically to the SecurDisc disc. Discs can also be read from any drive with InCD or InCD Reader, both available at www.nero.com.



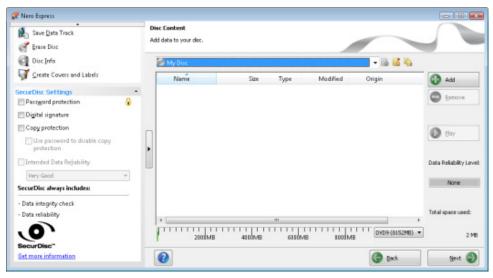
More information on SecurDisc technology can be found at www.securdisc.net.



This function is only available in the full version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.

To compile a SecurDisc disc, proceed as follows:

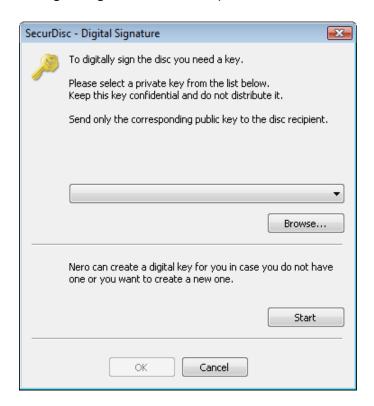
- 1. Click the **Data** menu icon in the Nero Express start screen.
 - → The data disc options are displayed.
- Click the SecurDisc option you require.
 - The Disc Content compilation screen for SecurDisc discs is displayed.



SecurDisc DVD compilation



- 3. Click the Add button.
 - → The **Add files and folders** window is opened.
- **4.** Select the files that you want to add to the compilation and click the **Add** button.
- 5. Repeat the previous step for all files that you want to add.
- 6. Click the Close button.
 - → The files are added to the compilation and displayed in the compilation screen.
- **7.** If you want to enable the password protection for all files:
 - Select the Password protection check box in the extended area of the compilation screen.
 - → A lock symbol shows that all data is protected.
- 8. If you want to sign the disc with a digital signature:
 - 1. Select the **Digital signature** check box in the extended area of the compilation screen.
 - → The SecurDisc Digital Signature window is opened.



- 2. If you have already created a digital key, click the **Browse** button and select the key.
- 3. If you want to create a digital key, click the Start button.
 - → The SecurDisc Create Digital Key window is opened.
- 4. Read the instructions and click the Next button.
 - → The SecurDisc Key Creation Process window is opened.



- 5. Move your mouse at random until the creation process is complete.
 - → You can monitor the status of the creation process using the progress bar. The **Next** button is enabled as soon as the process is complete.
- 6. Click the Next button.
 - → The SecurDisc Key Creation Completed window is opened.
- 7. Enter a file name for the key you have created and click the **Finish** button.
 - → The SecurDisc Digital Signature window is opened again and the selected key appears in the drop-down menu.
- 8. Click the OK button.
 - → The corresponding window is opened to inform you that the disc is being digitally signed with the selected key.
- 9. Click the OK button.



You can pass on the relevant public key to recipients to enable them to verify the signature.



SecurDisc capable drive and DVD to copy-protect PDF

With a SecurDisc supported drive (e.g. from HLDS/LG) you can copy-protect PDF files when you are compiling a SecurDisc DVD. Make sure you have selected the SecurDisc drive in the recorder drop-down menu.

To copy-protect all PDF files on the SecurDisc DVD, select the **Copy protection** check box. For permitting duplication of the data after entering a password, select the **Use password to disable copy protection** check box and enter the desired password in the window that is opened.

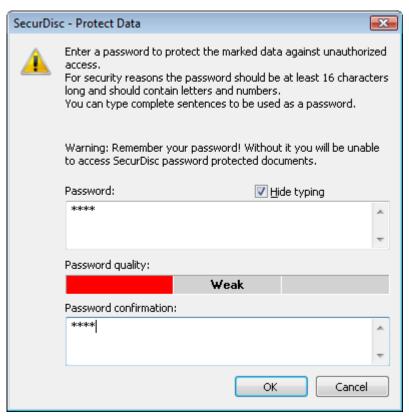
- **9.** If you want to enhance the burning speed by limiting the data redundancy or to configure the data redundancy:
 - 1. Select the Intended Data Reliability check box in the extended area of the screen...
 - → The drop-down menu is enabled.
 - 2. Select the desired reliability level.



If the **Intended Data Reliability** check box is cleared, the disc will be filled completely with copies of the chosen data and checksums. A display panel in the compilation screen indicates the current redundancy level.

- 10. Click the Next button.
 - → If you enabled the Password protection feature, the SecurDisc Protect Data window is opened.





SecurDisc - Protect Data window

11. Enter the desired password in the **Password** input area and then click the **OK** button.



When appropriate, a wizard offers suggestions in an additional **Tips** dialog box when entering and selecting the password. The wizard estimates the security level, i.e. the quality of the password, during entry.

→ You have compiled a SecurDisc disc with settings according to your requirements and can now burn the disc.

5.3 Saving Data Track

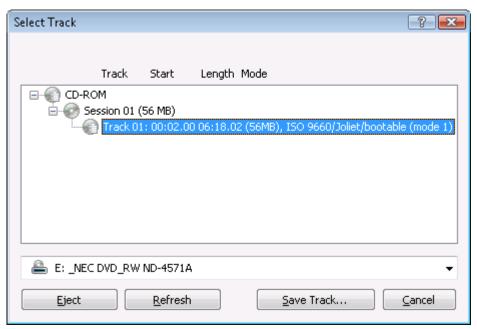
With Nero Express you can save a data disc as an image file. The image file can later be burned to a recordable disc. The result is a copy of the original data disc.

To save the data disc as an image file, proceed as follows:

- 1. Insert the data disc in a drive.
- 2. Click the Save Data Tracks button in the extended area of the start screen.
 - → The Select Track window is opened. The tracklist shows you the sessions and data tracks that are found on the disc. Due to the technical reasons, only the first data track of the first session can be saved.



Data Disc



Select Track

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- 3. Select the first data track.
- 4. Click the Save Track button.
 - → The **Save As** window is opened.
- 5. Select a file name and a storage location.
- **6** Select the desired output format (ISO or NRG) for the image file in the **Save As** drop-down menu.
- 7. Click the Start button.
 - The **Progress** window is opened and displays the progress made while saving. When the save process is complete, the window is closed automatically.
 - → You have successfully created an image file starting from a data disc. Now you can burn the image file to a disc.



6 Music

6.1 Compiling Audio CDs

0

Some of the functions mentioned here are restricted or not available in the Essentials version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.

With Nero Express you can create an Audio CD that contains music files. It can be played in all standard CD players. To compile an Audio CD, source files with different audio formats are automatically converted into Audio CD format before being burned.



Some CD players cannot play CD-RWs. Use CD-R discs to burn Audio CDs.



The encoding and decoding formats in the Essentials version are limited. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.



mp3PRO Plug-in

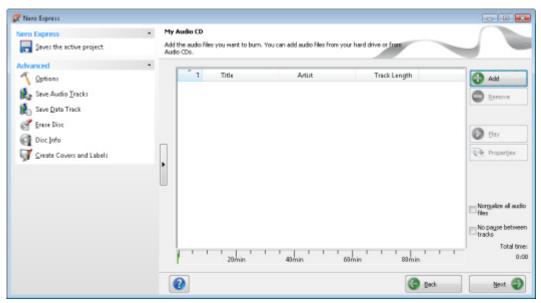
You will need the mp3PRO Plug-in for unlimited MP3 and mp3PRO encoding/decoding.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.

To create an Audio CD, proceed as follows:

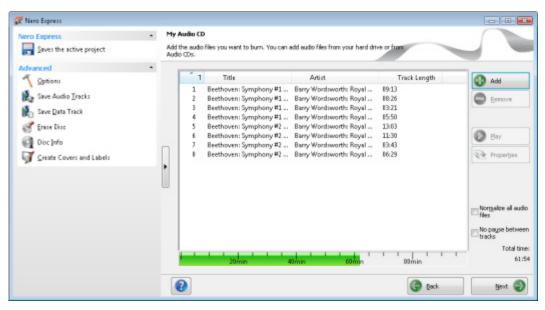
- 1. Click the **Music** menu icon in the Nero Express start screen.
 - → The compilation methods for music are displayed.
- 2. Click the Audio CD button.
 - → The My Audio CD compilation screen for Audio CDs is displayed.





My Audio CD compilation screen

- 3. Click the Add button.
 - → The Add files and folders window is opened.
- 4. Select the audio files that you want to add to the compilation and click the Add button.
- 5. Repeat the previous step for all audio files that you want to add.
- 6. Click the Close button.
 - → The audio files are added to the compilation and displayed in the compilation screen.



7. Customize the properties of the audio files to suit your requirements.



8. Click the **Next** button.

→ You have successfully compiled an Audio CD and can now burn this compilation.

See also

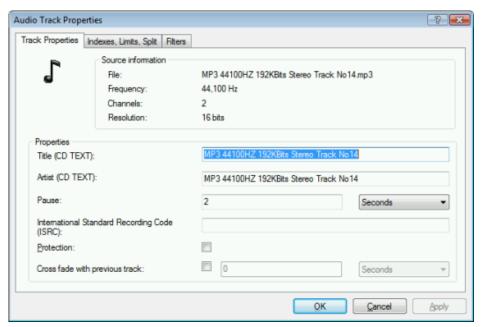
- ☐ Compilation Screen → 12
- Copy Audio CDs to Hard Drive → 31

6.1.1 Customizing Properties of The Audio File

You can display and/or make changes to the audio file properties on the **Track Properties**, **Indexes**, **Limits**, **Splits** and **Filters** tabs of the **Audio Track Properties** window. To open the window, select an audio file in the compilation screen **My Audio CD** for Audio CDs and click the **Properties** button.

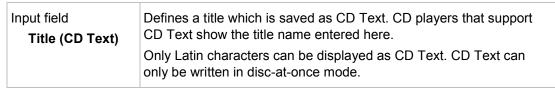
6.1.1.1 Track Properties Tab

On the **Track Properties** tab you will find basic information on the selected file in the **Source information** area. To open the window, mark an audio file in the compilation screen for Audio CDs and click the **Edit** > **Properties** menu.



Track properties

The following input areas are available in the **Properties** area:

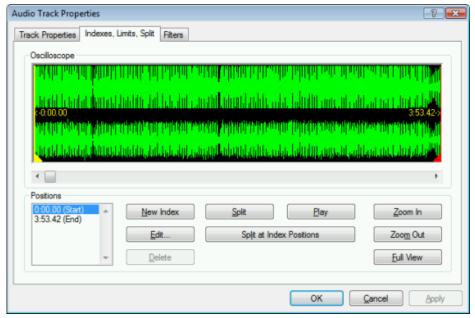




Input field Artist (CD Text)	Defines the artist which is saved as CD Text. CD players that support CD Text show the artist's name entered here. Only Latin characters can be displayed as CD Text. CD Text can only be written in disc-at-once mode.
Input field Pause	Defines the length of the pause in seconds or <u>frames</u> between the selected audio file and the next one.
Input field International Standard Recording Code (ISRC)	Identifies the CD title using a 12-character digital code. The ISRC is entered in the subcode and included silently. If you do not know the ISRC, you should leave this input field blank.
Check box Protection	Sets the copy protection bit for the corresponding track on the Audio CD. As most CD recording applications simply ignore this bit, copy protection cannot be ensured. A warning message will be opened in Nero Express while copying an Audio CD with copy protected tracks.
Check box Cross fade with previous track	Defines a crossfade between this and the previous audio file. You can specify the length of the crossfade in seconds or in sectors.

6.1.1.2 Indexes, Limits, Split Tab

On the **Indexes**, **Limits**, **Split** tab you can set and delete indexes and split audio files to create two or more shorter ones. The tab consists of the **Oscilloscope** and **Positions** areas.



Indexes, Limits, Split Tab

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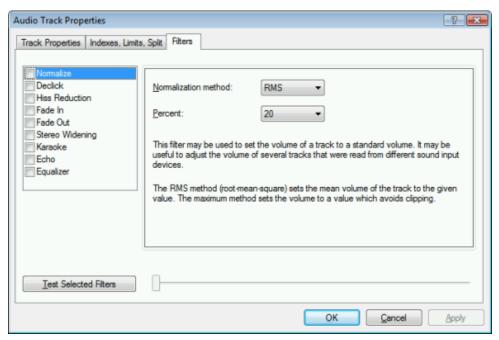
Audio files are displayed graphically in the **Oscilloscope** area. The following configuration options are available in the **Positions** area:

•	
Selection lists Start/End	Shows the positions for the beginning and end of the audio file on the CD.
Button New Index	Sets a new index position at the selected position. For the CD player this is the position from which a new song starts, and the player can also jump to it directly. However, not all CD players support this feature.
Button	Opens the Set Track End dialog box.
Edit	You can enter the exact position of a split.
Button Delete	Deletes a selected index.
Button Split	Splits the audio file at the marked position.
Button	Plays the audio file from the marked position.
Play	During playback, the Stop playing button is displayed.
Button	Stops playback of the audio file.
Stop playing	If playback is stopped, the Play button is displayed again.
Button Split at Index Positions	Splits the audio file at the set index positions.
Button Zoom In	Enlarges the graphical representation of the audio file.
Button Zoom Out	Reduces the graphical representation of the audio file.
Button Full View	Displays a graphical representation of the entire audio file.

6.1.1.3 Filters Tab

The **Filters** tab includes filters that improve or change the quality of the music. The so-called non-destructive procedure is used for processing, i.e. the actual recording is not changed, but flags are simply set that can be canceled at any time. No additional audio data is created. The audio files on hard drive are not modified during this procedure.





Audio Track Properties window, Filters tab

The following configuration options are available in the **Audio Track Properties** window:

Check box Normalize	Sets the volume of an audio file to a preset value. This filter can be useful to bring the volume of files originating from different sources into line with one another.
Check box Declick	Removes clicking and scratching noises, such as those on old LPs for example.
Check box Hiss Reduction	Reduces or removes the hiss on an audio file. All frequencies below a certain threshold (hiss level) are removed.
Check box Fade In	Fades in the volume of an audio file from zero to full volume. This filter can be useful for shortening files.
Check box Fade Out	Fades out the volume of an audio file from full volume to silence. This filter can be useful for shortening files.
Check box Stereo Widening	Increases/reduces the stereo effect of an audio file. This filter only works if the original file was recorded in stereo.
Check box Karaoke	Fades out the vocals on an audio file. This is done by fading out the parts of a song that are the same in both stereo channels.
Check box Echo	Adds an echo to the audio file.



Nero Express

Check box Equalizer	Opens an equalizer so you can change the volume, bass, and pitch in different frequency ranges.
Button Test Selected Filters	Plays the audio file and applies the activated filters. During play- back, the configuration options for the filters can be changed, al- lowing the effect to be controlled.

6.2 Compiling Jukebox Disc

Nero Express can be used to compile discs with audio formats you require (e.g. Nero Digital, MP3 or WMA). In contrast to Audio CDs that can only be burned on CDs, you can burn these compilations of different audio formats on other disc types – provided a corresponding recorder is installed on your computer. The procedure for compilation methods is identical. You can opt for a single format or a mix of audio formats of your choice. In contrast to data disc, a jukebox disc can display metadata (title, artist, genre, ...) about the audio file.



Nero Express does not convert the audio files when creating a jukebox disc. In other words, MP3 files are burned as MP3 files for example. Most CD players cannot play such discs.

There is no difference between creating a jukebox disc and creating a data disc. Please be sure to select the corresponding entry in the start screen.



From a technical point of view, a compilation of special audio formats is a data disc. You can also select **Data** > **Data CD/DVD** in the start screen to create and burn your project.

See also

- Compilation Screen → 12
- ☐ Compiling Data Disc → 14

6.3 Automatic Music Recognition

With Gracenote MusicID Nero Express can identify music files. So called metadata such as artist, title, and genre are accessed from the Gracenote Media Database and displayed in Nero Express. The identified metadata is written to the music file and is then available.

Identification is possible for single audio files as well as complete original Audio CDs.

If the metadata of the Audio CD is not yet included in the database then you can enter it and make it available. The metadata is sent to Gracenote and added into the database.

With Gracenote you can have audio files identified out of any sort of audio compilation. This is particularly useful when audio files are not named or are only partially named. The metadata that is made available by Gracenote is used for the compilation and is written into the audio files. In this way your music collection is correctly tagged with all information.



During the following actions, original Audio CDs can be automatically identified in Nero Express with Gracenote MusicID.

- Copying Audio CD
- Saving Tracks from the Audio CD to Hard Drive



Gracenote Plug-in

You will need the Gracenote Plug-in to identify single audio files and to display Album art.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.



Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information, please visit www.gracenote.com.

6.3.1 Identifying Audio Files

You can have the added audio files in the music compilations identified with Gracenote and access metadata such as artist and title from the Gracenote Media Database.



Some of the functions mentioned here are restricted or not available in the Essentials version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.



Gracenote Plug-in

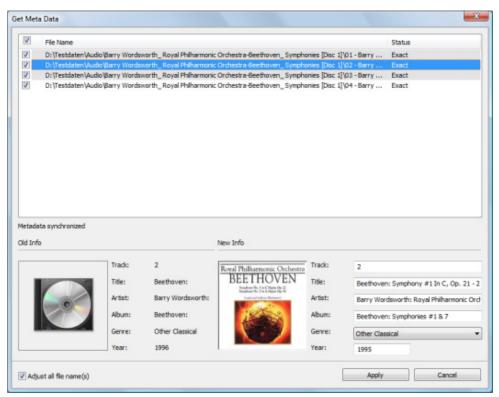
You will need the Gracenote Plug-in to identify single audio files and to display Album art.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.

To do this, proceed as follows:

- **1.** Select the type of compilation to burn a music CD.
 - → The compilation screen is displayed.
- 2. Add audio files from the hard drive to the music compilation.
- 3. Select one or more audio files in the compilation.
- 4. Right-click to open the context menu.
- 5. Select the **Get Meta Data** entry.
 - The audio files are analyzed and the required information is sent to Gracenote. The Edit Meta Data window is opened. The metadata received by Gracenote is displayed in the New Info area.





Edit Meta Data window

- 6. If necessary, edit the metadata, e.g. track number, title, artist, album title, year, and genre.
- **7.** Click the **Apply** button.
 - → The Edit Meta Data window is closed.
 - → The metadata is written into the audio file and accordingly shown in Nero Express. If the Adjust all file name(s) check box is selected, the file on hard disk is renamed accordingly (if technically possible).

6.4 Copy Audio CDs to Hard Drive

With Nero Express you can save audio files from an Audio CD to the hard drive. In the process, the files are encoded, i.e. converted into a format that the computer can read. The audio file is usually compressed.

The Audio CD can be automatically identified with Gracenote MusicID. So called metadata such as title, genre, and track title are accessed by the Gracenote Media Database and associated to the tracks. If available, Album art is also displayed and associated to the tracks. That way you have audio files that are accurately and fully named after the encoding process.



Music recognition technology and related data are provided by Gracenote®. Gracenote is the industry standard in music recognition technology and related content delivery. For more information, please visit www.gracenote.com.





Audio files from copy-protected Audio CDs cannot be saved.



The encoding and decoding formats in the Essentials version are limited. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.



mp3PRO Plug-in

You will need the mp3PRO Plug-in for unlimited MP3 and mp3PRO encoding/decoding.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.

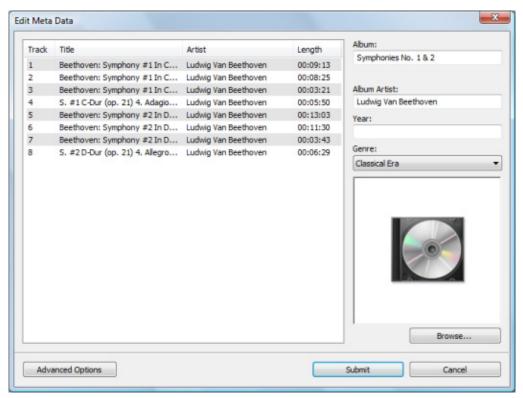
To save audio files, proceed as follows:

- 1. Click the **Save Audio Tracks** button in the extended area of the screen.
 - → The Save Audio Tracks to Hard Drive window is opened.
- 2. Insert your Audio CD into a drive.
 - The disc is being analyzed and the required information is sent to Gracenote. If an exact matching entry is found in the Gracenote Media Database then that metadata will be used and displayed.
 - If several entries are found or the found entry is ambiguous, then the **Matches** window is opened and the metadata records in question are displayed.
- 3. Select the metadata record that matches your Audio CD.
- 4. Click the **Send New Data** button if none of the metadata records match your Audio CD.
- **5.** The **Edit MetaData** window is opened.



The **Edit Meta Data** window also opens if no matching entry is found in the database but you want to enter the metadata and make it available.

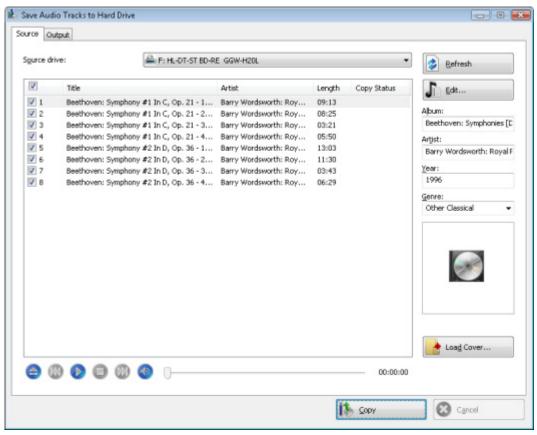




Edit Metadata

- 6. Edit the audio track metadata (Title and Artist) by clicking in the track list.
- 7. Edit the Audio CD metadata (Album Title, Artist, Year and Genre as well as Album Art) on the right side.
- 8. Click the Advanced Options button if you want to add additional information.
 - → The Gracenote MusicID Information window, which originates from Gracenote, is opened. After entering the additional information, you have to close this window so that the Edit MetaData window is displayed again.
- **9.** Click the **Submit Data** button.
 - If you have changed the Audio CD's metadata or filled them in for the first time then the changes are sent to Gracenote and entered into the Gracenote Media Database.
 - The Edit MetaData window is closed and the information is passed on to the Save Audio Tracks to Hard Drive window.





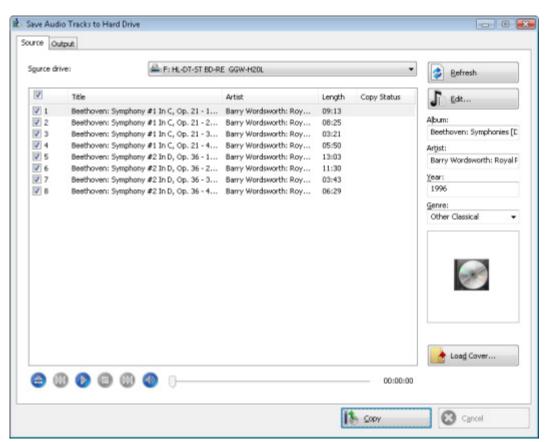
Save Audio Tracks to Hard Drive

- **10.** Select the tracks that you want to save on the hard drive.
- 11. Click the Output tab.
 - → The **Output** tab is opened.
- **12.** In the **File Format** drop-down menu, select the target file's audio format.
- 13. Choose a method for creating the file name in the Mode for Creating File Names drop-down menu.
- **14.** Define other settings according to your preferences.
- **15.** Click the **Copy** button.
 - Conversion starts. A folder with the album name is created in the desired folder. The audio files are saved in this folder and named according to the method you chose. Metadata that is identified with Gracenote is written into the audio file. The **Progress** window indicates the saving progress. When the save process is complete, this window is closed automatically.
- 16. Click the Close button.
 - The Save Audio Tracks to Hard Drive window is closed. You have saved audio files.



6.4.1 Copy Audio CDs to Hard Drive

Define the settings for audio files to be saved on the hard drive in the **Save Audio Tracks to Hard Drive** window. Open the window in the extended area of the start screen by clicking **Save Tracks**.



Copy Audio CDs to Hard Drive - Source

The following setting options are available:

Tab Source	Specifies settings for the source of the audio data.
Tab Output	Sets output files configuration options.
Button Copy	Starts the copy or save process.

See also

 \blacksquare Compiling Audio CDs \rightarrow 20



6.4.1.1 Source Tab

The **Source** tab displays the audio files on the Audio CD. The functions of the control buttons correspond to the familiar control buttons on CD players.

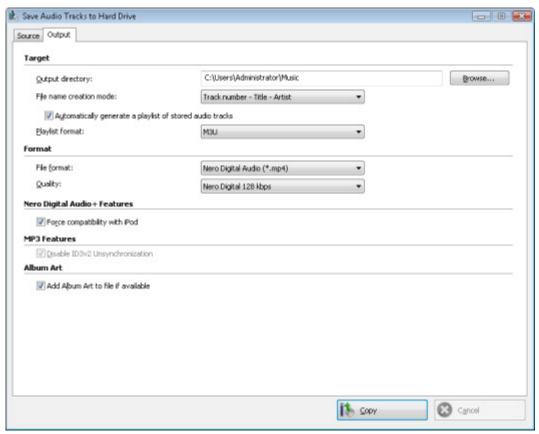
The following setting options are available:

Drop-down menu Source drive	Selects the drive where the Audio CD is inserted.
Title Selection List	Displays the tracks on the Audio CD. You can select individual tracks to copy by selecting the respective check box.
Button Refresh	Sends a new query to the Gracenote Media Database and completes the Audio CD's metadata including artist, title name, and genre if a matching entry exists in the database.
Button Edit	Opens the Edit Meta Data window. Here, you can edit the Audio CD metadata sent by Gracenote. You can enter the metadata if no entry for your Audio CD exists in the Gracenote Media Database. This metadata is sent to Gracenote, and added to the Gracenote Media Database.
Input fields Album/Artist/Year	Displays or specifies metadata for the album, artist and year.
Selection list Genre	Displays or specifies the genre.
Cover area	Displays Album Art, i.e., the cover of the Audio CD.
Button Load Cover	Loads an alternative cover from your hard drive.



6.4.1.2 Output Tab

You can define the properties of the audio files to be created on the **Output** tab.



Copy Audio CDs to Hard Drive - Output

The following setting options are available:

Input window Output directory	Selects the storage location for the output file.
Button Browse	Opens a browser window where you can select a storage location.
Drop-down menu Mode for creating file name	Selects the method to be used for creating the name of the output file.
Check box Automatically generate a playlist of stored audio tracks	Creates a playlist of the saved audio files. A playlist is a list of the ripped audio files in the right order with the right metadata. It is a very convenient tool – you simply have to select the playlist to add all the audio files in contains to an audio compilation or a playback application.



Drop-down menu Playlist format	Selects a format for the playlist.
Drop-down menu File format	Selects the output audio format for the selected audio file. The selected file format is available as the first entry the next time it is called up. You can choose between Nero Digital Audio, MP3 Audio, WAVE, AIFF, FLAC and Ogg Vorbis.
Drop-down menu Quality	Selects the bitrate for the selected audio file format. If the bit rate is small, less data is transferred. The file is then small, but quality is lower. If the bit rate is high, more data is transferred. The file size is then large, but the quality is high. A value of 128 for MP3 files is near CD quality. For the MP3 Audio file format you can also select if you want to create an MP3 file or an mp3PRO file. Only available if you selected the Nero Digital Audio or MP3 Audio file format.
Check box Force compatibility with iPod	Makes Nero Digital Audio+ available for an iPod. Is only available if you selected the Nero Digital Audio + output format.
Check box Disable ID3v2 Unsynchronization	Disables the ID3v2 Unsynchronization during the decoding process. ID3v2 Unsynchronization is a part of the MP3 decoding process. It increases the chance that the MP3 file can be played even with old software or hardware that does not support ID3v2. However, some devices that support ID3v2 do not support ID3v2 Unsychronization. The display of images or text tags might be corrupt on such devices when playing MP3 files with unsynchronized ID3v2. Select the check box if you have encountered such problems.
Check box Add Album Art to file if available	Adds Album Art to the files. Album Art works for example as a mini view in the Explorer. Adding Album Art increases the file size. Only available if Album Art is available or chosen for this Audio CD.



7 Video

7.1 Compiling DVD-Videos

With Nero Express you can burn DVDs made up of premastered DVD-Video files from your hard drive. You can show your burned DVDs on almost all DVD players. You can use Nero Express to burn a DVD if the DVD video title, i.e. a complete DVD folder structure, is already available.



In Nero Express it is not possible to create a DVD-Video, an AVCHD video, or a BDMV-Video from video files. You can convert video files to DVD-Video, to AVCHD video, or BDMV-Video in Nero Vision for example. More information about Nero Vision is available on the Web site www.nero.com, and more information about video editing is available in the separate Nero Vision manual.

To compile a DVD-Video, proceed as follows:

- 1. Click the **Videos** menu icon in the Nero Express start screen.
 - → The video options are displayed.
- 2. Click the **DVD-Video Files** option.
 - → The DVD-Video Files compilation screen is displayed.
- 3. Click the Add button.
 - → The Add files and folders window is opened.
- 4. Select the DVD-Video files that you would like to add to the compilation and click the Add button.
- 5. Click the Close button.
 - → The DVD-Video files are added to the compilation and are displayed in the compilation screen.



DVD-Video files compilation screen





If the DVD-Video files selected are larger than 4483 MB and if a DVD recorder which can burn DVDs with 2 layers (DVD DL) is installed, you can select the **DVD9 (8152MB)** option in the drop-down menu.

- 6. Click the **Next** button.
 - → You have successfully compiled a DVD-Video and can now burn this compilation.

See also

Compilation Screen → 12

7.2 Compiling AVCHD Video Disc

With Nero Express you can burn an AVCHD video disc made up of <u>AVCHD video files</u> from your hard drive or camcorder. The AVCHD video disc can be burned to a DVD as usual, or to a Blu-ray Disc. Burning to a Blu-ray Disc has the benefit that it offers more space than a DVD.

AVCHD video on DVD is compatible to the specification of a Blu-ray Disc. However, playback is not guaranteed on all Blu-ray players.

You can use Nero Express to burn an AVCHD video disc if the complete folder structure including premastered files is already available.



In Nero Express it is not possible to create a DVD-Video, an AVCHD video, or a BDMV-Video from video files. You can convert video files to DVD-Video, to AVCHD video, or BDMV-Video in Nero Vision for example. More information about Nero Vision is available on the Web site www.nero.com, and more information about video editing is available in the separate Nero Vision manual.

To compile an AVCHD video disc, proceed as follows:

- **1.** Click the **Videos** menu icon in the Nero Express start screen.
 - → The video options are displayed.
- 2. Click the AVCHD(TM) Files (BD) or AVCHD(TM) Files (DVD) option.
 - → The AVCHD(TM) Files compilation screen is displayed.





AVCHD (TM) Files compilation screen

- 3. Click the Add button.
 - → The **Add files and folders** window is opened.
- 4. Select the AVCHD video files that you would like to add to the compilation and click the Add button.
- 5. Click the Close button.
 - The AVCHD video files are added to the compilation and are displayed in the compilation screen.
- 6. Click the Next button.
 - You have successfully compiled an AVCHD video disc and can now burn this compilation.

7.3 Compiling Blu-ray Video Disc

With Nero Express you can burn a BDMV-Video disc made up of BDMV (= Blu-ray Movie) files from your hard drive. You can play your burned BDMV-Video on almost all Blu-ray players.

You can use Nero Express to burn a BDMV-Video if the complete folder structure is already available.



In Nero Express it is not possible to create a DVD-Video, an AVCHD video, or a BDMV-Video from video files. You can convert video files to DVD-Video, to AVCHD video, or BDMV-Video in Nero Vision for example. More information about Nero Vision is available on the Web site www.nero.com, and more information about video editing is available in the separate Nero Vision manual.



To compile a BDMV-Video disc, proceed as follows:

- **1.** Click the **Videos** menu icon in the Nero Express start screen.
 - → The video options are displayed.
- 2. Click the **BD-Video Files** option.
 - → The **BD-Video Files** compilation screen is displayed.



BD-Video files compilation screen

- 3. Click the Add button.
 - → The Add files and folders window is opened.
- **4.** Select the BD-Video files that you would like to add to the compilation and click the **Add** button.
- 5. Click the Close button.
 - → The BD-Video files are added to the compilation and are displayed in the compilation screen.





Files and Folders

The BDMV-Video contains different folders. Only certain files are allowed in an individual folder. If you only have individual files, you must allocate the right files to the specific folder:

\BDMV\index.bdmv \BDMV\MovieObject.bdmv

\BDMV\PLAYLIST*.mpls

\BDMV\CLIPINF*.clpi

\BDMV\STREAM*.m2ts

\BDMV\AUXDATA\sound.bdmv

\BDMV\AUXDATA*.otf

\BDMV\BDJO*.bdjo (this files are optional; however, the folder must be available)

Also, the folders \BDMV\META, \BDMV\JAR and \CERTIFICATE must be available but may remain empty.

If the folder \BDMV\BACKUP is available, it contains a copy of the files index.bdmv, MovieObjects.bdmv and the folders PLAYLIST, CLIPINF and BDJO.

6. Click the **Next** button.

→ You have successfully compiled a BD-Video and can now burn this compilation.

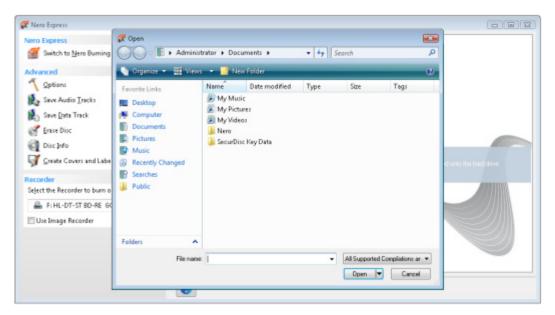


8 Loading a Disc Image or Saved Project

With Nero Express you can burn a disc from a disc <u>image</u> or compilation that you have previously saved on the hard drive.

To load an image file or a saved compilation for the burn process, proceed as follows:

- 1. Click the Image, Project, Copy menu icon in the Nero Express start screen.
 - → The copy and disc image options are displayed.
- 2. Click the Disc Image or Saved Project option.
 - The Open dialog window is opened.



- 3. Select the image file (*.nrg, e.g.) or saved compilation you want and click the **Open** button.
 - The selected file loads and the **Final Burn Settings** screen is displayed.
 - > You have successfully loaded the image file or compilation and can now burn it.



9 LightScribe

Using Nero Express and a <u>LightScribe</u> recorder you can create or load <u>labels</u> that you can burn onto the label side of CDs/DVDs in the <u>LightScribe</u> recorder. The function is available as a separate **Print LightScribe Label** option in the start screen or can be integrated as an intermediate step into the creation and burn process of a project.



This function is only available in recorders that support LightScribe technology.



This function is only available in the full version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.

See also

LightScribe Settings → 68

9.1 Printing LightScribe Labels (Without Compilation)

To create and print a LightScribe label for your CD/DVD, proceed as follows:

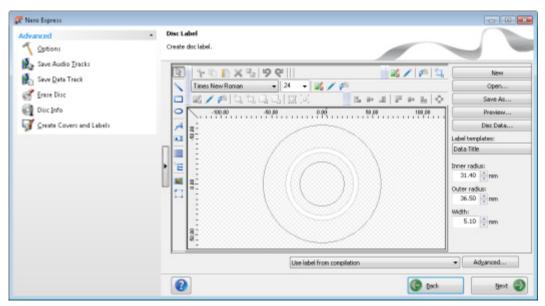
- **1.** Select the LightScribe recorder you want to use in the **Recorder** section of the extended area in the start screen.
- 2. Insert a blank LightScribe disc into the LightScribe recorder with the label side facing down.
 - → The **Print LightScribe Label** menu icon in the Nero Express start screen is displayed.



LightScribe Label start screen



- 3. Click the **Print LightScribe Label** menu icon.
 - → The **Print LightScribe Label** option is displayed.
- 4. Click the Print LightScribe Label option.
 - → The Disc Label screen is displayed.



Disc Label screen

5. Create a label according to your requirements.



The interface in the **Disc Label** screen works on the same principle as Nero CoverDesigner. Basically, it is irrelevant whether you print the <u>label</u> on paper or directly onto an appropriate disc.

Please see the separate Nero CoverDesigner user manual for full instructions on how to make professional looking covers and labels.

- 6. Click the **Next** button.
 - → The **LightScribe Print Properties** screen is displayed.
- **7.** Add to the required values in the input fields and enable the option button for the desired print quality.
- 8. Click the **Print** button.
 - The printing process begins. You can follow the process status in the status bar. As soon as printing is finished, the **Nero LightScribe** dialog appears and displays a message about the result of the printing process.
- 9. Click the **OK** button.
- 10. Click the Next button in the LightScribe Print Properties screen.



→ You have successfully created and printed a LightScribe label according to your requirements and can now continue by selecting another option from the final screen or by exiting Nero Express.

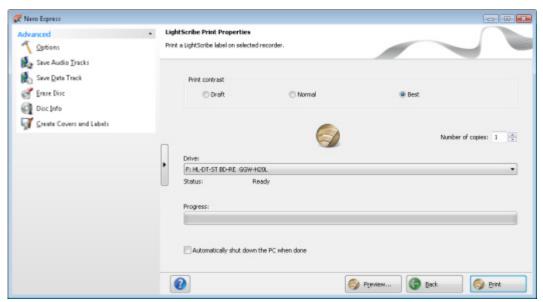
It is possible to burn the label several times to the same LightScribe disc. The printed labels will be aligned. This darkens the label und often improves the quality. It is also possible to extend the label with new elements in an additional burn process.

See also

- LightScribe Print Properties Window → 44
- Final Screen → 64

9.2 LightScribe Print Properties Window

You can customize the print properties of your LightScribe label to suit your requirements in the **LightScribe Print Properties** window.



LightScribe Print Properties window

The following options are available:

Area Print contrast	Adjusts the desired print quality. This option button is set to Normal by default.
Input field Number of copies	Defines the number of copies you require.
Drop-down menu Drive	Defines the desired recorder. Available only if multiple LightScribe recorders are available.



Check box Automatically shut down the PC when done	Shuts down the computer after the label has been printed (if possible).
Button Print	Starts printing the label.
Button Preview	Opens the LightScribe Print Preview dialog box. A print preview of the label is displayed here.

9.3 Printing LightScribe Labels (Within The Project)

To create and print a corresponding LightScribe label within your project, proceed as follows:

- 1. In the **Recorder** section of the extended area in the start screen, select the LightScribe recorder you want to use.
- 2. Compile a project of your choice.
 - → The **Disc Label** screen opens.
- 3. Create a label according to your requirements.



The interface in the **Disc Label** screen works on the same principle as Nero CoverDesigner. Basically, it is irrelevant whether you print the <u>label</u> on paper or directly onto an appropriate disc.

Please see the separate Nero CoverDesigner user manual for full instructions on how to make professional looking covers and labels.

- 4. Click the Next button.
 - → The Final Burn Settings screen opens.
- 5. Insert a suitable blank disc in the selected drive.
- **6.** Select the recorder you want from the **Current Recorder** drop-down menu.
- 7. Add to the desired values in the input fields as necessary and select the required check boxes.
- 8. Add to the desired settings in the extended area.
- 9. Click the **Burn** button.
 - → The **Burn Process** screen appears and the burn process starts. You can follow the process status in the status bar. As soon as the burn process is finished, the CD/DVD is ejected and a dialog box appears.



- **10.** Turn the blank LightScribe disc around, i.e. insert it in the LightScribe recorder with the label side facing down.
 - → The LightScribe Print Properties window opens and the print process starts. You can follow the process status in the status ba. As soon as the printing is finished, the Nero LightScribe dialog appears and displays a message about the result of the printing process.
- 11. Click the **OK** button.
- **12.** If you would like to save a log of the burn process, click the **Save** button.
 - → The log is saved.
- **13.** To print the log, click the **Print** button.
 - → The log is printed.
- **14.** Click the **Next** button.
 - → You have successfully created and printed a LightScribe label as an integral part of your CD/DVD project and can now continue by selecting another option from the final screen or by exiting Nero Express.

See also

- LightScribe Print Properties Window → 44



10 Labelflash

If you have a <u>Labelflash</u> recorder, you can print a <u>label</u> on the label and/or data side of the Labelflash DVD. A Labelflash DVD has a special layer between the top and bottom layers; this layer can be heated by the laser in the recorder so that images and text can be printed on the DVD.



The interface in the **Burn Label** screen works on the same principle as Nero CoverDesigner. Basically, it is irrelevant whether you print the label on paper or directly onto an appropriate disc.

Please see the separate Nero CoverDesigner user manual for full instructions on how to make professional looking covers and labels.

0	This feature is only available in recorders that support Labelflash technology.
	This function is only available in the full version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.

10.1 Burn Label Screen

In the **Burn Label** window you can create or load a label and write it on a Labelflash DVD. Information on the selected printing quality and rotation speed is displayed on the right-hand side of the screen. Under **Disc type** you can see whether the blank disc has been inserted with the label or data side. Either the Labelflash or the DiscT@2 logo is displayed in the **Burn Label** window depending on which side is inserted.

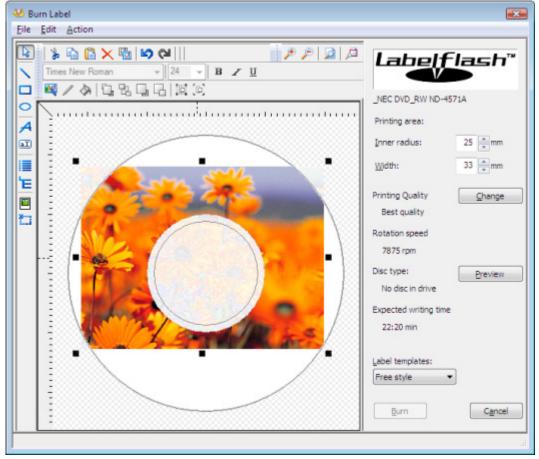
The following configuration options are available in the Burn Label window:

Input field Inner Radius	Defines the distance between the label and the inner edge.
Input field Width	Defines the width of the print area.
Button Edit	Opens the Labelflash Print Properties window. This is where you can change the printing quality and the contrast level and display the changes made directly in the print preview.
Button Preview	Opens the Print Preview window that shows how the label should appear on the Labelflash disc.



Labelflash

Selection list Label templates	Contains a selection of different templates for designing the label. You can continue to edit and customize a selected template.
Button Writing	Starts the burn process.
Button Cancel	Cancels the procedure and closes the window.



Burn Label Window

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If you are creating a DiscT@2, Nero Express displays only the available print area for creating the label by default, i.e. the area on the data side of your DVD that is not already taken up by data. You cannot increase the radius of the print area.



10.2 Printing Labelflash Labels and DiskT@2

Basically, it is irrelevant whether you print on the label or the data side when creating labels. The label is actually printed outside the normal burn process.



You can print on the label side of the DVD at any time.

We recommend that you print on the data side first when you have burned the compilation. It is not possible to burn data on a printed data side. When you insert a DVD on which data has already been burned, Nero Express automatically identifies the space that is still available on the data side and on which you can print.

To print a <u>Labelflash label</u> on the label side or a DiskT@2 on the data side of your DVD, proceed as follows:

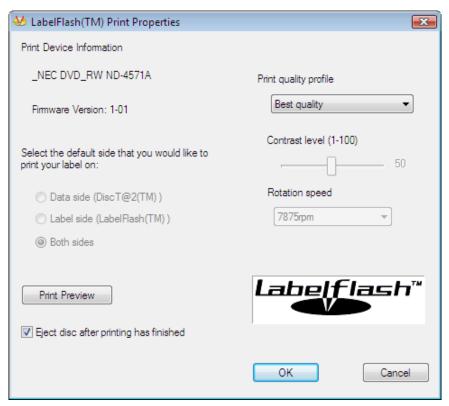
- 1. If you want to print a Labelflash label on the label side, insert a blank Labelflash disc into the recorder with the label side facing down.
 - → The **Burn Label** window is opened with the Labelflash logo.
- 2. If you want to print a DiskT@2 on the data side, insert a blank Labelflash disc with the data side facing down in the recorder.
 - → The **Burn Label** window is opened with the DiskT@2 logo.
- **3.** Create a label according to your requirements or open a label that you have already created with Nero CoverDesigner.



The interface in the **Burn Label** window and creation of a label work on the same principle as Nero CoverDesigner. See the separate Nero CoverDesigner manual for full instructions on how to create professional looking covers and labels.

- **4.** If you want to change the area in which the label is printed, change the print area accordingly using the input fields **Inner Radius** and **Width**.
- **5.** If you want to view or change the print properties:
 - 1. Click the **Change** button.
 - → The Labelflash Print Properties window is opened.
 - 2. If you want to change the printing quality, select a quality level from the **Print quality profile** drop-down menu.
 - 3. If you select the **User defined** entry from the **Print quality profile** drop-down menu, you can change the contrast level and the rotation speed.
 - 4. Click the OK button.





Labelflash Print Properties

- 6. The Labelflash Print Properties window is closed and the changes are accepted.
- 7. Click the **Burn** button.
 - → The labeling procedure starts and the Labelflash printing or DiscT@2 printing window is opened. The window shows the estimated printing time and the print progress. When printing is complete, a message window is opened informing about the successful print process.
- 8. Click the OK button.
- 9. The message window is closed and the disc ejected.
 - → You have successfully printed a label.



11 Burn Compilation

11.1 Choice of Burner

If multiple recorders are installed, you can select the recorder that you want to use for burning from the **Recorder** drop-down menu. Immediately before burning a project, you can change the recorder you selected again in the **Final Burn Settings** window.



Labelflash recorder

If a Labelflash recorder is installed on your computer, you can select it to create and print Labelflash DVD labels in Nero Express. The function is available as a separate **Burn Label** menu icon in the extended area of the start window.



LightScribe recorder

If a <u>LightScribe</u> recorder is installed on your computer, you can select it to create and print LightScribe CD/DVD labels in Nero Express. The feature is available as a separate **Print LightScribe Label** option in the start screen or can be integrated as an intermediate step into the creation and burn process of a project.



SecurDisc recorder

If a SecurDisc recorder is installed on your computer, you can select it to create and burn SecurDisc data CDs and/or DVDs in Nero Express. Corresponding options, e.g. **SecurDisc Data CD**, are available in the start window.



Burning labels with LightScribe, burning labels with Labelflash, burning SecurDisc data discs and burning simultaneously with multiple burners are not available in the Essentials version.

You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.

In addition to the installed recorders, Nero Image Recorder is also available in Nero Express. Nero Image Recorder can be used to create and save an image file to burn later. In order to use Nero Image Recorder, you can select the **Use Nero Image Recorder** check box in the extended area of the start screen.



Please note that Nero Image Recorder can only be activated in the extended area of the start screen.





The Image Recorder is also suitable for creating an image of a disc type not supported by the connected recorder. For example, you can therefore create a DVD image without having installed a DVD recorder. You can then write the image to a disc at any time.

11.2 Starting the Burn Process

To select one of the available recorders, to define the burn settings for your project according to your requirements, and to start the burn process, proceed as follows:

- 1. Compile a project of your choice.
 - → The **Final Burn Settings** screen is displayed.
- 2. Insert a suitable blank disc in the selected drive.
- 3. Select the recorder you want from the **Recorder** drop-down menu.
- **4.** Add to the desired values in the input fields as necessary and select the required check boxes.
- 5. Add to the desired settings in the extended area.
- 6. Click the Burn button.
 - The **Burn Process** screen is displayed and the burn process starts. You can follow the process status in the status bar. As soon as the burn process has finished, a window is opened and displays a message about the result of the burn process.
- 7. Click the **OK** button.
- 8. If you would like to save a log of the burn process, click the **Save** button.
- 9. Click the Next button.
 - You have successfully burned a project and can now continue by selecting another option from the final screen or by exiting Nero Express.

11.3 Creating an Image File

With Nero Express and the Image Recorder you can create disc images from every compilation. The NRG image file format can always be selected whereas the ISO image file format can only be selected from certain compilation types. Nero Express only enables the possible image file formats.

The NRG image file format was developed by Nero. In contrast to ISO, NRG can be created from every disc and compilation type. This means that even Audio CDs or multisession discs can be saved as an NRG image file.





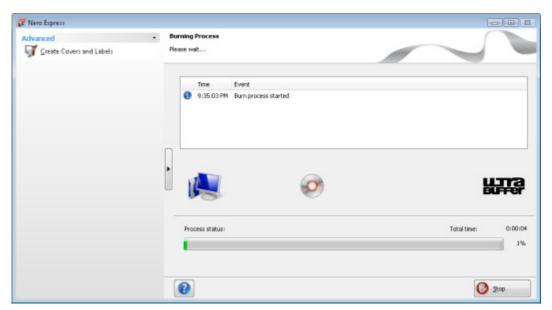
This function is only available in the full version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.



Nero Image Recorder must be activated before it appears in the drop-down menu

To set the burn settings according to your requirements and to save your project as an image file to the hard drive using the Image Recorder, proceed as follows:

- 1. Compile a project of your choice.
 - → The **Final Burn Settings** screen is opened.
- 2. Select the **Image Recorder** option from the **Current Recorder** drop-down menu.
- 3. Add to the required values in the input fields.
- **4.** Add to the required settings in the extended area as necessary.
- **5.** Click the **Burn** button.
 - The Burning Process screen is displayed and the Save Image File dialog box is opened.
- 6. Enter a name for your image file in the File Name input field.
- 7. Select the desired storage location in the navigation tree and click the **Save** button.
 - → The burn or save process starts. You can follow the process status in the status bar. As soon as the burn or save process is finished, a window is opened and displays a message about the result of the burn process.



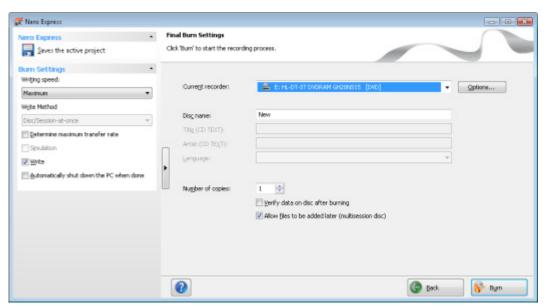
Burn progress window



- 8. Click the **OK** button.
- 9. If you would like to save a log of the burn process, click the **Save** button.
- 10. Click the Next button.
 - → You have successfully saved a project with Nero Image Recorder and can now continue by selecting another option from the final screen or by exiting Nero Express.

11.4 Final Burn Settings Screen

In the **Final Burn Settings** screen, you can define the burn settings to suit your requirements, use Nero Image Recorder to save a project to the hard drive as an image file or start the burn process.



Final Burn Settings screen

The following configuration options are available in the **Final Burn Settings** screen:

Button Options	Opens the Recorder Information window. You will find additional information here on the selected recorder and the media types that can be burned using it. Additional options can be enabled/disabled. In some recorders, you can change the Book Type settings. Not available for Audio CDs.
Input field Disc name	Defines the name of the CD/DVD. Not available for Audio CDs.
Input field Title (CD TEXT)	Defines the title of the Audio CD if CD Text is supported. Available for Audio CDs only. Only Latin characters can be displayed as CD Text. CD Text can only be written in disc-at-once mode.



Input field Artist (CD TEXT)	Defines the artist on the Audio CD if CD Text is supported. Available for Audio CDs only. Only Latin characters can be displayed as CD Text. CD Text can only be written in disc-at-once mode.
Input field Number of copies	Defines the number of copies you require. Not available when saving with Nero Image Recorder.
Check box Verify data on disc after burning	Compares the burned data to the original data. With compilations of multisession discs only the data that was added during the last burn process is compared. Not available when saving with Nero Image Recorder.
Check box Allow files to be added later (multi- session disc)	Enables the option to write additional files to the disc. The disc is not finalized. Multisession disc do not have to be written in a single burn process. You can burn projects repeatedly to a disc until it is completely burned. Only available for data discs.

11.4.1 Extended Area (Burn Settings)

You can access additional burn settings in the extended area of the **Final Burn Settings** screen by clicking the button in the left margin of the window.



An extended area with additional options and features is available in all Nero Express screens.

The following setting options are available:

Button Saves the active project	Opens the Save As dialog box. You can save your compilation here.
Selection list Writing speed	Defines the speed at which the disc is burned. Only the burn speeds that are supported by the selected recorder are displayed. Not available when saving with Nero Image Recorder.
Selection list Write method	Defines the Disc/Session-at-once or Track-at-once write method. Using the <u>disc-at-once</u> method the entire disc can be burned without the write laser having to stop. With the <u>track-at-once</u> method the laser turns off after each track. Available for CD compilations only. By default DVDs are burned using the disc-at-once method.



Check box Determine maximum speed	Checks how fast the compiled data can be accessed and reduces the selected writing speed if necessary. This prevents a buffer underrun. Recorders with a feature to prevent buffer underruns do not require a speed test. Current recorders mostly have such a feature. Not available when saving with Nero Image Recorder.
Check box Simulation	Performs all steps in the burn process without using the laser beam. We recommend running a simulation if you are decompressing data before burning, e.g. when burning an Audio CD from MP3 files. You can assume that if simulation is successful, the burn process will also be successful. Not available when saving with Nero Image Recorder.
Check box Write	Starts the actual physical burn process (e.g. after a simulation). This box is checked by default.
Check box Remove silence at end of *.cda tracks	Removes silence from the end of an audio file. This check box is selected by default. Audio data is stored in blocks even if you do not always finish at the end of a block limit. The last block is filled with silence when needed. To avoid unwanted effects set the pause length to 0 when
	clearing this check box (to set the pause length see <u>Track</u> <u>Properties Tab→ 22</u>). Available for Audio CDs only.
Check box Automatically shut down the PC when done	Automatically shuts down the PC after the burn process has ended.



Audio CDs should always be burned using the $\underline{\text{disc-at-once}}$ method. This entry is selected by default.



12 Copying a Disc

12.1 Methods of Copying

Nero Express can be used for copying discs. There are two methods for this:

- On-the-fly
- Copy Over Image

Each method has advantages and disadvantages which will depend on your requirements.

12.1.1 On-the-fly Copying

When using the on-the-fly method, insert the original disc into a drive and a recordable disc into the drive. The original disc in the drive is copied immediately without any time delay to the blank disc in the recorder. The on-the-fly method allows you to copy discs very quickly, and does not require any additional space on the disc.

In order to be able to use the on-the-fly method, you will need at least two drives: one for reading the disc and a disc burner for writing. The following requirements apply to the read drive and disc burner:

- The disc burner must feature <u>buffer underrun</u> protection, or the drive must be capable of delivering the data sufficiently quickly. The read speed should be at least twice as fast as the write speed.
- The read drive must be capable of delivering information on the number and type of sessions, otherwise Nero Express may not be able to produce an exact copy.

If you want to copy Audio CDs, we recommend the copy image method because the quality of the read audio files can suffer depending on the drive.

12.1.2 Copy Over Image

With the copy over image method, an image of the original disc is saved to a file first. The image file is then burned to a blank disc. Copying using copy over image takes longer, but it often produces better results.

You must have sufficient storage space to use the copy over image method.

The copy over image method is particularly suitable in the following situations:

- Only one drive is available.
- You would like to make several copies of the same disc.
- You think it likely that read errors may have occurred on the source CD (for example because it is scratched).
- You attach importance to the best possible reproduction (particularly in relation to index positions and the quality of Audio CDs).



12.2 Copying a Disc

With Nero Express you can copy a disc. That means you make an exact copy of a source disc and burn it to a target disc. If your source disc is an Audio CD, for instance, your copy will be an Audio CD as well. Depending on your installed burner, you can copy CDs, DVDs or Blu-ray Discs. The target disc must be the same disc type as the source disc - you can copy a DVD only to a DVD, for example. In any case, Nero Express will give you a message when the disc type do not fit.



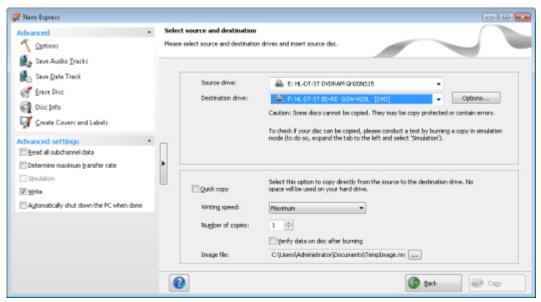
If you are not in possession of the copyright for the relevant disc and do not have authorization from the owner of the copyright, unauthorized copying of discs violates national and international legislation.



Some discs are copy-protected and cannot be copied. If you are not sure whether your disc can be copied, activate simulation before commencing the actual physical burn process.

To copy a disc, proceed as follows:

- 1. Click the **Image**, **Project**, **Copy** menu icon in the Nero Express start screen.
 - → The corresponding copy options are displayed.
- 2. Click the option you require, Copy Entire CD, Copy Entire DVD, or Copy Entire Blu-ray Disc.
 - The Select source and destination screen is displayed.



Source and Destination

3. Make the desired settings in this screen and, if required, in the extended area of the window.



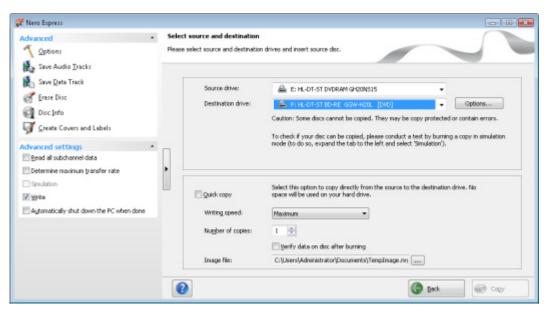
- **4.** If you want to copy discs using the **Image Copy** method:
 - 1. Clear the Quick copy box.
 - 2. Insert the disc that you want to copy into the recorder.
- **5.** If you want to copy discs using the **on-the-fly** method:
 - 1. Select the Quick copy check box.
 - 2. Select the Source drive and the Destination drive.
 - 3. Insert the disc that you want to copy into the selected drive.
 - 4. Insert a blank disc into the target drive.
- 6. Click the Copy button.
 - → If you are copying via the drive, the copy process starts. If you are using Nero Image Recorder, the **Save Image File** window is opened.
- 7. Enter a name for your image file in the File Name input field.
- **8.** Select the relevant storage location in the **Save to** navigation tree and click the **Save** button.
 - The copy and/or save process starts. You can follow the process status in the status bar.
 If you are using a single drive for copying, you will be prompted to remove the source
 - disc and to insert a suitable blank disc after the image file has been written. The burn process then starts automatically.
- 9. Click the **Next** button.
 - → You have successfully copied a disc and can now continue by selecting another option from the final screen or by closing Nero Express.

See also

Final Screen → 64



12.3 Copy Settings



Source and Destination screen

The following configuration options are available in the **Source and destination** screen:

Selection list Source drive	Defines the drive from which the source information is read. Insert the CD or DVD that you want to copy into the drive.
Selection list Destination drive	Creates the destination drive. Insert a blank disc into this drive.
Button Info	Opens the Recorder Information window. This contains information on the selected destination drive.
Check box Quick Copy	Enables direct copying from the source to the destination drive. Data is not buffered on the hard drive during this process.
	The option On-the-fly is only available if there are at least two drives connected (does not apply for Nero Image Recorder). If this check box is not selected, an image file will be created first, which is then burned.
Selection list Write speed	Defines the speed at which the disc is burned. Only the burn speeds that are supported by the selected recorder are displayed.
	Not available for Nero Image Recorder.



Input field Number of copies	Defines the number of copies you require.
Check box Verify data on disc after burning	Verifies whether the burned data is identical to the original data. Not available for Nero Image Recorder.
Button Image file	Defines the folder where the image file is stored. You can change the name of the image file and target folder. Not available for Nero Image Recorder.

The following configuration options are available in the extended area:

Check box Read all subchannel data	Reads all subchannel data during copying. Subchannel data is used to save additional information, e.g. CD Text or the lyrics of a karaoke CD. Select this check box when copying an Audio CD or a karaoke CD. The burner has to be capable of reading all the subchannel data.
Check box Determine maximum speed	Finds out the maximum burn speed. Not available for Nero Image Recorder.
Check box Simulation	Performs all steps in the burn process without using the laser beam. You can assume that if simulation is successful, the burn process will also be successful. Not available for Nero Image Recorder.
Check box Write	Starts the actual physical burn process (e.g. after a simulation). This check box is selected by default.

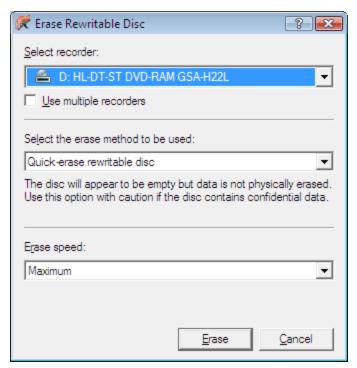


13 Erase Rewritable Disc Window

Nero Express can be used to erase rewritable discs, i.e. discs with the RW specification, as long as your recorder supports this feature. Two erase methods are available for this purpose:

Quick erasing does not remove the data physically from the disc, but instead only makes it inaccessible by erasing the references to existing content. The data can be restored!

Full erasing removes the data from the disc by overwriting it with zeroes. The contents cannot be restored with conventional methods. Repeated full erasing increases the probability that third parties will not be able to reconstruct the contents.



Erase Rewritable Disc window

The following configuration options are available in the **Erase Rewritable Disc** window:

Selection list Select recorder	Defines the desired recorder.
Check box Use multiple recorders	Simultaneously erases CDs/DVDs in multiple recorders.
Selection list Select the erase method to be used	Defines the erase method. Two options are available: The Quick-erase rewritable disc method does not physically erase all data from the disc, but only the references to the contents. The disc will appear to be empty even though the data is still physically available. Erasing a disc using this method takes



Erase Rewritable Disc Window

	between one and two minutes. The Full-erase rewritable disc method physically erases all data from the disc. The contents cannot be restored with conventional methods. Repeated full erasing increases the probability that third parties will not be able to reconstruct the content Erasing the disc using this method takes longer than the other method, depending on the type of disc involved.	
Selection list Erase speed	Defines the erase speed.	
Button Erase	Starts the erase process.	
Button Cancel	Cancels the action and closes the window.	



14 Final Screen

Once you have successfully concluded the burn or save process with Nero Express, the final screen is displayed with the options **Burn same project again**, **New project**, and **Save Project**. You can select one of these options to continue working with Nero Express or you can click the button to exit the program.

The following setting options are available

Entry Burn the same project again	Returns to the Final Burn Settings screen. You can burn the same project again with the same or different settings.
Entry New project	Opens the Nero Express start screen. You can create a new project here.
Entry Nero CoverDesigner	Opens Nero CoverDesigner. Please see the separate Nero CoverDesigner user manual for full instructions on how to make professional looking covers and labels.
Entry Save project	Opens the Save As window. You can save the current project if you want to access it again later.

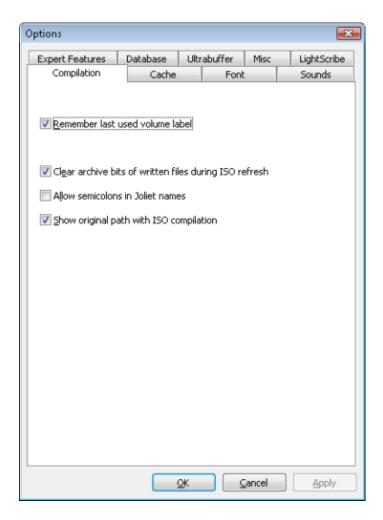


15 Configuration Options

You can define options for working with Nero Express in the **Options** window.



Some of the functions mentioned here are only available in the full version. You can always upgrade your Essentials version at www.nero.com to get the full version with all the functions.



Options Window

The following tabs are available:

Compilation	Contains options for the compilation and the selection screen.	
Cache	Contains options for the cache.	
Font	Contains selection options for the font.	



Sounds	Contains selection options for sounds in connection with burn tasks.
Expert Features	Contains options for configuring overburning and burning. We recommend that you retain the default settings.
Database	Selects the default naming method for audio files to be saved from an Audio CD to the hard drive.
Ultrabuffer	Defines the size of the RAM buffer.
Misc.	Contains options for configuring compilations, burning, the database, the user interface, as well as advanced settings.
LightScribe	Contains options for configuring LightScribe recorders such as the print contrast (quality), default drive, and default template. This tab is only available if a LightScribe recorder has been installed.

15.1 Compilation Settings

The following configuration options are available on the **Compilation** tab:

Check box Remember last used volume label	Makes available the title for the next disc.
Check box Clear archive bits of written files during ISO refresh	Deletes the archive bits of saved files.
Check box Allow semicolons in Joliet names	Allows the use of semicolons in addition to standard uppercase and lowercase letters and Unicode characters (and German umlauts) in file names in the Joliet file system.
Check box Show original path with ISO compilation	Lists the full path of the added files in the compilation screen in the Source column.

15.2 Cache Settings

The following configuration options are available on the **Cache** tab:

	Displays the path of the Cache memory.
Path for cache	You can enter the path manually or select the path in the browser window.



Button Browse	Opens a browser window. You can select a folder in which data is buffered before and during the burn process.
Input field Minimum space on hard drive, which Nero should not use	Defines the minimum storage volume on the cache drive that is not used by Nero Express.
Check box Cache files that have been dragged over from a CD-ROM drive	Saves files that have been added to the compilation from a source disc in a temporary directory. If you clear this check box then you have to insert the original source disc during the burn process.

15.3 Expert Features

The following configuration options are available on the **Expert Features** tab:

Check box Enable Disc-at-once CD over- burning	Enables the option that CDs can be overburned.
Drop-down menu / Input field Absolute/Relative maximum overburning size	Defines how much a CD can be overburned.
Check box Enable DVD overburning	Enables the option that DVDs can be overburned.
Drop-down menu / Input field Maximum DVD size	Defines how much a DVD can be overburned.
Check box Enable generation of short lead-out	Enables the option to write additional data to your CD.
Check box Do not eject disc after burning	Enables the option that your disc remains in the recorder and is not ejected when the burn process is finished.
Check box Enable all supported recorder formats for image recorder	Enables the option that all supported recorder formats for the Image Recorder are available. It is now possible to create compilations that the installed recorder cannot burn. For instance, you can create a Blu-ray compilation without a Blu-ray recorder and create an image file with Nero Image Recorder.



Area	Allows Nero Express to be started from the shell context
Nero burn functions in the context menu	menu. The shell context menu offers various pertinent information and is opened by clicking a file or folder with the right mouse button in the Windows Explorer.



Overburning

Overburning means writing more data on the disc than originally intended. It is achieved by reducing the lead-out area to a few seconds, which is sufficient in most cases. However, this violates the CD standard and may result in recording and playback errors (depends on the used recorder).

15.4 Ultrabuffer Settings

The following configuration options are available on the **Ultrabuffer** tab:

Selection list Method	Defines the memory capacity that Nero Express uses as a RAM buffer.
	The <u>ultrabuffer</u> is a second memory that enhances the physical buffer in the recorder.
Input field Data buffer size	Defines the memory capacity that can be manually entered.
	The input field is only enabled when Manual Configuration is selected in the selection list.

15.5 LightScribe Settings

The following configuration options are available on the **LightScribe** tab:

Area Print contrast	Adjusts the desired print quality.
Selection list Default LightScribe drive	Selects the drive with the LightScribe recorder.
Selection list Genre	Specifies the genre.
Selection list Current template	Defines a template for labels.



Configuration Options

Selection list Default print resolution (DPI)	Adjusts the desired print resolution.
Check box Printing LightScribe labels	Enables the option to automatically burn a LightScribe label. This tab is only available if a LightScribe recorder has been installed.



16 Technical Information

16.1 System Requirements

Nero Express 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.

In addition, the following requirements apply:



Using LightScribe Direct Disc Labeling

Your computer requires the latest LightScribe system software when using a CD or DVD recorder with LightScribe support.

If you have downloaded and installed an updated Nero version from the Nero website, install the LightScribe system software separately. You can find the latest version at www.nero.com/link.php?topic id=114&gen id=8.

- 16-bit Windows compatible sound card and speakers or headphones
- Optional: CD recorder
- Optional: Blu-ray capable recorder and Blu-ray disc
- Optional: LightScribe capable burner (LightScribe host software must be installed) and LightScribe capable disc
- Optional: Labelflash capable recorder and Labelflash disc
- Optional: SecurDisc capable drive

16.2 Formats Supported

16.2.1 Disc Types

- CD
- DVD
- Blu-ray burning only



You can find more information on Blu-ray support at www.nero.com/link.php?topic id=416.



The actual entries that are available and the actual disc types (e.g. **DVD**) to which can be written depend on the selected recorder.



16.2.2 Disc Formats

- Data CD/DVD/Blu-ray Disc
- SecurDisc CD/DVD/Blu-ray Disc
- Jukebox Audio CD/DVD/Blu-ray Disc
- Audio CD
- DVD-Video
- Nero Image (NRG)
- CUE-Image [Import only]
- ISO-Image
- AVCHD video
- BDMV-Video

16.2.3 Audio Formats and Codecs

- AAC elementary stream (AAC) not ripping
- Audio Interchange File Format (AIFF, AIF)
- Compact Disc Digital Audio (CDA) not encoding
- Dolby Digital (AC3) only source format in compilations
- MP3 / mp3PRO (MP3)
- Nero AAC Codec, Nero Digital (MP4)
- OGG Vorbis (OGG, OGM)
- PCM WAV file, ADPCM Wav file (WAV, WAVE)
- Windows Media Audio (WMA) not ripping
- Free Lossless Audio Codec (FLAC)



mp3PRO Plug-in

You will need the mp3PRO Plug-in for unlimited MP3 and mp3PRO encoding/decoding.

You can obtain the plug-in at www.nero.com. The plug-in is already included in the full version.



16.2.4 Video Formats and Codecs

- Advanced Streaming Format (ASF)
- Audio Video Interleave (AVI)
- Digital Video (DV)
- Moving Picture Experts Group-2 (MPG, MPEG, DAT, M2T)
- Nero AAC Codec, Nero Digital (MP4)
- QuickTime Movie (MOV)
- Video Object (VOB)

16.2.5 Image Formats

- Bitmap (BMP)
- Device Independent Bitmaps (DIB)
- Graphics Interchange Format (GIF)
- Icon Image File (ICO)
- JPEG File Interchange Format (JFIF)
- Joint Photographic Expert Group (JPEG, JPG, JPE)
- Picture Exchange (PCX)
- Portable Network Graphics (PNG)
- Portable Pixel Map (PPM)
- Targa Image File (TGA)
- Tagged Image File Format (TIFF, TIF)
- Windows Media File (WMF)

16.2.6 Formats for Playlists

- Moving Picture Experts Group Audio Layer 3 Uniform Resource Locator/MP3 URL (M3U)
- Moving Picture Experts Group Audio Layer 3 Uniform Resource Locator/MP3 URL + UTF-8 (M3U8)
- Playlists File Format (PLS)



17 Glossary

AIFF

The Audio Interchange File Format is an uncompressed audio file format from Apple® and represents a sort of counterpart to the WAV format from Microsoft. Files are larger than when using a compressed format, but the quality is higher. AIFF compressed is the compressed variation.

Archive Bit

Archive bits are used to identify files that have been edited. A file is only resaved during the next backup process if it was edited (and an archive bit is thus reset).

Audio CD

An Audio CD can contain up to 74 minutes of audio sequences and individual tracks in hi-fi quality. The storage capacity is 747 MB at a sample depth of 16 bit and a scan rate of 44.1 kHz.

AVCHD

AVCHD is an HD capturing format for camcorders. It is used for DVDs but compatible to Bluray Discs.

Block

A block refers to the smallest information unit on a CD-ROM or hard drive that is addressable in one access and that is indicated in bits or bytes. Several blocks are combined into a sector.

Book Type

The book type defines the specification (e.g. DVD-, DVD+, DVD-ROM) of a DVD. In order to ensure correct playback, the DVD specifications are defined in books so that all media can be read correctly. The specifications are defined in the so-called Rainbow Books, which are distinguished by means of their color (e.g. Yellow Book).

Buffer

A buffer refers to temporary memory that records and delivers data that cannot be processed immediately as required. The buffer also allows for continuous data flow.

Buffer Underrun

A buffer underrun is an interruption in the data flow in the internal memory (e.g. of the recorder). A buffer underrun results from an interruption in the data flow to the internal buffer. The buffer continues to deliver data until it is finally empty. When recording, data is fed continuously to the recorder's buffer in order to keep a steady flow of data. If the steady flow of data is interrupted, the media becomes unusable. Most modern recorders have a protective mechanism against buffer underruns.



Cache

Cache is a faster buffer that is used in various areas of a computer to access larger data volumes faster. Cache ensures a continuous flow of data.

CD-R

Compact Disc-Recordable is a technology for write-once media. The Orange Book standard defines the storage of audio data and other computer-readable data.

Disc-At-Once

Disc-At-Once refers to a method in which the laser in your recorder burns straight through in one session without turning off and on between each track. This method is best when recording Audio CDs you would like to play in your home or car stereo.

Frame

With an Audio CD, 75 sectors provide one second of played music. One sector consists of up to 98 frames; one frame contains 24 data bytes and 9 control bytes. Similarly, "frame" describes a full screen in television and video technology. Two successive half images result in a full screen within a second due to interlacing.

Image

An image refers to a single file on the hard drive that contains the image of a complete disc. A disc image can be used to create exact copies on media at a later point in time if problems occur during the write process or if no recorder is connected to your PC. The image requires as much free space on the hard drive as the contents of the original disc take up.

Joliet

Joliet refers to an extension of the ISO-9660 standard for file names. Joliet was designed by Microsoft in order to represent more characters. The file name can be up to 64 characters long and contain the letters A-Z, a-z, umlauts, as well as characters from Chinese, Japanese, and Korean.

Label

A label refers to a label on a disc. Some drives, e.g. drives that use LightScribe or Labelflash technology, can transfer labels directly to special media.

Labelflash

Labelflash is a technology with which pictures and texts can be burned on the label or data side of a disc with a laser.

LightScribe

LightScribe is a technology with which pictures or texts can be burned on the label side of discs with a laser.



MP3

The MPEG-1 Audio Layer 3 audio format is used to reduce the size of audio files to a fraction of their original size (factor 1:10) with little loss of quality. You can estimate about 1 MB per minute as opposed to 10 MB for the original files. This value and the quality can vary depending on the complexity of the audio signal. The bit rate used can be used as a measure of quality. The higher the bit rate, the better the quality, but also the more memory required.

mp3PRO

mp3PRO is an MP3 codec that compresses audio files even more but in lower bit rates and better quality. 64 kBit/s in mp3PRO is the equivalent to 128 kBit/s in MP3.

Multisession

A multisession refers to completing a disc in multiple cycles. After a first session has been written to the disc, information can then be added in another record because the disc has not been finalized.

Nero Digital

Various MPEG-4 video and audio codecs are collated in Nero Digital and are fully compatible with the standard MPEG-4. Nero AG is continuing to develop these. In this way a substantially higher quality of the multi-media data is achieved. Further, additional features such as subtitles have been implemented.

On-the-fly

On-the-fly refers to a method for copying to a disc. The data is transferred directly from the original storage location to the disc to be burned. To do this, Nero uses a compilation, a small file that simply refers to the transferred data.

Track-At-Once

Track-At-Once refers to a write method in which each track is written to the disc individually. The writing process is interrupted briefly after each track, i.e. the laser starts again for each track. With this write method, it is only possible to continue writing to a DVD sometimes and at a later stage. There is a pause of at least 27ms between tracks, which can be disruptive for Audio CDs.

WAV

The WAV audio format, also called WAVE or Waveform audio format, is an audio format from Microsoft and uses no data compression. WAV is the counterpart to the AIF format from Apple.



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